FIGURE 2467

GTGCGGTTGCCATGTAATATCCTGGCCGCGCGGGCGCGCGAGCGGCTGAGGCGGCGCCGGGGCGGGCGCGGAGCT
GGCAAGCGGGTGGCGGAGGCGGCGCCGACGGGGACTGCTGAGGCGCGCAGAGGGTCGGCGGCGCCCGGGAGCCTG
TCGCTGGCGCGGTCCGGGCGGGAGGCTCGGCGGCGGGCGGCAGCATGTCGGTGGCGGGGCTGAAGAAGCAGTTCT
ACAAGGCGAGCCAGCTGGTCAGTGAGAAGGTCGGAGGGGCCGAGGGGACCAAGCTGGATGATGACTTCAAAGAGA
TGGAGAAGAAGGTGGATGTCACCAGCAAGGCGGTGACAGAAGTGCTGGCCAGGACCATCGAGTACCTGCAGCCCA
ACCCAGCCTCGCGGGCTAAGCTGACCATGCTCAACACGGTGTCCAAGATCCGGGGCCAGGTGAAGAACCCCGGCT
ACCCGCAGTCGGAGGGGCTTCTGGGCGAGTGCATGATCCGCCACGGGAAGGAGCTGGGCGGCGAGTCCAACTTTG
GTGACGCATTGCTGGATGCCGGCGAGTCCATGAAGCGCCTGGCAGAGGTGAAGGACTCCCTGGACATCGAGGTCA
AGCAGAACTTCATTGACCCCCTCCAGAACCTGTGCGAGAAAGACCTGAAGGAGATCCAGCACCACCTGAAGAAAC
TGGAGGGCCGCCGCCTGGACTTTGACTACAAGAAGAAGCGGCAGGGCAAGATCCCCGATGAGGAGCTACGCCAGG
CGCTGGAGAAGTTCGAGGAGTCCAAGGAGGTGGCAGAAACCAGCATGCACAACCTCCTGGAGACTGACATCGAGC
AGGTGAGTCAGCTCTCGGCCCTGGTGGATGCACAGCTGGACTACCACCGGCAGGCCGTGCAGATCCTGGACGAGC
TGGCGGAGAAGCTCAAGCGCAGGATGCGGGAAGCTTCCTCACGCCCTAAGCGGGAGTATAAGCCCAAGCCCCGGG
AGCCCTTTGACCTTGGAGAGCCTGAGCAGTCCAACGGGGGCTTCCCCTGCACCACAGCCCCCAAGATCGCAGCTT
CATCGTCTTTCCGATCTTCCGACAAGCCCATCCGGACCCCTAGCCGGAGCATGCCGCCCCTGGACCAGCCGAGCT
GCAAGGCGCTGTACGACTTCGAGCCCGAGAACGACGGGGAGCTGGGCTTCCATGAGGGCGACGTCATCACGCTGA
CCAACCAGATCGATGAGAACTGGTACGAGGGCATGCTGGACGGCCAGTCGGGCTTCTTCCCGCTCAGCTACGTGG
AGGTGCTTGTGCCCCTGCCGCAGTGACTCACCCGTGTCCCCGCCCCGCCCCTCCGTCCACACTGGCCGGCACCCC
CTGCTGGGTCTCCTGCATTCCACGGAGCCCCTGCTGCCAGGGCGGTGTCTGAGCCTGCCGGCGCCACCTGGGCCC
CGGCCCTTGAGGTACTCCCTGAGCAGGACCCCACACTTGGGTGGGGGGGCTTATCTGGGTGGGTGGGGATGCCTG
TTTACACTAGCGCTGACTCCCAACGGTGACGGCTCCCTTCCCCACTCCATGGCGCCAGCCTCCTCCCCCGCTCCC
CAACTTCTCGCCCAGCTGGCCGAGGCGGGGCAACACTAAGGTGCTCTTAGAAACACTAATGTTCCTCTGGGGCAG
CCCCCACCTCCGTCCTGACCCGACGGGGGCCCGGCCCACTGCCTACCCTCGAGTCCCGCAGCCTTAACAGGATGG
GATCGAGGGTCCCCATGGGGTGGCTCAGAGATAGGACCCTGGTTTTAAATCCCTCCCAGCCTGGTGCTGGTGATG
GGCCCTGGCCCTACTCCAGGGCCAATGCACCCCCGCCTCACACACGCACTCCTTCTCCTCAAGGCCAGGGCAGAG
GGCCTCACCGCCTCCCGGGCCTGCTGTCAGCTTGCAGCCCGGGGACAGAGGCCAGCTGGGATCTGCCTGAGGACA
GAGAACATGGTCTCCTGCAGGGCCCTGCCTCCCAAGCCCCGCCCTCAGAAAGCCAAGTACCTTTTCAGCTTTTTA
ACTGCCCCCATCCCAACCCAGGGAGGCCTGTGTCACTCTGGCACAAGCTGCCACCACCAGCCACCCACACCCACC
CCAGCACACCTCACACGGGACCACAGCCGCGCTGCCGAGGGCCAAGCACAAAGGTTCCAGTGAGCGCATGTCCCA
GCCCCTGGTGGCCAGGCTCCCCTTGCTGAGCCGCTGCCACTTCACCCTGTGGGAAGTGGCCCCAGCCATCTCCTC
TAGACCAAGGCAGGCAGCCCCGACATCTGCTTCCTCTATCGCCCAATGCAAAATCGATGAAATGGGGAGTTCTCT
GGGCCAGGCCACATTCACATTCCCCTCCCCCTGTGGTCCAGTGAAGCCTCCGGACCCCAGGCTCTGCTCTGCCCT
GCCCTGCACCCCCCTCGTCAGAAGTACATGAGGGGCGCAGAGATGAGCACACAGCTTTGGGCACGGTCCAGGGCA
AACTGAAATGTACGCCTGAATTTTGTAAACAGAAGTATTAAATGTCTCTTTCTAC

FIGURE 2468

GGAGTGCGGGGCGCCCGGCGCCAGGGGAGCCGCCACAGCCATGGATTGCAAAGATAGACCAGCTTTTCCAGTTAA
GAAGTTAATACAAGCCCGTCTGCCGTTTAAGCGCCTGAATCTTGTCCCAAAGGGGAAAGCCGATGACATGTCAGA
CGATCAGGGTACTTCTGTGCAAAGTAAAAGCCCCGATTTAGAGGCCTCTTTGGACACCTTGGAAAACAACTGTCA
TGTGGGTTCTGACATAGACTTTAGACCGAAACTTGTCAACGGGAAGGGTCCCTTAGATAACTTTTTAAGAAATAG
AATCGAAACCAGTATTGGCCAGAGCACAGTCATCATTGATTTGACAGAGGACTCGAATGAGCAGCCAGACAGTCT
TGTGGACCACAATAAACTAAATTCTGAAGCCTCTCCCTCCAGGGAGGCAATAAATGGCCAGCGAGAAGACACTGG
GGATCAGCAGGGGTTGTTGAAGGCCATTCAGAACGACAAGTTGGCATTTCCTGGAGAGACCCTTTCAGACATTCC
TTGCAAAACAGAGGAGGAGGGTGTTGGCTGTGGAGGTGCAGGGAGGAGAGGCGACTCCCAGGAATGTTCGCCACG
GAGCTGCCCGGAGCTGACGAGTGGCCCGAGAATGTGCCCCAGAAAGGAGCAGGACAGTTGGAGTGAAGCTGGGGG
CATCCTGTTCAAAGGGAAGGTGCCTATGGTGGTCTTGCAGGACATCTTGGCTGTGAGACCACCGCAAATCAAGTC
CCTTCCAGCCACACCCCAAGGCAAGAACATGACCCCTGAGAGTGAGGTGCTGGAATCTTTCCCCGAAGAAGACTC
TGTACTCAGCCATTCGTCCCTGAGCTCTCCCTCTTCCACCAGCTCGCCCGAGGGGCCGCCTGCTCCCCCAAAGCA
GCACAGCAGTACCAGTCCCTTCCCCACCTCCACGCCCCTCCGCAGAATAACTAAGAAATTCGTCAAAGGCTCTAC
AGAGAAGAACAAGCTCAGACTGCAAAGAGATCAGGAGCGTCTGGGCAAGCAGCTCAAGTTACGTGCAGAAAGGGA
AGAAAAGGAGAAGCTGAAAGAGGAGGCCAAGCGGGCCAAGGAGGAGGCCAAGAAGAAGAAGGAGGAAGAGAAGGA
GCTTAAGGAAAAGGAGAGGCGGGAGAAGCGGGAGAAGGATGAGAAGGAGAAGGCGGAGAAGCAGCGGCTCAAGGA
GGAGCGGCGCAAGGAGAGACAGGAAGCCCTGGAGGCTAAACTTGAGGAAAAAAGGAAAAAGGAAGAAGAGAAACG
GTTAAGAGAAGAAGAGAAGCGCATTAAAGCAGAGAAGGCCGAAATCACGAGGTTCTTCCAGAAACCAAAGACTCC
ACAGGCCCCCAAGACCCTGGCCGGCTCCTGTGGGAAGTTTGCCCCCTTTGAAATTAAAGAGCACATGGTCCTGGC
CCCTCGGCGTCGGACCGCTTTCCATCCAGACCTCTGCAGTCAGCTGGACCAGCTCCTCCAGCAGCAGAGCGGCGA
GTTCTCCTTCTTGAAAGACCTCAAAGGCCGGCAGCCCCTGAGGTCCGGACCCACGCACGTTTCCACCCGGAATGC
AGATATTTTTAACAGTGATGTCGTCATCGTGGAGCGTGGGAAGGGCGACGGTGTTCCCGAGAGGAGGAAGTTTGG
CAGGATGAAGCTCCTGCAGTTCTGTGAGAACCACCGGCCTGCCTACTGGGGTACCTGGAATAAGAAGACGGCACT
CATCCGCGCGCGAGACCCCTGGGCCCAGGACACGAAGCTCCTGGACTATGAGGTGGACAGTGATGAGGAGTGGGA
AGAAGAGGAGCCTGGGGAGTCCCTGTCCCACAGTGAGGGGGATGATGATGACGACATGGGAGAGGATGAAGATGA
GGACGATGGTTTCTTTGTGCCCCATGGGTACCTGTCTGAGGACGAAGGTGTGACAGAGGAGTGTGCCGACCCTGA
GAACCATAAGGTCCGCCAGAAACTGAAGGCCAAGGAGTGGGACGAGTTCCTGGCTAAGGGGAAGCGCTTTCGCGT
CCTGCAACCTGTGAAGATCGGCTGCGTGTGGGCGGCTGACAGAGACTGCGCAGGCGATGACCTGAAGGTACTGCA
GCAGTTCGCAGCCTGCTTCCTGGAGACCCTGCCGGCCCAGGAGGAGCAGACGCCCAAGGCCTCCAAGCGGGAGAG
GAGAGACGAGCAGATCCTGGCCCAGCTGCTGCCGCTCCTGCACGGCAATGTGAACGGGAGCAAGGTCATCATCCG
GGAGTTCCAGGAGCACTGCCGCCGGGGACTGCTCAGCAACCACACCGGCAGCCCGCGGAGCCCCTCCACCACCTA
CCTGCACACCCCCACCCCCAGCGAGGATGCCGCCATCCCCTCTAAGTCCCGGCTCAAGCGGCTCATTTCCGAGAA
CTCAGTGTATGAGAAGCGGCCTGACTTCAGGATGTGCTGGTACGTGCACCCGCAGGTGCTACAGAGCTTCCAGCA
GGAGCACCTGCCCGTGCCGTGCCAGTGGAGCTATGTGACATCGGTGCCCTCGGCCCCCAAAGAGGACAGTGGCAG
CGTCCCCTCCACGGGGCCCAGCCAGGGCACTCCCATCTCGCTGAAGAGGAAGTCAGCGGGCAGCATGTGCATCAC
CCAATTCATGAAGAAGCGCAGGCACGACGGCCAGATTGGTGCTGAAGACATGGACGGCTTCCAGGCAGACACGGA
GGAGGAGGAAGAGGAGGAGGGCGACTGTATGATCGTGGATGTCCCGGATGCTGCGGAGGTCCAAGCCCCGTGTGG
AGCCGCTTCCGGAGCTGGGGGTGGTGTGGGGGTGGACACCGGCAAGGCCACCCTGACCTCGAGCCCACTGGGTGC
ATCCTGAGAGCAGGGGTGACGTATGTAGAATGCTTAGGGTGTCCTCCCCACAGAGCAGATACTTGAACCGACTCA
ATTCCTGTGTAAAGAGCACTTTGTCCTGCTTCACGGACCTCCCCAAAGTGTGCAGAGTTCTATATAGGATGCTGG
ATTAGTTCCTTTGATATTTGTAAAAATTCCCCCAAGAGCCGCATATGAATCTGCCCTTTAATAAAGCATTATTGA
GATTGCTGGCCTATTGGGGAAGCCTGCGGGCACAGGA

FIGURE 2469

TTTTCTTCCGGTGGCTGGTCTCCGGCGGCCCCGTCCCCGACTGGGCCCCGTGCCCCCCCGCCCCCGCGGCCCCCC
GCCGCCGGGCCAGCCGCCACCATGAAGAAATTCTTTCAGGAGTTCAAGGCCGACATCAAGTTCAAGAGCGCGGGA
CCCGGTCAGAAGCTCAAAGAGTCCGTGGGGGAAAAGGCCCACAAAGAGAAGCCCAACCAGCCAGCCCCCAGGCCG
CCCCGCCAGGGACCCACCAATGAGGCACAGATGGCAGCCGCTGCCGCCCTAGCCCGGCTGGAGCAGAAGCAGTCC
CGGGCCTGGGGCCCCACATCGCAGGACACCATCCGAAACCAGGTGAGAAAGGAACTTCAAGCCGAAGCCACCGTC
AGCGGGAGCCCCGAGGCCCCAGGGACCAACGTGGTATCTGAGCCCAGAGAGGAAGGCTCTGCCCACCTGGCTGTG
CCTGGCGTGTACTTCACCTGTCCGCTCACTGGGGCCACCCTGAGGAAGGACCAGCGGGACGCCTGCATCAAGGAG
GCCATTCTCTTGCACTTCTCCACCGACCCAGTGGCCGCCTCCATCATGAAGATCTACACGTTCAACAAAGACCAG
GACCGGGTGAAGCTGGGTGTGGACACCATTGCCAAGTACCTGGACAACATCCACCTGCACCCCGAGGAGGAGAAG
TACCGGAAGATCAAGCTGCAGAACAAGGTGTTTCAGGAGCGCATTAACTGCCTGGAAGGGACCCACGAGTTTTTT
GAGGCCATTGGGTTCCAGAAGGTGTTGCTTCCCGCCCAGGATCAGGAGGACCCCGAGGAGTTCTACGTGCTGAGC
GAGACCACCTTGGCCCAGCCCCAGAGCCTGGAGAGGCACAAGGAACAGCTGCTGGCTGCGGAGCCCGTGCGCGCC
AAGCTGGACAGGCAGCGCCGCGTCTTCCAGCCCTCGCCCCTGGCCTCGCAGTTCGAACTGCCTGGGGACTTCTTC
AACCTCACAGCAGAGGAGATCAAGCGGGAGCAGAGGCTCAGGTCCGAGGCGGTGGAGCGGCTGAGCGTGCTGCGG
ACCAAGGCCATGCGGGAGAAGGAGGAGCAGCGGGGGCTGCGCAAGTACAACTACACGCTGCTGCGCGTGCGCCTC
CCCGATGGCTGCCTCCTGCAGGGCACTTTCTACGCTCGGGAGCGGCTGGGGGCGGTGTACGGGTTCGTCCGGGAG
GCCCTGCAGAGCGACTGGCTGCCTTTTGAGCTGCTGGCCTCGGGAGGGCAGAAGCTGTCCGAGGACGAGAACCTG
GCCTTGAACGAGTGCGGGCTGGTGCCCTCTGCCCTCCTGACCTTCTCGTGGGACATGGCTGTGCTGGAGGACATC
AAGGCCGCGGGGGCCGAGCCGGACTCCATCCTGAAACCCGAGCTCCTGTCAGCCATCGAGAAGCTCTTGTGAAAT
AAAAGCAGGGTTGGCCTCAGCCCTGTGGGTCTGTCTCATGCTCTCCCTGTTCCTCTCCCCGCCACCCCAGGGCCT
CCAAGCCACCTCTGGAAATACTTGGCTCTGCCCCATGGGCACGGGAGGGGCGCCAGCCGTGGAGCTGTGGAATTG
GGCCCCGTGGCAGAGCCCCCATCCCTTGGGGGCTGTGGGGATGCGCCCAAGCCCCCGAGGGAGAGGCCTGGGGAC
ACCAAC

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FIGURE 2470

CGCCGCTGCAGCCGCTTTCCGCGGCCTGGGCCTCTCGCCGTCAGCATGCCACACGCCTTCAAGCCCGGGGACTTG
GTGTTCGCTAAGATGAAGGGCTACCCTCACTGGCCTGCCAGGATCGACGACATCGCGGATGGCGCCGTGAAGCCC
CCACCCAACAAGTACCCCATCTTTTTCTTTGGCACACACGAAACAGCCTTCCTGGGACCCAAGGACCTGTTCCCC
TACGACAAATGTAAAGACAAGTACGGGAAGCCCAACAAGAGGAAAGGCTTCAATGAAGGGCTGTGGGAGATCCAG
AACAACCCCCCACGCCAGCTACAGCGCCCCTCCGCCAGTGAGCTCCTCCGACAGCGAGGCCCCCGAGGCCAACCCC
GCCGACGGCAGTGACGCTGACGAGGACGATGAGGACCGGGGGGTCATGGCCGTCACAGCGGTAACCGCCACAGCT
GCCAGCGACAGGATGGAGAGCGACTCAGACTCAGACAAGAGTAGCGACAACAGTGGCCTGAAGAGGAAGACGCCT
GCGCTAAAGATGTCGGTCTCGAAACGAGCCCGAAAGGCCTCCAGCGACCTGGATCAGGCCAGCGTGTCCCCATCC
GAAGAGGAGAACTCGGAAAGCTCATCTGAGTCGGAGAAGACCAGCGACCAGGACTTCACACCTGAGAAGAAAGCA
GCGGTCCGGGCGCCACGGAGGGGCCCTCTGGGGGGACGGAAAAAAAAGAAGGCGCCATCAGCCTCCGACTCCGAC
TCCAAGGCCGATTCGGACGGGGCCAAGCCTGAGCCGGTGGCCATGGCGCGGTCGGCGTCCTCCTCCTCCTCTTCC
TCCTCCTCCTCCGACTCCGATGTGTCTGTGAAGAAGCCTCCGAGGGGCAGGAAGCCAGCGGAGAAGCCTCTCCCG
AAGCCGCGAGGGCGGAAACCGAAGCCTGAACGGCCTCCGTCCAGCTCCAGCAGTGACAGTGACAGCGACGAGGTG
GACCGCATCAGTGAGTGGAAGCGGCGGGACGAGGCGCGGAGGCGCGAGCTGGAGGCCCGGCGGCGGCGAGAGCAG
GAGGAGGAGCTGCGGCGCCTGCGGGAGCAGGAGAAGGAGGAGAAGGAGCGGAGGCGCGAGCGGGCCGACCGCGGG
GAGGCTGAGCGGGGCAGCGGCGGCAGCAGCGGGGACGAGCTCAGGGAGGACGATGAGCCCGTCAAGAAGCGGGGA
CGCAAGGGCCGGGGCCGGGGTCCCCCGTCCTCCTCTGACTCCGAGCCCGAGGCCGAGCTGGAGAGAGAGGCCAAG
AAATCAGCGAAGAAGCCGCAGTCCTCAAGCACAGAGCCCGCCAGGAAACCTGGCCAGAAGGAGAAGAGAGTGCGG
CCCGAGGAGAAGCAACAAGCCAAGCCCGTGAAGGTGGAGCGGACCCGGAAGCGGTCCGAGGGCTTCTCGATGGAC
AGGAAGGTAGAGAAGAAGAAAGAGCCCTCCGTGGAGGAGAAGCTGCAGAAGCTGCACAGTGAGATCAAGTTTGCC
CTAAAGGTCGACAGCCCGGACGTGAAGAGGTGCCTGAATGCCCTAGAGGAGCTGGGAACCCTGCAGGTGACCTCT
CAGATCCTCCAGAAGAACACAGACGTGGTGGCCACCTTGAAGAAGATTCGCCGTTACAAAGCGAACAAGGACGTA
ATGGAGAAGGCAGCAGAAGTCTATACCCGGCTCAAGTCGCGGGTCCTCGGCCCAAAGATCGAGGCGGTGCAGAAA
GTGAACAAGGCTGGGATGGAGAAGGAGAAGGCCGAGGAGAAGCTGGCCGGGGAGGAGCTGGCCGGGGAGGAGCTG
GCCGGGGAGGAGGCCCCCCAGGAGAAGGCGGAGGACAAGCCCAGCACCGATCTCTCAGCCCCAGTGAATGGCGAG
GCCACATCACAGAAGGGGGAGAGCGCAGAGGACAAGGAGCACGAGGAGGGTCGGGACTCGGAGGAGGGGCCAAGG
TGTGGCTCCTCTGAAGACCTGCACGACAGCGTACGGGAGGGTCCCGACCTGGACAGGCCTGGGAGCGACCGGCAG
GAGCGCGAGAGGGCACGGGGGGACTCGGAGGCCCTGGACGAGGAGAGCTGAGCCGCGGGCAGCCAGGCCCAGCCC
CCGCCCGAGCTCAGGCTGCCCCTCTCCTTCCCCGGCTCGCAGGAGAGCAGAGCAGAGAACTGTGGGGAACGCTGT
GCTGTTTGTATTTGTTCCCTTGGGTTTTTTTTTCCTGCCTAATTTCTGTGATTTCCAACCAACATGAAATGACTA
TAAATGGTTTTTTAATG

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FIGURE 2471

GGTGACCCTGTTTGCAGCACGATGTCTGAAGAAGAGGCGGCTCAGATCCCCAGATCCAGTGTGTGGGAGCAGGAC
CAGCAGAACGTGGTGCAGCGTGTGGTGGCTCTGCCCCTGGTCAGGGCCACGTGCACCGCGGTCTGCGATGTTTAC
AGTGCAGCCAAGGACAGGCACCCGCTGCTGGGCTCCGCCTGCCGCCTGGCTGAGAACTGCGTGTGCGGCCTGACC
ACCCGTGCCCTGGACCACGCCCAGCCGCTGCTCGAGCACCTGCAGCCCCAGCGCGCCACAGGTGTCTGCCCCAGC
GTCTTTGGTGTAAGCGGCTTCTTGGTGGGCCTGGACAAGCTGGAAGAGAAGCTTCCCTTTCTCCAGCAACCTTCG
GAGACGGTGGTGACCTCAGCCAAGGACGTGGTGGCCAGCAGTGTCACGGGTGTGGTGGACCTGGCCCGGAGGGGC
CGGCGCTGGAGCGTGGAGCTGAAGCGCTCCGTGAGCCATGCTGTGGATGTTGTACTGGAAAAATCAGAGGAGCTG
GTGGATCACTTCCTGCCCATGACGGAGGAAGAGCTCGCGGCACTGGCGGCTGAGGCTGAAGGCCCTGAAGTGGGT
TCGGTGGAGGATCAGAGGAGACAGCAGGGCTACTTTGTGCGCCTCGGCTCCCTGTCAGCACGGATCCGCCACCTG
GCCTACGAGCACTCTGTGGGGAAACTGAGGCAGAGCAAACACCGTGCCCAGGACACCCTGGCCCAGCTGCAGGAG
ACGCTGGAGCTGGTGAGAGCCCGCTGCCCGCCCCTGCTCCGGGATGCAGGCCAATCAGTATGGATTGAGCACCAG
CTGAATACCGGATCCCGTGCTAGCCTAAAGCAGGAGGCGGAGCTGGCTCTTCCCTCCCCGCAGCAGCCACCAGAG
GGCACCTGTGAGCCCCTGAGTCAGATAGACCACATGCAGTGTGGGGTGACCCCCACCGCCCCGGCCTGCCCTGGG
AAGGTGCACGAGCTGTGGGGGGAATGGGGCCAGCGCCCTCCGGAGAGCCGCCGCCGGAGCCAGGCAGAGCTGGAG
ACGCTGGTGCTGTCCCGCAGCCTGACCCAGGAGCTGCAGGGCACGGTAGAGGCTCTGGAGTCCAGCGTGCGGGGC
CTGCCCGCCGGCGCCCAGGAGAAGGTGGCTGAGGTGCGGCGCAGTGTGGATGCCCTGCAGACCGCCTTCGCTGAT
GCCCGCTGCTTCAGGGACGTGCCAGCGGCCGCGCTGGCCGAGGGCCGGGGTCGCGTGGCCCACGCGCACGCCTGC
GTGGACGAGCTGCTGGAGCTGGTGGTGCAGGCCGTGCCGCTGCCCTGGCTGGTGGGACCCTTCGCGCCCATCCTT
GTGGAGCGACCCGAGCCCCTGCCCGACCTGGCGGACCTGGTGGACGAGGTCATCGGGGGCCCTGACCCCCGCTGG
GCGCACCTGGACTGGCCGGCCCAGCAGAGAGCCTGGGAGGCAGAGCACAGGGACGGGAGTGGGAATGGGGATGGG
GACAGGATGGGTGTTGCCGGGGACATCTGCGAGCAGGAACCCGAGACCCCCAGCTGCCCGGTCAAGCACACCCTG
ATGCCCGAGCTGGACTTCTGA

FIGURE 2472

AGAAGCAAAAGAGCAGAGCTACCATGTCCTCTTGGAGCAGACAGCGACCAAAAAGCCCAGGGGGCATTCAACCCC
ATGTTTCTAGAACTCTGTTCCTGCTGCTGCTGTTGGCAGCCTCAGCCTGGGGGGTCACCCTGAGCCCCAAAGACT
GCCAGGTGTTCCGCTCAGACCATGGCAGCTCCATCTCCTGTCAACCACCTGCCGAAATCCCCGGCTACCTGCCAG
CCGACACCGTGCACCTGGCCGTGGAATTCTTCAACCTGACCCACCTGCCAGCCAACCTCCTCCAGGGCGCCTCTA
AGCTCCAAGAATTGCACCTCTCCAGCAATGGGCTGGAAAGCCTCTCGCCCGAATTCCTGCGGCCAGTGCCGCAGC
TGAGGGTGCTGGATCTAACCCGAAACGCCCTGACCGGGCTGCCCCCGGGCCTCTTCCAGGCCTCAGCCACCCTGG
ACACCCTGGTATTGAAAGAAAACCAGCTGGAGGTCCTGGAGGTCTCGTGGCTACACGGCCTGAAAGCTCTGGGGC
ATCTGGACCTGTCTGGGAACCGCCTCCGGAAACTGCCCCCCGGGCTGCTGGCCAACTTCACCCTCCTGCGCACCC
TTGACCTTGGGGAGAACCAGTTGGAGACCTTGCCACCTGACCTCCTGAGGGGTCCGCTGCAATTAGAACGGCTAC
ATCTAGAAGGCAACAAATTGCAAGTACTGGGAAAAGATCTCCTCTTGCCGCAGCCGGACCTGCGCTACCTCTTCC
TGAACGGCAACAAGCTGGCCAGGGTGGCAGCCGGTGCCTTCCAGGGCCTGCGGCAGCTGGACATGCTGGACCTCT
CCAATAACTCACTGGCCAGCGTGCCCGAGGGGCTCTGGGCATCCCTAGGGCAGCCAAACTGGGACATGCGGGATG
GCTTCGACATCTCCGGCAACCCCTGGATCTGTGACCAGAACCTGAGCGACCTCTATCGTTGGCTTCAGGCCCAAA
AAGACAAGATGTTTTCCCAGAATGACACGCGCTGTGCTGGGCCTGAAGCCGTGAAGGGCCAGACGCTCCTGGCAG
TGGCCAAGTCCCAGTGAGACCAGGGGCTTGGGTTGAGGGTGGGGGGTCTGGTAGAACACTGCAACCCGCTTAACA
AATAATCCTGCCTTTGGCCGGGTGCGGGGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCCAGGTGGGCGGA
TCACGAGGTCAGGAGATCGAGACCATCTTGGCTAACATGGTGAAACCCTGTCTCTACTAAAAATATAAAAAATTA
GCCAGGCGTGGTGGTGGGCACCTGTAGTCCCAGCAACTCGGGAGGCTGAGGCAGGAGAATGGCGTGAACTTGGGA
GGCGGAGCTTGCGGTGAGCCAAGATCGTGCCACTGCACTCTAGCCTGGGCGACAGAGCAAGACTGTCTCAAAAAA
ATTAAAATTAAAATTAAAAACAAATAATCCTGCCTTTTACAGGTGAAACTCGGGGCTGTCCATAGCGGCTGGGAC
CCCGTTTCATCCATCCATGCTTCCTAGAACACACGATGGGCTTTCCTTACCCATGCCCAAGGTGTGCCCTCCGTC
TGGAATGCCGTTCCCTGTTTCCCAGATCTCTTGAACTCTGGGTTCTCCCAGCCCCTTGTCCTTCCTTCCAGCTGA
GCCCTGGCCACACTGGGGCTGCCTTTCTCTGACTCTGTCTTCCCCAAGTCAGGGGGCTCTCTGAGTGCAGGGTCT
GATGCTGAGTCCCACTTAGCTTGGGGTCAGAACCAAGGGGTTTAATAAATAACCCTTGAAAACTGGATCGGATGA
ATTGGCTTTCATTGTGTTCCTAGCATCTTCTCAAATCAACTTCCCAGGACTCCAGGGTGAAGGAGGAAAAGAGGC
ATGGCCCAGGCCCTGGGGTGTGGGATATGGTCTCCCTAGGGGATGACAGTTGGGATCAATGGCCTGTGACTTCTC
CTCTCCCTTCCCCCATCCTGGGACCTAACTGGAAATAAAACCTTGACTGTTGCCCGGGTGTCATTTTACCAGTGG
ATTTCTGCCAGGGCTTGTGTCCTAGGAGAAGGTTTAAGTTAAACCAGATTGCCCAGGTCTCCAAACGATTTGTCA
TGCTGACCTGAGATCATCGAAGGGGGCACCTGCCCCCGGGCAAGGTTGCAGGGGCAGGATGGGGCTGAAGGGATG
AGCAGGGTCCCGGGCCCACCTGCTGATACAGCATTGGCCATGTGGGGGCTGCAATCGGATTTGGAAGACCCTGGG
GCTTGGGGGCATGTCCAGTTTTCCCAGCTCCCTAAAAAATGACCATGCAGCCTGGCGCCGTGGCTCATGCCTGTA
ATCCAAACACTTTGGGAGGCTGAGGCAGGCAGATCACCGGAGGTCAGGAGTTCGAGACCAGACTGGCCAACATGG
CAAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCAGGCACAGTGGCACGTGCCTGTAATACCAGCTACTTGG
GAGGGTCAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCCAAGATCACGCCACTGCACTCC
AGGCTGGGCGACAGAGTGAAACTGTGTCTCAAAAATAAAAATAAAAAT

FIGURE 2473

CCCCGGCCCCGGCTCCGGCGCTGCTCCCACCGCCGCGGCAACGGCCCCGGCCCACGGAGGCGGCTGGACGGACCC
CCGACGGTTGGACGTACGGACTCTGCTTCGAGAGTAGGCCATGGACACCTTCAGCACCAAGAGCCTGGCTCTGCA
GGCGCAGAAGAAGCTCCTGAGTAAGATGGCGTCCAAGGCAGTGGTGGCCGTGCTGGTGGATGACACCAGCAGTGA
GGTGCTGGATGAGCTGTACCGCGCCACCAGGGAGTTCACGCGCAGCCGCAAGGAGGCCCAGAAGATGCTCAAGAA
CCTGGTCAAGGTGGCCCTGAAGCTGGGACTGCTGCTGCGTGGGGACCAGCTGGGCGGTGAGGAGCTGGCGCTGCT
GCGGCGCTTCCGCCACCGGGCGCGCTGCCTGGCCATGACGGCCGTCAGCTTCCACCAGGTGGACTTCACCTTCGA
CCGGCGCGTGCTGGCCGCCGGGCTGCTCGAGTGCCGCGACCTGCTGCACCAGGCCGTGGGTCCCCACCTGACCGC
CAAGTCCCACGGCCGCATCAACCACGTGTTCGGCCACCTAGCCGACTGCGACTTCCTGGCTGCGCTCTACGGCCC
CGCCGAGCCCTACCGCTCCCACCTGCGCAGGATCTGCGAGGGCCTGGGCCGGATGCTGGACGAGGGCAGCCTCTG
AACCCCGGCGCCGCCCAACCGCGCCCCTCGCGCCTTTTGGGGCTCTCCTGCTGGGCGCGGGTGGGGTTTGTGGGT
TTTTTTCCACCTCTTTTCTCCCAATCGGACTCCGGCCAAACTCCCCTAGACAGATGGGTGACCTGTCTCCTTTGA
GAGGATGCTGAGGCATCTGTAGCAGCTGTTTCAAACACCAATGTCACCTCTCCTCCTGGCCCCCGCCCAATGGGG
AGAGGAATTTGGGGCCCTACTCTGGGGACCACCTTTCACCCGTTTGTACTTTCTGGGCCACGCCGACCCCTGGGT
CGCTTGATGTAAAAGCCAAAAGCTGCTGCCTCCCACTTGGATCATGTCGCCTGGGATTTTCATCCCTCGCACAAG
GACTACGGGTTCACACGGTGAACTGGGGGAAGGGAAGTGTTAGGGGGCAAGTCGCGGCACCCCCCCTTCCATAAA
CTCACGTCCTAACCCCCAGGACCTCAGAAGATGATCTGATTTGGAAATAGGATCATTACAGATGGAATTAGTTCA
GATGATCTCATCTTGGAGTAGGGTGGGCCCCAATTCAAGGACTGGGGTCCTTAAAAAAAGGGGGCCTGGGGCAGG
GCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGAGAGGCTGAGGCGGGCGGATCACGAGGTCAGGAGATCGAG
ACCATCCTGGCTAACACGGTGAAACCCCATCTCTACTGAAAATACAAAAAATTAGCTGGGCATGGTGGCACATGC
CTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGATAATCACTTGAACCAGGAGGAGGAGGTTGCAGTGAGCCGA
GATTGTGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTGTCTCAAAAAAAGAAGCGGGGGAGTGGGGGA
TTGAGGCCACGTGCAGTGGCTCACTACTCTAATTCCAGCACTTTGGGAGGCCGAGGCAGGAAGATTGCTTGAACT
CAGAAGTTCAAGACCAGTCTGGGCAACATGGTGAGACCCTCGTCTCTACAAAAAAAAAAATTATCGTGGTGGGCCG
GGCGTGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCAGATCACAAGGTCAAGAGATCGA
GACCATCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGTTGCGTGC
CTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGCAGGTTGCAGGGAGGCG
GAGGTTGCAGTGAGCCGAGATTGCACCACTGCACTTCAGCCTGGTGACAGAGCGAGACTCGTCTCAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAGTGACTGTGGTGGTGCACACGTATAATCCCAGCTACTTGAGAGATGACGAGGGAAGA
TCACTTGAGCCCAGGAGTTAAGAGGCTGCAGTGACCGATGATCATGCCACTGCACTCCAGCTTGGGTGAGAGTGG
GACTCTGTCTT

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FIGURE 2474

GTCTACCCGCCCCTGCCCTGAGGACCCTAGTCCAAC**ATG**GCGGCGCCCAGCGGAGGGTGGAACGGCGTCGGCGCG
AGCTTGTGGGCCGCGCTGCTCCTAGGGGCCGTGGCGCTGAGGCCGGCGGAGGCGGTGTCCGAGCCCACGACGGTG
GCGTTTGACGTGCGGCCCGGCGGCGTCGTGCATTCCTTCTCCCATAACGTGGGCCCGGGGGACAAATATACGTGT
ATGTTCACTTACGCCTCTCAAGGAGGGACCAATGAGCAATGGCAGATGAGTCTGGGGACCAGCGAAGACCACCAG
CACTTCACCTGCACCATCTGGAGGCCCCAGGGGAAGTCCTATCTGTACTTCACACAGTTCAAGGCAGAGGTGCGG
GGCGCTGAGATTGAGTACGCCATGGCCTACTCTAAAGCCGCATTTGAAAGGGAAAGTGATGTCCCTCTGAAAACT
GAGGAATTTGAAGTGACCAAAACAGCAGTGGCTCACAGGCCCGGGGCATTCAAAGCTGAGCTGTCCAAGCTGGTG
ATTGTGGCCAAGGCATCGCGCACTGAGCTG**TGA**CCAGCAGCCCTGTTGCGGGTGGCACCTTCTCATCTCCGGTGA
AGCTGAAGGGGCCCTCCTGGCTCCCAACAGCTTCTCAGTTCCCACTTCCTGCTGAGCTCTTCTGGACTCAGGATC
GCAGATCCGGGGCACAAAGAGGGTGGGGAACATGGGGGCTATGCTGGGGAAAGCAGCCATGCTCCCCCCGACCTC
CAGCCGAGCATCCTTCATGAGCCTGCAGAACTGCTTTCCTATGTTTACCCAGGGGACCTCCTTTCAGATGAACTG
GGAAGAGATGAAATGTTTTTTCATATTTAAATAAATAAGAACATTAAAAAGC

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FIGURE 2475

CTCTTTCCCTTCAGTGTGCCACTGAAGATCCTGGTGTCGCCATGGGCCGCCGCCCCGCCCGTTGTTACCGGTATT
GTAAGAACAAGCCGTACCCAAAGTCTCGCTTCTGCCGAGGTGTCCCTGATGCCAAGATTCGCATTTTTGACCTGG
GGCGGAAAAAGGCAAAAGTGGATGAGTTTCCGCTCTGTGGCCACATGGTGTCAGATGAATATGAGCAGCTGTCCT
CTGAAGCCCTGGAGGCTGCCCGAATTTGTGCCAATAAGTACATGGTAAAAAGTTGTGGCAAAGATGGCTTCCATA
TCCGGGTGCGGCTCCACCCCTTCCACGTCATCCGCATCAACAAGATGTCGTCCTGTGCTGGGGCTGACAGGCTCC
AAACAGGAATGCGAGGTGCCTTTGGAAAGCCCCAGGGCACTGTGGCCAGGGTTCACATTGGCCAAGTTATCATGT
CCATCCGCACCAAGCTGCAGAACAAGGAGCGTGTGATTGAGGCCCTGCGCAGGGCCAAGTTCAAGTTTCCTGGCC
GCCAGAAGATCCACATCTCAAAGAAGTGGGGCTTCACCAAGTTCAATGCTGATGAATTTGAAGACATGGTGGCTG
CTCTGGACAAGTGGTGGGCCCTGCACTCATGAGGGCTTCCAATGTGCTGCCCCCCTCTTAATACTCACCAATAAA
TTCTACTT

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FIGURE 2476

GGTTGGAACTATTGAAGCCCGCTTTCAGGTTCTTTTCCCCATTTTCCCTTTGAAAGGAAGACTTCTGGCTTCTCC
TAAATCTCCGTTCTCTGGGTAAGGGGAGTCCAAGCCTCTGTCATGAGGAACGGAAATGCGAGGGCCTCGGGTGTT
ACTCTAAAATCCGCCCTCAGCTTGCACGCCGGAAGCTGCGATTCCTGCAGCGGAAGAGGCGTGATCTGGCCTTCG
ACTCGCTATGTCCACTAACAATATGTCGGACCCACGGAGGCCGAACAAAGTGCTGAGGTACAAGCCCCCGCCGAG
CGAATGTAACCCGGCCTTGGACGACCCGACGCCGGACTACATGAACCTGCTGGGCATGATCTTCAGCATGTGCGG
CCTCATGCTTAAGCTGAAGTGGTGTGCTTGGGTCGCTGTCTACTGCTCCTTCATCAGCTTTGCCAACTCTCGGAG
CTCGGAGGACACGAAGCAAATGATGAGTAGCTTCATGCTGTCCATCTCTGCCGTGGTGATGTCCTATCTGCAGAA
TCCTCAGCCCATGACGCCCCCATGGTGATACCAGCCTAGAAGGGTCACATTTTGGACCCTGTCTATCCACTAGGC
CTGGGCTTTGGCTGCTAAACCTGCTGCCTTCAGCTGCCATCCTGGACTTCCCTGAATGAGGCCGTCTCGGTGCCC
CCAGCTGGATAGAGGGAACCTGGCCCTTTCCTAGGGAACACCCTAGGCTTACCCCTCCTGCCTCCCTTCCCCTGC
CTGCTGCTGGGGGAGATGCTGTCCATGTTTCTAGGGGTATTCATTTGCTTTCTCGTTGAAACCTGTTGTTAATAA
AGTTTTTCACTCTG

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FIGURE 2477

GCAAGGAAGGAGTCCTGGGAGC**ATG**GCTTTCCCTGAGCCAAAGCCGCGGCCTCCAGAGCTGCCGCAGAAACGGTT
GAAGACGCTGGACTGCGGGCAGGGGGCAGTGCGAGCCGTACGATTTAATGTGGATGGCAATTACTGCCTGACGTG
CGGCAGTGACAAGACGCTGAAGCTGTGGAACCCGCTTCGGGGGACGCTGCTGCGGACGTACAGCGGCCACGGCTA
CGAGGTGCTGGATGCGGCCGGCTCCTTTGACAACAGTAGTCTCTGCTCCGGCGGCGGGGACAAGGCGGTGGTTCT
GTGGGATGTGGCATCAGGGCAGGTCGTGCGCAAATTCCGGGGCCACGCAGGGAAGGTGAACACGGTGCAGTTTAA
TGAAGAGGCCACAGTTATCCTGTCCGGCTCTATTGATTCCAGTATCCGCTGTTGGGATTGCCGCTCACGGAGGCC
TGAGCCAGTGCAGACGCTGGATGAGGCCAGAGATGGCGTGTCCAGTGTGAAGGTGTCAGACCACGAGATCCTGGC
AGGCTCCGTGGATGGCCGCGTGAGACGCTATGACCTAAGGATGGGGCAGCTCTTCTCAGACTACGTGGGCAGCCC
CATCACCTGCACCTGCTTCAGCCGGGATGGGCAGTGCACCCTGGTGTCCAGCCTGGACTCCACATTGCGGCTCCT
GGACAAAGACACAGGGGAGCTGCTGGGCGAGTACAAGGGCCATAAGAACCAGGAATACAAGCTGGACTGCTGCCT
GAGCGAGCGTGACACACATGTGGTCAGCTGTTCTGAGGACGGGAAGGTGTTCTTCTGGGACCTGGTGGAGGGTGC
GCTGGCTCTGGCCCTGCCTGTGGGTTCCGGTGTGGTGCAGTCGCTGGCCTACCACCCAACAGAGCCCTGCCTGCT
GACCGCCATGGGAGGCAGCGTCCAGTGCTGGCGAGAGGAGGCCTATGAGGCAGAGGATGGAGCAGGC**TGA**AGCCA
GGGGACCCACCAACAGGACCAAGGACCGAGACACAGACATGGAAGGACTTCAGATACCATCTTATTCTAGAGACG
TAGCTGACCAAAAAGTAGGGGAGGGGCTGGGTCTGCAAATTAATAAATAGAAGAGGGGGTAAGACCTTCCTGGGA
CCGC

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FIGURE 2478

CTCTTGCGGAGACGCGCGCGTCGGGGTTTAACGCGTTTCTGGGCCGCCGTAAGCCCGGCCTAGGGGCAGCTTTGA
CTCGAGAGCCGGCTATAGGCGC**ATG**GAAGGTTCCCTGGAACGGGAGGCGCCAGCGGGGGCGCTGGCCGCCGTGCT
AAAGCACAGCTCGACGTTGCCGCCCGAAAGCACCCAGGTCCGGGGCTACGACTTCAACCGCGGTGTGAATTACCG
CGCACTGCTGGAGGCCTTCGGCACCACCGGCTTCCAAGCAACCAACTTCGGGCGCGCTGTACAGCAAGTCAATGC
CATGATCGAGAAGAAGCTGGAACCACTGTCACAGGATGAAGACCAGCACGCGGACCTGACCCAGAGCCGCCGCCC
ACTTACCAGCTGCACCATTTTCCTGGGATATACATCCAACCTCATCAGTTCAGGCATCCGTGAGACCATTCGCTA
CCTTGTGCAGCACAACATGGTGGACGTATTGGTGACCACAGCTGGCGGCGTGGAGGAAGACCTCATCAAGTGCCT
GGCGCCCACATACTTGGGCGAGTTTAGCCTCAGGGGGAAGGAGCTCCGGGAGAACGGGATCAATAGGATCGGAAA
CCTGCTGGTGCCCAATGAGAATTACTGCAAGTTTGAGGACTGGCTGATGCCCATTCTGGACCAGATGGTGATGGA
GCAGAACACAGAGGGTGTAAAGTGGACGCCTTCTAAGATGATCGCCCGGCTGGGCAAGGAGATCAACAACCCAGA
GTCCGTGTATTACTGGGCCCAGAAGAACCACATCCCTGTGTTTAGTCCCGCACTTACAGACGGCTCGCTGGGCGA
CATGATCTTCTTCCATTCCTACAAGAACCCGGGCCTGGTCCTGGACATCGTTGAGGACCTGAGGCTCATCAACAC
ACAGGCCATCTTTGCCAAGTGCACTGGGATGATCATTCTGGGCGGGGGCGTGGTCAAGCACCACATTGCCAATGC
CAACCTCATGCGGAACGGGGCCGACTACGCTGTTTACATCAACACAGCCCAGGAGTTTGATGGCTCTGACTCAGG
TGCCCGACCAGACGAGGCTGTCTCCTGGGGCAAGATCCGGGTGGATGCACAGCCCGTCAAGGTCTATGCTGACGC
CTCCCTGGTCTTCCCCCTGCTTGTGGCTGAAACCTTTGCCCAGAAGATGGATGCCTTCATGCATGAGAAGAACGA
GGAC**TGA**GCGGCTGCGGTCCCAGGAAGGTCTTACCCCCTCTTCTATTTATTAATTTGCAGACCCAGCCCCTCCCC
TACTTTTTGGTCAGCTACGTCTCTAGAATAAGATGGTATCTGAAGTCCTT

FIGURE 2479

GACAAGACGCGAGGCCGGCAGCGCCCACCCGGTCGCAATGGAGCTTCCCCTAGGGCGGTGCGATGATTCCCGCAC
CTGGGACGATGACTCGGACCCAGAGTCAGAGACAGACCCAGACGCGCAGGCCAAGGCCTACGTGGCCCGCGTTCT
CAGTCCGCCAAAATCCGGGCTGGCGTTCTCGCGCCCCTCGCAGCTATCCACACCCGCCGCGTCCCCGAGCGCTTC
GGAGCCTCGGGCCGCGTCCAGGGTTTCGGCCGTAAGTGAGCCGGGCCTTCTGAGCCTTCCCCCGGAGCTGCTGCT
CGAGATCTGCTCCTACCTGGACGCCCGCCTCGTGCTCCACGTCCTGTCGCGGGTGTGCCACGCGCTCCGCGACCT
CGTGTCTGACCATGTCACCTGGAGGCTACGCGCGCTACGCCGCGTACGCGCGCCCTACCCAGTGGTGGAAGAGAA
GAACTTTGACTGGCCGGCAGCCTGCATTGCGCTGGAGCAGCACCTGTCCCGCTGGGCAGAGGATGGGCGCTGGGT
CGAATACTTCTGCCTGGCCGAAGGCCACGTGGCTTCCGTTGACTCAGTGCTGCTGCTCCAGGGTGGGTCACTCTG
TCTGTCGGGCTCCCGAGATCGCAACGTCAACTTGTGGGACCTGCGGCAGCTGGGGACGGAGTCCAACCAGGTTCT
GATCAAGACCTTAGGCACTAAGCGAAATAGTACCCATGAGGGCTGGGTGTGGTCACTGGCAGCGCAGGACCACCG
CGTGTGCTCCGGCTCCTGGGACAGCACAGTGAAGCTCTGGGACATGGCAGCGGATGGGCAGCAGTTCGGCGAGAT
AAAGGCCAGCTCAGCCGTGCTGTGCCTCTCCTACCTGCCTGACATCCTGGTGACTGGCACCTATGACAAGAAGGT
GACCATCTACGACCCCAGAGCCGGCCCAGCCCTGTTGAAGCACCAGCAACTACACTCCAGACCCGTGCTGACCCT
GCTGGCGGATGACCGGCACATCATCTCAGGCAGCGAGGACCACACCCTGGTGGTGGTGGACCGCCGAGCCAACAG
CGTCCTGCAGCGTCTGCAGCTGGACTCCTACCTGCTCTGCATGTCCTACCAGGAACCCCAGCTCTGGGCTGGTGA
CAACCAGGGCCTGCTGCACGTCTTCGCCAACCGCAACGGCTGCTTCCAGCTTATCCGGTCCTTTGATGTGGGCCA
CAGCTTTCCCATCACTGGGATCCAGTACTCCGTGGGAGCCTTGTACACCACATCCACTGACAAGACCATCCGGGT
GCACGTGCCCACAGACCCACCAAGGACCATTTGCACCCGAAGGCATGACAATGGGCTCAATAGGGTCTGTGCTGA
GGGCAACCTGGTGGTGGCCGGCTCTGGAGACCTGTCGCTAGAGGTCTGGAGGCTGCAGGCCTGAGCAGGTGGGCG
TGGATGTGGATACTGCCTGCCGGAGGCTGGGCTTCCTCCTCTGTTCTTGGGGGACCATCCCCAATGTTGGTGCTG
CCTCCGCCCCGTGGGCCTAGGGCACAAGGAGTCCCAGCCACATTCGGGTGAGCGTCCTGGCCTGGGCCCTATGCC
CGGGGGAAGGGTGAAATTGGGGTTCAGGCCCACCCAGGGGGCCGCTTCCCACTCTTGGGCCCTGGTTTTGTTATG
ATTTGGATGCCCCGCTCTCAGTTGAGAGCGAAGGAGAAATAAACCTGACATGTTGGTGCTTGG

FIGURE 2480

CTCTCTTTGGCTCCCTCCTTCCGCGCGAGTCTCTGGAGAAGCCGCAGCGCGAGTTGCCGCCGCTGCTGCCCGGGG
CCGGCTTGCCTTGCGCCATGGACTGGCAGCCAGACGAGCAGGGCCTGCAGCAGGTCCTGCAGCTGCTCAAAGACT
CACAGTCGCCCAACACAGCCACTCAGCGCATCGTGCAGGATAAACTCAAACAACTCAATCAGTTTCCTGACTTCA
ACAACTACCTGATTTTCGTCCTGACCAGACTCAAGTCAGAAGATGAGCCAACGCGCTCTCTCAGTGGCCTCATCC
TCAAGAACAACGTGAAGGCACACTATCAGAGCTTCCCACCCCCTGTGGCAGACTTCATCAAACAGGAGTGTCTCA
ACAACATTGGCGATGCCTCCTCGCTCATCCGAGCCACCATTGGCATTCTCATCACCACCATCGCTTCCAAGGGTG
AGCTGCAGATGTGGCCCGAGCTGCTGCCCCAGCTCTGCAACCTGCTTAACTCGGAGGATTACAACACTTGTGAGG
GAGCCTTTGGAGCCCTGCAGAAGATCTGTGAAGACTCATCAGAGCTTCTGGACAGTGACGCCCTCAACAGGCCCC
TCAACATCATGATCCCCAAGTTCCTGCAGTTCTTCAAGCACTGCAGTCCCAAGATCCGGTCCCACGCCATCGCCT
GCGTGAACCAGTTCATCATGGACCGGGCCCAGGCGCTGATGGACAATATTGACACCTTCATCGAGCACCTATTTG
CCCTGGCTGTGGATGATGACCCCGAGGTGCGGAAGAATGTGTGCCGTGCCCTGGTGATGCTTCTGGAAGTGCGGA
TTGACAGGCTCATCCCCCACATGCACAGCATCATCCAGTACATGCTGCAGAGGACCCAGGACCATGATGAGAACG
TTGCCCTTGAGGCCTGTGAGTTCTGGCTGACGCTGGCCGAGCAGCCCATCTGCAAGGAAGTCCTGGCCTCCCATC
TGGTCCAGTTGATCCCCATCTTGGTGAATGGGATGAAGTACTCGGAAATTGACATCATCCTGCTCAAGGGGGATG
TGGAGGAGGATGAGGCTGTCCCCGACAGTGAGCAGGACATCAAGCCACGCTTCCACAAGTCACGCACGGTCACAC
TGCCCCACGAGGCTGAGCGGCCTGATGGCTCCGAGGACGCGGAGGATGACGATGATGATGATGCTCTGTCCGACT
GGAATTTGAGGAAGTGCTCAGCGGCTGCACTGGACGTCCTCGCCAATGTCTTCCGGGAGGAACTGCTGCCCCACC
TACTCCCACTACTCAAAGGCCTCCTCTTCCACCCCGAGTGGGTGGTCAAGGAGTCGGGCATCCTGGTGCTGGGCG
CCATTGCTGAGGGCTGCATGCAGGGCATGGTGCCCTACCTGCCTGAGCTGATCCCGCACCTGATCCAGTGCCTGT
CGGATAAGAAGGCCTTGGTCCGCTCCATCGCCTGCTGGACGCTGAGCCGCTATGCCCACTGGGTGGTCAGCCAGC
CACCCGACATGCACCTCAAGCCCCTGATGACAGAGCTGCTCAAACGCATCCTGGATGGCAACAAGAGGGTACAGG
AGGCGGCCTGCAGTGCTTTTGCCACCCTGGAGGAAGAGGCCTGCACGGAGCTGGTGCCCTACCTCAGCTACATCC
TGGACACCCTTGTCTTTGCCTTTGGGAAATACCAGCACAAGAACCTGCTCATCCTCTATGACGCCATTGGCACCC
TGGCCGACTCTGTAGGCCACCACCTCAACCAGCCGGAATACATCCAGAAGCTGATGCCCCCACTGATCCAGAAGT
GGAATGAGCTCAAGGACGAAGACAAGGACCTCTTCCCCCTGCTGGAGTGTCTGTCATCGGTGGCCACCGCCCTGC
AGAGTGGCTTCCTGCCTTACTGTGAGCCCGTCTACCAGCGCTGTGTCACCCTGGTGCAGAAGACACTGGCTCAGG
CCATGATGTACACCCAGCACCCTGAGCAGTATGAGGCTCCCGACAAGGACTTCATGATCGTAGCACTGGATCTGC
TCAGCGGCCTGGCCGAGGGCCTGGGTGGTCACGTGGAGCAGCTGGTGGCCCGCAGCAACATCATGACATTGCTGT
TCCAGTGCATGCAGGACTCGATGCCTGAGGTCCGGCAGAGCTCCTTTGCCCTCCTGGGAGACCTCACCAAAGCCT
GCTTCATCCATGTCAAGCCCTGTATCGCCGAGTTCATGCCCATTCTGGGCACCAACCTGAACCCAGAGTTCATCT
CCGTCTGCAACAACGCCACCTGGGCCATTGGTGAAATCTGCATGCAGATGGGGGCAGAGATGCAGCCTTATGTGC
AGATGGTCCTCAACAACCTGGTGGAAATCATTAACCGACCCAACACACCCAAGACACTGCTGGAAAACACAGGTC
GCCTGACGAGTCCCTCTGCCATTCCAGCCATCACCATCGGCCGCTTGGGCTACGTGTGCCCCCAGGAGGTGGCAC
CCATGCTGCAGCAGTTCATCCGGCCTTGGTGCACGTCCCTCAGGAACATCAGGGACAACGAGGAGAAGGACTCAG
CCTTCCGCGGCATCTGCATGATGATCGGTGTCAACCCGGGGGGCGTTGTGCAGGACTTTATTTTCTTCTGCGATG
CTGTAGCCTCCTGGGTGAGCCCGAAGGATGACCTTCGGGACATGTTTTATAAGATTCTCCACGGCTTCAAAGACC
AAGTTGGGGAAGATAACTGGCAGCAGTTCTCTGAGCAATTCCCGCCGCTGCTCAAGGAGAGGCTGGCGGCTTTCT
ATGGGGTCTAGGTGATCATGGAGACTGCCAGGTTTCTGTCTGCGTCGTCGTCGGAGGGATTACTGGGGAGTGCGC
TGCATCCGGAAGTCGCTGTGCCCTGGTTGAGGGGGGTTAGGGAGGAG

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FIGURE 2481

GCCAAGCGCGGGGCCGGAGCGGCCTTCCCGGAGTCCTTTGCGCGGCACCTGGCGACAAA**ATG**GCTGCCCGAGGGA
GACGGGCGGAGCCTCAGGGCCGGGAGGCTCCGGGCCCCGCGGGCGGTGGCGGTGGCGGGAGCCGTTGGGCTGAGT
CGGGATCGGGGACGTCGCCCGAGAGCGGGGACGAGGAGGTGTCGGGCGCGGGTTCGAGCCCGGTGTCGGGCGGCG
TGAACTTGTTCGCCAACGACGGCAGCTTCCTGGAGCTGTTCAAGCGGAAGATGGAGGAGGAGCAGCGGCAGCGGC
AGGAGGAGCCGCCCCCGGGTCCGCAGCGACCCGACCAGTCGGCCGCCGCCGCTGGCCCCGGGGATCCGAAGAGGA
AGGGCGGTCCGGGCTCCACACTTAGCTTCGTGGGCAAACGCAGAGGCGGGAACAAACTAGCCCTCAAGACGGGAA
TAGTAGCCAAGAAGCAGAAGACGGAGGATGAGGTATTAACAAGTAAAGGTGACGCGTGGGCCAAGTACATGGCAG
AAGTGAAAAAGTACAAAGCTCACCAGTGCGGTGACGATGATAAAACTCGGCCCCTGGTGAAA**TGA**CGCCCCTCCC
CCACCTGCCCATGGCCTGGGACTCTCTGCGATGTACATAACTATTTAATGCAGCGGCAGCGGCGACAGCCTTCCC
TGAGAGGACTTAAAAGCAGAAGGAAACCGAGATGCTTCCCGCAGCCGTGGACGATTCTCCAGGACTCTTTTTTTA
CCTTGAGCACTTGCCTCGTGAGACTTCATAGAACAGTGGTTTACTGTCCCCCCCTTCTCACCTCCTCATTCTCTC
TGGCTCTTTCTGTCTTCCTCTTCTCACCCTCCTCCCTCCCCTTAGCCATCACTTCTGGGAAGTAAAGAACTTGAC
TTAGTGCCGG

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FIGURE 2482

GCTGGATCACGTGAGCCAGTTCCAAA**ATG**GCGGCAGGGGTGGCCGGGTGGGGGGTTGAGGCAGAGGAGTTCGAAG
ATGCTCCTGATGTGGAGCCGCTGGAGCCTACACTTAGCAACATCATCGAGCAGCGCAGCCTGAAGTGGATCTTCG
TCGGGGGCAAGGGTGGTGTGGGCAAGACCACCTGCAGCTGCAGCCTGGCAGTCCAGCTCTCCAAGGGGCGTGAGA
GTGTTCTGATCATCTCCACAGACCCAGCACACAACATCTCAGATGCTTTTGACCAGAAGTTCTCAAAGGTGCCTA
CCAAGGTCAAAGGCTATGACAACCTCTTTGCTATGGAGATTGACCCCAGCCTGGGCGTGGCGGAGCTGCCTGACG
AGTTCTTCGAGGAGGACAACATGCTGAGCATGGGCAAGAAGATGATGCAGGAGGCCATGAGCGCATTTCCCGGCA
TCGATGAGGCCATGAGCTATGCCGAGGTCATGAGGCTGGTGAAGGGCATGAACTTCTCGGTGGTGGTATTTGACA
CGGCACCCACGGGCCACACCCTGAGGCTGCTCAACTTCCCCACCATCGTGGAGCGGGGCCTGGGCCGGCTTATGC
AGATCAAGAACCAGATCAGCCCTTTCATCTCACAGATGTGCAACATGCTGGGCCTGGGGGACATGAACGCAGACC
AGCTGGCCTCCAAGCTGGAGGAGACGCTGCCCGTCATCCGCTCAGTCAGCGAACAGTTCAAGGACCCTGAGCAGA
CAACTTTCATCTGCGTATGCATTGCTGAGTTCCTGTCCCTGTATGAGACAGAGAGGCTGATCCAGGAGCTGGCCA
AGTGCAAGATTGACACACACAATATAATTGTCAACCAGCTCGTCTTCCCCGACCCCGAGAAGCCCTGCAAGATGT
GTGAGGCCCGTCACAAGATCCAGGCCAAGTATCTGGACCAGATGGAGGACCTGTATGAAGACTTCCACATCGTGA
AGCTGCCGCTGTTACCCCATGAGGTGCGGGGGGCAGACAAGGTCAACACCTTCTCGGCCCTCCTCCTGGAGCCCT
ACAAGCCCCCCAGTGCCCAG**TAG**CACAGCTGCCAGCCCCAACCGCTGCCATTTCACACTCACCCTCCACCCTCCC
CACCCCCTCGGGGCAGAGTTTGCACAAAGTCCCCCCCCATAATACAGGGGGAGCCACTTGGGCAGGAGGCAGGGAG
GGGTCCATTCCCCCTGGTGGGGCTGGTGGGGAGCTGTAGTTGCCCCCTACCTCTCCCACCTCTTGCTCTTCAATA
AAATGATCTTAAACTGC

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FIGURE 2483

GGGAGGTCGGGGCTGCGGGCGCTCGCTGGTGGCGGACCCGGAGGCTGCTGCGGCGCCGGGGCTCCGTGGCCTGGA
TTGAATCCGATCGGGAGCCATGAGCGTGGACAAAGCTGAGCTATGCGGGTCTCTGCTCACCTGGTTACAGACGTT
CCACGTTCCGTCTCCCTGTGCCAGCCCTCAGGACCTGAGCAGCGGCCTTGCCGTAGCCTATGTGCTGAACCAGAT
AGACCCCTCCTGGTTCAACGAGGCATGGCTCCAGGGCATCTCGGAAGATCCAGGTCCCAACTGGAAGCTGAAGGT
CAGCAATCTGAAGATGGTCTTACGGAGCCTAGTAGAGTACTCCCAGGATGTCCTGGCGCATCCTGTGTCAGAAGA
GCATCTCCCAGATGTGAGCCTCATTGGAGAGTTCTCAGACCCGGCAGAGCTCGGCAAGCTGCTTCAGCTGGTGCT
GGGCTGTGCCATCAGTTGCGAGAAAAAGCAGGACCACATCCAGAGAATCATGACGCTGGAAGAATCGGTTCAGCA
TGTGGTGATGGAAGCCATCCAAGAGCTCATGACCAAAGACACTCCTGACTCCCTGTCACCAGAGACGTATGGCAA
CTTTGACAGCCAGTCCCGCAGGTACTATTTCCTAAGTGAGGAGGCTGAGGAGGGGGACGAATTACAGCAGCGCTG
TCTGGATCTGGAGCGGCAGCTGATGCTCCTGTCAGAGGAGAAGCAGAGCCTGGCGCAAGAGAATGCAGGGCTGCG
GGAGCGGATGGGCCGGCCTGAAGGCGAGGGTACCCCAGGTCTCACTGCCAAGAAGCTGCTGCTGCTGCAATCCCA
GCTGGAGCAGTTGCAGGAGGAGAACTTCAGGCTGGAGAGTGGCAGGGAGGATGAGCGCCTGCGCTGTGCCGAGCT
GGAGAGGGAGGTTGCGGAGCTGCAGCACCGGAACCAGGCGCTGACTAGCCTGGCCCAGGAGGCACAGGCCCTGAA
GGATGAGATGGATGAACTACGGCAGTCTTCGGAGCGTGCTGGGCAGCTGGAGGCCACGCTGACCAGTTGCCGGCG
CCGCTTGGGCGAGCTGAGGGAGCTGCGGCGGCAGGTGCGGCAGCTGGAGGAACGCAACGCCGGCCACGCCGAGCG
CACGCGACAACTGGAGGATGAGCTACGCCGAGCGGGCTCCCTGCGCGCCCAGCTGGAGGCGCAGCGGCGGCAGGT
GCAGGAACTGCAGGGCCAGCGGCAGGAGGAGGCCATGAAGGCCGAGAAATGGCTATTTGAATGCCGCAACCTGGA
GGAAAAGTATGAGTCGGTGACAAAGGAGAAGGAGCGGCTGTTGGCGGAGCGGGACTCCTTGCGGGAGGCCAATGA
GGAGCTGCGCTGCGCCCAGCTGCAGCCGCGGGGGTTGACCCAGGCCGATCCCTCACTGGATCCCACCTCCACACC
CGTGGATAACTTAGCCGCAGAGATCCTGCCTGCGGAGCTCAGGGAGACGCTCCTGCGGCTTCAGCTGGAGAACAA
GCGGCTGTGCAGGCAGGAGGCGGCCGACCGGGAGCGGCAGGAGGAGCTGCAGCGCCACCTGGAGGATGCCAACCG
CGCGCGCCACGGGTTGGAGACGCAGCACCGGCTGAACCAGCAGCAGCTATCCGAGCTGCGGGCCCAGGTGGAGGA
CCTGCAGAAAGCCCTGCAGGAGCAGGGGGGCAAGACTGAAGATTCCATTTTGCTGAAAAGGAAGCTGGAGGAACA
TTTGCAGAAGCTTCATGAGGCAGATCTGGAGTTGCAGAGGAAGCGGGAGTACATTGAGGAGCTGGAGCCACCCAC
TGACAGCAGCACAGCCCGGCGGATCGAGGAGCTGCAGCATAACTTGCAGAAGAAGGACGCGGACTTGCGGGCCAT
GGAGGAGCGATACCGCCGCTACGTGGACAAGGCCCGCATGGTCATGCAGACCATGGAACCCAAGCAGCGGCCAGC
TGCGGGGGCACCTCCAGAACTCCATTCCCTGAGGACACAGCTCCGAGAACGGGATGTCCGCATCCGACACCTGGA
GATGGACTTTGAGAAAAGCCGAAGTCAGCGGGAGCAGGAAGAAAAGCTGCTCATCAGTGCCTGGTATAATATGGG
CATGGCCTTGCAGCAGCGAGCTGGGGAGGAGCGGGCGCCTGCCCATGCCCAGTCATTCCTGGCACAGCAGCGGCT
GGCAACCAATTCTCGCCGTGGACCCTTGGGACGCCTGGCATCTCTGAACCTTCGCCCCACTGACAAGCACTGACA
GACCTCACAATCAAGCCAGCCTGGGCTCCACCCACCCTGGCTTCCTCCAGCTCACATGGCGCCCAGCACTGGGCT
TCAGCCAGGTGCTCGAGAGCTTTGAGGCCATGATCTCTGCTCTTCCCTCTCCCAGATTGGTGGGGAGGGAGGGCG
GGAGGTAGATATAGGCCTGTTCTTTTTAGCAATGTGATTCTTGTTGTTGATTCTCTCTCTGGAGTTCATGTGCTG
CCTCAGGAGACTCTGATTTTATATTTGAGAAAAATAAAGGCGTTCAATCTGC

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FIGURE 2484

CCAGCAGGGAGCTGGGAGCTGGGGGAAACGACGCCAGGAAAGCTATCGCGCCAGAGAGGGCGACGGGGGCTCGGG
AAGCCTGACAGGGCTTTTGCGCACAGCTGCCGGCTGGCTGCTACCCGCCCGCGCCAGCCCCCGAGAACGCGCGAC
CAGGCACCCAGTCCGGTCACCGCAGCGGAGAGCTCGCCGCTCGCTGCAGCGAGGCCCGGAGCGGCCCCGCAGGGA
CCCTCCCCAGACCGCCTGGGCCGCCCGGATGTGCACTAAAATGGAACAGCCCTTCTACCACGACGACTCATACAC
AGCTACGGGATACGGCCGGGCCCCTGGTGGCCTCTCTCTACACGACTACAAACTCCTGAAACCGAGCCTGGCGGT
CAACCTGGCCGACCCCTACCGGAGTCTCAAAGCGCCTGGGGCTCGCGGACCCGGCCCAGAGGGCGGCGGTGGCGG
CAGCTACTTTTCTGGTCAGGGCTCGGACACCGGCGCGTCTCTCAAGCTCGCCTCTTCGGAGCTGGAACGCCTGAT
TGTCCCCAACAGCAACGGCGTGATCACGACGACGCCTACACCCCCGGGACAGTACTTTTACCCCCGCGGGGGTGG
CAGCGGTGGAGGTGCAGGGGGCGCAGGGGGCGGCGTCACCGAGGAGCAGGAGGGCTTCGCCGACGGCTTTGTCAA
AGCCCTGGACGATCTGCACAAGATGAACCACGTGACACCCCCCAACGTGTCCCTGGGCGCTACCGGGGGGCCCCC
GGCTGGGCCCGGGGGCGTCTACGCCGGCCCGGAGCCACCTCCCGTTTACACCAACCTCAGCAGCTACTCCCCAGC
CTCTGCGTCCTCGGGAGGCGCCGGGGCTGCCGTCGGGACCGGGAGCTCGTACCCGACGACCACCATCAGCTACCT
CCCACACGCGCCGCCCTTCGCCGGTGGCCACCCGGCGCAGCTGGGCTTGGGCCGCGGCGCCTCCACCTTCAAGGA
GGAACCGCAGACCGTGCCGGAGGCGCGCAGCCGGGACGCCACGCCGCCGGTGTCCCCCATCAACATGGAAGACCA
AGAGCGCATCAAAGTGGAGCGCAAGCGGCTGCGGAACCGGCTGGCGGCCACCAAGTGCCGGAAGCGGAAGCTGGA
GCGCATCGCGCGCCTGGAGGACAAGGTGAAGACGCTCAAGGCCGAGAACGCGGGGCTGTCGAGTACCGCCGGCCT
CCTCCGGGAGCAGGTGGCCCAGCTCAAACAGAAGGTCATGACCCACGTCAGCAACGGCTGTCAGCTGCTGCTTGG
GGTCAAGGGACACGCCTTCTGAACGTCCCCTGCCCCTTTACGGACACCCCCTCGCTTGGACGGCTGGGCACACGC
CTCCCACTGGGGTCCAGGGAGCAGGCGGTGGGCACCCACCCTGGGACCTAGGGGCGCCGCAAACCACACTGGACT
CCGGCCCTCCTACCCTGCGCCCAGTCCTTCCACCTCGACGTTTACAAGCCCCCCCTTCCACTTTTTTTTGTATGT
TTTTTTTCTGCTGGAAACAGACTCGATTCATATTGAATATAATATATTTGTGTATTTAACAGGGAGGGGAAGAGG
GGGCGATCGCGGCGGAGCTGGCCCCGCCGCCTGGTACTCAAGCCCGCGGGGACATTGGGAAGGGGACCCCCGCCC
CCTGCCCTCCCCTCTCTGCACCGTACTGTGGAAAAGAAACACGCACTTAGTCTCTAAAGAGTTTATTTTAAGACG
TGTTTGTGTTTGTGTGTGTTTGTTCTTTTTATTGAATCTATTTAAGTAAAAAAAAAATTGGTTCTTTATTAA

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FIGURE 2485

CGCGGCCCAGGGCTCACTTGGCGCTGAGAACGCGGGTCCACGCGTGTGATCGTCCGTGCGTCTAGCCTTTGCCCA
CGCAGCTTTCAGTCATGGCCTCCGGTAACGCGCGCATCGGAAAGCCAGCCCCTGACTTCAAGGCCACAGCGGTGG
TTGATGGCGCCTTCAAAGAGGTGAAGCTGTCGGACTACAAAGGGAAGTACGTGGTCCTCTTTTTCTACCCTCTGG
ACTTCACTTTTGTGTGCCCCACCGAGATCATCGCGTTCAGCAACCGTGCAGAGGACTTCCGCAAGCTGGGCTGTG
AAGTGCTGGGCGTCTCGGTGGACTCTCAGTTCACCCACCTGGCTTGGATCAACACCCCCCGGAAAGAGGGAGGCT
TGGGCCCCCTGAACATCCCCCTGCTTGCTGACGTGACCAGACGCTTGTCTGAGGATTACGGCGTGCTGAAAACAG
ATGAGGGCATTGCCTACAGGGGCCTCTTTATCATCGATGGCAAGGGTGTCCTTCGCCAGATCACTGTTAATGATT
TGCCTGTGGGACGCTCCGTGGATGAGGCTCTGCGGCTGGTCCAGGCCTTCCAGTACACAGACGAGCATGGGGAAG
TTTGTCCCGCTGGCTGGAAGCCTGGCAGTGACACGATTAAGCCCAACGTGGATGACAGCAAGGAATATTTCTCCA
AACACAATTAGGCTGGCTAACGGATAGTGAGCTTGTGCCCCTGCCTAGGTGCCTGTGCTGGGTGTCCACCTGTGC
CCCCACCTGGGTGCCCTATGCTGACCCAGGAAAGGCCAGACCTGCCCCTCCAAACTCCACAGTATGGGACCCTGG
AGGGCTAGGCCAAGGCCTTCTCATGCCTCCACCTAGAAGCTGAATAGTGACGCCCTCCCCCAAGCCCACCCAGCC
GCACACAGGCCTAGAGGTAACCAATAAAGTATTAGGG

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FIGURE 2486

CGCTCCTGCAGTATTAGTTCTTGCAGCTGGTGGTGGCGGCTGAGGCGGCATGGATCTCAGCGAGCTGGAGAGAGA
CAATACAGGCCGCTGTCGCCTGAGTTCGCCTGTGCCCGCGGTGTGCCGCAAGGAGCCTTGCGTCCTGGGCGTCGA
TGAGGCGGGCAGGGGCCCCGTGCTGGGCCCCATGGTCTACGCCATCTGTTATTGTCCCCTGCCTCGCCTGGCAGA
TCTGGAGGCGCTGAAAGTGGCAGACTCAAAGACCCTATTGGAGAGCGAGCGGGAAAGGCTGTTTGCGAAAATGGA
GGACACGGACTTTGTCGGCTGGGCGCTGGATGTGCTGTCTCCAAACCTCATCTCTACCAGCATGCTTGGGCGGGT
CAAATACAACCTGAACTCCCTGTCACATGATACAGCCACTGGGCTTATACAGTATGCATTGGACCAGGGCGTGAA
CGTCACCCAGGTATTCGTGGACACCGTAGGGATGCCAGAGACATACCAGGCGCGGCTGCAGCAAAGTTTTCCCGG
GATTGAGGTGACGGTCAAGGCCAAAGCAGATGCCCTCTACCCGGTGGTTAGTGCTGCCAGCATCTGTGCCAAGGT
GGCCCGGGACCAGGCCGTGAAGAAATGGCAGTTCGTGGAGAAACTGCAGGACTTGGATACTGATTATGGCTCAGG
CTACCCCAATGATCCCAAGACAAAAGCGTGGTTGAAGGAGCACGTGGAGCCTGTGTTCGGCTTCCCCCAGTTTGT
CCGGTTCAGCTGGCGCACGGCCCAGACCATCCTGGAGAAAGAGGCGGAAGATGTTATATGGGAGGACTCAGCATC
CGAGAATCAGGAGGGACTCAGGAAGATCACATCCTACTTCCTCAATGAAGGGTCCCAAGCCCGTCCCCGTTCTTC
CCACCGATATTTCCTGGAACGCGGCCTGGAGTCAGCAACCAGCCTCTAGCAGCTGCCTCTACGCGCTCTACCTGC
TTCCCCAACCCAGACATTAAAATTGTTTAAGGAG

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FIGURE 2487

GTGAAAGGCGCCAGGTGCCAGTCCTGGCCTCTGATGTAACCCAGCGCCCCGCAGTCCCGACACAGATTCCTGGAT
CTCAGCCCCATAGCAGCTATGATCCCGCTGCTGCTGGCAGCGCTGCTGTGCGTCCCCGCCGGGGCCCTGACCTGC
TACGGGGACTCCGGGCAGCCTGTAGACTGGTTCGTGGTCTACAAGCTGCCAGCTCTTAGAGGGTCCGGGGAGGCG
GCGCAGAGAGGGCTGCAGTACAAGTATCTGGACGAGAGCTCCGGAGGCTGGCGGGACGGCAGGGCACTCATCAAC
AGCCCGGAGGGGGCCGTGGGCCGAAGCCTGCAGCCGCTGTACCGGAGCAACACCAGCCAGCTCGCCTTCCTGCTC
TACAATGACCAACCGCCTCAACCCAGCAAGGCTCAGGACTCTTCCATGCGTGGGCACACGAAGGGTGTCCTGCTC
CTTGACCACGATGGGGGCTTCTGGCTGGTCCACAGTGTACCTAACTTCCCTCCACCGGCCTCCTCTGCTGCATAC
AGCTGGCCTCATAGCGCCTGTACCTACGGGCAGACCCTGCTCTGTGTGTCTTTTCCCTTCGCTCAGTTCTCGAAG
ATGGGCAAGCAGCTGACCTACACCTACCCCTGGGTCTATAACTACCAGCTGGAAGGGATCTTTGCCCAGGAATTC
CCCGACTTGGAGAATGTGGTCAAGGGCCACCACGTTAGCCAAGAACCCTGGAACAGCAGCATCACACTCACATCC
CAGGCCGGGGCTGTTTTCCAGAGCTTTGCCAAGTTCAGCAAATTTGGAGATGACCTGTACTCCGGCTGGTTGGCA
GCAGCCCTTGGTACCAACCTGCAGGTCCAGTTCTGGCACAAAACTGTAGGCATCCTGCCCTCTAACTGCTCGGAT
ATCTGGCAGGTTCTGAATGTGAACCAGATAGCTTTCCCTGGACCAGCCGGCCCAAGCTTCAACAGCACAGAGGAC
CACTCCAAATGGTGCGTGTCCCCAAAAGGGCCCTGGACCTGCGTGGGTGACATGAATCGGAACCAGGGAGAGGAG
CAACGGGGTGGGGGCACACTGTGTGCCCAGCTGCCAGCCCTCTGGAAAGCCTTCCAGCCGCTGGTGAAGAACTAC
CAGCCCTGTAATGGCATGGCCAGGAAGCCCAGCAGAGCTTATAAGATCTAACCCTTATGGCCAGGTGCAGTGGCT
CACGTATGTAATCCCAGCACTTTGGGAAGCCAAGGAGGGAGGATCACTTGAACTCAGGAATTCGAGACCAGCCTG
GGCTACATAGTGAGACCACATCTCTACTAGAACTTAAAAAAAGTTAGCCAGGCACGGTGATAAATGCCTGTAGTC
CCAGCCACTGAAGCCAGAGGATCGATTGAACCAGGGAGATCATGGTCACAGTGAACTATGATTACGCCAACCTGG
GTCACATAGCAAGACTCTGTTTCAAAAAAAAAGGGGGGGCGGGGGACGGGTGGGTGCAGTGGCTCACATCTGTAA
CCCCAGCACTTTGGGAGGCTGAGATGGGCAGATCACTTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGGT
GAAACCCCATATCCATTAAAAATATTTAAAAATTAGCCAGACATGGTGGCACGCGTCTGTGGTCCTAGCTCCTCG
GGAGGCTGAGGCAGGAGAATCGCTTGAACTCGGGAGGCAGAGGTTGTCATGAGCTGAGCTAACACCACGGCACTT
CAGCCTGGGTGACAGAATGAGACTCTGTGTCAAAAAAATAAAAAATAAAAAATCTAAGGGCTCAGGAACCAGTTT
GGACTTGATTTTGAATCCCAGTTCATCCCCTTCCTAGCTGTATGACCTTGATTGTGTGCCTTAACCGCTCTGTGA
CACAGTCTACCTGTCTGCAAAATGGGAAACATAATACCTGCCATCAGGATTGTTGAGGAGTAAATAAATGGAAAT
TGGTG

FIGURE 2488

GGTCGCCGTCGTTGCTCCGCTCGCTCTGAGAGAGCATGGCCCTGAGAGGCGTCTCCGTGCGGCTGCTGAGCCGCG
GACCCGGCCTGCACGTCCTTCGCACGTGGGTCTCGTCGGCGGCGCAGACCGAGAAAGGCGGGAGAACACAGAGCC
AACTGGCTAAGTCCTCGCGTCCCGAGTTTGACTGGCAGGACCCGCTGGTGCTGGAGGAGCAGCTGACCACAGATG
AGATCCTCATCAGGGACACCTTCCGCACCTACTGCCAGGAGAGACTCATGCCTCGCATCCTGTTGGCCAATCGCA
ACGAAGTTTTTCATCGGGAGATCATTTCGGAGATGGGGGAGTTGGGTGTGCTGGGCCCCACCATCAAAGGATATG
GCTGTGCTGGGGTTTCGTCTGTGGCCTATGGGCTCCTGGCCCGAGAGCTGGAGCGGGTGGACAGTGGCTACAGGT
CGGCGATGAGTGTCCAGTCCTCCCTCGTCATGCACCCTATCTATGCCTATGGCAGCGAGGAACAGCGGCAGAAGT
ACCTGCCCCAGCTGGCCAAGGGGGAGCTCCTGGGCTGCTTCGGGCTCACAGAGCCCAACAGCGGAAGTGACCCCA
GCAGCATGGAGACCAGAGCCCACTACAACTCATCCAACAAGAGCTACACCCTCAATGGGACCAAGACCTGGATCA
CGAACTCGCCTATGGCCGATCTGTTTGTAGTGTGGGCTCGGTGTGAAGATGGCTGCATTCGGGGCTTCCTGCTGG
AGAAGGGGATGCGGGGTCTCTCGGCCCCCAGGATCCAGGGCAAGTTCTCGCTGCGGGCCTCAGCCACAGGCATGA
TCATCATGGACGGTGTGGAGGTGCCAGAGGAGAATGTGCTCCCTGGTGCATCCAGCCTGGGGGGTCCCTTCGGCT
GCCTGAACAACGCCCGGTACGGCATCGCGTGGGGCGTGCTTGGAGCTTCGGAGTTCTGCTTGCACACAGCCCGGC
AGTACGCCCTCGACAGGATGCAGTTTGGTGTCCCACTGGCCAGGAACCAGCTGATTCAGAAGAAGCTGGCAGACA
TGCTCACTGAGATTACCCTGGGCCTTCACGCCTGCCTGCAGCTCGGCCGCTTGAAGGACCAGGACAAGGCTGCCC
CCGAGATGGTTTCTCTGCTGAAGAGGAATAACTGTGGGAAAGCCCTGGACATCGCCCGCCAGGCCCGAGACATGC
TGGGGGGGAATGGGATTTCTGACGAGTATCACGTGATCCGGCACGCCATGAACCTGGAGGCCGTGAACACCTACG
AAGGTACACATGACATTCACGCCCTGATCCTTGGGAGAGCTATCACGGGAATCCAGGCGTTCACGGCCAGCAAGT
GAGCCGCTCCATCAGGGGCCCGAAACTCTCAAGCCCCTTTCTGGAGAGATGCCTGGCTGGACCGTAGGAGCGCTG
TGCTCTGAGCTTAGAAAGGGAGGTGGCGGATGGAGTGGGAAGTGAGAGACACTGATTTTTAAATATCAAAATTTC
CCTTCTGAAGTCGTTCAGATGTGTTCCTTAAAAAGAAGATGGAATTCTCTGTAGAGCGTCTCAATCCACTTTTAA
CCATGGATGAGAGCAGACTCCATTTACCCTGAAATAGCAGCTTCTCTTGAGAGGAGAGTGACATGGAAGCAACTC
CGTCTGCTGCAGCTGACCCCCTCACACTGAGTTCACAGTGCGCCCTCCCTCCCTCCCATCTGGGGGTAGTGCCTT
ATGCTGGGTGTTGGAGCAGAGTGAGGGAGAGGAAAATAAAGACCTGCACATCTG

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FIGURE 2489

CTGGAAGGAGTCATGGCGGATGGTCAGGTGGCGGAACTGCTGCTCCGGCGGCTGGAGGCGTCTGATGGCGGCCTG
GACAGCGCCGAGTTGGCGGCTGAGCTGGGCATGGAGCACCAGGCGGTGGTGGGCGCCGTGAAGAGCCTTCAGGCG
CTGGGCGAGGTCATCGAGGCTGAACTTCGGTCCACCAAGCACTGGGAGCTTACTGCGGAGGGCGAGGAGATTGCC
CGGGAGGGCAGCCATGAGGCCCGTGTGTTTCGAAGCATTCCCCCAGAGGGCCTGGCCCAGAGCGAGCTTATGCGA
CTGCCCAGTGGCAAAGTGGGCTTCAGCAAGGCCATGTCCAACAAGTGGATTCGGGTGGACAAGAGTGCGGCTGAC
GGGCCCCGGGTGTTCCGAGTGGTGGACAGCATGGAGGATGAGGTGCAGCGGCGGCTCCAGCTGGTCCGGGGGGGA
CAGGCTGAGAAGCTGGGGGAGAAGGAGAGGAGCGAGCTGAGGAAGAGGAAGCTGTTGGCTGAAGTGACTCTGAAG
ACCTACTGGGTGAGCAAAGGCAGTGCCTTTAGTACCAGCATCTCCAAGCAAGAGACAGAGCTGAGCCCAGAGATG
ATCTCCAGTGGCTCTTGGCGGGACCGGCCCTTCAAGCCCTACAACTTCTTGGCCCACGGTGTCCTCCCCGACAGC
GGCCACCTTCACCCGCTGCTCAAGGTCCGCTCCCAGTTCCGACAGATCTTCCTGGAGATGGGGTTCACCGAGATG
CCGACTGATAACTTCATTGAGAGCTCCTTCTGGAACTTTGACGCCCTCTTCCAGCCCCAGCAGCACCCAGCCCGT
GACCAGCACGACACCTTCTTCCTTCGAGATCCAGCGGAGGCCCTGCAGCTCCCAATGGACTATGTCCAGCGGGTC
AAGCGGACCCACTCTCAGGGCGGCTACGGCTCACAGGGGTACAAGTATAACTGGAAGCTGGACGAGGCCCGGAAA
AACCTACTGCGAACCCACACCACATCAGCCAGCGCCCGTGCGCTCTACCGCCTTGCCCAGAAGAAGCCCTTCACT
CCGGTCAAGTACTTCTCCATCGACCGCGTATTCCGGAATGAGACCCTGGACGCCACGCACCTGGCTGAGTTCCAC
CAGATCGAGGGCGTGGTGGCGGATCATGGTCTCACCTTGGGCCACCTCATGGGCGTTCTGCGGGAGTTCTTCACC
AAGCTGGGTATCACGCAACTCCGCTTCAAGCCAGCCTACAACCCATACACAGAGCCCAGCATGGAGGTGTTCAGC
TACCACCAAGGCCTGAAGAAGTGGGTGGAGGTCGGAAACTCGGGGGTCTTCCGTCCAGAGATGCTGCTGCCCATG
GGGCTTCCCGAGAACGTGTCGGTCATTGCCTGGGGCCTCTCCCTGGAGCGCCCAACGATGATCAAATATGGCATC
AACAATATCCGGGAGCTGGTGGGCCACAAGGTGAACCTGCAGATGGTGTATGACAGTCCCCTGTGCCGCCTGGAT
GCCGAGCCGAGGCCCCCTCCCACACAGGAGGCTGCGTGACATGGGCCACTCTAGGACAGGTCATCCTCCCCGAGT
CCCTGCTGCTGCGCTCCTTTGCATCCCTGGCCAGTGACCTTGTATTTATGAGGCCTCTGTGAGGCCAGCCCCCAC
CTTCCTCTTTCCCACCTGTCCCAGGACCAGAATCCCAGGGACAGAGGACTGGGTAGCAGGTTCCTTCTGTTGTCC
TGTGTGGTGTGTCTACTGTGAGGGTGGGCCCTGAGGAGACCTGTGGGCCACCTATTGTCTAATAAAGTGGGCAGT
TGCCCCCA

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FIGURE 2490

GTCCGTACTGCAGAGCCGCTGCCGGAGGGTCGTTTTAAAGGGCCCGCGCGTTGCCGCCCCCTCGGCCCGCCATGC
TGCTATCCGTGCCGCTGCTGCTCGGCCTCCTCGGCCTGGCCGTCGCCGAGCCTGCCGTCTACTTCAAGGAGCAGT
TTCTGGACGGAGACGGGTGGACTTCCCGCTGGATCGAATCCAAACACAAGTCAGATTTTGGCAAATTCGTTCTCA
GTTCCGGCAAGTTCTACGGTGACGAGGAGAAAGATAAAGGTTTGCAGACAAGCCAGGATGCACGCTTTTATGCTC
TGTCGGCCAGTTTCGAGCCTTTCAGCAACAAAGGCCAGACGCTGGTGGTGCAGTTCACGGTGAAACATGAGCAGA
ACATCGACTGTGGGGGCGGCTATGTGAAGCTGTTTCCTAATAGTTTGGACCAGACAGACATGCACGGAGACTCAG
AATACAACATCATGTTTGGTCCCGACATCTGTGGCCCTGGCACCAAGAAGGTTCATGTCATCTTCAACTACAAGG
GCAAGAACGTGCTGATCAACAAGGACATCCGTTGCAAGGATGATGAGTTTACACACCTGTACACACTGATTGTGC
GGCCAGACAACACCTATGAGGTGAAGATTGACAACAGCCAGGTGGAGTCCGGCTCCTTGGAAGACGATTGGGACT
TCCTGCCACCCAAGAAGATAAAGGATCCTGATGCTTCAAAACCGGAAGACTGGGATGAGCGGGCCAAGATCGATG
ATCCCACAGACTCCAAGCCTGAGGACTGGGACAAGCCCGAGCATATCCCTGACCCTGATGCTAAGAAGCCCGAGG
ACTGGGATGAAGAGATGGACGGAGAGTGGGAACCCCCAGTGATTCAGAACCCTGAGTACAAGGGTGAGTGGAAGC
CCCGGCAGATCGACAACCCAGATTACAAGGGCACTTGGATCCACCCAGAAATTGACAACCCCGAGTATTCTCCCG
ATCCCAGTATCTATGCCTATGATAACTTTGGCGTGCTGGGCCTGGACCTCTGGCAGGTCAAGTCTGGCACCATCT
TTGACAACTTCCTCATCACCAACGATGAGGCATACGCTGAGGAGTTTGGCAACGAGACGTGGGGCGTAACAAAGG
CAGCAGAGAAACAAATGAAGGACAAACAGGACGAGGAGCAGAGGCTTAAGGAGGAGGAAGAAGACAAGAAACGCA
AAGAGGAGGAGGAGGCAGAGGACAAGGAGGATGATGAGGACAAAGATGAGGATGAGGAGGATGAGGAGGACAAGG
AGGAAGATGAGGAGGAAGATGTCCCCGGCCAGGCCAAGGACGAGCTGTAGAGAGGCCTGCCTCCAGGGCTGGACT
GAGGCCTGAGCGCTCCTGCCGCAGAGCTTGCCGCGCCAAATAATGTCTCTGTGAGACTCGAGAACTTTCATTTTT
TTCCAGGCTGGTTCGGATTTGGGGTGGATTTTGGTTTTGTTCCCCTCCTCCACTCTCCCCCACCCCCTCCCCGCC
CTTTTTTTTTTTTTTTTTAAACTGGTATTTTATCTTTGATTCTCCTTCAGCCCTCACCCCTGGTTCTCATCTTTC
TTGATCAACATCTTTTCTTGCCTCTGTCCCCTTCTCTCATCTCTTAGCTCCCCTCCAACCTGGGGGGCAGTGGTG
TGGAGAAGCCACAGGCCTGAGATTTCATCTGCTCTCCTTCCTGGAGCCCAGAGGAGGGCAGCAGAAGGGGGTGGT
GTCTCCAACCCCCCAGCACTGAGGAAGAACGGGGCTCTTCTCATTTCACCCCTCCCTTTCTCCCCTGCCCCCAGG
ACTGGGCCACTTCTGGGTGGGGCAGTGGGTCCCAGATTGGCTCACACTGAGAATGTAAGAACTACAAACAAAATT
TCTATTAAATTAAATTTTGTGTCTC

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FIGURE 2491

GCGCGGCGCGGCGCGCCTGGGCGCTAAGATGGCGGCGGCGTGAGTTGCATGTTGTGTGAGGATCCCGGGGCCGCC
GCGTCGCTCGGGCCCCGCCATGGCCGTCACCATCACGCTCAAAACGCTGCAGCAGCAGACCTTCAAGATCCGCAT
GGAGCCTGACGAGACGGTGAAGGTGCTAAAGGAGAAGATAGAAGCTGAGAAGGGTCGTGATGCCTTCCCCGTGGC
TGGACAGAAACTCATCTATGCCGGCAAGATCTTGAGTGACGATGTCCCTATCAGGGACTATCGCATCGATGAGAA
GAACTTTGTGGTCGTCATGGTGACCAAGACCAAAGCCGGCCAGGGTACCTCAGCACCCCCAGAGGCCTCACCCAC
AGCTGCCCCAGAGTCCTCTACATCCTTCCCGCCTGCCCCCACCTCAGGCATGTCCCATCCCCCACCTGCCGCCAG
AGAGGACAAGAGCCCATCAGAGGAATCCGCCCCCACGACGTCCCCAGAGTCTGTGTCAGGCTCTGTTCCCTCTTC
AGGTAGCAGCGGGCGAGAGGAAGACGCGGCCTCCACGCTAGTGACGGGCTCTGAGTATGAGACGATGCTGACGGA
GATCATGTCCATGGGCTATGAGCGAGAGCGGGTCGTGGCCGCCCTGAGAGCCAGCTACAACAACCCCCACCGAGC
CGTGGAGTATCTGCTCACGGTGAGGTGGGGCTTCCGCCTCCCGGGGAGGCCTTGAGGGAGTACCCGGGCGTCACT
GCCCTGATGGGCGGTTGGGAAGGCAAAACCTGCCCTGAAAAGCCTTTGGGTAGTGATTCTAGCCACTAAAGGCTT
CCCACAGGAGGCTGGATGTGAGTGATGGGTGGGCCTCTGGAGGGCAGGGCCGAGGCCTCATCTGTGTCCTGCCAG
GGCATGGAGGAGGGTGGCAGCAGGAGGTCTGTGCATTAGAACTAAACAGGACCCCTGACAGGGAATTCCTGGGAG
CCCCGAGCCGGAACACGGTTCTGTCCAGGAGAGCCAGGTATCGGAGCAGCCGGCCACGGAAGCAGCAGGAGAGAA
CCCCCTGGAGTTCCTGCGGGACCAGCCCCAGTTCCAGAACATGCGGCAGGTGATTCAGCAGAACCCTGCGCTGCT
GCCCGCCCTGCTCCAGCAGCTGGGCCAGGAGAACCCTCAGCTTTTACAGCAAATCAGCCGGCACCAGGAGCAGTT
CATCCAGATGCTGAACGAGCCCCCTGGGGAGCTGGCGGACATCTCAGATGTGGAGGGGGAGGTGGGCGCCATAGG
AGAGGAGGCCCCGCAGATGAACTACATCCAGGTGACGCCGCAGGAGAAAGAAGCTATAGAGAGGTTGAAGGCCCT
GGGCTTCCCAGAGAGCCTGGTCATCCAGGCCTATTTCGCGTGTGAAAAAAATGAGAACTTGGCTGCCAACTTCCT
CCTGAGTCAGAACTTTGATGACGAGTGATGCCAGGAAGCCAGGCCACCGAAGCCCCCACCCTACCCTTATTCCAT
GAAAGTTTTATAAAAGAAAAAATATATATATATTCATGTTTATTTAAGAAATGGAAAAAAAAATCAAAAATCTTA
AAAAAACAAGCAAACAGTCCAGCTTCCTGTCCTCCTAAAGTGGCCCCTGTTCCCATCTCCCGGGCCAGACAGCTG
TCCCCCCGTCCTCCTCCCCAGCCCAGCCTGCTCAGAGAAGCTGGCAGGACTGGGAGGCGACAGATGGGCCCCTCT
TGGCCTCTGTCCCAGCTCTCTGCAGCCAGACGGAAAGGCGGCTGCTTGCCTCTCCATCCTCCGAAAAACCCCTGA
GGACCCCCCCCCATCCTCTTCTAGGATGAGGGGAAGCTGGAGCCCCAACTTTGATCCTCCATTGGAGTGGCCCAA
ATCTTTCCATCTAGGGCAAGTCCTGAAAGGCCCAAGGCCCCCTCCCCAGTCTAGCCTTGGCCTCCAGCCTGGAGA
AGGGCTAACATCAGCTCATTGTCAAGGCCACCCCCACCCCAGAACAGAACCGTGTCTCTGATAAAGGTTTTGAAG
TGAATAAAGTTTTAAAAACT

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FIGURE 2492

ATGGCGGCGTCCGTGCGACAGGCACGCAGCCTACTAGGTGTGGCGGCGACCCTGGCCCCGGGTTCCCGTGGCTAC
CGGGCGCGGCCGCCCCCGCGCCGCAGGCCGGGACCCCGGTGGCCAGACCCCGAGGACCTCCTGACCCCGCGGTGG
CAGCTGGGACCGCGCTACGCGGCTAAGCAGTTCGCGCGTTACGGCGCCGCCTCCGGGGTGGTCCCCGGTTCGTTA
TGGCCGTCGCCGGAGCAGCTGCGGGAGCTGGAGGCCGAAGAACGCGAATGGTACCCGAGCCTGGCGACCATGCAG
GAGTCGCTGCGGGTGAAGCAGCTGGCCGAAGAGCAGAAGCGTCGGGAGAGGGAGCAGCACATCGCAGAGTGCATG
GCCAAGATGCCACAGATGATTGTGAACTGGCAGCAGCAGCAGCGGGAGAACTGGGAGAAGGCCCAGGCTGACAAG
GAGAGGAGGGCCCGACTGCAGGCTGAGGCCCAGGAGCTCCTGGGCTACCAGGTGGACCCAAGGAGTGCCCGCTTC
CAGGAGCTGCTCCAGGACCTAGAGAAGAAGGAGCGCAAGCGCCTCAAGGAGGAAAAACAGAAACGGAAGAAGGAG
GCGCGAGCTGCTGCATTGGCTGCAGCTGTGGCTCAAGACCCAGCAGCCTCTGGGGCACCCAGCTCCTGA

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FIGURE 2493

TCGATAACAAAGCTGAAATCACATATTTAGGATTTAGGTCTGATTAAAAAATGTTGGGGTGGATGTTCCAACTGG
ATCAGGAGAAAAGAAAATGAAAACAGCCTGGGGAGAGGGAAGCCTGATCTGTTTCCTCACTCGCTTGCTCGTGGA
TGTCATTTTCTGTCTTCTTGGGGGCGGCCAAAAATCGACCGGTGTCGGGGACCAGAGGCGGCCCCGCACGCCCCC
GCGTGTGCGTCCACGGGCGTCTGTGCAGACGGACACTGTGCCGGGGCGAGCTGACAGGAGTTCACGGCTGCGATA
GAACATGGAGATGTCATGGGCGCGACAGAGCCTGGCGGGGATACCAGCAGCGTGTGATGAGTTCCACCCGTTCAT
CGAGGCACTGCTGCCTCACGTCCGCGCTTTCTCCTACACCTGGTTCAACCTGCAGGCGCGGAAGCGCAAGTACTT
CAAGAAGCATGAAAAGCGGATGTCGAAGGACGAGGAGCGGGCGGTGAAGGACGAGCTGCTGGGCGAGAAGCCCGA
GATCAAGCAGAAGTGGGCATCCCGGCTGCTGGCCAAGCTGCGCAAGGACATCCGGCCCGAGTTCCGCGAGGACTT
CGTGCTGACCATCACGGGCAAGAAGCCCCCCTGCTGCGTGCTCTCCAACCCCGACCAGAAGGGCAAGATCCGGCG
GATTGACTGCCTGCGCCAGGCTGACAAGGTGTGGCGGCTGGACCTGGTCATGGTGATTTTGTTTAAGGGGATCCC
CCTGGAAAGTACTGATGGGGAGCGGCTCTACAAGTCGCCTCAGTGCTCGAACCCCGGCCTGTGCGTCCAGCCACA
TCACATTGGAGTCACAATCAAAGAACTGGATCTTTATCTGGCTTACTTTGTCCACACTCCGGAATCCGGACAATC
AGATAGTTCAAACCAGCAAGGAGATGCGGACATCAAACCACTGCCCAACGGGCACTTAAGTTTCCAGGACTGTTT
TGTGACTTCCGGGGTCTGGAATGTGACGGAGCTGGTGAGAGTATCACAGACTCCTGTTGCAACAGCATCAGGGCC
CAACTTCTCCCTGGCGGACCTGGAGAGTCCCAGCTACTACAACATCAACCAGGTGACCCTGGGGCGGCGGTCCAT
CACCTCCCCTCCTTCCACCAGCACCACCAAGCGCCCCAAGTCCATCGATGACAGTGAGATGGAGAGCCCTGTTGA
TGACGTGTTCTATCCCGGGACAGGCCGTTCCCCAGCAGCTGGCAGCAGCCAGTCCAGCGGGTGGCCCAACGATGT
GGATGCAGGCCCGGCTTCTCTAAAGAAGTCAGGAAAGCTGGACTTCTGCAGTGCCCTCTCCTCTCAGGGCAGCTC
CCCGCGCATGGCTTTCACCCACCACCCGCTGCCTGTGCTTGCTGGAGTCAGACCAGGGAGCCCCCGGGCCACAGC
ATCAGCCCTGCACTTCCCCTCCACGTCCATCATCCAGCAGTCGAGCCCGTATTTCACGCACCCGACCATCCGCTA
CCACCACCACCACGGGCAGGACTCACTGAAGGAGTTTGTGCAGTTTGTGTGCTCGGATGGCTCGGGCCAGGCCAC
CGGACAGCCCAACGGTAGCGGCCAGGGCAAAGTCCCGGGGTCATTTTTGCTACCGCCGCCGCCTCCAGTGGCCAG
ACCTGTGCCCCTTCCTATGCCTGATTCCAAATCCACCAGCACTGCCCCAGACGGCGCCGCCTTGACTCCTCCATC
ACCTTCATTCGCAACGACAGGCGCCTCCTCTGCCAACCGGTTTGTCAGCATCGGACCCCGGGACGGCAACTTTCT
GAACATCCCACAGCAGTCTCAGTCCTGGTTCCTCTGATAAGATCGACAAAAGAAAC

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FIGURE 2494

CCACCCCACCCTTGGGCTAAAAGCCCCCAGGCGGGCAGGGGGTGACCCCTGGAGCTAGTTGCGTGTCCCAGAATG
GAGGGTGTTCTGACACCCCACCCTGAGCCGCAAGAGCAGTCCTGGGGCCCTGGACCCCTCTGTACAGTCCGTAGG
AAAAAGTCGGAATGCTCTCGACGGCCTCGTCCCAGCCTGGGACAGGCCCCCTTTCCCCTCTCTCTGCAGGCCAGG
AGGGCCTCCTTCCTGCCACGAGGGAGGGGAGTCGGGCCCCAGGTCGCCCCCGCCCCCAGCCCTGCATGCAGGTGC
CCTCGCTCCGCCCCATCAGTTCCTGCCCCTGCCCCTCATGCAGACTGCCCTGCTGGGGCCGGGCCGGAGGGTGGA
GCAGAAAGGGGACCCCGGAGCCGAGCGAGGAGGACCAGGCAGCCGCCGCTGCCGCGCTAAGCCACCACCTGCGCT
TAGGTAGGCGTCCTGCTCGCCGACTTTCAGTTCCTTGGGAGGGTGTTGGGTGTCGTCCTTTTCAAAAGTGTTTTG
GAGCTTTCTGTGCCCCCCGACTTTCCCCCGCCTCCCCGCCCCCGTCACTGCGCTTCTGTTATACCATCTTTGCCT
GACTCTCTCCGGCTTCTCCATTGAATGGCTAATGTGTATGTGAAATAAAGAAATAAAGAAAAAC

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FIGURE 2495

CTAATTCGGGAAACGTGCACCTTGACTAATTCGGTTTTCTGTGGCTACGAGAGCAGGCTTGGCGGGCGGAGGCGC
CAGCGGATGTCTCATGCAAGGATCGTCTCTGTGGCTAAGCCTCACTTTCCGCTCCGCCCGGGTGCTCTCTAGAGC
CCGGTTTTTCGAGTGGCAGTCTCCAGGGCTGCCGAATACAGCAGCGATGGAGAACGGCACCGGGCCCTACGGAGA
AGAACGTCCACGTGAAGTCCAGGAGACGACAGTCACCGAGGGGGCTGCCAAAATCGCCTTTCCCAGTGCCAACGA
GGTCTTTTATAACCCGGTGCAGGAATTCAATCGGGACCTGACATGTGCTGTGATCACCGAGTTTGCTCGCATTCA
GCTTGGGGCCAAAGGAATCCAGATCAAGGTTCCAGGAGAGAAGGACACGCAAAAAGTGGTCGTGGACTTGTCAGA
GCAAGAGGAGGAAAAGGTTGAACTGAAAGAGAGTGAAAACCTGGCCTCAGGAGACCAACCTCGCACAGCGGCCGT
GGGGGAGATCTGTGAGGAAGGCCTGCATGTGCTGGAAGGCCTGGCAGCTTCAGGCCTACGTTCCATTCGATTTGC
CCTAGAGGTGCCTGGGCTCAGATCTGTGGTTGCAAACGATGCCTCCACCCGGGCTGTGGATCTCATACGCCGGAA
TGTCCAGCTCAATGACGTGGCCCACCTGGTACAGCCGAGCCAAGCAGATGCCCGGATGCTGATGTACCAGCACCA
GAGGGTGTCGGAGAGGTTTGACGTCATCGATCTGGACCCCTATGGCAGCCCAGCCACCTTCCTGGATGCAGCTGT
GCAGGCTGTGAGTGAAGGAGGGTTGCTGTGTGTGACCTGCACAGACATGGCGGTGTTGGCGGGGAACAGCGGGGA
GACGTGCTACAGCAAGTACGGGGCCATGGCCCTCAAGAGCCGGGCCTGCCACGAGATGGCCCTGAGAATCGTCCT
GCACAGCCTGGACCTCCGCGCCAACTGCTACCAGCGCTTCGTGGTGCCGCTGCTCAGCATCAGCGCTGACTTCTA
CGTGCGTGTTTTTGTCCGTGTCTTCACCGGCCAGGCCAAGGTCAAGGCCTCAGCCAGCAAGCAGGCGCTGGTGTT
CCAGTGTGTGGGCTGCGGGGCCTTCCACCTTCAGCGTCTCGGCAAAGCGTCAGGAGTCCCCAGCGGCCGGGCCAA
GTTCTCTGCAGCCTGTGGTCCCCCTGTGACCCCCGAGTGTGAACACTGTGGGCAACGACACCAGCTTGGTGGCCC
CATGTGGGCAGAGCCCATCCATGACCTGGATTTTGTGGGCCGTGTCCTGGAGGCTGTGAGCGCTAACCCCGGCCG
CTTCCACACCTCGGAGCGGATCCGAGGGGTCCTGAGCGTCATCACTGAGGAGCTCCCGGACGTGCCTCTGTACTA
CACCCTGGACCAGCTGAGCAGCACCATCCACTGCAACACACCAAGCCTCCTGCAGTTGCGGTCGGCCCTCCTCCA
CGCTGACTTCCGGGTCTCACTCTCCCACGCCTGTAAGAACGCTGTGAAGACGGATGCCCCTGCCTCTGCCCTCTG
GGACATCATGCGTTGCTGGGAGAAGGAATGTCCGGTGAAACGGGAGCGACTATCAGAGACTAGCCCAGCGTTCCG
CATTCTCAGTGTGGAGCCCAGGCTGCAGGCCAACTTCACCATCCGGGAAGATGCCAACCCCAGCTCCCGACAGCG
AGGACTCAAGCGCTTCCAGGCTAACCCGGAGGCCAACTGGGGTCCCCGGCCTCGTGCCCGGCCAGGGGGCAAGGC
GGCCGACGAAGCTATGGAGGAGAGACGCAGGCTGCTTCAGAACAAGCGGAAGGAGCCGCCGGAAGATGTGGCCCA
GCGGGCTGCCCGGCTCAAGACATTTCCTTGCAAGAGGTTTAAGGAGGGCACCTGTCAACGCGGGGACCAGTGCTG
CTACTCCCACAGCCCCCCGACACCCAGGGTTTCTGCTGATGCTGCCCCTGACTGTCCAGAGACCTCCAACCAGAC
CCCCCCTGGACCTGGGGCTGCCGCTGGGCCAGGCATAGACTGAACCAATAAAGAGATGTCACGTCACCTTC

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FIGURE 2496

ATGTCTCTCGAAGACCCCTTTTTTGTAGTCCGAGGCGAGGTGCAGAAGGCGGTGAACACGGCCCGCGGGCTGTAC
CAGCGCTGGTGCGAGCTCCTGCAGGAAAGCGCGGCGGTCGGACGCGAGGAGCTGGACTGGACGACCAATGAGCTG
CGGAATGGCCTGCGCAGCATCGAGTGGGACCTCGAGGACCTGGAAGAGACCATCGATATAGTGGAAGCCAACCCA
GGCAAGTTCAAGCTCCCAGCCGGGGACCTGCAGGAGAGAAAGGTGTTCGTGGAGCGGATGCGAGAGGCAGTCCAG
GAAATGAAGGACCATATGGTCAGCCCAACAGCCGTAGCATTTTTGGAGAGGAATAACAGAGAGATACTCGCAGGC
AAGCCAGCTGCCCAGAAGTCACCCAGCGACCTGCTGGATGCCAGCGCAGTCTCGGCCACATCTCGCTACATCGAG
GAGCAGCAGGCCACACAGCAGCTGATCATGGATGAACAGGATCAACAGCTGGAGATGGTGTCTGGGAGCATCCAG
GTTCTGAAGCACATGTCCGGCCGCGTTGGAGAAGAGCTGGACGAGCAGGGCATCATGCTGGATGCCTTCGCCCAA
GAGATGGACCACACCCAGTCCCGCATGGACGGGGTCCTCAGGAAGTTGGCCAAAGTATCCCACATGACGAGTGAC
CGCCGACAGTGGTGTGCCATCGCCGTGCTAGTGGGGGTGCTTCTCCTCGTTCTCATCTTACTATTCTCTCTCTGA

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FIGURE 2497

GGTTTGTGTAGAGAGGCGTGAGCGAGCCCGTTGTCCGGAGTGCACCTGCTGCCTGTTCTGTCCCTCCCGGGAGCC
CCCGCCGCTGTCGCCGTCGAGTCGCC**ATG**GAAGTGCAGAAAGAGGCACAGCGCATCATGACCCTGTCGGTGTGGA
AGATGTATCACTCCCGCATGCAGCGCGGTGGCCTGCGGCTGCACCGGAGTCTGCAGCTGTCGCTGGTCATGCGCA
GCGCCCGGGAGCTCTACCTCTCGGCCAAGGTGGAGGCCCTCGAGCCCGAGGTGTCGTTGCCGGCCGCCCTCCCCT
CTGACCCTCGCCTGCACCCGCCCCGAGAAGCCGAGTCCACGGCCGAGACAGCGACCCCCGACGGTGAGCACCCGT
TTCCGGAGCCAATGGACACGCAGGAGGCGCCGACAGCCGAGGAGACCTCCGCCTGCTGTGCCCCGCGCCCCGCCA
AAGTCAGCCGCAAACGACGCAGCAGCAGCCTGAGCGACGGCGGGGACGCTGGACTGGTCCCGAGCAAGAAAGCCC
GTCTGGAAGAAAAGGAAGAAGAGGAGGGAGCGTCATCCGAAGTCGCCGATCGCCTGCAGCCCCCTCCGGCGCAAG
CGGAGGGCGCCTTTCCCAACCTGGCCCGCGTCCTGCAGAGGCGCTTCTCCGGCCTCCTGAACTGCAGCCCCGCGG
CCCCTCCGACGGCGCCGCCCGCGTGCGAGGCAAAGCCCGCTTGCCGCCCGGCGGACAGCATGCTCAACGTGCTCG
TGCGGGCCGTGGTGGCCTTC**TGA**GGACCCCGAGCGGCGCTGCCGGAGCCCAGAGCGCGCGTCGAACCGTCGGCCC
GAGGGCGCAGACCTGAGGCGAGGCCACCCCCCTCCATCCTGGGGGAAGCGCCCGCGAAAACCGTGGAGAGAAGCC
GCCGCCCGGGCTGCTGAGAGGCCCGGAGAGGGACTCTGTCCCCGGGGAGCCATCGCCTTCAGTGTGCAGGGACGG
CACCGAGGAGTCTGAGCCGGGGGCGCGGGCGCCTTCCGCAGAGACCTGCGCCCACAGGTGCTGTCTTAGTGGACT
GGGACGTGAACCTTTCGCTCTCCTTCTGGACTGGGAGAAGGGAGGCTTGGGTGTTGTGTTTTTTGTTTTGTTTGT
TTGTTTGTTTTTAAAGATCTCCTCAGGGTCGGACTTCATTTTGTACTGTGGGCTGTGCTGGCCCTTTCAAGGTTT
TTCAAGAGTTGGTTTTGCGTTTCCAACCTCGGAGAATTCCAGGCACTCCCCTTCCCCCTCCGCTGACATACTTGT
ATAAGCGGTCATCGTTGCGTCATGGGGCAGGCGTGGGGAGCTTCCTGTCGCCTTGCGTGGGTGTGGGGCCTGGGA
GGAGGTCCTGGGGCGTGCACCCGCCCTGGGCAGTGGGGAGGAGAGTGGCCTGAGTTACTTCACCCCCGCGTGCTG
CTGGTTAATGTCCCGCGTCTCTGCACCTTCGGGTGGGAGCGGGGACTGATCTACTTTCACATTCTCAAGTTTTTC
TCATCTGCATTAGAGGTGCCCAGTAGGTTCCCAGGTTCCAGCGTGCCCCTCCCTCAGACACACGGACACAATCAG
CCGAGAAGTTCCTGGTCTGAATCACGAGAATGTGGAGGGGTGGGGGGTGTCAGTGGAAAGGCATAAGGCTGAGCT
GAGACCAGTTGCTGGTGAAACTGGGCCAATCTGGGGAGGGGAACATCCTTGCCAGGGAGTTTCTGAGGGTCTGCT
TTGTTTACCTTTCGTGCGGTGGATTCTTTTTAACTCCGTCTACCTGGCGTTTTGTTAGAAATGTCAGATAGGAAA
ATAAAAACCATTTGAGT

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FIGURE 2498

CGCGCAACTTGCGGCCAAACTTTCCCCCCGGCCTCCCGCGCTCGGATGGCGGCCCGCTGAGTTGGCCGCAGCCCC
CGGGCGAGCGGCGGCCAGGCCAGAGGACGCCCCCTGCGCGGCTCGGGCCGGGCCATGGCCCGCGCGCCCCCGCCG
GGGCCCCAGGGCGGCGGGACGCGAGTCCTCTGGGCCCCCGGCCCGCGCCTCTAGCGTGCCCCTCCCGGCCCCGGG
CCCGGCCCCGCGCACGCGTGGGAAAGTTGGCCTGGAACCGGCCCGACCAGTTCCGCCCGGGCGCGAGGACCGGCC
GCAGGAAGTTGCTGCAAAACTTTTTTGGGGGGTGCAGCCCGTGCCCCCCGCGCGCCGGGGCCGAATGCGCGCCGC
GTAGGGTCCCCCGGGCCGAGAGGGGTGCCCGGAGGGAAGAGCGCGGTGGGGGCGCCCCGGCCCCGCTGCCCTGGG
GCTATGGCCATGGTGACCGGCGGCTGGGGCGGCCCCGGCGGCGACACGAACGGCGTGGACAAGGCGGGCGGCTAC
CCGCGCGCGGCCGAGGACGACTCGGCCTCGCCCCCCGGTGCCGCCAGCGACGCCGAGCCGGGCGACGAGGAGCGG
CCGGGGCTGCAGGTGGACTGCGTGGTGTGCGGGGACAAGTCGAGCGGCAAGCATTACGGTGTCTTCACCTGCGAG
GGCTGCAAGAGCTTTTTCAAGCGAAGCATCCGCCGCAACCTCAGCTACACCTGCCGGTCCAACCGTGACTGCCAG
ATCGACCAGCACCACCGGAACCAGTGCCAGTACTGCCGTCTCAAGAAGTGCTTCCGGGTGGGCATGAGGAAGGAG
GCGGTGCAGCGCGGCCGCATCCCGCACTCGCTGCCTGGTGCCGTGGCCGCCTCCTCGGGCAGCCCCCCGGGCTCG
GCGCTGGCGGCAGTGGCGAGCGGCGGAGACCTCTTCCCGGGGCAGCCGGTGTCCGAACTGATCGCGCAGCTGCTG
CGCGCTGAGCCCTACCCTGCGGCGGCCGGACGCTTCGGCGCAGGGGGCGGCGCGGCGGGCGCGGTGCTGGGCATC
GACAACGTGTGCGAGCTGGCGGCGCGGCTGCTCTTCAGCACCGTGGAGTGGGCGCGCCACGCGCCCTTCTTCCCC
GAGCTGCCGGTGGCCGACCAGGTGGCGCTGCTGCGCCTGAGCTGGAGCGAGCTCTTCGTGCTGAACGCGGCGCAG
GCGGCGCTGCCCCTGCACACGGCGCCGCTACTGGCCGCCGCCGGCCTCCACGCCGCGCCTATGGCCGCCGAGCGC
GCCGTGGCTTTCATGGACCAGGTGCGCGCCTTCCAGGAGCAGGTGGACAAGCTGGGCCGCCTGCAGGTCGACTCG
GCCGAGTATGGCTGCCTCAAGGCCATCGCGCTCTTCACGCCCGACGCCTGTGGCCTCTCAGACCCGGCCCACGTT
GAGAGCCTGCAGGAGAAGGCGCAGGTGGCCCTCACCGAGTATGTGCGGGCGCAGTACCCGTCCCAGCCCCAGCGC
TTCGGGCGCCTGCTGCTGCGGCTCCCCGCCCTGCGCGCGGTCCCTGCCTCCCTCATCTCCCAGCTGTTCTTCATG
CGCCTGGTGGGGAAGACGCCCATTGAGACACTGATCAGAGACATGCTGCTGTCGGGGAGTACCTTCAACTGGCCC
TACGGCTCGGGCCAGTGACCATGACGGGGCCACGTGTGCTGTGGCCAGGCCTGCAGACAGACCTCAAGGGACAGG
GAATGCTGAGGCCTCGAGGGGCCTCCCGGGGCCCAGGACTCTGGCTTCTCTCCTCAGACTTCTATTTTTTAAAGA
CTGTGAAATGTTTGTCTTTTCTGTTTTTTAAATGATCATGAAACCAAAAAGAGACTGATCATCCAGGCCTCAGCC
TCATCCTCCCCAGGACCCCTGTCCAGGATGGAGGGTCCAATCCTAGGACAGCCTTGTTCCTCAGCACCCCTAGCA
TGAACTTGTGGGATGGTGGGGTTGGCTTCCCTGGCATGATGGACAAAGGCCTGGCGTCGGCCAGAGGGGCTGCTC
CAGTGGGCAGGGGTAGCTAGCGTGTGCCAGGCAGATCCTCTGGACACGTAACCTATGTCAGACACTACATGATGA
CTCAAGGCCAATAATAAAGACATTTCCTACCTG

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FIGURE 2499

GGGGCTGCGCCGTACAACTTCCGGCTGTAAAGATGGCGGCTTCCTAGTGAGTCGGCGGCTGATTTAGAAGGAGGT
TCAGGCTACGGTGAGCCGAAGCCACACAGGAGCCATGGAAGTGGCAGAGCCCAGCAGCCCCACTGAAGAGGAGGA
GGAGGAAGAGGAGCACTCGGCAGAGCCTCGGCCCCGCACTCGCTCCAATCCTGAAGGGGCTGAGGACCGGGCAGT
AGGGGCACAGGCCAGCGTGGGCAGCCGCAGCGAGGGTGAGGGTGAGGCCGCCAGTGCTGATGATGGGAGCCTCAA
CACTTCAGGAGCCGGCCCTAAGTCCTGGCAGGTGCCCCCGCCAGCCCCTGAGGTCCAAATTCGGACACCAAGGGT
CAACTGTCCAGAGAAAGTGATTATCTGCCTGGACCTGTCAGAGGAAATGTCACTGCCAAAGCTGGAGTCGTTCAA
CGGCTCCAAAACCAACGCCCTCAATGTCTCCCAGAAGATGATTGAGATGTTCGTGCGGACAAAACACAAGATCGA
CAAAAGCCACGAGTTTGCACTGGTGGTGGTGAACGATGACACGGCCTGGCTGTCTGGCCTGACCTCCGACCCCCG
CGAGCTCTGTAGCTGCCTCTATGATCTGGAGACGGCCTCCTGTTCCACCTTCAATCTGGAAGGACTTTTCAGCCT
CATCCAGCAGAAAACTGAGCTTCCGGTCACAGAGAACGTGCAGACGATTCCCCCGCCATATGTGGTCCGCACCAT
CCTTGTCTACAGCCGTCCACCTTGCCAGCCCCAGTTCTCCTTGACGGAGCCCATGAAGAAAATGTTCCAGTGCCC
ATATTTCTTCTTTGACGTTGTTTACATCCACAATGGCACTGAGGAGAAGGAGGAGGAGATGAGTTGGAAGGATAT
GTTTGCCTTCATGGGCAGCCTGGATACCAAGGGTACCAGCTACAAGTATGAGGTGGCACTGGCTGGGCCAGCCCT
GGAGTTGCACAACTGCATGGCGAAACTGTTGGCCCACCCCCTGCAGCGGCCTTGCCAGAGCCATGCTTCCTACAG
CCTGCTGGAGGAGGAGGATGAAGCCATTGAGGTTGAGGCCACTGTCTGAACCATCCCTGTACATCTGCACCTTCT
TGTGCAAGGAAGTCCTTGGCCTAAAGCCTTGGTTCTCAAACTGGGTTCCTTGGGACCTCCGGGGTGGGGGGGTTC
CAGGAGGCACGTAGGGTACCTTGCAGGGTCCTAGGAGGGAAACCCAGGATTCCAGGAGGGATCCCAGGAACTGTG
GGCACCCATTTTCTGTGTCTCCCAGCCCATTTCCACTCCTAGTTTGTCATGGATAATTTTTGTTCTTCCCTGTGT
GATTTTTGCCATCAAAATAAAAATTTGAGACTCGTTAA

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FIGURE 2500

ATGTGGACCCCCGTGCGGCGCGGGGCAGCCTGGCTGGGAACCCTGCTCGGCCCTGGAGAGGGGCCCCCCGAGCCG
AGGGGAGGAGCGGCGCATGCCCACAAGCCCCCCGCGGGAAGTAGGAAATCGACCGACCAGGCGGTGCGCTTCGGA
CCCAGCCAGGGCATGTGCTCGGAGGCCCGCCTGGCTCGCAGGGCAGTAGAGGAGCTGCTGCGCTGCGGCGCGGAC
CCTAATTTGGTGCTAGAGGACGGCGCAGCGGCTGTGCACTTGGCGGCCGGAGCCCGGCACCCGCGCGGCCTGCGT
TGCCTCGGGGCCCTACTGCGCCAAGGCGGGGACCCCAACGCTCGATCTGTCGAGGCACTGACGCCGCTGCATGTG
GCCGCCGCGTGGGGCTGCCGCCGCGGCCTGGAGCTGCTGCTGAGCCAAGGAGCGGACCCGGCGCTGCGCGACCAG
GACGGACTCCGGCCGCTGGACCTGGCCCTGCAGCAGGGACACCTGGAGTGCGCGCGAGTCCTGCAGGATCTCGAC
ACGCGGACCAGGACCCGGACCCGGATCGGGGCAGAGACTCAGGAGCCCGAGCCTGCACCTGGCACCCCAGGCCTC
TCTGGACCTACCGATGAGACGCTGGACTCCATAGCACTCCAAAAGCAGCCATGCAGAGGTGACAACAGGGACATT
GGCTTGGAGGCTGACCCAGGACCCCCCAGCCTCCCTGTTCCCCTTGAAACTGTGGACAAACATGGGAGCTCGGCG
TCCCCTCCAGGGCACTGGGATTACAGCTCAGACGCCTCTTTCGTCACAGCGGTTGAGGTCTCTGGAGCTGAGGAC
CCAGCCTCGGACACTCCCCCCTGGGCTGGGTCATTGCCACCGACCAGGCAGGGACTTCTGCATGTTGTCCATGCC
AACCAGAGGGTACCTAGGTCTCAGGGCACGGAGGCAGAACTGAATGCCCGTCTGCAGGCCCTGACTCTGACCCCA
CCAAATGCTGCTGGCTTCCAGTCCTCCCCTTCCTCCATGCCTCTCCTGGACAGGAGTCCAGCTCATAGCCCCCCA
CGGACACCAACCCCTGGAGCTTCTGACTGCCACTGCCTGTGGGAGCACCAGACATCCATTGATAGTGACATGGCC
ACGCTCTGGCTGACAGAGGATGAGGCAAGCTCTACAGGTGGCAGGGAACCTGTCGGCCCTTGCCGGCACCTGCCA
GTCTCCACTGTGTCTGACTTGGAGTTGCTGAAGGGACTCCGAGCACTTGGTGAGAATCCTCACCCCATCACACCC
TTCACCAGGCAGTTGTACCACCAGCAGCTGGAAGAAGCCCAGATTGCTCCTGGCCCAGAGTTTTCAGGGCACAGC
CTAGAACTGGCTGCAGCCCTGCGGACGGGCTGTATTCCAGATGTCCAGGCAGATGAAGACGCGCTGGCCCAGCAG
TTTGAGCAGCCAGATCCTGCCAGGAGGTGGCGGGAGGGGGTCGTGAAGTCTAGCTTCACCTATCTGCTGCTGGAC
CCCAGGGAGACTCAGGACCTGCCAGCCCGAGCCTTCTCACTGACCCCAGCTGAGCGCCTTCAGACTTTCATCCGT
GCCATCTTCTACGTGGGCAAAGGGACGAGGGCCCGGCCATATGTCCACCTCTGGGAGGCCCTTGGTCACCATGGG
CGGTCAAGAAAACAGCCCCACCAGGCCTGCCCCAAGGTGCGTCAGATCTTGGACATCTGGGCCAGTGGTTGCGGT
GTTGTGTCCCTACATTGCTTCCAGCACGTGGTCGCTGTGGAGGCTTATACACGGGAGGCGTGTATTGTGGAAGCC
CTAGGGATCCAGACGCTCACCAACCAGAAGCAAGGGCACTGCTATGGAGTGGTGGCAGGCTGGCCACCTGCTCGT
CGCCGGCGCTTGGGGGTGCACCTGCTGCACCGTGCCCTCCTTGTCTTCCTGGCTGAAGGCGAGCGACAGCTTCAT
CCCCAGGACATCCAGGCCCGGGGCTGA

FIGURE 2501

AAAGGGCCGGCTGTTTCGGCGGCCGCGGGATGCCCCTGCGCTGACCGCCAGGGGCAGGTGCCCGCCCGCGTAGAC
GCACCCGGCCTGACCCCGCGCCACCATGTAAACGGCGCCAGCAGGCGGACGCTGGCTTCTCCGCCTGGGACCCCT
CCGCCCCGACCCGGGCCCCGCGGCCCTCGATGAGGACACACC**ATG**CTGACCGGGGTGACCGACGGTATCTTCTGT
TGCCTGCTGGGCACGCCCCCCAACGCCGTGGGGCCACTGGAGAGCGTCGAGTCCAGCGATGGCTACACCTTTGTA
GAGGTCAAGCCCGGCCGCGTGCTGCGGGTGAAGCATGCAGGACCCGCCCCAGCCGCTGCCCCACCTCCACCATCA
TCCGCATCCTCGGATGCAGCCCAGGGGGACCTCTCCGGCTTGGTCCGCTGTCAGCGCCGGATCACCGTGTACCGC
AATGGGCGGTTGCTGGTGGAAAACCTGGGCCGAGCCCCTCGAGCCGACCTCCTACACGGGCAGAATGGCTCTGGG
GAGCCGCCGGCCGCCCTGGAGGTGGAGCTGGCAGATCCGGCGGGCAGCGATGGCCGCTTGGCCCCCGGCAGCGCA
GGCAGCGGCAGCGGCAGTGGCAGTGGTGGGCGGCGGCGGCGAGCCAGGCGCCCCAAGAGGACCATCCATATTGAC
TGTGAGAAGCGCATCACTAGCTGCAAAGGCGCCCAGGCCGACGTGGTGCTCTTTTTCATCCATGGTGTCGGCGGT
TCCCTGGCCATCTGGAAGGAGCAGCTGGACTTCTTTGTGCGCCTAGGCTATGAGGTGGTGGCTCCTGACCTGGCC
GGCCACGGGGCCAGCTCTGCGCCCCAGGTGGCCGCAGCCTACACCTTCTATGCGCTGGCTGAGGACATGCGAGCA
ATCTTCAAGCGCTATGCCAAGAAGCGAAATGTGCTCATTGGCCATTCCTACGGTGTCTCTTTCTGCACATTCCTG
GCACATGAGTACCCAGACCTAGTGCACAAGGTGATCATGATCAATGGCGGGGGCCCTACGGCGCTGGAGCCCAGC
TTCTGCTCAATCTTCAACATGCCCACCTGCGTCCTGCACTGCTTGTCGCCCTGCCTGGCCTGGAGCTTCCTCAAG
GCCGGCTTCGCCCGCCAAGGAGCCAAGGAGAAGCAGCTGTTAAAGGAGGGCAACGCTTTCAACGTGTCATCCTTC
GTACTCCGGGCCATGATGAGCGGCCAGTACTGGCCCGAGGGCGACGAGGTCTACCACGCCGAGCTCACCGTGCCC
GTCCTGCTTGTCCACGGCATGCACGATAAGTTTGTGCCGGTGGAGGAAGACCAGCGCATGGCCGAGATCCTGCTC
CTGGCATTCCTGAAGCTCATCGACGAGGGCAGCCACATGGTGATGCTGGAATGCCCTGAGACGGTCAACACGCTG
CTCCACGAATTCCTGCTCTGGGAGCCCGAGCCCTCGCCCAAGGCTCTACCGGAGCCACTGCCGGCGCCTCCAGAA
GACAAGAAG**TAG**CCGCTGGGCCGGCGGGGCATCGCTTGGTGAGCACAGCCGCAGCAGGAGGAGGCCCGAGCCTGC
GCCAGGTCTGCAGCGCAGACCACCTGGGCGGGCCGTTCGCTCCGGTGGGCGGGGCCAGGTCAGGGAGACGCCCCC
AGGCTGCCTGGGCGGGGCGTGGCATCCGAGGGAGCCCAGCGGACATTCCGCTCTCCGCTTCCGTCCCGCGGGGCC
CATCGGCGTTTTGGGGCCGCAGCCGGGACCCTCACGGAAGATGACCTTGTACAGAAGCTCTCCCTCACCTTCCCC
CCAACGCCACGGCCAAGGCAGGCCCCCCACCCCGCTGTCTTCCGTGTCAGCCGTGCTTGATCCTGGGACCCACGA
GCCCCACAGGGACCCTCGAGGCCCCATCCCGTTATCCGAGACCCTTCCTACCCCCCATTCCTCGGCGCTGGGAGC
TATTTTTGCCCAAGGGGGGGGGATGGGGGGGCTGGCGCCACCGAACCTGCACATCTCAACTTGTAACTCAATAAA
CAGAAGTGACAATCGG

FIGURE 2502

GCGGCTCTGGGCTCCGGAATCGCCCGCAGCCGGTACTGCGGGACCCACTGCGGATATGGCTGTCTTGGCTGGATC
CCTGTTGGGCCCCACGAGTAGGTCGGCAGCGTTGCTGGGTGGCAGGTGGCTCCAGCCCCGGGCCTGGCTGGGGTT
CCCAGACGCCTGGGGCCTCCCCACCCCGCAGCAGGCCCGGGGCAAGGCTCGCGGGAATGAGTATCAGCCGAGCAA
CATCAAACGCAAGAACAAGCACGGCTGGGTCCGGCGCCTGAGCACGCCGGCCGGCGTGCAGGTCATCCTTCGCCG
AATGCTCAAGGGCCGCAAGTCGCTGAGCCATTGAGGATCGCGACGCAGTCGGCGGGACCCTCATGGAAGCATCGC
CCTCGCCTCGGACCTTGCCTGGCGCTATTTTTGCAGGGAGCTGGGGAGCAGGAACGCCTCGGACCTGAGTGCTCT
CCATATTGTGGGGTTGAAGTCTGGATGGGAGCTTGCCAAGTCCCTTTTTAGGCTTTTTAATTAGGAAGCATTTCG
AACCTGCGCAACAGACCAAAGAACAGTACAAAGAACATCCGTGTACCCAGTACCCTGACTACCGACTACCTACAA
CCCGTCCCTGCCCCATCCTGAGTTCTTTTGAAGCTGATCTCAGGCATCGGATTATTTCTTCTGTAAATATTTCAG
AATGTATCTCTCCAAGATGAGAGCTCATTAAAAGACAATTACAAAGCTTATCACATCCAAAAGAATTATCAATAA
TTTTGAAATATTATTAAACGTGTAATAAATGTTCAAAGTTCCACTTGC

FIGURE 2503

GGGAGGTGGTGGCGCCATCAGTGTGGGCTGTGCCGTGGCTGGAAGTTACTGTGAGGCGGCGGCTAAGAAGGCGGC
TCTGGTGGCGGCGGTGGAGGCTGAGGCGGCGGCCGAGGCGGCGACGGAGGAAACAGAAGATGGCAGATTTTTTGA
AAGGACTGCCTGTCTACAACAAAAGCAATTTTAGTCGATTTCACGCGGACTCCGTGTGCAAAGCCTCGAACCGAC
GGCCCTCAGTCTACCTGCCTACCCGCGAGTACCCGTCTGAACAGATCATCGTGACAGAAAAGACAAACATCCTCC
TGCGCTACCTGCATCAGCAATGGGACAAAAAGAACGCTGCCAAGAAGAGAGACCAGGAGCAAGTGGAGCTGGAAG
GCGAGAGCTCCGCACCTCCCCGCAAGGTGGCGCGGACCGACAGCCCAGACATGCACGAGGACACTTAAGACTCTC
AACTCCACAGGCGCCTCCTGCCAGGTCTGCTCCTCGGTCGCCCACCCGCCTGCCCGCCATGTGTAAGCACCCCGC
CCGCCCGCCTCCCTGCCGGCCCATCCACACCCTGCGTCCACACCACTTCCAACCTCATAGGAGCCGATGTATTTA
TTTTCCTTGAGTTTTTATTTATGCTGTAACCTGTATCAAGCGTTGGTTAAAGGGGACATCAGACCCAGTAGTGTG
ATGTTGGTAGATGCTTTTTAAAAAAAACAACATTGTCCCCCCGACCCCCGCCTTCCATCGGGCCAGTTCCCCGAT
TCCTGCCCCCAGTTCTCCAGAGAACCAGAGTGTGTCTGTGAGAGTCTCTAGCGGGGGCTTTACTGTGGCCGGGCG
ACAGGGGCGGGCCCGGGGTGGCCTGACCTACCAGGACAGCCGAGTGGCCTTCTCCCCCCCAACACCGGTCCAGGC
CATTGAGACTCGGTCTTGTCCCACGCTTCGCCCGGAACTTTCCCATGCCCAGGCCTCACTCAGCGTGCACGCACG
TTGGGGAGAAGTCGGCCCTTGGGATCTTTCTCTTGAGTCATTTTATTTTTATCATGGACTAGTGCGTGCTCCGTG
TCCACCCCAATAAAAGGGTCTTTCCTA

FIGURE 2504A

GTGAAAACCAGCCTCTAGATGACATCTGTGATTACTTTGGTGTGAAAATTGCCATGTACTTCGCCTGGCTGGGCT
TCTACACGTCGGCTATGGTATACCCAGCTGTCTTCGGGTCTGTCCTGTACACATTCACAGAGGCTGATCAGACAA
GCCGGGATGTTTCCTGCGTGGTCTTTGCCCTCTTCAACGTGATCTGGTCGACGCTGTTCCTAGAGGAATGGAAGC
GGAGAGGGGCTGAGCTGGCATATAAGTGGGGGACGCTGGACTCACCTGGGGAAGCCGTGGAGGAGCCACGCCCCC
AGTTCAGGGGCGTGCGACGTATCAGCCCCATCACGCGGGCCGAGGAGTTCTACTACCCGCCCTGGAAGCGGCTGC
TCTTCCAGCTGCTTGTGAGCCTCCCCCTGTGCCTGGCGTGCCTCGTCTGTGTCTTCTTGCTCATGCTTGGCTGCT
TCCAGCTGCAGGAGCTGGTGCTGAGCGTGAAGGGGTTGCCCCGTCTCGCCCGATTCCTGCCTAAGGTCATGCTGG
CCCTGCTTGTCAGTGTGAGTGCCGAGGGCTACAAGAAGCTAGCCATCTGGCTCAATGACATGGAAAATTACCGGC
TGGAGAGCGCCTATGAGAAGCACCTCATCATCAAAGTTGTCCTGTTCCAGTTTGTCAACTCGTACCTGAGCCTCT
TCTACATCGGTTTCTACCTCAAGGACATGGAGCGCTTGAAAGAGCTCCTGCTCGTCCTGTCCCTGTCCCAGAGCC
TCGAGCGGCAGCTGCAGGCGGTGCTGGTCCCGCTCGCGGCCCTGCGGTTCCGCCTGCTCCTCCTCTCCCTCCGGG
GCCTCCTGCTCGCGGCCCGGGCCAAAATGCTGGCCACGCTGCTGATCACCCGCCAGTTCCTCCAGAACGTGCGCG
AGGTCCTGCAGCCGCACCTGTACCGGCGCCTGGGCCGCGGCGAGCTGGGCCTGCGGGCCGTCTGGGAGCTGGCCC
GAGCCCTGCTTGGCCTCCTGAGCCTCCGGCGCCCTGCGCCCCGCCGCCTCGAACCCCAGGCGGATGAGGGCGGGG
GCGGCGGCAGCGGGGGCGGGGGCCGCAGGTGCCTCAGCGGGGGCTGCGGGGCGCCGGAGGAGGAGGAGGAGGCGG
CGCTGGTGGAGCGGCGGCGGGCGGGGGAAGGCGGGGAGGAGGGGGACGGGCCTCCAGGGGGCAAGGAGGAGGACG
AGGACGACGAGGAGGAGGAGGACGAGGAGGAAGAGGAGGACGAGGAGGAGGGCGAGGAAGGGGGCCTCCTGGACT
GCGGGCTCCGGCTGAAGAAGGTCAGCTTCGCTGAGCGCGGCGCGGGGCGGCGTCGGCCCGGCCCAAGCCCGGAGG
CCCTCCTGGAGGAAGGGAGCCCCACTATGGTGGAGAAGGGGCTGGAGCCGGGAGTGTTCACCCTGGCCGAGGAGG
ACGACGAGGCGGAGGGGGCTCCCGGCAGCCCTGAACGGGAGCCCCCGGCCATCTTGTTCCGCCGGGCCGGGGGCG
AGGGCCGAGACCAGGGGCCCGACGGGGGCCCGGACCCGGAACCCGGCTCCAACAGCGATTCGACCCGTAGGCAGA
GACGGCAGAACCGGTCGTCTTGGATTGACCCGCCGGAGGAGGAACACTCGCCCCAGCTCACCCAGGCAGAGCTGG
AGAGCTGTATGAAGAAGTACGAGGACACGTTCCAGGACTACCAGGAGATGTTCGTGCAGTTCGGCTACGTTGTGC
TCTTCTCGTCCGCCTTCCCCCTGGCGGCGCTGTGCGCCCTGGTCAACAACCTCATTGAGATCCGCAGCGACGCCT
TCAAGCTGTGCACCGGGCTGCAGCGGCCCTTCGGCCAGCGCGTGGAAAGCATCGGCCAGTGGCAGAAGGTGATGG
AGGCCATGGGTGTCCTAGCGATTGTGGTCAACTGCTACTTAATCGGCCAGTGCGGGCAGCTGCAGCGCCTCTTCC
CCTGGCTGAGCCCGGAGGCAGCCATCGTGTCGGTGGTAGTGCTCGAGCACTTCGCTCTGCTCCTCAAGTACCTCA
TCCACGTGGCCATCCCCGATATCCCGGGCTGGGTGGCCGAGGAAATGGCCAAGCTGGAGTACCAGCGCCGCGAGG
CCTTTAAGAGACACGAGCGCCAGGCCCAGCATCGCTACCAGCAGCAGCAGCGCAGGCGGCGGGAGGAGGAGGAGC
GACAGCGCCATGCAGAGCACCATGCCCGGCGGGAGCATGATTCTGGTGGCCGAGAGGAGGCGAGGGCCGAGGGCT
CTGGGCTGGACCCTGCCACCTCCTCCGAGAAGGCCTCTGCCAAGGCCAAGGGCAGCACTGCGGGTGGCCACGGGC
CTGAACGGCCCAAGCGCCCAGGGTCCCTGCTGGCACCCAACAACGTCATGAAGTTGAAGCAGATCATCCCACTGC
AGGGCAAATTCCTCTCGTCAGGGGCCACATCCTCACTGGCTGCTGCAGGGGCCGGAGCCACCACCCGGCCTCCCC
CTGCCCAGTCACCCACAGGCAGCGACACCCGCCTGCCTGCCTTCCTCAGCTTCAAGTTCCTCAAGTCACCCGAGA
CCCGGCGGGACTCTGAGCGCAGCCACTCACCGCCCAAAGCCTTCCATGCTGGCAAGCTCTTCCCCTTTGGTGGCA
CCCGGGCTGAGCCTGGGTCCAACGGGGCGGGCGGGCAGGCCCGGCCAGATGGGACCCCCAGCAGTGGCAGCAGCC
GGGTTCAGAGGAGTGGGCCGGTGGACGAGGCCCTGGCTGAGGAGCTGGAAGCCCCCCGGCCCGAAGAGGAAGGCT
CAGGTCACAAGCTTTAACTCGGGGGTGGGGACGCCGGGCCGGCTTTGGGGATAGGGTAGGGTGGCCAGGCCTGGG
GAGAGGGGCTGAAGGGGACAGGGGAAGCCCGGTCTTAGGTCCTGGTGGGGACCTGGGTCAGTGGTACGTGGAGCC
TCTCAGTTAAAGCCTGCTTAGTATCTCCAGGGCCTTTGTTAGCCTGGAGCCCCGTGCCTGACCCTCCCCAGGGAG
GGATGCCAAAGCCCCTTGTCCCAGGACTGCACCCAGGGACCCCCACCATGCTCCGGTGCCAGGAGAGATGAGGGA
GGCCTGTTTCCCAACCAGCCCACCCTTCTCCTGCTCCAGCTCACTCTTGGGGGGGACTTGACCCCCCAGGCCTCT
ATGCAAATCCACACCCTGCAGCCCAGCTGTTCAGGAAGGCCTTCCTCGAGGTGGGGCTGGGGCTGCCCACCCAGG
GAGCTCCCACATGTGCTGAGCAGAGGTGCAGGCCTCACCCCTACCCTCCCACCCCCACCACCTCCCCTGCCCCAA
TCCCAGCCTGGGCTCCAGCAACCCCATTCCCAGGGAGCCCAACAGGTGGCAGCTGCAGCACAAGGGCCATAGGTC
AGAAGCCAGAGGGACTTCCTCAAACTGTCCTCCCCCTGTGACCGGCAGGGCCGTGCCCAGAGGCAGGGTATGCAC
CGGAAGCCGCCCAGGGGGCCGCCCCACCTCAGTCTCTGATCAGAAGCAATAAGGCCTTTATGTGCCTGGATGCCC
GGGAGGGAGCGCGGGCAGGGTTGCCAGCCCGGCGGGGTCCGGCGGGGGCGGCATCCCCCCGGAACGGCCCCTCTC

FIGURE 2504B

GCCTCCGCAGGGACAGCGCTGGCCCCCGTGGGCGCCCCTGCCCTCCGCACCCGCCGCAGCCGGAGCCCCGCGCCG
CCGCCGCCAATGCCGCTGCCCCGGCCCCCGACACCGCCCGCAGGCTGCTGGCAGTGGGACGGGCCCTGGGGCTGC
GGGGGCGAGGGTGCCGCCCCCCGCCAGGCCCTGGCCGCTGCCGAGTGCCCACCCTGTGCCATGGCCGGGCCCCCA
CCCGCCCCCCAGCCCCTGCCGGGAGACGCCAGCTTTTACAGCCTCCCGCCCCCACCGCTACCGCCCACCTCGGAT
CCCCTCGAGACCCCAGCGCCCTCCCCTAGCCCCAGCCCCAGCCCCCAGGCCGTGTGCTGGCCCAGCGGCTGGCAT
TAGCTCTACCCGCCCTGCCTTCTCTTCTCATATGCAATATCAGTCATTCACAGGGGCGGCCGGTCTCCAAAATGC
AAAATGCGCTTCAGCCCCCGAGGGCCCCCAGTATTGGTCGGTGCCCCCCATCTGCCGTTTTCCTTTCCAAACGAA
AGGAAACCCACAAATCCAACAGAAAACACACACACACACACACACACACACACACACAGAACAGGCGATTATTTA
TTTGTTTTTAATTTATTTTGTCATATTTTTGTAAAACGGCAGAAATGCAATAAAAACTATATTTCAACAGTG

FIGURE 2505

GCCCAGACTTGAAGCCACACAGGCAGGTCGGGCAGGCGGGTCGCAGGTTGTAAATCCATGTGGCGGGGGCTTTGG
ACCCTGGCGGCCCAAGCGGCACGTGGGCCTCGCAGATTGTGCACGCGCCGGAGCAGCGGCGCACCAGCCCCCGGC
TCCGGCGCCACCATCTTCGCGCTAAGCTCTGGCCAAGGCCGCTGCGGCATCGCAGTGATCCGGACCAGCGGCCCC
GCCAGCGGCCACGCCCTCCGAATTCTCACAGCACCCCGAGACCTGCCCCTTGCTCGCCACGCCAGCCTGCGCCTG
CTCAGCGATCCCCGCTCCGGGGAGCCTCTGGACCGCGCACTGGTGCTCTGGTTCCCAGGTCCCCAGAGTTTCACC
GGTGAGGACTGCGTGGAGTTCCACGTGCATGGAGGCCCGGCAGTGGTGAGCGGCGTCCTGCAGGCCTTGGGCAGC
GTGCCAGGGCTTCGACCGGCGGAGGCAGGCGAGTTCACCAGACGGGCGTTCGCCAATGGGAAGCTGAACCTGACC
GAAGTGGAGGGGCTGGCGGACCTTATCCACGCGGAAACAGAGGCGCAGCGGCGGCAGGCCCTCAGGCAGCTGGAC
GGAGAGCTGGGCCACCTCTGCCGTGGCTGGGCCGAGACCCTCACCAAAGCTCTGGCCCACGTGGAGGCCTATATC
GATTTCGGCGAGGATGACAACCTGGAGGAGGGGGTCCTGGAGCAAGGTGGGTCTACCTGGTGGTGGGGGAGGAAG
ACACCTCATATCAGCCCTCAAAGGCTCCCCTCACTGTCTCTCTCTGCCTGCCTTCTCTCACCCACAGCCGACATC
GAAGTACGGGCACTGCAGGTGGCCCTGGGTGCACATCTACGAGATGCCAGGCGCGGGCAGAGGCTCCGCTCAGGG
GTGCACGTAGTGGTCACTGGACCCCCCAATGCGGGCAAGAGCAGCCTAGTGAACCTGCTCAGTCGGAAGCCTGTG
TCCATCGTGTCCCCGGAGCCAGGGACCACCCGTGACGTGCTGGAGACCCCAGTCGACCTGGCCGGATTTCCTGTG
CTGCTGAGCGACACGGCTGGGTTGCGGGAGGGCGTGGGGCCCGTGGAGCAGGAGGGCGTGCGGCGCGCCCGGGAG
AGGCTAGAGCAGGCTGACCTCATTCTGGCCATGCTGGATGCTTCTGACCTGGCCTCTCCCTCCAGTTGCAACTTC
CTGGCCACCGTCGTAGCCTCTGTGGGAGCCCAGAGCCCCAGTGACAGCAGCCAGCGCCTCCTCCTGGTGCTGAAC
AAGTCGGACCTGCTGTCCCCGGAGGGCCCAGGTCCCGGTCCTGACCTGCCCCCGCACCTGCTGCTGTCCTGTCTG
ACGGGAGAGGGGCTGGACGGCCTCCTGGAGGCGCTGAGGAAGGAGCTAGCTGCAGTGTGTGGGGACCCGTCCACA
GATCCCCCGCTGCTGACCCGAGCAAGGCACCAGCACCACCTCCAGGGTTGCCTGGATGCCCTCGGCCACTACAAG
CAGTCAAAAGACCTGGCCCTGGCGGCAGAGGCGCTGCGGGTGGCCCGGGGTCACCTGACCCGGCTCACAGGTGGA
GGGGGTACCGAGGAGATCCTGGACATCATCTTCCAGGACTTCTGTGTGGGCAAGTGACGGGATCCAGGGAAGTCG
CACCCAAGCTGCGTGGAGACCCAGGAGCCTCGGGGGATCTGGAAACAGTTTAGGCCAATTGGGATTCTCATTCGC
CTGGGAAAGAACTTGATTCTCAAATAGTGAAGCAACACAGCTGAGAGGTAGTGAGATCCCTGCAGGGACTCCCTG
GAGATTCAGGCCCTGGAATGGGGCTGAATGGAGGTCCCGTTCGACCCTTGATGCTGGGGCATCCGGGTTGGGATG
GAGATAGGAGGATCTCAGTATATTTGTTTCGTAGTTTTTTATTTATTTTGCAAATACCAAAGGAATGTAAAAAAA
ACTCAGGTGATCTAGAAGTGTTTATTTTCTTCCCTTCCCTTCCCTTCCCTTTCCTTTTCCCTTTCCCTTTCCCCT
TCCCCTTCCCCTTCCCCTTCCCCTACCCTTCCCTCCTCTGTCTATTGCCCAGGCTGGAGTGCAGTGGTGCGACCT
TGGCTCACTGCAACCTCCATCTCCGGGGCTCAAGCGCTTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTACAG
GCATGTGCCAGCATGCCCGGCTAATTTTTTTCTTTTTTTGAGACAGAGTCTCGCTCTGTCACCCAGGCTGGAGTT
CAGTGGTGCGACCTCGGCTTACTGCAACCTCCACCTCCCGGGTTCAAGTGATTCTCCTGCCTCAGCCTCTTGAGT
AGCTGGGACTACAGGCGCACACCACCACGCCAGGCTAATTTTTGTATTTTTAGTAGAGACAAGGTTTCACCATGT
TGACCAGGCTGGTCTTGAACTCCTTGACCTCAGGTAATCTGCCTACCTTGGCCTCCCAAAGTGCTGGGATCACAG
GCGTGAGCTATCACACCTGGCCCCAGAAGTGTTTCAACATGGAAATTTTCCTTAGCCCTTCTGTGGTTGTCATGG
CTTAATGTGTGTCTTTCCAGAACTTTGAATGTTTGCATACTTGTGGATGTACCTTTCAAATATGTTTGTCTTGTG
TATCATATATAAATGGTATTGTGTT

FIGURE 2506

GGTGAGCAGGGACGGTGCACCGGACGGCGGGATCGAGCAAATGGGTCTGGCCATGGAGCACGGAGGGTCCTACGC
TCGGGCGGGGGGCAGCTCTCGGGGCTGCTGGTATTACCTGCGCTACTTCTTCCTCTTCGTCTCCCTCATCCAATT
CCTCATCATCCTGGGGCTCGTGCTCTTCATGGTCTATGGCAACGTGCACGTGAGCACAGAGTCCAACCTGCAGGC
CACCGAGCGCCGAGCCGAGGGCCTATACAGTCAGCTCCTAGGGCTCACGGCCTCCCAGTCCAACTTGACCAAGGA
GCTCAACTTCACCACCCGCGCCAAGGATGCCATCATGCAGATGTGGCTGAATGCTCGCCGCGACCTGGACCGCAT
CAATGCCAGCTTCCGCCAGTGCCAGGGTGACCGGGTCATCTACACGAACAATCAGAGGTACATGGCTGCCATCAT
CTTGAGTGAGAAGCAATGCAGAGATCAATTCAAGGACATGAACAAGAGCTGCGATGCCTTGCTCTTCATGCTGAA
TCAGAAGGTGAAGACGCTGGAGGTGGAGATAGCCAAGGAGAAGACCATTTGCACTAAGGATAAGGAAAGCGTGCT
GCTGAACAAACGCGTGGCGGAGGAACAGCTGGTTGAATGCGTGAAAACCCGGGAGCTGCAGCACCAAGAGCGCCA
GCTGGCCAAGGAGCAACTGCAAAAGGTGCAAGCCCTCTGCCTGCCCCTGGACAAGGACAAGTTTGAGATGGACCT
TCGTAACCTGTGGAGGGACTCCATTATCCCACGCAGCCTGGACAACCTGGGTTACAACCTCTACCATCCCCTGGG
CTCGGAATTGGCCTCCATCCGCAGAGCCTGCGACCACATGCCCAGCCTCATGAGCTCCAAGGTGGAGGAGCTGGC
CCGGAGCCTCCGGGCGGATATCGAACGCGTGGCCCGCGAGAACTCAGACCTCCAACGCCAGAAGCTGGAAGCCCA
GCAGGGCCTGCGGGCCAGTCAGGAGGCGAAACAGAAGGTGGAGAAGGAGGCTCAGGCCCGGGAGGCCAAGCTCCA
AGCTGAATGCTCCCGGCAGACCCAGCTAGCGCTGGAGGAGAAGGCGGTGCTGCGGAAGGAACGAGACAACCTGGC
CAAGGAGCTGGAAGAGAAGAAGAGGGAGGCGGAGCAGCTCAGGATGGAGCTGGCCATCAGAAACTCAGCCCTGGA
CACCTGCATCAAGACCAAGTCGCAGCCGATGATGCCAGTGTCAAGGCCCATGGGCCCTGTCCCCAACCCCCAGCC
CATCGACCCAGCTAGCCTGGAGGAGTTCAAGAGGAAGATCCTGGAGTCCCAGAGGCCCCCTGCAGGCATCCCTGT
AGCCCCATCCAGTGGCTGAGGAGGCTCCAGGCCTGAGGACCAAGGGATGGCCCGACTCGGCGGTTTGCGGAGGAT
GCAGGGATATGCTCACAGCGCCCGACACAACCCCCTCCCGCCGCCCCCAACCACCCAGGGCCACCATCAGACAAC
TCCCTGCATGCAAACCCCTAGTACCCTCTCACACCCGCACCCGCGCCTCACGATCCCTCACCCAGAGCACACGGC
CGCGGAGATGACGTCACGCAAGCAACGGCGCTGACGTCACATATCACCGTGGTGATGGCGTCACGTGGCCATGTA
GACGTCACGAAGAGATATAGCGATGGCGTCGTGCAGATGCAGCACGTCGCACACAGACATGGGGAACTTGGCATG
ACGTCACACCGAGATGCAGCAACGACGTCACGGGCCATGTCGACGTCACACATATTAATGTCACACAGACGCGGC
GATGGCATCACACAGACGGTGATGATGTCACACACAGACACAGTGACAACACACACCATGACAACGACACCTATA
GATATGGCACCAACATCACATGCACGCATGCCCTTTCACACACACTTTCTACCCAATTCTCACCTAGTGTCACGT
TCCCCCGACCCTGGCACACGGGCCAAGGTACCCACAGGATCCCATCCCCTCCCGCACAGCCCTGGGCCCCAGCAC
CTCCCCTCCTCCAGCCTCCTGGCCTCCCAGCCACTTCCTCACCCCCAGTGCCTGGACCCGGAGGTGAGAACAGGA
AGCCATTCACCTCCGCTCCTTGAGCGTGAGTGTTTCCAGGACCCCCTCGGGGCCCTGAGCCGGGGGTGAGGGTCA
CCTGTTGTCGGGAGGGGAGCCACTCCTTCTCCCCCAACTCCCAGCCCTGCCTGTGGCCCGTTGAAATGTTGGTGG
CACTTAATAAATATTAGTAAATCCTT

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FIGURE 2507

ATGGCATCTACTTCGTATGACTATTGCAGAGTGCCCATGGAAGACGGGGATAAGCGCTGTAAGCTTCTGCTGGGG
ATAGGAATTCTGGTGCTCCTGATCATCGTGATTCTGGGGGTGCCCTTGATTATCTTCACCATCAAGGCCAACAGC
GAGGCCTGCCGGGACGGCCTTCGGGCAGTGATGGAGTGTCGCAATGTCACCCATCTCCTGCAACAAGAGCTGACC
GAGGCCCAGAAGGGCTTTCAGGATGTGGAGGCCCAGGCCGCCACCTGCAACCACACTGTGATGGCCCTAATGGCT
TCCCTGGATGCAGAGAAGGCCCAAGGACAAAAGAAAGTGGAGGAGCTTGAGGGAGAGATCACTACATTAAACCAT
AAGCTTCAGGACGCGTCTGCAGAGGTGGAGCGACTGAGAAGAGAAAACCAGGTCTTAAGCGTGAGAATCGCGGAC
AAGAAGTACTACCCCAGCTCCCAGGACTCCAGCTCCGCTGCGGCGCCCCAGCTGCTGATTGTGCTGCTGGGCCTC
AGCGCTCTGCTGCAGTGAGATCCCAGGAAGCTGGCACATCTTGGAAGGTCCGTCCTGCTCGGCTTTTCGCTTGAA
CATTCCCTTGATCTCATCAGTTCTGAGCGGGTCATGGGGCAACACGGTTAGCGGGGAGAGCACGGGGTAGCCGGA
GAAGGGCCTCTGGAGCAGGTCTGGAGGGGCCATGGGGAAGTCCTGGGTGTGGGGACACAGTCGGGTTGACCCAGG
GCTGTCTCCCTCCAGAGCCTCCCTCCGGACAATGAGTCCCCCCTCTTGTCTCCCACCCTGAGATTGGGCATGGGG
TGCGGTGTGGGGGGCATGTGCTGCCTGTTGTTATGGGTTTTTTTTGCGGGGGGGGTTGCTTTTTTCTGGGGTCTT
TGAGCTCCAAAAAATAAACACTTCCTTTGAGGGAGAGC

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FIGURE 2508

TTCCGGCGGAAGTTGCTGGGCGCGGAAAGCCGGCAAGACCTTTTTTTCCGCCATCATCGCTCACGCGCGCAACCC
TGGCGACGCGTGGTGGCGAGGCTCCGCCTCCCCACGCCATTGGCCAGCAGCTCCTCGGGCACGCGTATACTGCGC
TTCCGGGCAATCTCCGCCCCCCCCCCCCGCATGGCCTTCTGGGAGTTGTAGTTCGGTCGCGAGCGCTGCCGTCGG
GAGGCGCTCCGAGGTTCGAGGCTGTGCCCCGCGACCCCGCCTTCGGCGCTCGGCTCGCAGGATGGATCCCGTACC
CGGGACAGACTCGGCGCCGCTGGCTGGCCTGGCCTGGTCGTCGGCCTCTGCACCCCCGCCGCGGGGGTTCAGCGC
GATCTCCTGCACCGTCGAGGGGGCACCCGCCAGCTTTGGCAAGAGCTTCGCGCAGAAATCTGGCTACTTCCTGTG
CCTTAGTTCTCTGGGCAGCCTAGAGAACCCGCAGGAGAACGTGGTGGCCGATATCCAGATCGTGGTGGACAAGAG
CCCCCTGCCGCTGGGCTTCTCCCCCGTCTGCGACCCCATGGATTCCAAGGCCTCTGTGTCCAAGAAGAAACGCAT
GTGTGTGAAGCTGTTGCCCCTGGGAGCCACGGACACGGCTGTGTTTGATGTCCGGCTGAGTGGGAAGACCAAGAC
AGTGCCTGGATACCTTCGAATAGGGGACATGGGCGGCTTTGCCATCTGGTGCAAGAAGGCCAAGGCCCCGAGGCC
AGTGCCCAAGCCCCGAGGTCTCAGCCGGGACATGCAGGGCCTCTCTCTGGATGCAGCCAGCCAGCCAAGTAAGGG
CGGCCTCCTGGAGCGGACAGCGTCAAGGCTGGGCTCTCGGGCATCCACTCTGCGGAGGAATGACTCCATCTACGA
GGCCTCCAGCCTCTATGGCATCTCAGCCATGGATGGGGTTCCCTTCACACTCCACCCACGATTTGAGGGCAAGAG
CTGCAGCCCCCTGGCCTTCTCTGCTTTTGGGGACCTGACCATCAAGTCTCTGGCGGACATTGAGGAGGAGTATAA
CTACGGCTTCGTGGTGGAGAAGACCGCGGCTGCCCGCCTGCCCCCCAGCGTCTCATAGTCCCTCACCCTTCCGCG
GAAAGAGCCCCCTTACTCCACCTCCCCGCCAGCCTGGGGCCACCCCCCCTCACTGCATCCTGGGGCCACCCCCAC
TCACTGCATCCTGGGAACCTTCGCCCTGCAAGGCGTTTGCTATCTTCAGCCACTGGGCGGAGCTGCAGCCCTGGA
GGAGGGGGCGGGTCGAGGCTGCGTGGTGATGGGGTCTCCGCCCCCACGCCCTGCCGGGCAGGGCTGGAGCTGGAC
AGAAGCCAGTGCCTTTAAGTCATTTGTGTCAAAACCCTCTGGGGTCCGGAGGCTGTGCGGGTGTCCTCCTGGCAA
TAAACACTACCCGGTTCTCGCC

FIGURE 2509

GCCGGAGTTCGTGGGGCTGTGGCTGGGCCTGGCCAAGGCGGGCATGGAGGCCGCGCTGCTCAACGTGAACCTGCG
GCGCGAGCCCCTGGCCTTCTGCCTGGGCACCTCGGGCGCTAAGGCCCTGATCTTTGGAGGAGAAATGGTGGCGGC
GGTGGCCGAAGTGAGCGGGCATCTGGGGAAAAGTTTGATCAAGTTCTGCTCTGGAGACTTGGGGCCCGAGGGCAT
CTTGCCGGACACCCACCTCCTGGACCCGCTGCTGAAGGAGGCCTCTACTGCCCCCTTGGCACAGATCCCCAGCAA
GGGCATGGACGATCGTCTTTTCTACATCTACACGTCGGGGACCACCGGGCTGCCCAAGGCTGCCATTGTCGTGCA
CAGCAGGTACTACCGCATGGCAGCCTTCGGCCACCACGCCTACCGCATGCAGGCGGCTGACGTGCTCTATGACTG
CCTGCCCCTGTACCACTCGGCAGGAAACATCATCGGCGTGGGGCAGTGTCTCATCTATGGGCTGACAGTCGTCCT
CCGCAAGAAATTCTCGGCCAGCCGCTTCTGGGACGACTGCATCAAGTACAACTGTACCTGGCACGGCCCATCCTG
GACTGAGAAACTGGAACCTCAGAGGAACCCGTGCCTCTCTGCTGCCTTGGTGCCCCTGTGTCTGCCTCCTCTCCC
TGCTTTTCAGCCTCTGTCTCCTTCCATCCCTGTCCCTGTCTGGCCTTAACTCTTCCCTCTTTTTCTTTTCTTTCT
TTCTTTCTTTTTTTTTTAAGATAGAGTCTCACTCTGCTGCCCGGGCTAGAGTGCAGTGGTGGGATCTCGGCTCAC
TGCAACCTCTGCCTCCTGGGGTTCAAGTGATCCTCCCACCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACCCG
CCACCACGTCCAGCTAATTTTTATATTTTTAGTAGAGACGGGGTTTCACCATGTTGGTCAGGTTGGTCTTGAACT
CCTGACCTCAGGTGATCCGCTGGCCTCGGCCTCCCAGAGTGCTGGGATTATAGGCGTGAGCCTCTGGCCCGGCCT
TTCCTTTTTCCTCTCCTCTCCTGCCGAGAGTGGAACACGCGTGTCCTGGGAGCTGCATCTTGTGTAGGGTCCAGC
TGCTTTTGGGGACTGCAGGAATCATCTCCCCTGGGCCCTGGACTCGGACTGGGGCCTCCCCACCTCCCTCTCGGC
TGTGCCTTACGGAGCCCCGATCCAGGCCTCCTGTGGCTGTTGGGTTCCAGATGCTGCAGCTCCATGTGACTTCCA
AGCAGGCCCTCCGCCCTCCCTGCTGAATGGAGGAGCCGGGGGTCCCCCAGGCCAACTGGAAAATCTCCCAGGCTA
GGCCAATTGCCTTTTGCACTTCCCCGTTCCTGTCACATTTCCCCAGCCCCACCTTCCCCTCCTGATGCCCTGAAA
GCTTCCGGAATTGACTGTGACCACTTGGATGTCACCACTGTCAGCCCCTGCCTTGATGTCCCCATTTAGCCATCT
CCATGGAGCTCCTGCTGGAGGGCCCTGAACCCTGCACTGCGTGGCTGCCCAGCCAGCTGCCTCCTGTCCTGGGAG
GAGGCCTCCTGGGTGTCCTCATCTGGTGTGTCTACTGGAGGGTCCCACAGGAGAGGCAGCAGAGGGGTCAGGGGA
GGTCTCCTGCCGGGGGGTTGGCCTCTCAAGCCTCAGGGGTTCTAGCCTGTTGAATATACCCCACCTGGTGGTGGCC
CCTCCGATGTCCCCACTGATGGCTCTGACACCGTGTTGGTGGCGATGTCCCAGACAATCCCACCAGGACGGCCCA
GACATCCCTACTGGCTTCGCTGGTGGCTCATCTCGAACATCCACGCCAGCCTTTCTGGGGCCGGCCACCCAGGCC
GCCTGTCCGTCTGTCCTCCCTCCAGCAGCACCCCCTGGCCCCTGGAGTGGTGGGGCCATGGCAAGAGACACCGTG
GCGTCTCATGTGAACTTTCCTGGGCACTGTGGTTTTATTTCCTAATTGATTTAAGAAATAAACCTGAAGACCGTC

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FIGURE 2510

CCGCCGCCGCCCTCGCCATGGCCGCGCCGGCCCCGGGCCTCATCTCGGTGTTCTCGAGTTCCCAGGAGCTGGGTG
CGGCGCTAGCGCAGCTGGTGGCCCAGCGCGCAGCATGCTGCCTGGCAGGGGCCCGCGCCCGTTTCGCGCTCGGCC
TGTCGGGCGGGAGCCTCGTCTCGATGCTAGCCCGCGAGCTACCCGCCGCCGTCGCCCCTGCCGGGCCAGCTAGCT
TAGCGCGCTGGACGCTGGGCTTCTGCGACGAGCGCCTCGTGCCCTTCGATCACGCCGAGAGCACGTACGGCCTCT
ACCGGACGCATCTTCTCTCCAGACTGCCGATCCCAGAAAGCCAGGTGATCACCATTAACCCCGAGCTGCCTGTGG
AGGAGGCGGCTGAGGACTACGCCAAGAAGCTGAGACAGGCATTCCAAGGGGACTCCATCCCGGTTTTCGACCTGC
TGATCCTGGGGGTGGGCCCCGATGGTCACACCTGCTCACTCTTCCCAGACCACCCCCTCCTACAGGAGCGGGAGA
AGATTGTGGCTCCCATCAGTGACTCCCCGAAGCCACCGCCACAGCGTGTGACCCTCACACTACCTGTCCTGAATG
CAGCACGAACTGTCATCTTTGTGGCAACTGGAGAAGGCAAGGCAGCTGTTCTGAAGCGCATTTTGGAGGACCAGG
AGGAAAACCCGCTGCCCGCCGCCCTGGTCCAGCCCCACACCGGGAAACTGTGCTGGTTCTTGGACGAGGCGGCCG
CCCGCCTCCTGACCGTGCCCTTCGAGAAGCATTCCACTTTGTAGCTGGCCAGAGGGACGCCGCAGCTGGGACCAG
GCACGCGGCCCATGGGGCTGGGCCCCTGCTGGCCGCCACTCTCCGGGCTCTCCTTTCAAAAAGCCACGTCGTGCT
GCTGCTGGAAGCCAACAGCCTCCGGCCAGCAGCCCTACCCGGGGCTCAACACACAGGCTGTGGCTCTGGACATCC
GGATATTAAAAGGAGCGTTGCTGG

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FIGURE 2511

CCCCTTTAAGGCGCGGCCAGAGTCCTCCCGCAGAAAAACGACTTAAAGGAGACGCGTGGCGCGATGGCGGCGGCC
CCACGCGCGGGCCGGCGGCGCGGGCAGCCGCTCCTGGCGCTGCTGCTTCTGCTGCTGGCGCCACTGCCGCCGGGG
GCCCCGCCGGGCGCCGACGCCTACTTCCCCGAGGAGCGCTGGAGCCCGGAGTCGCCCCTGCAGGCGCCGCGCGTG
CTCATCGCGCTGTTGGCGCGAAACGCGGCCCACGCGTTGCCCACCACGCTGGGCGCACTCGAGCGGCTGCGGCAC
CCGCGGGAGCGCACGGCGCTATGGGTGGCTACGGACCACAACATGGATAACACGTCAACTGTGCTGCGGGAGTGG
CTGGTGGCCGTGAAGAGTTTGTACCATTCCGTGGAGTGGCGGCCAGCAGAGGAGCCCAGGTCCTACCCGGACGAG
GAAGGCCCGAAACACTGGTCTGACTCACGCTACGAGCATGTCATGAAGTTGCGCCAGGCAGCCCTGAAATCAGCT
CGAGACATGTGGGCTGATTACATCCTGTTTGTAGATGCGGACAACCTGATCCTCAACCCTGACACACTGAGCCTG
CTCATCGCTGAGAACAAGACGGTGGTCGCCCCCATGCTGGATTCCCGGGCTGCGTACTCCAACTTCTGGTGTGGA
ATGACTTCCCAGGGCTACTACAAGCGCACACCTGCCTACATCCCTATCCGCAAGCGAGACCGCCGGGGCTGCTTT
GCAGTTCCCATGGTGCACTCGACCTTCCTGATCGACCTGCGGAAGGCGGCGTCCAGGAACCTGGCCTTCTACCCA
CCTCACCCTGACTACACCTGGTCCTTTGACGACATCATCGTCTTTGCCTTCTCCTGCAAGCAGGCAGAGGTTCAG
ATGTATGTGTGCAACAAGGAGGAGTACGGATTCTTGCCAGTGCCATTGCGCGCCCACAGCACCCTCCAGGATGAG
GCCGAGAGCTTCATGCATGTGCAGCTGGAGGTCATGGTGAAGCACCCGCCCGCAGAGCCCTCCCGCTTCATCTCG
GCTCCCACCAAGACACCGGACAAGATGGGCTTCGACGAGGTCTTCATGATCAACCTGAGGCGGCGGCAGGACCGG
CGGGAGCGCATGCTGCGGGCGCTGCAGGCACAGGAGATCGAGTGCCGGCTGGTGGAGGCCGTGGACGGCAAAGCC
ATGAACACCAGCCAGGTGGAGGCGCTGGGGATCCAGATGCTGCCTGGCTACCGGGACCCCTACCACGGCCGGCCC
CTCACCAAGGGTGAGCTGGGCTGCTTCCTGAGCCACTACAACATCTGGAAGGAGGTGGTGGACCGGGGGCTGCAG
AAATCGCTTGTGTTTGAGGATGACCTGCGTTTTGAGATCTTCTTCAAGAGACGTCTGATGAACCTCATGCGGGAT
GTGGAGCGGGAGGGCCTGGACTGGGACCTCATCTATGTGGGCCGGAAGCGGATGCAGGTGGAGCACCCCGAGAAG
GCTGTGCCTCGCGTGAGGAACCTGGTGGAGGCCGACTATTCCTACTGGACAGTGCTGCCCGGGATGAACTCTGAG
GGGTAGCAGCCAGAAAGCCAAAGCAGCCATCGGTGGCCCAGGCTCCACGTGCTTACTGAGGACATCAGGTCCACC
TCTGGACCCCTTGGCAGGCCACAGAGGGCTCTCGTGTGGGGTGGTGTCCAGCCA

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FIGURE 2512A

AGACCATCAGTAATGTGCTCCTCCAGTATGCAGACATCATCTCCAAGGACTTTGCCTCCTACTGCTCCAAGGAGA
AGGAGAAAGTGCCCTGCATTCTCATGAATAACACTCAACAGCTACGAGTTCAGCTGGAGAAGATGTTCGAAGCCA
TGGGAGGAAAGGAGCTGGATGCTGAAGCCAGTGACATCCTGAAGGAGCTTCAGGTGAAACTCAATAACGTCTTGG
ATGAGCTCAGCCGGGTGTTTGCTACCAGCTTCCAGCCGCACATTGAAGAGTGTGTCAAACAGATGGGTGACATCC
TTAGCCAGGTTAAGGGCACAGGCAATGTGCCAGCCAGTGCCTGCAGCAGCGTGGCCCAGGACGCGGACAATGTGT
TGCAGCCCATCATGGACCTGCTGGACAGCAACCTGACCCTCTTTGCCAAAATCTGTGAGAAGACTGTGCTGAAGC
GAGTGCTGAAGGAGCTGTGGAAGCTGGTTATGAACACCATGGAGAAAACCATCGTCCTGCCGCCCCTCACTGACC
AGACGGTGAGAGGGAACCTCTTGAGAAAACATGGCAAGGGATTAGAAAAGGGCAGGGTGAAATTGCCAAGCCACT
CAGACGGAACCCAGATGATCTTCAATGCAGCCAAGGAGCTGGGTCAGCTGTCCAAACTCAAGGATCACATGGTAC
GAGAAGAAGCCAAGAGCTTGACCCCAAAGCAGTGCGCGGTTGTTGAGTTGGCCCTGGACACCATCAAGCAATATT
TCCACGCGGGTGGCGTGGGCCTCAAGAAGACCTTCCTGGAGAAGAGCCCGGACCTGCAATCCTTGCGCTATGCCC
TGTCGCTCTACACGCAGGCCACCGACCTGCTAATCAAGACCTTTGTACAGACGCAATCGGCCCAGGGCTTGGGTG
TAGAAGACCCTGTGGGTGAAGTCTCTGTCCATGTTGAGCTGTTCACTCATCCAGGAACTGGGGAACACAAGGTCA
CAGTGAAAGTGGTGGCTGCCAATGACCTCAAGTGGCAGACTTCTGGCATCTTCCGGCCGTTCATCGAGGTCAACA
TCATTGGGCCCCAGCTCAGCGACAAGAAACGCAAGTTTGCGACCAAATCCAAGAACAATAGCTGGGCTCCCAAGT
ACAATGAGAGCTTCCAGTTCACGCTGAGCGCCGACGCGGGTCCCGAGTGCTATGAGCTGCAGGTGTGCGTCAAGG
ACTACTGCTTCGCGCGCGAGGACCGCACGGTGGGGCTGGCCGTGCTGCAGCTGCGTGAGCTGGCCCAGCGCGGGA
GCGCCGCCTGCTGGCTGCCGCTCGGCCGCCGCATCCACATGGACGACACGGGCCTCACGGTGCTGCGAATCCTCT
CGCAGCGCAGCAACGACGAGGTGGCCAAGGAGTTCGTGAAGCTCAAGTCGGACACGCGCTCCGCCGAGGAGGGCG
GTGCCGCGCCTGCGCCTTAGCGCGGGCGGTCGGCCGAGCGGCACTGCGCCTGCGCGGAGGGCGCTGGGCGGGGAG
GGACGGGGCTTGCGCCTTGGTGGGACCTCCCCAGGGGCGGGGCTCGGGGGGCTCCACGCCAAGGGTGGGCTGCGC
CTACGCCCTTGACTCAGCTTTCCCTTTTGGGGAATTAGGAATGGAGGATGCCCCGCCCTCTCGGGAGGCCACGCC
CAAGGGCGCGACGAAGGAAGGAGCCACATCCCCAACTTGAGGCCACGCCCCCAGCACCTAGGGGGCATTTTGAGC
TGGGATGGGGGAAACCTCGTCCCTATGGAGGAGGCCACATCCCGGGGCTCTGGTACCGGGAGGCACCACCTCATG
TCCCCTGGAAAAGCCATAAGATGGGACCCAGACCCCTGGGACCCCAGACCAATTGCCAAGTATGGAAATCTCAGC
TCCCTCGAGGGGGGGCCCTGGGCAAGGGGTAGGGCTCTCTGGAGCGCCCCTCTAGGTGGCCTGGGGACTGGAGGG
ACCAGGATGCTGGTTGGAGGGCCCCGGAATACCGGAGTCCCTTTAGATATTTGTGCAAAAAATAAATGGGGGGAG
GGGGGAGGATGGGATTTCAAAAGCACATGCGCCCTTGGGCGCCCAAACCCTGGGGGCCGAGGGGACGGCTCTGGT
TCCCCACGCTGCCCCTACTTCCCTTTGGGAGTTTGCCTCTCCCTCTCCCCCAACAAACCCAGTCCTCATATCATA
GAGTTCAACACACCCATTTGACAGATGGCAAAACTGAGGCTTAAAGAGCTGCTTGAGACTTGGCCAAGGTTCCAG
GTGCCATACCCTCTGTGCCCCTCCCTTAGGCCTGTGTGCCCCATGGAAGGGTGGGCTGAGATCGGGATGACCTGA
CACAGCTCCCTATTGCTGCTAATTCCCCCTCGGCCTCCTCCAAGGGGTGGGAATTCCAGGCCAAGACCCCTACTT
CGCCTTTCCTTCTCCGGCTGCCAAGCAGGACCTTTGCCCTCAGCCCTTTCTCCTGGGATCTCCATGGGGGATGCC
ATGAGGGCCTCCCACCACAAAAGAGAATTTGGGATCCCCTGGTCCCAGGTTTCTCCATCCCTTCTTCCTTTTCCA
GAATTTTCCAAATAGGAAAGAACAGAAGGAGACCAGAAACTCTAGGGGGGAGAAAGAGAATGAGAGAAAGAGAAT
GAGAGAGAGAGAAACACAAACACAGTGACACAGTGAGAGCTTAGTCTCCAAGAGCCTATTCATTGATTCAAACAC
CCAAGCCACAGGATACCTCAGATGGCCCTCTTGCCAGCTGGAAGCTCTTTCTCCAATGAGCAAAGTTACAGTGAC
CTGGCTGGAGTTACCTGGTGCACATAGGACCTTAGGGGAAAGTTCAGCGTGGACTACACTTGCTCTGGGATCTGC
TTTTCCACATGTGTGTATGGCACGCCTTTTTCTGCTGGATTGGGAAGGACAAGATTTTGCTGTGCTAGGGAGAAA
TGAAAACGGGGTGAGCTGAGTAGCTGGGTTTCTGGAGGATAGAACATCAGATGGGGAGGCTTTCCGAGGTGAAGA
ATGAGAGGGAACCACTTACTAGAGAGAAAAGAGCTCCAGGCCTGGGGAACAGCACGTGCGAAGGCCAGGAGAGAA
GAACTGTTGAAACAACGAGAAGGGTGGCACGGCTGGAGCTGAGCCAGCAAGGGGGATCGTGAGGAGCCTTGGGGT
TGGGGAGATCTGCAGAAGCATCAGACCAGGCAGGGCCTCGTACGCAGTCCTGAGGAGTTTTACTTTTATTCTAAG
ACAGTTGGGGAGCTCCAGGAGCTGTTTTAAGTTGGGGAGAGACTGGATTCCAGCCTGCAAAAGCTGTTTTGTGAA
GACTAAAACCAGTGAGGAGAGGTGGAGGTGCTTTGGGGACACTGAAATGGATTCTTGGAAAGATTCTGAAGGCTG
TGTTGAAAAGACACCTATAGCTGTGGGGACATGACTATAATCCCAGCATTTGGGGAGACCGAGGCTGGCAGATCA
CTTAAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCGAAACCCCATCTCTGCTAAAAATACAAAAATTAGC
TGGGTGCAGTGGTGCATGCCTGTAGTCCCAGCTACTCAGGAGACTGAGGCGGGAGAATTGTTTGAACCCTGGAGG

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FIGURE 2512B

CAGAGGTTGTAGTGAGTCGTGATCACACAACTGCACTCCAGCCTGGGCAACAGAACAATACTCCATTCCCTCCCC
TCTACCCCACC

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FIGURE 2513

AAGATGGCGGCGGTGGCTGGATCTGGGGCTGCCGCGGCTCCGAGCTCACTGCTCCTCGTGGTGGGCAGCGAGTTC
GGGAGCCCGGGGCTCCTCACCTACGTCCTGGAGGAGCTCGAAAGAGGCATCCGGTCTTGGGATGTCGATCCTGGC
GTCTGCAACCTTGATGAACAGCTCAAGGTCTTTGTGTCCCGACACTCTGCCACCTTCTCCAGCATTGTGAAAGGC
CAGCGGAGCCTGCACCACCGTGGAGACAACCTGGAGACCCTGGTCCTCCTGAACCCATCAGACAAGTCCCTGTAT
GATGAGCTCCGGAACCTTCTGTTGGACCCTGCCTCTCACAAGCTACTGGTGTTGGCTGGGCCCTGCCTGGAGGAG
ACGGGGGAGCTGCTGCTACAGACAGGGGGCTTCTCGCCTCACCACTTCCTCCAGGTCCTGAAGGACAGAGAGATC
CGGGACATCCTGGCCACCACGCCCCCACCTGTGCAGCCGCCCATACTCACCATCACCTGCCCCACCTTCGGTGAC
TGGGCTCAGCTGGCACCCGCTGTGCCTGGCCTTCAGGGGGCGCTCCGGCTCCAGCTGCGGCTGAACCCCCCGGCG
CAGCTGCCCAACTCTGAGGGCCTGTGCGAATTCCTGGAGTACGTGGCTGAGTCTCTGGAGCCACCGTCCCCCTTC
GAGCTGCTGGAGCCCCCGACCTCCGGGGGCTTCCTCAGGCTGGGCCGGCCCTGCTGCTACATCTTCCCTGGAGGC
CTCGGGGATGCCGCCTTCTTCGCCGTCAATGGCTTCACTGTGCTGGTCAACGGTGGCTCAAACCCCAAGTCCAGT
TTCTGGAAGCTGGTGCGGCACCTGGACCGCGTGGATGCCGTGCTGGTGACCCACCCTGGCGCCGACAGCCTCCCC
GGCCTCAACAGCCTGCTGCGGCGCAAACTGGCGGAGCGCTCCGAGGTGGCTGCTGGTGGGGGCTCCTGGGACGAC
AGGCTGCGCAGGCTCATCTCCCCCAACCTGGGGGTCGTGTTCTTCAACGCCTGCGAGGCCGCGTCGCGGCTGGCG
CGCGGCGAGGATGAGGCGGAGCTGGCGCTGAGCCTCCTGGCGCAGCTGGGCATCACGCCTCTGCCACTCAGCCGC
GGCCCCGTGCCAGCCAAACCCACCGTGCTCTTCGAGAAGATGGGCGTGGGCCGGCTGGACATGTATGTGCTGCAC
CCGCCCTCCGCCGGCGCCGAGCGCACGCTGGCCTCTGTGTGCGCCCTGCTGGTGTGGCACCCCGCCGGCCCCGGC
GAGAAGGTGGTGCGCGTGCTGTTCCCCGGTTGCACCCCGCCCGCCTGCCTCCTGGACGGCCTGGTCCGCCTGCAG
CACTTGAGGTTCCTGCGAGAGCCCGTGGTGACGCCCCAGGACCTGGAGGGGCCGGGGCGAGCCGAGAGCAAAGAG
AGCGTGGGCTCCCGGGACAGCTCGAAGAGAGAGGGCCTCCTGGCCACCCACCCTAGACCTGGCCAGGAGCGCCCT
GGGGTGGCCCGCAAGGAGCCAGCACGGGCTGAGGCCCCACGCAAGACTGAGAAAGAAGCCAAGACCCCCCGGGAG
TTGAAGAAAGACCCCAAACCGAGTGTCTCCCGGACCCAGCCGCGGGAGGTGCGCCGGGCAGCCTCTTCTGTGCCC
AACCTCAAGAAGACGAATGCCCAGGCGGCACCCAAGCCCCGCAAAGCGCCCAGCACGTCCCACTCTGGCTTCCCG
CCGGTGGCAAATGGACCCCGCAGCCCGCCCAGCCTCCGATGTGGAGAAGCCAGCCCCCCCAGTGCAGCCTGCGGC
TCTCCGGCCTCCCAGCTGGTGGCCACGCCCAGCCTGGAGCTGGGGCCGATCCCAGCCGGGGAGGAGAAGGCACTG
GAGCTGCCTTTGGCCGCCAGCTCAATCCCAAGGCCACGCACACCCTCCCCTGAGTCCCACCGGAGCCCCGCAGAG
GGCAGCGAGCGGCTGTCGCTGAGCCCACTGCGGGGCGGGGAGGCCGGGCCAGACGCCTCACCCACAGTGACCACA
CCCACGGTGACCACGCCCTCACTACCCGCAGAGGTGGGCTCCCCGCACTCGACCGAGGTGGACGAGTCCCTGTCG
GTGTCCTTTGAGCAGGTGCTGCCGCCATCCGCCCCCACCAGTGAGGCTGGGCTGAGCCTCCCGCTGCGTGGCCCC
CGGGCGCGGCGCTCGGCTTCCCCACACGATGTGGACCTGTGCCTGGTGTCACCCTGTGAATTTGAGCATCGCAAG
GCGGTGCCAATGGCACCGGCACCTGCGTCCCCCGGCAGCTCGAATGACAGCAGTGCCCGGTCACAGGAACGGGCA
GGTGGGCTGGGGGCCGAGGAGACGCCACCCACATCGGTCAGCGAGTCCCTGCCCACCCTGTCTGACTCGGATCCC
GTGCCCCTGGCCCCCGGTGCGGCAGACTCAGACGAAGACACAGAGGGCTTTGGAGTCCCTCGCCACGACCCTTTG
CCTGACCCCCTCAAGGTCCCCCCACCACTGCCTGACCCATCCAGCATCTGCATGGTGGACCCCGAGATGCTGCCC
CCCAAGACAGCACGGCAAACGGAGAACGTCAGCCGCACCCGGAAGCCCCTGGCCCGCCCCAACTCACGCGCTGCC
GCCCCCAAAGCCACTCCAGTGGCTGCTGCCAAAACCAAGGGGCTTGCTGGTGGGGACCGTGCCAGCCGACCACTC
AGTGCCCGGAGTGAGCCCAGTGAGAAGGGAGGCCGGGCACCCCTGTCCAGAAAGTCCTCAACCCCCAAGACTGCC
ACTCGAGGCCCGTCGGGGTCAGCCAGCAGCCGGCCCGGGGTGTCAGCCACCCCACCCAAGTCCCCGGTCTACCTG
GACCTGGCCTACCTGCCCAGCGGGAGCAGCGCCCACCTGGTGGATGAGGAGTTCTTCCAGCGCGTGCGCGCGCTC
TGCTACGTCATCAGTGGCCAGGACCAGCGCAAGGAGGAAGGCATGCGGGCCGTCCTGGACGCGCTACTGGCCAGC
AAGCAGCATTGGGACCGTGACCTGCAGGTGACCCTGATCCCCACTTTCGACTCGGTGGCCATGCATACGTGGTAC
GCAGAGACGCACGCCCGGCACCAGGCGCTGGGCATCACGGTGTTGGGCAGCAACAGCATGGTGTCCATGCAGGAT
GACGCCTTCCCGGCCTGCAAGGTGGAGTTCTAGCCCCATCGCCGACACGCCCCCCACTCAGCCCAGCCCGCCTGT
CCCTAGATTCAGCCACATCAGAAATAAACTGTGACTACACTTG

FIGURE 2514

CGCGCCGCAGCCGCGGAGGGAGGGGCGGGGCGGGCTCCGGTGTCAGCGACCAAGCCGCAGGTGGCGGCGAGCGCG
GGGCTCGGCCCGAGCTCAGGAGATGGGGAAACTGAGGCACGGAGCTGGACAGTGACTCAGACACCAGACAGGCAC
TGGACGGGGCCTGCAGGGGTCTCCACAGAGACCATCAGGATGTCGTATTTTGGGGAGCATTTTTGGGGCGAGAAA
AATCATGGCTTTGAGGTCCTGTACCACAGCGTGAAGCAGGGGCCCATCTCCACCAAGGAGCTGGCGGACTTCATC
CGGGAGAGGGCCACCATCGAGGAGACCTACTCGAAGGCGATGGCGAAACTCTCCAAGCTGGCCAGCAACGGGACC
CCCATGGGGACCTTCGCCCCGCTCTGGGAGGTCTTCCGCGTCTCCTCGGACAAGCTGGCGCTGTGCCACCTGGAA
CTGACACGGAAGTTACAGGATCTCATCAAGGACGTTCTCCGCTACGGCGAGGAACAGCTCAAGACCCACAAGAAG
TGCAAGGAGGAAGTGGTGAGCACCTTGGATGCTGTGCAGGTACTCTCGGGCGTCAGCCAGCTCCTGCCCAAGTCC
CGCGAGAACTACCTGAACCGTTGCATGGACCAGGAGCGGCTGCGGAGGGAGAGTACCAGCCAGAAGGAGATGGAC
AAGGCGGAGACTAAAACCAAGAAGGCGGCAGAGAGCCTGCGGCGCTCAGTGGAAAAATACAACTCAGCCCGAGCT
GACTTTGAGCAGAAGATGCTGGACTCAGCCCTGCGCTTCCAAGCCATGGAGGAGACACACCTGAGGCACATGAAG
GCACTGCTGGGCTCATATGCTCACTCGGTGGAGGACACGCACGTGCAGATTGGGCAGGTGCATGAGGAATTTAAG
CAGAACATCGAGAACGTCAGCGTGGAGATGCTACTCAGGAAGTTTGCAGAGAGTAAGGGCACAGGCCGGGAGAAG
CCTGGACCTCTGGACTTCGAGGCATACAGTGCGGCTGCCCTGCAGGAAGCGATGAAACGTTTGCGGGGAGCCAAG
GCCTTTCGCCTTCCAGGACTAAGCCGGCGGGAGCGGGAGCCAGAGCCACCTGCAGCTGTAGATTTCCTGGAGCCC
GATTCAGGGACATGTCCAGAGGTGGATGAAGAAGGTTTCACTGTCCGGCCTGATGTGACCCAGAACAGCACGGCC
GAGCCCTCCCGTTTCTCGTCCAGCGACTCCGACTTCGACGATGAAGAGCCCCGCAAGTTCTATGTGCACATCAAG
CCTGCCCCGGCCCGGGCTCCAGCCTGCAGCCCCGAGGCAGCAGCGGCACAGCTCAGGGCCACCGCGGGCAGCCTC
ATCCTTCCTCCTGGCCCAGGGGGCACCATGAAACGCCATTCTTCACGGGACGCTGCTGGGAAACCCCAGAGACCT
CGGTCTGCCCCCAGAACCAGCAGCTGTGCAGAGAGATTGCAGTCAGAGGAGCAGGTGTCCAAGAACCTCTTTGGG
CCGCCCCTGGAGTCAGCCTTTGACCACGAAGATTTTACAGGCTCTAGCAGCCTGGGCTTCACCTCCAGCCCCTCC
CCTTTCTCCTCCTCGTCGCCCGAAAACGTGGAGGATTCCGGCCTGGACTCTCCGTCCCACGCGGCACCTGGCCCC
TCCCCAGATTCCTGGGTCCCCCGCCCAGGCACCCCGCAGAGCCCGCCCAGCTGTAGGGCGCCACCCCCAGAGGCC
AGGGGTATCCGGGCACCGCCTCTGCCAGACTCGCCGCAGCCCCTCGCCTCGTCTCCAGGCCCCTGGGGGCTGGAG
GCCTTGGCCGGAGGAGACCTGATGCCTGCACCTGCTGACCCCACAGCCAGGGAGGGCCTGGCAGCCCCACCCAGG
AGACTTCGCTCTAGGAAGGTGTCCTGCCCTCTCACACGTAGCAATGGGGACCTGTCTCGTTCCCTGAGCCCCTCC
CCACTGGGCTCTTCAGCCGCCAGCACTGCCTTGGAACGGCCCAGCTTCTTATCCCAGACAGGACACGGAGTCTCC
CGGGGTCCGAGCCCTGTGGTCCTGGGCTCCCAGGATGCCCTGCCCATAGCCACAGCCTTCACAGAGTATGTCCAC
GCCTACTTCCGTGGCCACAGCCCCAGCTGCCTGGCTCGAGTAACTGGGGAGCTGACCATGACCTTCCCTGCTGGC
ATCGTGCGTGTGTTCAGCGGGACCCCACCACCACCTGTCCTCAGCTTCCGGCTTGTACACACAACCGCTATTGAG
CACTTCCAGCCCAACGCCGATCTGCTGTTCAGTGACCCCTCCCAGAGTGACCCTGAGACCAAAGACTTCTGGCTC
AACATGGCAGCTCTGACCGAAGCCCTGCAGCGCCAGGCAGAGCAGAACCCCACTGCCTCCTACTACAACGTGGTG
CTGCTGCGATACCAGTTCTCCCGCCCGGGTCCCCAGTCTGTGCCTCTGCAGCTCAGTGCCCACTGGCAGTGTGGA
GCCACCCTCACCCAGGTCTCAGTGGAGTACGGCTACCGGCCCGGTGCCACGGCTGTGCCCACACCACTCACGAAC
GTCCAGATCCTGCTGCCTGTGGGGGAGCCTGTGACCAACGTCCGCTTGCAGCCGGCTGCCACCTGGAACCTGGAG
GAGAAGCGGCTCACTTGGAGGCTTCCAGATGTGTCCGAGGCAGGCGGTTCTGGCCGCCTCTCTGCCAGCTGGGAG
CCGCTCTCAGGGCCCAGCACACCCAGCCCCGTGGCTGCACAGTTCACCAGCGAGGGGACCACTCTGTCGGGCGTG
GACTTGGAACTGGTGGGCAGCGGTTACCGCATGTCGCTGGTGAAGAGGAGGTTTGCCACAGGGATGTACCTGGTG
AGCTGCTGAACCCGCAAATGCTGCTGCCCCAGCTCTACACTGCGCCCTGGTGCTGGCTGACCACCCCCTGCCCTC
CTGCCGGACCCTGGGGCCTCCCACCCCAGCCTCCCTGAGGCCCATACTCCACGGAGAGGAGCCCCATGCCCAGCC
TGGCTGAGCCCGAGATTCGCTCCTCCCCCTCATGCCAACCCCACACAGGTCCCGGCCTTTTAATGTTCTTTGAAT
AAACACTTTATTTTCTAATAAAATAAAAAAGGAAACCT

FIGURE 2515A

GTGGGACTTTCCTCTCGCTGCCTCCCGGCTCTGCCCGCCCTTCGAAAGTCCAGGGTCCCTGCCCGCTAGAGGCAA
GTTGCACTC**ATG**GCACCTCCAAGTGAAGAGACGCCCCTGATCCCTCAGCGTTCATGCAGCCTCTTGTCCACGGAG
GCTGGTGCCCTGCATGTGCTGCTGCCCGCTCGGGGCCCCGGGCCCCCCCAGCGCCTATCTTTCTCCTTTGGGGAC
CACTTGGCTGAGGACCTGTGCGTGCAGGCTGCCAAGGCCAGCGGCATCCTGCCTGTGTACCACTCCCTCTTTGCT
CTGGCCACGGAGGACCTGTCCTGCTGGTTCCCCCCGAGCCACATCTTCTCCGTGGAGGATGCCAGCACCCAAGTC
CTGCTGTACAGGATTCGCTTTTACTTCCCCAATTGGTTTGGGCTGGAGAAGTGCCACCGCTTCGGGCTACGCAAG
GATTTGGCCAGTGCTATCCTTGACCTGCCAGTCCTGGAGCACCTCTTTGCCCAGCACCGCAGTGACCTGGTGAGT
GGGCGCCTCCCCGTGGGCCTCAGTCTCAAGGAGCAGGGTGAGTGTCTCAGCCTGGCCGTGTTGGACCTGGCCCGG
ATGGCGCGAGAGCAGGCCCAGCGGCCGGGAGAGCTGCTGAAGACTGTCAGCTACAAGGCCTGCCTACCCCCAAGC
CTGCGCGACCTGATCCAGGGCCTGAGCTTCGTGACGCGGAGGCGTATTCGGAGGACGGTGCGCAGAGCCCTGCGC
CGCGTGGCCGCCTGCCAGGCAGACCGGCACTCGCTCATGGCCAAGTACATCATGGACCTGGAGCGGCTGGATCCA
GCCGGGGCCGCCGAGACCTTCCACGTGGGCCTCCCTGGGGCCCTTGGTGGCCACGACGGGCTGGGGCTGCTCCGC
GTGGCTGGTGACGGCGGCATCGCCTGGACCCAGGGAGAACAGGAGGTCCTCCAGCCCTTCTGCGACTTTCCAGAA
ATCGTAGACATTAGCATCAAGCAGGCCCCGCGCGTTGGCCCGGCCGGAGAGCACCGCCTGGTCACTGTTACCAGG
ACAGACAACCAGATTTTAGAGGCCGAGTTCCCAGGGCTGCCCGAGGCTCTGTCGTTCGTGGCGCTCGTGGACGGC
TACTTCCGGCTGACCACGGACTCCCAGCACTTCTTCTGCAAGGAGGTGGCACCGCCGAGGCTGCTGGAGGAAGTG
GCCGAGCAGTGCCACGGCCCCATCACTCTGGACTTTGCCATCAACAAGCTCAAGACTGGGGGCTCACGTCCTGGC
TCCTATGTTCTCCGCCGCAGCCCCCAGGACTTTGACAGCTTCCTCCTCACTGTCTGTGTCCAGAACCCCCTTGGT
CCTGATTATAAGGGCTGCCTCATCCGGCGCAGCCCCACAGGAACCTTCCTTCTGGTTGGCCTCAGCCGACCCCAC
AGCAGTCTTCGAGAGCTCCTGGCAACCTGCTGGGATGGGGGGCTGCACGTAGATGGGGTGGCAGTGACCCTCACT
TCCTGCTGTATCCCCAGACCCAAAGAAAAGTCCAACCTGATCGTGGTCCAGAGAGGTCACAGCCCACCCACATCA
TCCTTGGTTCAGCCCCAATCCCAATACCAGCTGAGTCAGATGACATTTCACAAGATCCCTGCTGACAGCCTGGAG
TGGCATGAGAACCTGGGCCATGGGTCCTTCACCAAGATTTACCGGGGCTGTCGCCATGAGGTGGTGGATGGGGAG
GCCCGAAAGACAGAGGTGCTGCTGAAGGTCATGGATGCCAAGCACAAGAACTGCATGGAGTCATTCCTGGAAGCA
GCGAGCTTGATGAGCCAAGTGTCGTACCGGCATCTCGTGCTGCTCCACGGCGTGTGCATGGCTGGAGACAGCACC
ATGGTGCAGGAATTTGTACACCTGGGGGCCATAGACATGTATCTGCGAAAACGTGGCCACCTGGTGCCAGCCAGC
TGGAAGCTGCAGGTGGTCAAACAGCTGGCCTACGCCCTCAACTATCTGGAGGACAAAGGCCTGCCCCATGGCAAT
GTCTCTGCCCGGAAGGTGCTCCTGGCTCGGGAGGGGGCTGATGGGAGCCCGCCCTTCATCAAGCTGAGTGACCCT
GGGGTCAGCCCCGCTGTGTTAAGCCTGGAGATGCTCACCGACAGGATCCCCTGGGTGGCCCCCGAGTGTCTCCGG
GAGGCGCAGACACTTAGCTTGGAAGCTGACAAGTGGGGCTTCGGCGCCACGGTCTGGGAAGTGTTTAGTGGCGTC
ACCATGCCCATCAGTGCCCTGGATCCTGCTAAGAAACTCCAATTTTATGAGGACCGGCAGCAGCTGCCGGCCCCC
AAGTGGACAGAGCTGGCCCTGCTGATTCAACAGTGCATGGCCTATGAGCCGGTCCAGAGGCCCTCCTTCCGAGCC
GTCATTCGTGACCTCAATAGCCTCATCTCTTCAGACTATGAGCTCCTCTCAGACCCCACACCTGGTGCCCTGGCA
CCTCGTGATGGGCTGTGGAATGGTGCCCAGCTCTATGCCTGCCAAGACCCCACGATCTTCGAGGAGAGACACCTC
AAGTACATCTCACAGCTGGGCAAGGGCAACTTTGGCAGCGTGGAGCTGTGCCGCTATGACCCGCTAGGCGACAAT
ACAGGTGCCCTGGTGGCCGTGAAACAGCTGCAGCACAGCGGGCCAGACCAGCAGAGGGACTTTCAGCGGGAGATT
CAGATCCTCAAAGCACTGCACAGTGATTTCATTGTCAAGTATCGTGGTGTCAGCTATGGCCCGGGCCGCCAGAGC
CTGCGGCTGGTCATGGAGTACCTGCCCAGCGGCTGCTTGCGCGACTTCCTGCAGCGGCACCGCGCGCGCCTCGAT
GCCAGCCGCCTCCTTCTCTATTCCTCGCAGATCTGCAAGGGCATGGAGTACCTGGGCTCCCGCCGCTGCGTGCAC
CGCGACCTGGCCGCCCGAAACATCCTCGTGGAGAGCGAGGCACACGTCAAGATCGCTGACTTCGGCCTAGCTAAG
CTGCTGCCGCTTGACAAAGACTACTACGTGGTCCGCGAGCCAGGCCAGAGCCCCATTTTCTGGTATGCCCCCGAA
TCCCTCTCGGACAACATCTTCTCTCGCCAGTCAGACGTCTGGAGCTTCGGGGTCGTCCTGTACGAGCTCTTCACC
TACTGCGACAAAAGCTGCAGCCCCTCGGCCGAGTTCCTGCGGATGATGGGATGTGAGCGGGATGTCCCCGCCCTC
TGCCGCCTCTTGGAACTGCTGGAGGAGGGCCAGAGGCTGCCGGCGCCTCCTGCCTGCCCTGCTGAGGTTCACGAG
CTCATGAAGCTGTGCTGGGCCCCTAGCCCACAGGACCGGCCATCATTCAGCGCCCTGGGCCCCCAGCTGGACATG
CTGTGGAGCGGAAGCCGGGGGTGTGAGACTCATGCCTTCACTGCTCACCCAGAGGGCAAACACCACTCCCTGTCC
TTTTCA**TAG**CTCCTGCCCGCAGACCTCTGGATTAGGTCTCTGTTGACTGGCTGTGTGACCTTAGGCCCGGAGCTG
CCCCTCTCTGGGCCTCAGAGGCCTTATGAGGGTCCTCTACTTCAGGAACACCCCCATGACATTGCATTTGGGGGG

FIGURE 2515B

GCTCCCGTGGCCTGTAGAATAGCCTGTGGCCTTTGCAATTTGTTAAGGTTCAAGACAGATGGGCATATGTGTCAG
TGGGGCTCTCTGAGTCCTGGCCCAAAGAAGCAAGGAACCAAATTTAAGACTCTCGCATCTTCCCAACCCCTTAAG
CCCTGGCCCCCTGAGTTTCCTTTTCTGTCTCTCTCTTTTTATTTTTTTTATTTTTATTTTTATTTTTGAGACAGA
GCCTCGCTCTGTTACCCAGGGTGGAGTGCAGTGGTGCGATCTCGGCTCAGTGCAACCTCTGCTTCCCAGGTTCAA
GCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGTGTGCACCACCACACCCGGCTAATTTTTTTTA
TTTTTAATAGAGATGAGGTTTCACCATGATGGCCAGGCTGATCTCGAACTCCTAACCTCAAGTGATCCTCCCACC
TCAGCCTCCCAAAGTGTTGGAATAATAGGCATGAGCCACTGCACCCAGGCTTTTTTTTTTTTAAATTTATTATTA
TTATTTTTAAGAGACAGGATCTTGCTACGTTGCCCAGGCTGGTCTTGAACTCCTGGGCTACAGTGATCCTCCTGC
CTTATCCTCCTAAATAGCTGGGACTACAGCACCTAGTTTTGAGTTTCCTGTCTTATTTCCAATGGGGACATTCAT
GTAGCTTTTT

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FIGURE 2516

CTTTTGCGGGTGGCGGCGAACGCGGAGAGCACGCC**ATG**AAGGCCTCGGGCACGCTACGAGAGTACAAGGTAGTGG
GTCGCTGCCTGCCCACCCCCAAATGCCACACGCCGCCCCTCTACCGCATGCGAATCTTTGCGCCTAATCATGTCG
TCGCCAAGTCCCGCTTCTGGTACTTTGTATCTCAGTTAAAGAAGATGAAGAAGTCTTCAGGGGAGATTGTCTACT
GTGGGCAGGTGTTTGAGAAGTCCCCCCTGCGGGTGAAGAACTTCGGGATCTGGCTGCGCTATGACTCCCGGAGCG
GCACCCACAACATGTACCGGGAATACCGGGACCTGACCACCGCAGGCGCTGTCACCCAGTGCTACCGAGACATGG
GTGCCCGGCACCGCGCCCGAGCCCACTCCATTCAGATCATGAAGGTGGAGGAGATCGCGGCCAGCAAGTGCCGCC
GGCCGGCTGTCAAGCAGTTCCACGACTCCAAGATCAAGTTCCCGCTGCCCCACCGGGTCCTGCGCCGTCAGCACA
AGCCACGCTTCACCACCAAGAGGCCCAACACCTTCTTC**TAG**GTGCAGGGCCCTCGTCCGGGTGTGCCCCAAATAA
ACTCAGGAACGCCCCGGT

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FIGURE 2517

CGGCGCTGGGGTAAGAAGCCTGCTGAGGGATGCCCAAGAAGTTCCAGGGTGAGAACACCAAGTCGGCAGCGGCCC
GGGCACGTAGGGCAGAGGCCAAGGCGGCCGCTGATGCCAAGAAGCAGAAGGAGCTGGAGGATGCCTACTGGAAGG
ACGACGACAAACACGTCATGAGGAAGGAGCAGCGCAAGGAGGAGAAGGAGAAGCGGCGCCTCGACCAGCTGGAAC
GTAAGAAGGAGACGCAGCGCCTACTGGAGGAGGAGGACTCCAAGCTCAAGGGCGGCAAGGCGCCGCGGGTGGCCA
CGTCCAGCAAGGTCACCCGGGCCCAGATCGAGGACACGCTGCGCCGAGACCATCAGCTCAGGGAGGCCCCGGACA
CAGCCGAGAAAGCCAAGAGCCATCTGGAGGTGCCGCTGGAGGAGAACGTGAACCGCCGCGTGCTGGAGGAGGGCA
GCGTGGAGGCGCGCACCATCGAGGACGCCATTGCAGTGCTCAGCGTGGCGGAGGAGGCGGCCGACCGGCACCCAG
AAAGACGCATGCGGGCAGCCTTCACAGCCTTTGAGGAAGCCCAGCTGCCGCGGCTCAAACAAGAGAACCCCAACA
TGCGGCTGTCGCAGCTGAAACAGCTGCTCAAGAAGGAGTGGCTCCGCTCTCCTGACAACCCCATGAACCAGCGGG
CCGTGCCCTTCAATGCCCCCAAGTGAGCCCAGAACTTGGGGAGCCAGTTCACCCACGGGTGGTCCAGGTCACGAC
TCTGCACGCCCTTAGGCCAGGTCAGCTGCGAGGGTCACAGAGCGTTCCGGGGGCCAAGGCGCCGGGCCCCGGGGC
CATGCTCTTATCACCAGCCACCCGTCCTCCCGCCAGAGGGTCCCTGCCCCGAGTGACACCCCATCCCCTCCCATC
CCCCGGCGCGTGTGTGTAGAGCCTCAGGGCTGAGTGCCCAATAAAGGTGGCGGCAAGGCT

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FIGURE 2518

GGGATTTTCTGCTCCGGTTGGTGAGCGCGCCTGCGCGTTGACGGCGATTTTGCGTTCTGAGGCTGCAGCGTCGGC
ATCTTGAGCTGCCGGTTCGCGAGTTCGAGGCCAGGTTCCGCCTGTCGTGGGTTCGCACCCCGGACGCGATGCTAT
TCGACAAGGTGAAAGCGTTCTCGGTGCAGTTGGACGGCGCGACCGCGGGCGTCGAGCCCGTGTTTAGCGGCGGCC
AGGCCGTGGCGGGCCGGGTGCTGCTGGAGCTGTCAAGCGCCGCGCGTGTGGGTGCCCTGAGGCTGCGCGCGCGGG
GCCGCGCCCACGTGCACTGGACCGAGTCGCGCAGCGCGGGCTCGAGCACGGCTTACACGCAGAGCTACAGTGAAC
GCGTGGAGGTCGTGAGCCACCGCGCCACGCTCCTGGCGCCAGATACCGGGGAGACCACGACGCTGCCTCCTGGGC
GCCATGAGTTCCTGTTCAGCTTCCAGCTGCCCCCGACCCTGGTGACATCCTTCGAGGGCAAACACGGTAGTGTCC
GCTACTGTATCAAGGCCACCCTGCACCGGCCCTGGGTCCCAGCACGCCGGGCAAGGAAGGTGTTCACTGTCATCG
AGCCTGTGGACATCAACACGCCAGCCCTGCTGGCACCTCAAGCGGGGGCTCGGGAAAAGGTTGCCCGATCCTGGT
ACTGTAACCGTGGCCTAGTCTCCCTTTCGGCCAAGATCGACCGCAAGGGCTACACCCCAGGAGAGGTCATCCCTG
TCTTTGCCGAGATCGACAACGGCTCCACACGTCCTGTGCTGCCTCGGGCAGCCGTGGTGCAGACACAGACGTTCA
TGGCCCGAGGCGCCCGAAAGCAGAAACGGGCAGTGGTGGCCAGCCTCGCGGGCGAGCCGGTGGGCCCCGGGCAGC
GGGCGCTGTGGCAGGGCCGGGCACTGCGGATCCCCCCAGTGGGTCCTTCCATCCTGCACTGCCGCGTTCTACACG
TGGACTACGCACTCAAGGTCTGTGTGGATATCCCAGGAACGTCCAAGCTGCTGCTGGAGCTGCCACTGGTGATCG
GCACCATTCCCTTGCACCCTTTTGGCAGCCGTTCCTCCAGCGTGGGCAGCCACGCCAGCTTCCTGCTGGACTGGA
GGCTGGGGGCCTTGCCGGAGCGGCCTGAGGCTCCTCCTGAGTACTCGGAGGTGGTAGCCGACACTGAGGAGGCAG
CCTTGGGGCAGAGCCCCTTCCCGCTTCCGCAGGACCCCGACATGAGCCTTGAAGGCCCGTTCTTCGCCTACATCC
AAGAGTTCCGCTACCGCCCGCCACCCCTGTACTCTGAGGAGGATCCAAACCCACTCTTGGGGGACATGAGGCCGC
GCTGCATGACTTGCTGAACGGCACAGGGACCCCTCGAGGAACAAGGTTGCACACCAGCTTTCAGCCACCATGACT
GTGGGGAGTGGCTGGACCAAGGGCTGACCTCCCCGACTGCATCAAAGTTGGGGAACCAAGTCTCAGAGTGAGGCG
GGGGCCTTTCGGATATCACATGGGACAGAGGAAGAGCCCGGCTGGAATCTGACTTACCTGGACCGCTGTCCTTGT
GAGGCATTGAATGCCCAGTGCAGTATCCGAGAGACTGTTTAATAACCTGTCTTCCCAGCCAATTGGTGGTGCTGG
AATCCCCTAGGAGCCTTCAGTCTGGGAGAAACAGAGCCAGACATAGACAGTTCCAGCATCACAGAACCAGAAGAA
GAGACCTGCAACTGTGAGAGTCCAGACAGGAAGCAGAGAAGGCGTCCTTGCGGAAAGGGCATTTTAGCTGAGGCT
TTGGAGTACGAATAGGAGCTCAGCAGGCAGACGAATGAGGAATAAAGGTCAGAGAAGGTCAGAGCTGAGTGACGT
TTGGAATCCACCCCGTTTATTGTAGAACTGGGGGTTCAGAGGGCAGGTGCCTCAGAGTTGAGGCCACACAGTGAG
GTCTGGTGGGTGAAAGGACCCAGGAACGAGGCGTTCAGGAAAGCAGGTTGTCAGAGCTATGTGGAGTCTGTGGGT
GGCAGGGGCAGCCGCTCCAGCCTTTGAAGACTTTGAAAGCCAGAGATTCCTGGCGCAGGCTTGGACTTCCTGGGA
GCTCCTCCAAGTACCCAGGGGCATCAGAGCTGCCTGGGTGTTACATGGCCCAGGGAACCCAGGTTCAGGGTAGGA
CAGGCAAGACCAGATACCCAATGTGCAAAGTGAAAACACTGGGCTCCCTGTTAAACGATGAAGAATTCAAGACAG
TGACAGCATTACGTCACCCCTGGGGACAGAGGTCAGCCTAAGGTGACACACGGGGACTACTGTGCTTCCGGAGGC
TCCCTGTGTCCTGGAGGAGAAAAGCATTAGAGGGGGCAGCTGGACAAGCTCCCAACTGCAGAGTCCCAGCCCTGG
CTGGGGCAGGGCCCCGGCCTGGGACTCAGCATTTCTGATATGCCTTAAGAATTCATTCTGTTTTGTACAATTATT
TTTTAAAAGTAAACGTGTGGAGAAAG

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FIGURE 2519

CCTGAAGGCTGTGGGACCCATGATCCTGGTTAGATTCTCCTTCTGCTTGTCCCTGGCTGTGCTGCCTCAGGCACA
TTACTTAACCTTTCTGGGCCTCTGCCACCTCATCTGTAAAATGGGCATGATGGTGAAGCCAGGTTGCCAGATAAA
ATATAGGCTACTCAGCTAAATGTGAAGTTCAGATCAATATTGAATTTGGTTTTACTGTAAGTATATCCCATGCAA
CATTTGGGATATACTTATACTAAAAAAAAATTATTCATTGATGCTATGGTTTGAATGGTCCCCCAAAGTTCATAT
GTTTGAAACTTAATCCTCAAAGCAGTCCTTTCAACCTTGTCAACCTGTCGGCGCGGCCTCTGGTGCAGTGGCGGC
GGCTCCTGTTCCTGCCGCAGCTCTCTCCCCTTCTTACCTCCCCACCAGATCCCGGAGATCGCCCGCCATGGCTTT
ACTTACTGCGGCCGCCCGGCTCTTGGGAACCAAGAATGCATCTTGTCTTGTTCTTGCAGCCCAGCATGCCAGTGC
TTCCTCCATGAATTTGAAAGACATATTGGCTGACCTCATACCTAAGGAGCAGGCCAGAATTAAGACCTTCAGGCA
GCAACATGGCAAGAAGGTGGTGGGCCAAATCACTGTGGACATGATGTATGGTGGCATGAGAGGCATGAAGGGATT
GGTCTATGAAACATCAGTTCTTGATCCTGATGAGGGCATCCGTTTCTGAGGCTTTAGTATCCCTGAATGCCAGAA
ACTGCTACCCAAGGCTAAGGGTGGGGAAGAACCCCTGCCTGAGGGCTTATTTTGGCTGCTGGTAACTGGATGTAT
CCCAACAGAGGAACAGGTATCTTGGCTCTCAAAAGAGTGGGCAAAGAGGGCAGCTCTGCCTTCCC**ATG**TGGTCAC
CATGCTGGACAACTTTCCCACCAATCTACACCCCATGTCTCAGCTCAGTGCAGCTGTTACAGCCCTCAACAGTGA
AAGTAACTTTGCCCAAGCATATGCACGGGGTATCAGCCGAACCCAAGTACTGGGAGTTGATTTATGAAGACTCTG
TGGATCTAATCACAAAGCTACCTTGTGTCGCAGCAAAGATCTACCGAAATCTCTATGGAGAAGGCAGTGGTATTG
GGGCCATTGACTCTAACCTGGACTGGTCTCACAGTTTCACCAACATGTTAGGCTATACTGATCATCAGTTCCCTG
AGCTCATGCACCTGTACCTCACTATCCACAGTGACCATGAGGGCGGCAATGTAAGTGCCCATACCAGCCACTTGG
TGGGCAGTGGCCTTTCAGACCCTTACCTGTCCTTTGCAGCAGCCATGAACGGGCTGGCAGGGCCTCTCCATGGAC
TGGCAAATCAGGAAGTGCTTGTCTGGCTAACACAGCTGCAGAAGGAAGTTGGCAAAGATGTGTCAGATGAGAAGT
TA**TGA**GACTACATCTGGAACACACTCAACTCAGGACGGGCTGTTCCAGGCTATGGCCATGCAGTACTAAGGAAGA
CTGATCCACGATATACCTGTCAGCGAGAGTTTGCTCTGAAACACCTGCCTAATGACCCCATGTTTAAGTTGGTTG
CTCAGCTATGCAAGATTGTGCCCAATGTCCTCTTAGAGCAGGGTAAGGCCAAGAATCCTTGGCCCAATGTAGATG
CTCACAGTGGGGTGCTGCTCCAGTATTATGGCATGATGGAGATGAATTACTACACAGTCCTGTTTGGGGTGTCAC
GAGCATTGGGTGTACTGGCACAGCTCATCTGGAGCCGAGCCTTAGGCTTCCCTCTAGAAAGGCCCAAGTCCATGA
GCACAGAGGGTCTGATGAAGTTTGTGGACTCTAAGTCAGGGTAAAACTGGAGACTGGGGGAAAGTGACTACCAGA
AAGTGAGGAAGCCTAAATAAAAAGTATACTTTTGTTTCAGGGGGCCTTTAAAGACTTAAGATTAAATTATATCTG
AGGCACTGATAATATGTTTGAGGTTAAAATATAAATTAAGACTTTAAAAGATGAAAAATGGTCCCTTCTTCCCTA
ATCAGCTCCTTTCCCCTGCCTGGTATGAGTTGCCCATCACAGGCATGGTCCTGGAGGATGACCAGGACTAATGCA
TGTGGTATGAGTAGGTTTGGCCCCCTCACTATCTCTAGAGTGAGAATCTGGCTCCTGTTTCCATGGCTCAAAGCC
GGTTGCAGAGAATCTGCAGTCACTTCGGAGCTTTAGCTTCTTCTCTGCCAAGCCCTCAATAAGCCAGCAAACCAG
GACTCTGCCCCTTCTGTTTCCATAGGAATCATGTTGGATAGTCAGCTGTACCAAGCCCCTTGGCCTTCCCATGCA
CACAAACACCTCCTAGCAAGACCTGTTGGTTAGCTGGACATGCTTTGGCAATTTTTTTATACTGCCAAGTGACCA
TAAAGGCATGGCATTTGTTGTGACTGGCACCCAATGTTTGATTTTTTTTTTAAACTATCCAATTAAAATTAAGGT
CTGGGAGTGTTCTGTTTCCCATTACTTTAATACTCACCCCCCTCCCAGACTTTCTACACCTGTTTCACCTCAGGC
TGAGGATGTTCTGGACCTCCCCCTCTTAGTCCCTACTAGAGACCTCTCAACAGATCTGTGGGCCCAGTCATTGGG
TTTTATCAGTGCTTAATGTGAACTAAGTTTTTTACTTCCAACAGAATACAAGCCACTACCTTCTGACCTCCCCAC
CCCCCACCAACCCCCAGCTTTTAATATGCTGTGGGGCATAGAACAGGGACTCCGGAATGACCAGCATGATATTTT
CAGAGTCTTGTCCCTGGGGTATTAGCACCTCTTTTTGAACAGAGAATTGATTCAAGATTGGACATGGTCTCCTCT
GATTATCAGGTACTGGGGCTGAGGGCATTAAAAATAGTAAGCCTCCTTCCTCGTCCCCTGCCTCAAGAAATTGCC
TCCTTATTTATCAACATCTTTTTCCTCCCTTTCCCTGAGAGCTCACAGTACAATGTTTGTTTCAGAAGCCCCATT
TGCACAGGTTTTCAGCAACTCAGAATGCTCTACTTCTTTTTCTTTGAGAAAGGATTGAGATACGCTCCTGCTGTG
CCCCCATCTTTCCTCCAAACTCCTGCCTGTGTTTGTGTGGATACCCAGTCCCAGAACCACACTGTTGAGTTGGAC
ACACTGTAAACCCCTGGCTAACTGTCAAGTCATGATGCAGACTTCAGGTTGTTCTGTATAAAATGCAAAATAAAT
GTTTTAATTAAC

FIGURE 2520A

GGACGAGTCGAGCCTCCTGCGGCGCCGCGGGCTCCAGAAGGAGCTGAGCCTGCCACGCCGAGGACGTGGCTGCCG
CAGCGGGAACCGCAAGAGCTTGGTGGTAGGAACGCCCTCCCCGACCCTCTCCCGGCCCCTGTCGCCATTGTCGGT
CCCAACGGCAGGCAGCAGCCCCTTGGATAGTCCTCGGAATTTCTCGGCTGCCTCTGCCCTAAATTTCCCCTTTGC
CCGGAGGGCAGACGGCAGAAGATGGTCCCTCGCGTCTCTCCCATCTTCCGGCTATGGAACCAACACACCCAGCTC
CACCCTCTCGTCAAGCTCATCCTCCCGGGAACGTCTCCACCAGCTTCCCTTCCAGCCGACGCCGGACGAGCTGCA
CTTCCTGTCCAAGCACTTCCGCAGCTCAGAGAATGTGCTTGATGAGGAAGGCGGCCGGTCACCCCGCCTCCGACC
CCGCTCTCGCAGTCTCAGCCCGGGCCGTGCAACGGGGACCTTCGACAATGAGATTGTC**ATG**ATGAATCACGTGTA
CCGGGAGAGGTTCCCCAAGGCCACAGCACAGATGGAGGGCCGTCTGCAGGAGTTCCTGACGGCCTACGCGCCCGG
CGCCCGGCTGGCGCTGGCTGATGGCGTCTTGGGCTTCATCCACCACCAGATCGTCGAGCTGGCCCGAGACTGCTT
GGCCAAGTCTGGCGAGAACCTCGTCACCTCCCGCTACTTCCTAGAGATGCAGGAGAAGCTGGAGCGGCTTCTGCA
GGATGCCCATGAGCGTTCGGACAGTGAGGAGGTCAGCTTCATCGTCCAGCTTGTCCGGAAACTGCTGATCATCAT
CTCACGGCCAGCTCGGCTGCTGGAGTGTCTGGAGTTTGACCCTGAGGAATTTTACCACCTGCTGGAGGCGGCTGA
GGGCCATGCGCGGGAGGGCCAAGGCATTAAGACTGACCTTCCACAGTACATCATTGGGCAGCTGGGCCTGGCCAA
GGACCCCCTGGAGGAGATGGTGCCACTGAGTCACCTCGAAGAAGAACAGCCCCCAGCACCTGAGTCCCCAGAGAG
CCGCGCCCTGGTCGGCCAGTCACGGAGGAAGCCATGCGAAAGCGACTTTGAGACCATCAAACTCATTAGCAACGG
AGCCTATGGGGCCGTCTACCTGGTGCGGCACCGTGACACACGGCAGCGCTTTGCCATCAAGAAGATCAACAAACA
GAACTTGATCCTGCGTAACCAGATCCAGCAGGTCTTTGTGGAGCGTGACATTCTCACCTTTGCCGAGAACCCCTT
TGTGGTCAGCATGTTCTGCTCCTTTGAGACCCGGCGCCACCTATGTATGGTCATGGAATACGTGGAAGGCGGCGA
CTGCGCCACGCTCCTGAAGAACATGGGCCCGCTGCCCGTGGACATGGCCCGCCTGTACTTCGCCGAGACGGTGTT
GGCGCTGGAGTACCTGCATAACTATGGCATCGTGCACCGTGACCTCAAACCAGACAATCTGCTCATCACCTCGCT
TGGCCACATCAAGCTCACGGACTTCGGCCTGTCCAAGATCGGCCTCATGAGCATGGCCACCAACCTCTATGAGGG
CCACATCGAGAAGGACGCCCGAGAGTTCATCGACAAGCAGGTGTGTGGGACGCCGGAGTACATAGCCCCCGAGGT
GATCTTCCGCCAGGGCTATGGGAAGCCAGTGGACTGGTGGGCCATGGGCGTCGTCCTCTATGAGTTTCTGGTGGG
CTGCGTGCCTTTCTTTGGAGATACCCCCGAGGAACTCTTCGGTCAGGTGGTCAGCGATGAGATCATGTGGCCAGA
GGGAGATGAGGCCCTTCCAGCAGACGCCCAGGACCTCATCACCAGGTTGCTCCGGCAGAGCCCGCTGGACCGTCT
GGGCACTGGTGGCACCCACGAAGTGAAGCAGCACCCCTTTTTCCTGGCCCTGGACTGGGCAGGGCTTCTCCGACA
CAAAGCCGAGTTCGTGCCCCAGCTCGAAGCTGAGGATGATACCAGCTACTTTGACACACGTTCGGAACGTTACCG
CCATCTGGGCTCCGAGGACGACGAGACCAATGATGAAGAATCGTCCACAGAGATCCCCCAGTTCTCCTCCTGCTC
CCACCGGTTCAGCAAGGTCTACAGCAGCTCTGAGTTCCTGGCCGTCCAGCCCACTCCTACCTTCGCTGAAAGGAG
CTTCAGTGAAGACCGGGAGGAGGGGTGGGAGCGCAGCGAAGTGGACTATGGCCGCCGGCTGAGTGCTGACATCCG
GCTGAGGTCCTGGACATCCTCTGGATCCTCCTGTCAGTCATCTTCGTCCCAGCCCGAGCGGGGTCCCAGCCCATC
TCTCCTGAATACCATCAGCCTGGACACAATGCCCAAGTTTGCCTTCTCATCAGAGGATGAGGGGGTAGGCCCAGG
CCCTGCAGGCCCCAAGAGGCCCGTCTTCATTCTAGGGGAGCCTGACCCCCCACCAGCGGCCACCCCAGTGATGCC
CAAGCCCTCGAGCCTTTCTGCCGACACAGCTGCTCTCAGCCACGCCCGCCTACGGAGCAATAGCATCGGCGCCCG
ACACTCCACACCAAGGCCTCTGGATGCCGGCCGGGGCCGCCGCCTTGGGGGCCCAAGAGACCCAGCCCCTGAGAA
GTCCAGAGCCTCCTCCAGCGGTGGCAGTGGTGGCGGCAGTGGGGGCCGCGTGCCCAAGTCAGCCTCTGTCTCTGC
CCTGTCCCTCATCATCACGGCAGATGATGGCAGCGGCGGCCCCCTCATGAGCCCCCTTTCCCCGCGCTCTCTGTC
CTCGAACCCGTCGTCCCGTGACTCTTCGCCGAGCCGAGACCCGTCCCCCGTGTGTGGCAGCCTGCGGCCCCCCAT
CGTTATCCACAGCTCTGGCAAGAAGTACGGCTTCAGCCTGCGGGCGATCCGCGTCTACATGGGTGATAGCGACGT
CTACACTGTGCACCACGTCGTCTGGAGTGTGGAGGACGGAAGCCCCGCCCAGGAGGCGGGCCTGCGGGCTGGGGA
CCTCATCACCCACATCAACGGGGAGTCAGTGCTGGGGCTGGTGCACATGGACGTCGTGGAGCTGCTGCTGAAGAG
CGGCAACAAGATATCCCTGCGGACCACAGCCCTGGAGAACACCTCCATCAAGGTGGGCCCCGCCCGGAAGAATGT
GGCCAAGGGCCGCATGGCACGCAGGAGCAAGAGGAGCCGTCGGCGGGAGACCCAGGATCGGCGGAAGTCACTTTT
CAAGAAGATCTCCAAGCAGACCTCCGTGCTGCACACCAGCCGCAGCTTCTCCTCCGGACTCCACCACTCACTGTC
ATCCAGTGAGAGCCTCCCCGGCTCGCCCACCCACAGCCTCTCCCCCAGCCCCACCACTCCCTGCCGAAGCCCAGC
CCCTGATGTCCCAGCAGATACCACTGCATCCCCACCCAGCGCATCCCCGAGCTCCAGCAGCCCCGCCTCCCCAGC
TGCTGCTGGCCACACCCGCCCCAGCTCCCTGCACGGCCTGGCTGCCAAGCTTGGGCCACCCCGCCCCAAGACTGG
CCGCCGCAAGTCCACCAGCAGCATCCCGCCCTCCCCGCTGGCCTGCCCGCCCATCTCCGCGCCCCCACCCCGCTC

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FIGURE 2520B

GCCCTCGCCCCTGCCCGGGCACCCGCCCGCACCTGCCCGATCCCCGCGGCTGCGCCGGGGCCAGTCAGCTGACAA
GCTGGGCACAGGGGAGCGGCTGGATGGGGAGGCGGGGCGGCGCACTCGTGGGCCAGAGGCCGAGCTCGTGGTCAT
GCGGCGGCTGCACCTGTCCGAGCGCCGAGACTCCTTCAAGAAGCAGGAGGCCGTGCAGGAGGTTAGCTTCGATGA
GCCGCAGGAGGAGGCCACTGGGCTGCCCACCTCAGTGCCACAGATCGCCGTGGAGGGCGAGGAAGCCGTGCCAGT
AGCTCTCGGGCCCACCGGAAGAGACTGATCCCCTGCCAGGTCTCTCCCTGGCATCAAAGTTACGCGTTTTCTTGT
GCAATGTTTTTTCCGTAAAGTCATGCCTGGATGGGGACTGAGCCACCAGCCTGACACCCAGAAGGCGAGAAGCCA
TCTCGGTCCTTGCTGGAAGGTGGAGACATCGCTTGTGTTCTGGTGTCAATCGGGGCTGGATGGGGCAAGAATGGG
GGACAAGGGTGGCTTTGTAAATAGCAGCAAATCCCTGCAACTAATTTATTACTTTTTTTTTCTTTTTTTTTTTTT
TTTTTTGAGACAGAGTCTCACTCTGTTGCCCGGGCTGGAGTGCAGCGGCGTGATCTCAGCTCACTGCAACCTCCG
CCTCCCAAGTTCAAGCGATTGTCCTGCCTCAGCTTCCCAAGTGGCTGGGATTACAGGCGCCCACCACTATGCCCA
GCTAATTTTTTGTATTTTTAGTACAGACGGGGTTTCACCATGTTGGTCAGGCTGGTCTCGAACTCCTGACCTCAT
GATTTGCCTGCCTTTGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGGGCCCAGCCTAATTTATTACTT
TTTATAAGCGATAGCCGTACTGAGCCGCCCCCTGAAGGCGGCTGCCAGGTCTTGCCCCAGGCACCTGGGACTCTG
TTTGCAGGCCCTGCCCTCTGGGCTGAGAAGGATGCACTTTGGACAAGTCATCTGTGTTTGTGTTTTCCAGTTTTT
CTGTACTTTTTAAGTGTTTTGTGTTACCTGGTCTCATTCCCCTCCCCACACCTACCCATTTGAGGGGATGGAGTT
GAAGTCACCTGGTCACCTGTACCGGCCCAGTTCGGCTACAACCTGGAGTGTCCGTAAACAATTCCTCTCACCCAC
AAAACAATGTAATCCCAGCGATGGACTGGATTCTGAAGGCCACTTCCCACCATCATAGCTGCCATGCCCAGGCAG
TGCCTGCTCTATATATAGAGTCTGCCTCCAATCCTGCTGGCTTCAGCCTGGAGAAGGGATATGGGAGCTGGAGCT
TTGATGGATGAATAGGTGTTCACCGGATCTGGGCAGAGGGGTCATCCGCTCCCCAGGTGGGCACTGATAAAGGAA
GGTACAGGCCTCACCTGGAACTGCCAAGGCAGCCTCCAGAAATGCTCGGCTGTCTCGGGGCACGCTCCAGTATGC
CAGTCCTGCGGGATTACGTCCAGCTACTTCCAGAAACACTCAGTGTCCCCTCCCCTCAGGCTCTGCCTTGGCCTG
GCCTTGTCCAGTCTACCCTGGACAAGATGCCGTGTGTTTGAGGCCCAGCAGAGTAAGCCCTTGGCCGTGATGTGT
CTGAAACACCTGTTAGGGGTTCCCTCCATATGTCAGAGCCTCTCTGGGATGAAGTTCAAGCCAGAAAACCCAGTC
GAGGCTCAAGTTTGAATTTCAGCTTCACTGTGTGGCTCTGGGAAAATGGCTTTCCCACTCTGTGCCTCAGTTTCC
TTGTGTTTACAAGACTAATCCCATTGACTGTTTATTAAGCACCTACTGTGTGCCAAGCGCTTTTACGTGGCTTCT
CCCTCAGCCAGCCTTGAGAAGGCTGGAGGTGGTGTCATCACCTCCATTTTACAGACAAAGCAGCTGAGACCCCAG
CGAGGGGCGGAGACCTGTCCCACGATCACCCAGCAGGAGTCGTGGCAGAACGGAGCATCAGCCAGACCCTGTTGT
GGGCGTTGTCATCAAGGGAGCTTGAATGGAGGGTCTGGTGTCAGATACAGCCGACTCCAGCCCCAGCTCATCCCC
CATGATGCTGTGTGACCCACTGGGCACTCTGGTGAGGGAGCTTTCCAGACATCAACAGCCCACTCTGCTTCCCTT
TCTGAGTCCCCTGTCCAGCACTGCCTAGTGTTGGAGGGTAGACCAAGGCTGTGCATGATTCACCCCCTCCTTCCA
TCCTGGAGCTGGCAGTGAATAAAAGCCCGTATTTAC

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FIGURE 2521A

TGGGCACTGAGCACATTCGGTTATTTCCAGAAACGCTCCGCGGTCTTGGGGATCAGCCTCAGTTGTGCCAGTGCG
GCCGTAGAGAGTGTTCGGCCATTTCCGAAAGCGCTCGGGCGTCTCTAAGCCCAGCCGAGCCCAGTCTCGGATCCC
TCGCCGACCCGATTGCACTCGGCTACCTCTGGAAACGCTCGGCTGTCTCGGGGGCACCCTCTAGTCCACCAGTCC
CGCGGGATTACGTTCGGCTACTTCCGGAAACACTCGGGTGCCCCCTTACCTCAGGCTCCGCCTCGGCCTCGGTTC
ATCCGCCCGGCTCGAATGCGCTCGGGCATTTCCGCCGGGGGCGGGCCAGGCCGCTCGGAACCGTGGCGGCGGCGG
AGGCGGGGATCCCGCGGCTGCGGCGACGGTGGCCGCGGTGGAGCCACGGGGCGGGCTTGGCTTGGTGTGACGGCG
GCTGCGGCGGCGGTGGCGGCCGCGACCAGGTCGGCGTCCTCAGCTGGCCGAGCATGGTGGCAGCCTGCACCCTTG
GCTCCCTTGTCTGGTGCAGCCAGCAGAGCCGCCAGCCTTGGGCGCCCATGGCCCTCCGTGTGAGGGCGTGAGCGG
CCTGCCCCAGCCTCACCTGCTGATGGAGGACTCAATGGCCCAGTGACCTGACACCACACCACCAACTCCCTCCCA
CCAGCTGACGAATGGTGGACCCAGTGACGAGTGGCCCTTGTAAGGGTCATGGAATAATTTGAAGCGAGGCATGAG
CGGCCCCTGTGGTCGCCTGTGACTGCTGGAGATAGAGGTCCCAGCACCCCAAGCCAACCCAGCGGACCCTCCCAG
CCCTGCTTCAACCAATGGGGCCAGTGGGGCTCCAAGCAGCCACCTAACCATCCAGACCCCACCCCACTCACGCGG
CCATGGCGGGCCCTGAGGGCTTCCAGTACCGCGCTCTGTACCCGTTCCGCCGGGAGCGGCCGGAGGACCTGGAGC
TGCTGCCCGGCGACGTGCTGGTAGTGAGCCGGGCGGCCTTGCAGGCGCTGGGCGTGGCCGAGGGTGGCGAGCGCT
GCCCACAGAGCGTGGGCTGGATGCCCGGCCTCAACGAGCGCACACGGCAGCGAGGTGACTTCCCTGGCACCTATG
TGGAGTTCCTGGGGCCCGTGGCCCTGGCCCGGCCCGGCCCTCGCCCACGGGGCCCCCGCCCACTGCCCGCCAGGC
CCCGTGATGGGGCCCCTGAGCCAGGCCTCACACTCCCCGACTTGCCCGAGCAGTTCTCCCCACCTGATGTGGCTC
CCCCTCTTCTGGTGAAGCTTGTGGAGGCCATTGAAAGGACAGGGCTGGACAGCGAATCTCACTACCGCCCGGAGC
TGCCCGCACCGCGTACAGACTGGTCCCTGAGCGACGTGGATCAGTGGGACACGGCAGCCCTGGCTGACGGCATTA
AGAGCTTCCTGCTGGCACTGCCCGCGCCGCTCGTGACCCCCGAGGCCTCGGCCGAGGCGCGCCGGGCCCTGCGGG
AGGCCGCGGGGCCCGTGGGGCCGGCGCTGGAGCCACCGACGCTGCCGCTGCACCGCGCGCTCACGCTGCGCTTCC
TGCTCCAGCACCTGGGCCGCGTGGCCAGCCGCGCCCCGGCCCTGGGTCCCGCGGTCCGGGCCCTGGGCGCCACCT
TTGGGCCGCTGCTGCTGCGCGCGCCGCCGCCGCCGTCCTCGCCGCCGCCAGGGGGCGCTCCCGACGGGAGTGAGC
CCAGCCCTGACTTCCCGGCGCTGCTGGTGGAGAAGCTGCTTCAGGAACACTTGGAAGAGCAGGAGGTTGCGCCCC
CAGCGCTGCCGCCTAAACCCCCCAAGGCAAAGCCGGCCTCCACAGTCCTGGCCAATGGAGGGAGCCCACCCTCCC
TGCAGGATGCTGAGTGGTACTGGGGGGACATTTCAAGGGAGGAGGTGAACGAGAAACTCCGGGACACTCCCGATG
GCACCTTCCTAGTCCGAGATGCTTCTAGCAAGATCCAGGGCGAGTACACGCTGACCCTCAGGAAAGGCGGGAACA
ATAAGCTGATCAAGGTCTTCCACCGAGATGGGCACTATGGCTTCTCAGAGCCACTCACCTTCTGCTCCGTTGTGG
ACCTCATCAATCACTACCGCCACGAGTCTCTGGCCCAGTACAATGCCAAGCTGGACACACGGCTCCTCTACCCTG
TGTCCAAATACCAGCAGGACCAGATTGTCAAGGAGGACAGCGTGGAGGCAGTGGGCGCCCAGCTTAAGGTCTATC
ACCAGCAGTACCAGGACAAGAGCCGCGAGTATGACCAGCTTTATGAAGAGTACACACGGACCTCCCAGGAGCTGC
AGATGAAGCGTACTGCAATTGAGGCCTTCAATGAGACTATCAAGATCTTTGAAGAGCAGGGCCAGACTCAAGAGA
AATGCAGCAAGGAATACCTGGAGCGCTTCCGGCGTGAGGGCAACGAGAAAGAGATGCAAAGGATCCTGCTGAACT
CCGAGCGGCTCAAGTCCCGCATTGCCGAGATCCATGAGAGCCGCACGAAGCTGGAGCAGCAGCTGCGGGCCCAGG
CCTCGGACAACAGAGAGATCGACAAGCGCATGAACAGCCTCAAGCCGGACCTCATGCAGCTGCGCAAGATCCGAG
ACCAGTACCTCGTGTGGCTCACCCAGAAAGGCGCCCGGCAGAAGAAAATCAACGAGTGGCTGGGGATTAAAAATG
AGACTGAGGACCAGTACGCACTCATGGAGGACGAGGACGATCTCCCGCACCACGAGGAACGCACTTGGTACGTGG
GCAAGATCAACCGCACGCAGGCAGAGGAGATGCTGAGTGGCAAGCGGGATGGCACCTTCCTCATCCGCGAGAGCA
GCCAGCGGGGCTGCTACGCCTGCTCCGTGGTAGTGGACGGCGACACCAAGCACTGCGTCATCTACCGCACGGCCA
CCGGCTTCGGCTTCGCGGAGCCCTACAACCTGTACGGGTCGCTGAAGGAGCTGGTGCTGCACTACCAGCACGCCT
CGCTGGTGCAGCACAACGACGCGCTCACCGTCACCCTGGCGCACCCAGTGCGCGCCCCGGGCCCCGGCCCGCCGC
CTGCCGCCCGCTGAGCACCGAGGACCCGCCCCAAGCAGAGCCGCCCCTGGGCCCGTCTGCGCCGGAGGCTGCGGC
GGCGGGAGCCACGGACCAGACCAGCCACATCCAGGGGTCCTCATTTCTCCGGCTCTGGCTCTTGTTTGGGGTTCT
CTCACCCTCTTTCTCTTTCCTTCCCTCCCCCATTCTCCAGATCTCCCTCTGTCTCCTTTTCTCTGTCTTTCTTGG
CCCCTGTCTCTCTCCATGTTGGGGGTCCTAACTCCCCCACCCCATATCTACGTGTCCTCCGGGCATTGCCCTCTC
CATGGCTCTGGTCACCCTGACCCTCTGCCCTGCCCACCGCAGGTCCCCCGGGGTCCCGGAAGCCCCTTCTGGCTG
CACCTGCCATGTTTACAGAGGGCCCCTGGGCTGCGCGGCCCCAGCCTGGGCACCCTGATTTTTAAGCCATAGACC
TGGGGTCAGGGCAGGAAGGAACTTCACTCTGCTGCTTCCGAGAACCTCGGCCGTGACATTCGGGGCCGGGCGGGA

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FIGURE 2521B

CCCGCCCCACAGACTCCAACTTCCCCTCCAAACCCCGAAGTGAAACCCGCCACCGGGTTACCCCCACAAGGGGGC
CGCTGCGAGAAGTTCACCCACCCCCGAAAAAATAATTAAACTCGCAGGCCAGGCACGGTGGCTCATGCCTGTAAT
CCCAGCACTTTGGGAGGCCAAGACGGGCGGATCTTTTGAGGTCGGGAGTTGGAGGCCAGCCTGGCCAAAATGGCA
AAACCCCGCATCTACTAAAATACAAAAATTAGCCGGGCGTGGTGGCGGCCGCCTGTAATCCCAGCTACTTGGGAG
GCTGAGGCGTGAGAATCTCTTGAACCCAGGAGATGGAGGTTGCAGTGAGCAGAGATCGTGCCACTGCACTCCAGC
CTGGGTAACAGAGGGAGACTCCTCCGTCTCAAAAAAATAAATAAATAAACTTGTGAGCTGGCCCCAACCCCTCCT
AGGAATCACAGCTCCCCGTACTGGTGCCGCCGCAGTGGCCAAGTTGCGACACTGCCCACGGCCCCTCCCTCTGAT
GCAGATTCAGGGCTTCTCTTCGATCATGTTGGGTTTTGATTCTGTTTTTCCTTGACTGCAAAACCCTCTTTCCTC
TCCTCTTTTGGGACAAGAGCCCTGGTTTTCTACGCTGCCCTTGGCCACCACACTGCCTGCCCCACGAGCTGGGAG
GCAGGTTTTGTACGGTACGTTGTTATTGATATGATATAAAACATCAAACGTC

FIGURE 2522

GGACCGCCGCCTGGTTAAAGGCGCTTATTTCCCAGGCAGCCGCTGCAGTCGCCACACCTTTGCCCCTGCTGCGATGACCCTGTCGCCACTTCTGCTGTTCCTGCCACCGCTGCTGCTGCTGCTGGACGTCCCCACGGCGGCGGTGCAGGCGTCCCCTCTGCAAGCGTTAGACTTCTTTGGGAATGGGCCACCAGTTAACTACAAGACAGGCAATCTATACCTGCGGGGGCCCCTGAAGAAGTCCAATGCACCGCTTGTCAATGTGACCCTCTACTATGAAGCACTGTGCGGTGGCTGCCGAGCCTTCCTGATCCGGGAGCTCTTCCCAACATGGCTGTTGGTCATGGAGATCCTCAATGTCACGCTGGTGCCCTACGGAAACGCACAGGAACAAAATGTCAGTGGCAGGTGGGAGTTCAAGTGCCAGCATGGAGAAGAGGAGTGCAAATTCAACAAGGTGGAGGCCTGCGTGTTGGATGAACTTGACATGGAGCTAGCCTTCCTGACCATTGTCTGCATGGAAGAGTTTGAGGACATGGAGAGAAGTCTGCCACTATGCCTGCAGCTCTACGCCCCAGGGCTGTCGCCAGACACTATCATGGAGTGTGCAATGGGGGACCGCGGCATGCAGCTCATGCACGCCAACGCCCAGCGGACAGATGCTCTCCAGCCACCACACGAGTATGTGCCCTGGGTCACCGTCAATGGGAAACCCTTGGAAGATCAGACCCAGCTCCTTACCCTTGTCTGCCAGTTGTACCAGGGCAAGAAGCCGGATGTCTGCCCTTCCTCAACCAGCTCCCTCAGGAGTGTTTGCTTCAAGTGATGGCCGGTGAGCTGCGGAGAGCTCATGGAAGGCGAGTGGGAACCCGGCTGCCTGCCTTTTTTTCTGATCCAGACCCTCGGCACCTGCTACTTACCAACTGGAAAATTTTATGCATCCCATGAAGCCCAGATACACAAAATTCCACCCCATGATCAAGAATCCTGCTCCACTAAGAATGGTGCTAAAGTAAAACTAGTTTAAT

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FIGURE 2523

CGAAAGCAGAGCGGCGCGCCGGTTCCTTGGTTCCTGAGGGCGATGGCGCGGGGTGGCTGGCGCCGGCTACGCCGC
CTGTTATCCGCGGGGCAGCTTCTATTCCAGGGCCGCGCGCTGCTCGTCACTAACACGCTGGGCTGCGGCGCGCTC
ATGGCGGCCGGTGATGGCGTGCGCCAGTCCTGGGAGATCCGCGCCCGGCCCGGCCAGGTTTTCGACCCACGGCGC
TCCGCGAGCATGTTTGCGGTGGGCTGCAGCATGGGTCCCTTCCTGCACTACTGGTACTTGTCGCTGGACCGCCTA
TTCCCTGCGTCTGGCCTCCGAGGCTTCCCAAATGTCCTCAAGAAGGTCCTCGTGGATCAGCTGGTAGCCTCTCCA
TTGCTGGGCGTCTGGGAATTCTACAAGGCAGACTGGTGCGTGTGGCCTGCTGCGCAGTTCGTGAACTTCCTCTTC
GTGCCCCCCCCAATTTCGAGTCACCTACATCAACGGCCTGACGCTGGGCTGGGACACGTACCTGTCCTACTTGAAG
TACCGGAGCCCAGTTCCTCTGACACCCCCAGGCTGTGTGGCCCTGGACACCCGAGCAGACTGAACTGTCTGCTTC
CTGGACCAGATGCAAGACTGTCTCCTGGCGGACCACCCCCTCTGACAGAAGGGGAATGGGCTCCTGCAGCAAGCT
CGGGTCTTGAGCCACGTCCCAGCACCACTTCAGCTCCGGAGCATTGGGCTGAGCCGCCCTTTCCAAGCTCACTTC
TGGGACTGAGTTTCCTCAACCGGAACACACCCATGAAGATGGATGATCATCCCCTAGCCCTTCTCAGCAGGAACC
TCATGCGACCTGTGACCAAGATGTCCCATCCTCAGCACAGGGCCCACTCTGCCAACCAGTCTCAAGCACCAGCCC
CTCAACACTGCCATCCACCTGGCTCTGGGCCAAGCCACCAATCCAGAGCTCCCTCAGGTCCTGGGACTAAGGCGG
GGACATGACTGATCCCCTCAGAGCAGGCTCAGGCCTGGAGTCGGCCCCCAAAAGTTTCACATAGGGCCAGGCAGC
CTCTGTGTTTCTTTCCCTGGTCCTGAACTGTGGAAATGCCATTAAACTCTCTCTATAATGTAACTGAAACTGCTG
GCTGGGCGCAGTGGCTCCCACCTGTAATCTCAGCCCTTCCCGAGGCTGAGGTGGAAGGATTGCTCGAGGCCAGGT
GTTCGAGACCAGCCTGGGCAACATAGCAAGACCCTGTCTCTATTTATATTGAAAAATAAAAATAACAAAAG

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FIGURE 2524

GTCGCCGTTGCATCGGTGCAGGGCAAGATGGCATCCGCCACAGACTCGCGCTATGGGCAGAAGGAGTCCTCGGAT
CAGAACTTCGACTACATGTTCAAGATTCTCATCATCGGCAACAGCAGCGTGGGCAAGACGTCCTTCCTCTTCCGC
TATGCTGACGACTCGTTCACGCCTGCCTTCGTCAGCACCGTGGGCATCGACTTCAAGGTCAAGACCATCTATCGC
AACGACAAGAGGATCAAGCTGCAGATCTGGGACACAGCAGGGCAAGAGCGGTACCGGACCATCACCACCGCATAC
TACCGGGGCGCTATGGGCTTCATCCTCATGTATGACATCACCAACGAGGAATCCTTCAATGCAGTGCAGGACTGG
TCCACCCAGATCAAGACCTACTCATGGGACAATGCCCAGGTGCTGCTGGTAGGAAACAAGTGTGACATGGAGGAT
GAGCGGGTGGTGTCATCAGAACGTGGCCGGCAGCTAGCTGACCACCTTGGGTTCGAGTTCTTTGAGGCAAGCGCC
AAGGACAACATTAACGTCAAGCAGACCTTTGAGCGCCTGGTGGATGTCATCTGCGAGAAGATGTCCGAGTCGTTG
GACACGGCGGACCCTGCGGTCACAGGCGCCAAGCAGGGCCCACAGCTCAGTGACCAGCAGGTGCCACCGCACCAG
GACTGCGCCTGCTGAGAGCCATCCCACTCCCTTTCCCCTCTTCCCTGTCTTCCCCACCTTCCCCCAACTACCCGG
GCCTGACCCGGCCCC

FIGURE 2525A

GTGCGAGGGACACCGTCTCGGCCCCGGGGGTCTCCTGAGACCCTGTCTCCCTGCCCTCCATTTAGCAGCGATCAG
TGGACAATTTCTGTCTTCTCCACTCCAAGTCCTTGTCTTGGTTCTTTTCCATGCAGCGCTATAGGGGACGGCAGA
CGGTTTTCGGGGCTGGTGTGTTGGGGGGGGTCTCTTCAGCCCCTAGCTTCAACACCCCCTCACCACGTTCTTCTC
CCCTGTTCTACCCTTCAGCACCATCTGGGCATCGACAGCTCCTCGGTGTCGGCCCCACCTTGAGCCCCAGTTCCA
CCTTCTACCGCTTCAGCACCTCCGGCGCGGACAGCTCCTCGCTGTCGCCTCCACTCCCGGCCCTGGGCCGGACCC
GGGAGCAGACGCTCCTCGGCGCCCGCTCACGGGGACGAGTCCTGCTCCCTGCTATCCCAGACCCCTTTCTCTGGC
GCATGGAGAACCTGGGGGTCGGCGAAGGGGCAGAGGCTTGCAGCAGGTTGAGTCGCTCTCGCGGCCGCCACAGCA
TGACCAGAGCCCCGAAGCACCTGTGGCGGCAACCCCGGCGCCCCATCCGCATCCAACAGCGCTTCTATTCGGATC
CGGACAAGTCCGCGGGCTGCCGCGAGAGGGACCTGAGCCCGCGGCCGGAGCTCAGGAAGTCGCGGCTCTCCTGGC
CCGTTTCCTCCTGCAGGCGCTTTGACCTGGAAAATGGGCTCTCGTGTGGGAGGAGGGCCCTGGACCCTCAGTCCA
GCCCTGGCCTGGGCCGGATTATGCAGGCTCCAGTCCCGCACAGCCAGCGGCGCGAGTCCTTCCTGTACCGCTCAG
ATAGCGACTATGAACTCTCGCCCAAGGCCATGTCTCGGAACTCCTCTGTGGCCAGCGACCTACATGGAGAGGACA
TGATTGTGACGCCCTTTGCCCAGGTCCTGGCCAGTCTGCGGACCGTTCGGAGCAACGTGGCGGCCCTTGCCCGCC
AGCAATGCCTAGGAGCAGCCAAGCAGGGACCCGTCGGAAACCCTTCATCCAGCAATCAGCTCCCTCCTGCAGAGG
ACACGGGGCAGAAGCTGGCATTGGAGACGCTAGACGAGCTGGACTGGTGCCTGGATCAGTTGGAGACGCTGCAGA
CCCGGCACTCGGTGGGGGAGATGGCCTCCAACAAGTTCAAGCGGATCCTGAACCGGGAGTTGACCCACCTGTCCG
AAACCAGCCGCTCCGGGAACCAGGTGTCCGAGTACATCTCCCGGACCTTCCTGGACCAGCAGACCGAGGTGGAGC
TGCCCAAGGTGACCGCTGAGGAGGCCCCACAGCCCATGTCCCGGATCAGTGGCCTACATGGGCTCTGCCACAGTG
CCAGCCTCTCCTCAGCCACTGTCCCACGCTTTGGGGTCCAGACTGACCAGGAGGAGCAACTGGCCAAGGAGCTAG
AAGACACCAACAAGTGGGGACTTGATGTGTTCAAGGTGGCGGAGCTAAGTGGGAACCGGCCCCTCACAGCTATCA
TATTCAGCATTTTTCAGGAGCGGGACCTGCTGAAGACATTCCAGATCCCAGCAGACACACTGGCCACCTACCTGC
TGATGCTGGAAGGTCACTACCACGCCAATGTGGCCTACCACAACAGCCTACATGCCGCCGACGTGGCCCAGTCCA
CGCATGTGCTGCTGGCTACGCCCGCCCTCGAGGCTGTGTTCACAGACTTGGAAATCCTGGCTGCCCTCTTTGCAA
GCGCCATCCACGACGTGGACCATCCTGGGGTCTCCAACCAGTTTCTGATTAACACCAACTCAGAGCTGGCGCTTA
TGTACAACGACGCCTCGGTGCTGGAGAACCATCACCTGGCTGTGGGCTTCAAGCTGCTGCAGGCAGAGAACTGCG
ATATCTTCCAGAACCTCAGCGCCAAGCAGCGACTGAGTCTGCGCAGGATGGTCATTGACATGGTGCTGGCCACAG
ACATGTCCAAACACATGAACCTCCTGGCCGACCTCAAGACCATGGTGGAGACCAAGAAGGTGACAAGCCTCGGTG
TCCTCCTCCTGGACAACTATTCCGACCGAATCCAGGTCTTGCAGAACCTGGTGCACTGTGCTGATCTGAGCAACC
CCACCAAGCCGCTGCCCCTGTACCGCCAGTGGACGGACCGCATCATGGCCGAGTTCTTCCAGCAGGGAGACCGCG
AGCGTGAGTCGGGCCTGGACATCAGTCCCATGTGTGACAAGCATACGGCCTCAGTGGAGAAGTCCCAGGTGGGTT
TCATTGACTACATTGCTCACCCACTGTGGGAGACTTGGGCTGACCTGGTCCACCCAGATGCACAGGACCTGCTGG
ACACGCTGGAGGACAATCGAGAGTGGTACCAGAGCAAGATCCCCCGAAGTCCCTCAGACCTCACCAACCCCGAGC
GGGACGGGCCTGACAGATTCCAGTTTGAACTGACTCTGGAGGAGGCAGAGGAAGAGGATGAGGAGGAAGAAGAGG
AGGGGGAAGAGACAGCTTTAGCCAAAGAGGCCTTGGAGTTGCCTGACACTGAACTCCTGTCCCCTGAAGCCGGCC
CAGACCCTGGGGACTTACCCCTCGACAACCAGAGGACTTAGGGCCAGCCCTGCGTGAACTGCAGGGGCAATGGAT
GGTAAAGCCCTTTGGCTCTTGGCAGGCAGACTTTCCAGGAAGAGGCTCCATGTGGCTCCTGCTTCACTTTCCCAC
CCATTTAGGGAGACAATCAAGCTCTTAGTTATAGGTGGCTCCCAGGGTCTAATTGGAGGCACCTGGCTGGGGTCC
ACTCTGACCCTAGACTTGCCTAAAAGAGCTCTCTAAGGGGCAGCCTCTTACGATGCCCTGGTGTCTTTCTCCTGG
GCTTCTATCCCTGTGAGGAGAGGTGCTGTCTGCTGGAGCCTCTAGTCCACCCTCTCCAGTGGTCACTCTTGAGTC
ACATCTGTCACTTAATTATTTCCTTCTTTATCAAATATTTATTGCTCATCTACTTCGTGCCAGCTTTCTGCCTCT
GTAGTAGCCCTGCACAAAGGGTGGGGAGTCAGGAGACCATCCCAAAGGCATCTCCCTGTCTTCCTCTACCAAGCG
GCTCTCTGCAAGAGCATGGAAATGTGAGTGGGGAAAATTTTCAGCACCAAAGCTTCACTCATACCCAGTTTTGTT
TCTGAAACTACGGTAGGGGGCAGGAAGAGGAGCAGAAAAGAAGGGCTGGGCAAGGCATAGTGGCTTATGCCTGTA
ATCCCGGTACTTTGGGAGGCTGAGGTGGGAGGACTGCTTAAGCTCAGGAGTTTGAGACCAGCCTGGGCAACATAG
CAAGACCCCCACCATCTCTGAAAAAAAAAATTAGCCAGGCATGGTGGTGTGCACCTGAGAATCCCAGCTACTCAG
AAGGTTGAGACAAAGGGGATCGCTTGAGCCCAGGAGTTGGAGGCTGAAGAGAGCTATGACTGCATCACTGCACTC
CAGCCTGGGCAACACAGCAAGATCCTGTCTAAAAATAAAAAGAAAAGAGAAGGAAAGGAAAGAGACGGGGCTCTG
AGGCCGAGCACAGTGGCCCATGCCTATAATCCCAGCACTTTGGGAGGCTGAGGCAGGTGGATCACCTGAGGTTAG

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FIGURE 2525B

GAGTTCGAGACCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAATTGGCTGGGCATGGTG
GCGGGTGCCTGTAATCCCAGCTACTGGGGAGGCTGAGGCAGGAGAATCACTTGAATTCAGGAGGTGGAGGTTGCA
GTGAGCCGACATCATGCCACTGCACTCCAGCCTGGGCGACAGAGCAAGACACTGTCTCAAAAAAG

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FIGURE 2526

ATGGCGTGCCCCCAGCTGCCGCCACTTCTGCTTTTGGTGCTGGTGGTGCTGCTGAAAGCTGGTGTGAATTACAAT
ACTCCCTTTACAGGCCACGCTGGTCCGCCAACCCTCCGAGGAAGGCTGGGTTTTCCCCCAGAAACAAACGGAGCA
GCTGTGAGGACAGATGAGGCACCGCTGCTCCCAAGCCCTGGGGCTGTGGGTCCTGCAACTCCAGGCCTGGGGGGC
TACATAGAGATCTGGGGAGGGTGGCATGTGGACCCAGCCCCCTCTCAGGGCCAGTGTTGTGTGTTATTTCCGCAT
TTCTGCTGCCTAGGCACCCACAGTTCAGGGGAACCCCCCAAATCCTACTCCAGCACCATGAGTTTGGAGACAGAC
TCCATAACCCACCTCAGCCCCTCAAGTTCAGGGGCAACCCCTACCATCCAGCCGAGCCCCAGCTCCACAGATTCA
AGGATGATACCCTCCTCCCCACAACCAGAGACAATCACGCACCCTAGTTCTGGCTCCCCCAGTGCAGAGCTCACC
CCCTCTTCCCATTCCACCCTCCCCAGTTCCGAATCCCTGACCCCGCACTGGAGCCCCACTTCCCACAGCCCCGGA
ACGGAGCCCTTGACCTCCACTGACCAGACCTTGGAGCCCCCTGGCCCAGGTGACACTGGGCCCCGTGAGTTACAC
AGGAACCCGAGTGTGGTGGTGGTCGTGTGTTTGCTGGTGTCTCTTTTGCTCATCGGGTCTGTGGTCATGGCTGTG
AGATTCTGTCACCGGAATGAGTCCAAGTTTGAGAACCTGGACGAGGTGTCCATGGGATCCGTGAATGACAGATTG
TCCTTTGCCCACCACCTCCAGGAGTGA

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FIGURE 2527A

GCACAGCCATCTGTGGTGACTAGGAGGTCCCCAAGCCGAGGACACCCATCAAGGACCTTTAGAGTGGCCTCAGAC
CAAGGTCACCAATCAATGGCTAACTGGGGGTCCCAAAACCTAGCCCAGCCATCTATGGACAGTGGGGAGCCCTCA
AGCCTAGCCCAGCCATCTCAAGCCCCTGGGGTAACCTCAAATCTGGCCCAGCCATCTCAAGCCTTTGGGGTGTCT
CCAAGTCCAGACTACCCATCTCAGTCTGTTGGGGAGTACCCAATGCTGGCTCAGCCATTTCAGCCCACTGAGGTG
TCCCCAAGTCCAACCTACCCATCTCAGGCCATTAGGGAGTACCCAACCCTGGCCCACCCATATCAGCTCACTGAG
GTGTCCCCAAGTGCAGCCTACTCATATCAGCCCACTGAGGTGTCCCCAAACCCAGGCTACCTATCTATGGCCATT
GAGATGTCCCCAAGCCCAGAATACCCATCTGTGGCCACTGAGGTGTCCCCAAGCCCAACCTACCCATATCAGCCC
ACTGAGATATCCCCAAGCTCAGGCTACCTATCTGTGGCCACTGAGGTGTCCCCAAGCCCAGGCTACCCATCTCAG
CTCACTGAGGTGTCCCCAAGCTCAGGCTACCTATCTGTGGCCACTGAAGTGTCCCCAAGCCCAGACTACTCATCT
CAGCCTACTGAGATGTCCCCAAGCTCAGGCTACCTATCTATGGCCACTGAGGTGTCCCCAAGCCCAGGCTACCCA
TTTCAGCCCACTGAGGTGTCCCCAAGCCCAGACTATCCATGTGTGGCCACTGGGGAGTCCCCTAGCCTTGCCCAG
CCATCTCAGCCCACTGAGGTGTCCCCAAGCTCAGCCTACCCATCTGTGGTCACTGGGGAGTCTCCAAGCCTGGCC
CAGTCATATCAGCGCACTGAGGTGTTCCCAAGCCCAGCCTACCCATTTATGGCCACTGAGGTGTCCCCAAGCCCA
GGCGACCCATCTGTGGTCACTGGGGAGTCCCCAAGCCCAGCCTACCCATCTCAGCCCACTGAGATGTCCCCAAGC
CCAGCCTACCCATCTCAGCCCACTGGGGAGTCTCCAAGCCTGACCCAGCCATCTCTGACCATCAGAGTGTCCCCA
AGCCTAGCCATGTCATCTCAGACTATTGGAGTGTCCCCAAGCCTAGCCATGCCATCTCAGACCATTGGAGTGTCC
CCAAGCCTAGCCATGCCATTTCACACCATTGGAGTGTCCCCAACCCTAGCTCACCCATCTATGGCCATTCGGGAG
TCTCCAAGCCTGGCCCAGCCTCCTCAGTCCACTGGGGAATCCCCAAGCTTGACCTGGCCATCTCAGGCCACTGGG
GTGTCCCCAAGTGTAGCCCACCAATCTGTGGCCAGTAGGGTTTCCTCAAGCCTAGCCCAGCCATCTCAAGCCAGT
GGGATGTCCCCTAGACAAGATTACCCACCAGTGGCCTCCAGGGTGTCCCCAAACCAAGCTCACGCATCTATAACC
AGCAGGATGTCCCCTAGCAGAGCTCATGCATCTATGACCTGTATGGTGTCCCCAAGCCAGGTTCATCGATCTATG
CCCAGTGAGGTGTCCCCAAGCCTTGCCCAGCTATCTCAGGCCACCACTGCAGTGCCCTTAAGACCAGCTCATCAA
CCTATGGCCTGTGGTGTATCCCCAAGCCTAGCCCAGCCGTCTCAAGCCACAGGGATGTCTTCAAGGCTAGCCCAC
CAACCTATGACCTGTGTGGTGTCCTTAAGCCCAGCCCAGCCATCTCAAGCCATTGGTGTGTCCCCAAGCCTAGCC
CACCCATCAGGACCCCATGGGTTGTCTCCAAGTCTAGCTCACCCATATGTGGCCAGTGGGGCGGGCTCCAGCCTA
GCCCACCCATCTCAGACCACTGCAGTATCCCCAAGGCAAGCCCAACCATCTGTGGCCTCCAGTCCAGGCAAGACA
AATTCATCCTGTACCCTAGCCTCCAGCCTAGCCGAGCCAGCTATAGCCCCCAGCCTATTCCCACCATCTGTGGCC
CACACGGAAGCCCTAAGCCTGGCTCAGTCACCCCCGGACACTAGGTTGGCCCCAAGCCGATCCCAGCCATCTGTG
GTCAGTGGTACATGTCATGGCCTCAATGAGCCATGCTGGGGCTCTAGGCTGGATTCAAATCTGCAGTGTTCAAGG
GTGGACTCAGTAGCCCCGTGTCTGTGTCACCCATCAGCGTTTGTTTCAGTTAGCCTGGGTGGACCATATCCCTCT
GTGGCTGGAAATATGGACCAGGGTCTGAACCAGCCATCCCTGGGTACTGGGGTGAACCTATGTGAAGAACCTCTG
ATGGTTAGTGAGATGGTATCCAGCCCCCCGGACTTCAAGTTCAACGACGTGTCCCTTGGGTTCCATCATCCACCC
AGGGTTGGTGGGAGGCATGTGTGTCCACCCTCTGTGGTTAGTGTTTCAACACCAAATCTCTCTCATGCTGATGAG
GAGGCCTGTTGTGTAGGCCAGTGAATCACGCCTCTGTTCAGGGGTGTGGCTGTAAGCCATCCCCAGGAGCCTTTG
GCTGATGCTATGTTCCCCAGTGGGTCTCAGGGGACCACATCTCCTGGCCTAGCTGGGAATCTCCCCTGGAGAACC
ATAGCAACTGGCATGGGCCAAAGTCAATGTCAGGTGGCCAATGGCATGGCTTCCCTTGCATCCCAGGTCTTAGAG
GCAGGTGGCCCTTTGACACATCCCTCTGGAACCACAGGGATGGCCCCCAGCCCCTCTCTGGCTTCAGTGCCCAAC
AGACTGGCCGTGACTCAGTCTAATCTTTCCCTGAACAGCATGGACCCCAGCAGCTCCCAGATCAGTGTGGTTATT
CCAAAAAAACATAGACTGCTGGCACCCTTCTGAGGCATCCATGGTCCCACCCAGTTACCAGCAGAGAGATGTGATT
CCGCAGGACTCTCTGAAGAGCAGGGCTGGTCGTGGTGCGGCAGGAGGTTTTGTAGCCAGTAGAATGAGCACGGGC
GCAGTCCCAGGCACTCTGCCTGGTGGCATAACCTCCAGCCTTCCCCCGGGCTCCACCATCCGAGGCATGGGTCAC
AGCCTTCCCGCAGGCTCTGTGTCCAGTTGGGTGGCTCCCAGTCTGATGGCAGACAGAAAGAAGCCAAGTCTATCT
GTAAGACCCTCCGCTAGCTTAGCTGCTCCAAACTTGCTCCCAGGTTCAGTAGTGAGTCGGGTGAGCCCAGTTGTC
CCCCTGGTTCTGTGCCAATGATGGGGGCCTCTAGTGTGGCTCAGAGCTGCTCCAAGGGGCCCATGGTGATTGACA
TCACTGCCCCTCCTTACCTCAAAGCCTGGCTGGGGAGAGGTCTTTAGCCCCCTTGCAGATGCCCCACACCACCAG
TCTGGCTCCAGGTCACTCCTCAGCCCCGGCAGCTAGTGGCACAGTGAGGAGTCTACACCGAGTGCCCACGGTTCT
ATCAAGAGCCTTACAATTGAGCCAAGATGCTAGGATAATGCCATCTGGGGTCACAGGGGACCAAGCCAAGCTAGG
AGAATTGGATGAGGCTGTGTTCCAAGTGTCAGGATCAAGTGGATCCAATGACCTATTCAGCAAAGCCAGGGTCAC

FIGURE 2527B

TGGTGCAACCCAGTGGATGTACTCCAGTCCTCTGGGAGCTGATGGGGGCCATGATCATAGGTCCCTGTCTGAGAA
AGGGTCTCTTCCCCAAGGGAGGTGGCTCCCAGCCATGCTAGTGGCATGGTCCCTGTCCCTTTCCAGGCCCCGGGT
TTAGCCACTAAGTCCCCCTCAGTTTATCAACAGGGGTCTGTCACTCACGTCATACCCCCAAATCACTCTCAGGGT
ACAGTGGCTTCTAATGTAGTCTCAGGATCACCCCAGCTGGCCCGTGGCAGTACTGAGGCTTTCAGATTGCTTTCA
GTGTCTGTGGGCAGGATGGGGAATCCTAGTCTTCTTCAGAGGTCAGGGACCACCAGCATGGTCTCACATGTGCCA
CTATATCCGTCCTCGGCTAGAAGGGCATTGTCCAGTCCCTTCCAGACAGAAGCTGTCCCCAATCCACTCCAGAAA
ACAGTGTCTGGAAACATGGCTCCGAGCAGCCGCTGGGACGCCATGGGCCCTAAAAATTCCTACAGATCCGTGCAT
GGTAGGATTGTTCCAGAACTGCTAGAAAGTTCTGTGGCCAGGGTTAGGCCCTTACAGTATGTGCAAAGACAACCA
TCCCAGGCCTCAGCCCGAAGTGGTGCAAACCCCACCCACAGGCCCTCTGCAGAGGTAAGGCCCGTCATCCGCACT
GGGGAGATGACACACTCCTCGGTCATTCCTCCGCTGGCCCCGGGAGTTCGGAGGGTGTCTCTAGGCTATGAGTCT
TCCCCAAGTGGTTCCCTGCCACCCCTTTTTAACCAGGAGTCACCGTGGAGACGGCAGGACTCCTATAGCCCCCAG
AATCCTGCCGTTAGTCACAAGGCATCCCTGAACTCCACTATACTCCAGGGCCCCGCGGACGCTGGTGTGGTTGGT
GGCCAATCGTGGAACCGCGCATGGGAGCCAGCCAGGGGTGCTGCGTCCTGGGACACCTGGCGCAACAAGGCGGTG
GTGCCTCCCAGGCGGTCCGGGGAGCCAATGGTGTCCATGCAGGCTGCAGAGGAGATCCGCATCCTCGCAGTGATC
ACTATCCAGGCGGGCGTCCGTGGCTACCTGGCGCGTCGCAGGATCCGGCTGTGGCACCGGGGGGCCATGGTCATC
CAAGCTACTTGGCGCGGCTACCGTGTGCGGCGGAACCTGGCACACCTCTGCAGAGCCACCACGACCATCCAGTCT
GCCTGGCGCGGCTACAGCACCCGCCGGGACCAAGCCCGGCACTGGCAGATGCTCCACCCCGTCACGTGGGTGGAG
CTGGGCAGCCGGGCCGGGGTCATGTCTGACCGAAGCTGGTTCCAGGATGGCAGAGCCAGGACAGTATCTGACCAT
CGCTGCTTCCAGTCCTGCCAGGCACACGCTTGCAGCGTCTGCCACTCCCTGAGCTCCAGGATCGGGAGCCCGCCC
AGCGTGGTGATGCTAGTGGGCTCCAGCCCTCGCACCTGTCATACCTGTGGACGCACACAGCCCACCCGTGTGGTG
CAGGGCATGGGCCAGGGCACTGAGGGCCCCGGGGCAGTGTCTTGGGCCTCCGCCTACCAGCTGGCTGCCCTGAGT
CCCAGGCAGCCGCATCGCCAGGACAAAGCGGCCACAGCCATCCAGTCCGCCTGGAGGGGCTTTAAGATCCGCCAG
CAGATGAGGCAGCAGCAAATGGCAGCGAAGATAGTTCAAGCCACCTGGCGAGGCCACCATACCCGGAGCTGTCTG
AAGAACACAGAGGCGCTCTTGGGACCAGCAGACCCCTCGGCCAGCTCACGGCACATGCATTGGCCTGGCATCTAG
GACCCTGGCTCCCTGCAGTGGGGACTTCGTGGGAGGCACTCATGGCTCTCTGGGTCTAATGAATAAAGTCCTCCA
CAGCCT

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FIGURE 2528

CCGAGGCTATAAGAGGGCGCACAAGTGGCGCGGCGCAGGAGCCGCCGCCAGTGGAGGGCCGGGCGCTGCGGCCGC
GGCCGGGGCGGGCGCAGGGCCGAGCGGACGGGGGGGCGCGGGCCCCCCGGGAGGCCGCGGCCACTCCCCCCCGGG
CCGGCGCGGCGGGGGAGGCGGAGGATGGAAACACCCTTCTACGGCGATGAGGCGCTGAGCGGCCTGGGCGGCGGC
GCCAGTGGCAGCGGCGGCAGCTTCGCGTCCCCGGGCCGCTTGTTCCCCGGGGCGCCCCCGACGGCCGCGGCCGGC
AGCATGATGAAGAAGGACGCGCTGACGCTGAGCCTGAGTGAGCAGGTGGCGGCAGCGCTCAAGCCTGCGGCCGCG
CCGCCTCCTACCCCCCTGCGCGCCGACGGCGCCCCCAGCGCGGCACCCCCCGACGGCCTGCTCGCCTCTCCCGAC
CTGGGGCTGCTGAAGCTGGCCTCCCCCGAGCTCGAGCGCCTCATCATCCAGTCCAACGGGCTGGTCACCACCACG
CCGACGAGCTCACAGTTCCTCTACCCCAAGGTGGCGGCCAGCGAGGAGCAGGAGTTCGCCGAGGGCTTCGTCAAG
GCCCTGGAGGATTTACACAAGCAGAACCAGCTCGGCGCGGGCGCGGCCGCTGCCGCCGCCGCCGCCGCCGCCGGG
GGGCCCTCGGGCACGGCCACGGGCTCCGCGCCCCCCGGCGAGCTGGCCCCGGCGGCGGCCGCGCCCGAAGCGCCT
GTCTACGCGAACCTGAGCAGCTACGCGGGCGGCGCCGGGGGCGCGGGGGGCGCCGCGACGGTCGCCTTCGCTGCC
GAACCTGTGCCCTTCCCGCCGCCGCCACCCCCAGGCGCGTTGGGGCCGCCGCGCCTGGCTGCGCTCAAGGACGAG
CCACAGACGGTGCCCGACGTGCCGAGCTTCGGCGAGAGCCCGCCGTTGTCGCCCATCGACATGGACACGCAGGAG
CGCATCAAGGCGGAGCGCAAGCGGCTGCGCAACCGCATCGCCGCCTCCAAGTGCCGCAAGCGCAAGCTGGAGCGC
ATCTCGCGCCTGGAAGAGAAAGTGAAGACCCTCAAGAGTCAGAACACGGAGCTGGCGTCCACGGCGAGCCTGCTG
CGCGAGCAGGTGGCGCAGCTCAAGCAGAAAGTCCTCAGCCACGTCAACAGCGGCTGCCAGCTGCTGCCCCAGCAC
CAGGTGCCCGCGTACTGAGTCCGCGCGCGGGGCGCATGCGCGGCCACCCTCCCCAAGGGGCGGGCTCGCGGGGGG
GTGTCGTGGGCGCCCCGGACTTGGAGAGGGTGCGGCCCTGGGGACCCCCCCTCCCCGAGTGTGCCCAGGAACTCA
GAGAGGGCGCGGCCCCCGGGGATTCCCCCCCCCCGAGGGTGCCCAGGACTCGACAAGCTGGACCCCCTGCTCCCG
GGGGGGCGAGCGCATGACCCCCCCGCCCTCGCGCTGCCTCTTTCCCCCGCGCGGCCGCCCCGTGTTGCACAAACC
CGCGCGTCTCGGCTGCCCCTTTGTACACCGCGCCGCGGAAGGGGGCTCCGAGGGGGCGCAGCCTCAAACCCTGCC
TTTCCTTTACTTTTACTTTTTTTTTTTTTCTTTGGAAGAGAGAAGAACAGAGTGTTCGATTCTGCCCTATTTAT
GTTTCTACTCGGGAACAAACGTTGGTTGTGTGTGTGTGTTTTCTTGTGTTGGTTTTTTAAAGAAATGGGAAGA
AGAAAAAAAAATTCTCCGCCCCTTTCCTCGATCTCGCTCCCCCCTTCGGTTCTTTCGACCGGTCCCCCCTCCCTT
TTTTGTTCTGTTTTGTTTTGTTTTGCTACGAGTCCACATTCCTGTTTGTAATCCTTGGTTCGCCCGGTTTTCTGT
TTTCAGTAAAGTCTCGTTACGCCA

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FIGURE 2529

ATGTGCCCAGAAGGATGTCAGTACACGGGGAGGGGCCACACGCTGAGGACCCCGCAGCTAGGCGAGGCAGGAGGC
CTCCACCAGCCTCCAGGCCTCTGCCCGCGCCGTTCCCTCCGCCTGGAATGCGCCTCCCGCCCCAACCCAACCCTG
TGTTTACTGCGACTTCCCTCCCTTCGGCCTGGCCCTGACCCCTCCGGGGCAGGGCGTGTCCGTGTCTGGCTGCTA
GCACCACCCTGCCCTCAGTCTGTCAGCGGGGAAATGGCTCAGTACCTGGAAAAGCCACGAGTATGTGGTCGGATG
CAGGCAAAACCCACACATCATGACACTGCCCTGAGAAGTGGGATAACGTCCCTCACCACTCGTGGAGCTGCTGCT
GAGATAAAGGTGAAAATGCAGAGTCCCGGACCAAGCCCTAGTGTTGCCCCAACCTCATCTGCAACTTTCATTGCC
TTGGGGACTTTCAGGATTAAGCGATTCCTGGACAAGAAACAAAAGCAAAATCGTCCCATTCCCCAGTGGATTTGG
ATGAAAACTGGAAATAAAATCAGGTACAACTCCAAAAGGACACTGGAGAAGAACCAAGCTGGGTCTATAAGGAAT
TGCACATGA

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FIGURE 2530

CAGCGGCGGCGGCGGAAGTGGCCGGCGAGCCCGGTCCCCGCCGGCACCATGCTTCCCTTGTCACTGCTGAAGACG
GCTCAGAATCACCCCATGTTGGTGGAGCTGAAAAATGGGGAGACGTACAATGGACACCTGGTGAGCTGCGACAAC
TGGATGAACATTAACCTGCGAGAAGTCATCTGCACGTCCAGGGACGGGGACAAGTTCTGGCGGATGCCCGAGTGC
TACATCCGCGGCAGCACCATCAAGTACCTGCGCATCCCCGACGAGATCATCGACATGGTCAAGGAGGAGGTGGTG
GCCAAGGGCCGCGGCCGCGGAGGCCTGCAGCAGCAGAAGCAGCAGAAAGGCCGCGGCATGGGCGGCGCTGGCCGA
GGTGTGTTTGGTGGCCGGGGCCGAGGTGGGATCCCGGGCACAGGCAGAGGCCAGCCAGAGAAGAAGCCTGGCAGA
CAGGCGGGCAAACAGTGAGCGCCCACCCAGACCGGCTGCTGCGCCCCCTCCTGCCAGGGTGGCGATTCCGCTCCA
CAGTCTCGGACGGATCTGCTCAGAAAGGAAGAGGCAGGCGCCAGGGGGAACCCCCTTCGTGTTTTGTGACCCTCC
CTTTTAGGTGAAGCCCCTTTTTCTTGCTAAAACCGGCAATTCTCCGGTTAGAAATGTTACTTGGTGTTTTTTGGT
TTTGTGAAACGGCCGTCCCAAAACTGGCTGGATTCCTAGAAGAGTCTGTGTTGAAGGCATCTTTCAAGCCCTCGC
TCTGGTTCTCAGGGCAGCATTTTCCAGGCGGGTTTGTTTTGCATTTCTTGGAGCCTCTCCGAGCAGCAACCAGAC
GGGAGATTTTTATTTTAAGCTGTTCATGCTGGGACTGACAGCCTGCAGGGTTTCCTTGGGCGCGGCCCCAAAATT
GCCTTCAAAACAAACCCGGGACGGTTGAAAGCCTTCGAACCGTGCAGGGGATGCCTCGGGCCCTGGCCCTTCGCT
TCCTCTCTTGTGTTATGGAAATAAAAACAAATAAAACTACA

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FIGURE 2531

GCTTTGTTTTTATAATCCGGATTAAATTTCCCTTCCCTGGGCACAAGTGCCTCATGAGGGCCCGGGGCTGCTGGT
TGGGAGGGAAAGCATCCCCGTTTTTGCAGTGAGGAGGCCGGCCGAGGGCTGGGGTTCCACTTAGACCCTTGGCAG
AATGGCTGTTGAGGGGCAGGCGCTGCCCAGTGCCCACGTCTGGAAAGCTAATTCCCGGGTGGACGCTGAACATAC
CTGCTGAGAGACTCTGTCCCCTGGTTTCCAGGACAGTTGTCACAAGCTGAGTGGGGGGGGACTCCCAGGACTTGA
GGGACCCAGTCCCACCCCAAACTGCTCCCCCTCCCCCAAATTCCCTTTCTCCTCCTGCTCTTTCTCCCCGCTGTG
CCTCCCCCAGTTACCCACAGAAGTGCCTGCCTCTCCAGCGCTCACAGAACACACAAAAAGGGACAGGAATTGGTC
ACTGGGTAGTGGCCGTGGCTCCTGACGATCCAGACCAGCGTCTGGCCCAAGCCATTCAGAGGTGGGGTCTGGGGC
CTGGGGGTTTTGTGTCGTGACACTTTGTCTCAAGGAGATTCCACATAGGGATTTGAATTAGGCTTTCTGCTTGCC
AAGGCCTGTGGCATCTGAGCCTGGCTGAGGGCCGGGCAAGCCTCCCCTGAGCCTTTGGAAGCCGAGTTCACTCTC
TGCCTGCCCAGGGGAGCACCGGCTTGGTTCTGGGGGCTCCTCTAACATCTCAGGTTTTTATCTTGTCTTAAATTT
CTTTCTAGGAAAAAACCCTTCCCTGCCAAAGGTGACTGTGTTTTCTGCCGCCGAAGGAGGGCCCGGTCCCTCCAG
GCTCAGTGTGGCTTCTCCCTGACCCCCGCCCTAGAACTTTTGCCAGTGCCTTTTCTGAAACTCCTGTGTCCCGGG
CCCCCCAGGCGGAGAAGGATATGCCGGATTCTGCCTGGGGCTGGGCTCTAGGAGACCCCAAATTTGACACCACAG
AAAGCAAATAAAACACTTGAAATACGC

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FIGURE 2532

GCAACCTGCACAGCCATGCCCGGGCAAGAACTCAGGACGGTGAATGGCTCTCAGATGCTCCTGGTGTTGCTGGTG
CTCTCGTGGCTGCCGCATGGGGGCGCCCTGTCTCTGGCCGAGGCGAGCCGCGCAAGTTTCCCGGGACCCTCAGAG
TTGCACTCCGAAGACTCCAGATTCCGAGAGTTGCGGAAACGCTACGAGGACCTGCTAACCAGGCTGCGGGCCAAC
CAGAGCTGGGAAGATTCGAACACCGACCTCGTCCCGGCCCCTGCAGTCCGGATACTCACGCCAGAAGTGCGGCTG
GGATCCGGCGGCCACCTGCACCTGCGTATCTCTCGGGCCGCCCTTCCCGAGGGGCTCCCCGAGGCCTCCCGCCTT
CACCGGGCTCTGTTCCGGCTGTCCCCGACGGCGTCAAGGTCGTGGGACGTGACACGACCGCTGCGGCGTCAGCTC
AGCCTTGCAAGACCCCAGGCGCCCGCGCTGCACCTGCGACTGTCGCCGCCGCCGTCGCAGTCGGACCAACTGCTG
GCAGAATCTTCGTCCGCACGGCCCCAGCTGGAGTTGCACTTGCGGCCGCAAGCCGCCAGGGGGCGCCGCAGAGCG
CGTGCGCGCAACGGGGACCACTGTCCGCTCGGGCCCGGGCGTTGCTGCCGTCTGCACACGGTCCGCGCGTCGCTG
GAAGACCTGGGCTGGGCCGATTGGGTGCTGTCGCCACGGGAGGTGCAAGTGACCATGTGCATCGGCGCGTGCCCG
AGCCAGTTCCGGGCGGCAAACATGCACGCGCAGATCAAGACGAGCCTGCACCGCCTGAAGCCCGACACGGTGCCA
GCGCCCTGCTGCGTGCCCGCCAGCTACAATCCCATGGTGCTCATTCAAAAGACCGACACCGGGGTGTCGCTCCAG
ACCTATGATGACTTGTTAGCCAAAGACTGCCACTGCATATTGAGCAGTCCTGGTCCTTCCACTGTGCACCTGCGCG
GAGGACGCGACCTCAGTTGTCCTGCCCTGTGGAATGGGCTCAAGGTTCCTGAGACACCCGATTCCTGCCCAAACA
GCTGTATTTATATAAGTCTGTTATTTATTATTAATTTATTGGGGTGACCTTCTTGGGGACTCGGGGGCTGGTCTG
ATGGAACTGTGTATTTATTTAAAACTCTGGTGATAAAAATAAAGCTGTCTGAACTGTT

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FIGURE 2533

GAGGAAAAAAAGCCACCCTGCGGCCGGGGCCGGAGCTGGAGCCGCCGCTGCCGCCGCCGCCGCGGCCGTCTGGAG
CTCCCCCGCGCGGACGATGCCTGCCGTGCCCGCCTGGGGCTCGGGGCGGTGAGGCCCGGGGCGCGGGGTAGCTAT
GGCGACGGCAAGCGCGGCCCGCGGCGCCGCCTGACAGGTGTGGGCCCCGGCGGCGGCGGCGTGGAGCAGCATGTA
CGCCAAGGGGGGCAAGGGTTCGGCCGTGCCCTCCGACAGCCAGGCCCGCGAGAAGTTGGCGCTGTACGTTTATGA
GTACCTGCTGCACATCGGTGCCCAGAAGTCAGCCCAGACCTTCCTGTCTGAGATCCGATGGGAGAAGAACATCAC
GCTGGGGGAGCCCCCTGGGTTCCTGCACTCCTGGTGGTGCGTCTTCTGGGACCTGTACTGCGCGGCGCCTGACAG
AAGAGAGGCCTGCGAGCACTCCGGCGAGGCCAAGGCCTTCCAGGACTATAGTGCTGCAGCCGCCCCCAGCCCCGT
TATGGGGAGTATGGCCCCAGGTGACACAATGGCCGCAGGCTCCATGGCGGCTGGCTTCTTCCAGGGCCCCCCCGG
CTCCCAGCCGTCCCCCCACAACCCCAACGCCCCCATGATGGGGCCTCACGGTCAGCCCTTCATGTCACCGCGCTT
CCCAGGGGGCCCCCGGCCCACCCTGCGGATGCCGAGTCAGCCTCCCGCAGGCCTCCCTGGCTCCCAGCCCCTCCT
CCCTGGCGCCATGGAGCCCTCCCCACGAGCCCAGGGGCATCCGAGCATGGGCGGCCCAATGCAGAGGGTGACGCC
TCCTCGTGGCATGGCCAGCGTGGGGCCCCAGAGCTATGGAGGTGGCATGCGACCCCCACCCAACTCCCTCGCCGG
CCCAGGCCTGCCTGCCATGAACATGGGCCCAGGAGTTCGTGGCCCGTGGGCCAGCCCCAGTGGAAACTCGATCCC
CTACTCCTCCTCATCCCCCGGCAGCTACACCGGACCCCCAGGAGGAGGTGGGCCCCCTGGAACACCCATCATGCC
TAGCCCTGGAGATTCCACCAACTCCAGCGAAAACATGTACACTATCATGAACCCCATCGGGCAGGGCGCCGGCAG
GGCTAATTTCCCGCTCGGCCCTGGCCCGGAGGGCCCCATGGCCGCCATGAGCGCGATGGAGCCTCACCACGTGAA
CGGATCCCTGGGCTCGGGCGACATGGACGGGTTGCCGAAGAGTTCCCCCGGCGCCGTGGCCGGCCTGAGCAACGC
CCCGGGCACCCCGCGGGACGACGGCGAGATGGCGGCCGCCGGGACCTTCCTGCACCCGTTCCCGAGCGAAAGCTA
CTCGCCAGGGATGACCATGAGCGTGTGATGGGGCGGCAGCCCCGGGCCTCTCTGCGGGCCTAGGCTTCTGCCCAG
CGCCCCTGCTCAGGGCGAGGGGCTGAGGTCACACCTCGGGCACCTGGACTCCTGGCCAATCAAGGCTTGCCCAGC
TGGGAGGCCCCACACGAAAGACTCTTACCATTTTATTAAAAACGCAAGGACCTCAGAGACGTTCTTTTCTGTATG
GACCCTTCCTGCCATTTGTATTTTGTCCCAGAGAGAAAGGCTCTTTGGGGGGCCCCTCTCCCCAGGACGTCAGGG
GGTGGGGCCCATAAATAAATGGAAGCTGGTTTTGGTTTTTGGT

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FIGURE 2534

GACTTTGTCCCCCGAGATGGATGGGGGCGGACATGGGGAGCCAGGGGATGGGACTGCCTGGTAGGTGCTGCTGCC
CACGAAGGGGGAGTAGGTGGCAGTGTGGCTCCGAGGAGATTCTGGCTTTGGAGTTCTGGTCCTCTGCCTGTTTCC
CCTGCAGTGTCTCTGACCCAGACCCCCTACCTACCCCCCCGGAGGCCCAGCTTCCCTGCCCAGCTCCACCCCCTG
GCTTGTGGCTGGGCTCATGTGTAGCCTCATTGTCCTCTTGTAAAGGGGGGATAGGCAGCCATGAGCCCCTGGGGG
CTGCGGAGCGAGCGAGGTGAACCTATACGCGCCGCGCTCGTGGACGCCTGGCCACTTCCGCCAGGCGGGGACCCG
ATGGCCACGGTGGCTCTGGGTTGTCGGGCCTCGAACCGGGTCTCCAGACGTTGGGCCCCTCCCTCCCAGCGCGGG
AGAGGCGGGGAAGGGGGCGGGGCGGGGGAGGGGCCGCAGCGCTTTTCTCCGGAGGTCGCGCGCCCGAGAGCCCGC
GCTGTCCGCCGCCGCTGCCTGAGTCGACTCTGCGCCGCCCGCCGCGATGGAGGCCGCCGCCCAGTTCTTCGTCGA
GAGCCCGGACGTGGTCTACGGCCCCGAGGCCATCGAGGCGCAATACGAGTACCGGACGACGCGCGTCAGCCGCGA
GGGTGGCGTTCTCAAGGTGCACCCCACGTCCACGCGCTTCACCTTCCGGACCGCCCGGCAGGTGCCCCGGCTCGG
GGTCATGCTTGTCGGCTGGGGCGGGAACAACGGCTCCACACTCACCGCCGCGGTGCTGGCCAATCGACTGCGTTT
GTCCTGGCCCACGCGCAGCGGCCGCAAGGAGGCCAACTACTACGGCTCGCTGACTCAGGCGGGCACCGTGAGCCT
GGGCCTGGACGCCGAGGGCCAGGAGGTGTTCGTACCCTTCAGCGCGGTGCTGCCCATGGTGGCGCCCAACGACCT
CGTGTTCGATGGCTGGGACATCTCGTCGCTGAACCTGGCCGAGGCGATGCGGCGCGCGAAGGTGCTGGACTGGGG
GCTGCAGGAGCAACTGTGGCCGCACATGGAGGCCCTGCGGCCCCGGCCTTCTGTTTACATCCCCGAATTCATCGC
GGCCAACCAGAGCGCGCGCGCGGACAACCTCATCCCAGGCTCGCGTGCGCAGCAGCTGGAGCAGATCCGCAGGGA
CATCCGAGACTTCCGGTCTAGCGCGGGGCTGGACAAAGTCATAGTGCTGTGGACGGCGAACACGGAGCGCTTCTG
TGAGGTGATTCCAGGCCTCAACGACACAGCCGAGAACCTGCTGCGCACCATTGAGCTCGGTCTGGAGGTGTCGCC
CTCCACGCTCTTCGCCGTGGCCAGCATCCTGGAGGGCTGTGCCTTCCTCAATGGGTCTCCGCAGAACACCCTGGT
GCCCGGAGCTCTTGAGCTCGCGTGGCAGCACCGGGTTTTTGTGGGCGGAGATGACTTCAAGTCAGGCCAGACCAA
AGTCAAGTCCGTGCTTGTGGACTTCCTCATTGGCTCCGGCCTCAAGACCATGTCCATCGTGAGTTACAACCACCT
GGGCAACAACGATGGGGAGAACCTATCGGCGCCATTGCAGTTCCGCTCTAAGGAGGTGTCCAAGAGCAACGTGGT
GGACGACATGGTGCAGAGCAACCCAGTGCTCTATACGCCCGGCGAAGAGCCTGACCACTGCGTGGTCATCAAGTA
TGTGCCGTACGTGGGTGACAGCAAGCGCGCGCTGGATGAGTATACCTCGGAGCTGATGCTGGGCGGAACCAACAC
ACTGGTGCTGCACAACACGTGTGAGGACTCGCTGCTGGCCGCACCCATCATGCTGGACCTAGCGCTGCTGACCGA
GCTGTGCCAGCGCGTGAGCTTCTGCACTGACATGGACCCCGAGCCGCAGACCTTCCACCCCGTGCTGTCCCTGCT
CAGCTTCCTCTTCAAGGCGCCACTAGTGCCGCCCGGCAGCCCGGTGGTCAATGCGCTTTTCCGCCAGCGCAGCTG
CATCGAGAACATCCTCAGGGCCTGCGTGGGGCTCCCGCCACAGAACCACATGCTCCTGGAACACAAAATGGAGCG
CCCAGGGCCCAGCCTCAAGCGAGTTGGACCCGTGGCTGCCACCTACCCTATGTTGAACAAGAAAGGACCGGTACC
CGCTGCCACCAATGGCTGCACCGGTGATGCCAATGGGCATCTGCAAGAGGAGCCCCCAATGCCCACCACCTGAGG
CCCCGGTCACACAGTTTCTCGGCTCTTCCTCCCCGCTGCCCCCCACGACCCTACCTTGAAGGCCCCCACAAATAA
AGGCGCTGCCACTCAGCCCTCCTTCCACCTGGGGTTCTTGGGGCCTGTGACCTGA

FIGURE 2535

GATGGTCGCAAGATGGCGGCGCTGAAGGAGGATAGGAGCTACGGGCTGTCGTGCGGGCGGGTTAGCGACGGCAGC
AAGGTGTCGGTGTTCCACGTGAAGCTCACCGACAGTGCCCTGAGGGCCTTCGAGAGCTACCGCGCCAGACAGGAT
TCTGTTTCACTGAGGCCATCTATCCGATTTCAAGGAAGCCAAGGGCACATCTCCATCCCCCAGCCTGACTGCCCC
GCAGAGGCGCGGACGTTCTCCTTCTACCTCTCCAACATCGGCCGCGACAACCCCCAGGGCAGCTTCGACTGCATC
CAGCAGTATGTCTCCAGTCATGGGGAAGTTCACCTGGACTGCCTGGGCAGCATACAGGACAAGATCACGGTGTGT
GCCACCGACGACTCCTACCAGAAGGCGCGGCAGAGCATGGCCCAGGCGGAGGAGGAGACGCGGAGCCGAAGTGCC
ATTGTCATCAAGGCTGGAGGCCGCTACCTGGGCAAGAAGGTTCAGTTTCGGAAACCAGCCCCAGGTGCAACAGAC
GCGGTGCCCTCCCGGAAGCGGGCAACCCCCATCAACTTGGCGAGTGCCATCAGGAAGAGTGGTGCCAGTGCCGTG
AGTGGGGGCAGCGGGGTGTCCCAGAGGCCCTTCCGTGACCGAGTGCTGCACCTCCTGGCACTACGGCCCTACCGC
AAGGCTGAGCTGCTGCTGCGACTGCAGAAGGACGGCCTGACGCAGGCGGACAAGGACGCGCTGGATGGCCTCCTC
CAGCAGGTGGCCAACATGAGTGCTAAGGACGGCACGTGTACACTGCAGGACTGCATGTACAAGGATGTGCAGAAG
GACTGGCCTGGCTACTCGGAGGGGGACCAGCAGCTGCTGAAGCGGGTGCTCGTCCGGAAGCTGTGCCAGCCACAG
AGCACTGGCAGCCTCCTTGGAGACCCTGCTGCCTCCAGCCCCCCAGGCGAGCGTGGGCGCTCGGCCTCGCCCCCA
CAGAAGCGGCTGCAGCCTCCTGATTTCATCGACCCCCTAGCCAACAAGAAACCCCGGATATCGCACTTCACTCAG
AGAGCTCAGCCTGCCGTCAACGGGAAGCTGGGCGTGCCCAATGGCCGTGAGGCCTTGCTGCCCACCCCGGGCCCA
CCAGCCAGCACGGACACCCTCAGCTCCAGCACTCACCTGCCCCCGCGGCTGGAGCCCCCGAGGGCCCACGACCCC
CTGGCCGATGTCAGCAATGACCTGGGCCACAGCGGCCGAGACTGTGAGCACGGAGAGGCGGCTGCCCCAGCCCCC
ACTGTGCGCCTCGGCCTGCCCCTGCTGACGGACTGTGCCCAGCCCAGCAGGCCACACGGCAGCCCCTCGCGCAGC
AAGCCCAAGAAGAAGTCCAAGAAGCACAAAGACAAGGAGAGGGCGGCTGAGGACAAGCCCCGGGCCCAGCTTCCA
GACTGTGCACCTGCCACCCATGCCACCCCCGGAGCCCCAGCAGACACCCCAGGTTTAAACGGAACCTGCAGCGTT
TCCAGTGTTCCCACGTCCACGTCGGAGACGCCTGACTACTTGCTGAAGTACGCAGCCATCTCCTCTTCGGAGCAG
CGCCAGAGCTACAAGAACGACTTCAATGCCGAGTACAGCGAGTACCGCGACCTGCACGCCCGCATTGAGCGCATC
ACGCGGCGGTTCACCCAGCTCGACGCCCAGCTCCGGCAGCTCTCCCAGGGCTCCGAGGAGTATGAGACTACTCGA
GGGCAGATTTTGCAGGAATATCGAAAAATCAAAAAGACCAACACCAACTACAGCCAGGAGAAGCACCGCTGCGAG
TACCTGCACAGCAAGCTGGCCCACATCAAGAGGCTCATCGCCGAGTACGACCAGCGGCAGCTGCAGGCTTGGCCC
TAGCCGCCCTCCCCGATGGCGGGGATCTGGGAGGGTCGGGGGAGCAAAAGGCGGTGAGAGAGGATTTATTTAAAA
AAATAAACCCGAGGAAGATGCTCATCTGAGCCAGCACCGCCGGCTTTCAGGGCAGCCCCTGCAGACGTCTGGCCC
TGGCGGGTGGCTGCAAGCCCACCTCGGCCCTCCCTGCGCTTCCTGAGCAGTCCCTGCTTATGATGGGCTCCCCAG
GAAGCCCACTGCCTCCTCCCTGGCTGCAGCCTCCGGGGTTCAGCCTCCTGTCTCGCCAGAAGACTCCTAGGCCCT
TGGGGTGGCGCGCCTGCCTTTTCTAGTTTTATACAAAGACAGCCACTTTTAGCTACTGCTAATGAGACTTGAGTC
TATTTTTGTACAAAAGAGAAGCAAAATCTTTTTTCTAAACCTGTGCCTCCCTCTCCTCGGACACCCAGGGTCTAG
CCGCTGCCCTGGGTCCTGCCTGCAGTATTACAGAGGTCGTCGAAAGGTGCAGCTGCGTTCTGAGGGCGTGGGGAA
TGGGCAGGTGGCCTCTGCTGGTCTCTGGCTCTACGTTTAGGCACCCCTTTCCCCAGCCTCTCCTCCTTGGGCAGG
GTCTCTGCTCCAGCAAGCAAACAGGGTGGCCCAGGTGGCTATTTTGAGAACTCCAGCTGGTGCCCCCAGACAGCT
GCTCAGAGCCAAGGGGGCAGAGGGCTTTCAGCGCCCCCAGGCCTGCCCTGCTATTTCAGGCCCTCAGCTGTCGGG
GGCCACTGTGTTTCTGTGCTCCAAGTTGAGACTCGGCCGCAGCGGCGTCAGACTTTTCTTTGCGATGTCCTCGGT
TTCCCATTTGTTGCTGCTGCTGCTCATTCCACACTGTTGAGACCTTGTGGTCTCGATGCTGCTGGCCTCCCTCCG
TCCCTCTGTCCACTTGTGGGTCCTGGGGTC

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FIGURE 2536

GGGTGAGGAGGAAGAGGAGGAGGAAGAGGAGGAAGAGGATGACCTGAGTGAGCTGCCACCGCTGGAGGACATGGG
ACAACCCCCGGCGGAGGAGGCTGAGCAGCCTGGGGCCCTGGCCCGAGAGTTCCTTGCTGCCATGGAGCCCGAGCC
CGCCCCAGCCCCGGCCCCAGAAGAGTGGCTGGACATTCTGGGGAACGGGCTGTTGAGGAAGAAGACGCTGGTCCC
AGGGCCGCCAGGTTCGAGCCGCCCGGTCAAGGGCCAGGTGGTCACCGTACATCTGCAGACGTCGCTGGAGAATGG
CACACGGGTGCAGGAGGAGCCGGAGCTGGTGTTCACTCTGGGTGACTGTGACGTCATCCAGGCCCTGGATCTCAG
TGTCCCACTCATGGACGTGGGGGAGACGGCCATGGTCACTGCTGACTCCAAGTACTGCTACGGCCCCCAAGGCAG
CAGGAGCCCATACATCCCCCCGCACGCGGCCCTGTGCCTGGAGGTGACCCTGAAGACGGCTGTGGACGGGCCTGA
CCTGGAGATGCTCACGGGGCAGGAGCGCGTGGCCCTGGCCAACCGGAAGCGGGAGTGCGGCAACGCCCACTACCA
GCGGGCGGACTTCGTCCTGGCCGCCAACTCCTACGACCTCGCCATCAAGGCTATCACCTCCAGCGCCAAAGTGGA
CATGACGTTCGAGGAGGAGGCACAGCTCCTGCAGTTGAAGGTGAAGTGTCTGAACAACCTGGCGGCCTCGCAGCT
GAAGCTCGACCACTACCGCGCAGCCCTGCGCTCCTGCAGCCTTGTGCTGGAGCACCAGCCAGACAACATCAAGGC
TCTCTTCCGCAAGGGCAAGGTGCTGGCCCAGCAGGGGGAGTACAGTGAGGCCATCCCCATCCTGAGGGCAGCCCT
GAAGCTGGAACCTTCCAACAAGACGATCCACGCAGAGCTCTCAAAGCTGGTGAAGAAGCATGCGGCGCAGCGGAG
CACGGAGACCGCCTTGTACCGGAAAATGCTGGGCAACCCCAGCCGGCTGCCTGCTAAGTGCCCTGGCAAGGGTGC
CTGGTCCATCCCATGGAAGTGGCTGTTTGGGGCGACTGCTGTTGCCTTGGGGGGTGTGGCACTCTCTGTGGTCAT
CGCTGCCAGGAACTGACCACCTAGGTGGCTGCCACCCCCTCTGCACACCATGGACCCTGCCCTGCGCTCCCCAAC
TCCCCCAGGCTCCCTGTCCACTGCCCTCCCTGGTCTGGCCCCCTCCTCCGGGTTAGGGGAGCAAGGATTGGGGGT
CGTGCAGCCCAGCCAGCAGGAGGGACTGAGGCCCTCTAGGAGGAAAGCCCAGAGGGAGGGGGCCCTCATTCCTTC
AGACCCAGTTTTCCCCCACCCTCCTTACCCCGCTGGGCTAGGTCTCCGCCAGGGCTGGCCTCAGTTTCTCCTCAA
CAGGCCTGGGGGCAGCCCTTCCCCTGCCTAGTCCCCGCCTGAGTGCCAGCCCCCCACCCCGCCTGCCGCCCCCTG
TCCAGGTTCCCTCCCCGCCACAGTGAAATAAAGCATCCCACCCTGC

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FIGURE 2537

ACGCACGCAAGCGGCTCCAGGGTACGTCCCCGCCACGCGCGCTCGCAGGATCGGTGCGTGGTGACGTTTCGCCGG
CGCGGGCGCCATCCCGGAAGCGCGAGCAAGGCCGCCAGATGTGCAGGCAGCGGAGGAGGAGAAAGAGATGGACCT
CCCGGACTCGGCCTCGAGGGTCTTCTGCGGCCGCATCCTGAGCATGGTGAACACAGATGATGTCAACGCCATCAT
CCTGGCCCAGAAGAACATGCTGGACCGCTTTGAGAAGACCAATGAGATGCTGCTCAACTTCAACAACCTGTCCAG
TGCCCGCCTGCAGCAGATGAGCGAACGCTTCCTGCACCACACGAGGACCCTAGTAGAGATGAAACGGGACCTGGA
CAGCATCTTCCGCCGTATCAGGACGCTGAAAGGGAAACTGGCCAGGCAGCACCCAGAGGCCTTCAGCCATATCCC
AGAGGCATCCTTCCTGGAGGAAGAGGATGAAGACCCCATCCCACCCAGCACCACGACCACCATTGCCACCTCAGA
ACAGAGCACGGGCTCATGTGACACCAGCCCCGACACCGTCTCGCCCTCCCTGAGCCCCGGCTTCGAGGACCTGTC
CCATGTCCAGCCTGGCTCCCCAGCCATCAACGGCCGCAGCCAGACAGATGACGAGGAGATGACGGGCGAATAGCC
CTGCTGCCCGGTGCCTTGAGGGGGTCTCAGGGCAGCAGCATACAAGGTGGCAGCGGGTAACCCTGCCTTGTTCTG
TCATCCAGGGCTCCTTTGCTGCCCCGTTCTGTCACCCAGGGCTCCTAGGGGGACAAGGCTCTCTCCCGAGGGGTG
TGGAATTCCTGGGGGGGTCTTTAATTCTGGCTCCTTCCTTCCTCAGAACATCTCTATTCTGCAAGACCCCTCTGC
CATGCCAGGGCACGCCCATTCCAGCTGGAGTCGTGGGGCTGGGCACAGGGGAATTTTTCCAGAGCTGAGCCTGAC
GTCTGCTCTGAAGAATGCTTAGAAGGTTCCCAGACACCAGAGCCAGATGTCCCCCACCACCGGTCAGGACCTCCT
TGAGGTGCACAAGCACGGTCTCCTCTGAGTTCACCCCAGCCCACCCCCGCACCCACTAATTCTGCTTTTCCTGCC
CCTTGCTCCGTAAAAGTATCAAATACTTTCTCCTTGGTATCTCAAGGAGGTTTCTGAGATAGGTAGAAGTCTTGA
GACGGAGGCTGGCCATCCATTCAGCCCTGAGCGTGCTGAGTTCTGTGTTTCTCTGAATAGAGGTGTGGAACCTGA
GGGGCCAGCAGGCCTCTCTGAAGGCCTCCATGGAGCAAACGGAGCCACCTCGGGAAAGAGTTTAATGGAATATTT
TTGTACCCGATGTTTACAGATGCTGTTGGGAAGTTATCAATAAAAAGACACCATTACTAAAAAGGG

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FIGURE 2538

TTCTTTTTCTTCAGCGAGGCGGCCGAGCTGACGCAAACATGCAGATCTTTGTGAAGACCCTCACTGGCAAAACCA
TCACCCTTGAGGTCGAGCCCAGTGACACCATTGAGAATGTCAAAGCCAAAATTCAAGACAAGGAGGGTATCCCAC
CTGACCAGCAGCGTCTGATATTTGCCGGCAAACAGCTGGAGGATGGCCGCACTCTCTCAGACTACAACATCCAGA
AAGAGTCCACCCTGCACCTGGTGTTGCGCCTGCGAGGTGGCATTATTGAGCCTTCTCTCCGCCAGCTTGCCCAGA
AATACAACTGCGACAAGATGATCTGCCGCAAGTGCTATGCTCGCCTTCACCCTCGTGCTGTCAACTGCCGCAAGA
AGAAGTGTGGTCACACCAACAACCTGCGTCCCAAGAAGAAGGTCAAATAAGGTGGTTCTTTCCTTGAAGGGCAGC
CTCCTGCCCAGGCCCCGTGGCCCTGGAGCCTCAATAAAGTGTCCCTTTCATTGACTGGAGCAGCA

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FIGURE 2539

AGTCATGATCACCGAGACCGCGGCGGAGCCTACGGTCCCTGCAGTGCCTGCTGCTGAGGAGGCCACCGAAGCTCG
GGGACGCGAGGAGCCGGCGTGGCCCTGGAAAGACGCCCCGATCCGGACGCTGGTGCAGCGCATCCACCAGCTGCA
GGCTGAGCGCGCGCAGGGCTTCCGCCGACTGGAGGAGTGGTTGGCGCCGGTGCAGGGCCTGAGAGCCTGGGGGCG
CGGCCTCAGGGTCCCCACATGCCGCAGAGGCCACCGCCAGTACCTGCGCAGCGGCCCTGACTACGACTTCGCGCG
CTACCGGAGCACAGTGCACGGGGTGACCCAGGCCTTCGCCGCCGCCTCGCGGGAGGTGCTGGCGGTGGAAGCAGA
GCTGGGCGGGCCTCGCAGGCAGCCGCTGCTCGCCGGCCACGTGCGCAGCCTGCAGGAGCTGGAGCAGACGCGGCT
GGGCACGGTGGCCCTGCTGCAGTTGATGGAGACGCCAGAGCTGGCGGGGCAGGAGGACGCTGTACGGATGCAGCA
GCTGAAAATGAAGGTAATTAAAACCATGGAGGCGATCAGCGAGGTTCTCCAGGACCTTAGGTTTGATGCGGAATC
TGCCGAGTGATGGCGGCTCCCCAGGGATGCGCCGAGGGAGATGGGAAACGGGGCGGATGGCGCCCAGCCCAGCCC
TAACTGCCAGCTGGCTGGGGTTGCGCCCCACTGCGCTGCTGACCTTCCTGCAGTTCCAGACACCTCCCACAATAA
AGAGCTCCTCCTCTGT

FIGURE 2540A

AGCGGCTGGCGGCTTCGAGGGGAGCTGAGGCGCGGAGGGGCTCGGCGGCAGCGGCGGCGGCTCGGCACTGTTACC
TCTCGGTCCGGCTGGCGCCGGGGCGCGCGGTTTGGTCCTTTCCGGGCGCGCGGGGGCGACAGCGGCAGCGACCCG
AGGCCTGCGGCCTAGGCCTCAGCGCGGCGGCGGGCTCGAGTGCAGCGCGGAACCGGCCCGAGGGCCCTACCCGGA
GGCACCATGAGCGTGGAGGCGTACGGGCCCAGCTCGCAGACTCTCACTTTCCTGGACACGGAGGAGGCCGAGCTG
CTTGGCGCCGACACACAGGGCTCCGAGTTCGAGTTCACCGACTTTACTCTTCCTAGCCAGACGCAGACGCCCCCC
GGCGGCCCCGGCGGCCCGGGCGGTGGCGGCGCGGGAGGCCCGGGCGGCGCGGGCGCGGGCGCTGCGGCGGGACAG
CTCGACGCGCAGGTTGGGCCCGAAGGCATCCTGCAGAACGGGGCTGTGGACGACAGTGTAGCCAAGACCAGCCAG
TTGTTGGCTGAGTTGAACTTCGAGGAAGATGAAGAAGACACCTATTACACGAAGGACCTCCCCATACACGCCTGC
AGTTACTGTGGAATACACGATCCTGCCTGCGTGGTTTACTGTAATACCAGCAAGAAGTGGTTCTGCAACGGACGT
GGAAATACTTCTGGCAGCCACATTGTAAATCACCTTGTGAGGGCAAAATGCAAAGAGGTGACCCTGCACAAGGAC
GGGCCCCTGGGGGAGACAGTCCTGGAGTGCTACAACTGCGGCTGTCGCAACGTCTTCCTCCTCGGCTTCATCCCG
GCCAAAGCTGACTCAGTGGTGGTGCTGCTGTGCAGGCAGCCCTGTGCCAGCCAGAGCAGCCTCAAGGACATCAAC
TGGGACAGCTCGCAGTGGCAGCCGCTGATCCAGGACCGCTGCTTCCTGTCCTGGCTGGTCAAGATCCCCTCCGAG
CAGGAGCAGCTGCGGGCACGCCAGATCACGGCACAGCAGATCAACAAGCTGGAGGAGCTGTGGAAGGAAAACCCT
TCTGCCACGCTGGAGGACCTGGAGAAGCCGGGGGTGGACGAGGAGCCGCAGCATGTCCTCCTGCGGTACGAGGAC
GCCTACCAGTACCAGAACATATTCGGGCCCCTGGTCAAGCTGGAGGCCGACTACGACAAGAAGCTGAAGGAGTCC
CAGACTCAAGATAACATCACTGTCAGGTGGGACCTGGGCCTTAACAAGAAGAGAATCGCCTACTTCACTTTGCCC
AAGACTGACTCTGGTAATGAGGATTTAGTCATAATTTGGTTAAGAGACATGCGGCTCATGCAGGGGGATGAGATA
TGCCTGCGGTACAAAGGGGACCTTGCGCCCCTGTGGAAAGGGATCGGCCACGTCATCAAGGTCCCTGATAATTAT
GGCGATGAGATCGCCATTGAGCTGCGGAGCAGCGTGGGTGCACCTGTGGAGGTGACTCACAACTTCCAGGTGGAT
TTTGTGTGGAAGTCGACCTCCTTTGACAGGATGCAGAGCGCATTGAAAACGTTTGCCGTGGATGAGACCTCGGTG
TCTGGCTACATCTACCACAAGCTGTTGGGCCACGAGGTGGAGGACGTAATCATCAAGTGCCAGCTGCCCAAGCGC
TTCACGGCGCAGGGCCTCCCCGACCTCAACCACTCCCAGGTTTATGCCGTGAAGACTGTGCTGCAAAGACCACTG
AGCCTGATCCAGGGCCCGCCAGGCACGGGGAAGACGGTGACGTCGGCCACCATCGTCTACCACCTGGCCCGGCAA
GGCAACGGGCCGGTGCTGGTGTGTGCTCCGAGCAACATCGCCGTGGACCAGCTAACGGAGAAGATCCACCAGACG
GGGCTAAAGGTCGTGCGCCTCTGCGCCAAGAGCCGTGAGGCCATCGACTCCCCGGTGTCTTTTCTGGCCCTGCAC
AACCAGATCAGGAACATGGACAGCATGCCTGAGCTGCAGAAGCTGCAGCAGCTGAAAGACGAGACTGGGGAGCTG
TCGTCTGCCGACGAGAAGCGGTACCGGGCCTTGAAGCGCACCGCAGAGAGAGAGCTGCTGATGAACGCAGATGTC
ATCTGCTGCACATGTGTGGGCGCCGGTGACCCGAGGCTGGCCAAGATGCAGTTCCGCTCCATTTTAATCGACGAA
AGCACCCAGGCCACCGAGCCGGAGTGCATGGTTCCCGTGGTCCTCGGGGCCAAGCAGCTGATCCTTGTAGGCGAC
CACTGCCAGCTGGGCCCAGTGGTGATGTGCAAGAAGGCGGCCAAGGCCGGGCTGTCACAGTCGCTCTTCGAGCGC
CTGGTGGTGCTGGGCATCCGGCCCATCCGCCTGCAGGTCCAGTACCGGATGCACCCTGCACTCAGCGCCTTCCCA
TCCAACATCTTCTACGAGGGCTCCCTCCAGAATGGTGTCACTGCAGCGGATCGTGTGAAGAAGGGATTTGACTTC
CAGTGGCCCCAACCCGATAAACCGATGTTCTTCTACGTGACCCAGGGCCAAGAGGAGATTGCCAGCTCGGGCACC
TCCTACCTGAACAGGACCGAGGCTGCGAACGTGGAGAAGATCACCACGAAGTTGCTGAAGGCAGGCGCCAAGCCG
GACCAGATTGGCATCATCACGCCCTACGAGGGCCAGCGCTCCTACCTGGTGCAGTACATGCAGTTCAGCGGCTCC
CTGCACACCAAGCTCTACCAGGAGGTGGAGATCGCCAGTGTGGACGCCTTTCAGGGACGCGAGAAGGACTTCATC
ATCCTGTCCTGTGTGCGGGCCAACGAGCACCAAGGCATTGGCTTTTTAAATGACCCCAGGCGTCTGAACGTGGCC
CTGACCAGAGCAAGGTATGGCGTCATCATTGTGGGCAACCCGAAGGCACTATCAAAGCAGCCGCTCTGGAACCAC
CTGCTGAACTACTATAAGGAGCAGAAGGTGCTGGTGGAGGGGCCGCTCAACAACCTGCGTGAGAGCCTCATGCAG
TTCAGCAAGCCACGGAAGCTGGTCAACACTATCAACCCGGGAGCCCGCTTCATGACCACAGCCATGTATGATGCC
CGGGAGGCCATCATCCCAGGCTCCGTCTATGATCGGAGCAGCCAGGGCCGGCCTTCCAGCATGTACTTCCAGACC
CATGACCAGATTGGCATGATCAGTGCCGGCCCTAGCCACGTGGCTGCCATGAACATTCCCATCCCCTTCAACCTG
GTCATGCCACCCATGCCACCGCCTGGCTATTTTGGACAAGCCAACGGGCCTGCTGCAGGGCGAGGCACCCCGAAA
GGCAAGACTGGTCGTGGGGGACGCCAGAAGAACCGCTTTGGGCTTCCTGGACCCAGCCAGACTAACCTCCCCAAC
AGCCAAGCCAGCCAGGATGTGGCGTCACAGCCCTTCTCTCAGGGCGCCCTGACGCAGGGCTACATCTCCATGAGC
CAGCCTTCCCAGATGAGCCAGCCCGGCCTCTCCCAGCCGGAGCTGTCCCAGGACAGTTACCTTGGTGACGAGTTT
AAATCACAAATCGACGTGGCGCTCTCACAGGACTCCACGTACCAGGGAGAGCGGGCTTACCAGCATGGCGGGGTG

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FIGURE 2540B

ACGGGGCTGTCCCAGTATTAAAAGGTGGCGGCGGAAGAGCTAAGCAACGTGGCTTAGTCCATCAGCATCTTATTC
TGGGTAATAAAAAATAAAAATAAACGGATACCTGTTTTCCACTGCTAAAACTGAAGCACCACTGTGTGAGCAACA
GGAAGGGAGAGCGCACGAGGGAGAGGAGCCGAGGCCGAGCGCCCCCTGCTGGCCCGCGGCGGCGAGGAGCAGAGG
GAGCGGAGGAGGGGCCGGCCCGCGGGAGCCGCGGCCACCAGGAGGCCCCGCTCCGTCCCATCGGGGCTGCGGCCA
GGGCGGAGGGAGGAAGACCCTCATCTCAGAGTAGCCCTTTCCTCTGTTCTTTTATTTCTTTTTCTCTTTGATTGA
AAGGGGACTACGTCTTAGCAGGAAAAAAAACTTCGCATTTCTGTGCCCGAGCAGGCTCCTTGCAAAGACAGCAGC
GTGCGGGGCAGAGCCCCGGGAGGGCGCGTCTGTCCACGCCTACCGGACGCGCCGAGGTCGCGCTGCCTGTGTTCT
CCGAGGGCCTTCATTTAAAGAAAATAAGGGTGTTTTGGGTTTTTCTCTTTGTTTTTTTCAAGATTCTTTTAAAGG
AGTACTGAAGAATACTTTCCTAAGTTTGTCTGTAAAATCTTAGCGGTGGACCTGGGAGATTTGAGAAGCTTCCAG
AAACAGTTTAAACAAGCCAGCGCTACTGGAGAAGAGGAGCAACACCTGTGCCGCGGCCGGAGGAGTTTTGTTGTT
GGTTTTAGCTTCCAGTGGCTTCTTTCTGCGGGGCATCAGGCTGCTGGGGTAGCCGCCCGCCGAGCCTGGAAGCTG
CTCGTTCTCCGCTGGACTCAGAAGCCAAGCTGCTTCCCGCCTAGACTCGGCGCAGGGCCCCGCACCGGTGAGGAA
GGTGCTTTTGGCCCCATTGCGAGGGGCCTTGGCCAGGACTGGCCCTGTGGCCAGGAGGCGAGAAGGTGGCTGTTC
CCGGATTGACGGCTTTTTCCCGGGGGCCTTTGGAAGATTTGGTGGAAGGACAAGAGGGCCTGTCCCTGTCCCCGT
CCCCAGGAGGTACCGACAGTCCCTGTGCTGGTTAGACACGGAGCGCTGCACACCGAAAGCCCAAATTGGGAGCTC
TGCCTGCCGGCAACTTTGCTGATGGGGTGATTGCTGCTTCTGGGGGGTAAGGAAACAAGTTACAGAAATTACCGC
GTTCTGTGTGAAGGGACTGAGGGTGTGGTGTCATTGGCAGAGGGTCATTTTAGGAGAGCTGCCCCAGCCCCTCGA
ACGCCTGGCTTGGGGTGTCATTCTGCCTGGCGGCCAGGCCTCCAGCTTCCCCTGCCCCGGGCCTGGGGCTGTCAC
TGGCCCTGATCCGAACACCTCCAGATTCCGGCTTCTACATGGGACAGACGGGGACGCACAGGCCACCTTCCTTCT
GGCAGGGACTCTTATTTATTCCCATTGCTCTAGGGCTTTCGGTTTCCCCTTCTTCCGGTAGGCCGCGTAGAGGCA
TGCACCGGGTAGGTTTCCGCGGTGACCCCGCGGCGGCCTGAGGGACGCTCCCTGCCCCATCCCGGCTGTTGGGCT
GGGCCGCTTTGCCTCTGCTTCGCCCTGTGCTGTGTTCTCCAGCTTTGTAGCAGCAGCCTTGACAAACCCAGGCGC
ACTGTACCAAGGCAATGTAACTTTTGATTTTCGGTCAATTTAAGTTCTTTTGTCACCAAATATTAATAAACAGTT
TTGACTTC

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FIGURE 2541

GGAAGAGGAGCTGGTGAGAAGACAGCGAAATGGCGCCTCCGGCCCCCGGCCCGGCCTCCGGCGGCTCCGGGGAGG
TAGACGAGCTGTTCGACGTAAAGAACGCCTTCTACATCGGCAGCTACCAGCAGTGCATAAACGAGGCGCAGCGGG
TGAAGCTATCAAGCCCAGAGAGAGACGTGGAGAGGGACGTCTTCCTGTATAGAGCGTACCTGGCGCAGAGGAAGT
TCGGTGTGGTCCTGGATGAGATCAAGCCCTCCTCGGCCCCTGAGCTCCAGGCCGTGCGCATGTTTGCTGACTACC
TCGCCCACGAGAGTCGGAGGGACAGCATCGTGGCCGAGCTGGACCGAGAGATGAGCAGGAGCGTGGACGTGACCA
ACACCACCTTCCTGCTCATGGCCGCCTCCATCTATCTCCACGACCAGAACCCGGATGCCGCCCTGCGTGCGCTGC
ACCAGGGGGACAGCCTGGAGTGCACAGCCATGACAGTGCAGATCCTGCTGAAGCTGGACCGCCTGGACCTCGCCC
GGAAGGAGCTGAAGAGAATGCAGGACCTGGACGAGGATGCCACCCTCACCCAGCTCGCCACTGCCTGGGTCAGCC
TGGCCACGGGTGGTGAGAAGCTGCAGGATGCCTACTACATCTTCCAGGAGATGGCTGACAAGTGCTCGCCCACCC
TGCTGCTGCTCAATGGGCAGGCGGCCTGCCACATGGCCCAGGGCCGCTGGGAGGCCGCTGAGGGCCTGCTGCAGG
AGGCGCTAGACAAGGATAGTGGCTACCCAGAGACGCTGGTCAACCTCATCGTCCTGTCCCAGCACCTGGGCAAGC
CCCCTGAGGTGACAAACCGATACCTGTCCCAGCTGAAGGATGCCCACAGGTCCCATCCCTTCATCAAGGAGTACC
AGGCCAAGGAGAACGACTTTGACAGGCTGGTGCTACAGTACGCTCCCAGCGCCTGAGGCTGGCCCAGAGCTGTCA
GGACCATGAAGCCAGGACAGAGGCCAGGAGCCAGCCCTGCAGCCCTCCCCACCCGGCATCCACCTGCATCCCCTC
TGGGGGCAGGAGCCCACCCCCAGCACCCCCATCTGTTAATAAATATCTCAACTCC

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FIGURE 2542

ACAAGCGGCCACAAGGATGGCAGGCTTCGCGGAGCTCGGGCTGTCATCGTGGCTCGTGGAACAATGTCGGCAGCT
GGGTTTGAAGCAGCCCACGCCCGTGCAGCTCGGCTGCATCCCCGCCATCCTGGAGGGTCGAGACTGCTTGGGCTG
TGCTAAGACAGGCAGTGGGAAGACAGCAGCGTTTGTCCTTCCCATCTTGCAGAAGCTGTCTGAGGATCCCTATGG
CATCTTCTGCCTCGTCCTGACACCCACCAGGGAGCTGGCCTACCAGATCGCAGAGCAGTTCCGGGTCCTGGGGAA
GCCTCTAGGGCTGAAAGACTGCATCATCGTCGGTGGCATGGACATGGTGGCCCAGGCGCTGGAGCTCTCTCGGAA
ACCACACGTGGTCATCGCCACGCCGGGGCGCCTGGCAGATCACCTGCGCAGCTCCAACACTTTTAGTATAAAGAA
GATCCGCTTCCTGGTGATGGATGAGGCAGACCGGCTGCTGGAACAGGGCTGCACTGACTTCACCGTGGACCTGGA
GGCCATCCTGGCGGCTGTGCCGGCCCGCAGGCAGACACTGCTGTTCAGCGCCACGCTGACCGACACACTCCGGGA
GCTGCAGGGTCTGGCCACCAACCAGCCCTTCTTCTGGGAAGCACAGGCCCCGGTGAGCACCGTGGAGCAGCTGGA
CCAGCGCTACCTGCTGGTGCCTGAGAAGGTCAAGGACGCCTACCTGGTCCACCTGATCCAGCGCTTCCAGGATGA
GCACGAGGACTGGTCCATTATCATCTTCACCAACACGTGCAAGACCTGCCAGATTCTGTGCATGATGCTGCGCAA
ATTCAGCTTCCCCACCGTGGCTCTGCACTCCATGATGAAGCAGAAAGAACGCTTTGCCGCCCTAGCCAAGTTCAA
GTCCAGCATCTACCGGATCCTGATCGCAACAGACGTGGCCTCCCGGGGCCTGGACATCCCTACGGTACAGGTGGT
CATCAACCACAACACCCCCGGGCTCCCCAAGATCTACATCCACCGAGTCGGCCGGACGGCCCGTGCAGGGCGGCA
GGGTCAGGCCATCACGCTGGTGACACAGTACGACATCCACCTGGTGCACGCCATCGAGGAGCAGATCAAGAAGAA
GCTGGAGGAGTTCTCCGTGGAAGAGGCCGAGGTGCTACAGATCCTCACACAGGTCAACGTGGTGCGAAGAGAGTG
TGAGATCAAACTGGAGGCGGCCCACTTTGACGAAAAGAAGGAGATCAACAAACGGAAGCAGCTGATCCTGGAGGG
GAAGGACCCTGACCTGGAGGCCAAGCGCAAGGCTGAGCTGGCCAAGATCAAGCAGAAGAACCGGCGCTTCAAGGA
GAAGGTGGAGGAGACGCTGAAGCGACAGAAGGCTGGCAGGGCTGGCCACAAGGGGCGTCCACCCAGGACACCGTC
TGGGTCCCACTCAGGCCCAGTCCCCTCCCAGGGCCTGGTCTGAGCCCCACACGGCCATCTGCCCAGTCCTTGACT
CGTCCATGGAGCTGAGGGTCGGAGGAACCTTCCTTGGGGGCAGCAGCCCTTCCCGGGGGCCTACCCAGTGCCCCA
CAGCAGAACCCGTGGGCGCTCGTGTTGTGCGGGCCCTGCTCCTCTGCCCCGAAACCACTGGCTGGTCCCTTCCCT
GAGCCCTGGCCAAGATTCAGGCTGCAGGGGAAGAAAGAACATGACCGGGAGGTTGTGACCCCAACCCAAGGTCAC
CCCCCAGGGGTGCCGCATACAGGAGGTGCTTAATAAACGGGTCTTTTGACTTCCTC

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FIGURE 2543

GGCGCATGACTAGTTGGGGCCAAACCAGTGCTCCTGCCACCTCTCTGGCTGCCCCCTAGAGCCTGCCCATCCCAG
CCTGACCAATGTCCACAGCCAGGGAGCAGCCAATCTTCAGCACACGGGCGCACGTGTTCCAAATTGACCCAGCCA
CCAAGCGAAACTGGATCCCAGCGGGCAAGCACGCACTCACTGTCTCCTATTTCTACGATGCCACCCGCAATGTGT
ACCGCATCATCAGCATCGGAGGCGCCAAGGCCATCATCAACAGCACTGTCACTCCCAACATGACCTTCACCAAAA
CTTCCCAGAAGTTCGGGCAGTGGGCCGACAGTCGCGCCAACACAGTCTACGGCCTGGGCTTTGCCTCTGAACAGC
ATCTGACACAGTTTGCCGAGAAGTTCCAGGAAGTGAAGGAAGCAGCCAGGCTGGCCAGGGAGAAATCTCAGGATG
GCGGGGAGCTCACCAGTCCAGCCCTGGGGCTCGCCTCCCACCAGGTGCCCCCGAGCCCTCTCGTCAGTGCCAACG
GCCCCGGCGAGGAAAAACTGTTCCGCAGCCAGAGCGCTGATGCCCCCGGCCCCACAGAGCGCGAGCGGCTAAAGA
AGATGTTGTCTGAGGGCTCCGTGGGCGAGGTACAGTGGGAGGCCGAGTTTTTCGCACTGCAGGACAGCAACAACA
AGCTGGCAGGCGCCCTGCGAGAGGCCAACGCCGCCGCAGCCCAGTGGAGGCAGCAGCTGGAGGCTCAGCGTGCAG
AGGCCGAGCGGCTGCGGCAGCGGGTGGCTGAGCTGGAGGCTCAGGCAGCTTCAGAGGTGACCCCCACCGGTGAGA
AGGAGGGGCTGGGCCAGGGCCAGTCGCTGGAACAGCTGGAAGCTCTGGTGCAAACCAAGGACCAGGAGATTCAGA
CCCTGAAGAGTCAGACTGGGGGGCCCCGCGAGGCCCTGGAGGCTGCCGAGCGTGAGGAGACTCAGCAGAAGGTGC
AGACCCGCAATGCGGAGTTGGAGCACCAGCTGCGGGCGATGGAGCGCAGCCTGGAGGAGGCACGGGCAGAGCGGG
AGCGGGCGCGGGCTGAGGTGGGCCGGGCAGCGCAGCTGCTGGACGTCAGCCTGTTTGAGCTGAGTGAGCTGCGTG
AGGGCCTGGCCCGCCTGGCTGAGGCTGCGCCCTGAGCCGGGGCTGGTTTTCTATGAACGATTCCGGCCTGGGATG
CGGGCCAGGCTGCAGGCGGCATAGTTGGGCCCATTCGTCCTGGAAAGGGACTGGGGGGTCCCAACTTAGCCCTGG
GTGGGCCGGGCCGGGCTGGGCTGGGGTGGGCCCCAGTCGGCTCTGGTTGTTGGCAGCTTTGGGGCTGTTTTTGAG
CTTCTCATTGTGTAGAATTTCTAGATCCCCCGATTACATTTCTAAGCGTG

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FIGURE 2544

GGCCGGCACGGTGACTCACGCCTATAATTCCAGCACTTTGGGAGGCCGAGGCAGGTGGATCACGAGGTCAAGAGA
TCGAGACCATCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATGCAAAAAATTAGCTGGGCGTGGTGGCG
GGCGCTTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCCGGGAGGCGGAGGTTGCAGTG
AGCCGAGATTGTGCCACCGCACTCCAGCCTGGCAACAGAGCGAGACTCTGTCTCAAAAAAAAAAAAAGGAAATCCT
GGCTTTCTTTAAGCCACAGACTTCCTAGGCTGTGGTCCCAGCTCCTTGTCTGCCTGGTCCCTGTCACCTTGCAGT
GCCACCACCCCCAGGGGCTCTGCTTGCTTCCAGTGGCTTCTGTAGCTTTGGCAACTGGCAGATCTTTATGGCAGT
AGAGGTGCCAGCATGGAGGATGGAGTTTGGGTTTATAACCCAACCCTCGAACGAACCAGCCTGTGGGGGCCTGGA
GTGGAGCTGGTTTTGGGGAGTCACAGGTGCGGGGGGTTCATCTTCTCCTTTCTCCTTCTCCTTTCCTGACCCCTC
CGACAGCTTCCATGTTGGCCATGGGTCAGGTGAATGGATGGAGCTCCAAGCGGGGCTCAGCCCATTGACCCGAGC
GAGGCGCACACACCTGCAGCGTGGATCAAGCGCACTCTCTCCAGCATCGCCCTGACCATTCCATGTGCTTTGTCC
TAGCATGTTCATTCTTGACTTTCTCCACTTCATTTTATTAAAAAGTTAAATGCTTTAGGAATCTGTGGCGTGTGG
CCACTGACCGCCCCCCACCTCCTGCCGCTCCTCCAAGTTTGAGCTGAGATGGTTCTGTGAGTCCTTGGCAGGGGT
CAAAGGGCACATCTCCTTGAACCTAGAAAGCCCCCTACACTCTCAGAGGACACCTCTCCTGTGGATTCAGCGCTG
GGGCAGTGAAGGTGTCGGGAGCCAGCAGAGCATGGTGCGTGCTGCCAGCTGCCGGCCAGCCGGGATAGAGGAGAT
GCCACTGGCCCTCCGTGCCCCCAGCCCCTCCCTCTTAACCGAGGCTGTCCTTGCTCTCTGCAGAGGCCGCTCTGC
AGGATCCTCGTGTCGCGCGTGATGTGTGGTGGCACAGCCGTGTCAAAGTCACAGTGTCTTTTCTGTCGTTCTAGT
TCCAGGGTCACCCCCGAGAGGACAACAGGCATCTGGAAGTGCTCTCTCGCCACTCTGGGTGCTTTACTGTCTCTG
GCTTGTTTCCATCACTGGAAATCACTTAGAGAATTGTAGTGTTTTTGGTCCTTGATAAAGCCTAGAAGACATTTG
TGATGTTACAAAATGGAAGTTTTCTTTTGTTTCTGTTTTTTAAGATCTAAGAAGTTGTGAATGTTGTTAATCATT
TAGCCGTTGCAATAAATGTAGAGGAAATGC

FIGURE 2545A

GGTTCATTTGCATGTCCCCGCCTCGCGCGGCGGCGGCGGCGGGTGAGGAGCCTGAGGCGGCGGCGGGGGTGGCTC
CGCGCGCGGTGGTCTCGGGGGCAAAATAACATGGCAGCCAGACGAATTACACAGGAGACTTTTGATGCTGTATTA
CAAGAAAAAGCCAAACGATATCACATGGATGCCAGTGGTGAGGCTGTAAGCGAAACTCTTCAGTTTAAAGCTCAA
GATCTCTTAAGGGCAGTCCCAAGATCCAGAGCAGAGATGTATGATGACGTCCACAGCGATGGCAGATACTCCCTC
AGTGGATCTGTAGCTCACTCTAGAGATGCCGGAAGAGAAGGCCTGAGAAGTGACGTATTTCCAGGGCCTTCCTTC
AGATCAAGCAACCCTTCCATCAGTGATGACAGCTACTTTCGCAAAGAATGTGGCCGGGATCTGGAATTTTCTCAC
TCTGATTCTCGGGACCAGGTCATTGGCCACCGGAAATTGGGGCATTTCCGTTCTCAGGACTGGAAATTTGCGCTC
CGTGGTTCTTGGGAACAAGACTTTGGCCATCCAGTTTCTCAAGAGTCCTCTTGGTCACAGGAGTATAGTTTTGGT
CCCTCTGCAGTTTTGGGGGACTTTGGATCTTCCAGGCTGATTGAGAAAGAGTGTTTGGAGAAGGAGAGTCGGGAT
TATGACGTGGACCATCCTGGGGAGGCTGACTCTGTGCTTAGGGGCGGCAGTCAAGTCCAGGCCAGAGGTCGAGCT
CTAAACATCGTTGACCAGGAAGGTTCCCTCCTAGGAAAGGGGGAGACTCAGGGCCTGCTCACAGCTAAGGGGGGT
GTTGGGAAACTTGTCACATTGAGAAATGTGAGCACAAAAAAAATACCCACCGTGAATCGTATTACTCCCAAAACT
CAGGGCACTAACCAAATCCAGAAAAACACTCCAAGTCCTGATGTGACCCTGGGGACAAACCCAGGGACAGAAGAT
ATCCAGTTCCCCATTCAGAAGATCCCTCTGGGGCTGGATCTGAAGAATCTTCGGCTCCCCAGAAGAAAGATGAGC
TTTGACATCATAGATAAGTCTGATGTTTTTTCAAGATTTGGGATAGAAATAATCAAATGGGCAGGATTCCACACC
ATAAAAGATGATATTAAATTTTCCCAACTTTTCCAGACTCTCTTTGAACTTGAAACAGAAACCTGTGCTAAAATG
CTTGCCTCATTCAAATGTTCCTTAAAACCAGAGCACAGAGATTTTTGCTTTTTTACTATCAAATTTTTAAAGCAC
TCTGCTTTGAAAACACCCAGAGTTGATAATGAGTTTTTAAACATGCTTTTAGACAAAGGTGCTGTGAAGACCAAA
AATTGCTTTTTTGAAATCATAAAGCCTTTTGACAAGTACATAATGAGACTTCAAGACCGGCTTCTGAAGAGTGTC
ACACCTTTGCTTATGGCCTGCAATGCCTACGAGCTAAGTGTCAAGATGAAGACCCTCAGTAACCCCCTGGACTTG
GCTCTTGCCCTAGAAACCACCAACTCTCTCTGCCGGAAGTCTTTGGCCCTTTTGGGACAGACATTTTCCTTGGCC
TCTTCTTTCCGGCAGGAGAAAATCTTAGAAGCTGTCGGCCTGCAAGATATAGCTCCCTCACCTGCTGCGTTTCCA
AACTTCGAAGACTCCACTTTGTTTGGGCGAGAGTACATAGACCACCTGAAGGCCTGGCTAGTCAGCAGCGGATGT
CCCCTCCAGGTTAAGAAAGCCGAACCAGAGCCGATGCGAGAGGAGGAGAAAATGATTCCTCCTACGAAACCTGAA
ATTCAGGCCAAGGCTCCAAGTAGTCTGAGTGATGCTGTCCCCCAGCGAGCAGATCACAGGGTAGTGGGCACCATC
GACCAGCTTGTGAAACGTGTCATCGAAGGCAGCCTGTCTCCCAAAGAGAGAACTCTTCTCAAAGAGGACCCTGCT
TACTGGTTTTTGTCTGATGAAAATAGTCTGGAGTATAAATATTACAAGCTGAAGTTGGCAGAAATGCAGCGGATG
AGCGAGAACTTGCGAGGAGCCGACCAGAAGCCGACCTCAGCAGACTGTGCAGTGAGGGCCATGCTGTACTCCCGG
GCTGTCCGCAACCTCAAGAAGAAACTCCTTCCGTGGCAGCGGCGGGGGCTCCTCCGTGCTCAAGGGCTCCGGGGC
TGGAAGGCGAGGAGAGCGACCACCGGGACCCAGACCCTCCTATCCTCAGGCACCAGGCTGAAACACCACGGCCGG
CAGGCTCCAGGCCTCTCACAGGCAAAACCATCCCTGCCAGACAGAAATGATGCTGCCAAGGACTGCCCGCCAGAC
CCAGTTGGACCTTCTCCTCAGGACCCCAGCTTAGAAGCCTCAGGCCCATCCCCCAAGCCAGCAGGAGTGGACATC
TCTGAAGCACCTCAGACCTCTTCTCCCTGCCCATCTGCTGACATTGACATGAAGACAATGGAGACTGCAGAGAAA
CTGGCTAGATTTGTTGCTCAGGTGGGACCAGAGATCGAACAATTCAGCATAGAAAACAGCACCGATAACCCTGAC
CTGTGGTTTCTACATGACCAAAATAGTTCTGCTTTCAAATTCTATCGAAAGAAAGTGTTTGAACTATGTCCATCA
ATTTGTTTCACGTCATCTCCGCACAACCTTCACACTGGTGGTGGTGACACCACGGGTTCTCAGGAGAGCCCCGTG
GACCTCATGGAAGGGGAAGCAGAGTTTGAAGACGAGCCCCCTCCGCGGGAGGCTGAGCTGGAGAGCCCAGAGGTG
ATGCCTGAGGAGGAGGACGAGGACGATGAGGATGGGGGAGAGGAGGCCCCCGCTCCTGGAGGGGCGGGCAAGTCT
GAGGGCAGCACCCCTGCCGACGGCCTTCCCGGCGAGGCTGCCGAGGACGACCTGGCTGGAGCACCTGCCTTGTCA
CAGGCCTCCTCAGGTACCTGCTTCCCTCGGAAGAGGATCAGCAGCAAGTCATTGAAGGTTGGCATGATTCCAGCT
CCCAAGAGAGTGTGTCTCATCCAGGAGCCAAAAGTCCATGAACCAGTTCGAATTGCCTATGACAGGCCTCGGGGT
CGTCCCATGTCCAAAAAGAAGAAACCCAAGGACTTGGACTTCGCCCAGCAGAAGCTGACCGATAAGAACCTGGGC
TTCCAGATGCTGCAGAAGATGGGCTGGAAGGAGGGCCATGGCCTGGGCTCCCTCGGAAAGGGCATCAGGGAGCCG
GTCAGCGTGGGAACCCCCTCGGAAGGGGAAGGGTTGGGTGCTGACGGGCAGGAGCACAAAGAAGACACATTCGAT
GTGTTCCGACAGAGGATGATGCAGATGTACAGACACAAGCGGGCCAACAAATAGATCAAAACCACTGATGTGAAA
GATAAGCCTTGAAGCAGCAATTGCCCTTAAAACATCATCCCTGCCCTGGATCGGCCTGGAGCCAGTGCCCAAGTA
CGGTTTGGTGTGTACATGAAAACAAACGTCTCTGCAGTCTCTGGGGCGGAGGTTTCGCTGGCTTTTCTTTCTCTC
AAAGAAAAAAACATGCACCATTTTCAATGTGCTTTTGCCTCTCCTCTCTGTTCACATGCTTTTAGCAGCAAGTCC

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FIGURE 2545B

CCTCCAAATCTGTCTTGGTTCCCCTTCAGAAGGTGGCGCTGCCCCCGAAAGGCACCTCAGCCTGTGAGTGCTGAG
GAACCAGCTCCTCTGGCTGATTTTCCAGTTGGACTGGCCATTGCTCTCCAGAAGTGCTCTGTTAGCAAACGTGAT
GTGGAAACGATCACAGATGGTGTTTTCTCGTTGTTCGCCAGAATTTATACGGGGGAGACAAATTCCCGGTAATTA
CCAAGTCTGCACTCGGGTACCAAAGCTCTGAAGCTCTCTGAACAGTTGCCATACTTGAGTTGATGAATGTGTTAT
TCATGGTGTCTCATCTCATCAATGCATCTTGAGAGACTTAATGAAATTTTAGCAACAGTATAGAATAGCTCTATC
GGGTGGGGAGTAATCATTAAACAGATGAAATCGGCCCCAGATTTAC

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FIGURE 2546

GCAAAACATTTCCCTGCTGGGGGCGGCGACCACCGTGAGCGTCCCGGAAGGGGCGGCAAAGACGCCTCCGTCGCG
CACGAGGTGGCCTCGTTGGCTTTACCTTGGTTCGCGGTCGTCCTTGGTTATCGTGAGCGTCCGCGAGTCTCTGGG
AGGCCAAGCCTAGGGGCGCCACAGCGCCTGCGCGCGTACGGCGGCCGGAAGGGGCTAGAGGCGGCTCCCTGGGTG
ACAACCGCGCGCCCCACCTTTCCCCACGTGGCCGCGAAGACCGGCTCAGGAGCATCTATCGGCTGCACGCCAACA
TCAACACAGGCGAAGATGGTCTCCAAGCGCATTGCCCAGGAGACCTTTGATGCAGCTGTGCGCGAGAACATCGAG
GAGTTTGCGATGGGGCCAGAGGAGGCAGTGAAAGAGGCCGTGGAGCAGTTTGAATCGCAAGGGGTTGATCTGAGC
AACATTGTAAAGACGGCACCTAAAGTCTCTGCAGACGGATCCCAGGAGCCCACACATGACATCCTGCAGATGCTC
AGTGACCTCCAGGAGTCTGTGGCCAGCTCTCGCCCCCAGGAGGTGTCAGCATACCTCACCCGCTTCTGCGACCAG
TGCAAACAGGACAAGGCCTGCCGCTTCCTCGCGGCCCAGAAGGGGGCCTACCCCATCATCTTCACTGCCTGGAAG
CTGGCCACTGCAGGTGACCAGGGCCTTCTGCTCCAGTCCCTCAATGCCCTGTCGGTGCTGACTGATGGACAGCCA
GACCTCCTGGATGCCCAGGGCCTGCAGCTCCTAGTGGCCACGCTGACCCAGAATGCTGATGAGGCTGACCTGACC
TGCTCTGGGATCCGCTGTGTGCGTCACGCTTGCCTGAAACATGAACAGAATCGGCAAGACCTGGTGAAAGCTGGC
GTGCTGCCTCTGCTGACTGGTGCCATCACCCATCATGGCCACCACACTGACGTGGTCAGGGAAGCCTGCTGGGCC
CTGCGTGTCATGACCTTCGATGACGACATCCGTGTGCCCTTTGGCCATGCCCACAACCATGCCAAGATGATTGTG
CAGGAGAACAAAGGCTTGAAGGTGCTCATCGAAGCCACCAAAGCGTTCCTGGATAACCCTGGCATCCTGAGCGAG
CTCTGTGGAACCCTGTCCCGCCTGGCCATTCGCAACGAGTTCTGCCAGGAGGTCGTCGACCTCGGGGGCCTGAGC
ATTCTGGTGTCCCTGCTAGCCGACTGCAATGACCACCAGATGAGGGACCAGAGCGGCGTTCAGGAGCTCGTGAAG
CAAGTGCTGAGCACCCTGCGAGCCATCGCAGGCAACGACGACGTGAAAGATGCTATTGTCCGTGCTGGTGGGACG
GAGTCCATCGTGGCTGCTATGACCCAGCATCTGACCAGCCCCCAGGTGTGTGAGCAGAGCTGCGCGGCCCTGTGC
TTCCTGGCCCTGCGTAAGCCCGACAACAGCCGCATCATCGTGGAGGGTGGCGGGGCTGTGGCAGCACTGCAGGCC
ATGAAGGCACACCCGCAGAAGGCCGGCGTGCAGAAACAGGCTTGCATGCTGATCCGAAACCTGGTGGCCCACGGC
CAGGCCTTCTCGAAGCCCATCCTGGACCTGGGGGCTGAGGCACTCATCATGCAGGCCCGATCTGCCCACCGTGAC
TGTGAGGACGTGGCCAAGGCCGCCCTGCGGGACCTGGGTTGTCATGTCGAGCTCCGAGAGCTGTGGACAGGCCAG
AGGGGCAACCTGGCGCCATGACCCCAGGCCCAGTCTGGGCCGTGACTCTGGGTGAGTCGTGTGACTCAGGAATGG
GGGTAGATCCATGTCCTCCACTGTCCCCCATTAGTTCTGTCCCCTTCACAATGAGAAGTGTTTTCTGGCAGGCCC
TAGGTAAAGGGTCGGGGGAGGGGGGAGCCTTGTAGGGAGGCCTCTACACAGAAGAAAGCAGCCCCCATGTCCCAG
CCACTTCTGGGTCCCAGCCAGCAGCACGGATGTTACTGTCCTGCTCCTTCCCCCAGCCCCACGCCCTACCAGAGG
GGGCAAAGGGCACGTCCCATCACTCACTGCCCTGTCTGAAATGTGGCAGCCACTGTGGGCCAGGCTCAGGGCAGG
GCAGGCGATTCCAGTGGGGTTGGGCCCCCTGGCGCCTGCTGCTTACTGCAGTTTCATGCAGGCCTCTGCTCCTTG
TCTTTCTTACCTGTAAAATGGGTCTCAGATGCTCCGCCCTGCTTGGCCCCAGCTTGTCTGTCTCTGGGTCCTGGG
CCAGCCAGGATACCTGATAATAAAAGATCATTGGGTG

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FIGURE 2547

GGCCGGTGGGTGAGTGCACCGCGTTCTCGCACGCGTCATGGCGGTCCTCGGAGTACAGCTGGTGGTGACCCTGCT
CACTGCCACCCTCATGCACAGGCTGGCGCCACACTGCTCCTTCGCGCGCTGGCTGCTCTGTAACGGCAGTTTGTT
CCGATACAAGCACCCGTCTGAGGAGGAGCTTCGGGCCCTGGCGGGGAAGCCGAGGCCCAGAGGCAGGAAAGAGCG
GTGGGCCAATGGCCTTAGTGAGGAGAAGCCACTGTCTGTGCCCCGAGATGCCCCGTTCCAGCTGGAGACCTGCCC
CCTCACGACCGTGGATGCCCTGGTCCTGCGCTTCTTCCTGGAGTACCAGTGGTTTGTGGACTTTGCTGTGTACTC
GGGCGGCGTGTACCTCTTCACAGAGGCCTACTACTACATGCTGGGACCAGCCAAGGAGACTAACATTGCTGTGTT
CTGGTGCCTGCTCACGGTGACCTTCTCCATCAAGATGTTCCTGACAGTGACACGGCTGTACTTCAGCGCCGAGGA
GGGGGGTGAGCGCTCTGTCTGCCTCACCTTTGCCTTCCTCTTCCTGCTGCTGGCCATGCTGGTGCAAGTGGTGCG
GGAGGAGACCCTCGAGCTGGGCCTGGAGCCTGGTCTGGCCAGCATGACCCAGAACTTAGAGCCACTTCTGAAGAA
GCAGGGCTGGGACTGGGCGCTTCCTGTGGCCAAGCTGGCTATCCGCGTGGGACTGGCAGTGGTGGGCTCTGTGCT
GGGTGCCTTCCTCACCTTCCCAGGCCTGCGGCTGGCCCAGACCCACCGGGACGCACTGACCATGTCGGAGGACAG
ACCCATGCTGCAGTTCCTCCTGCACACCAGCTTCCTGTCTCCCCTGTTCATCCTGTGGCTCTGGACAAAGCCCAT
TGCACGGGACTTCCTGCACCAGCCGCCGTTTGGGGAGACGCGTTTCTCCCTGCTGTCCGATTCTGCCTTCGACTC
TGGGCGCCTCTGGTTGCTGGTGGTGCTGTGCCTGCTGCGGCTGGCGGTGACCCGGCCCCACCTGCAGGCCTACCT
GTGCCTGGCCAAGGCCCGGGTGGAGCAGCTGCGAAGGGAGGCTGGCCGCATCGAAGCCCGTGAAATCCAGCAGAG
GGTGGTCCGAGTCTACTGCTATGTGACCGTGGTGAGCTTGCAGTACCTGACGCCGCTCATCCTCACCCTCAACTG
CACACTTCTGCTCAAGACGCTGGGAGGCTATTCCTGGGGCCTGGGCCCAGCTCCTCTACTATCCCCCGACCCATC
CTCAGCCAGCGCTGCCCCCATCGGCTCTGGGGAGGACGAAGTCCAGCAGACTGCAGCGCGGATTGCCGGGGCTCT
GGGTGGCCTGCTTACTCCCCTCTTCCTCCGTGGCGTCCTGGCCTACCTCATCTGGTGGACGGCTGCCTGCCAGCT
GCTCGCCAGCCTTTTCGGCCTCTACTTCCACCAGCACTTGGCAGGCTCCTAGCTGCCTGCAGACCCTCCTGGGGC
CCTGAGGTCTGTTCCTGGGGCAGCGGGACACTAGCCTGCCCCCTCTGTTTGCGCCCCCGTGTCCCCAGCTGCAAG
GTGGGGCCGGACTCCCCGGCGTTCCCTTCACCACAGTGCCTGACCCGCGGCCCCCCTTGGACGCCGAGTTTCTGC
CTCAGAACTGTCTCTCCTGGGCCCAGCAGCATGAGGGTCCCGAGGCCATTGTCTCCGAAGCGTATGTGCCAGGTT
TGAGTGGCAAGGGTGATGCTGGCTGCTCTTCTGAACAAATAAAGGAGCATGCCGATTTTT

FIGURE 2548

GGTCGCTATGGAGGAGCCGGAGATGCAGCTCAAGGGGAAGAAAGTCACGGACAAGTTCACTGAGAGCGTCTACGT
CCTGGCCAACGAGCCATCCGTGGCCCTGTACCGGCTGCAGGAGCATGTGCGTCGCTCCCTCCCCGAGCTGGCCCA
GCACAAGGCAGACATGCAGCGTTGGGAGGAGCAGAGCCAGGGAGCCATCTACACTGTGGAGTACGCCTGCAGCGC
CGTGAAGAACCTGGTGGACAGCAGCGTCTACTTCCGCAGCGTGGAGGGTCTGCTCAAACAGGCCATCAGCATCCG
GGACCATATGAATGCCAGTGCCCAGGGCCACAGCCCGGAGGAACCACCCCCGCCCTCCTCAGCCTGATCCTGGAA
GAGACTCGGGGCCCCCCAGCCTCCGCCAACCCAGACAAAGATCATTCCACTCAGCCTGGGACGATGGGGAGGAAA
AAAATCCAGATCTCCCGCATCCTGGACCAAAGGAATCGGCAGGTGACGTTCACCAAGCGGAAGTTCGGGCTGATG
AAGAAGGCCTATGAGCTGAGCGTGCTCTGTGACTGTGAGATAGCCCTCATCATCTTCAACAGCGCCAACCGCCTC
TTCCAGTATGCCAGCACGGACATGGACCGTGTGCTGCTGAAGTACACAGAGTACAGCGAGCCCCACGAGAGCCGC
ACCAACACTGACATCCTCGAGACGCTGAAGCGGAGGGGCATTGGCCTCGATGGGCCAGAGCTGGAGCCGGATGAA
GGGCCTGAGGAGCCAGGAGAGAAGTTTCGGAGGCTGGCAGGCGAAGGGGGTGATCCGGCCTTGCCCCGACCCCGG
CTGTATCCTGCAGCTCCTGCTATGCCCAGCCCAGATGTGGTATACGGGGCCTTACCGCCACCAGGCTGTGACCCC
AGTGGGCTTGGGGAAGCACTGCCCGCCCAGAGCCGCCCATCTCCCTTCCGACCAGCAGCCCCCAAAGCCGGGCCC
CCAGGCCTGGTGCACCCTCTCTTCTCACCAAGCCACCTCACCAGCAAGACACCACCCCCACTGTACCTGCCGACG
GAAGGGCGGAGGTCAGACCTGCCTGGTGGCCTGGCTGGGCCCCGAGGGGGACTAAACACCTCCAGAAGCCTCTAC
AGTGGCCTGCAGAACCCCTGCTCCACTGCAACTCCCGGACCCCCACTGGGGAGCTTCCCCTTCCTCCCCGGAGGC
CCCCCAGTGGGGGCCGAAGCCTGGGCGAGGAGGGTCCCCCAACCCGCGGCGCCTCCCCGCCGACCCCCCCAGTCA
GCATCAAGTCTGAGCGCCTCTCTCCGGCCCCCGGGGGCCCCGGCGACTTTCCTAAGACCTTCCCCTATCCCTTGC
TCCTCGCCCGGTCCCTGGCAGAGCCTCTGCGGCCTGGGCCCGCCCTGCGCCGGCTGCCCTTGGCCGACGGCTGGC
CCCGGTAGGAGATCACCCGGTGGCACCAGCCCAGAGCGCTCGCCAGGTACGGCGAGGGCACGTGGGGACCCCACC
TCCCTCCAGGCCTCTTCAGAGAAGACCCAACAGTGACGCCCCCCTCCGCGGTGGGGGCTTGGAGGTGGGCGGCTG
GACTCAATCCACCCTGGGGGGCTCCTTTCCTTCTTCCTATTTGTGTGTATATCCACAAATAAAACGCGCGTGGCG
TCCGTGGACC

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FIGURE 2549

CTCAGCTGCACCTGCATAGTCAGGGGGTCCCTTGGCCAGGACTGTTGGCAGCAGGGGTCAGATTTTCCTCATGGC
CTCTCCAGCAGGCCAGCCCGGGTTTCTCCTGGTGGCTGGGAGCCAGGAGAGCGGCTCCCATGCAGAGTGCTGGTT
TCACATTTGTGGGTGGCCCATCCGTTGAGGCCAGTCACGTGGCCAGGCCCAGGACCAGATGGGAGAGGACCGCAC
AAGTGCAGCGTGAGCTGTGGGAGGTGTGGCTGACCACGCTTAGAGAGTGTGGTGCCAGGAAAGATCTGATGTGTC
ACCATTCTATATCTGTGATGGGCAGACGCAGGCAGGTCAAAGGGGCCCTGGGGACTTACCGAGCCCCTGCCTATT
GGCCAGGCACTGTGATTGTCCTCGGTGCCATGTGCCATGGAAGCCCTCTCAGAGGTCGAGGGGAGGCAGGTGGAG
ACAGAGCCTCTGTAGGCCTTTCAAGCTGTAGCCCCAGAGCCCAGAGGCAGCCGAATTCATGTGTGCAGTCAGAGA
GCACTTAGTGGGCACTGTAGTCAATCAGTGAGCGCTTACTGGACACCACAGGCAGCAAGCATTTACTGAGTACCT
CTGGCAGTTGATGCATACTTCCTGAGTACCTGTTCATAGCAGGCTTAGCTCTGGATGTGGGGTGGTGAGGAATCC
CACAGGCTGAGGGGTGGCCTGGGAGCTTTCCAGGGGGCCTGAAGCAGGAGGGGCTGCCTGAGTGGGTCAGCAGCC
CAGCCCAGTGCCCTACGCAGCCCTGCCCACACCCCCAACCCAGCCTCTGTCTCCCCAGTCCCATCCCCCACACCC
TGGTCCCTCCTACTTTGTGCCTCGAGGACACTGCCCCGCTGCCCTCCTCACTTCCCAGCGTCTGCTGTCCCCTCC
GCTGCTGCTGCCCGGCAGGATTGCTCTGTGTCTCATCCACGTTTGTCCCTGCAGAGTTCCTCGCCTCTCCCTGGA
ACCGCCAGCCTCATGCCGCATCTCAGAGGCTTTTTTTTTCTCTCTTTTTTTTTTTTTTGAGATGGAGTCTCACTC
TGTCACCCAGGCTAGAGTGCGGTGGTGCGATCTCGGTTCAGTGTAACCTCTGCCTGTCAGGTTCAAGCGATTATC
CCGCTTCAGCCTCCCGAGTAGGTGGGACTACAGGTGCCTGCCACCTCGCCCGGCTAATTTTTGTATTTTTAGTAG
AGATGGAATTTCAGCATGTTGGTCAGTCAGGTCTCGAACTCCCGACCTCAGGTGATCTGCCCGCCTCGGCCTCCC
AAAGTCCTGGGATTATAGGCATGAGCCACTGCGCCCGGCCTCAGAGGCTTTCATTCCCACTTTTCCCCCAAAACT
GCGCCTCTTTGGGGTCATCAGTGACCTTCGCAGGGTCAAGTCATCCCCCTCTCCTGTCCCAGGACCTTAAGCACT
GCCCTGTTTTACAGAAGAGGAAACTGAGGCCCCGAGAGGTAAGGCAGCCAGCTCAGGGTCATCGCCCACGCCCAG
AAATGCCAGGATTCCCACCCGGACCTCTGACCACCAAGCTCCACCTTAGTCTGGCCCGGGGTCATCCCTCAGGTG
CTGCCTCATGCCTTGGGTCTGTCTCTCAGACCACCCTGGCCCTTGCCCCTGCTCCCCAGCCTGACTGAAGCTGGG
CCAGGCAGAGACTGAAGACTGAACGAGTGTGGCCAGCATTCCTCCTGCACCTGCCCGGAGCCTCCAGGCCCAGCC
GTCCATGTTCCCAGAAGTCCAGAAGTGGCTTTGCTGCTCCTGGACTCTCACTGGCCCCCCATCGACCCTTGGACC
AATAACTGCCATCAAAATAATCCTGATTATGCACCTATCAAGTCCCTGGCCCTGGGCTAAAGTCTTCACAGGGGT
CATCTCATTTCATCCTCAGCCCCAAAAGGCAGGTCTCACCCCCAAATACATATGGACAAAAAGAGGCTCTGCCGG
GTGTGATGGCGGGCACCTGTAATCCCAGCTACTCAGGAGGTTGAGGCATGAGAATCGCTTGAACCCAGGAGGCAG
AGGTTCCAGTGAGCCAAGATGGCGCCACTGCACTCCAGCCTGCGCGACAGAGCGAGACTTCGCACCCGCCGCCCC
CCAACC

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FIGURE 2550

ACGCAGGGAAGGAGGCACACCCGGGGGTGGCGCAGTGAGGAGGGGGCGCGACGGCCAGGAGGCTGGTGGAGCGAC
ACCCAGGCAGGAGAGGGGGAAGAACTCTCTCCCTTTCTGAACCCCCTTTTCCTTGAGAGACGAGTTGGGGGAGTC
CTCCACGCATTACCCACTCGGGCCGCAAAAACTCCCTTCTTTAGCCCTCTGCCCCCGCCCTTGCTTATAAGCCTT
TGAGACCGCAGAAGGGACCTTGTTGTGGAACGGGACGGCCAAGAGGAAGCCAGATCGCTGAGGGTCCGGTCTCCA
GTTTGCCTCCTGCTATATCCATTGGAAGAGAAAAGTTTGTGACTTGGGCCCCCAAGTTTTGAGAGAACTGGGCTT
TCGGCGCGGGGGGACAGAGGAGGCTCGTGGGGAGCTTTCCCC**ATG**GAGCTTACCCAGCCTGCAGAAGACCTCATC
CAGACCCAGCAGACCCCTGCCTCAGAACTTGGGGACCCTGAAGACCCCGGAGAGGAGGCTGCAGATGGCTCAGAC
ACTGTGGTCCTCAGTCTCTTTCCCTGCACCCCTGAGCCTGTGAATCCTGAACCGGATGCCAGTGTTTCCTCTCCA
CAGGCAGGCAGCTCCCTGAAGCACTCCACCACTCTCACCAACCGGCAGCGAGGGAACGAGGTGTCAGCTCTGCCG
GCCACCCTAGACTCCCTGTCCATCCACCAGCTCGCAGCACAGGGGGAGCTGGACCAGCTGAAGGAGCATTTGCGG
AAAGGTGACAACCTCGTCAACAAGCCAGACGAGCGCGGCTTCACCCCCCTCATCTGGGCCTCCGCCTTTGGAGAG
ATTGAGACCGTTCGCTTCCTGCTGGAGTGGGGTGCCGACCCCCACATCCTGGCAAAAGAGCGAGAGAGCGCCCTG
TCGCTGGCCAGCACAGGCGGCTACACAGACATTGTGGGGCTGCTGCTGGAGCGTGACGTGGACATCAACATCTAT
GATTGGAATGGAGGGACGCCACTGCTGTACGCTGTGCGCGGGAACCACGTGAAATGCGTTGAGGCCTTGCTGGCC
CGAGGCGCTGACCTCACCACCGAAGCCGACTCTGGCTACACCCCGATGGACCTTGCCGTGGCCCTGGGATACCGG
AAAGTGCAACAGGTGATCGAGAACCACATCCTCAAGCTCTTCCAGAGCAACCTGGTGCCCGCTGACCCTGAG**TGA**

AGGCCGCCTGCCGGGGACTCAGACACTCAGGGAACAAAATGGTCAGCCAGAGCTGGGGAAACCCAGAACTGACTT
CAAAGGCAGCTTCTGGACAGGTGGTGGGAGGGGACCCTTCCCAAGAGGAACCAATAAACCTTCTGTGCAG

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FIGURE 2551

CACGCGGTTCCGGGTCCCAAGATTTGGCTCCAAGAGCTATTCGCAGAGAAACAGCCTCGCACAAAAAGCCACCGC
CCCCGAAACCCGCGGGAAATCTGTTTCCTGTGAAAGGCCTGGCCTCCGGGCATTGGCGGTTTCCCTGATCCTCTC
TCCCAAATTTTCCGGCAGGGGATTGATCGAGGCGACATTTAGGACTGGGGTGGGCGAGGGAGTGGCGGTTCTCGT
CCCAAGTTACAGGTGAGGACGTTCAGGCCAAGGCGTAGCCAAGATCGCGCCGCCCTGTAGCTTGAGGAGGCGCCG
GGATTCGAACCAAGGCTGTGCCCAATCCTAAGCCCTGCGAGGTCTTGTGGAACCGACATGACCCACTCTTTGGTT
TGTCCAGAGACAGTGAGCAGGGTGAGTTCAGTGCTGAATCGCAACACTCGGCAGTTTGGAAAAAAACATCTTTTC
GACCAGGATGAGGAGACATGTTGGAACTCAGACCAGGGCCCCTCCCAGTGGGTGACGCTGGAGTTTCCCCAGCTC
ATCCGTGTCTCCCAGCTGCAGATCCAGTTTCAGGGTGGCTTCTCCAGTCGCCGGGGCTGCCTGGAAGGTTCACAG
GGCACTCAGGCTCTCCACAAGATTGTAGATTTCTACCCTGAGGACAACAACTCGCTTCAGACTTTCCCCATACCA
GCTGCTGAAGTGGACCGGCTGAAGGTGACGTTTGAGGATGCCACTGACTTTTTTGGCCGTGTGGTCATCTACCAC
CTGCGGGTGCTTGGGGAGAAGGTGTGAGACCTCTAGGGGCTGTCTCCTCCAGGAAGCCCTCCGGGAAGCACAGCA
AAGTCCCTCATTCTGCACAGAAGGTTTATTGGTTCCTCTTGGGAAGGGTCCCCTCCCACCACCTGTCCAGAAGCT
GCCTTTGAAGTCAGTTCTGGGTTTCCCCAGCTCTGGCTGACCATTTTGTTCCCTGAGTGTCTGAGTCCCCGGCAG
GCGGCCTTCACTCAGGGTCAGCGGGCACCAGGTTGCTCTGGAAGAGCTTGAGGATGTGGTTCTCGATCACCTGTT
GCACTGAGATGGGGCAGGGAAAAGGTGGGCTGTGAGCTTGAATCGGGAGTGGGGTGGAGGCACAGGCCAACCTGC
GCTCTCCCCTTAGGGGACAAACAGGGACCCTTGCAGAGACCTGCATTACAGAGCAAAGCTGGGAGAACCGAGGAC
TCACCCCAGGAACCTCAACTTCCCCTAAGTTTGTAAAAATGCACTTTTGTAGCTTTTCAGAATTAATATAAAAAT
ATTTCCTACC

FIGURE 2552

GTCTCAAGATGGACAACCGGGATGTTGCAGGAAAGGCTAACCGGTGGTTTGGGGTTGCTCCCCCTAAATCTGGAA
AAATGAACATGAACATCCTTCACCAGGAAGAGCTCATCGCTCAGAAGAAACGGGAAATTGAAGCCAAAATGGAAC
AGAAAGCCAAGCAGAATCAGGTGGCCAGCCCTCAGCCCCCACATCCTGGCGAAATCACAAATGCACACAACTCTT
CCTGCATTTCCAACAAGTTTGCCAACGATGGTAGCTTCTTGCAGCAGTTTCTGAAGTTGCAGAAGGCACAGACCA
GCACAGACGCCCCGACCAGTGCGCCCAGCGCCCCTCCCAGCACACCCACCCCCAGCGCTGGGAAGAGGTCCCTGC
TCATCAGCAGGCGGACAGGCCTGGGGCTGGCCAGCCTGCCGGGCCCTGTGAAGAGCTACTCCCACGCCAAGCAGC
TGCCCGTGGCGCACCGCCCGAGTGTCTTCCAGTCCCCTGACGAGGACGAGGAGGAGGACTATGAGCAGTGGCTGG
AGATCAAAGTTTCACCCCCAGAGGGAGCCGAGACTCGGAAAGTGATAGAGAAATTGGCCCGCTTTGTGGCAGAAG
GAGGCCCCGAGTTAGAAAAAGTAGCTATGGAGGACTACAAGGATAACCCAGCATTTGCATTTTTGCACGATAAGA
ATAGCAGGGAATTCCTCTACTACAGGAAGAAGGTGGCTGAGATAAGAAAGGAAGCACAGAAGTCGCAGGCAGCCT
CTCAGAAAGTTTCACCCCCAGAGGACGAAGAGGTCAAGAACCTTGCAGAAAAGTTGGCCAGGTTCATAGCGGACG
GGGGTCCCGAGGTGGAAACCATTGCCCTCCAGAACAACCGTGAGAACCAGGCATTCAGCTTTCTGTATGAGCCCA
ATAGCCAAGGGTACAAGTACTACCGACAGAAGCTGGAGGAGTTCCGGAAAGCCAAGGCCAGCTCCACAGGCAGCT
TCACAGCACCTGATCCCGGCCTGAAGCGCAAGTCCCCTCCTGAGGCCCTGTCAGGGTCCTTACCCCCAGCCACCA
CCTGCCCCCGCCTCGTCCACGCCTGCGCCCACTATCATCCCTGCTCCAGCTGCCCCCGGGAAGCCAGCCTCCGCAG
CCACCGTGAAGAGGAAGCGGAAGAGCCGGTGGGGGCCTGAAGAGGATAAGGTAGAGCTCCCACCTGCTGAACTGG
TGCAGAGGGACGTGGATGCCTCTCCCTCGCCTCTGTCAGTTCAGGACCTCAAGGGGCTCGGCTATGAGAAGGGGA
AGCCTGTGGGTCTAGTGGGCGTCACAGAGCTTTCAGACGCCCAGAAGAAGCAGCTGAAGGAGCAGCAGGAGATGC
AGCAGATGTACGACATGATCATGCAGCACAAGCGGGCCATGCAGGACATGCAGCTGCTGTGGGAGAAGGCAGTCC
AACAGCACCAGCACGGCTATGACAGTGATGAGGAGGTGGACAGCGAGCTGGGCACCTGGGAGCACCAGCTGCGGC
GCATGGAGATGGATAAGACCAGGGAATGGGCCGAGCAGCTGACAAAGATGGGCCGGGGCAAGCACTTCATCGGAG
ACTTCCTGCCTCCAGACGAGCTGGAAAAGTTTATGGAGACCTTCAAGGCCCTGAAGGAGGGCCGTGAGCCTGACT
ACTCAGAGTACAAGGAGTTCAAGCTGACTGTGGAGAACATCGGCTACCAGATGCTGATGAAGATGGGCTGGAAGG
AGGGCGAGGGGCTGGGCTCAGAGGGCCAGGGCATCAAGAACCCAGTGAACAAGGGCACCACCACAGTGGACGGCG
CTGGCTTCGGCATTGACCGGCCGGCGGAGCTCTCCAAGGAGGACGACGAGTATGAGGCGTTCCGCAAGAGGATGA
TGCTGGCCTACCGCTTCCGGCCCAACCCCCTGAACAATCCCAGACGGCCTTACTACTGAGTGTTCTGGAAATACA
TACTTTCTGAATGACCAACCGTCCCTGGACTGTGGAATGTTCCGGCCTGCATTTCTGCCCACCCCTTCCGTTGTC
ACGAGTGCCGTGCCGTGTAATAAAGTCCCAGTGCTCATCCACC

FIGURE 2553A

GCGGCTTGTTGTTGTGGAGGCCAAAATGGCGGCTCAGGCGGCGGCAGCGGCCCAGGCGGCGGCGGCCCAGGCTGC
GCAGGCCGAGGCGGCCGACTCGTGGTACCTGGCGCTTCTGGGCTTCGCTGAGCACTTCCGCACTTCCAGCCCGCC
CAAAATCCGCCTGTGCGTGCACTGCCTGCAGGCCGTGTTCCCCTTCAAGCCGCCGCAGCGCATCGAGGCCCGTAC
ACACCTGCAGCTGGGCTCCGTTCTCTATCACCACACCAAGAACAGCGAGCAGGCGCGCAGCCACCTGGAGAAGGC
GTGGTTGATATCACAGCAAATCCCGCAGTTCGAAGATGTTAAATTTGAAGCAGCAAGTCTGTTGTCTGAATTGTA
CTGTCAAGAGAATTCCGTTGATGCAGCAAAGCCGCTGCTGCGGAAGGCGATCCAGATCTCACAGCAGACCCCATA
TTGGCACTGCCGCCTGCTCTTCCAGCTCGCTCAACTGCACACGCTTGAGAAGGACCTGGTGTCGGCCTGTGACCT
CCTGGGTGTAGGGGCCGAGTACGCCCGGGTGGTGGGATCTGAATACACACGGGCGCTGTTCCTCCTCAGCAAGGG
GATGCTGCTGCTGATGGAGCGAAAGCTGCAGGAGGTGCACCCGCTGCTGACCCTCTGCGGGCAGATCGTGGAGAA
CTGGCAGGGGAACCCCATCCAGAAGGAGTCGCTGCGTGTCTTCTTCCTGGTGCTCCAGGTCACCCACTATCTGGA
TGCCGGGCAGGTGAAGAGCGTGAAGCCGTGTCTGAAGCAGCTGCAGCAGTGCATCCAGACCATCTCCACACTGCA
CGATGATGAGATCCTGCCCAGCAACCCCGCTGACCTCTTCCACTGGCTGCCCAAGGAGCACATGTGTGTGCTTGT
CTACCTGGTGACTGTGATGCACTCCATGCAGGCCGGCTACCTGGAGAAGGCGCAGAAGTACACGGACAAGGCCCT
CATGCAGCTGGAGAAGCTCAAGATGCTGGACTGCAGCCCCATCCTGTCATCCTTCCAAGTGATCCTGCTGGAGCA
CATCATCATGTGCCGCCTTGTCACGGGTCACAAGGCCACGGCGCTGCAGGAGATCTCCCAGGTCTGCCAGCTGTG
CCAGCAGTCCCCCCGGCTCTTCTCCAACCATGCAGCACAGCTGCACACATTGCTGGGCCTGTACTGTGTCTCTGT
CAACTGCATGGACAACGCGGAAGCCCAGTTCACCACGGCCCTGCGGCTCACCAACCACCAGGAGCTGTGGGCCTT
CATCGTCACCAACCTGGCGAGTGTGTATATACGGGAAGGAAATAGACACCAAGAGGTACTCTACAGTCTGCTGGA
GAGGATCAACCCGGACCACAGCTTCCCTGTCAGCTCGCACTGCCTCCGAGCAGCCGCCTTCTATGTGCGTGGGCT
CTTCTCCTTCTTCCAGGGACGCTACAACGAGGCCAAGCGATTTCTGCGGGAAACTCTGAAGATGTCCAATGCTGA
GGACCTGAACCGGCTCACAGCCTGCTCCCTCGTGCTTCTGGGCCACATCTTCTATGTGCTGGGAAACCACAGGGA
GAGTAACAACATGGTGGTGCCTGCCATGCAGCTCGCCAGCAAGATCCCGGACATGTCGGTACAGCTGTGGTCGTC
AGCACTGCTGAGAGACCTGAATAAAGCCTGTGGGAACGCCATGGATGCCCATGAAGCCGCCCAGATGCACCAGAA
CTTCTCGCAGCAGCTGCTCCAGGACCACATTGAGGCCTGCAGCCTCCCCGAACACAACCTCATCACGTGGACAGA
CGGTCCACCCCCCGTGCAGTTCCAAGCTCAGAATGGACCCAACACCAGCCTGGCCAGCCTCCTGTGAGGCCTTGA
TGGGGCCATCCAGCTCCGCAGGGCCTGCGCGTCTCCGGCTTCCACCCAGACGGCACTCAAGCCTGCCCCCGAGGC
GTGCTTCCTTCCTGATTGTCTCTAGAGCTTCCAAGTCCTGGGAATGTGCGGGGCCAGTCCCTGCCCTCCCAGGAG
GGGTGGTAGCCGTTCCCACCTCGCAGCAGGACCCCCAGTGCAGAGGCTCACAGGTGGCACACAGGCGCTGTCTCT
CCAGAGCCATCCTTCAGAGTGGACCTCAGTGCCAGTCCTGCCTCAGCATCTGGGTCACGTCGGCCAGGAGTAGGG
TGCAGGCCTCCAGCAGGTCCTAATCCTGTGTGCCAGGGCAGGCAGTGCCCCAGGGGCACCACGCCTGACTCTCCA
TCACCCAGGCCTTGATGCCGAGCGGGAGTAGAGTGTTTCCTCTGCTCAAGGCAATTTCCAGAGCCCGGATGCCAG
TTTCTGGCCTGAATTTGGAGGGAAGAAGTAATGGCGCTAGTGTGGGACGAAGCACAGATCCCAGCACTTTTCCCA
GCTTTCTCTCCAGCATCAGTCCCTGCAGCAGCTGGGGCCTCTGGTCAGGAACCCTCAGGGACCCAGGAACTCAGC
TTCCAAACATCTGCACCTTGACCGGACTCGCCATCCCGCCGTGGGGGTGCAGGTGATTGTAAACACGGGTGTGCA
TGTGGATGCACACGGGTGTGCGGTGAAGATCTGTGGAGATGGAGCTGGGAGCTGAGGCTCCTGTTGCACCAGCCA
CCTTCCCCCATCTTGTGGCTGCTGAGGGGCAGGAAGCGGGGGAGTGGGCTCGTCTCCTAAATTTAAGATCACCTC
CTCAGCTAGCTTAGAGTGCGTGGCACGGGCCCCCCGCCCCCGAGATCTGGAGCCCAGGGACTTTCTTCCTGGCAG
ATCTGTGGCCTTCCCTGCTCAGCCTCTTGGTCCCCCCACTCCCTCCACCGCCTCACCTTCCCTGCTGGGTCTCTG
GGGCACAGTGTGAAACCCGCACCCTAGCCAGGCCCCAGGGAGCCTCCGCTGGGCCCAGACAGCAGCGTTTGGTTT
TATCCACTTTTCTTGGATAATCAGGAGGTGCCCCAGTGGTCACAGTGTGGCATTCCGAGTTGGGGCGGGTGGTCG
GGTCAAGATAGCAGCAGGTGTCAGGGCTCAAGACACCACCCCCTCCAGCTTCTGGGGCCCAGGAGCCTCTCC
CTGCTACAGGGGGTGGGGGTCCTGCTCAGCAGGGTAGGTGGTGGTTTTAGGTCTTGTCACCCTCACTCAGTGGAA
CTGCCTCTGGGAGCTTTGGCGTCTGTGACTAAAGGGACGCTGGATTGCTCAGGTCAGCTGCTTGGGGCTCCCAGG
CTGGGTGTGCCTTAGCCACAGGCAGGGCTGTCAATAACCCCCTTCCTCACTGGCCACCACCTGACATCAGCACCA
GTGACAGGCTGGTCAGAGGGCGGGGCTGGTGAGGGTTTGTCCTAAGAGGACCACCGCCATCTCTGGGTCTCCAGG
GGGAGAGCCTGGCCCTGTCCTTTGCTACCCAGGGCTGCCCCCAGGCCCATGAAGCCAATAGGAGAGCGTGTGGCA
CTGGCCCACAAACTGTCCCTGTCCTGTCTTCCTCCCGAGCCATGGCCTCTGCTAGCTCCACCTTGAAGGAGCCCC
CCACATCCTCCCCTACATCCCAGAGATGCCACCACTTGTGTCTCCACAATGTGCTCCTGCCCACCCGGGTTCCGC

FIGURE 2553B

ACTGTCCGACCCCTGCACACCACTCATGTCACCACGGCGTGCATCATGTTCATCCCCATCTATTTATTTAAGCCT
TTCTTTGCTTGTAGGGCATTTTGTATGTAGAGCAGTTGAAAACAGAACCTCAGAACTTAACATCTGTCCTGATGT
TAAAGTGCTTTTCATGACCACCCTGTTATCTATGTATATGTAAAGTTAAGGATGAGATCTTAAGTTTACAATTAA
AAACTCAGTACTCAATATTTAATATTCTACTCGAGCTTTATGGAAGCCAAATCATGTGCATGTGTGTGTGTGCGT
GTGTGCAAGCTTTGAACCTCCTTCCACAGCCGCATCTTCTCATGACACAAAGCTTTTGATAAGTACTTTCCTGTG
GGTCGCTCAGCGCCTCATAGCATCTCATTCAATTGCAAGAATAGAGGCCAGACACGGTGGCGCATGCCTGTAGTC
CCAGCTAACTGGGAGGCTGAGGCAGGAGGATCACTTGAGCCCAGGAGATTGAGGCTGCAGTGAGCATGATCGCGA
CACTGCACTCCAGCCTGGGTGACGGTGAGACTTTGTCTC

FIGURE 2554

GGAGATTGTTGCCAGGGCTCTGGTGAGTTCAGAATGACCGAAGAAGCATGCCGAACACGGAGTCAGAAACGAGCG
CTTGAACGGGACCCAACAGAGGACGATGTGGAGAGCAAGAAAATAAAAATGGAGAGAGGATTGTTGGCTTCAGAT
TTAAACACTGACGGAGACATGAGGGTGACACCTGAGCCGGGAGCAGGTCCAACCCAAGGATTGCTGAGGGCAACA
GAGGCCACGGCCATGGCCATGGGCAGAGGCGAAGGGCTGGTGGGCGATGGGCCCGTGGACATGCGCACCTCACAC
AGTGACATGAAGTCCGAGAGGAGACCCCCCTCACCTGACGTGATTGTGCTCTCCGACAACGAGCAGCCCTCGAGC
CCGAGAGTGAATGGGCTGACCACGGTGGCCTTGAAGGAGACTAGCACCGAGGCCCTCATGAAAAGCAGTCCTGAA
GAACGAGAAAGGATGATCAAGCAGCTGAAGGAAGAATTGAGGTTAGAAGAAGCAAAACTCGTGTTGTTGAAAAAG
TTGCGGCAGAGTCAAATACAAAAGGAAGCCACCGCCCAGAAGCCCACAGGTTCTGTTGGGAGCACCGTGACCACC
CCTCCCCCGCTTGTTCGGGGCACTCAGAACATTCCTGCTGGCAAGCCATCACTCCAGACCTCTTCAGCTCGGATG
CCCGGCAGTGTCATACCCCCGCCCCTGGTCCGAGGTGGGCAGCAGGCGTCCTCGAAGCTGGGGCCACAGGCGAGC
TCACAGGTCGTCATGCCCCCACTCGTCAGGGGGGCTCAGCAAATCCACAGCATTAGGCAACATTCCAGCACAGGG
CCACCGCCCCTCCTCCTGGCCCCCCGGGCGTCGGTGCCCAGTGTGCAGATTCAGGGACAGAGGATCATCCAGCAG
GGCCTCATCCGCGTCGCCAATGTTCCCAACACCAGCCTGCTCGTCAACATCCCACAGCCCACCCCAGCATCACTG
AAGGGGACAACAGCCACCTCCGCTCAGGCCAACTCCACCCCCACTAGTGTGGCCTCTGTGGTCACCTCTGCCGAG
TCTCCAGCAAGCCGACAGGCGGCCGCCAAGCTGGCGCTGCGCAAACAGCTGGAGAAGACGCTACTCGAGATCCCC
CCACCCAAGCCCCCAGCCCCAGAGATGAACTTCCTGCCCAGCGCCGCCAACAACGAGTTCATCTACCTGGTCGGC
CTGGAGGAGGTGGTGCAGAACCTACTGGAGACACAAGCAGGCAGGATGTCGGCCGCCACTGTGCTGTCCCGGGAG
CCCTACATGTGTGCACAGTGCAAGACGGACTTCACGTGCCGCTGGCGGGAGGAGAAGAGCGGCGCCATCATGTGT
GAGAACTGCATGACAACCAACCAGAAGAAGGCGCTCAAGGTGGAGCACACCAGCCGGCTGAAGGCCGCCTTTGTG
AAGGCGCTGCAGCAGGAACAGGAGATTGAGCAGCGGCTCCTGCAGCAGGGCACGGCCCCTGCACAGGCCAAGGCC
GAGCCCACCGCTGCCCCACACCCCGTGCTGAAGCAGGTCATAAAACCCCGGCGTAAGTTGGCGTTCCGCTCAGGA
GAGGCCCGCGACTGGAGTAACGGGGCTGTGCTACAGGCCTCCAGCCAGCTGTCCCGGGGTTCGGCCACGACGCCC
CGAGGTGTCCTGCACACGTTCAGTCCGTCACCCAAACTGCAGAACTCAGCCTCGGCCACAGCCCTGGTCAGCAGG
ACCGGCAGACATTCTGAGAGAACCGTGAGCGCCGGCAAGGGCAGCGCCACCTCCAACTGGAAGAAGACGCCCCTC
AGCACAGGCGGGACCCTTGCGTTTGTCAGCCCAAGCCTGGCGGTGCACAAGAGCTCCTCGGCCGTGGACCGCCAG
CGAGAGTACCTCCTGGACATGATCCCACCCCGCTCCATCCCCCAGTCAGCCACGTGGAAATAGTGCGAGCCAGGC
CCCGTGGAAGACGGGCTCCCTCCTCCCCCACCTGGCCCCTGGTCTAGAAGGACCCACTGCACCACCCTCCGCTGG
CTCGGGAAGACACCGTGCCCGCCCCAAGAGCAAGCACCGGCCATGCTGCAGAGGCAAGACCTCAATTCTTGGCTG
CAAAGTTTCATCAGGGCTAGGGGGCTGGTGCCGCCTCATAGGCAGACGAGGATCATCGCTGGGGGACCTTTCCCG
TGGGCTTTCTTCCTTTCTCTCTTTGCCTTTAGTTTGCCCGACACCAGCAGAAAAGTGGACCTTGGGGGCTGGTTC
TGCTCCTGGCCCCCTTGTTCAGCCCCTGCCGGCACACGGGCGGCTCACCCTGGACACTGTGATGCGCATGGGCAA
GGCCAGCGCCCGGGGCTTCTGAACCGAGCGGGGTGTTTCATTTTTTTGCTTTTCCCTGTCTTAGGCTCCCAGTCT
TTGACTGCCTTCCCATGGCGATCTATAAGTTGAAAGATTTTTTTTTTTTTTAATCACCTCATGATGATGGAGTTA
AAAGTAAACCGTGCAGACCCTGGGGTCCCTGTTGTACGCTGCATCATCCCGCTGGCCCTGTGCCCTGGAGGGTGG
GCGGCTCATGGTGCCACAGCCCCTGGCAGGGACGGCCGGCCCGCCCCCGTGACTGACTGACAGATGCAGGGATGG
CCGAGGCAGCCCTCGCTCCAGCTGAACGCCTCCATTGCTGCTTGTTCTGGAGACCCCCGCCCCCGCACCTTCCAG
ACTTAGCAGAAGAACAAACTGAAGAACAGACCCAGCCAGAGAAGCAGGGATTCCAGAAGCTGCCCATTAAGGGAG
AAGGAGAGGATCCGGTCGGCAGCAGCCCTGAGCAGAAAGCTGGAGGGGGGACTGTCGCGGGGTTTTTCTGTTGTG
GTTTATTTTATTAAATTTTTTCCTTTTTTCTATTCATTTCGATGGACGCAATCTTAAGCCACCCTGGCCTTGCTC
CTGGGAGGTGAGCGTGCACAGGTGTGTGCAGGTCAGGAGGTGCCGTCCAGGTGTGCGGCGAGCCGCTGCGCACAG
ATGTCAGGATTTCCGTTTGGGTCTAGTTTAGAACCTGTCCTTAAACCTAGGGGTTGCTGTCAGGATTTGCTTTCA
GACTTTTTTTTTTTTTGTAATTCCCTTTAGAGTCTACAAAAATGTTTTTAAAAGGATCAGGTCTGCTTTTAGTTT
CATTTTTGTTTCTTTCCCGTCCCACTCTTTAAAAACTGGTTCCGTGAGGAAAGGCAGAAGCCGTTCCGTGTCTCT
TGCAGGCTGGGCCGGCTTCATGCCAGTGCGAGGGCGTCCCGTGCCCACGTACATACGTATGTCTCCATGAGTTCT
GGGCTCCACTGGTTCCAATTGAGCTCCAGCCCTGGTTTTCCTACCCATGCAGTTAGGGACTTTAATTTAATTTTT
TTTTTGTAGGGCCACCGCCTTCAAACACAACTGCTACAACATTCTAATAAAGGCTCATTTAACCCCC

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FIGURE 2555

TGCGAGTATGGCGGCGTCAAAGGTGAAGCAGGACATGCCTCCGCCGGGGGGCTATGGGCCCATCGACTACAAACG
GAACTTGCCGCGTCGAGGACTGTCGGGCTACAGCATGCTGGCCATAGGGATTGGAACCCTGATCTACGGGCACTG
GAGCATAATGAAGTGGAACCGTGAGCGCAGGCGCCTACAAATCGAGGACTTCGAGGCTCGCATCGCGCTGTTGCC
ACTGTTACAGGCAGAAACCGACCGGAGGACCTTGCAGATGCTTCGGGAGAACCTGGAGGAGGAGGCCATCATCAT
GAAGGACGTGCCCGACTGGAAGGTGGGGGAGTCTGTGTTCCACACAACCCGCTGGGTGCCCCCCTTGATCGGGGA
GCTGTACGGGCTGCGCACCACAGAGGAGGCTCTCCATGCCAGCCACGGCTTCATGTGGTACACGTAGGCCCTGTG
CCCTCCGGCCACCTGGATCCCTGCCCCTCCCCACTGGGACGGAATAAATGCTCTGCAGACCTGG

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FIGURE 2556

CTGAAGTCGGTGTCTGCTGTGTTCATGGCAGGATTCGGTTAGGAGGAACAGCACAGCATGCTGGGCTCTGGATTT
AAAGCTGAGCACTTAAGAGTGAATTTGAGATTAGTCATAAATCGCCTTGAACTATTGGAGGAAAAAAAAAAAAAA
CAGAACTGGCCCAGAAAGCAAGGAAGGAGATTGCTGACTATCTGGCTGCTGGGAAAGATGAACGAGCTCGGATCC
GTGTGGAGCACATTATCCGGGAAGACTACTTCGTGGAGGCCATGGAGATCCTGGAGCTGTACTGTGATCTGCTGC
TGGCTCGGTTTGGCCTTATCCAGTCTATGAAGGAACTAGATTCTGGTCTGGCTGAATCTGTGTCTACATTGATCT
GGGCTGCTCCTCGACTCCAGTCAGAAGTGGCTGAGTTGAAAATAGTTGCTGATCAGCTCTGTGCCAAGTATAGCA
AGTAATATGGCAAGCTATGTAGGACCAACCAGATTGGAACTGTGAATGACAGGCTAATGCACAATCTGAGTGTGG
AAGCCCCATCCAAAATCCTGGTGGAGAGATACCTGATTGAAATTGCGAAGAATTACAATGTACCCTATGAACCTG
ACTCTGTGGTCATGGCAGAAGCTCCTTCTGGGGTAGAGACAGATCTTATTGATGTTGGATTCACAGATGATGTGA
AGAAAGGAGGCCCTGGAAGAGGAGGGGGTGGTGGGTTCACAGCACCAGTTGGTGGACCTGATGGAATGGTGCCAA
TGCCCATGCCTATGCCCATGCTATCTGCAAATACTCCTTTCTCATATCCACTGCCAAAGGGACCATCAGATTTCA
ATGGACTGCCAATGGGGACTTACCAGGCCTTTCCCAATATTTATCCATCTCAGATACCAGCAACTCCCCCATCAT
ATGAATCTGTAGATGACATTAATGCTGATAAGAATATCTCTTCTGCACAGATTGTTGGTCCTGGACCCAAGCCAG
AAGCCTCTGCAAAGCTTCCTTCCTGACCTGCGGATAACTATGACAACTTTGTCCTACCAGAGTTGCCATCTGTGC
CAGACACACTACCAACTGCATTTGCTGGTGCCAGCACCTCAGCATCTGAAGACATTGACTTTGATGATCTTTCCC
AGAGGTTTGAAGAGCTGAAAAAGAAAATATAGGTCTCTTAAACCAGGCAACTTTCATATTCTGGGAGTTGAGACT
GAGCAATTTCTCCTTGTAACAAAGAATCTCCATGAAATTCCTTTTCATCTGTTAACCGTCACTGAGCACAACACT
CCTCCTCTGGGCTCTCTGCCTGCTCCTCCAGATTCTGCTGCTTTCCAGTTCTCTGTTGATCCTGAGACTAACAAC
CGGAGACTGAGGCTGGAGCAACTGGCTCCTGGCAGCTGTGCTTGTCCCTTTTCTGTCAGAGTGATCCCAGGTTTC
CTCCTGGCCCGTCCCATGGTCCCTCCACAGGAGCATAAGAGGATGGGAAAGCACTATGGGGAGACCACCAAAGAT
GGCTGGACAGTGGGAGAGAGCACGTCGTGAAGCATCCCAGCCTCGTGTTGAGGTTCCAGACTTAGAAACAAACCC
CTCTGTACAGGGGGATTGTGGTGAGTGAGAATCAAGGCCACGGTGTGTGTTTTCGCACTCGAATGCAAGTGGGAG
AGAGAAAATGACTCAGGACGCCATTGTAACGGTTCCTGGAAGCTGGGCCCTCTCATTGGCATATACACTACTCCT
CGCCGCAGGGCACTGTCCCACCGGGATCCAGTTGCAAAGTTTGTCTCGACAGTTTAAGGCCTCGCTTAGTTGTAC
TGGATTCTCAGGGAGTCCTCTGTGGCCTTTTGCTCTGAGTGCTGTTTCCCTTGTACCAGAGGGCAGCACCATGGA
AATTCTGTTTTTCCTGTAGCATATTGTGTTGGATTGCCTTACTGGCAGAGAAAGGACAAATTGCCATTGAAGTCT
AGGGTGGGCTTCCAGCTGCCTTAATAGAAGTACTCAAGTCTTTTGGGTAGTGAGCTGGAAAGCCTACAGGAAAAA
AGGGGTACCTGTTTTCATTTGAAAACTTTGATTCATGGAAACTTTAAAACTAATCTCAGATAAATTTTTGGTGCA
AATGTGGCTGTAGTTGTCCACTGCTTTCCTGGATGGATGGGACTCTTATGTCATAACTTCTATACTCCTTTGGCC
CATAGCTAAGGTCATCCTTCCCCACAGGGGTGGCTTTGGGATTGGATTATACAGCTTTTGCTTCTGTGTAGTATA
CCTGTACATACCTGTTTCAGGAAGCCTTTCTTTAATGTTTTCAGTTGGTTTGTATTCTGTAGCTCAGTAGCTGCT
AATAAAGTTAAAGATCCTG

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FIGURE 2557

CCCCTCTAGCCTAGGCGAGGACTTCTACCGCGAGGCCATCGAGCACTGCCGCAGTTACAACGCGCGCCTGTGCGC
CGAGCGCAGCCTGCGACTGCCCTTCCTCGACTCGCAGACCGGCGTGGCCCAGAACAACTGCTACATCTGGATGGA
GAAGACCCACCGCGGGCCGGGTTTGGCCCCGGGACAGATTTACACGTACCCCGCCCGCTGTTGGAGGAAGAAACG
GAGACTCAACATCCTGGAGGACCCCAGACTCAGGCCCTGCGAGTACAAGATCGACTGTGAAGCACCCCTGAAGAA
GGAGGGTGGCCTCCCGGAAGGGCCGGTCCTCGAGGCTCTACTGTGTGCAGAGACGGGGGAGAAGAAGATTGAGCT
GAAGGAGGAGGAGACCATTATGGACTGTCAGAAACAGCAGTTGCTGGAGTTTCCGCATGACCTCGAGGTGGAAGA
CTTGGAGGATGACATTCCCAGGAGGAAGAACAGGGCCAAAGGAAAGGCATATGGCATCGGGGGTCTCCGGAAACG
CCAGGACACCGCTTCCCTGGAGGACCGAGACAAGCCGTATGTCTGTGATAAGTTTTACAAAGAATTGGCCTGGGT
CCCTGAGGCACAAAGGAAACACACAGCCAAGAAGGCGCCCGACGGCACTGTCATCCCCAACGGCTACTGTGACTT
CTGCCTGGGGGGCTCCAAGAAGACGGGGTGTCCCGAGGACCTCATCTCCTGTGCGGACTGTGGGCGATCAGGACA
CCCCTCGTGTTTACAATTCACGGTGAACATGACGGCAGCCGTGCGGACCTACCGCTGGCAGTGCATCGAGTGCAA
ATCCTGCAGCCTGTGCGGAACCTCCGAGAACGACGGTGCCAGCTGGGCGGGTCTCACCCCCCAGGACCAGCTGCT
GTTTTGTGATGACTGCGATCGGGGTTACCACATGTACTGCCTGAGTCCCCCCATGGCGGAGCCCCCGGAAGGGAG
CTGGAGCTGTCACCTCTGTCTCCGGCACCTGAAGGAAAAGGCTTCTGCTTACATCACCCTCACCTAGGCCGGCTC
GGCTCGCCGCGACTCTGGGGTGGTGCTCGCCTACCTGCCTCTCCGAGCTCCTCAATTCTCCCCCACCCTGAACAT
CCCGCAGGGGGAGGGGGAGAGGGGGAAGCCGAGAGGGGGCTGGGCCACCCCCTCCCCTCTGTGCAAGTGGAATGT
CTGCCCTGTGGGTGGGTGGGCCCGGCCAGGGCCTCTCCCTCCCTCCCTCCCTCTCTGTCCCTTGGCAAATGGACA
CCAGGGGCTTCTCCCCTCAAAGCCATACCCCGCCTCTGGGCGGGCATGGGGGGTGGTGGGTGCCAGCCAGGGGCA
TGGACAGAGCCTTTTTCTAAAGAAAAAGACAAAAAGTT

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FIGURE 2558

GTTGGGAGGTGTAGCGCGGCTCTGAACGCGCTGAGGGCCGTTGAGTGTCGCAGGCGGCGAGGGCGCGAGTGAGGA
GCAGACCCAGGCATCGCGCGCCGAGAAGGCCGGGCGTCCCCACACTGAAGGTCCGGAAAGGCGACTTCCGGGGGC
TTTGGCACCTGGCGGACCCTCCCGGAGCGTCGGCACCTGAACGCGAGGCGCTCCATTGCGCGTGCGCGTTGAGGG
GCTTCCCGCACCTGATCGCGAGACCCCAACGGCTGGTGGCGTCGCCTGCGCGTCTCGGCTGAGCTGGCC**ATG**GCG
CAGCTGTGCGGGCTGAGGCGGAGCCGGGCGTTTCTCGCCCTGCTGGGATCGCTGCTCCTCTCTGGGGTCCTGGCG
GCCGACCGAGAACGCAGCATCCACGACTTCTGCCTGGTGTCGAAGGTGGTGGGCAGATGCCGGGCCTCCATGCCT
AGGTGGTGGTACAATGTCACTGACGGATCCTGCCAGCTGTTTGTGTATGGGGGCTGTGACGGAAACAGCAATAAT
TACCTGACCAAGGAGGAGTGCCTCAAGAAATGTGCCACTGTCACAGAGAATGCCACGGGTGACCTGGCCACCAGC
AGGAATGCAGCGGATTCCTCTGTCCCAAGTGCTCCCAGAAGGCAGGATTCTGAAGACCACTCCAGCGATATGTTC
AACTATGAAGAATACTGCACCGCCAACGCAGTCACTGGGCCTTGCCGTGCATCCTTCCCACGCTGGTACTTTGAC
GTGGAGAGGAACTCCTGCAATAACTTCATCTATGGAGGCTGCCGGGGCAATAAGAACAGCTACCGCTCTGAGGAG
GCCTGCATGCTCCGCTGCTTCCGCCAGCAGGAGAATCCTCCCCTGCCCCTTGGCTCAAAGGTGGTGGTTCTGGCG
GGGCTGTTCGTGATGGTGTTGATCCTCTTCCTGGGAGCCTCCATGGTCTACCTGATCCGGGTGGCACGGAGGAAC
CAGGAGCGTGCCCTGCGCACCGTCTGGAGCTCCGGAGATGACAAGGAGCAGCTGGTGAAGAACACATATGTCCTG
TGACCGCCCTGTCGCCAAGAGGACTGGGGAAGGGAGGGGAGACTATGTGTGAGCTTTTTTTAAATAGAGGGATTG
ACTCGGATTTGAGTGATCATTAGGGCTGAGGTCTGTTTCTCTGGGAGGTAGGACGGCTGCTTCCTGGTCTGGCAG
GGATGGGTTTGCTTTGGAAATCCTCTAGGAGGCTCCTCCTCGCATGGCCTGCAGTCTGGCAGCAGCCCCGAGTTG
TTTCCTCGCTGATCGATTTCTTTCCTCCAGGTAGAGTTTTCTTTGCTTATGTTGAATTCCATTGCCTCTTTTCTC
ATCACAGAAGTGATGTTGGAATCGTTTCTTTTGTTTGTCTGATTTATGGTTTTTTTAAGTATAAACAAAAGTTTT
TTATTAGCATTCTGAAAGAAGGAAAGTAAAATGTACAAGTTTAATAAAAAGGGGCCTTCCCCTTTAGAATAAATT
TCAGCATGTGCTTTC

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FIGURE 2559

ATTCCTCCAACGGGCAGGTCTCAGCGCTCCTCCCCCTGCTCCGCTCCTCTGCAGGGCCCAGGCGCCCTTGGCCTT
AGGACCCAACTTCTCTTACCGCC**ATG**GAGTTCGACCTGGGAGCAGCCCTGGAGCCCACCTCCCAGAAGCCCGGTG
TGGGGGCGGGCCACGGGGGAGATCCCAAGCTCAGTCCCCACAAAGTTCAGGGCCGGTCGGAGGCAGGGGCAGGTC
CGGGTCCAAAGCAAGGACACCACAGCTCTTCCGACTCCAGCAGCAGCTCCAGCGATTCGGACACGGATGTGAAGT
CCCACGCTGCTGGCTCCAAGCAGCACGAGAGCATCCCGGGCAAGGCCAAGAAGCCCAAAGTGAAGAAGAAGGAGA
AGGGCAAGAAGGAGAAGGGCAAGAAGAAGGAGGCTCCCCAC**TGA**AGGGCCCTGGACAGGGCTCATTAAACCTTCC
TCTCTGCCTTC

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FIGURE 2560

TGCCAGTCCATCTGACATCAAAGCCAGTGTCTCTAATGGTGACACCACCCTCCTCTGCAGCAGGAGGCAGAGCTG
TGGGATGAATGAGGTTCGCCAGGTCTCCCTTACCTATCCTGGGTCCCCAGCTCCTTCTCACTCTCTTCCCTTGCA
GCCTCGAAGCGGAGGATCCCTGTGTCCCAGCCGGGCATGGCGACCCCCACCAGCTTTTCGATGACACAAGTTCAG
CCCAGAGCCGGGGCTATGGGGCCCAGCGGGCACCTGGTGGCCTGAGTTATCCTGCAGCCTCTCCCACGCCCCATG
CAGCCTTCCTGGCTGACCCGGTGTCCAACATGGCCATGGCCTATGGGAGCAGCCTGGCCGCGCAGGGCAAGGAGC
TGGTGGATAAGAACATCGACCGCTTCATCCCCATCACCAAGCTCAAGTATTACTTTGCTGTGGACACCATGTATG
TGGGCAGAAAGCTGGGCCTGCTGTTCTTCCCCTACCTACACCAGGACTGGGAAGTGCAGTACCAACAGGACACCC
CGGTGGCCCCCCGCTTTGACGTCAATGCCCCGGACCTCTACATTCCAGCAATGGCTTTCATCACCTACGTTTTGG
TGGCTGGTCTTGCGCTGGGGACCCAGGATAGGTTCTCCCCAGACCTCCTGGGGCTGCAAGCGAGCTCAGCCCTGG
CCTGGCTGACCCTGGAGGTGCTGGCCATCCTGCTCAGCCTCTATCTGGTCACTGTCAACACCGACCTCACCACCA
TCGACCTGGTGGCCTTCTTGGGCTACAAATATGTCGGGATGATTGGCGGGGTCCTCATGGGCCTGCTCTTCGGGA
AGATTGGCTACTACCTGGTGCTGGGCTGGTGCTGCGTAGCCATCTTTGTGTTCATGATCCGGACGCTGCGGCTGA
AGATCTTGGCAGACGCAGCAGCTGAGGGGGTCCCGGTGCGTGGGGCCCGGAACCAGCTGCGCATGTACCTGACCA
TGGCGGTGGCGGCGGCGCAGCCTATGCTCATGTACTGGCTCACCTTCCACCTGGTGCGGTGAGCGCGCCCGCTGA
ACCTCCCGCTGCTGCTGCTGCTGCTGGGGGCCACTGTGGCCGCCGAACTCATCTCCTGCCTGCAGGCCCCAAGGT
CCACCCTGTCTGGCCACAGGCACCGCCTCCATCCCATGTCCCGCCCAGCCCCGCCCCCAACCCAAGGTGCTGAGA
GATCTCCAGCTGCACAGGCCACCGCCCCAGGGCGTGGCCGCTGTTACAGAAACAATAAACCCTGATGGGCATGG

FIGURE 2561

TGCCGCGCCTGTAGCACTCCCGGAACTGGAACTAGGTGCCAGACGGTCCGGAGGCGGGGGCCACGTCAGCGGGGC
CACCCAGGGCTCGCGGGGTCCCGGTGGGTGCCATGCGGAGGGGCGCGCTTCTGGCGGGCGCCTTGGCCGCGTACG
CCGCGTACCTGGTGCTGGGCGCGCTGTTGGTGGCGCGGCTGGAGGGGCCGCACGAAGCCAGGCTCCGAGCCGAGC
TGGAGACGCTGCGGGCGCAGCTGCTTCAGCGCAGCCCGTGTGTGGCTGCCCCCGCCCTGGACGCCTTCGTGGAGC
GAGTGCTGGCGGCCGGACGGCTGGGGCGGGTCGTGCTTGCTAACGCTTCGGGGTCCGCCAACGCCTCGGACCCCG
CCTGGGACTTCGCCTCTGCTCTCTTCTTCGCCAGCACGCTGATCACCACCGTGGGCTATGGGTACACAACGCCAC
TGACTGATGCGGGCAAGGCCTTCTCCATCGCCTTTGCGCTCCTGGGCGTGCCGACCACCATGCTGCTGCTGACCG
CCTCAGCCCAGCGCCTGTCACTGCTGCTGACTCACGTGCCCCTGTCTTGGCTGAGCATGCGTTGGGGCTGGGACC
CCCGGCGGGCGGCCTGCTGGCACTTGGTGGCCCTGTTGGGGGTCGTAGTGACCGTCTGCTTTCTGGTGCCGGCTG
TGATCTTTGCCCACCTCGAGGAGGCCTGGAGCTTCTTGGATGCCTTCTACTTCTGCTTTATCTCTCTGTCCACCA
TCGGCCTGGGCGACTACGTGCCCGGGGAGGCCCCTGGCCAGCCCTACCGGGCCCTCTACAAGGTGCTGGTCACAG
TCTACCTCTTCCTGGGCCTGGTGGCCATGGTGCTGGTGCTGCAGACCTTCCGCCACGTGTCCGACCTCCACGGCC
TCACGGAGCTCATCCTGCTGCCCCCTCCGTGCCCTGCCAGTTTCAATGCGGATGAGGACGATCGGGTGGACATCC
TGGGCCCCCAGCCGGAGTCGCACCAGCAACTCTCTGCCAGCTCCCACACCGACTACGCTTCCATCCCCAGGTAGC
TGGGGCAGCCTCTGCCAGGCTTGGGTGTGCCTGGCCTGGGACTGAGGGGTCCAGGCGACCAGAGCTGGCTGTACA
GGAATGTCCACGAGCACAGCAGGTGATCTTGAGGCCTTGCCGTCCACCGTCTCTCCTTTGTTTCCCAGCATCTGG
CTGGGATGTGAAGGGCAGCACTCCCTGTCCCCATGTCCCGGGCTCCACTGGGCACCAACATAACCTTGTTCTCTG
TCCTTTCTCTCATCCTCTTTACACTGTGTCTCTCTGGCTCTCTGGCATTCTCGCTGCCTCTGTCTTTCCCTCTTG
CTGTCTCTGTTTCTCATTCTCTTTCATGTTCCGTCTGTGTCTCTCAATTAACCACTCGTCAACTGCTGATTCTAC
TGGGCTGTGGGCTCAGACCTCATTTCAGGCACCAGATTGGTCGCTACACCCTGGACAAGTGACTGCCCGTCTCTG
AGCCTTGATTTCCTCAGCTGCCAAATGGGAAGAATAGAAGAATTTGCCCCTAAACCCCTCCTGTGTGCTGGCCCT
GTGCTAGACAGTGCTGGAGACATAGTTGGGGGTGGAGAACTGCCCTTATGGAGCTTGCAGTCCAGTGAGGTGGAC
AGACCTGTCCCCAGACAGTGATGGCCCAAAATGGTCAGGACTTTAATGGAGGAGGTGAGGTGTTGAAAGCACAGG
CAGAGTGGTCAGGGCTGAAGTCGGAGAAGCATAGGGACTAGGCCCAATCCAGCCTGGAAAGTCAGGGAGGACTTC
CTAGAGGAAGGGACATCGAACTAAGACCTGAACTATGAGAAATAGGCAGGAAGAAGTTGTACCTGACTCATTTTT
CTCAGGTGTCTCCAGGGAGCAGGACCCATGGAGGGACCCCTGGTGTAGGCCTGGGCGATAGACTCTTCCTCAGCA
GCCTGGCAGGCAGGAAACAGACATAGGACCCCAGCCCAGATCTGAATGGCATGGGAGGTGCTGCCCTTAACCATG
ACACCATTGTAAGAGCTGTCCACATTTGTATGTTGTGCCCTGGAATCAGCCTGGTTGAGCTCAAATCCCAACTTA
GCCACGTCTGGCCTGTGTCCTTGGGCAGTCACACTACCTCTCTGATTTTGTTTCCTTATCTGTAAAATGGTGATC
ATCATAATACAACTTCAAAAGGATTTCAGGCTGAGTGTGGTGGCTCACGCCTATACACCCAGCACTTTGGAAGGC
TGAGGAAGGAGGATCGCTTGAGGCCAGGAGTTTGAGACTAGCCTAGGCAACACAGTGAGGCCTTATCTCAACAAC
AACCACAAAATCTAAAAATTAGCTGGGTGTGGTGGTGCATGCCTGTGATCCTGGCTACTTCAGAGGCTGAGGTGG
AAGGATCACTTGAGGCCAGGAGTTTGAGGCTGCAGTGAGTTATGATGGCACTGCTGCACTCCAGCCTGCGGGACA
GAGTGAGACCCTGTCTGAAAGAAAGAGAGAAAGAAAGAAAGAAAGAGAGAGAAAGAAAGAAAGAAAGAAAGGGAA
AGATGGAAGGAAGGAAGGAAAAAGAAAGAGAAAGAGAGAGAGAGAGAAAGAAAAAGAAAGAAAAGTAAGAAAGAA
AAAAGAAAAAGAAAGAAAAGTAAGAAAG

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FIGURE 2562

CGGGGCGGCAGGCTTCTCGAGCTCCGGGCCCGCGGCAACCTCGGGCGCTGTTCTGCAGGCCGCGACCGGCATGTA
CGAGCAACTCAAGGGCGAGTGGAACCGTAAAAGCCCCAATCTTAGCAAGTGCGGGGAAGAGCTGGGTCGACTCAA
GCTAGTTCTTCTGGAGCTCAACTTCTTGCCAACCACAGGGACCAAGCTGACCAAACAGCAGCTAATTCTGGCCCG
TGACATACTGGAGATCGGGGCCCAATGGAGCATCCTACGCAAGGACATCCCCTCCTTCGAGCGCTACATGGCCCA
GCTCAAATGCTACTACTTTGATTACAAGGAGCAGCTCCCCGAGTCAGCCTATATGCACCAGCTCTTGGGCCTCAA
CCTCCTCTTCCTGCTGTCCCAGAACCGGGTGGCTGAGTTCCACACGGAGTTGGAGCGGCTGCCTGCCAAGGACAT
ACAGACCAATGTCTACATCAAGCACCCAGTGTCCCTGGAGCAATACCTGATGGAGGGCAGCTACAACAAAGTGTT
CCTGGCCAAGGGTAACATCCCCGCCGAGAGCTACACCTTCTTCATTGACATCCTGCTCGACACTATCAGGGATGA
GATCGCTGGGTGCATCGAGAAGGCCTACGAGAAAATCCTTTTCACTGAGGCCACCCGGATCCTCTTCTTCAACAC
ACCCAAAAAGATGACAGACTACGCCAAGAAGCGAGGGTGGGTCCTGGGCCCCAACAACTACTACAGTTTTGCCAG
CCAGCAGCAGAAGCCGGAAGACACCACCATTCCCTCCACAGAACTGGCCAAACAGGTCATCGAGTATGCCCGGCA
GCTGGAGATGATCGTCTGAGCCCCCCGGGCACTGGGTGGGGCAGGGCACGAGTTATTTAAAACAGTTACACTGCA
GGGTTTCGCCCAATAAAGGTGGACTGAC

FIGURE 2563

ATCCCCGTGTGGGGGAGGGGGGCCTTCGGTCTCTCCCCAGCCTCTTCCTTCCCCCTGGCCTGAGGGTGGGTGGGG
AGGGGCAGTTCCTCTTTCCTTCCCAAGCACCGAGGAGGCCCCAGCTCCCTAGGGGCTGAGAAGCTGGAGTCCTGG
GCAAGGGGAGGAGCTGAGCCCTACTCTTGCAAGACCCCCGGCCTCCTCACCCCACGCGGGAAGCATGAACAGAAA
AGACAGTAAGAGGAAGTCCCACCAGGAATGCACCGGAAAAATAGGAGGGCGAGGCCGGCCCCGCCAAGTGCGCCG
CCACAAGACATGCCCCAGCCCTCGGGAAATCAGCAAGGTCATGGCTTCCATGAACCTGGGCCTGCTGAGTGAGGG
CGGCTGCAGCGAAGATGAGCTGCTGGAGAAATGCATCCAGTCCTTCGATTCAGCTGGCAGCCTGTGCCACGAGGA
CCACATGCTCAACATGGTGCTGGCCATGCACAGCTGGGTGCTGCCGTCCGCCGACCTGGCTGCCCGCCTGCTGAC
CTCATACCAGAAGGCCACAGGGGACACCCAGGAGCTGAGACGGCTGCAGATCTGTCACCTGGTCAGGTACTGGCT
GATGCGACACCCTGAGGTGATGCACCAGGATCCCCAGCTAGAAGAAGTCATAGGTCGTTTCTGGGCCACCGTGGC
CCGGGAGGGCAACTCAGCCCAGAGAAGACTGGGAGACTCTTCTGACCTCCCAGGCCTGGGCAAAAAGCGCAAAGT
GTCCTTGCTTTTCGACCACTTGGAGACGGGGGAGCTGGCTCAGCACCTCACCTACCTGGAGTTCCGGTCCTTCCA
GGCTATCACGCCCCAGGACCTGCGGAGCTACGTTTTGCAGGGCTCAGTACGAGGCTGCCCGGCCCTGGAGGGCTC
CGTAGGTCTCAGCAACAGCGTGTCCCGCTGGGTGCAGGTGATGGTGCTGAGCCGTCCCGGGCCCCTACAGCGTGC
ACAGGTGCTGGACAAGTTCATTCACGTGGCACAGAGGCTCCACCAGCTGCAGAATTTCAACACGCTGATGGCAGT
CACAGGGGGCCTGTGTCACAGTGCCATCTCCAGACTCAAGGACTCCCATGCCCACCTGAGCCCTGACAGCACCAA
GGCCCTCCTGGAGCTCACTGAGCTCCTTGCCTCCCACAACAACTACGCCCGCTACCGCCGCACCTGGGCTGGCTG
CGCGGGTTTCCGGCTGCCTGTACTGGGCGTGCACCTCAAGGACCTGGTGTCCCTGCATGAGGCACAGCCCGACAG
GTTGCCTGACGGCCGCCTGCACCTACCCAAGCTGAACAACCTCTACCTGCGGCTGCAGGAGCTGGTGGCCCTCCA
AGGGCAGCATCCACCCTGCAGCGCCAATGAGGATCTGCTGCACCTGCTCACGCTCTCCCTGGACCTCTTCTACAC
GGAAGACGAGATCTATGAGCTTTCTTATGCCCGGGAGCCGCGTTGTCCCAAGAGCCTGCCACCCTCCCCCTTCAA
TGCACCTCTGGTGGTGGAGTGGGCCCCTGGTGTGACACCCAAGCCGGACAGGGTCACACTGGGTCGGCATGTGGA
GCAGCTGGTGGAGTCTGTGTTCAAGAATTATGACCCTGAAGGCCGAGGAACAATCTCTCAGGAGGACTTTGAGCG
ACTCTCGGGCAATTTTCCCTTCGCCTGCCATGGGCTTCACCCACCCCCACGCCAGGGGAGAGGATCCTTCAGCAG
AGAGGAGCTGACAGGGTACCTGCTCCGGGCCAGCGCCATCTGCTCCAAGTTGGGCCTGGCCTTCCTGCACACCTT
CCATGAGGTCACCTTCCGAAAGCCTACCTTCTGCGACAGCTGCAGTGGCTTCCTCTGGGGTGTCACCAAGCAAGG
CTACCGCTGTCGGGAGTGCGGGCTGTGTTGCCACAAACACTGCAGAGACCAGGTGAAGGTAGAATGTAAGAAGAG
GCCAGGGGCCAAGGGCGATGCAGGACCCCCCGGAGCTCCTGTCCCATCCACACCAGCTCCCCATGCCAGCTGTGG
CTCCGAGGAAAATCACTCCTACACGCTATCCCTGGAGCCTGAGACTGGGTGCCAGCTTCGCCATGCCTGGACCCA
GACTGAATCCCCACACCCTTCCTGGGAAACAGATACGGTCCCCTGCCCGGTGATGGACCCACCATCAACTGCATC
CTCCAAGCTGGATTCCTAGACATCTCTTGGTCTCCTCTCTTCCTCACTCCCTTCCCCCAGTCAGTCCTGAGTCCT
GCCGTCAGACTCTGGCAGGGCTCCCAGAGGAGCATCAACTCCAGGAGAACAGGGATTTCTATCAATGTCATTCAC
TGCTGCATCCCCAGTGCCTAGAACAGGGCTGGCAGGTGGTAGGCGCCTGACAGATGCTTGTCTGATGCCTGAATG
TCTCCTTACCCATGCCCACGGCACAGGATAGATGTGCTATAGGGCAAAGAACTTTGAGGGTCGAGCAGCAGGGGC
CCATTCAGTCCCAGGGAGCAGAGACCCCCCCAACCCCTTCACAAACCCCAACACCCCTGACTTGGCCCCCACAGA
GAGAGGTCCTACAGCTGTCATAAATTAAATTTATTCTCTGGA

FIGURE 2564A

TCTACCTCGCGGGTGCCTCTGGTGTCTCCAGAGGTCTCCGACCCCAGCCCGCCCCCAGCCCTCCCGCCCAGCCCG
CAGCCCCCTCCCTCTGTTCCCCGACCTCAGACCCTGGGCTTCCGACCTCGACATCATGGGTGACGCAGAAGGCGA
AGACGAGGTCCAGTTCCTGCGGACGGACGATGAGGTGGTCCTGCAGTGCAGCGCTACCGTGCTCAAGGAGCAGCT
CAAGCTCTGCCTGGCCGCCGAGGGCTTCGGCAACCGCCTGTGCTTCCTGGAGCCCACTAGCAACGCGCAGAATGT
GCCCCCCGATCTGGCCATCTGTTGCTTCGTCCTGGAGCAGTCCCTGTCTGTGCGAGCCCTGCAGGAGATGCTGGC
TAACACGGTGGAGGCTGGCGTGGAGTCATCCCAGGGCGGGGGACACAGGACGCTCCTGTATGGCCATGCCATCCT
GCTCCGGCATGCACACAGCCGCATGTATCTGAGCTGCCTCACCACCTCCCGCTCCATGACTGACAAGCTGGCCTT
CGATGTGGGACTGCAGGAGGACGCAACAGGAGAGGCTTGCTGGTGGACCATGCACCCAGCCTCCAAGCAGAGGTC
TGAAGGAGAAAAGGTCCGCGTTGGGGATGACATCATCCTTGTCAGTGTCTCCTCCGAGCGCTACCTGCACCTGTC
GACCGCCAGTGGGGAGCTCCAGGTTGACGCTTCCTTCATGCAGACACTATGGAACATGAACCCCATCTGCTCCCG
CTGCGAAGAGGGCTTCGTGACGGGAGGTCACGTCCTCCGCCTCTTTCATGGACATATGGATGAGTGTCTGACCAT
TTCCCCTGCTGACAGTGATGACCAGCGCAGACTTGTCTACTATGAGGGGGGAGCTGTGTGCACTCATGCCCGCTC
CCTCTGGAGGCTGGAGCCACTGAGAATCAGCTGGAGTGGGAGCCACCTGCGCTGGGGCCAGCCACTCCGAGTCCG
GCATGTCACTACCGGGCAGTACCTAGCGCTCACCGAGGACCAGGGCCTGGTGGTGGTTGACGCCAGCAAGGCTCA
CACCAAGGCTACCTCCTTCTGCTTCCGCATCTCCAAGGAGAAGCTGGATGTGGCCCCCAAGCGGGATGTGGAGGG
CATGGGCCCCCCTGAGATCAAGTACGGGGAGTCACTGTGCTTCGTGCAGCATGTGGCCTCAGGACTGTGGCTCAC
CTATGCTGCTCCAGACCCCAAGGCCCTGCGGCTCGGCGTGCTCAAGAAGAAGGCCATGCTGCACCAGGAGGGCCA
CATGGACGACGCACTGTCGCTGACCCGCTGCCAGCAGGAGGAGTCCCAGGCCGCCCGCATGATCCACAGCACCAA
TGGCCTATACAACCAGTTCATCAAGAGCCTGGACAGCTTCAGCGGGAAGCCACGGGGCTCGGGGCCACCCGCTGG
CACGGCGCTGCCCATCGAGGGCGTTATCCTGAGCCTGCAGGACCTCATCATCTACTTCGAGCCTCCCTCCGAGGA
CTTGCAGCACGAGGAGAAGCAGAGCAAGCTGCGAAGCCTGCGCAACCGCCAGAGCCTCTTCCAGGAGGAGGGGAT
GCTCTCCATGGTCCTGAATTGCATAGACCGCCTAAATGTCTACACCACTGCTGCCCACTTTGCTGAGTTTGCAGG
GGAGGAGGCAGCCGAGTCCTGGAAAGAGATTGTGAATCTTCTCTATGAACTCCTAGCTTCTCTAATCCGTGGCAA
TCGTAGCAACTGTGCCCTCTTCTCCACAAACTTGGACTGGCTGGTCAGCAAGCTGGATCGGCTGGAGGCCTCGTC
TGGCATCCTGGAGGTCCTGTACTGTGTCCTCATTGAGAGTCCAGAGGTTCTGAACATCATCCAGGAGAATCACAT
CAAGTCCATCATCTCCCTCCTGGACAAGCATGGGAGGAACCACAAGGTCCTGGACGTGCTATGCTCCCTGTGTGT
GTGTAATGGTGTGGCTGTACGCTCCAACCAAGATCTTATTACTGAGAACTTGCTGCCTGGCCGTGAGCTTCTGCT
GCAGACAAACCTCATCAACTATGTCACCAGCATCCGCCCCAACATCTTTGTGGGCCGAGCGGAAGGCACCACGCA
GTACAGCAAATGGTACTTTGAGGTGATGGTGGACGAGGTGACTCCATTTCTGACAGCTCAGGCCACCCACTTGCG
GGTGGGCTGGGCCCTCACCGAGGGCTACACCCCCTACCCTGGGGCCGGCGAGGGCTGGGGCGGCAACGGGGTCGG
CGATGACCTCTATTCCTACGGCTTTGATGGACTGCATCTCTGGACAGGACACGTGGCACGCCCAGTGACTTCCCC
AGGGCAGCACCTCCTGGCCCCTGAAGACGTGATCAGCTGCTGCCTGGACCTCAGCGTGCCGTCCATCTCCTTCCG
CATCAACGGCTGCCCCGTGCAGGGTGTCTTTGAGTCCTTCAACCTGGACGGGCTCTTCTTCCCTGTTGTCAGCTT
CTCGGCTGGTGTCAAGGTGCGGTTCCTCCTTGGTGGCCGCCATGGTGAATTCAAGTTCCTGCCCCCACCTGGCTA
TGCTCCATGCCATGAGGCTGTGCTCCCTCGAGAGCGACTCCATCTTGAACCCATCAAGGAGTATCGACGGGAGGG
GCCCCGGGGGCCTCACCTGGTGGGCCCCAGTCGCTGCCTCTCACACACCGACTTCGTGCCCTGCCCTGTGGACAC
TGTCCAGATTGTCCTGCCGCCCCATCTGGAGCGCATTCGGGAGAAGCTGGCGGAGAACATCCACGAGCTCTGGGC
GCTAACCCGCATCGAGCAGGGCTGGACCTACGGCCCGGTTCGGGATGACAACAAGAGGCTGCACCCGTGTCTTGT
GGACTTCCACAGCCTTCCAGAGCCTGAGAGGAACTACAACCTGCAGATGTCTGGGGAGACGCTCAAGACTCTGCT
GGCTCTGGGCTGCCACGTGGGCATGGCGGATGAGAAGGCGGAGGACAACCTGAAGAAGACAAAACTCCCCAAGAC
GTATATGATGAGCAATGGGTACAAGCCGGCTCCGCTGGACCTGAGCCACGTGCGGCTGACGCCGGCGCAGACGAC
ACTGGTGGACCGTCTGGCAGAAAATGGGCACAACGTGTGGGCCCGAGACCGCGTGGGCCAGGGCTGGAGCTACAG
CGCAGTGCAGGACATCCCAGCGCGCCGAAACCCTCGGCTGGTGCCCTACCGCCTGCTGGATGAAGCCACCAAGCG
CAGCAACCGGGACAGCCTCTGCCAGGCCGTGCGCACCCTCCTGGGCTACGGCTACAACATCGAGCCTCCTGACCA
GGAGCCCAGTCAGGTGGAGAACCAGTCTCGTTGTGACCGGGTGCGCATCTTCCGGGCAGAGAAATCCTATACAGT
GCAGAGCGGCCGCTGGTACTTCGAGTTTGAAGCAGTCACCACAGGCGAGATGCGCGTGGGCTGGGCGAGGCCCGA
GCTGAGGCCTGATGTAGAGCTGGGAGCTGACGAGCTGGCCTATGTCTTCAATGGGCACCGCGGCCAGCGCTGGCA
CTTGGGCAGTGAACCATTTGGGCGCCCCTGGCAGCCGGGCGATGTCGTTGGCTGTATGATCGACCTCACAGAGAA

FIGURE 2564B

CACCATTATCTTCACCCTCAATGGCGAGGTCCTCATGTCTGACTCAGGCTCCGAAACAGCCTTCCGGGAGATTGA
GATTGGGGACGGCTTCCTGCCCGTCTGCAGCTTGGGACCTGGCCAGGTGGGTCATCTGAACCTGGGCCAGGACGT
GAGCTCTCTGAGGTTCTTTGCCATCTGTGGCCTCCAGGAAGGCTTCGAGCCATTTGCCATCAACATGCAGCGCCC
AGTCACCACCTGGTTCAGCAAAGGCCTGCCCCAGTTTGAGCCAGTGCCCCTTGAACACCCTCACTATGAGGTATC
CCGAGTGGACGGCACTGTGGACACGCCCCCCTGCCTGCGCCTGACCCACCGCACCTGGGGCTCCCAGAACAGCCT
GGTGGAGATGCTTTTCCTGCGGCTGAGCCTCCCAGTCCAGTTCCACCAGCACTTCCGCTGCACTGCAGGGGCCAC
CCCGCTGGCACCTCCTGGCCTGCAGCCCCCCGCCGAGGACGAGGCCCGGGCGGCGGAACCCGACCCTGACTACGA
AAACCTGCGCCGCTCAGCTGGGGGCTGGAGCGAGGCAGAGAACGGCAAAGAAGGGACTGCGAAGGAGGGCGCCCC
CGGGGGCACCCCGCAGGCGGGGGGAGAGGCGCAGCCCGCCAGGGCGGAGAATGAGAAGGATGCCACCACCGAGAA
GAACAAGAAGAGAGGCTTCTTATTCAAGGCCAAGAAGGTCGCCATGATGACCCAGCCACCGGCCACCCCCACGCT
GCCCCGACTCCCTCACGACGTGGTGCCTGCAGACAACCGCGATGACCCCGAGATCATCCTCAACACCACCACGTA
CTATTACTCCGTGAGGGTCTTTGCTGGACAGGAGCCCAGCTGCGTGTGGGCGGGCTGGGTCACCCCTGACTACCA
TCAGCACGACATGAGCTTCGACCTCAGCAAGGTCCGGGTCGTGACGGTGACCATGGGGGATGAACAAGGCAACGT
CCACAGCAGCCTCAAGTGTAGCAACTGCTACATGGTGTGGGGCGGAGACTTTGTGAGTCCCGGGCAGCAGGGCCG
GATCAGCCACACGGACCTTGTCATTGGGTGCCTGGTGGACTTGGCCACTGGCTTAATGACCTTTACAGCCAATGG
CAAAGAGAGCAACACCTTTTTCCAGGTGGAACCCAACACTAAGCTATTTCCTGCCGTCTTCGTCCTGCCCACCCA
CCAGAACGTCATCCAGTTTGAGCTGGGGAAGCAGAAGAACATCATGCCGTTGTCAGCCGCCATGTTCCAAAGCGA
GCGCAAGAACCCGGCCCCGCAGTGCCCACCGCGGCTGGAGATGCAGATGCTGATGCCAGTGTCCTGGAGCCGCAT
GCCCAACCACTTCCTGCAGGTGGAGACGAGGCGTGCCGGCGAGCGGCTGGGCTGGGCCGTGCAGTGCCAGGAGCC
GCTGACCATGATGGCGCTGCACATCCCCGAGGAGAACCGGTGCATGGACATCCTGGAGCTGTCGGAGCGCCTGGA
CCTGCAGCGCTTCCACTCGCACACCCTGCGCCTCTACCGCGCTGTGTGCGCCCTGGGCAACAATCGCGTGGCGCA
CGCTCTGTGCAGCCACGTAGACCAAGCTCAGCTGCTGCACGCCCTGGAGGACGCGCACCTGCCAGGCCCACTGCG
CGCAGGCTACTATGACCTCCTCATCAGCATCCACCTCGAAAGTGCCTGCCGCAGCCGCCGCTCCATGCTCTCTGA
ATACATCGTGCCCCTCACGCCTGAGACCCGCGCCATCACGCTCTTCCCTCCTGGAAGGAGCACAGAAAATGGTCA
CCCCCGGCATGGCCTGCCGGGAGTTGGAGTCACCACTTCGCTGAGGCCCCCGCATCATTTCTCGCCCCCCTGTTT
CGTGGCCGCTCTGCCAGCTGCTGGGGCAGCAGAGGCCCCGGCCCGCCTCAGCCCTGCCATCCCGCTGGAGGCCCT
GCGGGACAAGGCACTGAGGATGCTGGGGGAGGCGGTGCGCGACGGTGGGCAGCACGCTCGCGACCCCGTCGGGGG
CTCCGTGGAGTTCCAGTTTGTGCCTGTGCTCAAGCTCGTGTCCACCCTGCTGGTGATGGGCATCTTTGGCGATGA
GGATGTGAAACAGATCTTGAAGATGATTGAGCCTGAGGTCTTCACTGAGGAAGAAGAGGAGGAGGACGAGGAGGA
AGAGGGTGAAGAGGAAGATGAGGAGGAGAAGGAGGAGGATGAGGAGGAAACAGCACAGGAAAAGGAAGATGAGGA
AAAAGAGGAAGAGGAGGCAGCAGAAGGGGAGAAAGAAGAAGGCTTGGAGGAAGGGCTGCTCCAGATGAAGTTGCC
AGAGTCTGTGAAGTTACAGATGTGCCACCTGCTGGAGTATTTCTGTGACCAAGAGCTGCAGCACCGTGTGGAGTC
CCTGGCAGCCTTTGCGGAGCGCTATGTGGACAAGCTCCAGGCCAACCAGCGGAGCCGCTATGGCCTCCTCATAAA
AGCCTTCAGCATGACCGCAGCAGAGACTGCAAGACGTACCCGCGAGTTCCGCTCCCCACCCCAGGAACAGATCAA
TATGCTATTGCAATTCAAAGATGGTACAGATGAGGAAGACTGTCCTCTCCCTGAAGAGATTCGACAGGATTTGCT
TGACTTTCATCAAGACCTGCTGGCACACTGTGGAATTCAGCTAGATGGAGAGGAGGAGGAACCAGAGGAAGAGAC
CACCCTGGGCAGCCGCCTCATGAGCCTGTTGGAGAAAGTGCGGCTGGTGAAGAAGAAGGAAGAGAAACCTGAGGA
GGAGCGGTCAGCAGAGGAGAGCAAACCCCGGTCCCTGCAGGAGCTGGTGTCCCACATGGTGGTGCGCTGGGCCCA
AGAGGACTTCGTGCAGAGCCCCGAGCTGGTGCGGGCCATGTTCAGCCTCCTGCACCGGCAGTACGACGGGCTGGG
TGAGCTGCTGCGTGCCCTGCCGCGGGCGTACACCATCTCACCGTCCTCCGTGGAAGACACCATGAGCCTGCTCGA
GTGCCTCGGCCAGATCCGCTCGCTGCTCATCGTGCAGATGGGCCCCCAGGAGGAGAACCTCATGATCCAGAGCAT
CGGGAACATCATGAACAACAAAGTCTTCTACCAACACCCGAACCTGATGAGGGCGCTGGGCATGCACGAGACGGT
CATGGAGGTCATGGTCAACGTCCTCGGGGGCGGCGAGTCCAAGGAGATCCGCTTCCCCAAGATGGTGACAAGCTG
CTGCCGCTTCCTCTGCTATTTCTGCCGAATCAGCCGGCAGAACCAGCGCTCCATGTTTGACCACCTGAGCTACCT
GCTGGAGAACAGTGGCATCGGCCTGGGCATGCAGGGCTCCACGCCCCTGGACGTGGCTGCTGCCTCCGTCATTGA
CAACAATGAGCTGGCCTTGGCATTGCAGGAGCAGGACCTGGAAAAGGTTGTGTCCTACCTGGCAGGCTGTGGCCT
CCAGAGCTGCCCCATGCTTGTGGCCAAAGGGTACCCAGACATTGGCTGGAACCCCTGTGGTGGAGAGCGCTACCT
GGACTTCCTGCGCTTTGCTGTCTTCGTCAACGGCGAGAGCGTGGAGGAGAACGCCAATGTGGTGGTGCGGCTGCT

FIGURE 2564C

CATCCGGAAGCCTGAGTGCTTCGGACCCGCCCTGCGGGGTGAGGGTGGCTCAGGGCTGCTGGCTGCCATCGAAGA
GGCCATCCGCATCTCCGAGGACCCTGCGAGGGATGGCCCAGGCATCCGCAGGGACCGGCGGCGCGAGCACTTTGG
TGAGGAACCGCCTGAAGAAAACCGGGTGCACCTGGGACACGCCATCATGTCCTTCTATGCCGCCTTGATCGACCT
GCTCGGACGCTGTGCACCAGAGATGCATCTAATCCAAGCCGGCAAGGGTGAGGCCCTGCGGATCCGCGCCATCCT
CCGCTCCCTTGTGCCCTTGGAGGACCTTGTGGGCATCATCAGCCTCCCACTGCAGATTCCCACCCTGGGCAAAGA
TGGGGCTCTGGTGCAGCCAAAGATGTCAGCATCCTTCGTGCCGGACCACAAGGCGTCCATGGTGCTCTTCCTGGA
CCGTGTGTATGGCATCGAGAACCAGGACTTCTTGCTGCACGTGCTGGACGTGGGGTTCCTGCCCGACATGAGGGC
AGCCGCCTCGCTGGACACGGCCACTTTCAGCACCACCGAGATGGCGCTGGCGCTGAACCGCTACCTGTGCCTGGC
CGTGCTGCCGCTCATCACCAAGTGTGCGCCGCTCTTTGCGGGCACAGAACACCGCGCCATCATGGTGGACTCTAT
GCTGCATACCGTGTACCGCCTGTCTCGGGGTCGTTCGCTCACCAAGGCGCAGCGTGACGTCATCGAGGACTGCCT
CATGTCGCTCTGCAGGTACATCCGCCCGTCGATGCTGCAGCACCTGTTGCGCCGCCTGGTGTTCGACGTGCCCAT
CCTCAACGAGTTCGCCAAGATGCCACTCAAGCTCCTCACCAACCACTATGAGCGCTGTTGGAAGTACTACTGCCT
ACCCACGGGCTGGGCCAACTTCGGGGTCACCTCAGAGGAGGAGCTGCACCTCACACGGAAACTCTTCTGGGGCAT
CTTTGACTCTCTGGCCCATAAGAAATACGACCCGGAGCTGTACCGCATGGCCATGCCTTGTCTGTGCGCCATTGC
CGGGGCTCTGCCCCCCGACTATGTGGATGCCTCATACTCATCTAAGGCAGAGAAAAAGGCCACAGTGGATGCTGA
AGGCAACTTTGATCCCCGGCCTGTGGAGACCCTCAATGTGATCATCCCGGAGAAGCTGGACTCCTTCATTAACAA
GTTTGCGGAGTACACACACGAGAAGTGGGCCTTCGACAAGATCCAGAACAACTGGTCCTATGGAGAGAACATAGA
CGAGGAGCTGAAGACCCACCCCATGCTGAGGCCCTACAAGACCTTTTCAGAGAAGGACAAAGAGATTTACCGCTG
GCCCATCAAGGAGTCCCTGAAGGCCATGATTGCCTGGGAATGGACGATAGAGAAGGCCAGGGAGGGTGAGGAGGA
GAAGACGGAAAAGAAAAAAACGCGGAAGATATCACAAAGTGCCCAGACCTATGATCCTCGAGAAGGCTACAACCC
TCAGCCCCCCGACCTTAGTGCTGTTACCCTGTCCCGGGAGCTGCAGGCCATGGCAGAACAACTGGCAGAAAATTA
CCACAACACGTGGGGACGGAAGAAGAAGCAGGAGCTGGAAGCCAAAGGCGGTGGGACCCACCCCCTGCTGGTCCC
CTACGACACGCTCACGGCCAAGGAGAAGGCACGAGATCGAGAGAAGGCCCAGGAGCTACTGAAATTCCTGCAGAT
GAATGGCTACGCGGTTACAAGAGGCCTTAAGGACATGGAACTGGACTCGTCTTCCATTGAAAAGCGGTTTGCCTT
TGGCTTCCTGCAGCAGCTGCTGCGCTGGATGGACATTTCTCAGGAGTTCATTGCCCACCTGGAGGCTGTGGTCAG
CAGTGGGCGAGTGGAAAAGTCCCCACATGAACAGGAGATTAAATTCTTTGCCAAGATCCTGCTCCCTTTGATCAA
CCAGTACTTCACCAACCACTGCCTCTATTTCTTGTCCACTCCGGCTAAAGTGCTGGGCAGCGGTGGCCACGCCTC
TAACAAGGAGAAGGAAATGATCACCAGCCTCTTCTGCAAACTTGCTGCTCTCGTCCGCCACCGAGTCTCTCTCTT
TGGGACAGACGCCCCAGCTGTGGTCAACTGTCTTCACATCCTGGCCCGCTCCCTGGATGCCAGGACAGTGATGAA
GTCAGGCCCTGAGATCGTGAAGGCTGGCCTCCGCTCCTTCTTCGAGAGTGCCTCGGAGGACATCGAGAAGATGGT
GGAGAACCTGCGGCTGGGCAAGGTGTCGCAGGCGCGCACCCAGGTGAAAGGCGTGGGCCAGAACCTCACCTACAC
CACTGTGGCACTGCTGCCGGTCCTCACCACCCTCTTCCAGCACATCGCCCAGCACCAGTTCGGAGATGACGTCAT
CCTGGACGACGTCCAGGTCTCTTGCTACCGAACGCTGTGCAGTATCTACTCCCTGGGAACCACCAAGAACACTTA
TGTGGAAAAGCTTCGGCCAGCCCTCGGGGAGTGCCTGGCCCGTCTGGCAGCAGCCATGCCGGTGGCGTTCCTGGA
GCCGCAGCTGAACGAGTACAACGCCTGCTCCGTGTACACCACCAAGTCTCCGCGGGAGCGGGCCATCCTGGGGCT
CCCCAACAGTGTGGAGGAGATGTGTCCCGACATCCCGGTGCTGGAGCGGCTCATGGCAGACATTGGGGGGCTGGC
CGAGTCAGGTGCCCGCTACACAGAGATGCCGCATGTCATCGAGATCACGCTGCCCATGCTATGCAGCTACCTGCC
CCGATGGTGGGAGCGCGGGCCCGAGGCACCCCCTTCCGCCCTGCCCGCCGGCGCCCCCCCACCCTGCACAGCTGT
CACCTCTGACCACCTCAACTCCCTGCTGGGGAATATCCTGAGAATCATCGTCAACAACCTGGGCATTGACGAGGC
CTCCTGGATGAAGCGGCTGGCTGTGTTCGCACAGCCCATTGTGAGCCGTGCACGGCCGGAGCTCCTGCAGTCCCA
CTTCATCCCAACTATCGGGCGGCTGCGCAAGAGGGCAGGGAAGGTGGTGTCCGAGGAGGAGCAGCTGCGCCTGGA
GGCCAAGGCGGAGGCCCAGGAGGGCGAGCTGCTGGTGCGGGACGAGTTCTCTGTGCTCTGCCGGGACCTCTACGC
CCTGTATCCGCTGCTCATCCGCTACGTGGACAACAACAGGGCGCAGTGGCTGACGGAGCCGAATCCCAGCGCGGA
GGAGCTGTTCAGGATGGTGGGCGAGATCTTCATCTACTGGTCCAAGTCCCACAACTTCAAGCGCGAGGAGCAGAA
CTTTGTGGTCCAGAATGAGATCAACAACATGTCCTTCCTGACTGCTGACAACAAAAGCAAAATGGCTAAGGCGGG
AGATATACAGTCCGGTGGCTCGGACCAGGAACGCACCAAGAAGAAGCGCCGGGGGGACCGGTACTCTGTGCAGAC
GTCACTGATCGTGGCCACACTGAAGAAGATGCTGCCCATCGGCCTGAATATGTGTGCGCCCACCGACCAAGACCT
CATCACGCTGGCCAAGACCCGTTACGCCCTGAAAGACACAGATGAGGAGGTCCGGGAATTTCTGCACAACAACCT

FIGURE 2564D

TCACCTTCAGGGAAAGGTCGAAGGCTCCCCGTCTCTGCGCTGGCAGATGGCTCTGTACCGGGGCGTCCCGGGTCG
CGAGGAGGACGCCGATGACCCCGAGAAAATCGTGCGCAGAGTCCAGGAAGTGTCAGCCGTGCTCTACTACCTGGA
CCAGACCGAGCACCCTTACAAGTCTAAGAAGGCCGTGTGGCACAAGCTTTTGTCCAAACAGCGCCGGCGGGCAGT
CGTGGCCTGTTTCCGTATGACGCCCCTGTACAACCTGCCCACGCACCGGGCATGTAACATGTTCCTGGAGAGCTA
CAAGGCTGCATGGATCCTGACTGAAGACCACAGTTTTGAGGACCGCATGATAGATGACCTTTCAAAAGCTGGGGA
GCAGGAGGAGGAGGAGGAAGAGGTGGAAGAGAAGAAGCCAGACCCCCTGCACCAGTTGGTCCTGCACTTCAGCCG
CACTGCCCTGACGGAAAAGAGCAAACTGGATGAGGATTACCTGTACATGGCCTATGCTGATATCATGGCAAAGAG
CTGCCACCTGGAGGAGGGAGGGGAGAACGGTGAAGCTGAAGAGGAGGTTGAGGTCTCCTTTGAGGAGAAACAGAT
GGAGAAGCAGAGGCTCTTGTACCAGCAAGCACGGCTGCACACCCGGGGGGCGGCCGAGATGGTGCTGCAGATGAT
CAGTGCCTGCAAAGGAGAGACAGGTGCCATGGTGTCCTCCACCCTGAAGCTGGGCATCTCCATCCTCAATGGAGG
CAATGCTGAGGTCCAGCAGAAAATGCTGGATTATCTTAAGGACAAGAAGGAAGTTGGCTTCTTCCAGAGTATCCA
GGCACTGATGCAAACATGCAGCGTCCTGGATCTCAATGCCTTTGAGAGACAGAACAAGGCCGAGGGGCTGGGCAT
GGTGAATGAGGATGGCACTGTCATCAATCGCCAGAACGGAGAGAAGGTCATGGCGGATGATGAATTCACACAAGA
CCTGTTCCGATTCCTACAATTGCTCTGTGAGGGGCACAATAATGATTTCCAGAACTACCTACGGACACAGACAGG
GAACACGACCACTATTAACATCATCATTTGCACTGTGGACTACCTCCTGCGGCTGCAGGAATCCATCAGCGACTT
CTACTGGTACTACTCGGGCAAGGATGTCATTGAAGAGCAGGGCAAGAGGAACTTCTCCAAAGCCATGTCGGTGGC
TAAGCAGGTGTTCAACAGCCTCACTGAGTACATCCAGGGTCCCTGCACCGGGAACCAGCAGAGCCTGGCGCACAG
TCGCCTATGGGACGCAGTGGTGGGATTCCTGCACGTGTTCGCCCACATGATGATGAAGCTCGCTCAGGACTCAAG
CCAGATCGAGCTGCTGAAGGAGCTGCTGGATCTGCAGAAGGACATGGTGGTGATGTTGCTGTCGCTACTAGAAGG
GAACGTGGTGAACGGCATGATCGCCCGGCAGATGGTGGACATGCTCGTGGAATCCTCATCCAATGTGGAGATGAT
CCTCAAGTTCTTCGACATGTTCCTGAAACTCAAGGACATTGTGGGCTCTGAAGCCTTCCAGGACTACGTAACGGA
TCCCCGTGGCCTCATCTCCAAGAAGGACTTCCAGAAGGCCATGGACAGCCAGAAGCAGTTCAGCGGTCCAGAAAT
CCAGTTCCTGCTTTCGTGCTCCGAAGCGGATGAGAACGAAATGATCAACTGCGAAGAGTTCGCCAACCGCTTCCA
GGAGCCAGCACGCGACATCGGCTTCAACGTGGCGGTGCTGCTGACCAACCTGTCGGAGCATGTGCCGCATGACCC
TCGCCTGCACAACTTCCTGGAGCTGGCCGAGAGCATCCTTGAGTACTTCCGCCCCTACCTGGGCCGCATCGAGAT
CATGGGCGCGTCACGCCGCATCGAGCGCATCTACTTCGAGATCTCAGAGACCAACCGCGCCCAGTGGGAGATGCC
CCAGGTGAAGGAGTCCAAGCGCCAGTTCATCTTCGACGTGGTGAACGAGGGCGGCGAGGCTGAGAAGATGGAGCT
CTTCGTGAGTTTCTGCGAGGACACCATCTTCGAGATGCAGATCGCCGCGCAGATCTCGGAGCCCGAGGGCGAGCC
GGAGACCGACGAGGACGAGGGCGCGGGCGCGGCGGAGGCGGGCGCGGAAGGCGCGGAGGAGGGCGCGGCGGGGCT
CGAGGGCACGGCGGCCACGGCGGCGGCGGGGGCGACGGCGCGGGTTGTGGCGGCCGCAGGCCGGGCCCTGCGAGG
CCTCAGCTACCGCAGCCTGCGGCGGCGCGTGCGGCGGCTGCGGCGGCTTACGGCCCGCGAGGCGGCCACCGCAGT
GGCGGCGCTGCTCTGGGCAGCAGTGACGCGCGCTGGGGCCGCTGGCGCGGGGGCGGCGGCGGGCGCGCTGGGCCT
GCTCTGGGGCTCGCTGTTCGGCGGCGGCCTGGTGGAGGGCGCCAAGAAGGTGACGGTGACCGAGCTCCTGGCAGG
CATGCCCGACCCCACCAGCGACGAGGTGCACGGCGAGCAGCCGGCCGGGCCGGGCGGAGACGCAGACGGCGAGGG
TGCCAGCGAGGGCGCTGGAGACGCCGCGGAGGGCGCTGGAGACGAGGAGGAGGCGGTGCACGAGGCCGGGCCGGG
CGGTGCCGACGGGGCGGTGGCCGTGACCGATGGGGGCCCCTTCCGGCCCGAAGGGGCTGGCGGTCTCGGGGACAT
GGGGGACACGACGCCTGCGGAACCGCCCACACCCGAGGGCTCTCCCATCCTCAAGAGGAAATTGGGGGTGGATGG
AGTGGAGGAGGAGCTCCCGCCAGAGCCAGAGCCCGAGCCGGAACCAGAGCTGGAGCCGGAGAAAGCCGATGCCGA
GAATGGGGAGAAGGAAGAAGTTCCCGAGCCCACACCAGAGCCCCCCAAGAAGCAAGCACCTCCCTCACCCCCTCC
AAAGAAGGAGGAAGCTGGAGGCGAATTCTGGGGAGAACTGGAGGTGCAGAGGGTGAAGTTCCTGAACTACCTGTC
CCGGAACTTTTACACCCTGCGGTTCCTTGCCCTCTTCTTGGCATTTGCCATCAACTTCATCTTGCTGTTTTATAA
GGTCTCAGACTCTCCACCAGGGGAGGACGACATGGAAGGCTCAGCTGCTGGGGATGTGTCAGGTGCAGGCTCTGG
TGGCAGCTCTGGCTGGGGCTTGGGGGCCGGAGAGGAGGCAGAGGGCGATGAGGATGAGAACATGGTGTACTACTT
CCTGGAGGAAAGCACAGGCTACATGGAACCCGCCCTGCGGTGTCTGAGCCTCCTGCATACACTGGTGGCCTTTCT
CTGCATCATTGGCTATAATTGTCTCAAGGTGCCCCTGGTAATCTTTAAGCGGGAGAAGGAGCTGGCCCGGAAGCT
GGAGTTTGATGGCCTGTACATCACGGAGCAGCCTGAGGACGATGACGTGAAGGGGCAGTGGGACCGACTGGTGCT
CAACACGCCGTCTTTCCCTAGCAACTACTGGGACAAGTTTGTCAAGCGCAAGGTCCTGGACAAACATGGGGACAT
CTACGGGCGGGAGCGGATTGCTGAGCTACTGGGCATGGACCTGGCCACACTAGAGATCACAGCCCACAATGAGCG

FIGURE 2564E

CAAGCCCAACCCGCCGCCAGGGCTGCTGACCTGGCTCATGTCCATCGATGTCAAGTACCAGATCTGGAAGTTCGG
GGTCATCTTCACAGACAACTCCTTCCTGTACCTGGGCTGGTATATGGTGATGTCCCTCTTGGGACACTACAACAA
CTTCTTCTTTGCTGCCCATCTCCTGGACATCGCCATGGGGGTCAAGACGCTGCGCACCATCCTGTCCTCTGTCAC
CCACAATGGGAAACAGCTGGTGATGACCGTGGGCCTTCTGGCGGTGGTCGTCTACCTGTACACCGTGGTGGCCTT
CAACTTCTTCCGCAAGTTCTACAACAAGAGCGAGGATGAGGATGAACCTGACATGAAGTGTGATGACATGATGAC
GTGTTACCTGTTTCACATGTACGTGGGTGTCCGGGCTGGCGGAGGCATTGGGGACGAGATCGAGGACCCCGCGGG
TGACGAATACGAGCTCTACAGGGTGGTCTTCGACATCACCTTCTTCTTCTTCGTCATCGTCATCCTGTTGGCCAT
CATCCAGGGTCTGATCATCGACGCTTTTGGTGAGCTCCGAGACCAACAAGAGCAAGTGAAGGAGGATATGGAGAC
CAAGTGCTTCATCTGTGGAATCGGCAGTGACTACTTTGATACGACACCGCATGGCTTCGAGACTCACACGCTGGA
GGAGCACAACCTGGCCAATTACATGTTTTTCCTGATGTATTTGATAAACAAGGATGAGACAGAACACACGGGTCA
GGAGTCTTATGTCTGGAAGATGTACCAAGAGAGATGTTGGGATTTCTTCCCAGCTGGTGATTGTTTCCGTAAGCA
GTATGAGGACCAGCTTAGCTGACACACCCCCAGCTGGCCCTCCACCCCCACCTCAAGTGCCTTATTCTCACAGCA
AGCCCCTTAGTCCCCAAGCCCCTCCCCCTAAGGCAGCTGGGGGAGAGGTGACCTAGTAC

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FIGURE 2565

GGAAAGCGTGGCGGCTGCTGCTAGAGCCTTTCCCTTTACCGCACCCAAGGAGCTGGAGCGACAACAACGACGTCG
TTTCCGTTTCCACCACCTCTTCCTGTTCCCGTCCTTGAGGACGCCGTGCCGGGTCAGTGTTAGCCTCCAGCCCTG
GTTGTGGAAGGCGACAGAAGTCATGGCGATGTTTGAGCAGATGAGAGCCAACGTGGGCAAGTTGCTCAAGGGTAT
CGACAGGTACAATCCTGAGAACCTGGCCACCCTGGAGCGCTATGTAGAGACGCAGGCCAAGGAAAATGCCTATGA
TCTGGAAGCCAACCTGGCTGTCCTGAAGCTGTACCAGTTCAACCCAGCCTTCTTTCAGACCACGGTCACCGCCCA
GATCCTGCTGAAGGCCCTCACCAACTTGCCGCACACAGACTTCACCCTGTGCAAGTGCATGATCGACCAGGCACA
TCAAGAAGAACGGCCAATCCGACAGATTTTGTACCTCGGGGACCTGCTGGAGACCTGCCATTTCCAGGCCTTCTG
GCAAGCCCTGGATGAAAACATGGACCTCTTGGAAGGTATAACTGGCTTTGAAGACTCTGTCCGAAAGTTTATCTG
CCATGTTGTGGGTATCACTTACCAGCACATTGACCGCTGGCTGCTGGCCGAGATGCTCGGGGATCTGTCGGACAG
CCAGCTAAAGGTGTGGATGAGCAAATACGGCTGGAGTGCCGACGAGTCGGGGCAGATCTTCATCTGTAGCCAAGA
AGAGAGCATTAAACCCAAGAACATTGTGGAGAAGATTGACTTTGACAGTGTGTCCAGCATCATGGCCTCCTCCCA
GTAACTTCAGGTGTTTAATAAAGATGTGTTGACTCAG

FIGURE 2566

AGAGGGGCGGGAGCTGAGGCGGGAGCGGACAGGCTGGTGGGCGAGCGAGAGGCGGCGGAATGGTGGACTACCACG
CGGCGAACCAGTCGTACCAGTACGGCCCCAGCAGCGCGGGCAATGGCGCTGGCGGCGGGGGCAGCATGGGCGACT
ACATGGCCCAGGAGGACGACTGGGACCGGGACCTGCTGCTGGACCCGGCCTGGGAGAAGCAGCAGCGCAAGACCT
TCACGGCATGGTGCAACTCCCACCTGCGGAAGGCAGGCACACAGATCGAGAACATTGATGAGGACTTCCGAGACG
GGCTCAAGCTCATGCTGCTCCTGGAGGTCATATCAGGGGAGCGGTTACCTAAGCCGGAGCGGGGGAAGATGAGAG
TGCACAAAATCAACAATGTGAACAAAGCGCTGGACTTTATTGCCAGCAAAGGCGTCAAGCTGGTCTCCATCGGGG
CAGAAGAGATTGTGGACGGCAACGCAAAGATGACCCTGGGAATGATCTGGACCATCATCCTTAGGTTCGCCATCC
AGGACATCTCCGTGGAAGAGACCTCGGCCAAGGAAGGGCTCCTTCTCTGGTGCCAGAGAAAGACAGCCCCGTATA
AGAACGTCAATGTGCAGAACTTCCACATCAGCTGGAAGGATGGTCTTGCCTTCAATGCCCTGATCCACCGGCACA
GACCAGAGCTGATTGAGTATGACAAGCTGAGGAAGGACGACCCTGTCACCAACCTGAACAATGCCTTCGAAGTGG
CTGAGAAATACCTCGACATCCCCAAGATGCTGGATGCAGAGGACATCGTGAACACGGCCCGGCCCGACGAGAAGG
CCATAATGACCTATGTGTCCAGCTTCTACCATGCCTTTTCAGGAGCGCAGAAGGCTGAAACTGCCGCCAACCGGA
TCTGTAAGGTGCTGGCTGTCAACCAAGAGAACGAGCACCTGATGGAGGACTACGAGAAGCTGGCCAGCGACCTCC
TGGAGTGGATCCGGCGCACCATCCCCTGGCTGGAGGACCGTGTGCCCCAAAAGACTATCCAGGAGATGCAGCAGA
AGCTGGAGGACTTCCGCGACTACCGGCGTGTGCACAAGCCGCCCAAGGTGCAGGAGAAGTGCCAGCTGGAGATCA
ACTTCAACACGCTGCAGACCAAGCTGCGCCTCAGCAACCGGCCCGCCTTCATGCCCTCCGAGGGCAAGATGGTCT
CGGACATCAACAATGGCTGGCAGCACTTGGAGCAGGCTGAGAAGGGCTACGAGGAGTGGCTGCTGAATGAGATCC
GCAGGCTGGAGCGGCTCGACCACCTGGCAGAGAAGTTCCGGCAGAAGGCCTCCATCCACGAGGCCTGGACTGACG
GGAAGGAAGCCATGCTGAAGCACCGGGACTACGAGACGGCCACACTATCGGACATCAAAGCCCTCATTCGCAAGC
ACGAGGCCTTCGAGAGCGACCTGGCTGCGCACCAGGACCGCGTGGAGCAGATCGCCGCCATTGCCCAGGAGCTCA
ACGAGCTGGATTACTACGACTCCCACAATGTCAACACCCGGTGCCAGAAGATCTGTGACCAGTGGGACGCCCTCG
GCTCTCTGACACATAGTCGCAGGGAAGCCCTGGAGAAAACAGAGAAGCAGCTGGAGGCCATCGACCAGCTGCACC
TGGAATACGCCAAGCGCGCGGCCCCCTTCAACAACTGGATGGAGAGCGCCATGGAGGACCTCCAGGACATGTTCA
TCGTCCATACCATCGAGGAGATTGAGGGCCTGATCTCAGCCCATGACCAGTTCAAGTCCACCCTGCCGGACGCCG
ATAGGGAGCGCGAGGCCATCCTGGCCATCCACAAGGAGGCCCAGAGGATCGCTGAGAGCAACCACATCAAGCTGT
CGGGCAGCAACCCCTACACCACCGTCACCCCGCAAATCATCAACTCCAAGTGGGAGAAGGTGCAGCAGCTGGTGC
CAAAACGGGACCATGCCCTCCTGGAGGAGCAGAGCAAGCAGCAGTCCAACGAGCACCTGCGCCGCCAGTTCGCCA
GCCAGGCCAATGTTGTGGGGCCCTGGATCCAGACCAAGATGGAGGAGATCGGGCGCATCTCCATTGAGATGAACG
GGACCCTGGAGGACCAGCTGAGCCACCTGAAGCAGTATGAACGCAGCATCGTGGACTACAAGCCCAACCTGGACC
TGCTGGAGCAGCAGCACCAGCTCATCCAGGAGGCCCTCATCTTCGACAACAAGCACACCAACTATACCATGGAGC
ACATCCGCGTGGGCTGGGAGCAGCTGCTCACCACCATTGCCCGCACCATCAACGAGGTGGAGAACCAGATCCTCA
CCCGCGACGCCAAGGGCATCAGCCAGGAGCAGATGCAGGAGTTCCGGGCGTCCTTCAACCACTTCGACAAGGATC
ATGGCGGGGCGCTGGGGCCCGAGGAGTTCAAGGCCTGCCTCATCAGCCTGGGCTACGACGTGGAGAACGACCGGC
AGGGTGAGGCCGAGTTCAACCGCATCATGAGCCTGGTCGACCCCAACCATAGCGGCCTTGTGACCTTCCAAGCCT
TCATCGACTTCATGTCGCGGGAGACCACCGACACGGACACGGCTGACCAGGTCATCGCTTCCTTCAAGGTCTTAG
CAGGGGACAAGAACTTCATCACAGCTGAGGAGCTGCGGAGAGAGCTGCCCCCCGACCAGGCCGAGTACTGCATCG
CCCGCATGGCGCCATACCAGGGCCCTGACGCCGTGCCCGGTGCCCTCGACTACAAGTCCTTCTCCACGGCCTTGT
ATGGCGAGAGCGACCTGTGAGGCCCCAGAGACCTGACCCAACACCCCCGACGGCCTCCAGGAGGGGCCTGGGCAG
CCCCACAGTCCCATTCCTCCACTCTGTATCTATGCAAAGCACTCTCTGCAGTCCTCCGGGGTGGGTGGGTGGGCA

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FIGURE 2567

GCCCCGCGAGGATGAGCCCAGGGCTCCACGGTCCCTACCTAGACCCCACGCGATTCCTCACCTGAGACCCCGTCC
CACACAGCCCCAGCTGGGGCAAACAGCCCCCTCCCCACTTCCCATCTGTAATTTGCAGGGAGATCGACGACGTGA
TCAGCGCAGACCTGCAGTCTCTCCAGGTGGGGACTGTTCCTGGAGGGGCGGCATGGGGCGGGGATCTTGGCCAGC
GCTAAACTTCCGCCATGCGGCAGGGCCCCTACCTGCCCCTGGAGCTGGGGTTGGAGCAGCTGTTTCAGGAGCTGG
CTGGAGAGCCAGGGCCCATACCTCCACCCCCAGAGAGATCGGGCTCAGGACCTGTGAGCAGCTGCTGCAGTGTTT
CGGGCATGGGCAAAGCCTGGCCTTACACCACTTCCAGCAGCTCTGGGGCTACCTCCTGGAGTGGCAGGCCATATT
TAACAAGTTCGATGAGGACACCTCTGGAACCATGAACTCCTACGAGCTGAGGCTGGCACTGAATGCAGCAGGCTT
CCACCTGAACAACCAGCTGACCCAGACCCTCACCAGCCGCTACCGGGATAGCCGTCTGCGTGTGGACTTCGAGCG
GTTCGTGTCCTGTGTGGCCCACCTCACCTGCATCTTCTGCCACTGCAGCCAGCACCTGGATGGGGGTGAGGGGGT
CATCTGCCTGACCCACAGACAGTGGATGGAGGTGGCCACCTTCTCCTAGGATCTCCGGATGGGCGCACCTGCTGC
TCAGGGCAGGGTTGCTGAGCAAGACCACCTCCCTAGGCCTTGCCTGGCATGGGTGCCACTCTCTCTGGCATCCAC
CTGTCTGGGGCTAGTCTCTGGCCCTCACTGCTCACGGCCGGGTGACCACTCTGGCCTGCGTACTCCTCACTCAGA
AACAAGAACAGCGACAGCCCTTCTCGAGCAGATGACACGAGCTAGTCCACGTTGACAGCTTAAGACAGTGCTAGC
TCTGCCCTGGCTCTCCTAGAAGGTGGAGGACAGACACAGGAGAAATAAAAAAAGATGATGCTGCAGGAATCCTTC
TTAAAAATATTACATGTTTTATTATCCTGTCCCCAGAGGGTGGTTTATCCAGAAACCAAGAAAAAAAATCAATCA
GAATAAACTCAAAAAAAAAAGGTAGGGGGAGCAAAACCATCAACCACCAGGCAGCCAGGCCATCAGCCCACCTCC
ACCTCTGGAGGGTCCCCAGAGACCCACGCCCGACGCAGACCCGGAGGAGCATCAGCAAGGGGCCCGGGCAGAGAA
TCGGCTATGTCTTCATTATGAGAGCAGGAGAGACGGCAGAGATATGTTGCTAGGTGAATATATATTTATATAATA
AATCCGTAAGTTAATAAAGTAAATAGTAATTCTCTGAAA

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FIGURE 2568

ATGGCTCTGTACCTCTCCTGTGCTGGGAGCCATCTGGTGACCATGATGCCCTGCCCTGGCCCACGCCACTCAGAG
TCTGGATGGAGCAGTATTTCCCCCAAAGGACTCTGGAGCCATTGGAGGAAATGGGAGAAACAGAACTACCTGTCC
CGGAACTTTTATCCACTGCGGTTCCTTGCCCTCTTCTATGCATTTGCCATCAACTTCATCTTGCTATTTTATAAG
GTCTCAGACTCTCCACCAGGGGAGGACGACATGGAAGGCTCAGCTGCTGGGGATGTGTCAGGTGCAGGCTCTGGT
GGCAGCTCTGGCTGGGGCTTGGGGGCCGGAGAGGAGGCAGAGGGCGATGAGGATGAGAACATGGTGTACTACTTC
CTGGAGGAAAGCACAGGCTACATGGAACCCGCCCTGCGGTGTCTGAGCCTCCTGCATACACTGGTGGCCTTTCTC
TGCATCATTGGCTATAATTGTCTCAAGGTGCCCCTGGTAATCTTTAAGCGGGAGAAGGAGCTGGCCCGGAAGCTG
GAGTTTGATGGCCTGTACATCACGGAGCAGCCTGAGGACGATGACGTGAAGGGGCAGTGGGACCGACTGGTGCTC
AACACGCCGTAA

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FIGURE 2569

ATCTCCCACTCCTGCAGCTCTTCTCACAGGACCAGCCACTAGCGCAGCCTCGAGCGATGGCCTATGTCCCCGCAC
CGGGCTACCAGCCCACCTACAACCCGACGCTGCCTTACTACCAGCCCATCCCGGGCGGGCTCAACGTGGGAATGT
CTGTTTACATCCAAGGAGTGGCCAGCGAGCACATGAAGCGGTTCTTCGTGAACTTTGTGGTTGGGCAGGATCCGG
GCTCAGACGTCGCCTTCCACTTCAATCCGCGGTTTGACGGCTGGGACAAGGTGGTCTTCAACACGTTGCAGGGCG
GGAAGTGGGGCAGCGAGGAGAGGAAGAGGAGCATGCCCTTCAAAAAGGGTGCCGCCTTTGAGCTGGTCTTCATAG
TCCTGGCTGAGCACTACAAGGTGGTGGTAAATGGAAATCCCTTCTATGAGTACGGGCACCGGCTTCCCCTACAGA
TGGTCACCCACCTGCAAGTGGATGGGGATCTGCAACTTCAATCAATCAACTTCATCGGAGGCCAGCCCCTCCGGC
CCCAGGGACCCCCGATGATGCCACCTTACCCTGGTCCCGGACATTGCCATCAACAGCTGAACAGCCTGCCCACCA
TGGAAGGACCCCCAACCTTCAACCCGCCTGTGCCATATTTCGGGAGGCTGCAAGGAGGGCTCACAGCTCGAAGAA
CCATCATCATCAAGGGCTATGTGCCTCCCACAGGCAAGAGCTTTGCTATCAACTTCAAGGTGGGCTCCTCAGGGG
ACATAGCTCTGCACATTAATCCCCGCATGGGCAACGGTACCGTGGTCCGGAACAGCCTTCTGAATGGCTCGTGGG
GATCCGAGGAGAAGAAGATCACCCACAACCCATTTGGTCCCGGACAGTTCTTTGATCTGTCCATTCGCTGTGGCT
TGGATCGCTTCAAGGTTTACGCCAATGGCCAGCACCTCTTTGACTTTGCCCATCGCCTCTCGGCCTTCCAGAGGG
TGGACACATTGGAAATCCAGGGTGATGTCACCTTGTCCTATGTCCAGATCTAATCTATTCCTGGGGCCATAACTC
ATGGGAAAACAGAATTATCCCCTAGGACTCCTTTCTAAGCCCCTAATAAAATGTCTGAGGGTGTCTC

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FIGURE 2570

GAACGCAGTAGACGAAGGCGGCGGCGATGGCGGCGGGGATAGTGGCTTCTCGCAGACTCCGCGACCTACTGACCC
GGCGACTGACAGGCTCCAACTACCCGGGACTCAGTATTAGCCTTCGCCTCACTGGCTCCTCTGCACAAGAGGAGG
CTTCCGGAGTAGCCCTCGGTGAAGCCCCAGACCACAGCTATGAGTCCCTTCGTGTGACGTCTGCGCAGAAACATG
TTCTGCATGTCCAGCTCAACCGGCCCAACAAGAGGAATGCCATGAACAAGGTCTTCTGGAGAGAGATGGTAGAGT
GCTTCAACAAGATTTCGAGAGACGCTGACTGTCGGGCGGTGGTGATCTCTGGTGCAGGAAAAATGTTCACTGCAG
GTATTGACCTGATGGACATGGCTTCGGACATCCTGCAGCCCAAAGGAGATGATGTGGCCCGGATCAGCTGGTACC
TCCGTGACATCATCACTCGATACCAGGAGACCTTCAACGTCATCGAGAGGTGCCCCAAGCCCGTGATTGCTGCCG
TCCATGGGGGCTGCATTGGCGGAGGTGTGGACCTTGTCACCGCCTGTGACATCCGGTACTGTGCCCAGGATGCTT
TCTTCCAGGTGAAGGAGGTGGACGTGGGTTTGGCTGCCGATGTAGGAACACTGCAGCGCCTGCCCAAGGTCATCG
GGAACCAGAGCCTGGTCAACGAGCTGGCCTTCACCGCCCGCAAGATGATGGCTGACGAGGCCCTGGGCAGTGGGC
TGGTCAGCCGGGTGTTCCCAGACAAAGAGGTCATGCTGGATGCTGCCTTAGCGCTGGCGGCCGAGATTTCCAGCA
AGAGCCCCGTGGCGGTGCAGAGCACCAAGGTCAACCTGCTGTATTCCCGCGACCATTCGGTGGCCGAGAGCCTCA
ACTACGTGGCGTCCTGGAACATGAGCATGCTGCAGACCCAAGACCTCGTGAAGTCGGTCCAGGCCACGACTGAGA
ACAAGGAACTGAAAACCGTCACCTTCTCCAAGCTCTGAGAGCCCTCGCGTCCCAGGCCCCAGCCAGGGGGCCGGC
CTTGTCCCGCCTCATCCACAGAAAGGGAGGATGGGCGATGACAGTTGTTTCTATGCCTTCTGACCCAGTTTCCCA
GTTTATAACTTTATGACAATGAGTTTCTCAAGCCCAAGGCCTTATCTTCACCCCACAAACAATAAAGCAAA

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FIGURE 2571

GGACGAGCAGCGGAGGCGGTCGGGAGCGATGGTGAAGATGGCGGCGGCGGGCGGCGGAGGCGGCGGTGGCCGCTA
CTACGGCGGCGGCAGTGAGGGCGGCCGGGCCCCTAAGCGGCTCAAGACTGACAACGCCGGCGACCAGCACGGAGG
CGGCGGCGGTGGCGGTGGAGGAGCCGGGGCGGCGGGCGGCGGCGGCGGTGGGGAGAACTACGATGACCCGCACAA
AACCCCTGCCTCCCCAGTTGTCCACATCAGGGGCCTGATTGACGGTGTGGTGGAAGCAGACCTTGTGGAGGCCTT
GCAGGAGTTTGGACCCATCAGCTATGTGGTGGTAATGCCTAAAAAGAGACAAGCACTGGTGGAGTTTGAAGATGT
GTTGGGGGCTTGCAACGCAGTGAACTACGCAGCCGACAACCAAATATACATTGCTGGTCACCCAGCTTTTGTCAA
CTACTCTACCAGCCAGAAGATCTCCCGCCCTGGGGACTCGGATGACTCCCGGAGCGTGAACAGTGTGCTTCTCTT
TACCATCCTGAACCCCATTTATTCGATCACCACGGATGTTCTTTACACTATCTGTAATCCTTGTGGCCCTGTCCA
GAGAATTGTCATTTTCAGGAAGAATGGAGTTCAGGCGATGGTGGAATTTGACTCAGTTCAAAGTGCCCAGCGGGC
CAAGGCCTCTCTCAATGGGGCTGATATCTATTCTGGCTGTTGCACTCTGAAGATCGAATACGCAAAGCCTACACG
CTTGAATGTGTTCAAGAATGATCAGGATACTTGGGACTACACAAACCCCAATCTCAGTGGACAAGGTGACCCTGG
CAGCAACCCCAACAAACGCCAGAGGCAGCCCCCTCTCCTGGGAGATCACCCCGCAGAATATGGAGGGCCCCACGG
TGGGTACCACAGCCATTACCATGATGAGGGCTACGGGCCCCCCCCACCTCACTACGAAGGGAGAAGGATGGGTCC
ACCAGTGGGGGGTCACCGTCGGGGCCCAAGTCGCTACGGCCCCCAGTATGGGCACCCCCCACCCCCTCCCCCACC
ACCCGAGTATGGCCCTCACGCCGACAGCCCTGTGCTCATGGTCTATGGCTTGGATCAATCTAAGATGAACTGTGA
CCGAGTCTTCAATGTCTTCTGCTTATATGGCAATGTGGAGAAGGTGAAATTCATGAAAAGCAAGCCGGGGGCCGC
CATGGTGGAGATGGCTGATGGCTACGCTGTAGACCGGGCCATTACCCACCTCAACAACAACTTCATGTTTGGGCA
GAAGCTGAATGTCTGTGTCTCCAAGCAGCCAGCCATCATGCCTGGTCAGTCATACGGGTTGGAAGACGGGTCTTG
CAGTTACAAAGACTTCAGTGAATCCCGGAACAATCGGTTCTCCACCCCAGAGCAGGCAGCCAAGAACCGCATCCA
GCACCCCAGCAACGTGCTGCACTTCTTCAACGCCCCGCTGGAGGTGACCGAGGAGAACTTCTTTGAGATCTGCGA
TGAGCTGGGAGTGAAGCGGCCATCTTCTGTGAAAGTATTCTCAGGCAAAAGTGAGCGCAGCTCCTCTGGACTGCT
GGAGTGGGAATCCAAGAGCGATGCCCTGGAGACTCTGGGCTTCCTGAACCATTACCAGATGAAAAACCCAAATGG
TCCATACCCTTACACTCTGAAGTTGTGTTTCTCCACTGCTCAGCACGCCTCCTAATTAGGTGCCTAGGAAGAGTC
CCATCTGAGCAGGAAGACATTTCTCTTTCCTTTATGCCATTTTTTGTTTTTGTTATTTGCAAAAGATCTTGTATT
CCTTTTTTTTTTTTTTTTTTTTTTTTTTAAATGCTAGGTTTGTAGAGGCTTACTTAACCTTAATGGAAACGCTGG
AAATCTGCAGGGGGAGGGAGAGGGGAACTGTTATCTCCCAAGATTAACCTTCACTTTTAAAAAATTATTGTACAT
GTGATTTTTTTTTTTCCTGTTCATACATTTGTGCTGCCCATGTACTCTTGGCACATTTCAATAAAATTGTTTGGA
AAATAAACACAGC

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FIGURE 2572

GTGTTGTACGAAAGCGCGTCTGCGGCCGCAATGTCTGCTGAGAGTTGTAGTTCTGTGCCCTATCACGGCCACTCC
CATTTCTGGTGCCGTCACGGGACAGAGCAGTCGGTGACAGGACAGAGCAGTCGGTGACGGGACACAGTGGTTGGT
GACGGGACAGAGCGGTCGGTGACAGCCTCAAGGGCTTCAGCACCGCGCCCATGGCAGAGCCAGACCCCTCTCACC
CTCTGGAGACCCAGGCAGGGAAGGTGCAGGAGGCTCAGGACTCAGATTCAGACTCTGAGGGAGGAGCCGCTGGTG
GAGAAGCAGACATGGACTTCCTGCGGAACTTATTCTCCCAGACGCTCAGCCTGGGCAGCCAGAAGGAGCGTCTGC
TGGACGAGCTGACCTTGGAAGGGGTGGCCCGGTACATGCAGAGCGAACGCTGTCGCAGAGTCATCTGTTTGGTGG
GAGCTGGAATCTCCACATCCGCAGGCATCCCCGACTTTCGCTCTCCATCCACCGGCCTCTATGACAACCTAGAGA
AGTACCATCTTCCCTACCCAGAGGCCATCTTTGAGATCAGCTATTTCAAGAAACATCCGGAACCCTTCTTCGCCC
TCGCCAAGGAACTCTATCCTGGGCAGTTCAAGCCAACCATCTGTCACTACTTCATGCGCCTGCTGAAGGACAAGG
GGCTACTCCTGCGCTGCTACACGCAGAACATAGATACCCTGGAGCGAATAGCCGGGCTGGAACAGGAGGACTTGG
TGGAGGCGCACGGCACCTTCTACACATCACACTGCGTCAGCGCCAGCTGCCGGCACGAATACCCGCTAAGCTGGA
TGAAAGAGAAGATCTTCTCTGAGGTGACGCCCAAGTGTGAAGACTGTCAGAGCCTGGTGAAGCCTGATATCGTCT
TTTTTGGTGAGAGCCTCCCAGCGCGTTTCTTCTCCTGTATGCAGTCAGACTTCCTGAAGGTGGACCTCCTCCTGG
TCATGGGTACCTCCTTGCAGGTGCAGCCCTTTGCCTCCCTCATCAGCAAGGCACCCCTCTCCACCCCTCGCCTGC
TCATCAACAAGGAGAAAGCTGGCCAGTCGGACCCTTTCCTGGGGATGATTATGGGCCTCGGAGGAGGCATGGACT
TTGACTCCAAGAAGGCCTACAGGGACGTGGCCTGGCTGGGTGAATGCGACCAGGGCTGCCTGGCCCTTGCTGAGC
TCCTTGGATGGAAGAAGGAGCTGGAGGACCTTGTCCGGAGGGAGCACGCCAGCATAGATGCCCAGTCGGGGGCGG
GGGTCCCCAACCCCAGCACTTCAGCTTCCCCCAAGAAGTCCCCGCCACCTGCCAAGGACGAGGCCAGGACAACAG
AGAGGGAGAAACCCCAGTGACAGCTGCATCTCCCAGGCGGGATGCCGAGCTCCTCAGGGACAGCTGAGCCCCAAC
CGGGCCTGGCCCCCTCTTAACCAGCAGTTCTTGTCTGGGGAGCTCAGAACATCCCCCAATCTCTTACAGCTCCCT
CCCCAAAACTGGGGTCCCAGCAACCCTGGCCCCCAACCCCAGCAAATCTCTAACACCTCCTAGAGGCCAAGGCTT
AAACAGGCATCTCTACCAGCCCCACTGTCTCTAACCACTCCTGGGCTAAGGAGTAACCTCCCTCATCTCTAACTG
CCCCCACGGGGCCAGGGCTACCCCAGAACTTTTAACTCTTCCAGGACAGGGAGCTTCGGGCCCCCACTCTGTCTC
CTGCCCCCGGGGGCCTGTGGCTAAGTAAACCATACCTAACCTACCCCAGTGTGGGTGTGGGCCTCTGAATATAAC
CCACACCCAGCGTAGGGGGAGTCTGAGCCGGGAGGGCTCCCGAGTCTCTGCCTTCAGCTCCCAAAGTGGGTGGTG
GGCCCCCTTCACGTGGGACCCACTTCCCATGCTGGATGGGCAGAAGACATTGCTTATTGGAGACAAATTAAAAAC
AAAAACAACTAAC

FIGURE 2573

ATGGCTGGGGTCGCGTGCTTGGGAAAAGCTGCCGACGCAGATGAATGGTGCGACAGCGGCCTGGGCTCCCTGGGT
CCGGACGCAGCGGCCCCCGGAGGACCTGGGTTGGGCGCGGAGTTGGGCCCGGGGCTGTCGTGGGCTCCCCTCGTC
TTCGGCTACGTCACTGAGGATGGGGACACGGCACTGCACTTGGCTGTGATTCATCAGCATGAACCCTTCCTGGAT
TTTCTTCTAGGCTTCTCGGCCGGCACTGAGTACATGGACCTGCAGAATGACCTAGGCCAGACAGCCCTGCACCTG
GCAGCCATCCTGGGGGGAGACATCCACGGTGGAGAAGCTGTACGCAGCAGGCGCCGGGCTGTGTGTGGCGGAGCGT
AGGGGCCACACGGCGCTGCACCTGGCCTGCCGTGTGGGGGCACACGCCTGTGCCCGTGCCCTGCTTCAGCCCCGC
CCCCGGCGCCCCAGGGAAGCCCCCGACACCTACCTCGCTCAGGGCCCTGACCGTACTCCCGACACCAACCATACC
CCTGTCGCCTTGTACCCCGATTCCGACTTGGAGAAGGAAGAAGAGGAGAGTGAGGAGGACTGGAAGCTGCAGCTG
GAGGCTGAAAACTACGAGGGCCACACCCCACTCCACGTGGCCGTTATCCACAAAGATGTGGAGATGGTCCGGCTG
CTCCGAGATGCTGGAGCTGACCTTGACAAACCGGAGCCCACGTGCGGCCGGAGCCCCCTTCATTTGGCAGTGGAG
GCCCAGGCAGCCGATGTGCTGGAGCTTCTCCTGAGGGCAGGCGCGAACCCTGCTGCCCGCATGTACGGTGGCCGC
ACCCCACTCGGCAGTGCCATGCTCCGGCCCAACCCCATCCTCGCCCGCCTCCTCCGTGCACACGGAGCCCCTGAG
CCCGAGGGCGAGGACGAGAAATCCGGCCCCTGCAGCAGCAGTAGCGACAGCGACAGCGGAGACGAGGGCGTGAGT
CAGGAGGAGAGACAGGGCAGCCCAGCTGGGGGGTCAGGA**TAG**

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FIGURE 2574

TGAAGAGGCGGGACACAGACGACGATTGGGCGACGAAGGACTCTATCGCGGTCAACTTTCCTCAGGATCTGATTG
GCTCGTCACGGTCAGGTTCGCTGCCTTGCAATTGGTCTAAACGCGGAGTGGGCGGGACGAAGTGCCGCCTTGTTC
CCGGTCCAAGATGGCTGCGTCCATGGCGCGGCGCTTGTGGCCTTTGCTGACTCGTCGGGGGTTCCGGCCCCGGGG
AGGCTGCATCTCCAACGATAGTCCAAGGAGAAGTTTCACTACAGAGAAACGAAACCGGAACCTCCTGTACGAGTA
TGCGCGCGAGGGCTACAGCGCACTCCCTCAGCTGGACATAGAGCGGTTCTGCGCATGCCCAGAAGAGGCCGCACA
CGCCCTGGAGCTCCGCAAGGGGGAGCTGCGCTCGGCGGACCTGCCCGCGATCATCTCGACATGGCAGGAGCTGAG
GCAGCTGCAGGAGCAGATCCGGAGCCTGGAGGAAGAGAAGGCAGCTGTGACTGAGGCAGTGCGGGCCCTGCTGGC
AAACCAGGACAGTGGTGAAGTGCAGCAGGACCCCAAGTACCAGGGTCTGCGGGCACGTGGCCGGGAGATCCGGAA
GGAGCTTGTTCACCTGTACCCCAGGGAGGCCCAGCTTGAGGAGCAGTTCTACCTGCAGGCGCTGAAGCTGCCCAA
CCAGACCCACCCAGACGTGCCCGTCGGGGATGAGAGCCAGGCTCGAGTGCTCCACATGGTCGGAGACAAGCCAGT
TTTCTCCTTCCAACCTCGGGGCCACCTGGAAATTGGCGAGAAACTCGACATCATCCGTCAGAAGCGCCTGTCCCA
CGTGTCTGGCCACCGGTCCTATTACCTGCGCGGGGCTGGAGCCCTCCTGCAGCACGGCCTGGTCAACTTCACATT
CAACAAGCTTCTCCGCCGGGGCTTCACCCCCATGACGGTGCCAGACCTTCTCCGCGGAGCAGTGTTTGAAGGCTG
TGGGATGACACCAAATGCCAACCCATCCCAAATTTACAACATCGACCCTGCCCGCTTCAAAGATCTCAACCTGGC
TGGAACAGCGGAGGTGGGGCTTGCAGGCTACTTCATGGACCACACCGTGGCCTTCAGGGACCTGCCAGTCAGGAT
GGTTTGCTCCAGCACCTGCTACCGGGCAGAGACAAACACGGGACAGGAACCCCGGGGGCTGTATCGAGTACACCA
CTTCACCAAGGTGGAGATGTTTGGGGTGACAGGCCCTGGGCTGGAGCAGAGCTCACAGCTGCTGGAGGAGTTCCT
GTCCCTTCAGATGGAGATCTTGACAGAGCTGGGCTTGCACTTCCGGGTCCTGGATATGCCCACCCAAGAACTGGG
CCTCCCCGCCTACCGCAAGTTTGACATTGAGGCCTGGATGCCAGGCCGAGGCCGCTTTGGAGAGGTCACCAGTGC
TTCCAACTGCACAGACTTCCAGAGCCGCCGCCTCCACATCATGTTCCAGACCGAGGCTGGGGAGCTGCAGTTTGC
CCACACGGTGAACGCCACCGCCTGTGCTGTCCCCCGCCTTCTCATCGCGCTCCTGGAGAGTAACCAGCAGAAGGA
CGGCTCAGTGCTCGTGCCCCCTGCCCTCCAGTCCTACCTCGGCACTGATCGGATCACAGCCCCTACCCACGTGCC
TCTCCAGTACATCGGCCCCAACCAGCCCCGGAAGCCTGGGCTGCCTGGCCAGCCTGCTGTAAGCTAAGAACCCAC
CCACAGCAGCCCTCGGGGGTGTCACTGCTTCCTGGAGTTCAGGAGACCCCGGACACCTGGGACCTGTGTTGCTGA
GCCCGTCCTGACATCTGTGTTCTTCCTGTCAGCTCCACGCCCGGGCCCCTGGACCACGGGGTCCACCTCTCCTCT
GTCCTTGCTGCCTCAGAGTCAGTCACTGACCCTGTTATCATTGAGGGTCCCAGTGGGAAGCAGGACGTCTGGGCT
TTACGGTTCTAGGGACAGGAGAAGCAGAGGAAGAGGCTTCCATCCCTCCTTCCTTCTTTCCTCCTACAGTGCTGA
GCAAAAAGTCCCCAATAAATGGTCAGGAC

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FIGURE 2575

AGCTGGATTCAGCGTGTCCGCGACCTCACCTTTAGGTCCTGTGAGGTCGGTGGAATCCTGGGGTCCTCCAAATCT
ACCAGGCCATCTCCCCAGTTTCCCAGTTCTTCCTGCGTGCGGGCGAGAGTGGTTGGGCCCTCGGGAACCCACTCA
GAGCGAGGCTAAATTTACGGAGGGACTTTCTGTTAGCAGCATGAGGGCCTGTGGTTAGACCTATAGAGGTATTTC
CTTTGATTTAAGCCAGAAAGTCCTGAGAGCGGATCGGGGAGCATTTGCGGATCGGTCACTTTTTCCTCCTTTCTG
AGTCTCTTATCCCCTACCACAGGGACGGCCCAGGTGGCAGGATGTCCTGGTCTGGCCTTCTCCATGGCCTCAACA
CGTCCCTAACTTGTGGCCCAGCTCTGGTTCCCCGGCTCTGGGCTACCTGCTCCATGGCTACCCTGAACCAGATGC
ACCGCCTGGGGCCCCCCAAGCGGCCGCCTCGGAAGCTGGGCCCCACGGAAGGCCGGCCGCAGCTGAAGGGTGTGG
TCCTGTGCACGTTTACCCGCAAGCCGAAGAAGCCCAACTCAGCCAATCGCAAGTGCTGTCGAGTGCGGCTCAGCA
CTGGCCGCGAGGCCGTCTGCTTCATCCCTGGGGAGGGCCACACCCTGCAGGAGCACCAGATTGTCCTTGTGGAGG
GCGGCCGCACCCAGGACCTGCCAGGCGTCAAGCTCACCGTTGTGCGTGGCAAGTACGACTGTGGCCACGTGCAGA
AGAAGTGACGGCTGGGGGCACAGTGGGCTGGGCGCCCCTGCAGAACATGAACCTTCCGCTCCTGGCTGCCACAGG
GTCCTCCGATGCTGGCCTTTGCGCCTCTAGAGGCAGCCACTCATGGATTCAAGTCCTGGCTCCGCCTCTTCCATC
AGGACCACTATTAAGCCATAGGAGTCCTGGGGGTGCAAAGGGTGCCCCTCTGTCAACACCCTTGGCTCCTGTGTT
TAGAGGGGTGGCCTGAAGGACCTTTTCTGCTGGGACAAGACACTGTACTGCCCTCTGCTGGGAAGGGGTTTTAAT
AAACAGACCCTGGCGCTTGTGATGT

FIGURE 2576A

GGGGATTCAACATGGCGGCGGGAGTGTCCGCGGTGGTGGCGGTGCAAGAGAGCTGAGGGAGGCGCGAGGGCGCGG
AGTTCCAGGTCGAGCAGTTAGGCCGCGAGCGACTGCGGCGCCGAGCCGATGAGTAACCCGAAGCCCCTAGAGGAG
TGGTCACCTGCCTGAGGGCACTTCTGTCCCACCAGCATCAGACCAGGCCGCACCGAGTCCCCGGCACCATGTTTG
GGAAGAGGAAGAAGCGGGTGGAGATCTCCGCGCCGTCCAACTTCGAGCACCGCGTGCACACGGGCTTCGACCAGC
ACGAGCAGAAGTTCACGGGGCTGCCCCGCCAGTGGCAGAGCCTGATCGAGGAGTCGGCTCGCCGGCCCAAGCCCC
TCGTCGACCCCGCCTGCATCACCTCCATCCAGCCCGGGGCCCCCAAGACCATCGTGCGGGGCAGCAAAGGTGCCA
AAGATGGGGCCCTCACGCTGCTGCTGGACGAGTTTGAGAACATGTCGGTGACACGCTCCAACTCCCTGCGGAGAG
ACAGCCCGCCGCCGCCCGCCCGTGCCCGCCAGGAAAATGGGATGCCAGAGGAGCCGGCCACCACGGCCAGAGGGG
GCCCAGGGAAGGCAGGCAGCCGAGGCCGGTTCGCCGGTCACAGCGAGGCGGGTGGCGGCAGTGGTGACAGGCGAC
GGGCGGGGCCAGAGAAGAGGCCCAAGTCTTCCAGGGAGGGCTCAGGGGGTCCCCAGGAGTCCTCCCGGGACAAAC
GCCCCCTCTCCGGGCCTGATGTCGGCACCCCCCAGCCTGCTGGTCTGGCCAGTGGGGCGAAACTGGCAGCTGGCC
GGCCCTTTAACACCTACCCGAGGGCTGACACGGACCACCCATCCCGGGGTGCCCAGGGGGAGCCTCATGACGTGG
CCCCTAACGGGCCATCAGCGGGGGGCCTGGCCATCCCCCAGTCCTCCTCCTCCTCCTCCCGGCCTCCCACCCGAG
CCCGAGGTGCCCCCAGCCCTGGAGTGCTGGGACCCCACGCCTCAGAGCCCCAGCTGGCCCCTCCAGCCTGCACCC
CCGCCGCCCCCTGCTGTTCCTGGGCCCCCTGGCCCCCGCTCACCACAGCGGGAGCCACAGCGAGTATCCCATGAGC
AGTTCCGGGCTGCCCTGCAGCTGGTGGTGGACCCAGGCGACCCCCGCTCCTACCTGGACAACTTCATCAAGATTG
GCGAGGGCTCCACGGGCATCGTGTGCATCGCCACCGTGCGCAGCTCGGGCAAGCTGGTGGCCGTCAAGAAGATGG
ACCTGCGCAAGCAGCAGAGGCGCGAGCTGCTCTTCAACGAGGTGGTAATCATGAGGGACTACCAGCACGAGAATG
TGGTGGAGATGTACAACAGCTACCTGGTGGGGGACGAGCTCTGGGTGGTCATGGAGTTCCTGGAAGGAGGCGCCC
TCACCGACATGGTCACCCACACCAGGATGAACGAGGAGCAGATCGCGGCCGTGTGCCTTGCAGTGCTGCAGGCCC
TGTCGGTGCTCCACGCCCAGGGCGTCATCCACCGGGACATCAAGAGCGACTCGATCCTGCTGACCCATGATGGCA
GGGTGAAGCTGTCAGACTTTGGGTTCTGCGCCCAGGTGAGCAAGGAAGTGCCCCGAAGGAAGTCGCTGGTCGGCA
CGCCCTACTGGATGGCCCCAGAGCTCATCTCCCGCCTTCCCTACGGGCCAGAGGTAGACATCTGGTCGCTGGGGA
TAATGGTGATTGAGATGGTGGACGGAGAGCCCCCCTACTTCAACGAGCCACCCCTCAAAGCCATGAAGATGATTC
GGGACAACCTGCCACCCCGACTGAAGAACCTGCACAAGGTGTCGCCATCCCTGAAGGGCTTCCTGGACCGCCTGC
TGGTGCGAGACCCTGCCCAGCGGGCCACGGCAGCCGAGCTGCTGAAGCACCCATTCCTGGCCAAGGCAGGGCCGC
CTGCCAGCATCGTGCCCCTCATGCGCCAGAACCGCACCAGATGAGGCCCAGCGCCCTTCCCCTCAACCAAAGAGC
CCCCCGGGTCACCCCCGCCCCACTGAGGCCAGTAGGGGGCCAGGCCTCCCACTCCTCCCAGCCCGGGAGATGCTC
CGCGTGGCACCACCCTCCTTGCTGGGGGTAGATGAGACCCTACTACTGAACTCCAGTTTTGATCTCGTGACTTTT
AGAAAAACACAGGGACTCGTGGGAGCAAGCGAGGCTCCCAGGACCCCCACCCTCTGGGACAGGCCCTCCCCCATG
TTCTTCTGTCTCCAGGAAGGGCAGCGGCCCTCCCATCACTGGAAGTCTGCAGTGGGGGTCGCTGGGGGTGGAGAG
AACACTAAGAGGTGAACATGTATGAGTGTGTGCACGCGTGTGAGTGTGCATGTGTGTGTGTGCAAAGGTCCAGCC
ACCCCGTCCTCCAGCCTGCAAGGGGTGTCTGGCGCCTTGCCTGACACCCAGCCCCCTCTCCCCCTGAGCCATTGT
GGGGGTCGATCATGAATGTCCGAAGAGTGGCCTTTTCCCGTAGCCCTGCGCCCCCTTTCTGTGGCTGGATGGGGA
GACAGGTCAGGGCCCCCACCCTCTCCAGCCCCTGCAGCAAATGACTACTGCACCTGGACAGCCTCCTCTTTTCT
AGAAGTCTATTTATATTGTCATTTTATAACACTCTAGCCCCTGCCCTTATTGGGGGACAGATGGTCCCTGTCCTG
CGGGGTGGCCCTGGCAGAACCACTGCCTGAAGAACCAGGTTCCTGCCCGGTCAGCGCAGCCCCAGCCCGCCCACC
CCTGCCTCGAGTTAGTTTTACAATTAAAACATTGTCTTGTTTTGTGTCTGTGTGCGATGTGTGGGGGGCAGGGGG
CCCTGCCCGGCTGTCTTGGGTGGGAATTTGCAGGGAGAGGGTCTGGATCTGGGAGCAAACCACGATTCCAGCCAA
GGCAGGGCAAGGGTGGGGTGGGGAGTGGGGAGTTCAGGTCATAGCAGCCAGTAAGCTCCCCCAGCCTGCCACTCC
CCAGAATGGGGCAGGATTGTCCCCACCCCTGGAAGCAGCCAGTTTGCCACAGTCCATGTGCAGACTGATCCCAGT
TTGCCAAATCTGCAATTTCCTGGAACCTTTTAAAGGCTGTCTTGAGCGCGTTTGGTGAGTAGGAGCTAACCCAAG
TTAGTAAATTGAAGGCCATTTGGCAAATTGGTCAGTGGGCAGATGGGCTTTTGGGGATTGACTGAGGCTGACTGG
CCTGGAGCTGCTGGCTTCGGAGAGACACCCTGTGAAGTGTGTCCTTCCACGCAGGAGCCCAGAGCCGAGCCCACG
CTGGGGGGAATCTGACTGGCATGGAGGTGGCCATGCCACCATCGCTGCTGCAGCTGCATCCTGGCACTTTGCGCC
TCAGGCCCTGTTGGGCTCCACTTTCTGCATCCTCCCCAGCCCCCAGGGAGGCAGTGGAGTGGGGAGAGAGCCAGG
AGTGAGCCTCCGTCCCCAAAGCCAGCCAGGCGTCATCAGCACCAGAGACCTCAGCCTGGTCCTCTCGGGAAGTGA
GTGGCCAGGGCAGAGATTCCAGGTTAGTCCACGCCTCCCACCCTTCACAGGTCCTGACCCCAAGAATCAGAGCAC

FIGURE 2576B

TGTGTGTGTGGCAGGGCCTATGCCAAGTGCAAACACAGCCTAGATGGATCATCACAGAGTGAAACCCAGCGGTGC
AAGCAGCTGTGCTCTCTGCGATGTATTGGAGGCTTAGGTGAGGTGGATGCCTTTCTGGAAAAAAAAAAAATGCTA
ACATTGGCAAAAGAAGAAATAGAAAACAAGACCAAAATAACTGTCTCCTCACTGCACACACACTCCAGAATAAAT
AAAAGGTTTCAGGCTTGAATGCACTTTCAAATGAGATTTTTTTTTTTTTTTGAGACGGAGTATCGCTCTGTCGC
CCAGGCTGGAGTGCAGTGGCACGATCTTGGCTCACTGCAACTTCTGCCTCCTGGGTTCAAGCGATTCTCCTGCCT
CAGCCTCCCAAGTAGCTGGGATTACAGGCGCTTGCCACCACGCCAGGCTAATTTTTTGTATTTTGAGTAGAGACT
GGATTTCGCCATCTTGGCCAGACTGGTCTTGAACTCCTGACCTCGTGATCCACCCACCTCAGCCTCCCAAAGTGC
TGGGATTACAGGCATGAGCCACCATGCCTGGCCTCAAATGAGGTTTACCAGACTTTGAAGGAGCAGGTAATTCCT
TCTACCTTGTGAACAAGTTGTTCCAGAAAGATAGCAGCTCAGGAGGCCTCTGTGACCATGGTTCCAGACCCAGAT
AAGGACGGCAAAGAACAGAGCATCTCAGAAACGCAAGGCTCACAGCCAGGGTGCCCGGCGACCCCACGGGCACTG
AGAACAGCTAGCTCTAGGAGCTCCACTCTCCTGCTGAAGAAACCACGGGCTCAGAGACGGGGAGCTCCCTCGCCC
AGCCACATCTGTGACCCCACGGTAACTCTGCTGGTTTTGGTGCCTTCAGTCACTCACTGCAGGTTTGTTTTGTTT
TGTTTTGTTTTGAGTTTTTTTGTTTTTTGTTTTTTGTTTTTAGAGACAAGATGTTGCTATGTTGCCTAGGCTGGT
TTCGAACTCCTGGCCTCAAGGGATCCTCCCTCCTTGGCCCCGCAAAGTGCTGGGATTACAGGCGTGAGCCACCGT
GCCCAGCCCGCTCACTGCAGTTTGAAGGCATGGCTTTGGGTGGCGTGGGGTGAAAGCTGCCCGAGGCCCCGTTCC
TCCCCACGTGGCTGCCTCCTGCCAGAGCCAGTCAGGAAAACAGACCCCAACTAGAGTTGTTTCAAATGGCAGGGA
TTTGGTACCGGTGGTTGGATCATGACAAAGCTCTGAGAAGGCTGGAGGAGCCACAGAGTGCCAAGTGCCCAGCAA
TCATTAGAGGAAGGAGGCTGCTGCCACCTGTGTGGCTAGAGGAACAGAGGGGCCAATGGCATTCCCCAAACCCCA
CTCTCGCCTCTGTCTGGCCAGAGCAGAATGGCTTCTTCCAGCTTCCCACCCTGGACTCCCACCCAGGAGCCTCCT
CCTGGCAGACCCTTCCTGACCCCACCGGCCCGGGGGGTCTACAGATCCATGTTTCAGGCGTCCGCCTGGAGCGGA
ACAGGGGAGTGCTTAGGACAAGGGTGGTGCCAGAGGATCCACTCTGCCCACATTTAGTTGACCAGCTGAGGCACT
CCACGGGAATGAATGACTCTCGACAGGTGCCGGAGGTGAGGAGGGGCCCGGAGGCCCAGGAGGGGCACAGGGATG
GATTCGTCCGCCTGGGGGCTGGAGGTGTGTTTACAGAGCCCCAAAATAAACAATGCAACCAGGTCAGACCAGCGG
TTCTCACAGTGTGGTTCCCAGACCAGCAGCATCACTGGGAGCTTACTGGACACGCAAATAAATCCCTGTGTGCCA
CCCCAGCTGCATCAGATGCTGGTGGGGCCCAGTGATCTGTATTTAACACACCCTCCGGGGGATGCCGGTGCCCAC
TCACGTTTGAGAACCCCTGCGATCCACGACTGCCCTCCCGTGTAAAAGGCCCACCTCTGTGGGACTCCAAGTCAT
CAGCACCCTAGGGTCCTTCCGTCTTTTTCCTTCCTCCTGGGACACCTGCCTCTCCCATGTCGTATTAGAGAATTC
CTTATGCTCCCAAGTGGGCACGGGGAGAGGAAGGCACTCCTCTTTAAGGACCGACCCAGAGGTTTTGCCATTGCT
TCACTGGCCAGAGCTTAGTCACGCAGCCTCACCCAGAGGCAAGGGAGGTTGGAAAATGTAGTGTTTGTGTGTGTC
TAACACAAATTCTATTACCATGCAGTCAGGATTCTCCACTCTTGCTCTTTCATTAGATTTGCTGGGCTTCACCCT
GGACTTTCTGATTTAGTGACAGAACAGAGAACCCAGAGGCAGACCCAGATGTGTACAAGGGCTTCATATACAATC
AGGAGATTTAATAATCATGCTAGGGGCCGGGTGCAGTGGCTCACGCCTGTAATCCCAAGCACTTTGGGGAGCCGA
GGCAGGCAGATCACTTGAGGTCAGGAGTTTGAGACCAGCCTGGGCAACAAAGTGAGACCCTGTCTCTACTAAAAA
TAACAAAAATTAGCCGGGCGTGGTGGTGGGCGCCTGTAATCCCAGCTCCTCGGGTGGCTGAGGCATGAGAATCAC
TTGAACCCAGGAGGCAGAGGTTTCAGTGAGCTGAGATCACATCACTGCACTCCAGCCTGGGTGACAGAGTGAGAT
TCTGTC

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FIGURE 2577

ATGTCCACCCCAGGGGAGTGGGTGGCTAAACAGAAGGGGTGCACCCCCAAAATTCCTGTCCAGACAGCAGCCCCG
GAGGCCCCCGAGCTCCCCGAGCCGGCGCAGCCGTCCGAGGCTCACGCCCGGCAGCTGCTGCTGGAGGAGTGGGGG
CCGCTGAGCGGGGGCCTGGAGCTGCCCCAGCGCCTCACCTGGAAGCTGCTCCTGTTGCGGCGGCCGCTCTACCGC
AACCTGCTGCGCTCGCCCAACCCCGAAGGCATCAACATTTATGAGCCAGCACCCCCTACTGGTCCCACCCAGCGA
CCCCTGGAAACTCTGGGCAATTTCCGTGGCTGGTACATTAGAACTGAAAAGCTCCAGCAGAACCAAAGCTGGACA
GTGAAGCAGCAGTGTGTGGACCTTCTGGCCGAGGGCCTGTGGGAGGAGCTGCTGGATGACGAACAACCAGCCATT
ACGGTCATGGACTGGTTCGAGGACAGCCGGCTGGATGCGTGCGTCTATGAGCTGCATGTCTGGCTGCTGGCGGCC
GACCGCCGCACGGTCATTGCTCAGCACCACGTGGCCCCCCGAACTTCTGGGAGAGGACCCCCTGGCCGCTGGGTC
CAGGTGTCCCACGTATTCCGCCATTATGGTCCCGGTGTGCGCTTTATCCACTTCCTGCACAAGGCCAAGAACCGC
ATGGAGCCTGGTGGGCTGCGGCGGACACGGGTGACCGACTCCTCCGTGTCTGTGCAGCTCCGGGAGTGA

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FIGURE 2578

GTTGGATGAAACCTTCCTCCTACTGCACAGCCCGCCCCCCTACAGCCCCGGTCCCCACGCCTAGAAGACAGCGGA
ACTAAGAAAAGAAGAGGCCTGTGGACAGAACAATCATGTCTGACTCCCTGGTGGTGTGCGAGGTAGACCCAGAGC
TAACAGAAAAGCTGAGGAAATTCCGCTTCCGAAAAGAGACAGACAATGCAGCCATCATAATGAAGGTGGACAAAG
ACCGGCAGATGGTGGTGCTGGAGGAAGAATTTCAGAACATTTCCCCAGAGGAGCTCAAAATGGAGTTGCCGGAGA
GACAGCCCAGGTTCGTGGTTTACAGCTACAAGTACGTGCATGACGATGGCCGAGTGTCCTACCCTTTGTGTTTCA
TCTTCTCCAGCCCTGTGGGCTGCAAGCCGGAACAACAGATGATGTATGCAGGGAGTAAAAACAGGCTGGTGCAGA
CAGCAGAGCTCACAAAGGTGTTCGAAATCCGCACCACTGATGACCTCACTGAGGCCTGGCTCCAAGAAAAGTTGT
CTTTCTTTCGTTGATCTCTGGGCTGGGGACTGAATTCCTGATGTCTGAGTCCTCAAGGTGACTGGGGACTTGGAA
CCCCTAGGACCTGAACAACCAAGACTTTAAATAAATTTTAAAATGCAAAAACTCGG

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FIGURE 2579

GGCGGCGGTGGTCGGTGCGGGAGGAGGGAGGGGAGCTTGCGGGCCCGAGAGGGGGCGACGGCGGCGGCGGTGGCC
TGAGGAGGCCCGAGCGGCGGCGGTGGCGGCGAAGGCCGAGGCGTCTAGGTGTTTTTGGAAGAGCTGAGGCCAGAG
CCGGGACCATGTGACGGCGCTGGCCCTCGCCACCGCCGTCCCCCGACCCTGGCCCCAGGCCCGGCACC**ATG**ATGT
TCCGAGACCAGGTGGGCATCCTCGCTGGCTGGTTCAAAGGCTGGAATGAGTGTGAGCAGACAGTGGCCCTCCTGT
CACTTCTGAAACGGGTCACCCGTACCCAGGCCCGCTTCCTGCAGCTCTGCCTGGAGCACTCACTGGCGGACTGCA
ATGACATCCACCTGCTGGAGTCGGAGGCCAACAGTGCTGCCATCGTCAGCCAGTGGCAGCAGGAGTCCAAAGAGA
AGGTGGTGTCCCTCCTGCTGTCCCACCTTCCCCTGCTTCAGCCAGGCAACACAGAGGCCAAGTCGGAGTACATGA
GGCTACTGCAGAAAGTGCTGGCCTACTCAATCGAGAGCAATGCTTTCATCGAGGAGAGTCGCCAGCTGCTTTCCT
ATGCCCTCATCCACCCAGCCACCACACTGGAGGACCGCAACGCACTGGCCCTCTGGCTGAGCCACCTGGAAGAGC
GGTTGGCTAGTGGCTTCCGCTCCCGGCCAGAGCCCTCCTACCATTCACGTCAAGGCTCAGATGAGTGGGGGGGCC
CTGCAGAGCTAGGCCCTGGGGAGGCAGGGCCAGGCTGGCAGGACAAGCCACCCCGGGAAAATGGACACGTGCCCT
TCCACCCATCCAGCTCAGTGCCGCCAGCCATCAACAGTATTGGGAGCAATGCAAACACAGGTCTCCCCTGCCAAA
TCCACCCTAGCCCACTGAAGCGCTCCATGTCACTCATCCCTACAAGCCCCCAGGTCCCTGGTGAGTGGCCGAGTC
CAGAGGAGCTTGGGGCCCGGGCTGCTTTTACCACGCCCGATCACGCACCTCTCTCGCCCCAGAGCAGCGTGGCCT
CCTCTGGCAGTGAGCAGACAGAGGAGCAGGGCTCCAGCCGGAACACCTTCCAGGAGGATGGCAGTGGCATGAAAG
ATGTGCCCTCATGGCTCAAGAGCCTCCGTTTGCACAAGTATGCAGCCCTCTTCTCACAGAATCAGCTT**TGA**GTAA
CTGTACAGTTTTTCTCGCTGTTGGAGAAGACTTATTTGTTGGAGTTTCACTTGTTTAATGGTCTGGGCTTATTTT
GGAAAAAAAAAAAACAAACAAAAAAAACGAATTCTGACCTT

FIGURE 2580

AGTTGGTGGAACCGGAGCTTCGAGTCCGTCCCCGGTGCTGCCTGCGCGTTCACCTGAGTCTCGCTGGAGCTCTTC
TCGCCCGCCCACCTCATCTCAACCCACTTTCCGCGGGGAGCGGCGCCAAGCTGGGCCTTCCTCGGATCAGGCGTC
CCCTGAAGTCGGCACGCCCCTCTGCGTCCCCCTTCGGTCCCGCTAGGACCCCGTCCGGGCTGCCGTCGCCTCGTC
GCTATGGCGCCCACCATCCAGACCCAGGCCCAGCGGGAGGATGGCCACAGGCCCAATTCCCACCGGACTCTGCCT
GAGAGGTCTGGAGTGGTCTGCCGAGTCAAGTACTGCAATAGCCTCCCTGATATCCCCTTCGACCCCAAGTTCATC
ACCTACCCCTTCGACCAGAACAGGTTCGTCCAGTACAAAGCCACTTCCTTGGAGAAACAGCACAAACATGACCTC
CTGACTGAGCCAGACCTGGGGGTCACCATCGATCTCATCAATCCTGACACCTACCGCATCGACCCCAATGTTCTT
CTAGATCCAGCTGATGAGAAACTTTTGGAAGAGGAGATTCAGGCCCCCACCAGCTCCAAGAGATCCCAGCAGCAC
GCGAAGGTGGTGCCATGGATGCGAAAGACAGAGTACATCTCCACTGAGTTCAACCGTTATGGCATCTCCAATGAG
AAGCCTGAGGTCAAGATTGGGGTTTCTGTGAAGCAGCAGTTTACCGAGGAAGAAATATACAAAGACAGGGATAGC
CAGATCACAGCCATTGAGAAGACTTTTGAGGATGCCCAGAAATCAATCTCACAGCATTACAGCAAACCCCGAGTC
ACACCGGTGGAGGTCATGCCTGTCTTCCCAGACTTTAAGATGTGGATCAATCCATGTGCTCAGGTGATCTTTGAC
TCAGACCCAGCCCCCAAGGACACGAGTGGTGCAGCTGCGTTGGAGATGATGTCTCAGGCCATGATTAGGGGCATG
ATGGATGAGGAAGGGAACCAGTTTGTGGCCTATTTCCTGCCTGTAGAAGAGACGTTGAAGAAACGAAAGCGGGAC
CAGGAGGAGGAGATGGACTATGCACCAGATGATGTGTATGACTACAAAATTGCTCGGGAGTACAACTGGAACGTG
AAGAACAAAGCTAGCAAGGGCTATGAGGAAAACTACTTCTTCATCTTCCGAGAGGGTGACGGGGTTTACTACAAT
GAGTTGGAAACCAGGGTCCGCCTTAGTAAGCGCCGGGCCAAGGCTGGGGTTCAGTCAGGCACCAACGCCCTGCTT
GTGGTCAAACATCGGGACATGAATGAGAAGGAACTGGAAGCTCAGGAGGCACGGAAGGCCCAGCTAGAAAACCAC
GAACCGGAGGAGGAAGAGGAAGAGGAGATGGAGACAGAAGAGAAAGAAGCTGGGGGCTCAGATGAGGAGCAGGAG
AAGGGCAGCAGCAGTGAGAAGGAGGGCAGTGAAGATGAGCACTCGGGCAGCGAGAGTGAACGGGAGGAAGGTGAC
AGGGACGAGGCCAGTGACAAGAGTGGCAGTGGTGAGGACGAGAGCAGCGAGGATGAGGCCCGGGCTGCCCGTGAC
AAAGAGGAGATCTTTGGCAGTGATGCTGATTCTGAGGACGATGCCGACTCTGATGATGAGGACAGAGGACAGGCC
CAAGGTGGCAGTGACAATGATTCAGACAGCGGCAGCAATGGGGGTGGCCAGCGGAGCCGGAGCCACAGCCGCAGC
GCCAGTCCCTTCCCCAGTGGCAGCGAGCACTCGGCCCAGGAGGATGGCAGTGAAGCTGCAGCTTCTGATTCCAGT
GAAGCTGATAGTGACAGTGACTGAGTCCCAGGGCATTCAGGGCTGGTTCAGACACCATTATTGTGAGCAGCAAAG
CACTTTTCTAGTGGTCTGTTTGTGAGCCTTTCACTTGTTTGTTCCCCACCCCCAAACCTTTGCTGTTAATAAAGT
CAACTTCTCTTTA

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FIGURE 2581

GGGGTTTACTACAATGAGTTGGAAACCAGGGTCCGCCTTAGTAAGCGCCGGGCCAAGGCTGGGGTTCAGTCAGGC
ACCAACGCCCTGCTTGTGGTCAAACATCGGGAC**ATG**AATGAGAAGGAACTGGAAGCTCAGGAGGCACGGAAGGCC
CAGCTAGAAAACCACGAACCGGAGGAGGAAGAGGAAGAGGAGATGGAGACAGAAGAGAAAGAAGCTGGGGGCTCA
GATGAGGAGCAGGAGAAGGGCAGCAGCAGTGAGAAGGAGGGCAGTGAAGATGAGCACTCGGGCAGCGAGAGTGAA
CGGGAGGAAGGTGACAGGGACGAGGCCAGTGACAAGAGTGGCAGTGGTGAGGACGAGAGCAGCGAGGATGAGGCC
CGGGCTGCCCGTGACAAAGAGGAGATCTTTGGCAGTGATGCTGATTCTGAGGACGATGCCGACTCTGATGATGAG
GACAGAGGACAGGCCCAAGGTGGCAGTGACAATGATTCAGACAGCGGCAGCAATGGGGGTGGCCAGCGGAGCCGG
AGCCACAGCCGCAGCGCCAGTCCCTTCCCCAGTGGCAGCGAGCACTCGGCCCAGGAGGATGGCAGTGAAGCTGCA
GCTTCTGATTCCAGTGAAGCTGATAGTGACAGTGAC**TGA**GTCCCAGGGCATTCAGGGCTGGTTCAGACACCATTA
TTGTGAGCAGCAAAGCACTTTTCTAGTGGTCTGTTTGTGAGCCTTTCACTTGTTTGTTCCCCACCCCCAAACCTT
TGCTGTTAATAAAGTCAACTTCTCTTT

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FIGURE 2582

AGGCCCAGCGGGAGGATGGCCACAGGTCTGGAGTGGTCTGCCGAGTCAAGTACTGCAATAGCCTCCCTGATATCC
CCTTCGACCCCAAGTTCATCACCTACCCCTTCGACCAGAACAGGTTCGTCCAGTACAAAGCCACTTCCTTGGAGA
AACAGCACAAACATGACCTCCTGACTGAGCCAGACCTGGGGGTCACCATCGATCTCATCAATCCTGACACCTACC
GCATCGACCCCAATGTTCTTCTAGATCCAGCTGATGAGAAACTTTTGGAAGAGGAGATTCAGGCCCCCACCAGCT
CCAAGAGATCCCAGCAGCACGCGAAGGTGGTGCCATGGATGCGAAAGACAGAGTACATCTCCACTGAGTTCAACC
GTTATGGCATCTCCAATGAGAAGCCTGAGGTCAAGATTGGGGTTTCTGTGAAGCAGCAGTTTACCGAGGAAGAAA
TATACAAAGACAGGGATAGCCAGATCACAGCCATTGAGAAGACTTTTGAGGATGCCCAGAAATCAATCTCACAGC
ATTACAGCAAACCCCGAGTCACACCGGTGGAGGTCATGCCTGTCTTCCCAGACTTTAAGATGTGGATCAATCCAT
GTGCTCAGGTGATCTTTGACTCAGACCCAGCCCCCAAGGACACGAGTGGTGCAGCTGCGTTGGAGATGATGTCTC
AGGCCATGATTAGGGGCATGATGGATGAGGAAGGGAACCAGTTTGTGGCCTATTTCCTGCCTGTAGAAGAGACGT
TGAAGAAACGAAAGCGGGACCAGGAGGAGGAGATGGACTATGCACCAGATGATGTGTATGACTACAAAATTGCTC
GGGAGTACAACTGGAACGTGAAGAACAAAGCTAGCAAGGGCTATGAGGAAAACTAATACTTCATCTTC

FIGURE 2583

GTCGTAACGCACTTCCGGCGGTCTACGCGAGGAAGATGGCTGCATCCCAGCAGCAAGCTTCAGCGGCTTCCTCAG
CTGCTGGTGTATCGGGTCCTAGTTCGGCTGGCGGCCCGGGTCCCCAGCAGCAGCCGCAACCGCCAGCACAACTGG
TGGGCCCTGCCCAGAGCGGCCTCCTGCAGCAACAGCAACAGGACTTCGATCCTGTGCAGCGTTATAAGATGCTCA
TCCCGCAGCTGAAGGAGAGTCTACAGACCTTGATGAAGGTTGCGGCCCAAAACTTGATTCAGAACACTAACATCG
ACAATGGACAAAAGAGCAGTGATGGACCCATACAGCGCTTTGACAAGTGCCTGGAAGAGTTCTATGCACTCTGTG
ACCAGCTGGAGCTGTGCCTGCGCCTGGCGCATGAGTGCCTGTCACAGAGTTGTGACAGTGCCAAGCACTCTCCAA
CGTTGGTGCCCACAGCCACCAAGCCCGACGCAGTGCAGCCTGACAGCCTCCCCTACCCACAGTACCTGGCGGTCA
TCAAAGCCCAGATTTCCTGTGCCAAGGACATTCACACCGCCCTGCTGGACTGTGCCAACAAGGTCACGGGCAAGA
CACCCGCACCACCTGCTGGCCCTGGGGGCACTCTGTGAAGTGGGGGACAGGGAGTGGGGCAGGCAGTGGTTGGTG
GGTGGTGTGCAAAGGGAATGAAGAGCGTCCTGGGCCTAAACACAGCAGCCTCCTCTCTTCCTGCCTGAGCACCGC
AGCGGGAGCCAGCAGGGGGCAGCAGAGGCCAACAGGGAGCTCGCAGGCCGGGCCCCTGCGTCCCTGCCCCTTCTT
CCTGCTCCCCCTCCTAGCCTAGGGTAGACTTTGAACTGTGTGTGTTGATGACTTCTCTGTTCCACAGGCCCTCCC
CCATTCTTGCCTGGGTGTGGAGCCCTGGCTGTCCCCTCTCCCTCAGTCCTTCCTGACTGTCTCCAGCTGGGAGGT
GGTCTCTGTGTGCCACTCCTCTGTGTCTCTATTACAGTTGTGTCTCTCTCATCCTGTCTCTTTTTCCCTTGTTTC
TCTGTTCCTGTTAATGTGTTTCTCCCCATGGTCCTATTTCTCTCACTCTGACCTCTCTCTCTTAGTCCCCTTTAG
CTGTCTTCTATCCCCAGCTCCTAACTGGGACTCTGTGTCTATGCAGGGGGCCAGCACCCCTGGGTTATCTGGGGC
TAAGGGAAGGGACTTCATTTCCAGGGGCCACAGCCAAGCCCAGAGTCCCCCAGCGGCTCGCATGTCAGCCCAGAC
CCCAGGGTCCTTGGCCTAGGAGAGGAGCAGTGGAGGGGCCCAGGCTCTGAGCTCCACAGGTCTGAGCTGGGAGCA
ACTCAGGCCCCCACCCAAGCCTGCGTCAGCGGAACTTGAGTGAGGGGCGTTGTGCAATTTGTGGCAAGGCTGGCC
CAGCTGGATGCCTGGGTCCCAGTATTTTTAGCCCCAAAGGAGAAGTGAAAAGGCCCCAGCCGGGGTGAATCATCA
GTCCTGGGGAAGAACCCAGGCGCCTGAGCCCCAGCTCCGGGAAGCAGGCACTGGGGAGGGGGCTTCAAGGAGGGA
GTGCCCCCTCAGACTCCCTGCTTCCCTGGAAGCTTCAGGAAGCTCAGCCTCAGCCTTCAGGCCTGAGCAAGTGCA
GGGCGGAGCTACCAGCCCAGGCTCAGATGTTGGGGTGTGAAAGCCTCAAGTGACTCAGCCTGGTTGGAGAACTGC
CCCACCCAGTATCTTCTGTGCCATGGTTCCCACATTCGCACTCCATGGCCTCCTGTCCTGGACCCCACGTCTGCA
AGGAAACCCTAGGACCATGGATACCTCTGTGATTCACGCTGAGCCCAAGTCCCCACACTGGAAAACTGGGAAATG
GCCAGCTGTGTGTCCCAGGAAATTCCTCCCCTTATTCTTCCTTGAAGTGCCCGAGCATGTAGGGCAAGAAGGAAG
GCTGAAGCGCTGTCCCTAGGAGGAATTTCTCCTTCAGGGAAGCCTCAGTTTTGCCCATTTATCTAATTGAATCAG
TTTTTTACCCAATCCCCCGATTTTGTAGGATAATCTCCCTTATCTAAAGTCAACTGATTATGGACTTTAATCACA
TCTACAAAACACTTCCATGGCGACAGCTAGATGAGTGTTTGAATAACTGGGACTGTAGCCCGTCCAAGTTGACAC
ATAAAACTGACCATCGGGCCGGGGGCGGTGGCTCACGCCTGTAATCCCAACACTTTGGGAGCCCGAGGCGGGCGG
ATCACAAGGTCAGGAGTTCGAGACCAGCCTGGCCAACACGGTGAAACCCCGACTCTACTAAAAATACAAAAAATT
AGCTGGGTGTGGTGGCACACACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGTTTGAACCTGGG
AGGCAGAGGTTGCAGTGAGCCAAGATCACACTATTGCACTCCAGCCTGGGCGACAGGGCAAGACTCTGTCTCAAA
AAAAATAAAAAACTGACCATCTAGTCCTTGTCATCTGGGCACCCTCACACATCTCCTTAACCACACTTAATCTCC
AAATAAGTACGATAACATAGTCATAGTCCCACCCAACATGATGCAGTTATCTTGCATACAACTGAAGACAACTAA
CCCTTTCCCCAACAGAGCCCACCAGCAGTGGTGGAGATGTCGGTCCATGAGCGCACACACAAGACTGAGGGACTG
TCGGCCCTCCCAGGTGGTGTCAACACAACATCACACACAGGTGGGGGGGCCTGATAGCCCAGCACCCATGATACA
GGGCCTACCAATGCTTAAAACCACACCCAGGGAGCCCACAGAGGCACTCAGTGGGTGGTGGGGTGATGGATACAC
ATCTATCAGGCACAGGGCGGAGGTGGGCACCACTGAGTTGCACTCAGCAAACACATTGGGTATCTTGTGCCCAAG
GCCTGTATTTGTGGAGCTGATGTTCTAGTGAGAGACAGTAAATGTGACAAAAGTAAAATATATCAGATGGTGAGA
AAACAGAAAAATGAGATCAGAAGTGGAGATGTTGGGGCCAGGCACAGTGGCCCAGGCCTGTAATCCCATCACTTT
GGGAGGTGCAGGCAGGCAGATGGCTTGAGCCCAGGAATTCAAGACCAGTCCGAGCAACATAGCAAAAGCCCTTAT
CTGCAAAAAATTCAAAAATTAGCCAGGTGTGGTGGTGCGTGCCCAGGTTCCCAGGTACTCGGAGGCTGAGAGGTG
GGAGGATGCCTTGAGCTTGAGAGGTTGAAGCTGCAGTGAGCTGTGATCGCACCACTGCACTCCAGCTTGGTTCAT
GGAGACCCTGTTTTTTTAAAAAAAGAAGTGGAGGTGTTTACACCAGCAAAATACTCATTTTTTAAGTGTAATTAA
GTTGAAGATCAAAAAATGGAAATGTATAATTAAATCATACTTAGCAAATCTAACACATGAAATGTAACATCTGCA
TATGGAGAATCGTGTTACTTTATTGAAAAACATTAAAAGTTTGAGAACTT

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FIGURE 2584

AGCCTGACTTCAGCGCTCCCACTCTCGGCCGACACCCCTCATGGCCAACCGTTACACCATGGATCTGACTGCCAT
CTACGAGAGCCTCCTGTCGCTGAGCCCTGACGTGCCCGTGCCATCCGACCATGGAGGGACTGAGTCCAGCCCAGG
CTGGGGCTCCTCGGGACCCTGGAGCCTGAGCCCCTCCGACTCCAGCCCGTCTGGGGTCACCTCCCGCCTGCCTGG
CCGCTCCACCAGCCTAGTGGAGGGCCGCAGCTGTGGCTGGGTGCCCCCACCCCCTGGCTTCGCACCGCTGGCTCC
CCGCCTGGGCCCTGAGCTGTCACCCTCACCCACTTCGCCCACTGCAACCTCCACCACCCCCTCGCGCTACAAGAC
TGAGCTATGTCGGACCTTCTCAGAGAGTGGGCGCTGCCGCTACGGGGCCAAGTGCCAGTTTGCCCATGGCCTGGG
CGAGCTGCGCCAGGCCAATCGCCACCCCAAATACAAGACGGAACTCTGTCACAAGTTCTACCTCCAGGGCCGCTG
CCCCTACGGCTCTCGCTGCCACTTCATCCACAACCCTAGCGAAGACCTGGCGGCCCCGGGCCACCCTCCTGTGCT
TCGCCAGAGCATCAGCTTCTCCGGCCTGCCCTCTGGCCGCCGGACCTCACCACCACCACCAGGCCTGGCCGGCCC
TTCCCTGTCCTCCAGCTCCTTCTCGCCCTCCAGCTCCCCACCACCACCTGGGGACCTTCCACTGTCACCCTCTGC
CTTCTCTGCTGCCCCTGGCACCCCCCTGGCTCGAAGAGACCCCACCCCAGTCTGTTGCCCCTCCTGCCGAAGGGC
CACTCCTATCAGCGTCTGGGGGCCCTTGGGTGGCCTGGTTCGGACCCCCTCTGTACAGTCCCTGGGATCCGACCC
TGATGAATATGCCAGCAGCGGCAGCAGCCTGGGGGGCTCTGACTCTCCCGTCTTCGAGGCGGGAGTTTTTGCACC
ACCCCAGCCCGTGGCAGCCCCCCGGCGACTCCCCATCTTCAATCGCATCTCTGTTTCTGAGTGACAAAGTGACTG
CCCGGTCAGATCAGCTGGATCTCAGCGGGGAGCCACGTCTCTTGCACTGTGGTCTCTGCATGGACCCCAGGGCTG
TGGGGACTTGGGGGACAGTAATCAAGTAATCCCCTTTTCCAGAATGCATTAACCCACTCCCCTGACCTCACGCTG
GGGCAGGTCCCCAAGTGTGCAAGCTCAGTATTCATGATGGTGGGGGATGGAGTGTCTTCCGAGGTTCTTGGGGGA
AAAAAAATTGTAGCATATTTAAGGGAGGCAATGAACCCTCTCCCCCACCTCTTCCCTGCCCAAATCTGTCTCCTA
GAATCTTATGTGCTGTGAATAATAGGCCTTCACTGCCCCTCCAGTTTTTATAGACCTGAGGTTCCAGTGTCTCCT
GGTAACTGGAACCTCTCCTGAGGGGGAATCCTGGTGCTCAAATTACCCTCCAAAAGCAAGTAGCCAAAGCCGTTG
CCAAACCCCACCCATAAATCAATGGGCCCTTTATTTATGACGACTTTATTTATTCTAATATGATTTTATAGTATT
TATATATATTGGGTCGTCTGCTTCCCTTGTATTTTTCTTCCTTTTTTTTGTAATATTGAAAACGACGATATAATTA
TTATAAGTAGACTATAATATATTTAGTAATATATATTATTACCTTAAAAGTCTATTTTTGTGTTTTGGGCATTTT
TAAATAAACAATCTGAGTGT

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FIGURE 2585

GAATTAGGGGAACTCAGAAATCCATCCCCCACCCCACGGCCCTACCTAGAAGACTTAGGAATGTGGGTCCCCAGC
GCCGCCATCTGAGACTCCAGAGTCGAGGCTCCTAGCATCCCCTACGTAGAACACTGAGAAATTCCGACTGCGGGA
CCCCAGTCTCCGAGAGACCCCAGATTCTATTCCTGGAGCCTGAGAGCCCGAAGTTCACGCCCCTGAGTCTGGGCT
CCGCACCTCCCTGGGGACCGCGTCGGGGTCGCGCAGGAGCCGGGCTGCCTCGAGCCGGGGCTGGAGGCTCCCCGG
GAGGACTCTGCTGGGCCGCTCAGCCATGCCTGAGGGAGCCCAAGGACTGAGCCTCTCCAAACCTAGCCCAAGCCT
CGGGTGTGGCCGAAGAGGTGAAGTGTGTGACTGTGGCACCGTGTGTGAGACTCGGACAGCTCCTGCAGCCCCCAC
CATGGCCTCCCCCCGAGGTTCTGGGAGCTCCACATCCCTGAGCACAGTGGGCTCTGAGGGGGATCCAGCCCCTGG
GCCCACTCCAGCCTGCTCAGCCTCCAGGCCAGAGCCCCTTCCAGGGCCTCCCATCCGCCTACATCTCTCTCCGGT
GGGGATCCCAGGTTCAGCCAGACCCTCAAGGCTGGAGCGTGTGGCCCGGGAGATCGTGGAGACAGAACGGGCCTA
TGTCAGGGACCTCCGCAGCATCGTGGAGGACTACCTGGGCCCTCTGCTGGACGGCGGGGTCCTGGGGCTGAGCGT
GGAGCAGGTGGGCACGCTGTTTGCCAACATTGAGGACATCTACGAGTTCAGCAGCGAGCTCCTGGAGGACTTGGA
GAACAGCAGCAGCGCCGGGGGTATTGCCGAGTGCTTCGTGCAGAGGAGCGAGGATTTTGACATCTACACATTGTA
CTGCATGAACTACCCGAGCTCCCTGGCCCTGCTCCGGGAGCTGTCGTTGTCTCCGCCAGCAGCCCTGTGGCTGCA
GGAGCGCCAGGCCCAGCTTCGCCACTCGCTGCCCCTGCAGAGCTTCCTGCTGAAACCTGTCCAGCGCATTCTCAA
GTACCATCTGCTGCTGCAGGAACTAGGGAAGCACTGGGCGGAGGGCCCAGGCACTGGGGGTCGCGAGATGGTGGA
GGAAGCTATTGTGTCCATGACAGCGGTTGCCTGGTACATCAACGACATGAAGCGCAAGCAGGAGCATGCAGCGCG
CCTCCAGGAAGTGCAGCGGCGGCTGGGTGGCTGGACCGGACCAGAGCTCAGTGCTTTTGGGGAACTGGTGTTGGA
GGGCGCGTTCCGAGGAGGCGGAGGGGGTGGCCCCCGGCTACGAGGGGGTGAGCGGCTGCTCTTCCTGTTCTCTCG
GATGCTGCTGGTGGCCAAGCGCAGGGGGCTGGAGTACACCTACAAAGGCCACATCTTCTGCTGCAACCTGAGCGT
GAGCGAGAGTCCCCGAGACCCTCTAGGGTTCAAGGTGTCTGATCTGACCATTCCCAAGCACAGACACCTGCTCCA
GGCCAAGAACCAAGAAGAGAAGAGGCTGTGGATTCACTGTCTCCAGCGCCTCTTCTTTGAGAACCACCCTGCCTC
CATCCCTGCCAAGGCAAAGCAAGTTCTCCTTGAAAACAGCCTGCATTGTGCCCCCAAAAGTAAGCCTGTCCTAGA
GCCCCTGACACCCCCACTTGGGTCTCCTCGACCTCGAGATGCTAGAAGTTTTACCCCTGGGCGAAGGAACACAGC
TCCATCTCCTGGGCCCTCTGTGATTCGCCGAGGCCGCAGGCAGTCTGAGCCGGTGAAGGACCCTTATGTCATGTT
CCCACAGAACGCTAAGCCTGGATTCAAGCACGCTGGCAGCGAAGGGGAACTCTACCCTCCAGAATCTCAGCCACC
AGTTTCAGGCTCTGCACCCCCTGAGGACCTGGAGGATGCTGGACCCCCAACACTGGACCCCTCTGGGACCTCAAT
CACTGAAGAAATCCTGGAACTGCTGAATCAGCGAGGCCTTCGAGATCCAGGGGAATCTATGGGCCTTCACAGGGC
CCAGGGGGCTCCTGATGCCCCCTTCCACATGTGAGCCAGGACATGAGGCTTCCCTGAAGCAAGGATTTCAGCCAG
ATGCCATAGACCCTCAGAACTTGACCTGGAAGTCCAGACACTGAACGCAGGCCTCAAAACTGCTGCGGCCTTCCA
ACTCCTGGTATCTGCATCGGCGAATGGCCCTTCTTGCCTTGATCCACAGGGATGGGGAAGGGAGGAATGTCATTA
ATGTTTTGTTAATACTGATTCTTTCATGC

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FIGURE 2586

GGTGGCCCCTAGCTTTCCTTTTCCGGTTGCGGCGCCGCGCGGTGAGGTTGTCTAGTCCACGCTCGGAGCCATGCC
GTCCAAGGGCCCGCTGCAGTCTGTGCAGGTCTTCGGACGCAAGAAGACAGCGACAGCTGTGGCGCACTGCAAACG
CGGCAATGGTCTCATCAAGGTGAACGGGCGGCCCCTGGAGATGATTGAGCCGCGCACGCTACAGTACAAGCTGCT
GGAGCCAGTTCTGCTTCTCGGCAAGGAGCGATTTGCTGGTGTAGACATCCGTGTCCGTGTAAAGGGTGGTGGTCA
CGTGGCCCAGATTTATGCTATCCGTCAGTCCATCTCCAAAGCCCTGGTGGCCTATTACCAGAAATATGTGGATGA
GGCTTCCAAGAAGGAGATCAAAGACATCCTCATCCAGTATGACCGGACCCTGCTGGTAGCTGACCCTCGTCGCTG
CGAGTCCAAAAAGTTTGGAGGCCCTGGTGCCCGCGCTCGCTACCAGAAATCCTACCGATAAGCCCATCGTGACTC
AAAACTCACTTGTATAATAAACAGTTTTTGAGGGATTTTAAAGTTTCAAAAAAAAAAAAAAAAAAAA

FIGURE 2587A

AGAGAACAGATTCGGAAACTGGGGAGGTCTAGCATGTGGCGTAGGAGGGGGTCCTCACTCCGCTTCGCGATTGCC
AAAACGAGCCTGCCGGAAGCGCCCTAAGGGGTTTTCTTCTCCCAGGGAACCAGCGGGGAAACTGAGGCTCGGGGT
GGAGCGCAGGATTGTGGGACGCGCCAAGGCTGCTGTCTTTCCCAGCAGCAGCGGAAGATGTCGGACAGCGAGGAC
AGCAACTTTTCCGAGGAGGAGGACAGCGAGCGCAGCAGTGACGGCGAGGAGGCCGAGGTAGACGAAGAGCGGCGG
AGTGCAGCGGGCAGTGAGAAAGAAGAAGAGCCTGAGGACGAAGAGGAGGAGGAAGAGGAGGAGGAATACGATGAG
GAAGAGGAGGAAGAAGATGATGACCGACCCCCCAAGAAACCCCGCCATGGAGGCTTCATTCTGGACGAGGCTGAT
GTTGACGATGAGTATGAGGACGAGGACCAGTGGGAGGATGGAGCAGAGGACATTCTAGAGAAAGAAGAGATTGAA
GCCTCCAATATCGATAATGTTGTCCTGGATGAAGATCGTTCTGGGGCTCGCCGCCTGCAAAACCTCTGGAGGGAC
CAGCGAGAAGAAGAACTGGGCGAGTATTACATGAAGAAATACGCCAAGTCATCTGTGGGAGAGACGGTGTATGGA
GGATCTGATGAGCTCTCAGACGACATCACCCAGCAGCAGCTGCTCCCAGGAGTCAAGGATCCCAATCTGTGGACT
GTCAAATGTAAGATTGGGGAGGAACGGGCCACGGCCATTTCCTTGATGCGCAAGTTCATTGCCTACCAGTTCACA
GACACGCCCCTGCAGATCAAGTCAGTAGTGGCACCAGAGCATGTGAAGGGCTACATCTACGTGGAGGCCTACAAG
CAGACCCACGTGAAGCAGGCCATTGAGGGGGTGGGCAACCTGCGGCTTGGCTACTGGAACCAGCAGATGGTGCCC
ATCAAGGAGATGACAGACGTGCTCAAAGTGGTGAAGGAGGTGGCCAACCTGAAACCAAAGTCCTGGGTCCGCCTC
AAGCGGGGCATCTACAAGGATGACATTGCTCAGGTGGACTACGTGGAGCCCAGCCAGAACACCATCTCCCTGAAG
ATGATCCCACGCATCGACTACGATCGCATCAAGGCCCGCATGAGCTTGAAAGACTGGTTTGCCAAAAGGAAGAAG
TTTAAGCGGCCTCCACAGAGGCTGTTTGATGCTGAGAAGATCAGGTCCCTGGGGGGTGATGTTGCCTCTGATGGT
GACTTCCTCATCTTTGAGGGGAACCGTTACAGCCGGAAGGGCTTTCTGTTCAAGAGCTTCGCCATGTCTGCTGTG
ATCACGGAGGGTGTGAAGCCAACACTCTCTGAGCTGGAAAAGTTTGAGGACCAGCCAGAGGGCATTGACCTGGAG
GTGGTGACTGAGAGCACAGGGAAGGAGCGGGAGCACAACTTCCAACCTGGGGACAACGTGGAGGTCTGTGAGGGT
GAGCTCATCAACCTGCAGGGCAAGATCCTCAGCGTGGATGGCAACAAGATCACCATCATGCCCAAGCATGAGGAC
CTCAAGGACATGTTGGAGTTCCCAGCCCAGGAACTTAGAAAATACTTCAAGATGGGGGACCACGTGAAGGTGATT
GCTGGCCGATTCGAGGGCGACACAGGCCTCATTGTGCGGGTGGAGGAGAATTTCGTTATCCTGTTCTCTGACCTC
ACCATGCATGAGCTGAAGGTGCTCCCCCGGGACCTGCAGCTCTGCTCAGAGACAGCATCAGGTGTGGATGTTGGG
GGCCAGCATGAATGGGGCGAGCTGGTGCAGCTGGATCCCCAGACTGTGGGTGTCATCGTGCGACTAGAACGGGAG
ACCTTCCAGGTGCTGAACATGTACGGGAAGGTGGTGACTGTCAGACATCAGGCTGTGACCCGGAAGAAGGACAAC
CGCTTTGCTGTGGCCTTGGACTCAGAGCAGAACAACATCCATGTGAAAGACATCGTTAAGGTCATTGATGGCCCC
CACTCAGGCCGAGAAGGGGAGATTCGCCATCTCTTCCGAAGCTTCGCCTTCCTACATTGCAAGAAACTGGTGGAG
AACGGGGGCATGTTTGTCTGCAAGACCCGCCACCTGGTGCTGGCTGGGGGCTCAAAGCCCCGTGATGTGACCAAC
TTCACCGTGGGTGGCTTTGCGCCTATGAGTCCCCGGATCAGCAGCCCCATGCACCCCAGTGCTGGAGGTCAGCGT
GGCGGCTTTGGTAGCCCAGGTGGCGGCAGTGGTGGCATGAGCAGGGGCCGGGGCCGGAGGGACAACGAACTCATC
GGCCAGACCGTGCGCATCTCCCAGGGGCCCTACAAAGGCTACATCGGTGTGGTGAAAGATGCCACAGAGTCCACG
GCCCGTGTGGAGCTGCACTCCACCTGCCAGACCATCTCTGTGGACCGTCAGCGGCTCACCACGGTGGGCTCACGG
CGCCCGGGCGGCATGACCTCGACCTATGGGAGGACGCCCATGTATGGCTCCCAGACGCCCATGTATGGCTCTGGC
TCCCGAACACCCATGTACGGCTCACAGACACCCCTCCAGGATGGTAGCCGCACCCCACACTACGGCTCACAGACG
CCCCTGCATGATGGCAGCCGCACTCCTGCCCAGAGTGGGGCCTGGGACCCCAACAACCCCAACACGCCGTCACGG
GCTGAGGAAGAATATGAGTATGCTTTCGATGATGAGCCCACCCCGTCCCCGCAGGCCTATGGGGGAACCCCCAAT
CCCCAAACACCTGGCTACCCAGACCCCTCGTCCCCACAGGTCAACCCACAATACAACCCGCAGACGCCAGGGACG
CCGGCCATGTACAACACAGACCAGTTCTCTCCCTATGCTGCCCCCTCCCCACAAGGTTCCTACCAGCCCAGCCCC
AGCCCCCAGAGCTACCACCAGGTGGCGCCAAGCCCAGCAGGCTACCAGAATACCCACTCCCCAGCCAGCTACCAC
CCTACACCGTCGCCCATGGCCTATCAGGCTAGCCCCAGCCCGAGCCCCGTTGGCTACAGTCCTATGACACCTGGA
GCTCCCTCCCCTGGTGGCTACAACCCACACACGCCAGGCTCAGGCATCGAGCAGAACTCCAGCGACTGGGTAACC
ACTGACATTCAGGTGAAGGTGCGGGACACCTACCTGGATACACAGGTGGTGGGACAGACAGGTGTCATCCGCAGT
GTCACGGGGGGCATGTGCTCTGTGTACCTGAAGGACAGTGAGAAGGTTGTCAGCATTTCCAGTGAGCACCTGGAG
CCTATCACCCCCACCAAGAACAACAAGGTGAAAGTGATCCTGGGCGAGGATCGGGAAGCCACGGGCGTCCTACTG
AGCATTGATGGTGAGGATGGCATTGTCCGTATGGACCTTGATGAGCAGCTCAAGATCCTCAACCTCCGCTTCCTG
GGGAAGCTCCTGGAAGCCTGAAGCAGGCAGGGCCGGTGGACTTCGTCGGATGAAGAGTGATCCTCCTTCCTTCCC
TGGCCCTTGGCTGTGACACAAGATCCTCCTGCAGGGCTAGGCGGATTGTTCTGGATTTCCTTTTGTTTTTCCTTT

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FIGURE 2587B

TAGTTTTCCATCTTTTCCCTCCCTGGTGCTCATTGGAATCTGAGTAGAGTCTGGGGGAGGGTCCCCACCTTCCTG
TACCTCCTCCCCACAGCTTGCTTTTGTTGTACCGTCTTTCAATAAAAAGAAGCTGTTTGGTCT

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FIGURE 2588

CTCAGAGGCTGGAGGGATCCTCCGTATGCTGAACGCTGGTCCCCTGGGCCCCCTTTATTTCTTTCTCTATACTTT
GTTTCTGTGTCTTTTTCTCTTCCAAAGTCTCTCGTTCCACCTAACGAGAAACACCCACAGGTGTGGAGGGGCAAC
CCATCCCTTCAGACAATTGGGAGGTGAGGGCCGATTGCCTTACACGGTGAGACAAGCGGCCTGACTCGTGACTAT
TTTTTTGGACAAATCAGGCAGCCACTGACTCCCTTCATTATGGCCTCAGCTTTATCTCTGGGCAATAAGTGTGAT
CCCTTCCTTCGCTGCGTCCTTTGCAGGGGCGGTGGCGCTCTGCAAGGCCCAAGGGGGCGTGGTCCAGATGACTTT
GAATCCCAGTTGTCGCCCCCAGGGTCAGCCAGGAGACTAGTCAGAAGCAAACGCGCCTGCGGCAATCCGCCCGAT
GCCTTTGGTCTCTCTCGGGCTTCCGTCCACCCGCCCCTCCCCCGCGTTTCCATTGGCTGTAGCTCCGGCCCGGGG
CGGGCGAAGAGGGAGCGAGTGGGCGGGGCCGCGTGGCGTCAGCGCAAGATGGCGGCCTCGGCAGCGGTGTTCTCG
CGCTTGCGAAGCGGGCTCCGGCTCGGCTCGCGGGGACTGTGCACGAGGTTGGCGACGCCGCCCCGCCGGGCCCCA
GATCAGGCCGCAGAGATCGGGAGCCGCGGGAGCACTAAGGCGCAAGGGCCACAGCAGCAGCCGGGCTCAGAGGGT
CCCAGCTATGCCAAAAAAGTTGCGCTCTGGCTTGCTGGGCTGCTTGGAGCTGGTGGGACTGTGAGCGTCGTCTAT
ATCTTTGGAAACAACCCGGTGGACGAAAATGGTGCCAAGATTCCTGATGAGTTCGACAATGATCCAATTCTGGTA
CAGCAGTTGCGCCGGACATACAAATATTTCAAAGATTATAGACAGATGATCATCGAGCCCACCAGCCCTTGCCTT
CTCCCAGACCCTCTGCAGGAACCGTACTACCAGCCACCCTACACGCTCGTTTTGGAGCTCACCGGCGTCCTCTTG
CATCCTGAGTGGTCGCTGGCCACTGGCTGGAGGTTTAAGAAGCGCCCAGGCATCGAGACCTTGTTCCAGCAGCTT
GCCCCTTTATATGAAATTGTCATCTTTACGTCAGAGACTGGCATGACTGCGTTTCCACTCATTGATAGTGTGGAC
CCCCATGGCTTCATCTCCTACCGCCTATTCCGGGACGCCACAAGATACATGGATGGACACCATGTAAAGGATATT
TCATGTCTGAATCGGGACCCAGCTCGAGTAGTAGTTGTGGACTGCAAGAAGGAAGCCTTCCGCCTGCAGCCCTAT
AACGGCGTTGCCCTGCGGCCCTGGGACGGCAACTCTGATGACCGGGTCTTGTTGGATCTGTCTGCCTTCCTCAAG
ACCATTGCACTGAATGGTGTGGAGGACGTGCGAACCGTGCTGGAGCACTATGCCCTGGAGGATGACCCGCTGGCG
GCTTTCAAACAGCGGCAAAGCCGGCTAGAGCAGGAGGAGCAGCAGCGCCTGGCCGAGCTCTCCAAGTCCAACAAG
CAGAACCTCTTCCTTGGCTCCCTCACCAGCCGCTTGTGGCCTCGCTCCAAACAGCCCTGAACTCTGGGCCTCCTC
AAACTCAGTGCCTGGGTCCAGGGCCCCAGTGCTTCCAGACCAAGACTTGGGCCACCACTTGTCCAATAAAGTACA
TCCCAGACGCCACACCTGCTGTGTCCCGAGAGTCTCCAGATGGGGGCATCAGGGTGAGGTCCGGGACTCTTGGGT
CATCGTCCCACAGTGGCTGATCGGCTGCCAAGCACAGTGGGGGTGCTTTGTTGGATCAGAGCAGATTTTTCACCC
TGGTCTCGGAATCTAAAAACCCTCGCTGTGTCTTCCTGTGTGTTGCGTGATCTGTGAAAAATACATCTCCCTCTG
ACCACAGACTCCTCATCTGTGGAGAAGGGAAGAGAGGATGGCACTTGGCTTTAAAGACAGGTAGCTGCCAGGCTA
CTGTGGAGAGAATGTGTTATGGGCCTAGTGGGCCTCTGGTGGACCAGAGATTACCCCTCTCAACAGGCCAGCTGC
TGGTTGGCTCCAGCCAGTGTGGCCCTGGGGTAAAGGGGGCCTGGAGTTGCTTGACACGCCAGTTGTTCAAA

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FIGURE 2589

GAAGGCCATGGTCTCCCCACGGATGTCCGGGCTCCTCTCCCAGACTGTGATCCTAGCGCTCATTTTCCTCCCCCA
GACACGGCCCGCTGGCGTCTTCGAGCTGCAGATCCACTCTTTCGGGCCGGGTCCAGGCCCTGGGGCCCCGCGGTC
CCCCTGCAGCGCCCGGCTCCCCTGCCGCCTCTTCTTCAGAGTCTGCCTGAAGCCTGGGCTCTCAGAGGAGGCCGC
CGAGTCCCCGTGCGCCCTGGGCGCGGCGCTGAGTGCGCGCGGACCGGTCTACACCGAGCAGCCCGGAGCGCCCGC
GCCTGATCTCCCACTGCCCGACGGCCTCTTGCAGGTGCCCTTCCGGGACGCCTGGCCTGGCACCTTCTCTTTCAT
CATCGAAACCTGGAGAGAGGAGTTAGGAGACCAGATTGGAGGGCCCGCCTGGAGCCTGCTGGCGCGCGTGGCTGG
CAGGCGGCGCTTGGCAGCCGGAGGCCCGTGGGCCCGGGACATTCAGCGCGCAGGCGCCTGGGAGCTGCGCTTCTC
GTACCGCGCGCGCTGCGAGCCGCCTGCCGTCGGGACCGCGTGCACGCGCCTCTGCCGTCCGCGCAGCGCCCCCTC
GCGGTGCGGTCCGGGACTGCGCCCCTGCGCACCGCTCGAGGACGAATGTGAGGCGCCGCTGGTGTGCCGAGCAGG
CTGCAGCCCTGAGCATGGCTTCTGTGAACAGCCCGGTGAATGCCGATGCCTAGAGGGCTGGACTGGACCCCTCTG
CACGGTCCCTGTCTCCACCAGCAGCTGCCTCAGCCCCAGGGGCCCGTCCTCTGCTACCACCGGATGCCTTGTCCC
TGGGCCTGGGCCCTGTGACGGGAACCCGTGTGCCAATGGAGGCAGCTGTAGTGAGACACCCAGGTCCTTTGAATG
CACCTGCCCGCGTGGGTTCTACGGGCTGCGGTGTGAGGTGAGCGGGGTGACATGTGCAGATGGACCCTGCTTCAA
CGGCGGCTTGTGTGTCGGGGGTGCAGACCCTGACTCTGCCTACATCTGCCACTGCCCACCCGGTTTCCAAGGCTC
CAACTGTGAGAAGAGGGTGGACCGGTGCAGCCTGCAGCCATGCCGCAATGGCGGACTCTGCCTGGACCTGGGCCA
CGCCCTGCGCTGCCGCTGCCGCGCCGGCTTCGCGGGTCCTCGCTGCGAGCACGACCTGGACGACTGCGCGGGCCG
CGCCTGCGCTAACGGCGGCACGTGTGTGGAGGGCGGCGGCGCGCACCGCTGCTCCTGCGCGCTGGGCTTCGGCGG
CCGCGACTGCCGCGAGCGCGCGGACCCGTGCGCCGCGCGCCCCTGTGCTCACGGCGGCCGCTGCTACGCCCACTT
CTCCGGCCTCGTCTGCGCTTGCGCTCCCGGCTACATGGGAGCGCGGTGTGAGTTCCCAGTGCACCCCGACGGCGC
AAGCGCCTTGCCCGCGGCCCCGCCGGGCCTCAGGCCCGGGGACCCTCAGCGCTACCTTTTGCCTCCGGCTCTGGG
ACTGCTCGTGGCCGCGGGCGTGGCCGGCGCTGCGCTCTTGCTGGTCCACGTGCGCCGCCGTGGCCACTCCCAGGA
TGCTGGGTCTCGCTTGCTGGCTGGGACCCCGGAGCCGTCAGTCCACGCACTCCCGGATGCACTCAACAACCTAAG
GACGCAGGAGGGTTCCGGGGATGGTCCGAGCTCGTCCGTAGATTGGAATCGCCCTGAAGATGTAGACCCTCAAGG
GATTTATGTCATATCTGCTCCTTCCATCTACGCTCGGGAGGTAGCGACGCCCCTTTTCCCCCCGCTACACACTGG
GCGCGCTGGGCAGAGGCAGCACCTGCTTTTTCCCTACCCTTCCTCGATTCTGTCCGTGAAATGAATTGGGTAGAG
TCTCTGGAAGGTTTTAAGCCCATTTTCAGTTCTAACTTACTTTCATCCTATTTTGCATCCCTCTTATCGTTTTGA
GCTACCTGCCATCTTCTCTTT

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FIGURE 2590

GGGATGGGGGCGGAGTCCAGGGCGTGGGGGGGCCGGTTTGTTGTGGTCGCCATTTTGCTGGTTGCATTACTGGGT
AATCGGGGCCCTGGCTTGCCGCGTCCGCCGGATACCCTCAGCCAGTGGGCAGGTCTGAGCTCGGGCTCCCCGAGC
AGTTTGAGTCCCCTTGCCCGCTCCTTCAGGTCTCAGCGGCGGTGGCAGCCGAGGTGCAGGATGCAAGAAGGCGCC
CCCCGGCCGGGCTCCCGCTCCAGGCCTCGCTCCCCTGCGGCCCTCTGAGCCCACC**ATG**GCCGTCCCACCGGGCCA
TGGTCCCTTCTCTGGCTTCCCAGGGCCCCAGGAGCACACGCAGGTATTGCCTGATGTGCGGCTACTGCCTCGGAG
GCTGCCCCTGGCCTTCCGGGATGCAACCTCAGCCCCGCTGCGTAAGCTCTCTGTGGACCTCATCAAGACCTACAA
GCACATCAATGAGGTATACTATGCGAAGAAGAAGCGGCGGGCCCAGCAGGCGCCACCCCAGGATTCGAGCAACAA
GAAGGAGAAGAAGGTCCTGAACCATGGTTATGATGACGACAACCATGACTACATCGTGCGCAGTGGCGAGCGCTG
GCTGGAGCGCTACGAAATTGACTCGCTCATTGGCAAAGGCTCCTTTGGCCAGGTGGTGAAAGCCTATGATCATCA
GACCCAGGAGCTTGTGGCCATCAAGATCATCAAGAACAAAAAGGCTTTCCTGAACCAGGCCCAGATTGAGCTGCG
GCTGCTGGAGCTGATGAACCAGCATGACACGGAGATGAAGTACTATATAGTACACCTGAAGCGGCACTTCATGTT
CCGGAACCACCTGTGCCTGGTATTTGAGCTGCTGTCCTACAACCTGTACGACCTCCTGCGCAACACCCACTTCCG
CGGCGTCTCGCTGAACCTGACCCGGAAGCTGGCGCAGCAGCTCTGCACGGCACTGCTCTTTCTGGCCACGCCTGA
GCTCAGCATCATTCACTGCGACCTCAAGCCCGAAAACATCTTGCTGTGCAACCCCAAGCGCAGCGCCATCAAGAT
TGTGGACTTCGGCAGCTCCTGCCAGCTTGGCCAGAGGATCTACCAGTATATCCAGAGCCGCTTCTACCGCTCACC
TGAGGTGCTCCTGGGCACACCCTACGACCTGGCCATTGACATGTGGTCCCTGGGCTGCATCCTTGTGGAGATGCA
CACCGGAGAGCCCCTCTTCAGTGGCTCCAATGAGGTCGACCAGATGAACCGCATTGTGGAGGTGCTGGGCATCCC
ACCGGCCGCCATGCTGGACCAGGCGCCCAAGGCTCGCAAGTACTTTGAACGGCTGCCTGGGGGTGGCTGGACCCT
ACGAAGGACGAAAGAACTCAGGAAGGATTACCAGGGCCCCGGGACACGGCGGCTGCAGGAGGTGCTGGGCGTGCA
GACGGGCGGGCCCGGGGGCCGGCGGGCGGGGGAGCCGGGCCACAGCCCCGCCGACTACCTCCGCTTCCAGGACCT
GGTGCTGCGCATGCTGGAGTATGAGCCCGCCGCCCGCATCAGCCCCCTGGGGGCTCTGCAGCACGGCTTCTTCCG
CCGCACGGCCGACGAGGCCACCAACACGGGCCCGGCAGGCAGCAGTGCCTCCACCTCGCCCGCGCCCCTCGACAC
CTGCCCCTCTTCCAGCACCGCCAGCTCCATCTCCAGTTCTGGAGGCTCCAGTGGCTCCTCCAGTGACAACCGGAC
CTACCGCTACAGCAACCGATATTGTGGGGGCCCTGGGCCCCCTATCACAGACTGTGAGATGAACAGCCCCCAGGT
CCCACCCTCCCAGCCGCTGCGGCCCTGGGCAGGGGGTGATGTGCCCCACAAGACACATCAAGCCCCTGCCTCTGC
CTCGTCACTGCCTGGGACCGGGGCCCAGTTACCCCCCCAGCCCCGATACCTTGGTCGTCCCCCATCACCAACCTC
ACCACCACCCCCGGAGCTGATGGATGTGAGCCTGGTGGGCGGCCCTGCTGACTGCTCCCCACCTCACCCAGCGCC
TGCCCCCCAGCACCCGGCTGCCTCAGCCCTCCGGACTCGGATGACTGGAGGTCGTCCACCCCTCCCGCCTCCTGA
TGACCCTGCCACTCTGGGGCCTCACCTGGGCCTCCGTGGTGTACCCCAGAGCACAGCAGCCAGCTCG**TGA**CCCTG
CCCCCTCCCTGGGGCCCCTCCTGAAGCCATACCCTCCCCCATCTGGGGGCCCTGGGCTCCCATCCTCATCTCTCT
CCTTGACTGGAATTGCTGCTACCCAGCTGGGGTGGGTGAGGCCTGCACTGATTGGGGCCTGGGGCAGGGGGGTCA
AGGAGAGGGTTTTGGCCGCTCCCTCCCCACTAAGGACTGGACCCTTGGGCCCCTCTCCCCCTTTTTTTCTATTTA
TTGTACCAAAGACAGTGGTGGTCCGGTGGAGGGAAGACCCCCCCTCACCCCAGGACCCTAGGAGGGGGTGGGGGC
AGGTAGGGGGAGATGGCCTTGCTCCTCCTCGCTGTACCCCCAGTAAAGAGCTTTCTCACA

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FIGURE 2591

CGGACTCCGGAGCCGCACAAACCAGGGCTCGCCATGAAGCCAGGATTCAGTCCCCGTGGGGGTGGCTTTGGCGGC
CGAGGGGGCTTTGGTGACCGTGGTGGTCGTGGAGGCCGAGGGGGCTTTGGCGGGGGCCGAGGTCGAGGCGGAGGC
TTTAGAGGTCGTGGACGAGGAGGAGGTGGAGGCGGCGGCGGCGGTGGAGGAGGAGGAAGAGGTGGTGGAGGCTTC
CATTCTGGTGGCAACCGGGGTCGTGGTCGGGGAGGAAAAAGAGGAAACCAGTCGGGGAAGAATGTGATGGTGGAG
CCGCATCGGCATGAGGGTGTCTTCATTTGTCGAGGAAAGGAAGATGCACTGGTCACCAAGAACCTGGTCCCTGGG
GAATCAGTTTATGGAGAGAAGAGAGTCTCGATTTCGGAAGGAGATGACAAAATTGAGTACCGAGCCTGGAACCCC
TTCCGCTCCAAGCTAGCAGCAGCAATCCTGGGTGGTGTGGACCAGATCCACATCAAACCGGGGGCTAAGGTTCTC
TACCTCGGGGCTGCCTCGGGCACCACGGTCTCCCATGTCTCTGACATCGTTGGTCCGGATGGTCTAGTCTATGCA
GTCGAGTTCTCCCACCGCTCTGGCCGTGACCTCATTAACTTGGCCAAGAAGAGGACCAACATCATTCCTGTGATC
GAGGATGCTCGACACCCACACAAATACCGCATGCTCATCGCAATGGTGGATGTGATCTTTGCTGATGTGGCCCAG
CCAGACCAGACCCGGATTGTGGCCCTGAATGCCCACACCTTCCTGCGTAATGGAGGACACTTTGTGATTTCCATT
AAGGCCAACTGCATTGACTCCACAGCCTCAGCCGAGGCCGTGTTTGCCTCCGAAGTGAAAAAGATGCAACAGGAG
AACATGAAGCCGCAGGAGCAGTTGACCCTTGAGCCATATGAAAGAGACCATGCCGTGGTCGTGGGAGTGTACAGG
CCACCCCCCAAGGTGAAGAACTGAAGTTCAGCGCTGTCAGGATTGCGAGAGATGTGTGTTGATACTGTTGCACGT
GTGTTTTTCTATTAAAAGACTCATCCGTC

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FIGURE 2592

CAACGGGGGCATCCACTACATCACCCTTGATGGCCGTGTCTACGACCTGCATGGCTCCTGCTCCTATGTCTTGGC
CCAAGTCTGCCACCCAAAGCCTGGGGACGAGGACTTTTCCATCGTGCTTGAGAAGAATGCAGCTGGAGATCTCCA
ACGCCTCCTGGTTACTGTGGCTGGCCAGGTTGTGAGCCTAGCTCAGGGGCAGCAGGTCACCGTGGACGGCGAGGC
TGTGGCCCTGCCTGTGGCTGTGGGCCGCGTGCGGGTGACCGCCGAGGGCCGAAACATGGTTCTGCAGACGACCAA
GGGGCTGCGGCTTCTCTTTGATGGCGATGCCCACCTCCTCATGTCCATCCCCAGCCCCTTCCGTGGACGGCTCTG
TGGCCTCTGTGGGAACTTCAATGGCAACTGGAGTGACGACTTTGTCCTGCCCAATGGCTCAGCAGCGTCCAGTGT
GGAGACCTTCGGGGCTGCATGGCGGGCGCCCGGCTCCTCCAAGGGCTGTGGCGAGGGCTGCGGGCCCCAAGGCTG
CCCAGTGTGCTTGGCAGAGGAGACTGCACCCTATGAGAGCAACGAGGCCTGCGGGCAGCTCCGGAACCCCCAGGG
CCCCTTCGCGACCTGCCAGGCGGTGCTGAGTCCCTCTGAGTACTTCCGCCAATGCGTATACGACCTGTGCGCGCA
AAAGGGTGACAAAGCCTTCCTGTGCCGCAGCCTGGCAGCCTACACGGCGGCCTGTCAGGCAGCTGGCGTGGCCGT
GAAGCCCTGGAGGACAGACAGCTTCTGCCCGCTCCATTGCCCCGCCCACAGCCACTACTCCATCTGCACTCGCAC
CTGCCAGGGATCCTGTGCGGCTCTCTCCGGCCTCACGGGCTGCACCACCCGCTGTTTTGAGGGCTGTGAGTGCGA
CGACCGCTTCCTGCTTTCCCAGGGTGTCTGCATCCCTGTCCAAGATTGTGGCTGCACCCATAATGGCCGATACTT
GCCGGTAAACTCCTCCCTGCTGACCTCAGACTGCAGCGAGCGCTGTTCCTGTTCCTCAAGCTCTGGCCTGACATG
CCAGGCAGCTGGCTGCCCACCAGGCCGTGTATGTGAGGTCAAGGCTGAAGCCCGGAACTGCTGGGCCACCCGTGG
TCTCTGTGTCCTGTCTGTGGGTGCCAACCTCACCACCTTTGATGGGGCCCGTGGTGCCACCACCTCTCCTGGTGT
CTATGAGCTCTCTTCCCGCTGCCCAGGACTACAGAATACCATCCCCTGGTACCGTGTAGTTGCCGAAGTCCAGAT
CTGCCATGGCAAAACGGAGGCTGTGGGCCAGGTCCACATCTTCTTCCAGGATGGGATGGTGACGTTGACTCCAAA
CAAGGGTGTGTGGGTGAATGGTCTCCGAGTGGATCTCCCAGCTGAGAAGTTAGCATCTGTGTCCGTGAGTCGTAC
ACCTGATGGCTCCCTGCTAGTCCGCCAGAAGGCAGGGGTCCAGGTGTGGCTTGGAGCCAATGGGAAGGTGGCTGT
GATTGTCAGCAATGACCATGCTGGGAAACTGTGTGGGGCCTGTGGAAACTTTGACGGGGACCAGACCAATGATTG
GCATGACTCCCAGGAGAAGCCAGCGATGGAGAAATGGAGAGCGCAGGACTTCTCCCCATGTTATGGCTGATCAGT
CATCCACCAGGAACGAAGATTTCCTGAAGAAGACCTGGTCCCTCTGGAGGTTGCAGTGGCTGAAGGATGCATCAT
GTGCTCCTACCCTGCTCTACCGCTTTTCTGGGTCACAGAGGCCAAATGTGAGAGCATTGAATAAATATCTTAAGC
T

FIGURE 2593A

CTGCAGCCATGGGTGCCCTATGGAGCTGGTGGATACTCTGGGCTGGAGCAACCCTCCTGTGGGGATTGACCCAGG
AGGCTTCAGTGGACCTCAAGAACACTGGCAGAGAGGAATTCCTCACAGCCTTCCTGCAGAACTATCAGCTGGCCT
ACAGCAAGGCCTACCCCCGCCTCCTTATCTCCAGTCTGTCAGAGAGCCCCGCTTCAGTCTCCATCCTCAGCCAGG
CAGACAACACCTCAAAGAAGGTCACAGTGAGGCCCGGGGAGTCGGTCATGGTCAACATCAGTGCCAAGGCTGAGA
TGATAGGCAGCAAGATCTTCCAGCATGCGGTGGTGATCCATTCTGACTATGCCATCTCTGTGCAGGCACTAAATG
CCAAGCCTGACACAGCGGAGCTGACACTGCTGCGGCCCATCCAGGCCCTAGGCACCGAGTATTTTGTGCTCACAC
CCCCCGGCACCTCAGCCAGGAATGTCAAGGAGTTTGCCGTGGTGGCCGGTGCCGCAGGTGCCTCGGTCAGTGTCA
CGCTGAAGGGGTCAGTGACATTCAATGGCAAGTTCTATCCAGCAGGCGATGTCCTAAGAGTGACTCTACAGCCCT
ACAATGTGGCCCAGCTACAGAGCTCAGTGGATCTCTCGGGGTCAAAGGTCACAGCTAGTAGCCCCGTGGCTGTCC
TCTCTGGCCACAGCTGTGCGCAGAAACATACGACCTGCAACCATGTGGTTGAGCAGCTGCTACCCACGTCTGCCT
GGGGCACCCACTATGTAGTACCCACGCTGGCCTCCCAATCTCGCTATGATTTGGCCTTCGTTGTGGCCAGCCAGG
CCACAAAGCTGACCTACAACCATGGGGGTATCACTGGCTCCCGTGGGCTCCAGGCAGGTGATGTGGTAGAGTTTG
AGGTCCGGCCATCCTGGCCACTCTACCTGTCTGCAAATGTGGGCATCCAGGTCCTGTTGTTTGGCACAGGTGCCA
TAAGGAATGAAGTGACTTATGACCCCTACCTGGTCCTGATCCCAGATGTGGCGGCCTACTGCCCAGCCTATGTGG
TCAAGAGTGTACCAGGCTGTGAGGGCGTGGCCCTGGTAGTGGCACAGACGAAGGCTATCAGCGGGCTGACCATAG
ATGGGCATGCAGTGGGGGCCAAGCTCACCTGGGAGGCTGTGCCAGGCAGTGAGTTCTCGTATGCTGAAGTGGAGC
TCGGCACAGCTGACATGATCCACACGGCCGAGGCCACCACCAACTTGGGACTGCTCACCTTCGGGCTGGCCAAGG
CTATAGGCTACGCAACAGCTGCTGATTGCGGCCGGACTGTACTGTCCCCAGTGGAGCCCTCCTGCGAAGGCATGC
AGTGCGCAGCCGGGCAGCGCTGCCAGGTGGTAGGCGGGAAGGCCGGGTGTGTGGCGGAGTCCACCGCTGTCTGCC
GCGCCCAGGGCGACCCCCATTACACCACCTTCGACGGCCGTCGCTACGACATGATGGGCACCTGTTCGTACACGA
TGGTGGAGCTGTGCAGCGAGGACGACACCCTGCCCGCCTTCAGCGTGGAGGCCAAGAACGAGCACCGGGGCAGCC
GCCGCGTCTCCTACGTGGGCCTCGTCACTGTGCGCGCCTACAGCCACTCTGTGTCGCTGACCCGCGGTGAAGTTG
GCTTCGTCCTGGTTGACAACCAGCGCTCGCGCCTGCCAGTCTCCCTGAGTGAGGGTCGCCTGCGTGTGTACCAGA
GCGGACCACGGGCCGTGGTGGAGCTGGTCTTTGGGCTGGTGGTCACTTATGACTGGGACTGCCAGCTGGCACTCA
GCCTGCCTGCACGCTTCCAAGACCAGGTGTGCGGGCTGTGTGGCAACTATAATGGTGACCCAGCAGACGACTTCC
TCACGCCTGACGGGGCTCTGGCTCCTGACGCTGTGGAGTTCGCAAGTAGCTGGAAGCTGGATGATGGGGACTACC
TGTGTGAGGATGGCTGCCAGAACAACTGTCCCGCCTGCACCCCAGGCCAGGCCCAACACTATGAGGGCGACCGAC
TCTGTGGCATGCTGACCAAGCTCG**ATG**GCCCCTTCGCTGTCTGCCATGACACCCTGGACCCCAGGCCCTTCCTGG
AGCAGTGTGTATATGACCTGTGTGTGGTCGGTGGGGAGCGGCTCAGCCTGTGCCGTGGCCTCAGCGCCTATGCCC
AGGCCTGTCTGGAGCTTGGCATCTCGGTTGGGGACTGGAGATCACCAGCCAACTGCCCCCTGTCCTGCCCTGCCA
ACAGCCGCTATGAGCTCTGCGGCCCTGCTTGCCCGACCTCCTGCAACGGGGCTGCGGCGCCGTCCAACTGCTCCG
GGCGCCCCTGCGTGGAGGGCTGCGTGTGCCTCCCAGGCTTCGTGGCCAGCGGCGGCGCCTGCGTGCCGGCCTCGT
CGTGTGGCTGCACCTTCCAGGGTCTCCAGCTCGCTCCGGGCCAGGAAGTGTGGGCGGACGAGTTGTGCCAAAGGC
GCTGCACCTGCAACGGCGCCACCCATCAGGTCACCTGCCGCGACAAGCAGAGCTGCCCGGCGGGTGAGCGCTGCA
GCGTCCAGAACGGCCTCCTGGGCTGCTACCCCGATCGCTTCGGGACCTGCCAGGGGTCCGGGGACCCACACTATG
TGAGCTTCGACGGCCGGCGCTTCGACTTCATGGGCACCTGCACGTACCTGCTGGTCGGCTCATGCGGCCAGAACG
CAGCGCTGCCTGCCTTCCGGGTGCTGGTGGAAAACGAGCATCGGGGCAGCCAGACTGTGAGCTACACGCGCGCCG
TGCGGGTGGAGGCCCGCGGGGTGAAGGTGGCCGTGCGCCGGGAGTACCCCGGGCAAGTGCTGGTGGATGACGTCC
TTCAGTATCTGCCCTTCCAAGCAGCAGATGGGCAGGTGCAGGTGTTCCGACAGGGCAGGGATGCCGTCGTGCGCA
CGGACTTTGGCCTGACTGTCACTTATGACTGGAATGCACGAGTGACTGCCAAGGTGCCCAGCAGCTATGCTGAGG
CCCTGTGTGGACTCTGTGGGAACTTCAACGGGGACCCAGCTGATGACCTGGCTCTGCGGGGTGGGGGTCAAGCTG
CCAATGCACTGGCCTTTGGGAACAGCTGGCAAGAAGAGACGAGGCCCGGCTGTGGAGCAACTGAACCGGGTGACT
GTCCCAAGCTGGACTCCCTGGTGGCCCAGCAGCTGCAGAGCAAGAATGAGTGTGGAATCCTTGCCGACCCCAAGG
GGCCCTTCCGGGAGTGCCATAGCAAGCTGGACCCCCAGGGTGCCGTGCGCGACTGTGTCTATGACCGCTGCCTGC
TGCCAGGCCAGTCTGGGCCACTGTGTGACGCACTGGCCACCTATGCTGCTGCATGCCAGGCTGCTGGAGCCACAG
TGCACCCCTGGAGGAGTGAAGAACTTTGCCCACTGAGCTGCCCACCCCACAGCCACTATGAGGCGTGTTCCTACG
GCTGCCCGCTGTCCTGTGGAGACCTCCCAGTGCCCGGGGGCTGTGGCTCAGAATGCCATGAGGGCTGCGTGTGCG
ATGAGGGCTTTGCGCTCAGTGGTGAGTCCTGCCTGCCCCTGGCCTCCTGTGGCTGCGTACACCAGGGCACCTACC

FIGURE 2593B

ACCCACCAGGCCAGACCTTCTACCCTGGCCCCGGATGTGATTCCCTTTGCCACTGCCAGGAGGGCGGCCTGGTGT
CCTGTGAGTCCTCCAGCTGCGGACCGCACGAGGCCTGCCAGCCATCCGGTGGCAGCTTGGGGTGTGTGGCCGTGG
GCTCTAGCACCTGCCAGGCGTCAGGAGACCCCCACTACACCACCTTCGATGGCCGCCGCTTCGACTTCATGGGCA
CCTGCGTGTATGTGCTGGCTCAGACCTGCGGCACCCGGCCTGGCCTGCATCGGTTTGCCGTCCTGCAGGAGAACG
TGGCCTGGGGTAATGGGCGAGTCAGTGTGACCAGGGTGATCACGGTCCAGGTGGCAAACTTCACCCTGCGGCTGG
AGCAGAGACAGTGGAAGGTCACGGTGAACGGTGTGGACATGAAGCTGCCCGTGGTGCTGGCCAACGGCCAGATCC
GTGCCTCCCAGCATGGTTCAGATGTTGTGATTGAGACCGACTTCGGCCTGCGTGTGGCCTACGACCTTGTGTACT
ATGTGCGGGTCACCGTCCCCGGAAACTACTACCAGCAGATGTGTGGCCTGTGTGGGAACTACAACGGCGACCCCA
AGGATGACTTCCAGAAGCCCAATGGCTCACAGGCAGGCAACGCCAATGAGTTCGGCAACTCCTGGGAGGAGGTGG
TGCCCGACTCTCCCTGCCTGCCGCCCACCCCTTGCCCGCCGGGGAGCGAGGACTGTATCCCCAGCCACAAGTGTC
CTCCCGAGCTGGAGAAGAAGTATCAGAAGGAGGAGTTCTGTGGGCTCCTCTCCAGCCCCACAGGGCCACTGTCCT
CCTGCCACAAGCTGGTGGATCCCCAGGGTCCCTTGAAAGATTGCATCTTTGATCTCTGCCTGGGTGGTGGGAACC
TGAGCATTCTCTGCAGCAACATCCATGCCTACGTGAGTGCTTGCCAGGCGGCTGGAGGCCACGTGGAGCCCTGGA
GGACTGAAACTTTCTGTCCCATGGAGTGCCCTCCGAACAGTCACTACGAGCTCTGTGCGGACACCTGCTCCCTGG
GCTGCTCAGCTCTCAGTGCCCCTCCACAGTGCCAGGATGGGTGTGCTGAGGGCTGCCAGTGTGACTCCGGCTTCC
TCTACAATGGCCAAGCCTGCGTGCCCATCCAGCAATGCGGCTGCTACCACAATGGTGTCTACTATGAGCCGGAGC
AGACAGTCCTCATTGACAACTGTCGGCAGCAGTGCACGTGCCATGCGGGTAAAGGCATGGTGTGCCAGGAACACA
GCTGCAAGCCGGGGCAGGTGTGCCAGCCCTCCGGAGGCATCCTGAGCTGCGTCACCAAAGACCCGTGCCACGGCG
TGACATGCCGGCCACAGGAGACATGCAAGGAGCAGGGTGGCCAGGGCGTGTGCCTGCCCAACTATGAGGCCACGT
GCTGGCTGTGGGGCGACCCACACTACCACTCCTTCGATGGCCGGAAGTTTGACTTCCAGGGCACCTGTAACTATG
TGCTGGCAACAACTGGCTGCCCGGGGGTCAGCACCCAGGGCCTGACACCCTTCACCGTCACCACCAAGAACCAGA
ACCGGGGCAACCCTGCTGTGTCCTACGTGAGAGTCGTCACCGTGGCTGCCCTCGGCACCAACATCTCCATCCACA
AGGACGAGATCGGCAAAGTCCGGGTGAACGGTGTGCTCACAGCCTTGCCTGTCTCTGTGGCCGACGGGCGGATTT
CAGTGACCCAGGGTGCATCGAAGGCACTGCTGGTGGCTGACTTTGGACTGCAAGTCAGCTATGACTGGAACTGGC
GGGTAGACGTGACGCTGCCCAGCAGCTATCATGGCGCAGTGTGCGGGCTCTGCGGTAACATGGACCGCAACCCCA
ACAATGACCAGGTCTTCCCTAATGGCACACTGGCTCCCTCCATACCCATCTGGGGCGGCAGCTGGCGAGCCCCAG
GCTGGGACCCACTGTGTTGGGACGAATGTCGGGGGTCCTGCCCAACGTGCCCTGAGGACCGGTTGGAGCAGTACG
AGGGCCCTGGCTTCTGCGGACCCCTGGCCCCCGGCACAGGGGGCCCTTTCACCACCTGCCATGCTCATGTGCCAC
CTGAGAGCTTCTTCAAGGGCTGTGTTCTGGACGTCTGCATGGGTGGTGGGGACCGTGACATTCTTTGCAAGGCTC
TGGCTTCCTATGTGGCCGCCTGCCAGGCTGCTGGGGTTGTCATCGAAGACTGGCGGGCACAGGTTGGCTGTGAGA
TCACCTGCCCAGAAAACAGCCACTATGAGGTCTGTGGCTCACCCTGCCCGGCCAGCTGTCCGTCCCCTGCACCCC
TTACGACGCCAGCCGTATGTGAGGGCCCCTGTGTGGAGGGCTGCCAGTGCGACGCGGGTTTCGTGTTAAGTGCTG
ACCGCTGTGTTCCCCTCAACAACGGCTGCGGCTGCTGGGCCAATGGCACCTACCACGAGGCGGGCAGTGAGTTTT
GGGCTGATGGCACCTGCTCCCAGTGGTGTCGCTGCGGGCCTGGGGGTGGCTCGCTGGTCTGCACACCTGCCAGCT
GTGGGCTGGGTGAAGTGTGTGGCCTCCTGCCATCCGGCCAGCACGGCTGCCAGCCCGTCAGCACAGCTGAGTGCC
AGGCGTGGGGTGACCCCCATTACGTCACTCTGGATGGGCACCGATTCAATTTCCAAGGCACCTGCGAGTACCTGC
TGAGTGCACCCTGCCACGGACCACCCTTGGGGGCTGAGAACTTCACTGTCACTGTAGCCAATGAGCACCGGGGCA
GCCAGGCTGTCAGCTACACCCGCAGTGTCACCCTGCAAATCTACAACCACAGCCTGACACTGAGTGCCCGCTGGC
CCCGGAAGCTACAGGTGGACGGCGTGTTCGTCACTCTGCCCTTCCAGCTGGACTCGCTCCTGCACGCACACCTGA
GCGGCGCCGACGTGGTGGTGACCACAACCTCAGGGCTCTCGCTGGCTTTCGACGGGGACAGCTTCGTGCGCCTGC
GCGTGCCGGCGGCGTACGCGGGCTCTCTCTGTGGCTTATGCGGGAACTACAACCAGGACCCCGCAGACGACCTGA
AGGCGGTGGGCGGGAAGCCCGCCGGATGGCAGGTGGGCGGCGCCCAGGGCTGCGGGGAATGTGTGTCCAAGCCAT
GCCCGTCGCCGTGCACCCCAGAGCAGCAAGAGTCCTTCGGCGGCCCGGACGCCTGCGGCGTGATCTCCGCCACCG
ACGGCCCGCTGGCGCCCTGCCACGGCCTTGTGCCGCCCGCGCAGTACTTCCAGGGCTGCTTGCTGGACGCCTGCC
AAGTTCAGGGCCATCCTGGAGGCCTCTGTCCTGCAGTGGCCACCTACGTGGCAGCCTGTCAGGCCGCTGGGGCCC
AGCTCCGCGAGTGGAGGCGGCCGGACTTCTGTCCCTTCCAGTGCCCTGCCCACAGCCACTACGAGCTCTGCGGTG
ACTCCTGTCCTGGGAGCTGCCCGAGCCTGTCGGCACCCGAGGGCTGTGAGTCGGCCTGCCGTGAAGGCTGTGTCT
GCGATGCTGGCTTCGTGCTCAGTGGTGACACGTGTGTACCTGTGGGCCAGTGTGGCTGCCTCCACGATGACCGCT

FIGURE 2593C

ACTACCCACTGGGCCAGACCTTCTACCCTGGCCCTGGGTGTGATTCCCTTTGCCGCTGCCGGGAGGGCGGTGAGG
TGTCCTGTGAGCCCTCCAGCTGCGGCCCGCATGAGACCTGCCGGCCATCCGGTGGCAGCTTGGGCTGCGTGGCCG
TGGGCTCTACCACCTGCCAGGCGTCGGGAGATCCCCACTACACCACCTTCGATGGCCGCCGCTTCGACTTCATGG
GCACCTGCGTGTATGTGCTGGCTCAGACCTGCGGCACCCGGCCTGGCCTACATCGGTTTGCCGTCCTGCAGGAGA
ACGTGGCCTGGGGTAATGGGCGAGTCAGTGTGACCAGGGTGATCACGGTCCAGGTGGCAAACTTCACCCTGCGGC
TGGAGCAGAGACAGTGGAAGGTCACGGTGAACGGTGTGGACATGAAGCTGCCCGTGGTGCTGGCCAACGGCCAGA
TCCGTGCCTCCCAGCATGGTTCAGATGTTGTGATTGAGACCGACTTCGGCCTGCGTGTGGCCTACGACCTTGTGT
ACTATGTGCGGGTCACCGTCCCTGGAAACTACTACCAGCTGATGTGTGGCCTGTGTGGGAACTACAACGGCGACC
CCAAGGATGACTTCCAGAAGCCCAATGGCTCGCAGGCAGGCAACGCCAATGAGTTCGGCAACTCCTGGGAGGAGG
TGGTGCCCGACTCTCCCTGCCTGCCGCCGCCCACCTGCCCGCCGGGGAGCGAGGGCTGTATCCCCAGCGAGGAGT
GTCCTCCCGAGCTGGAGAAGAAGTATCAGAAGGAGGAGTTCTGTGGGCTCCTCTCCAGCCCCACAGGGCCACTGT
CCTCTTGCCACAAGCTGGTGGATCCCCAGGGTCCCTTGAAAGATTGCATCTTTGATCTCTGCCTGGGTGGTGGGA
ACCTGAGCATTCTCTGCAGCAACATCCATGCCTACGTGAGTGCTTGCCAGGCAGCTGGAGGCCAGGTGGAGCCCT
GGAGGAATGAAACTTTCTGTCCCATGGAATGCCCTCAGAACAGTCACTACGAGCTCTGTGCGGACACCTGCTCCC
TGGGCTGCTCGGCTCTCAGTGCCCCTCTGCAGTGCCCAGATGGGTGTGCTGAGGGCTGCCAGTGTGACTCCGGCT
TCCTCTACAACGGCCAAGCCTGCGTGCCCATCCAGCAATGTGGCTGCTACCACAATGGTGCCTACTATGAGCCGG
AGCAGACAGTCCTCATTGACAACTGTCGGCAGCAGTGCACGTGCCATGTGGGTAAAGTCGTGGTGTGCCAGGAAC
ACAGCTGCAAGCCGGGGCAGGTGTGCCAGCCCTCCGGAGGCATCCTGAGCTGCGTCAACAAAG

FIGURE 2594

GTCAACTTAGTGTACAATGCTGTCAGATGAACCTTACCCTTGTAAGGCTTGTAACTTGGTTCCTCCCTTTCTTAA
GCCCTTATTGGCTATCTTTCTTCTTTTAATATTTAAAGTTTTTAATCTTTAAATTTTTAATTTTTAAACCATGCT
TGTTTAACCTGCTGGTAAAATTCACGTCTTTCAGACTGTAATGCTTTCATGCCAAGTAAATGGTCTTGCCAGGCT
TCCAGCCTGTTTCAGAGACCACTAGCCCAGAGCCGTATCAGCCCCTTCAGCAAGCCATAAGAAATTTCTACTCCT
CCTGGAAATAGATGTAGAGACTATGTCCATGCTTAGCAGGAAGTAGTTCCAGAAGAGACCTTTGCTCCTTAAGAA
TAAGGAGAATGAGGACTGCGAAGGAGAACGCAGCAAGCCCAGGCGGCGGTGGAAAGGCTGGAGGACACACCTAAA
CATGTGGAATCCCAATGCCGGGCAGCCAGGGCCAAATCCATATCCCCCCAATATTGGGTGCCCTGGAGGTTCCAA
TCCTGCCCACCCACCACCTATTAATCCACCCTTTCCCCCAGGCCCCTGTCCTCCTCCCCCAGGAGCTCCCCATGG
CAATCCAGCTTTCCCCCCAGGTGGGCCCCCTCATCCTGTGCCACAGCCAGGGTATCCAGGATGCCAACCGTTGGG
TCCCTACCCTCCTCCATACCCACCGCCTGCCCCTGGAATCCCTCCTGTGAATCCCTTGGCTCCTGGCATGGTTGG
ACCAGCAGTGATAGTGGACAAGAAGATGCAGAAGAAAATGAAGAAAGCTCATAAAAAGATGCACAAGCACCAAAA
GCACCACAAGTACCACAAGCATGACAAGCATTCCTCCTCTTCCTCCTCCTCTTCCAGCAGTGATTCTGACTGAAT
ACAGGCCCTGGACCCTTCCCTCAAGTCCCACCAGTTCTGCTCTCCCATCAAGCTTCAGATGCCACGTTGTACTGG
GGGAATGTAGCCCTTGTGCTCCCCACCCCCTACCTCCACCTGAGCCTCACCCTGCTGTTGAGCCCTGAGTGGCTA
GGGGAAATAGGAAGAGGATTGCCATGGCCTGGCCATCTTGTTGCTGCTTGGAGAGATCATATAGCTAATGAATTA
GGCAGGGGAGCTATTTTTTGAAGATGATGAACTAAATGTTGAAGACAAGTTTGAGATCTGTAAAATGTGATTTTT
TACTTCCACTTATAATACTTGTGATTGGGGAGGTTTGTGGAAATTCAATTATGATGAAAAACCTCTATCTTTTTT
GTAATGTTGGCATACTTGGGGGATTTAGTGGCAAATACATTCCCCAGCAGGCCTTTTGTTGGTTGCACTAACTGC
AAGGTTGCTGGGAAGTAGAGTCCATTTGGTTGATGAGCTTTGACTGCGGTTTTGGAACCTTACCTCTCCTCCTTA
GCCCAATATGCTGTCTCGGGTCCTATTCAAATAAAGTTATTTCTCCTGGTCT

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FIGURE 2595

GGCTTGGTCACTATGGAGGAGATAGGCATCTTGGTGGAGAAGGCTCAGGATGAGATCCCAGCACTGTCCGTGTCC
CGGCCCCAGACCGGCCTGTCCTTCCTGGGCCCTGAGCCTGAGGACCTGGAGGACCTGTACAGCCGCTACAAGAAG
CTGCAGCAAGAGCTGGAGTTCCTGGAGGTGCAGGAGGAATACATCAAAGATGAGCAAAAGAACCTGAAAAAGGAA
TTTCTCCATGCCCAGGAGGAGGTGAAGCGAATCCAAAGCATCCCGCTGGTCATCGGACAATTTCTGGAGGCTGTG
GATCAGAATACAGCCATCGTGGGCTCTACCACAGGCTCCAACTATTATGTGCGCATCCTGAGCACCATCGATCGG
GAGCTGCTCAAGCCCAACGCCTCAGTGGCCCTCCACAAGCACAGCAATGCACTGGTGGACGTGCTGCCCCCCGAA
GCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGCCAGATGTGATGTACGCGGACATCGGAGGCATGGAC
ATCCAGAAGCAGGAGGTGCGGGAGGCCGTGGAGCTCCCGCTCACGCATTTCGAGCTCTACAAGCAGATCGGCATC
GATCCCCCCCCGAGGCGTCCTCATGTATGGCCCACCTGGCTGTGGGAAGACCATGTTGGCAAAGGCGGTGGCACAT
CACACAACAGCTGCATTCATCCGGGTCGTGGGCTCGGAGTTTGTACAGAAGTATCTGGGTGAGGGCCCCCGCATG
GTCCGGGATGTGTTCCGCCTGGCCAAGGAGAATGCACCTGCCATCATCTTCATAGACGAGATTGATGCCATCGCC
ACCAAGAGATTCGATGCTCAGACAGGGGCCGACAGGGAGGTTCAGAGGATCCTGCTGGAGCTGCTGAATCAGATG
GATGGATTTGATCAGAATGTCAATGTCAAGGTAATCATGGCCACAAACAGAGCAGACACCCTGGATCCGGCCCTG
CTACGGCCAGGACGGCTGGACCGTAAAATTGAATTTCCACTTCCTGACCGCCGCCAGAAGAGATTGATTTTCTCC
ACTATCACTAGCAAGATGAACCTCTCTGAGGAGGTTGACTTGGAAGACTATGTGGCCCGGCCAGATAAGATTTCA
GGAGCTGATATTAACTCCATCTGTCAGGAGAGTGGAATGTTGGCTGTCCGTGAAAACCGCTACATTGTCCTGGCC
AAGGACTTCGAGAAAGCATACAAGACTGTCATCAAGAAGGACGAGCAGGAGCATGAGTTTTACAAGTGACCCTTC
CCTTCCCTCCACCACACCACTCAGGGGCTGGGGCTTCTCTCGCACCCCCAGCACCTCTGTCCCAAAACCTCATTC
CCTTTTTTCTTTACCCAGGATTGGTTTCTTCAATAAATAGATAAGATCGAATCC

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FIGURE 2596

GTTTTTTTTCTTGCTCCTGCGGAGGGCGCCCCAGCCATGGCCCTCAGGAGCTCCCTAGACCCCGCAGGGACTGCC
CTCCATCCCGGCCGCCGGGGCCCGCCCTCTGCATCCCGCGGGCAGCCTGTGTGAAGCGGCCTCCCGCAGCCCCCG
GCCCCTCCCCCATGGAGGAGGAGGAGGGGGCGGTGGCCAAGGAGTGGGGCACGACCCCCGCGGGGCCCGTCTGGA
CCGCGGTGTTCGACTACGAGGCGGCGGGCGACGAGGAGCTGACCCTGCGGAGGGGCGATCGCGTCCAGGTGCTTT
CCCAAGACTGTGCGGTGTCCGGCGACGAGGGCTGGTGGACCGGGCAGCTCCCCAGCGGCCGCGTGGGCGTCTTCC
CCAGCAACTACGTGGCCCCCGGCGCCCCCGCTGCACCCGCGGGCCTCCAGCTGCCCCAGGAGATCCCCTTCCACG
AGCTGCAGCTAGAGGAGATCATCGGTGTGGGGGGCTTTGGCAAGGTCTATCGGGCCCTGTGGCGTGGCGAGGAGG
TGGCAGTCAAGGCCGCCCGGCTGGACCCTGAGAAGGACCCGGCAGTGACAGCGGAGCAGGTGTGCCAGGAAGCCC
GGCTCTTTGGAGCCCTGCAGCACCCCAACATAATTGCCCTTAGGGGCGCCTGCCTCAACCCCCCACACCTCTGCC
TAGTGATGGAGTATGCCCGGGGTGGTGCACTGAGCAGGGTGCTGGCAGGTCGCCGGGTGCCACCTCACGTGCTGG
TCAACTGGGCTGTGCAGGTGGCCCGGGGCATGAACTACCTACACAATGATGCCCCTGTGCCCATCATCCACCGGG
ACCTCAAGTCCATCAACATCCTGATCCTGGAGGCCATCGAGAACCACAACCTCGCAGACACGGTGCTCAAGATCA
CGGACTTCGGCCTCGCCCGCGAGTGGCACAAGACCACCAAGATGAGCGCTGCGGGGACCTACGCCTGGATGGCGC
CGGAGGTTATCCGTCTCTCCCTCTTCTCCAAAAGCAGTGATGTCTGGAGCTTCGGGGTGCTGCTGTGGGAGCTGC
TGACGGGGGAGGTCCCCTACCGTGAGATCGACGCCTTGGCCGTGGCGTATGGCGTGGCTATGAATAAGCTGACGC
TGCCCATTCCCTCCACGTGCCCCGAGCCCTTTGCCCGCCTCCTGGAGGAATGCTGGGACCCAGACCCCCACGGGC
GGCCAGATTTCGGTAGCATCTTGAAGCGGCTTGAAGTCATCGAACAGTCAGCCCTGTTCCAGATGCCACTGGAGT
CCTTCCACTCGCTGCAGGAAGACTGGAAGCTGGAGATTCAGCACATGTTTGATGACCTTCGGACCAAGGAGAAGG
AGCTTCGGAGCCGTGAGGAGGAGCTGCTGCGGGCGGCACAGGAGCAGCGCTTCCAGGAGGAGCAGCTGCGGCGGC
GGGAGCAGGAGCTGGCAGAACGTGAGATGGACATCGTGGAACGGGAGCTGCACCTGCTCATGTGCCAGCTGAGCC
AGGAGAAGCCCCGGGTCCGCAAGCGCAAGGGCAACTTCAAGCGCAGCCGCCTGCTCAAGCTGCGGGAAGGCGGCA
GCCACATCAGCCTGCCCTCTGGCTTTGAGCATAAGATCACAGTCCAGGCCTCTCCAACTCTGGATAAGCGGAAAG
GATCCGATGGGGCCAGCCCCCCTGCAAGCCCCAGCATCATCCCCCGGCTGAGGGCCATTCGCCTGACTCCCGTGG
ACTGTGGTGGCAGCAGCAGTGGCAGCAGCAGTGGAGGAAGTGGGACATGGAGCCGCGGTGGGCCCCCAAAGAAGG
AAGAACTGGTCGGGGGCAAGAAGAAGGGACGAACGTGGGGGCCCAGCTCCACCCTGCAGAAGGAGCGGGTGGGAG
GAGAGGAGAGGCTGAAGGGGCTGGGGGAAGGAAGCAAACAGTGGTCATCAAGTGCCCCCAACCTGGGCAAGTCCC
CCAAACACACACCCAGTCGCCGCTGGCTTCGCCAGCCTCAATGAGATGGAGGAGTTCGCGGAGGCAGAGGATGGA
GGCAGCAGCGTGCCCCCTTCCCCCTACTCGACCCCGTCCTACCTCTCAGTGCCACTGCCTGCCGAGCCCTCCCCG
GGGGCGCGGGCGCCGTGGGAGCCGACGCCGTCCGCGCCCCCCGCTCGGTGGGGACACGGCGCCCGGCGGCGCTGC
GACCTGGCGCTGCTAGGCTGCGCCACGCTGCTGGGGGCTGTGGGCCTGGGCGCCGACGTGGCCGAGGCGCGCGCG
GCCGACGGTGAGGAGCAGCGGCGCTGGCTCGACGGCCTCTTCTTTCCCCGCGCCGGCCGCTTCCCGCGGGGCCTC
AGCCCACCCGCGCGTCCCCACGGCCGCCGCGAAGACGTGGGCCCCGGCCTGGGCCTGGCGCCCTCGGCCACCCTC
GTGTCGCTGTCGTCCGTGTCCGACTGCAACTCCACGCGTTCACTGCTGCGCTCTGACAGTGACGAGGCCGCACCG
GCCGCGCCCTCCCCACCACCCTCCCCGCCCGCGCCCACACCCACGCCCTCGCCCAGCACCAACCCCCTGGTGGAC
CTGGAGCTGGAGAGCTTCAAGAAGGACCCCCGCCAGTCGCTCACGCCCACCCACGTCACGGCTGCATGCGCTGTG
AGCCGCGGGCACCGGCGGACGCCATCGGATGGGGCGCTGGGGCAGCGGGGGCCGCCCGAGCCCGCGGGCCATGGC
CCTGGCCCTCGTGACCTTCTGGACTTCCCCCGCCTGCCCGACCCCCAGGCCCTGTTCCCAGCCCGCCGCCGGCCC
CCTGAGTTCCCAGGCCGCCCCACCACCCTGACCTTTGCCCCGAGACCTCGGCCGGCTGCCAGTCGCCCCCGCTTG
GACCCCTGGAAACTGGTCTCCTTCGGCCGGACACTCACCATCTCGCCTCCCAGCAGGCCAGACACTCCGGAGAGC
CCTGGGCCCCCCCAGCGTGCAGCCCACACTGCTGGACATGGACATGGAGGGGCAGAACCAAGACAGCACAGTGCCC
CTGTGCGGGGCCCACGGCTCCCACTAAGGCCTGCCCACCACCGCCCGCCTGGGCAGCCATGAATGTAGCGCCCCA
GGCCCTGCCCCAGCCCGCCATGCCACAAGGTGGGGGAGGCCCTGGGCAGGATGTTCACTCTATTTATT

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FIGURE 2597

ACTGTGCCCTGTCCACGGTGCCTCCTGCATGTCCTGCTGCCCTGAGCTGTCCCGAGCTAGGTGACAGCGTACCAC
GCTGCCACCATGAATGAGGTGTCTGTCATCAAAGAAGGCTGGCTCCACAAGCGTGGTGAATACATCAAGACCTGG
AGGCCACGGTACTTCCTGCTGAAGAGCGACGGCTCCTTCATTGGGTACAAGGAGAGGCCCGAGGCCCCTGATCAG
ACTCTACCCCCCTTAAACAACTTCTCCGTAGCAGAATGCCAGCTGATGAAGACCGAGAGGCCGCGACCCAACACC
TTTGTCATACGCTGCCTGCAGTGGACCACAGTCATCGAGAGGACCTTCCACGTGGATTCTCCAGACGAGAGGGAG
GAGTGGATGCGGGCCATCCAGATGGTCGCCAACAGCCTCAAGCAGCGGGCCCCAGGCGAGGACCCCATGGACTAC
AAGTGTGGCTCCCCCAGTGACTCCTCCACGACTGAGGAGATGGAAGTGGCGGTCAGCAAGGCACGGGCTAAAGTG
ACCATGAATGACTTCGACTATCTCAAACTCCTTGGCAAGGGAACCTTTGGCAAAGTCATCCTGGTGCGGGAGAAG
GCCACTGGCCGCTACTACGCCATGAAGATCCTGCGGAAGGAAGTCATCATTGCCAAGGATGAAGTCGCTCACACA
GTCACCGAGAGCCGGGTCCTCCAGAACACCAGGCACCCGTTCCTCACTGCGCTGAAGTATGCCTTCCAGACCCAC
GACCGCCTGTGCTTTGTGATGGAGTATGCCAACGGGGGTGAGCTGTTCTTCCACCTGTCCCGGGAGCGTGTCTTC
ACAGAGGAGCGGGCCCGGTTTTATGGTGCAGAGATTGTCTCGGCTCTTGAGTACTTGCACTCGCGGGACGTGGTA
TACCGCGACATCAAGCTGGAAAACCTCATGCTGGACAAAGATGGCCACATCAAGATCACTGACTTTGGCCTCTGC
AAAGAGGGCATCAGTGACGGGGCCACCATGAAAACCTTCTGTGGGACCCCGGAGTACCTGGCGCCTGAGGTGCTG
GAGGACAATGACTATGGCCGGGCCGTGGACTGGTGGGGGCTGGGTGTGGTCATGTACGAGATGATGTGCGGCCGC
CTGCCCTTCTACAACCAGGACCACGAGCGCCTCTTCGAGCTCATCCTCATGGAAGAGATCCGCTTCCCGCGCACG
CTCAGCCCCGAGGCCAAGTCCCTGCTTGCTGGGCTGCTTAAGAAGGACCCCAAGCAGAGGCTTGGTGGGGGGCCC
AGCGATGCCAAGGAGGTCATGGAGCACAGGTTCTTCCTCAGCATCAACTGGCAGGACGTGGTCCAGAAGAAGCTC
CTGCCACCCTTCAAACCTCAGGTCACGTCCGAGGTCGACACAAGGTACTTCGATGATGAATTTACCGCCCAGTCC
ATCACAATCACACCCCCTGACCGCTATGACAGCCTGGGCTTACTGGAGCTGGACCAGCGGACCCACTTCCCCCAG
TTCTCCTACTCGGCCAGCATCCGCGAGTGAGCAGTCTGCCCACGCAGAGGACGCACGCTCGCTGCCATCACCGCT
GGGTGGTTTTTTCCCCCT

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FIGURE 2598

GTTGGCGCCGCCGGGAGGGAGGGCGGGCGGCGCGAGTGGGCGCGGGCCCGGTGGGCCAGGCTCCAGGGAGCAGTG
TCAGGGCCAGGGAGACGATGGTCTCCGTGACTATGGCCACTTCCGAGTGGATCCAGTTCTTTAAGGAAGCCGGCA
TTCCTCCAGGACCTGCCGTCAATTATGCCGTGATGTTTGTGGATAATAGGATTCAGAAGAGCATGCTGCTGGATC
TCAATAAGGAGATAATGAATGAGCTGGGCGTGACCGTGGTGGGTGACATCATCGCCATTCTCAAGCATGCCAAAG
TGGTGCACCGTCAGGACATGTGCAAAGCTGCCACTGAGTCAGTACCCTGCAGCCCTAGCCCCCTTGCAGGCGAAA
TTCGCCGTGGCACCAGTGCTGCCTCCCGAATGATCACCAACAGCCTGAACCATGACTCTCCACCCAGCACACCCC
CCAGGCGCCCGGACACCAGCACCTCCAAGATCTCGGTCACTGTGTCCAACAAGATGGCAGCAAAGAGTGCCAAGG
CCACTGCAGCCCTGGCCCGCCGGGAGGAGGAGAGCCTGGCTGTTCCTGCCAAGCGGCGCCGGGTCACTGCTGAGA
TGGAGGGGAAGTACGTCATCAACATGCCCAAAGGCACCACACCCCGCACCCGCAAGATCCTGGAGCAGCAGCAGG
CTGCAAAAGGTCTCCATAGGACGTCTGTGTTTGACCGCCTCGGCGCCGAGACCAAGGCAGACACCACGACAGGGA
GTAAACCCACAGGAGTCTTCAGCCGCCTGGGGGCCACCCCAGAAACGGACGAGGATCTGGCTTGGGACAGCGACA
ATGACAGCAGCAGCTCTGTCTTGCAGTATGCCGGGGTCCTGAAGAAGCTAGGACGGGGCCCAGCCAAGGCCAGTC
CCCAGCCAGCACTGACTGTCAAAGCCAAGGCCACAAGCTCAGCGACAACGGCTGCTGCCCCGACACTGCGGCGCC
TGGCGCTTTCCTCACGGTCTGGGCTTGAGAGGAAGCCGGAGTCCTTGTCTAAAGTCAGCATCATCAAGAGACTGG
GCGCAGCTGCCCTTGTGCCCGAGGCCCAGGACAGCCAGGTCACCAGCACCAAGAGTAAGTCCTCAGCCGAGGTCA
AGGTCACCATTAAGAGGACTCTGGTGGGGCCCCGGGGGAGCAGCTCCAGCGAGGGCCTTGGTGCCCAGATGGACC
ACGCGGGCACTGTGAGCGTGTTCAAAAGACTGGGCCGCAGGACCTTCTAGCCCACCTGTGGGCGGGGTGCAGGCA
GCAGAGCCTGCGGGCATCTGCCCTGGCCGCCCCAGGCTCCTGGCTTCATCACGCCTCCCACCAGCTCCTGGATGA
CACAGCTTGTCTCCCTCGGGCTCTAGAGCTAGGCCCGAGCATTCGGGGGATCACCCCATTTCTCCTAGCCTGGGA
TGGTCGTCGCAGCTGGCCTGGCCTGCTCCAGGACTCCCCTTCTCTCATGTCCTCTGTGCTTTCTTCTCTGGCTGT
GGCCTTGGCAGAACCCACTTTTCTACCTCTCCCAAGTGCCAGGGGGCTTCTTCCTCTCCTACATTCCCCTTCTTC
CCCTGAGCAGGGTCTGCTGCCTCAGACCCCAGCTCATCAGCCTCCCTGTCCCCCTCAACTAAGTGGGTGTCACCT
GGTGGGCCTCCCTTCCC

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FIGURE 2599

CTCTTTATAATTTAGTTTCCATAGAAGTTATATGTGCATTTAAAAAAATTCAATGCTGGAGCGACCGTGTCTGGG
GAGCCGAGCCCCGCTTCTCGCTGCGGTGAGCCCGGACTGGGGCACGCACTGCGCAGACTCCCCGCTGCAGTGGGC
GGAGCTCCCACAGGCCCCGCCCCCTCCTCCCACCCTCGTTCAGCCTGTCCAGACAGAAGCTGGGGCCCAGCGGAG
GTAGCAGCAGACGCCTGAGAGCGAGGCCGAGGCCCCTCAGGGTTTGGAGACCCTGACACACCCACCTTCTCACCT
GGGCTCTGCGTATCCCCCAGCCTTGAGGGAAGATGAAGCCTAAACTGATGTACCAGGAGCTGAAGGTGCCTGCAG
AGGAGCCCGCCAATGAGCTGCCCATGAATGAGATTGAGGCGTGGAAGGCTGCGGAAAAGAAAGCCCGCTGGGTCC
TGCTGGTCCTCATTCTGGCGGTTGTGGGCTTCGGAGCCCTG**ATG**ACTCAGCTGTTTCTATGGGAATACGGCGACT
TGCATCTCTTTGGGCCCAACCAGCGCCCAGCCCCCTGCTATGACCCTTGCGAAGCAGTGCTGGTGGAAAGCATTC
CTGAGGGCCTGGACTTCCCCAATGCCTCCACGGGGAACCCTTCCACCAGCCAGGCCTGGCTGGGCCTGCTCGCCG
GTGCGCACAGCAGCCTGGACATCGCCTCCTTCTACTGGACCCTCACCAACAATGACACCCACACGCAGGAGCCCT
CTGCCCAGCAGGGTGAGGAGGTCCTCCGGCAGCTGCAGACCCTGGCACCAAAGGGCGTGAACGTCCGCATCGCTG
TGAGCAAGCCCAGCGGGCCCCAGCCACAGGCGGACCTGCAGGCTCTGCTGCAGAGCGGTGCCCAGGTCCGCATGG
TGGACATGCAGAAGCTGACCCATGGCGTCCTGCATACCAAGTTCTGGGTGGTGGACCAGACCCACTTCTACCTGG
GCAGTGCCAACATGGACTGGCGTTCACTGACCCAGGTCAAGGAGCTGGGCGTGGTCATGTACAACTGCAGCTGCC
TGGCTCGAGACCTGACCAAGATCTTTGAGGCCTACTGGTTCCTGGGCCAGGCAGGCAGCTCCATCCCATCAACTT
GGCCCCGGTTCTATGACACCCGCTACAACCAAGAGACACCAATGGAGATCTGCCTCAATGGAACCCCTGCTCTGG
CCTACCTGGCGAGTGCGCCCCCACCCCTGTGTCCAAGTGGCCGCACTCCAGACCTGAAGGCTCTACTCAACGTGG
TGGACAATGCCCGGAGTTTCATCTACGTCGCTGTCATGAACTACCTGCCCACTCTGGAGTTCTCCCACCCTCACA
GGTTCTGGCCTGCCATTGACGATGGGCTGCGGCGGGCCACCTACGAGCGTGGCGTCAAGGTGCGCCTGCTCATCA
GCTGCTGGGGACACTCGGAGCCATCCATGCGGGCCTTCCTGCTCTCTCTGGCTGCCCTGCGTGACAACCATACCC
ACTCTGACATCCAGGTGAAACTCTTTGTGGTCCCCGCGGATGAGGCCCAGGCTCGAATCCCATATGCCCGTGTCA
ACCACAACAAGTACATGGTGACTGAACGCGCCACCTACATCGGAACCTCCAACTGGTCTGGCAACTACTTCACGG
AGACGGCGGGCACCTCGCTGCTGGTGACGCAGAATGGGAGGGGCGGCCTGCGGAGCCAGCTGGAGGCCATTTTCC
TGAGGGACTGGGACTCCCCTTACAGCCATGACCTTGACACCTCAGCTGACAGCGTGGGCAACGCCTGCCGCCTGC
TC**TGA**GGCCCGATCCAGTGGGCAGGCCAAGGCCTGCTGGGCCCCCGCGGACCCAGGTGCTCTGGGTCACGGTCCC
TGTCCCCGCGCCCCCGCTTCTGTCTGCCCCATTGTGGCTCCTCAGGCTCTCTCCCCTGCTCTCCCACCTCTACCT
CCACCCCCACCGGCCTGACGCTGTGGCCCCGGGACCCAGCAGAGCTGGGGGAGGGATCAGCCCCCAAAGAAATGG
GGGTGCATGCTGGGCCTGGCCCCCTGGCCCACCCCCACTTTCCAGGGCAAAAAGGGCCCAGGGTTATAATAAGTA
AATAACTTGTCTGT

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FIGURE 2600

AGAACTGCGTCTCGCGACCCAGGCGCGGGTTTCCAGAGGACAGCCAACAAGCGATGCTGCCGCCGCCGTTTCCTG
ATTGGTTGTGGGTGGCTACCTCTTCGTTCTGATTGGCCGCTAGTGAGCAAGATGCTGAGCAAGGGTCTGAAGCGG
AAACGGGAGGAGGAGGAGGAGAAGGAACCTCTGGCAGTCGACTCCTGGTGGCTAGATCCTGGCCACACAGCGGTG
GCACAGGCACCCCCGGCCGTGGCCTCTAGCTCCCTCTTTGACCTCTCAGTGCTCAAGCTCCACCACAGCCTGCAG
CAGAGTGAGCCGGACCTGCGGCACCTGGTGCTGGTCGTGAACACTCTGCGGCGCATCCAGGCGTCCATGGCACCC
GCGGCTGCCCTGCCACCTGTGCCTAGCCCACCTGCAGCCCCCAGTGTGGCTGACAACTTACTGGCAAGCTCGGAC
GCTGCCCTTTCAGCCTCCATGGCCAGCCTCCTGGAGGACCTCAGCCACATTGAGGGCCTGAGTCAGGCTCCCCAA
CCCTTGGCAGACGAGGGGCCACCAGGCCGTAGCATCGGGGGAGCAGCGCCCAGCCTGGGTGCCTTGGACCTGCTG
GGCCCAGCCACTGGCTGTCTACTGGACGATGGGCTTGAGGGCCTGTTTGAGGATATTGACACCTCTATGTATGAC
AATGAACTTTGGGCACCAGCCTCTGAGGGCCTCAAACCAGGCCCTGAGGATGGGCCGGGCAAGGAGGAAGCTCCG
GAGCTGGACGAGGCCGAATTGGACTACCTCATGGATGTGCTGGTGGGCACACAGGCACTGGAGCGACCGCCGGGG
CCAGGGCGCTGAGCCCTCGTGCTGGAATGGTTGTCTGGTATCTGAACTGAGCCTGCTGGCTGGACCAACTGTCCT
CGAAAAGACACAGCTGGCTTCCCTAGTACAGAGAACAGGGCTTGGGCCACTTTGGAGAGACAGAATCTAGTCCTG
GGCAACTTCACATCCGTCCTCCTGTCTCAGGGCTGGCAGGGGGAGCCTGGAATTACCCCCTAGTGATGGAATGAC
AGGGTCTGGTGGGGACTGAATTCCCTGGCCCTGGGGTCATAGCTTGGGCTGTTCCTTCTCTGATACGGGAAGAGA
CCCCAATCAGATTTTTCAAATTAAAGCCAGTCCTGGG

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FIGURE 2601

AGGAAACTGAGGCCCTGAGAATTGACTCATTCAGATCACTTCCCATGATCACGCAGCTGAGCAGTTTCCAATACA
GAATTCAGATTTGGGGTTCCCTACTTCCAATCCAGGTCTCTGTGCTCCACACTTGTCTTTCGTGCTCCATGTTTG
AAGAAATTAATATTGTGGAAGAACAGTTTTAAGGCTTAGAGGAACTTGAGTTAGGATCCGTACTTGGCAGATGAG
GAAATTGATTCTCATGGATGTAAATTCACTGTTTGAGGCCACAACAGGGCATC**ATG**GTGGGAGGCTTGAAGAGGA
AACACTCTGATTTGGAAGAGGAGGAGGAGAGGTGGGAGTGGAGTCCAGCAGGCCTTCAGAGCTACCAGCAAGCCC
TGCTCCGCATCTCCCTAGACAAAGTCCAGCGCAGCCTGGGCCCCCGAGCACCCAGCCTCCGCAGGCATGTCCTCA
TCCATAACACCCTCCAACAGCTGCAGGCTGCACTTCGCCTGGCTCCCGCCCCTGCCCTGCCCCCCGAGCCCCTCT
TCCTGGGCGAGGAGGATTTCTCCCTGTCAGCCACCATTGGCTCTATCCTCAGGGAGCTGGACACCTCCATGGATG
GGACTGAGCCCCCTCAGAATCCAGTGACTCCCCTTGGCCTCCAGAATGAAGTGCCACCCCAGCCTGATCCAGTCT
TCTTAGAAGCTCTGAGCTCCCGGTACTTGGGGGACTCTGGCCTGGATGACTTCTTTCTGGACATTGACACATCTG
CGGTAGAAAAGGAGCCTGCACGGGCCCCACCAGAGCCTCCTCACAACCTCTTCTGTGCCCCAGGTTCTTGGGAGT
GGAATGAACTGGATCACATCATGGAAATCATTCTGGGGTCC**TAA**AACTGTGATAGAGGGGATCGATCCTTCCTCA
TGTCATCTTCGGTGGCCTGGATCCCTGAATGCAACTCTGGGTGTGTGTTTTTGTGGGGGCTCGAAGCAGTGACTA
TGGCCTCCTTTGTTCCCATTTCAGGGTTCCACAAACTGTCTTGCATGTGTGTGTGTGTCTGGTTACCCCGACCTT
CTGTGAAGGTGGGTCTTCCTGAATTAATTTATCTATTCCAAATGCCTTAACGAGACTCTGTTTCTGGGAGTCTGA
TTTTCCACTTACACATTTCTTCCACCTTTCCTGCTAGTTCCCACTCCCCTGTGACCACTGGGGCCTCAGGGAAGA
TAAAGAAAGCTGGGCCTGTCGAAGGATGACAGGGATGTGCTGCCAGGTTGCTATAGAAACCCAGGCTCTGCCTCT
TGCACCTTGAGGGGGTGGGAGGGGCTGGTGTCCTCCCTCCAGGCTGAACCCCACTTCCTCGGCAGGACCCCAGTC
TCAGCAGCCTCCTGATTTCATAACCAGGCCGGACCACGTGCAATAGGGTGGAAACCAAACTGCTCCATGCCGGGT
TATTTAAAAGAAAGGCAGAGTTTGTGGTGGCTTTTTTTTTTTTTTTTGGATTGTTTGTAATTTTTTTAAATAAAA
GTATTTTGGAAGGAG

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FIGURE 2602

GGGCAGAGAGCACCGCCCAGCAGCCAGTGGGTTCCCGCGCGTGCCGAGACTCTGAGGCCTTGCACCCCCACGATC
CCGTACGATGGCCGTCAAGAAGATCGCGATCTTCGGCGCCACTGGCCAGACCGGGCTCACCACCCTGGCGCAGGC
GGTGCAAGCAGGTTACGAAGTGACAGTGCTGGTGCGGGACTCCTCCAGGCTGCCATCAGAGGGGCCCCGGCCGGC
CCACGTGGTAGTGGGAGATGTTCTGCAGGCAGCCGATGTGGACAAGACCGTGGCTGGGCAGGACGCTGTCATCGT
GCTGCTGGGCACCCGCAATGACCTCAGTCCCACGACAGTGATGTCCGAGGGCGCCCGGAACATTGTGGCAGCCAT
GAAGGCTCATGGTGTGGACAAGGTCGTGGCCTGCACCTCGGCTTTCCTGCTCTGGGACCCTACCAAGGTGCCCCC
ACGACTGCAGGCTGTGACTGATGACCACATCCGGATGCACAAGGTGCTGCGGGAATCAGGCCTGAAGTACGTGGC
TGTGATGCCGCCACACATAGGAGACCAGCCACTAACTGGGGCGTACACAGTGACCCTGGATGGACGAGGGCCCTC
AAGGGTCATCTCCAAACATGACCTGGGCCATTTCATGCTGCGCTGCCTCACCACCGATGAGTACGACGGACACAG
CACCTACCCCTCCCACCAGTACCAGTAGCACTCTGTCCCCATCTGGGAGGGTGGCATTCTGGGACATGAGGAGCA
AAGGAAGGGGGCAATAAATGTTGAGCCAAGAGCTTCAAATTACTCTAG

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FIGURE 2603

GCACACCCGGAAGTGGGTGCGGGCCAGCCGGCTCGCCCGGGGGCCATGGCAGCAGCGGCTACTGCAGCCGAGGGG
GTCCCCAGTCGGGGGCCTCCCGGGGAAGTCATTCATCTGAATGTGGGAGGCAAGAGATTCAGTACCTCTCGCCAG
ACTCTCACCTGGATCCCAGACTCCTTCTTCTCCAGTCTTCTGAGCGGACGCATCTCGACGCTGAAAGATGAGACC
GGAGCAATCTTCATCGATCAGGGACCATTACAGTCTTCGCCCACCCGTCACTCTACGTCTTGCGCATCACAAAGA
GTTGGATCCCAGGGGTGTCCACGGTTCCAGCCTCCTCCATGAAGCCCAGTTCTATGGGCTCACTCCTCTGGTTCG
TCGCCTGCAGCTTCGAGAGGAGTTGGATCGATCTTCTTGTGGAAACGTCCTCTTCAATGGTTACCTGCCGCCACC
AGTGTTCCCAGTGAAGCGGCGGAACCGGCACAGCCTAGTGGGGCCTCAGCAGCTAGGAGGACGGCCAGCCCCTGT
CCGACGGAGCAACACGATGCCCCCCAACCTTGGCAATGCAGGGCTGCTGGGCCGAATGCTGGATGAGAAAACCCC
TCCCTCACCCTCAGGACAACCTGAGGAGCCGGGGATGGTGCGCCTGGTGTGTGGACACCATAATTGGATCGCTGT
GGCCTATACCCAGTTTCTAGTCTGCTACAGGTTGAAGGAAGCCTCTGGCTGGCAGCTGGTGTTTTCCAGCCCCCG
CCTGGACTGGCCCATCGAACGACTGGCGCTCACAGCCCGGGTGCATGGTGGGGCTTTGGGTGAACATGACAAGAT
GGTGGCAGCAGCCACCGGCAGCGAGATCCTGCTATGGGCTCTGCAGGCGGAAGGCGGTGGCTCCGAGATAGGGGT
CTTTCATCTGGGGGTGCCTGTGGAGGCCTTGTTCTTCGTCGGGAACCAGCTCATTGCTACAAGCCACACAGGGCG
CATCGGGGTGTGGAATGCCGTCACCAAGCACTGGCAGGTCCAGGAGGTGCAGCCCATCACCAGTTATGACGCGGC
AGGCTCCTTCCTCCTCCTGGGCTGCAACAACGGCTCCATTTACTACGTGGATGTGCAGAAGTTCCCCTTGCGCAT
GAAAGACAACGACCTCCTTGTCAGCGAGCTCTATCGGGACCCAGCGGAGGATGGGGTCACCGCCCTCAGTGTCTA
CCTCACCCCCAAGACCAGTGACAGTGGGAACTGGATCGAGATCGCCTATGGCACCAGCTCAGGGGGCGTGCGGGT
CATCGTGCAGCACCCGGAGACTGTGGGCTCGGGGCCTCAGCTCTTCCAGACCTTCACTGTGCACCGCAGCCCTGT
CACCAAGATCATGCTGTCGGAGAAGCACCTCATCTCAGTCTGTGCCGACAACAACCACGTGCGGACATGGTCTGT
GACTCGCTTCCGCGGCATGATTTCCACCCAGCCCGGCTCCACCCCACTCGCTTCCTTTAAGATCCTGGCTCTGGA
GTCGGCAGATGGGCATGGCGGCTGCAGTGCTGGCAATGACATTGGCCCCTACGGTGAGCGGGACGACCAGCAAGT
GTTCATCCAGAAGGTGGTGCCCAGTGCCAGCCAGCTCTTCGTGCGTCTCTCATCTACTGGGCAGCGGGTGTGCTC
CGTGCGCTCCGTGGACGGCTCACCCACGACAGCCTTCACAGTGCTGGAGTGCGAGGGCTCCCGGCGGCTCGGCTC
TCGGCCCCGGCGCTACCTGCTCACTGGCCAGGCCAACGGCAGCTTGGCCATGTGGGACCTAACCACCGCCATGGA
CGGCCTCGGCCAGGCCCCTGCAGGTGGCCTGACGGAGCAAGAGCTGATGGAACAGCTGGAACACTGTGAGCTGGC
CCCGCCGGCTCCTTCAGCTCCCTCATGGGGCTGTCTCCCCAGCCCCTCACCCCGCATCTCCCTCACCAGCCTCCA
CTCAGCCTCCAGCAACACCTCCTTGTCTGGCCACCGTGGGAGCCCAAGCCCCCCGCAGGCTGAGGCCCGGCGCCG
TGGTGGGGGCAGCTTTGTGGAACGCTGCCAGGAACTGGTGCGGAGTGGGCCAGACCTCCGACGGCCACCCACACC
AGCCCCGTGGCCCTCCAGCGGTCTCGGCACTCCCCTCACACCTCCCAAGATGAAGCTCAATGAAACTTCCTTTTGG
AACAACGCAGCTGCCATGATGCCTTGGGATGCCCTGGTCCTGGGGGACTCAGGTGCCTCCCTGATTCCTGTGGGA
ACCCCGGGTTCAGGGCCAGGGCCTCCTTGGAATAAATGGTTATTGTTACTAGGTCCCCACCTTCCCTCTTTTCTG
GAAGCCAAAGTCACCCTCCCCAATAAAGTCCTCACTGCC

FIGURE 2604A

CGTTGCTGTTTGTCGCTGCTGCCCGGGCCAGACGTCTAGGAGGAGCCGCTGCATCCGAGTCCCTGGCTGTCTCCG
AAGCCTTCTGCAGGGTCCGAAGCTGCCAGCCCAAAAAGTGTGCAGGCCCCCAGCGGTGCCTGAACCCAGTGCCTG
CAGTGCCCAGTCCCAGCCCCAGCGTGAGGAAGAGACAGGTGTCCCTCAACTGGCAGCCACTGACGCTCCAGGAGG
CCAGAGCTCTACTGAAGCGGCGGCGGCCCCGGGGGCCAGGGGGCCGGGGACTACTGAGAAGGAGGCCCCCACAGC
GTGCCCCCGCTGGCAAGGCCCCGGTCCTGTGTCCCTTGATCTGTCACAATGGCGGTGTGTGCGTGAAGCCTGACC
GCTGCCTCTGTCCCCCGGACTTCGCTGGCAAGTTCTGCCAGTTGCACTCCTCGGGCGCCCGGCCCCCGGCCCCGG
CTGTACCAGGCCTCACCCGCTCCGTGTACACTATGCCACTGGCCAACCACCGCGACGACGAGCACGGCGTGGCAT
CTATGGTGAGCGTCCACGTGGAGCACCCGCAGGAGGCGTCGGTGGTGGTGCACCAGGTGGAGCGTGTGTCTGGCC
CTTGGGAGGAGGCGGACGCTGAGGCGGTGGCGCGGGCGGAAGCGGCGGCGCGGGCGGAGGCGGCAGCGCCCTACA
CGGTGTTGGCACAGAGCGCGCCGCGGGAGGACGGCTACTCAGATGCCTCGGGCTTCGGTTACTGCTTTCGGGAGC
TGCGCGGAGGCGAATGCGCGTCCCCGCTGCCCGGGCTCCGGACGCAGGAGGTCTGCTGCCGAGGGGCCGGCTTGG
CCTGGGGCGTTCACGACTGTCAGCTGTGCTCCGAGCGCCTGGGGAACTCCGAAAGAGTGAGCGCCCCAGATGGAC
CTTGTCCAACCGGCTTTGAAAGAGTTAATGGGTCCTGCGAAGATGTGGATGAGTGCGCGACTGGCGGGCGCTGCC
AGCACGGCGAGTGTGCAAACACGCGCGGCGGGTACACGTGTGTGTGCCCCGACGGCTTTCTGCTCGACTCGTCCC
GCAGCAGCTGCATCTCCCAACACGTGATCTCAGAGGCCAAAGGGCCCTGCTTCCGCGTGCTCCGCGACGGCGGCT
GTTCGCTGCCCATTCTGCGGAACATCACTAAACAGATCTGCTGCTGCAGCCGCGTAGGCAAGGCCTGGGGCCGGG
GCTGCCAGCTCTGCCCACCCTTCGGCTCAGAGGGTTTCCGGGAGATCTGCCCGGCTGGTCCTGGTTACCACTACT
CGGCCTCCGACCTCCGCTACAACACCAGACCCCTGGGCCAGGAGCCACCCCGAGTGTCACTCAGCCAGCCTCGTA
CCCTGCCAGCCACCTCTCGGCCATCTGCAGGCTTTCTGCCCACCCATCGCCTGGAGCCCCGGCCTGAACCCCGGC
CCGATCCCCGGCCCGGCCCTGAGCTTCCCTTGCCCAGCATCCCTGCCTGGACTGGTCCTGAGATTCCTGAATCAG
GTCCCTCCTCCGGCATGTGTCAGCGCAACCCCCAGGTCTGCGGCCCAGGACGCTGCATTTCCCGGCCCAGCGGCT
ACACCTGCGCTTGCGACTCTGGCTTCCGGCTCAGCCCCCAGGGCACCCGATGCATTGATGTGGACGAATGTCGCC
GCGTGCCCCCGCCCTGTGCTCCCGGGCGCTGCGAGAACTCACCAGGCAGCTTCCGCTGCGTGTGCGGCCCGGGCT
TCCGAGCCGGCCCACGGGCTGCGGAATGCCTGGATGTGGACGAGTGCCACCGCGTGCCGCCGCCGTGTGACCTCG
GGCGCTGCGAGAACACGCCAGGCAGCTTCCTGTGCGTGTGCCCCGCCGGGTACCAGGCTGCACCGCACGGAGCCA
GCTGCCAGGATGTGGATGAATGCACCCAGAGCCCAGGCCTGTGTGGCCGAGGGGCCTGCAAGAACCTGCCTGGCT
CTTTCCGCTGTGTTTGCCCGGCTGGCTTCCGGGGCTCGGCGTGTGAAGAGGATGTGGATGAGTGTGCCCAGGAGC
CGCCGCCCTGTGGGCCCGGCCGCTGTGACAACACGGCAGGCTCCTTTCACTGTGCCTGCCCTGCTGGCTTCCGCT
CCCGAGGGCCCGGGGCCCCCTGCCAAGATGTGGATGAGTGTGCCCGAAGCCCCCCACCCTGCACCTACGGCCGGT
GTGAGAACACAGAAGGCAGCTTCCAGTGTGTCTGCCCCATGGGCTTCCAACCCAACACTGCTGGCTCCGAGTGCG
AGGATGTGGATGAGTGTGAGAACCACCTCGCATGCCCTGGGCAGGAGTGTGTGAACTCGCCCGGCTCCTTCCAGT
GCAGGACCTGTCCTTCTGGCCACCACCTGCACCGTGGCAGATGCACTGATGTGGACGAATGCAGTTCGGGTGCCC
CTCCCTGTGGTCCCCACGGCCACTGCACTAACACCGAAGGCTCCTTCCGCTGCAGCTGCGCGCCAGGCTACCGGG
CGCCGTCGGGTCGGCCCGGGCCCTGCGCAGACGTGAACGAGTGCCTGGAGGGCGATTTCTGCTTCCCTCACGGCG
AGTGCCTCAACACTGACGGCTCCTTTGCCTGTACTTGTGCCCCTGGCTACCGACCCGGACCCCGCGGAGCCTCTT
GCCTCGACGTTGACGAGTGCAGCGAGGAGGACCTTTGCCAGAGCGGCATCTGTACCAACACCGACGGCTCCTTCG
AGTGCATCTGTCCTCCGGGACACCGCGCTGGCCCGGACCTCGCCTCCTGCCTCGACGTGGACGAATGTCGCGAGC
GAGGCCCAGCCCTGTGCGGGTCGCAGCGCTGTGAGAACTCTCCCGGCTCCTACCGCTGTGTCCGGGACTGCGATC
CTGGGTACCACGCGGGCCCCGAGGGCACCTGTGACGATGTGGATGAGTGCCAAGAATATGGTCCCGAGATTTGTG
GAGCCCAGCGTTGTGAGAACACCCCTGGCTCCTACCGCTGCACACCAGCCTGTGACCCTGGCTATCAGCCCACGC
CAGGGGGCGGATGCCAGGATGTGAACGAGTGTGAAACACTACAGGGTGTATGTGGAGCTGCCCTGTGTGAAAATG
TCGAAGGCTCCTTCCTCTGTGTCTGCCCCAACAGCCCGGAAGAGTTTGACCCCATGACTGGACGCTGTGTTCCCC
CACGAACTTCTGCTGGCACGTTCCCAGGCTCGCAGCCCCAGGCACCTGCTAGCCCCGTTCTGCCCGCCAGGCCAC
CTCCGCCACCCCTGCCCCGCCGACCCAGCACACCTAGGCAGGGCCCTGTGGGGAGTGGGCGCCGGGAGTGCTACT
TTGACACAGCGGCCCCGGATGCATGTGACAACATCCTGGCTCGGAATGTGACATGGCAGGAGTGCTGCTGTACTG
TGGGTGAGGGCTGGGGCAGCGGCTGCCGCATCCAGCAGTGCCCGGGCACCGAGACAGCTGAGTACCAGTCATTGT
GCCCTCACGGCCGGGGCTACCTGGCGCCCAGTGGAGACCTGAGCCTCCGGAGAGACGTGGACGAATGTCAGCTCT
TCCGAGACCAGGTGTGCAAGAGTGGCGTGTGTGTGAACACGGCCCCGGGCTACTCATGCTATTGCAGCAACGGCT

FIGURE 2604B

ACTACTACCACACACAGCGGCTGGAGTGCATCGACAATGACGAGTGCGCCGATGAGGAACCGGCCTGTGAGGGCG
GCCGCTGTGTCAACACTGTGGGCTCTTATCACTGTACCTGCGAGCCCCCACTGGTGCTGGATGGCTCGCAGCGCC
GCTGCGTCTCCAACGAGAGCCAGAGCCTCGATGACAATCTGGGAGTGTGCTGGCAGGAAGTGGGGGCTGACCTCG
TGTGCAGCCACCCTCGGCTGGACCGTCAGGCCACCTACACAGAGTGCTGCTGCCTGTATGGAGAGGCCTGGGGCA
TGGACTGCGCCCTCTGCCCTGCGCAGGACTCAGATGACTTCGAGGCCCTGTGCAATGTGCTACGCCCCCCCGCAT
ATAGCCCCCCGCGACCAGGTGGCTTTGGACTCCCCTACGAGTACGGCCCAGACTTAGGTCCACCTTACCAGGGCC
TCCCATATGGGCCTGAGTTGTACCCACCACCTGCGCTACCCTACGACCCCTACCCACCGCCACCTGGGCCCTTCG
CCCGCCGGGAGGCTCCTTATGGGGCACCCCGCTTCGACATGCCAGACTTTGAGGACGATGGTGGCCCCTATGGCG
AATCTGAGGCTCCTGCGCCACCTGGCCCGGGCACCCGCTGGCCCTATCGGTCCCGGGACACCCGCCGCTCCTTCC
CAGAGCCCGAGGAGCCTCCTGAAGGTGGAAGCTATGCTGGTTCCCTGGCTGAGCCCTACGAGGAGCTGGAGGCGG
AGGAGTGCGGGATCCTGGACGGCTGCACCAACGGCCGCTGCGTGCGCGTCCCCGAAGGCTTCACCTGCCGTTGCT
TCGACGGCTACCGCCTGGACATGACCCGCATGGCCTGCGTTGACATCAACGAGTGTGATGAGGCCGAGGCTGCCT
CCCCGCTGTGCGTCAACGCGCGTTGCCTCAACACGGATGGCTCCTTCCGCTGCATCTGCCGCCCGGGATTCGCAC
CCACGCACCAGCCGCACCACTGTGCGCCCGCACGGCCCCGGGCCTGAGCCCTGGCACCCGCTGGCCGCCCACCCG
CGCCCGCCACTCGGGGCCCCTGCCGCGCATCCTGCAGCCCGCTTATGCGTATGTGCACGGGGCCGCCCGCCTGGA
CCTGGAGAAGGGACCTACGGACGCCTGGAAGCTGCGACGCCCTGCACTGCTCCCGCCTCCACCAGCGCCTCCCAC
TGATGTCGTGGTCCCGGGCCTGGCCCAGGGGCCCCTTTACATGCCCTCTCCCTTTTATAAAATTTTCCATTAAAA
ACCACCTATTTTCT

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FIGURE 2605

ACATTGTGACGCCCAGGTTGCAACAGG**ATG**GAATTCAGGGACGGACCCAGCCTGGCTAAGGGAACCATTTCACTG
CCGGACTTAGGCTGGCAATGCCCCCTTCCCCAACCCCAGACACAGGGGTTGGCCACAATCCCACTGAATGCCCTT
GGTTCACACTCCATTTCCCAGTTTCTGTTGACCCCCACCTTCCAGTGTTGGACAGGATGGAGGGGGGACACTTGC
TTAGGAGGCGGGGAGGGAGGAGGAGGAGAAGATGCGCAGTTACCTCATGTCGGTGCCCGCTGGGGAGGGGTCCGG
GAAGAAGGGGAAGGGGTGCCTGGCGGGTACTTTTCTATCTTTTATTTCCAGATTTTTTTTGTATCTAAACTTGAA
GATTTGTATTATACAAGGACAGCCAATAAAGGAAGAATA**TAA**TGGTG

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FIGURE 2606

GCTCGCGCGCGTGCATCCCGCACCATCCCCCGGCCCCGGGCCCTGGCCGGCGTCAGACCGAGCTGCCGCCGCCAC
CACCGCAGCAGCAGCAGTCGGGGAGCCAGGCCCAGCCAGGGCCGCGGGAGGCGGGGGCGCCCGGGCCCTGGATGT
CCCGCAGCGCGGCGGCCAGCGGCGGACCCCGGAGGCCTGAGCGGCACCTGCCCCCAGCCCCCTGTGGGGCCCCGG
GGCCCCCAGAAACCTGCAGGACGGAGCCAGACGGGGCGGGCACCATGAACAAGTTACGGCAGAGCCTGCGGCGGA
GGAAGCCAGCCTACGTGCCCGAGGCGTCGCGCCCGCACCAGTGGCAGGCAGACGAGGACGCGGTGCGGAAGGGCA
CGTGCAGCTTCCCGGTCAGGTACCTGGGTCACGTGGAGGTAGAGGAGTCCCGGGGAATGCACGTGTGTGAAGATG
CGGTGAAGAAGCTGAAGGCGATGGGCCGAAAGTCCGTGAAGTCTGTCCTGTGGGTGTCAGCCGATGGGCTCCGAG
TGGTGGACGACAAAACCAAGGATCTTCTGGTCGACCAGACCATCGAAAAGGTCTCCTTTTGTGCTCCTGACCGCA
ACCTGGACAAGGCTTTCTCCTATATCTGTCGTGACGGGACTACCCGCCGCTGGATCTGCCACTGTTTTCTGGCAC
TGAAGGACTCCGGCGAGAGGCTGAGCCACGCTGTGGGCTGTGCTTTTGCCGCCTGCCTGGAGCGAAAACAGCGAC
GGGAGAAGGAATGTGGGGTCACGGCCGCCTTCGATGCCAGCCGCACCAGCTTCGCCCGCGAGGGCTCCTTCCGCC
TGTCTGGGGGTGGGCGGCCTGCTGAGCGAGAGGCCCCGGACAAGAAGAAAGCAGAGGCAGCAGCTGCCCCCACTG
TGGCTCCTGGCCCTGCCCAGCCTGGGCACGTGTCCCCGACACCAGCCACCACATCCCCTGGTGAGAAGGGTGAGG
CAGGCACCCCTGTGGCTGCAGGCACCACTGCGGCCGCCATCCCCCGGCGCCATGCACCCCTGGAGCAGCTGGTTC
GCCAGGGCTCCTTCCGTGGGTTCCCAGCACTCAGCCAGAAGAACTCGCCTTTCAAACGGCAGCTGAGCCTACGGC
TGAATGAGCTGCCATCCACGCTGCAGCGCCGCACTGACTTCCAGGTGAAGGGCACAGTGCCTGAGATGGAGCCTC
CTGGTGCCGGCGACAGTGACAGCATCAACGCTCTGTGCACACAGATCAGTTCATCTTTTGCCAGTGCTGGAGCGC
CAGCACCAGGGCCACCACCTGCCACAACAGGGACTTCTGCCTGGGGTGAGCCCTCCGTGCCCCCTGCAGCTGCCT
TCCAGCCTGGGCACAAGCGGACACCTTCAGAGGCTGAGCGATGGCTGGAGGAGGTGTCACAGGTGGCCAAGGCCC
AGCAGCAGCAGCAGCAGCAACAGCAACAGCAGCAGCAGCAGCAGCAACAGCAGCAAGCAGCCTCAGTGGCCC
CAGTGCCCACCATGCCTCCTGCCCTGCAGCCTTTCCCCGCCCCCGTGGGGCCCTTTGACGCTGCACCTGCCCAAG
TGGCCGTGTTCCTGCCACCCCCACACATGCAGCCCCCTTTTGTGCCCGCCTACCCGGGCTTGGGCTACCCACCGA
TGCCCCGGGTGCCCGTGGTGGGCATCACACCCTCACAGATGGTGGCAAACGCCTTCTGCTCAGCCGCCCAGCTCC
AGCCTCAGCCTGCCACTCTGCTTGGGAAAGCTGGGGCCTTCCCGCCCCCTGCCATACCCAGTGCCCCTGGGAGCC
AGGCCCGCCCTCGCCCCAATGGGGCCCCCTGGCCCCCTGAGCCAGCGCCTGCCCCAGCTCCAGAGTTGGACCCCT
TTGAGGCCCAGTGGGCGGCATTAGAAGGCAAAGCCACTGTAGAGAAACCCTCCAACCCCTTTTCTGGCGACCTGC
AAAAGACATTCGAGATTGAACTGTAG

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FIGURE 2607

TCTGAGCATCCGAAGCGCGGCCAGGTATGCATCTAGGGCACCGGGGTCCTGGTGGCGCGCCAGTGGGCCCCCTCC
CTCCACCCCTGTGACTAAACCACCCTCCCTACACGGTTGAATGACAAGTTCAACCTTCCCTAAAACCCCCGGTGA
CGAGTCCAGCCGCGCGCCCATTCTTCACGCAGGGGCGGGACGGACTTTCAAAGACTTGGAGTTCCCACGGGTGTG
GGTTCGAGACCTTCCTCTGCCAGTTCCCAGCTCCGCTACCCTGAGCAAATGACTTACGCTCCATTGGATTTTCCG
CAATGTGGCTGAAGGTGGGGGGCCTACTTCGGGGGACCGGTGGACAGCTGGGCCAGACTGTTGGTTGGCCTTGTG
GGGCCCTGGGGCCTGGGCCCCACCGCTGGGGACCATGTGGAGGTTCTTGGGCCCAAAAGTTTTACCAGGATGGGC
CTGGGAGAGGCCTGGGTGAGGAGGACATTCGCAGGGCACGGGAGGCCCGTCCCAGGAAGACACCCCGGCCCCAGC
TGAGTGACCGCTCTCGAGAACGCAAGGTGCCTGCCTCCCGCATCAGCCGCTTGGCCAACTTTGGGGGACTGGCTG
TGGGCTTGGGGCTAGGAGTACTGGCCGAGATGGCTAAGAAGTCCATGCCAGGAGGTCGTCTGCAGTCAGAGGGTG
GTTCTGGGCTGGACTCCAGCCCCTTCCTGTCGGAGGCCAATGCCGAGCGGATTGTGCAGACCTTATGTACAGTTC
GAGGGGCCGCCCTCAAGGTTGGCCAGATGCTCAGCATCCAGGGTACAGCATGACCCTCGACTCCTGACCCCTGAC
CTCCCTTCTACCCCAGCCCTACCCACCAACAGGCCCCAACTTCAGATACTCACACGGGGTCCCTCCTCACCTCTT
CGCTTACTTCCCCCCTGGTTCCACTGTCTCCCAAGACAACAGCTTCATCAGCCCTCAGCTGCAGCACATCTTTGA
GCGGGTCCGCCAGAGCGCCGACTTCATGCCCCGCTGGCAGATGCTGGTGAGTGCCCAGTGGGGGAGGGCGGTGAG
GGAGGCAGGCTCCATCTCCTCTGACCTGCCTGACCTTCCTGGCTTCACTGCCCCACTCCCTGCCTCTGAGCCTCA
CTTTCCCCATCTGTAAAATGGGAATCACCAGAGTACACACCTCCTAGCATTGCTGTGGTGATTAAAACAGGGAAC
AGCAGCCTGACCTCTCTGTGCTTCAGTTCCCTTCCCTGGGAAATGGCGATAGTGACAGCCACACCCACATCATAG
GGTCACATAAATCAGTTTACACTGAGCACTGAGAACGGCCCCTGATTCACTGTGAGCAACATGCAGGTGTTAGCT
GTGATTATTACTGTTTTTTTAATTAAAGGAGATCGTGTCTGTAATAGGTTGGCACGGCGCCTGGCACCAAGTAAG
TGCCCAGGACATGAGCTGTTCTAATAACTGGGTAAGGCATGGAATCCAGGATTCCGCCACCCACCTGCTCTCCCA
TCCCTGTTCTGCTTATTCGCCATGCGGCCCCAGGCAGGTACTGCCTCTCTCTGGGCCACTCTGAATAGGACCTGG
CCCACAGGAAGCCCATTGTAAATTTTAGCTCTTCTTGATCACAGTAACTGTGAGTTAATAATAACATATAAGAGC
ATAATAAAGGATGGTTGGCCACGTGTAATGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGCGGTGGGAGG
ATCATTTGAGCTCAGGACTTCCAGACCACCCTGGGCAACATAGTGAGACCTTGTCTCTACTAAACATAATAACAG
TAATAATTAGCTGGGCACAGTGGCACATATCTGTAGTCCCAGCTATTCAGGAGGCAGGAGGATGGCTTGAGCTCG
GGAGGTTGATGCTGCAGTGAGCCGTGAGAGTGCCACTACACTCCAGCCTGGGCTACAGAACAAGACCCTGTCTC

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FIGURE 2608

ATGAGGCGCTGCCCGTGCCGTGGGAGCCTGAACGAGGCGGAGGCCGGGGCGCTGCCCGCGGCGGCCCGCATGGGA
CTGGAGGCGCCGCGAGGAGGGCGGCGGCGGCAGCCGGGACAGCAGCGACCTGGGCCCGGCGCAGGGGCCCCGGCG
GGGCGGCCGGAGGGGGGCGGGCCCTGGGCCCGGACAGAGGGGTCCAGCCTCCACAGCGAGCCTGAGAGGGCCGGC
CTCGGGCCTGCGCCGGGGACAGAGAGTCCGCAGGCAGAATTCTGGACAGACGGACAGACTGAGCCCGCGGCAGCT
GGCCTTGGAGTAGAGACCGAGAGGCCCAAGCAAAAGACGGAGCCAGACAGGTCCAGCCTCCGGACGCATCTAGAA
TGGAGCTGGTCAGAGCTGGAGACGACTTGTCTTTGGACGGAGACCGGGACAGATGGCCTTTGGACTGATCCGCAC
AGGTCCGACCTCCAGTTTCAGCCCGAGGAGGCCAGCCCCTGGACACAGCCAGGGGTTCATGGGCCCTGGACAGAG
CTGGAAACGCATGGGTCACAGACTCAGCCAGAGAGGGTCAAGTCCTGGGCTGATAACCTCTGGACCCACCAGAAC
AGTTCCAGCCTCCAGACTCACCCAGAAGGAGCCTGTCCCTCAAAAGAGCCAAGTGCTGATGGCTCCTGGAAAGAA
TTGTATACTGATGGCTCCAGGACACAACAGGATATTGAAGGTCCCTGGACAGAGCCATATACTGATGGCTCCCAG
AAAAAACAGGATACTGAAGCAGCCAGGAAACAGCCTGGCACTGGTGGTTTCCAAATACAACAGGATACTGATGGC
TCCTGGACACAACCTAGCACTGACGGTTCCCAGACAGCACCTGGGACAGACTGCCTCTTGGGAGAGCCTGAGGAT
GGCCCATTAGAGGAACCAGAGCCTGGAGAATTGCTGACTCACCTGTACTCTCACCTGAAGTGTAGCCCCCTGTGC
CCTGTGCCCCGCCTCATCATTACCCCTGAGACCCCTGAGCCTGAGGCCCAGCCAGTGGGACCCCCCTCCCGGGTT
GAGGGGGGCAGCGGCGGCTTCTCCTCTGCCTCTTCTTTCGACGAGTCTGAGGATGACGTGGTGGCCGGGGGCGGA
GGTGCCAGCGATCCCGAGGACAGGTCTGGGAGCAAACCCTGGAAGAAGCTGAAGACAGTTCTGAAGTATTCACCC
TTTGTGGTCTCCTTCCGAAAACACTACCCTTGGGTCCAGCTTTCTGGACATGCTGGGAACTTCCAGGCAGGAGAG
GATGGTCGGATTCTGAAACGTTTCTGTCAGTGTGAGCAGCGCAGCCTGGAGCAGCTGATGAAAGACCCGCTGCGA
CCTTTCGTGCCTGCCTACTATGGCATGGTGCTGCAGGATGGCCAGACCTTCAACCAGATGGAAGACCTCCTGGCT
GACTTTGAGGGCCCCTCCATTATGGACTGCAAGATGGGCAGCAGGACCTATCTGGAAGAGGAGCTAGTGAAGGCA
CGGGAACGTCCCCGTCCCCGGAAGGACATGTATGAGAAGATGGTGGCTGTGGACCCTGGGGCCCCTACCCCTGAG
GAGCATGCCCAGGGTGCAGTCACCAAGCCCCGCTACATGCAGTGGAGGGAAACCATGAGCTCCACCTCTACCCTG
GGCTTCCGGATCGAGGGCATCAAGAAGGCAGATGGGACCTGTAACACCAACTTCAAGAAGACGCAGGCACTGGAG
CAGGTGACAAAAGTGCTGGAGGACTTCGTGGATGGAGACCACGTCATCCTGCAAAAGTACGTGGCATGCCTAGAA
GAACTTCGTGAAGCTCTGGAGATCTCCCCCTTCTTCAAGACCCACGAGGTGGTAGGCAGCTCCCTCCTCTTCGTG
CACGACCACACCGGCCTGGCCAAGGTCTGGATGATAGACTTCGGCAAGACGGTGGCCTTGCCCGACCACCAGACG
CTCAGCCACAGGCTGCCCTGGGCTGAGGGCAACCGTGAGGACGGCTACCTCTGGGGCCTGGACAACATGATCTGC
CTCCTGCAGGGGCTGGCACAGAGCTGA

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FIGURE 2609

CCTGACTTCCTTTTCGGAGGAAGATCCTTGAGCAGCCGACGTTGGGACAAAGGATTTGGAGAAACCCAGGGCTAA
AGTCACGTTTTTCCTCCTTTAAGACTTACCTCAACACTTCACTCCATGGCAGTTCCCGAGACCCGCCCTAACCAC
ACTATTTATATCAACAACCTCAATGAGAAGATCAAGAAGGATGAGCTAAAAAAAGTCCCTGTACGCCATCTTCTCC
CAGTTTGGCCAGATCCTGGATATCCTGGTATCACGGAGCCTGAAGATGAGGGGCCAGGCCTTTGTCATCTTCAAG
GAGGTCAGCAGCGCCACCAACGCCCTGCGCTCCATGCAGGGTTTCCCTTTCTATGACAAACCTATGCGTATCCAG
TATGCCAAGACCGACTCAGATATCATTGCCAAGATGAAAGGCACCTTCGTGGAGCGGGACCGCAAGCGGGAGAAG
AGGAAGCCCAAGAGCCAGGAGACCCCGGCCACCAAGAAGGCTGTGCAAGGCGGGGGAGCCACCCCCGTGGTGGGG
GCTGTCCAGGGGCCTGTCCCGGGCATGCCGCCGATGACTCAGGCGCCCCGCATTATGCACCACATGCCGGGCCAG
CCGCCCTACATGCCGCCCCCTGGTATGATCCCCCCGCCAGGCCTTGCACCTGGCCAGATCCCACCAGGGGCCATG
CCCCCGCAGCAGCTTATGCCAGGACAGATGCCCCCTGCCCAGCCTCTTTCTGAGAATCCACCGAATCACATCTTG
TTCCTCACCAACCTGCCAGAGGAGACCAACGAGCTCATGCTGTCCATGCTTTTCAATCAGTTCCCTGGCTTCAAG
GAGGTCCGTCTGGTACCCGGGCGGCATGACATCGCCTTCGTGGAGTTTGACAATGAGGTACAGGCAGGGGCAGCT
CGCGATGCCCTGCAGGGCTTTAAGATCACGCAGAACAACGCCATGAAGATCTCCTTTGCCAAGAAGTAGCACCTT
TTCCCCCCATGCCTGCCCCTTCCCCTGTTCTGGGGCCACCCCTTTCCCCCTTGGCTCAGCCCCCTGAAGGTAAGT
CCCCCCTTGGGGGCCTTCTTGGAGCCGTGTGTGAGTGAGTGGTCGCCACACAGCATTGTACCCAGAGTCTGTCCC
CAGACATTGCACCTGGCGCTGTTAGGCCGGAATTAAAGTGGCTTTTTGAGGTTTGGTTTTTCAC

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FIGURE 2610

AGTAGGAAGGAGCCGGGGCTGTAGCCGGAGTGGAGCGGCTGCCAGCCGAGGAGCAGGCGCGGCCGCGGCGCCATA
TTGCGGCCCTCAGCGGCCGCGACCGAGTC**ATG**GCTGAGACCTACGACTTCCTCTTCAAATTCCTGGTGATTGGCA
GTGCAGGAACTGGCAAATCATGTCTCCTTCATCAGTTCATTGAGAATAAGTTCAAACAGGACTCCAACCACACAA
TCGGCGTGGAGTTTGGATCCCGGGTGGTCAACGTGGGTGGGAAGACTGTGAAGCTACAGATTTGGGACACGGCTG
GCCAGGAGCGGTTTCGGTCAGTGACGCGGAGTTATTACCGAGGGGCGGCTGGAGCCCTGCTGGTGTACGACATCA
CCAGCCGGGAGACATACAACTCACTGGCTGCCTGGCTGACGGATGCCCGCACCCTGGCCAGCCCCAACATCGTGG
TCATCCTCTGTGGCAACAAGAAGGACCTGGACCCTGAGCGGGAGGTCACTTTCCTGGAGGCCTCCCGCTTTGCCC
AGGAGAATGAGCTGATGTTCCTGGAGACCAGCGCTCTCACAGGCGAGAACGTGGAGGAGGCGTTCCTCAAGTGTG
CCCGCACTATCCTCAACAAGATTGACTCAGGCGAGCTAGACCCGGAGAGGATGGGCTCTGGCATTCAGTACGGGG
ATGCGTCCCTCCGCCAGCTTCGGCAGCCTCGGAGTGCCCAGGCCGTGGCCCCTCAGCCGTGTGGCTGC**TGA**GCTC
TGTGGAGCCAGCTCACCTGTTCTCCAGGACCAGCCCTGCTGGGGCCCAGGCCCAGGCTCTGAGAGGCCGTGTCCT
AACCTGCCCTGGCCCCGGAGAAGCTACGTTGCCACCTGTCCCCCTTCCCTGGCCTGGTGGGGCCTGGCTTTGGGG
CAAGACTGAGCCACGGGGGAAGGGGGAATCCCGTACCTGCTGCTGCTTCCTCTGTCTTGGCTAACGTCTGTCCCC
CTGAACCCCTAACCATACCCCAAGAGCTCCCAAAGCCTGAGACCAGGGTCATTTGTCCCCAACTCCCCATCTGGC
CCTGCTGTTGCTAGTACCTGTTATTTATTACCTGGAGGCCTGTCCAGCACCCACCCTACCCCCATAAAGCATTGT
TTACA

FIGURE 2611A

GTGTGAGTCCCATGTGCTTGGTGGGAGGCGCTGTGTGAGAATGTACAGGGCAGGAGGAAACATAGCAGGGCTGGG
GTGCAGAGGAGGCCCAGAGCAGTGCACTCCAGTCTGCAGGTACTGCACTGGGCACTGGGGAGACCAACCTGGCCC
CAGGGGCTTCCCTGTGGCTGCCTTCCAGGGCAGTACTAGGTAAACAGGTGCCTGTGCTGATGCCATGTTGCTAGG
AGTGGAACGGACAATCAGCCGGAGTACTCAAGGTGACCCTTGGTCTCTGAATCCTGAATAACAAAGAGGGTCAGA
AGGAAGAGTGTCCCAGGCCAGTGCTGAGGCCTTGTGGTGGCGATGAGCTCAGCCTGTTGAGGCATGGAGCAGAGT
GATGGGAGAGGCACATGAGGTTGGGGGCCTTTGAGGCTGTGGTTGGGAATTTGTATTTTCTCAGGATGGAGTGAA
GACCTGGAGAGGAGGGGCTCTGGCTGCTGTGTGGGGATGAATTGTGGGAAGAGGGTGCAGCACTGGACCCCTTCC
CTGCCACCCATCCACGTGCATCATCAGTGTAATCTCTGATTGGATTCCTAATTGGGGAGGTCTTGCCCATCTCTA
GTCAGTAACTCACTGTTTCTAAGCCTCCTGGACCATGGCCCAATTCTTCTCCCAGTGAGGTGGTTGCTCAGAGTG
CCGACCCTTCCATAGGGAGTGAGCAGTGCAAAGAAGGTGCCCCCTCCTGAACCTTGAAGTGTAGCCATTAGGGTT
TTCCCTGGGGGGCCTTCTCACTAATTGTACTCTGGTGCTGCCAGAGAGAAGGTTGTCAGCTTCCCACTGCTAGGT
GGCAGTAGATGGTGGCAGCCCTCTCTTTCCAGGGCAAGGTCTGGTGGATGAGGTGCACATGGTTAATGCAGAGCA
GCTTAACATCCACCACAGAGGGTGAGCCCTGGGATAATGTGTTGGGAGGCGTCCTGGGGAGGGTGAGGATTGAAG
CAGCCCAGTCTGCTGTGGCGTGCGTGCTTGGCAAGCATCCTGTTGTGGCAGTGGCCACTGATGTTTGATCGTGAA
TGTTTATCTTGGGACTGTCTTGCTGGGCCGGGCCCATAGGTGTAGCTGAGCATTCGTGGGGAATGGACGCCAGCA
GAGTTGTACCAGGGCAGAGAGGTCAGGGCAGAGAGGTCAAGACAGATGGTCCGGGCTGGGGAGAAGTTGAAGGGT
CCTTGTGCCAGTCCTCCCCTTTTTGTGTGCTACCTCATCTTGCCACTGCAGTGACTTTGGGCAGAGGGTGGGACA
GGGACCTTTTAAAATTTTTAAATGGCATTTCAGCCTGTGCTCCAGTTCTCCATGTGGCAGGCACTGTGCTGGCTG
TCTTCCCAGACACTTGTTATCTTGTTCACTTGTTCCACAACAACCTGTGAAATAGCTGTGAGCTCCATTGGATCC
ATGGATGAGGAACCTGAGACCAGGAAGTCACCTGCCTGATGCCACAGCTCATGTGGCAGCACTGAGACTTGAACC
AGGGAATTGTGTCTGCAGAAGTGGCTGGGCCATTTCCTTTACCTCTCAGCCACCTTTCTGCCAGCTCCCTGATGA
CAAACATCCCGGGGCCCTGGCCACAGCATTGTAGGGCTGGGTCAGGGGAGTGGCAACTGTCAGGCAGAGGAAAGA
ACCCTGTAGACAGAGAAACCAAGCCCTGCAATGAGTCCTGTTAGATCTCCAGGAGTTGGGGCTCCAGAACCTCCC
AAGTTATGTTCTCAGAGAGATTAATTGCTACCGCTGTAAACAGCAGTGTTTATTACCCCTGCTGTACACATCAGG
CAGTTGAGGCCCATTCAGGTGTTGGAACTGGCTAGGGTTACCCAGCAAATTATCCTTGGAGTTGGAATTAGGTCT
TTCTATTCAGACTGTAGCTTTTGGCTCCTGTTCGGAGGTCTATGGGACAGATAATTTAGTGGGGATTCTTTGTAG
TCCAGGGCAGCAGTTCTTAACATTGCTGCATGGTAGAATTACCTGGGAAGCTTTACCAATTTCAGGCCCTTCCTT
AGGCCAGGTACTTCAGAACCTCAGAGCTCCCCAGGGGGCTCCACTCCACAGCCAAGGGTAAGAATTCCTGGTCTA
GGGCTGTGAGGCCACCTCCTTGCACACCTGAAAATGTTTAAATTGGTATTATTCTACTGAAATGGCTGAGGTGGG
GTTTGGGGTATCTTGAAACAAATCAAACTCTGTTACTAATTGAGCCCTAGCTGGGTGCCAGGCCCCAGGTATGTG
TGTTGGGAGGGAGTGGGCTCTTGAGGCCCAGGAGCTGAGGTTTCTGATAGACTTGGGGATGGGATTTTGGCTGAA
AAAGAAAGTCTTTTGGGGCAGGAGCTTGGAACCCTTGACCCAAGGAGTCATGGGGAAGATGGGGCAAGGAGGGGT
GGGAAAATAGGTAATTCATGGCTGCTTCTCTAAGATGTGCCTGCCTAGCCCCAGTAAACCTACCTCCCTCCATCC
CTGCCAGGCCATGGTGGCGTGTTACCCAGGCAACGGGCTCGGGTACGTAAGGCACGTTGACAATCCCCACGGCGA
TGGGCGCTGCATCACCTGTATCTATTACCTGAATCAGAACTGGGACGTTAAGGTAGGGGTGAGGGTGAGGGTGAG
GGTGGCGCTGGGGCTAGGGCTGGGGCGGGGGTGGCGTGCGTCCACTCCATTTTCCACTCTCAGCCCAGATTCTGG
CATTCTCCTGTTTCTCTTCTCAACACACAGCGGGCAGTGCGATCTGCCGGCTCTTCCTGGGAAATGGCACCTCCT
CCTCTCTAGCGGACTGTGTGGTGGGAACTCCCCTCTTTCCGGGAATGGTGCTGTCTGCCCAGCCCCACCCGGCCT
TGTAATGAACACTTTCCCCCTTTTCCTGTCTTTAGTAGCTTCCTGCCCATCTCCATGGTGATGCAGTCTCTGGGT
TGTCATTCACTTTGAGAGCCCGAGGGGTGGGAGGGAGTGATGCAGGCAGACGCTGCGCCTCCTAGTGGGCTCCCG
GGGCACCGTGGGAGGCAGCGGCTCCTGGCCGTACCAGCTAGCCTCATCCTTTGGCCTGCCCCCAGGTGCATGGCG
GCCTGCTGCAGATCTTCCCTGAGGGCCGGCCCGTGGTAGCCAACATCGAGCCACTCTTTGACCGGTTGCTCATTT
TCTGGTCTGACCGGCGGAACCCCCACGAGGTGAAGCCAGCCTATGCCACCAGGTACGCCATCACTGTCTGGTATT
TTGATGCCAAGGAGCGGGCAGCAGCCAAAGACAAGTATCAGCTAGCATCAGGACAGAAAGGTGTCCAAGTACCTG
TATCACAGCCGCCTACGCCCACCTAGTGGCCAGTCCCAGAGCCGCATGGCAGACAGCTTAAATGACTTCAGGAGA
GCCCTGGGCCTGTGCTGGCTGCTCCTTCCCTGCCACCGCTGCTGCTTCTGACTTTGCCTCTGTCCTGCCTGGTGT
GGAGGGCTCTGTCTGTTGCTGAGGACCAAGGAGGAGAAGAGACCTTTGCTGCCCCATCATGGGGGCTGGGGTTGT
CACCTGGACAGGGGGCAGCCGTGGAGGCCACCGTTACCAACTGAAGCTGGGGGCCTGGGTCCTACCCTGTCTGGT

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FIGURE 2611B

CATGACCCCATTAGGTATGGAGAGCTGGGAGGAGGCATTGTCACTTCCCACCAGGATGCAGGACTTGGGGTTGAG
GTGAGTCATGGCCTCTTGCTGGCAATGGGGTGGGAGGAGTACCCCCAAGTCCTCTCACTCCTCCAGCCTGGAATG
TGAAGTGACTCCCCAACCCCTTTGGCCATGGCAGGCACCTTTTGGACTGGGCTGCCACTGCTTGGGCAGAGTAAA
AGGTGCCAGGAGGAGCATGGGTGTGGAAGTCCTGTCAGCCAAGAAATAAAAGTTTACCTCAGAGCTGCA

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FIGURE 2612

ACTACCACCATGCTGGCCTCAGGGATGCTTCTGGTGGCCTTGCTGGTCTGCCTGACTGTAATGGTCTTGATGTCT
GTTTGGCAGCAGAGGAAGAGCAAGGGGAAGCTGCCTCCGGGACCCACCCCATTGCCCTTCATTGGAAACTACCTG
CAGCTGAACACAGAGCAGATGTACAACTCCCTCATGAAGATCAGTGAGCGCTATGGCCCCGTGTTCACCATTCAC
TTGGGGCCCCGGCGGGTCGTGGTGCTGTGTGGACATGATGCCGTCAGGGAGGCTCTGGTGGACCAGGCTGAGGAG
TTCAGCGGGCGAGGCGAGCAAGCCACCTTCGACTGGGTCTTCAAAGGCTATGGCGTGGTATTCAGCAACGGGGAG
CGCGCCAAGCAGCTCCGGCGCTTCTCCATCGCCACCCTGCGGGACTTCGGGGTGGGCAAGCGAGGCATCGAGGAG
CGCATCCAGGAGGAGGCGGGCTTCCTCATCGACGCCCTCCGGGGCACTGGCGGCGCCAATATCGATCCCACCTTC
TTCCTGAGCCGCACAGTCTCCAATGTCATCAGCTCCATTGTCTTTGGGGACCGCTTTGACTATAAGGACAAAGAG
TTCCTGTCACTGTTGCGCATGATGCTAGGAATCTTCCAGTTCACGTCAACCTCCACGGGGCAGCTCTATGAGATG
TTCTCTTCGGTGATGAAACACCTGCCAGGACCACAGCAACAGGCCTTTCAGTTGCTGCAAGGGCTGGAGGACTTC
ATAGCCAAGAAGGTGGAGCACAACCAGCGCACGCTGGATCCCAATTCCCCACGGGACTTCATTGACTCCTTTCTC
ATCCGCATGCAGGAGGAGGAGAAGAACCCCAACACGGAGTTCTACTTGAAAAACCTGGTGATGACCACGTTGAAC
CTCTTCATTGGGGGCACCGAGACCGTCAGCACCACCCTGCGCTATGGCTTCTTGCTGCTCATGAAGCACCCAGAG
GTGGAGGCCAAGGTCCATGAGGAGATTGACAGAGTGATCGGCAAGAACCGGCAGCCCAAGTTTGAGGACCGGGCC
AAGATGCCCTACATGGAGGCAGTGATCCACGAGATCCAAAGATTTGGAGACGTGATCCCCATGAGTTTGGCCCGC
AGAGTCAAAAAGGACACCAAGTTTCGGGATTTCTTCCTCCCTAAGGGCACCGAAGTGTTCCCTATGCTGGGCTCT
GTGCTGAGAGACCCCAGTTTCTTCTCCAACCCCCAGGACTTCAATCCCCAGCACTTCCTGAATGAGAAGGGGCAG
TTTAAGAAGAGTGATGCTTTTGTGCCCTTTTCCATCGGAAAGCGGAACTGTTTCGGAGAAGGCCTGGCCAGAATG
GAGCTCTTTCTCTTCTTCACCACCGTCATGCAGAACTTCCGCCTCAAGTCCTCCCAGTCACCTAAGGACATTGAC
GTGTCCCCCAAACACGTGGGCTTTGCCACGATCCCACGAAACTACACCATGAGCTTCCTGCCCCGCTGAGCGAGG
GCTGTGCCGGTGCAGGTCTGGTGGGCGGGGCCAGGGAAAGGGCAGGGCCAAGACCGGGCTTGGGAGAGGGGCGCA
GCTAAGACTGGGGGCAGGATGGCGGAAAGGAAGGGGCGTGGTGGCTAGAGGGAAGAGAAGAAACAGAAGCGGCTC
AGTTCACCTTGATAAGGTGCTTCCGAGCTGGGATGAGAGGAAGGAAACCCTTACATTATGCTATGAAGAGTAGTA
ATAATAGCAGCTCTTATTTCCTGAGC

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FIGURE 2613

CCCTGGGTCTTCCTAGCCCCGAGACTTTCAAGTCCATATGCCTGGAGTCCCCCCTCCTGAGACCCTTAACCCTGC
ATCCTCCGCAACAGAAGACCTCCAGATGCACAGCCACACTTCCATCTCACCCTAATAAAACCCAGACCTTTGGAT
TCCTCTCCCCTTGGAATGCCCAAATCCACAACTTTGGGGTGCATTCTCACTCTCAGACCCCAAATCCAAAGCCCAA
GTGCTCCCCTATGCAAATATTCCAAACTCTTCAGTTCTACAGTTTATCGGTTGCCCCCTCCTAAATCCACAGCCC
TGCGGCACCCCTCCTGAAGTACCACAGATTTAGTCTGGAGGCCCCCTCTCTGTTCAGCTGCCCTGGGGTCCCCTT
ATCCTCCCTTGCTGGCTGTGTCCCAAGCTAGGTGGCATTCATGGTGGGGCGTGTAGTTGGGAGGTGAAATAAGGT
GATTATGTAATTAGCCAAAGTCCATCCCTCTTTTTCAGGCAGTATAAAGGCAAACCACCCCACCCATCACCATCT
GTCATCTCACTACCACC**ATG**CTGGCCTCAGGGCTGCTTCTGGTGGCCTTGCTGGCCTGCCTGACTGTGATGGTCT
TGATGTCTGTCTGGCAGCAGAGGAAGAGCAGGGGGAAGCTGCCTCCGGGACCCACCCCACTGCCCTTCATTGGAA
ACTACCTCCAGCTGAACACAGAGCACATATGTGACTCCATCATGAAGTTCAGTGAGTGCTATGGCCCCGTGTTCA
CCATTCACTTGGGGCCCCGGCGGGTCGTGGTGCTGTGTGGACATGATGCCGTCAGGGAGGCTCTGGTGGACCAGG
CTGAGGAGTTCAGCGGGCGAGGCGAGCAAGCCACCTTCGACTGGGTCTTCAAAGGCTATGGCGTGGCGTTCAGCA
ACGGGGAGCGCGCCAAGCAGCTCCTGCGCTTTGCCATCGCCACCCTGAGGGACTTCGGGGTGGGCAAGCGAGGCA
TCGAGGAGCGCATCCAGGAGGAGTCGGGCTTCCTCATCGAGGCCATCCGGAGCACGCACGGCGCCAATATCGATC
CCACCTTCTTCCTGAGCCGCACAGTCTCCAATGTCATCAGCTCCATTGTCTTTGGGGACCGCTTTGACTATGAGG
ACAAAGAGTTCCTGTCACTGCTGAGCATGATGCTAGGAATCTTCCAGTTCACGTCAACCTCCACGGGGCAGCTCT
ATGAGATGTTCTCTTCGGTGATGAAACACCTGCCAGGACCACAGCAACAGGCCTTTAAGTTGCTGCAAGGGCTGG
AGGACTTCATAGCCAAGAAGGTGGAGCACAACCAGCGCACGCTGGATCCCAATTCCCCACAGGACTTCATCGACT
CCTTTCTCATCCACATGCAGGAGGAGGAGAAGAACCCCAACACGGAGTTCTACTTGAAGAACCTGATGATGAGCA
CGTTGAACCTCTTCATTGCAGGCACCGAGACGGTCAGCACCACCCTGCGCTATGGCTTCTTGCTGCTCATGAAGC
ACCCAGAGGTGGAGGCCAAGGTCCATGAGGAGATTGACAGAGTGATCGGCAAGAACCGGCAGCCCAAGTTTGAGG
ACCGGACCAAGATGCCCTACATGGAGGCAGTGATCCACGAGATCCAAAGATTTGGAGACGTGATCCCCATGAGTT
TGGCCCGCAGGGTTAAAAAGGACACCAAGTTTCGGGATTTTTTCCTCCCTAAGGGCACCGAAGTGTTCCCTATGC
TGGGCTCCGTGCTGAGAGACCCCAGCTTCTTCTCCAACCCTCAGGACTTCAATCCCCAGCATTTCCTGGATGACA
AGGGGCAGTTTAAGAAGAGTGATGCTTTTGTGCCCTTTTCCATCGGAAAGCGGAACTGTTTCGGAGAAGGCCTGG
CCAGAATGGAGCTCTTTCTCTTCTTCACCACCGTCATGCAGAACTTCCGCCTCAAGTCCTCCCAGTCACCTAAGG
ACATTGACGTGTCCCCCAAACACGTGGTCTTTGCCACGATCCCACGAAACTACACCATGAGCTTCCTGCCCCGC**T**
GAGCGAGGGCTGTGCCGGTGCAGGTCTGGTGGGCGGGGCCAGGGAAAGGCGGGGTCAGGGCGGGGTTCGCGGAAG
AGGCGGGTATAAGAATGGGGGGAAGATGCGGGAAAGGAAGGGGCGTGGTGGCTAGAGGGAAGAGAAGAAACAGAA
GCGGCTCAGTTCACCTTGATAAGGTGCTTCCGAGCTGGGATGAGAGGAAGGGAAACCTTACATTATGCTATGAAG
AGTAGTAATAATAGCAGCTCTTATTTCCTGA

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FIGURE 2614

CAGGACCATGGAACTCAGCGTCCTCCTCTTCCTTGCACTCCTCACAGGACTCTTGCTACTCCTGGTTCAGCGCCA
CCCTAACACCCATGACCGCCTCCCACCAGGGCCCCGCCCTCTGCCCCTTTTGGGAAACCTTCTGCAGATGGATAG
AAGAGGCCTACTCAAATCCTTTCTGAGGTTCCGAGAGAAATATGGGGACGTCTTCACGGTACACCTGGGACCGAG
GCCCGTGGTCATGCTGTGTGGAGTAGAGGCCATACGGGAGGCCCTTGTGGACAAGGCTGAGGCCTTCTCTGGCCG
GGGAAAAATCGCCATGGTCGACCCATTCTTCCGGGGATATGGTGTGATCTTTGCCAATGGAAACCGCTGGAAGGT
GCTTCGGCGATTCTCTGTGACCACTATGAGGGACTTCGGGATGGGAAAGCGGAGTGTGGAGGAGCGGATTCAGGA
GGAGGCTCAGTGTCTGATAGAGGAGCTTCGGAAATCCAAGGGGGCCCTCATGGACCCCACCTTCCTCTTCCAGTC
CATTACCGCCAACATCATCTGCTCCATCGTCTTTGGAAAACGATTCCACTACCAAGATCAAGAGTTCCTGAAGAT
GCTGAACTTGTTCTACCAGACTTTTTCACTCATCAGCTCTGTATTCGGCCAGCTGTTTGAGCTCTTCTCTGGCTT
CTTGAAATACTTTCCTGGGGCACACAGGCAAGTTTACAAAAACCTGCAGGAAATCAATGCTTACATTGGCCACAG
TGTGGAGAAGCACCGTGAAACCCTGGACCCCAGCGCCCCCAAGGACCTCATCGACACCTACCTGCTCCACATGGA
AAAAGAGAAATCCAACGCACACAGTGAATTCAGCCACCAGAACCTCAACCTCAACACGCTCTCGCTCTTCTTTGC
TGGCACTGAGACCACCAGCACCACTCTCCGCTACGGCTTCCTGCTCATGCTCAAATACCCTCATGTTGCAGAGAG
AGTCTACAGGGAGATTGAACAGGTGATTGGCCCACATCGCCCTCCAGAGCTTCATGACCGAGCCAAAATGCCATA
CACAGAGGCAGTCATCTATGAGATTCAGAGATTTTCCGACCTTCTCCCCATGGGTGTGCCCCACATTGTCACCCA
ACACACCAGCTTCCGAGGGTACATCATCCCCAAGGACACAGAAGTATTTCTCATCCTGAGCACTGCTCTCCATGA
CCCACACTACTTTGAAAAACCAGACGCCTTCAATCCTGACCACTTTCTGGATGCCAATGGGGCACTGAAAAAGAC
TGAAGCTTTTATCCCCTTCTCCTTAGGGAAGCGGATTTGTCTTGGTGAAGGCATCGCCCGTGCGGAATTGTTCCT
CTTCTTCACCACCATCCTCCAGAACTTCTCCATGGCCAGCCCCGTGGCCCCAGAAGACATCGATCTGACACCCCA
GGAGTGTGGTGTGGGCAAAATACCCCCAACATACCAGATCCGCTTCCTGCCCCGCTGAAGGGGCTGAGGGAAGGG
GGTCAAAGGATTCCAGGGTCATTCAGTGTCCCCGCCTCTGTAGACAATGGCTCTGACTCCCCGCAACTTCCTGCC
TCTGAGAGACCTGCTACAAGCCAGCTTCCTTCCCCTCCATGGCACCAGTTGTCTGAGGTCACATTGCAAGTGAGT
GCAGGAGTGAGATTATCGAAAATTATAATATACAAAATCATATATATATATATGTTCTTGTTTTTTGAGACAGAG
TCTCACACTGTTGCCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAACCTCCACCCCCGGGGATCAAG
CAACTCTCCTGCCTCAGCCTCCCTAGTAGCTGGGATTACAGGCATGCACTACCACGCTTGGCTAATTTTTGTATT
TTTAGTAGAGATGGGGTTTCACTGTGTAGGCCAGGCTGGTCTCGAACTCCTGAACTCAAGTGATTCACCCACCTT
AGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGTCACCGTGCCCAGCCATGTATATATATAATTTTAAAAATTAA
GCTGAAATTCACATAACATAAAATTAGCTGTTTTAAAGTGTAAAATTTAGTGGCGTGTGGTTCATTCACAAAGCT
GTACAACCACCACCATCTAGTTCCAAACATTTTCTTTTTTTCTGAGATGGAGTCTCACTCTGTCACCCAGGTTCG
AGTTCAGTGGTGCCATCTCTGTCCACTGCAACCTCCACATCCTGGGTTCAAGTGATTCTCCTGCCTCAGCCTCTG
GAGGAGCTGGTATCACAGGCGTCCCCCACCACGCCTGGCTAAATTTTGTATTTTTAGGTGGTCTTGAACTCCTGA
TGTCAGGTGATTCTCCTAGCTCCAAATGTTTTCATTATCTCTCCCCCAACAAAACCCATACCTATCAAGCTGTCA
CTCCCCATACCCCATTCTCTTTTTCATCTCGGCCCCTGTCAATCTGGTTTTTGTCACTATGGACTTACCAATTCT
GAATATTTCCCATAAACAGAATCATACAATATTTGATTTTTTTTTTTTTTTTGAAACTAAGCCTTGCTCTGTCTC
CCAGGCTGGAGTGCTATGGTGCAATTTTTGTTCACTGCAACCTCTGCCTTCCAAGATCAAGAGATTCTCCAGTCT
CAGCTCCCAAGTAGCTGGGATTACAGGCATGTACTACCATGCCTGGCTAATTTTCTTGTAGTTTTAGTAGGGACA
TGTTGGCCAGGCTGGTGGTGAGCTCCTGGCCTCAGGTGATCCACCCACCTCAGTGTTCCAAAGTGCTGATATTAC
AGGCATAATATGTGATCTTTTGTGTCTGGTTGCTTTCATGTTGAATGCTATTTTTGAGGTTCATGCCTGTTGTAG
ACCACAGTCACACACTGCTGTAGTCTTCCCCAGTCCTCATTCCCAGCTGCCTCTTCCTACTGCTTCCGTCTATCA
AAAAGCCCCCTTGGCCCAGGTTCCCTGAGCTGTGGGATTCTGCACTGGTGCTTTGGATTCCCTGATATGTTCCTT
CAAATCTGCTGAGAATTAAATAAACATCTCTAAAGCCTGACCTCCCCACGTC

FIGURE 2672

CCGAGGGTCAGGCTGCAGAAGCCCAGAATCCCACCCCAGTCCCCAAGTACAGAGGTCGCTGTCAAGATGGAGTTT
CCAACCCAGTAAATCCAAGGGCCAGACCGTGACCTCATAAAGC**ATG**ATCTCCTTCTGTCCAGACTGTGGCAAAAG
TATCCAAGCGGCATTCAAATTCTGCCCCTACTGTGGAAATTCTTTGCCTGTAGAGGAGCATGTAGGGTCCCAGAC
CTTTGTCAATCCACATGTGTCATCCTTCCAAGGCTCAAAGAGAGGGCTGAACTCCAGTTTTGAAACCTCTCCTAA
GAAAGTGAAATGGTCCAGCACCGTCACCTCTCCCCGATTATCCCTCTTCTCAGATGGTGACAGTTCTGAGTCTGA
AGATACTCTGAGTTCCTCTGAGAGATCCAAAGGCTCCGGGAGCAGACCCCCAACCCCCAAAAGCAGCCCTCAGAA
GACCAGGAAGAGCCCTCAGGTGACCAGGGGTAGCCCTCAGAAGACCAGCTGTAGCCCTCAGAAGACCAGGCAGAG
CCCTCAGACGCTGAAGCGGAGCCGAGTGACCACCTCACTTGAAGCTTTGCCCACAGGGACAGTGCTGACAGACAA
GAGTGGGCGACAGTGGAAGCTGAAGTCCTTCCAGACCAGGGACAACCAGGGCATTCTCTATGAAGCTGCACCCAC
CTCCACCCTCACCTGTGACTCAGGACCACAGAAGCAAAAGTTCTCACTCAAACTGGATGCCAAGGATGGGCGCTT
GTTCAATGAGCAGAACTTCTTCCAGCGGGCCGCCAAGCCTCTGCAAGTCAACAAGTGGAAGAAGCTGTACTCGAC
CCCACTGCTGGCCATCCCTACCTGCATGGGTTTCGGTGTTCACCAGGACAAATACAGGTTCTTGGTGTTACCCAG
CCTGGGGAGGAGCCTTCAGTCGGCCCTGGATGTCAGCCCAAAGCATGTGCTGTCAGAGAGGTCTGTGCTGCAGGT
GGCCTGCCGGCTGCTGGATGCCCTGGAGTTCCTCCATGAGAATGAGTATGTTCATGGAAATGTGACAGCTGAAAA
TATCTTTGTGGATCCAGAGGACCAGAGTCAGGTGACTTTGGCAGGCTATGGCTTCGCCTTCCGCTATTGCCCAAG
TGGCAAACACGTGGCCTACGTGGAAGGCAGCAGGAGCCCTCACGAGGGGGACCTTGAGTTCATTAGCATGGACCT
GCACAAGGGATGCGGGCCCTCCCGCCGCAGCGACCTCCAGAGCCTGGGCTACTGCATGCTGAAGTGGCTCTACGG
GTTTCTGCCATGGACAAATTGCCTTCCCAACACTGAGGACATCATGAAGCAAAAACAGAAGTTTGTTGATAAGCC
GGGGCCCTTCGTGGGACCCTGCGGTCACTGGATCAGGCCCTCAGAGACCCTGCAGAAGTACCTGAAGGTGGTGAT
GGCCCTCACGTATGAGGAGAAGCCGCCCTACGCCATGCTGAGGAACAACCTAGAAGCTTTGCTGCAGGATCTGCG
TGTGTCTCCATATGACCCCATTGGCCTCCCGATGGTGCCC**TAG**GTGGAATCCAGAACTTTCCATTTGCAGTGTGC
AACAGAAAAAAAAAAAATGAAGTAATGTGACTCAAGGCCTGCTGTTTAATCACAGATAAGCTTCTAGAACAAGCCC
TGGAATGTGCATTCCTGCCACTGGTTTCAGGATACTCATCAGTCCTGATTAGCCTCCCGGAGGGCCCCAGTTTCC
CTCCCGTGAATGTGAAGTTCCCCATCTTGGTGGCCTGCCCTTCAGCCAGTGTCCTAGCAAAGCTGGATGGGGTTG
GGCCGGCCCACAGGGGGGACCCCTCCTACCCTTGACACCTCTGTGCTTTGGTAATAAATTGTTTTACCAGAG

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FIGURE 2673

CACTCTGCCTAGGACGCACCTAATTGCCCAGCCACAGGCTGTGACAGTACATGGGAACTGTCCACCAGGAAGTTC
CTCAGAGGCTCAGTGCTCGGGGCTGTTATTGGGGAGTAGTCATGTGGCCCCCTCTGTCTGACATGTATCCGCATC
CCAGGTTCCCCAGAGGAAAGCAGGTGTTGCACAGAAACCACAGTGATTGCACAAGCAGTTTAGGCTCAGCGAGCC
CCACTCACTTAGGGGATTCTGGGAGCCCTCCCGGAATCCAGGGTCCCAGACCTTGCCAGGAGAGCCGTCTCAGGC
CTGCTGCATTAGCCCTTCCTGCATGGCTGGATAGTGACAGAGAGAAAGAGGAAGAAGAAGCTTATTTAAAACTAG
GAAGCAGCAAGTCGTGAGAGCCAAGAGTGCGCTTGACCTTGTTGGAACCAGGGCACCAGAGCCGCTTCTCATTGC
TGGGAAGTTTGGGGATGATGACCCTGACCTTCCGCGTGGTTATAACCTCACTCCCTTGTTTGTTCCCCCACAGCT
GCACCCACCTCCACCCTCACCTGTGACTCAGGACCACAGAAGCAAAAGTTCTCACTCAAACTGGTAAGTGACCCT
GCAGGTGGGGGGCAGCTTGGAGGGGAGGGACTTTCACAAACACATCCTTGACTTCTGAGCCCGTCTGTCAGCTGG
GAGAGCTCGGCCGGGGGCCAGGGTCCCCACCTGCAAGGAGTATTAAGACCGTGGGCGGGGCAGGCGCCCAGTTCT
CCATCATCCCAGGGTGTTGGAAACCCACAGTTGGATCCACCCAAGTCTGGCTCTGATGCTTCCCTGCTGTGTGAC
CTGGGCAAGCCCATCCCCCTCAGAGCTCAGTTTCCTCATCTGTGAAATGGAGCCACTAATACCCACAGGGTGTGG
CCCATCTGCCCCCTACCACCGGCCTCGCAGCGTGCTCGTATCGAGCACCTACTGTGTATCACCGTGCTGGGTGTG
GGGTCCAAAAGAGAACCCAGCAGATGGGGTCCCTGTGCTGAGGATTCAGTGAAATCACACATCGGGTGCCGAGCA
TGAGTCTCAGCAGACAGGACATGTGCACTCGAGGTTGGGGCTAAAAGGAAACAAATAGAGAAAGGGAGAGTGGCC
ACGAGGGTGAATCACGCCTTCCACACAGAGGAGGTGCCTAACAGAAGGGCATCGTGGTGGTTCATAGCCCCGCCA
TCATCCCTGGGTGCTGGGATTACAGGTGACTCTTATTTTCTTTTTGTTTATCAGAATTGTCTCACACCCCAGAAA
ACCAGGGACAGCTGGGTCAGTTGCCCTCCCTCCGCCCTAGGTGGAGGCCATGAGAGTGGGTCAGAGCGTGGGCTG
TGGAGCCGGGCTCACTAGTGGTGGGTAGCACCTGCTTTGAGAGCCTGGCATTGCCTGAGCCGGGCTGTGTTTCAT
AAGCACTGCTTCATTGAATCCTCCCAGTAGGGCAGCTACCGTGTCCCATTTAACACTTCTCTGCATGGTTCAGGT
GTGTCTGGCACAGTAGGCACCCCATCAACCTGAGCTGTTCCTGTTATTACTACTGTAATTATGCTCATCATCCTA
GAAATACAGCCTTGCTCTCTGTTCGTGCATCTGACCTCATCAACATTTCCTGAGGCTCAAAACTTGGTGATGATG
AGTTGGCCCCAGGCCCAGCCCTGGAGAGGCTCCCAGTCTGGCGGGAGCCATGTCATGTCCCAGTCCCATCGGGAA
GAGGGGTGGGCTGGGAGGGGAGCACAGGGCACTGGGCCAACCAGAAGACATTCACCCTCCCCATCCACTGGGAAG
GCAGCTCTGTTCTGAAGCATTCGAAAGGTCAGGGGCTGAATGCCCAGTGGTGTTCATCCATCCATTTATTCATTT
ATTCACCAAGCCTTTCCTGCAACCTCCTGTGAACTGAGTGCTGGGGACATCTGCAGAGATGGGTCAGACCCAATT
CCTGCCCTGAAGGAGCTGCCCCCTTGGGGGAGTGGGGCAGGCATGAATACCCCACATGAGATTGCTCAGGGCCTG
CATGGCTGTGCCCACGTCGCTCGCGTCAGTCACTATGGGCTTCGCCAGCATCGTGGGGAGGACTCCAGGACGC

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FIGURE 2674

TCATTCCCTGTCCTCGGATCACAGTCTCTTCTCACTACAGTGTCGCCGCCTCTGCCTGCGTAGCCCCGGCCATGG
CTCTGTAGCCTCGACCCCTTTGTGCCCCCGGCCCGTCTCCGCGCTCACCACGCCTGCGCTCTCCGCTCCCACCTT
CTTTCTTCAGCCGAGGCCGCCGCCGCCTCTCCTTGCTGCAGCCATGGAGTCTTCCACTTTCGCCTTGGTGCCTGT
CTTCGCCCACCTGAGCATCCTCCAGAGCCTCGTGCCAGCTGCTGGTGCAGCCTCTCCTGTTGCCATCAGTGCCCA
GCACCTGTGCTACAGCC**ATG**TCACTCCTGGCGACCCTGGGGCTGGAGCTGGACAGGGCCCTGCTCCCAGCTAGTG
GGCTGGGATGGCTCGTAGACTATGGGAAACTCCCCCCGGCCCCTGCCCCCCTGGCTCCCTATGAGGTCCTTGGGG
GAGCCCTGGAGGGCGGGCTTCCAGTGGGGGGAGAGCCCCTGGCAGGTGATGGCTTCTCTGACTGGATGACTGAGC
GAGTTGATTTCACAGCTCTCCTCCCTCTGGAGCCTCCCTTACCCCCCGGCACCCTCCCCCAACCTTCCCCAACCC
CACCTGACCTGGAAGCTATGGCCTCCCTCCTCAAGAAGGAGCTGGAACAGATGGAAGACTTCTTCCTAGATGCCC
CGCCCCTCCCACCACCCTCCCCGCCGCCACTACCACCACCACCACTACCACCAGCCCCCTCCCTCCCCCTGTCCC
TCCCCTCCTTTGACCTCCCCCAGCCCCCTGTCTTGGATACTCTGGACTTGCTGGCCATCTACTGCCGCAACGAGG
CCGGGCAGGAGGAAGTGGGGATGCCGCCTCTGCCCCCGCCACAGCAGCCCCCTCCTCCTTCTCCACCTCAACCTT
CTCGCCTGGCCCCCTACCCACATCCTGCCACCACCCGAGGGGACCGCAAGCAAAAGAAGAGAGACCAGAACAAGT
CGGCGGCTCTGAGGTACCGCCAGCGGAAGCGGGCAGAGGGTGAGGCCCTGGAGGGCGAGTGCCAGGGGCTGGAGG
CACGGAATCGCGAGCTGAAGGAACGGGCAGAGTCCGTGGAGCGCGAGATCCAGTACGTCAAGGACCTGCTCATCG
AGGTTTACAAGGCCCGGAGCCAGAGGACCCGTAGCTGC**TAG**AAGGGCAGGGGTGTGGCTTCTGGGGGCTGGTCTT
CAGCTCTGGCGCCTTCATCCCCCTGCCTCTACCTTCATTCCAAACCCCTCTCGGCCGGGTGCAGTGGCTTATGCT
TGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCGTTTGAGGCCAGGAGGTCAATACCAGCCTGGGCAAC
ATAGTAAGACCCTGTCTCTATTAAAAAAAAAAAAATCAACCCTTCTTCCCCACCAAACCACCCAACTCCTCTCTAC
TCTTATCCTTTTATCCTCTGTCTCTGCTTATCACCTCTCTTGCGTATTTCTGGATCTCCTTCCCTCCTTTCTCGT
CCAAATCATGAAATGTTTGGCCTTAGTCAATGTCTATGCCCGTCACATAACAGCCGAGGCACCGAGGCCCACAGG
GAAGCAGCTGGGAGCTTGGAAACCTGGTCTCTTGAATTTCAAACCTGGTTTCTTACAGGTGGTTGTCTGGGGTGG
GTGGAGTGGCGACAGGATAGAGCTGAAGGACTATGCAAATGAGGAAGTAAGTCAGGGCGGGCTTTGAGAAGGGGA
CCCATATCCTACAGGCAAAAAGCAGGCTAGGTGACCTTGGGACACTACGCTAAGGGAGGGAGGCTAAAGGCGGCC
AGGTTTGCAGTGCGGGAAGATGAGCAGGCCAGTGGGAGGAGGGGCAGGGCAGGGCTGTAGTTGGTGACTGGGTGT
TCATTTTAGCTCTAAGAAAAAAAAATCAGTGTTTCGTGAAGGTGTTGGAGAGGGGCTGTGTCTGGGTGAGGGATGG
CGGGGTACTGATTTTTTTGGGAGGTTATGAGCAAAAATAAAACGAAACATTTCCTCTG

FIGURE 2675

GCGACCGTGATTCCCCGCTCGCGACTCCCCACCCCCCAGGGCTCCCTAAAGAGGGCCACGAGCTGCGAAAGGGCG
GGAAAGGCAGTTGGAGAAGAGGTAAGCGGTTACTCACTCCATGGCTGCAGCAAGGAGAGGCGGCGGCGGCCTCGG
CTGAAGAAAGAAGGTGGGAGCGGAGAGCGCAGGCGTGAAACCCACCTTGTCCCATCCACATCAGGACATCCCAGC
TGGAGTTCAACCTTCATCCCTTCTGTGGCAGTTAGGAGACTGAATCAAGGTCCAGAGAAGGTGGAGGAATCCTGA
TACTGAGCGGAAGAAAATACACAGATGTGCTTCCTTCCCAGTCCTGACAAATGGCCTTTCCTTAAGTTCCTCATT
AATTCATATGAAGACAACACATTTGGTGACTAAATTTGGAATCAGAGGCTTTTAAAGCCTCCCAGCTGCTCTGAC
CCCAATATCAGGAACTTGGCATCTCTGATCTAACAAGGGCACCACTAACAAGGACAAAGCCACCATCATTCACCT
TGATTCCGCACATGCCCAACGATGACTTCTGTCCTGGGCTAACCATCAAGGCCATGGGTGCTGAGAGAGCCCCCC
AGAGGCAGCCATGCACCCTGCACCTCCTCGTCCTCGTCCCCATCCTCCTCAGCCTGGTGGCCTCCCAGGACTGGA
AGGCTGAACGCAGCCAAGACCCCTTCGAGAAATGCATGCAGGATCCTGACTATGAGCAGCTGCTCAAGGTGGTGA
CCTGGGGGCTCAATCGGACCCTGAAGCCCCAGAGGGTGATTGTGGTTGGCGCTGGTGTGGCCGGGCTGGTGGCCG
CCAAGGTGCTCAGCGATGCTGGACACAAGGTCACCATCCTGGAGGCAGATAACAGGATCGGGGGCCGCATCTTCA
CCTACCGGGACCAGAACACGGGCTGGATTGGGGAGCTGGGAGCCATGCGCATGCCCAGCTCTCACAGGATCCTCC
ACAAGCTCTGCCAGGGCCTGGGGCTCAACCTGACCAAGTTCACCCAGTACGACAAGAACACGTGGACGGAGGTGC
ACGAAGTGAAGCTGCGCAACTATGTGGTGGAGAAGGTGCCCGAGAAGCTGGGCTACGCCTTGCGTCCCCAGGAAA
AGGGCCACTCGCCCGAAGACATCTACCAGATGGCTCTCAACCAGGCCCTCAAAGACCTCAAGGCACTGGGCTGCA
GAAAGGCGATGAAGAAGTTTGAAAGGCACACGCTCTTGGAATATCTTCTCGGGGAGGGGAACCTGAGCCGGCCGG
CCGTGCAGCTTCTGGGAGACGTGATGTCCGAGGATGGCTTCTTCTATCTCAGCTTCGCCGAGGCCCTCCGCGCAN
CAGCTGCCTCAGCGACAGACTCCAGTACAGCCGCATCGTGGGTGGCTGGGACCTGATGCCGCGCGCGCTGCTGAG
CTCGCTGTCCGGGCTTGTGCTGTTGAACGCGCCCGTGGTGGCGATGACCCAGGGACCGCACGATGTGCACGTGCA
GATCGAGACCTCTCCCCCGGCGCGGAATCTGAAGGTGCTGAAGGCCGACGTGGTGCTGCTGACGGCGAGCGGACC
GGCGGTGAAGCGCATCACCTTCTCGCCGCCGCTGCCCCGCCACATGCAGGAGGCGCTGCGGAGGCTGCACTACGT
GCCGGCCACCAAGGTGTTCCTAAGCTTCCGCAGGCCCTTCTGGCGCGAGGAGCACATTGAAGGCGGCCACTCAAA
CACCGATCGCCCGTCGCGCATGATTTTCTACCCGCCGCCGCGCGAGGGCGCGCTGCTGCTGGCCTCGTACACGTG
GTCGGACGCGGCGGCAGCGTTCGCCGGCTTGAGCCGGGAAGAGGCGTTGCGCTTGGCGCTCGACGACGTGGCGGC
ATTGCACGGGCCTGTCGTGCGCCAGCTCTGGGACGGCACCGGCGTCGTCAAGCGTTGGGCGGAGGACCAGCACAG
CCAGGGTGGCTTTGTGGTACAGCCGCCGGCGCTCTGGCAAACCGAAAAGGATGACTGGACGGTCCCTTATGGCCG
CATCTACTTTGCCGGCGAGCACACCGCCTACCCGCACGGCTGGGTGGAGACGGCGGTCAAGTCGGCGCTGCGCGC
CGCCATCAAGATCAACAGCCGGAAGGGGCCTGCATCGGACACGGCCAGCCCCGAGGGGCACGCATCTGACATGGA
GGGGCAGGGGCATGTGCATGGGGTGGCCAGCAGCCCCTCGCATGACCTGGCAAAGGAAGAAGGCAGCCACCCTCC
AGTCCAAGGCCAGTTATCTCTCCAAAACACGACCCACACGAGGACCTCGCATTAAAGTATTTTCGGAAA

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FIGURE 2676

GAAGAGGTAAGCGGTTACTCACTCCATGGCTGCAGCAAGGAGAGGCGGCGGCGGCCTCGGCTGAAGAAAGAAGAA
ATCTTCCCAAGGCTGCAGACACCGACGGATTTGCTTTGGGAGCCAGAGTAGCTGCCGCCACCAGAGTCCGGAGCC
ATGAGCGGGTTTAATTTTGGAGGCACTGGGGCCCCTACAGGCGGGTTCACGTTTGGCACTGCAAAGACGGCAACA
ACCACACCTGCTACAGGGTTTTCTTTCTCCACCTCTGGCACTGGAGGGTTTAATTTTGGGGCTCCCTTCCAACCA
GCCACAAGTACCCCTTCCACCGGCCTGTTCTCACTTGCCACCCAGACTCCGGCCACACAGACGACAGGCTTCACT
TTTGGAACAGCGACTCTTGCTTCGGGGGGAACTGGATTTTCTTTGGGGATCGGTGCTTCAAAGCTCAACTTGAGC
AACACAGCTGCCACCCCAGCCATGGCAAACCCCAGCGGCTTTGGGCTGGGCAGCAGCAACCTCACTAATGCCATA
TCGAGCACCGTCACCTCCAGCCAGGGCACAGCACCCACCGGCTTTGTGTTTGGCCCCTCCACCACCTCTGTGGCT
CCAGCTACCACATCTGGAGGCTTCTCATTCACTGGTGGAAGCACGGCCCAACCCTCCGGTTTCAACATTGGCTCA
GCAGGGAATTCAGCCCAGCCCACGGCACCTGCCACGTTGCCCTTCACTCCGGCCACGCCAGCAGCCACCACAGCA
GGTGCCACACAGCCAGCTGCTCCCACACCCACAGCCACCATCACCAGCACTGGGCCCAGCCTCTTTGCGTCAATA
GCAACTGCTCCAACCTCATCTGCCACCACTGGACTCTCCCTCTGTACCCCTGTGACCACAGCGGGCGCCCCCACT
GCTGGGACACAGGGCTTCAGCTTAAAGGCACCTGGAGCAGCTTCCGGCACCTCCACAACAACATCCACCGCTGCC
ACCGCCACCGCCACCACCACCAGCAGCAGCAGCACCACCGGCTTTGCCTTGAATTTAAAACCACTGGCGCCAGCC
GGGATCCCCAGCAATACAGCAGCTGCCGTGACCGCTCCACCTGGCCCTGGCGCAGCTGCAGGGGCGGCTGCCAGC
TCCGCCATGACCTACGCGCAGCTGGAGAGCCTGATCAACAAATGGAGCCTGGAGCTAGAGGACCAGGAGCGGCAC
TTCCTCCAGCAGGCCACCCAGGTCAACGCCTGGGACCGCACGCTGATCGAGAATGGAGAAAAGATCACCAGCCTG
CACCGCGAGGTGGAGAAGGTGAAGCTGGACCAGAAGAGGCTGGACCAGGAGCTCGACTTCATCCTGTCCCAGCAG
AAGGAGCTGGAAGACCTGCTGAGCCCACTGGAGGAGTTGGTCAAGGAGCAGAGCGGGACCATCTACCTGCAGCAC
GCGGATGAGGAGCGTGAGAAAACCTACAAGCTGGCTGAGAACATCGATGCACAGCTCAAGCGCATGGCCCAGGAT
CTCAAGGACATCATCGAGCACCTGAACACGTCCGGGGCCCCCGCCGACACCAGTGACCCACTGCAGCAGATCTGC
AAGATCCTCAATGCGCACATGGACTCACTGCAGTGGATCGACCAGAACTCGGCCCTGCTGCAGAGGAAGGTGGAG
GAGGTGACCAAGGTGTGCGAGGGCCGGCGCAAGGAGCAGGAGCGCAGCTTCCGGATCACCTTTGAC**TGA**GCGACA
GCAGCCCTGGGGCCCGCAGGTCCCTAGGGAGTTCATGAGGGGAATGCGCCCTGTTGTCTGTAGTTTGGGGTTGTG
GCAAGATACTTGTTTGTTTGTTTCTTTCTTTCACA

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FIGURE 2677

GTGGAATAACCCCCTTCTGAAAAATGGTTTCACCCGCTCCGTCTCTAGAACGGGTCGGGCCGCTACCACTGTCCG
GCCCGGAGGGGAACTGTTTTCTCCGGAAGTGACAACACGCTGACTAGGAAAAGGAGGAGGCGGGGCAGTGGGGCC
TTCGGCGGCGACT**ATG**GAAGGAGCCGGCTACAGGGTGGTGTTTGAGAAGGGCGGAGTGTACCTGCACACCAGCGC
TAAGAAGTATCAGGACCGAGACTCTCTCATCGCTGGTGTCATCCGTGTCGTGGAAAAGGACAATGACGTCCTCCT
GCACTGGGCTCCTGTAGAGGAGGCTGGAGATTCCACCCAAATCCTCTTCTCCAAGAAGGACTCCAGTGGGGGTGA
CTCATGTGCTTCTGAGGAGGAACCAACCTTTGACCCCGGCTATGAACCTGACTGGGCTGTCATCAGCACTGTGCG
GCCACAGCCCTGCCACTCAGAGCCCACGAGAGGTGCAGAGCCCAGCTGCCCCCAGGGCTCCTGGGCCTTCTCAGT
GAGTCTGGGGGAGCTAAAGTCCATCCGCCGCTCCAAGCCAGGCCTCAGCTGGGCCTACCTGGTTCTGGTGACCCA
GGCTGGAGGTTCCCTGCCCGCACTGCACTTCCACCGCGGGGGCACCCGCGCCCTGCTCCGCGTCCTCAGCCGCTA
CCTGCTGTTGGCCAGCTCCCCGCAGGACTCCCGCCTCTACCTTGTCTTCCCCCACGACTCCTCTGCTCTCTCCAA
CTCCTTCCACCACCTGCAGCTCTTTGACCAGGACAGCTCCAATGTGGTGTCACGCTTCCTCCAGATCCCTACTCC
ACCAACTTCAGCAGCTTCTCCCGAG**TGA**CCAACTTCTTCCGGGGTGCCCTGCAGCCACAGCCTGAGGGAGCCGCC
TCCGACCTTCCCCCGCCACCCGACGATGAGCCCGAGCCTGGATTCGAGGTCATTTCCTGTGTGGAGCTGGGGCCT
CGGCCAACCGTGGAGCGGGGCCCTCCAGTTACAGAGGAGGAGTGGGCACGCCACGTGGGCCCTGAAGGTCGCCTG
CAGCAGGTCCCTGAGCTGAAGAACCGGATCTTCTCGGGGGGTCTGAGCCCCAGCCTGCGGCGCGAGGCCTGGAAG
TTCCTCCTAGGGTACCTCAGCTGGGAAGGCACAGCTGAGGAGCACAAGGCCCACATACGCAAGAAAACGGATGAG
TATTTCCGCATGAAGCTGCAGTGGAAATCTGTGAGCCCTGAGCAGGAGCGGAGAAACTCACTTCTGCATGGATAC
CGCAGCCTCATCG

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FIGURE 2678

CCGGTCAGCTAAGGCCATGTTAATACGGGGCTGTCCCATCTCTCTGCGGGGCGCGACAGCTGGAAGAGCCGAACG
GATAAGAGAAGAGGAGAGCGCGGATGGCGTCGGGGCGCCCCGAGGAGCTATGCTGCCCATGGTCGAGGAGCCCTG
GCGGAGGCAGCGCGCCGTTGCCTCCACGACATCGCACTGGCCCACAGGGCTGCCACTGCTGCTCGGCCTCCTGCG
CCCCCACCAGCACCACAGCCACCCAGTCCCACACCCAGCCCACCCCGGCCTACCCTGGCCAGAGAGGACAACGAG
GAGGACGAGGATGAGCCCACAGAGACAGAGACCTCCGGGGAGCAGCTGGGCATTAGTGATAATGGAGGGCTCTTT
GTGATGGATGAGGACGCCACCCTCCAGGACCTTCCCCCCTTCTGTGAGTCAGACCCCGAGAGTACAGATGATGGC
AGCCTGAGCGAGGAGACCCCCGCCGGCCCCCCCCACCTGCTCAGTGCCCCCAGCCTCAGCCCTACCCACACAGCAG
TACGCCAAGTCCCTGCCTGTGTCTGTGCCCGTCTGGGGCTTCAAGGAGAAGAGGACAGAGGCGCGGTCATCAGAT
GAGGAGAATGGGCCGCCCTCTTCGCCCGACCTGGACCGCATCGCGGCGAGCATGCGCGCGCTGGTGCTGCGAGAG
GCCGAGGACACCCAGGTCTTCGGGGACCTGCCACGGCCGCGGCTTAACACCAGCGACTTCCAGAAGCTGAAGCGG
AAATATTGAAGTCCAGGGAGGGAGCGCCCCGGGCCGCGTCCGCCCCGTCCCACACTACGCCCCCGCCCCACTCCC
GGGGCCTGCTAATCTGAGGCCGATCCGGGACCGGCCTCCTTGCGTCTCCCATTCCCAAGATTGTCCCGCCTCTGC
CAATCCCCGCCGTCCTTCCAGCCCACGACCTGCCGCGCCGAGGAGCGGCATCTGTCCCGTTTCCCGATTGGGTCT
GTCGTCTCTCTCCGCCTAGCGACAGATTCCTTCTATTAAGGGATTGGCTCGCTGAGTTCTAAGCTCTAAATGGGT
CAACTCCTTTGTTTTCCGCCTAGCGACAAGGGATTTGCTCGCACGGCATTGGCTCCATCCCCTAGTCGCTGGACA
GCTCTTTTTTTGATTGGCTCAAATCCTGTAAAGGGCTTGACCAGTCTCTACATAGTCACCGTCCGCTTTTCCTGA
GTTCTCCCTCCCAATTGGCTCCAGCTTCCTGGGGGCGTGGCCAAGCCCTCCTCTTCCCAGAATTGGCCCGGGGCC
TTCAATTTACGTTCTTTACACTACGGGGACTGGGGTCGTCTTTGCCCACGTCCCGACAACTTGTTCCCTGACCCC
CTCAGGGATGGCCCCAAACTGTCCCTGCCTCTGGCACCCCCTTTCATTGGTTCCATCCATCCCCACAACAGCCTG
CCAATCGAAGCCCGTCCCTGCATCCAGGATGGTACCAGCTCCCGCCCCTCGCCCCCCACCTCCACAGGTGCCTTA
AAGGGCCCTCGTCCACCCAAGGTGGGGGGCAGGGGCCCTCACTCTCCGGCCCTGGTGTGGGGGAGAGAGTGAGGG
GTTGGGGGATCGGCAGTTGGGAGGGGCGCTCTGAGATTAAAGAGTTTTACCTCTGAGAT

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FIGURE 2679

GCCGGGTTGCAGGCGGGGCACCTCGGGCAGGACCTCCCTGGTCGGAAGTGGCCGTGAGCCCAAGCCGCGGTCCCG
GGCCGGCACCCAGGATGGGCGAGGTGGAGGCCCCGGGCCGCTTGTGGCTCGAGAGCCCCCTGGGGGAGCGCCCCC
CATCTTCCTGCCCTCGGACGGGCAAGCCCTGGTCCTGGGCAGGGGACCCCTGACCCAGGTTACGGACCGGAAGTG
CTCCAGAACTCAAGCCTGAAGCAGGCCACACTCCCCAGAAATGAGGGACCCAATCACACAAGGATGCAAATCCTG
ACTCCACCCCTCCAATCCTCAGTGGAGCTGGTCGCAGATCCTGAGACCCGGACAGTGGCAGTGAAACAGCTGGGA
GTTAACCCCTCAACTACCGGGACCCAGGAGTTGAAGCCGGGGTTGGAGGGCTCTCTGGGGGTGGGGGACACACTG
TATTTGGTCAATGGCCTCCACCCACTGACCCTGCGCTGGGAAGAGACCCGCACACCAGAATCCCAGCCAGATACT
CCGCCTGGCACCCCTCTGGTGTCCCAAGATGAGAAGAGAGATGCTGAGCTGCCGAAGAAGCGTATGCGGAAGTCA
AACCCCGGCTGGGAGAACTTGGAGAAGTTGCTAGTGTTCACCGCAGCTGGGGTGAAACCCCAGGGCAAGGTGGCT
GGCTTTGATCTGGACGGGACGCTCATCACCACACGCTCTGGGAAGGTCTTTCCCACTGGCCCCAGTGACTGGAGG
ATCTTGTACCCAGAGATTCCCCGTAAGCTCCGAGAGCTGGAAGCCGAGGGCTACAAGCTGGTGATCTTCACCAAC
CAGATGAGCATCGGGCGCGGGAAGCTGCCAGCCGAGGAGTTCAAGGCCAAGGTGGAGGCTGTGGTGGAGAAGCTG
GGGGTCCCCTTCCAGGTGCTGGTGGCCACGCACGCAGGCTTGTACCGGAAGCCGGTGACGGGCATGTGGGACCAT
CTGCAGGAGCAGGCCAACGACGGCACGCCCATATCCATCGGGGACAGCATCTTTGTGGGAGACGCAGCCGGACGC
CCGGCCAACTGGGCCCCGGGGCGGAAGAAGAAAGACTTCTCCTGCGCCGATCGCCTGTTTGCCCTCAACCTTGGC
CTGCCCTTCGCCACGCCTGAGGAGTTCTTTCTCAAGTGGCCAGCAGCCGGCTTCGAGCTCCCAGCCTTTGATCCG
AGGACTGTCTCCCGCTCAGGGCCTCTCTGCCTCCCCGAGTCCAGGGCCCTCCTGAGCGCCAGCCCGGAGGTGGTT
GTCGCAGTGGGATTCCCTGGGGCCGGGAAGTCCACCTTTCTCAAGAAGCACCTCGTGTCGGCCGGATATGTCCAC
GTGAACAGGGACACGCTAGGCTCCTGGCAGCGCTGTGTGACCACGTGTGAGACAGCCCTGAAGCAAGGGAAACGG
GTCGCCATCGACAACACAAACCCAGACGCCGCGAGCCGCGCCAGGTACGTCCAGTGTGCCCGAGCCGCGGGCGTC
CCCTGCCGCTGCTTCCTCTTCACCGCCACTCTGGAGCAGGCGCGCCACAACAACCGGTTTCGAGAGATGACGGAC
TCCTCTCATATCCCCGTGTCAGACATGGTCATGTATGGCTACAGGAAGCAGTTCGAGGCCCCAACGCTGGCTGAA
GGCTTCTCTGCCATCCTGGAGATCCCGTTCCGGCTATGGGTGGAGCCGAGGCTGGGGCGGCTGTACTGCCAGTTC
TCCGAGGGCTGAGCCCCGCCCAGCTCCCCTCCACAATAAACGCTGTTTCTCCTTG

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FIGURE 2680

ATGGTCCGTCCGCGCCGTGCCCCGTACCGCTCCGGCGCCGGGGGCCCCCTCGGGGGTCGCGGCCGCCCTCCGCGG
CCCCTCGTGGTGCGCGCCGTCCGCTCGCGCTCCTGGCCTGCCAGCCCCCGAGGCCCGCAGCCTCCGCGGATCCGG
GCCCGCTCGGCCCCTCCCATGGAAGGTGCTCGGGTCTTCGGGGCACTGGGTCCCATCGGTCCCTCCTCACCTGGG
CTCACCCTCGGGGGTCTGGCCGTGAGCGAGCACCGGCTCAGCAACAAGCTGCTGGCTTGGAGCGGCAAGCGCAGA
CCCTACTCTGACTCCACTGCAAAGCTGAAGCGGACCCTGCCCTGCCAAGCCTACGTGAACCAAGGCGAGAACCTG
GAGACCGACCAGTGGCCGCAGAAGCTGATCATGCAGCTGATCCCTCAGCAGCTGCTGACCACCCTGGGCCCCCTG
TTCCGGAACTCCCAGTTGGCACAGTTCCACTTCACCAACAGAGACTGCGACTCGCTCAAGGGGCTCTGCCGCATC
ATGGGCAACGGCTTCGCGGGCTGCATGCTGTTCCCCCACATCTCCCCCTGTGAGGTGCGCGTGCTCATGCTCCTG
TACTCGTCCAAGAAGAAGATCTTCATGGGCCTCATCCCCTACGACCAGAGCGGCTTCGTCAGTGCCATCCGGCAG
GTCATCACCACCCGCAAGCAGGCAGTGGGACCTGGTGGTGTCAACTCAGGCCCAGTCCAGATCGTCAACAACAAG
TTTCTGGCATGGAGTGGTGTCATGGAGTGGCAGGAGCCCAGGCCTGAGCCCAACAGTCGGTCCAAGAGGTGGCTG
CCATCCCACGTCTACGTGAACCAGGGGGAGATCCTGAGGACCGAGCAGTGGCCAAGGAAGCTGTACATGCAGCTC
ATCCCGCAGCAGCTGCTGACCACCCTAGTGCCGCTGTTCCGGAACTCGCGCCTGGTCCAGTTCCACTTCACCAAG
GACCTGGAGACACTGAAGAGCCTGTGCCGGATCATGGACAATGGCTTCGCCGGCTGCGTGCACTTTTCCTACAAA
GCATCGTGTGAGATCCGCGTGCTTATGCTCCTGTACTCTTCAGAGAAGAAAATCTTCATTGGCCTCATCCCCCAT
GACCAGGGCAACTTTGTCAACGGCATCCGGCGTGTCATTGCCAACCAGCAGCAGGTCCTGCAGCGGAACCTGGAG
CAGGAGCAACAGCAACGAGGGATGGGGGGGTAGTGGTTACCCCGGGCTGGGCCCCTCCAGGAGTCACAGATGAGG
CCCCCGCAGAGACTGGTGACACGCTTCTGAGCAGGGGCCCCTGGGGACTTCAACTGCCCAGCAACATGGAGGATG
GTGTCCTGAGGCCTCCAAGGACGGTCCCCACCCCTCTACGTTTCCCCAATAAAGCCTTTTAAAAACC

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FIGURE 2681

ACAAGCTCCCGGGAAACCAGGAGTGACAAGGGCGCCTGTCCCTGAGGAGTGGAGAGCGCGGAGTTGGTGCTGAGT
CAGCCCTGATGTGGCAGAGGAGGAGCAGGCCCCCGCAGAACCAGGGCTCTTCAGTGTCTCCAGGTCCTTGGTGAA
GTGGAACTGGACCAGGCGCGAGTTCCGGAACAGCGGCACTAGGGTGGTCTGCGGGGAAGCGAGGGGACCCCCAGC
TCTGGCTTCTCCCACCACGGCCTCCCGGCTCCCAGCCCGCTGAGTCCCCCGGGCCCAGGACCAAACTGAGACTCC
CCTGTCCTCCCTACCTCAGGAAACGTCATCTCCACCGCTCAACCAGCCCAACCCTGGAGTGCTGTGGAAGCCGCT
CTCAGATCCCTTGGCAGCCCCCCAGGTGCAGGTCGTGGCTGCCCCTGCCCCGCTCAGTCCCTGCACAGCCACCAG
CTGGCTGCCTGGGACCCCTTGAAGCCAAGCCTGAGGAGCTACCCACCACACCTGCTTCAGCACCCTCAGCTCCGC
TCCCTCACAGCCAGCTCAGGCCACCTGGGGAGGCGCTCTTGCCCCCAGCCCCGCCCTCTGGAAGAGCTACTGCGT
GCAGGCTCCAGCACCCGGCCCCAGCCCCTCACCAGCAGCTGCTGCGGGATGAGCTGCATGTACAGCTTCCTTGGC
CACTGCTCGGTCCTCCTGTGGGGCACAAAGGGACGAGGGTCAGGAAGCCCCAGCTCCCCTGGATGCTGCCTCCAC
CCCCCAGCCCAGCACTCACAGGATCTCCCCCTGGTTCACGTAGACGTGGGATGGCAGCCACCTCTTGGACCGACT
GTTGGGCTCAGGCCTGGGCTTTTGGGGGAGAGGCAAAGAGGAGCCCTCAGGGCTGGAGACCCCCAATGCCAGTGT
CCCCTCCCAGCCACAGTCCGTGAGGATCTGGGGGTCCCAAGTCCCTGGGCTGCCGAGTGCTCACCTCCTGCCACT
CCATGACACCACTCCATGCCAGAAACTTGTTGTTGACGATCTGGACTGGGCCTGAGTTGACACCACCAGGTCCCA
CTGCCTGTTGGAAGGGAACGGGGTGGGAAGAGGGGCCCAGGCTCCTGGGAAACCTGTCTGTCTGTCCTGGGGCCT
GCCATCCCTCCCTCCGAGCCTTGGCCTGTTAGCCCCAGCTGGGTCCATTCTCTAGTCCCAGGGGAACAGGCCCTG
CCCCTCATCTGCTCACAGCCCCCC**ATG**GCTCCCCAGTGGCCTGAGACAGGTCCCGGCCCTCACCTGGTGCACAGG
ACCTGCAGAGTCTGCCTCAACTGGCAAGGCATGACCAGGACACGTGGTTACCAGGCAGGGCCTTCCAGCCGCAGG
ACGATCCCAACCCCTGCCCAGCTCCCCGCTCCGCTGGCTTCCCTGCCGCCGCGCCAAGACCCACCCTCCAGCCCT
GCAGAGCCGCCCAGTGGCCGCTTTTCCATGGAGCCCTGGTGGGAACCCGCCCGGCATCCTCCGGGCTCCCCTGCA
GCTCCTTGCTCCAGCCATCGCATCACACTCCGCCCACACCAAGTCTGGCTGCCCAACCAGGGCAGTGGGGTC**TAA**

TCCCCCTCTGTCCCCAGAGGGGCTGTGCTTGGCTGGCACACCTGCTTGCGGGTGGTGATGACCTGCCGGATGGCA
CTGACGAAGCCGCTCTGGTCGTAGGGGATGAGGCCCATGAAGATCTTCTTCTTGGACGAGTACAGGAGCATGAGC
ACGCGCACCTCACAGGGGGAGATGTGGGGGAACAGCATGCAGCCCGCCTGCGGGGGCCGCGGGTCAGGACCCTGT
GGTCACTGCCCGGGGCCACTGTGCCCCCACCACCCTGGACCGCCCCACCTGTAGGGGATGAAGGGAGATCATCGG
TGGACAGAGGCCCCCACAGTCAAGGCCATGGCCATAGGTGAGGGGCCTCTGAGAGCCCGTGCAGCGCCCATCGGC
ATCCCCCGACCCTGCCATGGCTGAGGTCAGAGTGGCACCCGGCACCCAGGCTGCGGTGAGAATGCCAAGAAGGCA
CTACCTCCCACCCACATCACCCCCTGCCGCCAGCCCTCCTGACTGCCTGATGGGGTGACTTGGCCTGGGGGTTAA
GAGCACAGGCAGCGCCCCACCGTTCTGCTGCCTCCTAGCTGTGTGACCTAACACCAGCCACCTCCTGCTTCTGGG
CCTCCATCATCTGTAAAACCGGGTAATAGTGCACACAGTTGGTGCCACATAAAGGCTCAACAGATAAA

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FIGURE 2682

GGCTGCGGCTGCAGTGGTGGTGGCGGGTACCGCACGGGGT**ATG**GTCCCCGGGTCCGAGGGCCCGGCCCGCGCCGG
GAGCGTGGTGGCCGACGTGGTGTTTGTGATTGAGGGTACGGCCAACCTGGGACCCTACTTCGAGGGGCTCCGCAA
GCACTACCTGCTCCCGGCCATCGAGTATTTTAATGGTGGTCCTCCTGCTGAGACGGACTTCGGGGGAGACTATGG
GGGGACCCAGTACAGCCTCGTGGTGTTCAACACAGTGGACTGCGCTCCCGAGTCCTACGTACAATGTCACGCTCC
CACCAGCAGCGCCTATGAGTTTGTCACCTGGCTCGATGGCATTAAGTTCATGGGCGGGGGTGGTGAGAGCTGCAG
CCTCATCGCGGAAGGACTCAGCACAGCCTTGCAGCTGTTTGATGACTTCAAGAAGATGCGCGAGCAGATTGGCCA
GACGCACCGGGTCTGCCTCCTCATCTGCAACTCACCCCCATACTTGTTGCCTGCTGTTGAGAGCACCACGTACTC
TGGATGCACAACTGAGAATCTTGTGCAGCAGATTGGGGAGCGGGGGATCCACTTCTCCATTGTGTCTCCCCGGAA
GCTGCCTGCGCTTCGGCTTCTGTTTGAGAAGGCAGCCCCCCCGGCCTTGCTGGAGCCGCTGCAGCCTCCGACAGA
TGTGAGCCAGGACCCGAGGCACATGGTGCTGGTTCGGGGACTCGTGCTGCCTGTTGGGGGTGGCTCAGCCCCAGG
CCCCCTCCAGTCAAAGCAGCCAGTCCCCCTGCCTCCCGCCGCACCCTCAGGTGCCACTCTCTCAGCAGCCCCCCA
GCAGCCTCTGCCCCCCGTCCCCCCCGCAGTACCAGGTTCCCGGGAACCTGAGTGCAGCTCAGGTGGCCGCGCAGAA
TGCAGTGGAGGCTGCCAAGAACCAGAAGGCTGGGCTGGGCCCTCGCTTCTCGCCCATCACCCCTCTCCAACAAGC
TGCTCCCGGAGTGGGTCCCCCCTTCAGCCAGGCCCCAGCTCCCCAACTACCCCCAGGACCCCCTGGCGCCCCCAA
GCCACCACCTGCTTCCCAGCCCAGTCTGGTCTCCACTGTGGCCCCTGGCTCCGGCCTGGCTCCCACGGCACAGCC
CGGGGCACCGTCCATGGCAGGCACTGTGGCCCCAGGAGGGGTGAGCGGCCCTTCCCCAGCCCAGCTGGGAGCCCC
AGCCCTCGGTGGGCAGCAGTCAGTCTCCAATAAGCTTCTGGCCTGGAGCGGGGTCCTGGAGTGGCAAGAGAAACC
CAAACCTGCCTCAGTGGATGCCAACACCAAGCTGACGCGGTCACTGCCCTGCCAGGTCTACGTGAATCATGGCGA
GAACCTGAAGACGGAGCAGTGGCCCCAGAAGCTGATCATGCAGCTCATCCCCCAGCAGCTGCTGACCACCCTGGG
CCCTTTGTTCCGGAACTCAAGGATGGTCCAGTTCCATTTCACCAACAAGGACCTGGAGTCTCTCAAAGGCCTCTA
CCGCATCATGGGCAACGGCTTCGCGGGCTGCGTGCACTTCCCCCACACGGCGCCCTGTGAGGTGCGCGTGCTCAT
GCTCCTGTACTCGTCCAAGAAGAAGATCTTCATGGGCCTCATCCCCTACGACCAGAGCGGCTTCGTCAACGGCAT
CCGGCAGGTCATCACCAACCACAAGCAGGTCCAGCAGCAGAAGCTGGAGCAGCAGCAGCGAGGAATGGGGGGACA
GCAGGCACCCCCAGGGCTGGGGCCCATTCTGGAGGACCAAGCCAGGCCCTCACAGAATCTGCTCCAGCTCCGCCC
ACCGCAGCCCCAGCCTCAGGGTACCGTAGGGGCCTCTGGGGCCACGGGGCAGCCCCAGCCCCAAGGTACTGCCCA
GCCCCCGCCAGGTGCCCCTCAAGGCCCTCCTGGAGCAGCTTCTGGCCCACCCCCTCCTGGACCCATCCTTCGGCC
CCAGAACCCTGGGGCCAACCCTCAGCTGCGAAGCCTCCTCCTCAACCCACCACCGCCGCAGACTGGGGTGCCCCC
ACCCCAGGCCTCCCTCCACCACCTGCCCAGTCCTGGCCCGCACAACTTCCCCCTCGGGCTCCACTGCCAGGTAAG
GGGACCCGGGGGAGGGCAGAGGTCTGGACTGAGTGTCCCAGCAGCTCCTGGGCTAGAGCACCAAGACCGAGTGCT
CCTGGGAAGTAAAGACATAGGATCCAAGAATGAGGGTTCCCCCAGCCGGGCCTGCAGCCCAGCGTCATGGAGGAC
GACATCCTCATGGATCTCATCTGAATCCCCAACACCCAATAAAGTTCCTTTT**TAA**CAC

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FIGURE 2683

AGGGTTTGAGGGTCTGTTTGAGTTGGGTGAAGAAGGCGGGAAGTTAATCCTCTTCCAATCAGCTCCCCATCTCGC
CCTCTGGCGGCTCCGGACCACAGGCCGAGTTACTCTGATTACCGCCATGCTCCAAGACCCGCACTGACAGTCCCC
ACGTGAGGGACCGCGGTGGGAGTCCTAA**ATG**GGGGAGGAGGGGACGGGCGGCACTGTGCATCTGCTGTGCCTCGC
GGCCTCCAGCGGGGTCCCCCTATTCTGCAGGAGCAGTCGCGGCGGCGCCCCCGCCCGTCAGCAGCTCCCGTTCTC
TGTCATCGGTTCCCTCAATGGAGTCCACATGTTTGGGCAGAATCTGGAGGTGCAGCTGAGCTCTGCGAGGACCGA
GAACACGACTGTGGTGTGGAAAAGCTTCCATGACAGCATCACCCTCATTGTTCTGTCATCTGAGGTGGGCATCTC
TGAGCTGAGGCTGGAGAGACTACTCCAAATGGTGTTTGGAGCCATGGTCCTTCTTGTGGGACTTGAAGAACTGAC
CAATATCCGCAACGTGGAGAGACTGAAGAAGGACTTGAGGGCCAGTTATTGCCTCATCGACAGCTTCCTGGGGGA
CTCGGAGCTCATCGGGGACCTGACCCAGTGTGTGGACTGCGTGATTCCTCCAGAGGGGTCCCTCTTGCAGGAAGC
CCTCTCCGGGTTCGCTGAGGCCGCGGGCACGACCTTCGTCAGTCTGGTGGTGTCCGGCCGGGTGGTGGCAGCAAC
AGAGGGTTGGTGGCGGCTGGGGACGCCCGAGGCCGTGCTGCTCCCCTGGCTGGTGGGGTCCCTGCCGCCGCAGAC
CGCTCGCGACTACCCGGTGTACCTGCCGCACGGGAGCCCCACGGTCCCACACCGGCTCCTGACCCTGACTCTGCT
GCCGAGCCTGGAGCTGTGTCTACTCTGCGGGCCGAGCCCACCCCTCAGCCAGTTGTATCCACAGCTTCTGGAGCG
CTGGTGGCAGCCACTGCTGGACCCGTTGCGGGCCTGTCTGCCGTTGGGACCCCGGGCGCTGCCCAGTGGCTTCCC
CCTTCACACAGACATCCTCGGGCTGCTGCTCCTCCACCTGGAACTGAAGCGCTGCCTCTTCACCGTGGAGCCCTT
GGGGGATAAAGAGCCTTCACCAGAACAGCGCCGGCGCCTCCTCCGAAACTTCTATACCCTGGTCACCTCCACGCA
CTTCCCACCAGAGCCAGGGCCACCAGAGAAGACAGAAGATGAGGTCTACCAGGCCCAGCTGCCCAGAGCTTGCTA
CCTGGTGTTGGGGACTGAGGAACCAGGCACAGGAGTGCGTCTGGTGGCCTTGCAGCTGGGGCTTCGGCGGCTGCT
GCTGCTGCTGTCTCCCCAGAGTCCCACCCATGGGCTGCGAAGCCTGGCCACCCACACTCTGCATGCCCTCACCCC
ACTTCTT**TGA**CTACCTAGCAGTGGGTGATGGACACAGACATGGGGCTGTTAGCGTCTCTCTGTTTATTCGCTCAC
AATAATACACAGCCCCTGGATGGGGAGGGGGTAGGAGGGGCTACAACAGGGTGGGGTGGGAGGGGAGGAGACATC
CACTTCCCTGGCCCCTCTCCCCTCTGTGCTTGGGGGGGAAAGGGAGGGAGGGGGACTCCCCCTAACCCCCCAGAA
TGTAAACAGCAGCAGATGAACAAAAATAAAAATACAAAAGGCCGGAGGAAAGTCCCAGGCATCCCCC

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FIGURE 2684

CGCCCGGTCCCCGCTTGCCAGCCCCCGCTGCTCTGTGCCCTGTCCGGCCAGGCCTGGAGCCGACACCACCGCCAT
CATGCCGGCCGTGTCCAAGGGCGATGGGATGCGGGGGCTCGCGGTGTTCATCTCCGACATCCGGAACTGTAAGAG
CAAAGAGGCGGAAATTAAGAGAATCAACAAGGAACTGGCCAACATCCGCTCCAAGTTCAAAGGAGACAAAGCCTT
GGATGGCTACAGTAAGAAAAAATATGTGTGTAAACTGCTTTTCATCTTCCTGCTTGGCCATGACATTGACTTTGG
GCACATGGAGGCTGTGAATCTGTTGAGTTCCAATAAATACACAGAGAAGCAAATAGGTTACCTGTTCATTTCTGT
GCTGGTGAACTCGAACTCGGAGCTGATCCGCCTCATCAACAACGCCATCAAGAATGACCTGGCCAGCCGCAACCC
CACCTTCATGTGCCTGGCCCTGCACTGCATCGCCAACGTGGGCAGCCGGGAGATGGGCGAGGCCTTTGCCGCTGA
CATCCCCCGCATCCTGGTGGCCGGGGACAGCATGGACAGTGTCAAGCAGAGTGCGGCCCTGTGCCTCCTTCGACT
GTACAAGGCCTCGCCTGACCTGGTGCCCATGGGCGAGTGGACGGCGCGTGTGGTACACCTGCTCAATGACCAGCA
CATGGGTGTGGTCACGGCCGCCGTCAGCCTCATCACCTGTCTCTGCAAGAAGAACCCAGATGACTTCAAGACGTG
CGTCTCTCTGGCTGTGTCGCGCCTGAGCCGGATCGTCTCCTCTGCCTCCACCGACCTCCAGGACTACACCTACTA
CTTCGTCCCAGCACCCTGGCTCTCGGTGAAGCTCCTGCGGCTGCTGCAGTGCTACCCGCCTCCAGAGGATGCGGC
TGTGAAGGGGCGGCTGGTGGAATGTCTGGAGACTGTGCTCAACAAGGCCCAGGAGCCCCCCAAATCCAAGAAGGT
GCAGCATTCCAACGCCAAGAACGCCATCCTCTTCGAGACCATCAGCCTCATCATCCACTATGACAGTGAGCCCAA
CCTCCTGGTTCGGGCCTGCAACCAGCTGGGCCAGTTCCTGCAGCACCGGGAGACCAACCTGCGCTACCTGGCCCT
GGAGAGCATGTGCACGCTGGCCAGCTCCGAGTTCTCCCATGAAGCCGTCAAGACGCACATTGACACCGTCATCAA
TGCCCTCAAGACGGAGCGGGACGTCAGCGTGCGGCAGCGGGCGGCTGACCTCCTCTACGCCATGTGTGACCGGAG
CAATGCCAAGCAGATCGTGTCGGAGATGCTGCGGTACCTGGAGACGGCAGACTACGCCATCCGCGAGGAGATCGT
CCTGAAGGTGGCCATCCTGGCCGAGAAGTACGCCGTGGACTACAGCTGGTACGTGGACACCATCCTCAACCTCAT
CCGCATTGCGGGCGACTACGTGAGTGAGGAGGTGTGGTACCGTGTGCTACAGATCGTCACCAACCGTGATGACGT
CCAGGGCTATGCCGCCAAGACCGTCTTTGAGGCGCTCCAGGCCCCTGCCTGTCACGAGAACATGGTGAAGGTTGG
CGGCTACATCCTTGGGGAGTTTGGGAACCTGATTGCTGGGGACCCCCGCTCCAGCCCCCCAGTGCAGTTCTCCCT
GCTCCACTCCAAGTTCCATCTGTGCAGCGTGGCCACGCGGGCGCTGCTGCTGTCCACCTACATCAAGTTCATCAA
CCTCTTCCCCGAGACCAAGGCCACCATCCAGGGCGTCCTGCGGGCCGGCTCCCAGCTGCGCAATGCTGACGTGGA
GCTGCAGCAGCGAGCCGTGGAGTACCTCACCCTCAGCTCAGTGGCCAGCACCGACGTCCTGGCCACGGTGCTGGA
GGAGATGCCGCCCTTCCCCGAGCGCGAGTCGTCCATCCTGGCCAAGCTGAAACGCAAGAAGGGGCCAGGGGCCGG
CAGCGCCCTGGACGATGGCCGGAGGGACCCCAGCAGCAACGACATCAACGGGGGCATGGAGCCCACCCCCAGCAC
TGTGTCGACGCCCTCGCCCTCCGCCGACCTCCTGGGGCTGCGGGCAGCCCCTCCCCCGGCAGCACCCCCGGCTTC
TGCAGGAGCAGGGAACCTTCTGGTGGACGTCTTCGATGGCCCGGCCGCCCAGCCCAGCCTGGGGCCCACCCCCGA
GGAGGCCTTCCTCAGCGAGCTGGAGCCGCCTGCCCCCGAGAGCCCCATGGCTTTGCTGGCTGACCCAGCTCCAGC
TGCTGACCCAGGTCCTGAGGACATCGGCCCTCCCATTCCGGAAGCCGATGAGTTGCTGAATAAGTTTGTGTGTAA
GAACAACGGGGTCCTGTTCGAGAACCAGCTGCTGCAGATCGGAGTCAAGTCAGAGTTCCGACAGAACCTGGGCCG
CATGTATCTCTTCTATGGCAACAAGACCTCGGTGCAGTTCCAGAATTTCTCACCCACTGTGGTTCACCCGGGAGA
CCTCCAGACTCAGCTGGCTGTGCAGACCAAGCGCGTGGCGGCGCAGGTGGACGGCGGCGCGCAGGTGCAGCAGGT
GCTCAATATCGAGTGCCTGCGGGACTTCCTGACGCCCCCGCTGCTGTCCGTGCGCTTCCGGTACGGTGGCGCCCC
CCAGGCCCTCACCCTGAAGCTCCCAGTGACCATCAACAAGTTCTTCCAGCCCACCGAGATGGCGGCCCAGGATTT
CTTCCAGCGCTGGAAGCAGCTGAGCCTCCCTCAACAGGAGGCGCAGAAAATCTTCAAAGCCAACCACCCCATGGA
CGCAGAAGTTACTAAGGCCAAGCTTCTGGGGTTTGGCTCTGCTCTCCTGGACAATGTGGACCCCAACCCTGAGAA
CTTCGTGGGGGCGGGGATCATCCAGACTAAAGCCCTGCAGGTGGGCTGTCTGCTTCGGCTGGAGCCCAATGCCCA
GGCCCAGATGTACCGGCTGACCCTGCGCACCAGCAAGGAGCCCGTCTCCCGTCACCTGTGTGAGCTGCTGGCACA
GCAGTTCTGAGCCCTGGACTCTGCCCCGGGGGATGTGGCCGGCACTGGGCAGCCCCTTGGACTGAGGCAGTTTTG
GTGGATGGGGGACCTCCACTGGTGACAGAGAAGACACCAGGGTTTGGGGGATGCCTGGGACTTTCCTCCGGCCTT
TTGTATTTTTATTTTTGTTCATCTGCTGCTGTTTACATTCTGGGGGGTTAGGGGGAGTCCCCCTCCCTCCCTTTC
CCCCCCAAGCACAGAGGGGAGAGGGGCCAGGGAAGTGGATGTCTCCTCCCCTCCCACCCCACCCTGTTGTAGCCC
CTCCTACCCCCTCCCCATCCAGGGGCTGTGTATTATTGTGAGCGAATAAACAGAGAGACGCT

FIGURE 2685

AGGCGCAGACGGGGAAGCGGAGCCAACATGCCAGTGGCCCGGAGCTGGGTTTGTCACAAAACTTATGTGACCCCG
CGGAGACCCTTCGAGAAATCTCGTCTCGACCAAGAGCTGAAGCTGATCGGCAACGTCCTGCTGCGGCGGCTGCTC
CGCATTGGGGTGCTGGATGAGGGCAAGACGAAGCTGGATTACATCCTGGGCCTGAAGATAGAGGATTTCTTAGAG
AGACGCCTACAGACCCAGGTCTTCAAGCTGGGCTTGGCCAAGTCCATCCACCACGCTGGCGTACTGATCCGCCAG
CGCCGTGTCAGGGTCCGCAATCAGGTGGCGAACATCCCGTCCTTCATTGTCCGCCTGGATTCCCAGAAGCGCATC
GACTTGTCTCTGCGCTCTCCCTATGGGGTGGCCGCCCCGGCCGCGTGAAGAGGAAGAACGCCAAGAAGGGCCAGG
GTGAGGGTGGGGCTGGAGACGACGAGGAGGAGGATTAAGTCCACCTGTCCCTCCTGGGCTGCTGGATTGTCTCGT
TTTCCTGCCAAATAAACAGGATCAGCACTTTAC

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FIGURE 2686

GGCAGCCGAGGCCGCGAACTGCATCATGGAGAATTTTGTAGCCACCTTGGCTAATGGGATGAGCCTCCAGCCGCC
TCTTGAAGAAGTGTCCTGTGGCCAGGCGGAAAGCAGTGAGAAGCCCAACGCTGAGGACATGACATCCAAAGATTA
CTACTTTGACTCCTACGCACACTTTGGCATCCACGAGGAGATGCTGAAGGACGAGGTGCGCACCCTCACTTACCG
CAACTCCATGTTTCATAACCGGCACCTCTTCAAGGACAAGGTGGTGCTGGACGTCGGCTCGGGCACCGGCATCCT
CTGCATGTTTGCTGCCAAGGCCGGGGCCCGCAAGGTCATCGGGATCGAGTGTTCCAGTATCTCTGATTATGCGGT
GAAGATCGTCAAAGCCAACAAGTTAGACCACGTGGTGACCATCATCAAGGGGAAGGTGGAGGAGGTGGAGCTCCC
AGTGGAGAAGGTGGACATCATCATCAGCGAGTGGATGGGCTACTGCCTCTTCTACGAGTCCATGCTCAACACCGT
GCTCTATGCCCGGGACAAGTGGGCGCCCGATGGCCTCATCTTCCCAGACCGGGCCACGCTGTATGTGACGGCCAT
CGAGGACCGGCAGTACAAAGACTACAAGATCCACTGGTGGGAGAACGTGTATGGCTTCGACATGTCTTGCATCAA
AGATGTGGCCATTAAGGAGCCCCTAGTGGATGTCGTGGACCCCAAACAGCTGGTCACCAACGCCTGCCTCATAAA
GGAGGTGGACATCTATACCGTCAAGGTGGAAGACCTGACCTTCACCTCCCCGTTCTGCCTGCAAGTGAAGCGGAA
TGACTACGTGCACGCCCTGGTGGCCTACTTCAACATCGAGTTCACACGCTGCCACAAGAGGACCGGCTTCTCCAC
CAGCCCCGAGTCCCCGTACACGCACTGGAAGCAGACGGTGTTCTACATGGAGGACTACCTGACCGTGAAGACGGG
CGAGGAGATCTTCGGCACCATCGGCATGCGGCCCAACGCCAAGAACAACCGGGACCTGGACTTCACCATCGACCT
GGACTTCAAGGGCCAGCTGTGCGAGCTGTCCTGCTCCACCGACTACCGGATGCGCTGAGGCCCGGCTCTCCCGCC
CTGCACGAGCCCAGGGGCTGAGCGTTCCTAGGCGGTTTCGGGGCTCCCCCTTCCTCTCCCTCCCTCCCGCAGAAG
GGGGTTTTAGGGGCCTGGGCTGGGGGGATGGGGAGGGCACATCGTGACTGTGTTTTTCATAACTTATGTTTTTAT
ATGGTTGCATTTACGCCAATAAATCCTCAGCTGGG

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FIGURE 2687

AAGTAAGTATCCCCACTTTCAGGGTAGCATCCTCTTTCCCTAGTTATTTCAGTGCAGAATCGATTCACGTGTAAG
CCTCTACCTCCTGCACTTACCCCAATGTAGACCCCCTTCCACAGTCCCCCTACAGAAGATCTCCCAAAACATTTC
CAACACAGAACTTCCATTCAATTCCCCTCCGACTGCCCGCCTCCCTCCTCCAGGACAGAGCACGCCCCAGGTTTC
GAGACTGAACTACCCCCATCTACGGAGTCCACCCCTCCCTCTCTAGAACCCCCTCAGTGTAGACGCCTCCTCTTT
TCCTCTTTCCTCCCTACTTTTTCTAGTTTTTCTGCAGCCGACCTCCAGCGTCGGCCACTGTAGCTCCTTCCTTGC
TCCACTTTCCCCAGAGTACACAGCCTGCCTTTCCACTCTCCGTGCAGACCCATCCTCTTTCCCGCTCCTCGCTCT
CGGACGCCACCAACGCTCTCCCGGGCTCTTCCGCGTTACCTACGATGGAAGGTCGGGGCGTGCGGGCAGCTGGAA
CCCACCCCTGTCTTGGAGCTCCGGGTAGCTCTCAAACTCGAGGCTGCGCACCCCCTTTCCCGTCAGCTGAGCTCT
AGAGCGCTGGGGCTTTCTTTTTGATCGACTTCTTGAAATAAAACCAACTTTATCATTCTTTGGGTAACAGACCCA
AAAGCCG**ATG**GGACGGCCCGCTGGGCTGTTCCCGCCCCTATGCCCTTTTTTGGGTTTCCGGCCAGAGGCATGCTG
GGAGCGTCACATGCAAATTGAGCGTGCACCCAGCGTTCCGCCCTTTCTACGCTGGGCCGGTTATCGACCCGGCCC
AGTGCGCAGGCGCGGGAAAGTTGAACTAATAAAGTTTGTACGAGTTCAGTGGAGGAGACCGCAAGTTGAGTGGAG
GAGGCGGCGGTGGGGCCCCGGACCAGGTGCCTCCATGGCAGGCTCTGAAGAGCTGGGGCTCCGGGAAGACACGCT
GAGGGTCCTAGCTGCCTTCCTTAGGCGTGGTGAGGCTGCCGGGTCTCCTGTTCCAACTCCACCTAGAAGCCCTGC
CCAAGAAGAGCCAACAGACTTCCTGAGCCGCCTTCGAAGATGTCTTCCCTGCTCCCTGGGGCGAGGAGCAGCCCC
CTCTGAGTCCCCTCGGCCTTGCTCTCTGCCCATCCGCCCCTGCTATGGTTTAGAGCCTGGCCCAGCTACTCCAGA
CTTCTATGCTTTGGTGGCCCAGCGGCTGGAACAGCTGGTCCAAGAGCAGCTGAAATCTCCGCCCAGCCCAGAATT
ACAGGGTCCCCCATCGACAGAGAAGGAAGCCATACTGCGGAGGCTGGTGGCCCTGCTGGAGGAGGAGGCAGAAGT
CATTAACCAGAAGCTGGCCTCGGACCCCGCCCTGCGCAGCAAGCTGGTCCGCCTGTCCTCCGACTCTTTCGCCCG
CCTGGTGGAGCTGTTCTGTAGCCGGGATGACAGCTCTCGCCCAAGCCGAGCATGCCCCGGGCCCCCGCCTCCTTC
CCCGGAGCCCCTGGCCCGCCTGGCCCTAGCCATGGAGCTGAGCCGGCGCGTGGCCGGGCTGGGGGGCACCCTGGC
CGGACTCAGCGTGGAGCACGTGCACAGCTTCACGCCCTGGATCCAGGCCCACGGGGGCTGGGAGGGCATCCTGGC
TGTTTCACCCGTGGACTTGAACTTGCCATTGGAC**TGA**

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FIGURE 2688

GGTTCCAGCTGCCCGCACGCCCCGACCTTCCATCGTAGGCCGGACC**ATG**GGAACCCCAAAGCCACGGATCCTGCC
CTGGCTGGTGTCGCAGCTGGACCTGGGGCAACTGGAGGGCGTGGCCTGGGTGAACAAGAGCCGCACGCGCTTCCG
CATCCCTTGGAAGCACGGCCTACGGCAGGATGCACAGCAGGAGGATTTCGGAATCTTCCAGGCCTGGGCCGAGGC
CACTGGTGCATATGTTCCCGGGAGGGATAAGCCAGACCTGCCAACCTGGAAGAGGAATTTCCGCTCTGCCCTCAA
CCGCAAAGAAGGGTTGCGTTTAGCAGAGGACCGGAGCAAGGACCCTCACGACCCACATAAAATCTACGAGTTTGT
GAACTCAGGAGTTGGGGACTTTTCCCAGCCAGACACCTCTCCGGACACCAATGGTGGAGGCAGTACTTCTGATAC
CCAGGAAGACATTCTGGATGAGTTACTGGGTAACATGGTGTTGGCCCCACTCCCAGATCCGGGACCCCCAAGCCT
GGCTGTAGCCCCTGAGCCCTGCCCTCAGCCCCTGCGGAGCCCCAGCTTGGACAATCCCACTCCCTTCCCAAACCT
GGGGCCCTCTGAGAACCCACTGAAGCGGCTGTTGGTGCCGGGGGAAGAGTGGGAGTTCGAGGTGACAGCCTTCTA
CCGGGGCCGCCAAGTCTTCCAGCAGACCATCTCCTGCCCGGAGGGCCTGCGGCTGGTGGGGTCCGAAGTGGGAGA
CAGGACGCTGCCTGGATGGCCAGTCACACTGCCAGACCCTGGCATGTCCCTGACAGACAGGGGAGTGATGAGCTA
CGTGAGGCATGTGCTGAGCTGCCTGGGTGGGGGACTGGCTCTCTGGCGGGCCGGGCAGTGGCTCTGGGCCCAGCG
GCTGGGGCACTGCCACACATACTGGGCAGTGAGCGAGGAGCTGCTCCCCAACAGCGGGCATGGGCCTGATGGCGA
GGTCCCCAAGGACAAGGAAGGAGGCGTGTTTGACCTGGGGCCCTTCATTGTAGATCTGATTACCTTCACGGAAGG
AAGCGGACGCTCACCACGCTATGCCCTCTGGTTCTGTGTGGGGGAGTCATGGCCCCAGGACCAGCCGTGGACCAA
GAGGCTCGTGATGGTCAAGGTTGTGCCCACGTGCCTCAGGGCCTTGGTAGAAATGGCCCGGGTAGGGGGTGCCTC
CTCCCTGGAGAATACTGTGGACCTGCACATTTCCAACAGCCACCCACTCTCCCTCACCTCCGACCAGTACAAGGC
CTACCTGCAGGACTTGGTGGAGGGCATGGATTTCCAGGGCCCTGGGGAGAGC**TGA**GCCCTCGCTCCTCATGGTGT
GCCTCCAACCCCCCTGTTCCCCACCACCTCAACCAATAAACTGGTTCCTGCTATGA

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FIGURE 2689A

CTGGGGTGTCTGTGCTGGGTCCAGCGCCCACCCAAGCACAGGGTGGAGTGGGAGGAGGTGGAGGAGAGGAGGGGT
GCCAGAGGGGATGCTGAGGGAGATAGTGTGGGGCCCTTGAGGTCTTC**ATG**TCTATCCTCTACTTCCATCCTTTCT
CCCGGGACCTCCACTCCAAACTCTCCCCCCTGGACCCCCAGGTGACCATGGAGGAAGAAGATGAGTCTCGAGGGA
AGACAGAGGAGTCGGGGGAGGATCGGGGCGATGGTCCGCCAGACAGAGACCCCACGCTTTCTCCTTCTGCCTTTA
TCCTGCGAGCCATCCAGCAGGCTGTGGGAAGCTCCCTGCAGGGGGACCTGCCCAATGATAAAGATGGCTCTCGGT
GTCATGGCCTTCGATGGCGGCGCTGCCGGAGTCCACGGTCAGAGCCCCGTTCCCAGGAATCAGGGGGCACTGACA
CGGCTACTGTGTTGGACATGGCCACGGACAGCTTCCTCGCAGGGCTGGTGAGTGTCCTGGATCCCCCGGATACCT
GGGTTCCCAGCCGCCTGGACCTGCGGCCTGGCGAAAGTGAGGACATGCTGGAGCTGGTGGCTGAGGTCCGAATCG
GGGACAGAGATCCCATCCCTCTGCCTGTGCCCAGCCTGCTGCCCCGTCTCAGGGCCTGGAGGACGGGCAAAACGG
TTTCTCCACAGTCGAACTCCTCTAGGCCCACCTGTGCCCGTCACCTCACCTTGGGCACGGGAGACGGGGGCCCTG
CCCCACCCCCTGCCCCCTCCTCTGCATCCTCCTCCCCTTCCCCTTCTCCCTCATCTTCCTCCCCTTCCCCTCCCC
CACCCCCACCGCCCCCTGCACCCCCAGCCCCACCTGCCCCCCGATTCGATATCTATGACCCCTTCCACCCCACCG
ACGAGGCCTACTCTCCACCGCCTGCTCCGGAGCAAAAGTACGACCCTTTTGAGCCCACCGGCTCCAACCCCAGCT
CATCAGCGGGGACCCCCTCACCTGAGGAGGAAGAGGAGGAGGAAGAGGAAGAAGAAGAGGAAGAGGAAGACGAGG
AGGAGGAGGAAGGCCTGTCCCAGAGCATCAGCCGCATCTCGGAGACCCTGGCGGGCATCTACGATGACAACAGCC
TGAGCCAGGACTTCCCAGGTGACGAGAGCCCCCGCCCGGACGCGCAGCCCACACAGCCGACTCCCGCCCCTGGAA
CGCCGCCCCAGGTGGACTCCACCCGGGCTGATGGAGCCATGCGCCGGCGGGTCTTCGTGGTGGGGACCGAGGCAG
AGGCTTGTCGGGAAGGCAAGGTCTCGGTGGAGGTGGTGACCGCTGGTGGAGCCGCCCTCCCGCCGCCCCTGCTGC
CGCCCGGCGACTCGGAGATCGAGGAAGGGGAGATCGTCCAGCCGGAGGAGGAGCCCAGGCTGGCGCTGTCCCTCT
TCCGCCCCGGCGGCCGGGCCGCCCGGCCTACACCGGCCGCCTCGGCCACCCCCACGGCCCAGCCCCTTCCTCAGC
CTCCCGCTCCGCGGGCCCCCGAGGGGGACGACTTCTTGTCCCTGCATGCGGAGTCGGACGGCGAGGGCGCCCTGC
AGGTGGACCTAGGGGAGCCGGCTCCCGCGCCGCCCGCCGCCGACTCGCGCTGGGGCGGCCTGGACCTGCGCCGCA
AGATCCTGACCCAACGGCGGGAGCGCTACCGCCAGCGCTCGCCCTCCCCGGCGCCCGCGCCCGCCCCGGCCGCCG
CTGCTGGTCCGCCCACGCGCAAGAAGTCCAGGCGGGAACGCAAGCGCAGCGGCGAGGCCAAGGAGGCCGCCTCGT
CCTCGTCGGGCACCCAGCCAGCGCCGCCCGCCCCGGCCTCGCCCTGGGACTCCAAGAAGCACCGCTCGCGGGACC
GCAAGCCCGGCTCCCACGCCTCGTCGTCCGCCCGCCGCCGCTCCCGCTCCCGCTCCCGCTCCCGCTCCACCCGCC
GCCGCTCGCGCAGCACCGACCGCCGCCGCGGGGGCAGCCGCAGGTCGCGGTCCCGGGAGAAGCGGCGACGGCGGC
GGCGCTCCGCCTCCCCGCCCCCGGCCACTTCCTCATCGTCGTCCTCGAGGCGCGAGCGGCACCGCGGGAAACACC
GGGACGGTGGCGGCAGCAAGAAGAAGAAGAAGCGGTCGCGGTCCCGGGGTGAGAAGCGGTCTGGGGATGGCAGCG
AGAAGGCCCCGGCGCCCGCCCCGCCGCCCTCTGGCTCCACCTCGTGTGGTGACCGCGACAGCCGCCGCCGGGGGG
CCGTGCCACCCTCCATCCAGGACCTCACGGACCACGACCTCTTCGCCATCAAGCGGACCATCACGGTGGGCCGGC
TTGACAAGTCCGACCCCCGAGGACCCTCTCCTGCTCCGGCCTCCTCACCTAAGCGGGAGGTCCTGTACGACTCCG
AGGGACTGAGCGGCGAGGAGCGGGGCGGCAAGAGCAGCCAGAAGGATCGGCGCCGCTCGGGGGCCGCCTCCTCCT
CCTCCTCTTCCCGGGAGAAGGGGTCTCGTCGGAAGGCGCTGGACGGGGGTGACCGGGATCGGGACAGGGACAGAG
ATAGGGACAGGGACAGGTCATCCAAGAAGGCCCGGCCCCCCCAAGGAGTCGGCGCCTTCCTCAGGGCCCCCGCCAA
AGCCACCAGTCAGCAGCGGCTCAGGCTCTTCATCCTCGTCGTCCTCCTGTTCTTCCCGGAAGGTGAAGCTGCAGT
CCAAGGTGGCGGTGCTGATCCGCGAGGGTGTCAGCAGCACCACCCCGGCCAAGGATGCCGCGTCAGCCGGCCTGG
GCTCCATTGGCGTCAAATTCAGCCGTGACCGCGAGAGTCGCTCCCCCTTCCTCAAACCTGACGAGCGGGCCCCCA
CTGAGATGGCCAAAGCAGCTCCGGGCAGCACCAAGCCCAAAAAGACCAAGGTCAAGGCCAAGGCAGGGGCCAAGA
AAACCAAGGGGACCAAGGGAAAGACCAAGCCATCCAAGACCAGGAAAAAGGTCCGCAGTGGAGGTGGCAGCGGGG
GCAGTGGTGGCCAGGTGTCGCTGAAGAAGTCCAAGGCGGATAGCTGCAGCCAGGCGGCAGGCACCAAGGGGGCGG
AGGAGACTTCCTGGTCCGGGGAGGAGCGGGCAGCCAAGGTTCCTAGCACCCCGCCCCCCAAGGCAGCCCCACCAC
CCCCTGCCCTCACTCCGGACTCGCAGACCGTGGACAGCAGCTGCAAGACACCTGAGGTCTCCTTCCTGCCCGAGG
AGGCCACTGAGGAGGCTGGGGTCCGAGGTGGGGCGGAGGAGGAGGAGGAGGAAGAAGAAGAGGAGGAGGAAGAGG
AAGAGGAGGAGGAGCAGCAGCCTGCTACCACCACGGCCACCAGCACTGCTGCAGCCGCCCCAAGCACTGCCCCCA
GCGCGGGGTCCACAGCCGGTGACTCGGGGGCGGAGGACGGGCCAGCTTCCCGTGTCTCCCAGCTGCCCACGTTGC
CCCCGCCCATGCCCTGGAATCTGCCAGCTGGTGTGGACTGCACCACCAGCGGCGTCCTGGCCTTGACTGCACTTC
TCTTCAAGATGGAAGAAGCCAACCTGGCGAGCCGAGCGAAGGCCCAGGAGCTGATCCAGGCCACCAACCAGATCC

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FIGURE 2689B

TCAGCCACAGAAAGCCACCCTCAAGTCTGGGGATGACCCCAGCTCCTGTGCCCACCTCTTTGGGTCTGCCCCCTG
GCCCCTCCAGCTACCTGCTTCCTGGCAGCCTCCCTCTGGGGGGCTGCGGTTCGACCCCCCCCACCCCCACCGGGC
TGGCTGCCACGTCTGACAAGAGAGAGGGCAGCAGCAGCTCTGAGGGCCGTGGGGACACAGATAAGTATCTGAAGA
AGCTGCACACGCAGGAGCGGGCGGTGGAGGAGGTGAAGCTGGCCATCAAGCCATACTATCAGAAGAAGGACATCA
CCAAGGAGGAGTACAAGGACATCCTGAGGAAGGCCGTCCACAAGATCTGCCACAGCAAAAGTGGGGAAATCAACC
CAGTGAAGGTGAGCAACCTGGTGCGGGCCTACGTCCAGCGCTACCGCTACTTCCGCAAGCACGGTCGCAAGCCAG
GGGACCCCCCAGGGCCCCCACGGCCGCCCAAGGAGCCAGGGCCCCCAGACAAGGGTGGCCCGGGCCTGCCCCTGC
CCCCTCTC**TGA**GAGCCCTGGCCAGCTCTTCGCCCCTCACCTCTTTGAAACTCTGGACGTATTTATGGCTCCACCT
CCCCACCTCCCTCCCCCGTCAGTGGGATGACTGGGGGAGGGTTGCTGCAGGGAAGAGGAGAGCCCCCTGCCCTGC
CCTGCCCCGTGTCCACCTCCCTTGCCCCCAAGCCTGTCCCCAGTGCCCCTCCCTTCTGTTTGTGCCCCTCTCCCC
AATTTCATTAAAGATTTCATGAAACATT

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FIGURE 2690

GGCTCCCCCGCAGGCGGTAGCGAAGGCAGCAGCAGCGGTGGCGACATGAGCAGCGGGGCGGCGTCCGGGACAGGG
CGGGGGCGGCCCCGGGGCGGGGGACCTGGGCCCGGGGACCCCCCGCCCAGCGAGACACACAAGCTGGTGGTCGTG
GGCGGCGGCGGCGTGGGCAAGAGCGCGCTGACCATCCAGTTCATCCAGTCCTACTTCGTGTCTGACTACGACCCC
ACTATTGAGGACTCCTACACGAAGATCTGCAGTGTGGATGGCATCCCAGCCCGGCTGGACATCCTGGACACCGCG
GGCCAGGAAGAGTTCGGGGGCCATGAGAGAGCAGTACATGCGTGCTGGCCACGGCTTCCTGCTGGTGTTCGCCATT
AACGACCGGCAGAGTTTCAACGAGGTGGGCAAGCTCTTCACGCAGATTCTGCGGGTCAAGGACCGCGACGACTTC
CCCGTTGTGTTGGTCGGGAACAAGGCAGATCTGGAGTCACAGCGCCAGGTCCCCCGATCAGAAGCCTCTGCCTTC
GGCGCCTCCCACCACGTGGCCTACTTTGAGGCCTCGGCCAAACTGCGTCTCAACGTGGACGAGGCTTTTGAGCAG
CTGGTGCGGGCTGTCCGGAAATACCAGGAACAAGAGCTCCCACCGAGCCCTCCCAGTGCCCCCAGGAAGAAGGGC
GGGGGCTGCCCCTGCGTCCTCCTGTAGCCCAGGCAAGAGAGAAGCAACCACCACAAGCTCTCGGGACTAGCTGCC
TTCGCACCTTGCTGTGTGACCTGAGGCCCTCACTGAGCCTCAATTTCCTCATCTGGGTCTCCCAGGACACATCAC
ATACCCACCCTTACTTCCTGGCCTCTTCTGGGCTACTGCCACTGTGTGCCTTCTGCCAACGCCTCCTGTCCCCAC
CTAAGCCTGGTGGGGGTGAGGGGCTCCGGGTCACTGCTGTATATAACTCCCCTCCCCCAGAAAAATAAATGTCAC
TGCCAACGTC

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FIGURE 2691A

GTGGTTATGGAGCAGCTGCCGGGGGTGCCACCAGGCCCCCCCCACCCCGTTCGACCGCCACCCCCGCCTCCACCA
CCCATGCCCCTGCAGCTCGAGGCCCACCTCCGCAGCCATGGCCTGGAGCCCGCGGCCCCCAGCCCCCGCCTGCGA
CCCGAGGAGAGCCTGGATCCGCCAGGCGCCATGCAGGAATTGCTCGGGGCTCTGGAGCCGCTGCCCCCGGCGCCT
GGGGATACTGGCGTAGGCCCACCAAACTCGGAGGGCAAGGATCCCGCAGGCGCCTACCGCAGCCCCAGCCCGCAA
GGCACCAAGGCGCCGCGTTTCGTGCCGCTCACCTCCATCTGCTTCCCTGACTCCTTGCTCCAAGACGAGGAGCGC
AGCTTCTTCCCCACCATGGAGGAGATGTTCGGTGGAGGGGCCGCGGACGACTACGGCAAGGCCGGGCCACCTGAG
GACGAGGGGGACCCCAAGGCTGGCGCTGGGCCACCCCCCGGCCCCCCTGCTTATGATCCCTATGGGCCCTACTGT
CCTGGCCGGGCGTCGGGAGCCGGGCCCGAGACACCGGGCCTGGGCCTGGACCCCAACAAACCGCCTGAACTGCCC
TCCACGGTCAACGCCGAGCCGCTGGGCCTGATCCAGAGTGGCCCCCACCAGGCGGCGCCACCACCCCCGCCTCCG
CCACCGCCGCCTCCCGCGCCGGCCTCCGAACCCAAGGGTGGCCTCACCTCGCCCATCTTCTGCTCTACCAAGCCA
AAGAAGCTGCTCAAGACATCCTCCTTCCACCTGCTGCGGCGCCGCGACCCACCCTTCCAGACCCCCAAGAAGCTG
TACGCCCAGGAGTACGAGTTCGAGGCGGACGAGGACAAGGCCGATGTTCCCGCCGACATCCGCCTCAACCCCCGG
CGCTTGCCTGACCTGGTCTCCAGCTGCCGCTCCCGTCCGGCCCTCTCGCCACTGGGGGACATCGACTTCTGCCCA
CCCAACCCAGGACCCGATGGCCCCCGGCGCCGTGGCCGCAAGCCCACGAAGGCGAAACGTGATGGGCCACCCCGG
CCACGGGGGAGGCCCCGGATCCGCCCCCTGGAGGTCCCGACCACTGCGGGGCCCGCCTCGGCCTCCACGCCCACC
GATGGCGCCAAGAAACCCCGGGGCCGGGGCCGAGGCCGGGGTCGAAAGGCTGAGGAGGCAGGGGGCACCCGGTTG
GAGCCCCTGAAGCCACTTAAGATCAAGCTGTCTGTGCCCAAGGCTGGCGAGGGTCTGGGAACCTCATCGGGTGAT
GCCATATCAGGCACTGACCACAACAGCCTGGACTCGAGCCTGACTCGGGAGAAGATCGAGGCCAAGATTAAGGAG
GTGGAGGAGAAGCAGCCGGAGATGAAGTCGGGTTTCATGGCCTCCTTCTTGGACTTCCTCAAGTCAGGCAAGCGC
CACCCACCACTCTACCAGGCGGGCCTGACGCCTCCGCTCAGCCCTCCCAAGAGTGTGCCACCCTCTGTGCCAGCC
CGAGGCCTGCAGCCCCAGCCCCCTGCCACCCCTGCTGTGCCACATCCCCCACCTTCCGGAGCCTTTGGGCTTGGG
GGCGCCCTGGAGGCTGCAGAGAGTGAGGGTCTGGGGCTTGGCTGCCCTTCACCCTGCAAGCGGCTTGATGAGGAG
CTGAAGCGGAACCTCGAGACGCTGCCCTCCTTCTCCTCGGATGAGGAAGACTCTGTCGCCAAGAACCGAGACCTG
CAGGAGAGCATCTCCTCCGCCATCTCTGCCCTCGATGACCCACCCCTTGCTGGGCCAAAAGACACTTCCACCCCA
GATGGGCCGCCCTTGGCCCCCGCGGCTGCAGTTCCAGGGCCACCCCCTCTTCCGGGGCTCCCCAGTGCCAACAGC
AATGGCACTCCCGAGCCCCCGCTGCTGGAGGAGAAACCCCCACCCACTCCACCTCCTGCCCCGACTCCTCAGCCT
CAGCCTCCGCCACCCCCTCCGCCGCCACAGCCAGCCCTGCCCTCGCCACCCCCGCTGGTGGCCCCCACGCCCAGC
TCACCACCGCCACCGCCGCTGCCGCCGCCACCTCCACCAGCCATGCCCTCGCCTCCACCACCACCCCCACCAGCC
GCTGCCCCACTGGCTGCTCCTCCTGAGGAGCCCGCCGCCCCGTCTCCCGAAGACCCCGAGCTGCCGGACACCCGG
CCCCTGCATCTGGCCAAAAAGCAGGAGACGGCGGCAGTGTGTGGGGAGACGGACGAGGAGGCCGGCGAGAGTGGC
GGAGAGGGCATCTTCCGGGAACGGGACGAGTTCGTCATCCGTGCTGAGGACATCCCTTCCCTCAAGCTGGCGTTG
CAGACGGGGCGTGAACCCCCACCCATCTGGCGAGTCCAGAAGGCCCTTCTGCAGAAATTCACTCCGGAGATCAAG
GACGGCCAGAGGCAGTTTTGTGCCACCAGTAATTATTTGGGGTATTTTGGGGATGCAAAAAATCGGTACCAGCGC
CTCTATGTAAAGTTCCTGGAAAATGTCAATAAGAAGGACTACGTGAGGGTCTGTGCTCGGAAACCCTGGCATCGG
CCCCCAGTGCCAGTCAGACGCTCTGGGCAGGCCAAGAACCCCGTATCTGCTGGGGGTAGCTCTGCACCTCCCCCT
AAGGCCCCAGCACCACCTCCCAAGCCTGAGACCCCTGAAAAGACGACATCTGAGAAGCCCCCAGAGCAGACTCCT
GAGACGGCCATGCCTGAGCCCCCTGCCCCCGAGAAGCCCTCCCTCCTGCGGCCTGTTGAGAAGGAAAAGGAGAAG
GAGAAGGTGACACGTGGAGAGCGGCCATTGCGGGGTGAGCGGGCCACCAGCGGACGGCAGACACGGCCAGAGCGG
AGTCTCGCCACGGGACAACCTGCCACATCCCGGCTGCCCAAAGCCCGGCCTACCAAGGTGAAGGCTGAACCGCCC
CCTAAGAAGAGGAAGAAATGGCTGAAGGAGGCAGGCGGCAACGCTACAGCAGGCGGGGGCCCACCAGGCAGCTCC
TCGGACTCGGAGTCCTCCCCTGGAGCCCCCAGCGAGGACGAGCGGGCAGTACCTGGGCGTCTGCTCAAAACCAGG
GCGATGCGGGAGATGTACCGGAGCTACGTGGAGATGTTGGTGAGCACAGCACTTGACCCAGACATGATCCAGGCC
CTGGAGGACACGCATGACGAGCTGTACCTGCCCCCCATGCGGAAGATAGACGGCCTGCTGAATGAGCACAAGAAG
AAAGTCCTGAAGCGGCTGTCGCTAAGCCCAGCCCTGCAGGATGCTCTGCACACGTTCCCACAGCTGCAAGTGGAG
CAGAGTGGGGAGGGCTCTCCGGAAGAGGGGGCTGTGCGGCTGCGGCCTGCTGGGGAACCCTACAACCGCAAGACG
CTCAGCAAGCTCAAGAGGAGCGTGGTCAGAGCCCAGGAGTTCAAGGTTGAGCTGGAAAAGTCGGGATACTATACA
CTCTACCATTCGCTCCACCACTATAAATACCACACCTTCCTGCGCTGCCGGGACCAGACCCTGGCCATCGAGGGC
GGCGCCGAGGACCTGGGCCAGGAGGAGGTGGTCCAGCAGTGCATGCGGAACCAGCCGTGGCTGGAACAGCTCTTT

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FIGURE 2691B

GACTCCTTCAGTGACCTGCTGGCCCAAGCACAGGCCCACAGCCGCTGCGGGTGACCCCGCCCCAGCTTGTGAGGG
GGGCGCCTCCTCCATGAACCGAGAATTGGGACAGAACCGTGTCCTCAGGAGCTAACACCTGGGCTCCATCGCCGG
GGAAAGGGGGTCATGGGTCAGGGTGTGTCTGTGCTGCCCCCTCCAGGGCAGGGTTCAAAGTCCGACTCCCCCCCT
CTCCCAAGCCCCCTCCACTCCCTCCCCATTCCTCCCACTGTTCGGTGTACAGAGAAATTATTTATATATATGTAT
AAATGTCTATTTAGTAACGGTTTCCCTCTCCCCTTGCCCCGACCCCCCCTCCACAGCCACAGCCCCCGCCCCCTC
CACCTTGTACATAATGTATAGGAAAAGTCTATGTATGGCTGGGGGGGGTGGGGTGGCTTCAGAGAGCTGGGGGAC
CCCTTCCCCCCAAGTCCCCCCTGCAGGCCAAGATCTTTGCTAAAGGCCATTCCCTCCGCAGGGCATTTGGCGTCG
GGTGGGAGGGGAAAACGCATCTTGTTAATTATTTTTAATCTTATTTATTGTACATACCTGGGGCAGGGGCTTGGG
GAGGTGGAGGGGGGAGAAGGGTCCCCTCTCTCTGCCCCTCCCACTCCTTTTCTACGGCGATTTGTCTGTGTCTGG
CCCCCACCCACTGCCCATCCCCCATTGTTGTCTGGATGTGGTTCTATTTTTTATCGGTCTCCTTTCCCCTCCTCC
CCGTTCTCGCCCCCGCCCCACCCCCTGCTCCCACTACCCTTTGTCTCTTGCTCTTTCTTGGGCTTCTGTACAACT
CAACTTGTATACACTGTGTACACACAACCAGCCAAACGAAAACCCAACGGCAAACACTTT

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FIGURE 2692

GAAGCGACCGAGGGACTGGGAGTCGTTAGTGAGAGTTTCACTCTTGTTGCCTAGGCTGGAGTGCAATGGTGCGAT
CTTGGCTCATCACGACCTTCGCCTCCCAGGTTCAAGTGATTGTCCCATTTCAGCCTCCCGAGTAGCTGGGATTAC
AGGATGACGCGGCATGGCAAGAACTGCACCGCAGGGGCCGTCTACACCTACCACGAGAAGAAGAAGGACACAGCG
GCCTCGGGCTATGGGACCCAGAACATTCGACTGAGCCGGGATGCCGTGAAGGACTTCGACTGCTGTTGTCTCTCC
CTGCAGCCTTGCCACGATCCTGTTGTCACCCCAGATGGCTACCTGTATGAGCGTGAGGCCATCCTGGAGTACATT
CTGCACCAGAAGAAGGAGATTGCCCGGCAGATGAAGGCCTACGAGAAGCAGCGGGGCACCCGGCGCGAGGAGCAG
AAGGAGCTTCAGCGGGCGGCCTCGCAGGACCATGTGCGGGGCTTCCTGGAGAAGGAGTCGGCTATCGTGAGCCGG
CCCCTCAACCCTTTCACAGCCAAGGCCCTCTCGGGCACCAGCCCAGATGATGTCCAACCTGGGCCCAGTGTGGGT
CCTCCAAGTAAGGACAAGGACAAAGTGCTGCCCAGCTTCTGGATCCCGTCGCTGACGCCCGAAGCCAAGGCCACC
AAGCTGGAGAAGCCGTCCCGCACGGTGACCTGCCCCATGTCAGGGAAGCCCCTGCGCATGTCGGACCTGACGCCC
GTGCACTTCACACCGCTAGACAGCTCCGTGGACCGCGTGGGGCTCATCACCCGCAGCGAGCGCTACGTGTGTGCC
GTGACCCGCGACAGCCTGAGCAACGCCACCCCCTGCGCTGTGCTGCGGCCCTCTGGGGCTGTGGTCACCCTCGAA
TGCGTGGAGAAGCTGATTCGGAAGGACATGGTGGACCCTGTGACTGGAGACAAACTCACAGACCGCGACATCATC
GTGCTGCAGCGGGGCGGTACCGGCTTCGCGGGCTCCGGAGTGAAGCTGCAAGCGGAGAAATCACGGCCGGTGATG
CAGGCCTGAGTGTGTGCGGGAGACCAAATAAACCGGCTTGGGTGCGC

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FIGURE 2693

AGCGGAGCGAAGCTGGATAACAGGGGACCGATGATGTGGCGACCATCAGTTCTGCTGCTTCTGTTGCTACTGAGG
CACGGGGCCCAGGGGAAGCCATCCCCAGACGCAGGCCCTCATGGCCAGGGGAGGGTGCACCAGGCGGCCCCCCTG
AGCGACGCTCCCCATGATGACGCCCACGGGAACTTCCAGTACGACCATGAGGCTTTCCTGGGACGGGAAGTGGCC
AAGGAATTCGACCAACTCACCCCAGAGGAAAGCCAGGCCCGTCTGGGGCGGATCGTGGACCGCATGGACCGCGCG
GGGGACGGCGACGGCTGGGTGTCGCTGGCCGAGCTTCGCGCGTGGATCGCGCACACGCAGCAGCGGCACATACGG
GACTCGGTGAGCGCGGCCTGGGACACGTACGACACGGACCGCGACGGGCGTGTGGGTTGGGAGGAGCTGCGCAAC
GCCACCTATGGCCACTACGCGCCCGGTGAAGAATTTCATGACGTGGAGGATGCAGAGACCTACAAAAAGATGCTG
GCTCGGGACGAGCGGCGTTTCCGGGTGGCCGACCAGGATGGGGACTCGATGGCCACTCGAGAGGAGCTGACAGCC
TTCCTGCACCCCGAGGAGTTCCCTCACATGCGGGACATCGTGATTGCTGAAACCCTGGAGGACCTGGACAGAAAC
AAAGATGGCTATGTCCAGGTGGAGGAGTACATCGCGGATCTGTACTCAGCCGAGCCTGGGGAGGAGGAGCCGGCG
TGGGTGCAGACGGAGAGGCAGCAGTTCCGGGACTTCCGGGATCTGAACAAGGATGGGCACCTGGATGGGAGTGAG
GTGGGCCACTGGGTGCTGCCCCCTGCCCAGGACCAGCCCCTGGTGGAAGCCAACCACCTGCTGCACGAGAGCGAC
ACGGACAAGGATGGGCGGCTGAGCAAAGCGGAAATCCTGGGTAATTGGAACATGTTTGTGGGCAGTCAGGCCACC
AACTATGGCGAGGACCTGACCCGGCACCACGATGAGCTGTGAGCACCGCGCACCTGCCACAGCCTCAGAGGCCCG
CACAATGACCGGAGGAGGGGCCGCTGTGGTCTGGCCCCCTCCCTGTCCAGGCCCCGCAGGAGGCAGATGCAGTCC
CAGGCATCCTCCTGCCCCTGGGCTCTCAGGGACCCCCTGGGTCGGCTTCTGTCCCTGTCACACCCCCAACCCCAG
GGAGGGGCTGTCATAGTCCCAGAGGATAAGCAATACCTATTTCTGACTGAGTCTCCCAGCCCAGACCCAGGGACC
CTTGGCCCCAAGCTCAGCTCTAAGAACCGCCCCAACCCCTCCAGCTCCAAATCTGAGCCTCCACCACATAGACTG
AAACTCCCCTGGCCCCAGCCCTCTCCTGCCTGGCCTGGCCTGGGACACCTCCTCTCTGCCAGGAGGCAATAAAAG
CCAGCGCCGGG

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FIGURE 2694

GAAGGATATTAAAGAGCACCTGCAGGAATTTTTTAAGGGGATGCCGGGGGAAGGGCTTGAAGGAGGAACTAAGGA
GGCTTCCAGAAGATTTTGATTAACAGCGAGCGCTAGGGAAGGCCACGGGGATACAGAGGGGTAGGAGGAGGATCC
AGAGACCTCCAAGTTGTGGACTCCGGAGGCATCGAGTTCCTTTCCCAGTTTTGTCAAGAATTCCCTGAGCGGCAG
ACACCCTCAAAGTAAAAAACGGGAACCACAGAGAAGGAAAAAGAAGAACCACAAGCGTTTTGAGAAACAAACAGG
CTGGGCCTAGGGCCTGGGGTGTGCCCTGCAACTGGGGGGTGGGGCTGGATGTTCTTGGAGTCAGGGAGCAGCAGC
CTCCCACAGGATGTGAGAGAGGAACTGGGGTCTCCAGTCACGGGAGCCAGGAGCCGGCCAGGGCCGCAGGCAGGA
AGCGGAGCGAGGCTGAAGGGAACTTCGTCCTCTCAGC**ATG**GGGGTCCCGCGGCCTCAGCCCTGGGCGCTGGGGCT
CCTGCTCTTTCTCCTTCCTGGGAGCCTGGGCGCAGAAAGCCACCTCTCCCTCCTGTACCACCTTACCGCGGTGTC
CTCGCCTGCCCCGGGGACTCCTGCCTTCTGGGTGTCCGGCTGGCTGGGCCCGCAGCAGTACCTGAGCTACAATAG
CCTGCGGGGCGAGGCGGAGCCCTGTGGAGCTTGGGTCTGGGAAAACCAGGTGTCCTGGTATTGGGAGAAAGAGAC
CACAGATCTGAGGATCAAGGAGAAGCTCTTTCTGGAAGCTTTCAAAGCTTTGGGGGGAAAAGGTCCCTACACTCT
GCAGGGCCTGCTGGGCTGTGAACTGGGCCCTGACAACACCTCGGTGCCCACCGCCAAGTTCGCCCTGAACGGCGA
GGAGTTCATGAATTTCGACCTCAAGCAGGGCACCTGGGGTGGGGACTGGCCCGAGGCCCTGGCTATCAGTCAGCG
GTGGCAGCAGCAGGACAAGGCGGCCAACAAGGAGCTCACCTTCCTGCTATTCTCCTGCCCGCACCGCCTGCGGGA
GCACCTGGAGAGGGGCCGCGGAAACCTGGAGTGGAAGGAGCCCCCCTCCATGCGCCTGAAGGCCCGACCCAGCAG
CCCTGGCTTTTCCGTGCTTACCTGCAGCGCCTTCTCCTTCTACCCTCCGGAGCTGCAACTTCGGTTCCTGCGGAA
TGGGCTGGCCGCTGGCACCGGCCAGGGTGACTTCGGCCCCAACAGTGACGGATCCTTCCACGCCTCGTCGTCACT
AACAGTCAAAAGTGGCGATGAGCACCACTACTGCTGCATTGTGCAGCACGCGGGGCTGGCGCAGCCCCTCAGGGT
GGAGCTGGAATCTCCAGCCAAGTCCTCCGTGCTCGTGGTGGGAATCGTCATCGGTGTCTTGCTACTCACGGCAGC
GGCTGTAGGAGGAGCTCTGTTGTGGAGAAGGATGAGGAGTGGGCTGCCAGCCCCTTGGATCTCCCTTCGTGGAGA
CGACACCGGGGTCCTCCTGCCCACCCCAGGGGAGGCCCAGGATGCTGATTTGAAGGATGTAAATGTGATTCCAGC
CACCGCC**TGA**CCATCCGCCATTCCGACTGCTAAAAGCGAATGTAGTCAGGCCCCTTTCATGCTGTGAGACCTCCT
GGAACACTGGCATCTCTGAGCCTCCAGAAGGGGTTCTGGGCCTAGTTGTCCTCCCTCTGGAGCCCCGTCCTGTGG
TCTGCCTCAGTTTCCCCTCCTAATACATATGGCTGTTTTCCACCTCGATAATATAACACGAGTTTGGGCCC

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FIGURE 2695

TTTCTTTTTTTCAGGCGGCCGGGAAGATGGCGGACATTCAGACTGAGCGTGCCTACCAAAAGCAGCCGACCATCT
TTCAAAACAAGAAGAGGGTCCTGCTGGGAGAAACTGGCAAGGAGAAGCTCCCGCGGTACTACAAGAACATCGGTC
TGGGCTTCAAGACACCCAAGGAGGCTATTGAGGGCACCTACATTGACAAGAAATGCCCCTTCACTGGTAATGTGT
CCATTCGAGGGCGGATCCTCTCTGGCGTGGTGACCAAGATGAAGATGCAGAGGACCATTGTCATCCGCCGAGACT
ATCTGCACTACATCCGCAAGTACAACCGCTTCGAGAAGCGCCACAAGAACATGTCTGTACACCTGTCCCCCTGCT
TCAGGGACGTCCAGATCGGTGACATCGTCACAGTGGGCGAGTGCCGGCCTCTGAGCAAGACAGTGCGCTTCAACG
TGCTCAAGGTCACCAAGGCTGCCGGCACCAAGAAGCAGTTCCAGAAGTTCTGAGGCTGGACATCGGCCCGCTCCC
CACAATGAAATAAAGTTATTTTCTCATTCCCAGGCCAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2696

CTTTTCCAAGCGGCTGCCGAAGATGGCGGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCCG
CCTGGCGGCCATCGTGGCTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTCGTACGCTGTGAAGGCATCAACAT
TTCTGGCAATTTCTACAGAAACAAGTTGAAGTACCTGGCTTTCCTCCGCAAGCGGATGAACACCAACCCTTCCCG
AGGCCCCTACCACTTCCGGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAAACCAA
GCGAGGCCAGGCCGCTCTGGACCGTCTCAAGGTGTTTGACGGCATCCCACCGCCCTACGACAAGAAAAAGCGGAT
GGTGGTTCCTGCTGCCCTCAAGGTCGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCA
CGAGGTTGGCTGGAAGTACCAGGCAGTGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTA
CCGGAAGAAGAAACAGCTCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACAC
AGAGGTCCTCAAGACCCACGGACTCCTGGTCTGAGCCCAATAAAGACTGTTAATTCCTCATGCGTTGCCTGCCCT
TCCTCCATTGTTGCCCTGGAATGTACGGGACCCAGGGGCAGCAGCAGTCCAGGTGCCACAGGCAGCCCTGGGACA
TAGGAAGCTGGGAGCAAGGAAAGGGTCTTAGTCACTGCCTCCCGAAGTTGCTTGAAAGCACTCGGAGAATTGTGC
AGGTGTCATTTATCTATGACCAATAGGAAGAGCAACCAGTTACTATGAGTGAAAGGGAGCCAGAAGACTGATTGG
AGGGCCCTATCTTGTGAGTGGGGCATCTGTTGGACTTTCCACCTGGTCATATACTCTGCAGCTGTTAGAATGTGC
AAGCACTTGGGGACAGCATGAGCTTGCTGTTGTACACAGGGTATTTCTAGAAGCAGAAATAGACTGGGAAGATGC
ACAACCAAGGGGTTACAGGCATCGCCCATGCTCCTCACCTGTATTTTGTAATCAGAAATAAATTGCTTTTAAAG

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FIGURE 2697

CGCAGTCTTCGCGGAAAGCGTTCGGGGTAGGCGATGGCTGCGACGCGTGCAGGGCCCCGCGCCCGCGAGATCTTC
ACCTCGCTGGAGTACGGACCGGTGCCGGAGAGCCACGCATGCGCACTGGCCTGGCTGGACACCCAGGACCGGTGC
TTGGGCCACTATGTGAATGGGAAGTGGTTAAAGCCTGAACACAGAAATTCAGTGCCTTGCCAGGATCCCATCACA
GGCTGGCCGAGGTGATCCAGAAGCACCAGCGGCTGCTGTGGACCCTGGAATCCCTGGTGACTGGGCGGGCTGTTC
GAGAGGTTCGAGACGGGGACGTCCAGCTGGCCCAGCAGCTGCTCCACTACCATGCAATCCAGGCATCCACCCAGG
AGGAGGCACTGGCAGGCTGGGAGCCC**ATG**GGAGTAATTGGCCTCATCCTGCCACCCACATTCTCCTTCCTTGAGA
TGATGTGGAGGATTTGCCCTGCCCTGGCTGTGGGCTGCACCGTGGTGGCCCTCGTGCCCCCGGCCTCCCCGGCGC
CCCTCCTCCTGGCCCAGCTGGCGGGGGAGCTGGGCCCCTTCCCGGGAATCCTGAATGTCCTCAGTGGCCCTGCGT
CCCTGGTGCCCATCCTGGCCTCCCAGCCTGGAATCCGGAAGGTGGCCTTCTGCGGAGCCCCGGAGGAAGGGCGTG
CCCTTCGACGGAGCCTGGCGGGAGAGTGTGCGGAGCTGGGCCTGGCGCTGGGGACGGAGTCGCTGCTGCTGCTGA
CGGACACGGCGGACGTAGACTCGGCCGTGGAGGGTGTCGTGGACGCCGCCTGGTCCGACCGCGGCCCGGGTGGCC
TCAGGCTCCTCATCCAGGAGTCTGTGTGGGATGAAGCCATGAGACGGCTGCAGGAGCGGATGGGGCGGCTTCGGA
GTGGCCGAGGGCTGGATGGGGCCGTGGACATGGGGGCCCGGGGGGCTGCCGCATGTGACCTGGTCCAGCGCTTTG
TGCGTGAGGCCCAGAGCCAGGGTGCACAGGTGTTCCAGGCTGGTGATGTGCCTTCGGAACGCCCATTCTATCCCC
CAACCTTGGTCTCCAACCTGCCCCCAGCCTCCCCATGTGCCCAGGTGGAGGTGCCGTGGCCTGTGGTCGTGGCCT
CCCCCTTCCGCACAGCCAAGGAGGCACTGTTGGTGGCCAACGGGACGCCCCGCGGGGGCAGCGCCAGTGTGTGGA
GCGAGAGGCTGGGGCAGGCGCTGGAGCTGGGCTATGGGCTCCAGGTGGGCACTGTCTGGATCAACGCCCACGGCC
TCAGAGACCCTTCGGTGCCCACAGGCGGCTGCAAGGAGAGTGGGTGTTCCTGGCACGGGGGCCCAGACGGGCTGT
ATGAGTATCTGCGGCCCTCAGGGACCCCTGCCCGGCTGTCCTGCCTCTCCAAGAACCTGAACTATGACACCTTTG
GCCTCGCTGTTCCCTCAACCCTGCCGGCTGGGCCTGAAATAGGGCCCAGCCCAGCACCCCCCTATGGGCTCTTCG
TTGGGGGCCGTTTCCAGGCTCCTGGGGCCCGAAGCTCCAGGCCCATCCGGGATTCGTCTGGCAACCTCCATGGCT
ACGTGGCTGAGGGTGGAGCCAAGGACATCCGAGGTGCTGTGGAGGCCGCTCACCAGGCTTTCCCTGGCTGGGCGG
GCCAGTCCCCAGGAGCCCGGGCAGCCCTGCTGTGGGCCCTGGCGGCTGCACTGGAGCGCCGGAAGTCTACCCTGG
CCTCGAGGCTGGAGAGGCAGGGAGCGGAGCTCAAGGCTGCGGAGGCGGAGGTGGAGCTGAGCGCAAGACGACTTC
GGGCGTGGGGGGCCCGGGTGCAGGCCCAAGGCCACACCCTGCAGGTAGCCGGGCTGAGAGGCCCTGTGCTGCGCC
TGCGGGAGCCGCTGGGTGTGCTGGCTGTGGTGTGTCCGGACGAGTGGCCCCTGCTTGCCTTCGTGTCCCTGCTGG
CTCCCGCCCTGGCCTACGGCAACACTGTGGTCATGGTGCCCAGTGCGGCCTGTCCTCTGCTGGCCCTGGAGGTCT
GCCAGGACATGGCCACCGTGTTCCCAGCAGGCCTGGCCAACGTGGTGACAGGAGACCGGGACCATCTGACCCGCT
GCCTGGCCTTGCACCAAGACGTCCAGGCCATGTGGTATTTCGGATCAGCCCAGGGTTCCCAGTTTGTCGAGTGGG
CCTCGGCAGGAAACCTCAAACCGGTGTGGGCGAGCAGGGGCTGCCCGCGGGCCTGGGACCAGGAGGCCGAGGGGG
CAGGCCCAGAGCTGGGGCTGCGAGTGGCGCGGACCAAGGCCCTGTGGCTGCCTATGGGGGAC**TGA**TGCCTGAGCG
CCACCTACTGCATTTTGGACACCTCACACCAAGGGGAGATGCACCCCACAGACACCTGGGACTTTCCCCTTCTGG
TTCCTGTGTCTCCCAATAAACTCTCTGACCAACCCTAGCTGTGCTTCTGCGAGAAGAAAGGGTGTAGCAACTTCT
GGCAGATATGAGGCTTTTTTCTTTTTTTTTTTTTTTTTTGAGACAACGTCTGGCTCTGTCACCCAGGCTGGAGCG
CAGTGGCACAATCTCGGCCCACTGCAGCCTCGACCTCTGGGGCTCAAGGGATCCTCATGCCTCAGCCTCATATGT
AGCTGGGGCCACAGACATGCACCACCACACCTGGCTCGAGGCCATTTTAGTTCTGAGGTTGAGCAGCTCAGGAGC
CGGCTCCAGCACGGTGCTGTGTTTGTGAAACAGAGAAAGGGGACCCCCGAGGACCCCAGACAGGGCCTTAGGACT
CTCATATCTTCTTGTCTTCTCCATCTGGTGGCTCTTGCTCTCTGGTTTTCTCTACCTTTTCATGGCCCCAGAATC
CATATGCAGTAAAGGAACTCTCTGGAATAAAATTAAAGTCCTCCT

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FIGURE 2698

ACAGTTCGGCACGTAGGACGGAGGGTAGTGCGTCTAGAGACACATATTCCCCACGGATTTGACGATGGTGTTCGG
TCTTGAATGGAAATGTAGTCTTAGGCCAGTCTTAGGTTTTTGAACAGGATAGTAGGTATCCGGAGTCGATTGAGG
GCCAGAGCAGGCACTGGGGTTCGGATCCTGGGCAAAGTTTCCCACGTTGAGGGTCTCGAGGACGCCTAGATCTCT
TTCCCAGGGCC**ATG**GCGAACCCGAAGCTGCTGGGAATGGGGCTAAGCGAGGCGGAGGCGATCGGTGCTGATTCGG
CGCGATTTGAGGAGCTGCTGCTGCAGGCCTCGAAGGAGCTCCAGCAAGCCCAGACAACCAGACCAGAATCGACAC
AAATCCAGCCTCAGCCTGGTTTCTGCATAAAGACCAACTCCTCGGAAGGGAAGGTTTTCATCAACATCTGCCACT
CCCCCTCTATCCCTCCTCCCGCCGACGTGACCGAGGAGGAGCTGCTTCAGATGCTAGAGGAGGACCAAGCTGGGT
TTCGCATCCCCATGAGTCTGGGAGAGCCTCATGCAGAACTGGATGCAAAAGGCCAGGGATGTACCGCCTACGACG
TAGCTGTCAACAGCGACTTCTACCGGAGGATGCAGAACAGCGATTTCTTGCGGGAGCTCGTGATCACCATCGCCA
GGGAGGGCCTTGAGGACAAATACAACTTGCAGCTGAATCCGGAATGGCGCATGATGAAGAACCGGCCATTCATGG
GCTCCATCTCGCAGCAGAACATCCGCTCGGAGCAGCGTCCTCGGATCCAGGAGCTGGGGGACCTGTACACGCCCG
CCCCCGGGAGAGCTGAGTCAGGGCCTGAAAAGCCTCACCTGAACCTGTGGCTGGAAGCCCCCGACCTCCTCTTGG
CCGAAGTTGACCTCCCCAAACTGGATGGAGCCCTGGGGCTGTCGCTGGAGATCGGGGAGAACCGCCTGGTGATGG
GGGGCCCCCAGCAGCTGTATCATCTAGACGCTTATATCCCGCTGCAGATCAACTCTCATGAGAGCAAGGCAGCCT
TCCACCGGAAGAGAAAGCAATTAATGGTGGCCATGCCGCTTCTGCCGGTGCCTTCT**TGA**TCAGGGTGTCTCCTTG
TGCTTCTGAGATGTGGAGAAGAGGCTGCTGGCTTCCCTAAAAGTTGAAATAAAAGATTTTTGCCTTT

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FIGURE 2699

CCGGCGGCAGGAGCCGCCACC**ATG**GAGTTCCGCCAGGAGGAGTTTCGGAAGCTAGCGGGTCGTGCTCTCGGGAAG
CTGCACCGCCTTCTGGAGAAGCGGCAGGAAGGCGCGGAGACGCTGGAGCTGAGTGCGGATGGGCGCCCGGTGACC
ACGCAGACCCGGGACCCGCCGGTGGTGGACTGCACCTGCTTCGGCCTCCCTCGCCGCTACATTATCGCCATCATG
AGTGGTCTGGGCTTCTGCATCAGCTTTGGCATCCGCTGCAACCTGGGCGTGGCCATCGTCTCCATGGTCAATAAC
AGCACGACCCACCGCGGGGGCCACGTGGTGGTGCAGAAAGCCCAGTTCAGCTGGGATCCAGAGACTGTCGGCCTC
ATACACGGCTCCTTTTTCTGGGGCTACATTGTCACTCAGATTCCAGGAGGATTTATCTGTCAAAAATTTGCAGCC
AACAGAGTTTTCGGCTTTGCTATTGTGGCAACATCCACTCTAAACATGCTGATCCCCTCAGCTGCCCGCGTCCAC
TATGGCTGTGTCATCTTCGTGAGGATCCTGCAGGGGTTGGTAGAGGGGGTCACATACCCCGCCTGCCATGGGATC
TGGAGCAAATGGGCCCCACCCTTAGAACGGAGTCGCCTGGCGACGACAGCCTTTTGTGGTTCCTATGCTGGGGCG
GTGGTCGCGATGCCCCTCGCCGGGGTCCTTGTGCAGTACTCAGGATGGAGCTCTGTTTTCTACGTCTACGGCAGC
TTCGGGATCTTCTGGTACCTGTTCTGGCTGCTCGTCTCCTACGAGTCCCCCGCGCTGCACCCCAGCATCTCGGAG
GAGGAGCGCAAGTACATCGAGGACGCCATCGGAGAGAGCGCGAAACTCATGAACCCCCTCACGAAGTTTAGCACT
CCCTGGCGGCGCTTCTTCACGTCTATGCCAGTCTATGCCATCATCGTGGCCAACTTCTGCCGCAGCTGGACGTTC
TACCTGCTGCTCATCTCCCAGCCCGCCTACTTCGAAGAAGTGTTCGGCTTCGAGATCAGCAAGGTAGGCCTGGTG
TCCGCGCTGCCCCACCTGGTCATGACCATCATCGTGCCCATCGGCGGCCAGATCGCGGACTTCCTGCGGAGCCGC
CGCATCATGTCCACCACCAACGTGCGCAAGTTGATGAACTGCGGAGGCTTCGGCATGGAAGCCACGCTGCTGTTG
GTGGTCGGCTACTCGCACTCCAAGGGCGTGGCCATCTCCTTCCTGGTCCTAGCCGTGGGCTTCAGCGGCTTCGCC
ATCTCTGGGTTCAACGTGAACCACCTGGACATAGCCCCGCGCTACGCCAGCATCCTCATGGGCATCTCCAACGGC
GTGGGCACACTGTCGGGCATGGTGTGCCCCATCATCGTGGGGGCCATGACTAAGCACAAGACTCGGGAGGAGTGG
CAGTACGTGTTCCTAATTGCCTCCCTGGTGCACTATGGAGGTGTCATCTTCTACGGGGTCTTTGCTTCTGGAGAG
AAGCAGCCGTGGGCAGAGCCTGAGGAGATGAGCGAGGAGAAGTGTGGCTTCGTTGGCCATGACCAGCTGGCTGGC
AGTGACGACAGCGAAATGGAGGATGAGGCTGAGCCCCCGGGGGCACCCCCTGCACCCCCGCCCTCCTATGGGGCC
ACACACAGCACATTTCAGCCCCCCAGGCCCCCACCCCCTGTCCGGGACTAC**TGA**CCATGTGCCTCCCACTGAATG
GCAGTTTCCAGGACCTCCATTCCACTCATCTCTGGCCTGAGTGACAGTGTCAAGGAACCCTGCTCCTCTCTGTCC
TGCCTCAGGCCTAAGAAGCACTCTCCCTTGTTCCCAGTGCTGTCAAATCCTCTTTCCTTCCCAATTGCCTCTCAG
GGGTAGTGAAGCTGCAGACTGACAGTTTCAAGGATACCCAAATTCCCCTAAAGGTTCCCTCTCCACCCGTTCTGC
CTCAGTGGTTTCAAATCTCTCCTTTCAGGGCTTTATTTGAATGGACAGTTCGACCTCTTACTCTCTCTTGTGGTT
TTGAGGCACCCACACCCCCCGCTTTCCTTTATCTCCAGGGACTCTCAGGCTAACCTTTGAGATCACTCAGCTCCC
ATCTCCTTTCAGAAAAATTCAAGGTCCTCCTCTAGAAGTTTCAAATCTCTCCCAACTCTGTTCTGCATCTTCCAG
ATTGGTTTAACCAATTACTCGTCCCCGCCATTCCAGGGATTGATTCTCACCAGCGTTTCTGATGGAAAATGGCGG
TTTCAAGTCCCCGATTCCGTGCCCACTTCACATCTCCCCTACCAGCAGATTCTGCGAAAGCACCAAATTTCTCAA
GACCCTCTTCTCCCTAGCTTAGCATAATGTCTGGGGAAACA

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FIGURE 2642

CAGTATCCCTCCTGACAAAACTAACAAAAATCCTGTTAGCCAAATAATCAGCCACATTCATATTTACCGTCAAAG
TTTTTATCCTCATTTTACAGCAGTGGAGAGCGATTGCCCCGGGTCCCACGTTAGGAAGAGAGAGAACTGGGATTT
GCACCCAGGCAATCTGGGGACAGAGCTGTGATCACAACTCCATGAGTCAGGGCCGAGCCAGCCCCTTCACCACCA
GCCGGCCGCGCCCCGGGAAGGGAAGTTTGTGGCGGAGGAGGTTCGTACGGGAGGAGGGGGAGGCGCCCACGCATC
TGGGGCTGACTCGCTCTTTCGCAAAACGTCTGGGAGGAGTCCCTGGGGCCACAAAACTGCCTCCTTCCTGAGGCC
AGAAGGAGAGAAGACGTGCAGGGACCCCGCGCACAGGAGCTGCCCTCGCGAC**ATG**GGTCACCCGCCGCTGCTGCC
GCTGCTGCTGCTGCTCCACACCTGCGTCCCAGCCTCTTGGGGCCTGCGGTGCATGCAGTGTAAGACCAACGGGGA
TTGCCGTGTGGAAGAGTGCGCCCTGGGACAGGACCTCTGCAGGACCACGATCGTGCGCTTGTGGGAAGAAGGAGA
AGAGCTGGAGCTGGTGGAGAAAAGCTGTACCCACTCAGAGAAGACCAACAGGACCCTGAGCTATCGGACTGGCTT
GAAGATCACCAGCCTTACCGAGGTTGTGTGTGGGTTAGACTTGTGCAACCAGGGCAACTCTGGCCGGGCTGTCAC
CTATTCCCGAAGCCGTTACCTCGAATGCATTTCCTGTGGCTCATCAGACATGAGCTGTGAGAGGGGCCGGCACCA
GAGCCTGCAGTGCCGCAGCCCTGAAGAACAGTGCCTGGATGTGGTGACCCACTGGATCCAGGAAGGTGAAGAAGG
GCGTCCAAAGGATGACCGCCACCTCCGTGGCTGTGGCTACCTTCCCGGCTGCCCGGGCTCCAATGGTTTCCACAA
CAACGACACCTTCCACTTCCTGAAATGCTGCAACACCACCAAATGCAACGAGGGCCCAATCCTGGAGCTTGAAAA
TCTGCCGCAGAATGGCCGCCAGTGTTACAGCTGCAAGGGGAACAGCACCCATGGATGCTCCTCTGAAGAGACTTT
CCTCATTGACTGCCGAGGCCCCATGAATCAATGTCTGGTAGCCACCGGCACTCACGAACCGAAAAACCAAAGCTA
TATGGTAAGAGGCTGTGCAACCGCCTCAATGTGCCAACATGCCCACCTGGGTGACGCCTTCAGCATGAACCACAT
TGATGTCTCCTGCTGTACTAAAAGTGGCTGTAACCACCCAGACCTGGATGTCCAGTACCGCAGTGGGGCTGCTCC
TCAGCCTGGCCCTGCCCATCTCAGCCTCACCATCACCCTGCTAATGACTGCCAGACTGTGGGGAGGCACTCTCCT
CTGGACC**TAA**ACCTGAAATCCCCCTCTCTGCCCTGGCTGGATCCGGGGGACCCCTTTGCCCTTCCCTCGGCTCCC
AGCCCTACAGACTTGCTGTGTGACCTCAGGCCAGTGTGCCGACCTCTCTGGGCCTCAGTTTTCCCAGCTATGAAA
ACAGCTATCTCACAAAGTTGTGTGAAGCAGAAGAGAAAAGCTGGAGGAAGGCCGTGGGCCAATGGGAGAGCTCTT
GTTATTATTAATATTGTTGCCGCTGTTGTGTTGTTGTTATTAATTAATATTCATATTATTTATTTTATACTTACA
TAAAGATTTTGTACCAGTGG

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FIGURE 2701

CCCACTTTTCCCAAACAAAGCTCCCGGCAACTTTCTCCCTCGCAGCGCCCCGCCCGCCCGCGGCTCCCCAGCCCC
AGGCCGGGAGGCCCAGATGGGGGAACCCCGGGCTGGGGCCGCCCTGGACGATGGCAGCGGCTGGACGGGCAGTGA
GGAAGGCAGTGAGGAGGGTACCGGCGGCAGTGAGGGGGCTGGGGGTGACGGGGGCCCGGATGCAGAGGGGGTGTG
GAGCCCAGACATTGAGCAGAGCTTCCAGGAGGCCCTGGCCATCTATCCACCCTGCGGCCGCCGGAAAATAATTTT
GTCTGATGAAGGCAAGATGTATGGTCGGAATGAACTGATCGCCCGCTACATCAAGCTGAGAACGGGGAAGACCCG
AACTCGAAAACAGGTTTCTAGTCACATCCAGGTTTTGGCCCGAAGGAAATCAAGGGAAATCCAGTCCAAGTTGAA
GGACCAGGTTTCCAAGGACAAGGCTTTCCAGACAATGGCAACCATGTCCTCTGCCCAGCTCATCTCCGCGCCTTC
TCTGCAGGCCAAACTGGGTCCCACTGGTCCTCAGGCCTCTGAGCTTTTCCAGTTTTGGTCTGGAGGATCTGGGCC
CCCCTGGAATGTTCCAGATGTGAAGCCATTCTCACAGACACCGTTCACCTTGTCACTGACTCCCCCATCTACTGA
CCTCCCAGGGTACGAGCCCCCCCAAGCCCTCTCACCCCTGCCCCCACCTACCCCATCGCCCCCAGCCTGGCAGGC
TCGGGGCCTGGGCACCGCCCGGTTGCAGCTGGTAGAGTTCTCAGCCTTCGTGGAACCGCCAGATGCAGTTGATTC
TTACCAGAGGCACCTGTTCGTGCACATCAGCCAGCACTGCCCCAGCCCCGGAGCGCCGCCGCTCGAGAGTGTGGA
CGTCCGGCAGATCTACGACAAATTCCCTGAGAAAAAGGGTGGCCTCCGAGAGCTATATGATCGTGGCCCCCCCCA
TGCCTTCTTCCTGGTCAAGTTCTGGGCGGACCTGAACTGGGGCCCAAGTGGTGAGGAGGCAGGGGCCGGTGGCAG
CATCAGCAGTGGTGGCTTCTACGGAGTGAGCAGCCAGTATGAGAGCCTGGAACACATGACCCTCACCTGTTCCTC
CAAGGTCTGCTCTTTTGGCAAGCAGGTGGTGGAGAAGGTGGAGACGGAACGGGCCCAGCTGGAGGACGGCAGATT
TGTGTACCGCCTGCTGCGCTCGCCCATGTGCGAGTACCTGGTGAATTTCTTGCACAAGTTGCGGCAGCTGCCTGA
GCGATACATGATGAACAGCGTCCTGGAAAACTTCACCATCCTCCAGGTGGTGACAAACAGAGACACCCAGGAACT
GCTGCTCTGCACCGCCTATGTCTTCGAGGTCTCCACCAGCGAGCGTGGGGCCCAGCATCACATTTACCGCCTGGT
CAGGGACTGAAGGGGGACCCCAAAACTGGCTCACCCCCCAGAACACCCTCCTCCCAGGGAGGGTCCTCCAGCTCA
CCTCATGCTTCTTATTTGGGGAGAGGGCTGTGATGTAAAGGGGTTGACCTCAGAGGCCTAAGCAACTGGGGCCAT
CCCCCCCATTAGAGGGGCCCCCAAAACTTGGTTGGAGAGCTGAACAGGCTGGGACTGAGGAAAGGATAAACCCCG
ATATTGGGACCTCACAGTGGGTGTCTGAAAGGACAGATCACTCCGGAGTATCAGGGATTGTGGGGACAGGAGTGA
GACAACCCCCCAGGTACAGCACTGGCTTTTCTTTTCAGCCCCTGACAGGCCACCCCCACTCCTCTGCATGTCTTG
GAGAGCGCTAGTTACACATTGGCTTGTCCCCTTTACTTTTTCCCAGCCACCCCTCCCCCTGAAATTTCTGCCCCT
CTCTACCACCCTCACTCCATGACCTGTGAGATCACAAAGTGAAGATGAACCCTTTCTGTGCAGGAGCAGAGCCAG
GTGGGCCCTGGACATTTTTTTTTTTTTTAATATAACGAGATATTTATAAGTGGGTGCTAGGGTCTTGACTTTATC
TCCGCTGCACAAGCAGTGTGTTGAACTTTCTAATCTCATCCCTCTCCTAAGTGAGCCCTGAGCTAGACGGTTTCC
TTCCTCCCCTCTCAAAGTTTGTTTGTTTGTGTTCTGACAGAGGATAAAGCTATTTTACC

FIGURE 2702

GTCTCCCCCACTGTCAGCACCTCTTCTGTGTGGTGAGTGGACCGCTTACCCCACTAGGTGAAGATGTCAGCCCAG
GAGAGCTGCCTCAGCCTCATCAAGTACTTCCTCTTCGTTTTCAACCTCTTCTTCTTCGTCCTCGGCAGCCTGATC
TTCTGCTTCGGCATCTGGATCCTCATTGACAAGACCAGCTTCGTGTCCTTTGTGGGCTTGGCCTTCGTGCCTCTG
CAGATCTGGTCCAAAGTCCTGGCCATCTCAGGAATCTTCACCATGGGCATCGCCCTCCTGGGTTGTGTGGGGGCC
CTCAAGGAGCTCCGCTGCCTCCTGGGCCTGTATTTTGGGATGCTGCTGCTCCTGTTTGCCACACAGATCACCCTG
GGAATCCTCATCTCCACTCAGCGGGCCCAGCTGGAGCGAAGCTTGCGGGACGTCGTAGAGAAAACCATCCAAAAG
TACGGCACCAACCCCGAGGAGACCGCGGCCGAGGAGAGCTGGGACTATGTGCAGTTCCAGCTGCGCTGCTGCGGC
TGGCACTACCCGCAGGACTGGTTCCAAGTCCTCATCCTGAGAGGTAACGGGTCGGAGGCGCACCGCGTGCCCTGC
TCCTGCTACAACTTGTCGGCGACCAACGACTCCACAATCCTAGATAAGGTGATCTTGCCCCAGCTCAGCAGGCTT
GGACACCTGGCGCGGTCCAGACACAGTGCAGACATCTGCGCTGTCCCTGCAGAGAGCCACATCTACCGCGAGGGC
TGCGCGCAGGGCCTCCAGAAGTGGCTGCACAACAACCTTATTTCCATAGTGGGCATTTGCCTGGGCGTCGGCCTA
CTCGAGCTCGGGTTCATGACGCTCTCGATATTCCTGTGCAGAAACCTGGACCACGTCTACAACCGGCTCGCTCGA
TACCGTTAGGCCCCGCCCTCCCCAAAGTCCCGCCCCGCCCCCGTCACGTGCGCTGGGCACTTCCCTGCTGCCTGT
AAATATTTGTTTAATCCCCAGTTCGCCTGGAGCCCTCCGCCTTCACATTCCCCTGGGGACCCACGTGGCTGCGTG
CCCCTGCTGCTGTCACCTCTCCCACGGGACCTGGGGCTTTCGTCCACAGCTTCCTGTCCCCATCTGTCGGCCTAC

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FIGURE 2703A

GAGGGAGCGCCGGGGCCCTGGGCTGCAGGAGGTTGCGGCGGCCGCGGCAGCATGGTGGTGCCGGAGAAGGAGCAG
AGCTGGATCCCCAAGATCTTCAAGAAGAAGACCTGCACGACGTTCATAGTTGACTCCACAGATCCGGGGAGCCTG
GATTGTCACTGGGGGTCTGCACACGGGCATCGGCCGGCATGTTGGTGTGGCTGTACGGGACCATCAGATGGCCAG
CACTGGGGGCACCAAGGTGGTGGCCATGGGTGTGGCCCCCTGGGGTGTGGTCCGGAATAGAGACACCCTCATCAA
CCCCAAGGGCTCGTTCCCTGCGAGGTACCGGTGGCGCGGTGACCCGGAGGACGGGGTCCAGTTTCCCCTGGACTA
CAACTACTCGGCCTTCTTCCTGGTGGACGACGGCACACACGGCTGCCTGGGGGGCGAGAACCGCTTCCGCTTGCG
CCTGGAGTCCTACATCTCACAGCAGAAGACGGGCGTGGGAGGGACTGGAATTGACATCCCTGTCCTGCTCCTCCT
GATTGATGGTGATGAGAAGATGTTGACGCGAATAGAGAACGCCACCCAGGCTCAGCTCCCATGTCTCCTCGTGGC
TGGCTCAGGGGGAGCTGCGGACTGCCTGGCGGAGACCCTGGAAGACACTCTGGCCCCAGGGAGTGGGGGAGCCAG
GCAAGGCGAAGCCCGAGATCGAATCAGGCGTTTCTTTCCCAAAGGGGACCTTGAGGTCCTGCAGGCCCAGGTGGA
GAGGATTATGACCCGGAAGGAGCTCCTGACAGTCTATTCTTCTGAGGATGGGTCTGAGGAATTCGAGACCATAGT
TTTGAAGGCCCTTGTGAAGGCCTGTGGGAGCTCGGAGGCCTCAGCCTACCTGGATGAGCTGCGTTTGGCTGTGGC
TTGGAACCGCGTGGACATTGCCCAGAGTGAACTCTTTCGGGGGGACATCCAATGGCGGTCCTTCCATCTCGAAGC
TTCCCTCATGGACGCCCTGCTGAATGACCGGCCTGAGTTCGTGCGCTTGCTCATTTCCCACGGCCTCAGCCTGGG
CCACTTCCTGACCCCGATGCGCCTGGCCCAACTCTACAGCGCGGCGCCCTCCAACTCGCTCATCCGCAACCTTTT
GGACCAGGCGTCCCACAGCGCAGGCACCAAAGCCCCAGCCCTAAAAGGGGGAGCTGCGGAGCTCCGGCCCCCTGA
CGTGGGGCATGTGCTGAGGATGCTGCTGGGGAAGATGTGCGCGCCGAGGTACCCCTCCGGGGGCGCCTGGGACCC
TCACCCAGGCCAGGGCTTCGGGGAGAGCATGTATCTGCTCTCGGACAAGGCCACCTCGCCGCTCTCGCTGGATGC
TGGCCTCGGGCAGGCCCCCTGGAGCGACCTGCTTCTTTGGGCACTGTTGCTGAACAGGGCACAGATGGCCATGTA
CTTCTGGGAGATGGGTTCCAATGCAGTTTCCTCAGCTCTTGGGGCCTGTTTGCTGCTCCGGGTGATGGCACGCCT
GGAGCCTGACGCTGAGGAGGCAGCACGGAGGAAAGACCTGGCGTTCAAGTTTGAGGGGATGGGCGTTGACCTCTT
TGGCGAGTGCTATCGCAGCAGTGAGGTGAGGGCTGCCCGCCTCCTCCTCCGTCGCTGCCCGCTCTGGGGGGATGC
CACTTGCCTCCAGCTGGCCATGCAAGCTGACGCCCGTGCCTTCTTTGCCCAGGATGGGGTACAGTCTCTGCTGAC
ACAGAAGTGGTGGGGAGATATGGCCAGCACTACACCCATCTGGGCCCTGGTTCTCGCCTTCTTTTGCCCTCCACT
CATCTACACCCGCCTCATCACCTTCAGGAAATCAGAAGAGGAGCCCACACGGGAGGAGCTAGAGTTTGACATGGA
TAGTGTCATTAATGGGGAAGGGCCTGTCGGGACGGCGGACCCAGCCGAGAAGACGCCGCTGGGGGTCCCGCGCCA
GTCGGGCCGTCCGGGTTGCTGCGGGGGCCGCTGCGGGGGGCGCCGGTGCCTACGCCGCTGGTTCCACTTCTGGGG
CGCGCCGGTGACCATCTTCATGGGCAACGTGGTCAGCTACCTGCTGTTCCTGCTGCTTTTCTCGCGGGTGCTGCT
CGTGGATTTCCAGCCGGCGCCGCCCGGCTCCCTGGAGCTGCTGCTCTATTTCTGGGCTTTCACGCTGCTGTGCGA
GGAACTGCGCCAGGGCCTGAGCGGAGGCGGGGGCAGCCTCGCCAGCGGGGGCCCCGGGCCTGGCCATGCCTCACT
GAGCCAGCGCCTGCGCCTCTACCTCGCCGACAGCTGGAACCAGTGCGACCTAGTGGCTCTCACCTGCTTCCTCCT
GGGCGTGGGCTGCCGGCTGACCCCGGGTTTGTACCACCTGGGCCGCACTGTCCTCTGCATCGACTTCATGGTTTT
CACGGTGCGGCTGCTTCACATCTTCACGGTCAACAAACAGCTGGGGCCCAAGATCGTCATCGTGAGCAAGATGAT
GAAGGACGTGTTCTTCTTCCTCTTCTTCCTCGGCGTGTGGCTGGTAGCCTATGGCGTGGCCACGGAGGGGCTCCT
GAGGCCACGGGACAGTGACTTCCCAAGTATCCTGCGCCGCGTCTTCTACCGTCCCTACCTGCAGATCTTCGGGCA
GATTCCCCAGGAGGACATGGACGTGGCCCTCATGGAGCACAGCAACTGCTCGTCGGAGCCCGGCTTCTGGGCACA
CCCTCCTGGGGCCCAGGCGGGCACCTGCGTCTCCCAGTATGCCAACTGGCTGGTGGTGCTGCTCCTCGTCATCTT
CCTGCTCGTGGCCAACATCCTGCTGGTCAACTTGCTCATTGCCATGTTCAGTTACACATTCGGCAAAGTACAGGG
CAACAGCGATCTCTACTGGAAGGCGCAGCGTTACCGCCTCATCCGGGAATTCCACTCTCGGCCCGCGCTGGCCCC
GCCCTTTATCGTCATCTCCCACTTGCGCCTCCTGCTCAGGCAATTGTGCAGGCGACCCCGGAGCCCCCAGCCGTC
CTCCCCGGCCCTCGAGCATTTCCGGGTTTACCTTTCTAAGGAAGCCGAGCGGAAGCTGCTAACGTGGGAATCGGT
GCATAAGGAGAACTTTCTGCTGGCACGCGCTAGGGACAAGCGGGAGAGCGACTCCGAGCGTCTGAAGCGCACGTC
CCAGAAGGTGGACTTGGCACTGAAACAGCTGGGACACATCCGCGAGTACGAACAGCGCCTGAAAGTGCTGGAGCG
GGAGGTCCAGCAGTGTAGCCGCGTCCTGGGGTGGGTGGCCGAGGCCCTGAGCCGCTCTGCCTTGCTGCCCCCAGG
TGGGCCGCCACCCCCTGACCTGCCTGGGTCCAAAGACTGAGCCCTGCTGGCGGACTTCAAGGAGAAGCCCCCACA
GGGGATTTTGCTCCTAGAGTAAGGCTCATCTGGGCCTCGGCCCCCGCACCTGGTGGCCTTGTCCTTGAGGTGAGC
CCCATGTCCATCTGGGCCACTGTCAGGACCACCTTTGGGAGTGTCATCCTTACAAACCACAGCATGCCCGGCTCC
TCCCAGAACCAGTCCCAGCCTGGGAGGATCAAGGCCTGGATCCCGGGCCGTTATCCATCTGGAGGCTGCAGGGTC

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FIGURE 2703B

CTTGGGGTAACAGGGACCACAGACCCCTCACCACTCACAGATTCCTCACACTGGGGAAATAAAGCCATTTCAGAG
G

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FIGURE 2704A

GTGGGATTTGGGGGGCGCTGGTGGGCACCCCTGGATCTGGCGGCTGCGGCCTCGCGGGGGGAGGCTGATCGGTGA
CAGGGGCAGGGGGCTATTTTGGGGGTAGAAGGCAGTGAGAGCGTGAGGGGGAGGGGGGTCCCCAGCGCCCAAGCC
GGAGCCAGAGACGCGGAGCCCGCGCGAGCGTCGGAGACAGGGCTCCAGGGCTCCGAAGCGACAGAGCCGGGCCCC
GGCCGCTGCCAGGGGCCCCGCCCGGCCCCCCCACTCCACCCCACGTCCCTCCTGCAGCCCAGCTCCGCCCGCAGC
CGCCGCGGACCAGGCAGGCCCGCACCGCCGCC**ATG**ATGTGCGAGGTGATGCCCACCATCAGCGAGGATGGCCGGC
GGGGCTCGGCGCTGGGCCCGGACGAGGCGGGCGGGGAGCTGGAGCGCCTCATGGTCACGATGCTCACGGAGCGCG
AGCGCCTGCTGGAGACGCTGCGCGAGGCACAGGACGGGTTGGCTACAGCGCAGCTGCGGCTGCGCGAGCTCGGCC
ACGAGAAGGACTCGCTGCAGCGCCAGCTCAGCATCGCGCTGCCCCAGGAGTTTGCAGCTCTGACGAAGGAGCTGA
ACTTATGTCGGGAGCAGCTGCTGGAGAGGGAGGAAGAGATTGCAGAGCTGAAGGCGGAACGGAACAACACGCGGC
TGCTCCTGGAACACCTGGAGTGCCTGGTGTCCAGGCACGAGAGGTCACTGCGCATGACCGTGGTGAAGCGCCAGG
CCCAGTCCCCGGGTGGGGTCTCCTCGGAGGTAGAAGTGCTCAAAGCTCTAAAGTCTCTCTTCGAGCACCACAAGG
CCCTGGATGAGAAGGTCCGGGAGCGGCTGCGGATGGCGCTGGAGCGCGTGGCAGTGCTCGAGGAGGAGCTGGAAC
TGAGCAATCAGGAGACTCTGAACCTTCGAGAACAGCTGTCTAGGCGGCGGTCAGGGCTGGAAGAGCCGGGCAAGG
ATGGGGATGGGCAGACTCTTGCCAATGGCCTGGGTCCTGGCGGGGATTCCAACCGGCGCACAGCAGAGCTGGAGG
AGGCCCTGGAGCGGCAGCGCGCCGAGGTGTGCCAGCTGCGGGAGCGCCTGGCGGTGCTGTGCCGTCAGATGAGCC
AGCTGGAGGAGGAGTTGGGCACCGCGCACCGTGAGCTGGGCAAGGCAGAGGAAGCCAACTCCAAGCTGCAGCGCG
ACCTCAAGGAGGCGCTGGCGCAGCGGGAAGATATGGAGGAGCGGATTACAACACTGGAGAAGCGCTACCTGAGCG
CCCAGCGGGAGGCCACGTCTCTGCACGACGCCAACGACAAACTGGAGAACGAGTTAGCTAGCAAGGAGTCGTTGT
ATCGGCAGAGTGAAGAGAAGAGCCGTCAGCTGGCCGAGTGGTTGGACGACGCCAAGCAGAAGCTGCAGCAGACGC
TGCAGAAAGCGGAGACCTTGCCCGAGATAGAGGCGCAGCTGGCGCAGCGCGTGGCGGCGCTCAACAAGGCCGAGG
AACGTCATGGGAATTTTGAGGAGCGGCTTCGGCAGCTGGAGGCCCAGCTGGAAGAGAAGAATCAAGAGCTGCAGC
GGGCCCGGCAGCGGGAGAAGATGAACGATGACCACAATAAGCGGCTGTCCGAGACGGTGGACAAGCTGCTGAGCG
AGTCCAACGAGCGCTTACAGCTTCACCTCAAGGAGCGCATGGGGGCGCTGGAGGAGAAGAACTCCCTGAGCGAGG
AGATAGCCAACATGAAGAAGCTTCAGGATGAGTTGCTGCTAAACAAGGAGCAGCTCTTGGCCGAAATGGAGCGGA
TGCAGATGGAGATCGACCAGCTGCGGGGGAGGCCACCATCCTCCTACTCCAGGTCTCTCCCTGGCAGTGCCCTGG
AGCTCCGTTACTCTCAGGCACCCACTTTACCTTCTGGTGCCCACCTGGATCCCTATGTGGCTGGCAGTGGTCGGG
CAGGCAAGAGGGGCCGCTGGTCAGGGGTCAAGGAGGAGCCCTCCAAGGATTGGGAGCGGTCTGCCCCTGCGGGCT
CCATACCACCCCCATTCCCTGGGGAACTGGACGGCTCCGATGAGGAGGAGGCAGAGGGGATGTTTGGGGCCGAGC
TGCTGTCCCCCAGTGGGCAGGCTGACGTGCAGACGCTGGCCATCATGCTTCAGGAGCAGCTGGAGGCCATCAACA
AGGAGATCAAGCTGATCCAAGAGGAGAAGGAGACAACAGAACAGAGGGCAGAGGAGCTGGAGAGTCGGGTGTCCA
GCTCTGGCTTGGACTCGTTGGGCCGCTACCGCAGCAGCTGCTCCCTGCCCCCCTCCCTCACCACCTCTACCCTTG
CCAGCCCCTCCCCTCCCAGCTCTGGCCACTCAACACCCCGCCTGGCACCCCCTAGCCCTGCCCGTGAGGGCACCG
ACAAGGCTAATCATGTCCCTAAGGAGGAAGCTGGAGCTCCACGAGGGGAGGGGCCGGCCATCCCAGGAGACACCC
CACCACCCACTCCCCGCTCTGCCCGTCTTGAGAGAATGACCCAGGCCTTGGCACTGCAGGCGGGGTCCCTGGAAG
ATGGGGGACCCCCACGGGGAAGTGAGGGCACCCCAGATTCTCTGCACAAAGCCCCCAAGAAGAAGAGCATCAAGT
CATCCATAGGCCGTCTCTTTGGCAAGAAAGAGAAGGGACGAATGGGACCCCCAGGCCGGGACAGCTCTTCTCTGG
CTGGAACACCCTCAGATGAGACACTGGCCACTGACCCTCTGGGGCTAGCCAAGCTGACAGGCCCAGGAGACAAGG
ACCGAAGGAACAAGAGGAAGCATGAACTCCTGGAGGAGGCCTGCCGCCAGGGCCTACCTTTTGCTGCCTGGGACG
GGCCCACCGTGGTGTCCTGGCTGGAGCTGTGGGTGGGCATGCCTGCCTGGTATGTGGCCGCCTGCCGGGCCAATG
TCAAGAGCGGTGCCATCATGGCCAACCTGTCAGACACGGAGATCCAGCGCGAGATCGGCATCAGCAACCCGCTGC
ACCGACTCAAGCTACGCCTCGCCATCCAGGAGATGGTCTCGCTCACCTCGCCCTCAGCCCCCGCCTCCTCCCGCA
CTTCCACAGGAAACGTGTGGATGACACACGAGGAGATGGAGTCCCTTACGGCCACGACCAAGCCCGAGACCAAGG
AGATCAGCTGGGAGCAGATCCTGGCATATGGCGACATGAACCACGAGTGGGTGGGGAACGACTGGCTGCCCAGCC
TGGGGCTGCCCCAATACCGCAGCTACTTCATGGAGTCGCTGGTGGACGCTCGAATGTTAGATCACCTTAACAAGA
AGGAGCTCCGGGGCCAACTCAAGATGGTGGACAGCTTTCACAGGGTGAGTCTACATTATGGGATTATGTGCCTGA
AACGGCTCAACTATGACCGGAAGGACCTGGAGCGGAGGCGGGAAGAAAGTCAGACCCAGATCCGAGACGTGATGG
TGTGGTCCAATGAGCGGGTCATGGGTTGGGTGTCCGGGCTGGGCCTGAAGGAATTTGCCACGAACCTCACGGAGA
GCGGGGTACACGGGGCACTGCTCGCCCTGGACGAGACCTTCGACTACTCCGACCTGGCCTTGCTCCTGCAGATCC

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FIGURE 2704B

CCACGCAGAATGCACAGGCCCGGCAGCTTCTGGAGAAGGAATTCAGCAACCTTATCTCCTTAGGCACAGACAGGC
GGCTGGACGAGGACAGCGCCAAGTCTTTCAGCCGCTCCCCATCCTGGCGGAAGATGTTCCGGGAGAAGGACCTCC
GAGGCGTAACTCCCGACTCAGCTGAGATGTTGCCCCCCAACTTTCGTTCGGCTGCAGCGGGAGCCCTGGGCTCTC
CGGGGCTCCCTCTCCGCAAGCTGCAGCCAGAAGGCCAGACTTCTGGGAGTTCCCGGGCAGACGGCGTTTCGGTCC
GGACCTATTCCTGCTAGTGCAGGCCTCCAGGTGACCTCACTCGGACGGAAGAATCTTCCCGAGGCTGGGCTGTTC
CCTCTCCTGCCCGGACTGTGGCCTCGCCGGGGAGAGCGGGCGGGGGAGCTCGCGCCGAGGACTGGACCATCTGTA
CAGACCAGCGGGAGTGCGCGCGCCCGCCTCGCACAGGGCCGGGGCCTGGACCAAACCACATGAACTGGACTGAGA
GGGGGAAGAAGCGGGGAGGAAGAAATCCCGCCCCAAACGTCCGCTTTCCTTTTCTCTACTTTGTAATTTATTGAT
CAGTTTCTGTTGGGAGACGGGTGTCCTTTACCCGCGGGAAGGGGGCGGGGCTTCCCTCCCGGGCCGCATGCGGGG
AGAGGCTGCTCCCTCCCCTTTTTCCTGCCCAGTCGCGGGGCCCAAGTCTTCCTTCTTCGTCCGAAAGGAGGGGAG
GGGGGACTCGCTGCTACAAGCCTCGCCCCCTGTGCCACTCAGCTCCGCCCCGCCGCGTCCGGTCGCCGGTCCCCC
GGGTCATCTGCGGGCGGGTTCCCCTCTCCCTCCCCCGTGTCTCGTGTCCCCGGGGCCTCACCGCCCCCCGTGCTG
TGGCCGTGTCCGTGCCCCGGGGGTAGGGGGCGCAGAATGGCGCTTCCCCTTCTCCTCTGGCTCCGGGGTTTGCAT
GGGAGAATCCTCTTTCCACGATGCCGCTGGGCGACGTGGCGTGGGGGCAGGGGGACGGTGGGGGAGCCCTCGCCC
CCGACTCTCGGTCGGCCTCCCCGCCCCAGGCGTCACTCAGTGATCACGGGTAAAGAGAACTGTTTC

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FIGURE 2705

GATGTCACCTGGAGCGAGTAGCGCGCGGCGTGGAACGCGAGTCGCGACCCCGGCTCCCGGCAGTGGCGCGCACTA
GCCCTCGCGCCGCACGGGACACGAGGGCTGGGCGGGCAGCGGGATGAGGCTAAAGGTTGGATTTCAAGGCGGGGG
CTGCTTCCGGAAAGACGCGCTGTGTTTGGAAGGTGGAGTGAGCGCCCGGTGGGCGAGGGCACCTCATTCTGCACC
CCTGCGCCCGCCTCGGGAACTGCACGCGGCACCCCCACCCGCGACTCCCACGCAGACAGTAGTGCGGCCTGCAGG
GTTCCCCCGGCGGACGAGGCTAATGGTTCGCTCCGCCCCGCCCACACAGAGGCCGCCCACTGGCTCCGGCTGCGT
TTCAGGACTCTGGAGGAAGGGACTTGGCCTTCGCCCTCAGACGCTCTTAAGGGTAGGCAGCGTTGTCCTCAGTTC
TGCCCCAGCACTCAGACCCAGACTGGGTCCCTGCCTCCGCCCTCCGCCCTCGGACTAGTCTCTTGGAAGCCGGCC
TGTCTCCGCCTTCAGACCTAGGGAGAGGTCTTAACCTCTGTTCTCAGACTCTGGAAAAGGCTTCTCAACGGCTTG
GCCTGACCTCAGCTCCTCGCATTCCCTCCACATCTCAAGACACCAACCCAGGGATGCAGGACAGACACACAGACA
CTCAGTGAGGGTCAAATATCTTTAAATAAAGTGCCAGGAACAATAAATACTGTACAGGAAGAGAGTGC

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FIGURE 2706

CATGGCTGCGCTGGTGGAGCCGCTGGGGCTGGAGCGGGACGTGTCCCGGGCGGTTGAGCTCCTCGAGCGGCTCCA
GCGCAGCGGGGAGCTGCCGCCGCAGAAGCTGCAGGCCCTCCAGCGAGTTCTGCAGAGCCGCTTCTGCTCCGCTAT
CCGAGAGGTGTATGAGCAGCTTTATGACACGCTGGACATCACCGGCAGCGCCGAGATCCGAGCCCATGCCACAGC
CAAGGCCACAGTGGCTGCCTTCACAGCCAGCGAGGGCCACGCACATCCCAGGGTAGTGGAGCTACCCAAGACGGA
TGAGGGCCTAGGCTTCAACATCATGGGTGGCAAAGAGCAAAACTCGCCCATCTACATCTCCCGGGTCATCCCAGG
GGGTGTGGCTGACCGCCATGGAGGCCTCAAGCGTGGGGATCAACTGTTGTCGGTGAACGGTGTGAGCGTTGAGGG
TGAGCAGCATGAGAAGGCGGTGGAGCTGCTGAAGGCGGCCCAGGGCTCGGTGAAGCTGGTTGTCCGTTACACACC
GCGAGTGCTGGAGGAGATGGAGGCCCGGTTCGAGAAGATGCGCTCTGCCCGCCGGCGCCAACAGCATCAGAGCTA
CTCGTCCTTGGAGTCTCGAGGTTGAAACCACAGATCTGGACGTTCACGTGCACTCTCTTCCTGTACAGTATTTAT
TGTTCCTGGCACTTTATTTAAAGATATTTGACCCTC

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FIGURE 2707

AAGTACCTATTGGATCACCAGCTGTGTGCCGGGCTTCTAGTTGAGCAACACAGAGGCAGCCTCTGCCCTCTGAGC
CTCCTGCATTCGGTCTCCTCATTGTCATTTGCTGTCTCAGGCAAGGTCAGTTTGGCTGCAAGTATCAGAAATAAA
CTTGAGCTTCCTGAAACATAAAGGGCCCTGTTGATGTAGAATCATGGGCATCCTTTGGAGTTCGGAGGTATGTGA
TGTCCGTGGACCTGAGAACCTGGTAGCTGACGCTGTTAAGAGCTGGGGCAACCAGGCCAGGCGTGGTGGCTCGCC
TGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGATCATGAGGTCAGGAGTTCGAGACCAGCCTGGCCAAGAT
GTTGAAACCGCATCTCTACTAAAAATACAAAAATTAACTGGGCGTGGTGGCGGGTGCCTGTAATCCCATCTACTC
GGGAGGCTGAGGCAGAGAATTGCTTAAACCTGGGAGGCAGAGGTTGCAGTGAGCCAAGATAGAGTCACTGCATTC
CATCCAGCCTGGGTGCCAGAGCAAGACTCTGTCTCAAAAAAAAAAACAAAAAACAAAAAAACTGGGGCGACCCAC
CTGTGATGTGTGACAGCCCACAGCTTGCTTCTGCCTCGTTTGCCTCCATGCAGCTAGGTCGGTCCCATGCCTCTT
TGCACTGGCCCAGCGCAGCAGGCCACAGGCCCCAGCTTTACACTCAGTCCTGGATGAGTCTCTTGTTTCGGGGTG
GGCACATTTGATTGACTCAGTGTTGGGCCTGGGGTCCTGTTGCTCAGGCATGCTTATTGAGGACTGAATCCTGCA
AAGCTGAGTGACAGTTGTCAGAGAAGATGATGGTCCCTGGGCAGACACCCAGGCAGTAGTAGCCACTTGGGGCTC
CTGTCCTGCCTCCCAGCCCTGTGTCCTGGCTCTGGACTCGCCTGTGCTAGGGAGACCACGCTCTCAGCTGCTGAG
CCTCGGAGCTTACCAGGCATGTTCTTACCTTACTCTGGTCTCTCTGGGGTGGAGTGGGTTCTTATAGCTCTGCTG
TTTCCTGTTGGGGCGGGAAAATGCTAGAATCTCAGTCTTTCCAGAATCTCAGAATCTTCTAGTTCAATTGCCATT
CAAACTTTTTGTTGGTGTTAGCCAATAACATCTTGACTCGGTGCACCCGCAGAAATACTGTAACCTAAAGTTTGA
GGAAACAGTTTTTTCTATGTAGTAAGTATATAGTTGTATTCTGCTGTTTTGTTTCTTAAGATGTTGGTTGCAACC
CATCAGATTGATGATGGGACTCATTTCTGGGTCATGACCTGAATATAGGAAAGGCTAGTCTAGCTGCCCTGTGCC
TGTGACATGGCAGGTGCCTGGTCCGCTGCCTGCTTCTATAAGAATGTCTCCCTGCAGCCTCTTTTCTATACAGAA
CTCAGCCCTGCCTCACGGAAGCTTTTCCAGGCAGTGCGAGATAGAGGAGCGCTTGAGAAGGCAGGTTTTGCAGCA
GACGGCAGTGACAGCCCAGTTCTGCACCTTCTTTGCTGAGTCACTGTGGGCCAGTGACTTGATCTGAGATTGTTT
CCCCATCAGAACCATGAGGTTATCATCTGTGCCTTGGGGCTGTTCATCTATCTATTCACTTGACACACACACATC
CACCTTTCTATACCAGCTGCAGCGCCACCTGCTGGTACCGTGAGCAAGAGCTGGGCATGCCCACGGTTCCGGTGC
CCTGCAGTCTGGTGGGAGAGGCAGGTAGGGGTCGACTCAGGTAGCAAACCTGAAACTCCAGGGGAAGGAAGCGTT
TCTGCAACTGTGAGTACATAGGACTGTGAGGAGAGACTTCCCGAGAAAGGATGTTCGGGCTAGCGTTAAGGGTGA
GCGTGAGTTCACCAGAGAAGGAAGGGGAGACCAGTCCAGGGCAAGGAGAATGCACAGACACTGGCAGGAAGGTGA
GCGTGGGGACACTGGGAAAGGCCTGGGACACGCAGCCAAGAGCCGCGGCTCAGACGCTAGCAGGGCCCGCTCTTG
CTGCCTCTACCACCAGTTGACGAGGAGTTTGGACCTTAGGCTGGGGGACGCCAGCAAAGGCTTCTAAGCAGATCA
CATTTTTGGGTGGAAAGATCATTGGCTTCGGGTTTCTGTGAGGGCGAGGATGATTGGAAGGGAGGGTTTTGAGGA
GGCTGTGAAGTGCGCTATGGTTAAGATGATGCGCTTTGGGGCCAGACATGGGTTCCAGTAACGGCTGTTGCCTAG
CGAACGCTTTGTGTGAGTTAATTAGAGAAGACGTGGCTGTCTTGTGATGGGAGTGCGCGGGATGAACTGCACGGG
GGGACCCGGCCCTGTGAACACTAAGCCAGGGGCTGCCTTCCTGCCCTTTGCTCTTGGAGTCGGCTCATTTCTGCT
CCTCCGGGCCCTGTCCCTGCCCAGATTCACCCTCTGTCCGTCTGCCCTGCCCCAGGAGGAGGCCTCGGTGGTACC
AGAAGAGGAGGGGCTGATGTGAACATCCGGCATTCAGGCCGCGATGACACCTCCCGCTACGATGAGAGGCCCGGC
CCCTCCCCGCTTCCGCACAGGGACCGGGACCGGGACCGTGAGCGGGAGCGCAGAGAGCGGAGCCGGGAGCGAGAC
AAGGAGCGAGAACGGCGACGCTCCCGCTCCCGGGACCGGCGGAGGCGCTCACGGAGTCGCGACAAGGAGGAGCGG
AGGCGCTCCAGGGAGCGGAGCAAGGACAAGGACCGGGACCGGAAGCGGCGAAGCAGCCGGAGTCGGGAGCGGGCC
CGGCGGGAGCGGGAGCGCAAGGAGGAGCTGCGTGGCGGCGGTGGCGAC**ATG**GCGGAGCCCTCCGAGGCGGGTGAC
GCGCCCCCTGATGATGGGCCTCCAGGGGAGCTCGGGCCTGACGGCCCTGACGGTCCAGAGGAAAAGGGCCGGGAT
CGTGACCGGGAGCGACGGCGGAGCCACCGGAGCGAGCGCGAGCGGCGCCGGGACCGGGATCGTGACCGTGACCGT
GACCGCGAGCACAAACGGGGGGAGCGGGGCAGTGAGCGGGGCAGGGATGAGGCCCGAGGTGGGGGCGGTGGCCAG
GACAACGGGCTGGAGGGTCTGGGCAACGACAGCCGAGACATGTACATGGAGTCTGAGGGCGGCGACGGCTACCTG
GCTCCGGAGAATGGGTATTTGATGGAGGCTGCGCCGGAG**TGA**AGAGGTCGTCCTCTCCATCTGCTGTGTTTGGAC
GCGTTCCTGCCCAGCCCCTTGCTGTCATCCCCTCCCCCAACCTTGGCCACTTGAGTTTGTCCTCCAAGGGTAGGT
GTCTCATTTGTTCTGGCCCCTTGGATTTAAAAATAAAATTAATTTCCTGTT

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FIGURE 2708

GCCGCGGGAGCCGAAGAGGGCGCCCCAGGTGGTTGCCCCCTCCCTCTCCTGAGATGTCAGGAAGGAGGGGGCCAC
CTGTGTCCTCCACAGGGGCCCCCCGAAGCCTGGGGACTCCCAGCCCCAGAGCTCCGAGGCGGAGGAGGTGCTGAC
AGGTGCTCCGAGAGATGCTCCCTCTCCCCTCATGCTCCCTCCCCATCCTCCTCCTTTTCCTCCTCCCCAGTGTGC
CAATTGAGTCCCAACCCCCACCCTCAACATTGCCCCCTTTTCTGGCCCCTGAGTGGGACCTTCTCTCCCCCCGAG
TAGTCCTGTCTAGGGGTGCCCCTGCTGGGCCCCCTCTGCTCTTCCTGCTGGAGGCTGGGGCCTTTCGGGAGTCAG
CAGGTGCCCCGGCCAACCGCAGCCGGCGTGGGGTGAGCGAAACTGCACCAGCGAGTCGTCGGGGTGAGCTGGCTG
TGTGCGATGCAGTCAGTGGCTGGGTGACAGACCGCCGGACCGCTGTGGACTTGCGTGGGCGCGAGGTGGAGGTGT
TGGGCGAGGTGCCTGCAGCTGGCGGCAGTCCCCTCCGCCAGTACTTCTTTGAAACCCGCTGCAAGGCTGATAACG
CTGAGGAAGGTGGCCCGGGGGCAGGTGGAGGGGGCTGCCGGGGAGTGGACAGGAGGCACTGGGTATCTGAGTGCA
AGGCCAAGCAGTCCTATGTGCGGGCATTGACCGCTGATGCCCAGGGCCGTGTGGGCTGGCGATGGATTCGAATTG
ACACTGCCTGCGTCTGCACACTCCTCAGCCGGACTGGCCGGGCCTGAGACCCATGCCCAGGAAAATAACAGAGCT
GGATGCTGAGAGACCTCAGGGATGGCCCAGCTGATCTAAGGACCCCAGTTTGGGAACTCATCAAATAATCACAAA
ATCACAATTCTCTGATTTTGAGCTCAATCTCTGCAGGATGGGTGAAACCACATGGGGTTTTGGAGGTTGAATAGG
AGTTCTCCTGGAGCAACTTGAGGGTAATAATGATGATGATATAATAA

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FIGURE 2709

GTTGGTGAGCATC**ATG**GCAACCGTTACAGCCACAACCAAAGTCCCGGAGATCCGTGATGTAACAAGGATTGAGCG
AATCGGTGCCCACTCCCACATCCGGGGACTGGGGCTGGACGATGCCTTGGAGCCTCGGCAGGCTTCGCAAGGCAT
GGTGGGTCAGCTGGCGGCACGGCGGGCGGCTGGCGTGGTGCTGGAGATGATCCGGGAAGGGAAGATTGCCGGTCG
GGCAGTCCTTATTGCTGGCCAGCCGGGCACGGGGAAGACGGCCATCGCCATGGGCATGGCGCAGGCCCTGGGCCC
TGACACGCCATTCACAGCCATCGCCGGCAGTGAAATCTTCTCCCTGGAGATGAGCAAGACCGAGGCGCTGACGCA
GGCCTTCCGGCGGTCCATCGGCGTTCGCATCAAGGAGGAGACGGAGATCATCGAAGGGGAGGTGGTGGAGATCCA
GATTGATCGACCAGCAACAGGGACGGGCTCCAAGGTGGGCAAACTGACCCTCAAGACCACAGAGATGGAGACCAT
CTACGACCTGGGCACCAAGATGATTGAGTCCCTGACCAAGGACAAGGTCCAGGCCGGGGACGTGATCACCATCGA
CAAGGCGACGGGCAAGATCTCCAAGCTGGGCCGCTCCTTCACACGCGCCCGCGACTACGACGCTATGGGCTCCCA
GACCAAGTTCGTGCAGTGCCCAGATGGGGAGCTCCAGAAACGCAAGGAGGTGGTGCACACCGTGTCCCTGCACGA
GATCGACGTCATCAACTCTCGCACCCAGGGCTTCCTGGCGCTCTTCTCAGGTGACACAGGGGAGATCAAGTCAGA
AGTCCGTGAGCAGATCAATGCCAAGGTGGCTGAGTGGCGCGAGGAGGGCAAGGCGGAGATCATCCCTGGAGTGCT
GTTCATCGACGAGGTCCACATGCTGGACATCGAGAGCTTCTCCTTCCTCAACCGGGCCCTGGAGAGTGACATGGC
GCCTGTCCTGATCATGGCCACCAACCGTGGCATCACGCGAATCCGGGGCACCAGCTACCAGAGCCCTCACGGCAT
CCCCATAGACCTGCTGGACCGGCTGCTTATCGTCTCCACCACCCCCTACAGCGAGAAAGACACGAAGCAGATCCT
CCGCATCCGGTGCGAGGAAGAAGATGTGGAGATGAGTGAGGACGCCTACACGGTGCTGACCCGCATCGGGCTGGA
GACGTCACTGCGCTACGCCATCCAGCTCATCACAGCTGCCAGCTTGGTGTGCCGGAAACGCAAGGGTACAGAAGT
GCAGGTGGATGACATCAAGCGGGTCTACTCACTCTTCCTGGACGAGTCCCGCTCCACGCAGTACATGAAGGAGTA
CCAGGACGCCTTCCTCTTCAACGAACTCAAAGGCGAGACCATGGACACCTCC**TGA**GTTGGATGTCATCCCCCGAC
CCCACCCTGTTTTCCACCAGAGTTCTGACACTGTGACTCTGTATAAAATGGTTGGGAAGCTGC

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FIGURE 2710

CGCTTCGGGGCAGGGGTGCGGTCTTGCAATAGGAAGCCGAGCGTCTTGCAAGCTTCCCGTCGGGCACCAGCTACT
CGGCCCCGCACCCTACCTGGTGCATTCCCTAGACACCTCCGGGGTCCCTACCTGGAGATCCCCGGAGCCCCCCTT
CCTGCGCCAGCC**ATG**CCTTTAAACCGCACTTTGTCCATGTCCTCACTGCCAGGACTGGAGGACTGGGAGGATGAA
TTCGACCTGGAGAACGCAGTGCTCTTCGAAGTGGCCTGGGAGGTGGCTAACAAGGTGGGTGGCATCTACACGGTG
CTGCAGACGAAGGCGAAGGTGACAGGGGACGAATGGGGCGACAACTACTTCCTGGTGGGGCCGTACACGGAGCAG
GGCGTGAGGACCCAGGTGGAACTGCTGGAGGCCCCCACCCCGGCCCTGAAGAGGACACTGGATTCCATGAACAGC
AAGGGCTGCAAGGTGTATTTCGGGCGCTGGCTGATCGAGGGAGGCCCTCTGGTGGTGCTCCTGGACGTGGGTGCC
TCAGCTTGGGCCCTGGAGCGCTGGAAGGGAGAGCTCTGGGATACCTGCAACATCGGAGTGCCGTGGTACGACCGC
GAGGCCAACGACGCTGTCCTCTTTGGCTTTCTGACCACCTGGTTCCTGGGTGAGTTCCTGGCACAGAGTGAGGAG
AAGCCACATGTGGTTGCTCACTTCCATGAGTGGTTGGCAGGCGTTGGACTCTGCCTGTGTCGTGCCCGGCGACTG
CCTGTAGCAACCATCTTCACCACCCATGCCACGCTGCTGGGGCGCTACCTGTGTGCCGGTGCCGTGGACTTCTAC
AACAACCTGGAGAACTTCAACGTGGACAAGGAAGCAGGGGAGAGGCAGATCTACCACCGATACTGCATGGAAAGG
GCGGCAGCCCACTGCGCTCACGTCTTCACTACTGTGTCCCAGATCACCGCCATCGAGGCACAGCACTTGCTCAAG
AGGAAACCAGATATTGTGACCCCCAATGGGCTGAATGTGAAGAAGTTTTCTGCCATGCATGAGTTCCAGAACCTC
CATGCTCAGAGCAAGGCTCGAATCCAGGAGTTTGTGCGGGGCCATTTTTATGGGCATCTGGACTTCAACTTGGAC
AAGACCTTATACTTCTTTATCGCCGGCCGCTATGAGTTCTCCAACAAGGGTGCTGACGTCTTCCTGGAGGCATTG
GCTCGGCTCAACTATCTGCTCAGAGTGAACGGCAGCGAGCAGACAGTGGTTGCCTTCTTCATCATGCCAGCGCGG
ACCAACAATTTCAACGTGGAAACCCTCAAAGGCCAAGCTGTGCGCAAACAGCTTTGGGACACGGCCAACACGGTG
AAGGAAAAGTTCGGGAGGAAGCTTTATGAATCCTTACTGGTTGGGAGCCTTCCCGACATGAACAAGATGCTGGAT
AAGGAAGACTTCACTATGATGAAGAGAGCCATCTTTGCAACGCAGCGGCAGTCTTTCCCCCCTGTGTGCACCCAC
AATATGCTGGATGACTCCTCAGACCCCATCCTGACCACCATCCGCCGAATCGGCCTCTTCAATAGCAGTGCCGAC
AGGGTGAAGGTGATTTTCCACCCGGAGTTCCTCTCCTCCACAAGCCCCCTGCTCCCTGTGGACTATGAGGAGTTT
GTCCGTGGCTGTCACCTTGGAGTCTTCCCCTCCTACTATGAGCCTTGGGGCTACACACCGGCTGAGTGCACGGTT
ATGGGAATCCCCAGTATCTCCACCAATCTCTCCGGCTTCGGCTGCTTCATGGAGGAACACATCGCAGACCCCTCA
GCTTACGGTATCTACATTCTTGACCGGCGGTTCCGCAGCCTGGATGATTCCTGCTCGCAGCTCACCTCCTTCCTC
TACAGTTTCTGTCAGCAGAGCCGGCGGCAGCGTATCATCCAGCGGAACCGCACGGAGCGCCTCTCCGACCTTCTG
GACTGGAAATACCTAGGCCGGTACTATATGTCTGCGCGCCACATGGCGCTGTCCAAGGCCTTTCCAGAGCACTTC
ACCTACGAGCCCAACGAGGCGGATGCAGGCCCAGGGGTACCGCTACCCACGGCCAGCCTCGGTGCCACCGTCGCC
CTCGCTGTCACGACACTCCAGCCCGCACCAGAG**TGA**GGACGAGGAGGATCCCCGGAACGGGCCGCTGGAGGAAGA
CGGCGAGCGCTACGATGAGGACGAGGAGGCCGCCAAGGACCGGCGCAACATCCGTGCACCAGAGTGGCCGCGCCG
AGCGTCCTGCACCTCCTCCACCAGCGGCAGCAAGCGCAACTCTGTGGACACGGCCACCTCCAGCTCACTCAGCAC
CCCGAGCGAGCCCCTCAGCCCCACCAGCTCCCTGGGCGAGGAGCGTAACTAAGTCCGCCCCACCACACTCCCCGC
CTGTCCTGCCTCTCTGCTCCAGAGAGAGGATGCAGAGGGGTGCTGCTCCTAAACCCCCGCTCCAGATCTGCACTG
GGTGTGGCCCCGCAGTGCCCCCACCCAGTCCGCCAAACACTCCACCCCCTCCAGCTCCAGTTTCCAAGTTCCTGC
ACTCCAGAATCCACAAAGCCGTGCCTTTCTCTGGCTCCAGAATATGCATAATCAGCGCCCTGGAGTCCCCTGGGC
CTGGACCGCTTCCCAGAGGCCAGGAATCTGCCATTACTCTGCGGTGGTGCCAGAGGTTTTAGGAAACCTGGCATG
GTGCTTTCAGGTCTGGGGCTTTTAGAGCCCCCCGTGTGGCTTACAAATTCTACAGCATACAGAGCAGGCCACGCT
CAGGCCCGGCATGCGGGCCACCAAGTTCTGGAAACCACGTGGTGTCCCTGCGAATGGGGCGATCAAGTCCAGAGC
CGGGGCACTTTCAGAGTTTGAAGGTAACTGAGAGCAGATGGTCCTCCATTTCAACTCCAGAAGTGGGGCTCTGGG
AGGGATGTTCTAGCCCTCCCTGGCATGTCAGAGCCAGGCTCTGCCTGGAGGATCCCTCCATCCGGCTCCTGTCAT
CCCCTACACTTTGGCCAAGCAAGAGGTGGTAGAACCACTTGGCTGCTCATTCCTTCTGGAGGACACACAGTCTCA
GTCCAGATGCCTTCCTGTCTTTCTGGCCCTTTCTGGACCAGATCCTACTCTTCCTTTCTAAATCTGAGATCTCCC
TCCAGGGAATCCGCCTGCAGAGGACAGAGCTGGCTGTCTTCCCCCACCCCTAACCTGGCTTATTCCCAACTGCTC
TGCCCACTGTGAAACCACTAGGTTCTAGGTCCTGGCTTCTAGATCTGGAACCTTACCACGTTACTGCATACTGAT
CCCTTTCCCATGATCCAGAACTGAGGTCACTGGGTTCTAGAACCCCCACATTTACCTCGAGGCTCTTCCATCCCC
AAACTGTGCCCTGCCTTCAGCTTTGGTGAAAGGGAGGGCCCCTCATGTGTGCTGTGCTGTGTCTGCACCGCTTGG
TTTGCAGTTGAGAGGGGAGGGCAGGAGGGGTGTGATTGGAGTGTGTCCGGAGATGAGATGAAAAAAATACATCTA
TATTTAAG

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FIGURE 2711

ACCATAAAAGAAGCCGCCCTAGCCACGTCCCCTCGCAGTTCGGCGGTCCCGCGGGTCTGTCTCTTGCTTCAACAG
TGTTTGGACGGAACAGATCCGGGGACTCTCTTCCAGCCTCCGACCGCCCTCCGATTTCCTCTCCGCTTGCAACCT
CCGGGACCATCTTCTCGGCCATCTCCTGCTTCTGGGACCTGCCAGCACCGTTTTTGTGGTTAGCTCCTTCTTGCC
AACCAACC**ATG**AGCTCCCAGATTCGTCAGAATTATTCCACCGACGTGGAGGCAGCCGTCAACAGCCTGGTCAATT
TGTACCTGCAGGCCTCCTACACCTACCTCTCTCTGGGCTTCTATTTCGACCGCGATGATGTGGCTCTGGAAGGCG
TGAGCCACTTCTTCCGCGAATTGGCCGAGGAGAAGCGCGAGGGCTACGAGCGTCTCCTGAAGATGCAAAACCAGC
GTGGCGGCCGCGCTCTCTTCCAGGACATCAAGAAGCCAGCTGAAGATGAGTGGGGTAAAACCCCAGACGCCATGA
AAGCTGCCATGGCCCTGGAGAAAAAGCTGAACCAGGCCCTTTTGGATCTTCATGCCCTGGGTTCTGCCCGCACGG
ACCCCCATCTCTGTGACTTCCTGGAGACTCACTTCCTAGATGAGGAAGTGAAGCTTATCAAGAAGATGGGTGACC
ACCTGACCAACCTCCACAGGCTGGGTGGCCCGGAGGCTGGGCTGGGCGAGTATCTCTTCGAAAGGCTCACTCTCA
AGCACGAC**TAA**GAGCCTTCTGAGCCCAGCGACTTCTGAAGGGCCCCTTGCAAAGTAATAGGGCTTCTGCCTAAGC
CTCTCCCTCCAGCCAATAGGCAGCTTTCTTAACTATCCTAACAAGCCTTGGACCAAATGGAAATAAAGCTTTTTG
ATGC

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FIGURE 2712

ATGGACGGGTCCGGGGAGCAGCCCAGAGGCGGGGGGCCCACCAGCTCTGAGCAGATCATGAAGACAGGGGCCCTT
TTGCTTCAGGGTTTCATCCAGGATCGAGCAGGGCGAATGGGGGGGGAGGCACCCGAGCTGGCCCTGGACCCGGTG
CCTCAGGATGCGTCCACCAAGAAGCTGAGCGAGTGTCTCAAGCGCATCGGGGACGAACTGGACAGTAACATGGAG
CTGCAGAGGATGATTGCCGCCGTGGACACAGACTCCCCCCGAGAGGTCTTTTTCCGAGTGGCAGCTGACATGTTT
TCTGACGGCAACTTCAACTGGGGCCGGGTTGTCGCCCTTTTCTACTTTGCCAGCAAACTGGTGCTCAAGGCCCTG
TGCACCAAGGTGCCGGAACTGATCAGAACCATCATGGGCTGGACATTGGACTTCCTCCGGGAGCGGCTGTTGGGC
TGGATCCAAGACCAGGGTGGTTGGGTGAGACTCCTCAAGCCTCCTCACCCCCACCACCGCGCCCTCACCACCGCC
CCTGCCCCACCGTCCCTGCCCCCCGCCACTCCTCTGGGACCCTGGGCCTTCTGGAGCAGGTCACAGTGGTGCCCT
CTCCCCATCTTCAGATCATCAGATGTGGTCTATAATGCGTTTTCCTTACGTGTC**TGA**

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FIGURE 2713

ATAAGTGGGCGTGGTCTAGGGGGGAAGTCACCAAGAACGCACCGGAGGTCCTTGCCCGCCCTGGAAAACGCCCTC
TGCGGTGAAGGAGAGACCACACTGCC**ATG**CCTCCCTCTGGGCCCCGAGGAACCCTCCTTCTGTTGCCGCTGCTGC
TGCTGCTCCTGCTTCGCGCCGTGCTGGCTGTCCCCCTGGAGCGAGGGGCGCCCAACAAGGAGGAGACCCCTGCGA
CTGAGAGTCCCGACACAGGCCTGTACTACCACCGGTACCTCCAGGAGGTCATCGATGTACTGGAGACGGATGGGC
ATTTCCGAGAGAAGCTGCAGGCTGCCAATGCGGAGGACATCAAGAGCGGGAAGCTGAGCCGAGAGCTGGACTTTG
TCAGCCACCACGTCCGCACCAAGCTGGATGAGCTCAAGCGACAGGAGGTGTCACGGCTGCGGATGCTGCTCAAGG
CCAAGATGGACGCCGAGCAGGATCCCAATGTACAGGTGGATCATCTGAATCTCCTGAAACAGTTTGAACACCTGG
ACCCTCAGAACCAGCATACATTCGAGGCCCGCGACCTGGAGCTGCTGATCCAGACGGCCACCCGGGACCTTGCCC
AGTACGACGCAGCCCATCATGAAGAGTTCAAGCGCTACGAGATGCTTAAGGAACACGAGAGACGGCGTTATCTGG
AGTCACTGGGAGAGGAGCAGAGAAAGGAGGCGGAGAGGAAGCTGGAAGAGCAACAGCGCCGGCACCGCGAGCACC
CTAAAGTCAACGTGCCTGGCAGCCAAGCCCAGTTGAAGGAGGTGTGGGAGGAGCTGGATGGACTGGACCCCAACA
GGTTTAACCCCAAGACCTTCTTCATACTGCATGATATCAACAGTGATGGTGTCCTGGATGAGCAGGAGCTGGAGG
CACTCTTCACCAAGGAGCTGGAGAAAGTGTACGACCCAAAGAATGAGGAGGACGACATGCGGGAGATGGAGGAGG
AGCGACTGCGCATGCGGGAGCATGTGATGAAGAATGTGGACACCAACCAGGACCGCCTCGTGACCCTGGAGGAGT
TCCTCGCATCCACTCAGAGGAAGGAGTTTGGGGACACCGGGGAGGGCTGGGAGACAGTGGAGATGCACCCTGCCT
ACACCGAGGAAGAGCTGAGGCGCTTTGAAGAGGAGCTGGCTGCCCGGGAGGCAGAGCTGAATGCCAAGGCCCAGC
GCCTCAGCCAGGAGACAGAGGCTCTAGGGCGGTCCCAGGGCCGCCTGGAGGCCCAGAAGAGAGAGCTGCAGCAGG
CTGTGCTGCACATGGAGCAGCGGAAGCAGCAGCAGCAGCAGCAGCAAGGCCACAAGGCCCCGGCTGCCCACCCTG
AGGGGCAGCTCAAGTTCCACCCAGACACAGACGATGTACCTGTCCCAGCTCCAGCCGGTGACCAGAAGGAGGTGG
ACACTTCAGAAAAGAAACTTCTCGAGCGGCTCCCTGAGGTTGAGGTGCCCCAGCATCTG**TGA**TCCTCCGGGACCC
CAGCCCTCAGGATTCCTGATGCTCCAAGGCGACTGATGGGCGCTGGATGAAGTGGCACAGTCAGCTTCCCTGGGG
GCTGGTGTCATGTTGGGCTCCTGGGGCGGGGGCACGGCCTGGCATTTCACGCATTGCTGCCACCCCAGGTCCACC
TGTCTCCACTTTCACAGCCTCCAAGTCTGTGGCTCTTCCCTTCTGTCCTCCGAGGGGCTTGCCTTCTCTCGTGTC
CAGTGAGGTGCTCAGTGATCGGCTTAACTTAGAGAAGCCCGCCCCCTCCCCTTCTCCGTCTGTCCCAAGAGGGTC
TGCTCTGAGCCTGCGTTCCTAGGTGGCTCGGCCTCAGCTGCCTGGGTTGTGGCCGCCCTAGCATCCTGTATGCCC
ACAGCTACTGGAATCCCCGCTGCTGCTCCGGGCCAAGCTTCTGGTTGATTAATGAGGGCATGGGGTGGTCCCTCA
AGACCTTCCCCTACCTTTTGTGGAACCAGTGATGCCTCAAAGACAGTGTCCCCTCCACAGCTGGGTGCCAGGGGC
AGGGGATCCTCAGTATAGCCGGTGAACCCTGATACCAGGAGCCTGGGCCTCCCTGAACCCCTGGCTTCCAGCCAT
CTCATCGCCAGCCTCCTCCTGGACCTCTTGGCCCCCAGCCCCTTCCCCACACAGCCCCAGAAGGGTCCCAGAGCT
GACCCCACTCCAGGACCTAGGCCCAGCCCCTCAGCCTCATCTGGAGCCCCTGAAGACCAGTCCCACCCACCTTTC
TGGCCTCATCTGACACTGCTCCGCATCCTGCTGTGTGTCCTGTTCCATGTTCCGGTTCCATCCAAATACACTTTC
TGGAAC

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FIGURE 2714

CCCAGTTGTTGATCTTATGCAAGACGCTGCACGACCCCGCGCCCGCTTGTCGCCACGGCACTTGAGGCAGCCGGA
GATACTCTGAGTTACTCGGAGCCCGACGCCTGAGGGTGAGATGAACGCGCTGGCCTCCCTAACCGTCCGGACCTG
TGATCGCTTCTGGCAGACCGAACCGGCGCTCCTGCCCCCGGGGTGACGCGCAGCTCCCAGCCGCCCAGACAC**ATG**

GCCCCAGGCCAAGCACCCCATCAGGCTACCCCGTGGAGGGATGCCCACCCTTTCTTCCTCCTGTCCCCAGTGATG
GGCCTCCTCAGCCGCGCCTGGAGCCGCCTGAGGGGCCTGGGACCTCTAGAGCCCTGGCTGGTGGAAGCAGTAAAA
GGAGCAGCTCTGGTAGAAGCTGGCCTGGAGGGAGAAGCTAGGACTCCTCTGGCAATCCCCCATACCCCTTGGGGC
AGACGCCCTGAAGAGGAGGCTGAAGACAGTGGAGGCCCTGGAGAGGACAGAGAAACACTGGGGCTGAAAACCAGC
AGTTCCCTTCCTGAAGCCTGGGGACTTTTGGATGATGATGATGGCATGTATGGTGAGCGAGAGGCAACCAGTGTC
CCTAGAGGGCAGGGAAGTCAATTTGCAGATGGCCAGCGTGCTCCCCTGTCTCCCAGCCTTCTGATAAGGACACTG
CAAGGTTCTGATAAGAACCCAGGGGAGGAGAAAGCCGAGGAAGAGGGAGTTGCTGAAGAGGAGGGAGTTAACAAG
TTCTCTTATCCACCATCACACCGGGAGTGTTGTCCAGCCGTGGAGGAGGAGGACGATGAAGAAGCTGTAAAGAAA
GAAGCTCACAGAACCTCTACTTCTGCCTTGTCTCCAGGATCCAAGCCCAGCACTTGGGTGTCTTGCCCAGGGGAG
GAAGAGAATCAAGCCACGGAGGATAAAAGAACAGAAAGAAGTAAAGGAGCCAGGAAGACCTCCGTGTCCCCCCGA
TCTTCAGGCTCCGACCCCAGGTCCTGGGAGTATCGTTCAGGAGAGGCGTCCGAGGAGAAGGAGGAAAAGGCACAC
AAAGAAACTGGGAAAGGAGAAGCTGCCCCAGGGCCGCAATCCTCAGCCCCAGCCCAGAGGCCCCAGCTCAAGTCC
TGGTGGTGCCAACCCAGTGATGAAGAGGAGGGTGAGGTCAAGGCTTTGGGGGCAGCTGAGAAGGATGGAGAAGCT
GAGTGTCCTCCCTGCATCCCCCCACCAAGTGCCTTCCTGAAGGCCTGGGTGTATTGGCCAGGAGAGGACACAGAG
GAAGAGGAAGATGAGGAAGAAGATGAGGACAGTGACTCTGGATCAGATGAGGAAGAGGGAGAAGCTGAGGCTTCC
TCTTCCACTCCTGCTACAGGTGTCTTCTTGAAGTCCTGGGTCTATCAGCCAGGAGAGGACACAGAGGAGGAGGAA
GATGAGGACAGTGATACAGGATCAGCCGAGGATGAAAGAGAAGCTGAGACTTCTGCTTCCACACCCCCTGCAAGT
GCTTTCTTGAAGGCCTGGGTGTATCGGCCAGGAGAGGACACGGAGGAGGAGGAAGATGAGGATGTGGATAGTGAG
GATAAGGAAGATGATTCAGAAGCAGCCTTGGGAGAAGCTGAGTCAGACCCACATCCCTCCCACCCGGACCAGAGG
GCCCACTTCAGGGGCTGGGGATATCGACCTGGAAAAGAGACAGAGGAAGAGGAAGCTGCTGAGGACTGGGGAGAA
GCTGAGCCCTGCCCCTTCCGAGTGGCCATCTATGTACCTGGAGAGAAGCCACCGCCTCCCTGGGCTCCTCCTAGG
CTGCCCCTCCGACTGCAAAGGCGGCTCAAGCGCCCAGAAACCCCTACTCATGATCCGGACCCTGAGACTCCCCTA
AAGGCCAGAAAGGTGCGCTTCTCCGAGAAGGTCACTGTCCATTTCCTGGCTGTCTGGGCAGGGCCGGCCCAGGCC
GCCCGCCAGGGCCCCTGGGAGCAGCTTGCTCGGGATCGCAGCCGCTTCGCACGCCGCATCACCCAGGCCCAGGAG
GAGCTGAGCCCCTGCCTCACCCCTGCTGCCCGGGCCAGAGCCTGGGCACGCCTCAGGAACCCACCTTTAGCCCCC
ATCCCTGCCCTCACCCAGACCTTGCCTTCCTCCTCTGTCCCTTCGTCCCCAGTCCAGACCACGCCCTTGAGCCAA
GCTGTGGCCACACCTTCCCGCTCGTCTGCTGCTGCAGCGGCTGCCCTGGACCTCAGTGGGAGGCGTGGC**TGA**GAC
CAACTGGTTTGCCTATAATTTATTAACTATTTATTTTTTCTAAGTGTGGGTTTATATAAGGAATAAAGCCTTTTG
ATTTGT

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FIGURE 2715

AAACTGGGAGAGGGAGGAAGGGAGAAAGTGAGAAGGGAAATCGGAAAGAGAAAAGGGAGGAAACGGCAGAGCCAG
AGAGAAAGAGGAAGAGACTGAGTGTGAAGGAGAGAGGACACAGGGGATGACTGAGAGACAGAGAGAGAGAGAGAG
AGAGAATGAGACAGAGACTTAAGGAAGAGACCCTGTGAGTCTGACAATAAAAGATTTGGACAGAAACAGAAAGAT
TGGAGAGAGAGAGAGAGGGAGAGAATGAGTGAGAGAGAGACTGGAAGAGACAGAGATCAGAGGGAGACACAGAAA
GTGAGAGTGGGGAGAGAGGTAGTGTAAAAGGAAGAGAGAGAGAGAGACCGTAAGAGACAGGAGACAAAGAGAC
AAAAAGTGTGAGTGAGCAGGTGAGGAGAGAGATTGAGAACTATGAGAGACAGCAGCTAAGAGACAAAGGAGGCGG
GAGACTGCCTAGGTGCCGCAGCACCCACACCGTCCTCTTGCCCCCCCGTCACTGGGACCCCAGAGCTGGCCCTTG
ATGGAGGGGAGCCGACCTCGCAGCAGCCTGAGCCTGGCCAGCAGCGCCTCCACCATCTCCTCGCTCAGCAGCCTG
AGCCCCAAGAAGCCCACCCGGGCAGTAAACAAGATCCACGCCTTTGGGAAGAGAGGCAATGCGCTCAGGAGGGAT
CCCAACCTTCCCGTGCACATCCGAGGCTGGCTTCATAAGCAGGACAGCTCGGGGCTCCGTCTCTGGAAACGCCGC
TGGTTCGTCCTCTCCGGCCATTGCCTCTTTTATTACAAGGACAGCCGCGAGGAGAGTGTCCTAGGCAGCGTCCTG
CTCCCCAGCTACAATATTAGACCAGATGGGCCGGGAGCCCCCCGAGGGCGGCGCTTCACCTTCACCGCAGAGCAC
CCGGGCATGAGGACCTACGTTTTGGCCGCTGACACCTTAGAAGACCTGCGGGGCTGGCTACGGGCGCTGGGCCGG
GCCTCCCGTGCGGAGGGGGACGACTATGGGCAACCCAGGTCACCTGCACGACCCCAGCCCGGGGAGGGCCCCGGC
GGCCCCGGTGGTCCCCCGGAGGTGAGCAGAGGGGAAGAGGGGCGCATCTCAGAATCACCGGAAGTGACTCGACTC
TCCAGAGGTCGTGGTAGACCCAGGCTGCTCACTCCCAGCCCCACAACCGACCTCCACTCTGGACTCCAGATGCGG
AGGGCGAGGAGCCCCGACCTGTTCACCCCCCTCTCTCGCCCTCCCTCGCCTCTGAGCCTCCCCCGTCCCCGTTCT
GCCCCTGCGCGGCGACCCCCTGCCCCCTCAGGAGACACAGCACCCCCTGCCCGACCTCACACCCCGTTGAGTCGC
ATTGATGTCCGACCTCCTCTGGATTGGGGCCCCCAACGCCAGACCCTCTCCCGACCCCCTACTCCCCGCCGAGGA
CCTCCCTCTGAGGCTGGGGGAGGAAAGCCCCCCAGGAGTCCCCAGCACTGGAGTCAGGAGCCCAGAACACAGGCA
CACTCTGGCTCCCCCACTTATCTCCAGCTCCCCCCGCGGCCCCCTGGGACCCGGGCCTCCATGGTTTTATTGCCG
GGTCCTCCCCTGGAGTCAACTTTCCACCAAAGCTTGGAGACAGATACGCTGCTGACCAAGTTGTGCGGGCAGGAC
CGGCTTCTGCGGAGGCTGCAGGAGGAGATAGACCAGAAGCAGGAGGAGAAGGAGCAACTAGAAGCAGCTCTGGAG
TTGACCCGGCAACAGCTGGGCCAAGCCACCAGGGAGGCTGGGGCTCCCGGGAGGGCCTGGGGTCGCCAGCGCCTC
TTGCAGGACCGGCTGGTCAGTGTGAGGGCCACCCTCTGTCACTTGACTCAGGAGCGAGAGAGGGTTTGGGACACG
TACAGTGGCCTGGAGCAGGAGCTGGGCACCTTAAGAGAGACGCTGGAGTACCTGCTGCACCTTGGTTCTCCCCAG
GACAGAGTGTCTGCTCAGCAGCAGCTGTGGATGGTGGAAGACACGCTGGCAGGTCTGGGTGGCCCCCAGAAACCG
CCCCCACACACTGAGCCTGACTCCCCATCTCCCGTGCTCCAGGGCGAGGAGTCCTCAGAGAGGGAGAGCCTGCCA
GAGTCCTTGGAACTGAGCTCCCCTAGGTCCCCCGAGACTGACTGGGGGCGGCCTCCTGGAGGCGACAAAGACCTC
GCCAGCCCTCACTTAGGTCTTGGGTCTCCGAGGGTCTCCCGGGCTTCCAGCCCTGAGGGTCGCCACCTCCCTTCC
CCACAGCTAGGAACCAAGGCCCCGGTGGCCCGGCCCCGGATGAGTGCCCAGGAGCAGCTGGAGCGGATGCGCAGA
AACCAGGAATGTGGACGGCCCTTCCCTCGCCCGACCTCCCCCCGGCTTCTCACCCTGGGAAGGACACTGTCCCCA
GCCAGACGCCAGCCTGACGTGGAGCAAAGGCCTGTCGTAGGACACTCGGGAGCCCAGAAATGGCTCAGAAGCTCT
GGGTCCTGGAGTAGTCCAAGGAACACCACCCCTTACTTGCCGACTTCCGAAGGTCACCGGGAGCGGGTTCTCAGC
CTCTCCCAAGCCCTGGCTACTGAGGCGTCGCAGTGGCACAGAATGATGACAGGTGGAAATTTGGACTCCCAGGGA
GACCCTCTTCCCGGTGTGCCGCTGCCTCCTTCGGACCCCACGCGCCAGGAGACCCCTCCCCCCAGATCTCCCCCG
GTGGCTAATTCGGGTTCCACGGGGTTCTCTCGCCGAGGGAGTGGGCGTGGAGGAGGTCCCACCCCCTGGGGGCCC
GCGTGGGATGCCGGGATCGCCCCTCCGGTCCTGCCACAAGACGAGGGGGCATGGCCTCTGCGAGTCACTCTGCTA
CAATCCAGCTTC**TAA**TCCGCCCAAAAGCGGCAGCCAATCGGAGCGCGAGGACGTGGTCTGGAGGTACCGCCGGAG
ATCTGGGACCACTCAGGGCATCAGGGGGCGTGGTCTGGTCCCCATTGCGGGCCCGGGAGGGGAATGGTTTCTATG
GCCAAAGTTTGGTTTTCTCAACACTGTCTAAATTTGGATTAAAACTTTGAACTTTT

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FIGURE 2716

ATGGCCGCAGCCGCTCTGGGGCAGATCTGGGCACGAAAGCTTCTCTCTGTCCCTTGGCTTCTGTGTGGTCCCAGA
AGATATGCCTCCTCCAGTTTCAAGGCTGCAGACCTGCAGCTGGAAATGACACAGAAGCCTCATAAGAAGCCTGGC
CCCGGCGAGCCCCTGGTGTTTGGGAAGACATTTACCGACCACATGCTGATGGTGGAATGGAATGACAAGGGCTGG
GGCCAGCCCCGAATCCAGCCCTTCCAGAACCTCACGCTGCACCCAGCCTCCTCCAGCCTCCACTACTCCCTGCAG
CTGTTTGAGGGCATGAAGGCGTTCAAAGGCAAAGACCAGCAGGTGCGCCTCTTCCGCCCCTGGCTCAACATGGAC
CGGATGCTGCGCTCAGCCATGCGCCTGTGCCTGCCGAGTTTCGACAAGCTGGAGTTGCTGGAGTGCATCCGCCGG
CTCATCGAAGTGGACAAGGACTGGGTCCCCGATGCCGCCGGCACCAGCCTCTATGTGCGGCCTGTGCTCATTGGG
AACGAGCCCTCGCTGGGTGTCAGCCAGCCCACGCGCGCGCTCCTGTTCGTCATTCTCTGCCCAGTGGGTGCCTAC
TTCCCTGGAGGCTCCGTGACCCCGGTCTCCCTCCTGGCCGACCCAGCCTTCATCCGGGCCTGGGTGGGCGGGGTC
GGCAACTACAAGTTAGGTGGGAATTATGGGCCCACCGTGTTAGTGCAACAGGAGGCACTCAAGCGGGGCTGTGAA
CAGGTCCTCTGGCTGTATGGGCCCGACCACCAGCTCACCGAGGTGGGAACCATGAACATCTTTGTCTACTGGACC
CACGAAGATGGGGTGCTGGAGCTGGTGACGCCCCCGCTGAATGGTGTTATCCTGCCTGGAGTGGTCAGACAGAGT
CTACTGGACATGGCTCAGACCTGGGGTGAGTTCCGGGTGGTGGAGCGCACGATCACCATGAAGCAGTTGCTGCGG
GCCCTGGAGGAGGGCCGCGTGCGGGAAGTCTTTGGCTCGGGCACCGCTTGCCAGGTCTGCCCAGTGCACCGAATC
CTGTACAAAGACAGGAACCTCCACATTCCCACCATGGAAAATGGGCCTGAGCTGATCCTCCGCTTCCAGAAGGAG
CTGAAGGAGATCCAGTACGGAATCAGAGCCCACGAGTGGATGTTCCCGGTGTGAAGCTGCAGGCTGTGCTCCAGA
TCCACCGACCCGTAGCATCTCGTCACGCCAGCACTCGCCTCCCTACCAATGACTCACCTGAAGTGCAATACGAAA
TAAAAGGCCAGCGGGCGGCGTCTGGGTCTCTGGCGCCCCCATGTGGTTGCGACACTCCCAAAGCCGTAAGGGCCG
ACCCAGGCATCTTGGCCCCCAGCCCCTCGTCGCGGGTTCAGGTCCGCCCATTACTCCTTGTCGTGCGGTCAAGGA
TACACCTTGGCCCCGATTCCGGATCTCTCCGTTCTCAGGCCAGACCCCTGGTGCTGCCGTTGATTTTTTTTCTC
TGTCTTTGCTGCAATTTTGAAATAAAATGCCAAAGAACACA

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FIGURE 2717

AGCCGCCGGCTCGGGAGACCTGCCGCCCCTCGGGCCCGCCACGCTGCTGGCGCTGTGCGTGCAGCATTCCGCCCG
TGAGCTGGAGCTGGGCCACCTGCCACGACTGCTGGGCCGCCTGGCCCGGCTCATCAAGGAGGCCGTCTGGGAAAA
GATTAAGGAAATTGGAGACCGTCAGCCAGAAAACCACCCTGAGGGGGTCCCCGAGGTGCCCCTGACTCCTGAAGC
TGTGTCTGTGGAGCTGCGGCCACTC**ATG**CTGTGGATGGCCAACACCACGGAGCTGCTTAGCTTTGTGCAGGAGAA
GGTGCTGGAAATGGAGAAGGAGGCTGACCAAGAGGACCCACAGCTCTGCAATGACTTGGAATTATGTGATGAGGC
CATGGCCCTCCTGGATGAGGTCATCATGTGTACCTTCCAGCAGTCTGTCTACTACCTCACCAAGACTCTCTATTC
AACGCTGCCTGCTCTCCTGGATAGTAACCCTTTCACAGCTGGTGCAGAGCTGCCGGGGCCTGGCGCGGAGCTGGG
GGCCATGCCTCCAGGATTGAGACCTACCCTGGGCGTGTTCCAGGCAGCCTTGGAGCTGACCAGCCAGTGCGAGCT
GCACCCTGACCTCGTGTCTCAGACTTTTGGCTACTTGTTCTTCTTCTCCAACGCATCCCTTCTCAACTCGCTGAT
GGAACGAGGTCAAGGCCGGCCTTTCTATCAATGGTCCCGAGCTGTTCAAATCCGAACCAACCTGGACCTCGTCTT
GGACTGGCTACAGGGAGCTGGGCTGGGCGACATTGCCACTGAGTTCTTCCGGAAACTCTCCATGGCTGTGAACCT
GCTCTGTGTGCCCCGCACTTCCCTGCTCAAGGCTTCATGGAGCAGCCTAAGAACCGACCACCCCACCTTGACCCC
CGCCCAGCTGCACCATCTGCTCAGCCACTATCAGCTGGGCCCTGGCCGCGGGCCGCCAGCCGCGTGGGACCCTCC
CCCTGCAGAGCGGGAGGCTGTGGACACAGGGGACATCTTCGAAAGCTTCTCCTCGCACCCGCCCCTCATCCTCCC
CCTGGGGAGCTCGCGCCTGCGCCTCACTGGTCCAGTGACGGACGATGCCTTGCACCGTGAACTCCGTAGGCTCCG
CCGCCTCCTCTGGGATCTTGAGCAGCAGGAGCTGCCAGCCAATTATCGCCATGGGCCTCCCGTGGCCACGTCTCC
T**TGA**GAACCAATACCAAACGAGCGCGCGAACCTTGAAATGTCACGGGCTTCTACGGACAGGAGCCCGCCTGAGCG
CAAAGCTTTCTGGGAGTTGTAGTTCTTATCCCGCGTGGAATGTTGGGAGATTGAGTTTTCGGGAAGTAGCGGATG
GGACGGTGGGAGCATGGGCTTAGGATGTGAATGCCAGGGAGCAATAAAGGTATCCGTGGTATCGGC

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FIGURE 2718

ATGTCCTCTCTCCTCCCCACAGCCGTCAAGGGATTCTGGGCCACCCGCCCTTCCTTCTCCACCTTCTACTTCGTC
TTTGCCATTTTTGTGGTGTCCACCATCTTTCACTGCCACCAGCACCTGGCTCTGGTGCCTGCGCCCTGGGCATAC
TCAGCCCGTGTGGTCCTGGCCCCCAGACACCTGCCCCGGGAGGACCTGTTCACTATCAACTCCAAGGGCCGCCTG
GGGAACCAGATGGGCGAGTACGCCACACTGTACGCCCTGGCCAAGATGAACGGGCGGCCCGCCTTCATCCCGGCC
CAGATGCACAGCACCCTGGCCCCCATCTTCAGAATCACCCTGCCGGTGCTGCACAGCGCCACGGCCAGCAGGATC
CCCTGGCAGAACTACCACCTGAACGACTGGATGGAGGAGGAATACCGCCACATCCCGGGGGAGTACGTCCGCTTC
ACCGGCTACCCCTGCTCCTGGACCTTCTACCACCACCTCCGCCAGGAGATCCTCCAGGAGTTCACCCTGCACGAC
CACGTGCGGGAGGAGGCCCAGAAGTTCCTGCGGGGCCTGCAGGTGAACGGGAGCCGGCCGGGCACCTTTGTAGGG
GTCCATGTTCGCCGAGGGGACTATGTCCATGTCATGCCAAAAGTGTGGAAGGGGGTGGTGGCCGACCGGCGATAC
CTACAGCAGGCCCTGGACTGGTTCCGAGCTCGCTACAGCTCCCTCATCTTCGTGGTCACCAGTAATGGCATGGCC
TGGTGTCGGGAGAACATTGACACCTCCCACGGTGATGTGGTGTTTGCTGGCGATGGCATTGAGGGCTCACCTGCC
AAAGATTTTGCTCTACTCACACAGTGTAACCACACCATCATGACCATTGGGACGTTCGGGATCTGGGCCGCATAC
CTCACGGGCGGAGACACCATCTACCTGGCCAATTACACCCTCCCCGACTCCCCTTTCCTCAAAATCTTTAAGCCA
GAGGCAGCCTTCCTGCCGGAGTGGACAGGGATTGCCGCAGACCTGTCCCCCTTACTCAAGCAC**TAA**

FIGURE 2719

ATCCCACTCCACCCCTGCCCACTGGCTCAGCCCCGCCTTGTGGTGGCCGCCATCGCGATCGGGCAGGGGCTGACC
TTTGGGAGACAATCGCTGTTGGAAACTTTGCTCAGCCCCTGCCTCTGGCTGCGTGACCCCAAGCCAGCCCCTCCT
CCTCCTCTCTGGAACCTTTTGTCAGCTGTGGGTTCACCGAGCCTTAAGCCGTCAAGGGATTCTGGGCCACCCGCC
CTTCCTTCTCCACCTTCTACTTCGTCTTTGCCATTTTTGTGGTGTCCACCATCTTTCACTGCCACCAGCACCTGG
CTCTGGTGCCTGCGCCCTGGGCATACTCAGCCCGTGTGGTCCTGGCCCCCAGACACCTGCCCCGGGAGGACCTGT
TCACTATCAACTCCAAGGGCCGCCTGGGGAACCAG**ATG**GGCGAGTACGCCACGCTGTACGCCCTGGCCAAGATGA
ACGGGCGGCCCGCCTTCATCCCGGCCCAGATGCACAGCACCCTGGCCCCCATCTTCAGAATCACCCTGCCGGTGC
TGCACAGCGCCACGGCCAGCAGGATCCCCTGGCAGAACTACCACCTGAACGACTGGATGGAGGAGGAGTACCGCC
ACATCCCGGGGCGCTGTGTCCGCCTCACGGGCTACCCCTGCTCCTGGACCTTCTACCACCACCTCCGCCAGGAGA
TCCTCCAGGAGTTCACCCTGCACGACCACGTGCGCGAGGAGGCCCAGAAGTTCCTGCGGGGCCTGCAGGCCAAGT
GGGCAGGGCAGGCGACCTTCGTGGGGGTCCACGTGCGCCGGGGGGACTATGTCCGTGTCATGCCGCGCGTATGGA
AGGGGGTGCTGGCCGACCGGCTACCTGCAGCGGGCCCTGGACTGGTTCCGGGCCTGCTGCCGCCTCCCGGTCTTT
GTGGTCACCAGCGA**TGA**CATGGCCTGGTGCCGGGAGAGCATCAACAGCTCCCTTGGGGACGTGGTGTTCGCTGGC
AATGGCCTCCAGGGCTCACCTGCCAAGGACTTCGCACTGCTCACACAGTGCAACCACACCATCATCACCGTGGGC
ACCTTCGGGGTCTGGGCCGCGTACCTCGCGGGCGGGGACACTGTCTACCTGGCCAACTTCACCCTGCCCAACTCC
CCTTTCAACGTGGTCTTTAGGCCGTAAGCGGCCTTCCTGCCAGAGTGGGTGGGCCTTGCGGCTGACCTTGGACAG
GCTGGACAGAACGGCCTCTAGCCAGCCCTGCATGTGCCTGGTCCTCATCCTGTGACCCGAGGGGCAGTGAGTGGG
GCGTGCGGGGCATGGACTCACGGTCCCTCATGCAGTTTGGATCCAGGCTTATCTACTTCATAGCTGAGTGAGTTT
GGACAACTGACTCAACCTCTGTGCCTTAGTATGTCAACCACAAAATGCACAAACCACAGAACTAAACACCAGTAG
CAGCTGGTGGGAGCTGAGCAAATTCGCTTAGAGCCAGTGCCTTGTGACCGTGTGGGAGGTGTCGGCTGCTCACAT
GTATGCAGCACGTCAGGAACACTGGCATTGCTTTCCAATGGAAACGCAGTTTTGCCCTCTCCTTCCTGGCAGCAC
TGGTAGCACAGAGCCCAGATATTTTGCACTCACGTCCCAGGACGAAGCCATCCCTGCCCTGAAGGATAGGGGAAC
TCGATTTTCTGGGCAACTAGGAATTTTGGCTTTGGAGTTAGTGGGCCTTATCACAAAAGAATGTGAGGGAAGGGC
CGGGTGCGGTGGCACGCCTGTAATCCCAGCCCTTTGGGAAGCCAAGGCTGGTGGATCACTTGAGGTCAGGAGTTC
GAGACCAGCCTGGCCAACATGGCGAAACCCAGTCTCTACTAAAAATACAAAAAGCCAGGCACGGTGGTGCGTGCC
CCTAATCCCAGCTACTCCGGAGGCTGAAGCAGGAGGATAGCTTGAATTGGGAAGCAGAGGTTGCAGTAAACCGAG
ATCATACCACTGCACTCCAGCCTGGGCCACAGAGCGAGACTCCATCGCAA

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FIGURE 2720

CCATCTTTAGGACCGCGGCCCCTTTAAGCGGCGCCCCTTTTCCCCCCATCACCCCCCTCGCCATCAGGCAGCACG
AGCAGAGCCATGTGCTTCCCCCTCCCGCCTGCCTCATTGGCCCAAACTGGGTCACGGTCCCGCCCCCCAGTACCG
CCTCCCATTGGGCAAATGTAGGTCAGTGTCCCGCCTCCCACCGAAAGGCAAGGCAACTTCACGCGCTGAGCCCCT
CACGCGCCCTCCTGGGCCCTGGCGGACCCAGAGGCCCCATTGGCTGTGCGTCTCAAGGTGTCGGAGACGATTGGT
CCGTGTTTGCAGCCGGAGGGAGGCACGCGGCTGGGTTGCATGCCCATAGAGGCTGGCGGGGCTGGACGCGCCGGG
CGGGGACCCGGAGGAGGGGCGCGCGCTGTGGCGTCGGGTGTTTTGGTTTGGATTTTTTTTCCGCGAAAGAAGTT
TGCTTTGGCCACGCCTCAAGGCGGCCGCCTCCTCCTGCCCCCTCCTCCGCCCCTCCGCGCACACCTCTCGGTGCA
GATTGCAAAGCGCCTTCCGTTGCGAGAGCTGCAGATTTTGCAAGAGCCAGGCTCGCCCACCTTGTAGAAGGAGCG
CCTTGAGTCCCCTCTCACCCTCGGTTGCAAAGAGCCGACCGCTTGATCTGGACACCCCCTCGCCCAGATTGCATG
ATCTCCCGGGACCCTCTTGAGTTGCACGTTTCTGCACCGAGGACCTCAAATCCCCGTCGCTCCTAGGATTTGCAG
CGTTCTGGATACTGGAGGGTTGCAGGCTACACTCGCCCGCCCCTGGGCAGACACTCGTCCAAACCACTGGAGTGT
GCTGGTGACTGGCAGGCCAGCCCTTCGCCTCTCCATGAACCCGTGAGCCTGGGGGCAGGTGCCAGGCG**ATG**GCGC
GGCCTGTGAGCGACAGGACCCCGGCCCCTCTGCTGCTGGGCGGCCCGGCCGGGACACCCCCTGGCGGGGGAGCGC
TGCTTGGGTTGCGGAGCCTTCTGCAGGGGACCAGCAAGCCCAAAGAGCCGGCCAGCTGTCTCCTGAAGGAAAAGG
AGCGCAAGGCGGCCCTGCCTGCAGCCACAACCCCTGGGCCAGGCCTGGAGACTGCGGGCCCGGCGGATGCCCCGG
CTGGGGCAGTGGTGGGCGGAGGGTCCCCGCGGGGGCGCCCGGGGCCGGTGCCCGCCCCGGGTCTGTTGGCGCCAC
TGCTGTGGGAGCGCACGCTGCCGTTCGGCGATGTGGAGTACGTAGACCTGGACGCCTTCCTGCTGGAGCACGGGC
TCCCGCCCAGCCCGCCGCCCCCCGGTGGCCCGTCGCCGGAGCCGTCGCCCGCGCGGACGCCCGCACCCTCCCCAG
GGCCGGGTTCGTGCGGCTCGGCTTCCCCCCGCTCCTCTCCTGGGCACGCCCCCGCCCGGGCTGCCCTCGGGACCG
CCAGCGGCCACCGCGCAGGCCTGACCTCTCGGGACACACCCAGCCCTGTGGACCCAGACACCGTGGAGGTGTTGA
TGACCTTTGAACCCGACCCAGCTGATCTTGCCCTATCAAGCATTCCTGGCCACGAGACCTTTGACCCTCGAAGAC
ATCGCTTCTCAGAAGAGGAACTTAAGCCCCAGCCAATCATGAAGAAGGCAAGAAAAATCCAGGTGCCGGAGGAGC
AGAAGGATGAGAAATACTGGAGCCGGCGGTACAAGAACAACGAGGCAGCCAAGCGGTCCCGTGACGCCCGGCGGC
TCAAGGAGAACCAGATATCGGTGCGGGCGGCCTTCCTGGAGAAGGAGAACGCCCTGCTGCGGCAGGAAGTTGTGG
CCGTGCGCCAGGAGCTGTCCCACTACCGCGCCGTGCTGTCCCGATACCAGGCCCAGCACGGGGCCCTG**TGA**GGCT
GCCCCACATCCCCACCTGGCGGAGCTCTCCTCCGCCTTGCTGAGACTTACGCCCTGTTCCCTTCCTGCCCTGTGG
CCCACGGGCCGGCCAGCTGGGTGCCCCAGGGACGTGATAATGCAGATAAATACATTTATATTTTTAAGAAAAAGC
GAGCCTCCCCCCTCCCTTGCGGGGGCGGGGAGGGTTCTCTGTGTGTGTCCCCGGCACGTCAGGGACCCTATCCTC
CCACCGCCTCCGTTAACACGATCCTGAATAAATCTTGAGAACCCCAGAGCCAGCTGTTGTGGAAGAAGAGGGCAG
CTCCCTGGCATACTGGCTGCAGCCCGTGGGCAGCTCCGGGCTGTCGTCCATAGAGGGCAGGCGCTGCTGGAAGTG
CTGGAGTCTGAGTCCTCCCGCGGGCTGTCGGATGGAGGAAGGGCAGAAGGTCTGAGAGGAATGAAGCGACTGCCT
TTATTGCATAGACCTTTTCAATTGCTTTTTAGATTGGGGACGGAGGACGCGCATGAGACGAACAGGGGATATGAA
TTTCCCCGCCCCCACCCGCGGGGAGAGGAACATTAGTGCAAATCCTAGCGCCGGCCCCGGGGAACCTGCCCCTCC
TGGGCTGATTGGCCAGCTAAATGGAGGCACCGGAGTGGATGGGGCGAGGCTGCGGGCCCTGACCGGCCGACTCAC
TGAGGCCTACCCCAGCCAGTACATTCCAGGTCCTGTCATTGGGCGACGCGTAAAATAGACTCCGCCCTCAGCCAT
CCTGGCCGGGTAGGAGCAGGTGGCAAGCGTCAGGACTGAGCCCTGCCCCGTAA

FIGURE 2664

CCGGGTGGGCTCCAGGCGGCCGGTCCCCGGCCTCCCCCCATGGCCACCGCCCCCTCTTATCCCGCCGGGCTCCCT
GGCTCTCCCGGGCCGGGGTCTCCTCCGCCCCCCGGCGGCCTAGAGCTGCAGTCGCCGCCACCGCTACTGCCCCAG
ATCCCGGCCCCGGGTTCCGGGGTCTCCTTTCACATCCAGATCGGGCTGACCCGCGAGTTCGTGCTGTTGCCCGCC
GCCTCCGAGCTGGCTCATGTGAAGCAGCTGGCCTGTTCCATCGTGGACCAGAAGTTCCCTGAGTGTGGCTTCTAC
GGCCTTTACGACAAGATCCTGCTTTTCAAACATGACCCCACGTCGGCCAACCTCCTGCAGCTGGTGCGCTCGTCC
GGAGACATCCAGGAGGGCGACCTGGTGGAGGTGGTGCTGTCGGCCTCGGCCACCTTCGAGGACTTCCAGATCCGC
CCGCACGCCCTCACGGTGCACTCCTATCGGGCGCCTGCCTTCTGTGATCACTGCGGGGAGATGCTCTTCGGCCTA
GTGCGCCAGGGCCTCAAGTGCGATGGCTGCGGGCTGAACTACCACAAGCGCTGTGCCTTCAGCATCCCCAACAAC
TGTAGTGGGGCCCGCAAACGGCGCCTGTCATCCACGTCTCTGGCCAGTGGCCACTCGGTGCGCCTCGGCACCTCC
GAGTCCCTGCCCTGCACGGCTGAAGAGCTGAGCCGTAGCACCACCGAACTCCTGCCTCGCCGTCCCCCGTCATCC
TCTTCCTCCTCTTCTGCCTCATCGTATACGGGCCGCCCCATTGAGCTGGACAAGATGCTGCTCTCCAAGGTCAAG
GTGCCGCACACCTTCCTCATCCACAGCTATACACGGCCCACCGTTTGCCAGGCTTGCAAGAAACTCCTCAAGGGC
CTCTTCCGGCAGGGCCTGCAATGCAAAGACTGCAAGTTTAACTGTCACAAACGCTGCGCCACCCGCGTCCCTAAT
GACTGCCTGGGGGAGGCCCTTATCAATGGAGATGTGCCGATGGAGGAGGCCACCGATTTCAGCGAGGCTGACAAG
AGCGCCCTCATGGATGAGTCAGAGGACTCCGGTGTCATCCCTGGCTCCCACTCAGAGAATGCGCTCCACGCCAGT
GAGGAGGAGGAAGGCGAGGGAGGCAAGGCCCAGAGCTCCCTGGGGTACATCCCCCTAATGAGGGTGGTGCAATCG
GTGCGACACACGACGCGGAAATCCAGCACCACGCTGCGGGAGGGTTGGGTGGTTCATTACAGCAACAAGGACACG
CTGAGAAAGCGGCACTATTGGCGCCTGGACTGCAAGTGTATCACGCTCTTCCAGAACAACACGACCAACAGATAC
TATAAGGAAATTCCGCTGTCAGAAATCCTCACGGTGGAGTCCGCCCAGAACTTCAGCCTTGTGCCGCCGGGCACC
AACCCACACTGCTTTGAGATCGTCACTGCCAATGCCACCTACTTCGTGGGCGAGATGCCTGGCGGGACTCCGGGT
GGGCCAAGTGGGCAGGGGGCTGAGGCCGCCCGGGGCTGGGAGACAGCCATCCGCCAGGCCCTGATGCCCGTCATC
CTTCAGGACGCACCCAGCGCCCCAGGCCACGCGCCCCACAGACAAGCTTCTCTGAGCATCTCTGTGTCCAACAGT
CAGATCCAAGAGAATGTGGACATTGCCACTGTCTACCAGATCTTCCCTGACGAAGTGCTGGGCTCAGGGCAGTTT
GGAGTGGTCTATGGAGGAAAACACCGGAAGACAGGCCGGGACGTGGCAGTTAAGGTCATTGACAAACTGCGCTTC
CCTACCAAGCAGGAGAGCCAGCTCCGGAATGAAGTGGCCATTCTGCAGAGCCTGCGGCATCCCGGGATCGTGAAC
CTGGAGTGCATGTTCGAGACGCCTGAGAAAGTGTTTGTGGTGATGGAGAAGCTGCATGGGGACATGTTGGAGATG
ATCCTGTCCAGTGAGAAGGGCCGGCTGCCTGAGCGCCTCACCAAGTTCCTCATCACCCAGATCCTGGTGGCTTTG
AGACACCTTCACTTCAAGAACATTGTCCACTGTGACTTGAAACCAGAAAACGTGTTGCTGGCATCAGCAGACCCA
TTTCCTCAGGTGAAGCTGTGTGACTTTGGCTTTGCTCGCATCATCGGCGAGAAGTCGTTCCGCCGCTCAGTGGTG
GGCACGCCGGCCTACCTGGCACCCGAGGTGCTGCTCAACCAGGGCTACAACCGCTCGCTGGACATGTGGTCAGTG
GGCGTGATCATGTACGTCAGCCTCAGCGGCACCTTCCCTTTCAACGAGGATGAGGACATCAATGACCAGATCCAG
AACGCCGCCTTCATGTACCCGGCCAGCCCCTGGAGCCACATCTCAGCTGGAGCCATTGACCTCATCAACAACCTG
CTGCAGGTGAAGATGCGCAAACGCTACAGCGTGGACAAATCTCTCAGCCACCCCTGGTTACAGGAGTACCAGACG
TGGCTGGACCTCCGAGAGCTGGAGGGGAAGATGGGAGAGCGATACATCACGCATGAGAGTGACGACGTGCGCTGG
GAGCAGTTTGCAGCAGAGCATCCGCTGCCTGGGTCTGGGCTGCCCACGGACAGGGATCTCGGTGGGGCCTGTCCA
CCACAGGACCACGACATGCAGGGGCTGGCGGAGCGCATCAGTGTTCTCTGAGGTCCTGTGCCCTCGTCCAGCTGC
TGCCCTCCACAGCGGTTCTTCACAGGATCCCAGCAATGAACTGTTCTAGGGAAAGTGGCTTCCTGCCCAAACTGG
ATGGGACACGTGGGGAGTGGGGTGGGGGGAGCTATTTCCAAGGCCCCTCCCTGTTTCCCCAGCAATTAAAACGGA
CTCATCTCTGGCCCCATGGCCTTGATCTCAGCACACGGCACTCTCGAATCATTACTCTGTTGTACCAACATGGAG
TTCATCTGGAAGGAGGACTGCCTGAAAAGAGGAAGGATGG

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FIGURE 2722

CTTTCCGGACCTGGCCGAGCAGGAGGCGCCATC**ATG**GGAGTGGACATCCGCCATAACAAGGACCGAAAGGTTCGG
CGCAAGGAGCCCAAGAGCCAGGATATCTACCTGAGGCTGTTGGTCAAGTTATACAGGTTTCTGGCCAGAAGAACC
AACTCCACATTCAACCAGGTTGTGTTGAAGAGGTTGTTTATGAGTCGCACCAACCGGCCGCCTCTGTCCCTTTCC
CGGATGATCCGGAAGATGAAGCTTCCTGGCCGGGAAAACAAGACGGCCGTGGTTGTGGGGACCATAACTGATGAT
GTGCGGGTTCAGGAGGTACCCAAACTGAAGGTATGTGCACTGCGCGTGACCAGCCGGGCCCGCAGCCGCATCCTC
AGGGCAGGGGGCAAGATCCTCACTTTCGACCAGCTGGCCCTGGACTCCCCTAAGGGCTGTGGCACTGTCCTGCTC
TCCGGTCCTCGCAAGGGCCGAGAGGTGTACCGGCATTTCGGCAAGGCCCCAGGAACCCCGCACAGCCACACCAAA
CCCTACGTCCGCTCCAAGGGCCGGAAGTTCGAGCGTGCCAGAGGCCGACGGGCCAGCCGAGGCTACAAAAAC**TAA**
CCCTGGATCCTACTCTCTTATTAAAAAGATTTTTGCTGAC

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FIGURE 2723

TGTCAGAACAGTGTGGCAGGGGCTGCTGCAGGGAGCCATTTGGACATCTGCAGGGCCCCGCCGGAGGCCTCGGAT
GGCCACGTAGGGTCTGCCTATCAGGAGAACCCCCAGATGATCACAGTCCCCAGAGACAGCCAGACCCCCGGGGAC
CCAGCCTCTCACAGTCAGTCCTCCCACCCGAGTGACCCCG**ATG**GCGGCCTCCCAGCTGGCGGCGCTGGAAGGAGT
GGACTCCGGTCCCAGGGTGCCCGGGGCCAGCCCCGGCTTTCTATATTCCGAGGGCCAGCGGCTGGCACTGGAGGC
TCTGTTGAGCAAGGGCGCGGAGGCGTTCCAGACCTGCGTGCAGCGCGAGGAGCTGTGGCCCTTCCTCAGTGCGGA
TGAGGTTCAGGGCTTGGCAGCGGCAGCTGAAGACTGGACAGTGGCCAAGCAGGAGCCCAGCGGGATGGCAGAGGG
AGCCACCACCACCGATGTGGACGCGGGCAGCCTGAGCTACTGGCCTGGGCAGTCGGAGCAGCCGGCGCCCGTCCT
GCGGCTGGGCTGGCCAGTGGACTCTGCGTGGAAAGGCATCACCCGGGCGCAGCTGTACACCCAGCCTCCTGGAGA
GGGTCAGCCGCCCCTCAAGGAGCTGGTGCGGCTGGAGATCCAGGCTGCCCACAAGCTGGTGGCCGTGGTCATGGA
CGTCTTCACTGACCCAGACCTGCTTTTGGACTTGGTGGATGCTGCCACGCGCCGCTGGGTACCTGTCTACCTGCT
CCTGGACCGCCAGCAGCTGCCTGCCTTCCTGGAACTGGCCCAGCAGCTGGGGGTGAACCCCTGGAACACGGAGAA
CGTGGATGTCCGTGTCGTGCGGGGCTGCAGCTTCCAGAGCCGCTGGCGACGGCAGGTGAGCGGCACCGTGCGGGA
GAAGTTTGTGCTGCTGGACGGCGAGAGGGTCATCTCAGGATCCTACAGCTTCACGTGGAGTGACGCACGCCTGCA
CCGAGGCCTGGTGACCCTGCTGACTGGTGAAATTGTTGACGCCTTCAGCCTTGAGTTCCGGACGCTGTACGCGGC
CTCCTGCCCGCTCCCACCTGCGCCCCCCCAGAAACCCTCGGTCATAGGTGGCCTGCAGCGGGGCCGCAGCCCGCA
CCGCGTGTCCCGCCGCCGCTCCGTGGCCCCCGCGTCGCCTCCGCCGCCTGACGGCCCGCTGGCCCACCGCCTGGC
CGCCTGCCGCGTCTCCCCTGCTACCCCGGGGCCGGCACTCAGTGACATTCTAAGGAGTGTGCAGCGCGCCCGGAC
CCCCAGCGGCCCCCCGGCCCGGCCCAGCCGCTCCATGTGGGACCTAAGCCGCCTGTCCCAGCTGTCTGGCTCCAG
TGATGGGGACAACGAGCTCAAGAAATCCTGGGGCTCCAAGGACACTCCAGCCAAGGCTCTGATGAGGCAGCGGGG
CACTGGAGGAGGCCCCTGGGGGGAAGTGGACTCCCGACCTCCGTGGGGCGGTGCCCTGCCCCTGCCCCCCGCCCA
CCGCCTCCGCTATCTGTCCCCAGCCCGAAGGCGGTTCGGTGGGGATGCTACATTCAAACTTCAAGAGCCCAGAGG
CGTCAGGCCGTCAGACTGGGCCCCCCGGGCAGGACTTGGGGGGCAACCC**TGA**ACAGGAGCCCAAGCCAAATCTGC
TGGCCCACCCAAGGAGCAGTGCCGGACAACTGTCGGCTCAGAGCCCTCTGCCTCAATGCCCTGCCTTGGACAAGG
CTTCTGGCCTCGGCGTCTGTCAAGCAGAAGGGATGTTTGTCACTTGTTCTGCAACTTGGGCCGGGAGTGGTGGCT
CATGCCTGTAATCCCTGCACTTTGGGAGGCTAAGGTGGGAGGGTTGCTTAAGGCCAGGAGTTGGAGACCAGCCTG
GGCAACATAGTGAGACCCCATCTCTACAATTAAAAAAACAAATTAGTTGGG

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FIGURE 2667

CATCCGCTTGAACACCAAAGAAGACAAAAATGGTGTCCCCGACTTAGTGGCCCTGCTGGCTGTGAGAGACACCCC
GGACGAGGAGCCGGTGGACAGCGACACTTCGGAGAGCGACTCGCAGGAAAGTGGGGACCAAGAAACAGAGGAGTT
GGATAATCCTGAGTTCGTGGCCATTGTGGCCTATACCGACCCGTCGGACCCCTGGGCCCGGGAGGAGATGTTGAA
AATCGCTTCTGTTATCGAGTCGCTGGGCTGGAGCGACGAGAAAGACAAGCGAGACCCCCTCCGACAGGTCTTGTC
CGTCATGTCCAAGGACACTAACGGGACCCGCGTGAAGGTGGAAGAGGCGGGCCGCGAGGTGGACGCCGTGGTCCT
GCGCAAGGCCGGGGATGACGGGGACCTCCGGGAGTGCATTTCCACCTTGGCGCAGCCGGATCTCCCTCCCCAGGC
GAAGAAGGCTGGGCGTGGCCTCTTCGGGGGCTGGAGCGAGCACCGTGAGGACGAAGGGGGTCTTCTGGAGCTGGT
GGCGCTCCTGGCTGCCCAGGACATGGCGGAGGTGATGAAGGAGGAAAAAGAAAACGCCTGGGAAGGCGGGAAGTA
CAAATACCCCAAAGGCAAACTGGGGGAGGTATTGGCGCTCCTGGCCGCCCGGGAGAACATGGGGTCCAACGAGGG
GTCGGAGGAGGCTTCGGACGAACAGTCCGAGGAGGAGTCGGAGGACACCGAGAGCGAGGCGTCGGAGCCGGAGGA
CAGGGCATCCAGGAAGCCCCGGGCCAAGAGGGCGCGCACGGCCCCCAGGGGCCTGACTCCGGCCGGCGCGCCTCC
CACCGCTTCCGGGGCCCGCAAAACCCGCGCGGGCGGCCGAGGCCGAGGCCGGGGCGTCACTCCCGAGAAGAAAGC
CGGGAGCCGGGGCTCGGCCCAGGACGACGCCGCAGGAAGCAGGAAGAAGAAGGGGAGCGCGGGCGCCGGGGCCCA
TGCCAGGGCAGGCGAGGCCAAGGGCCAGGCGCCCACTGGATCCAAGGCCGCGCGCGGGAAGAAGGCCCGTCGGGG
CCGGAGGCTGCCCCCTAAATGCCGCTAGTGGCCCCCCAAGAAGCCGCCCAGGCTGCGAGCAGGCCCCGCAGGGCA
CCCGCCCGCCTGTGGCCCCCGCCCTCCCCTCCCCTCTTCCTGTCCTCCGCAGACGCAATCTCCTCGCTTCACAGC
GCGCCCGGGCCGCGTTTTGCCAGCGTCACGTTCCCCTCTCGGGCCCTCGCAGGCCGGGGGCGCCAGCGATCCCGA
CGGAGGAAGCCCGGATGGGAGGAGGAAAGAGAAGTGGGCGCCCGAGGCAGCAGCGCAGGGCCGAGATGGGGACGC
GCCAAGTGGACCAGGATTGGGGGCCCGGGTTGCCCCCGGAGGGGGTGTGTGTGTGGACGCCGGGCACCTGCAGAG
GCGAGCAGGGCTCTTCGTGGCGCTCTCGGGGCCTGCGCCTGGCAGGTGCTGTAGGCCGCTGTCGCCCCTACCCCA
GTCTGACTGGGCCCTGGGTCTGTGGTGGAGGCTCAGTCACCAGCCGCGCAGCGCGTGTCAGGGCGCAACTCTCAG
CCAGGGGAGGCCCCAGCTCCCAGCCAGGGGAAGAGATGATTCCAGAAAGGAAAGTCTGAGAGATAGAAGGCGGTT
GGGAAGGGGAGGAGGAGGAAAGGGGAGAGGAACGGTGGGAGAAGGGAAAGAGGAGGAGGAGGGGGAGGGGGGAGC
AGAGGGAAGACACATGCCAGCCCTGCCTACTGGGGCGCCCCTGATAACAAAGGAACCAGCCCCAGGCCAAGGCCA
CCTGCCCCTGACCACAAGTTGAATTTGTCACTCAGACTGCAGTGTTTCCCAACATTCTAATTATTTGCAGAGGTG
TTCAATTTGGGGTAATTCACTTAAAATCCAGTTTTGGTTCTTCTGGGCTGAGTGGGCCCTGGCCCCTCCCATAGG
CTGTGGCTCCCCTGGGTGCCCCCTCTCCAGTGGAGCTGACCCACCGCTCAGCGCTGGCCTTGCAGCCCTTACTAA
AAGACTTGAAAGTCCCTGGGTTCACCCCCTGAGTGAATTAAAGGCCAGAGGGGCCCCGAAGGGCACTGTGAGGGA
CAGAGGCTCACCTGGGCAGTGCAGAAGCCGGCCGCGTGTCCCTCCTTACAGGGGATGAAATGACCTGGGGAGGAA
ACCCCAGCCCTGCCCTGGAGGTTCCAGAGTAGGCGGGCCGGTGCTGTGAGGCTTCACAACCTGCTGTCCCAAGCA
CGCTTGAGTTGTATGTGAGTCTGTGCCGTGCCGTGCCGTATGCTTCAGCTCCTGCAACCCCGGCTGAGCTCGATT
TTTACCTAAATATCAGTCTCCACGGGACCCCACCTTCATTCATGCCTTCTTGTCCCTGGGGCAATGTGTGTGCTT
CCTCGTCCCAATTTCCATTCCCTGGCAGTGAGGAGCCCATCGTGCCAGGGGGCCCTGCCCCACTTGTCCCTGGGA
AGGAATAGGAGGGTTTGGGTGTGACCTCACAGTCCAGACCAGACTGTCCCAGTCCTATGTCAGGGACACCCAGAT
GTAGAAGCTGACTGAGACCTGCTGCAGGGCGTGGGTGCTCCCCTCTGCTTGGAGGCTGTCCCTGGACAGTGACCC
ACCCACTGAGGACCAGGCTGGGTGTACCTTGAGCTGGGCACAGCAGCCTGTGGTGTTGCCTGTGGGTGGGGAGGG
CCCCAGGTGTGCTTCTCCCGTAGCAGTCCTAGGCTTCTCTCCCTGTGCCCTGTGTCACCTGGATCCTCCAGTAAA
GTGAAATTCAGCACTGT

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FIGURE 2725

GCAGAGGTGGCTGTACCGCGTGGCTCCGCCTCCGCGCGACACTTTTCCGGGGCTTCTCATTGGAGAGCAAGCCTG
TCAAGTGCTTTCTGTTGTTTCGGAGGCGGGGCCTGCTGCCCTGCCTGCACTCCGATTGGCCCCGCGGGCCGTCTA
CCTCTGGCCGGACATACCTACACCGGCTTTTTGTACGACTGTTGGCCCTGGAGAACGATCCTTTGGTGGCGAGGG
CGGGGAGGACGAAAGCGCCCACTGTGGATTGGACAGTGTCAAAAAGAGGGGCGGTCCCTACTGAAGGGGCGGTTG
GGCGACGAAGGGAAGAGTCTTTTCAGCGCTGAGGACTGGCGCTGAGGAGGCGGCGGTGGCTCCCGGGGCGTTTGA
GCGGGCTCACCCGAGCCCGCGGGCCAACGCGGATCCAGGCCCGACTGGCGGGACCGCCCCGGATTCCCCGCGGGC
CTTCCTAGCCGCC**ATG**GAGGACGGCGTCTATGAACCCCCAGACCTGACTCCGGAGGAGCGGATGGAGCTGGAGAA
CATCCGGCGGCGGAAGCAGGAGCTGCTGGTGGAGATTCAGCGCCTGCGGGAGGAGCTCAGTGAAGCCATGAGCGA
GGTGGAGGGGCTGGAGGCCAATGAGGGCAGTAAGACCTTGCAACGGAACCGGAAGATGGCAATGGGCAGGAAGAA
GTTCAACATGGACCCCAAGAAGGGGATCCAGTTCTTGGTGGAGAATGAACTGCTGCAGAACACACCCGAGGAGAT
CGCCCGCTTCCTGTACAAGGGCGAGGGGCTGAACAAGACAGCCATCGGGGACTACCTGGGGGAGAGGGAAGAACT
GAACCTGGCAGTGCTCCATGCTTTTGTGGATCTGCATGAGTTCACCGACCTCAATCTGGTGCAGGCCCTCAGGCA
GTTTCTATGGAGCTTTCGCCTACCCGGAGAGGCCCAGAAAATTGACCGGATGATGGAGGCCTTCGCCCAGCGATA
CTGCCTGTGCAACCCTGGGGTTTTCCAGTCCACAGACACGTGCTATGTGCTGTCCTTCGCCGTCATCATGCTCAA
CACCAGTCTCCACAATCCCAATGTCCGGGACAAGCCGGGCCTGGAGCGCTTTGTGGCCATGAACCGGGGCATCAA
CGAGGGCGGGGACCTGCCTGAGGAGCTGCTCAGGAACCTGTACGACAGCATCCGAAATGAGCCCTTCAAGATTCC
TGAGGATGACGGGAATGACCTGACCCACACCTTCTTCAACCCGGACCGGGAGGGCTGGCTCCTGAAGCTGGGAGG
GGGCCGGGTGAAGACGTGGAAGCGGCGCTGGTTTATCCTCACAGACAACTGCCTCTACTACTTTGAGTACACCAC
GGACAAGGAGCCCCGAGGAATCATCCCCCTGGAGAATCTGAGCATCCGAGAGGTGGACGACCCCCGGAAACCGAA
CTGCTTTGAACTTTACATCCCCAACAACAAGGGGCAGCTCATCAAAGCCTGCAAAACTGAGGCGGACGGCCGAGT
GGTGGAGGGAAACCACATGGTGTACCGGATCTCGGCCCCCACGCAGGAGGAGAAGGACGAGTGGATCAAGTCCAT
CCAGGCGGCTGTGAGTGTGGACCCCTTCTATGAGATGCTGGCAGCGAGAAAGAAGCGGATTTCAGTCAAGAAGAA
GCAGGAGCAGCCC**TGA**CCCCCTGCCCCCAACTCCATTATTTATTACGGAGCTGCCCCGCCTGGGTGGCCGGACCC
CTGGGCCTTGGGGCTGTGGATCCTGGTTCCCTGTTTGGAAAATTCACCACCTCTAGCTCCTCACTGTTCTTTGTA
ATTAACACGCTGTTGGTAATCTTATTAATTATTTAACCACTTGG

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FIGURE 2726

GAGGGTTCGAAG**ATG**GCGGCGCGCAAGGGTCGGCGGCGCACGTGTGAAACCGGGGAACCCATGGAAGCCGAGTCC
GGCGACACAAGTTCCGAGGGCCCGGCCCAGGTCTACCTGCCCGGCCGGGGGCCGCCGCTACGCGAAGGGGAGGAG
CTGGTCATGGACGAGGAGGCCTATGTGCTCTACCACCGAGCGCAGACTGGCGCCCCCTGTCTCAGCTTTGACATA
GTCCGGGATCACCTGGGAGACAACCGGACAGAGCTTCCTCTTACACTTTACTTGTGTGCTGGGACCCAGGCTGAG
AGCGCCCAGAGCAACAGACTGATGATGCTTCGGATGCACAATCTGCATGGGACAAAGCCCCCACCCTCAGAGGGC
AGTGATGAAGAAGAAGAGGAGGAAGATGAAGAGGATGAAGAAGAGCGGAAACCTCAGCTGGAGCTGGCCATGGTG
CCCCACTATGGTGGCATCAACCGAGTTCGGGTGTCATGGCTGGGTGAAGAGCCTGTGGCTGGGGTGTGGTCAGAG
AAGGGCCAGGTGGAGGTGTTTGCGCTGCGGCGGCTTCTGCAGGTGGTGGAGGAGCCCCAGGCCCTGGCAGCCTTC
CTCCGGGATGAGCAGGCCCAAATGAAGCCCATCTTCTCCTTCGCTGGACACATGGGCGAGGGCTTTGCCCTTGAC
TGGTCCCCCCGGGTGACCGGTCGCCTGCTGACCGGTGACTGTCAAAAGAACATCCACCTCTGGACACCTACGGAC
GGCGGCTCCTGGCACGTGGACCAGCGGCCATTCGTGGGCCACACACGCTCTGTGGAGGACCTGCAGTGGTCACCG
ACTGAGAACACGGTGTTTGCCTCCTGCTCAGCTGACGCCTCCATCCGCATCTGGGACATCCGGGCAGCCCCCAGC
AAGGCCTGCATGCTCACCACAGCCACCGCCCATGATGGGGACGTCAATGTCATCAGCTGGAGCCGCCGGGAGCCC
TTCCTGCTCAGTGGCGGGGATGATGGGGCCCTCAAGATCTGGGACCTTCGGCAGTTCAAGTCTGGTTCCCCAGTG
GCCACCTTCAAGCAGCACGTGGCCCCCGTGACCTCCGTCGAGTGGCACCCCCAGGACAGCGGGGTCTTTGCAGCC
TCGGGTGCAGACCACCAGATCACACAGTGGGACCTGGCAGTGGAGCGGGACCCTGAGGCGGGCGACGTGGAGGCC
GACCCCGGACTGGCCGACCTCCCGCAGCAGCTGCTGTTCGTGCACCAGGGCGAGACCGAGCTGAAGGAGCTGCAC
TGGCACCCGCAGTGCCCAGGGCTCCTGGTCAGCACGGCGCTGTCAGGCTTCACCATCTTCCGCACCATCAGCGTC
TGAGGCGTCCCACTGGCTCTGATCTTGCTTCCTGCTTGGAAACTGAAGTCGAATTGGGCTCCCCTGGAAGGGGTT
CATTCAGGTCTGTTGACTGAGACTGGCCGGCCTGTGGGCTGCCGTGATGGATTCTGTTTGACGTATTGTTCTCTA
GAAGGCCTGGCTCTGATCCAGTGACCCCTCTCACCAAAGAACTCGGTTTAACCAGGGCTCTGTAAGACCACTCCC
ACCCAGAGACTTGTGTGGCCTGGTGTGGCCTGTGTGTCGGATTCCTTCCTGTCAGCTGTGACCCATTTGACCTGT
GTCCCCAGAACCCAGTTTTTTGTTTGTTTGTTTGAGACGGAGTCTTGGTCTGTCGCCCAGGCTGGAGTGCAGTAG
CACGATCTTGGCTCACTGCAACCTCCGCCTCCTGGGTTAAAGTGATTCTCTCAGCTCAGTCTCCCAGGTAGCTGG
GATTACAGGCATGTGCCACCACACCCCGTTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTGGCCA
GGCTGGTCTCAAATTCTTGATCTCAAGTGATCTGTCCGCCCCGGCCTCCCAGAGTGCTGGGTTGGGATTACAGGC
GTGAGCCACCGCGTCCGGCTCAGGACCCAGTTTTGGCTGCTGGTTCCCAGCAGGGGACTCGGGGGATATACAGTG
GCTGCACCAAATTGGAGGTGTGGGTTCCTCCAACACAATTTGCTTCTGCCCGTTGTCTTCCTGCCAGCTGGGTTT
GGCCAGGATTTCTCCGTGTGGGGGCTACATGCGACCCTCTCCCCTCCTCCCTGACTTTAGAGGCTGGTGCTGTGT
CGGGAGGAAGGTCAGGGCTCCTGAGCAGCAATAAAGGACCAGGAAGAGGCCTGAGGTGTA

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FIGURE 2727

GTCCCCTCCCCGGAGCGGAGCGCACCTAGGGTCCCTCTTCCGTCCCCCCAGCCCAGCTACCCGTTCAGACCAGCA
GCCTCGGGGGGCACCCCCCCCGCCAGCCTGCCTCCCTCCCGCTCAGCCCTGCCAGGGTTCCCCAGCC**ATG**AATCTC
TTCCGATTCCTGGGAGACCTCTCCCACCTCCTCGCCATCATCTTGCTACTGCTCAAAATCTGGAAGTCCCGCTCG
TGCGCCGGAATTTCAGGGAAGAGCCAGGTCCTGTTTGCTGTGGTGTTCACTGCCCGATATCTGGACCTCTTCACC
AACTACATCTCACTCTACAACACGTGTATGAAGGTGGTCTACATAGCCTGCTCCTTCACCACGGTCTGGTTGATT
TATAGCAAGTTCAAAGCTACTTACGATGGGAACCATGACACGTTCAGAGTGGAGTTCCTGGTCGTTCCCACAGCC
ATTCTGGCGTTCCTGGTCAATCATGACTTCACCCCTCTGGAGATCCTCTGGACCTTCTCCATCTACCTGGAGTCA
GTGGCCATCTTGCCGCAGCTGTTCATGGTGAGCAAGACCGGCGAGGCGGAGACCATCACCAGCCACTACTTGTTT
GCGCTAGGCGTTTACCGCACGCTCTATCTCTTCAACTGGATCTGGCGCTACCATTTCGAGGGCTTCTTCGACCTC
ATCGCCATTGTGGCAGGCCTGGTCCAGACAGTCCTCTACTGCGATTTCTTCTACCTCTATATCACCAAAGTCCTA
AAGGGGAAGAAGTTGAGTTTGCCGGCA**TAG**CCCCGGTCCTCTCCATCTCTCTCCTCGGCAGCAGCGGGAGGCAGA
GGAAGGCGGCAGAAGATGAAGAGCTTTCCCATCCAGGGGTGACTTTTTTAAGAACCCACCTCTTGTGCTCCCCAT
CCCGCCTCCTGCCGGGTTTCAGGGGGACAGTGGAGGATCCAGGTCTTGGGGAGCTCAGGACTTGGGCTGTTTGTA
GTTTTTTGCCTTTTAGACAAGAAAAAAAAAATCTTTCCACTCTTTAGTTTTTGATTCTGATGACTCGTTTTTCTTC
TACTCTGTGGCCCCAATTTTTATAAAGTG

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FIGURE 2671A

GGGAAATAGAGTCCTGGCGCTGCCGCGGAGGATCCTGGGTGCAGCCGCTCAGAGAAGCTTCTCGCGCACAGGAAG
TCGCTGCGAGGAGGCGCGTGTGCGGGGAGTTGAATCTCCCGCTCCCTTGAGGCTGGGGTTGCGTCTGTTGACGCG
GCCGACTACAATCCCGAGCCCTGCCAGCCGGGAACACGGAGGGGAAGGAGGAGGAGCTTAAAAGAGGCTACTGAA
CCCCAGTTGGCCATGGCTGAGGAATTTGTGACCCTCAAGGATGTCGGCATGGACTTCACCTTGGGAGACTGGGAG
CAGCTCGGGCTGGAACAGGGGGACACGTTCTGGGACACAGCGTTGGACAATTGCCAGGACCTCTTCCTGCTGGAC
CCCCCAAGACCCAACCTGACCTCCCACCCAGATGGCAGTGAAGATCTGGAGCCTCTGGCAGGAGGAAGCCCAGAA
GCAACAAGCCCTGATGTGACTGAGACCAAGAACTCTCCTCTGATGGAGGATTTCTTCGAAGAAGGATTCTCCCAG
GAGATTATAGAGATGTTATCCAAGGATGGCTTCTGGAACTCCAATTTCGGAGAAGCCTGTATAGAGGACACCTGG
TTAGATAGTTTGCTAGGCGATCCAGAAAGTCTTCTGAGGTCTGATATTGCCACCAACGGGGAAAGTCCCACGGAA
TGCAAGAGTCATGAATTAAAGAGAGGACTCAGTCCTGTGTCCACCGTTTCCACGGGAGAAGATTCCATGGTGCAT
AATGTTTCTGAAAAGACCCTCACACCAGCTAAGTCTAAGGAATATAGGGGTGAGTTTTTCTCCTACTCCGACCAC
AGCCAGCAGGATTCTGTTCAGGAAGGGGAGAAACCATATCAATGTAGTGAATGTGGGAAAAGCTTCAGTGGGAGT
TACCGTCTTACCCAGCACTGGATCACTCATACTAGGGAGAAACCCACTGTCCATCAAGAGTGTGAGCAAGGTTTT
GACCGGAATGCTTCCCTTTCTGTGTATCCGAAAACTCACACGGGCTACAAATTCTATGTGTGTAATGAATATGGG
ACAACTTTTAGTCAGAGTACATACCTGTGGCATCAGAAAACTCACACTGGAGAAAAACCATGTAAGAGTCAAGAT
AGTGACCACCCACCCAGTCATGACACACAGCCTGGTGAGCATCAGAAAACTCACACAGATAGTAAGTCCTACAAC
TGTAACGAATGCGGCAAGGCTTTTACCCGGATCTTCCACCTTACTCGGCACCAGAAGATCCACACTCGGAAACGC
TATGAGTGTTCCAAGTGCCAGGCGACCTTCAACTTGAGAAAACACCTCATCCAACATCAGAAAACTCACGCTGCA
AAAACTACCTCTGAGTGTCAGGAGTGTGGGAAGATTTTTAGGCACAGTTCGCTGCTCATTGAACACCAGGCTCTT
CATGCTGGAGAGGAGCCTTATAAGTGTAACGAACGTGGGAAATCCTTCAGGCATAACTCTACCCTAAAGATCCAT
CAGAGGGTTCACAGTGGAGAGAAGCCTTACAAATGCAGTGAGTGTGGGAAGGCCTTCCACCGGCACACTCACCTT
AATGAACATCGGCGAATTCATACAGGCTACAGACCCCACAAATGTCAGGAATGCGTCAGGAGTTTCAGCCGGCCC
TCACATCTGATGCGACATCAGGCCATTCACACCGCAGAAAAGCCCTATAGCTGTGCTGAATGCAAGGAGACTTTC
AGCGATAACAATCGCCTTGTGCAACACCAGAAAATGCACACTGTCAAAACCCCATATGAATGTCAGGAGTGCGGA
GAACGCTTCATTTGCGGCTCAACCCTGAAGTGCCACGAGAGTGTTCACGCCAGAGAAAAACAAGGATTTTTTGTG
AGTGGGAAGATCTTGGATCAGAACCCAGAACAGAAAGAGAAGTGCTTTAAGTGTAACAAATGTGAGAAAACCTTT
AGCTGCAGCAAATACCTAACTCAGCACGAGAGGATTCACACCAGGGGAGTGAAGCCCTTTGAATGTGACCAGTGT
GGGAAAGCCTTTGGCCAAAGTACTCGGCTCATTCACCATCAAAGAATCCACTCTAGAGTGAGGCTGTATAAATGG
GGTGAGCAAGGGAAAGCCATCAGCAGTGCCTCCCTTATCAAACTTCAGTCCTTCCACACAAAGGAGCACCCTTTT
AAATGTAACGAATGCGGAAAGACCTTCAGCCACAGTGCACACCTCTCAAAACATCAGTTAATTCACGCTGGAGAG
AATCCCTTTAAATGTAGTAAGTGTGACAGAGTCTTCACCCAGAGAAACTACCTTGTTCAGCATGAGCGAACTCAT
GCCAGAAAGAAGCCGTTGGTGTGTAACGAATGCGGGAAAACGTTCCGTCAGAGCTCATGCCTTTCTAAGCATCAG
AGAATTCACTCAGGTGAGAAGCCCTATGTATGTGATTACTGCGGGAAGGCCTTCGGCCTGAGTGCTGAGCTTGTC
CGCCACCAGAGAATTCACACTGGAGAAAAGCCTTATGTTTGTCAGGAATGCGGGAAAGCCTTCACCCAGAGCTCA
TGCCTTTCTATTCACCGGAGAGTTCACACTGGGGAGAAGCCCTACAGATGTGGTGAATGTGGGAAAGCCTTTGCC
CAGAAAGCAAATCTAACACAGCACCAGAGAATTCACACAGGGGAGAAGCCTTACTCCTGTAATGTGTGTGGCAAA
GCTTTTGTCCTCAGTGCCCATCTCAACCAGCACCTGAGAGTTCACACCCAGGAGACACTTTATCAGTGTCAACGT
TGCCAGAAAGCCTTTCGGTGCCACTCGAGCCTCAGCCGCCATCAGCGTGTACACAACAAGCAGCAATACTGCCTG
TAGCCATTGGGTGGCAGCAGAGTCCCAGAATATGAGACCGTTACTCGGATGTTGAAAGTTGGAAACTATCCCATT
GCAAGTTTCTCTCCAAATAAATGCATCTAAAGATTGATTAGAAAGTTTGTGCGCATGTTTTTCATTATAACAATG
AAAACACAAAAGTGGAGAAGCTGTACAACGTCAGGATTCAGAGGTAGGCTCTGGAGCCAGTCTACCTTGAGTTAA
ATCCCACCTCTGCCATCTACTACCTAAGTGACCTTGGGAAGGTCAGAAAAATCTCTCAGGGCCTCGGTGTCCTTA
TCTGTAAAATGGGCATCACCTACCTCAGAGGGCTTTTCTGAGGATTAAATAAATAAATGTGAAGCACTTAGAACT
GATGGCCAGCACATGAGGGCTCACCAAGTGTAAGCCACAAATACACATCAGCTATAGCACAAATATACTTGTGTT
ACAAGAAAGGAATTAGTAATCTGTGTTTACTGTAGTTAATGTTCTTACAATGTATCGCTTTTAATTTAAGTTTTC
CTTTTTTACAGTTTTTCTCCAGCACTTTACTCTTCTTAAGTGCCTGGCCTTTTTTGTCCCTTTATCTCTCCTGGT
TTTTTTCTTAAGCCCCAGAAAGCCAAAAAGAACATGTAAACTCTTCACCTCAACTAGCTACAACCTTCCACTCCT
AACCTCCCAAGCTTCTCACTTAAAGAGGACTCCCTATCCCACAAACACATGCTCCCTCTTCCTATGACCTTCCTC

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FIGURE 2729

GAAGGAGGCCCAGACAGTGAGGGCAGGAGGGAGAGAAGAGACGCAGAAGGAGAGCGAGCGAGAGAGAAAGGGTTC
TGGATTGGAGGGGAGAGCAAGGGAGGGAGGAAGGCGGTGAGAGAGGCGGGGGCCTCGGGAGGGTGAAAGGAGGGA
GGAGAAGGGCGGGGCACGGAGGCCCGAGCGAGGGACAAGACTCCGACTCCAGCTCTGACTTTTTTCGCGGCTCTC
GGCTTCCACTGCAGCC**ATG**TCACTCCTCTTGCTGGTGGTCTCAGCCCTTCACATCCTCATTCTTATACTGCTTTT
CGTGGCCACTTTGGACAAGTCCTGGTGGACTCTCCCTGGGAAAGAGTCCCTGAATCTCTGGTACGACTGCACGTG
GAACAACGACACCAAAACATGGGCCTGCAGTAATGTCAGCGAGAATGGCTGGCTGAAGGCGGTGCAGGTCCTCAT
GGTGCTCTCCCTCATTCTCTGCTGTCTCTCCTTCATCCTGTTCATGTTCCAGCTCTACACCATGCGACGAGGAGG
TCTCTTCTATGCCACCGGCCTCTGCCAGCTTTGCACCAGCGTGGCGGTGTTTACTGGCGCCTTGATCTATGCCAT
TCACGCCGAGGAGATCCTGGAGAAGCACCCGCGAGGGGGCAGCTTCGGATACTGCTTCGCCCTGGCCTGGGTGGC
CTTCCCCCTCGCCCTGGTCAGCGGCATCATCTACATCCACCTACGGAAGCGGGAG**TGA**GCGCCCCGCCTCGCTCG
GCTGCCCCCGCCCCTTCCCGGCCCCCCTCGCCGCGCGTCCTCCAAAAAATAAAACCTTAACCGCGG

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FIGURE 2730

GTGAGAGGTGGGAGGGCTGGAGAGGTGTGGGAGAGGCCTGAGAGAGGTCCCCCTCCAACCCCTCTTGGAGGAATG
AGGCCAGCGTGGTTCTAGGGTCACCCCCTTTCAATTCCCAGTCCCTCGCAGTTCATTGTCCACCCTCTCTGGGCC
CTGGCCCGCCTGCTGTCTGAAGGGTCTTATATGTCCATCCCTACAGGAGCCCCACCCTGTTTGGCCAGGATGCCT
TTGGGACGCTTGGCAGGGAGCGCCCGCTCCGAGGAGGGAAGCGAGGCATTTCTGGAGGGAATGGTGGATTGGGAG
CTGAGTAGGCTGCAGCGACAATGCAAAGTGATGGAAGGGGAGAGGCGGGCCTACAGCAAGGAAGTCCACCAGCGC
ATCAACAAGCAACTTGAGGAGATCCGGCGCTTGGAGGAGGTACGGGGCGATCTCCAGGTGCAGATCAGCGCAGCC
CAGAACCAGGTCAAGCGGCTTCGGGACAGTCAGCGGCTGGAGAACATGGACCGCCTGCTGAAGGGCCGGGCCCAG
GTGCAGGCGGAGATCGAGGAGCTGCAGGAGCAGACCAGGGCCCTGGACAAGCAGCCAGGAGTGGGAGACGCGGAT
CTTTACCCACAGTAAGAATGTCAGGTCCCCGGGATTCATCCTGGATCAGAAGGTCAAGATCAGGCGAAGGATCAG
GATCCTAGAAAACCAGTTGGACAGGGTCACCTGTCACTTTGACAACCAGCTGGTACGGAATGCGGCCCTGCGGGA
GGAGCTGGATCTGCTGCGGATCGACAGGAACCGCTATCTGAACGTGGACCGCAAGCTGAAGAAGGAGATCCACCA
CCTGCATCACCTGGTCAGCACCCTTATCCTCTCCTCCACCTCTGCCTACGCCGTCAGGGAGGAGGCGAAGGCCAA
GATGGGCTTGCTGCGGGAGCGCGCGGAGAAAGAGGAGGCCCAGAGCGAG**ATG**GAGGCGCAGGTCCTGCAGCGGCA
GATCTTGCACCTGGAGCAGCTGCACCACTTCCTCAAGCTCAAGAACAACGACCGGCAGCCGGATCCCGATGTCCT
GGAGAAGCGTGAAAAGCAGGCCGGGGAGGTGGCCGAGGGCGTCTGGAAGACCTCCCAGGAGAGGCTGGTGCTTTG
CTACGAGGACGCCCTGAATAAACTGTCCCAGCTGATGGGGGAGAGTGACCCTGACCTGTTGGTGCAGAAGTATCT
GGAGATCGAGGAGCGCAACTTTGCTGAGTTCAACTTCATCAACGAGCAGAACTTGGAGCTGGAGCATGTGCAGGA
AGAGATCAAGGAGATGCAGGAGGCTTTGGTGAGCGCACGTGCCAGCAAGGATGACCAGCATTTGCTGCAGGAGCA
GCAGCAGAAGGTGTTGCAGCAGCGCATGGACAAGGTGCACTCGGAGGCTGAGCGCCTTGAGGCCCGCTTCCAGGA
TGTGCGGGGACAGCTGGAGAAGCTCAAGGCTGATATCCAGCTCCTCTTCACCAAGGCCCATTGCGACAGCAGCAT
GATCGATGACCTCCTTGGGGTCAAGACCAGCATGGGAGACCGGGACATGGGCCTCTTCCTGAGCCTCATTGAGAA
GCGGCTGGTGGAGCTCCTGACAGTGCAGGCCTTCCTACATGCCCAGAGCTTCACCTCCCTGGCCGACGCTGCCCT
CCTAGTGCTGGGCCAGAGCCTGGAGGACCTTCCGAAGAAGATGGCCCCACTTCAGCCCCCTGACACTCTAGAAGA
CCCCCCGGGTTTTGAGGCCAGCGATGACTACCCCATGAGCAGGGAGGAGCTGCTGAGCCAAGTGGAGAAGCTGGT
GGAGCTCCAGGAGCAGGCGGAGGCGCAGCGCCAGAAGGACCTGGCCGCCGCCGCCGCGAAGCTGGACGGCACCCT
GAGCGTGGACCTGGCCAGCACCCAGAGGGCCGGCTCCAGTACCGTCCTGGTGCCCACCAGGCACCCCCATGCCAT
CCCCGGGTCCATTTTGAGCCACAAGACTAGCAGAGACCGTGGCTCTCTTGGCCACGTCACTTTTGGCGGCCTCAG
CTCCAGCACTGGGCATTTGCCCAGCCACATCACGCACGGTGACCCCAACACTGGCCACGTGACCTTCGGCTCCAC
CAGTGCCTCGAGTGGGGGCCACGTGACCTTCAGACCCGTCAGCGCCAGCAGCTACCTGGGCTCCACTGGATACGT
GGGGTCCAGCAGGGGCGGAGAAAACACAGAGGGTGGTGTGGAGAGCGGAGGCACAGCGTCTGATTCGAGCGGAGG
CCTCGGGTCCAGCAGAGACCACGTCTCCAGCACCGGCCCTGCCTCCAGCACTGGCCCGGGCTCCTCCACCAGCAA
AGACTCCCGGGGC**TAA**CACGAGGGGCACGCAGCCCCCACCCTGCCCTGGCTCTCTGTGGGGTCTTTTTTTGTGTC
TCTACTTCCCCTGTTTGCCTTGTGGGTCTCTGTCTTTTTCTCCCAGTGGCAGGCCTCTGTCTTTTTGCCCCTTCA
ACTGTTTTCATCTGCCCTTCATCACCGCCTCACCTGTGTCTCCCGGTTCCTTTCTCTCTGCTCCTGACACTGCTT
TTCCCTCTGACTCCTGATCTCCTGTTCTCTGGGCTTCCTGGTCAGTGTCTGTCCGTCTTGTCTCCATATCTGCCC
CTTCCCTGTCTGCTGAGCCCTGGCCCCCTGTGGATCCCCCACCTCCTGTTTCCGGCTCTCTCTCCTCATCTCCAT
CTCCCAGGCTCTCCACGCATCCTGTGTCCCTGTCTCTGTAGCTCCTTACTCCCCAAGAGCCCCCCAGTGCTGACA
GGTGTGGGAAAAGTCAGGGCGAAGACGCCAGGTTCAGCATGGGAAAATGGGACTGTGGAAATAAAGTATATGTGT
GG

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FIGURE 2731A

GTTCTCAACTTCTTTTGAAATAATGTTCATAGAGAAGGAGGGCTGTCTGAGATTCGAGGGAAACAAGCTCTCAGG
ACTTCCGGTCGCCATGATGGCTGTGGGCGGTAAACGCGGTTAGTGCAAGCATCTGGGCCATCTTCAATGGTAAAA
AAGATACAGTAAAGACATAAATACCACATTTGACAAATGGAAAAAAAGGAGTGTCCAGAAAAGAGTAGCAGCAGT
GAGGAAGAGCTGCCGAGACGGGTATACAGGGAGCTACCCTGTGTTTCTGAGACCCTTTGTGACATCTCACATTTT
TTCCAAGAAG**ATG**ATGAGACAGAGGCAGAGCCATTATTGTTCCGTGCTGTTCCTGAGTGTCAACTATCTGGGGGG
GACATTCCCAGGAGACATTTGCTCAGAAGAGAATCAAATAGTTTCCTCTTATGCTTCTAAAGTCTGTTTTGAGAT
CGAAGAAGATTATAAAAATCGTCAGTTTCTGGGGCCTGAAGGAAATGTGGATGTTGAGTTGATTGATAAGAGCAC
AAACAGATACAGCGTTTGGTTCCCCACTGCTGGCTGGTATCTGTGGTCAGCCACAGGCCTCGGCTTCCTGGTAAG
GGATGAGGTCACAGTGACGATTGCGTTTGGTTCCTGGAGTCAGCACCTGGCCCTGGACCTGCAGCACCATGAACA
GTGGCTGGTGGGCGGCCCCTTGTTTGATGTCACTGCAGAGCCAGAGGAGGCTGTCGCCGAAATCCACCTCCCCCA
CTTCATCTCCCTCCAAGGTGAGGTGGACGTCTCCTGGTTTCTCGTTGCCCATTTTAAGAATGAAGGGATGGTCCT
GGAGCATCCAGCCCGGGTGGAGCCTTTCTATGCTGTCCTGGAAAGCCCCAGCTTCTCTCTGATGGGCATCCTGCT
GCGGATCGCCAGTGGGACTCGCCTCTCCATCCCCATCACTTCCAACACATTGATCTATTATCACCCCCACCCCGA
AGATATTAAGTTCCACTTGTACCTTGTCCCCAGCGACGCCTTGCTAACAAAGGCGATAGATGATGAGGAAGATCG
CTTCCATGGTGTGCGCCTGCAGACTTCGCCCCCAATGGAACCCCTGAACTTTGGTTCCAGTTATATTGTGTCTAA
TTCTGCTAACCTGAAAGTAATGCCCAAGGAGTTGAAATTGTCCTACAGGAGCCCTGGAGAAATTCAGCACTTCTC
AAAATTCTATGCTGGGCAGATGAAGGAACCCATTCAACTTGAGATTACTGAAAAAAGACATGGGACTTTGGTGTG
GGATACTGAGGTGAAGCCAGTGGATCTCCAGCTTGTAGCTGCATCAGCCCCTCCTCCTTTCTCAGGTGCAGCCTT
TGTGAAGGAGAACCACCGGCAACTCCAAGCCAGGATGGGGGACCTGAAAGGGGTGCTCGATGATCTCCAAGACAA
TGAGGTTCTTACTGAGAATGAGAAGGAGCTGGTGGAGCAGGAAAAGACACGGCAGAGCAAGAATGAGGCCTTGCT
GAGCATGGTGGAGAAGAAAGGGGACCTGGCCCTGGACGTGCTCTTCAGAAGCATTAGTGAAAGGGACCCTTACCT
CGTGTCCTATCTTAGACAGCAGAATTTG**TAA**AATGAGTCAGTTAGGTAGTCTGGAAGAGAGAATCCAGCGTTCTC
ATTGGAAATGGATAAACAGAAATGTGATCATTGATTTCAGTGTTCAAGACAGAAGAAGACTGGGTAACATCTATC
ACACAGGCTTTCAGGACAGACTTGTAACCTGGCATGTACCTATTGACTGTATCCTCATGCATTTTCCTCAAGAAT
GTCTGAAGAAGGTAGTAATATTCCTTTTAAATTTTTTCCAACCATTGCTTGATATATCACTATTTTATCCATTGA
CATGATTCTTGAAGACCCAGGATAAAGGACATCCGGATAGGTGTGTTTATGAAGGATGGGGCCTGGAAAGGCAAC
TTTTCCTGATTAATGTGAAAAATAATTCCTATGGACACTCCGTTTGAAGTATCACCTTCTCATAACTAAAAGCAG
AAAAGCTAACAAAAGCTTCTCAGCTGAGGACACTCAAGGCATACATGATGACAGTCTTTTTTTTTTTGTATGTT
AGGACTTTAACACTTTATCTATGGCTACTGTTATTAGAACAATGTAAATGTATTTGCTGAAAGAGAGCACAAAAA
TGGGAGAAAATGCAAACATGAGCAGAAAATATTTTCCCACTGGTGTGTAGCCTGCTACAAGGAGTTGTTGGGTTA
AATGTTCATGGTCAACTCCAAGGAATACTGAGATGAAATGTGGTAAATCAACTCCACAGAACCACCAAAAAGAAA
ATGAGGGTAATTCAGCTTATTCTGAGACAGACATTCCTGGCAATGTACCATACAAAAAATAAGCCAACTCTGACA
TTTGGATTCTACCATAGACTCTGTCATTTTGTAGCCATTTCAGCTGTCTTTTGATTAATGTTTTCGTGGCACACA
TATTTCCATCCTTTTATGTTTAATCTGTTTAAAACAAGTTCCTAGTAGACACCATCTGGTTGAGTCAGTTTTTTT
TATGGTGTATTTTGAACCCATTCTGATAGTCTCTTTTAACTGGAAGATTTCAATTACTTACGTTAATGTAATTAT
TAATATGTTAGGATTTATCCTCAGTCAGCCAGTTTGTTATGTCTTTTCTATTCTACTGTTATCACATTTGTACCA
CTTAAAGTGGAATCTAGGCACTTTATCACCATTTAGATCCTATTACCTTTTCTCATCTAGGATATAGTTATCTTC
TACATAATCTTTCTGTATCTTAAAACCCATCAATAAATTATTATATATTTTCTACTTTTAATCACTCAGAAGATT
TAAAAAACTCATGAGAAGAGTAATCTGTTATGTTTTTCCAGATATTTACCATTTCTGTTGCTCTTCCTTCATTAT
TTTCCAAATTTCGTTCTGCAAATTTCCACTTCCTCTGATAGACGTTTTTTAGTTCTTTTAGAGTGGTTCTGATAG
GTACAGATTCTCTTATTTTTTGCTTCCTCTGAGGACATCTTTTTCTCACCTTCATTCTCAGTGATGTTTTTTGCT
TGTAGTATTTTTAGTTGACATTGTTTTCTGTTCAGCAGTTTCCTTTTAGCTTCCGTATTTCCTGATGAGAAATCT
GCAGTCATTCAAATTGTTGTTTCCCTGTATGTAGTGTGTCATTTTTCTGTCAGATTTCAAGGTATTTATCTTTAG
TTTTTAGCCATTTCATTATGTTGGGGATGAGTTTCCTTGTTTTATTCCCTTTGGAATTTGCTCCAATTCATAAAT
TTGCAGTTTTATGTCTTTTACCAAACTTAGAGGTTTTCAGCCTAATTTCTAAAAATACTTTTTATTAGCCTGATT
TTCATCTTTATAGGAAATAGTTTAAGTGATGACAAGTTCCAATAGCTTATATGCCCAGAAGGCCTTCAAAATAAG
AATTTTGAAAGAATACAGAAAACAAACTTTTATATCCTTCTCATGTCTTCTACTGTAAAATTCATATGCTTTGCT
ACTCTAAACCTAGTTTGAAATCAACAGTCTTGAGAATAGATGAAAATTTTGATGAATAGTGGAATTCTTTTAAAT

FIGURE 2731B

GGAAACCTCTTACATGTGATTTTCCTTGCCATCTAGAAATAAACCATAGTATTTATGTTGAATCAATCAATATTA
TATTTTGTTTTTTTCCTCCTCTTCTGAGACTCTTATTGTGGAAATGTTAGACTTTTATGTTTTCCTAAATGTCCC
TGATATTCTACTTATTTAGAACATCTTTTCATTTTTTCCATTATTCTGATTGGGTAATTTTAATTTGTCTATTTT
CAAATTTGCTGGAGTGTTCACCTGTTGTTATCTGTGTCGTCCCACTGAGTGCATTCACCACCTTTTAAATTTTGG
TCACTGTATGTATCAGTTCTAAAATTTCCATTTTGTTCTCTATATTTTAAATTTCTTGCCTTATATTCTATTTTC
CTGCAAATGTGTCAGCATTTGCTTGTTTGAGCTTTTTTTTTTTCAAGACAGGGTCTCAACTCTGTTACCCAGGCT
GGAGTGCAGTGGTGCGATCTCAGCTCACTGCAACCTCTGCCTCCTGGTTCAAGCGATTATTGTGCCTCAGCCTCC
AGAGTAGCTGGGATTACAGGCATGCACCACCACAGCCCAGCTAATTTTTTGTATTTTTAGTAGAGACAGAGTTTT
GCTATGTTGGCCAGGCTGGTTTTGAACTCCTGGCCTCAAGTGATCCACCCACCTCAGCCTCCCAAAGTGCTGGGA
TTACAGGCCACTACACCTGGCACATTTGAGTATTTTTTTTTTTTTTTTTTTTTTTTGAGATGGAGTCTCGCTCT
GTCATCTAGGCTGGAGTGCAGTGGTGTGATCTCAGCTCACTGCAGCCTCTGTCTCCCGGGCTCAAGCGATTCTCT
TGCCTCAGCCTCCTGAGTAGCTAGGACTACAGGTGCATGCCAACACGCCCGGCTAATTTTTTTTTAAAAATATTT
TTAGTAGAGACAGGGTTTCACCATTTTGGCCAGGATGGTCTTGATCTCCTGACCTCATGATCCACCCGCCTCGGC
CTTCCAAAGTGCTGGGATTACAGGCATGAGCCACCGTGCCTGGCCTCATTTGAGTATTTTTATAATGTCTCTTTT
AAAGTCTTTGTCAGATAATTTCACTGTACATGTTATTCAGTGTTTGGTGTCCACTGAGTTGTCATTTGCCAGACA
AGTGGAGATTTTTGCAGCTCATCCTTGTATTCTCAGTAGTTCCGATATGTACCCTCGAAATGTGAATGTTATCTT
ATGAGACTCTGTTTTATTTGTATCCAACAGAAGATGTTTATTATTTATTTGGCTTTCTGTGAACTGAGGTCTTAA
TATCAGCTCATTTTAAAAGTCTTTGCAGTGGTATTCGGATCTATCCTGTGTGTGCCTATGAGATTGGGTGCAGTG
TATCCTGTTAGCTCCATTCTCAGGGCGTTTGAATGTGAATTAGGACCAGCGCAATGAATGCTCAAGTTGGGGTTG
GGCGTTAGAATTCATAAAAGTCTTTATATGCTCAG

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FIGURE 2732

GACGTCTGCGCGCGAATGCCGTGGCGCGAACTTGGGACTGCAGAGGCGCGCCTGGCGGATCTGAGTGTGTTGCCC
GGGCAGCGGCGCGCGGGACCAACGCAAGGAGCAGCTGACAGACGAAGAAAAGTGCTGGACAGGAAGGGAGAATTC
TGACGCCAACATGCAGCGAAGTATCATGTCATTTTTCCACCCCAAGAAAGAGGGTAAAGCAAAGAAGCCTGAGAA
GGAGGCATCCAATAGCAGCAGAGAGACGGAGCCCCCTCCAAAGGCGGCACTGAAGGAGTGGAATGGAGTGGTGTC
CGAGAGTGACTCTCCGGTGAAGAGGCCAGGGAGGAAGGCGGCCCGGGTCCTGGGCAGCGAAGGGGAAGAGGAGGA
TGAAGCCCTTAGCCCTGCTAAAGGCCAGAAGCCTGCCCTGGACTGCTCACAGGTCTCCCCGCCCCGTCCTGCCAC
ATCTCCTGAGAACAATGCTTCCCTCTCTGACACCTCTCCCATGGACAGTTCCCCATCAGGGATTCCGAAGCGTCG
CACAGCTCGGAAGCAGCTCCCGAAACGGACCATTCAGGAAGTCCTGGAAGAGCAGAGTGAGGACGAGGACAGAGA
AGCCAAGAGGAAGAAGGAGGAGGAAGAAGAGGAGACCCCGAAAGAAAGCCTCACAGAGGCTGAAGTGGCCACAGA
GAAGGAAGGAGAAGACGGGGACCAGCCCACCACGCCTCCCAAGCCCCTAAAGACCTCCAAAGCAGAGACCCCGAC
GGAAAGCGTTTCAGAGCCTGAGGTGGCCACGAAGCAGGAACTGCAGGAGGAGGAAGAGCAGACCAAGCCTCCCCG
CAGAGCTCCCAAGACGCTCAGCAGCTTCTTCACCCCCCGGAAGCCAGCAGTCAAAAAAGAAGTGAAGGAAGAGGA
GCCAGGGGCTCCAGGAAAGGAGGGAGCTGCTGAGGGACCCCTGGATCCATCTGGTTACAATCCTGCCAAGAACAA
CTATCATCCCGTGGAAGATGCCTGCTGGAAACCGGGCCAGAAGGTTCCTTACCTGGCTGTGGCCCGGACGTTTGA
GAAGATCGAGGAGGTGTCTGCTCGGCTCCGGATGGTGGAGACGCTGAGCAACTTGCTGCGCTCCGTGGTGGCCCT
GTCGCCTCCAGACCTCCTCCCTGTCCTCTACCTCAGCCTCAACCACCTTGGGCCACCCCAGCAGGGCCTGGAGCT
TGGCGTGGGTGATGGTGTCCTTCTCAAGGCAGTGGCCCAGGCCACAGGTCGGCAGCTGGAGTCCGTCCGGGCTGA
GGCAGCCGAGAAAGGCGACGTGGGGCTGGTGGCCGAGAACAGCCGCAGCACCCAGAGGCTCATGCTGCCACCACC
TCCGCTCACTGCCTCCGGGGTCTTCAGCAAGTTCCGCGACATCGCCAGGCTCACTGGCAGTGCTTCCACAGCCAA
GAAGATAGACATCATCAAAGGCCTCTTTGTGGCCTGCCGCCACTCAGAAGCCCGGTTCATCGCTAGGTCCCTGAG
CGGACGGCTGCGCCTTGGGCTGGCAGAGCAGTCGGTGCTGGCTGCCCTCTCCCAGGCAGTGAGCCTCACGCCCCC
GGGCCAAGAATTCCCACCAGCCATGGTGGATGCTGGGAAGGGCAAGACAGCAGAGGCCAGAAAGACGTGGCTGGA
GGAGCAAGGCATGATCCTGAAGCAGACGTTCTGCGAGGTTCCCGACCTGGACCGAATTATCCCCGTGCTGCTGGA
GCACGGCCTGGAACGTCTCCCGGAGCACTGCAAGCTGAGCCCAGGGATTCCCCTGAAACCAATGTTGGCCCATCC
CACCCGGGGCATCAGCGAGGTCCTGAAACGCTTTGAGGAGGCAGCTTTCACCTGCGAATACAAATATGACGGGCA
GAGGGCACAGATCCACGCCCTGGAAGGCGGGGAGGTGAAGATCTTCAGCAGGAATCAGGAAGACAACACTGGGAA
GTACCCGGACATCATCAGCCGCATCCCCAAGATTAAACTCCCATCGGTCACATCCTTCATCCTGGACACCGAAGC
CGTGGCTTGGGACCGGGAAAAGAAGCAGATCCAGCCATTCCAAGTGCTCACCACCCGCAAACGCAAGGAGGTGGA
TGCGTCTGAGATCCAGGTGCAGGTGTGTTTGTACGCCTTCGACCTCATCTACCTCAATGGAGAGTCCCTGGTACG
TGAGCCCCTTTCCCGGCGCCGGCAGCTGCTCCGGGAGAACTTTGTGGAGACAGAGGGCGAGTTTGTCTTCGCCAC
CTCCCTGGACACCAAGGACATCGAGCAGATCGCCGAGTTCCTGGAGCAGTCAGTGAAAGACTCCTGCGAGGGGCT
GATGGTGAAGACCCTGGATGTTGATGCCACCTACGAGATCGCCAAGAGATCGCACAACTGGCTCAAGCTGAAGAA
GGACTACCTTGATGGCGTGGGTGACACCCTGGACCTGGTGGTGATCGGCGCCTACCTGGGCCGGGGGAAGCGGGC
CGGCCGGTACGGGGGCTTCCTGCTGGCCTCCTACGACGAGGACAGTGAGGAGCTGCAGGCCATATGCAAGCTTGG
AACTGGCTTCAGTGACGAGGAGCTGGAGGAGCATCACCAGAGCCTCAAGGCCCTGGTGCTGCCCAGCCCACGCCC
TTACGTGCGGATAGATGGCGCTGTGATTCCCGACCACTGGCTGGACCCCAGCGCTGTGTGGGAGGTGAAGTGCGC
TGACCTCTCCCTCTCTCCCATCTACCCTGCTGCGCGGGGCCTGGTGGATAGTGACAAGGGCATCTCCCTTCGCTT
CCCTCGGTTTATTCGAGTCCGTGAAGACAAGCAGCCGGAGCAGGCCACCACCAGTGCTCAGGTGGCCTGTTTGTA
CCGGAAGCAAAGTCAGATTCAGAACCAACAAGGCGAGGACTCAGGCTCTGACCCTGAAGATACCTACTAAGCCCT
CGCCCTCCTAGGGCCTGGGTACAGGGCATGAGTTGGACGGACCCCAGGGTTATTATTGCCTTTGCTTTTTAGCAA
ATCTGCTGTGGCAGGCTGTGGATTTTGAGAGTCAGGGGAGGGGTGTGTGTGTGAGGGGGTGGCTTACTCCGGAGT
CTGGGATTCATCCCGTCATTTCTTTCAATAAATAATTATCGGATAGCT

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FIGURE 2733

GTTGATGGTGACAGCAGCAGTGACCGTAGCAGCCTAGAGGTGGCCGAATGCTTACTCTAATGGGCTGGCCCATCC
CTGAGTGTCTAGAGTTCCCAGCCCGCTTAAGGAAGGAAGGAAAACACAGGCAGCTCTAAGTGTACGACGAGGGAG
GTCTCATCGGCGGTGAGGAAGCCCAGGCGGGTCCCCTTCCCAGCTGAAAGGGGTTCGGAATTTCACTCTGTCGCC
AGGCTGGAATGCAGTAGGGCAATCTCGGCTCACTGCAACCTCCACCTCCCGAGTTCAAGTGATGCTCCTGCTTCG
GCCTCCTGAGTAGCTGGGACTACAGGGACTATGTCACCGGTGGGGCTTGCCCCAGCAAGGCCACCATCCCTGGGA
AGACGGTCATCGTGACGGGTGCCAACACAGGCATCGGGAAGCAGACCGCCTTGGAACTGGCCAGGAGAGGAGGCA
ACATCATCCTGGCCTGCCGAGAC**ATG**GAGAAGTGTGAGGCGGCAGCAAAGGACATCCGCGGGGAGACCCTCAATC
ACCATGTCAACGCCCGGCACCTGGACTTGGCTTCCCTCAAGTCTATCCGAGAGTTTGCAGCAAAGATCATTGAAG
AGGAGGAGCGAGTGGACATTCTAATCAACAACGCGGGTGTGATGCGGTGCCCCCACTGGACCACCGAGGACGGCT
TCGAGATGCAGTTTGGCGTTAACCACCTGGGTCACTTTCTCTTGACAAACTTGCTGCTGGACAAGCTGAAAGCCT
CAGCCCCTTCGCGGATCATCAACCTCTCGTCCCTGGCCCATGTTGCTGGGCACATAGACTTTGACGACTTGAACT
GGCAGACGAGGAAGTATAACACCAAAGCCGCCTACTGCCAGAGCAAGCTCGCCATCGTCCTCTTCACCAAGGAGC
TGAGCCGGCGGCTGCAAGGCTCTGGTGTGACTGTCAACGCCCTGCACCCCGGCGTGGCCAGGACAGAGCTGGGCA
GACACACGGGCATCCATGGCTCCACCTTCTCCAGCACCACACTCGGGCCCATCTTCTGGCTGCTGGTCAAGAGCC
CCGAGCTGGCCGCCCAGCCCAGCACATACCTGGCCGTGGCGGAGGAACTGGCGGATGTTTCCGGAAAGTACTTCG
ATGGACTCAAACAGAAGGCCCCGGCCCCCGAGGCTGAGGATGAGGAGGTGGCCCGGAGGCTTTGGGCTGAAAGTG
CCCGCCTGGTGGGCTTAGAGGCTCCCTCTGTGAGGGAGCAGCCCCTCCCCAGA**TAA**CCTCTGGAGCAGATTTGAA
AGCCAGGATGGCGCCTCCAGACCGAGGACAGCTGTCCGCCATGCCCGCAGCTTCCTGGCACTACCTGAGCCGGGA
GACCCAGGACTGGCGGCCGCCATGCCCGCAGTAGGTTCTAGGGGGCGGTGCTGGCCGCAGTGGACTGGCCTGCAG
GTGAGCACTGCCCTGGGCTCTGGCTGGTTCCGTCTGCTCTGCTGCCAGCAGGGGAGAGGGGCCATCTGATGCTTC
CCCTGGGAATCTAAACTGGGAATGGCCGAGGAGGAAGGGGCTCCGTGCACTTGCAGGCCACGTCAGGAGAGCCAG
CGGTGCCTGTCGGGGAGGGTTCCAAGGTGCTCCGTGAAGAGCATGGGCAAGTTGTCTGACACTTGGTGGATTCTT
GGGTCCCTGTGGGACCTTGTGCATGCATGGTCCTCTCTGAGCCTTGGTTTCTTCAGCAGTGAGATGCTCAGAATA
ACTGCTGTCTCCCATGATGGTGTGGTACAGCGAGCTGTTGTCTGGCTATGGCATGGCTGTGCCGGGGGTGTTTGC
TGAGGGCTTCCTGTGCCAGAGCCCAGCCAGAGAGCAGGTGCAGGTGTCATCCTGAGTTCAGGCTCTGCACGGCAT
GGAGTGGGAACCCCACCAGCTGCTGCTACAGGACCTGGGATTGCCTGGGACTCCCACCTTCCTATCAATTCTCAT
GGTAGTCCAAACTGCAGACTCTCAAACTTGCTCATTT

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FIGURE 2734

GATCTCTTCCAA**ATG**TCCCCGCTCTCCCCAGGCTCTCCCCTCCCGCCACTTGCCAGGGCTGACCTCACCGCCATC
TTAACCGGGTGTCCACCTCTCTCTGCCTGCCTGGTGCTGGCCCCGCGTCCCCATCGCCGCGCCCGTCTGCTCCCC
TCAGAGGGCTTGCTGACGCTGCGGGCCAAGCCGCCCTCGGAGGCCGAGTACACCGACGTGCTGCAGAAGATCAAG
TACGCCTTCAGCCTGCTGGCCCGGCTGCGCGGCAACATCGCCGACCCCTCCTCTCCGGAGCTGTTGCACTTCCTT
TTCGGGCCTCTGCAGATGATTGTGAACACGTCGGGGGGGCCGGAGTTCGCGAGCAGTGTGCGGCGGCCGCATCTG
ACATCGGATGCCGTGGCGCTGCTGCGGGACAACGTCACTCCACGTGAAAACGAGCTCTGGACCTCGCTGGGGGAC
TCGTGGACCCGCCCCGGGCTGGAGCTGTCCCCGGAGGAGGGACCCCCATACAGACCCGAGTTCTTCAGCGGCTGG
GAGCCGCCGGTCACTGACCCGCAGAGCCGCGCCTGGGAGGACCCAGTTGAGAAACAGCTACAGCACGAGCGGAGG
CGCCGGCAGGTGACCCAAGCGACACAGCAGGGCCGAGGCTGGGAAGTCCGGGGGCGCGGCCGGTCCGCCTGGCCC
CGCCTGACCCGACTGTCTTACTTCCTACAGCAAAGCGCCCCCCAGGTCGCTGTCAATGGTCACCGAGACTTGGAG
CCAGAATCTGAGCCTCAGCTGGAGTCAGAGACAGCAGGAAAATGGGTCCTGTGTAATTATGACTTCCAGGCCCGC
AACAGCAGTGAGCTGTCGGTCAAGCAGCGGGACGTACTGGAGGTCCTGGATGACAGTCGTAAGTGGTGGAAGGTT
CGGGACCCAGCGGGGCAGGAGGGATATGTGCCCTACAACATCCTGACACCCTACCCCGGACCCCGGCTGCACCAC
AGCCAAAGCCCTGCCCGCAGCCTGAACAGCACTCCTCCTCCACCACCAGCCCCAGCCCCGGCCCCACCTCCAGCT
CTGGCTCGGCCCGCTGGGACAGGCCCCGCTGGGACAGCTGCGATAGCTCAACGGCTTGGACCCCAGCGAGAAGGA
GAAATTCTCCCAGATGCTCATCGTCAACGAGGAACTGCAGGCGCGCCTGGCCCAGGGCCGCTCGGGACCGAGCCG
CGCAGTCCCAGGGCCCCGCGCCCCGGAACCGCAGCTCAGCCCGGGCTCGGACGCCTCCGAGGTCCGCGCCTGGCT
GCAGGCCAAGGGCTT**TAG**CTCCGGGACCGTGGACGCGCTGGGTGTGCTGACCGGGGCGCAGCTTTTCTCGCTGCA
GAGGGAGGAGCTGCGGGCGGTGAGCCCCGAGGAGGGGGCACGTGTGTACAGCCAGGTCACCGTGCAGCGCTCGCT
GCTGGAGGACAAAGAGAAAGTGTCAGAGCTGGAGGCAGTGATGGAGAAGCAAAAGAAGAAGGTGGAAGGCGAGGT
GGAAATGGAGGTCATTTGACCTGCCAGGCGCCCTTCGCAAAGAGTGACGAGGCCCCGTGGGAGAACGGACTCCTC
AGACTCTCCCCAATAGCGGAAGTCGATCTTCTGAAGGATGGCCAATCTGCTCCGGCCCTGGTCTTCCCCCATCCC
GGTGGACAGACTTAACGATCCTTGCTGCAGATCCTCCGGAGAGGATCTGGACTGGCTGGGAGTGGGGAGGGCGTG
GAGACAGTCTACGGAAAGCGCTAGCAGACCCCCGAGAGGGTGCAGTGGAGCCCTGAGCATTGTAATATGCGGCCC
AGCCTATAAACAGCCTCCGTGCTTAGC

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FIGURE 2735

GCGGGCGGGCGGTGCGATGTCCGGAGAGGATGGCCCGGCGGCTGGCCCGGGGGGCGGCGGCGGCGGCTGCCCGGG
AGCGGCGACGGGAGCAGCTGCGGCAGTGGGGGGCGCGGGCGGGCGCCGAGCCTGGCCCCGGAGAGCGCCGCGCCC
GCACCGTCCGCTTCGAGCGCGCCGCCGAGTTCCTGGCGGCCTGTGCGGGCGGCGACCTGGACGAGGCGCGTCTGA
TGCTGCGCGCCGCCGACCCTGGCCCCGGCGCCGAGCTCGACCTCCGCCGCGCCGCCGCCCGCCCGCGCCGTGCTG
GACTCCACCAACGCCGACGGTATCAGCGCCCTGCACCAGGCCTGCATTGATGAGAACCTGGAGGTGGTGCGCTTC
TTGGTGGAGCAGGGCGCCACTGTGAACCAGGCAGACAACGAGGGCTGGACGCCACTGCACGTGGCCGCCTCCTGT
GGCTACCTAGATATCGCCAGGTACCTCCTGAGCCACGGGGCCAACATCGCCGCCGTCAACAGTGACGGGGACCTG
CCCCTGGACCTGGCCGAGTCGGACGCC**ATG**GAGGGGCTGCTGAAGGCGGAGATCGCCCGCCGAGGTGTGGATGTG
GAGGCAGCCAAGCGGGCAGAAGAGGAATTGCTCCTTCATGACACGAGGTGCTGGCTGAATGGGGGCGCCATGCCA
GAGGCCCGGCACCCCCGCACAGGCGCCTCTGCCCTGCACGTGGCTGCTGCCAAGGGCTACATTGAGGTGATGAGG
TTGCTCCTTCAGGCTGGCTACGACCCAGAGCTCCGGGACGGGGACGGCTGGACTCCCCTGCACGCAGCGGCACAC
TGGGGCGTGGAGGATGCCTGCCGCCTGCTGGCCGAGCATGGCGGGGGCATGGACTCACTGACCCATGCGGGGCAG
CGTCCCTGTGACCTGGCCGATGAGGAAGTACTGAGCCTGTTGGAGGAACTGGCCCGGAAACAGGAGGACCTTCGG
AACCAAAAAGAAGCTTCCCAGAGCCGGGGCCAGGAGCCCCAAGCGCCCTCTAGCAGCAAACACAGAAGGAGCTCT
GTGTGTCGTCTGAGCAGTCGCGAGAAGATTTCCCTCCAGGACTTGTCCAAGGAGCGCCGGCCTGGTGGGGCTGGG
GGGCCCCCATCCAGGACGAGGATGAGGGGGAAGAAGGTCCCACCGAACCACCCCCTGCAGAACCCAGAACCCTCA
ATGGCGTCTCCTCCCCGCCGCACCCCAGCCCTAAGAGTCCCGTGCAGCTTGAAGAGGCCCCCTTCTCCAGGCGCT
TTGGCCTCC**TGA**AGACAGGGAGTTCTGGTGCCCTGGGTCCCCCTGAAAGGCGGACAGCGGAGGGAGCCCCTGGGG
CTGGGCTGCAGCGCTCGGCTTCCTCCTCCTGGCTGGAAGGGACCTCCACTCAGGCCAAGGAGCTCCGTCTTGCCA
GAATTACCCCGACCCCCTCCCCGAAGCTGCCGGAGCCCTCTGTCCTGTCTGAGGTCACCAAGCCTCCTCCTTGCT
TGGAGAACTCCTCGCCTCCCTCCAGGATTCCGGAGCCTGAATCCCCAGCGAAGCCAAACGTCCCCACAGCCTCCA
CGGCGCCCCCCAGCGGACTCCCGGGACCGACGGAGGTCCTACCAGATGCCTGTGCGGGATGAGGAGTCGGAATCCC
AGAGAAAAGCTCGCTCCCGTCTCATGCGCCAGTCTCGGAGGTCCACACAGGGTGTGACTCTTACAGACCTGAAGG
AGGCAGAGAAGGCTGCAGGGAAGGCCCCAGAGTCAGAGAAGCCGGCGCAGAGCCTGGACCCTTCCCGAAGGCCCC
GCGTCCCTGGAGTGGAGAACTCTGACAGCCCTGCCCAGAGAGCAGAGGCGCCCGACGGGCAGGGTCCGGGACCGC
AGGCGGCCAGGGAGCACCGCAAGGTCGTGAAAGGAGTGGAGGGGGCCTGCGGAGGGGGAGGAGGCGGAGCCGCTG
ACCGCAGCCAGGAGTCCAGCACCCTGGAGGGCGGCCCCTCGGCCGCAGGCAGCGGTGGCAGCGGGACCTCAACCC
AGAACCTGAGCCAGAATCGGAAGAGCCAGACGGAGGCTTTAGGACGCTGTATGCAGAGCTGCGCAGGGAGAACGA
GCGGCTTCGCGAGGCCCTGACCGAGACCACGCTGCGGCTGGCGCAGCTCAAGGTGGAGCTGGAGCGGGCCACGCA
GAGGCAAGAACGCTTCGCTGAGAGGCCAGCCCTCCTGGAACTGGAGAGATTCGAGCGCAGGGCCCTGGAACGCAA
GGCCGCAGAGCTGGAGGAGGAGCTGAAGGCCCTGTCTGACCTCCGCGCTGACAACCAGCGCCTCAAGGATGAGAA
TGCAGCGTTGATCCGCGTCATCAGCAAACTCTCCAAGTGACCCGGAGGGACTTTCCCGCACCCGTATTTATACAG
CTGCTTCTGCCACACGCACCCCTTCCCCCGTGTGAACACGAGTGACAGGGCTCCGGGGGGAAGTCTCAGAGAAGCC
ATAGCCCCCCTGGGACCTCCGGACTGGGAGGGGAGCAGAGTCCCCAGGAGCCGAGGGGGCCACCCGAGGCCAGGA
TGGAGGTGGGAGGCCGAGCCAAGCAGGGGGACGTTGCCAGAGGGGACCAGGGCCAGAGACGGGACCAGGAAGGAA
CTGAGGACCAAGAAGTGCAAGGATCAGTAGCCAGGACCAGAGTGGCCGCCTGGAGGTCCCCATCTCACGTGTGAT
GCCACCCCGTCACCCCTCCCCTCCTGAGCAGGGATCCAAGAATGTGCCAAGAGTCCCGCCAGCCTCAGCCAGGTG
GGCCTGTATATAGGGTCCATGTGCAATAGGGAGGGACGTCTTCTATTTTTTGCTGCCCCCTCCCCGCCCACTGTC
TGGGGCAGGGGGAGAAGGTATTTTCGAGATAAAGCACAGGCACCACAAATAAAAGTCGTGAAGTTGCCACTC

FIGURE 2736A

GTTCTCAGTGGCCACCCTGCGCTACCCTCTCCCAGAACCTGAGCTGCTCTGACGCGGCTGTCTGGTGCGTTTCAC
TGATCCTGGTGCTGCAGCTTCCTTACACTTCCCAAGAGGAGAAGCAGTTTGGAAAAACAAAATCAGAATAAGTTG
GTCCTGAGTTCTAACTTTGGCTCTTCACCTTTCTAGTCCCCAATTTATATTGTTCCTCCGTGCGTCAGTTTTACC
TGTGAGATAAGGCCAGTAGCCAGCCCCGTCCTGGCAGGGCTGTGGTGAGGAGGGGGGTGTCCGTGTGGAAAACTC
CCTTTGTGAGAATGGTGCGTCCTAGGTGTTCACCAGGTCGTGGCCGCCTCTACTCCCTTTCTCTTTCTCCATCCT
TCTTTCCTTAAAGAGTCCCCAGTGCTATCTGGGACATATTCCTCCGCCCAGAGCAGGGTCCCGCTTCCCTAAGGC
CCTGCTCTGGGCTTCTGGGTTTGAGTCCTTGGCAAGCCCAGGAGAGGCGCTCAGGCTTCCCTGTCCCCCTTCCTC
GTCCACCATCTCATGCCCCTGGCTCTCCTGCCCCTTCCCTACAGGGGTTCCTGGCTCTGCTCTTCAGACTGAGCC
CCGTTCCCCTGCATCCCCGTTCCCCTGCATCCCCCTTCCCCTGCATCCCCCAGAGGCCCCAGGCCACCTACTTGG
CCTGGACCCCACGAGAGGCCACCCCAGCCCTGTCTACCAGGCTGCCTTTTGGGTGGATTCTCCTCCAACTGTGGG
GTGACTGCTTGGCAAACTCACTCTTCGGGGTATCCCAGGAGGCCTGGAGCATTGGGGTGGGCTGGGGTTCAGAGA
GGAGGGATTCCCTTCTCAGGTTACGTGGCCAAGAAGCAGGGGAGCTGGGTTTGGGTCAGGTCTGGGTGTGGGGTG
ACCAGCTTATGCTGTTTGCCCAGGACAGCCTAGTTTTAGCGCTGAAACCCTCAGTCCTAGGAAAACAGGGATGGT
TGGTCACTGTCTCTGGGTGACTCTTGATTCCCGGCCAGTTTCTCCACCTGGGGCTGTGTTTCTCGTCCTGCATCC
TTCTCCAGGCAGGTCCCCAAGCATCGCCCCCCTGCTGTGGCTGTTCCCAAGTTCTTAGGGTACCCCACGTGGGTT
TATCAACCACTTGGTGAGGCTGGTACCCTGCCCCCATTCCTGCACCCCAATTGCCTTAGTGGCTAGGGGGTTGGG
GGCTAGAGTAGGAGGGGCTGGAGCCAGGATTCTTAGGGCTGAACAGAGAAGAGCTGGGGGCCTGGGCTCCTGGGT
TTGAGAGAGGAGGGGCTGGGGCCTGGACTCCTGGGTCCGAGGGAGGAGGGGCTGGGGCCTGGACTCCTGGGTCTG
AGGGTGGAGGGACTGGGGGCCTGGACTCCTGGGTCCGAGGGAGGAGGGGCTGGGGCCTGGACTCGTGGGTCTGAG
GGAGGAGGGGCTGGGGGCCTGGACTTCTGGGTCTTAGGGAGGCGGGGCTGGGCCTGGACCCCTGGGTCTGAATGG
GGAGAGGCTGGGGGCCTGGACTCCTTCATCTGAGGGCGGAAGGGCTGGGGCCTGGCCTCCTGGGTTGAATGGGGA
GGGGTTGGGCCTGGACTCTGGAGTCCCTGGTGCCCAGGCCTCAGGCATCTTTCACAGGGATGCCTGTACTGGGCA
GGTCCTTGAAAGGGAAAGGCCCATTGCTCTCCTTGCCCCCCTCCCCTATCGCCATGACAACTGGGTGGAAATAAA
CGAGCCGAGTTCATCCCGTTCCCAGGGCACGTGCGGCCCCTTCACAGCCCGAGTTTCCATGACCTCATGCTCTTG
GCCCTCGTAGCTCCCTCCCGCCTCCTCCAGATGGGCAGCTTTGGAGAGGTGAGGGACTTGGGGGGTAATTTATCC
CGTGGATCTAGGAGTTTAGCTTCACTCCTTCCTCAGCTCCAGTTCAGGTCCCGGAGCCCACCCAGTGTCCACAAG
GCCTGGGGCAAGTCCCTCCTCCGACCCCCTGGACTTCGGCTTTTGTCCCCCCAAGTTTTGGACCCCTAAGGGAAG
AATGAGAAACGGTGGCCCGTGTCAGCCCCTGGCTGCAGGGCCCCGTGCAGAGGGGGCCTCAGTGAACTGGAGTGT
GACAGCCTGGGGCCCAGGCACACAGGTGTGCAGCTGTCTCACCCCTCTGGGAGTCCCGCCCAGGCCCCTGAGTCT
GTCCCAGCACAGGGTGGCCTTCCTCCACCCTGCATAGCCCTGGGCCCACGGCTTCGTTCCTGCAGAGTATCTGCT
GGGGTGGTTTCCGAGCTTGACCCTTGGAAGGACCTGGCTGGGTTTAAGGCAGGAGGGGCTGGGGGCCAGGACTCC
TGGCTCTGAAGGAGGAGGGGCTGGAACCTCTTCCCTAGTCTGAGCACTGGAAGCGCCACCTGTGGGTGGTGACGG
GGGTTTTGCCGTGTCTAACAGGTACCATGTGGGGTTCCCGCACCCAGATGAGAAGCCCCCTCCCTTCCCCGTTCA
CTTCCTGTTTGCAGATAGCCAGGAGTCCTTTCGTGGTTTCCACTGAGCACTGAAGGCCTGGCCGGCCTGACCACT
GGGCAACCAGGCGTATCTTAAACAGCCAGTGGCCAGAGGCTGTTGGGTCATTTTCCCCACTGTCCTAGCACCGTG
TCCCTGGATCTGTTTTCGTGGCTCCCTCTGGAGTCCCGACTTGCTGGGACACCGTGGCTGGGGTAGGTGCGGCTG
ACGGCTGTTTCCCACCCCCAGGCCTGCATTGATGAGAACCTGGAGGTGGTGCGCTTCTTGGTGGAGCAGGGCGCC
ACTGTGAACCAGGCAGACAACGAGGGCTGGACGCCACTGCACGTGGCCGCCTCCTGTGGCTACCTAGATATCGCC
AGGTGAGGCAAGGGAGGGCCGGGCAGGACCTGGTCGGGGTGGGGGCCTGGACCCTCAGCCCTGACCAGCCCCCAC
CCCCAGGTACCTCCTGAGCCACGGGGCCAACATCGCCGCCGTCAACAGTGACGGGGACCTGCCCCTGGACCTGGC
CGAGTCGGACGCC**ATG**GAGGGGCTGCTGAAGGCGGAGATCGCCCGCCGAGGTGGGCTCTGGTGTGCTGTGTGTGG
GGTGGGGGACACCTCCTCACCCGTGGTCTCCAGGCTGAGAGCTTTAGAGGCGGCCTGGGCACCGAGGCTGACCCT
GCTTCCTAGGATTGTCTTTCTTTGTGCCTCAGTTTCCTCACCTGTGAAATGGGGGTGTAGGGGCCTGCCTCCAGG
ATTGCTTGGAGCCCAGCACACGCACAGGATGAGAACTCAAACCCCTACCAACTGGGACTGTCAATCCCCC**TGA**GT
AACTGAGGGGATTGGAATGCCGGGGCGGGGTGGGTGGGTGGAGGGACTCACCCAGGAGTGCGTTAGGTAGGATTG
CTGGAACCCTGCCGCAGGTCTTTCTGGGAGGGGATGCGTTTACTTGGGGGGGAGTAGGGGCATGCAGGGGTTGCC
AGGGACTGGTCTCCCTGTCCTCTGAGACTCATCGTACCCCAGGAGCCTTCATATGGGGTCCAGGAGCCCCTGAAA
CTGTGTCTGGCCAGGTTCATTTTTCTAGGGAAGGGGTGTTGCTTCTAGCAGGTGTGTGATGGCCACACAGGATCC

FIGURE 2736B

CTGGGTCCCCAGCATGTCTTCTAAAGTCCTGGGCTTGCCTCCCAGCTCTGCCTGTGACTGGTGACTCCAGGCACG
TCCCTGAAGCTTGCTTCCCTGATTTCCTAAAACAGGACCACTGGTGCCGCTTCATGGGGTGGTTGTCAGGGTCTG
GCTGGGTTGGAGTGGAAGGGTGTGAGCATGGTTCCCGGCAGACTCCAGGGGACCGTGTGGAAGGAAAGGGAGACT
GACGAGGAAATGAGATACCGGCAGCCTCCGAGACTTCTGACGCGGCTGTCCTGACGGGGCCGCTGGCCAGGCTGA
AAGGATAGGATTCCGCGTGGGTTCAGGGGTCCACGAGAGCCATGCGGGAGGACTAGCTAGTGGGACACGTGACGG
CGGAGATCTGAGGTTCGGGAGCCCCTCTTTGGTTGAAATGGGGAGTGGGTCAAATCAGCCCTGGACCTGGATTCT
GTCTCCTTCCTCCTCCAACTTTTTATTTTGGGAAAGCTTCAGATTTACAGAAAAGTTGAAGCAATAGCATGTGAC
TACCCATATGACTTTC

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FIGURE 2737

AAGATTCACAGCATCTCAGACACAGCCTAGGCCGCACCAGGATGTCGGACACCGAGGAGCAGGAATATGAGGAGG
AGCAGCCGGAAGAGGAGGCTGCGGAGGAGGAGGAGGAAGAAGAGGAACGCCCCAAACCAAGCCGCCCCGTGGTGC
CTCCTTTGATCCCGCCAAAGATCCCAGAAGGGGAGCGCGTTGACTTCGATGACATCCACCGCAAGCGCATGGAGA
AAGACCTGCTGGAGCTGCAGACACTCATCGATGTACATTTCGAGCAGCGGAAGAAGGAGGAAGAGGAGCTGGTTG
CCTTGAAGGAGCGCATTGAGCGGCGCCGGTCAGAGAGAGCCGAGCAACAGCGCTTCAGAACTGAGAAGGAACGCG
AACGTCAGGCTAAGCTGGCGGAGGAGAAGATGAGGAAGGAAGAGGAAGAGGCCAAGAAGCGGGCAGAGGATGATG
CCAAGAAAAAGAAGGTGCTGTCCAACATGGGGGCCCATTTTGGCGGCTACCTGGTCAAGGCAGAACAGAAGCGTG
GTAAGCGGCAGACGGGGCGGGAGATGAAGGTGCGCATCCTCTCCGAGCGTAAGAAGCCTCTGGACATTGACTACA
TGGGGGAGGAACAGCTCCGGGAGAAAGCCCAGGAGCTGTCGGACTGGATCCACCAGCTGGAGTCTGAGAAGTTCG
ACCTGATGGCGAAGCTGAAACAGCAGAAATATGAGATCAACGTGCTGTACAACCGCATCAGCCACGCCCAGAAGT
TCCGTAAGGGGGCAGGGAAGGGCCGCGTTGGAGGCCGCTGGAAGTGAGGATGCCGCCCCGGACAGTGGCACCTGG
GAAGCCTGGGAGTGTTTGTCCCATCGGTAGCTTGAAATAAACGCTCCCCTCAGACA

FIGURE 2738A

CTAGGCCTGGGACTCCTGGGTCCCCGGCAGTGTCTGGAGGCATGGCTGGGGCTGGCGGGGGCCTCGGGGTCTGGG
GGAACCTGGTGCTGCTGGGCCTGTGCAGCTGGACAGGGGCCAGGGCGCCTGCCCCCAACCCAGGGAGGAACCTGA
CAGTGGAGACTCAGACCACCAGCTCCATCTCCCTGAGCTGGGAGGTCCCCGATGGCCTAGACTCACAGAACTCCA
ACTACTGGGTTCAGTGTACTGGAGACGGCGGCACAACAGAGACTCGAAACACAACAGCCACCAACGTCACCGTGG
ATGGCCTTGGACCCGGGTCATTGTATACGTGTTCTGTGTGGGTGGAGAAAGACGGAGTAAATAGCTCTGTGGGGA
CTGTCACTACTGCCACAGCTCCCAACCCAGTGAGGAACCTGAGAGTGGAGGCTCAGACCAACAGCTCCATCGCCC
TGACCTGGGAGGTCCCCGACGGCCCAGACCCACAGAACTCCACCTACGGGGTTGAGTACACTGGAGATGGTGGCA
GAGCAGGGACTCGAAGCACAGCACACACTAACATCACCGTGGATGGACTTGAACCCGGGTGTTTGTATGCGTTTT
CCATGTGGGTGGGAAAGAATGGAATCAACAGCTCCCGGGAGACTCGAAATGCCACCACAGCTCACAACCCAGTGA
GGAACCTGAGAGTGGAGGCTCAGACCACCAGCTCCATCTCCCTGAGCTGGGAGGTCCCCGATGGCACAGACCCAC
AGAACTCGACCTACTGCGTTCAGTGCACTGGAGATGGTGGCAGAACAGAGACTCGAAACACAACAGACACCAGAG
TCACCGTGGATGGCCTTGGACCCGGGTCATTGTATACGTGTTCTGTGTGGGTGGAGAAAGACGGAGTAAATAGCT
CTGTGGAGATTGTCACTAGTGCCACAGCTCCCAACCCAGTGAGAAACCTGACAGTGGAGGCTCAGACCAACAGCT
CCATCGCCCTGACCTGGGAGGTCCCCGATGGCCCAGACCCACAGAACTCCACCTACGGGGTTGAGTACACTGGAG
ATGGTGGCAGAGCAGGGACTCGAAGCACAGCACACACCAACATCACCGTGGATAGACTTGAACCCGGGTGTTTGT
ATGTGTTTTCCGTGTGGGTGGGGAAGAATGGAATCAACAGCTCCCGGGAGACTCGAAATGCCACCACAGCCCCCA
ACCCAGTGAGAAACCTCCATATGGAGACTCAGACCAACAGCTCCATCGCCCTATGCTGGGAAGTCCCCGATGGCC
CATACCCTCAGGACTACACCTACTGGGTAGAGTACACTGGAGACGGTGGTGGCACAGAGACCCGAAACACAACAA
ATACCAGTGTGACAGCTGAGAGACTTGAGCCCGGAACCTTGTACACATTCTCTGTATGGGCAGAAAAAAATGGAG
CACGTGGCTCCAGGCAGAATGTCAGCATCTCCACAGTCCCCAACGCAGTGACAAGCCTCAGCAAGCAGGACTGGA
CCAACAGCACCATTGCTTTGCGCTGGACAGCTCCCCAGGGCCCAGGCCAGTCTTCCTACAGCTACTGGGTCTCAT
GGGTCAGGGAAGGCATGACTGACCCCAGGACCCAAAGCACCTCAGGTACTGACATCACCCTAAAGGAACTGGAAG
CTGGCAGCCTGTACCACCTCACCGTCTGGGCCGAGAGGAATGAGGTCAGAGGCTATAACAGCACCCTCACTGCAG
CCACTGCTCCCAATGAGGTCACAGATCTCCAGAATGAAACTCAGACTAAGAACTCAGTCATGCTGTGGTGGAAGG
CCCCTGGAGACCCCCACTCTCAGTTGTACGTATACTGGGTCCAGTGGGCCAGCAAGGGACATCCCCGGAGGGGGC
AAGATCCCCAAGCGAATTGGGTCAACCAGACCAGCAGGACCAATGAGACGTGGTACAAAGTGGAGGCCCTGGAAC
CCGGGACGTTGTACAATTTCACCGTGTGGGCAGAGAGGAATGACGTAGCCAGTTCCACGCAGAGCCTCTGTGCGT
CCACATACCCAGACACAGTCACCATCACTTCCTGTGTCAGCACCTCAGCGGGCTATGGAGTCAACTTGATCTGGT
CCTGCCCCCAGGGAGGCTACGAGGCCTTTGAGTTGGAGGTGGGAGGACAGCGGGGCTCCCAGGACAGATCTTCAT
GTGGGGAGGCTGTGTCTGTGTTGGGTCTCGGGCCGGCTCGGTCCTACCCAGCCACCATCACGACCATCTGGGACG
GAATGAAGGTCGTGTCTCACTCTGTGGTCTGCCACACCGAGAGTGCAGGGGTCATTGCCGGAGCCTTTGTGGGCA
TCCTCCTGTTTCTCATCCTCGTGGGCCTGCTGATTTTCTTCCTGAAGAGGAGGAATAAGAAGAAGCAGCAGAAAC
CAGAACTCAGGGATCTGGTCTTTAGCTCCCCAGGGGACATCCCAGCTGAAGACTTCGCTGACCACGTCAGGAAGA
ATGAGAGGGACAGCAACTGTGGTTTTGCAGACAAGTACCAGCAACTCTCCCTGGTGGGCCACAGCCAGTCTCAGA
TGGTGGCTTCGGCTTCAGAGAACAACGCCAAGAACCGCTACAGAAATGTGCTGCCCTATGACTGGTCCCGGGTGC
CCCTGAAGCCCATCCATGAGGAGCCAGGCTCTGACTACATCAATGCCAGCTTCATGCCCGGTCTCTGGAGCCCCC
AGGAGTTCATTGCAACCCAGGGTCCCCTGCCACAGACAGTGGGTGACTTCTGGCGCCTGGTGTGGGAACAGCAGA
GCCACACCCTGGTCATGCTGACCAACTGCATGGAGGCCGGCCGGGTGAAGTGTGAGCATTACTGGCCTCTGGACT
CGCAGCCCTGCACCCATGGGCACCTGCGGGTAACCCTGGTAGGTGAGGAAGTGATGGAGAACTGGACGGTGCGGG
AACTGCTGCTCCTCCAGGTGGAGGAGCAGAAGACACTGTCTGTGCGCCAATTCCACTACCAGGCCTGGCCGGATC
ACGGCGTTCCCTCCTCCCCAGACACCTTGCTGGCTTTCTGGAGGATGCTTCGGCAGTGGCTGGATCAGACCATGG
AGGGAGGCCCACCCATTGTGCACTGCAGTGCTGGCGTGGGTCGCACAGGAACCCTCATTGCCCTGGACGTCCTGC
TCCGGCAGCTGCAGTCCGAGGGTCTCCTTGGGCCCTTCAGCTTTGTAAGGAAGATGAGAGAGAGTCGGCCGTTGA
TGGTGCAGACTGAGGCTCAGTACGTATTCCTGCATCAGTGCATCCTGCGGTTCCTCCAACAGTCAGCCCAGGCCC
CAGCCGAGAAGGAAGTCCCGTATGAGGATGTCGAAAACCTCATCTACGAGAACGTGGCCGCCATCCAGGCCCACA
AGTTGGAGGTCTAAGTGACGAGGGGGCTGGGTCGGCAGCCCAGGCATCCTCAAGCTCTGGACACCCACTTGAGCC
CAGATTCCTGGAAGAGCAGAGGGCTGGGCTCCCAGACTCCTGGGTGCTGTGGGAGGAGGGGGCTGGTATCCCAAA
CTCTGGTTTCCCCAGGAGAGAGTGGTCTGGTGGGCTTCAGATGAGTCCTATGGGAGCTGGGGATCTGGATTCCTG

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FIGURE 2738B

GTTCCCTGAAGGAGGAGAGGGATGATAGCTTGGATTCCCTAGGTCTTTCCAGGATGCAGAAAGAAACAGGCTGGG
GCCTGGATTCTGAGGCAGGAAGGAATTTGGGTCTGGAGTTCTGGCTACTTGAGGACCAAAGGCAGGAAGGATCCT
GCCTTGATTTTACTTCAGAAACCAAATCAGTCTTCTATAATCTGGGGTCGGAGGGAGTCCCTGTGCCCAAGGTCT
CTCTGCACCCCACCATCCACATGTATTTTTCCTTCTATCCCATAATTTATTAAATCACTGTTCTCCCCAG

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FIGURE 2739A

CGCCCAGCTAATTTTTGTATTTTTGGTAGAGACAGGGTTTCGCCATGTTGCCCAGGCTGGTCTTGAACTTCTGAC
CTCAAGTGATATGCCTGCCTCAGCCTCCCAAGGGGTACCTCCCCACAGTCCTGGAGCAGACTGTGGCCCCTCAGG
GCCTTGAGTGGCACGCTGGTGGGGCAGCTCTTGTCTTGGAGCCGTCAGGCACCGTGTGAAAGTTTGGAGGAGGGA
GGCAGGAGGTGAGGTTGGAAGTTGAGCAAGGTTCCAGGAGTCAGCCGGAGCTGGGGCAGCATACGGGGTTGCAAG
TGAAGCCGCTGAGAGGCAAAAGGGATGAGTGTTAGCTGCTGGGGGGATTGGGAAGCGCAGGAGCTTCAGGACCAGC
TTGTCTTGGGGGTGGTAAGGAGCCTAGGATGGGATGGTTGGGTGTTAGCAGGGTGGAGGAGGCCTGGTGTGGGCC
CTTGTTTCTGCGTCACCCTGTCCTCTGCCCTTTCCCCTTCCTGGACAGGGGTCTCTGCAGTTCCCAGAAACCCAG
TGCCCGGTGCAGAGAAGAGGGTGGAGCCTTGCCGCCCCCTGCCCCCGGCCTCCGACCCGAGCCCCCACCCGCCTG
TGCTTGCCTCCCAGGTACCCCAGTGTGGCCTGCGAGATTCTGACCTCAGATGTGCCCCAGATCAATGATGCCCTG
GGTGCTGATGAGTCCCTTCTGAACCGGCTCTACGGCTTCCTGCAGAGCACCGGCAGCCTCAACCCACTGCTGGCC
AGCTTCTTCAGCAAGGTC**ATG**GGCATCCTCATCAACCGCAAGACAGACCAGCTCGTGTCCTTTCTTCGGAAGAAG
GATGACTTCGTGGACCTGCTGCTGCAGCACATTGGCACCTCGGCCATCATGGACCTCCTGCTGCGCCTGCTCACC
TGTGTGGAGCGGCCTCAGCTGAGGCAGGATGTTGTCAATTGGCTCAACGAGGAGAAGATCGTCCAGCGGCTGATT
GAGCAGATCCACCCGTCGAAGGATGAGAATCAACATTCCAACGCATCCCAGTCCCTGTGTGACATCATCCGCCTG
AGCCGGGAGCAGATGATCCAAGTCCAGGACAGCCCAGAGCCTGACCAACTGCTGGCCACCCTGGAGAAGCAGGAG
ACGATTGAGCAGCTCTTAAGCAACATGTTCGAGGGGGAGCAGAGCCAGTCTGTCATCGTCAGTGGGATCCAGGTG
CTGCTGACCCTGCTGGAGCCCAGGAGGCCGAGGTCCGAGTCCGTGACCGTGAACAGCTTCTTCAGCAGTGTGGAT
GGGCAGCTGGAGCTCCTGGCCCAGGGGGCCCTGGAAAGCACTGTGTCCAGTGTGGGCGCCTTGCACGCCCTACGC
CCGCGGCTCAGCTGCTTCCACCAGCTCCTGCTGGAGCCTCCCAAGCTGGAGCCGCTACAGATGACATGGGGCATG
CTGGCTCCGCCTCTGGGCAACACGCGGCTGCACGTGGTCAAGCTCCTGGCCAGTGCCCTGAGCGCCAATGATGCA
GCCCTGACGCACGAGCTCCTGGCACTGGACGTGCCCAACACCATGCTGGACCTCTTCTTCCATTATGTCTTCAAC
AACTTCTTGCATGCCCAAGTAGAGGGATGCGTGAGCACCATGCTGAGCTTGGGGCCACCTCCTGACAGCAGCCCT
GAGACGCCCATCCAAAACCCTGTTGTGAAACATCTGCTGCAGCAGTGCCGCCTGGTGGAGCGGATCCTGACGTCC
TGGGAGGAGAACGACCGTGTACAGTGTGCGGGAGGCCCTCGGAAAGGCTACATGGGTCACCTGACAAGAGTGGCC
GGTGCCCTGGTGCAGAACACGGAGAAGGGGCCCAATGCAGAGCAGCTGCGGCAGCTGCTGAAGGAGCTGCCCAGC
GAGCAGCAGGAGCAGTGGGAAGCCTTCGTATCGGGGCCCCTGGCGGAGACCAACAAGAAGAACATGGTGGACCTG
GTGAACACCCACCACCTACACTCCTCCAGTGACGATGAGGACGACCGGCTCAAGGAGTTCAACTTCCCTGAGGAG
GCTGTGCTGCAGCAGGCCTTCATGGACTTCCAGATGCAGCGCATGACCTCTGCCTTCATTGACCACTTCGGCTTC
AATGATGAGGAGTTTGGGGAGCAGGAGGAGAGTGTGAACGCACCTTTTGACAAGACAGCCAACATCACCTTCTCC
CTCAATGCTGACGATGAGAACCCCAACGCCAACCTACTTGAGATATGCTACAAGGACCGCATCCAGCAGTTTGAT
GATGATGAGGAAGAGGAGGACGAGGAAGAGGCCCAGGGCTCAGGGGAGTCTGATGGAGAAGATGGCGCCTGGCAG
GGCAGCCAGCTGGCCAGGGGGGCCCGTCTGGGCCAGCCACCTGGTGTCCGGAGTGGAGGCAGCACAGACAGTGAG
GACGAAGAAGAGGAGGACGAGGAGGAGGAGGAAGACGAGGAGGGCATTGGCTGTGCAGCCCGTGGAGGGGCCACC
CCTCTGTCCTACCCCAGCCCTGGCCCTCAGCCTCCAGGCCCCAGCTGGACAGCCACCTTTGACCCAGTGCCTACA
GATGCCCCGACCAGCCCCCGAGTCTCCGGGGAGGAAGAGCTGCACACTGGGCCTCCAGCCCCACAGGGGCCCCTC
AGTGTGCCCCAGGGCCTCCCCACTCAGAGCCTGGCCAGCCCTCCTGCCCGTGACGCCCTGCAGCTCAGGTCTCAG
GACCCCACACCCCCCTCAGCACCTCAGGAAGCCACAGAAGGCAGCAAAGTCACGGAGCCCTCAGCCCCTTGCCAG
GCCTTGGTTAGCATCGGGGACCTTCAGGCCACCTTCCACGGGATCCGTTCTGCCCCCAGCTCCTCGGACAGTGCA
ACCAGAGACCCCTCTACCTCTGTCCCAGCCTCCGGGGCCCACCAGCCCCCCCAGACCACAGAAGGGGAGAAGAGC
CCAGAGCCCTTGGGGCTTCCCCAAAGCCAGAGTGCCCAGGCCCTCACGCCTCCTCCGATACCCAATGGCTCTGCC
CCGGAAGGGCCTGCATCCCCAGGCTCCCAA**TAG**CTGCCTGGTGCGGCAGCGGCGGCCAAATCTTCCGTCCTCCCG
TGGATCTCCCGGGGTGGGGGCAGGGCGGGTCCCACGATGGCCCCCATTGCCCTCATCACCCTGACACCCCCACAT
TCTCTCCTCTGGACCCCCAGGAGGCTGGTGCCAGGGAGACAGGCCCAACCCACCCCCATTTGCACTGAGAAGAGA
AGTTTTGGAGCGTTGCCTCCTAGAATAAAGATACAGAGAGTCAAATAGAGAGAATGGAGAGAGAGAAACATATAT
TATATATTATATAGAGAGAGGGAGGAGAGCGAGAGAGAGTGAGGACACCGAACTGGGCTGGCGGCTCCAAAGCAC
AGCCTTCCCTGTTCCGTCCCAGCGGGAGCTGGTGTTAGGGGTCCCAAGGTTGCCACCCACGTGCCCAGCTGTCCC
ACGCTGCAGCGCAGACGGCCACGCCCACACCCGGCCTTTTAGCTCAGGTCCACCATGGGGGACGGCCCAGCGTGG
GTGGGGGTGCCAGAGGGTCCCGAGTGGGGGCCGTGCCTTTGCCCAGACCCTGCACTTTCAACCAGGCCAGTCCGG

FIGURE 2739B

CTCTGGGGAGCAGGGGCCTCCCCGGCAACAGCCCCAGGGGCCTTGAGGGTCTGAGGTCCCAGCCCTGTTGCCAAG
TGACCTTGTCCCCAGCTCCCTCCTCCCAGGCTGGTGTGAGTGTGCGTGCGTTTGTGCCGAGCTTCTATTTCATAT
TGCAAATATAAATAAAGGAAGGCAGTTTACG

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FIGURE 2740

GCGGCGCCCAGCAGAGTCAGGTGCGGACGACTTTGTCTGTAGGAGCAGCGGCGGCTTGAGGACCCGGGGAGACCC
TCAAGAATCGACCCATCAGGACGCCAGAGCTGCTTCAGCGGTGACCACCTTCTCCCTCTAACACATTCTTCCCTT
CTTCACAAACGGCCC**ATG**TCAGACGAAGGCTCAAGGGGGAGCCGCCTGCCCCTGGCGCTGCCCCCGGCCTCCCAG
GGTTGCTCTTCAGGGGGCGGCGGCGGCGGCGGCGGCGGCTCCTCGGCTGGGGGCTCGGGCAATTCCCGGCCCCCA
CGCAACCTCCAAGGCTTGCTGCAGATGGCCATCACCGCGGGCTCTGAAGAGCCAGACCCTCCTCCAGAACCGATG
AGTGAGGAGAGGCGTCAGTGGCTGCAGGAGGCCATGTCGGCTGCCTTCCGAGGCCAGCGGGAGGAGGTGGAGCAG
ATGAAGAGCTGCCTCCGAGTGCTGTCACAGCCCATGCCCCCCACTGCTGGGGAGGCCGAGCAGGCGGCCGACCAG
CAAGAGCGAGAGGGGGCCCTGGAGCTGCTGGCCGACCTGTGTGAGAACATGGACAATGCCGCAGACTTCTGCCAG
CTGTCTGGCATGCACCTGCTGGTGGGCCGGTACCTGGAGGCGGGGGCTGCGGGACTGCGGTGGCGGGCGGCACAG
CTCATCGGCACGTGCAGTCAGAACGTGGCAGCCATCCAGGAGCAGGTGCTGGGCCTGGGTGCCCTGCGTAAGCTG
CTGCGGCTGCTGGACCGCGACGCCTGCGACACGGTGCGCGTCAAGGCCCTCTTCGCCATCTCCTGTCTGGTCCGA
GAGCAGGAGGCTGGGCTGCTGCAGTTCCTCCGCCTGGACGGCTTCTCTGTGTTGATGAGGGCCATGCAGCAGCAG
GTGCAGAAGCTCAAGGTCAAATCAGCATTCCTGCTGCAGAACCTGCTGGTGGGCCACCCTGAACACAAAGGGACC
CTGTGCTCCATGGGGATGGTCCAGCAGCTGGTGGCCCTGGTGCGGACAGAGCACAGCCCCTTCCACGAGCACGTG
CTTGGAGCCCTGTGCAGCCTGGTGACAGACTTTCCGCAGGGTGTGCGCGAGTGTCGGGAGCCGGAACTGGGCCTG
GAGGAGCTCCTCCGCCACCGCTGTCAGCTGCTGCAGCAGCATGAGGAGTACCAGGAGGAGCTGGAGTTCTGTGAA
AAGCTGCTACAGACCTGTTTCTCCAGCCCAGCGGACGACAGCATGGATCGG**TGA**AACCAGGTGGCTTCTTGCCCC
CTTCTCCGTGGGAACCCCAGGCCTCTTGCCTCCCTCCCCACCTACAAGGCCCTCTCCCAAGGGATCGCAGGGCCT
AGGTGCCTGGACCCAGGGTGTGCCAGCCCGTCTCTGTGCAGTCCCTGGAAGGGGCGCTGAGAAAGGCACCAGCTC
CTTGGACCCCACCTCCCATGCTCTCACTCTCATCCCCGTTCTCTTGTCCACACAGCTCTTCCAATAAAGGTGTTT
CTCTTCCTCCTTCTC

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FIGURE 2741

GCTCACGCCTGTAATCCCAGCACTTTGGGAAGCTGAGGTGGGCAAATCACAAGGTCAGGAGTTTGAGACCAGCCT
GACCAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCAGGCATGGTGGCGGAAGGGTTAACTTT
GGGGAAGGGCCCGGAGTCCCCGGATGGTGATGTCAGCGTGCCGGAGAGAAAGGACGAGGTGGCGGGGGGAGGCGG
AGAGGAGGAGGAGGCGGAGGAGAGAGGGCGCCACGCCCAATATGTGGGCCCCTATCGGCTGGAGAAGACGCTGGG
CAAAGGACAGACAGGGCTGGTTAAACTCGGGGTCCACTGCATCACGGGTCAGAAGGTCGCCATCAAGATCGTGAA
CCGGGAGAAGCTGTCGGAGTCGGTGCTGATGAAGGTGGAGCGGGAGATCGCCATCCTGAAGCTCATCGAACACCC
ACATGTCCTCAAGCTCCACGACGTCTACGAGAACAAGAAATATTTGTACCTGGTTCTGGAGCACGTCTCGGGGGG
TGAGCTATTCGACTACCTGGTAAAGAAGGGGAGACTGACGCCCAAGGAGGCCCGAAAGTTCTTCCGCCAGATTGT
GTCTGCGCTGGACTTCTGCCACAGCTACTCCATCTGCCACAGAGACCTAAAGCCCGAGAACCTGCTTTTGGATGA
GAAAAACAACATCCGCATTGCAGACTTCGGCATGGCGTCCCTGCAGGTGGGGGACAGCCTCCTGGAGACCAGCTG
CGGGTCCCCCCATTATGCGTGTCCAGAGGTGATTAAGGGGGAAAAATATGATGGCCGCCGGGCAGACATGTGGAG
CTGTGGAGTCATCCTCTTCGCCCTGCTCGTGGGGGCTCTGCCCTTTGATGACGACAACCTCCGCCAGCTGCTGGA
GAAGGTGAAACGGGGCGTCTTCCACATGCCCCACTTCATTCCTCCAGATTGCCAGAGCCTCCTGAGGGGAATGAT
CGAAGTGGAGCCCGAAAAAAGGCTCAGTCTGGAGCAAATTCAGAAACATCCTTGGTACCTAGGCGGGAAACACGA
GCCAGACCCGTGCCTGGAGCCAGCCCCTGGCCGCCGGGTAGCCATGCGGAGCCTGCCATCCAACGGAGAGCTGGA
CCCCGACGTCCTAGAGAGCATGGCATCACTGGGCTGCTTCAGGGACCGCGAGAGGCTGCATCGCGAGCTGCGCAG
TGAGGAGGAGAACCAAGAAAAGATGATATATTATCTGCTTTTGGATCGGAAGGAGCGGTATCCCAGCTGTGAGGA
CCAGGACCTGCCTCCCCGGAATGATGTTGACCCCCCCCGGAAGCGTGTGGATTCTCCCATGCTGAGCCGTCACGG
GAAGCGGCGACCAGAGCGGAAGTCCATGGAAGTCCTGAGCATCACCGATGCCGGGGGTGGTGGCTCCCCTGTACC
CACCCGACGGGCCTTGGAGATGGCCCAGCACAGCCAGAGATCCCGTAGCGTCAGTGGAGCCTCCACGGGTCTGTC
CTCCAGCCCTCTAAGCAGCCCAAGGAGTCCGGTCTTTTCCTTTTCACCGGAGCCGGGGGCTGGAGATGAGGCTCG
AGGCGGGGGCTCCCCGACTTCCAAAACGCAGACGCTGCCTTCTCGGGGCCCCAGGGGTGGGGGCGCCGGGGAGCA
GCCCCCGCCCCCCAGTGCCCGCTCCACACCCCTGCCCGGCCCCCCAGGCTCCCCGCGCTCCTCTGGCGGGACCCC
CTTGCACTCGCCTCTGCACACGCCCCGGGCCAGTCCCACCGGGACCCCGGGGACAACACCACCCCCCAGCCCCGG
CGGTGGCGTCGGGGGAGCCGCCTGGAGGAGTCGTCTCAACTCCATCCGCAACAGCTTCCTGGGCTCCCCTCGCTT
TCACCGGCGCAAGATGCAGGTCCCTACCGCTGAGGAGATGTCCAGCTTGACGCCAGAGTCCTCCCCGGAGCTGGC
AAAACGCTCCTGGTTCGGGAACTTCATCTCCTTGGACAAAGAAGAACAAATATTCCTCGTGCTAAAGGACAAACC
TCTCAGCAGCATCAAAGCAGACATCGTCCATGCCTTTCTGTCGATCCCCAGCCTGAGTCACAGTGTGCTGTCACA
GACCAGCTTCAGGGCCGAGTACAAGGCCAGTGGCGGCCCCTCCGTCTTCCAAAAGCCCGTCCGCTTCCAGGTGGA
CATCAGCTCCTCTGAGGGTCCAGAGCCCTCCCCGCGACGGGACGGCAGCGGAGGTGGTGGCATCTACTCCGTCAC
CTTCACTCTCATCTCGGGTCCCAGCCGTCGGTTCAAGCGAGTGGTGGAGACCATCCAGGCACAGCTCCTGAGCAC
TCATGACCAGCCCTCCGTGCAGGCCCTGGCAGACGAGAAGAACGGGGCCCAGACCCGGCCTGCTGGTGCCCCACC
CCGAAGCCTGCAGCCCCCACCCGGCCGCCCAGACCCAGAGCTGAGCAGCTCTCCCCGCCGAGGCCCCCCCAAGGA
CAAGAAGCTCCTGGCCACCAACGGGACCCCTCTGCCCTGACCCCACGGGGCCGGGGAGGGAGGGGACCCCCCTCC
ACCCCCCTTCCGTGCCCCCCAACTGTGAATCTGTAAATAAGGCCCAAGGAACATGTCGGGAGGGGGGTGGACACA
AAAACCGGCCTTGCCCTGCAGGGATGGGGCTCCACAGGCCGTGCCCAACTGGGGGTGGTTCTAGGGGAACAGGGG
GCGGGGGAGCTGTTTCTATTTTATTTATTGATTAATTTATTATTTTATTTATTGATCAATCTCTCTGCGGGGTGG
GGTGGGGGAGGGACGGGAGCTGGTTGGGGTGGCTTAGCAGATCCGGACAGGGCCCTCTGTCCCTGTGTCGTCCCC
AACCCCCTCTTCCCGGGCCCCTCCTCCCCTGGTCCTCCCCCCACGACCTTCTGTACGGATTTGCTCTCCGGAAGG
AATTCTGGTTTCGCGTGATCCTGCCTGCGTCCGTGTCTCTGATTCCGCCGGCGGC

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FIGURE 2742

GCCGAAGGAGGCTGTGGGAGGTGTTGGCGGCGGCGGCGCGGGCGCCTGAGGAGGAGGAGGAGAAGCGGGATGAGA
TCGTGGGGCTCACCAGCGTCCCCCATGGCTTCTGAGTAGCGTGGGAGTGGAGTCAGCACCAAGCCAGGCTCCCCG
CGCCTGCCTTGCCCTCACCTGCTCCTGCTCTCTGCCAGAGGCAGCATGGTCCGCAGGGCACCATGGGGCCCGACA
GAGTGACAGCACGAGAACTGTGCGAGAACGACGACCTGGCCACCAGCCTCGTCCTGGACCCCTACCTCGGTTTCC
GCACCCATAAGATGAACGTCAGGTCTATCGCTACCTCCGTGCCTTCCTGCCGGAAAGTGGCTTTACCATCCTGCC
CTGCACGCGCTACTCC**ATG**GAGACCAACGGGGCCAAGATCGTGTCCACTCGTGCTTGGAAAAAGAATGAGAAGCT
GGAGCTGCTGGTGGGCTGCATTGCAGAGCTGCGGGAGGCAGATGAGGGGCTGCTGAGGGCCGGTGAGAATGACTT
CAGCATCATGTACTCAACCCGCAAGCGGAGTGCTCAGCTGTGGCTGGGCCCAGCCGCCTTCATCAACCATGACTG
CAAACCCAACTGCAAGTTTGTGCCTGCAGATGGGAACGCAGCCTGCGTGAAGGTGCTCCGGGACATTGAGCCTGG
GGACGAGGTGACATGCTTCTACGGCGAGGGCTTCTTCGGCGAGAAGAATGAGCACTGTGAATGCCACACCTGTGA
GAGGAAAGGTGAAGGAGCTTTCCGAACCAGGCCTAGGGAGCCCGCGTTGCCACCACGGCCCCTGGACAAGTACCA
GCTGCGTGAGACCAAGCGGCGGCTGCAGCAAGGCCTGGACAGTGGCAGCCGACAGGGCCTGCTGGGCCCTCGGGC
CTGCGTGCACCCATCCCCGCTGCGCCGGGACCCATTCTGCGCCGCCTGCCAGCCCCTGCGCCTGCCAGCCTGCAG
CGCCCGCCCAGACACCTCACCCCTCTGGCTCCAGTGGCTGCCTCAGCCCCAGCCCCGAGTGCGGCCCCGGAAGCG
CCGACGCCCCCGGCCCCGGAGGGCCCCAGTGCTCTCCACCCACCACGCTGCCCGCGTCTCCCTGCACCGATGGGG
AGGCTGTGGCCCCCACTGCCGCCTGCGAGGAGAGGCCCTGGTGGCCCTGGGCCAGCCCCCCCACGCCCGCTGGGC
CCCTCAGCAGGACTGGCACTGGGCCCGGCGCTATGGGCTGCCTTACGTGGTGCGTGTGGACCTTCGTCGCCTGGC
CCCAGCCCCACCAGCTACCCCAGCCCCTGCTGGGACCCCAGGCCCCATCCTGATCCCGAAGCAGGCCCTCGCCTT
CGCCCCCTTCTCCCCACCCAAGCGCCTACGGCTGGTGGTCAGCCACGGCTCCATCGACCTGGATGTCGGCGGTGA
AGAGCTG**TGA**CAGGCCGGACGGGGAGGCCCAGCAGGGAGAGAGGGTCTCTCTCCTAGCTGCTACCCAGGACCTCC
AGAAGGAGCCCTTGGACCTCTGGGAGGGAGCTGACCCTTGACTCCAGCATAGCTCTGACCCTGGAATGGGGTTGG
TTTGGACACCCCCAGGGATCTGAGCCCTGACCCTTTGTGACTGCTGACCCCTGAGCCACCCCCACTCCCACAGGG
AGCCCCGGCCATTTGCTGCCCTCCCCACCCCTGCCCCAGCCTCAGGACTGCAGGAGCCATCCGCCCCCCTCAGCC
CCTTCCTCCCCAGGGAGCAAAGCCATAAGGGGCAGGGGCCACCCCACGGCATCTCCCCAGAAGTACAGGCCTCAG
GAGGAGGTGGAACTGATGTAGGGGGTGGCACTCCCCAGAGACTGCCCTCACGAGGGGACTGGGTTCGCTCTCAGC
TCTGCAGCTGTCTGCGGTGGGGGGAAGGTTGGGGGGTGTCTGGAGGCATGTTCCCCTCACCACCCCCCGTGGGTC
TCAGGGAGGCCGGGTGTGACCTCATCTTTCTCATGGTGCTATCCTGGTGCTATTGGGGTGGGGAGCTCCCTCCCC
TCCCCCACACCAGAAAGGGGTATGTTGGGGGCTTGGAAGCACTTGAACTTTTTATTTTATTAAAACCTTGTTATA
AGCAGC

FIGURE 2743

GAAGGGTTAAAGGCCCCCGGCTCCCTGCCCCCTGCCCTGGGGAACCCCTGGCCCTGTGGGGACATGAACTGTGTT
TGCCGCCTGGTCCTGGTCGTGCTGAGCCTGTGGCCAGATACAGCTGTCGCCCCTGGGCCACCACCTGGCCCCCCT
CGAGTTTCCCCAGACCCTCGGGCCGAGCTGGACAGCACCGTGCTCCTGACCCGCTCTCTCCTGGCGGACACGCGG
CAGCTGGCTGCACAGCTGAGGGACAAATTCCCAGCTGACGGGGACCACAACCTGGATTCCCTGCCCACCCTGGCC
ATGAGTGCGGGGGCACTGGGAGCTCTACAGCTCCCAGGTGTGCTGACAAGGCTGCGAGCGGACCTACTGTCCTAC
CTGCGGCACGTGCAGTGGCTGCGCCGGGCAGGTGGCTCTTCCCTGAAGACCCTGGAGCCCGAGCTGGGCACCCTG
CAGGCCCGACTGGACCGGCTGCTGCGCCGGCTGCAGCTCCTGATGTCCCGCCTGGCCCTGCCCCAGCCACCCCCG
GACCCGCCGGCGCCCCCGCTGGCGCCCCCCTCCTCAGCCTGGGGGGGCATCAGGGCCGCCCACGCCATCCTGGGG
GGGCTGCACCTGACACTTGACTGGGCCGTGAGGGGACTGCTGCTGCTGAAGACTCGGCTGTGACCCGGGGCCCAA
AGCCACCACCGTCCTTCCAAAGCCAGATCTTATTTATTTATTTATTTCAGTACTGGGGGCGAAACAGCCAGGTGA
TCCCCCCGCCATTATCTCCCCCTAGTTAGAGACAGTCCTTCCGTGAGGCCTGGGGGGCATCTGTGCCTTATTTAT
ACTTATTTATTTCAGGAGCAGGGGTGGGAGGCAGGTGGACTCCTGGGTCCCCGAGGAGGAGGGGACTGGGGTCCC
GGATTCTTGGGTCTCCAAGAAGTCTGTCCACAGACTTCTGCCCTGGCTCTTCCCCATCTAGGCCTGGGCAGGAAC
ATATATTATTTATTTAAGCAATTACTTTTCATGTTGGGGTGGGGACGGAGGGGAAAGGGAAGCCTGGGTTTTTGT
ACAAAAATGTGAGAAACCTTTGTGAGACAGAGAACAGGGAATTAAATGTGTCATACATATCCACTTGAGGGCGAT
TTGTCTGAGAGCTGGGGCTGGATGCTTGGGTAACTGGGGCAGGGCAGGTGGAGGGGAGACCTCCATTCAGGTGGA
GGTCCCGAGTGGGCGGGGCAGCGACTGGGAGATGGGTCGGTCACCCAGACAGCTCTGTGGAGGCAGGGTCTGAGC
CTTGCCTGGGGCCCCGCACTGCATAGGGCCTTTTGTTTGTTTTTTGAGATGGAGTCTCGCTCTGTTGCCTAGGCT
GGAGTGCAGTGAGGCAATCTGAGGTCACTGCAACCTCCACCTCCCGGGTTCAAGCAATTCTCCTGCCTCAGCCTC
CCGATTAGCTGGGATCACAGGTGTGCACCACCATGCCCAGCTAATTATTTATTTCTTTTGTATTTTTAGTAGAGA
CAGGGTTTCACCATGTTGGCCAGGCTGGTTTCGAACTCCTGACCTCAGGTGATCCTCCTGCCTCGGCCTCCCAAA
GTGCTGGGATTACAGGTGTGAGCCACCACACCTGACCCATAGGTCTTCAATAAATATTTAATGGAAGGTTCCACA
AGTCACCCTGTGATCAACAGTACCCGTATGGGACAAAGCTGCAAGGTCAAGATGGTTCATTATGGCTGTGTTCAC
CATAGCAAACTGGAAACAATCTAGATATCCAACAGTGAGGGTTAAGCAACATGGTGCATCTGTGGATAGAACGCC
ACCCAGCCGCCCGGAGCAGGGACTGTCATTCAGGGAGGCTAAGGAGAGAGGCTTGCTTGGGATATAGAAAGATAT
CCTGACATTGGCCAGGCATGGTGGCTCACGCCTGTAATCCTGGCACTTTGGGAGGACGAAGCGAGTGGATCACTG
AAGTCCAAGAGTTCGAGACCGGCCTGCGAGACATGGCAAAACCCTGTCTCAAAAAAGAAAGAATGATGTCCTGAC
ATGAAACAGCAGGCTACAAAACCACTGCATGCTGTGATCCCAATTTTGTGTTTTTCTTTCTATATATGGATTAAA
ACAAAAATCCTAAAGGGAAATACGCCAAAATGTTGACAATGACTGTCTCCAGGTCAAAGGAGAGAGGTGGGATTG
TGGGTGACTTTTAATGTGTATGATTGTCTGTATTTTACAGAATTTCTGCCATGACTGTGTATTTTGCATGACACA
TTTTAAAAATAATAAACACTATTTTTAGAAT

FIGURE 2744

CTCTTTCCGTCTCAGGTCGCCGCTGCGAAGGGAGCCGCCGCC**ATG**TCTGCGCATCTGCAATGGATGGTCGTGCGG
AACTGCTCCAGTTTCCTGATCAAGAGGAATAAGCAGACCTACAGCACTGAGCCCAATAACTTGAAGGCCCGCAAT
TCCTTCCGCTACAACGGACTGATTCACCGCAAGACTGTGGGCGTGGAGCCGGCAGCCGACGGCAAAGGTGTCGTG
GTGGTCATTAAGCGGAGATCCGGCCAGCGGAAGCCTGCCACCTCCTATGTGCGGACCACCATCAACAAGAATGCT
CGCGCCACGCTCAGCAGCATCAGACACATGATCCGCAAGAACAAGTACCGCCCCGACCTGCGCATGGCAGCCATC
CGCAGGGCCAGCGCCATCCTGCGCAGCCAGAAGCCTGTGATGGTGAAGAGGAAGCGGACCCGCCCCACCAAGAGC
TCC**TGA**GCCCCCTGCCCCCAGAGCAATAAAGTCAGCTGGCTTTCTCA

FIGURE 2745

GGCGGACCGAAGAACGCAGGAAGGGGGCCGGGGGGACCCGCCCCCGGCCGGCCGCAGCCATGAACTCCAACGTGG
AGAACCTACCCCCGCACATCATCCGCCTGGTGTACAAGGAGGTGACGACACTGACCGCAGACCCACCCGATGGCA
TCAAGGTCTTTCCCAACGAGGAGGACCTCACCGACCTCCAGGTCACCATCGAGGGCCCTGAGGGGACCCCATATG
CTGGAGGTCTGTTCCGCATGAAACTCCTGCTGGGGAAGGACTTCCCTGCCTCCCCACCCAAGGGCTACTTCCTGA
CCAAGATCTTCCACCCGAACGTGGGCGCCAATGGCGAGATCTGCGTCAACGTGCTCAAGAGGGACTGGACGGCTG
AGCTGGGCATCCGACACGTACTGCTGACCATCAAGTGCCTGCTGATCCACCCTAACCCCGAGTCTGCACTCAACG
AGGAGGCGGGCCGCCTGCTCTTGGAGAACTACGAGGAGTATGCGGCTCGGGCCCGTCTGCTCACAGAGATCCACG
GGGGCGCCGGCGGGCCCAGCGGCAGGGCCGAAGCCGGTCGGGCCCTGGCCAGTGGCACTGAAGCTTCCTCCACCG
ACCCTGGGGCCCCAGGGGGCCCGGGAGGGGCTGAGGGTCCCATGGCCAAGAAGCATGCTGGCGAGCGCGATAAGA
AGCTGGCGGCCAAGAAAAAGACGGACAAGAAGCGGGCGCTGCGGCGGCTGTAGTGGGCTCTCTTCCTCCTTCCAC
CGTGACCCCAACCTCTCCTGTCCCCTCCCTCCAACTCTGTCTCTAAGTTATTTAAATTATGGCTGGGGTCGGGGA
GGGTACAGGGGGCACTGGGACCTGGATTTGTTTTTCTAAATAAAGTTGGAAAAGCA

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FIGURE 2746

AATTCTTTCATTTCAGAGTTGAGCAAACTGTGTCTCAAGGAGGTGTGCGCTGCAGGTAGCTGATGTGGCCAGGAT
TTGAACCCACATTTTATATTCTTTGCCATTAGATTCCATTTTTCTTATCTCTTATTTCTCAGCGCCAGGTCTCTT
TTTGTTTCTGGGCCTCTTTCTTCCTTGGCCTCCTGCCTCCCTGTCTTCCCATGTTCTTGTATCTGCTGCTGCCTG
TGTTTTTCTCATTGTGTCTCTGCCTAGCTCCCTCTGCCCAGGTTTCTATGTGTCTCTTTCTGTCAGAACTGTCTT
CTATTTCTTCTCAGTCCCCTTCTCTGCATTTGTTACATCATCTCTTCATCTTAATGTATTAGGCTGGGGCTGTTT
TGGGACTCCAGAGAGTTACTTTTTAACTAGCTACATCTGTCTTCAGGTGCCTGGCTTTCTGGCCTGAGGTGGAAG
CAGAGGCCAGCCTCTCTCCGTCATCCCTATCTCCCCTGGGCTTACATCATGGCGGGGCTTTGAAAATCTCCCTCT
GTGGCTTCTTGGAGCCGCATAG**ATG**GGTGATCAGAGCTGGCTCTGGAACCAGGCTGCTCCAGGAGTAAGGAGCCC
AGTCTTTGCATGCAGTGTTGAAAAAGGTAATGTCCCTCTTGTGCTGAGCGAGCACCTGGCACACAGCAGGGACCC
AGGCAGTGGGGCTGTTAGGTTCCTTATCTCTCCTGAGCCTTGGGCTTCCGCTATCCTTGGGACGTCTGGTCTTCT
GGCTTCCCCGGTTCTTCCTGCCGCCCTGGATGCGGTGACCTGCCAGCACCTGCCGCAGCCTTCGTCCGGGAGTCG
CCCCATCTCTCCACGCATCGGGGCCCTGTGCCCCTTGCTGCTGCAGCCGGGCACCATGTCGACCTCGTCCTTGAG
GCGCCAGATGAAGAACATCGTCCACAACTACTCAGAGGCGGAGATCAAGGTTCGAGAGGCCACGAGCAATGACCC
CTGGGGCCCATCCAGCTCCCTCATGTCAGAGATTGCCGACCTCACCTACAACGTTGTCGCCTTCTCGGAGATCAT
GAGCATGATCTGGAAGCGGCTCAATGACCATGGCAAGAACTGGCGTCACGTTTACAAGGCCATGACGCTGATGGA
GTACCTCATCAAGACCGGCTCGGAGCGCGTGTCGCAGCAGTGCAAGGAGAACATGTACGCCGTGCAGACGCTGAA
GGACTTCCAGTACGTGGACCGCGACGGCAAGGACCAGGGCGTGAACGTGCGTGAGAAAGCTAAGCAGCTGGTGGC
CCTGCTGCGCGACGAGGACCGGCTGCGGGAAGAGCGGGCGCACGCGCTCAAGACCAAGGAAAAGCTGGCACAGAC
CGCCACGGCCTCATCAGCAGCTGTGGGCTCAGGCCCCCCTCCCGAGGCGGAGCAGGCGTGGCCGCAGAGCAGCGG
GGAGGAGGAGCTGCAGCTCCAGCTGGCCCTGGCCATGAGCAAGGAGGAGGCCGACCAGCCCCCGTCCTGCGGCCC
CGAGGACGACGCCCAGCTCCAGCTGGCCCTTAGTTTGAGCCGAGAAGAGCATGATAAGGAGGAGCGGATCCGTCG
CGGGGATGACCTGCGGCTGCAGATGGCAATCGAGGAGAGCAAGAGGGAGACTGGGGGCAAGGAGGAGTCGTCCCT
CATGGACCTTGCTGACGTCTTCACGGCCCCAGCTCCTGCCCCGACCACAGACCCCTGGGGGGGCCCAGCACCCAT
GGCTGCTGCCGTCCCCACGGCTGCCCCCACCTCGGACCCCTGGGGCGGCCCCCCTGTCCCTCCAGCTGCTGATCC
CTGGGGAGGTCCAGCCCCCACGCCGGCCTCTGGGGACCCCTGGAGGCCTGCTGCCCCTGCAGGACCCTCAGTTGA
CCCTTGGGGTGGGACCCCAGCCCCTGCAGCTGGGGAGGGGCCCACGCCTGATCCATGGGGAAGTTCCGATGGTGG
GGTCCCGGTCAGTGGGCCCTCAGCCTCCGATCCCTGGACACCGGCCCCGGCCTTCTCAGATCCCTGGGGAGGGTC
ACCTGCCAAGCCCAGCACCAATGGCACAACAGCAGCCGGGGGATTCGACACGGAGCCCGACGAGTTCTCTGACTT
TGACCGACTCCGCACGGCACTGCCGACCTCCGGGAGCAGCGCAGGAGAGCTGGAGCTGCTGGCAGGAGAGGTGCC
GGCCCGAAGCCCTGGGGCGTTTGACATGAGTGGGGTCAGGGGATCTCTGGCTGAGGCTGTGGGCAGCCCCCCACC
TGCAGCCACACCAACTCCCACGCCCCCCACCCGGAAGACGCCGGAGTCATTCCTGGGGCCCAATGCAGCCCTCGT
CGACCTGGACTCGCTGGTGAGCCGGCCGGGCCCCACGCCGCCTGGAGCCAAGGCCTCCAACCCCTTCCTGCCAGG
CGGAGGCCCAGCCACTGGCCCTTCCGTCACCAACCCCTTCCAGCCCGCGCCTCCCGCGACGCTCACCCTGAACCA
GCTCCGTCTCAGTCCTGTGCCTCCCGTCCCTGGAGCGCCACCCACGTACATCTCTCCCCTTGGCGGGGGCCCTGG
CCTGCCCCCCATGATGCCCCCGGGCCCCCCGGCCCCCAACACTAATCCCTTCCTCCTA**TAA**TCCAGGGCGGAAGG
GGGCCTGGCTCCATCCGGCTGCCCCATTCCGGCTCCCTGGGAGATCAGTGTTGTGAGTGCATGTGAAATGG

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FIGURE 2747

GAGGCGAAAGCTGCACAGGGCCCTACGCGGCCGCCTCAGC**ATG**TCGGACTTCGACGAGTTCGAGCGGCAGCTCAA
CGAGAATAAACAAGAGCGGGACAAGGAGAACCGGCATCGGAAGCGCAGCCACAGCCGCTCTCGGAGCCGGGACCG
CAAACGCCGGAGCCGGAGCCGCGACCGGCGCAACCGGGACCAGCGGAGCGCCTCCCGGGACAGGCGACGACGCAG
CAAACCTTTGACCAGAGGCGCTAAAGAGGAGCACGGTGGACTGATTCGTTCCCCCCGCCACGAGAAGAAGAAGAA
GGTCCGTAAATACTGGGACGTGCCACCCCCAGGCTTTGAGCACATCACCCCAATGCAGTACAAGGCCATGCAAGC
TGCGGGTCAGATTCCAGCCACTGCTCTTCTCCCCACCATGACCCCTGACGGTCTGGCTGTGACCCCAACGCCGGT
GCCCGTGGTCGGGAGCCAGATGACCAGACAAGCCCGGCGCCTCTACGTGGGCAACATCCCCTTTGGCATCACTGA
GGAGGCCATGATGGATTTCTTCAACGCCCAGATGCGCCTGGGGGGGCTGACCCAGGCCCCTGGCAACCCAGTGTT
GGCTGTGCAGATTAACCAGGACAAGAATTTTGCCTTTTTGGAGTTCCGCTCAGTGGACGAGACTACCCAGGCTAT
GGCCTTTGATGGCATCATCTTCCAGGGCCAGTCACTAAAGATCCGCAGGCCTCACGACTACCAGCCGCTTCCTGG
CATGTCAGAGAACCCCTCCGTCTATGTGCCTGGGGTTGTGTCCACTGTGGTCCCCGACTCTGCCCACAAGCTGTT
CATCGGGGGCTTACCCAACTACCTGAACGATGACCAGGTCAAAGAGCTGCTGACATCCTTTGGGCCCCTCAAGGC
CTTCAACCTGGTCAAGGACAGTGCCACGGGGCTCTCCAAGGGCTACGCCTTCTGTGAGTACGTGGACATCAACGT
CACGGATCAGGCCATTGCGGGGCTGAACGGCATGCAGCTGGGGGATAAGAAGCTGCTGGTCCAGAGGGCGAGTGT
GGGAGCCAAGAATGCCACGCTGGTGAGCCCCCCGAGCACCATCAATCAGACGCCTGTGACCCTGCAAGTGCCGGG
CTTGATGAGCTCCCAGGTGCAGATGGGCGGCCACCCGACTGAGGTCCTGTGCCTCATGAACATGGTGCTGCCTGA
GGAGCTGCTGGACGACGAGGAGTATGAGGAGATCGTGGAGGACGTGCGGGACGAGTGCAGCAAGTACGGGCTTGT
CAAGTCCATCGAGATCCCCCGGCCTGTGGACGGCGTCGAGGTGCCCGGCTGCGGAAAGATCTTTGTGGAGTTCAC
CTCTGTGTTTGACTGCCAGAAAGCCATGCAGGGCCTGACGGGCCGCAAGTTCGCCAACAGAGTGGTTGTCACAAA
ATACTGTGACCCCGACTCTTATCACCGCCGGGACTTCTGG**TAG**AGGCGGCTGGGGGAGGGTGGGGGCAGGGCTGG
CTGGGGGCTTCTCCCCACTCCCGCCCCCCCCTTATCCCCCTCTGAAGACGATGGGCAGAGGAGTGACAGCCGCAG
ACACACGACAGCCGGCAGCAACTGGAATGGCAGCAATTAAGGGTGGGGGGCGGGGGTTGGGGGGTTGGGGGGTTA
GGGCAGGGAGGGGACTGGGGAAGTGCGCACACAGCCCACACAGACAACACGCAC

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FIGURE 2748

GGGCGGCGGGAGGGGCTGGACCGCGTGGAGGGCCTCAGCCAGCCCTCCGGATGCTGGTGCTGCCATCCCCCTGCC
CTCAGCCTCTGGCATTTTCCTCCGTTGAGACCATGGAGGGCCCTCCCCGTCGGACTTGCCGCTCCCCAGAACCTG
GACCTTCCTCCTCCATCGGATCTCCCCAGGCTTCATCTCCTCCAAGGCCCAACCACTACCTGCTTATTGACACTC
AGGGTGTCCCCTACACAGTGCTGGTGGACGAGGAGTCACAGAGGGAGCCAGGGGCCAGTGGGGCTCCAGGCCAGA
AAAAGTGCTACAGCTGCCCCGTGTGCTCAAGGGTCTTCGAGTACATGTCCTACCTTCAGCGACACAGCATCACCC
ACTCGGAGGTAAAGCCCTTCGAGTGTGACATCTGTGGGAAGGCATTCAAGCGCGCCAGCCACTTGGCACGGCACC
ATTCCATTCACCTGGCGGGTGGTGGGCGGCCCCACGGCTGCCCGCTCTGCCCTCGCCGCTTCCGGGATGCGGGTG
AGCTGGCCCAGCACAGCCGGGTGCACTCTGGGGAACGCCCGTTTCAGTGTCCACACTGCCCTCGCCGCTTTATGG
AGCAGAACACACTGCAGAAACACACGCGGTGGAAGCATCCATGAGCCGGGCTGCCGGGTGCCCCAGGTACCACAG
GACTTTGCAGGGAGCCTGGACTCCTGTCCAGA

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FIGURE 2749

GCGCCGGCCCCGTTGCCCCCGCGCGCGCGCACACTCGCGAGCCCCGGCGACATGCAAATGAGCTGGCTCCAGTGC
CCAGACCCAAGCCCCCCACTGCTCAATGGACACCCCCAGCCCAGACCCGTTGCCTTCGCCTTTGCCCGGGGAGGA
AGAGAAACCTCTGGCCTTATCTCCTCCTGTTCCCCGGGGCCGCCGAGGCCGTCGTCCTGGGGGAGCCACCTCCTC
AAATCGGACACTCAAGGCCTCCCTCCCTCGCAAGCGGGGCCGCCCCCCCCAAGTCAGGGCAGGAGCCCCCACTGGT
GCAGGTGCAGGGGGTGACAGCCCCAGTAGGCAGCAGTGGCGGGAGCGACCTCCTCCTGATCGATGATCAGGGTGT
GCCCTATACGGTCTCTGAAGGTTCAGCGGCTGGGCCTGAGGGCTCTGGCCCCAGGAAGGCCCCACACTTCTGCCC
GGTGTGCCTGCGGGCCTTCCCCTACCTCTCCGACCTGGAGCGCCACAGCATCTCGCACTCAGAGCTGAAGCCGCA
CCAGTGCAAGGTTTGCGGCAAGACCTTCAAGCGCTCCAGCCACCTGCGGCGGCACTGCAACATCCATGCCGGCCT
GCGGCCCTTCCGCTGCCCGCTGTGCCCCCGCCGCTTCCGCGAGGCGGGCGAGCTGGCGCACCACCACCGCGTGCA
CTCGGGGGAGCGCCCGTACCAGTGCCCCATCTGCCGGCTGCGCTTTACAGAGGCCAACACGCTCCGGCGCCATGC
GAAGCGCAAGCACCCGGAGGCCATGGGGGTACCCCTGTGTGCACCAGATCCAGGGTCTGAACCGCCGTGGGACGA
GGAGGGCATCCCGGC

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FIGURE 2750

GTGGAAGTGACGCTGCCCCCGCTGCCCAAAATGTCGGCGCCCAGAGGGAGGTAGAGAGCCCCCACATACCACTGT
ATTCCCCGCCACCATGGATGACGTCCCCGCCCCAACCCCTGCACCAGCACCGCCCGCCGCTGCCGCCCCCAGGGT
CCCGTTTCACTGCAGTGAATGTGGCAAGAGCTTCCGCTACCGCTCAGACCTGCGGCGCCACTTTGCCCGGCACAC
AGCGCTCAAGCCCCACGCATGTCCGCGCTGCGGCAAGGGTTTCAAGCACAGCTTCAACCTAGCCAACCACCTGCG
CTCGCACACCGGGGAGCGGCCCTACCGCTGCTCTGCCTGCCCCAAGGGGTTCCGCGACTCCACCGGCCTGCTGCA
CCACCAGGTCGTCCACACTGGTGAGAAACCCTACTGCTGCCTGGTCTGCGAGCTCCGCTTCTCCTCACGCTCCAG
CCTGGGCCGCCACCTCAAGCGCCAGCACCGTGGGGTTCTCCCCTCTCCCCTGCAGCCCGGCCCTGGCCTGCCCGC
CTTGAGTGCGCCCTGCTCCGTCTGCTGCAATGTGGGGCCCTGCTCGGTGTGCGGGGGCTCAGGGGCCGGCGGCGG
AGAGGGCCCCGAGGGGGCAGGCGCGGGTCTGGGCAGCTGGGGGCTGGCAGAGGCGGCAGCTGCGGCCGCGGCCTC
CTTGCCCCCATTTGCGTGCGGCGCCTGCGCGCGGCGCTTCGACCACGGCCGCGAGCTGGCGGCCCACTGGGCGGC
GCACACCGACGTGAAGCCCTTCAAGTGCCCGCGCTGCGAGCGCGACTTCAACGCGCCCGCGCTGCTGGAGCGGCA
CAAGCTGACGCACGACCTGCAGGGCCCGGGCGCGCCCCCAGCGCAGGCCTGGGCCGCGGGGCCAGGCGCAGGGCC
CGAGACGGCGGGCGAAGGCACCGCTGCGGAGGCGGGCGACGCTCCTCTGGCTTCGGACCGCAGGCTGCTCCTGGG
CCCCGCGGGGGGCGGCGTGCCCAAGCTCGGGGGGCTGCTCCCCGAGGGCGGTGGGGAGGCGCCTGCACCTGCGGC
GGCCGCCGAGCCCTCGGAAGACACCCTGTACCAGTGCGACTGCGGGACCTTCTTTGCGTCGGCCGCGGCCCTGGC
CAGTCACCTGGAGGCCCACTCGGGCCCGGCCACCTACGGCTGCGGCCACTGCGGGGCTCTGTACGCGGCGCTGGC
CGCCTTGGAGGAGCACCGGCGGGTCAGCCACGGTGAGGGCGGCGGGGAGGAGGCGGCGACCGCCGCCCGGGAAAG
GGAACCGGCGTCCGGGGAACCCCCGTCTGGCTCCGGCCGCGGCAAGAAGATCTTCGGCTGCTCCGAGTGCGAGAA
GCTGTTCCGCTCACCGCGAGACCTGGAGCGGCACGTGCTGGTGCACACTGGCGAGAAGCCGTTCCCGTGCCTGGA
GTGCGGCAAGTTCTTCCGCCACGAGTGCTACCTCAAGCGCCACCGGCTGCTGCACGGCACCGAGCGGCCCTTCCC
TTGCCACATCTGCGGCAAGGGCTTCATCACGCTCAGCAACCTCTCCAGGCACCTGAAGCTGCACCGGGGCATGGA
CTGACTGCCAGGCTGCGTGCGCCCTGCCCTCCACCCAGCCTCCTGGACTCGGCCTGGACCAGGGGACCTCGGGAC
TGCGCGTGAGGCCCCGGCCCTCCAAATCCAAATCCAGACGCAGGCCCTGAAATGAGGGGACCCTGACTGGAGAGG
TGGGGGCCACCAAAAACCCACAAAGGCCCCGGAGCTGGGGGACCACAAACAAACAGGGTCCTTAGCTGGGGCAGG
GGAGCCCAAATCTAGGGAGAGACTCCTGAGCCTGAGGTCCCTGGAATGAGTGTGGGTAGCCGTAAGTCCCCAAGA
CATGGGGACTTTGCAGTGAGCAATGGGTCTCCACAAGTACCTCTCATCTTGAGAGCCCTAATACTAAAAGATGGG
CACCCACCCCCACCAAGGGAAGACTGCCCCATTCCCTGAGAGCCATCATTCCTAACGACCTTGATCTGGAGAATG
TGGAGGGAGCATGTCCCTGAATTTTCCTAGATCCCTCCAAATGCCACCCACCAGAGTCACTGGTGACCCCAGAAA
ATGGATATAGCCGAAATCTGCCTTTCCCCTTTTTCATTCCCTGTGCTGAAAGAGGGACCAGGGTAGATGCCCCCT
GCCCTCGAATCCCCCCTCCCCGACTGTGGAATGGATCGACCCTAACGATCTTCCCCGCCCCAAACACTAGAATAG
ACTGGCCTGAAATCCCCTTGCCCAGTAGAATGGACTGATCTATGTGCACACACCCCCATCACATGGAATGGGCTG
GTCTAGGCTGTGGCCTGCCACCTTCCTTAGAGTGAATAGGGCGGACACTCCTCTCTTTTCCTGTAGCGTGTGGAC
CGGTCCACGCAATTCTTTATCCTGTGAACTCATCTGAGTGGGAGGTGGTGGACACTGGGGTTTCCTTCCCTCTCT
CCGTAGCATCCGTTGGTCTTTCTCTCCATCTCTGTTGGTTTGTCTGTCTCTGTCTTCCTCCCAATCCCTAGGGGA
AGGGGGCATTTGGCTAGGGGGTGCCCCTGTGAGCCTCGACCTTGCCCCCTCGTCCCTCTCCCCAGTGTTTCCAGG
ACCCCCAATAAACCTTGTCCTGTC

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FIGURE 2751

CCTTGTCGAAGGACCAAAGGCGACCGGTGCAGGTGCACGACGCCAGCTCCCTTCTGGGGGGCCGGGGCCTGGGGG
TTGCCATGGCCCCCAGCCACCTGTCAGTGCGGGAGATGAGGGAAGATGAGAAGCCCCTGGTGCTGGAGATGCTGA
AGGCCGGCGTGAAGGACACGGAAAACCGCGTGGCCCTCCATGCCTTGACACGGCCGCCGGCCCTGCTCCTCCTGG
CGGCGGCCAGCAGCGGCCTGCGCTTTGTCCTGGCTTCCTTCGCCCTGGCCCTCCTCCTGCCGGTGTTCCTGGCTG
TGGCCGCCGTGAAGCTGGGCCTGCGGGCCCGATGGGGCTCGCTGCCTCCGCCGGGTGGCCTGGGGGGCCCCTGGG
TGGCCGTGCGGGGCTCCGGTGACGTGTGTGGGGTCCTGGCTCTGGCCCCTGGCACAAATGCAGGGGACGGGGCCC
GGGTCACCCGCCTGTCTGTCTCTCGCTGGCACCGCCGCCGGGGCGTGGGCAGGAGGCTGCTGGCCTTCGCGGAGG
CCCGGGCTCGGGCCTGGGCTGGGGGCATGGGGGAGCCCCGGGCCCGGCTCGTGGTCCCCGTGGCTGTGGCCGCCT
GGGGGGTGGGAGGGATGCTGGAGGGCTGTGGCTACCAGGCCGAGGGGGGCTGGGGCTGCCTGGGCTACACGCTGG
TGAGGGAATTCAGCAAAGACCTGTGAAGCTACAGACTGACAGCCAGGGCAGGGGAGGAGGGAGGGGCGCCAGCAC
CTGATGATCGCCTACTGTCTGCGGGTTCTTTTACCTGCTCTCCCTCAGTGAGTCCTCAACCACCCTGGGCCCAGA
AACAGAGGCCTGCCGAGGGGAGGAGCCTGGCCTCTGTCCACCCGTCAGCAGTGTGAAGTCTGTTGTGTTTGAGCT
TCTCAGAGTGGAATGACTCCTTTTCCTTCCTGGCCCTCGGGGGCCTCTCGAGGTCAGCCTCTCCAACCCCTACCT
CAGCTCCTGTCTGCACTGAGAAACCTCCCCGGGTGATGTCTGCAAAGTCTGTGCTGTCCGTGCCCCAGGCTGGGA
GAGCTATCTGGGGAGGGGGAGAGGAGGCCGAGCAGAATACACCCCAGAGTTAGGGTTTGCGACTCCGCCTCCCTG
GGACCTGGATTGGGTCAGATGCCTGTCCTTGGAGGGGACAAGGTTGACTGCTTAGGAGGCGCGACGCACAGGGCT
GCCAGGCCTGGCCCCTCTCTGGGAAGGTTGAGAGCTGAGACGGGCAGCCCTGTCCCTTCCTCCAGATCCGTCTGG
TTTTTTACACCGTTTGTTAATAAAGCCTGAAACCGC

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FIGURE 2752

ACCAGCGCGTGCACACGGGCGAGCGGCCCTTCCGCTGCCCGCTCTGCCCCAAGACCTTCACCCACTCCTCCAACC
TGCTGCTGCGCGGGCCCCGCCAGCCACCCAAGATGTCCACGTCCTGCCCCACCTCCAGGCCACGCTCTCCCTCGA
GGTGGCGGGGGGCACGGCCCAGGCCCCGAGCTTGGGGCCAGCAGCGCCCAACTCTCAGACGTTCCTCCTGGTGCA
AACTGCCCAGGGCCTCCAGCTGATCCCCAGCAGCGTGCAGCCCCCTACACCTCCGCCCCCTCCCGCACCTCCCAA
GCTCATCCTGCTGCCCTCCTCCAGTGCTGGGGCTGGGGGCGGCCGTGCAAGGCAGGGCCCGCGGGCAGTGGGGAA
AGCGGGCCAGGGGGCGGGAGTGGTCTGGCTGCCAGGCCCTGGGGGTCTAGGGGTGCAGGGAGCGGCCAGCGCTGG
GGCCAGCGGGACAGGGCAGAGCCTCATCGTTCTGCAGAATGTGGGGGGTGGGGAGGCAGGGCCACAGGAAATGAG
TGGGGTGCAGCTCCAGCCCCTCCGACCAGCCCCAGAAGTAACCACGGTCCAGCTCCAGCCAGCGCAGGAGGTGAC
CACAGTCCAGCTCCAGCCAGCACAGGAAGTAACCACGGTCCAGCTCCAGCCAGCACAGGAGGTGACCACGGTCCA
GCTCCAGCCCGTGGCCGGCCAGCTCTCCAATTCCAGTGGGGGAGCTGTGGCTACTGAGGCACCCAACCTGCTGGT
TGTTCAGAGCGGGGCAGCTGAGGAGTTGCTCACTGGCCCGGGCCCCGGGGAGGCGGGGGATGGCGAGGCCAGCAC
TGGTGTGGTCCAGGATGTCCTCTTTGAGACACTCCAGACGGACGAGGGCTTGCAGAGCGTGCTGGTGCTGAGCGG
GGCCGATGGCGAACAGACTCGACTCTGCGTACAGGAGGTAGAAACACTTCCTCCTGGGCTGACGGAGCCGCCTGC
CACCGGCCCACCCGGACAGAAACTCCTCATCATCCGCAGCGCCCCAGCCACTGAGCTGCTGGACAGCAGCAACAC
TGGAGGAGGCACCGCCACGCTGCAGCTCCTGGCCCCACCGCCGTCAGGCCCAGCCTCGGGCCCCGCGGGGCTCCC
CGGGGCTCCAGCCTCCCAGATGGTGCAAGTGGTCCCCGCAGGAGCTGGGCCTGGTGTTATGACCCCTCAGGGCCT
GCCCTCCATCCAGATTGTCCAGACTCTACCCGCAGTCCAGCTGGTGCACACGTTTTGAGGAGAGGCAGTGATTCC
CCTCCCGCCCCGCACAGAGACCCCGACTCACTGCCAGCCGGGGCGGGGCAGGGTGCCGCAGGCTGGGCTTGCTAA
TAAAGACCCGAGTCTCCCCGCC

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FIGURE 2753

CCTAACGAAACGGTAACCAGCCCTGGGAAGCCCGCAAGAGGCCTCAGCGGTGGCCGTCCGAGAGCCGAGAGGTGA
GGGTGCCCCCGCCTCACCTGCAGAGGGGCCGTTCCGGGCTCGAACCCGGCACCTTCCGGAAA**ATG**GCGGCTGCCA
GGCCCAGCCTGGGCCGAGTCCTCCCAGGATCCTCTGTCCTGTTCCTGTGTGACATGCAGGAGAAGTTCCGCCACA
ACATCGCCTACTTCCCACAGATCGTCTCAGTGGCTGCCCGCATGCTCAAGGTGGCCCGGCTGCTTGAGGTGCCAG
TCATGCTGACGGAGCAGTACCCACAAGGCCTGGGCCCCACGGTGCCCGAGCTGGGGACTGAGGGCCTTCGGCCGC
TGGCCAAGACCTGCTTCAGCATGGTGCCTGCCCTGCAGCAGGAGCTGGACAGTCGGCCCCAGCTGCGCTCTGTGC
TGCTCTGTGGCATTGAGGCACAGGCCTGCATCTTGGACCCCCGTTCTTATCCGGGGTTGGCCCTGACCTCTCTCT
ACCCACAGAACACGACCCTGGACCTCCTAGACCGGGGGCTGCAGGTCCATGTGGTGGTGGACGCCTGCTCCTCAC
GCAGCCAGGTGGACCGGCTGGTGGCTCTGGCCCGCATGAGACAGAGTGGTGCCTTCCTCTCCACCAGCGAAGGGC
TCATTCTGCAGCTTGTGGGCGATGCCGTCCACCCCCAGTTCAAGGAGATCCAGAAACTCATCAAGGAGCCCGCCC
CAGACAGCGGACTGCTGGGCCTCTTCCAAGGCCAGAACTCCCTCCTCCAC**TGA**ACTCCAACCCTGCCTTGAGGGA
AGACCACCCTCCTGTCACCCGGACCTCAGTGGAAGCCCGTTCCCCCCATCCCTGGATCCCAAGAGTGGTGCGATC
CACCAGGAGTGCCGCCCCCTTGTGGGGGGGGGCAGGGTGCTGCCTTCCCATTGGACAGCTGCTCCCGGAAATGCA
AATGAGACTCCTGGAAACTGGGTGGGAATTGGCTGAGCCAAGATGGAGGCGGGGCTCGGCCCCGGGCCACTTCAC
GGGGCGGGAAGGGGAGGGGAAGAAGAGTCTCAGACTGTGGGACACGGACTCGCAGAATAAACATATATGTGGC

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FIGURE 2754

CTTCGCGGCCGAGATGGACCCTGGGCTCGGCGTCCTCCGGAAAACTGCACTGTGAGGCGGGGCGATGGGGAAGGG
CCGAAGCCCCGCCAGCCCAGCTAAAGCAGACGGCTCGCACTGCGACCCGAAGCGCGAGTCATGGCTGGGGCCTTA
GTGGCAACAAGTGCTGAGATCAGCGGGCTCAGTAGCAGGAACACAAGCACCCCCTTGCGGTGTCTGGAGGAAGCG
GCGCGGACAGTCTCCCGCTCCACCGTGTCGGGCCTGAAGAGGCCGCTGAACGCTCGCGATTACTGAGGCATCTGG
TAGGATCGCAAGGCCATCAACCTACAGGTGAAGCTCGAGGCGCTGTGGCGCTTTGAAGCCGGAGAGAAGCTCAGT
AGAATCGGGAAGGCGCTGGGGCTGTCCAACTCCACCTTGGCCACCATTCGTGACAACAAGGAAAAGATCTGGGCG
AGTTCCCAGGAGGCCACACTGCAGGCGGCCACCAAGTTGACGCGTGGCCGCAGCCTGGTGATGGAGAACATGGAG
CAGCTGCTGAGCATGCGGATGGAGGACCAGAGCCAGCGCAACATGCCCCTCAGTGTGGTGCTCATTCGGGAGAAA
GCCCACAGCCCGTTCGAGAACCGCAAGCAGGAGCAGGGCGAGGGCGCCTAGCCCGAGAGCTTCGGGGCCGGTCGA
GGGTGATTCGCTGGCTTTAAGGCGCGCCACAGCTTGAGCAGCATCGGGGCCAGCGGCCCAAGAACGCAGCGTGCA
AGAATCCAGCGTTAATGCGCAGGGTGATCCCGGAGGGCGGCTACACACTCTGGCTGGTGTTCACCATGAATAAGC
TCTGGCTGGTGTTCACCATGAATAAGCCCAGGTTCCTCTGTAAGCGCCTGCCGAGAGGACGTTCATTTTCCTGTG
GAAG**ATG**AGTCGGCCCCTGGGTCAAAGCCGCCGGAGACCTCCTGACCCTATTGCTCGGTGGCAACGCAGCCGGCG
ACTTCAAGCTGAAGGCCCTGCTGGGGTACCCCTCGGAGAACCCGTGTTTCCTCAAGGGCTCCTTCAAGCCCAACC
TGCCCTTGGTGTGGTGCTCGCACAAGAAAGCCTGGGTACAGCCTGGGTGACAGAGCGAGACTCCGTCTCAAAAAA
AAAAAAAAAAGCCTGGGTAACCATGAGCCTCTTCCAGGAGTGGTTCCTGCACTTCTGCTCTACAGTGGAGGGCGC
TGCACCCAGTACGACCTTCCCTACAAGGGGCTGCCCATCCTGGACAGCACTCCCGGCCACCCTGGGTGTTGAGAC
AGAGTCTGGCTCTGTCGCGCAGGCTGGAGTGCGGTGGCGCGATCTCGGCTCACTGCAACCTCCGCCTCCCGGGTT
CACGCCATTCTCCTGCCTCAGCCTCCCAGGTAGCTGGGACTACAGGCGCCCGCCACCACGCCCGGCTAATTTTTT
TGTATTTTTAGTAGAGACGGGGTTTCACCGTGTTAGCCAGAATGGTCTCGGTCTCCTGACCCCA**TGA**TCCACCCG
CCTTGGCGTCCCAAAGTGCTGGGATTACAGGCGTGAGCCATGGTGCCTGGCCCTTTAATTCCCCCAATATTTTTT
TATCTGCATTAATTTATTATTTCAAGTGAACTTCCATCTCAAATACATGGTTCTCAGACGCTTC

FIGURE 2755

CAATACATAGGAACACTTGGGTCCCTGCAGTCAGGGTGTGGAAATGGCAGATGAGTTCAGCCCTAAGGTGCATTT
TTCTTACTAGGAGGAGATGGAGTGTATTTTATGGGATATAAGCATTAGCTACATTTCCTGTCCTGTTCACATCCT
TTGCCCATGTGTCTATGAGGTTATTGATCTTTCTTACTGATTTATTGTAGCTCTTTACTTAGGAGGTTAATTAGC
CTTTTGCCTGTGGAGAGTTTTTTGGTTTGCCATTTGTCCTTTTTTAATTTTTTTTGTTTTTTGGCCATTTGTCTT
TTGACTCTGATGTGGTTTTTGCTGATTTCCTTTGATGTATTCTAGTTTATCTGACTTTTCTTTGGCGACTTATGG
ACTTTCTCTCACCACTAAAAGCCCTCACTGCTCTCTCAGTCTTCTTGATTTAACCTCCTCCAGGCTTCCGCCTTC
TCCAGGCCCTGATTCTCAGTTGGAGTTGCTGGTGCCTCCTCCTTCACCCAGCGTCTGACGCTGGAGTGCTCACAG
TGTGGCTGGGACCCACTTCTCTCCTCTGTAGATACCCACCCCTGTGTTGATCACTTGCAGGCCCGGGTTCTGTGT
GCCATGTGTATGCCCTAGAGCCCTTGCTCACGTTTCCCCACAGCCTTCATGAAGTCTGTGTTCCTCAGATGCCCC
ACAGACATCACAAGCAAGGCACATCCAAACCCCAGACCACTATCCAGGAGCCTGCACCCTCTTTCTGTTGGCTCC
ACCTCCAGCCTCCGAGACCCACCCACTTCCCTGCATTTGCTGAGACCATCATTTTCCACCTAGACAATGCCCCCA
CGCTTGCCCTACAGCCCTTCCAAAAACGATTTTTTCCAACCTAAATCAGACCTAGAAAGCTTTTTCACATAGCCC
AGTCTTCCTCCTTGTGCTGGGTTCTGTCTCATTATCACCTCATCAGGGAAGTCTGTACAGATAGAATCCCTACCC
CTGCATTTGTCGCCTCCGTCTGCCTCTTTGGTCAGTTTCAGGTCCCTGTAGTTCACACTGTGTCCCCAGGGATGA
AGTGGGTCCCGGCACGGTGGGCATTCTGTCATGAATGAATGGTCCCCTTGTGTATGCAGGGTTCGCGCTGCAGCT
AGGCAGCATCTCCGCAGGTCCAGGTAGTGTAAGCCCTCACCTCCACGTCCCCTGGGACCTCGGCATGGCTGGCCT
TTCTGGCCAGATCCAATCACCCTCCCGCGAAGGTGGCTTTGCGCATGCGCTTCTGCTCCCCAGCGATCTGAGGAG
TGAACAGGACCCCACGGACGAGGATCCCTGCCGGGGTGTGGGCCCTGCTCTGATCACCACCCGCTGGCGCTCCCC
CAGGGGCCGGAGCCGGGGCCGCCCCAGCACTGGGGGCGGGGTGGTTAGGGGCGGCCGTTGCGATGTATGTGGCAA
GGTGTTCAGCCAACGCAGCAACCTGCTGAGGCACCAGAAGATCCACACGGGTGAGCGACCATTCGTGTGCAGCGA
GTGCGGCCGCAGCTTCAGCCGCAGCTCGCACCTGCTGCGCCACCAGCTTACGCACACCGAGGAGCGGCCGTTCGT
GTGCGGCGACTGTGGCCAGGGCTTCGTGCGCAGCGCGCGCCTGGAAGAGCATCGGAGAGTGCACACGGGCGAACA
GCCTTTCCGTTGCGCTGAGTGCGGCCAGAGCTTCCGGCAGCGCTCCAATCTGCTGCAGCACCAGCGCATCCACGG
CGATCCCCCGGGCCCTGGCGCTAAGCCCCCGGCCCCTCCTGGTGCGCCCGAGCCTCCCGGCCCCTTTCCGTGCAG
CGAGTGCCGCGAGAGCTTCGCGCGGCGCGCCGTGCTGCTGGAGCACCAGGCGGTACACACGGGCGACAAGTCCTT
TGGCTGCGTCGAGTGCGGCGAGCGCTTCGGCCGCCGCTCAGTGCTGCTGCAGCACCGGCGCGTGCACAGTGGCGA
GCGGCCCTTCGCCTGTGCCGAGTGCGGCCAGAGCTTCCGGCAGCGCTCCAACCTGACGCAGCACCGGCGCATCCA
CACCGGGGAGCGGCCCTTCGCCTGCGCCGAGTGTGGCAAGGCCTTCCGCCAGCGGCCTACGCTCACGCAGCATCT
CCGCGTACACACGGGCGAGAAACCCTTTGCCTGCCCCGAGTGTGGCCAGCGCTTCAGCCAGCGCCTCAAGCTCAC
GCGTCATCAGAGGACACACACCGGCGAAAAGCCCTACCACTGCGGTGAGTGCGGCCTGGGCTTCACGCAGGTCTC
GCGGCTCACCGAGCACCAGCGCATCCACACGGGCGAACGGCCCTTCGCCTGCCCCGAGTGCGGCCAGAGCTTTCG
GCAGCACGCCAACCTCACCCAGCACCGGCGCATCCACACGGGTGAACGGCCCTACGCATGCCCTGAGTGTGGCAA
GGCCTTCCGCCAGCGGCCCACGCTCACGCAGCATCTGCGCACCCACCGACGAGAGAAGCCCTTCGCCTGCCAGGA
CTGTGGCCGCCGCTTCCACCAGAGCACCAAGCTCATTCAGCACCAGCGCGTCCACAGCGCCGAGTAGCTCCAGCC
GGGACGCACTGTGTCCGCCATGGTCAGAACACCTACCTCCCCTGGTTATTGTGAGGCTGGCGATTACATAAGTAT
AAGCAGGTCCGCCCAGGGCTTGGCTACTGTAGGTGTCCAATAAACAGTAGATGGAAAC

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FIGURE 2756

AGGATGATCAAGCTGTTCTCGCTGAAGCAGCAGAAGAAGGAGGAGGAGTCGGCGGGCGGCACCAAGGGCAGCAGC
AAGAAGGCGTCGGCGGCGCAGCTGCGGATCCAGAAGGACATAAACGAGCTGAACCTGCCCAAGACGTGTGATATC
AGCTTCTCAGATCCAGACGACCTCCTCAACTTCAAGCTGGTCATCTGTCCTGATGAGGGCTTCTACAAGAGTGGG
AAGTTTGTGTTCAGTTTTAAGGTGGGCCAGGGTTACCCGCATGATCCCCCCAAGGTGAAGTGTGAGACAATGGTC
TATCACCCCAACATTGACCTCGAGGGCAACGTCTGCCTCAACATCCTCAGAGAGGACTGGAAGCCAGTCCTTACG
ATAAACTCCATAATTTATGGCCTGCAGTATCTCTTCTTGGAGCCCAACCCCGAGGACCCACTGAACAAGGAGGCC
GCAGAGGTCCTGCAGAACAACCGGCGGCTGTTTGAGCAGAACGTGCAGCGCTCCATGCGGGGTGGCTACATCGGC
TCCACCTACTTTGAGCGCTGCCTGAAATAGGGTTGGCGCATACCCACCCCCGCCACGGCCACAAGCCCTGGCATC
CCCTGCAAATATTTATTGGGGGCCATGGGTAGGGGTTTGGGGGGCGGCCGGTGGGGGAATCCCCTGCCTTGGCCT
TGCCTCCCCTTCCTGCCACGTGCCCCTAGTTATTTTTTTTTGGGGAATGTTACTGC

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FIGURE 2757

CGGCGGCGGCGACAGGACCGAGGGGCCTTAGTTGGTGGGCAAGTCGGGGATCCCAGAAAGAGAAGCGTGACCCGG
AAGCGGAAACGGGTGTCCGTCCCAGCTCCGGCCTGCCAGTGAGCTTCTACCATCATGGACCTATTGTTCGGGCGC
CGGAAGACGCCAGAGGAGCTACTGCGGCAGAACCAGAGGGCCCTGAACCGTGCCATGCGGGAGCTGGACCGCGAG
CGACAGAAACTAGAGACCCAGGAGAAGAAAATCATTGCAGACATTAAGAAGATGGCCAAGCAAGGCCAGATGGAT
GCTGTTCGCATCATGGCAAAAGACTTGGTGCGCACCCGGCGCTATGTGCGCAAGTTTGTATTGATGCGGGCCAAC
ATCCAGGCTGTGTCCCTCAAGATCCAGACACTCAAGTCCAACAACTCGATGGCACAAGCCATGAAGGGTGTCACC
AAGGCCATGGGCACCATGAACAGACAGCTGAAGTTGCCCCAGATCCAGAAGATCATGATGGAGTTTGAGCGGCAG
GCAGAGATCATGGATATGAAGGAGGAGATGATGAATGATGCCATTGATGATGCCATGGGTGATGAGGAAGATGAA
GAGGAGAGTGATGCTGTGGTGTCCCAGGTTCTGGATGAGCTGGGACTTAGCCTAACAGATGAGCTGTCGAACCTC
CCCTCAACTGGGGGCTCGCTTAGTGTGGCTGCTGGTGGGAAAAAAGCAGAGGCCGCAGCCTCAGCCCTAGCTGAT
GCTGATGCAGACCTGGAGGAACGGCTTAAGAACCTGCGGAGGGACTGAGTGCCCCTGCCACTCCGAGATAACCAG
TGGATGCCCAGGATCTTTTACCACAACCCCTCTGTAATAAAAGAGATTTGACACT

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FIGURE 2758

GGCGCGCGGGCGAGCGGTTGTGCTTGTGCTTGTGGCGCGTGGTGCGGGTTTCGGCGGCGGCTGAGGAAGAAGCGC
GGGCGGCGCCTTCGGGAGGCGAGCAGGCAGCAGTTGGCCGTGCCGTAGCAGCGTCCCGCGCGCGGCGGGCAGCGG
CCCAGGAGGCGCGTGGCGGCGCTCGGCCTCGCGGCGGCGGCGGCGGCAGCGGCCCAGCAGTTGGCGGCGAGCGCG
TCTGCGCCTGCGCGGCGGGCCCCGCGCCCCTCCTCCCCCCCCTGGGCGCCCCCGGCGGCGTGTGA**ATG**GCGGCCTC
CGCGGCGGCAGCCTCGGCAGCAGCGGCCTCGGCCGCCTCTGGCAGCCCGGGCCCGGGCGAGGGCTCCGCTGGCGG
CGAAAAGCGCTCCACCGCCCCTTCGGCCGCAGCCTCGGCCTCTGCCTCAGCCGCGGCGTCGTCGCCCGCGGGGGG
CGGCGCCGAGGCGCTGGAGCTGCTGGAGCACTGCGGCGTGTGCAGAGAGCGCCTGCGACCCGAGAGGGAGCCCCG
CCTGCTGCCCTGTTTGCACTCGGCCTGTAGTGCCTGCTTAGGGCCCGCGGCCCCCGCCGCCGCCAACAGCTCGGG
GGACGGCGGGGCGGCGGGCGACGGCACCGTGGTGGACTGTCCCGTGTGCAAGCAACAGTGCTTCTCCAAAGACAT
CGTGGAGAATTATTTCATGCGTGATAGTGGCAGCAAGGCTGCCACCGACGCCCAGGATGCGAACCAGTGCTGCAC
TAGCTGTGAGGATAATGCCCCAGCCACCAGCTACTGTGTGGAGTGCTCGGAGCCTCTGTGTGAGACCTGTGTAGA
GGCGCACCAGCGGGTGAAGTACACCAAGGACCATACTGTGCGCTCTACTGGGCCAGCCAAGTCTCGGGATGGTGA
ACGTACTGTCTATTGCAACGTACACAAGCATGAACCCCTTGTGCTGTTTTGTGAGAGCTGTGATACTCTCACCTG
CCGAGACTGCCAGCTCAATGCCCACAAGGACCACCAGTACCAGTTCTTAGAGGATGCAGTGAGGAACCAGCGCAA
GCTCCTGGCCTCACTGGTGAAGCGCCTTGGGGACAAACATGCAACATTGCAGAAGAGCACCAAGGAGGTTCGCAG
CTCAATCCGCCAGGTGTCTGACGTACAGAAGCGTGTGCAAGTGGATGTCAAGATGGCCATCCTGCAGATCATGAA
GGAGCTGAATAAGCGGGGCCGTGTGCTGGTCAATGATGCCCAGAAGGTGACTGAGGGGCAGCAGGAGCGCCTGGA
GCGGCAGCACTGGACCATGACCAAGATCCAGAAGCACCAGGAGCACATTCTGCGCTTTGCCTCTTGGGCTCTGGA
GAGTGACAACAACACAGCCCTTTTGCTTTCTAAGAAGTTGATCTACTTCCAGCTGCACCGGGCCCTCAAGATGAT
TGTGGATCCCGTGGAGCCACATGGCGAGATGAAGTTTCAGTGGGACCTCAATGCCTGGACCAAGAGTGCCGAGGC
CTTTGGCAAGATTGTGGCAGAGCGTCCTGGCACTAACTCAACAGGCCCTGCACCCATGGCCCCTCCAAGAGCCCC
AGGGCCCCTGAGCAAGCAGGGCTCTGGCAGCAGCCAGCCCATGGAGGTGCAGGAAGGCTATGGCTTTGGGTCAGG
AGATGATCCCTACTCAAGTGCAGAGCCCCATGTGTCAGGTGTGAAACGGTCCCGCTCAGGTGAGGGCGAGGTGAG
CGGCCTTATGCGCAAGGTGCCACGAGTGAGCCTTGAACGCCTGGACCTGGACCTCACAGCTGACAGCCAGCCACC
CGTCTTCAAGGTCTTCCCAGGCAGTACCACTGAGGACTACAACCTTATTGTTATTGAACGTGGCGCTGCCGCTGC
AGCTACCGGCCAGCCAGGGACTGCGCCTGCAGGAACCCCTGGTGCCCCACCCCTGGCTGGCATGGCCATTGTCAA
GGAGGAGGAGACGGAGGCTGCCATTGGAGCCCCTCCTACTGCCACTGAGGGCCCTGAGACCAAACCTGTGCTTAT
GGCTCTTGCGGAGGGTCCTGGTGCTGAGGGTCCCCGCCTGGCCTCACCTAGTGGCAGCACCAGCTCAGGGCTGGA
GGTGGTGGCTCCTGAGGGTACCTCAGCCCCAGGTGGTGGCCCGGGAACCCTGGATGACAGTGCCACCATTTGCCG
TGTCTGCCAGAAGCCAGGCGATCTGGTTATGTGCAACCAGTGTGAGTTTTGTTTCCACCTGGACTGTCACCTGCC
GGCCCTGCAGGATGTACCAGGGGAGGAGTGGAGCTGCTCACTCTGCCATGTGCTCCCTGACCTGAAGGAGGAGGA
TGGCAGCCTCAGCCTGGATGGTGCAGACAGCACTGGCGTGGTGGCCAAGCTCTCACCAGCCAACCAGCGGAAATG
TGAGCGTGTACTGCTGGCCCTATTCTGTCACGAACCCTGCCGCCCCCTGCATCAGCTGGCTACCGACTCCACCTT
CTCCCTGGACCAGCCCGGTGGCACCCTGGATCTGACCCTGATCCGTGCCCGCCTCCAGGAGAAGTTGTCACCTCC
CTACAGCTCCCCACAGGAGTTTGCCCAGGATGTGGGCCGCATGTTCAAGCAATTCAACAAGTTAACTGAGGACAA
GGCAGACGTGCAGTCCATCATCGGCCTGCAGCGCTTCTTCGAGACGCGCATGAACGAGGCCTTCGGTGACACCAA
GTTCTCTGCTGTGCTGGTGGAGCCCCCGCCGATGAGCCTGCCTGGTGCTGGCCTGAGTTCCCAGGAGCTGTCTGG
TGGCCCTGGTGATGGCCCC**TGA**GGCTGGAGCCCCCATGGCCAGCCCAGCCTGGCTCTGTTCTCTGTCCTGTCACC
CCATCCCCACTCCCCTGGTGGCCTGACTCCCACTCCCTGGTGGCCCCATCCCCCAGTTCCTCACGATATGGTTTT
TACTTCTGTGGATTTAATAAAAACTTCACCAGTT

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FIGURE 2759

GTGAGGGGGCTTGGGGGGCCTCGCCTGAGAGAGTGAGGACAGGCTGCGGGAGGAGCTGCAGGACTGAGGTACAGA
GGCCAGGGGCCCAGGGCAGGACCCAGCCTGGACTTGACTCCCTGGGATCCCAGGAAGGGCACACCCTTTCCTCAC
CACCCGAGTGAGCGCTGCCCCCTCACAGAGACCTCTTTGCCCCCTGGGCCAGGCAGAGCAGGCGCTGCGGTCCGG
GAGGCCCC**ATG**GAGGTGGCGGTGCCCGTGAAGCAGGAGGCCGAGGGCCTGGCGCTGGACTCCCCGTGGCACCGCT
TCCGCCGCTTCCACCTGGGCGACGCGCCGGGCCCGCGGGAGGCGCTGGGGCTGCTCCGCGCCCTGTGCCGGGACT
GGCTGCGGCCCGAGGTGCACACCAAGGAGCAGATGTTGGAGCTGCTGGTGCTGGAACAGTTCCTGAGCGCGCTGC
CCGCCGACACGCAGGCCTGGGTGTGCAGCCGGCAGCCGCAGAGCGGGGAGGAGGCGGTGGCCCTGCTGGAGGAGC
TCTGGGGGCCAGCAGCCTCCCCCGATGGGTCGTCAGCAACGAGGGTGCCTCAGGATGTGACGCAGGGCCCTGGGG
CCACAGGTGGAAAGGAGGACAGTGGGATGATTCCCTTAGGCACCGCCCCTGGGGCTGAGGGGCCGGCGCCTGGGG
ACTCCCAGGCTGTGCGCCCCTACAAGCAGGAGCCCAGCAGCCCCCCGCTGGCGCCTGGCCTGCCCGCCTTCCTAG
CGGCCCCGGGCACCACGTCCTGCCCCGAGTGCGGCAAAACGTCCCTGAAACCAGCTCACCTGCTGCGCCACCGGC
AGAGCCACTCGGGCGAGAAGCCGCACGCCTGCCCTGAGTGCGGGAAGGCCTTTCGGCGCAAGGAGCACCTGCGGC
GCCACCGCGACACGCACCCCGGCAGCCCCGGCAGCCCCGGGCCCGCGCTGCGCCCTCTGCCCGCCCGTGAGAAGC
CCCACGCGTGCTGCGAGTGTGGCAAGACCTTCTACTGGCGCGAGCACCTGGTGCGCCACCGCAAGACGCACTCGG
GAGCGCGGCCCTTTGCCTGCTGGGAGTGTGGCAAGGGCTTCGGGCGCCGCGAGCACGTGCTGCGCCACCAGCGCA
TCCACGGCCGGGCAGCGGCCAGCGCGCAGGGGGCGGTAGCTCCGGGCCCGGATGGTGGAGGCCCCTTCCCGCCCT
GGCCCTTGGGT**TAG**CCGCCTCCCGGCCAGCGCCATCTCCCGCCCTTGGTGCTGCCCCCGGGCGGTACCTGCTCTC
TCCCAGCGCCACTTGGCCTCTTCCTCTCCTCCTTCCCTCCCATCGTCCTCCTCCACCTGCGCCTCCCTTGTCTGA
ACTTCCCAACGCCTTCCTATTCCTTTCCAACTCCTTTTCCCCCAAATTTCACTTTCCTTCTCAGGTCTCACCTCA
GCCCCCCCCTTCTCCCTGATTTCTCGGCCTCTCTCTCTGTGTGAAGGGGCCTCTCCCTAATGTCTCCTCCTTCCC
CCCTCTTCTCTCTCCTGCGGCCCAGCCTCCCTCTCCCTCCTCCATTCCTCTCTCCCTGCCCTTTTCCTGCCTGAA
GAGCAGAGGTGAGGACCTGGGACCCCTGAGGGGCAGGCCAGGAGGAGCTCGGGCGCAGGCCAGGCCCCCTTGGTG
AAGCAGAGGCTGAAGGAAAGGGGTCTGGGTCTTGTCCCTAGGAATTCTCCTCCCTCAGGAGATTGGGGGTTGGGG
GAGGCAGCGGGTGATGGCTCTGAAGCTGAACCCAGGGCCTGGCTGTGGTCTTCTTGGTCTTGCTGCCCCCTGTGA
CCCAAAGGCATGGGATGGACAGAGATGCCTGCCCCCGTGAAGCTGGTTGGGGAGGGCAGTTCACCAGCATCCATA
GAGTAATAAAGTCACTGTGTGTAGACCCGGA

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FIGURE 2760

CTCCAGGGCTAGTGAGCTGGACCGGAAGTAGGTTTCTACCCGACCGCATTTTACGTGGTGCTGCATTTCCGGTAG
CGGCGGCGGGAAATCGGCTGTGGGAGAGAGGCTAGGCCTCTGAGGAGGCGAATCCGGCGGGTATCAGAGCCATCA
GAACCGCCACC**ATG**ACGGTGGGCAAGAGCAGCAAGATGCTGCAGCATATTGATTACAGGATGAGGTGCATCCTGC
AGGACGGCCGGATCTTCATTGGCACCTTCAAGGCTTTTGACAAGCACATGAATTTGATCCTCTGTGACTGTGATG
AGTTCAGAAAGATCAAGCCAAAGAACTCCAAACAAGCAGAAAGGGAAGAGAAGCGAGTCCTCGGTCTGGTGCTGC
TGCGAGGGGAGAATCTGGTCTCAATGACAGTAGAGGGACCTCCTCCCAAAGATACTGGTATTGCTCGAGTTCCAC
TTGCTGGAGCTGCCGGGGGCCCAGGGATCGGCAGGGCTGCTGGCAGAGGAATCCCAGCTGGGGTTCCCATGCCCC
AGGCTCCTGCAGGACTTGCTGGGCCAGTCCGTGGGGTTGGCGGGCCATCCCAACAGGTGATGACCCCACAAGGAA
GAGGTACTGTTGCAGCCGCTGCAGCTGCTGCCACAGCCAGTATTGCCGGGGCTCCAACCCAGTACCCACCTGGCC
GTGGGGGTCCTCCCCCACCTATGGGCCGAGGAGCACCCCCTCCAGGCATGATGGGCCCACCTCCTGGTATGAGAC
CTCCTATGGGTCCCCCAATGGGGATCCCCCCTGGAAGAGGGACTCCAATGGGCATGCCCCCTCCGGGAATGCGGC
CTCCTCCCCCTGGGATGCGAGGCCTTCTT**TGA**CCCTTGGCCACAGAGTATGGAAGTAGCTCCGCAGAGGCGTGGG
CTCGATTCCTCAGGGCCACGTTACCACAGACCTGTTTGTTTCTTATGCTGTTGTTCGTGGAGTCTCATGGGATTG
TCTGGTTTCCCTTACAGGGCCCCCTCCCCCGGGAATGCGCCCACCAAGGCCCTAGACTCATCTTGGCCCTCCTCA
GCTCCCTGCCTGTTTCCCGTAAGGCTGTACATAGTCCTTTTATCTCCTTGTGGCCTATGAAACTGGTTTATAATA
AACTCTTAAG

FIGURE 2761

GCATATCCAGGCTCTCCAGGGTCACCAGCTGTGCTCCACACACAGGGAAGATTGATGGTGGCTTGCTATACATTA
ATTTACTGGTTGTTTGTAGGTACCAGTTACATTCAGGGATGTGACTGTGATCTTCACAGAAGCAGAATGGAAGAG
ACTGAGTCCAGAGCAGAGGAATCTATACAAAGAAGTGATGCTGGAGAATTACAGGAATCTTCTCTCATTGGCAGA
ACCAAAGCCAGAAATCTACACTTGTTCCTCCTGCCTTCTGGCCTTCTCCTGTCAGCAGTTCCTCAGTCAACATGT
ACTTCAGATCTTCCTGGGCTTATGTGCAGAAAATCACTTCCATCCAGGGAATTCTAGCCCAGGGCATTGGAAACA
GCAGGGGCAGCAGTATTCCCATGTAAGCTGTTGGTTTGAAAATGCAGAAGGTCAGGAGAGAGGAGGTGGCTCCAA
ACCCTGGTCTGCAAGGACAGAGGAGAGAGAAACCTCAAGGGCATTCCCCAGCCCACTCCAAAGACAGTCAGCAAG
TCCTAGAAAAGGCAAC**ATG**GTGGTAGAAACAGAGCCCAGCTCAGCCCAAAGACCAAACCCTGTGCAGCTAGACAA
AGGCTTGAAGGAATTAGAAACCTTGAGATTTGGAGCAATCAACTGTAGAGAGTATGAACCGGACCATAACCTGGA
ATCAAACTTTATTACAAACCCGAGGACCCTCTTAGGGAAGAAGCCCTACATTTGCAGTGATTGTGGGCGAAGCTT
TAAAGATAGATCAACCCTCATCAGACACCATCGTATACACTCGATGGAGAAGCCTTATGTGTGCAGTGAGTGCGG
GCGAGGTTTTAGCCAGAAGTCCAACCTCAGCAGACACCAGAGAACACATTCAGAAGAGAAGCCTTATTTGTGCAG
GGAGTGTGGGCAAAGCTTTAGAAGTAAGTCCATCCTCAATAGACATCAGTGGACTCACTCAGAGGAGAAGCCCTA
TGTTTGCAGCGAGTGTGGGCGAGGCTTTAGCGAGAAGTCATCCTTCATCAGACACCAGAGGACACACTCCGGTGA
GAAACCCTATGTGTGCCTGGAGTGTGGACGAAGCTTTTGTGATAAGTCAACCCTCAGAAAACACCAGAGGATACA
CTCAGGGGAGAAGCCTTATGTTTGCAGGGAGTGTGGGCGAGGCTTTAGCCAGAACTCAGATCTCATCAAACACCA
GAGGACACACTTGGATGAGAAGCCTTATGTTTGCAGGGAGTGTGGGCGAGGCTTTTGTGACAAGTCAACCCTCAT
CATACACGAGCGGACGCACTCTGGAGAGAAGCCTTATGTGTGTGGTGAGTGTGGCCGAGGCTTTAGTCGGAAATC
ACTCCTCCTTGTCCACCAGAGGACACACTCAGGGGAGAAGCATTATGTCTGCAGGGAGTGTAGGCGAGGTTTTAG
CCAGAAGTCAAATCTCATCAGACACCAGAGGACGCACTCAAATGAGAAGCCTTATATTTGCAGGGAATGTGGGCG
AGGCTTTTGTGACAAGTCAACCCTCATTGTACATGAGAGGACACACTCAGGAGAGAAGCCTTACGTGTGCAGTGA
GTGTGGCCGAGGCTTTAGCCGGAAATCACTCCTCCTTGTCCACCAGAGGACACACTCAGGGGAGAAGCATTATGT
TTGTAGGGAGTGTGGGCGAGGCTTTAGTCATAAGTCAAATCTCATCAGACACCAGAGGACACAC**TGA**CGGGAGAA
ACCTGTGTATGCAGGGGTCATGAACAAGACCTGAGTGACCAGTCAAGCCTCATGTTACCCCAGAGAGACACATGG
GGAGTAGACCCTGTGTACACAGATTGTGAGTGAAGTTCCAGAGATGTGTCAGCCCTTATCAGGCATGGGAGGGAC
ACGTTCAGGAGAGGAGCCTTATGAGTATAGAGTACGGGCAACTGTAGCCATCAGTCAGCCTTGAGCATGCACAAA
AGGACACACTTAGGAGAGAAGTTTATGTGTAGGGACTGTGGGAAGGCTTTAGCAATAATCAACATTTACCAGACA
TCCAATGACAGCCTCAGGGGAAAGCACCCTTGTCTGGGGAGTGTTGGGGAGCATCAGTAAAAGAATGGACACTCA
GGCACAGAGTGGCCCTCAGGAAGGAGGTCTTTGTTTGTAGGATGTATGGGCAAAGCTTTTGTGATCACACACCAC
AGGGAGAATCTGCATGTGGGGACACTGTGGAGCTCTGCCCAGATGACCTTTTCAGGGGTAACACCCCAGCTGCTT
GAGAGAACAGTGTTGCTGCTGGCAGAGATGCATTCCAGAGATGCACTCCGCTCTGGAACTCACTCTCAGCCACAG
GGAGCTGCATGCACCACAGGGGCAATGCACCTTTGCAGGGGTACCTTCTGGCCCCAACCCTTGACTCAACGGGGA
CAACTCCAGAAGGTCATTCCAGATCCAGAGATCCCCATCGAACTGAAGGATCACTGGGTTGCAGACACATTGCAG
GTCAGCTTCTTCCTCTGCCCAGTCCTGCCCTCACTCCCCAGTGAATCCTCAATTTTCTGTCTCGTTGTCTGTCCA
GATAATTGATTCTAAGACATGTTAGGTATATAAGGAGTGTAGATAAGGCTTCAGCCATGAGTCACCCCGCAGTAA
GCCCCAGAGTATATTGAATAGAAATTCTGCATGTGTGGGGAGAATGGACAAGGACTTAGGAAAAAGTCCTCATCA
AAGAACAGCTTTTTTGGGACAAGCTTTACATGGGTGGGGAGGGAAAATGTGAAACACATTAGCAATAAGTTAAAC
CTCATCTTGTACTAAAGGAGGACACACTCAGGGAGAAGACCTCTGTGGGCAGGGCTTGTGGGTGGAGCTTCATCC
CGATGTCACTCCTCAACTGACTTAGGAGGACAGTCTTGCTACCCCAAGTCACTACCTCACTCACCTCTGAGGGAT
TTTCAGGAAATGTCTTGACTCCCCCATGTACTCTGTATGTGAGCGAAGATGGCAGTAACTGTTAAATAAGCATTC
TTTTCTACTTCTTGGAATCAGATGAAATAAAAAAGCAGGCTTTATTTAAGTAATC

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FIGURE 2762

GATGAGGGTCTGCGGGGCCGCCAAAGGAGCCCACGGATCTCACCCACCTGCGGCTGCAGCAGACTGATCTCCTCC
ACTTCCTTCAGCGCCAGCAGCGCGTAGCCGACCGCGTGCTCAAACAGCACGTGCAACAGCACCTGGAACGGGAGC
CGGGGCGCGAGCGTCAACGCAACCTCAGCGTCTGCCGGAACCCGTTCCCAGGGCAGGCGCAGGCGCAGGCGCAGG
CCCAGGCCCAGGCCCAGGCCCTGTCTGCGGCCCGAACGCAGGCCGAAACCCCCACCGTCGCGTCGCCCGCGCCCC
GCAACCACTCCTCACCATGGCGCCAGCTCCCGGGTTCGGCTCGCAATGCGGCTAGCGCGCTCCGGCGCGCGGAAC
CAGGCTCCAGAGGCCACGCCCCCGCCCCCCCGACCAATCGGAGGCCGGGGACGACACCATCTCCGGCCTTTGGAG
GGGCCGCCCAGGGTGGTATCGCCCGGAGCGCGGGCTGGGTGGTGCCGAGCGCGGGCGAGCGGGCCTTTTCCGGCC
TCTGCAGCTGCGCGGGCGGGCGTGGTTGCCGGGGACGCGCGGCCCCCGGTCGGGCACTGCAGGCGGCGAAACGAC
TTGGGAAGGCCCTTTCGGGGTAATAGTCCGGTTCCTGATGTTCTTGTCATATGAGTTACGGGCAGCAGAGCTGGG
TGAAGTCGGGGCGGGAGGTCCGCGTGGGGCGCGGCGTCCATCCCAGACAGAGACCGCTGCCTAGCCGGCTTCCCG
CTTCGTCCGTGGCCTCGGGCCCCAGACCCTGCGCCCCACGTCCCCGGGACCCAGGCGTTCCCGTCCCCTACTCGG
GGACGAGCCTCCCCGGCGCCGGGTGGGCGGTGCATCCTTTCCTCCCACCCGTAACGGGAGCGGTGCCTGGCGCGC
TCTGGCGCAGACCCTGCTGGGAATGTAGCTCGCGCAGTTTTCTTCGTACTATTAATTTATTTCTTTTTTTTGTTT
TTGGTTTTTTTTTTTTAAATGACTGTAGCAGGCAGTAACGTGCGAAAGAAAGACGCTCCAGCGTCTTCCTAGGCC
AGTTTCTTGTTGCTGTGCTGCACGGGACCCAGCTCCTTTTGCTGGGCCACGTGTTGCTCCTCCGCTTGGGCGGCC
CTGAATTCTGGGCGCTGGTGATCGCTGAGTGAATCGCAGCTGCTTCCCTGTCCTTGAGGGCGTCTTTTGGGCACT
CAGGCGACTCTTTAGAAATGAGTTTTGCTTTAATAATTAATATTAACGTTATAAATCCAAAACCTAGTTATACTT
AAGTAGCGTATCCCCTGGTATGTTTTAAAGAGTCATTCGAAGGGGATTTTTAAAAATAATGTATAGCTATAAACT
GCATTTATACATTTAATTGTTATTTTGTTAAGCGATTGAGTTACTTGACAAAATCCAAGTACATAGTTCACTCAC
AAATCTAATATGTCAAACCTAAATGTGGTTGGTAAATCTTACTCTCATAATTTCAATATGGTTTACAGATGTGGT
TGAATTCTGTTACACATGTCTACTTACGAGTCAGAATCGTTATTCCATTTAATATTTTAAAATGGAATTGCCAAG
TTAATCCATACATTAGCATGTTAAATTATTTTAACCGTCGTGAATACATCAAAATAGACGATTCCAAAATGTAAT
GGAAAATACTAATGCTAATACTTCAATTTACTTCATTATTTCTGCCCTTAATCCTGAATCTTCCTGGAGTTACAG
GTGCTTATCCACTAAACCAGGGGTTTTCAAGCAAGAAGTCAGAATGCATTAATGGACAGCATTTAAAAAAATAGG
ATTGGGTGGGCTATAATCCAGCACTTTAGGAGGCCGAGGCAGGCGGATCACTTAAGATCAGGAGTTCGAGACCAG
CCTGGCCAACATGGTGAAACCCCGTCTCTACCAAAAAATAAAAAAATTAGCTGGACGTGGTGGAGCATGTCTGTA
ATCCCAGCTACTCGGGAGGCTGAGGAAGGAGAATCGCTTGAACCCGGGAGGCAGAGGCTGCACTCTAGCCTGGGC
AACAGAGCAAGGCTCTGTC

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FIGURE 2763

CGAACCCGGGAGCTGGCGCC**ATG**GTGCTGTTGCACGTGCTGTTTGAGCACGCGGTCGGCTACGCGCTGCTGGCGC
TGAAGGAAGTGGAGGAGATCAGTCTGCTGCAGCCGCAGGTGGAGGAGTCTGTGCTCAACCTGGGCAAATTCCACA
GCATCGTTCGTCTGGTGGCCTTTTGTCCCTTTGCCTCATCCCAGGTTGCCTTGGAAAATGCCAACGCCGTGTCTG
AAGGGGTTGTTCATGAGGACCTCCGCCTGCTCTTGGAGACCCACCTGCCGTCCAAAAAGAAGAAAGTACTCTTGG
GAGTTGGGGATCCCAAGATTGGTGCCGCAATACAGGAGGAGTTAGGGTACAACTGCCAGACTGGAGGAGTCATAG
CTGAGATCCTGCGAGGAGTTCGTCTGCACTTCCACAATCTGGTGAAGGGTCTGACCGATCTGTCAGCTTGTAAAG
CACAGCTGGGGCTGGGACACAGCTATTCCCGTGCCAAAGTTAAGTTTAATGTGAACCGGGTGGACAATATGATCA
TCCAGTCCATTAGCCTCCTGGACCAGCTGGATAAGGACATCAATACCTTCTCTATGCGTGTCAGGGAGTGGTACG
GGTATCACTTTCCGGAGCTGGTGAAGATCATCAACGACAATGCCACATACTGCCGTCTTGCCCAGTTTATTGGAA
ACCGAAGGGAACTGAATGAGGACAAGCTGGAGAAGCTGGAGGAGCTGACAATGGATGGGGCCAAGGCTAAGGCTA
TTCTGGATGCCTCACGGTCCTCCATGGGCATGGACATATCTGCCATTGACTTGATAAACATCGAGAGCTTCTCCA
GTCGTGTGGTGTCTTTATCTGAATACCGCCAGAGCCTACACACTTACCTGCGCTCCAAGATGAGCCAAGTAGCCC
CCAGCCTGTCAGCCCTAATTGGGGAAGCGGTAGGTGCACGTCTCATCGCACATGCTGGCAGCCTCACCAACCTGG
CCAAGTATCCAGCATCCACAGTGCAGATCCTTGGGGCTGAAAAGGCCCTGTTCAGAGCCCTGAAGACAAGGGGTA
ACACTCCAAAATATGGACTCATTTTCCACTCCACCTTCATTGGCCGAGCAGCTGCCAAGAACAAAGGCCGCATCT
CCCGATACCTGGCAAACAAATGCAGTATTGCCTCACGAATCGATTGCTTCTCTGAGGTGCCCACGAGTGTATTCG
GGGAGAAGCTTCGAGAACAAGTTGAAGAGCGACTGTCCTTCTATGAGACTGGAGAGATACCACGAAAGAATCTGG
ATGTCATGAAGGAAGCAATGGTTCAGGCAGAGGAAGCGGCTGCTGAGATTACTAGGAAGCTGGAGAAACAGGAGA
AGAAACGCTTAAAGAAGGAAAAGAAACGGCTGGCTGCACTTGCCCTCGCGTCTTCAGAAAACAGCAGTAGTACTC
CAGAGGAGTGTGAGGAGATGAGTGAAAAACCCAAAAAGAAGAAAAAGCAAAAGCCCCAGGAGGTTCCTCAGGAGA
ATGGAATGGAAGACCCATCTATCTCTTTCTCCAAACCCAAGAAAAAGAAATCTTTTTCCAAGGAGGAGTTGATGA
GTAGCGATCTTGAAGAGACCGCTGGCAGCACCAGTATTCCCAAGAGGAAGAAGTCTACACCCAAGGAGGAAACAG
TTAATGACCCTGAGGAGGCAGGCCACAGAAGTGGCTCCAAGAAAAAGAGGAAATTCTCCAAAGAGGAGCCGGTCA
GCAGTGGGCCTGAAGAGGCGGTTGGCAAGAGCAGCTCCAAGAAGAAGAAAAAGTTCCATAAAGCATCCCAGGAAG
AT**TAG**AATGCAAATGGACATTCTCTGGGAGGTGGGGCATACCATAGCCCAAGGTGACATTTCCCACCCTGTGCCG
TGTTCCCCAATAAAAACAAATTCACAAG

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FIGURE 2764

CATGGCGGCATTGAGCGGAGTCCGCTGGCTGACCCGAGCGCTGGTCTCCGCCGGGAACCCTGGGGCATGGAGAGG
TCTGAGTACCTCGGCCGCGGCGCACGCTGCATCGCGGAGCCAGGCCGAGGACGTGAGGGTGGAGGGCTCCTTTCC
CGTGACCATGCTTCCGGGAGACGGTGTGGGGCCTGAGCTGATGCACGCCGTCAAGGAGGTGTTCAAGGCTGCCGC
TGTCCCAGTGGAGTTCCAGGAGCACCACCTGAGTGAGGTGCAGAATATGGCATCTGAGGAGAAGCTGGAGCAGGT
GCTGAGTTCCATGAAGGAGAACAAAGTGGCCATCATTGGAAAGATTCATACCCCGATGGAGTATAAGGGGGAGCT
AGCCTCCTATGATATGCGGCTGAGGCGTAAGTTGGACTTATTTGCCAACGTAGTCCATGTGAAGTCACTTCCTGG
GTATATGACTCGGCACAACAATCTAGACCTGGTGATCATTCGAGAGCAGACAGAAGGGGAGTACAGCTCTCTGGA
ACATGAGGTGAGGCCCCAGAAACTGGGGGAGGGCAAGGATGAAGATGGGAGAGAGGTGGAGCTCCTTGTTTCCCT
TCCCAGTGTCACCTAGCTGCTGCTTTCTTCTTACCCAGAGTGCAAGGGGTGTGATTGAGTGTTTGAAGATTGTCA
CACGAGCCAAGTCTCAGCGGATTGCAAAGTTCGCCTTTGACTATGCCACCAAGAAGGGGCGGGGCAAGGTCACTG
CTGTCCACAAGGCCAACATCATGAAACTTGGGGATGGGTTGTTCCTGCAGTGCTGTGAGGAAGTTGCTGAACTGT
ACCCCAAAATCAAATTTGAGACAATGATCATAGACAACTGCTGCATGCAGCTGGTGCAGAATCCTTACCAGTTTG
ATGTGCTTGTGATGCCCAATCTCTATGGGAACATTATTGACAATCTGGCTGCTGGCCTGGTTGGGGGAGCTGGTG
TGGTCCCTGGTGAGAGCTATAGTGCAGAATACGCAGTCTTTGAGACGGGTGCCCGGCACCCATTTGCCCAGGCAG
TGGGCAGGAATATAGCCAATCCCACGGCCATGCTGCTGTCGGCTTCCAACATGCTGCGGCATCTTAATCTTGAGT
ATCACTCCAGCATGATCGCAGATGCGGTGAAGAAGGTGATCAAAGTTGGCAAGGTGCGGACTCGAGACATGGGCG
GCTACAGCACCACAACCGACTTCATCAAGTCTGTCATCGGTCACCTGCAGACTAAAGGGAGCTAGAGCCCTTTAT
TTCTTCCAACCTTGCAAGGACCACACTCCCCATACCCTTCAGTGCAGTGTACCAGGGAAGAGACCTTGTGCCTCT
AAGCAGTGGACCATGGTCACCTTGCTGGGTAGAGCCTAGGTTGTCCTTGGGCCGGCTTCCTTAGGGGACAGACTG
TTGGGTGGTGATGGGGATTGTTAGGATGGAGCCCAGGCCACATGGATGATGATGATTCTCCCCCACAGGTTCGAA
CCTCTGACATGGGTGGCTATGCTACTTGCCATGACTTCACTGAGGCTGTCATTGCTGCCTTGCCCCACCCATAGG
CCCTGTCCATACCCATGTAAGGTGTTCAATAAAGAACATGAACC

FIGURE 2765

GATCCCGCCCCCCTCGGAGCGCCCCTGTGGTCTGACTTCAGCAGCACTTTCCGGCAGGAGACTGGGCACTCGCTG
TCACCCGCGAGCTGCCTCCCTCAGCGAGATCTGAGCATCTTTCCGGAGGCTAACAGACCTGGGCTTCGGGGTGAC
CACTGTGCTTGCCTCAGTTTCCTTTTCTGGAGCAGGGGAAGGCCCGGCTCCCTGCCCAAAGGCGGCTGTGCGCTA
AGTGGCAGACGCTCGGGGAGAGCCGGCGCGGGGCGGACCCCAGCGCCAGTAGTGACAGGGGCGAACGCCGCCGGG
AGACTCCAGCCGGCGGGCGAGCAGGCCTGTCGTTGCTGGTGGCGGC**ATG**GTCTTCTGTCTGTCGAGCGAGGAGCC
GCGCCGCCCGCTGCGAAGCGACATGGTCCACTTCCAGGCCTCGGAAGTCCAGCAGCTGCTACACAACAAGTTCGT
GGTCATCTTGGGGGACTCCATTCAGAGGGCTGTGTACAAGGACCTGGTGCTCTTGCTCCAGAAAGACTCACTGCT
CACAGCTGCCCAGCTGAAAGCCAAGTACCTTGAGGATGTTCTGGAAGAGCTGACATATGGACCTGCCCCGGACCT
GGTGATCATCAACTCCTGCCTCTGGGATCTCTCCAGATATGGTCGCTGCTCAATGGAGAGCTACCGGGAGAACCT
GGAGCGGGTGTTTGTGCGCATGGACCAAGTATTGCCAGACTCCTGCCTGCTGGTGTGGAACATGGCGATGCCCCT
CGGGGAACGTATCACTGGGGGTTTCCTCCTGCCAGAGCTCCAGCCCCTGGCAGGCTCCCTGCGGCGGGATGTGGT
TGAAGGGAACTTCTACAGTGCTACGCTGGCCGGGGACCACTGCTTTGATGTCCTAGACCTCCACTTTCACTTCCG
GCATGCAGTACAGCACCGTCATCGGGATGGTGTCCACTGGGACCAGCATGCACACCGCCACCTCTCACACCTGCT
TCTGACCCATGTGGCTGACGCCTGGGGCGTGGAGCTGCCCAAGCGTGGCTATCCCCCTGACCCGTGGATTGAGGA
CTGGGCAGAGATGAATCATCCATTCCAGGGAAGCCATAGGCAGACCCCAGACTTCGGGGAGCACCTGGCCTTGCT
CCCACCCCCACCTTCTTCTTTGCCTCCTCCCATGCCTTTTCCCTACCCGCTTCCTCAGCCCTCGCCACCTCCCCT
CTTCCCACCCCTGCCCCAGGATACCCCTTTTTTCCCAGGCCAGCCCTTCCCACCCCATGAATTCTTCAACTATAA
TCCAGTGGAGGACTTCTCGATGCCACCCCACTTAGGATGTGGCCCTGGAGTGAACTTTGTGCCTGGCCCTCTGCC
ACCTCCAATCCCTGGCCCTAATCCCCATGGTCAGCACTGGGGCCCAGTGGTCCACCGGGGGATGCCACGCTATGT
TCCTAACAGCCCCTACCATGTGCGGAGAATGGGGGGGCCCTGCAGGCAGCGGCTCAGACACTCAGAGAGACTGAT
CCACACATACAAACTGGACAGACGGCCTCCTGCCCATTCGGGGACATGGCCTGGG**TAG**ACTGGATCTTGGGCTGG
GACTGGATGTGCCAATGGCCCTTCAGGGCCTGCCTGGCACCTCAGGTACTGGGCTAGGGTGTCTGCTATGCCTGG
TATTGTTCTTGTCCATTGCTGTCACCAATAAAGGCATGGAAGAACAGAGTGACAAA

FIGURE 2766A

GGAGTATGAGCCACGCTCAGGGGAGCAGGTACCCCTTCTCCTAAAGATGAAGAGGAGCAAACTGGCACTAAGCAA
GGCCATCGAGAGCGGGGACACTGACCTGGTGTTCACGGTGTTGCTGCACCTGAAGAACGAGCTGAACCGAGGAGA
TTTTTTCATGACCCTTCGGAATCAGCCCATGGCCCTCAGTTTGTACCGACAGTTCTGTAAGCATCAGGAGCTAGA
GACGCTGAAGGACCTTTACAATCAGGATGACAATCACCAGGAATTGGGCAGCTTCCACATCCGAGCCAGCTATGC
TGCAGAAGAGCGTATTGAGGGGCGAGTAGCAGCTCTGCAGACAGCCGCCGATGCCTTCTACAAGGCCAAGAATGA
GTTTGCAGCCAAGGCTACAGAGGATCAAATGCGGCTCCTACGGCTGCAGCGGCGCCTAGAAGACGAGCTGGGGGG
CCAGTTCCTAGACCTGTCTCTACATGACACAGTTACCACCCTCATTCTTGGCGGTCACAACAAGCGTGCAGAGCA
GCTGGCACGTGACTTCCGCATCCCTGACAAGAGGTGACACAACTAAAAAAAAACAAAGGTATTTATGGAATTCCA
CTGAGTGGTAATGGATGATGCAGTTCAAATAACTAAGGACACATGTTCAAAGAGCATAATTAACTTTTAAAAGA
AGCTAATAAGC**ATG**GATTCCTGGTTCATTCTTGTTCTGCTCGGCAGTGGTCTGATATGTGTCAGTGCCAACAATG
CTACCACAGTTGCACCTTCTGTAGGAATTACAAGATTAATTAACTCATCAACGGCAGAACCAGTTAAAGAAGAGG
CCAAAACTTCAAATCCAACTTCTTCACTAACTTCTCTTTCTGTGGCACCAACATTCAGCCCAAATATAACTCTGG
GACCCACCTATTTAACCACTGTCAATTCTTCAGACTCTGACAATGGGACCACAAGAACAGCAAGCACCAATTCTA
TAGGCATTACAATTTCACCAAATGGAACGTGGCTTCCAGATAACCAGTTCACGGATGCCAGAACAGAACCCTGGG
AGGGGAATTCCAGCACCGCAGCAACCACTCCAGAAACTTTCCCTCCTTCAGGTAATTCTGACTCGAAGGACAGAA
GAGATGAGACACCAATTATTGCGGTGATGGTGGCCCTGTCCTCTCTGCTAGTGATCGTGTTTATTATCATAGTTT
TGTACATGTTAAGGTTTAAGAAATACAAGCAAGCTGGGAGCCATTCCAATTCTTTCCGCTTATCCAACGGCCGCA
CTGAGGATGTGGAGCCCCAGAGTGTGCCACTTCTGGCCAGATCCCCAAGCACCAACAGGAAATACCCACCCCTGC
CCGTGGACAAGCTGGAAGAGGAAATTAACCGGAGAATGGCAGACGACAATAAGCTCTTCAGGGAGGAATTCAACG
CTCTCCCTGCATGTCCTATCCAGGCCACCTGTGAGGCTGCTTCCAAGGAGGAAAACAAGGAAAAAAATCGATATG
TAAACATCTTGCCTTATGACCACTCTAGAGTCCACCTGACACCGGTTGAAGGGGTTCCAGATTCTGATTACATCA
ATGCTTCATTCATCAACGGCTACCAAGAAAAGAACAAATTCATTGCTGCACAAGGACCAAAAGAAGAAACGGTGA
ATGATTTCTGGCGGATGATCTGGGAACAAAACACAGCCACCATCGTCATGGTTACCAACCTGAAGGAGAGAAAGG
AGTGCAAGTGCGCCCAGTACTGGCCAGACCAAGGCTGCTGGACCTATGGGAATATTCGGGTGTCTGTAGAGGATG
TGACTGTCCTGGTGGACTACACAGTACGGAAGTTCTGCATCCAGCAGGTGGGCGACATGACCAACAGAAAGCCAC
AGCGCCTCATCACTCAGTTCCACTTTACCAGCTGGCCAGACTTTGGGGTGCCTTTTACCCCGATCGGCATGCTCA
AGTTCCTCAAGAAGGTGAAGGCCTGTAACCCTCAGTATGCAGGGGCCATCGTGGTCCACTGCAGTGCAGGTGTAG
GGCGTACAGGTACCTTTGTCGTCATTGATGCCATGCTGGACATGATGCATACAGAACGGAAGGTGGACGTGTATG
GCTTTGTGAGCCGGATCCGGGCACAGCGCTGCCAGATGGTGCAAACCGATATGCAGTATGTCTTCATATACCAAG
CCCTTCTGGAGCATTATCTCTATGGAGATACAGAACTGGAAGTGACCTCTCTAGAAACCCACCTGCAGAAAATTT
ACAACAAAATCCCAGGGACCAGCAACAATGGATTAGAGGAGGAGTTTAAGAAGTTAACATCAATCAAAATCCAGA
ATGACAAGATGCGGACTGGAAACCTTCCAGCCAACATGAAGAAGAACCGTGTTTTACAGATCATTCCATATGAAT
TCAACAGAGTGATCATTCCAGTTAAGCGGGGCGAAGAGAATACAGACTATGTGAACGCATCCTTTATTGATGGCT
ACCGGCAGAAGGACTCCTATATCGCCAGCCAGGGCCCTCTTCTCCACACAATTGAGGACTTCTGGCGAATGATCT
GGGAGTGGAAATCCTGCTCTATCGTGATGCTAACAGAACTGGAGGAGAGAGGCCAGGAGAAGTGTGCCCAGTACT
GGCCATCTGATGGACTGGTGTCCTATGGAGATATTACAGTGGAACTGAAGAAGGAGGAGGAATGTGAGAGCTACA
CCGTCCGAGACCTCCTGGTCACCAACACCAGGGAGAATAAGAGCCGGCAGATCCGGCAGTTCCACTTCCATGGCT
GGCCTGAAGTGGGCATCCCCAGTGACGGAAAGGGCATGATCAGCATCATCGCCGCCGTGCAGAAGCAGCAGCAGC
AGTCAGGGAACCACCCCATCACCGTGCACTGCAGCGCCGGGGCAGGAAGGACGGGGACCTTCTGTGCCCTGAGCA
CCGTCCTGGAGCGTGTGAAAGCAGAGGGGATTTTGGATGTCTTCCAGACTGTCAAGAGCCTGCGGCTACAGAGGC
CACACATGGTCCAGACACTGGAACAGTATGAGTTCTGCTACAAGGTGGTGCAGGAGTATATTGATGCATTCTCAG
ATTATGCCAACTTCAAG**TAA**GCGGCAACAAGGGTCCGTGGACCAGGAGGATTGCCTTTAATATTTTGTAATATTC
TGTTTTGTTAATATACCCCAAATTGTGTATATATCTTATAACTGTTTTAGAAATTGGTACATAGGCTTCTATTAC
CTATTAGGTGGAAATTTTATATGTAAATGTGTTAGCACTGATAGTCCTTTTTCCAATGTTTTATTGGGGAATTAA
ATAGTGTGATGTTTGGATTGATATCGTGAAATCCTCAGCCGAGAAATTGGGCTGGATTGTGCTTTGGTTAATACA
TCTTTCCCTAAAGAAGATAAACACAAAATCCATTCCAGGTAGCTCGGCACCAACTAAGAAAAAAAGCACAAAGTT
CTCAGAGCTCTCGAGGAAAGTGGTTGTCCCCGTACCACCATGCACTGTAAATATCCCTCCCCTCTCTCCCTGGTC
CCCTCCCCCATCCCCACCACTGATATCATGGGGAGTAATAGGACCAGAGCGGTATCTCTGGCACCACACTAGGGA

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FIGURE 2766B

CTATCAGGTAATAAAAGCTTTGACTCCCTG

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FIGURE 2767

GAGACTCGGCC**ATG**CTACGCGCGCTGAGCCGCCTGGGCGCGGGGACCCCGTGCAGGCCCCGGGCCCCTCTGGTGC
TGCCAGCGCGCGGCCGCAAGACCCGCCACGACCCGCTGGCCAAATCCAAGATCGAGCGAGTGAACATGCCGCCCG
CGGTGGACCCTGCGGAGTTCTTCGTGCTGATGGAGCGTTACCAGCACTACCGCCAGACCGTGCGCGCCCTCAGGA
TGGAGTTCGTGTCCGAGGTGCAGAGGAAGGTGCACGAGGCCCGAGCCGGGGTTCTGGCGGAGCGCAAGGCCCTGA
AGGACGCCGCCGAGCACCGCGAGCTGATGGCCTGGAACCAGGCGGAGAACCGGCGGCTGCACGAGCTGCGGATAG
CGAGGCTGCGGCAGGAGGAGCGGGAGCAGGAGCAGCGGCAGGCGTTGGAGCAGGCCCGCAAGGCCGAAGAGGTGC
AGGCCTGGGCGCAGCGCAAGGAGCGGGAAGTGCTGCAGCTGCAGGAAGAGGTGAAAAACTTCATCACCCGAGAGA
ACCTGGAGGCACGGGTGGAAGCAGCATTGGACTCCCGGAAGAACTACAACTGGGCCATCACCAGAGAGGGGCTGG
TGGTCAGGCCACAACGCAGGGACTCC**TAG**GGGCCCAGTAAGGACAGTGCCCGCCAGGGACCATGTATGTATCATG
GCGGAAGAGTTGGCCCTGACCTGGAATAAAGCAGTTGGTGTTGCTTATGAGGAAGGTTCAGCCTTATCCAGCACA
GCCTTCACGTTTTGCCCTCTGCTGTCACCACTTGGTCAGAAACTTCCAAACGCAGTGCCCTGTTCTGCCGGTGTG
TACAGCCTCAGCGCACCAGGAGACCCTAGAGTGGTTTCCATCTCACAGAGAATCAGACAGGGCCACAGCCCCCTC
AGGCAGCCAGGTCATCTGAGTATCATTAAGAGTAGTGATGGGAAGATTACAGTCTGAGGGCCAAACGTGCCTGCT
TCCTGTTTTTGTAAATAAAGTTTTGTTGGAACAC

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FIGURE 2768

GCTGTGAGGCTCGGAGTCGCCGGAGGAGCCAGTATCTGTGTCGCCGCCGCCCGCGGCGTCCCCGGTTTGGTGTTG
CGGCGCCCACCTTCGGGAGGATCAGTATCTGGCACCAATTCTGACCCAGTCATTTGTGATCCCTGGCTCTTGTGA
TATGCTGAAGATTTCCAGGCAGTTTTTGTGGAACACCTCCCCGTCCAGCTCTAATCAAGCACCATATAAACAAGA
AATTGCCTGGTCAAATCTGTGAGGACTGTATTCTGACTGCCAAAGAGATCAATACTGACACCAGAATGGCAGCTA
CTCTCAAGTCATTAAAACTTGTAAGATACCGAGCATTTTGCAGTCCTTCTGCCTTTGGTGCAGTCCGAAGTGTGT
CATACTGGAATGTGAGCAGCACACAGCATGGGGGACAGGACCCTCCAGAACACATTAGCCTCTGCCATTCTGCCA
AAAAAGTTAAGAACATATGTAGCACCTTCTCTTCTCGGAGAATCCTGACAACCAGCAGTGCCCACCCAGGTTTGG
AATTCAGCAAGACTTCTTCCTCTAAGGCCAGTACATTGCAGCTGGGCTCACCCAGGGCCACAGGAGTTGATGAAG
AGGACGTAGAAGTGTTTGATTCCTTTGAAAACATGCGAGTTTTCCTACAGCTAAGACCAGAATACCGTGTTCACA
GCTATAATGCATCTGAGACTTCTCAGCTCCTGTCTGTTTCAGAAGGTGAACTAATTTTGCACAAAGTCAGAGTTA
ATCAAAATAATCTCCAGGCTCAAGTCATTGTTGATTATTTGTGTAAGCTGAGCTCTTTGCCTGCAGAGCAGCATC
CTGTCTTGCTGGGCAGTACCAGCTTTGCTCTGCTCTGCCAGCTGAGTGTGAAGAAGATACAGCTCTTTGATACCC
AAGATCTGATCAATGTTTTGAAAGCTTTTGTCATTTTAGGAATCCCTCACTCCCATTCAATGCTAGATGTGTATG
AGACCAAGTGTTGCCATCAGGTATGGGAGATGAATATGGATCAGCTCCTTTTGGTGGCTGATCTCTGGAGGTACT
TAGGCCGCAAAGTACCTAGGTTTTTAAACATTTTTTCTAGTTATCTTAATTTGCACTGGAAGGATCTATCCTTGT
CTCAGCTAGTTCACTTAATTTATGTTATAGGTGAAAATCGTCAGGTATCCCAGGACCTAATGCAAAAATTGGAAT
CATTGATCCTTAAATATATAGATTTGATCAATTTGGAGGAGGTTGGTACCATCTGTTTGGGGTTCTTTAAATCAA
GTACTAATCTCTCTGAATTTGTCATGCGGAAAATTGGAGACTTGGCTTGTGCTAACATTCAGCATCTGAGTAGTC
GCTCCTTAGTGAATATTGTTAAAATGTTCCGTTTCACTCACGTGGATCACATCAATTTCATGAAGCAGATTGGAG
AGATAGCTCCTCAGCGAATTCCTTCCCTGGGAGTTCAAGGTGTCATGCACCTGACTCTTTACTGCTCGGCCTTAC
GCTTCCTGAATGAAGGAGTAATGAATGCAGTGGCTGCGTCTTTGCCTCCTAGAGTGGCACACTGTCGAAGTAAAG
ATGTTGCCAAGATTCTGTGGTCATTTGGAACTCTGAATTATAAGCCACCCAATGCAGAAGAATTTTACTCCAGCC
TGATAAGTGAGATTCACAGAAAGATGCCTGAATTCAACCAGTACCCAGAACACCTGCCCACCTGCCTGCTGGGCC
TGGCATTTTTGGAGTACTTTCCAGTAGAGTTAATTGATTTCGCTCTCAGTCCAGGGTTTGTCAGGTTAGCTCAGG
AGAGAACTAAGTTTGACCTCCTTAAGGAACTATATACCCTCGATGGTACAGTTGGCATTGAGTGTCCAGATTACA
GAGGCAATCGTCTTAGTACTCACCTTCAGCAAGAGGGGTCTGAATTGCTGTGGTATTTAGCAGAGAAGGATATGA
ATTCAAAGCCTGAATTCTTAGAAACTGTCTTTTTACTGGAGACCATGCTGGGGGGGCCCCAGTACGTCAAGCACC
ATATGATTTTGCCTCATACCCGATCTTCTGACTTAGAGGTCCAGCTTGATGTTAACCTGAAGCCATTACCATTTA
ATAGAGAAGCCACGCCGGCTGAAAATGTAGCCAAATTAAGGCTTGAGCATGTGGGAGTCAGCCTTACAGATGATT
TGATGAATAAGTTACTAAAAGGGAAAGCAAGAGGACATTTCCAGGGCAAAACTGAGTCAGAGCCTGGGCAGCAGC
CCATGGAGTTGGAGAATAAGGCAGCTGTACCTCTGGGGGGCTTCCTTTGCAATGTAGCAGATAAATCAGGGGCCA
TGGAGATGGCTGGCCTGTGCCCCGCAGCCTGCATGCAGACCCCAAGAATGAAGCTGGCTGTTCAGTTCACAAACA
GGAACCAGTATTGCTATGGCTCCAGGGATCTCCTTGGACTGCACAATATGAAGAGGCGGCAGCTGGCTCGGCTTG
GCTACCGTGTGGTAGAGTTATCCTACTGGGAATGGCTCCCACTACTGAAACGAACTCGCTTAGAAAAGTTGGCGT
TTCTTCATGAGAAAGTATTCACCTCTGCTCTCTGAAGGGCATTTAGGGGCATTTCTATGGCAAAGCTATAGGTGT
ATACTGTACCAGGTGTTGCAAAATGATTATAAAAGCCAGAATGTAAGTTTGGCGATAAAATAGTGTGTTGAGGAG
ACTTAATTGTATCCAAGGCAGGTTAGAGCTAGTGTATGTTACTGTGAATTGTAATGTAGTTGGATTGTACAAATT
ACTGCAAATGTATACATGTTACTCTTAGTAAATAATAAACATCTTAATATGTCCTACGGTC

FIGURE 2769A

CGCTTGTGGGCCGGCCTTGGGGGAGGGGGACGCGCACCCACAGAAGGACTCAGAGGGCTTCACGGTAAGCTGAGC
AGGGTCAAGGTCCACAGGGAGCGGGAGAGGGTAGTAATCCGGGAAGTCTTCCTGGTGGCAGTGAATTCTTTGCGG
GGTTCGGCAGGCGCAGGATCCTTGGGGCCGCGCACCCTGCAGCGGCCCCTCCCCTCCCCTCCCCCCTCCCACCTG
TGGGAAACGCAGGCCCTGAGAGAGGCTCCGTCAGTGCCAGCAGCTGGCGCCACTGCGTCCCCTGCCCCGGCCTCA
GCCAGCCCTGGGACCTCTGCGGAGGACTGATCCCGGGAAGGGGGCCCTGTCTTCCCAGGGCCCCGGTGCGGCCGA
GCTGGGAAGACCTTGGGGAGGGCAGGCCTGCCACCTACTGCAGCCGCGGCCCCCGTCCATCCGGGAGGGACAGGC
TGTGCCCTTGGCGGCGCCCACCCGCGACCCAGATGTGCGTCGCCTACCCACCCTCCCCCAGACCCCCGTTTCCTC
AGGCGCTCGCCGCCTCGGGGCGCCTGGCACGCGGCAGCCCCGCAAGGTAGGTCCTTCATTCCTCCCATTTCGCAG
AGGAGAAAACTGCAGTCCGGGATGGCTCAGTCGGCCCCTCCAAAGTCGCGCAGCTGGTTCGGGCCGAGCCCCGAC
TGCGAGAGTGAGGCACATGGCCCCTGCAGACCGGGCCTCGGAGGGTCCCAGGCTTGAGGACCCGTCGGCCCCTCA
ACCCCTTGGAAAGGCAAGGAGAGAAGCCTGCGCTGGTAGTGAGCTTCCACTTCTGCCCTGACTGCAACACTTAGG
TTAGGGGGCTGGGAAGGACCCCCACCCTCAATTTTTGGATAGGGGTGTATTTCTCTCCCTCCCCTAATTTCTGAG
GTTGGTTCCCTGTTGGATTCAGGTACTGCTCTCCCCTTCCAACCCCATTTCCCCAGCCCATGAGGTTGGGATATT
AGGGTCCCAGACCCAAGATAAAGAACCCCAAAATTCTGGGGTTGCAGCAAAGAGTTGAGAGGGTCACTGAGCCTG
GGAAGCTCATGGCGGAGGTGGGGCTAAGGCAGAAGTTTAGGAATGGAACGCTGAGCTGAGCTGAGCTGAGCTGAG
CTGAGCAACGCTGGGGGCTATGTGCATGGAGCCCTGGGGGTTGGGCTTTATCAGGTGGGCAACAGGCAGCCCCCA
TTCCCAAGTTCTCTCTTTTATCCCAGCCTTATTCCTTCACCTTGGATGCCTGGGAACTTTTTGTACCCATTGTAG
GGAAGGGGACACTGAGGGGCAGAGCGGTGCCGGGTTGACTTGGCTGGGGTGGTGGGAATAGGAGTAGGGTCTTAC
CTATCTCTGCCTTCCCACCTGTGCCCACAGTGCCCCCCTGGCTTAGTC**ATG**GCGAAGCTGGAGACGCTGCCTGTG
CGCGCTGACCCAGGGCGGGATCCTCTCCTGGCCTTTGCCCCACGGCCCTCCGAGCTTGGACCCCCGGACCCCCGC
CTGGCCATGGGCAGCGTGGGCAGTGGGGTGGCCCATGCCCAGGAGTTTGCCATGAAGAGCGTGGGTACCCGCACA
GGGGGTGGGGGCAGCCAGGGCAGTTTCCCTGGCCCCCGAGGCAGTGGCAGTGGGGCCAGCAGGGAGAGGCCGGGC
CGCTACCCCTCAGAGGACAAGGGTCTCGCCAACTCCCTCTACCTCAATGGTGAGCTGCGGGGCAGTGACCACACC
GATGTCTGTGGCAACGTGGTTGGCAGCAGCGGAGGCAGCAGCAGCAGTGGTGGCAGTGACAAAGCCCCACCGCAG
TATCGTGAGCCCAGCCACCCACCCAAGCTCCTGGCCACCTCTGGCAAGCTAGACCAGTGCTCAGAACCACTAGTT
CGGCCGTCGGCCTTCAAGCCTGTCGTACCCAAGAATTTCCACTCCATGCAGAATTTGTGCCCCCCGCAGACCAAT
GGGACTCCTGAGGGACGGCAGGGCCCTGGTGGCCTCAAAGGCGGACTGGACAAGTCTCGGACCATGACTCCAGCG
GGTGGGAGTGGGAGTGGCCTCTCAGACTCAGGCCGGAACTCCCTCACAAGCCTGCCCACCTACAGCTCCAGCTAC
AGCCAGCACCTGGCACCCCTCAGTGCCTCCACCAGCCACATTAACCGCATTGGCACTGCCAGCTATGGTAGTGGT
AGTGGCGGCAGCAGCGGTGGGGGGTCGGGCTACCAGGACCTGGGGACCTCCGATAGTGGACGGGCCTCCAGCAAG
AGTGGGTCGTCGTCATCTATGGGGCGGCCAGGCCACCTGGGCTCTGGGGAGGGCGGAGGTGGAGGCCTGCCTTTC
GCGGCCTGCTCACCGCCCTCCCCCAGTGCACTCATCCAGGAGCTGGAGGAGCGGCTGTGGGAGAAGGAGCAGGAG
GTGGCAGCTCTGCGGCGCAGCCTGGAGCAGAGCGAGGCGGCTGTGGCCCAGGTACTGGAGGAGCGGCAGAAGGCG
TGGGAGCGGGAGCTGGCCGAGCTGCGGCAGGGCTGCAGCGGGAAGCTACAGCAGGTGGCCCGACGTGCCCAGCGC
GCCCAGCAGGGCCTACAGCTGCAGGTGTTGCGGCTGCAGCAGGACAAGAAGCAGCTGCAGGAGGAGGCGGCCCGG
CTGATGCGGCAGCGGGAAGAGCTGGAGGACAAGGTGGCCGCCTGCCAGAAGGAGCAGGCCGACTTCCTGCCCCGG
ATAGAGGAAACTAAGTGGGAGGTGTGCCAGAAGGCTGGCGAGATCTCCCTCCTGAAGCAGCAGCTGAAGGACTCG
CAGGCGGATGTGTCGCAGAAGTTGAGTGAGATCGTGGGACTGCGCTCGCAGCTGCGGGAGGGCCGGGCTTCGCTG
CGGGAGAAGGAGGAGCAGCTGCTCAGCCTGCGGGACTCCTTCAGCAGCAAGCAGGCCAGCCTGGAGCTGGGCGAA
GGCGAGCTGCCTGCCGCCTGCCTCAAGCCGGCGCTGACCCCCGTGGACCCGGCCGAGCCACAGGATGCTCTGGCC
ACCTGCGAGAGCGACGAGGCTAAGATGCGCCGTCAGGCCGGGGTGGCCGCTGCCGCCTCCTTGGTTTCCGTGGAC
GGGGAGGCGGAGGCTGGCGGGGAGAGCGGGACGCGGGCCCTGCGGCGGGAGGTGGGGCGGCTGCAGGCCGAGCTG
GCGGCTGAGCGGCGGGCCCGGGAGCGCCAGGGTGCCAGCTTCGCCGAGGAGCGCCGCGTGTGGCTGGAGGAGAAG
GAGAAGGTGATCGAGTACCAGAAGCAGCTGCAGCTGAGCTACGTGGAGATGTACCAGCGCAACCAGCAGCTGGAG
CGCAGGCTGCGGGAGCGCGGGGCCGCAGGGGGTGCAAGCACGCCCACTCCCCAGCATGGCGAGGAGAAGAAGGCC
TGGACCCCCTCCCGCCTCGAGCGCATTGAGTCCACAGAAATC**TGA**TCGACCTGGGCACTCGGCATTTTGACACAT
GTCCTGTCAAAAGGCCAGAGTCCCCAGTGTCCCCTCCCCTCCATCTCTCTTCCCCATAGACCCCATAACCCCAGA
CCAAAGAGGTTCTCTAAGCAGCTGTGACCAGGTTCCTCCCTCCCCACCTGCCCTCCTAGCTCCAGCACTGCCCCC

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FIGURE 2769B

GTGGCAGCCCACTTGGACCCCCCTAAAAGGAGGGAATAGGAGGAGGGCAGGGTGAGTGGGGGCAATCCTAGGTGG
TGGGGGAGTCATGCTCCCTTTCTCGGCACCCCCTTGTTGGAGATGGAGGCAGCAGACGTGCAGTGCCATAAGGTG
CCCCAGTCCTTCTGGAGGCCTGGGCTGCTACTGTTGGCCACCCTGTGTCTAGTGATGCTCTCTGTGCTCACCTCC
TAGGCCATGGAGCCTGAGGGGGCCTGCACCAGGTTTGCTGAAACTGACAGAGCCTGGGCTCCAGACCTCTCTCCC
TCCTACAGTGCTCTCCCTCCCTGGGCAGATTGGCAGGACAAGTGGGAGCAGATGGCCTGCCTTTGGCTGAGAGGG
CTACCTGCCCAGCCCCTCCCCCAACAAGATCTCTTGGACTCAGGCCTCAGAGCCTGGCCTGGTTGTGAGTGTGTG
TCCCTGTGTGTGTGTTGCGGGAGGGGAGGACTGGGGCTGGAAGTCCAGCACCCAGGGAAGATCTGTCCTCCTGTT
CTTGGGAAGCGTTGCCTGACGGCTTCTCGGCTCTACCCTCACCCTTCTGGCCAGGATCCCGCAGGGCAACAGCCC
CATCTGCTTGGCTGACCCCACACCCAGGACCACTGTCCGGCTCTAACACAGCTATTAAGTGCTACCTGCCTCTCA
GGCACTCTCCTCGCCCAGTTTCTGAGGTCAGACGAGTGTCTGCGATGTCTTCCCGCACTCTATTCCCCCAGCCTC
TTTCTGCTTTCATGCTCAGCACATCATCTTCCTAGGCAGTCTCTTCCCCAAAGTCTCACCTTTTCTTCCAATAGA
AAATTCCGCTTGACCTTTGGTGCACTGCCCACTTCCCAGCTCCACTGGCCCAAGTCTGAGCCGGAGGCCCTTGTT
TTGGGGGCGGGGGGAGAGTTGGATGTGATTGCCCTTGAAGAACAAGGCTGACCTGAGAGGTTCCTGGCGCCCTGA
GGTGGCTCAGCACCTGCCCAGGGTAGGCCTGGCATGAGGGGTTAGGTCAGCCAATGTCAGCTGCTTCTCTTGGGG
CCCTCTCAGAGTCTATCTCCCCAAGACAGGAAGGGAAAAGCAAATTTCTAATTCACCAGCAATAAAAATTGGAGG
AGGCTTGGCCCTCAGCCCTTATATCTCTCTCTTTTTCACTCTCTTCCTCCCACCCCCAAGACTGAGTTTTGGGGG
GCAAGGTGGAGAGAGCTGGCAACTACTGTGAGCAAGTCCCCTAGCCCCTGACCAGCCTCCTCCCATGACTGGTGA
CTGTTTAATGAGCTGTGCATCCCCCACAAAAACATGAGTGCCCCTCTGTGTGGCCTCTAACCCTCTGCACAGCCC
TTCTGGGTGGTCCTCACCAGGTCTCTGAGCTGGGTGGGAGGCCATCCTGGCGACCACTGCCCATTCCATTCACCC
CTCACTGTACCTGCCCTAGAACCTGGGCCTAGGCCACAGGGGCAGGGAGAAGAGAAGGCATTAGTAAGAAAAAAA
TAGAAAAAAATATGAACAGACTCAGCTTTGGGACGTCCAACCACAAAAGAAATTATATATAAATATATATAAATA
TATATCTCTACCATATGTGATGGAAAGACTTTTTGTTTTCCTTTCCCAAAGAAATAAAACGGAAAAAGCC

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FIGURE 2770

GTTCTGCACTGAGGCCCTCGTCATGGTGGCGCCTGTGTGGTACTTGGTAGCGGCGGCTCTGCTAGTCGGCTTTAT
CCTCTTCCTGACTCGCAGCCGGGGCCGGGCGGCATCAGCCGGCCAAGAGCCACTGCACAATGAGGAGCTGGCAGG
AGCAGGCCGGGTGGCCCAGCCTGGGCCCCTGGAGCCTGAGGAGCCGAGAGCTGGAGGCAGGCCTCGGCGCCGGAG
GGACCTGGGCAGCCGCCTACAGGCCCAGCGTCGAGCCCAGCGGGTGGCCTGGGCAGAAGCAGATGAGAACGAGGA
GGAAGCTGTCATCCTAGCCCAGGAGGAGGAAGGTGTCGAGAAGCCAGCGGAAACTCACCTGTCGGGGAAAATTGG
AGCTAAGAAACTGCGGAAGCTGGAGGAGAAACAAGCGCGAAAGGCCCAGCGTGAGGCAGAGGAGGCTGAACGTGA
GGAGCGGAAACGACTCGAGTCCCAGCGCGAAGCTGAGTGGAAGAAGGAGGAGGAGCGGCTTCGCCTGGAGGAGGA
GCAGAAGGAGGAGGAGGAGAGGAAGGCCCGCGAGGAGCAGGCCCAGCGGGAGCATGAGGAGTACCTGAAACTGAA
GGAGGCCTTTGTGGTGGAGGAGGAAGGCGTAGGAGAGACCATGACTGAGGAACAGTCCCAGAGCTTCCTGACAGA
GTTCATCAACTACATCAAGCAGTCCAAGGTTGTGCTCTTGGAAGACCTGGCTTCCCAGGTGGGCCTACGCACTCA
GGACACCATAAATCGCATCCAGGACCTGCTGGCTGAGGGGACTATAACAGGTGTGATTGACGACCGGGGCAAGTT
CATCTACATAACCCCAGAGGAACTGGCCGCCGTGGCCAACTTCATCCGACAGCGGGGCCGGGTGTCCATCGCCGA
GCTTGCCCAAGCCAGCAACTCCCTCATCGCCTGGGGCCGGGAGTCCCCTGCCCAAGCCCCAGCCTGACCCCAGTC
CTTCCCTCTTGGACTCAGAGTTGGTGTGGCCTACCTGGCTATACATCTTCATCCCTCCCCACCATCCTGGGGAAG
TGATGGTGTGGCCAGGCAGTTATAGATTAAAGGCCTGTGAGTACTGCTGAGCTTGGTGTGGCTTGGTGTGGCAGA
AGGCCTGGCCTAGGATCCTAGATAAGCAGGTGAAATTTAGGCTTCAGAATATATCCGAGAGGTGGGGAGGGTCCC
TTGGAAGCTGGTGAAGTCCTGTTCTTATTATGAATCCATTCATTCAAGAAAATA

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FIGURE 2771

CCTGGCCGGAAACTGAGCCGTTCACTTCCGCCACCAGCCGGAAGTTTTCTGTCACTGGACGCCAAGGAGTTTTCG
GTGGCTCAGCTGGGTAACCGGGGATCACC**ATG**GCGGCCTCATTGGTGGGGAAGAAGATCGTGTTTGTAACGGGGA
ACGCCAAGAAGCTGGAGGAGGTCGTTCAGATTCTAGGAGATAAGTTTCCATGCACTTTGGTGGCACAGAAAATTG
ACCTGCCGGAGTACCAGGGGGAGCCGGATGAGATTTCCATACAGAAATGTCAGGAGGCAGTTCGCCAGGTACAGG
GGCCCGTGCTGGTTGAGGACACTTGTCTGTGCTTCAATGCCCTTGGAGGGCTCCCCGGCCCCTACATAAAGTGGT
TTCTGGAGAAGTTAAAGCCTGAAGGTCTCCACCAGCTCCTGGCCGGGTTCGAGGACAAGTCAGCCTATGCGCTCT
GCACGTTTGCACTCAGCACCGGGGACCCAAGCCAGCCCGTGCGCCTGTTCAGGGGCCGGACCTCGGGCCGGATCG
TGGCACCCAGAGGCTGCCAGGACTTTGGCTGGGACCCCTGCTTTCAGCCTGATGGATATGAGCAGACGTACGCAG
AGATGCCTAAGGCGGAGAAGAACGCTGTCTCCCATCGCTTCCGGGCCCTGCTGGAGCTGCAGGAGTACTTTGGCA
GTTTGGCAGCT**TGA**CTTCTGCAGCTGGAGGAGGCCCCTCAGGCCGGGGATCTGGGGAGGGCTAGCCCAAAACCTC
CCGCATCGGGCAGGCACCCCCTGAAGTACTTCCTTCAGGGTTTCCCCTTTGTGAGGGTGTCGAGTAGCCTCACCG
GCCTGTCTGGAGGAGCAGCTGGCTCTGCTCTGAGAAACTCTGGCAAGTGGACGCCATTCTCTTGCCCTTAGGATT
CACTGCTCTCTCCTACAGCCGCCAGGCCTGGGGTCCTGAAAGGACCTTGGGTGGTAAAGCTGTACTTGGTGGGAG
TGAGGGCGTGGGGAGGAACCATGCAAATCGCCTTCCATGGTTTTTAAATGCAGTAAATAACATTTCTGGATGAGA
CTTGTTTCCAAAATAAACCAGCTATATCTGTTTTG

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FIGURE 2772

GCAAGATGGCAGCCACCACAGGCTCAGTAGTAAAAGTCCCTTGCAATTTCCAACTGTTGGAAGAACTCGAAGAAA
GCCAGAAAGGAGTAGGAGATGACACAGTTAGCTGGGGTCTAGAAGATTACGAAGACATGACACTTACAAGATGGA
CAGGGATGATAATTGGGCCTCCAGGAACAATTTATGAAAACCGAATATACAGCCTTAAAATAGAATATGGACCTA
AATACTCAGAAGCACCCCCCTTTGTAATATTTGTAACAAAAAATTAATATGAATGGAGTTAATAGTTCTAATGGA
GTGGTGGACCCAAGAGCCATACCAGTGCTAGCAAAATGGCAGAATTCATATAGCATCAAAGTTGTCCTGCAAGAG
TTTCGGCGCCTAATGATGTCTAAAGAAAATATGAAACTCCCTCTGAGATTGGCCTTTGGTGAGGAATTCAGAGCT
TTCCCCATATCTTCTCTCCCCCACCTTTATCGAGGGGTGCTGCTTTTTATTCCCTCCTCAAGATCCTTTTTGCAC
CATCACCACCCAACACCTTCCATGAGACTTCCTTGCTTTGGCCAGAAGACATCAGGTAAGGTTGGAAAGAGTCTT
TGACCTCCCTTGTTTAATTTTGTAACCATACTTATTCACTCTCCACC

FIGURE 2773A

ATGGTGGCTGCAGCGGCGGCAACTGAGGCAAGGCTGAGGAGGAGGACGGCGGCGACGGCAGCGCTCGCGGGCAGG
AGCGGCGGGCCGCACTGGGACTGGGACGTGACCAGGGCTGGGAGGCCGGGGCTGGGGGCCGGGCTGCGCCTCCCG
CGGCTGCTGTCTCCACCGCTGCGGCCACGGCTGCTGCTGCTGCTGTTGTTGCTCTCGCCGCCGCTGCTGCTGCTG
CTGCTGCCCTGTGAGGCCGAGGCCGCGGCGGCGGCGGCGGCGGTGTCGGGCTCAGCCGCAGCCGAGGCCAAGGAA
TGTGACCGGCCCTGTGTCAACGGCGGTCGCTGCAACCCTGGCACCGGCCAGTGCGTCTGCCCCGCCGGCTGGGTG
GGCGAGCAATGCCAGCACTGCGGGGGCCGCTTCAGACTAACTGGATCTTCTGGGTTTGTGACAGATGGACCTGGA
AATTATAAATACAAAACGAAGTGCACGTGGCTCATTGAAGGACAGCCAAATAGAATAATGAGACTTCGTTTCAAT
CATTTTGCTACAGAGTGTAGTTGGGACCATTTATATGTTTATGATGGGGACTCAATTTATGCACCGCTAGTTGCT
GCATTTAGTGGCCTCATTGTTCCTGAGAGAGATGGCAATGAGACTGTCCCTGAGGTTGTTGCCACATCAGGTTAT
GCCTTGCTGCATTTTTTTAGTGATGCTGCTTATAATTTGACTGGATTTAATATTACTTACAGTTTTGATATGTGT
CCAAATAACTGCTCAGGCCGAGGAGAGTGTAAGATCAGTAATAGCAGCGATACTGTTGAATGTGAATGTTCTGAA
AACTGGAAAGGTGAAGCATGTGACATTCCTCACTGTACAGACAACTGTGGTTTTCCTCATCGAGGCATCTGCAAT
TCAAGTGATGTCAGAGGATGCTCCTGCTTCTCAGACTGGCAGGGTCCTGGATGTTCAGTTCCTGTACCAGCTAAC
CAGTCATTTTGGACTCGAGAGGAATATTCTAACTTAAAGCTCCCCAGAGCATCTCATAAAGCTGTGGTCAATGGA
AACATTATGTGGGTTGTTGGAGGATATATGTTCAACCACTCAGATTATAACATGGTTCTAGCGTATGACCTTGCT
TCTAGGGAGTGGCTTCCACTAAACCGTTCTGTGAACAATGTGGTTGTTAGATATGGTCATTCTTTGGCATTATAC
AAGGATAAAATTTACATGTATGGAGGAAAAATTGATTCAACTGGGAATGTGACCAATGAGTTGAGAGTTTTTCAC
ATTCATAATGAGTCATGGGTGTTGTTGACCCCTAAGGCAAAGGAGCAGTATGCAGTGGTTGGGCACTCTGCACAC
ATTGTTACACTGAAGAATGGCCGAGTGGTCATGCTGGTCATCTTTGGTCACTGCCCTCTCTATGGATATATAAGC
AATGTGCAGGAATATGATTTGGATAAGAACACATGGAGTATATTACACACCCAGGGTGCCCTTGTGCAAGGGGGT
TACGGCCATAGCAGTGTTTACGACCATAGGACCAGGGCCCTATACGTTCATGGTGGCTACAAGGCTTTCAGTGCC
AATAAGTACCGGCTTGCAGATGATCTCTACCGATATGATGTGGATACCCAGATGTGGACCATTCTTAAGGACAGC
CGATTTTTCCGTTACTTGCACACAGCTGTGATAGTGAGTGGAACCATGCTGGTGTTTGGAGGAAACACACACAAT
GACACATCTATGAGCCATGGCGCCAAATGCTTCTCTTCAGATTTCATGGCCTATGACATTGCCTGTGACCGCTGG
TCAGTGCTTCCCAGACCTGATCTCCACCATGATGTCAACAGATTTGGCCATTCAGCAGTCTTACACAACAGCACC
ATGTATGTGTTCGGTGGTTTCAATAGTCTCCTCCTCAGCGACATCCTGGTATTCACCTCGGAACAGTGTGATGCG
CATCGGAGTGAAGCCGCTTGTTTAGCAGCAGGACCTGGTATTCGGTGTGTGTGGAACACAGGGTCGTCTCAGTGT
ATCTCGTGGGCGCTGGCAACTGATGAACAAGAAGAAAAGTTAAAATCAGAATGTTTTTCCAAAAGAACTCTTGAC
CATGACAGATGTGACCAGCACACAGATTGTTACAGCTGCACAGCCAACACCAATGACTGCCACTGGTGCAATGAC
CATTGTGTCCCCAGGAACCACAGCTGCTCAGAAGGCCAGATCTCCATTTTTAGGTATGAGAATTGCCCCAAGGAT
AACCCCATGTACTACTGTAACAAGAAGACCAGCTGCAGGAGCTGTGCCCTGGACCAGAACTGCCAGTGGGAGCCC
CGGAATCAGGAGTGCATTGCCCTGCCCGAAAATATCTGTGGCATTGGCTGGCATTTGGTTGGAAACTCATGTTTG
AAAATTACTACTGCCAAGGAGAATTATGACAATGCTAAATTGTTCTGTAGGAACCACAATGCCCTTTTGGCTTCT
CTTACAACCCAGAAGAAGGTAGAATTTGTCCTTAAGCAGCTGCGAATAATGCAGTCATCTCAGAGCATGTCCAAG
CTCACCTTAACCCCATGGGTCGGCCTTCGGAAGATCAATGTGTCCTACTGGTGCTGGGAAGATATGTCCCCATTT
ACAAATAGTTTACTACAGTGGATGCCGTCTGAGCCCAGTGATGCTGGATTCTGTGGAATTTTATCAGAACCCAGT
ACTCGGGGACTGAAGGCTGCAACCTGCATCAACCCACTCAATGGTAGTGTCTGTGAAAGGCCTGCAAACCACAGT
GCTAAGCAGTGCCGGACACCATGTGCCTTGAGGACAGCATGTGGAGATTGCACCAGCGGCAGCTCTGAGTGCATG
TGGTGCAGCAACATGAAGCAGTGTGTGGACTCCAATGCCTACGTGGCCTCCTTCCCTTTTGGCCAGTGTATGGAA
TGGTATACGATGAGCACCTGCCCCCCTGAAAATTGTTCAGGCTACTGTACCTGTAGTCATTGCTTGGAGCAACCA
GGCTGTGGCTGGTGTACTGATCCCAGCAATACTGGCAAAGGGAAATGCATAGAGGGTTCCTATAAAGGACCAGTG
AAGATGCCTTCGCAAGCCCCTACAGGAAATTTCTATCCACAGCCCCTGCTCAATTCCAGCATGTGTCTAGAGGAC
AGCAGATACAACTGGTCTTTCATTCACTGTCCAGCTTGCCAATGCAACGGCCACAGTAAATGCATCAATCAGAGC
ATCTGTGAGAAGTGTGAGAACCTGACCACAGGCAAGCACTGCGAGACCTGCATATCTGGCTTCTACGGTGATCCC
ACCAATGGAGGGAAATGTCAGCCATGCAAGTGCAATGGGCACGCGTCTCTGTGCAACACCAACACGGGCAAGTGC
TTCTGCACCACCAAGGGCGTCAAGGGGGACGAGTGCCAGCTATGTGAGGTAGAAAATCGATACCAAGGAAACCCT
CTCAGAGGAACATGTTATTATACTCTTCTTATTGACTATCAGTTCACCTTTAGTCTATCCCAGGAAGATGATCGC
TATTACACAGCTATCAATTTTGTGGCTACTCCTGACGAACAAAACAGGGATTTGGACATGTTCATCAATGCCTCC

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FIGURE 2773B

AAGAATTTCAACCTCAACATCACCTGGGCTGCCAGTTTCTCAGCTGGAACCCAGGCTGGAGAAGAGATGCCTGTT
GTTTCAAAAACCAACATTAAGGAGTACAAAGATAGTTTCTCTAATGAGAAGTTTGATTTTCGCAACCACCCAAAT
ATCACTTTCTTTGTTTATGTCAGTAATTTCACCTGGCCCATCAAAATTCAGATTGCCTTCTCTCAGCACAGCAAT
TTTATGGACCTGGTACAGTTCTTCGTGACTTTCTTCAGTTGTTTCCTCTCTTTGCTCCTGGTGGCTGCTGTGGTT
TGGAAGATCAAACAAAGTTGTTGGGCCTCCAGACGTAGAGAGCAACTTCTTCGAGAGATGCAACAGATGGCCAGC
CGTCCCTTTGCCTCTGTAAATGTCGCCTTGGAAACAGATGAGGAGCCTCCTGATCTTATTGGGGGGAGTATAAAG
ACTGTTCCCAAACCCATTGCACTGGAGCCGTGTTTTGGCAACAAAGCCGCTGTCCTCTCTGTGTTTGTGAGGCTC
CCTCGAGGCCTGGGTGGCATCCCTCCTCCTGGGCAGTCAGGTCTTGCTGTGGCCAGCGCCCTGGTGGACATTTCT
CAGCAGATGCCGATAGTGTACAAGGAGAAGTCAGGAGCCGTGAGAAACCGGAAGCAGCAGCCCCCTGCACAGCCT
GGGACCTGCATC**TGA**TGCTGGGGCCAGGGACTCTCCCACGCACGAGCTAGTGAGTGGCACACCAGAGCCATCTGC
AGGGAAGGGCGTGGCGGGGAAATGGCTGTGCGGTGCGGGACGGAAGACTGGAAACCCTCAAAGCATCTGACTCAC
CTGCATGATCACAAGCTTTCTTTGACGGTTTCTCCCATCCGTGTTCCAGCATCTAACCTTTTACTTTTGCATAGG
AAATACTTGATTTAATTACAGGTCCAGGGATGAGCTGATGGTTGCTGGAGGAGGCCAGTGTAGAGCCAGTGAGAG
AACTAGGAATGACACTCAGGTTCACTGTGGAAAACTGTTCTTGGGACTGTCTCAACTGTGCAAAAAACAAAAGAT
GGAGTGTTTACAAGTAGACATTCGTCATCAGTTGTTCTTGAACATGGTCTTTTAAAAACTAGTCAGATGAATTGT
TTTCATCTGAAGCCTGCTATCTTTTTTAAAAGATGTGCTATTTATTCTTGCACGATTTAGGCAATTATCTCTCTT
CCAGGGAGTACCTTTTTTTCTAGTTGAGAATTAATAATGGTCCATCTCTTTTGATCATATCAAGCTAGGATAGAA
GGGGGGCTATTTTAAATGTCAAGGTCAGCAGTGTTACTTTGAATGTAAACTGGTATAATAGGTAGTTTTCTATAG
TAACTTGATTAATTTAGTCTTAATCCATTTGAAACTCTCTCTTCCTTTCTCTCTGCCTGTCCCTCTCCTTCTCCA
TCTCACCCTCCCTCTCTCACACATACACACACAAACACATACACACAACACTAAGTGCCTAGACTTTAAATAGAT
CTAGCAATTGGAAAGTTAGTAAGCCTAAGTTTTTACATAATTGCATTCCTACATTCTTGTAAAATTTAAATAGCT
ACCATTGGCAATCTGCTTTTTTTCTAAAATCTGATTTGCAGCCAGGAAAGAATTTTCTCACCCAAGGAACATTTG
ATCTAGCAGCAGGGATGAGAGGAAAGCAGAAATGAATGAACTGTGAAAGCTCCTGTTTTTATTATCAAAAAGGAC
ACTGTCAAGAAGGCGCCCCCTGCCCCCACCCCCGTGTCACCCTAGGCCTGATAAGCGATCAGAGGAAAGGACTCA
TTCATGTCACGCTTCCTTGAGCAGAAAAGAGCACTGAGAGCACTTGGGACCCCTGGATCAGAGAGCATCTGTGTG
TCCTGCAGCCTCCTCTGAACTTGTGGTTCATTCTCAGGCTGGGGTGGACTCAGATGCCAGGAAAGGGACAGCCTC
CCATTGTCAGGCAGAAGCTGCCCAAAGCCTGGAGAAGGACTTGTTTGCCCTCTTTCCCCCAGGAGGGGCTCGACC
CACCCACCCTCCCTCTCAGACCAAGGTGGTGGCTGTGAGGAGGGCAGCAAATGCTGACAAGGATGAAAAGCACAT
GGAAAAAAATGGATGAGGAGGGAAAACTCTGCCAAATGGAAAATGACCAAATTTAAGAGGGTGGGACAGTCCCCT
GCTCCTCTCCCAGAGGGCACTGCTTGGAAATTGTGTTTTCCCCATTTATGGTGCTCTGTATTCTGGCATTATGCA
GCAGCCTCCCAGAAGCTCTCTTCTGCTTCAAAACCTGGGATCTCTGGCATTACCCTATTGGGATGGACCGCTGGA
CAGCAATGCTCGAGTTTGTGAATTTGGAGAGATACTCAAAAGAGCTAAAACTGCAGCATTTTACCTTTAAATGCA
GTGCCTAGAGAGAGAGTATTGTCTCTTCCCCAACACTAACCCCACTCCCATGAAGAATTGCCTGGAAAGATGTTT
TCAAGGAATTTGAACCATAAAACACTATCTGATGCACAGAACACCTCTACTTTGAGACTCACCTCTCATAAAGCT
TCTTTTTCACATTACTGTTAAAGACCAGACGTTCTAGAAAAGACCCCTCCTCTCATGAGCTCCCCCATCCCTGCT
ACAGAACACAGCACCCATGGCGCCTGCAGTGGACTGGCCCCTTAATTCCCACAGGCCCCCCCAGCAAGGCCAAAG
GGAGGCCCCTGGGTATTGTCCTCCTACAAGGAAGATCCTCTTTGTTTGTTCAAAGGACCAGTTTTCCTAGGCCAA
AGAAGTCTCTTCCCCATGTTAGTCCTATGCCTTGAAATATCATGCACCATGACCCACAGCCATCTGGTTATGTCT
TATTTTTTTCCTAAAAGATAATGTTTATTTTTAAAAAGGAAGGAAGGAGCAAGTGAAGTTTCATTCTGCTCCAGC
GGTGGGGAAGCCGCTGAATCCACCTGCTTCTCCTTTGCAACCGACAGCAAACAGCTTTCTCCGGCCTCAGGGCAG
AAAAAGGGAATGGCAGGGAGTAAGAGGCGCTGGGCTCGGAGCCTGTTTCCAAGAAGGAATTGGTTGTCATCTGGC
AGTGTTGCGCGTCACAAGAGAGCCTGTATATAAATTAAAATAGTCAAGACAACACTGACCTTGCACTTGTACATA
ACTATACAGTAGTGTCCAGAATGTTCAGACATTCGGAGTGTACATAAAACAGAAAAAATCTTCATGTATTTTTAT
TAAATATAACAATGTCTGAGTTTCACCTAAGATGTTTTTGTGCCATATGCTGGATATCCAGGTTCTCGCCAGGCC
CCGATACATGAATAACAAACCCAAGAAACGCATCCCCATTGTGTGATGTGTTCAGATGCATCTGGCACCAATTAG
GTATTTCTTAAAACAGGACTCATCTGTCAGAGTGCACATGAAAAATCAGGCAGGGAATCGAAACGACAGTGCTGG
AGGAGACTCAGGAAGCAGAGGCGTCCCTGCCGCTGCCCTTGGCCCTGCAAGCACATCATGACCCTTTCTGGCAGC
CTCTTGGTGCTCTGGGTAGTGAGGGATGACCAGTCTTGTCCTGAGAAATGTTTCTCTTAGTCTTTAAGTTCAAAG

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FIGURE 2773C

ACTAACCTGTAGCAATCAGACTTTCCAAAAGGGGGTTCTCCATTTTTTGTAGTTTTGTCTAAATTTTTAATGACC
ATTTCCTGGAATCAGTTTATTATACTGAAAACTGGGGGTGGGAGTAGGGAGCTAGTTTGTTGATAAATAGTTCCC
ATTTCCCCATGGAGAATTTGACATACCCTGGACTCCTGTGTGCCTCCTGCCATCCCTGCACACAGCCTGGGGAGA
AGCCTGTGCCTCCCCGTGTGGAGAGAAGGCAACCCCAGATCCCCTGAGCTAACCCGGAGGAAAGGCAGTCCTGGA
CAGAAGACTGTCAGCAGAAGGAAAGTACTGGACTACCCGTGGGTAAGTCCTGCCATTCAAGACTGGAGACACCTG
GGAAATAAAAAGAGCAGGGCACTGCTGGTGGGAAGAGGCATTTTACCTTCCAGTGCAAATCCTGCTCCTTTGATT
TAATGGGGTGTACTGGGGCCAGGGGCTGATTCACTTCCTTGGGAGATGGTGGTGTTTTCATGAACATCTTTGATC
CTTCCATTTCATTTATTCATCCATCCATTCAACAAGTATTTGCTAAACACTAACTTAAGCTAATGCTAGGGTAGT
GACTGAGATGTAAAAATAGATTTTAGAATTAAAACAAAATCCAAGTCCTCACACCCCTGTCATCCCAGGAGATCT
TTCCTTGTGGTGGTTTCTGTGAGAATTGGCCATCCTGAGGACACAGCCAGGACGGCAGAGGCCTCCTGGCCTCAG
GGCATGCCCTGCCTACCTTCTGAAATGTTTACCCCATTGACCAAACTTGGCTCCAGCCATTGCGGTGGTTTCTAG
ATAGCCAGGCCCACCAAGAGATATTGCCCCTTGATGAGAGTCAAACACCCTGCCTACAAGGAGATGTTTTGAAAT
GGAGAGGAAAATTGGCACCTCATCTTTTAAAGGCAGTAATGGAATTGATTTTCAGTAACTGAATTTGTGCACAAA
ACATTCTAAACACTAGTGAAGCCTGTTTCGTTGAACTAATTCTGGCTCTGGAAATGTTTTTGTTTTATAGTTATT
TACGATTTCGTTTGTTTGGATTCAAGCTTAGTTTGTTAATATGTATAATTTAGCATCTATTACACTCATGTAAAT
ATGGAGTAAGTATTGTAAACTATTTCATCGCGGGGATTGTGGGTGTTATACATACATTTAGGACTGCAATTTTTT
GGTATTTTTTGTATTGTAAAATAACAGCTAATTTAAGCAGGAACAAGAGAACTAAGGGAGGTCTGTGCATTTTAA
ACACAAATGTGAAGAACTTGTATATAAACAAAAGTAAATACTATAATACAAACTTCCTTCTGAAATAAAAGTAGA
TCTGGT

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FIGURE 2774

CTAAAGGAAGATGGAGACAATACTGGAGCAGCAGCGGCGCTATCATGAGGAGAAGGAAAGGCTCATGGACGTCAT
GGCCAAAGAGATGCTCACTAAGAAGTCCACGCTCAATTCTGATCACCGCACTCAGGCCATGCAAGATATCTGTGT
GCCAATGTCAGTGAAATTTGAGGAGCTCCTGAAGGCTCAGAGAATCCAAGTGAAGAGGCACAAAACTTGGTGGAG
TTCACAGATGAAGAGGGATATGGTCGTTACCTCGATCTCCGTGACTGTTACCTCAAGTACATTAACGTGAAGGCA
TCTGAGAAGCTGGATTATATCACATACCTGTCCATCTCTGACCAATTATTTGACATTCCTAAAGAAAGGAAGAAT
GCAGAGTATAAGAGATACCTAGAGATGCTGCTTGAGTAACTTCAGGATTACACAGATAGAGTAAAGCCTCTCCAA
GATCAGAATGAACTTTTTGGGAAGATTCAGGCTGAGTTTGAGAAGAAATGGGAGAATGTGACCTTCCTGGATGGG
CGAAAGAGACAAGCAGCGCTCTGACCCATGCTGGAGCCCATCTTGACCTCTCCGCCTTCTCCTCCTGGGAGGAGT
TGGCCTCTCTGGGTTTGGACAGATTGAAATCTGCTCTCTTAGCTTTAGGCTTGAAATGTGGCGGACCGTAGAAGA
GCAAGCCCAGAGACTATTCAGTACCAAAGGAAAGTCCCTGGAGTCACTTGATAACTCTTTGTTTGCCAAAAATCC
CAAATCAAAGGGCACCAAGCGAGACATTGAGAGAACAAAGACATTGCTTTTCTAGAAGCCCAGATCTATGAATA

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FIGURE 2775

AACGAGCTGCGGGCCCGGGATCGCGGCGGCTGGACGGGGCTGGAGCTGTCGGGAGGGCGGAGCTACAGGGCCTGC
AAGGATGTTGGCTGTCCCGGAGATGGGCCTGCAGGGGCTGTACATCGGCTCCAGCCCGGAGCGGTCCCCAGTGCC
TAGCCCACCCGGCTCCCCGAGGACCCAGGAAAGCTGCGGCATTGCCCCCCTCACACCCTCGCAGTCTCCAAAACC
CGAGGTCCGAGCCCCCCAGCAGGCCTCCTTCTCTGTGGTGGTGGCCATTGACTTCGGCACCACGTCTAGTGGCTA
TGCTTTCAGCTTTGCCAGTGACCCTGAGGCCATCCACATGATGAGGAAATGGGAGGGCGGAGACCCGGGCGTGGC
CCACCAGAAGACCCCGACCTGCCTGCTGCTGACTCCGGAGGGCGCCTTCCACAGCTTTGGCTACACCGCCCGCGA
TTACTACCATGACCTGGACCCCGAAGAGGCGCGGGACTGGCTCTACTTCGAGAAGTTCAAGATGAAGATCCACAG
CGCCACGGATCTCACCTTGAAGACCCAGCTAGAGGCAGTAAATGGAAAGACGATGCCCGCCCTGGAGGTGTTCGC
CCATGCCCTGCGCTTCTTCAGGGAGCACGCCCTTCAGGAGCTGAGGGAGCAGAGCCCATCGCTGCCAGAGAAGGA
CACTGTGCGCTGGGTGTTGACGGTGCCTGCCATCTGGAAACAGCCAGCCAAGCAGTTCATGCGGGAGGCTGCCTA
CCTGGCTGGACTAGTGTCCCGAGAGAATGCAGAGCAGCTACTCATCGCCCTGGAGCCCGAGGCCGCCTCGGTATA
CTGCCGCAAGCTGCGCCTGCACCAGCTCCTGGACCTGAGTGGCCGGGCCCCAGGTGGTGGGCGCCTGGGTGAGCG
CCGCTCCATCGACTCCAGCTTCCGTCAGGCTCGGGAGCAGCTGCGAAGGTCCCGCCACAGCCGCACGTTCCTGGT
GGAGTCAGGCGTAGGAGAGCTGTGGGCAGAGATGCAAGCAGGAGACCGCTACGTGGTGGCCGACTGCGGCGGAGG
CACCGTGGACCTGACGGTGCACCAGCTGGAGCAGCCCCATGGCACCCTCAAGGAGCTCTACAAGGCATCTGGGGG
CCCTTATGGCGCGGTGGGCGTGGACCTGGCCTTCGAGCAGCTGCTGTGCCGCATCTTCGGCGAGGACTTCATCGC
CACCTTCAAAAGGCAACGGCCGGCAGCCTGGGTAGATCTGACCATCGCCTTCGAGGCTCGCAAGCGCACTGCTGG
CCCACACCGTGCAGGGGCGCTCAACATCTCGCTGCCCTTCTCCTTCATTGACTTCTACCGCAAGCAGCGGGGCCA
CAACGTGGAGACCGCTCTGCGCAGGAGCAGCGTGAACTTCGTGAAGTGGTCCTCACAGGGGATGCTCCGAATGTC
TTGTGAAGCCATGAACGAGCTCTTTCAGCCCACCGTCAGCGGGATCATCCAGCACATAGAGGCCCTGCTGGCACG
GCCGGAGGTGCAGGGTGTGAAGCTGCTGTTCCTAGTGGGCGGCTTCGCCGAGTCAGCGGTGCTGCAGCACGCGGT
GCAGGCGGCGCTGGGCGCCCGCGGTCTGCGTGTCGTGGTCCCGCACGACGTGGGCCTCACCATCCTCAAAGGCGC
GGTGCTGTTCGGCCAGGCGCCGGGCGTGGTGCGGGTCCGCCGCTCGCCGCTCACCTATGGCGTGGGCGTGCTCAA
CCGCTTTGTGCCTGGGCGCCACCCGCCCGAAAAGCTGCTGGTTCGCGACGGCCGCCGCTGGTGCACCGACGTCTT
CGAGCGCTTCGTGGCCGCCGAGCAGTCGGTGGCCCTGGGCGAGGAGGTGCGGCGCAGCTACTGCCCGGCGCGTCC
CGGCCAGCGGCGCGTACTCATCAACCTGTACTGCTGCGCGGCAGAGGATGCGCGCTTCATCACCGACCCCGGCGT
GCGCAAATGCGGCGCGCTCAGCCTCGAGCTTGAGCCCGCCGACTGCGGCCAGGACACCGCCGGCGCGCCTCCCGG
CCGCCGCGAGATCCGCGCCGCCATGCAGTTTGGCGACACCGAAATTAAGGTCACCGCCGTCGACGTCAGCACCAA
TCGCTCCGTGCGCGCGTCCATCGACTTTCTTTCCAACTGAGGGCGCGCCGGCGCGGTGCCAGCGCCGTCTGCCCG
GCCCCGCCCTCTTTCGGTTCAGGGGCCTGCGGAGCGGGTTGGGGCGGGGGAAACGATAGTTCTGCAGTCTGCGCC
TTTCCACGCCCTCCAGCCCCGGGGGAGATAAGGTCATGGGAGAGTGGGTGGGGACACACCCAGAGACTGGCTTTG
GGATTGGGCACTGGTCCGCTGACTGCCAGGCTGAAGGGACCCGCCAAGGACTGAACGGGTAAGAGAAGAGGTTTG
CAAGACAGAGCGCGCAGCCCGGCAAGGGGCATGTGACCCCGAAGGAAGAACGCAACAGAAGAGTCCTGGTCTGAA
CTTGGCCGAGTAGGGGTGGGGGTGGGATGGCAGGAGGAGCCGCAGGAGGAAGGAGGTTGTGCAGGGTCTGGACCT
GCAGGGCTGAAGTTCACTCATCGACCGACTCAGCCCCAACCGGGAGCCAGGCAGAAAAACCCTGTGCCGTAGGAA
AGTGACTGGAAGTGGACTCCAGAGGGACAGGTGTGGTGGCACAGTCCTGGTGTGGTGCTGACCACCCAAATATGA
CTGTGAATTGTGGAAAGGGCAGTAGATCTCTAATGTGGAGGTGGGAACATTATTGTGGTGGAGGCAATTATGAGG
GTAGCATTTCTTTCGAGACAAAACACCCGTCTGGGAAGGCCCCAAGGTCAGCTTATGAAGGACCCCACTTGCACC
CCACCCCAGCCATGGAAGAGCAGCTGGAGGGTGGATGGGGAGGCCAGAGGGAGCAATGAGGGGTGGTCCCAGCTC
TGCTATTGACTCGGTATGCCTTTAGGACATTCTCTTACCGCTCATGGGCCTCAGTTTCCTAAAGTGTGAAATGTC
AGGCACTTCCCTCTAACTGGCATGCAACAGCCCCACCTGCCTGAGAGCCCTGAGGTGACAATAAAACATTTATGC
TCAAGGGG

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FIGURE 2776

GTGCTCGGCGTTGAGCTCCTGCAGCCGCCGCCGCTGCAGTGGTCGTCCCTGCCCTCCCCGGCCCCGGGGTGCACC
CCGCAAGGCTCCCGCTGGTGTCCCTGGAGCATGGGAGGCTGCTGAGCGTGAGTGGCGGTGTCTGGCAGGAGCTGC
GTGGCAGGGAGGGCGTCC**ATG**GCTGCAGCCAACAAGGGCAACAAGCCCAGAGTCCGGAGTATCCGCTTTGCGGCA
GGCCACGATGCAGAAGGATCCCACAGCCACGTCCACTTTGATGAGAAGCTGCATGACTCGGTGGTCATGGTCACC
CAGGAGAGTGACAGCAGCTTTCTGGTCAAGGTTGGCTTCCTGAAGATCCTGCACAGGTATGAGATTACCTTCACT
CTGCCCCCAGTGCACAGGCTGAGCAAGGATGTCCGCGAGGCACCTGTCCCCAGCCTGCACCTCAAGCTCCTCAGC
GTGGTGCCCGTCCCTGAAGGTTATAGTGTCAAGTGTGAGTACTCGGCGCACAAAGAGGGCGTCCTCAAAGAGGAG
ATACTGCTAGCCTGCGAAGGTGGCACTGGCACCTGTGTGCGCGTGACGGTGCAGGCCCGCGTCATGGACCGGCAC
CACGGCACGCCCATGCTGCTGGATGGTGTCAAGTGTGTGGGCGCCGAGCTGGAATACGACTCAGAGCACAGCGAC
TGGCACGGCTTTGAC**TGA**GGCCCGAGGCCCCGCCTGCCCCGGGCCCCTCAGCCTTAAACCCCGCCTTGTCCCCCC
GACATGCTGCGTGATGGTGTGGCTTCCTCGCCCCTCTCTGGGGTGGGTGTGGGGGTGGAGTGGCCTTGCCCACGC
CTCTCACCTCTGCCTTCATTTGTGCTGCCACCCTGCCCCTCCCTCGTCCTCCTCTCCCACTTCCTCCTCTCTGTG
TGCCTCAGTCTCCTGCCGGAAGAAATGGGTTGAGCCCGAAAGGAGGCTGTCTGAGGAAGGGAGAGGGAGGGCCTG
GGGTGGGTCCCCCACTCCCCACCCCAAGCCACAGGGACTCCCACCAGGGTCTGGGAGAGGACGGAGCTGGCTCTG
TGGCGTCGTGGCCCCATTACTGCTGCCTTGCTTCAGCCACCTCTCCTGCCCCTCCCTAGTCCCCACTGCTGTCCA
CCATGAGTAGGAGGGAGGTGCAGTCCCCAGCCCCCACCCCTCAGGTCTGTGTTACTTGGTTTTTAAGCGACTGGT
TGGGATAGAACCCTAAAGAAATAAACTTCCAGTGGAT

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FIGURE 2777

CGACAGCTGACGTTCCGGGAGAAGTCACGGATCATCCAGGAGGTGGAGGAGAATCCGGACCTGCGCAAGGGCGAG
ATCGCGCGGCGCTTCAACATCCCGCCGTCCACGCTGAGCACGATCCTGAAGAACAAGCGCGCCATCCTGGCGTCG
GAGCGCAAGTACGGGGTGGCCTCCACCTGCCGCAAGACCAACAAGCTGTCTCCCTACGACAAGCTCGAGGGCTTG
CTCATCGCCTGGTTCCAGCAGATCCGCGCCGCCGGCCTGCCGGTCAAGGGCATCATCCTCAAGGAGAAGGCGCTG
CGCATAGCCGAGGAGCTGGGC**ATG**GACGACTTCACCGCCTCCAACGGCTGGCTGGACCGCTTCCGCCGGCGCCAC
GGCGTGGTGTCCTGCAGCGGCGTGGCCCGCGCCCGCGCGCGAAACGCTGCCCCCCGCACCCCGGCGGCGCCTGCC
AGTCCGGCCGCGGTGCCCTCGGAGGGCAGTGGCGGGAGCACTACTGGTTGGCGCGCTCGGGAGGAGCAGCCGCCG
TCGGTGGCCGAGGGCTACGCCTCGCAGGACGTGTTCAGCGCCACCGAGACCAGTCTATGGTACGACTTCCTGCCC
GACCAGGCCGCGGGGCTGTGCGGAGGCGACGGACGGCCGCGTCAAGCCACCCAGCGCCTGAGCGTCCTGCTATGC
GCCAATGCCGACGGCAGCGAGAAGCTGCCCCCGCTGGTGGCCGGCAAGTCGGCCAAGCCCCGCGCAGGCCAAGCC
GGCCTGCCCTGCGACTACACCGCCAACTCCAAGGGTGGTGTCACCACCCAGGCCCTGGCCAAGTACTTGAAGGCC
TTGGACACCCGAATGGCTGCAGAGTCTCGCCGGGTCCTGCTGTTGGCCGGCCGCTTGGCTGCCCAGTCCTTGGAC
ACCTCGGGCCTGCGGCATGTGCAGCTGGCCTTCTTCCCTCCCGGCACCGTGCATCCGCTGGAGAGGGGAGTGGTC
CAGCAGGTGAAGGGCCACTACCGCCAGGCCATGCTGCTCAAGGCCATGGCCGCGCTAGAGGGCCAGGATCCCTCA
GGCCTGCAGCTGGGTCTCACGGAGGCCCTGCACTTTGTGGCTGCCGCCTGGCAGGCAGTGGAGCCTTCGGACATA
GCCGCCTGCTTTCGTGAGGCTGGCTTTGGGGGTGGCCCTAATGCCACCATCACCACTTCCCTCAAGAGTGAGGGA
GAGGAAGAGGAGGAGGAGGAGGAAGAAGAGGAGGAGGAAGAGGGTGAAGGAGAGGAAGAGGAGGAGGAAGGGGAG
GAGGAGGAGGAGGAAGGGGGGGAAGGAGAGGAATTGGGGGAGGAAGAGGAGGTGGAGGAGGAGGGTGATGTTGAT
AGTGATGAAGAAGAGGAGGAAGATGAGGAGAGCTCCTCGGAGGGCTTGGAGGCTGAGGACTGGGCCCAGGGAGTA
GTGGAGGCCGGTGGCAGCTTCGGGGCTTATGGTGCCCAGGAGGAAGCCCAGTGCCCTACTCTGCATTTCCTGGAA
GGTGGGGAGGACTCTGATTCAGACAGTGAGGAAGAGGACGATGAGGAAGAGGATGATGAAGATGAAGACGACGAT
GATGATGAGGAGGATGGTGATGAGGTGCCTGTACCCAGCTTTGGGGAGGCCATGGCTTACTTTGCCATGGTCAAG
AGGTACCTGACCTCCTTCCCCATTGATGACCGCGTGCAGAGCCACATCCTCCACTTGGAACACGATCTGGTTCAT
GTGACCAGGAAGAACCACGCCAGGCAGGCGGGAGTTCGAGGTCTTGGACATCAAAGC**TGA**GTCACTGGACCTAGC
TGTGCCCCCAACCTAGATTGGCAGCACCACCCCAGGGCAGAGGACTCTCTGGGCACCCGCTGTGCATGGAGCCAG
AGTGCAGAGCCCCAGATCCTTTAGTAATGCTTCCCCTGGTCCTGCAACAGGCCCGGTCACCTCGGCCGGGCCCGG
GGCTGAGGTCAGCCTCACTGCCTGCTTATTGCCTCTTTCTCAGAATCCTCTTTCCTCCCCATTTGGCCCTGGGCT
CAGGGGACCAGGTGGGGCGGGTGGGGAGCTGTCCGGTGCTACCACACCGTGCCCTCAGTGGACTAACCACAGCAG
CAGCCAGGGATGGGCCCTGGAGGTTCCCGGCCGGAGAGTGCCTCTCCCCTCTGCCATCCACGTCAGGTCTTTGGT
GGGGGGACCCCAAAGCCATTCTGGGAAGGGCTCCAGAAGAAGGTCCAGCCTAGGCCCCCTGCAAGGCTGGCAGCC
CCCACCCCCACCCCCCAGGCCGCCTTGAGAAGCACAGTTTAACTCACTGCGGGCTCCTGAGCCTGCTTCTGCCTG
CTTTCCACCTCCCCAGTCCCTTTCTCTGGCCCTGTCCATGTGACTTTGGCCCTTGGTTTTCTTTCCAGATTGGAG
GTTTCCAAGAGGCCCCCCACCGTGGAAGTAACCAAGGGCGCTTCCTTGTGGGCAGCTGCAGGCCCCATGCCTCTC
CTCCCTCTCTGGCAGGGCCCCATCCTGGGCAGAGGGGCCTGGGGCTGGGCCCAGAGTCCAGCCGTCCAGCTGCTC
CTTTCCCAGTTTGATTTCAATAAATCTGTCCACTCCCCTTTTGTGGGGGTGAACGTTTTAACAGCC

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FIGURE 2778

AGAGGCTTCCCTGGCTGGTGCCTGAGCCCGGCGTCCCTCGCCCCCCGCCCTCCCCGCATCCCTCTCCTCCCTCGC
GCCTGGCCCTGTGGCTCTTCCTCCCTCCCTCCTTCCCCCCCCCCCCCACCCCTCGCCCGCTGCCTCCCTCGGCCCA
GCCAGCTGTGCCGGCGTTTGTTGGCTGCCCTGCGCCCGGCCCTCCAGCCAGCCTTCTGCCGGCCCCGCCGCGATG

GAGGTGCCCCAGCCGGAGCCCGCGCCAGGCTCGGCTCTCAGTCCAGCAGGCGTGTGCGGTGGCGCCCAGCGTCCG
GGCCACCTCCCGGGCCTCCTGCTGGGATCTCATGGCCTCCTGGGGTCCCCGGTGCGGGCGGCCGCTTCCTCGCCG
GTCACCACCCTCACCCAGACCATGCACGACCTCGCCGGGCTCGGCAGCCGCAGCCGCCTGACGCACCTATCCCTG
TCTCGACGGGCATCCGAATCCTCCCTGTCGTCTGAATCCTCCGAATCTTCTGATGCAGGTCTCTGCATGGATTCC
CCCAGCCCTATGGACCCCCACATGGCGGAGCAGACGTTTGAACAGGCCATCCAGGCAGCCAGCCGGATCATTCGA
AACGAGCAGTTTGCCATCAGACGCTTCCAGTCTATGCCGGTGAGGCTGCTGGGCCACAGCCCCGTGCTTCGGAAC
ATCACCAACTCCCAGGCGCCCGACGGCCGGAGGAAGAGCGAGGCGGGCAGTGGAGCTGCCAGCAGCTCTGGGGAA
GACAAGGAGAATGTGCGCTTCTGGAAGGCCGGGGTGGGAGCTCTCCGGGAAGAGGAGGGGGCATGCTGGGGTGGT
TCCCTGGCATGTGAGGACCCTCCTCTCCCATCTTGGCTGCAGGATGGATTTGTCTTCAAGATGCCATGGAAGCCC
ACACATCCCAGCTCCACCCATGCTCTGGCAGAGTGGGCCAGCCGCAGGGAAGCCTTTGCCCAGAGACCCAGCTCG
GCCCCCGACCTGATGTGTCTCAGTCCTGACCGGAAGATGGAAGTGGAGGAGCTCAGCCCCCTGGCCCTAGGTCGC
TTCTCTCTGACCCCTGCAGAGGGGGATACTGAGGAAGATGATGGATTTGTGGACATCCTAGAGAGTGACTTAAAG
GATGATGATGCAGTTCCCCCAGGCATGGAGAGTCTCATTAGTGCCCCACTGGTCAAGACCTTGGAAAAGGAAGAG
GAAAAGGACCTCGTCATGTACAGCAAGTGCCAGCGGCTCTTCCGCTCTCCGTCCATGCCCTGCAGCGTGATCCGG
CCCATCCTCAAGAGGCTGGAGCGGCCCCAGGACAGGGACACGCCCGTGCAGAATAAGCGGAGGCGGAGCGTGACC
CCTCCTGAGGAGCAGCAGGAGGCTGAGGAACCTAAAGCCCGCGTCCTCCGCTCAAAATCACTGTGTCACGATGAG
ATCGAGAACCTCCTGGACAGTGACCACCGAGAGCTGATTGGAGATTACTCTAAGGCCTTCCTCCTACAGACAGTA
GACGGAAAGCACCAAGACCTCAAGTACATCTCACCAGAAACGATGGTGGCCCTATTGACGGGCAAGTTCAGCAAC
ATCGTGGATAAGTTTGTGATTGTAGACTGCAGATACCCCTATGAATATGAAGGCGGGCACATCAAGACTGCGGTG
AACTTGCCCCTGGAACGCGACGCCGAGAGCTTCCTACTGAAGAGCCCCATCGCGCCCTGTAGCCTGGACAAGAGA
GTCATCCTCATTTTCCACTGTGAATTCTCATCTGAGCGTGGGCCCCGCATGTGCCGTTTCATCAGGGAACGAGAC
CGTGCTGTCAACGACTACCCCAGCCTCTACTACCCTGAGATGTATATCCTGAAAGGCGGCTACAAGGAGTTCTTC
CCTCAGCACCCGAACTTCTGTGAACCCCAGGACTACCGGCCCATGAACCACGAGGCCTTCAAGGATGAGCTAAAG
ACCTTCCGCCTCAAGACTCGCAGCTGGGCTGGGGAGCGGAGCCGGCGGGAGCTCTGTAGCCGGCTGCAGGACCAG
TGAGGGGCCTGCGCCAGTCCTGCTACCTCCCTTGCCTTTCGAGGCCTGAAGCCAGCTGCCCTATGGGCCTGCCGG
GCTGAGGGCCTGCTGGAGGCCTCAGGTGCTGTCCATGGGAAAGATGGTGTGGGTGTCCTGCCTGTCTGCCCCAGC
CCAGATTCCCCTGTGTCATCCCATCATTTTCCATATCCTGGTGCCCCCCACCCCTGGAAGAGCCCAGTCTGTTGA
GTTAGTTAAGTTGGGTTAATACCAGCTTAAAGGCAGTATTTTGTGTCCTCCAGGAGCTTCTTGTTTCCTTGTTAG
GGTTAACCCTTCATCTTCCTGTGTCCTGAAACGCTCCTTTGTGTGTGTGTCAGCTGAGGCTGGGGGAGAGCCGTG
GTCCCTGAGGATGGGTCAGAGCTAAACTCCTTCCTGGCCTGAGAGTCAGCTCTCTGCCCTGTGTACTTCCCGGGC
CAGGGCTGCCCCTAATCTCTGTAGGAACCGTGGTATGTCTGCCATGTTGCCCCTTTCTCTTTTCCCCTTTCCTGT
CCCACCATACGAGCACCTCCAGCCTGAACAGAAGCTCTTACTCTTTCCTATTTCAGTGTTACCTGTGTGCTTGGT
CTGTTTGACTTTACGCCCATCTCAGGACACTTCCGTAGACTGTTTAGGTTCCCCTGTCAAATATCAGTTACCCAC
TCGGTCCCAGTTTTGTTGCCCCAGAAAGGGATGTTATTATCCTTGGGGGCTCCCAGGGCAAGGGTTAAGGCCTGA
ATCATGAGCCTGCTGGAAGCCCAGCCCCTACTGCTGTGAACCCTGGGGCCTGACTGCTCAGAACTTGCTGCTGTC
TTGTTGCGGATGGATGGAAGGTTGGATGGATGGGTGGATGGCCGTGGATGGCCGTGGATGCGCAGTGCCTTGCAT
ACCCAAACCAGGTGGGAGCGTTTTGTTGAGCATGACAGCCTGCAGCAGGAATATATGTGTGCCTATTTGTGTGGA
CAAAAATATTTACACTTAGGGTTTGGAGCTATTCAAGAGGAAATGTCACAGAAGCAGCTAAACCAAGGACTGAGC
ACCCTCTGGATTCTGAATCTCAAGATGGGGGCAGGGCTGTGCTTGAAGGCCCTGCTGAGTCATCTGTTAGGGCCT
TGGTTCAATAAAGCACTGAGCAAGTTGAG

FIGURE 2779

GTATGAACGCAGCGGCGGACCTGTGAGGGGATCCGACTTGCCGGCAGAACTTACGCTGCGGGACCCCGGGCACTG
TTGCTGCTGCGGGAGACTGTGGGCTGTTTAGTGCCATGCACCCTTTACAGTGTGTCCTCCAAGTGCAGAGGTCTC
TGGGGTGGGGACCATTGGCCTCTGTGTCTTGGCTGTCGCTGAGGATGTGCAGGGCACACAGCAGTCTCTCTAGTA
CCATGTGTCCCAGTCCAGAGAGGCAGGAGGATGGAGCTCGGAAGGATTTCAGCTCCAGGCTGGCTGCTGGACCGA
CTTTTCAACATTTTTTAAAAAGTGCCTCAGCTCCTCAGGAGAAGCTGTCTTCAGAAGTGGAAGACCCACCTCCCT
ATCTCATGATGGATGAACTTCTTGGAAGGCAGAGAAAAGTCTACCTCGAGACCTATGGCTGCCAGATGAATGTGA
ATGACACAGAGATAGCCTGGTCCATCTTACAGAAGAGTGGCTACCTGCGGACCAGTAACCTCCAAGAGGCAGATG
TGATTCTCCTTGTCACATGCTCTATCAGGGAGAAGGCTGAGCAGACCATCTGGAACCGTTTACATCAGCTTAAAG
CCTTGAAGACAAGGCGGCCCCGCTCCCGGGTTCCTCTGAGGATTGGAATTCTAGGCTGCATGGCTGAGAGGTTGA
AGGAGGAGATTCTCAACAGAGAGAAAATGGTAGATATTTTGGCTGGTCCTGATGCCTACCGGGACCTTCCCCGGC
TGCTGGCTGTTGCTGAGTCGGGCCAGCAAGCTGCCAACGTGCTGCTCTCTCTGGACGAGACCTATGCTGATGTCA
TGCCAGTCCAGACAAGCGCCAGTGCCACGTCTGCCTTTGTGTCAATCATGCGAGGCTGTGACAACATGTGTAGCT
ACTGCATTGTTCCTTTCACCCGGGGCAGGGAGAGGAGTCGGCCTATTGCCTCCATTCTAGAGGAAGTGAAGAAGC
TTTCTGAGCAGGGGCTGAAAGAAGTGACACTTCTTGGTCAGAATGTTAATAGTTTTCGGGACAATTCGGAGGTCC
AGTTCAACAGTGCAGTGCCTACCAATCTCAGTCGTGGCTTTACCACCAACTATAAAACCAAGCAAGGAGGACTTC
GTTTTGCTCATCTTCTGGATCAGGTCTCCAGAGTAGATCCTGAAATGAGGATCCGTTTTACCTCTCCCCACCCCA
AGGATTTTCCTGATGAGGTTCTGCAGCTGATTCATGAGAGAGATAACATCTGTAAACAGATCCACCTGCCAGCCC
AGAGTGGAAGCAGCCGTGTGTTGGAGGCCATGCGGAGGGGATATTCAAGAGAAGCTTATGTGGAGTTAGTTCACC
ATATTAGAGAATCTATTCCAGGTGTGAGCCTCAGCAGCGATTTCATTGCTGGCTTTTGTGGTGAGACGGAGGAAG
ATCACGTCCAGACAGTCTCTTTGCTCCGGGAAGTTCAGTACAACATGGGCTTCCTCTTTGCCTACAGCATGAGAC
AGAAGACACGGGCATATCATAGGCTGAAGGATGATGTCCCGGAAGAGGTAAAATTAAGGCGTTTGGAGGAACTCA
TCACTATCTTCCGAGAAGAAGCAACAAAAGCCAATCAGACCTCTGTGGGCTGTACCCAGTTGGTGCTAGTGGAAG
GGCTCAGTAAACGCTCTGCCACTGACCTGTGTGGCAGGAATGATGGAAACCTTAAGGTGATCTTCCCTGATGCAG
AGATGGAGGATGTCAATAACCCTGGGCTCAGGGTCAGAGCCCAGCCTGGGGACTATGTGCTGGTGAAGATCACCT
CAGCCAGTTCTCAGACACTTAGGGGACATGTTCTCTGCAGGACCACTCTGAGGGACTCTTCTGCATATTGCTGACC
CTGAGAGGATGGCCTCAGAGCTGACTTGGGCAATCCTCCCCAACAGGAAGGGGAGACATTGCCTGCCACTGAGGA
AACAGGTCATGAAGGTGGAGATAAGCTGCAAGGGGCGAAGCAACTTTATGTCAGTGGAAAACGTGTCTCTTTAAA
GCTGCTATGTGAACAGCTTTTACAGTCATTAAATTTACCTAAACTAAGGTT

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FIGURE 2780

CCCTTCTGACCCACCCCGCTAGGTAGTCCCACACGGCGGCCCTCGGCTCCCGGGCCCCGCCCCGGCCTCCTGCAT
TTGCCCGAGGCCCCCTCCCCAGCACTGGCCACACCCCAGGGTAGCCCCGCCCCCAGAGCTCCTCCCCCAGCGGCC
GGGGTAGGGTGGCGGCTGGCCCAGCCGGGCCCCCGCTGCCCTCTGCCCTGGGCGCTTGGTCGGAGCGGGCTGGGC
AAAGCGGGACAGGGCGAGCGCGGCGGCCCGGGGGCTCGGAGGCGAAGATGGCGTCCGGCAGGCGCGCCCCGCGCA
CCGGGCTGCTGGAGCTGCGCGCCGGGGCGGGCTCGGGGGCCGGCGGCGAGCGATGGCAGCGGGTGCTGCTGAGTC
TGGCGGAGGACGTGCTGACCGTGAGCCCCGCCGACGGCGACCCTGGTCCCGAGCCCGGCGCTCCGCGGGAGCAGG
AGCCCGCGCAGCTCAACGGCGCCGCGGAGCCGGGCGCCGGGCCCCCGCAGCTGCCAGAGGCGCTACTGCTCCAGC
GGCGCCGCGTGACGGTGCGCAAGGCCGACGCCGGTGGGCTGGGCATCAGCATCAAAGGCGGCCGGGAGAACAAGA
TGCCTATTCTCATTTCCAAGATCTTCAAGGGATTGGCAGCTGACCAGACAGAGGCCCTTTTTGTGGGGGATGCCA
TCCTGTCTGTGAATGGGGAAGACTTGTCCTCTGCTACCCATGATGAGGCGGTGCAGGTCCTCAAGAAGACAGGCA
AGGAGGTGGTGCTGGAGGTCAAGTATATGAAGGACGTCTCACCGTATTTCAAGAACTCTACTGGTGGGACCTCGG
TCGGCTGGGACTCACCTCCTGCCTCACCCCTTCAGCGGCAGCCTTCCTCCCCTGGCCCCACACCCCGGAACTTCA
GCGAGGCCAAACACATGTCCTTGAAGATGGCATATGTCTCGAAGAGGTGCACCCCCAATGACCCGGAGCCCAGGT
ATCTGGAGATCTGCTCGGCAGATGGTCAAGACACCCTCTTCCTGAGGGCCAAGGATGAGGCTAGTGCGAGGTCGT
GGGCGACTGCCATCCAAGCCCAGGTCAATACTCTGACGCCGCGGGTCAAGGATGAGCTGCAGGCACTGTTGGCAG
CCACCAGCACAGCTGGGAGCCAGGACATCAAGCAGATTGGCTGGCTAACTGAGCAGCTGCCCAGTGGGGGCACAG
CCCCCACCCTGGCCCTGCTAACTGAAAAGGAACTGCTCCTCTACTTGTCTCTCCCCGAGACCCGCGAGGCCCTGA
GCCGGCCAGCCCGTACTGCCCCACTCATCGCCACCAGACTGGTGCACTCAGGCCCCTCCAAGGGCTCAGTGCCCT
ACGATGCAGAGCTCTCTTTTGCCCTGCGCACGGGCACGCGTCACGGTGTGGACACTCACCTGTTCAGCGTGGAGT
CACCGCAGGAGCTGGCTGCCTGGACCCGCCAGCTTGTGGATGGCTGTCACCGGGCCGCCGAGGGTGTGCAGGAGG
TGTCTACAGCCTGCACGTGGAATGGGCGTCCCTGCAGCCTGTCTGTGCACATCGACAAGGGCTTCACACTGTGGG
CGGCTGAGCCAGGTGCAGCCCGAGCTGTGCTCCTGCGACAGCCCTTCGAGAAGCTGCAGATGTCTTCAGATGACG
GTGCCAGTCTCCTTTTCCTGGATTTTGGAGGTGCTGAAGGCGAGATCCAGCTGGACCTGCACTCGTGTCCCAAAA
CCATAGTCTTCATCATCCACTCCTTCCTGTCGGCCAAAGTCACCCGCCTCGGGCTGTTGGCCTAGAAGTCGCCGG
ATGCACTAGCCCTGAAGAGGGGTGTCCATGACATGGCCTGAGCTGGGCCTCCACCGACTGCCTGCTCACCCCTGG
GCTGAGGGAAGGGAGAGGAGAGGAACAAGGGCCTCCGAAACCCCAACCCTGAGGGAGACTGGATTGGTCTTGGGG
CCCAGGACCCAGACGCAGGACAGAGTGGACTCTGCCTGTGATGGGGTGGCCTTCCTGCTGCCCCCCTCCACCAGT
GCCTTTTGCAGAGAGATATTTTGTGTACACAGAAGCCATTCCGAGTCTGGGACCTGCCCCTGTGCGGATCCTGAC
CCCAGCCAACAGCTGAGCTGCCGGGCCTCCTCGAGGCCCCTAAGCCACCCCCAGAGGTCCCATCTGAAGCTGGAG
TACCCTGGGGTCAGCAGCAAGAGAAAGAAGAGGAGATTTTCTGTTTGTTTTTCCCCTCAGCCCTGCCACCGTGGG
GAGTCTGGTTTTTCTCTTCATCCTGTCTCTCTCCTCCTTACTCTTGGATAAATAAACAGCCTGTGAGCACACAGG
CAGCCCGGCCCAGTG

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FIGURE 2781A

GGAAGGGTAGTGGAGAGAGAGGAAGCAGGAGGGAGGGAGAAAAAGAGAGAGACTGACTGTATCTGGGGATTCTGG
CAAGGTGAAGAGCTGGTCTGTTTGGCAGGACCTTCCCATCTGGGATCCATCTGTGTTTCCCTGGAATGGGACAGG
CAGCTCTAGTCAGTGAGAAATCGCAGATGTGAGAGAGCTGACACATGTCCAGCTAATGAAAGGAGGAGGAAGGCT
GGTCTCCGATTGAGCTTTGAAGATTAGGAGGAGAAAAAGAGGAGCTTTGGAATATCTATTTCAAATAAATTTGGT
GTATTTAAGAATCTGGATTGTTTATAATTTGGGCATTTGGGTTGGTCCTGAGAAAAGGGTGCCAGCGATGCCTGG
ATCGCCTGTGGAAGTGAAGATACAGTCCAGATCCTCACCTCCCACCATGCCACCCCTCCCACCAATAAATCCTGG
AGGACCGAGGCCAGTGTCCTTCACTCCTACTGCATTAAGCAATGGCATCAACCATTCTCCTCCTACCCTGAATGG
TGCCCCATCACCGCCACAGAGATTCAGCAATGGTCCTGCCTCCTCCACATCATCTGCACTCACAAATCAGCAATT
GCCAGCCACTTGTGGTGCTCGACAACTCAGCAAGTTGAAACGCTTTCTTACCACTCTGCAACAGTTTGGCAATGA
CATCTCCCCTGAGATTGGGGAGAAGGTGCGGACTCTTGTTCTTGCACTGGTGAACTCAACAGTGACAATTGAGGA
ATTCCACTGTAAGCTCCAAGAAGCCACAAACTTTCCCCTTCGTCCTTTTGTGATTCCATTTCTCAAGGCCAACCT
GCCCCTGCTGCAGCGGGAACTGCTGCACTGCGCTCGGGCGGCCAAGCAGACCCCATCCCAGTACCTGGCTCAGCA
CGAACACCTTCTGCTCAACACAAGCATTGCATCGCCTGCTGACTCGTCAGAGTTGCTCATGGAGGTGCACGGAAA
TGGGAAGAGGCCCAGTCCAGAGAGGAGAGAAGAGAATAGTTTTGATAGAGACACAATTGCTCCTGAGCCTCCTGC
CAAGAGAGTATGTACCATCAGCCCTGCTCCTCGGCACAGTCCTGCTCTCACTGTGCCCCTCATGAATCCCGGGGG
CCAATTCCATCCTACCCCTCCACCTCTTCAGCATTACACCTTAGAGGATATTGCAACTTCTCACCTGTATCGGGA
ACCCAACAAGATGCTAGAGCATCGAGAAGTTCGTGATAGACACCACAGTCTTGGTCTAAATGGAGGCTATCAAGA
TGAGTTGGTAGATCATCGTTTGACAGAAAGGGAATGGGCTGATGAATGGAAACATCTTGACCATGCGCTGAATTG
CATTATGGAAATGGTAGAGAAAACAAGGCGCTCTATGGCAGTTCTGCGGCGCTGTCAGGAATCAGATCGTGAAGA
ACTCAACTACTGGAAAAGACGGTACAATGAAAACACAGAGCTGAGGAAAACGGGGACCGAGTTGGTCTCCAGGCA
GCACAGCCCTGGGAGTGCAGATTCTCTCAGCAATGATTCTCAGAGAGAGTTCAACAGCAGGCCAGGTACAGGATA
CGTACCTGTGGAGTTTTGGAAAAAAACAGAAGAAGCTGTGAATAAGGTGAAAATTCAGGCCATGTCAGAAGTACA
GAAGGCCGTCGCTGAGGCAGAGCAGAAAGCCTTTGAAGTGATTGCAACAGAGAGAGCACGAATGGAGCAAACCAT
AGCGGATGTCAAGCGGCAGGCCGCAGAGGATGCTTTCCTCGTCATCAATGAGCAAGAGGAGTCCACGGAGAACTG
CTGGAACTGTGGCCGCAAAGCCAGCGAGACATGCAGTGGCTGCAATATCGCGCGATACTGTGGCTCTTTCTGCCA
GCACAAGGACTGGGAGCGGCACCACCGCCTCTGTGGTCAGAACCTGCATGGCCAGAGCCCCCACGGCCAGGGCCG
GCCGCTGCTTCCTGTAGGCAGGGGCTCCTCTGCCAGGTCCGCCGACTGCAGCGTGCCCAGCCCAGCCCTCGACAA
GACCTCGGCAACCACATCGCGTTCCTCAACACCTGCTTCTGTGACAGCTATCGACACCAACGGACTCTGAGCCCC
GGACTCTGCTTACCCTGATGGCTGCTCAGCACCACAGAGTGCTTGGGCTGAGGGACTGACTGTTGGAACCCGTGC
ATGTAGCTGCCGGGTCATCAGCAAGAAATGAATTGGAGGCAGGAAGAGTCCAAGCCTGAATAATAACACCCCACA
GCCTCTCTGTGCACTTGCTGTCTGCGGAGCCAGTGTGCCATTCTCTGCACATGGGCAGCCAGCCTGAGCTGCCTC
CTCCATGGCTTTCCTGGTTTGTTCCTCTCTCCACTGAAGCTGACTTAGCCGGCCCCTTTTCAGTGTAGACCACCA
GCTCCCCTCCCCATCTCCTTGAGTCAGCAGACTGTCCAATGTGCTCAGCCAGGCTGGAGGCGGCAGGCGGCAGGC
AGCAGGCTGTGGAGGAGGCCCCTCGGTCAGGGAGCGGCCTGCCTCACCCCTGAATAGCTCCTTCGGCCCCATCTC
CATCCTCAGCAGATGACACTGATTGGCCTCACGGGGACTTGGGTAAGCAACAGGCGGCATTCAGGACTCTTCTCA
ACCCTGCTGTTCAGACTTGATAAGATCTCAGAGTCCACAGGAAAGAAGTCACTGTTGCAATAAAAGCACCCGTAG
TAGCAAAAACATAAAACAAATAAAACTTCCCCCACATCACAGATGATTTTGGACAAGATTTTCCAACCTTGCTGG
CTACTTTAGTTTGGGACCTGTTTTTTTTCTCATTTGATTTTGCTTGTGCAGAAAATAGTTTCCAGCACATGGATT
GATCTGAGAGAGAATGAGGCTCAGTTGTGGATAGTCTGTTTTCTCTGAGCATGTTGGCCAACTAGTATCGTCAAA
TTATTGAGTGGATCATCTCTTGGAAATGCAGAACTTCTGCCACCACTTGGCTATTTGCACAGTCATCTTGTTCTG
TGTCCTTTTATCTCTCAGACCACACACATCTGGAACGCTGTGGGCATCTTCTGCCCATGGGCTCCATTTGGCACC
TGCTGAGCCACAGTTGTCCTGCTGGATGTGCTGTGCAGGTTGGTAGGACTTGCCCCCACTGTCAAGGCCTGGTCT
CATCTGAAAAGCCCTCCTGGACCTCAAAGAATTCTTCAGACCTCATAGTTACAGGTCATTATATCTACTATGTTG
ATTTATCATCAGGCACACAACTTCTGTTTCCTTCTCTTGTGTTATCTGATAGCGTCCCTCCTTGAGCTCATCAGA
AAGGTTTTATGAAATGTGAACCATTTTGGGAAAAGCTGATCAATTTTTCTTCCTAGCTTCCCATTTTCAAATGGG
ACATCACTCATATCCCTTTCAGAATGTTAGGAACTGCCTCCCACATTCTTCCCTGTCTTTTTGGGTTTTGTTTTT
TGTTGTTGTGGTGGTTTTTTAACACAAACCTGGGCAACAGAGCAAAACTCTGTCTCAAAAAAAAAAAAAAAAAGG
CAAAATTAAAGAATTTCAAGTCCCTAATTTACTCTAACCAAGCATTTTCAGTCTTACAAAGAAATCTAGTGCACG

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FIGURE 2781B

ACACCTTTAAAATGCCTAGATTTCCATTGCCTAAAGTAAGGTGTGACCAGTGAAACAACAGCAGAGAATCATGTT
CCTTTGCTGTGGAACACATAAGCCCCACAGTTTTCCAGTCAGCCTAATACATGGGTATCCCCCGACCCCATCTGC
CTCCTTAAGCCACAGTCCTTGGTGGGGAACTCTAAGGGGGACGGAGTCAGTACCCCGGACAGGGCCACATTTGCA
TGAGACATGGCTGTCTCACAGGTCACAGAGCCATTACAACAGCTTACTAGTTTTTCATGGATTTGTTGGATTAAC
ACCTTAAGCAGGTTTTTTATTGTTATTTTGTTTGTTTGTTTGTTTTGAGACGGGAGTTTCTCTCTTGTCTCCCAG
GCTGGAGTGCAATCGCGCAATCTCGGCTCACGGTAACCTCTGCCTCCCAGGTTCAAGCGAGTCTCCTGCCTCAGC
CTTCTGAGTAGCTGGGATTACAGGCATGCGCCACCACGCCCAACTAATTTTGTATTTTTAGTAGAGACGGGGTTT
CTCCTTGTTGGTCAGGCTGGTCTCAAACCCCGGACCTCAGGTGATCCCCCCACCTTGGCCTCCCAAAGTGCCAGG
ATTACAGGCATGAGCCACTGTGTCCGGTCTTGAGCAGGTTTTTAAAATCTCCAGTGGCCATAAAACTAGCCAGGG
TAGCTCATGCTTTTACTGGTTGGAATAAGGAGCCAAAACCAACAAAATAATATTTATTAGGGCTCGATGCCCATT
TCTGTGGCTAAGGCTTAGGTTTGGTGTGCAGAGCCTGGCCTGCTCTTGTGGGCTGTGGTTGCTGTGACAGTTTCG
TTTTCTGAATCTTTGTAATGCTCTTCCACCCTGCTCGTGCTGCCCAGAGGCTGATCTGCAAACCTGGGCAGTATT
CCACACTGAAGCTCAGTTTGCAAACCTTCTGCTGTGTTAATTCTGGTCAGTTTCACACAGAAGTCACGAGGGCCT
CTGCCCAGGACCTTCTATTCACATTTCAAGAATCCCTTTCTGAAATTCTCCAACTCTCTGGTCAGGAGGAGGAGC
ACCATTGGGGCGGGGTAGGCAGCTAGAGGCGCAGGAGCGAATCCAGGTTCCTTGCGTGGTTCCCAGCCTCTGCTG
ACAGCACCTCAGCTACCAGGTGGGGAGTGGAAATTCAGCCTGCTTAGAGGACTGACCTCTACAGTTCATATTTGC
AGTGACATAAAAGGCAAAGAGGAGCTGGCATGGTGGTACAGAAGGTATCAGTCAAGCGCAGGCTCTTCAGAAACC
TAGAAACTAAAAAAGAGATGCAACATGTGACTGGCCATCAGCCAGACATGTCTAGGGTGAGACCAGTGCTCAGCAC
CACCCGCCAAGGAACACTGATGAGTTGTGGGACATTATGGTCGGCCAAGTGAGGAATGATTGCAGGGACCAGAGA
AGACCAAAGATGCCAGATGTCCCCAGAGTTTCTTGAGGGCTGGGTTTCACGTCTTTGCTTGTCCTTTTTGTCCCC
ACTTGCCTGCACCGTGCCTGACTCATCCAGTGGGGAAGGTGACTCAAGAAGTTGTTTAAGCCTAGGCCTAGGCAG
TCCACTTCGGGAGGTGGGGGCACTCCACACTGGGGGGCCCTGCAGCTCCAGGGCTGGTGCTCTAGCAGATCCGCT
CAGGCACGGTTGGGTGACCGTGGGGTCACCGATTGCGTAGATTATTTCTAGGGCAGTGCTGGGTTAGAAATGTCT
GTCTGGAAACAGGACACATCTTGCCACCACAAGTCCACACCTGGCCTTGGCTGCTGCCCGCTCTCTGCAGCGTGG
ATTTCCTTTGCCCATTTGGGCCAGAAGGTCACCAGGAGTTCATCACTGCTTAGTGTCAACTTGACATCTTCAGCT
TCCAGACAGAAAACCCATGCTTTACTTTGTACAGCCCTGTCCCAGAGTTAGTAAGCCTCGGCTTGTCACCTGCTT
GCAAAGGGTATAGACATCATTCTGGGTAGTTCTAGAGGATATCGCAACAAGTGCGTTTGAAGGTTCAGCACAGCT
GGAATTGTACGGTAGTGAGCTCTTCAAAATGAAAACAGAATGACCGGATGGCCATCTGTCCTGGAAACTGTAGAA
TTGAATAAATCACTGAAAATAGAACACTTCTTGGAGGCTTTCTTCAGAACTGAACTAGAAACAAGGTTTCCAGGC
TCCCAGGTCAGTAGACCAAACCAACTTCCTTAGATTTTTTTTTTTAAGCTGTTTGCAGAAAACTGGGTGGTAGCG
TGTCTGAACCAAACGGAAGAATAGCCAGCGGAGCATGGACTGTTCCAGCACGGGCCAGATGGCCAGCTGTCGAGA
GCAGCCCTGCCCAGATTGCGGTGGGGGCTGTGCCAGCGGCTCCGCAGGGCCCTTCCAACTCTGGAGTGTCTGTAG
TTCTTGTGAAACCAAAACGTTGACTACCTGCCTCTTTCCTCGGGCATCGACGTGCTCATTTCCAAAGATGATGGT
GCAGGTGACCTTTTCCATCGTGAGCTAAGAGAAGGTTAGGAGGCCTGAGGGGCGGGCCTTGTGTCCCCTCCTCCC
CCTCCACAGCCCCTGAGGTGGAGCTTCCCTCACAGACCCCATCTGGTCGAGCCTACGGCTGCCCAGTGTACACTC
AGTGATGCTTATACCAAATAGGGCATGTGCGCTGGTGTCTGTTGGGGACAGCCCCATCCCTACCTTGGAGTCGGC
AGAGAAGCAGCAATAAGCATTAGGCGAATGATTGAAAGGGCTGCTGCGCCAAGAGGCCTTCAGTCCCCTTAACGT
GGCTTTCCAACTTCCTGACGAGGCTACAAAGGCTCCGCTCACAAAAGAAAGCCAATAATGTAAATAAATAGAAAA
CGAAGCCTCCACGCGTGGTTTTTAAAGGGGGATGATGAATGTGACACCACCCACAGAATGCATTAGAATCTGGTT
TTTCTGTGCTTTGTCATTTTACTCTGATAGGAATTTTTGTTACCTAACTCTGTGCATAACTTATTTAATGTACTG
TATAAATGAACCAAAACTGTTAAATATGTATTTAGTTTGTTCTACTTAAAGTAGTCAATAAAAAGGCTATATTCC
T

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FIGURE 2782

GGCGCCGGCGCCAAGGGGCGGCCTCTAGCCACACCGAGTCCGCCGCGGCGTCCAGGGTCGGCAGCAACCGCAGCC
GAGCCCGAGCGGGTGGCGGCGCCATGGCGTGCGCGGGGCTGCTCACCGTGTGCCTGCTCCGGCCGCCCGCGCCCC
AGCCCCAGCCCCAGACCCCGCGGCACCCCCAGCTCGCGCCCGACCCGGGGCCCGCCGGACACACGCTCTTCCAGG
ACGTTTTCCGCAGAGCAGACAAGAATGATGATGGGAAGCTCTCATTTGAGGAATTCCAGAATTACTTTGCCGATG
GGGTTCTCAGCCTGGGGGAGCTGCAGGAACTGTTCAGCGGCATTGATGGGCATCTCACCGACAATTTAGAAACAG
AAAAACTGTGTGACTACTTCTCAGAGCACCTGGGTGTCTACCGGCCGGTGCTGGCTGCATTGGAATCGCTGAACC
GTGCAGTGCTCGCTGCCATGGATGCCACCAAGCTGGAGTACGAGAGGGCCTCCAAAGTGGACCAGTTTGTGACGC
GCTTCCTGCTGCGGGAGACGGTGAGCCAGCTGCAAGCCCTTCAGAGCTCGCTGGAGGGGGCGTCAGATACCCTGG
AGGCCCAGGCCCATGGCTGGCGGTCAGATGCAGAGAGCGTGGAGGCGCAGAGCAGGCTCTGCGGCAGCCGGCGGG
CAGGACGCCGAGCCCTGAGGAGTGTCAGCCGGTCATCCACCTGGTCCCCCGGCTCTTCTGACACAGGGCGCAGCT
CAGAGGCCGAGATGCAGTGGCGGCTCCAGGTGAACCGCCTCCAGGAGCTCATCGACCAGCTCGAGTGCAAGGCCC
CCCGGCTGGAACCCCTGCGTGAAGAGGACCTGGCCAAGGGGCCTGACTTGCACATCCTCATGGCCCAGAGGCAGG
TCCAGGTGGCAGAGGAAGGCCTGCAGGACTTCCACCGAGCCCTGCGCTGCTATGTGGACTTCACAGGGGCCCAGA
GCCATTGTCTGCAGTGAGTCCGCCCAGAAGATGCTGGACGGTGCCTCCTTCACCCTGTATGAGTTCTGGCAGGAT
GAGGCCTCCTGGAGAAGGCACCAGCAGTCGCCTGGCAGCAAGGCCTTCCAGCGCATCCTCATCGACCACCTGCGG
GCCCCGGACACCCTCACCACTGTGTTCTTCCCAGCCTCCTGGTGGATAATGAATAACAACTGAGCCAGACCTGCA
CACGCCGAGGGCCCCGGGACCCTGCCTGCCTCCCTCTGGAGCCTTCTGGACTGGCCAGCCCAGCGCAAAGACCAG
GACTTGTCTCCTCCTGGACTTGGGCCTGGTGGAAGGGCTCTCAGCCCAGGGATCAGGGACTGGGCTGCTTGCTTT
CTATTTATTATTGATTTATTTATCCCTGTATTTTATTGTTTGTCACTTCAGCCTCCAAGCTACTTTGGCTTCTGC
CTGGCTCAGGAGACCTGGATTCTGGTCCCTGCTGTCCCTGCCTGGCTGAGCGACCCAGGGCAGGTCCCGTCCCTG
TCTGGGTGGGCCTCAGGCCATCTGGCCGCCTAGCGAGGGTCCTGCTTTCTTCCTGCTGTCTTGGGACCAGGCTTC
TGCTCCTCCTCAGCCAGCGGCAGAAGCAGGGCTGATGCTCAGGGACCCCCCAACCCTCAAACCTTGCCTCCGAGG
CTGGGCCTGAGCTGGGTGCCCCGTCGCCCTCCCAGGCCACTAGGCTCTGACTCTTCCAGCACCCATGGATGTGCC
AGAGGCCTCTGGGTTGGTTTGCATGTCATTTGCATATCGTTTGCATGCCCTCATCCCACCCATTCTCAGGGCAGT
ATGGGAAGCCCCAAGGTGACCTGGCCAAGTAGCAATAATTTGGGTCCAGGGTCACCTATTGCCCCCAGAGGCCTC
TGAACCCCAGGCTGGGACCCCAGCACAGAGGCAATAAAGGCAGTGGTCCCTTCC

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FIGURE 2783

CCCTGCTGGGGCATCCCCGGCCTGTGATGCTCCCCGTCTCCCCAGAACCGCTGTTGTCCCGGATGGGCAGCCTGC
GGGCTCCCGTGGACGAGGACCGCCTGTCCCCGCTGGTGGCGGCCGACTCGCTCCTGGAGCATGTGCGGGAGGACT
TCTCCGGCCTCCTCCCTGAGGAGTTCATCAGCCTTTCCCCACCCCACGAGGCCCTCGACTACCACTTCGGCCTCG
AGGAGGGCGAGGGCATCAGAGACCTCTTCGACTGTGACTTTGGGGACCTCACCCCCCTGGATTTCTGACAGGGCT
TGGAGGGACCAGGGTTTCCAGAGATGCTCACCTTGTCTCTGCAGCCCTGGAGCCCCCTGTCCCTGGCCGTCCTCC
CAGCCTGTTTGGAAACATTTAATTTATACCCCTCTCCTCTGTCTCCAGAAGCTTCTAGCTCTGGGGTCTGGCTAC
CGCTAGGAGGCTGAGCAAGCCAGGAAGGGAAGGAGTCTGTGTGGTGTGTATGTGCATGCAGCCTACACCCACACG
TGTGTACCGGGGGTGAATGTGTGTGAGCATGTGTGTGTGCATGTACCGGGGAATGAAGGTGAACATACACCTCTG
TGTGTGCACTGCAGACACGCCCCAGTGTGTCCACATGTGTGTGCATGAGTCCATGTGTGCGCGTGGGGGGGCTCT
AACTGCACTTTCGGCCCTTTTGCTCTGGGGGTCCCACAAGGCCCAGGGCAGTGCCTGCTCCCAGAATCTGGTGCT
CTGACCAGGCCAGGTGGGGAGGCTTTGGCTGGCTGGGCGTGTAGGACGGTGAGAGCACTTCTGTCTTAAAGGTTT
TTTCTGATTGAAGCTTTAATGGAGCGTTATTTATTTATCGAGGCCTCTTTGGTGAGCCTGGGGAATCAGCAAAGG
GGAGGAGGGGTGTGGGGTTGATACCCCAACTCCCTCTACCCTTGAGCAAGGGCAGGGGTCCCTGAGCTGTTCTTC
TGCCCCATACTGAAGGAACTGAGGCCTGGGTGATTTATTTATTGGGAAAGTGAGGGAGGGAGACAGACTGACTGA
CAGCCATGGGTGGTCAGATGGTGGGGTGGGCCCTCTCCAGGGGGCCAGTTCAGGGCCCCAGCTGCCCCCCAGGAT
GGATATGAGATGGGAGAGGTGAGTGGGGGACCTTCACTGATGTGGGCAGGAGGGGTGGTGAAGGCCTCCCCCAGC
CCAGACCCTGTGGTCCCTCCTGCAGTGTCTGAAGCGCCTGCCTCCCCACTGCTCTGCCCCACCCTCCAATCTGCA
CTTTGATTTGCTTCCTAACAGCTCTGTTCCCTCCTGCTTTGGTTTTAATAAATATTTTGATGACGTTTGGGCCGG
GTTTTGGGACTCTGTTGGGAACATTTCGGGGCGGGAGAGGCCAAGGTTGCTGGGGAAATGCCCATTCTCCACTTC
CCTTCTCCCTGTCCGTGCCCGATTTGATTTGAGCCTCATAACTCGAAGAAAGGTCAGCTTCCTCGCTGTTTTGGT
CCTAACTCAAAAGCAGATCCAGTAAAGGTTTTTGTTGT

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FIGURE 2784

GTGCGCTTACAGTTCCTAACCCCGACCCTGCGCGCAGCCCGCACTATGGCAGCCCCGCCGCAGCTAAGGGCTCTG
CTCGTAGTCGTCAACGCACTGCTGCGCAAGCGCCGCTACCACGCTGCGTTGGCCGTGCTTAAGGGCTTCCGGAAC
GGGGCTGTCTATGGAGCCAAAATCCGGGCCCCTCACGCGCTGGTCATGACCTTTCTCTTCCGGAATGGCAGCCTC
CAGGAGAAGCTGTGGGCCATACTGCAGGCCACATATATCCACTCCTGGAACCTGGCACGGTTTGTGTTCACCTAC
AAGGGTCTCCGTGCCCTGCAGTCCTACATACAAGGCAAGACCTACCCAGCACACGCATTCCTGGCGGCCTTCCTC
GGGGGTATCCTGGTGTTTGGAGAAAACAATAACATCAACAGCCAGATCAACATGTACCTGTTGTCACGCGTCCTG
TTTGCCCTGAGCCGCCTGGCTGTAGAGAAGGGCTACATCCCTGAACCCAGGTGGGACCCGTTCCCGCTGCTCACT
GCGGTGGTGTGGGGGCTGGTGCTGTGGCTCTTTGAGTATCACCGATCCACCCTGCAGCCCTCGCTGCAGTCCTCC
ATGACCTACCTCTATGAGGACAGCAATGTATGGCACGACATCTCAGACTTCCTCGTCTATAACAAGAGCCGTCCC
TCCAATTAATGCAGCCCTGAGGTGTCTGGCTGTGGCTCAAGATTTGGCCCCATGCAGACCCTCCCAAAGGATACT
GCCTTCTCAAGATCATAGGCCTCAGACTCCAACTGGTGTTATCCCAGGGTTCCGTTTGCTGAAGTAAAAACACTG
ATTTTAAAATCCCAGTGGGTACCTTTGTATGGTGGCACAAGTGGCCGAATCAGGCTGAGGAATCTACGGCTTGGT
TCCAGCTGTGCAGCTGACTTCTGTGAGACTGGGGCCAGCCACACTACTCTCTAGGCCTCAGGGGTCAAGGAGCTC
AGAGGAGGGCCCTGAGGTCTCTTTCCGGTGGGTATGTTCATTCTTCAACTGTTCTTATGTCACAGAGGGCTCCTT
GCTGGTGGGCAGTGGGTTGTAAATACTTTTTAAAAAACACTAAGTTCCTTATCTCAGATGCTGTTCTACTGGAGA
AGTTCTAGATTCCCACTGTCCAATAGAAACACGTGAGCCATATATGTAATTAAAATGTTTCTAGTAGCTGCATTA
CAAAAAAGAAGCCTGGGCACTGTGGCTCACTCCTGTAATCTCAGAACTTTGGGAGGCTGAGGCAGGTGGATCACT
TGAGCTCAGGAGCTTGAGACCAGCCTGGGCAACATGGTGAAACCCAGTTTCTAC

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FIGURE 2785

GAATGGACAATCAGACCGTTCTGGCTGTCCAGTCATTATTGGATGGCCAAGGAGCAGTCCCTGATCCGACAGGCC
AGAGTGTCAATGCGCCCCCTGCTATCCAGCCATTGGATGACGAGGATGTATTTCTCTGCGGGAAGTGTAAGAAGC
AATTCAACTCGCTGCCAGCGTTTATGACCCACAAGCGGGAACAGTGCCAGGGGAATGCCCCCGCCCTGGCCACAG
TCTCACTGGCCACCAACAGCATCTACCCACCTTCGGCAGCACCCACAGCGGTCCAGCAGGCCCCAACTCCTGCCA
ATCGCCAGATCTCCACATACATCACAGTGCCCCCGTCCCCACTGATCCAGACCCTGGTGCAGGGGAACATCTTGG
TGAGCGATGATGTGCTCATGTCTGCCATGTCAGCCTTCACATCCCTGGACCAGCCCATGCCCCAGGGCCCCCCAC
CTGTGCAGGTGCCAAACCAGTGTGTGGAGCCTCCAGTATATCCCACCCCCACAGTGTACAGCCCTGGCAAACAGG
GATTCAAACCCAAAGGACCAAACCCCGCCGCCCCCATGACCAGCGCCACCGGGGGCACGGTGGCCACCTTTGACT
CTCCAGCAACGCTGAAGACCCGACGAGCTAAAGGTGCCAGGGGACTCCCGGAAGCTGCAGGGAAGCCAAAGGCTC
AGAAACTCAAGTGCTCATACTGTGACAAGTCATTCACCAAAAACTTTGACCTGCAGCAGCACATCCGAAGGTACA
CATGCGTGGAGGGCACTGACAAGCTTGTCTTCCACAGCCACACCGGTGAGAAGCCCTTCCAGTGCATTGCATGTG
GCCGTGCCTTTGCCCAGAAGTCTAATGTTAAGAAACACATGCAGACCCACAAGGTGTGGCCTCCAGGACACAGTG
GTGGCACCGTGTCTCGAAACTCTGTGACCGTACAGGTCATGGCCCTGAACCCCAGCAGGCAGGAGGACGAGGAAA
GCACAGGGTTGGGCCAGCCCCTGCCGGGTGCGCCACAGCCCCAGGCCTTGTCCACAGCTGGTGAGGAAGAGGGGG
ACAAGCCGGAGTCCAAGCAGGTGGTCCTCATCGACAGCTCCTACCTGTGCCAATTCTGCCCCAGCAAATTCAGCA
CCTACTTCCAGCTCAAGTCTCACATGACCCAGCATAAGAATGAGCAGGTGTACAAGTGTGTGGTCAAAAGCTGTG
CCCAGACGTTCCCAAAGCTCGACACATTTCTGGAGCACATCAAGAGCCACCAGGAGGAGCTGAGCTACCGCTGCC
ACCTCTGCGGCAAGGACTTCCCCTCGCTGTACGACCTGGGCGTGCACCAGTACTCCCACAGCCTCCTGCCACAGC
ACAGCCCCAAGAAGGACAATGCCGTCTACAAGTGTGTCAAATGTGTCAACAAATACTCCACCCCTGAGGCCCTGG
AGCACCACCTGCAGACCGCCACTCACAACTTCCCCTGCCCACACTGCCAGAAGGTGTTTCCTTGTGAACGCTACC
TGCGGCGTCATCTGCCCACCCACGGCAGCGGGGGCAGGTTCAAGTGCCAAGTGTGCAAGAAGTTCTTCCGGCGGG
AGCATTATCTCAAACTGCATGCTCACATCCACTCGGGTGAGAAGCCCTACAAATGCTCAGTGTGCGAGTCTGCGT
TCAACCGCAAGGACAAACTGAAGAGACACATGTTGATCCACGAGCCCTTCAAGAAATACAAATGCCCTTTCTCGA
CGCACACAGGCTGCAGTAAGGAGTTCAACCGGCCGGACAAGCTGAAGGCCCACATCCTCTCCCACTCTGGCATGA
AGCTCCACAAATGCGCCCTGTGCAGCAAGTCCTTCAGCCGCCGTGCCCACCTCGCCGAGCATCAGCGCGCCCACA
CGGGCAACTACAAGTTCCGCTGTGCTGGCTGCGCCAAGGGCTTTTCCCGCCACAAATACCTCAAAGATCACCGCT
GTCGTCTCGGCCCCCAAAAGGACAAGGACCTGCAAACCCGGCGGCCCCCCCAGAGGAGGGCAGCCCCCCGCAGTT
GCGGCAGTGGTGGGCGCAAGGTGCTGACCCCCTTGCCTGACCCGCTGGGGCTGGAGGAGCTGAAGGACACAGGGG
CTGGGCTGGTGCCCGAGGCTGTCCCCGGCAAGCCGCCCTTCGCAGAGCCGGACGCGGTGCTGTCCATCGTTGTGG
GTGGTGCGGTGGGCGCGGAAACTGAGCTGGTGGTACCTGGACACGCTGAGGGGCTGGGCTCCAACCTGGCTCTGG
CGGAGCTGCAGGCTGGGGCCGAGGGCCCATGTGCCATGCTCGCTGTGCCCGTCTACATCCAGGCCTCCGAGTGA

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FIGURE 2786

CAGCTGCGGGGCGGAGGCGGAGGCGGAGGAGAGGCCTGCGGCGGCAGGGAGCGGCGGGACTGGGAGCGGGCGCCG
GAGCCGACCCGAGCCGAGCCGAGCCGAGCCGAGCCGGAGCGGGCGGCGAAGGCCGGCGCGGCGAGCAGCAACC**AT**
GTCGGTGTTCGGGAAGCTGTTCGGGGCTGGAGGGGGTAAGGCCGGCAAGGGCGGCCCGACCCCCCAGGAGGCCAT
CCAGCGGCTGCGGGACACGGAAGAGATGTTAAGCAAGAAACAGGAGTTCCTGGAGAAGAAAATCGAGCAGGAGCT
GACGGCCGCCAAGAAGCACGGCACCAAAAACAAGCGCGCGGCCCTCCAGGCACTGAAGCGTAAGAAGAGGTATGA
GAAGCAGCTGGCGCAGATCGACGGCACATTATCAACCATCGAGTTCCAGCGGGAGGCCCTGGAGAATGCCAACAC
CAACACCGAGGTGCTCAAGAACATGGGCTATGCCGCCAAGGCCATGAAGGCGGCCCATGACAACATGGACATCGA
TAAAGTTGATGAGTTAATGCAGGACATTGCTGACCAGCAAGAACTTGCAGAGGAGATTTCAACAGCAATTTCGAA
ACCTGTAGGGTTTGGAGAAGAGTTTGACGAGGATGAGCTCATGGCGGAATTAGAAGAACTAGAACAGGAGGAACT
AGACAAGAATTTGCTGGAAATCAGTGGACCCGAAACAGTCCCTCTACCAAATGTTCCCTCTATAGCCCTACCATC
AAAACCCGCCAAGAAGAAAGAAGAGGAGGACGACGACATGAAGGAATTGGAGAACTGGGCTGGATCCATG**TAA**TG
GGGTCCAGCGCTGGCTGGGCCCAGACAGACTGTGGTGGCCTGCGCAGCGAGCAGGCGTGTGCGTGTGTGGGGCAG
GCAGGATGTGGTGCAGGCAGGTTCCATCGCTTTCGACTCTCACTCCAAAGCAGTAGGGCCGCGTTGCTGCTCACT
CTCTGCATAGCATGGTCTGCACCTGGGAGATGGGCGGGGGGAGGGGGGCGGGCGGGGTGGGAAGTGCCTGCTGTT
TATAATGTTGAATTTCTGTAAAATAAACTGTATTTGCAAATCCAACATTGAGCTTCTGGACTACGCTGACTCCAC
TGCTGAATCCTCAATGGAAAGGGTCGACTGGTTGCAGTTGAAATGACCTGAAATGTAGCCTCTGTCCTTGTAAGT
CAGTTGACTTGCCGCACATCTCTTTGTGTACTTGTACGGTACTGGCAGAAAAGTCATTTTTCAAAAGCCATAGGC
TTTTCCTTGCCCTTAGCTGTAATAATGCATCTGATTTTGATTTCCTCCAGAGCTGTGTTTCTGTCCATCACCTGT
GTATTGGCCCTGTGTTTACCACTCTGGCCCACTCCTCACCCCCTTGCTCCCCTGGTCTTCTGGAGTTTGTGACAT
TGATTTGAAATGGATGGTGTTCTCTTGAGAGCAAGTGAGATTGTTAGAATTAAGTTCCAACTATACAGTTTTCTA
ACATAGCTATAAGGTCCTTGTTGCTGTTTGTGATAACTGATAGATAACTCATTGGAAACGTGCATACATTTATAT
TCAGATGAAATTATGGTTTGCACTGTCTATTAAATATCTCGATTAATTTTC

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FIGURE 2787

CGCGCGAGCGGCGCCAGCTCGGGGCAGCGGAACCCAGAGAAGCTGAGGGGGCGGTAGCGGCGGCGACGGCGACGA
CGACGACTCCCGCGCGTGTGCCCAGCCTCTTCCCGCCGCAGCCGCCCTTTTCCTCCCTCCCTTACGTCCCCGAGT
GCGGCAGTACCGCCTCCTTCCCAGCCGCGCGGCTTCCTCCAGACCTCTCGGCGCGGGTGAGCCCTATTCCCAGAG
GCAGGTGGTGCTGACCCTGTAACCCAAAGGAGGAAACAGCTGGCTAAGCTCATCATTGTTACTGGTGGGCACCATG
TCCTTGAAGCTTCAGGCAAGCAATGTAACCAACAAGAATGACCCCAAGTCCATCAACTCTCGAGTCTTCATTGG
AAACCTCAACACAGCTCTGGTGAAGAAATCAGATGTGGAGACCATCTTCTCTAAGTATGGCCGTGTGGCCGGCTG
TTCTGTGCACAAGGGCTATGCCTTTGTTCAGTACTCCAATGAGCGCCATGCCCGGGCAGCTGTGCTGGGAGAGAA
TGGGCGGGTGCTGGCCGGGCAGACCCTGGACATCAACATGGCTGGAGAGCCTAAGCCTGACAGACCCAAGGGGCT
AAAGAGAGCAGCATCTGCCATATACAGTGGCTACATCTTTGACTATGATTACTACCGGGACGACTTCTACGACAG
GCTCTTCGACTACCGGGGCCGTCTGTCGCCCGTGCCAGTGCCCAGGGCGGTCCCTGTGAAGCGACCCCGGGTCAC
AGTCCCTTTGGTCCGGCGTGTCAAAACTAACGTACCTGTCAAGCTCTTTGCCCGCTCCACAGCTGTCACCACCAG
CTCAGCCAAGATCAAGTTAAAGAGCAGTGAGCTGCAGGCCATCAAGACGGAGCTGACACAGATCAAGTCCAATAT
CGATGCCCTGCTGAGCCGCTTGGAGCAGATCGCTGCGGAGCAAAAGGCCAATCCAGATGGCAAGAAGAAGGGTGA
TGGAGGTGGCGCCGGCGGCGGCGGCGGTGGTGGTGGCAGCGGTGGCGGTGGCAGTGGTGGTGGCGGTGGCGGTGG
CAGCAGCCGGCCACCAGCCCCCCAAGAGAACACAACTTCTGAGGCAGGCCTGCCCCAGGGGGAAGCACGGACCCG
AGACGACGGCGATGAGGAAGGGCTCCTGACACACAGCGAGGAAGAGCTGGAACACAGCCAGGACACAGACGCGGA
TGATGGGGCCTTGCAGTAAGCAGCCTGACAGGAGCAATGGCCACCAGCAGGTGAAGGGCATCGCTGCCCCAGGCC
TCAAGCCGGGCACCCAACCCTGGATGCCACCCCCCAGCGGGTACCAGAGGAAAGCTGGCAGCAGGCGCCTCCTCC
CCCAACGCATCCCAGCCAGTGCCATGTCCTCTGCAGGTGGAGTTACTGGCCTACTCCTTCCCCATGAGCCCTCCC
TGTCTGCACTGCCCAGGCCAGAGGGTAGAGCACAGGGGTTTCCCCATACTACCTCCCCTCCCCAGGACACTCCCA
GGCTTGGGTTTTTTCTATAGGTTTGGCGGGGGGCCACAGGGAGGGGACCCTGACAATAAAGAGATTGGATCCC

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FIGURE 2788

GGTGGTGGGAGAGGTATCGGCAGGGGCAGCGCTGCCGCCGGGGCCTGGGGCTGACCCGTCTGACTTCCCGTCCGT
GCCGAGCCCACTCGAGCCGCAGCC**ATG**TCTGGGGACGAGATGATTTTTGATCCTACTATGAGCAAGAAGAAAAAG
AAGAAGAAGAAGCCTTTTATGTTAGATGAGGAAGGGGATACCCAAACAGAGGAAACCCAGCCTTCAGAAACAAAA
GAAGTGGAGCCAGAGCCAACTGAGGACAAGGATTTGGAAGCTGATGAAGAGGACACTAGGAAAAAAGATGCTTCT
GATGATCTAGATGACTTGAACTTCTTTAATCAAAAGAAAAAGAAGAAAAAAACTAAAAAGATATTTGATATTGAT
GAAGCTGAAGAAGGTGTAAAGGATCTTAAGATTGAAAGTGATGTTCAAGAACCAACTGAACCAGAGGATGACCTT
GACATTATGCTTGGCAATAAAAAGAAGAAAAAGAAGAATGTTAAGTTCCCAGATGAGGATGAAATACTAGAGAAA
GATGAAGCTCTAGAAGATGAAGACAACAAAAAAGATGATGGTATCTCATTCAGTAATCAGACAGGCCCTGCTTGG
GCAGGCTCAGAAAGAGACTACACATACGAGGAGCTGCTGAATCGAGTGTTCAACATCATGAGGGAAAAGAATCCA
GATATGGTTGCTGGGGAGAAAAGGAAATTTGTCATGAAACCTCCACAAGTCGTCCGAGTAGGAACCAAGAAAACT
TCTTTTGTCAACTTTACAGATATCTGTAAACTATTACATCGTCAGCCCAAACATCTCCTTGCATTTTTGTTGGCT
GAATTGGGTACAAGTGGTTCTATAGATGGTAATAACCAACTTGTAATCAAAGGAAGATTCCAACAGAAACAGATA
GAAAATGTCTTGAGAAGATATATCAAGGAATATGTCACTTGTCACACATGCCGATCACCGGACACAATCCTGCAG
AAGGACACACGACTCTATTTCCTACAGTGCGAAACTTGTCATTCTAGATGTTCTGTTGCCAGTATCAAAACCGGC
TTCCAGGCTGTCACGGGCAAGCGAGCACAGCTCCGTGCCAAAGCTAAC**TAA**TTTGCTAATCACTGATTTTGCAAA
GCTTGTTGTGGAGATGTGGCTGGACAGGTTTGCCATCAGAGTGGATATACCGTTGTATTAAAAACAAGATAAAAA
AGCTGCCAAGATTTTTGGCGAGTGGTTGGTCTGAAGTCCTTGCAAGACGCTGATGCTCAAGCTGTTGACATACTC
ATTGCCTACTTTAACACCTGTCAGAGAAACGTGATATGGGGTAAGGAGGTGCTTTTTTAAAATCGTTCATAGACT
TCTGTAAAATGCAAGATAAATTAAAGTTATTATAACAGTGATTCTTTCA

FIGURE 2789

AGATGTTTATAAATTCTTCTGTGGGATCAGAGGGCAAGCCTATTATAACCAGAAAACTCCAAGTATAGCAGCAAG
GATGGATAAACAGGCTCTATTAGGGCTAAATCCAAATGCTGATTCAGACTTTAGACTAAGGGCCCTGGCCTATTT
TGAGCAGTTAAAGATTTCCCCAGATGCCTGGCAGGTGTGTGCAGAAGCTCTAGCCCAGAGGACATATAGTGATGA
TCATGTAAAGTTTTTCTGCTTTCAAGTACTGGAACATCAAGTTAAATACAAATATTCAGAACTAACCACTGTTCA
ACAACAACTAATTAGGGAGACGCTCATATCATGGCTGCAAGCTCAGATGCTGAATCCCCAACCAGAGAAGACCTT
TATACCAAATAAAGCCGCCCAAGTCCTCGCCTTGCTTTTTGTTGCAGAATATCTCACTAAGTGGCCCAAGTTTTT
TTTTTGACATTCTCTCAGTAGTGGACCTAAATCCAAGGGGAGTAGATCTGTACCTGCGAATCCTC**ATG**GCTATCA
ACTCAGAGTTGGTGGATCGTGATGTGGTGCATACATCAGAGGAGGCTCACAGGAATACTCTCATAAAAGATACCA
TGAGGGAACAGTGCATTCCAAATCTGGTGGAATCATGGTACCAAATATCACAAAATTATCAGTATACTAATTCTG
AAGTGATGTGTCAGTGCCTTGAAGTAGTTGGGGCTTATGTCTCTTGGATTGACTTATCCCTTTTAGCCAATGATA
GGTTTATAAATATGCTGCTAGGTCATATGTCAATAGAAGTTCTACGGGAAGAAGCATGTGACTGTTTATTTGAAG
TTGTAAATAAAGGAATGGACCCTGTTGATAAAATGAAACTAGTAGAATCTTTGTGTCAAGTATTACAGTCTGCTG
GCTTTTTCAGCATTGACCAGGAAGAAGATGTTGACTTCTTTTCAGCATTGACCAGGAAGAAGATGTTGGCCAGAT
TTTCTAAGCCGGTAAACGGAATGGGACAGTCATGGATAGTTAGTTGGAGTAAATTAACTAAGAATGGGAATATTA
AGAATGCTCAAGAGGCACTACAAGCTATTGAAACAAAAGTGGCACTGATGTTGCAGCTACTAATTCATGAGGATG
ATGATATTTCTTCTAATATTGGATTTTGTTATGATTATCTTCATATTTTGAAACAGCTTACAGTGCTCTCGGATC
AGCAAAAAGCTAATGTGGAGGCAATCATGTTGGCCGTTATGAAAAAATTGACTTATGATGAAGAATATAACTTTG
AAAATGAGGGTCAAGATAAAGCCATGTTTGTAGAATATAGAAAACAACTGAAGTTAGTGTTGGACAGGCTTGCTC
AAGTTTCACGAGAGTTACTACTGGCCTCTGTTCGCAGAGTTTTTAGTTCTACACTGCAGAATTGGCAGACTACAC
GGTTCATGGAAGTTGAAGTAGCAATAAGATTGCTGTATATGTTGGCAGAAGCTCTTCCAGTATCTATCTCATGGT
GCTCACTTCTCAGG**TGA**TGTTTCAAAAGCTAGTGCTTTGCAGGGTATGATGCGAACTCTGGTAACATCAGGAGTC
AGTTCCTATCAGCATACATCTGTGACGTTGGAGTTCTTCGAAACTGTTGTTAGATATGAAAAGTTTTTCACAGTT
GAACCTCAGCACGTTCCATGTGTACTAATGGCTTTCTTAGATCACAGAGGTCTGCGTCATTCCAGTGCAAAAGTT
CAGAGCAAGATGGCTTACCTGTTTTCTAGATTTGTCAAATCTCTCAATAAGCAAATGAATCCTTTCATTGAGGAT
ATTTTGAATAGAATACAAGATTTATTAAAGCTTTCTCCACCTGAGAATGGCCACCAGTCCTTCCTGAGCAGCGAT
GATCAAATTTTATTTATGAGACAGTTGGAGTGATGATTGTTAATAATGAATACCCGGCAGAAAGGAAAGAAGCCT
TAATGAGGAATCTGTTGACTCCACTAATGGAGAAGTTTAAAATTCTGTTAGAAAATTTGATGCTGGCACAAGATG
AAGAAAGGCAAGCCTCTCTAGCAGACTGTCTCAACCATGCTGTTGGATTTGCAAGTCGAACTAGTAAAGCTTTCA
GCAACAAGCAGACTGTGAAACAGTGTGGCTGTTCCGAAGTTTATCTGGACTGTTTACAGACATTCTTGCTGGCCC
TCAGTTGTCCCTTACAAAAGGGTATTCTCAGAAGTGGAGTCTGTACTTTCCTTCATCGAATGATTATTTGCCTGG
AGGAAGAAGTTTTTCCGTTCATCCCATCTGCTTCAGAACATATACTCAAAGATTGTGAAGCAAAAGACCTCCAGG
AGTTCATTCCTCTTATCAACCAGATTACGGCCAAATTCAAGGTACAAGTATCCCCGTTTTTACAACAGATGTTCA
TGCCCCTGCTTCATGCAATTTTTGAAGTGCTACTCTGGCCCGCAGAAGAAAATGACCAGTCTGCTGCTTTAGAGA

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FIGURE 2790

CTGAGGCCCAGCCCCCTTCGCCCGTTTCCATCACGAGTGCCGCCAGCATGTCTGACAAACTGCCCTACAAAGTCG
CCGACATCGGCCTGGCTGCCTGGGGACGCAAGGCCCTGGACATTGCTGAGAACGAGATGCCGGGCCTGATGCGTA
TGCGGGAGCGGTACTCGGCCTCCAAGCCACTGAAGGGCGCCCGCATCGCTGGCTGCCTGCACATGACCGTGGAGA
CGGCCGTCCTCATTGAGACCCTCGTCACCCTGGGTGCTGAGGTGCAGTGGTCCAGCTGCAACATCTTCTCCACCC
AGGACCATGCGGCGGCTGCCATTGCCAAGGCTGGCATTCCGGTGTATGCCTGGAAGGGCGAAACGGACGAGGAGT
ACCTGTGGTGCATTGAGCAGACCCTGTACTTCAAGGACGGGCCCCTCAACATGATTCTGGACGACGGGGGCGACC
TCACCAACCTCATCCACACCAAGTACCCGCAGCTTCTGCCAGGCATCCGAGGCATCTCTGAGGAGACCACGACTG
GGGTCCACAACCTCTACAAGATGATGGCCAATGGGATCCTCAAGGTGCCTGCCATCAATGTCAATGACTCCGTCA
CCAAGAGCAAGTTTGACAACCTCTATGGCTGCCGGGAGTCCCTCATAGATGGCATCAAGCGGGCCACAGATGTGA
TGATTGCCGGCAAGGTAGCGGTGGTAGCAGGCTATGGTGATGTGGGCAAGGGCTGTGCCCAGGCCCTGCGGGGTT
TCGGAGCCCGCGTCATCATCACCGAGATTGACCCCATCAACGCACTGCAGGCTGCCATGGAGGGCTATGAGGTGA
CCACCATGGATGAGGCCTGTCAGGAGGGCAACATCTTTGTCACCACCACAGGCTGTATTGACATCATCCTTGGCC
GGTAGGTGCCAGATGGGGGGTCCCGGGGAGTGAGGGAGGAGGGCAGAGTTGGGACAGCTTTCTGTCCCTGACAAT
CTCCCACGGTCTTGGGCTGCCTGACAGGCACTTTGAGCAGATGAAGGATGATGCCATTGTGTGTAACATTGGACA
CTTTGACGTGGAGATCGATGTCAAGTGGCTCAACGAGAACGCCGTGGAGAAGGTGAACATCAAGCCGCAGGTGGA
CCGGTATCGGTTGAAGAATGGGCGCCGCATCATCCTGCTGGCCGAGGGTCGGCTGGTCAACCTGGGTTGTGCCAT
GGGCCACCCCAGCTTCGTGATGAGTAACTCCTTCACCAACCAGGTGATGGCGCAGATCGAGCTGTGGACCCATCC
AGACAAGTACCCCGTTGGGGTTCATTTCCTGCCCAAGAAGCTGGATGAGGCAGTGGCTGAAGCCCACCTGGGCAA
GCTGAATGTGAAGTTGACCAAGCTAACTGAGAAGCAAGCCCAGTACCTGGGCATGTCCTGTGATGGCCCCTTCAA
GCCGGATCACTACCGCTACTGAGAGCCAGGTCTGCGTTTCACCCTCCAGCTGCTGTCCTTGCCCAGGCCCCACCT
CTCCTCCCTAAGAGCTAATGGCACCAACTTTGTGATTGGTTTGTCAGTGTCCCCCATCGACTCTCTGGGGCTGAT
CACTTAGTTTTTGGCCTCTGCTGCAGCCGTCATACTGTTCCAAATGTGGCAGCGGGAACAGAGTACCCTCTTCAA
GCCCCGGTCATGATGGAGGTCCCAGCCACAGGGAACCATGAGCTCAGTGGTCTTGGAACAGCTCACTAAGTCAGT
CCTTCCTTAGCCTGGAAGTCAGTAGTGGAGTCACAAAGCCCATGTGTTTTGCCATCTAGGCCTTCACCTGGTCTG
TGGACTTATACCTGTGTGCTTGGTTTACAGGTCCAGTGGTTCTTCAGCCCATGACAGATGAGAAGGGGCTATATT
GAAGGGCAAAGAGGAACTGTTGTTTGAATTTTCCTGAGAGCCTGGCTTAGTGCTGGGCCTTCTCTTAAACCTCAT
TACAATGAGGTTAGTACTTTTAGTCCCTGTTTTACAGGGGTTAGAATAGACTGTTAAGGGGCAACTGAGAAAGAA
CAGAGAAGTGACAGCTAGGGGTTGAGAGGGGCCAGAAAAACATGAATGCAGGCAGATTTCGTGAAATCTGCCACC
ACTTTATAACCAGATGGTTCCTTTCACAACCCTGGGTCAAAAAGAGAATAATTTGGCCTATAATGTTAAAAGAAA
GCAGGAAGGTGGGTAAATAAAAATCTTGGTGCCTGG

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FIGURE 2791

AGTAGCTGTGGTCGGGGCTCGGGACCGGCTGCCATCTTAGTCTAGGGACTGAGGAGTCGCCGCCGCCCCGAGTCC
CGGTACCATGCATTTCACGGTGGCCTTGTGGAGACAACGCCTTAACCCAAGGAAGTGACTCAAACTGTGAGAACT
TCAGGTTTTCCAACCTATTGGTGGT**ATG**TCTGACAGTGGATCACAACTTGGTTCAATGGGTAGCCTCACCATGAA
ATCACAGCTTCAGATCACTGTCATCTCAGCAAAACTTAAGGAAAATAAGAAGAATTGGTTTGGACCAAGTCCTTA
CGTAGAGGTCACAGTAGATGGACAGTCAAAGAAGACAGAAAAATGCAACAACACAAACAGTCCCAAGTGGAAGCA
ACCCCTTACAGTTATCGTTACCCCTGTGAGTAAATTACATTTTCGTGTGTGGAGTCACCAGACACTGAAATCTGA
TGTTTTGTTGGGAACTGCTGCATTAGATATTTATGAAACATTAAAGTCAAACAATATGAAACTTGAAGAAGTAGT
TGTGACTTTGCAGCTTGGAGGTGACAAAGAGCCAACAGAGACAATAGGAGACTTGTCAATTTGTCTTGATGGGCT
ACAGTTAGAGTCTGAAGTTGTTACCAATGGTGAAACTACATGTTCAGAAAGTGCTTCTCAGAATGATGATGGCTC
CAGATCCAAGGATGAAACAAGAGTGAGCACAAATGGATCAGATGACCCTGAAGATGCAGGAGCTGGTGAAAATAG
GAGAGTCAGTGGGAATAATTCTCCATCACTCTCAAATGGTGGTTTTAAACCTTCTAGACCTCCAAGACCTTCACG
ACCACCACCACCCACCCCACGTAGACCAGCATCTGTCAATGGTTCACCATCTGCCACTTCTGAAAGTGATGGGTC
TAGTACAGGCTCTCTGCCGCCGACAAATACAAATACAAATACATCTGAAGGAGCAACATCTGGATTAATAATTCC
TCTTACTATATCTGGAGGCTCAGGCCCTAGGCCATTAAATCCTGTAACTCAAGCTCCCTTGCCACCTGGTTGGGA
GCAGAGAGTGGACCAGCACGGGCGAGTTTACTATGTAGATCATGTTGAGAAAAGAACAACATGGGATAGACCAGA
ACCTCTACCTCCTGGCTGGGAACGGCGGGTTGACAACATGGGACGTATTTATTATGTTGACCATTTCACAAGAAC
AACAACGTGGCAGAGGCCAACACTGGAATCCGTCCGGAACTATGAACAATGGCAGCTACAGCGTAGTCAGCTTCA
AGGAGCAATGCAGCAGTTTAACCAGAGATTCATTTATGGGAATCAAGATTTATTTGCTACATCACAAAGTAAAGA
ATTTGATCCTCTTGGTCCATTGCCACCTGGATGGGAGAAGAGAACAGACAGCAATGGCAGAGTATATTTCGTCAA
CCACAACACACGAATTACACAATGGGAAGACCCCAGAAGTCAAGGTCAATTAAATGAAAAGCCCTTACCTGAAGG
TTGGGAAATGAGATTCACAGTGGATGGAATTCCATATTTTGTGGACCACAATAGAAGAACTACCACCTATATAGA
TCCCCGCACAGGAAAATCTGCCCTAGACAATGGACCTCAGATAGCCTATGTTCGGGACTTCAAAGCAAAGGTTCA
GTATTTCCGGTTCTGGTGTCAGCAACTGGCCATGCCACAGCACATAAAGATTACAGTGACAAGAAAAACATTGTT
TGAGGATTCCTTTCAACAGATAATGAGCTTCAGTCCCCAAGATCTGCGAAGACGTTTGTGGGTGATTTTTCCAGG
AGAAGAAGGTTTAGATTATGGAGGTGTAGCAAGG**TAG**TGATAATATGAATACTCAGAACTTAGTTCCTTTCCTCC
AAAGAGAATGGTTCTTTCTTTTGTCACATGAAGTGTTGAACCCAATGTATTGCCTGTTTGAATATGCAGGGAAGG
ATAACTACTGCTTGCAGATAAACCCCGCTTCTTACATCAATCCAGATCACCTGAAATATTTTCGTTTTATTGGCA
GATTTATTGCCATGGCTCTGTTCCATGGGAAATTCATAGACACGGGTTTTTCTTTACCATTCTATAAGCGTATCT
TGAACAAACCAGTTGGACTCAAGGATTTAGAATCTATTGATCCAGAATTTTACAATTCTCTCATCTGGGTTAAGG
AAAACAATATTGAGGAATGTGATTTGGAAATGTACTTCTCCGTTGACAAAGAAATTCTAGGTGAAATTAAGAGTC
ATGATCTGAAACCTAATGGTGGCAATATTCTTGTAACAGAAGAAAATAAAGAGGAATACATCAGAATGGTAGCTG
AGTGGAGGTTGTCTCGAGGTGTTGAAGAACAGACACAAGCTTTCTTTGAAGGCTTTAATGAAATTCTTCCCCAGC
AATATTTGCAATACTTTGATGCAAAGGAATTAGAGGTCCTTTTATGTGGAATGCAAGAGATTGATTTGAATGACT
GGCAAAGACATGCCATCTACCGTCATTATGCAAGGACCAGCAAACAAATCATGTGGTTTTGGCAGTTTGTTAAAG
AAATTGATAATGAGAAGAGAATGAGACTTCTGCAGTTTGTTACTGGAACCTGCCGATTGCCAGTAGGAGGATTTG
CTGATCTCATGGGGAGCAATGGACCACAGAAATTCTGCATTGAAAAAGTTGGGAAAGAAAATTGGCTACCCAGAA
GTCATACCTGTTTTAATCGCCTGGACCTGCCACCATACAAGAGCTATGAGCAACTGAAGGAAAAGCTGTTGTTTG
CCATAGAAGAAACAGAAGGATTTGGACAAGAGTAACTTCTGAGAACTTGCACCATGAATGGGCAAGAACTTATTT
GCAATGTTTGTCCTTCTCTGCCTGTTGCACATCTTGTAAAATTGGACAATGGCTCTTTAGAGAGTTATCTGAGTG
TAAGTAAATTAATGTTCTCATTTAGATTTATCTCCCAGTGATTTCTACTCAGCGTTTCCAGAAATCAGGTCTGCA
AATGACTAGTCAGAACCTTGCTTAACATGAGATTTTAACACAACAATGAAATTTGCCTTGTCTTATTCCACTAGT
TTATTCCTTTAACAACAATATTTTATGTGTGTCAAAAGTCTCACTTGGGAGTAGTGTTTTTTTCTTTTAGACATT
CTGCAGACATGCAGGGAAGTCCTTTGGTAACTGCAATATACAAGATTTTCCTATTAAGCCTCTTGGTAAGAGGCA
TTTGTTAAAAGTGCAAGCTTACTCCTGCTTCTGGGGATGTGAGCAAAATTCGGGCTTGTGTTCTCCCTCTCATTT
TAGTCTGACTTGACTATTGTTTTTCCTTTCTGGCGCATGAATCCATACATCATTCCTGGAAGTGAGGCAAGACTC
TTGCATCTCTACAAAGTAGTTTTGTCAATTTGAAT

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FIGURE 2792

GGACTCGCTAAGTGTTCGCTACGCGGGGCTACCGGATCGGTCGGAA**ATG**GCAGAGGTGGAGGAGACACTGAAGCG
ACTGCAGAGCCAGAAGGGAGTGCAGGGAATCATCGTCGTGAACACAGAAGGCATTCCCATCAAGAGCACCATGGA
CAACCCCACCACCACCCAGTATGCCAGCCTCATGCACAGCTTCATCCTGAAGGCACGGAGCACCGTGCGTGACAT
CGACCCCCAGAACGATCTCACCTTCCTTCGAATTCGCTCCAAGAAAAATGAAATTATGGTTGCACCAGATAAAGA
CTATTTCCTGATTGTGATTCAGAATCCAACCGAA**TAA**GCCACTCTCTTGGCTCCCTGTGTCATTCCTTAATTTAA
TGCCCCCCAAGAATGTTAATGTCAATCATGTCAGTGGACTAGCACATGGCAGTCGCTTGGAACCCACTCACACCA
ATCCAGTGACCGTGTGTGGGCTGGCGGCTCTTCTCCCCCACCAACGGAACCCCTGTGTGCACCAACCTTCCCCAG
AGCTCCGGAGCGCCCTCTCCTCACTTCCAGGTTTTGGAGCAAGAGCTTGCAGGAAGCCCGCACCCAGCTTCCTTC
TGACCTTCAGTTCACTTTGTCGCCCTTGGAGAAAGCTGTTTTTCTTTAACTAAAAATAACCAAAATGCT

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FIGURE 2793

GAGTTACCTCCCGCAGCCGCAGCCGCCGTGCTCAGCGCGAGCCCCGGAGCCCTTGAGCGCGAGGCGCGGAGCCCC
CGGAGCCCCCAAACCGCAGACACATCCCCGCGCCCCAGAGCCCCGGCCTGCGCGCCCAGCCGGGCCCGCGCG**ATG**

CCCTCAGACCGGCCTTTCAAGCAGCGGCGGAGCTTCGCCGACCGCTGTAAGGAGGTACAGCAGATCCGCGACCAG
CACCCCAGCAAAATCCCGGTGATCATCGAGCGCTACAAGGGTGAGAAGCAGCTGCCCGTCCTGGACAAGACCAAG
TTTTTGGTCCCGGACCATGTCAACATGAGCGAGTTGGTCAAGATCATCCGGCGCCGCCTGCAGCTGAACCCCACG
CAGGCCTTCTTCCTGCTGGTGAACCAGCACAGCATGGTGAGTGTGTCCACGCCCATCGCGGACATCTACGAGCAG
GAGAAAGACGAGGACGGCTTCCTCTATATGGTCTACGCCTCCCAGGAAACCTTCGGCTTC**TGA**GCCAGCAGTAGG
GGGGCTCGGCCTGGGAGTCGGGCGGCCCCGGTCAGGCCCTGCCCAGAGAGCTCCTGGTTCCTGAACTGAGCTGCC
TCTACCGTGGTGGGCTGGGCAGGCATGTGCCCCCCTAGTCAGAGGGCACCAACCCACCTACTCTGCCCCTGGGTG
GATCCTGGGCCGGTCGTGTTAGGGTTGTCCCTCTGGGTGCTGGCTGGTGGGATGGGGGAGGGTGGGGAGCAGCTC
CCAGCACCCCTGCTGTGTGGTTCATCTTTTTTTTAGGCCCCTGCCTGTCTGCCCATCTGCCCCTCACCCACCCGA
GGCTCTGCCCACCGCCTGGACCTGCCCACCCCTGAAAGACTGGCCCCTGGCTCCCCGCCCCTCGGTCTCCACGTG
GTGTATGGATCTGTGGTCATTGTCCCTCTGCAGAATAAAGATTGCTCAGGCCTGCCTGGC

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FIGURE 2794

GATGGACGAGAGCTGGTTTGTTACCCCTCCCGCCTGTTTTACGGCAGAGGGGCCTGGACTCGGTCCCGCCCGCCT
CCAGAGCAGTCCCCTGGAGGACCTCCTCATCGAGCACCCCAGCATGTCCGTTTACGTCACCGGCAGCACCATAGT
GCTAGAGCCCGGGTCCCCTTCCCCGCTCCCGGACGCGGCCCTGCCTGACGGCGACCTCAGCGAAGGGGAATTGAC
GCCCGCCCGCCGCGAGCCGCGGGCCGCGCGCCACGCCGCTCCTCTCCCAGCGCGGGCGGCGCTGCTGGAGAAGGC
GGGCCAGGTGCGGCGGCTGCAGCGGGCCCGGCAGCGGGCAGAGCGCCACGCGCTGAGCGCCAAGGCGGTGCAGCG
GCAGAACCGAGCCCGCGAGAGCCGTCCGCGCCGGTCCAAGAACCAGAGCAGCTTCATCTACCAGCCGTGCCAGCG
CCAGTTCAACTACTGAGCGTCCACCGGCCGCGCCACGAACCCCTTGCCGATCCCGATCCCTGTCGGGCTCCTCCG
ACTCCTCGGGCTGGACACCGAAACCTCCCTTCTTAAAG

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FIGURE 2795

CCCTCACTCCTGGTCCCCATACCCAGCATCTAATCATCCATGCCCCCTACTCCTGGCCCCTCCATCCTTTCTTCT
CTGGTCCCCATCCCTGTCTCTCCCTTTCACCCTTGCCCTCCAGTCCTCTACCTCTGGCCTGCCCCTATTTCTGAA
AGCTTCTTCCAGTCCCTGATCTGGCTCATTCCCCACCTTCAACTCCCACCTTACATGTCTCACACTATCCCATGG
TTGGCATTACACTCACTCCTGTTCCCTTATTCTTCATTCCCAGTAATTCCCTACCAAATGGTGGGGACCCTGAGC
CCAGCTCTGACCAGGTAGAGCCTGTGCAGCCTGGGCTGCTGTCATTGCCCTCCAGTAAGGGCTCAGGGTTTTGCT
TTTAGTCTCCCCTTCCTTCTGCCTTGGGGGCGGTACTCTGTGGAGCTGCTTAGGCCTGGAAAGGTACAGTATGTA
GAAGAGGACTGTGAGACGTGAGTTAGAGGGAGAAGATGGAGGGAATCTAGGGAACGAGGCAGCCTATTGGAGATG
CGGACAGGACAGACACGTTGAGAAGCTGCAGGGAGCAGGGCACCAAGGGAGTGTGCACTGTGCTTGCTCAGAGAG
GCCAAACCCTGCTCCCAGGCTGAAGCCTGGAGTCTGCCCCCACTTCCCTTTTCTATAATCCACCCTTCTGCAGGC
CCTGAAATCTGAAGGGCTTAGTTAGTACCTTGCCACTCTACCCCCAACACGTCACCCGAGTAGAAGCTGGGCAAG
GCCCTACCATCCTGGCCGTCTGTTCACAAGCCCAAGGTGCTAGAACTAGCTTAGGAGACATGCAGGCCACAGGGC
TTCTAGGCAGGGAAAGGGCACACACCCTAGGTCAGCGTGCAGAGCAGTGATGCTGGAGGACACACCATGGGGTGA
AGCCATCCCAAGGCTGACAGCTCAGTCTTCACCTTGCCTCTGGCCTTGTATTTCACACCCTGCTCAGTATGGCTA
GCCAGCAGTCCTGAGTAGGAGTCCAGGACTCCCACTGTCTCAATCTGCAAATTGTTCCTATCCAGGTTCAGGGCC
TTCAGGGGGCCTCTTTTCATTTTCTCCCACAGGCCTCTCTTTCTTTCTAGGTTGCTGGGGAGAAATGGGTACCCT
ATGATCCCCCTCCCCTTCTCCTCCAGTAAATACCTGGAAGAGGGAACCTGAATCCCTGGGGGAGACAGAAGGGGC
AGGGGCCACCAGCCTCCCCTTCTTGTGGTGAGACTGAATTTTGGGCTCAGACACCAGCAACAGCCTCTTGGGATG
CCCTGAGTTGCTTCCCATTTCCTCTTTCTAGCCGTCCTTTTCTAGTGTGTGCTCACTCTTCCTAGGAACTTTTAA
GACTTCTTGGTACCTATGAACATAGGTCCTCCCCTCACCCCAACTCTAGGTTTCCAGGCCTCACAGCCAAGCTGA
AGCTTGGAGAAAACTCTGCATTCCCATGAGGGCAAAGGCAGCTGCCCTCCCTGACCCTATAGCCCCAGGCCTCAT
GGGGGGTATGTGGGGAAGGGATGGGGTATCCCCATGGATGCTGGGATGAGGACAGAGGAAGACCTGATGGGGTCT
CCTATTCCAGGGAATAAGCCAAATTAACACTAAAAACGGATCAAAGCTCCCACGCCAGTCCACTAGGGCCCCAGT
AGTTGACAGCCTTGCTCCTCTCCCAAGTTCTCCTTCAGAACCTAGTTGCTTTTATTCTTCCAGCTACCACTTGGG
CACTTCACAGCCAGCCTAGGGTCTTCGGCACCTCCAAGAGCTGAATCTCCCTCCAACCCTTCTTGCCTACTCCTC
ACTGCCAGCTGGGACCTAGGCTCAGTCCTGTGTGGTGCCCATGATCCTTCTGGTGGGGGAAGAGTTTAAGTTATA
GGGCATTTGGCTCAAATTTTAAAAGGCCTTTTGTTTACCTATATTTCTGGAGGCTCCTGTATTCTAGAACCCAAT
CTCTCACCTGCTTGGTTGCAAGGCTCATATTTTTTTGTACCTTTCCTATAGATTCTGTAGCATTTGAGTGTGGCA
ATATTTTAATTGTGTATAGATTTCTAAGAACCAACACTACTCAGTCTCCTGCTAGTCTGACTCCTGAAGCATCAG
CCCTTGTCATACTGTATTGACTGTGTACGTGCCTTTCACCTTGAGCATGCTTCAGGATTTTTTTTTAAACCACAG
AACTTGAATACATGAGGGAACCAGAGTTCAAAGTCCTATGCAACCTTAGGAGGGGGTTAGAGAGTCTGTTTTGAT
TGATGTTTTCTGAGGCCCTAGAGGAGTTTGTATCAATTTGTGAGTATTAATGTCAGTACTACCAGCACTTTGCCA
AAACTGTCAGAGGGACCCGTTTCTAGAGTGAGTCCCAGTTACATCAAACAGTGACTTCCAGTTATTCCCCAGTAA
GTCTGAGTGGTTCCTTCAAGCTGGGTGTCTTTCCAGCCTTTGCCAGTCTAGCCCCAGCAGGGCACCGTGTATGAA
TGCAGTTTGGTGCTGTTTTAGAGTATGCCTGCTCCCCAGCCCCCTGCCTGGAACCCTCTGAGCAACTTGCTCTGA
CCTATAATGTCTTAGGTGCAACACGGACCCCACCAGAGCTCTTGGATACCCCCCTAGATCCATGTGGCTTTATGT
GAGGGGACTGAATGCAGACACACCATAGCCCCCTTCTACTACTTTCCCTCTCGCCCTGCCACCTAGTTCCACATG
GAACCAACAAGTTGAGTGCATCCCTGTTGGGTGTTTTGTGTTGAGACTGGCTGAAATGAGGAGACTTTGACCATG
TGACGTGTCAACAGACTCAAGGAGACAACCACCTCAACTGGGTCATGTGGCATGCCTGTGTATGTGTGTAACAGA
ATTCTGATTGTTAGACTGTAATGCTATTCCTCTATGGGAGAAAAAAATTAATATAAAGAAAAACAAATAAAAATA
TATTTAAAGC

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FIGURE 2796A

CTCCAGCCCAGGCAACAGAGCGTGACTCCGTCTCAAAAAAAAAAAAAAAAGTGAAAGGAAAATGAGGGGAGAATT
CTCATTGATAATAAGGGCGAAAAGGTTTTTTTGGCAGAGTAATAGAGTTTTGGAAACCATTGCAAAGCTGTCAAG
TGTGGTGTAGTTTTTGGTTAAGGAAATCAGAGGTGTCAGCAGACATAAAAGACAGGGGAAAACATGGGAAGTGTC
CTACCTATAGTGTAGAAAAAGCACAACTATCTATGTCAGAGGTCGACAGACTGTGGTCCATAGGTCAAATCTGGC
CCACGATCTGTTTTTGTAAATAACGTTTTATTGGAACATAGCCACACTCATTTATTTATATATTGTCCATATCTT
CTTTTGTGGTACCAATAGCAGAGTTGAGTAGTCGTGACAGAGATGTGTTGTGTCAGCTCACAAAGCTGGAAATAC
TCTTTACAAAAACATTTGCCAACCCCTGATCTATGTGTTTGAGTGTTGGATGTTCAACCTCTAATTTGCCATCCA
ATGTCTATATGATGATAGAGAATGAATAAACGTCTTGGCTCTGCCCTTTGGGCTGGATTACCCATGCTCTGTGTA
CCTGCAGCATAACACAGACCCCTGAATATTTATATCAGTCAGTGATGGCAAGGTCTATTGTTCTGGAGTGTACTG
TGTGGTAACTGTGGTAGTGCCAGCTTTACACGGATTAGATAATGCTCGGGCTTGTTTTGCCATTTTTTTTATTGG
GTTGTCTTTTACAAAAGATTTATTTATATATTCTGATTATTAATCCTTTGTTGTTGGTAGATATTACAGATGTCA
TTTCCCAGTTTCTTGCTTATTTTAATTTTTTTTTTTTTTTTTTGAGATGAAGTCTTGCTCTGTCGCCCAGGCTG
GAGTGCAGTCGTGCCATCTCAGCTCATTGTAACCTCCGTCTCCCAGGTTCAAGTGATTCTCTTGCCTCAGCCTCC
CAAGTAGCTGGGACTACAGGCATGTGCCACCACACCTGGCTGATTTTTGTGTTTTTAGTAGGGATGGGGTTTCAT
CATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAAGTGATCCACCCGTCTTGGCCTCCTAAAGTGCTGGGATT
ACAGGTGTGAGCCACTGCGCCTGGCCTGTTGCTTATTTTAAAACATCTGTTTTAAGGTGTCATTTGTTAAAAAGT
TCTGAATTTTAGTATCAACTTTATCAATCTTTTCCTTTAAGATTTGCAGTTATTCTTTGTTTTGAGGCAGGGTCT
CGCTCTGTCACCGAGGCTGGAGTGCAGTGGTGCGATCTCGGCTCACTGCAGCCTCAACCTCCTGGGCTCAAGCAA
CCCTCCCACCTCCCATGCCAGTTGAGACCACAGGCATGCGCCACCATGCCCTGCTACTTTTTGCATTTTTTGTAG
AGGCGGGGTTTCGCCATGTTGCCCAGGCTAGTCTGGAACTCCTGAGCTCAAGCAGTCCACAAAGTGCTGGGATTA
CAGGTGTGAGCTACTGTGCCCAGCCTGCAATTATTCTTTATATTCTGGAATACCTACTGTTGTTTTCAATGGTTA
GATCTTTAATGTATCTGGAATGGATTCTTATGTGTAGTGTAAGGTCGGGTCCAGTTTCATTTTTTTTCCCTATGT
ATAACCAGTGATCCCAGCATCATTTATTGAATGGGGCTTGCTTTCAAATTGTGAGCTCTTTTTGGTGGAGTCTGT
CTCAGGTCCTTATTAAGCACTGCTGCTTGCTGATTGTGTGACCTTGGACAAATAAAACCTCATTGCGCCTCAGTC
TTTAAGGATAATAGTAATCTCATAGGGTTTTGTGAGGATTAAATGAGTCAATATACATAACGTGTAAAACAGTGC
TTGGCACCTAGAACATGCTCAATAAATATTAGCTGTACTTTAGCACTACTGTTCATTTCTGATTCCTCAGCACCT
GGTACAGAGCAGGGGCTCATTTTGCTCAATTAAATTGCCAAATTAATTTGGTTTTCAGGTCAATCAGAATGGTGA
GAGTTGGGCTGAGTGTTGCAGGAGATGCTTCCAAGGAGCTACTTAGTTTTAGGGGCTGCCTTAGATTATCTGCTA
GGATAGAACTCTTCTCACGCCATCACTTTTGCAGAGAACTTCTGTAGCAGAGGTTGCAAACTGGCAACCTGTGGT
TGGATTTGACCTGTATAAGTATTTTGTTTGGTTTACACAATATTTTTAATGTCTTAAAAATGTACACAGACCTCT
GAGTTTCTGACTTAACCTTGAAAAATTGGAAGATCTGTCAACAGCAAGCCCATATTCATTTATAGCGGTAACCAG
CTGAAACTTTTAGGTCCTGGGAGGAATGGAGAGGGGTCCCACTGACTAACTTTTCTGAGAGTGGTCAGAGAGTTC
TTAAGCAGAATTTTGATTTGGCTGCTGGGCTGCTACCTTGAAATCCAAGCCCTAAAAATGCCAGCTTCTTTGGAC
TTAGAAGATGACCTGGATAAATGATAAAAATTAAGAAAGAGATTTTGAAGTTTTCTTATTGTCCTCTTGGCATAT
GCTTCTGGAATAATATTCACC**ATG**GTTTTGGATGACCTTCCAAACTTAGAAGACATCTATACTTCCTTGTGTTCA
TCAACAATGGAAGACTCAGAGATGGATTTTGACTCTGGACTAGAAGATGATGACACAAAAAGTGATAGTATTTTG
GAGGATTCCACAATTTTTGTGGCCTTCAAAGGAAATATAGATGATAAAGACTTCAAATGGAAATTAGATGCAATA
TTGAAAAACGTGCCCAATTTGTTACACATGGAGTCCAGCAAGCTAAAAGTACAGAAGGTGGAGCCCTGGAACAGC
GTGCGTGTGACATTCAACATCCCCCGGGAAGCAGCGGAGCGGCTACGGATCCTTGCTCAGAGCAACAACCAGCAG
CTTCGGGATTTAGGGATTCTCTCCGTTCAGATTGAAGGGGAAGGTGCTATTAACCTGGCTTTGGCTCAGAACCGA
AGCCAAGATGTGAGAATGAATGGACCCATGGGAGCTGGAAATTCAGTTAGGATGGAGGCGGGATTTCCTATGGCA
AGTGGTCCAGGAATAATAAGGATGAACAACCCTGCCACTGTTATGATACCCCCGGGTGGAAATGTGTCATCTTCC
ATGATGGCACCAGGCCCCAATCCAGAGCTGCAGCCCAGGACTCCTCGCCCTGCTTCTCAGTCAGATGCAATGGAT
CCACTCCTCTCTGGGCTCCATATACAGCAGCAAAGTCATCCCTCAGGATCTTTAGCTCCCCCACATCACCCAATG
CAGCCTGTCTCTGTGAACAGACAAATGAACCCAGCTAATTTTCCCCAGCTGCAGCAGCAGCAGCAACAACAACAA
CAGCAGCAGCAGCAGCAGCAGCAGCAACAACAGCAACAGCAGCAACAACAGTTGCAGGCAAGACCCCCACAGCAA
CATCAGCAGCAACAGCCACAGGGAATTCGACCCCAGTTTACTGCCCCAACTCAGGTGCCTGTTCCTCCAGGCTGG
AACCAGCTGCCTTCTGGAGCCCTTCAACCTCCTCCAGCCCAGGGTTCTCTGGGCACAATGACTGCAAACCAAGGG

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FIGURE 2796B

TGGAAGAAGGCTCCCTTGCCCGGCCCAATGCAACAGCAACTCCAGGCAAGACCATCCTTAGCCACGGTACAGACG
CCTTCCCACCCTCCCCCTCCATATCCCTTTGGCAGCCAGCAAGCCTCACAAGCCCACACAAACTTTCCTCAGATG
AGCAACCCAGGCCAGTTCACAGCTCCTCAGATGAAGAGTTTGCAGGGAGGGCCCTCTAGGGTCCCAACTCCCTTG
CAGCAGCCCCACCTCACCAACAAGTCTCCTGCCTCCTCACCCTCCTCCTTCCAGCAGGGATCCCCTGCATCCTCC
CCAACGGTTAACCAAACTCAGCAGCAGATGGGACCAAGGCCACCTCAAAATAACCCACTTCCCCAGGGATTTCAG
CAGCCTGTCAGCTCTCCGGGTCGGAATCCTATGGTTCAACAGGGAAATGTGCCACCTAACTTCATGGTGATGCAG
CAGCAACCACCAAACCAGGGGCCACAGAGTTTACATCCAGGCCTAGGAGGAATGCCTAAACGCCTCCCACCTGGC
TTCTCAGCAGGACAGGCCAATCCGAACTTTATGCAAGGTCAGGTGCCTTCGACCACAGCAACCACCCCTGGGAAT
TCAGGAGCCCCTCAGCTGCAAGCAAATCAAAATGTCCAGCATGCAGGTGGTCAAGGAGCTGGTCCTCCTCAAAAC
CAGATGCAGGTGTCCCACGGGCCGCCAAATATGATGCAGCCCAGCCTCATGGGAATTCATGGCAACATGAACAAT
CAGCAGGCTGGTACTTCTGGGGTTCCTCAAGTGAACCTCAGCAACATGCAAGGCCAGCCCCAGCAGGGCCCACCA
TCTCAGCTGATGGGCATGCACCAGCAAATCGTGCCCTCCCAGGGCCAGATGGTCCAGCAACAAGGAACCTTGAAC
CCTCAGAACCCTATGATCCTTTCAAGGGCCCAGCTTATGCCACAGGGCCAGATGATGGTGAACCCCCCGAGCCAA
AATCTTGGGCCCTCGCCCCAAAGGATGACCCCACCCAAGCAGATGCTTTCCCAGCAGGGCCCACAAATGATGGCG
CCACATAACCAGATGATGGGGCCTCAGGGGCAGGTTTTGCTCCAACAGAACCCAATGATAGAGCAGATTATGACC
AATCAAATGCAGGGGAATAAGCAGCAGTTTAACACTCAGAACCAGTCCAATGTCATGCCGGGACCAGCCCAGATA
ATGAGGGGACCAACTCCAAACATGCAAGGAAATATGGTGCAGTTTACGGGACAGATGTCAGGACAGATGCTGCCC
CAGCAAGGGCCTGTGAACAACAGTCCATCTCAGGTTATGGGCATTCAGGGACAGGTCCTGCGGCCACCAGGGCCC
AGCCCACACATGGCCCAGCAGCATGGTGATCCTGCTACTACAGCAAATAACGATGTCAGTTTATCTCAGATGATG
CCTGATGTTAGCATTCAACAAACCAACATGGTCCCCCCTCATGTGCAGGCCATGCAGGGAAACAGTGCCTCGGGA
AACCACTTCTCAGGCCATGGGATGTCTTTCAATGCACCTTTCAGTGGAGCTCCCAATGGAAATCAGATGTCCTGT
GGTCAAAATCCAGGCTTCCCAGTCAATAAGGATGTCACGCTAACGAGCCCATTGTTGGTCAACTTATTGCAGAGT
GACATATCTGCAGGCCATTTTGGGGTAAACAATAAGCAAAATAATACCAACGCAAATAAACCGAAGAAGAAGAAA
CCCCCTCGGAAGAAGAAAAATAGTCAGCAAGATCTAAACACCCCAGATACTCGCCCAGCTGGTCTGGAAGAGGCT
GATCAGCCACCGTTGCCTGGAGAACAAGGAATTAACTTGGATAACTCAGGCCCTAAACTGCCAGAATTTTCAAAC
CGGCCACCAGGTTATCCTTCTCAACCAGTTGAACAGAGGCCACTTCAGCAGATGCCTCCTCAACTCATGCAGCAT
GTGGCACCCCCACCACAGCCACCACAGCAGCAGCCACAGCCACAACTGCCTCAGCAGCAGCAGCCACCACCTCCC
AGTCAGCCACAGTCTCAGCAGCAGCAGCAGCAGCAGCAACAAATGATGATGATGCTCATGATGCAGCAGGATCCC
AAATCAGTTAGGCTTCCAGTCTCTCAAAATGTCCATCCTCCAAGGGGCCCCCTGAACCCCGACTCCCAGAGAATG
CCCATGCAACAGAGTGGCAGTGTGCCTGTCATGGTCAGTCTGCAAGGACCTGCCTCCGTGCCACCATCACCTGAT
AAACAAAGAATGCCAATGCCTGTGAATACTCCCTTGGGAAGCAATTCAAGGAAAATGGTCTATCAGGAGAGCCCG
CAGAATCCTTCCAGCTCGCCACTGGCGGAGATGGCCTCACTCCCTGAAGCAAGTGGCAGTGAAGCACCATCTGTC
CCAGGAGGCCCAAACAACATGCCTTCACATGTAGTACTTCCCCAGAATCAGTTAATGATGACAGGGCCAAAACCT
GGACCATCGCCCCTTTCAGCAACTCAAGGTGCAACTCCCCAGCAACCCCCTGTAAATTCCCTGCCCAGCTCTCAC
GGCCACCACTTCCCAAATGTGGCTGCGCCAACCCAGACATCTAGGCCCAAAACACCAAACAGAGCCAGCCCCAGA
CCCTATTATCCTCAGACACCCAACAACCGCCCTCCCAGCACAGAACCTTCAGAAATCAGTCTGTCACCAGAAAGA
CTCAATGCCTCCATAGCAGGACTCTTCCCTCCACAGATTAATATTCCTTTACCTCCTAGGCCAAATTTAAACAGG
GGCTTTGATCAACAAGGCCTAAATCCAACAACTTTGAAGGCCATCGGGCAAGCACCTTCAAATCTTACCATGAAT
CCTTCCAATTTTGCTACCCCACAAACTCACAAATTAGATTCTGTGGTAGTGAATTCTGGAAAGCAGTCTAATTCT
GGAGCAACAAAACGGGCAAGTCCAAGCAACAGTCGCAGGTCTAGTCCTGGGTCCAGTAGGAAAACCACTCCAAGC
CCTGGGAGGCAAAATTCAAAAGCCCCTAAACTTACTCTGGCCTCTCAGACAAATGCAGCCCTATTGCAGAATGTG
GAGTTGCCGAGAAATGTATTGGTCAGTCCCACTCCTCTGGCCAATCCCCCTGTACCTGGGAGCTTTCCTAACAAC
AGTGGGCTGAATCCTCAGAATTCTACTGTGTCTGTGGCTGCAGTTGGGGGTGTTGTTGAGGATAACAAGGAGAGC
TTGAATGTGCCTCAGGACAGTGATTGCCAGAATTCCCAGAGTAGGAAGGAACAGGTAAACATTGAACTAAAAGCA
GTCCCTGCCCAAGAAGTTAAAATGGTTGTCCCTGAAGATCAGTCCAAAAAGGATGGGCAGCCTTCGGATCCTAAC
AAACTTCCCAGTGTCGAAGAGAACAAAAATTTGGTGTCTCCTGCTATGAGGGAAGCACCAACATCGTTAAGTCAA
CTTCTTGACAACTCTGGAGCTCCCAATGTGACAATTAAACCCCCTGGGCTTACAGATCTGGAAGTAACACCTCCA
GTAGTTTCTGGGGAGGACCTCAAAAAAGCATCTGTCATTCCCACACTGCAGGATCTGTCTTCTTCTAAAGAACCT

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FIGURE 2796C

TCTAATTCCCTAAACTTACCTCACAGTAATGAGCTGTGTTCATCCCTTGTGCATCCCGAATTGAGTGAGGTCAGT
TCTAACGTTGCACCAAGCATCCCTCCAGTAATGTCAAGACCTGTTAGCTCTTCCTCCATTTCCACTCCCTTGCCC
CCAAATCAAATAACTGTATTTGTCACTTCCAATCCCATCACAACTTCAGCTAACACATCAGCAGCTTTGCCAACT
CACTTGCAGTCTGCATTGATGTCAACAGTTGTCACAATGCCCAATGCGGGTAGCAAGGTTATGGTTTCTGAGGGA
CAGTCAGCTGCTCAGTCTAATGCCCGGCCTCAGTTCATTACACCTGTCTTTATCAATTCATCCTCAATAATTCAG
GTTATGAAAGGATCACAGCCAAGCACAATTCCTGCAGCCCCACTGACAACCAACTCTGGCCTGATGCCTCCCTCT
GTTGCAGTTGTTGGCCCTTTACACATACCTCAGAACATAAAATTTTCTTCTGCTCCTGTACCGCCTAATGCCCTC
TCCAGTAGTCCTGCTCCAAACATCCAGACAGGTCGACCTTTGGTCCTTAGCTCACGAGCCACCCCTGTTCAGCTT
CCTTCCCCTCCTTGTACGTCTTCTCCAGTTGTCCCTTCTCATCCCCCTGTGCAGCAAGTGAAAGAATTGAATCCA
GATGAGGCTAGCCCTCAGGTGAACACCTCAGCAGATCAGAACACTCTTCCCTCTTCACAGTCAACCACAATGGTT
TCTCCCCTTTTGACCAATAGTCCAGGGTCCTCTGGCAACCGGCGAAGCCCAGTCTCGTCTAGTAAGGGCAAAGGA
AAAGTGGACAAAATTGGCCAAATTTTGTTGACCAAGGCATGTAAGAAAGTTACAGGCTCTCTTGAGAAAGGGGAA
GAACAATATGGTGCAGATGGAGAGACTGAAGGCCAAGGGCTAGACACCACAGCTCCGGGGGCTCATGGGAACAGAG
CAGTTATCCACAGAGCTGGACAGTAAAACCCCAACGCCCCCAGCACCCACTCTGCTAAAAATGACCTCTAGCCCT
GTGGGCCCGGGCACTGCCTCAGCAGGACCCAGCTTACCTGGCGGTGCTCTCCCCACCAGTGTACGCTCGATAGTA
ACCACTCTGGTACCCTCCGAGCTCATCTCCGCCGTACCGACCACAAAAAGCAATCATGGTGGCATAGCATCTGAG
TCACTTGCGGGTGGCCTAGTGGAGGAGAAGGTGGGATCCCATCCAGAACTTCTACCCAGCATAGCCCCGTCGCAG
AATTTAGTCTCAAAGGAAACTTCAACCACAGCACTGCAGGCCTCTGTTGCCAGACCAGAGCTGGAGGTAAATGCT
GCCATAGTCTCTGGACAAAGCAGTGAGCCCAAAGAGATAGTTGAAAAGTCCAAAATCCCAGGCCGAAGAAACTCC
CGAACTGAAGAGCCAACTGTGGCCTCTGAAAGTGTGGAAAATGGACATCGTAAACGATCTTCTCGACCTGCTTCA
GCCTCCAGCTCTACTAAAGACATAACCAGTGCGGTGCAATCCAAGCGAAGAAAATCCAAGTAAACAAGCAGGACT
GCGACTTGATACTTGGAAATGTGTGTGACTTTTACAAAGAGCAATTTTGAGCTGTGACTTTTTTAAATCAATTTC
TGTACAGTTAGTAATTTTAATAATGTGGCCCTTTTCCTAGTCCCTGCAACCTGTTTCATAAAGTGCAATGGGGAA
AGCAGGACTGTTGAGCCCTTTTGGTGTTGCGAGTTGAAGTTCAAGGTTTCTAAAATGTTGTCTTGTATTGAAAGG
AGCTAATGCCATTATAAATGTTACTAGTTTTCACATTTCCTAAGCAGCCTAGAGTACAGGGTGAGCATTTTTAGA
TCTCCTAATGATGTATTGTGCCGTGGAAGTACTGTGTGTGAATAGCAGTAGTGGGGGCAAAAGCAATCTTCTCAT
TTGGAAATGTTGTAAATAATTTTATTATATAGTGTTTTGGATGTATTTGTTGTAGAAATGGACCAGTGAATAAAG
AGAATCTAAGGATTTGTACAATGTGAAATAACGTGTTAAATAAATGTCATTGTCATAGAACATAAAGTTATGTTA
TTGGTAAGGG

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FIGURE 2797

ATGGCGGCGGAGAACGAGGCCAGCCAGGAGAGCGCCCTGGGCGCCTACTCGCCAGTGGACTACATGAGCATCACC
AGCTTCCCGCGGCTGCCCGAGGACGAGCCGGCGCCCGCGGCCCCGCTGAGGGGCCGCAAGGACGAGGACGCCTTT
CTGGGAGACCCCGACACCGACCCGGACTCCTTCCTGAAGTCTGCACGGCTGCAGCGGCTGCCATCGTCGTCGTCG
GAGATGGGCAGCCAAGACGGGTCGCCGCTACGCGAGACGCGCAAAGACCCGTTCTCCGCCGCAGCGGCCGAGTGC
TCCTGCCGCCAGGATGGGCTCACGGTCATCGTCACGGCCTGTCTCACCTTCGCTACCGGTGTCACCGTGGCGCTG
GTCATGCAGATCTACTTCGGGGACCCCCAGATCTTCCAGCAGGGTGCCGTGGTGACCGATGCTGCCCGCTGCACT
TCACTGGGCATCGAGGTGCTCAGTAAACAGGGATCTTCTGTGGACGCAGCGGTGGCAGCAGCCTTGTGTTTGGGT
ATCGTGGCTCCACACAGTTCTGGCCTGGGCGGTGGGGGCGTGATGCTGGTACATGACATCCGACGAAATGAGAGC
CACCTAATTGATTTCCGGGAGTCCGCACCAGGGGCCCTCAGGGAAGAGACCCTGCAAAGATCCTGGGAGACCAAG
GTGGGGACCCTGCCTGGGCTCTTGGTGGGGGTTCCCGGAATGGTGAAGGGGCTACATGAAGCTCACCAGCTCTAT
GGCAGGCTGCCATGGTCCCAAGTCCTGGCCTTTGCAGCAGCTGTGGCCCAAGATGGCTTCAACGTGACTCATGAT
CTAGCCCGTGCCCTGGCTGAACAGCTGCCACCCAACATGTCCGAGCGCTTCCGGGAGACGTTCCTGCCATCGGGC
CGCCCGCCACTACCTGGCTCGTTGCTGCATCGGCCCGACCTGGCTGAGGTGCTGGATGTACTTGGCACCTCCGGC
CCGGCTGCCTTCTACGCAGGTGGCAACCTCACACTGGAGATGGTGGCCGAGGCTCAGCACGCAGGGGGTGTCATA
ACCGAAGAGGACTTCAGCAATTACAGCGCCCTTGTGGAGAAGCCTGTGTGTGGCGTGTACAGAGGCCACCTGGTT
CTTAGTCCCCCACCTCCGCACACGGGCCCTGCCCTCATCAGTGCTCTCAACATCCTGGAGGGCTTCAATCTCACC
AGCCTGGTATCCCGAGAACAGGCTCTTCACTGGGTGGCAGAGACCCTGAAGATTGCATTAGCCCTGGCCAGCAGA
CTGGGAGATCCCGTCTATGATTCTACCATCACTGAGAGCATGGATGACATGCTCAGCAAGGTGGAGGCCGCCTAC
CTCCGGGGCCATATCAATGACTCCCAGGCAGCCCCTGCCCCACTCCTGCCTGTCTATGAACTAGACGGAGCTCCC
ACGGCTGCCCAGGTGCTGATCATGGGACCTGATGACTTCATTGTGGCCATGGTTAGCTCCCTGAACCAGCCCTTT
GGCAGCGGCCTTATCACCCCCTCGGGGATCCTGCTCAACAGCCAGATGCTGGACTTCTCCTGGCCCAACCGGACA
GCTAACCACTCTGCACCCAGCCTGGAGAATTCAGTGCAGCCAGGGAAGCGGCCACTCTCTTTCCTGCTGCCCACA
GTGGTCCGACCCGCGGAGGGGCTCTGTGGAACCTACCTCGCTCTGGGGGCCAATGGAGCTGCGCGGGGCCTCAGC
GGCCTGACACAGGTTCTGCTGAATGTCCTGACCTTGAACCGGAACCTGAGTGACAGCCTGGCCCGCGGCCGCCTA
CACCCGGACCTGCAGTCCAACCTCCTGCAGGTGGACAGTGAGTTCACAGAGGAAGAGATTGAGTTCCTGGAAGCC
AGGGGTCACCACGTGGAGAAAGTAGATGTCTTATCCTGGGTCCATGGCAGCCGAAGGACCAACAACTTCATCATC
GCTGTTAAGGACCCTCGGAGCCCAGATGCAGCTGGAGCCACCATCCTGTAG

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FIGURE 2798

ATGGGGCTTCCTGAGGAGCGGGTCCGGAGCGGCAGCGGGAGCCGGGGCCAGGAGGAAGCTGGAGCCGGAGGCCGG
GCGCGGAGTTGGTCTCCGCCGCCCGAGGTCAGCCGCTCCGCGCACGTCCCCTCGCTGCAGCGCTACCGCGAGCTG
CACCGGCGCTCCGTGGAGGAGCCGCGGGAATTCTGGGGAGACATTGCCAAGGAATTTTACTGGAAGACTCCATGC
CCTGGCCCATTCCTTCGGTACAACTTTGATGTGACTAAAGGGAAAATCTTCATTGAGTGGATGAAAGGAGCAACT
ACCAACATCTGCTACAATGTACTGGATCGAAATGTCCATGAGAAAAAGCTTGGAGATAAAGTTGCTTTTTACTGG
GAGGGCAATGAGCCAGGGGAGACCACTCAGATCACATACCATCAGCTTCTGGTCCAAGTGTGTCAGTTCAGCAAT
GTTCTCCGAAAACAGGGCATTCAGAAGGGGGACCGAGTGGCCATCTACATGCCTATGATCCCAGAGCTTGTGGTG
GCCATGCTGGCATGTGCCCGCATTGGGGCTTTGCACTCCATTGTGTTTGCAGGCTTCTCTTCAGAGTCTCTATGT
GAACGGATCTTGGATTCCAGCTGCAGTCTTCTCATCACTACAGATGCCTTCTACAGGGGGGAAAAGCTTGTGAAC
CTGAAGGAGCTGGCTGACGAGGCCCTGCAGAAGTGTCAGGAGAAGGGTTTCCCAGTAAGATGCTGCATTGTGGTC
AAGCACCTGGGGCGGGCAGAGCTCGGCATGGGTGACTCCACCAGCCAGTCCCCCCCAATTAAGAGGTCATGCCCA
G**ATG**TGCAGATCTCATGGAACCAAGGGATTGACTTGTGGTGGCATGAGCTCATGCAAGAGGCAGGGGATGAGTGT
GAGCCCGAGTGGTGTGATGCCGAGGACCCACTCTTCATCCTGTACACCAGTGGCTCCACAGGCAAACCCAAGGGG
TGTGGTTCACACAGTTGGGGGCTACATGCTCTATGTAGCCACAACCTTCAAGTATGTGTTTGACTTCCATGCAGA
GGATGTGTTCTGGTGCACGGCAGACATTGGTTGGATCACTGGTCATTCCTACGTCACCTATGGGCCACTGGCCAA
TGGTGCCACCAGTGTTTTGTTTGAGGGGATTCCCACATATCCGGACGTGAACCGCCTGTGGAGCATTGTGGACAA
ATACAAGGTGACCAAGTTCTACACAGCACCCACAGCCATCCGTCTGCTCATGAAGTTTGGAGATGAGCCTGTCAC
CAAGCATAGCCGGGCATCCTTGCAGGTGTTAGGCACAGTGGGTGAACCCATCAACCCTGAGGCCTGGCTATGGTA
CCACCGGGTGGTAGGTGCCCAGCGCTGCCCCATCGTGGACACCTTCTGGCAAACAGAGACAGGTGGCCACATGTT
GACTCCCCTTCCTGGTGCCACACCCATGAAACCCGGTTCTGCTACTTTCCCATTCTTTGGTGTAGCTCCTGCAAT
CCTGAATGAGTCCGGGGAAGAGTTGGAAGGTGAAGCTGAAGGTTATCTGGTGTTCAAGCAGCCCTGGCCAGGGAT
CATGCGCACAGTCTATGGGAACCACGAACGCTTTGAGACAACCTACTTTAAGAAGTTTCCTGGATACTATGTTAC
AGGAGATGGCTGCCAGCGGGACCAGGATGGCTATTACTGGATCACTGGCAGGATTGATGACATGCTCAATGTATC
TGGACACCTGCTGAGTACAGCAGAGGTGGAGTCAGCACTTGTGGAACATGAGGCTGTTGCAGAGGCAGCTGTGGT
GGGCCACCCTCATCCTGTGAAGGGTGAATGCCTCTACTGCTTTGTCACCTTGTGTGATGGCCACACCTTCAGCCC
CAAGCTCACCGAGGAGCTCAAGAAGCAGATTAGAGAAAAGATTGGCCCCATTGCCACACCAGACTACATCCAGAA
TGCACCTGGCTTGCCTAAAACCCGCTCAGGGAAAATCATGAGGCGAGTGCTTCGGAAGATTGCTCAGAATGACCA
TGACCTCGGGGACATGTCTACTGTGGCTGACCCATCTGTCATCAGTCACCTCTTCAGCCACCGCTGCCTGACCAT
CCAG**TGA**

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FIGURE 2799

GGGAGAACCGTTCGCGGAGGAAAGGCGAACTAGTGTTGGGATGGCCACCAACTGGGGGAGCCTCTTGCAGGATAA
ACAGCAGCTAGAGGAGCTGGCACGGCAGGCCGTGGACCGGGCCCTGGCTGAGGGAGTATTGCTGAGGACCTCACA
GGAGCCCACTTCCTCGGAGGTGGTGAGCTATGCCCCATTCACGCTCTTCCCCTCACTGGTCCCCAGTGCCCTGCT
GGAGCAAGCCTATGCTGTGCAGATGGACTTCAACCTGCTAGTGGATGCTGTCAGCCAGAACGCTGCCTTCCTGGA
GCAAACTCTTTCCAGCACCATCAAACAGGATGACTTTACCGCTCGTCTCTTTGACATCCACAAGCAAGTCCTAAA
AGAGGGCATTGCCCAGACTGTGTTCCTGGGCCTGAATCGCTCAGACTACATGTTCCAGCGCAGCGCAGATGGCTC
CCCAGCCCTGAAACAGATCGAAATCAACACCATCTCTGCCAGCTTTGGGGGCCTGGCCTCCCGGACCCCAGCTGT
GCACCGACATGTTCTCAGTGTCCTGAGTAAGACCAAAGAAGCTGGCAAGATCCTCTCTAATAATCCCAGCAAGGG
ACTGGCCCTGGGAATTGCCAAAGCCTGGGAGCTCTACGGCTCACCCAATGCTCTGGTGCTACTGATTGCTCAAGA
GAAGGAAAGAAACATATTTGACCAGCGTGCCATAGAGAATGAGCTACTGGCCAGGAACATCCATGTGATCCGACG
AACATTTGAAGATATCTCTGAAAAGGGGTCTCTGGACCAAGACCGAAGGCTGTTTGTGGATGGCCAGGAAATTGC
TGTGGTTTACTTCCGGGATGGCTACATGCCTCGTCAGTACAGTCTACAGAATTGGGAAGCACGTCTACTGCTGGA
GAGGTCACATGCTGCCAAGTGCCCAGACATTGCCACCCAGCTGGCTGGGACTAAGAAGGTGCAGCAGGAGCTAAG
CAGGCCGGGCATGCTGGAGATGTTGCTCCCTGGCCAGCCTGAGGCTGTGGCCCGCCTCCGCGCCACCTTTGCTGG
CCTCTACTCACTGGATGTGGGTGAAGAAGGGGACCAGGCCATCGCCGAGGCCCTTGCTGCCCCTAGCCGGTTTGT
GCTAAAGCCCCAGAGAGAGGGTGGAGGTAACAACCTATATGGGGAGGAAATGGTACAGGCCCTGAAACAGCTGAA
GGACAGTGAGGAGAGGGCCTCCTACATCCTCATGGAGAAGATCGAACCTGAGCCTTTTGAGAATTGCCTGCTACG
GCCTGGCAGCCCTGCCCGAGTGGTCCAGTGCATTTCAGAGCTGGGCATCTTTGGGGTCTATGTCAGGCAGGAAAA
GACACTCGTGATGAACAAGCACGTGGGGCATCTACTTCGAACCAAAGCCATCGAGCATGCAGATGGTGGTGTGGC
AGCGGGAGTGGCAGTCCTGGACAACCCATACCCTGTGTGAGGGCACAACCAGGCCACGGGACCTTCTATCCTCTG
TATTTGTCATTCCTCTCCTAGCCCTCCTGAGGGGTATCCTCCTAAAGACCTCCAAAGTTTTTATGGAAGGGTAAA
TACTGGTACCTTCCCCCAGCTTTCCATCTGAGGACCAGAAAAGTTGTGTCTCCCTTAGATGAGATCTAGACGCCC
CCAAATCCTTGAGATGTGGGTATAGCTCAGGGTAAGCTGCTCTGAGGTAAAGGTCCATGAACCCTGCCCCACTCC
TGTCAGCCCCTCATCAGCCTTTTCAGCAGGTTCCAGTGCCTGACTTGGGATAGGACTGAGTGGTAGGAGGAGGGG
GAGTGGAGGGGCATAGCCTTTCCCTAATTCTGCCTTAAATAAAACTGCATTGCTG

FIGURE 2800A

AGTTCATCCGCATTCACTTTGGTCCCTCTGGGAAGCTGGCATCCGCGGATATTGACAGCTATCTCCTGGAGAAGT
CGCGGGTGATCTTCCAGTTGCCTGGTGAGCGCAGCTACCATGTCTACTACCAGATCCTCTCAGGGAGGAAGCCAG
AGCTGCAGGAC**ATG**CTGCTTCTGTCTATGAACCCCTATGACTACCACTTCTGCAGCCAGGGCGTCATCACCGTGG
ACAACATGAATGATGGGGAGGAGCTCATCGCCACCGACCATGCCATGGACATCCTAGGCTTCAGCGTGGATGAGA
AATGTGCCTGCTATAAGATCGTGGGCGCCCTCCTGCACTTTGGCAACATGAAGTTCAAGCAGAAGCAGCGGGAGG
AGCAGGCGGAGGCCGATGGCACTGAGAGTGCTGACAAGGCTGCCTACCTGATGGGGGTCAGCAGTGGGGACCTCC
TCAAAGGCCTTTTGCACCCCCGGGTGCGTGTAGGGAACGAGTACGTGACCAAGGGCCAGAGTGTGGAGCAGGTGG
TGTTTGCTGTGGGGGCTCTGGCCAAGGCCACCTATGACCGGCTGTTCAGGTGGCTGGTGTCTCGGATCAACCAGA
CCCTGGACACAAAGCTGCCCCGGCAGTTCTTCATCGGGGTTCTGGACATCGCTGGGTTTGAGATCTTTGAGTTCA
ACAGCTTCGAACAGCTGTGCATCAACTTCACCAATGAGAAATTGCAGCAGTTCTTCAACCAGCACATGTTTGTGC
TGGAGCAGGAGGAGTACAAGCGGGAGGGCATCGACTGGGTCTTCATCGACTTCGGCCTTGACCTGCAGCCTTGCA
TCGACCTCATCGAGAAGCCACTGGGCATCCTGTCCATCCTGGAGGAGGAATGCATGTTCCCCAAGGCCTCAGACG
CCAGCTTCCGGGCCAAGCTCTACGACAACCACGCGGGGAAGTCACCCAATTTCCAGCAGCCTCGGCCTGACAAGA
AGCGCAAGTACCAGGCCCACTTCGAGGTGGTCCACTACGCAGGCGTGGTGCCTTACAGCATTGTGGGCTGGCTGG
AGAAAAACAAGGATCCCCTGAATGAGACCGTGGTCCCCATCTTCCAGAAGTCACAGAATAGGCTCCTGGCGACTC
TCTATGAGAATTATGCGGGCTCCTGCTCCACTGAGCCCCCCAAGTCTGGGGTGAAAGAGAAGCGTAAGAAGGCAG
CATCGTTCCAGACGGTGTCCCAGCTGCACAAGGAGAACCTCAACAAGCTGATGACCAACCTGCGGGCCACACAGC
CCCACTTCGTCCGCTGCATTGTCCCCAACGAGAACAAAACCCCAGGGGTCATGGATGCCTTCTTGGTGCTACACC
AGCTGCGCTGCAATGGGGTCCTGGAGGGGATCCGGATCTGCCGCCAAGGGTTCCCCAACAGGTTGCTCTACACCG
ACTTCCGGCAGCGGTACCGTATCCTGAACCCCAGTGCCATCCCGGATGACACCTTCATGGACAGCAGGAAGGCCA
CAGAGAAACTGCTGGGCTCGCTGGACTTGGATCACACCCAGTACCAGTTTGGCCACACCAAGGTGTTCTTCAAGG
CTGGGCTTCTAGGCGTCCTGGAAGAGCTCCGTGACCAGCGCCTGGCCAAGGTGCTGACGCTGCTGCAGGCGCGGA
GCCGTGGCCGCCTCATGCGCCTTGAGTACCAGCGCCTGCTGGGAGGCAGGGATGCGCTGTTCACCATCCAGTGGA
ACATCCGTGCCTTCAATGCCGTCAAGAACTGGTCATGGATGAAGCTCTTTTTCAAGATGAAGCCGCTGCTGCGCT
CGGCGCAGGCTGAGGAGGAGCTGGCGGCCCTGCGGGCAGAGCTGCGGGGGTTGCGAGGGGCGCTGGCTGCGGCCG
AGGCCAAGCGCCAGGAACTGGAGGAGACGCACGTCAGCATCACCCAGGAGAAGAATGACCTGGCCCTGCAGCTGC
AGGCTGAGCAGGACAACCTGGCAGATGCCGAGGAGCGCTGCCACTTGCTGATCAAGTCCAAGGTGCAGCTGGAGG
GGAAGGTGAAGGAGCTGAGTGAGCGGCTGGAGGATGAGGAGGAGGTGAACGCTGACCTGGCCGCCCGCCGGCGCA
AGCTGGAGGACGAGTGCACGGAGCTCAAGAAGGACATTGATGACCTGAAGCTGACACTGGCCAAAGCTGAGAAGG
AGAAGCAAGCCACTGAGAACAAGGTGAAGAACCTGACGGAAGAGATGGCTGCGCTGGACGAGTCAGTGGCCCGGC
TGACCAAGGAGAAGAAGGCGTTGCAGGAGGCCCACCAACAGGCCCTGGGTGACCTGCAGGCCGAGGAGGACCGTG
TGAGCGCGCTGACCAAGGCCAAGCTCCGGCTGGAGCAACAGGTGGAGGACCTGGAATGCTCCCTGGAGCAGGAGA
AGAAGCTGCGCATGGACACGGAGCGGGCCAAGCGCAAGCTGGAGGGTGACCTGAAGCTGACGCAGGAGTCGGTGG
CTGATGCTGCTCAAGACAAGCAGCAGCTGGAGGAGAAGCTCAAGAAGAAGGACTCCGAGCTGAGCCAGCTGAGCC
TGCGGGTGGAAGACGAGCAGCTCTTGGGGGCCCAGATGCAGAAGAAGATCAAGGAGCTGCAGGCTCGGGCGGAGG
AGCTGGAAGAGGAGCTGGAGGCAGAGCGGGCAGCCCGGGCCCGCGTGGAGAAGCAGCGTGCAGAGGCGGCGCGGG
AGCTGGAGGAGCTGAGCGAGCGGCTGGAGGAGGCAGGCGGCGCATCCGCGGGGCAGCGCGAGGGCTGCCGCAAGC
GGGAGGCGGAGCTGGGGAGGCTGCGGCGGGAGCTGGAGGAGGCGGCGCTGCGGCACGAGGCCACAGTGGCGGCAC
TGCGGCGCAAGCAGGCGGAGGGCGCGGCGGAGCTGGGGGAGCAGGTGGACAGCCTGCAGCGGGTGCGGCAGAAGC
TGGAGAAGGAGAAGAGTGAGCTGCGCATGGAGGTGGACGACCTGGCTGCCAACGTGGAGACTCTGACCCGCGCCA
AGGCCAGTGCAGAGAAGCTGTGCCGGACCTATGAGGATCAGCTAAGCGAGGCCAAGATCAAGGTGGAGGAGCTGC
AGCGGCAGCTGGCGGACGCAAGCACGCAGCGTGGGCGACTACAGACGGAAAGCGGGGAGCTGAGTCGCCTGCTAG
AGGAGAAGGAGTGTCTGATCAGTCAGCTGAGCCGTGGAAAGGCCCTGGCCGCCCAAAGCCTGGAAGAGTTGCGGC
GCCAGCTAGAGGAGGAAAGCAAGGCCAAGAGTGCCCTGGCCCACGCCGTGCAGGCTCTGCGGCACGACTGTGACC
TCCTGCGGGAGCAACACGAGGAGGAGGCTGAGGCCCAGGCTGAGCTGCAGCGGCTGCTGTCCAAGGCCAATGCCG
AGGTGGCCCAGTGGAGGAGCAAGTACGAAGCAGATGCCATCCAGAGGACCGAGGAGCTGGAGGAGGCCAAAAAAA
AGCTGGCACTGCGGCTGCAGGAGGCAGAGGAGGGCGTGGAGGCTGCCAACGCCAAGTGCTCATCGTTGGAGAAGG
CCAAGCTGCGGCTACAGACAGAGTCAGAGGATGTAACCCTGGAGCTGGAGCGGGCGACCTCAGCAGCTGCTGCGC

FIGURE 2800B

TGGACAAGAAGCAGCGGCACTTGGAACGGGCACTGGAGGAACGGCGGCGGCAGGAGGAGGAGATGCAGCGGGAGC
TGGAGGCGGCACAGAGGGAGTCCCGTGGCCTGGGCACCGAGCTCTTCCGGCTGCGGCACGGCCACGAGGAGGCAC
TTGAAGCCCTGGAGACGCTCAAGCGGGAGAACAAGAACCTGCAGAGGAGATCAGCGACCTCACAGACCAGGTGAG
TCTCAGTGGGAAGAGCATCCAGGAACTGGAGAAAACCAAGAAGGCGCTGGAAGGCGAGAAGAGTGAGATCCAGGC
TGCACTGGAGGAGGCAGAGGGGGCCCTGGAGCTGGAGGAGACCAAGACGCTGCGGATCCAGCTGGAGCTCTCCCA
GGTCAAAGCAGAAGTGGACCGGAAGCTGGCAGAGAAAGACGAGGAGTGCGCTAACCTGAGGCGCAACCACCAGCG
AGCTGTGGAGTCCCTGCAGGCCTCCCTGGATGCAGAGACACGGGCCCGCAATGAGGCGCTGCGGCTCAAGAAGAA
GATGGAGGGTGACCTCAACGACCTGGAGCTGCAGCTGGGCCATGCCACCCGTCAGGCCACAGAGGCCCAGGCTGC
CACGCGGCTGATGCAGGCACAGCTCAAGGAGGAGCAGGCAGGGCGGGACGAGGAGCAGCGGCTGGCAGCTGAGCT
CCACGAGCAGGCGCAGGCTCTGGAGCGCCGGGCCTCGCTGCTGGCTGCGGAGCTGGAGGAGCTGCGGGCTGCCCT
GGAGCAGGGCGAGCGCAGCCGGCGACTGGCAGAGCAGGAGCTTTTGGAGGCCACCGAGCGCCTCAACCTTCTGCA
TTCGCAGAACACAGGCCTCCTAAACCAGAAGAAGAAGCTGGAGGCGGACTTGGCCCAGCTGAGCGGGGAGGTGGA
GGAGGCTGCACAGGAGAGGCGGGAGGCTGAGGAGAAGGCCAAAAAGGCCATCACTGATGCGGCCATGATGGCCGA
GGAGCTGAAGAAGGAGCAGGACACAAGTGCACACCTGGAACGGATGAAGAAGACGCTGGAGCAGACGGTGCGCGA
GCTCCAGGCCCGCCTTGAGGAGGCAGAACAGGCCGCCCTCCGTGGCGGGAAGAAGCAGGTGCAGAAGCTGGAGGC
CAAGGTACGGGAGCTGGAGGCTGAGCTTGATGCAGAGCAGAAGAAGCACGCCGAGGCCCTTAAGGGCGTGCGCAA
GCATGAGCGCCGTGTCAAGGAGCTCGCATACCAGGCCGAGGAGGACAGGAAGAACCTGGCTCGCATGCAGGACCT
GGTGGACAAGCTGCAGAGCAAGGTCAAGAGCTACAAGCGCCAGTTTGAGGAGGCGGAGCAGCAGGCCAACACCAA
CCTGGCCAAGTATCGCAAGGCCCAGCACGAGCTGGATGATGCGGAGGAGCGGGCAGACATGGCGGAAACCCAGGC
CAACAAGCTGCGGGCACGGACCCGGGACGCCCTGGGCCCCAAGCACAAGGAGTGACGGCCTGACCCCCTGGGCTC
TAAAGAGGAATGTCTGCTGTTGCACATCTGGCTGAGGCCACCTGCCCCGATCCTGCCATCTCTGCATCGCCCCCT
GCTGCCTTCAGCCTTCCCTGGGCCCTGAATAAACACCACAGCCAGTTTCCTTCTCATTCTTTTCTTTGGGGTTCA
GGAGGAAAAACACAGTCCTAGGGACAAAAGCCAGGTCCACAGCAGTCATTTTTAAAATAAAGTTATTTAATAGTC
TCC

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FIGURE 2801

GACATGGCGGCGGCGCCGGTAGCGGCTGGGTCTGGAGCCGGCCGAGGGAGACGGTCGGCAGCCACAGTGGCGGCT
TGGGGCGGATGGGGCGGCCGGCCGCGGCCTGGTAACATTCTGCTGCAGCTGCGGCAGGGCCAGCTGACCGGCCGG
GGCCTGGTCCGGGCGGTGCAGTTCACTGAGACTTTTTTGACGGAGAGGGACAAACAATCCAAGTGGAGTGGAATT
CCTCAGCTGCTCCTCAAGCTGCACACCACCAGCCACCTCCACAGTGACTTTGTTGAGTGTCAAAACATCCTCAAG
GAAATTTCTCCTCTTCTCTCCATGGAGGCTATGGCATTTGTTACTGAAGAGAGGAAACTTACCCAAGAAACCACT
TATCCAAATACTTACATTTTTGACTTGTTTGGAGGTGTTGATCTTCTTGTAGAAATTCTTATGAGGCCTACGATC
TCTATCCGGGGACAGAAACTGAAAAGTAATGATGAAATGTCCAAGGACTGCTTGAGTATCCTGTATAATACCTGT
GTCTGTACAGAGGGAGTTACAAAGCGTTTGGCAGAAAAGAATGACTTTGTGATCTTCCTGTTTACATTGATGACA
AGTAAGAAGACATTCTTACAAACAGCAACCCTCATTGAAGATATTTTGGGTGTTAAAAAGGAAATGATCCGACTA
GATGAAGTCCCCAATCTGAGTTCCTTAGTATCCAATTTCGATCAGCAGCAGCTCGCTAATTTCTGCCGGATTCTG
GCTGTCACCATTTCAGAGATGGATACAGGGAATGATGACAAGCACACGCTTCTTGCCAAAAATGCTCAACAGAAG
AAGAGCTTGAGTTTGGGGCCTTCTGCAGCTGAAATCAATCAAGCGGCCCTTCTCAGCATTCCTGGCTTTGTTGAG
CGGCTTTGCAAACTGGCGACTCGAAAGGTGTCAGAGTCAACGGGCACAGCCAGCTTCCTTCAGGAGTTGGAAGAG
TGGTACACATGGCTAGACAATGCTTTGGTGCTAGATGCCCTGATGCGAGTGGCCAATGAGGAGTCAGAGCACAAT
CAAGCCTCCATTGTGTTCCCTCCTCCAGGGGCTTCTGAGGAGAATGGCCTGCCTCACACGTCAGCCAGAACCCAG
CTGCCCCAGTCAATGAAGATTATGCATGAGATCATGTACAAACTGGAAGTGCTCTATGTCCTCTGCGTGCTGCTG
ATGGGGCGTCAGCGAAACCAGGTTCACAGAATGATTGCAGAGTTCAAGCTGATCCCTGGACTTAATAATTTGTTT
GACAAACTGATTTGGAGGAAGCATTCAGCATCTGCCCTTGTCCTCCATGGTCACAACCAGAACTGTGACTGTAGC
CCGGACATCACCTTGAAGATACAGTTTTTGAGGCTTCTTCAGAGCTTCAGTGACCACCACGAGAACAAGTACTTG
TTACTCAACAACCAGGAGCTGAATGAACTCAGTGCCATCTCTCTCAAGGCCAACATCCCTGAGGTGGAAGCTGTC
CTCAACACCGACAGGAGTTTGGTGTGTGATGGGAAGAGGGGCTTATTAACTCGTCTGCTGCAGGTCATGAAGAAG
GAGCCAGCAGAGTCGTCTTTCAGGTTTTGGCAAGCTCGGGCTGTGGAGAGTTTCCTCCGAGGGACCACCTCCTAT
GCAGACCAGATGTTCCTGCTGAAGCGAGGCCTCTTGGAGCACATCCTTTACTGCATTGTGGACAGCGAGTGTAAG
TCAAGGGATGTGCTCCAGAGTTACTTTGACCTCCTGGGGGGAGCTGATGAAGTTCAACGTTGATGCATTCAAGAGA
TTCAATAAATATATCAACACCGATGCAAAGTTCCAGGTATTCCTGAAGCAGATCAACAGCTCCCTGGTGGACTCC
AACATGCTGGTGCGCTGTGTCACTCTGTCCCTGGACCGATTTGAAAACCAGGTGGATATGAAAGTTGCCGAGGTA
CTGTCTGAATGCCGCCTGCTCGCCTACATATCCCAGGTGCCCACGCAGATGTCCTTCCTCTTCCGCCTCATCAAC
ATCATCCACGTGCAGACGCTGACCCAGGAGAACGTCAGCTGCCTCAACACCAGCCTGGTGATCCTGATGCTGGCC
CGACGGAAAGAGCGGCTGCCCCTGTACCTGCGGCTGCTGCAGCGGATGGAGCACAGCAAGAAGTACCCCGGCTTC
CTGCTCAACAACTTCCACAACCTGCTGCGCTTCTGGCAGCAGCACTACCTGCACAAGGACAAGGACAGCACCTGC
CTAGAGAACAGCTCCTGCATCAGCTTCTCATACTGGAAGGAGACAGTGTCCATCCTGTTGAACCCGGACCGGCAG
TCACCCTCTGCTCTCGTTAGCTACATTGAGGAGCCCTACATGGACATAGACAGGGACTTCACTGAGGAGTGACCT
TGGGCCAGGCCTCGGGAGGCTGCTGGGCCAGTGTGGGTGAGCGTGGGTACGATGCCACACGCCCTGCCCTGTTCC
CGTTCCTCCCTGCTGCTCTCTGCCTGCCCCAGGTCTTTGGGTACAGGCTTGGTGGGAGGGAAGTCCTAGAAGCCC
TTGGTCCCCCTGGGTCTGAGGGCCCTAGGTCATGGAGAGCCTCAGTCCCCATAATGAGGACAGGGTACCATGCCC
ACCTTTCCTTCAGAACCCTGGGGCCCAGGGCCACCCAGAGGTAAGAGGACATTTAGCATTAGCTCTGTGTGAGCT
CCTGCCGGTTTCTTGGCTGTCAGTCAGTCCCAGAGTGGGGAGGAAGATATGGGTGACCCCCACCCCCCATCTGTG
AGCCAAGCCTCCCTTGTCCCTGGCCTTTGGACCCAGGCAAAGGCTTCTGAGCCCTGGGCAGGGGTGGTGGGTACC
AGAGAATGCTGCCTTCCCCCAAGCCTGCCCCTCTGCCTCATTTTCCTGTAGCTCCTCTGGTTCTGTTTGCTCATT
GGCCGCTGTGTTCATCCAAGGGGGTTCTCCCAGAAGTGAGGGGCCTTTCCCTCCATCCCTTGGGGCACGGGGCAG
CTGTGCCTGCCCTGCCTCTGCCTGAGGCAGCCGCTCCTGCCTGAGCCTGGACATGGGGCCCTTCCTTGTGTTGCC
AATTTATTAACAGCAAATAAACCAATTAAATGGAGACTATTAAATAACTTTATTTT

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FIGURE 2802

GGAAGAACCCGCAGCAGCTCCCAGGATGAACTGGTTGCAGTGGCTGCTGCTGCTGCGGGGGCGCTGAGAGGACAC
GAGCTCTATGCCTTTCCGGCTGCTCATCCCGCTCGGCCTCCTGTGCGCGCTGCTGCCTCAGCACCATGGTGCGCC
AGGTCCCGACGGCTCCGCGCCAGATCCCGCCCACTACAGGGAGCGAGTCAAGGCCATGTTCTACCACGCCTACGA
CAGCTACCTGGAGAATGCCTTTCCCTTCGATGAGCTGCGACCTCTCACCTGTGACGGGCACGACACCTGGGGCAG
TTTTTCTCTGACTCTAATTGATGCACTGGACACCTTGCTGATTTTGGGGAATGTCTCAGAATTCCAAAGAGTGGT
TGAAGTGCTCCAGGACAGCGTGGACTTTGATATTGATGTGAACGCCTCTGTGTTTGAAACAAACATTCGAGTGGT
AGGAGGACTCCTGTCTGCTCATCTGCTCTCCAAGAAGGCTGGGGTGGAAGTAGAGGCTGGATGGCCCTGTTCCGG
GCCTCTCCTGAGAATGGCTGAGGAGGCGGCCCGAAAACTCCTCCCAGCCTTTCAGACCCCCACTGGCATGCCATA
TGGAACAGTGAACTTACTTCATGGCGTGAACCCAGGAGAGACCCCTGTCACCTGTACGGCAGGGATTGGGACCTT
CATTGTTGAATTTGCCACCCTGAGCAGCCTCACTGGTGACCCGGTGTTCGAAGATGTGGCCAGAGTGGCTTTGAT
GCGCCTCTGGGAGAGCCGGTCAGATATCGGGCTGGTCGGCAACCACATTGATGTGCTCACTGGCAAGTGGGTGGC
CCAGGACGCAGGCATCGGGGCTGGCGTGGACTCCTACTTTGAGTACTTGGTGAAAGGAGCCATCCTGCTTCAGGA
TAAGAAGCTCATGGCCATGTTCCTAGAGTATAACAAAGCCATCCGGAACTACACCCGCTTCGATGACTGGTACCT
GTGGGTTCAGATGTACAAGGGGACTGTGTCCATGCCAGTCTTCCAGTCCTTGGAGGCCTACTGGCCTGGTCTTCA
GAGCCTCATTGGAGACATTGACAATGCCATGAGGACCTTCCTCAACTACTACACTGTATGGAAGCAGTTTGGGGG
GCTCCCGGAATTCTACAACATTCCTCAGGGATACACAGTGGAGAAGCGAGAGGGCTACCCACTTCGGCCAGAACT
TATTGAAAGCGCAATGTACCTCTACCGTGCCACGGGGGATCCCACCCTCCTAGAACTCGGAAGAGATGCTGTGGA
ATCCATTGAAAAAATCAGCAAGGTGGAGTGCGGATTTGCAACAATCAAAGATCTGCGAGACCACAAGCTGGACAA
CCGCATGGAGTCGTTCTTCCTGGCCGAGACTGTGAAATACCTCTACCTCCTGTTTGACCCAACCAACTTCATCCA
CAACAATGGGTCCACCTTCGACGCGGTGATCACCCCCTATGGGGAGTGCATCCTGGGGGCTGGGGGGTACATCTT
CAACACAGAAGCTCACCCCATCGACCCTGCCGCCCTGCACTGCTGCCAGAGGCTGAAGGAAGAGCAGTGGGAGGT
GGAGGACTTGATGAGGGAATTCTACTCTCTCAAACGGAGCAGGTCGAAATTTCAGAAAAACACTGTTAGTTCGGG
GCCATGGGAACCTCCAGCAAGGCCAGGAACACTCTTCTCACCAGAAAACCATGACCAGGCAAGGGAGAGGAAGCC
TGCCAAACAGAAGGTCCCACTTCTCAGCTGCCCCAGTCAGCCCTTCACCTCCAAGTTGGCATTACTGGGACAGGT
TTTCCTAGACTCCTCATAACCACTGGATAATTTTTTTATTTTTATTTTTTTGAGGCTAAACTATAATAAATTGCT
TTTGGCTATC

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FIGURE 2803

CAGGTCCGGAGCCTCAACTTCAGGATGTTGACAACATTGCTGCCGATACTGCTGCTGTCTGGCTGGGCCTTTTGT
AGCCAAGACGCCTCAGATGGCCTCCAAAGACTTCATATGCTCCAGATCTCCTACTTCCGCGACCCCTATCACGTG
TGGTACCAGGGCAACGCGTCGCTGGGGGGACACCTAACGCACGTGCTGGAAGGCCCAGACACCAACACCACGATC
ATTCAGCTGCAGCCCTTGCAGGAGCCCGAGAGCTGGGCGCGCACGCAGAGTGGCCTGCAGTCCTACCTGCTCCAG
TTCCACGGCCTCGTGCGCCTGGTGCACCAGGAGCGGACCTTGGCCTTTCCTCTGACCATCCGCTGCTTCCTGGGC
TGTGAGCTGCCTCCCGAGGGCTCTAGAGCCCATGTCTTCTTCGAAGTGGCTGTGAATGGGAGCTCCTTTGTGAGT
TTCCGGCCGGAGAGAGCCTTGTGGCAGGCAGACACCCAGGTCACCTCCGGAGTGGTCACCTTCACCCTGCAGCAG
CTCAATGCCTACAACCGCACTCGGTATGAACTGCGGGAATTCCTGGAGGACACCTGTGTGCAGTATGTGCAGAAA
CATATTTCCGCGGAAAACACGAAAGGGAGCCAAACAAGCCGCTCCTACACTTCGCTGGTCCTGGGCGTCCTGGTG
GGCAGTTTCATCATTGCTGGTGTGGCTGTAGGCATCTTCCTGTGCACAGGTGGACGGCGATGTTAATTACTCTCC
AGCCCCCTCAGAAGGGGCTGGATTGATGGAGGCTGGCAAGGGAAAGTTTCAGCTCACTGTGAAGCCAGACTCCCC
AACTGAAACACCAGAAGGTTTGGAGTGACAGCTCCTTTCTTCTCCCACATCTGCCCACTGAAGATTTGAGGGAGG
GGAGATGGAGAGGAGAGGTGGACAAAGTACTTGGTTTGCTAAGAACCTAAGAACGTGTATGCTTTGCTGAATTAG
TCTGATAAGTGAATGTTTATCTATCTTTGTGGAAAACAGATAATGGAGTTGGGGCAGGAAGCCTATGGCCCATCC
TCCAAAGACAGACAGAATCACCTGAGGCGTTCAAAAGATATAACCAAATAAACAAGTCATCCACAATCAAAATAC
AACATTCAATACTTCCAGGTGTGTCAGACTTGGGATGGGACGCTGATATAATAGGGTAGAAAGAAGTAACACGAA
GAAGTGGTGGAAATGTAAAATCCAAGTCATATGGCAGTGATCAATTATTAATCAATTAATAATATTAATAAATTT
CTTATATTT

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FIGURE 2804

TCACTGAGGAGCCCTAGACAAGGCCAATGGGTTCATCAATGCCCACTGGCTCTCTGCCAAAGCCAAAAAGGTGTC
AGGCAGTCTCCAGCGTGCTGGCCGGGTCTCGGATGCCACCCCTGCTCACTGAGCCTGCATGGGCCTTGCCCCCGA
CCCTGTGGTCTCTGGGATTGGGGTCGGCTTACCCTGTAGCACAGACAGGGACTCCTGCTGCCCTGGGAGCTGTCT
CAAGCAAAATCTCTTGTCCCAGAGGTGCCCATGTGGGTCCGCTGTGTCCCCTGTCATCATCCTTGTTTTTTCTCA
TTTTGGCCAAGGGCAGGCTCCCTGGGACAGGCAGGGAACAACTGCGGAGATATTAGTGATTCATAGGTTTGTACA
GTGTTTTATACTTTGCAAAGCACTTTATTAGCTCACACCTGTCCACTCACATGAAACTCGTGTTAGGCCCTGGGA
GGCCGACGGTAACTCTCACCGTGCCCTCAGATGAAGCACAGAGAGGTTGTTACTTGCCCGGGCCATCCAGTGGGC
TGGCTGGGTCTTGTGTCCCCATCTGTGGACCCCTCTAGGGTCTGAGATGAGATGAGAAGTGTCTCCTGTATCCAC
CTCTTCCTGGCCTCCCTTCCCCCACTTCCTGGTCCCTGTCCACTCCTCAGGTTGGTGCTCTCACTTCTTGAAAGC
TCTAGGCACCCCCGCCTCCCGCCAGGCTCCCCATTGGCTCCTGGCAGGCCAGCTGAGAATGAACAGGAGATGGAG
GCAGGCTGGGGTGTAGACTGCGAAGGCGGCCCTGCCGGGACTTCTTTCCAGTCCCCGGCGACCTCTTCGAATTCT
CTGCTATCTCTGGGGAGCCTCGGGTGGGAGGGGGTGTAAGAGACGCAGGGACGTGGGGAGAGGAGACAAGGCAGG
CAAGAACCACAGGGGACGGCGGACAGACGGGCGACATCCTGCGGAGGACGCCGTCAGTACCAGGAAGTGCAGGCG
ATGAGGAAGCGCACGTCGTCCAGCGGCCCCCACGGGCTGGGCTCGGGCTGGGGCTGGGGCTGGGGCTGGGGCTGG
GGCTGGGGCGGATGCCGGGGCTGTTCCGGGCCCTCCGGCGCCGCAGGCTGGGGCTGGGGCTGGGGCTGGGTTTGC
GCAGGCTCCGGGGCGCCGCGGCCG

FIGURE 2805

GGTGGTGGCGTCACGGCGCCAGCTCCTCCCGACGCCGAGACCATGGGGGCTCAGCTAAGCGGCGGCCGCGGCGCC
CCGGAGCCTGCGCAAACCCAGCCCCAGCCCCAGCCCCAGCCTGCGGCGCCGGAGGGCCCGGAACAGCCCCGGCAT
CCGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCGAGCCCAGCCCGTGGGGGCCGCTGGACGACGTG
CGCTTCCTCATCGCCTGCACTTCCTGGTACTGACGGCGTCCTCCGCAGGATGTCGCCCGTCTGTCCGCCGTCCCC
TGTGGTTCTTGCCTGCCTTGTCTCCTCTCCCCACGTCCCTGCGTCTCTTACACCCCCTCCCACCCGAGGCTCCCC
AGAGATAGCAGAGAATTCGAAGAGGTCGCCGGGGACTGGAAAGAAGTCCCGGCAGGGCCGCCTTCGCAGTCTACA
CCCCAGCCTGCTTCCCAGCCTACACCCAGACCCAGCTCAGACCTTCGTGACCACCCCATCCCTTTCTCCGGCTGG
CTGGGTCGGGGGCATCCCTCTCTGTCGCTGGCTTCCAGAGGCAGGACAGGCCTCCTGGTCATGTCCCAGGTCATG
GAGAAGCCCGTGCCACAGTGACCCTCCCCATACTCCTGGGGGGGCTGCTCTCCATCCTGGATCGTAAGGAGGCAT
CATCAGGCTGTGTTCCTGGAACCCCAATAACCCTGGGCCCCCAGGGCCAGCCTGTTGTAGAGGGAGGCTATCTGA
CCGCCGGTCTGGCAGAGGAGATGGGTGGGCAGCTCCCAGACACCCCAAAGGACCCGGTTCTCTTCCCAGAGCGTC
CTAAGGTTACTCTTGGAACCTGATCTTTGTTCCCTCATCCCAGGGAAATGACACACTCTGTATTTCTGTTTTATT
TAGAAATGATTTAAAAAACATTATACAAAGGCTGATCAGTTTAAAATGTGACTGACACTGAAATGCTGTGATGTC
CCCCAGGCTGAGGGGAAGCTAGGCTCTGGGGCCCCCAGTGCTTTGCCCCTCTGTCTGCCCTGTCCTGGGGTGATG
GACAAACAGATGACCACAGGCAGGAGAATCTGAGATTGGAAGCCTCTAGGCTGAGCCCTCTGGGCCTGGCCCCAC
ATCCCTCACCTCTGCAGCCTGGGCTGCCTGCCTCCATCTCCTGTTCATTCTCAGCTGGCCTGCCAGGAGCCAATG
GGGAGCCTGGCGGGAGGCGGGGGTGCCTAGAGCTTTCAAGAAGTGAGAGCACCAACCTGAGGAGTGGACAGGGAC
CAGGAAGTGGGGGAAGGGAGGCCAGGAAGAGGTGGATACAGGAGACACTTCTCATCTCATCTCAGACCCTAGAGG
GGTCCACAGATGGGGACACAAGACCCAGCCAGCCCACTGGATGGCCCGGGCAAGTAACAACCTCTCTGTGCTTCA
TCTGAGGGCACGGTGAGAGTTACCGTCGGCCTCCCAGGGCCTAACACGAGTTTCATGTGAGTGGACAGGTGTGAG
CTAATAAAGTGCTTTGCAAAGTAT

FIGURE 2806

ACGGAAACCTTTTTAGGGAGTCCAAGGTACAGTCGCCGCGTGCGGAGCTTGTTACTGGTTACTTGGCCTCATGGC
GGTCCGAGCTTCGTTCGAGAACAACTGTGAGATCGGCTGCTTTGCCAAGCTCACCAACACCTACTGTCTGGTAGC
GATCGGAGGCTCAGAGAACTTCTACAGTGTGTTCGAGGGCGAGCTCTCCGATACCATCCCCGTGGTGCACGCGTC
TATCGCCGGCTGCCGCATCATCGGGCGCATGTGTGTGGGGAACAGGCACGGTCTCCTGGTACCCAACAATACCAC
CGACCAGGAGCTGCAACACATTCGCAACAGCCTCCCAGACACAGTGCAGATTAGGCGGGTGGAGGAGCGGCTCTC
AGCCTTGGGCAATGTCACCACCTGCAATGACTACGTGGCCTTGGTCCACCCAGACTTGGACAGGGAGACAGAAGA
AATTCTGGCAGATGTGCTCAAGGTGGAAGTCTTCAGACAGACAGTGGCCGACCAGGTGCTAGTAGGAAGCTACTG
TGTCTTCAGCAATCAGGGAGGGCTGGTGCATCCCAAGACTTCAATTGAAGACCAGGATGAGCTGTCCTCTCTTCT
TCAAGTCCCCCTTGTGGCGGGGACTGTGAACCGAGGCAGTGAGGTGATTGCTGCTGGGATGGTGGTGAATGACTG
GTGTGCCTTCTGTGGCCTGGACACAACCAGCACAGAGCTGTCAGTGGTGGAGAGTGTCTTCAAGCTGAATGAAGC
CCAGCCTAGCACCATTGCCACCAGCATGCGGGATTCCCTCATTGACAGCCTCACCTGAGTCACCTTCCAAGTTGT
TCCATGGGCTCCTGGCTCTGGACTGTGGCCAACCTTCTCCACATTCCGCCCAATCTGTACCGGATGCTGGCAGGG
AGGTGGCAGAGAGCTCACTGGGACTGAGGGGCTGGGCACCCAACCCTTTTCCACCTGTGCTTATCGCCTGGATCT
ATCATTACTGCAAAAACCTGCTCTGTTGTGCTGGCTGGCAGGCCCTGTGGCTGCTGGCTGAGGGTTCTGCTGTCC
TGTGCCACCCCATTAAAGTGCAGTTCCCTCCGG

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FIGURE 2807

AGGAACCAGACTAGCATTTCTCAGTGGGTTCCAGTATGCAGCCGATTGATACCTGTGTCTCCTACCCAAGGACAG
GGGGACAGGGCTCTGTCTCGCACTTCCCAGTGGCCCCAG**ATG**AGCCAGTCCCGAGCATGTGGTGGATCAGAACAG
ATTCCTGGAATAGACATACAGCTGAATAGGAAGTATCACACCACACGTAAGCTTTCTACTACCAAAGATTCCCCA
CAGCCTGTTGAGGAGAAGGTTGGTGCTTTCACAAAGATAATAGAAGCCATGGGATTCACGGGACCTTTGAAATAC
AGTAAATGGAAGATTAAGATTGCGGCCCTGCGCATGTATACTAGCTGTGTGGAGAAAACTGACTTCGAGGAATTC
TTTCTAAGGTGTCAGATGCCTGATACATTCAATTCATGGTTTCTTATAACCCTACTCCACGTCTGGATGTGTCTA
GTCCGAATGAAGCAGGAAGGCCGGAGTGGGAAGTACATGTGTCGTATCATAGTTCATTTTATGTGGGAGGATGTT
CAGCAGCGCGGCAGAGTCATGGGGGTTAATCCCTATATCCTGAAGAAGAACATGATCCTCATGACAAATCATTTC
TATGCAGCGATCTTGGGATATGATGAGGGGATCCTTTCAGATGATCATGGGCTGGCCGCTGCCCTCTGGAGAACC
TTCTTCAACCGGAAATGTGAAGACCCTCGACATCTTGAATTGCTGGTAGAGTATGTGAGGAAACAGATACAGTAC
CTGGACTCCATGAACGGGGAGGATCTGCTTCTGACAGGGGAGGTGAGCTGGCGCCCTCTAGTGGAGAAGAATCCT
CAGAGCATCCTGAAGCCCCATTCTCCGACTTACAACGACGAGGGACTT**TGA**TGGGCTGGGCCCTCCGCACGGCCC
GCCAGCTGGCTTCGAGGAACCTCCAGGAGAGAAGTGCCTGTTGGTCCAGGACCCTGCAGAAAGTGGCCTGAACTG
ACCTCTGAACAGCATCTGTCAAATACCTGGCCCCATTTGTGTTGAGTTTCCTCTTAGTGTGCCCAGGAGTCTGAT
CTGCTGGGGTACAGGGCTGGGAGAACCCCTAGCTCTCCCGGGGTGTCCTCTCCCTTAGGGGAAGCCCCGAGTGAG
AGTCCCCCAGCACACACTCCCCAACCCCCTCCAGCAACTACATGTGACTGATAGCTTTTCCCAAAGGCCAAGGAA
GGGATGGTGTAGGTTCAAAAGGGAAACCCCCCAGGGCCTGCTGTGGCCTAGGAGCAGATTGTAATGCTGCCGAGT
CCGGTCGGTGACCACGCGTTGTCCCTCGGCTTTCAGCCATGGGGTTGAGTTGGCCATTAAAAGAAACAGAGACTT
CTCTCTGCCATGGCCCTTCTTTATTCCAGGGACTTAGAAACTTGCCTGAGATGGTGGACGCAGTAATGAGGGCAC
CGCGCAGCTCAGTTAGAGACGGAGAAAGGGAAGAGGCTGGGATGGTCTCTGCTGCTCTTGCCTCTAGTTCATGGA
GATGTGTCTCTGTTCAGGCCAAGATACAGCCAGCCAGGCCTGTCGTCTGGGACCCAGGAGGCCTCTGATGACCAA
GGGCTTTCACATCCTAAGTCATTTGGAAGGAGGCCTTGAGAACAAAGTCACCTTTGTCACTCCCAGTGAACTGAA
TGAGGAACATGCTGTCTCCTGTCTTGGCCTCCCCTTTCATGAGATACTGGGGAGAAGAGAACATTCCTCCTGGCT
TAGTTGTAGCAGACCCAGACCTGTGCCCAGCTTTGGTCCCCCTTCCCAACTTCTGAAGCACGTGCTGCAGAGCCA
CCTTGGTCTGAGCACCTGAGGACCAGCCCCTCCTCCCTCAGTGCGGGTCATCTCTTGGGGGATTTTCTTAAAGTG
AAGAAAGGGGGTGGGGAACCATATTGCCCCTCCCTCCCCCATCAAACTTCCTTCATTTAACTTGCTATAAAATGA
GTCATATAAAGAAACTCTATATGGGTGAGGTATATCCCACTTCTGTGAAAACATTACAAATCAAACCGCTTCTCT
CAGTTTATTTAAGATGCTTTTGTTGCGAGCGGAGCTCTAGAGTGAAGCCTCCTGTGTGTGTGTGAGATAATAACA
CCTTGTAACTCATTACAGCTGGGCACTATTTACATAAACCAGAGCTGAGCCAGGCAGGAATTTGCTGATTAATTT
ATTTTTAATGGAGTGAAGTATACCATGCACCAAAATAAACTTTACTGTGTGTACCTAACTGCTCCTGG

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FIGURE 2808

CTCCTTCAAGCCCTCAGTCAGTTGTGCAGGAGAAAGGGGGCGGTTGGCTTTCTCCTTTCAAGAACGAGTTATTTT
CAGCTGCTGACTGGAGACGGTGCACGTCTGGATACGAGAGCATTTCCACTATGGGACTGGATACAAACACACACC
CGGCAGACTTCAAGAGTCTCAGACTGAGGAGAAAGCCTTTCCTTCTGCTGCTACTGCTGCTGCCGCTGCTTTTGA
AAGTCCACTCCTTTCATGGTTTTTCCTGCCAAACCAGAGGCACCTTTGCTGCTGCCGCTGTTCTCTTTGGTGTCA
TTCAGCGGCTGGCCAGAGG**ATG**AGACTCCCCAAACTCCTCACTTTCTTGCTTTGGTACCTGGCTTGGCTGGACCT
GGAATTCATCTGCACTGTGTTGGGTGCCCCTGACTTGGGCCAGAGACCCCAGGGGACCAGGCCAGGATTGGCCAA
AGCAGAGGCCAAGGAGAGGCCCCCCCTGGCCCGGAACGTCTTCAGGCCAGGGGGTCACAGCTATGGTGGGGGGGC
CACCAATGCCAATGCCAGGGCAAAGGGAGGCACCGGGCAGACAGGAGGCCTGACACAGCCCAAGAAGGATGAACC
CAAAAAGCTGCCCCCCAGACCGGGCGGCCCTGAACCCAAGCCAGGACACCCTCCCCAAACAAGGCAGGCTACAGC
CCGGACTGTGACCCCAAAAGGACAGCTTCCCGGAGGCAAGGCACCCCCAAAAGCAGGATCTGTCCCCAGCTCCTT
CCTGCTGAAGAAGGCCAGGGAGCCCGGGCCCCCACGAGAGCCCAAGGAGCCGTTTCGCCCACCCCCCATCACACC
CCACGAGTACATGCTCTCGCTGTACAGGACGCTGTCCGATGCTGACAGAAAGGGAGGCAACAGCAGCGTGAAGTT
GGAGGCTGGCCTGGCCAACACCATCACCAGCTTTATTGACAAAGGGCAAGATGACCGAGGTCCCGTGGTCAGGAA
GCAGAGGTACGTGTTTGACATTAGTGCCCTGGAGAAGGATGGGCTGCTGGGGGCCGAGCTGCGGATCTTGCGGAA
GAAGCCCTCGGACACGGCCAAGCCAGCGGCCCCCGGAGGCGGGCGGGCTGCCCAGCTGAAGCTGTCCAGCTGCCC
CAGCGGCCGGCAGCCGGCCTCCTTGCTGGATGTGCGCTCCGTGCCAGGCCTGGACGGATCTGGCTGGGAGGTGTT
CGACATCTGGAAGCTCTTCCGAAACTTTAAGAACTCGGCCCAGCTGTGCCTGGAGCTGGAGGCCTGGGAACGGGG
CAGGGCCGTGGACCTCCGTGGCCTGGGCTTCGACCGCGCCGCCCGGCAGGTCCACGAGAAGGCCCTGTTCCTGGT
GTTTGGCCGCACCAAGAAACGGGACCTGTTCTTTAATGAGATTAAGGCCCGCTCTGGCCAGGACGATAAGACCGT
GTATGAGTACCTGTTCAGCCAGCGGCGAAAACGGCGGGCCCCACTGGCCACTCGCCAGGGCAAGCGACCCAGCAA
GAACCTTAAGGCTCGCTGCAGTCGGAAGGCACTGCATGTCAACTTCAAGGACATGGGCTGGGACGACTGGATCAT
CGCACCCCTTGAGTACGAGGCTTTCCACTGCGAGGGGCTGTGCGAGTTCCCATTGCGCTCCCACCTGGAGCCCAC
GAATCATGCAGTCATCCAGACCCTGATGAACTCCATGGACCCCGAGTCCACACCACCCACCTGCTGTGTGCCCAC
GCGGCTGAGTCCCATCAGCATCCTCTTCATTGACTCTGCCAACAACGTGGTGTATAAGCAGTATGAGGACATGGT
CGTGGAGTCGTGTGGCTGCAGG**TAG**CAGCACTGGCCCTCTGTCTTCCTGGGTGGCACATCCCAAGAGCCCCTTCC
TGCACTCCTGGAATCACAGAGGGGTCAGGAAGCTGTGGCAGGAGCATCTACACAGCTTGGGTGAAAGGGGATTCC
AATAAGCTTGCTCGCTCTCTGAGTGTGACTTGGGCTAAAGGCCCCCTTTTATCCACAAGTTCCCCTGGCTGAGGA
TTGCTGCCCGTCTGCTGATGTGACCAGTGGCAGGCACAGGTCCAGGGAGACAGACTCTGAATGGGACTGAGTCCC
AGGAAACAGTGCTTTCCGATGAGACTCAGCCCACCATTTCTCCTCACCTGGGCCTTCTCAGCCTCTGGACTCTCC
TAAGCACCTCTCAGGAGAGCCACAGGTGCCACTGCCTCCTCAAATCACATTTGTGCCTGGTGACTTCCTGTCCCT
GGGACAGTTGAGAAGCTGACTGGGCAAGAGTGGGAGAGAAGAGGAGAGGGCTTGGATAGAGTTGAGGAGTGTGAG
GCTGTTAGACTGTTAGATTTAAATGTATATTGATGAGATAAAAAGCAAAACTGTGCCT

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FIGURE 2809A

CGTTCGGGCAGCGGCCTCTTGTTACCCGGGGCCCGCTTGCCTCAGCTTCTTGCTGCCGCCAGCACGCTAAGCTCC
AGTCGGCGCCGAAGGAGAGCTTCCCGACCCTCGTGTCCAGTAGCCGCAATCCCAGGCTGGGAGGGTGAGGCGCCG
CGCTCTGCCGCCCCCCCGCCCCTCGCTCCCTGTGTCCTGGCGGATTTGCACGTAATCTATCCGAAAGCCCAGTCC
CACCCGCCACCCGACTCTGGAGCTCCCATTCTTCAGGACCCTGCTGAAGTATCGCTTCTCAGCCGCCTTCTCCAG
GCGCAGCTGCATTCGCTTCTCGGTTTTTGCACTCGCTGTGCACCGAGTTACTTTCCCGGCCCCTCGTTGACACCG
TTCACAGGTGGCTGTTGGTCTTTAGTAAGGGTGCTGTCTTCCCTGTCTGATCCTTAGCAAAAGTAGGAAGGTAGA
GTTGTTGGCAGAAATCCTGGGATAAGAGAATAGTTTCCTGGAAGATCTGTGCCTCCAACCAGCAGAGAGGGATTG
AGCTTCATTGAACTCAACAGAGCCAACATTTCATAGCACCATGTTCAAGAGGAGGTTGAAGTGGCATGGCAATGG
TTAGAGACCCTGCTGGGCGTGAACACCCTCTGGCTACCTAGGGACCTGTGGGCCTACCACCTGGTGCCCTC**ATG**G
AGACAAGAAGCCCTGGGTTGAACAACATGAAGCCCCAGTCACTGCAGCTGGTACTGGAAGAGCAGGTGCTGGCAC
TACAGCAGCAGATGGCAGAGAATCAGGCAGCCTCCTGGCGGAAGCTGAAGAACTCCCAGGAGGCCCAGCAGAGAC
AAGCAACCCTTGTGAGGAAGCTGCAGGCCAAGGTGCTGCAGTACCGAAGCTGGTGCCAAGAGCTGGAGAAGCGGC
TAGAAGCCACTGGAGGACCAATCCCCCAGAGGTGGGAAAATGTGGAGGAGCCAAACCTGGATGAGCTGCTGGTCC
GATTGGAGGAGGAGCAACAGAGGTGTGAGAGTCTAGCAGAGGTGAACACCCAGCTTCGACTGCACATGGAAAAAG
CTGACGTGGTGAATAAAGCCCTTAGGGAAGATGTGGAAAAACTGACAGTGGACTGGAGCCGGGCCCGGGATGAGC
TAATGAGGAAGGAGAGCCAGTGGCAGATGGAGCAGGAGTTCTTCAAGGGCTACCTGAAAGGGGAGCACGGTCGCC
TTCTCAGTCTATGGCGGGAGGTTGTGACATTCCGACGCCACTTCCTGGAAATGAAGTCAGCTACTGACAGAGATC
TGATGGAGCTAAAAGCTGAGCATGTGAGGCTTTCAGGGTCTCTGTTGACCTGTTGTCTGCGCTTGACTGTGGGAG
CACAGTCTCGGGAACCCAACGGATCTGGAAGAATGGATGGGCGGGAGCCGGCCCAGCTGCTGCTGCTACTAGCCA
AGACCCAGGAGCTGGAGAAGGAAGCCCATGAAAGGAGCCAGGAGTTAATACAGCTGAAGAGTCAAGGGGATCTGG
AGAAGGCTGAACTTCAGGACCGGGTGACCGAGCTCTCTGCTCTGTTGACCCAGTCTCAGAAGCAAAATGAAGATT
ATGAAAAGATGATAAAGGCTCTGAGAGAGACAGTGGAGATCCTGGAGACAAATCACACAGAATTAATGGAACATG
AAGCATCTCTTAGTAGGAATGCGCAAGAGGAGAAGTTGTCTTTACAGCAGGTGATCAAGGATATAACCCAGGTCA
TGGTGGAAGAAGGGGACAATATAGCCCAAGGCTCTGGTCATGAGAACTCTTTGGAATTGGACTCTAGTATCTTCT
CCCAGTTTGATTACCAGGATGCAGACAAGGCTCTTACTCTGGTGCGTTCAGTGCTGACTCGGAGACGCCAGGCTG
TGCAGGACCTAAGGCAGCAGCTTGCAGGCTGTCAAGAGGCTGTGAACTTGTTGCAACAGCAGCATGATCAGTGGG
AGGAAGAGGGCAAAGCCTTGAGACAGCGGCTGCAGAAGCTCACTGGGGAGCGGGACACTCTGGCAGGGCAGACTG
TGGACCTCCAGGGAGAGGTGGACTCTCTCAGCAAGGAGCGAGAGCTGCTGCAGAAGGCCAGGGAAGAGCTGCGGC
AGCAGCTGGAGGTGCTAGAGCAGGAGGCATGGCGCCTGCGAAGGGTAAATGTGGAGCTTCAGCTGCAGGGGGACT
CTGCCCAGGGCCAGAAGGAGGAACAGCAGGAGGAGCTGCACCTGGCTGTCCGGGAGAGGGAGCGTCTTCAGGAGA
TGCTGATGGGCCTGGAAGCCAAACAGTCAGAATCACTCAGTGAACTGATCACTCTTCGGGAAGCCCTGGAGTCAA
GTCACCTGGAAGGGGAGTTACTGAGGCAAGAGCAAACGGAAGTGACCGCAGCGCTGGCTAGGGCAGAGCAGTCAA
TTGCAGAGCTGTCGAGTTCTGAAAACACCCTGAAGACAGAAGTAGCTGATCTTCGGGCTGCAGCTGTCAAGCTCA
GTGCCTTAAATGAGGCTTTGGCGTTAGATAAAGTTGGGCTGAACCAGCAGCTTCTCCAGTTAGAGGAGGAGAACC
AGTCTGTGTGCAGCAGAATGGAGGCCGCAGAGCAGGCGAGAAATGCTTTGCAGGTCGACCTGGCGGAGGCAGAGA
AGAGGAGGGAAGCCCTGTGGGAAAAGAACACTCACCTGGAGGCTCAGCTGCAGAAAGCTGAGGAGGCTGGGGCTG
AGCTGCAGGCAGATCTCAGGGACATCCAAGAAGAGAAGGAAGAAATTCAAAAGAAACTAAGTGAGTCACGTCACC
AGCAGGAGGCAGCCACGACTCAGCTGGAGCAGCTACATCAGGAGGCAAAGCGACAGGAAGAAGTGCTTGCCAGGG
CAGTCCAGGAGAAGGAGGCCCTAGTACGAGAGAAAGCGGCTCTAGAGGTGCGGCTGCAGGCCGTGGAGCGTGACC
GGCAGGACCTCGCTGAACAACTACAGGGGCTCAGCTCAGCCAAGGAGCTACTGGAGAGCAGTCTGTTTGAAGCCC
AACAACAAAATTCTGTGATAGAGGTCACCAAGGGGCAGCTGGAGGTCCAGATTCAAACTGTCACTCAAGCCAAGG
AAGTAATCCAAGGGGAAGTGAGGTGCCTGAAGCTGGAACTGGACACTGAACGGAGTCAGGCAGAGCAGGAGCGGG
ATGCTGCAGCCAGACAGCTGGCCCAGGCTGAGCAAGAAGGGAAGACTGCCTTGGAGCAGCAGAAGGCAGCCCATG
AGAAAGAGGTGAACCAGCTCCGGGAGAAATGGGAGAAGGAGCGCTCCTGGCACCAGCAGGAGCTGGCAAAGGCTC
TGGAGAGCTTAGAAAGGGAAAAAATGGAGCTGGAAATGAGGCTAAAGGAGCAGCAGACAGAAATGGAGGCCATCC
AGGCCCAGAGGGAAGAAGAACGGACCCAGGCAGAGAGTGCCCTATGCCAGATGCAGCTGGAAACAGAGAAGGAGA
GAGTATCCCTCCTGGAGACACTGCTGCAGACGCAGAAGGAGCTAGCAGATGCCAGCCAACAACTGGAACGACTGA
GGCAGGACATGAAAGTCCAGAAATTAAAGGAGCAGGAGACCACTGGGATACTACAGACCCAGCTCCAGGAGGCTC

FIGURE 2809B

AACGGGAGCTGAAGGAGGCAGCCCGGCAGCACAGAGATGACCTTGCTGCCCTCCAAGAAGAGAGCAGCTCCCTGC
TGCAGGATAAGATGGACCTGCAGAAGCAGGTGGAGGACTTGAAGTCTCAGCTGGTGGCCCAGGATGACTCCCAGA
GGCTGGTGGAGCAGGAGGTTCAGGAGAAGCTGAGAGAGACCCAGGAGTATAACCGAATTCAGAAGGAGCTGGAGA
GAGAGAAAGCCAGCCTGACTCTGTCACTGATGGAAAAGGAACAGAGACTCCTTGTTTTACAAGAAGCTGACTCTA
TTCGACAACAAGAGCTGAGTGCCCTGCGCCAGGACATGCAGGAGGCCCAGGGAGAACAGAAAGAGCTCAGTGCTC
AGATGGAATTACTAAGGCAAGAGGTGAAGGAAAAGGAGGCTGACTTTCTGGCCCAGGAAGCACAGCTGCTGGAGG
AGCTGGAGGCGTCTCATATCACGGAGCAGCAGCTGCGAGCCTCCTTGTGGGCCCAGGAAGCCAAGGCAGCCCAAC
TACAGCTGCGACTGCGCAGCACAGAGAGCCAGCTAGAAGCGCTGGCCGCAGAGCAGCAGCCCGGGAACCAGGCCC
AGGCCCAGGCCCAGCTGGCCAGCCTCTACTCTGCCCTGCAGCAGGCCCTGGGGTCTGTTTGTGAGAGCAGGCCTG
AGCTGAGTGGTGGGGGAGACTCTGCTCCTTCCGTCTGGGGCCTTGAGCCAGACCAGAATGGAGCTAGGAGCCTCT
TTAAGAGAGGGCCCCTGCTGACTGCTCTCTCCGCTGAGGCAGTAGCATCTGCCCTCCACAAGCTTCATCAAGACC
TGTGGAAGACTCAACAGACCCGGGATGTTCTGAGGGATCAGGTCCAGAAACTGGAAGAGCGTCTAACTGATACTG
AGGCTGAGAAGAGCCAGGTCCACACAGAGTTGCAGGATCTGCAGAGACAGCTCTCCCAGAATCAGGAAGAGAAAT
CCAAGTGGGAAGGAAAGCAGAACTCCCTAGAATCTGAGCTGATGGAACTACATGAAACTATGGCATCCTTACAGA
GTCGCCTGCGGAGAGCAGAGCTACAGCGAATGGAAGCCCAGGGTGAGCGAGAGTTACTTCAGGCAGCCAAGGAGA
ACCTGACAGCCCAGGTGGAACACCTGCAAGCAGCTGTCGTAGAAGCCAGGGCTCAGGCAAGTGCTGCTGGCATCC
TGGAAGAAGACCTGAGAACGGCTCGCTCAGCACTGAAGCTGAAAAATGAGGAAGTAGAGAGTGAGCGTGAGAGAG
CCCAGGCTCTGCAAGAGCAGGGCGAACTGAAGGTGGCCCAAGGGAAGGCTCTGCAAGAGAATTTGGCCCTCCTGA
CCCAGACCCTAGCTGAAAGAGAAGAGGAGGTGGAGACTCTGCGGGGACAAATCCAGGAACTGGAGAAGCAACGGG
AAATGCAGAAGGCTGCTTTGGAATTGCTGTCTCTGGACCTGAAGAAGAGGAACCAAGAGGTAGATCTGCAGCAAG
AACAGATTCAGGAGCTAGAGAAGTGTAGGTCTGTTTTAGAGCATCTGCCCATGGCCGTCCAGGAGCGAGAGCAGA
AGCTGACTGTGCAGAGGGAGCAGATCAGAGAGCTCGAGAAGGATCGGGAGACTCAGAGGAACGTCTTGGAGCATC
AGCTTCTAGAACTTGAGAAGAAAGACCAAATGATTGAGTCCCAGAGAGGACAGGTTCAGGACCTGAAAAAGCAGT
TGGTTACTCTGGAATGCCTGGCCCTGGAACTGGAGGAAAACCATCACAAGATGGAGTGCCAGCAAAAACTGATCA
AGGAGCTGGAGGGCCAGAGGGAAACCCAGAGAGTGGCTTTGACCCACCTTACGCTGGACCTAGAAGAAAGGAGCC
AGGAGCTGCAGGCACAAAGCAGCCAGATCCATGACCTGGAGAGCCACAGCACCGTTCTGGCAAGAGAGCTGCAGG
AGAGGGACCAGGAGGTGAAGTCTCAGCGAGAACAGATCGAGGAGCTGCAGAGGCAGAAAGAGCATCTGACTCAGG
ATCTCGAGAGGAGAGACCAGGAGCTGATGCTGCAGAAGGAGAGGATTCAGGTTCTCGAGGATCAGAGGACCCGGC
AGACCAAGATCCTGGAGGAGGACCTGGAACAGATCAAGCTGTCCTTGAGAGAGCGAGGCCGGGAGCTGACCACTC
AGAGGCAGCTGATGCAGGAACGGGCAGAGGAAGGGAAGGGCCCAAGTAAAGCACAGCGCGGGAGCCTAGAGCACA
TGAAGCTGATCCTGCGTGATAAGGAGAAGGAGGTGGAATGTCAGCAGGAGCATATCCATGAACTCCAGGAGCTCA
AAGACCAGCTGGAGCAGCAGCTCCAGGGCCTGCACAGGAAGGTAGGTGAGACCAGCCTCCTCCTGTCCCAGCGAG
AGCAGGAAATAGTGGTCCTGCAGCAGCAACTGCAGGAAGCCAGGGAACAAGGGGAGCTGAAGGAGCAGTCACTTC
AGAGTCAACTGGATGAGGCCCAGAGAGCCCTAGCCCAGAGGGACCAGGAACTGGAGGCTCTGCAGCAAGAACAGC
AGCAGGCCCAGGGACAGGAGGAGAGGGTGAAGGAAAAGGCAGACGCCCTCCAGGGAGCTCTGGAGCAAGCCCATA
TGACACTGAAGGAGCGTCATGGAGAGCTTCAGGACCACAAGGAACAGGCACGAAGGCTGGAGGAAGAGCTGGCAG
TGGAGGGACGGCGGGTCCAGGCCCTGGAGGAGGTGCTGGGAGACCTAAGGGCTGAGTCTCGGGAACAGGAGAAAG
CTCTGTTGGCCCTCCAGCAGCAGTGTGCTGAGCAGGCACAGGAGCATGAGGTGGAGACCAGGGCCCTGCAGGACA
GCTGGCTGCAGGCCCAGGCAGTGCTCAAGGAACGGGACCAGGAGCTGGAAGCTCTGCGGGCAGAAAGTCAGTCCT
CCCGGCATCAGGAGGAGGCTGCCCGGGCCCGGGCTGAGGCTCTGCAGGAGGCCCTTGGCAAGGCTCATGCTGCCC
TGCAGGGGAAAGAGCAGCATCTCCTCGAGCAGGCAGAATTGAGCCGCAGTCTGGAGGCCAGCACTGCAACCCTGC
AAGCCTCCCTGGATGCCTGCCAGGCACACAGTCGGCAGCTGGAGGAGGCTCTGAGGATACAAGAAGGTGAGATCC
AGGACCAGGATCTCCGATACCAGGAGGATGTGCAGCAGCTGCAGCAGGCACTTGCCCAGAGGGATGAAGAGCTGA
GACATCAGCAGGAACGGGAGCAGCTGCTGGAGAAGTCTCTGGCCCAGAGGGTCCAAGAGAATATGATCCAAGAGA
AGCAGAATCTGGGGCAAGAGAGAGAAGAGGAGGAGATAAGGGGCCTTCATCAGAGTGTAAGGGAGCTACAGCTGA
CTCTAGCCCAAAAGGAACAGGAGATTCTGGAGCTGAGGGAGACCCAGCAAAGGAACAACCTGGAAGCCTTACCCC
ACAGCCACAAAACCTCCCCAATGGAGGAACAATCTCTAAAACTTGATTCTTTAGAGCCCAGGCTGCAGCGGGAGC
TGGAGCGGCTACAGGCAGCCCTGAGACAGACAGAAGCCAGGGAGATTGAGTGGAGGGAGAAGGCCCAGGACTTGG

FIGURE 2809C

CACTCTCCCTAGCGCAGACCAAGGCCAGTGTCAGCAGTCTGCAGGAGGTAGCCATGTTCCTACAAGCCTCTGTCC
TGGAGCGGGACTCAGAACAGCAAAGGCTGCAGGATGAACTGGAGCTCACCAGACGGGCTCTGGAGAAGGAGCGGC
TACACAGCCCAGGTGCAACCAGCACAGCAGAACTGGGGTCCAGAGGGGAGCAGGGTGTGCAGCTGGGAGAGGTCT
CAGGAGTGGAGGCTGAGCCTAGTCCTGATGGAATGGAGAAGCAGTCATGGAGACAAAGGCTTGAACACCTGCAGC
AAGCAGTGGCCCGGCTGGAGATTGACAGGAGCAGGCTGCAGCGCCACAATGTCCAGCTGCGGAGTACCTTGGAGC
AGGTGGAGCGAGAACGGAGGAAGCTGAAGAGGGAGGCCATGCGTGCGGCCCAGGCAGGGTCCCTAGAGATCAGCA
AGGCCACGGCTTCTTCACCCACACAGCAGGATGGGAGAGGACAGAAGAACTCAGATGCCAAGTGTGTGGCTGAAC
TGCAGAAAGAGGTGGTCCTGCTGCAAGCTCAGCTGACTTTGGAGCGGAAGCAGAAGCAGGACTACATCACCCGCT
CAGCACAGACCAGCCGTGAGCTAGCAGGCCTGCACCACAGCCTCTCACACTCACTTCTTGCCGTGGCCCAGGCCC
CTGAGGCCACTGTCCTGGAGGCAGAGACCCGCAGGCTGGATGAGTCCCTGACTCAAAGTCTGACATCCCCAGGGC
CAGTCCTGCTACACCCCAGCCCCAGCACTACCCAAGCCGCCTCCAGGTAGCAGCCACAGCCAGGAGCACACAGAC
AGAAGACTGTGTCATGGGTCATGGCCCCTCCGCACACCTACAGGTTTGCCAAAGGAAAAGCCTGGCTCTGTTAGG
CACCCAGGAGCCCCAGGTCGGCGGGTGTTCCCAGGAAGAGGAAGTAAATCTGCAACCCTGGGGAGGACCCCAACT
CACCTGGGAATGAGGCAAATTGCATTTGCTTGCTCCCTATGGAATCACCCAGAGGGGTGCCTTGCCCTGGCTGAG
GGACATGTACTGCCTCTCATCTAGAATTTATTTTCCTAGCACTTCACCACCTCCTTCATCTTCTCCTTCAACAAT
AAACCCTGAGATCTTTGCATTC

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FIGURE 2810

CTGGCGTCCCCTTTCCGGCCGGTCCCCATGGAGGCGCTGGGGAAGCTGAAGCAGTTCGATGCCTACCCCAAGACT
TTGGAGGACTTCCGGGTCAAGACCTGCGGGGGCGCCACCGTGACCATTGTCAGTGGCCTTCTCATGCTGCTACTG
TTCCTGTCCGAGCTGCAGTATTACCTCACCACGGAGGTGCATCCTGAGCTCTACGTGGACAAGTCGCGGGGAGAT
AAACTGAAGATCAACATCGATGTACTTTTTCCGCACATGCCTTGTGCCTATCTGAGTATTGATGCCATGGATGTG
GCCGGAGAACAGCAGCTGGATGTGGAACACAACCTGTTCAAGCAACGACTAGATAAAGATGGCATCCCCGTGAGC
TCAGAGGCTGAGCGGCATGAGCTTGGGAAAGTCGAGGTGACGGTGTTTGACCCTGACTCCCTGGACCCTGATCGC
TGTGAGAGCTGCTATGGTGCTGAGGCAGAAGATATCAAGTGCTGTAACACCTGTGAAGATGTGCGGGAGGCATAT
CGCCGTAGAGGCTGGGCCTTCAAGAACCCAGATACTATTGAGCAGTGCCGGCGAGAGGGCTTCAGCCAGAAGATG
CAGGAGCAGAAGAATGAAGGCTGCCAGGTGTATGGCTTCTTGGAAGTCAATAAGGTGGCCGGAAACTTCCACTTT
GCCCCTGGGAAGAGCTTCCAGCAGTCCCATGTGCACGTCCATGACTTGCAGAGCTTTGGCCTTGACAACATCAAC
ATGACCCACTACATCCAGCACCTGTCATTTGGGGAGGACTATCCAGGCATTGTGAACCCCCTGGACCACACCAAT
GTCACTGCGCCCCAAGCCTCCATGATGTTCCAGTACTTTGTGAAGGTGGTGCCCACTGTGTACATGAAGGTGGAC
GGAGAGGTACTGAGGACAAATCAGTTCTCTGTGACCAGACATGAGAAGGTTGCCAATGGGCTGTTGGGCGACCAA
GGCCTTCCCGGAGTCTTCGTCCTCTATGAGCTCTCGCCCATGATGGTGAAGCTGACGGAGAAGCACAGGTCCTTC
ACCCACTTCCTGACAGGTGTGTGCGCCATCATTGGGGGCATGTTCACAGTGGCTGGACTCATCGATTCGCTCATC
TACCACTCAGCACGAGCCATCCAGAAGAAAATTGATCTAGGGAAGACAACGTAGTCACCCTCGGTGCTTCCTCTG
TCTCCTCTTTCTCCCTGGCCTGTGGTTGTCCCCCAGCCTCTGCCACCCTCCACCTCCTCGGTCAGCCCCAGCCCC
AGGTTGATAAATCTATTGATTGATTGTGATAGT

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FIGURE 2811

AGAAGAAAGCTGGTAGGGGCTGGGAGAGGGTACCACAGGGGAGTATGATCTACTTGGGGGCCAGAGAAGGTTCCC
TGAGGAAATAGTACCTGAACTTAGACTTGAAGGATAACAGATGTTAACTGGGAGGAGAGAATGTTCCAGGCAGAG
GAAAAGGCATATGCAAAAGTCCAGCGCCTTGAAGGAGCACAGCTGGGGTGCCTGGAGTGAGATGGAGCTGGAAAG
ATCCAGGTGGAGCTTGACCTGAAGTACCAGCCCCCAGAGGGCGCTACTGGAGCCTGGTCAGAGGAGGACTTTGGG
GCACCCATCCAGGACAGCTTCGAGTTAATCATCCCCAATGTGGGCTTCCAGGAACTGGAGCCTGGGGAGGCCCAG
CTGGAGCGGCGGGCAGTGGCTCTAGGCCGCAGGCTAGCTCGAAGTCTAGGCCAGCAGGACGATGAAGAGAATGAG
CTGGAGCTTGAGCTGGAGCAGGACCTGGATGATGAGCCTGACGTGGAACTTTCTGGTGTT**ATG**TTCAGCCCCCTC
AAGAGCCGCGCCAGGGCCCTGGCCCATGGGGATCCCTTCCAGGTGTCCAGAGCTCAAGACTTCCAGGTGGGAGTC
ACTGTGCTGGAAGCCCAGAAACTGGTGGGAGTCAACATTAACCCCTATGTGGCCGTGCAAGTGGGGGGGCAGCGC
CGTGTGACCGCCACACAGCGTGGGACCAGTTGCCCCTTCTACAATGAGTACTTCTTGTTCGAATTTCATGACACG
CGGCTTCGTCTCCAAGACTTGCTGCTGGAGATCACGGTGAGTGGGGTAGGGGTGACCAGTGTCCTTCAGAGAAGG
GGGGATGAGAAAGCTGCAGGACTAACACCACCTTCCCCCAAGGCTTTCCATTCGCAGACCCTCCCCTTTATGGCC
ACCCGGATAGGCACCTTCAGGATGGACCTGGGCATCATCTTGGACCAGCCAGGTATGGAATCGTCCCCTTAT**TGA**

GACTCTGCACGGACAAGGGCCCTAGAGATTGACCCTGCAGTGACTCCGCATGGACCCCTATACACTCACTTCGGA
GAGGGCCATCTCTGGCGGAGGCTGAACTCTTGGCACTTCCGCCCCTCCCTGCTGAGCCAGAGAAGCCCTGGCCAT
TGTCCGTCACTCCGATAGCCTCACGGCCACCCTGTGCGTCCCGCCGGTCGCCCCTTACCCCTGGCTCGCCCCTTC
GCCCTTAGATGGCCAGTTCTACCAAAGATGGGTTCCGCTGCATGATCCCCGAGACACCCGCGCCGGGACCAAGGG
TTTCATTAAGGTCACCTTGTCCGTGAGGGCGCGCGGGGACCTGCCCCCTCCAATGCTACCCCCGGCCCCAGGGCA
CTGTTCGGACATCGAGAAGTGAGCCGGGGTGAGGTGGGGAGGAGGACATGGATCCGGGGGTGGCCGTGGGGCGCG
GATAAGGGGAGGGGCCGAGATCCCAGTTTCTCCCCCCCCGCTCGGTGCCCCCTCCCCTAGGAACCTGCTCCTGCC
GCGCGGGGTGCCCGCCGAGAGGCCATGGGCGCGGCTCCGCGTGCGCCTGTACCGCGCCGAGGGGCTTCCCGCGCT
GCGCCTGGGGCTGCTGGGCAGCCTGGTCCGCGCCCTGCACGACCAGCGCGTCCTGGTGGAGCCCTATGTGCGGGT
GTCTTTCCTGGGGCAGGAGGGCGAGACGTCGGTGAGCGCCGAGGCGGCGGCGCCCGAATGGAACGAGCAGCTGAG
CTTCGTGGAGCTCTTCCCGCCGCTGACGCGCAGCCTCCGCCTGCAGCTGCGGGACGACGCGCCCCTGGTCGACGC
GGCACTCGCTACGCACGTGCCGGACCTGAGGCGGATCTCCCATCCGGGCCGCGCGGCGGGGTTTAACCCTACCTT
CGGCCCGGCCTGGGTGCCCCTCTATGGCTCGCCCCCCGGCGCGGGGCTCCGGGATAGTCTTCAAGGTCTCAACGA
AGGCGTTGGCCAAGGCATTTGGTTCCGCGGCCGCCTTCTGCTGGCTGTGTCCATGCAGGTGTTGGAAGGGAGAGC
TGAACCTGAGCCTCCCCAGGCCCAGCAGGGGTCCACGTTGTCCCGGCTCACCCG

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FIGURE 2812

CAAATATTCCATTCAGCATTACAAAGATGGATGTTCTTCAGTTCCTAGAAGGAATCCCAGTGGATGAAAATGCTG
TACATGTTCTTGTTGATAACAATGGGCAAGGTCTAGGACAGGCATTGGTTCAGTTTAAAAATGAAGATGATGCAC
ATGGCCCACTGCGTGACCTTGGTTCAGCTGTCCATTTCCTGTGACCATCTCATTGACAAGGACATCGGCTCCAAG
TCTGACCCACTCTGCGTCCTTTTACAGGATGTGGGAGGGGGCAGCTGGGCTGAGCTTGGCCGGACTGAACGGGTG
CGGAACTGCTCAAGCCCTGAGTTCTCCAAGACTCTACAGCTTGAGTACCGCTTTGAGACAGTCCAGAAGCTACGC
TTTGGAATCTATGACATAGACAACAAGACGCCAGAGCTGAGGGATGATGACTTCCTAGGGGGTGCTGAGTGTTCC
CTAGGACAGATTGTGTCCAGCCAGGTACTGACTCTCCCCTTGATGCTGAAGCCTGGAAAACCTGCTGGGCGGGGG
ACCATCACGGTCTCAGCTCAGGAATTAAAGGACAATCGTGTAGTAACCATGGAGGTAGAGGCCAGAAACCTAGAT
AAGAAGGACTTCCTGGGAAAATCAGATCCATTTCTGGAGTTCTTCCGCCAGGGTGATGGGAAATGGCACCTGGTG
TACAGATCTGAGGTCATCAAGAACAACCTGAACCCTACATGGAAGCGTTTCTCAGTCCCCGTTCAGCATTTCTGT
GGTGGGAACCCCAGCACACCCATCCAGGTGCAATGCTCCGATTATGACAGTGACGGGTCACATGATCTCATCGGT
ACCTTCCACACCAGCTTGGCCCAGCTGCAGGCAGTCCCGGCTGAGTTTGAATGCATCCACCCTGAGAAGCAGCAG
AAAAAGAAAAGCTACAAGAACTCTGGAACTATCCGTGTCAAGATTTGTCGGGTAGAAACAGAGTACTCCTTTCTG
GACTATGTGATGGGAGGCTGTCAGATCAACTTCACTGTGGGCGTGGACTTCACTGGCTCCAATGGAGACCCCTCC
TCACCTGACTCCCTACACTACCTGAGTCCAACAGGGGTCAATGAGTACCTGATGGCACTGTGGAGTGTGGGCAGC
GTGGTTCAGGACTATGACTCAGACAAGCTGTTCCCTGCATTTGGATTTGGGGCCCAGGTTCCCCCTGACTGGCAG
GTCTCGCATGAATTTGCCTTGAATTTCAACCCCAGTAACCCCTACTGTGCAGGCATCCAGGGCATTGTGGATGCC
TACCGCCAAGCCCTGCCCCAAGTTCGCCTCTATGGCCCTACCAACTTTGCACCCATCATCAACCATGTGGCCAGG
TTTGCAGCCCAGGCTGCACATCAGGGGACTGCCTCGCAATACTTCATGCTGTTGCTGCTGACTGATGGTGCTGTG
ACGGATGTGGAAGCCACACGTGAGGCTGTGGTGCGTGCCTCGAACCTGCCCATGTCAGTGATCATTGTGGGTGTG
GGTGGTGCTGACTTTGAGGCCATGGAGCAGCTGGACGCTGATGGTGGACCCCTGCATACACGTTCTGGGCAGGCT
GCTGCCCGCGACATTGTGCAGTTTGTACCCTACCGCCGGTTCCAGAATGCCCCTCGGGAGGCATTGGCACAGACC
GTGCTCGCAGAAGTGCCCACACAACTGGTCTCATACTTCAGGGCCCAGGGTTGGGCCCCGCTCAAGCCACTTCCA
CCCTCAGCCAAGGATCCTGCACAGGCCCCCCAGGCC**TAG**GTTCCCTTGGAGGCTGTGGCAAGTCCTCAATCCTGT
GTCCCAGAGGTCCCTCTGGGCCACAACCCAACCCTTCTCACTCTCCTCAGTGCTAGCACTTTGTATTTTTTGATA
CTTTTATACTTGTTTCTGCTTTTGCTGCTCTTGATCCCACCTTTGCTCCTGACAACCCTCATTCAATAAAGACCA
GTGAAGACC

FIGURE 2813A

GCTTCCTTTGGGAGCCCAACGTTTAGCTCAACTGTTCCAAGCACAGCCTCTCCAATGAACACAGTCCCGCCGCCA
CCAATTCCTCCAATTCCAGCGATGCCATCTCTGTGCCACCCATGACCCCACTGCCACCCATGTCGGGCATGCCGC
CCTTGAATCCGCCACCTGTGGCACCTCTACCTGCTGGAATGAATGGCTCTGGAGCACCTATGAATTTGAACAATA
ATCTGAATCCTATGTTTCTTGGTCCGTTGAATCCTGTTAACCCTATCCAGATGAACTCTCAGAGCAGTGTGAAGC
CACTCCCCATCAACCCTGATGATCTGTATGTCAGTGTGCATGGAATGCCCTTTTCTGCAATGGAAAATGATGTCA
GAGATTTTTTTCATGGGCTCCGTGTTGATGCAGTGCATTTGTTGAAAGATCATGTAGGTCGAAATAATGGGAATG
GATTGGTTAAGTTTCTCTCCCCTCAAGATACATTTGAAGCTTTGAAACGAAACAGAATGCTGATGATTCAACGCT
ATGTGGAAGTTAGCCCTGCCACAGAAAGACAGTGGGTAGCTGCTGGAGGCCATATCACTTTTAAGCAAAATATGG
GACCTTCTGGACAAACTCATCCCCCTCCTCAGACACTTCCCAGGTCAAAATCGCCCAGTGGGCAGAAAAGATCAA
GGTCAAGATCACCACATGAGGCTGGTTTTTGTGTTTACTTGAAAGGGCTACCATTTGAAGCAGAAAACAAACATG
TCATTGATTTTTTTAAAAAGCTGGATATTGTGGAAGATAGTATTTATATAGCTTATGGACCCAATGGGAAAGCAA
CTGGCGAAGGCTTTGTAGAGTTCAGAAATGAGGCTGACTATAAGGCTGCTCTGTGTCGTCATAAACAGTACATGG
GCAATCGCTTTATTCAAGTTCATCCAATTACTAAGAAAGGTATGCTAGAAAAGATAGATATGATTCGAAAAAGAC
TGCAGAACTTCAGCTATGACCAGAGGGAAATGATACTAAATCCAGAGGGGGATGTCAACTCTGCCAAAGTCTGTG
CCCACATAACAAATATTCCATTCAGCATTACAAAGATGGATGTTCTTCAGTTCCTAGAAGGAATCCCAGTGGATG
AAAATGCTGTACATGTTCTTGTTGATAACAATGGGCAAGGTCTAGGACAGGCATTGGTTCAGTTTAAAAATGAAG
ATGATGCACGTAAGTCTGAACGCTTACACCGTAAAAAACTTAATGGGAGAGAAGCTTTTGTTCATGTAGTTACCC
TAGAAGATATGAGAGAGATTGAGAAAAATCCCCCTGCCCAAGGAAAAAAGGGATTAAAGATGCCTGTGCCAGGTA
ATCCTGCAGTTCCAGGAATGCCCAATGCGGGACTGCCCGGTGTGGGACTGCCCAGTGCAGGACTTCCCGGTGCAG
GCCTGCCCAGCACAGGACTGCCTGGTTCAGCAATAACCAGTGCAGGACTGCCTGGTGCGGGAATGCCCAGTGCAG
GAATACCTAGTGCAGGAGGTGAAGAGCATGCCTTCCTGACTGTAGGATCAAAGGAAGCCAATAATGGGCCTCCAT
TTAACTTTCCTGGTAATTTTGGTGGATCAAATGCCTTTGGGCCACCAATCCCTCCTCCAGGATTAGGAGGCGGGG
CCTTTGGTGATGCTAGGCCTGGTATGCCTTCAGTTGGAAACAGTGGTTTGCCTGGTCTAGGACTGGATGTTCCGG
GTTTTGGAGGTGGACCAAACAATTTAAGTGGGCCATCGGGATTTGGAGGGGGCCCTCAGAATTTTGGAAATGGCC
CTGGTAGCTTAGGCGGTCCCCCGGGGTTTGGAAGTGGCCCTCCTGGTCTTGGAAGTGCCCCTGGGCATTTGGGTG
GGCCACCAGCTTTTGGGCCTGGCCCCGGCCCCGGCCCCGGCCCTGGCCCAATCCATATTGGTGGTCCCCCTGGCT
TTGCATCTAGTTCTGGAAAACCAGGACCGACAGTAATTAAAGTGCAAAACATGCCCTTTACTGTGTCTATTGATG
AGATTTTAGATTTCTTTTATGGCTATCAAGTAATCCCAGGCTCAGTGTGTTTAAAATACAATGAAAAAGGTATGC
CCACAGGTGAAGCCATGGTGGCCTTTGAGTCTCGGGATGAAGCCACAGCTGCTGTCATTGACTTAAATGACAGGC
CTATAGGTTCAAGAAAAGTAAAACTTGTATTAGGGTAGCCATTCACATCATTTTTTATAGGGTAGATCTTCATAT
TGCTGTGATTAATGCATCCAGATTGTTTTCCTAGTATTTCCAGGTTAGAACCTGTGGATTGTTTCAATTGCATAT
AGCTTGGTTTCCATAACATAGAGCATTGGTTGACTGTTTACAGAAGACTCACTCACCAGGATAAACATTGCTGTA
TGTTACAGTAAAGCTATCTGGAGAGAACACATAAATGATTTTGGCATACCATTAGAGAAACCATTTGTAAAACTC
AAATGACCACATAAAGCTTATCAAGGAGTCTAGATTGGTTTTGTTTTATACCATATGGGATGAAGAAAATAGAAA
TGTCAGTAGAACTCATTGAGGGTGCTCTTGCCAGCTGCTGAAAATAGAAGTTGGCTACTCTCAGAATTTGGTTTA
AAGCTGGACAGATTTGCTTTGTTATAGGGTAAAGCTTTGTCTAAAGTCCTCATTTTCTTTTAAAATTGAATAAAA
TTTCTGTATACAGATTCATTGTATGTACCTTTATTGCTTCTTAAGGGTCCTTGCTGTATAGACAGTCCTGCTTCA
GAAGTTGCTGCTTTGTTTGTCTAATTGACTCATTTGTAAATGAGCAGAACTGTTTTGTTGGTTTTTTTCCCTAAA
TATAAAAGTCCACACTTCGTTTGTGCTATAACCTCAAACTTTGATTTCTAATGTCACACTTAAAACTGTGTGGAA
TAAGACTTTTGCCATAAAAATAAACTATGGAGTCCTTTATCTACCAGAGCCTTTTTGGTTTGACCGCCACGATTT
AGGTTAGTCAGTTTAAAAATTGTTCATGTTGTTTGGATGGTATCGAAAACCAGAAACCACTTTTAATAATGTGTT
TAAGATACTTGATTTGAAGTCCTTTTCATATGGACTAATTGTAGTATCAATTTCCTCCTGTCCCGATTATGTGAA
ATTTTGGCCTTTAAACAAAGAGGGGCCCATTCATAAGAAAGTGTTATATCTAGGTTTTTAAAACTGAAGTTGAAA
TTATCTTTGTTAGCAGTAGTAGTATAGAATAAAAGATCCGTATGCTGGTTCGTAGATTGATACGTGTTAGTCCTG
TTATTTGGAGGCTTTTTGGCATAGTTGTTCGATCAGGAGCCTGTTTACTAAAAGTCTTCATACAGAGTACAAGTG
CAGCCGCCAGAGGAGAAAATTGAGATTCTTGACCCTTTCATACTCTTTTCTTTGGTATTCAGGACACTAAGGCAG
GAGGACCACATGAGTTCTGGTTGGTAAGTGTCCTTGTCATGAAAACACTTGCCTTACAAGGCTCTAATTATGATT
TCCCTAGTCAGTGCTCTGAAGATGTGTCACATTATATTATAAACAATACGGAAGGGGAGATAGGTGAGATGATAT

FIGURE 2813B

GAAAAACAAATTTTCTCACTGTCATAAAAGGCTCTAATTATGGTTACTTTCCTTGTGATGAAAAACTTGGCCTTA
CAGGGCTCTAGTTATGGTTACTTTCCCTAGTCAATGCTCTGAAAATGTGTCACATTATAAACAATACAGAAGGAG
AGATAGATGAGAGATCATGAAAACCAAATTTTATCTTTTACATGGCCCCTTTGTCTTCGTTTGAAACATCCCCAA
CATTTCCTACAAATCAGCGTAGTTACAAAGGGGTCAGTCTTTTAAAATAAGTATTTCCTATTAAACTATATATAT
ATACAGTGCCTTTTTGGTGTTGTGAGTCAGTGGAACACTGAAATACAGCGGTTGTGTAATTTAAGAGTGGCAACA
GTTTCATTTGATAAGATTTGAAAAGGCTTTTTATCACTACAATCTTAGAGGATTGACAGTACAGGATTTTTGTTT
AAGAGAAGGATTGTTTAGACTCAAGAGGTGACTATGTTGTGGGTCTTTTGATAATTCATGAATACAGATTTGCTT
TGACCGATCACTAGATACTGCCTCCTCAATTTCAAAAGCAATATAACGTTTGTATATGCTGTTTAATTTAAGTTA
ATGTTAAGTAATCATTTCTCATTCCAAAGACAATGCAAAAAACTTCAGCACTGCTTGAGAGTTGTATTTCAGCCA
CAGATATTTTCTCCATTGGAAAGCTATTTTCATTTTAGAAAAATGGGTTGTTTGAAGATGAAAGTCTTTTATCTT
TTTTCACAATTTATTTTGGTTATATGTTCGTACATTCTTATTAAATATTTCATACACTTTATTGCAACTACTTTG
TTATTTCTACATCTTAGATAAATGCTGAAAAGGAAAACGATTTCATTGTTCATCTAATTAAATAAATTAAAAGAG
CGGTTTGTGTAGAAATTGGAGAGAACTATGTTTTATATGAATCACAACAGTGCTCGTTGTGGACTGTAATTAAAT
GCTTTGCCCTCTGGAACTTG

FIGURE 2814

GAGCCTGGGGCCCAGGACTGCAGCGGCTTCGGAAGGTGGGCTCTGCCAGCGGGACCATGCTGCTCCGAGCCGCTT
GGAGGCGGGCGGCAGTGGCGGTGACAGCGGCTCCAGGGCCGAAGCCCGCGGCGCCCACTCGGGGGCTGCGCCTGC
GCGTTGGAGACCGTGCTCCTCAGTCTGCGGTTCCCGCAGATACAGCCGCTGCCCCGGAGGTGGGGCCAGTGCTGC
GACCTCTCTATATGGATGTGCAAGCTACAACTCCTCTGGACCCCCGGGTGCTTGATGCCATGCTCCCTTACCTAA
TCAACTACTATGGGAACCCACACTCCCGGACACATGCTTATGGCTGGGAGAGTGAGGCAGCCATGGAACGTGCTC
GTCAGCAAGTAGCATCTCTGATTGGAGCTGATCCTCGTGAGATCATTTTTACTAGTGGTGCTACTGAATCCAACA
ACATAGCAATTAAGGGGGTGGCCCGATTCTACAGGTCACGGAAAAAGCACTTGATCACCACCCAGACAGAACACA
AATGTGTCTTGGACTCCTGCCGTTCACTGGAAGCTGAGGGCTTTCAGGTCACCTACCTCCCAGTGCAGAAGAGTG
GGATCATTGACCTAAAGGAACTAGAGGCTGCTATCCAGCCAGATACTAGCCTGGTGTCAGTCATGACTGTGAACA
ATGAGATTGGAGTGAAGCAGCCTATTGCAGAAATAGGGCGGATTTGCAGTTCCAGAAAGGTATATTTCCATACTG
ATGCAGCCCAGGCTGTTGGAAAAATCCCACTTGATGTCAATGACATGAAAATTGATCTCATGAGCATTAGTGGTC
ACAAAATCTACGGTCCCAAAGGGGTTGGTGCCATCTACATCCGTCGCCGGCCCCGTGTGCGTGTGGAGGCCCTGC
AGAGTGGAGGGGGGCAGGAGCGGGGTATGCGGTCTGGGACAGTGCCCACACCCTTAGTGGTGGGGCTGGGGGCTG
CGTGTGAGGTGGCACAGCAAGAGATGGAGTATGACCACAAGCGAATCTCAAAGTTGTCAGAGCGGCTGATACAGA
ATATAATGAAGAGCCTTCCAGATGTGGTGATGAATGGGGACCCTAAGCACCATTATCCCGGCTGTATCAACCTCT
CCTTTGCATATGTGGAAGGGGAAAGTCTGCTGATGGCACTGAAGGACGTTGCCTTATCCTCAGGGAGTGCCTGCA
CCTCTGCATCCCTGGAGCCCTCTTATGTGCTTAGAGCAATTGGCACTGATGAGGATTTAGCGCACTCTTCTATCA
GGTTTGGAATTGGCCGCTTCACTACAGAGGAGGAAGTGGACTACACAGTGGAGAAATGCATTCAGCATGTGAAGC
GTCTTCGAGAAATGAGCCCTCTCTGGGAGATGGTTCAGGATGGCATTGACCTCAAGAGCATCAAGTGGACCCAAC
ACTAGAAGAATAGGGCCCTGACTTTGTGCTGGTCTGGCCCCTCCTGCCTCACCAACCCGTGCACAACCAGACACC
TTGTTACACCTAGTGGATGCTCTAGATTGGTATAGACCAGTTGACTTCAGCATCAGTCCACCTCTATGACAGAAA
CACAAGAAAACTGTCTTTCCCTAGCTTCAGTTCCTTGGGTGTGGAGCACTCCCCATTTCTTCTCGGGTCTTAAAG
TGTGTGGACATTTTCATCCCGAAGCCATAGAGACATTTGCTGTCATATTGCTGCTGGGCACATCTGTGCTCTTGG
TGAGGAGAGCAAGAGGAACCAGAAGAAGTCTCTTTGGTCAGGGACCATGATGCTCTACATGGACATTTGAGTCTT
CGTCTTCTGCTGCTGCTCGGCTGGACCAGCTTCTTTAACAGCAAGCATAATCCACTTCAATGTAATATTTTCTGT
AGCTCCAAAGGCTATCTCTTCATATTGACTGCAGACAGACTGAATGGACAGTTTCTTAGAGGGCTTGTCTCCTTT
CTACCCTTGTCCTCTTTCCTTTCCTTTGACCTAATGGAGCTAGAAATATGTCTGTGACTCCACCAGTTATTCTAA
TAATTTGTTTTCTTGAAAATTGTTAATTTCAAGACTGGAGAAATAAACTCACCTTCTATTTACTCTGTGACTTTA
TGAGAGGTTGAGGGAAAAGTGGAAGCTGTACTTGGGAATTGTGGAGAAGACCGCCACTCCATCTGATTTGCATAA
ATGACTCAGTGGGCTTTTGTATCTCTTCATTTAAGAATTATTTGAATGCCTGCCAGGAGCCAGATTTGTTCTGGG
TATTAGGAATACACTGGTTAACAGGACCAAAAAAGACCCTGCCCTCACTGAGTTTTAAATTTTAGTGGAGAGATG
GAAAATAATTAAACAAATAAACAATGTTATAGATTGTG

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FIGURE 2815

GACGCGGGGCCGGAACGCGAAGAGGGTGGTGGAGTCGGGCTACCCACTGATTTTCCTTCCCTTACTTCCCCTGAG
CCCTTGGGCCCACTTCCCAGCCTACCGCTTCCGTCCCCGCCCGACTCTTGGGCCAGCGCCTGGGCCCACACTTTC
CTATCCCCCGCAG**ATG**CCGGTGGCCGTGGGTCCCTACGGACAGTCCCAGCCAAGCTGCTTCGACCGTGTCAAAAT
GGGCTTCGTGATGGGTTGCGCCGTGGGCATGGCGGCCGGGGCGCTCTTCGGCACCTTTTCCTGTCTCAGGATCGG
AATGCGGGGTCGAGAGCTGATGGGCGGCATTGGGAAAACCATGATGCAGAGTGGCGGCACCTTTGGCACATTCAT
GGCCATTGGGATGGGCATCCGATGC**TAA**CCATGGTTGCCAACTACATCTGTCCCTTCCCATCAATCCCAGCCCAT
GTACTAATAAAAGAAAGTCTTTGAGT

FIGURE 2816

CGGGCTGGGCGGTTCCGCGGCCTGGGCCTAGGGGCTTAACAGTAGCAACAGAAGCGGCGGCGGCGGCAGCAGCAG
CAGCAGCAGCAGCAATCTCTTCCCGAACACGAGCACCACAGGCGCCCGAAGGCCGGAACAGGCGTTTAGAGAAAA
TGGCAGACGATATTGATATTGAAGCAATGCTTGAGGCTCCTTACAAGAAGGATGAGAACAAGTTGAGCAGTGCCA
ACGGCCATGAAGAACGTAGCAAAAAGAGGAAAAAAAGCAAGAGCAGAAGTCGTAGTCATGAACGAAAGAGAAGCA
AAAGTAAGGAACGGAAGCGAAGTAGAGACAGAGAAAGGAAAAAGAGCAAAAGCCGTGAAAGAAAGCGAAGTAGAA
GCAAAGAGAGGCGACGGAGCCGCTCAAGAAGTCGAGATCGAAGATTTAGAGGCCGCTACAGAAGTCCTTACTCCG
GACCAAAATTTAACAGTGCCATCCGAGGAAAGATTGGGTTGCCTCATAGCATCAAATTAAGCAGACGACGTTCCC
GAAGCAAAAGTCCATTCAGAAAAGACAAGAGCCCTGTGAGAGAACCTATTGATAATTTAACTCCTGAGGAAAGAG
ATGCAAGGACAGTCTTCTGTATGCAGCTGGCGGCAAGAATTCGACCAAGGGATTTGGAAGAGTTTTTCTCTACAG
TAGGAAAGGTTCGAGATGTGAGGATGATTTCTGACAGAAATTCAAGACGTTCCAAAGGAATTGCTTATGTGGAGT
TCGTCGATGTTAGCTCAGTGCCTCTAGCAATAGGATTAACTGGCCAACGAGTTTTAGGCGTGCCAATCATAGTAC
AGGCATCACAGGCAGAAAAAAACAGAGCTGCAGCAATGGCAAACAATTTACAAAAGGGAAGTGCTGGACCTATGA
GGCTTTATGTGGGCTCATTACACTTCAACATAACTGAAGATATGCTTCGTGGGATCTTTGAGCCTTTTGGAAGAA
TTGAAAGTATCCAGCTGATGATGGACAGTGAAACTGGTCGATCCAAGGGATATGGATTTATTACATTTTCTGACT
CAGAATGTGCCAAAAAGGCTTTGGAACAACTTAATGGATTTGAACTAGCAGGAAGACCAATGAAAGTTGGTCATG
TTACTGAACGTACTGATGCTTCGAGTGCTAGTTCATTTTTGGACAGTGATGAACTGGAAAGGACTGGAATTGATT
TGGGAACAACTGGTCGTCTTCAGTTAATGGCAAGACTTGCAGAGGGTACAGGTTTGCAGATTCCGCCAGCAGCAC
AGCAAGCTCTACAGATGAGTGGCTCTTTGGCATTTGGTGCTGTGGCAGATTTGCAAACAAGACTTTCCCAGCAGA
CTGAAGCTTCAGCTTTAGCTGCAGCTGCCTCTGTTCAGCCACTTGCAACACAATGTTTCCAACTCTCTAACATGT
TTAACCCTCAAACAGAAGAAGAAGTTGGATGGGATACCGAGATTAAGGATGATGTGATTGAAGAATGTAATAAAC
ATGGAGGAGTTATTCATATTTATGTTGACAAAAATTCAGCTCAGGGCAATGTGTATGTGAAGTGCCCATCAATTG
CTGCAGCTATTGCTGCTGTCAATGCATTGCATGGCAGGTGGTTTGCTGGTAAAATGATAACAGCAGCATATGTAC
CTCTTCCAACTTACCACAACCTGTTTCCTGATTCTATGACAGCAACACAGCTACTGGTTCCAAGTAGACGATGAA
GGAAGATATAGTCCCTTATGTATATAGCTTTTTTTCTTTCTTGAGAATTCATCTTGAGTTATCTTTTATTTAGAT
AAAAATAAAGAGGCAAGGATCTACTGTCATTTGTATGCAATTTCCTGTTACCTTGAAAAAATAAAAATGTTAACA
GGAATGCAGTGTGCTCATTCTCCCTAAATAGTAAATCCCACTGTATACAAAACTGTTCTCTTGTTCTGCCTTTTA
AAATGTTCATGTAGAAAATTAATGAACTATAGGAATAGCTCTAGGAGAACAAATGTGCTTTCTGTAAAAAGGCAG
ACCAGGGATGTAATGTTTTTAATGTTTCAGAAGCCTAACTTTTTACACAGTGGTTACATTTCACATTTCACTAAT
GTTGATATTTGGCTGATGGTTGAGCAGTTTCTGAAATACACATTTAGTGTATGGAAATACAAGACAGCTAAAGGG
CTGTTTGGTTAGCATCTCATCTTGCATTCTGATCAATTGGCAAGAAAGGGAGATTTCAAAATTATATTTCTTGAT
GGTATCTTTTCAATTAATGTATCTGTAAAAGTTTCTTTGTAAATACTATGTGTTCTGGTGTGTCTTAAAATTCCA
AACAAAATGATCCCTGCATTTCCTGAAGATGTTTAAACGTGAGAGTCTGGTAGGCAAAGCAGTCTGAGAAAGAAA
TAGGAAATGCAGAAATAGGTTTTGTCTGGTTGCATATAATCTTTGCTCTTTTTAAGCTCTGTGAGCTCTGAAATA
TATTTTTGGGTTACTTCAGTGTGTTTGACAAGACAGCTTGATATTTCTATCAAACAAATGACTTTCATATTGCAA
CAATCTTTGTAAGAACCACTCAAATAAAAGTCTCTTAAAAAGGCC

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FIGURE 2817

ATGAAAAGAGTCAAGAGATTCCTTGAGAAGAGAGAACCAAAACTCAATGAAAATATTAAAAATGCAATGCTGATT
AAAGGGGGAAATGCAAACGCAACAGTGACACAAGTACTTAAAGATGTGTGTGCACTGAAAAAACCATACGGTGTA
CTGTATAAAAAGAAAAATGTTACAAGACCTTTTGAGGATCAGACATCACTGGAATTACTTTCAAAGAAGTCAGAT
TGTTCTTTATTCATGTTTGGCTCCTATAATAAGAAGCGGCCAAATAATCTAGTAATAGGTCATATGTATGACTAC
CATGTGCTGGATATGATTGAATTAGGTATTGAGAATTTTGTCTCTCTAAAAGACATTAAGAACAGTAAATGTCCT
GAGGGAACAAAACCCATGCTAATATTTGCTGGTGATGATTTCAATGTAACAGAAGATTACAGAAGACTAAAAAGT
CTTCTTACTGATTTCTTCAGAGGCCCCACAGTATCAAATATCTGCCTGGCTGGATTAGAATATGTTCTGCACTTC
ACTGCACTGAATGGGAAGATTTACTTTCGAAGATATAAGTTGCTGTTGAAGAAATCTGGTTGCAGAACACCACGG
ATTGAATTGGAAGAGATAGGACCCTCATTGAATCTGGTTCTGAGGAGGACACACCTGGCATCCGATGACCTTTAT
ACATTATCTATGAAAATGCCAAAAGCTCTCAAGCCAAAGAAGAAGAAAAATATCTCCAATGATACTTTTGGTACA
ACTTATGGAAGGATTCATATGTAG

FIGURE 2818A

GAGAAATAGGGAGATGCAGGAAGTGGGGGCCCATGGGGCCCCCAAGAAGCGGACTCTCCAAGGGGTACCCCCACC
CCGCTACCTTCCCCACGGACGGGCCCCTCCTGGAGCCCATACCCTCCTGTGAGGCCATTCCAGTGTCTTCTAGAA
AGACTCGCTTGCCAGGAGTGCGTTCTTTGTTGAAAAATGCCCTGAAGCGAAAAGATGCAGGTTTATATGGAACCC
CCACCCCCTCCCCCACTCTCCCACTCTGTTCGTTCTGAATGTCTTCACGAGCGTGCATCAGGGCGCCTGGCTCCC
CCACCTCAGCCAGTGAGTCAGACACGGGTTTCGCAGCCATGTTTCCTGGCTCCGAGGACACGGGTGGCAGGCCCG
TTGCAGCCCAGAGCCACTGGTCCCTACAGGGCGCCGCCACACCAGCAGGAAGGAGGATGGCTGTGTCCGGAGCCT
GGCGGGGAGGCGGCCTCCCCAGTATGTGAGTGCAGGGATCTGCCAGAACCACCTGGCCCTCTGTAGGGCGTTTAA
CTGGAAATACCCTCACTGCCAAGTGGAGACTGGGGCGTGTGCCACATTGCCAGCCACCAGGAAAGCTTTTCTTTT
TCTTTTTTTTTTTTTTTTAAACACCAAGAGCACGTATAGCATGGGGGAAAGAACCTAAATGTCTCTCTGTCCTGT
GAGCTGGTGAAAAACCCAGCATGAGAACGCAGTGTCAGGTGTGGGACTCCTTCTGCCCCTGCAGTGGGTGTTACG
GGCGGTGTGCCCTGGCGAGCAAGCTTTGATTCTTGGTTCTTTGAGCTCGTTTCAGAGGCTGAGTCCCCACATCAG
CTTTAGTTCTTGGACTTCCCTGTATTAAGCAAGAATTAGGAGAATGGCTGTCCCTGCAGGCGCCTCCCGTAAATC
CTGAGCTCTCTGGCGCAATCTGAAACTTCTCTTCTGTTTTCTTTGGCTGTATCAGCCGAACCAGGAGAGGCCTGG
GCTGCGACTAAGGAGAAAGAAATCGGGGGTTTCTGAGAGCAGATGGTGCCTTTGTGGGTGCAGGGCTTTTGTGGA
AATTGTCAGCCTCTACGGGCAGAGTCCGGCATCCCCTCCCCAGACTGCCTGCTGTCAAACCACGGAGCAGCTGGA
GCCTGCCCTGTCCACGGCCCGTTTCCACCCGGGCATGTTCGTCTCTCCTGACTTCGGCAGAGGCCCCTGGTGGCC
TTCAGTTTCAGTTTCTCATCCAGGAAGGTAACCTTGGGCATTGGCAGTGGGTTTCCCTATGGCTTGGATCCAGAT
TAGAATTGATCTTTGTTTTCACTTTCCATAGTTAATAACATGCAAAATAATGAGAAGAATTTATTTTAAGGTGAC
AGCTATACTGGTCCAACATCGCCTGCTTATTGTCAGGGTACAGAAGTTTAATACTTTCTTAATCCAGTTTTTCAA
ACTTCTCCCTGTAGACCGTAAGGATGAATTCCACAATAGGATCCTTTTTAAAATCGATTTTAAATTGTTGCCTAG
TCCTGCCAAGGTTATTATGTGCATCTGTTATTTTTCCAATACATGTAAACAGTTGCAGCATGATGCTTTGTTTAA
TGTCCTGTTCTTAAGCTCGTTAGAGCCAGTTTTGAAACGTTTGGTCTTACCGTGAACGGAGGCTGGCTTGGCTTA
GCCACGCTGATGAGTAAGTGAGGGATGTCTCCATCTTGAGATCACCAGGCAAGAGAGTTGCCTGCACCAGGTAAG
AGGCCAAAGCCCCTGGGGTAACAGTCCCCACCGCTACCCGAGGTAAAACAATAAAAGCTATGTGGTTGAGCTCAG
GCCTCTCGTGCCTGGTGTCAGAGAAGGCAGAGCCCACAGTAGGTGCACGGTGCAAGGCCCTGGGAGGGCACTGGC
CAGGGAAGGTGGTATAGATGGCCCTCAGATTGCGGGGCCCCGAGCAGCTCCCCACTCTGCCCGTCCACCTTCCCT
GGCTCCAGCCTCATTCTCTCTTTAGTTTAACTATGCAAAGAGAGGAGGTTGAGAGTGTTCTGGCAGCTGGAGCTC
TTTTCCTTGTCCTTCCTGCCCTCCGATGGGGCCACCTGTGTCGGGGCAGCAGTGTCCATGTTTATGGAGATCAGA
GGTGTCCCCACTGTGTGGCTGGACTGTACTCTGCTGCCCGGGTAGCCAGGAGTCTCTCCCTCTCTCCCCTGCCGC
CTGCCTGGTCTCATGGGCCTCCTTCACACACCCCTCCCTGTGGATCGCCTGCCTGGGCCCAGAGCAGGGGAACTG
GAGTTTGTGAGTGAGCAGAGCAGGTTATGTGCAGACAGGGAAACGAGAACTTTGGACCTGGCTTTCTGAGTCCAG
GTGAGAGCTGTGTGGCCCCCCGATGCCACTCTGCCCGCCGGAGGGATGTGCCTGCTGAGCCTTTTCCTTCCACGC
CGCCTCTCACTGCCAGGCCAGCGGCTTCCGCTGAGACTCGCTGGAGAGGCGGCTCCCGTGTCCGTCCACCGAGCA
CTCAGATGGATGCTGATCACCAGGGCCGAGGGGGCTCCCAGAAGGACCCCAGGCCCTGGGGAGGGTGGCTGTGGG
AGGCCAAGTCCACTGCCCGGAAGTCTTGTCAGCCCTAAGCCAGGGAAGCCTGGAGCGTGGCCTGGCGGGTCTGGG
TGGACACCGTCCCCACTCCGGACTCCCAGCACAGGGGAGGATACCTGAGCCTGTATGGCCCTGTAGCCCTGGGCA
GAGCTGGGCCTGTCGTGTGTTCCTGCCTGGCAGGTGCAGGTGCTGGCCATCTGCAGGTGGAAGGAGGTGGGAATC
TTGGATTTTTTGTTTTTTTTTGTTTTTTTTTTTTTGAGGTGAAGTCTCGCTCTGACACCCAGGCTGGCGTGCAGT
GGTGTGATCTCGGCTCACTGCAAACTCCGCTTCCTGGGTTCAAGTGGTTCTCCTGCCCCAGCCTCCCAAGTAGCT
GGGATTACAGGCATGCGCCACCACGCTCAGCTGATTTTTGTATTTTTAGTAGAGATGGGGTTTCACCATGTTGGC
CAAGCTGGTCTCAAACTCCTGACCTCAAGTGATCTGCCCGCCTCGGCCTCCCAGAGTGCTGGGATTACAGGCATG
AGCCAGTGCACCCGGCGGAATCTTGGAATTTTTATAGACAGCACCTCAGTTTCTGACTCCAGCCGCACACCTCCT
GCCTCTGCCAGCAGGGGTTGCCGCCAGACCAGAGCCAGGGCCAGGTCCCTGCGTCCATCCCCCCCGGTAGGATGG
ACGTGAGCCATCCTTCTAGGGGACTTTTTTCAGTGTGCGACTCGTCTCTGTTAGGTGGTAGGAGCCAGTTTGTGT
GGCCTGTGCCACGCTCCACAGTGCGTGGCTGGGCTCTGTGTGTGGCCTGTGTCCCCTGTCCCTGCAGGACCCAGC
AGGCATCGTGGCGTGACAGCTGTGTCCAAGCCACTGCCCGGGCATCCCATCACCCACCAGGGTGCACGGTCTCTC
CTGCTGGGGGCTTTCTGTCGCATGTGTGTCTCCTGTCGACTCTGCAGTTTGTTCTCAGAGCAGAATGTTTCCTGT
TCTCAGTGCACAAAGACACTGGTTTTCAATCGGCGTCTAAAACCACGTTCCTGCCTTTCATTGCAACACGGTGTG

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FIGURE 2818B

TTCATTTGTTTAAAACAGTTTAATGAGTAAGTTTAGATGACTGGTCAATATCTTAAAAATGTATATTAGTAAGAA
GTTCTTCCTGGAATTTTTCTTTCGATTCTGGCAGAATAAACAGGTGTTTTTAGTTTTCCCACTGTCTGAGCCAAG
CAGGACCCTGTCCCAGAGCAAGAG**ATG**TCCCCTTCCATCTCTGACCCTTGCCTGGGACAAGCTTTGATGGGGGGC
CCCAGCTTCAAGGCTGTGGTGGGAACAGCACCCCCAAATGCCAGCCTCTCCTTTCTTCCCATCCACCAGTATACT
GCGGGGCCATTTCTGGTCTTTGTCCAACAGGAAACCCATTTCTGGTGGGATATGCCTTCCAGTGCCACAGGGCCA
CTCACCCCATGCATCTCTGTCCTGCCCGTCAGTGCTGGGACGGACAGCAAGGGCAAGCCCAGTGTCTGGCGGATA
GGTGGGTGGGAACAGAGAGGGGAGAATGCCGTCCTAAGCTTCTGCTTGGGGATCCCCCACACGACCTGGGTACTG
CCTGGGAAACCTGTCCTAAGTAAAACTATGGACCTCGCCTCGCCCACCGGCCTGCGAAGCCAGCATCTCCGTGAA
GGTGGATGGAAGCGCCTTTGTCCTCATTTTGAGCTGCAAGCTGGGTCAGCGGCTCTGAAGCCCTCGAGTGACTTT
CTAACCCAAGACCCAGCCCCTGGCAGGAGGAGGGTGGGTGCAGGGCTGGTGGGACAAAAAGAGGCCTCAGCAGGC
CTGGAAGACCCTTCCAGTACATCCCACAGCGTGTCGAGCAGCTGGGAGAACCTGTGTCAAGCTCGAGCCGTCATA
GGTCCCCATGAGGTGTCTGAAGCCCCTTCTTGG**TGA**TGGGAGGCAGAGGTGCTGACGTTCTGGAGCATGGACGTG
AGTCCTCAGCTGGCTCCGCGTGGGCCCTTGGAGGGTGCCAGGTGTGTGGTGACCTTCTGGATGCCTTTAACTTCA
TGGCTGCGTCATTCCTGATTTAGAACTTTAACCGGAGCTTCATCTAGTGATTGCAAAACTGGACCAATGGGAGGA
CGGCGGCGCAGCCCGCTCCCTCCGTGGAATGGAGCTCAGCTCTTCGGAGGCATCAAAGCACCTGTCGCCTCCGTG
GTCCCCCTGCTGAGGGAGTGCGGCCTCTGCAAGGTTCGGGGGTGGCTTCGTTTGCCTGGAGTGGCCGGCCCTGCT
TGTGCCATGTGGATGTTTGTGAGCCTCGGTCCTACAGCACTGTGTAGGCTGCATCTGTTTCGTGCTGGTCCTGTT
GACTTGTATGATATCCACAAATAAATATTTTCATGGC

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FIGURE 2819

CCCGCGCGTCACGTGACCCCAGCGCCTACTTGGGCTGAGGAGCCGCCGCGTCCCCTCGCCGAGTCCCCTCGCCAG
ATTCCCTCCGTCGCCGCCAAG**ATG**ATGTGCGGGGCGCCCTCCGCCACGCAGCCGGCCACCGCCGAGACCCAGCAC
ATCGCCGACCAGGTGAGGTCCCAGCTTGAAGAGAAAGAAAACAAGAAGTTCCCTGTGTTTAAGGCCGTGTCATTC
AAGAGCCAGGTGGTCGCGGGGACAAACTACTTCATCAAGGTGCACGTCGGCGACGAGGACTTCGTACACCTGCGA
GTGTTCCAATCTCTCCCTCATGAAAACAAGCCCTTGACCTTATCTAACTACCAGACCAACAAAGCCAAGCATGAT
GAGCTGACCTATTTC**TGA**TCCTGACTTTGGACAAGGCCCTTCAGCCAGAAGACTGACAAAGTCATCCTCCGTCTA
CCAGAGCGTGCACTTGTGATCCTAAAATAAGCTTCATCTCCGGGCTGTGCCCCTTGGGGTGGAAGGGGCAGGATT
CTGCAGCTGCTTTTGCATTTCTCTTCCTAAATTTCATTGTGTTGATTTCTTTCCTTCCCAATAGGTGATCTTAAT
TACTTTCAGAATATTTTCAAAATAGATATATTTTTAAAATCCTTAC

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FIGURE 2820

GCGTGCTCAGTGTGCTGGGTACCAGGCGACTCCGGGACAGGGGGTCTCGGCCGTCGGCGTC**ATG**GTTTCGCGCGT
GCAGCTCCCGCCTGAGATCCAGCTGGCTCAGCGCCTGGCGGGGAATGAGCAGGTGACCCGGGACCGGGCGGTGAG
GAAGCTCCGGAAATACATCGTCGCCAGGACTCAGCGGGCCGCAGGTGGTTTTACGCACGACGAGCTGCTGAAGGT
GTGGAAAGGACTGTTTTATTGCATGTGGATGCAGGACAAGCCACTCCTCCAGGAAGAATTAGGAAGGACTATTTC
CCAGCTCGTTCATGCTTTTCAGACCACGGAGGCGCAGCACCTGTTCCTTCAGGCCTTCTGGCAGACCATGAATCG
CGAGTGGACGGGCATTGACAGGCTGCGCCTGGATAAATTCTACATGCTCATGCGGATGGTCCTGAACGAGTCCTT
GAAGGTTCTGAAGATGCAAGGCTGGGAAGAAAGACAGATCGAGGAGCTGCTAGAGCTGCTGATGACTGAGATCCT
GCACCCCAGCAGCCAGGCCCCCAACGGTGTGAAGAGCCACTTCATCGAGATCTTCCTGGAGGAGCTGACCAAAGT
GGGCGCCGAGGAGCTTACGGCAGACCAGAACCTGAAGTTCATCGACCCCTTCTGCAGAATTGCTGCCCGGACCAA
GGATTCCTTGGTTTTGAACAACATCACTCGAGGCATCTTTGAGACGATTGTGGAGCAGGCCCCGCTTGCCATTGA
AGACCTCCTGAATGAACTGGACACACAGGATGAGGAGGTGGCGTCGGACAGTGATGAGTCCTCTGAGGGTGGTGA
GCGTGGAGACGCGCTGTCCCAGAAGAGGTCTGAGAAGCCGCCCGCAGGCTCCATCTGCAGGGCTGAACCTGAGGC
TGGTGAGGAGCAGGCAGGTGACGACAGGGACAGTGGCGGCCCCGTTCTCCAGTTTGACTACGAGGCAGTTGCTAA
CAGACTGTTTGAAATGGCCAGCCGCCAGAGCACCCCTTCTCAGAACAGAAAGCGTCTCTACAAAGTGATCCGGAA
GCTGCAGGACCTGGCAGGAGGCATTTTCCCTGAAGATGAGATCCCAGAGAAGGCCTGCAGGCGCCTGCTTGAAGG
GAGGCGGCAGAAGAAGACGAAGAAGCAGAAGCGTCTGCTCAGGTTGCAGCAGGAGAGAGGGAAAGGTGAGAAGGA
GCCCCCGAGCCCGGGCATGGAGAGGAAGAGGAGCAGGAGGAGGGGTGTAGGGGCCGACCCCGAGGCGCGGGCAGA
GGCTGGTGAGCAGCCAGGCACAGCTGAGCGGGCCCTGCTCCGAGATCAGCCCAGGGGCCGTGGCCAGAGAGGGGC
TCGCCAGAGAAGGAGGACACCTCGGCCCCTGACCAGTGCCCGAGCAAAGGCGGCCAATGTCCAGGAGCCGGAGAA
GAAGAAGAAACGCAGGGAG**TGA**TGTGGCCGGGCCAAGGACAGGCAGGGAGGGAGGCCAGGCCTCGCTTGCACCGC
GGGACGAGGCTGACCGGGCTGTTCTGTAGACTCAGGACCGTGGCTCCAGAACTCCTGTGCCAGGCGGGAGGGAAG
GGCGGCACTGGAGAGATGGGCCCATCATTAGGGGCCAGCATCCCAGGAACTGGACCTTTCCCCAGAGCCTCCGCC
TGTGGCTGTGATGACCTTGGGCCAGAAGGTCAAACTCCGAAGACTGAAACTCTGCCTGCAGCAGGACTGGCCGCC
CCTGCTGTGGGGGGTTCAGAAAATAAAATGCCGCGCAGCCCTTGCCAGGGGAAGTGTCGCTTCAGGTGTGTCCTA
CGGACGTGTGGGAGGTGGCAGGCGCCAGCCTCCGAGCAGTGTGGTGGTTTATATTCATGTTTGTGGAAAAATCTT
GCAAGACATTTCTCCTTTCACAGAACTGCCCAGGTGTTAACAGGGCTGTCTGGACGGGGCTCTTTTGCTTCCCCC
TCAATCTGGGGTCTAGAGTTGTGCAAGGAATTCAGCTCCAGTAAGGCCTGGATTGCCCGGGGTGAGCGTGTGTGT
GGTGGGAAGACCTGGCTTCCGCGAGAGCCTTGTTCCTGGAGGCAGGAGCGCCCCGCCATCCTGGGTACCCGCGGG
TCCGCAGGCTGCGCACCTCTTTCCCTCAGCCAGGTCACCCTCAGCGTCCTCCCTGCCCCTCTCCCCTTCACACCT
GCTGGAGCCTGTGAGGGAGGTGGCGGGTCCCCACTGTGGCGACGGAGAGCTGACAGTAGCCCAGGGCTTTCCACC
TGCATGGAACAAGGGCCTGTCTGCCGCCAGCGCTGTGGCCACAGCCTGCATAGGTGACAAGGGGCCGCTGCGTTG
GGTTTTGCCCGCATCTTCTGTTCCATGGGTGCCCAGCCAGCCAGGCCGTGTGGGATCCAGCGAGAGGCCAGGGCT
TGGAGTGGGCCTGGGACCAGGAAGGACCTCTAGGCTGTGGCTGGCCTTGTGCAGACCCTGGACTGCATCCGGTTC
CCCAAAGCCCTGCTGCATTCGAGTGTCCCCCAACCCCGGGCAGGTGGCACCTGGTGACACCTCCTTCAGTCCCAC
TCAGCTGGGCGGCCGGGGCAGGCTTAGGGCACAGTTAGGGGCCAAGGAGAGGGAAGGCCAGGGCCCCTGTTCTAG
GGGTTAGGGTTCTTTCCCCAAAGGAACTTAAAAAGACAAGCGTGGCCAGGCACAGTGGCTCACACCTGTAATCCC
AGCACTTTGGGAGGCCGAGGTGGCCAGATCACCTGAGGTCAGGAGTTTGAGACCAGACTGACCAACATGGAGAAA
CCCCATCTCTACTAAAATACAAAATTAGCCAGGCGTGGTGGCACATGCCTGTAATCCCAGCTACTCGGGAGGCTG
AGGCAGGAGAATTGCTTGAACCTGGGAGGCAGAGGTTGTGGTGAGCTAAGATCACGCCATTGCACTCCAGCCTGG
GCAACGAGAGGGAAACTCTGTTTC

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FIGURE 2821

TCTATGAAACCAACATACATGGCGTTTGCATCACAGTTGGAGTCAGATGTGAGCCCGGAGGGCAGGTGTCTGGCT
TGTCCAGCCGGAAGCCCTGAGGGCAGCTGTTCCCACTGGCTCTGCTGACCTTGTGCCTTGGACGGCTGTCCTCAG
CGAGGGGCCGTGCACCCGCTCCTGAGCAGCGCC**ATG**GGCCTGCTGGCCTTCCTGAAGACCCAGTTCGTGCTGCAC
CTGCTGGTCGGCTTTGTCTTCGTGGTGAGTGGTCTGGTCATCAACTTCGTCCAGCTGTGCACGCTGGCGCTCTGG
CCGGTCAGCAAGCAGCTCTACCGCCGCCTCAACTGCCGCCTCGCCTACTCACTCTGGAGCCAACTGGTCATGCTG
CTGGAGTGGTGGTCCTGCACGGAGTGTACACTGTTCACGGACCAGGCCACGGTAGAGCGCTTTGGGAAGGAGCAC
GCAGTCATCATCCTCAACCACAACTTCGAGATCGACTTCCTCTGTGGGTGGACCATGTGTGAGCGCTTCGGAGTG
CTGGGGAGCTCCAAGGTCCTCGCTAAGAAGGAGCTGCTCTACGTGCCCCTCATCGGCTGGACGTGGTACTTTCTG
GAGATTGTGTTCTGCAAGCGGAAGTGGGAGGAGGACCGGGACACCGTGGTCGAAGGGCTGAGGCGCCTGTCGGAC
TACCCCGAGTACATGTGGTTTCTCCTGTACTGCGAGGGGACGCGCTTCACGGAGACCAAGCACCGCGTTAGCATG
GAGGTGGCGGCTGCTAAGGGGCTTCCTGTCCTCAAGTACCACCTGCTGCCGCGGACCAAGGGCTTCACCACCGCA
GTCAAGTGCCTCCGGGGGGACAGTCGCAGCTGTCTATGATGTAACCCTGAACTTCAGAGGAAACAAGAACCCGTCC
CTGCTGGGGATCCTCTACGGGAAGAAGTACGAGGCGGACATGTGCGTGAGGAGATTTCCTCTGGAAGACATCCCG
CTGGATGAAAAGGAAGCAGCTCAGTGGCTTCATAAACTGTACCAGGAGAAGGACGCGCTCCAGGAGATATATAAT
CAGAAGGGCATGTTTCCAGGGGAGCAGTTTAAGCCTGCCCGGAGGCCGTGGACCCTCCTGAACTTCCTGTCCTGG
GCCACCATTCTCCTGTCTCCCCTCTTCAGTTTTGTCTTGGGCGTCTTTGCCAGCGGATCACCTCTCCTGATCCTG
ACTTTCTTGGGGTTTGTGGGAGCAGCTTCCTTTGGAGTTCGCAGACTGATAGGAGTAACTGAGATAGAAAAAGGC
TCCAGCTACGGAAACCAAGAGTTTAAGAAAAAGGAA**TAA**TTAATGGCTGTGACTGAACACACGCGGCCCTGACGG
TGGTATCCAGTTAACTCAAAACCAACACACAGAGTGCAGGAAAAGACAATTAGAAACTATTTTTCTTATTAACTG
GTGACTAATATTAACAAAACTTGAGCCAAGAGTAAAGAATTCAGAAGGCCTGTCAGGTGAAGTCTTCAGCCTCCC
ACAGCGCAGGGTCCCAGCATCTCCACGCGCGCCCGTGGGAGGTGGGTCCGGCCGGAGAGGCCTCCCGCGGACGCC
GTCTCTCCAGAACTCCGCTTCCAAGAGGGAGCCTTTGGCTGCTTTCTCTCCTTAAACTTAGATCAAATTTT

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FIGURE 2822

GTTATGTCCAAATTCAGGCTGAGTGCTCAGGCTGAAGCAACTCTGTAGCCCACAGTCCGTGCTGGCCACTGTCGG
GGTGAGGCACATTCTAGGCCTGGCATCGCTGATGCCCTCTGCACCCAGTCCTTGAGCCAGGCCGAGGACAGGAAG
GGCATTGCTGGCCTGTAGCTCCTGTTACCCACCCAGAGCCAGGCGCCACACTGGAGGCTCCCAGGCGGGAGGGCC
CAGGCCCACCCACGGGCGTCTGGCCGGTCAAGCTCCCAGCCTGGGCCGTGGTCTCCTGGGGACGCCGCTGGCCTC
CCAGCTTAGGCCCAGGTGCCAGGTGTC**ATG**GGGTCTCCTGCCCATCTTCCCAAGGATGCCATTGCTGTCTTCATC
GTCTTCCCCCGTGTGAGACACTGGTTGTCTGGTACTCGGCGACAGTGTACCAGACGCGCACCCTATGTGAGGTGC
TTTAAGGTCCCTGTCCTCAGGAAGCGCAGTCTGGTGGAAGAGATGAGCGCTGAACAAATCACTAAA**TAA**CACAAA
ACAACAATGTAAGCAGCACTTTCTTGTGTAAAAAAAAAAAAAAAAGCACGTCCTGTCGATGAATTTTGAGTCTCTC
TGCCTTGCCTGTCCCGACTCCCTTTCGCGCACCGTGGCATGAGAATCTTTCCTCACGCTGTTCGTTGCGGTATTG
CTGAGCATTGATGTTGATTTGAAGGAAAAGCCGTGGTTGGACCCAGCTGTGTGTTTCACTCACGTGCAATTGAGT
AGCTGTTGCCAGGCTGTCCATGCCTGTTGTGACTACCGGTTGGGGTCAGATTTGGGGTGAAGAATGAGTAAGTTT
CTGCATGCTTTGTCTCTACCTGAGACACTTCTACAACAAGCCAAGTATAATCTCTCCAGCCCTGCAGATTTTCAC
CTGACTTGTTCAGCCCCATGCGTAGACTCCCGCTGCAGGCCTCTGGCCTGTGGCTCACTGCATGCAGCCCCTGGC
GTGCAATACTAGTGCTCCACGGCGCGATGTGCTTCTAGCCCTTGCACTGCACCTAGGCTCAGGGTTCAAACGGCC
AGCCCGAAAAGCCTGCCTGCCTTCTTTCTGGAAACAGCACGTCCCCGGCCGTGTGCCTGCCCCTTTCTCTACTGA
GCTAGTCCCCAAACCAAAGGCAAGCCCCCTCGGGCCTCGGGGGATGGGGCCGGCCACACCCCTGACTCCGCCCTG
GCTCTGCCCCATACCCCTGCCGTGGGGCCGACCTGGGGGATGCAGACATCCGGCTCCGTATTCCTGCCTATCGGG
GCCAGGATGCAAAAACAATTTTTGCGTAAAAGATGTCACACTGATCTGCTGGAGTGGGGTGGACACATGAATTCA
GTTTTATCATGAACACTCGCCACTGGCTGCTTGTTAATTCAGGGATAATGGTGGCATTCTTACAAACTGCTCGGG
AAATAGAATGACGGGAACACTTTTAGGGAGCCCAGGAAGTTACCAGGGACATTGGTGTCGCCGGCCCAGGCAACA
GCAGCGTACGCTTTTCAAAGATCATTGAGTTGTCTTAGAATTTGAAGCTGTGTAATGACAATGTCACCTGGAGTT
CGTCTCCATTTCTTAACTTTTTGTTGCACAAGTATTTGGACAGAAGTCGAACTGTGAATGAGATACTGAAATGCA
CTAAATTGTATTACATTAAACTGGAGTTACTTGATACAATG

FIGURE 2823A

GCGGCGCAACCGGCTCCGGAGCTGCCTGGCGCGGCCGGGCGGGCGGCGCCGCTCAGGCTCGGGCTCCGGCTGGGC
CCGGCGCGGCCTCGGGGCTGCCCATGGGGCGCGGGGGGCCGGGCCGGTGACGCCGGACGCCCATGGACGCCTCTG
AGGAGCCGCTGCCGCCGGTGATCTACACCATGGAGAACAAGCCCATCGTCACCTGTGCTGGAGATCAGAATTTAT
TTACCTCTGTTTATCCAACGCTCTCTCAGCAGCTTCCAAGAGAACCAATGGAATGGAGAAGGTCCTATGGCCGGG
CTCCGAAGATGATTCACCTAGAGTCTAACTTTGTTCAATTCAAAGAGGAGCTGCTGCCCAAAGAAGGAAACAAAG
CTCTGCTCACGTTTCCCTTCCTCCATATTTACTGGACAGAGTGCTGTGATACCGAAGTGTATAAAGCTACAGTAA
AAGATGACCTCACCAAGTGGCAGAATGTTCTGAAGGCTCATAGCTCTGTGGACTGGTTAATAGTGATAGTTGAAA
ATGATGCCAAGAAAAAAAACAAAACCAACATCCTTCCCCGAACCTCTATTGTGGACAAAATAAGAAATGATTTTT
GTAATAAACAGAGTGACAGGTGTGTTGTGCTCTCCGACCCCTTGAAGGACTCTTCTCGAACTCAGGAATCCTGGA
ATGCCTTCCTGACCAAACTCAGGACATTGCTTCTTATGTCTTTTACCAAAAACCTAGGCAAGTTTGAGGATGACA
TGAGAACCTTGAGGGAGAAGAGGACTGAGCCAGGCTGGAGCTTTTGTGAATATTTCATGGTTCAGGAGGAGCTTG
CCTTTGTTTTCGAGATGCTGCAGCAGTTCGAGGACGCCCTGGTGCAGTACGACGAACTGGACGCCCTCTTCTCTC
AGTATGTGGTCAACTTCGGGGCCGGGGATGGTGCCAACTGGCTGACTTTTTTCTGCCAGCCAGTGAAGAGCTGGA
ACGGATTGATCCTCCGAAAACCCATAGATATGGAGAAGCGGGAATCGATCCAGAGGCGAGAAGCCACCCTGTTAG
ATCTGCGCAGTTACCTGTTCTCTCGCCAGTGCACCTTGCTGCTCTTCCTGCAGAGGCCGTGGGAGGTGGCCCAGC
GCGCCCTAGAGCTGCTGCACAACTGCGTGCAGGAACTGAAGCTCTTAGAAGTCTCTGTCCCACCTGGTGCTCTGG
ACTGCTGGGTGTTTCTGAGCTGTCTGGAGGTGTTGCAGAGGATAGAAGGCTGCTGTGACCGGGCACAGATCGACT
CAAACATTGCCCACACTGTGGGGCTATGGAGCTATGCCACAGAAAAGTTAAAGTCCTTGGGCTATCTATGTGGAC
TTGTGTCAGAGAAAGGACCTAACTCAGAAGATCTCAACAGGACAGTTGACCTTTTGGCAGGTTTGGGAGCTGAGC
GACCAGAAACAGCCAACACAGCTCAGAGTCCTTATAAGAAACTGAAAGAAGCATTATCGTCAGTGGAAGCTTTTG
AAAAACACTACTTAGATTTGTCCCATGCCACCATTGAAATGTATACAAGCATTGGGAGGATTCGATCTGCTAAGT
TTGTTGGAAAAGATCTGGCAGAGTTTTACATGAGGAAAAAGGCTCCACAAAAGGCAGAAATCTATCTTCAAGGAG
CACTGAAAAACTACCTGGCTGAGGGCTGGGCACTCCCCATCACACACACAAGGAAGCAGCTGGCCGAATGTCAAA
AGCACCTTGGACAAATTGAAAACTACCTGCAGACCAGCAGCCTCTTAGCCAGTGACCACCACCTCACTGAAGAGG
AGCGCAAGCACTTCTGCCAGGAGATACTTGACTTTGCCAGCCAGCCGTCAGACAGCCCAGGTCATAAGATAGTGC
TACCCATGCATTCCTTTGCACAACTGCGAGATCTCCATTTTGATCCCTCCAATGCCGTGGTCCACGTGGGCGGCG
TTTTGTGCGTTGAGATAACCATGTACAGCCAGATGCCTGTGCCTGTTCACGTGGAGCAGATTGTGGTCAATGTCC
ACTTCAGCATTGAGAAAAACAGCTACCGGAAGACTGCGGAGTGGCTTACCAAGCACAAGACGTCCAATGGGATCA
TTAACTTTCCACCCGAGACCGCACCTTTCCCTGTATCCCAAAACAGTTTGCCCGCGCTGGAGTTGTATGAAATGT
TTGAGAGAAGCCCATCTGATAACTCCTTGAACACGACTGGGATTATCTGCAGAAACGTCCACATGCTCCTGAGAA
GGCAGGAGAGCAGCTCCTCTCTAGAGATGCCCTCAGGGGTGGCTCTGGAGGAGGGTGCCCACGTGCTGAGGTGCA
GCCACGTGACCCTGGAACCAGGGGCCAACCAGATAACATTCAGGACTCAGGCCAAGGAACCTGGAACGTATACAC
TCAGGCAGCTGTGCGCCTCGGTGGGCTCCGTGTGGTTCGTCCTCCCTCACATCTACCCCATTGTGCAGTACGACG
TGTACTCACAGGAGCCCCAGCTGCACGTGGAGCCGCTGGCTGATAGCCTTCTGGCAGGCATTCCTCAGAGAGTCA
AGTTCACTGTCACTACCGGCCATTATACGATAAAGAATGGAGACAGCCTGCAGCTTAGCAATGCCGAAGCCATGC
TCATCCTGTGCCAGGCGGAGAGCAGGGCTGTGGTCTACTCCAACACGAGAGAACAGTCTTCTGAGGCCGCGCTCC
GGATTCAGTCCTCCGACAAGGTCACGAGCATCAGTCTGCCTGTTGCGCCTGCGTACCACGTGATCGAATTTGAAC
TGGAAGTTCTCTCTTTACCTTCAGCCCCAGCACTCGGAGGGGAGAGTGACATGCTGGGGATGGCAGAGCCCCACA
GGAAGCATAAGGACAAACAGAGAACTGGCCGCTGCATGGTTACCACAGACCACAAAGTGTCGATTGACTGCCCGT
GGTCCATCTACTCCACAGTCATCGCACTGACCTTCAGCGTACCCTTCAGGACCACACACAGCCTCCTGTCCTCAG
GAACACGGAAATATGTTCAAGTTTGTGTCCAGAATTTGTCAGAACTTGACTTTCAGCTGTCAGATAGTTATCTTG
TAGATACCGGTGATAGTACCGACCTGCAACTAGTACCACTGAACACGCAGTCCCAGCAGCCCATCTACAGCAAGC
AGTCGGTGTTCTTCGTCTGGGAACTCAAGTGGACAGAAGAGCCTCCCCCTTCTCTGCATTGCCGGTTCTCTGTTG
GATTTTCCCCAGCTTCTGAGGAACAGCTGTCTATCTCCTTAAAGCCGTATACTTATGAATTTAAAGTGGAAAATT
TTTTTACATTATACAACGTGAAGGCTGAGATCTTTCCCCCTTCGGGAATGGAGTATTGCAGAACAGGCTCCCTCT
GCTCCCTGGAGGTTTTGATCACGAGGCTCTCAGACCTCTTGGAGGTGGATAAAGATGAAGCACTGACTGAATCTG
ATGAGCATTTTTCGACAAAGCTTATGTATGAAGTTGTCGACAACAGTAGCAACTGGGCAGTGTGTGGGAAAAGCT
GCGGTGTCATCTCCATGCCAGTGGCTGCTCGGGCCACTCACAGGGTCCACATGGAAGTGATGCCGCTCTTCGCCG

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FIGURE 2823B

GGTATCTCCCCCTGCCCGACGTCAGGCTGTTCAAGTACCTCCCCCATCATTCTGCACACTCCTCCCAACTGGACG
CTGACAGCTGGATAGAAAACGACAGCCTGTCAGTAGACAAGCACGGGGACGACCAGCCGGACAGCAGCAGCCTCA
AGAGCAGGGGCAGCGTGCATTCGGCCTGCAGCAGCGAGCACAAAGGCCTACCCATGCCCCGGCTGCAGGCACTGC
CGGCCGGCCAGGTCTTCAACTCCAGCTCGGGCACACAAGTCCTGGTCATCCCCAGCCAAGATGACCACGTCCTGG
AAGTCAGTGTAACA**TGA**CAACGCCAGGGTGAACACACGCCACTTCCCAGCTAGGAGTGCACTTTATGGGACTGTG
ACTGGACTCTTCCGTTCTGGCTCCAGCCAGACCTTCAGTGGTCCTGCCTGGCCGTGGGGACATCAGAGAGTGTCA
TCACGCAGCTGGCCAGCTGAGTTCTGTTGTTGTTTTCATGCCGCCTGTGATCTCAGATTCCTGCTTTTCTCACCC
CGTCCCCATGCTGGTGTCCGACGCCGCTTACTCAGAGCCCTGGCCTCCCTCCCCCTACCTCACACGCTGCTCATG
AAAGTTTCCACCCACGCTGTCTCCACGGAACAGCCTCCGTCTGCTGGCTCTTCGTGGAAGGCCATTTGTCTTTCA
GGTAGACACTCAGCAGCCCTCACGGTCTTAGTGACGTGTGTGCCTTTCTGGTCACACAGCTGCCCAGTTTCCTGA
TCGGGGTGGATTTGTGTCCCCTAAGGGGTAAAACAGCCGTTTACCGCAGATCCTCTCATTGTGCTTTTCTAGAAT
AACACCCTTCTAGGGGAGGCGGGTGGGGGAGGGAGGGATCATAACCCCTTCTGTGCCTTGGGATGCCGGAGCTGG
GGGACCTGGAGGCCCATCAGCCGGAGCCACGTGAAAGGTACTGAAGAAAGCTGAGACCCGGCTGTGAGGAGCGCC
TCAGCGGTGAGGTGGTTTAGGGATAAATGTTTCTGGAACCCTGTGGTCCCCCATAATGTTGATAGAATATCATAT
GCACTGGGAGTTAAATATATTTAATTTAATGATCATTATATATGTGGGGGTTAATATGTTGTTTTTCTGTCCCTT
TAAAGTCTTTACATGTAATTGTAGCTGTATAATCGTTATTTTTCTTTTGCATCTTAAGTCTTAGAAATTAAGATA
TTCCATCGTGAGGATGAGAGAGGTCCTCAGTGTGTTTTTGGTCTGGTTGTAGGGAAGGACTCAAGTCCTGGAATG
TCCTCCACTGGTCTACTGAGTTGCAGTCACACTGTTCCAATGGATTATTTGCTTTCGGTTGTAAATTTAATTGTA
CATATGGTTGATTTATTATTTTTAAAAATACAGACTAACTGATGTAATGTTTATGTATAAGTTGCACCAAAAATC
AAGGACAAAAATAAGTGTGTTTGTTTTTACAGGTGTGAAAGTCACAGCTTGTAAATAAGTGTTGTATGTATTAAA
CCTTTTCCAGTTCTCCAAAGCGATGT

FIGURE 2824

GCGGCACACGTGCGACGGCCGTGATGAAGTTCGCTTACCGGTTTTCAAATTTGCTGGGTACGGTGTACCGGCGTG
GGAACCTAAATTTTACCTGCAATGGAAATTCAGTTATCAGTCCCGTGGGCAATAGAGTCACTGTATTTGACCTTA
AAAACAACAAATCTGACACGCTGCCCCTGGCCACTCGGTACAACGTCAAGTGCGTGGGGCTGTCCCCGGATGGCC
GCCTCGCTATCATCGTCGATGAAGGGGGCGATGCGCTGCTGGTCAGCCTGGTCTGCAGGTCTGTGCTGCACCACT
TCCACTTCAAGGGCTCTGTGCACAGTGTGTCCTTCTCCCCTGATGGCAGGAAGTTTGTTGTCACAAAGGGTAACA
TTGCCCAGATGTATCATGCCCCTGGGAAGAAGCGGGAGTTCAACGCCTTCGTTCTGGACAAGACCTATTTTGGGC
CCTACGATGAGACCACCTGCATCGACTGGACGGATGACTCCAGGTGCTTTGTGGTTGGGAGCAAAGACATGTCCA
CCTGGGTGTTCGGAGCCGAGCGCTGGGACAACCTCATCTACTATGCACTGGGGGGACATAAGGATGCCATCGTGG
CCTGCTTCTTTGAATCCAACAGCCTGGACCTGTACTCACTCAGCCAGGACGGAGTGCTGTGCATGTGGCAGTGTG
ACACGCCCCCCGAGGGCTTGCGGCTGAAGCCCCCTGCGGGCTGGAAAGCAGACCTGTTGCAGCGGGAGGAGGAAG
AGGAGGAGGAGGAGGACCAGGAGGGCGACAGAGAGACCACCATCCGGGGAAAAGCCACTCCGGCCGAGGAGGAGA
AGACAGGAAAAGTGAAGTACTCACGGCTGGCCAAGTACTTCTTCAATAAAGAAGGGGATTTTAACAACCTGACAG
CTGCAGCATTTCATAAGAAGTCTCACCTCTTGGTCACTGGCTTTGCTTCTGGAATCTTCCATCTTCATGAGCTGC
CAGAGTTTAACCTCATCCACTCCCTGAGCATTTCAGATCAGAGCATCGCCTCAGTGGCCATCAATAGCTCGGGGG
ACTGGATTGCTTTTGGCTGTTCAGGCCTGGGCCAGCTGCTGGTGTGGGAGTGGCAGAGTGAGTCCTACGTGCTCA
AGCAGCAGGGCCACTTCAACAGCATGGTGGCCCTGGCCTACTCGCCCGACGGACAGTACATCGTGACTGGCGGGG
ACGACGGCAAGGTCAAGGTGTGGAACACCCTCAGCGGCTTCTGCTTCGTCACTTTTACGGAGCACTCCAGCGGGG
TGACCGGTGTGACCTTTACTGCCACCGGCTACGTTGTGGTGACCTCATCCATGGACGGGACCGTGCGAGCCTTTG
ACCTTCACAGGTACCGAAACTTCCGCACCTTCACCTCTCCACGCCCCACCCAGTTCTCCTGTGTGGCGGTGGATG
CGAGCGGTGAGATCGTCTCTGCAGGGGCGCAGGACTCCTTTGAGATTTTCGTGTGGTCCATGCAGACAGGCAGGC
TCCTTGATGTTTTGTCTGGACACGAAGGGCCCATCAGTGGTCTGTGTTTTAACCCAATGAAGTCCGTCCTGGCCA
GTGCCTCCTGGGACAAGACAGTGCGCCTATGGGACATGTTTGACAGCTGGAGGACCAAGGAGACGCTGGCCCTGA
CCTCTGATGCTCTGGCTGTGACTTTTCGCCCTGATGGTGCGGAGCTGGCTGTGGCCACACTGAACTCACAGATCA
CCTTCTGGGACCCTGAGAACGCGGTGCAGACGGGCTCCATTGAGGGCAGGCATGACCTCAAGACTGGCAGGAAGG
AGCTGGACAAGATTACAGCCAAGCACGCGGCCAAGGGGAAGGCCTTCACCGCCCTGTGCTACTCTGCAGACGGCC
ACAGCATCCTGGCGGGAGGCATGTCCAAGTTCGTGTGCATCTACCACGTCCGTGAGCAGATTCTCATGAAGAGGT
TCGAGATCTCTTGCAACCTGTCTTTGGACGCCATGGAGGAATTTTTGAACCGAAGAAAAATGACAGAGTTTGGCA
ACCTGGCACTAATTGATCAGGATGCTGGGCAGGAGGATGGAGTCGCGATACCACTGCCAGGCGTCAGGAAAGGTG
ACATGAGTTCTCGGCACTTCAAACCTGAGATCAGGGTGACCTCACTCCGCTTCTCTCCCACTGGGCGCTGCTGGG
CGGCCACCACCACGGAGGGACTCCTCATCTACTCCCTGGACACCCGCGTGCTCTTTGACCCGTTTGAGCTGGACA
CCAGCGTCACCCCCGGGAGGGTGCGCGAGGCACTGCGCCAGCAGGACTTCACCAGGGCCATCCTCATGGCCCTCC
GGCTCAACGAGAGCAAACTGGTGCAGGAGGCCCTGGAGGCGGTGCCCAGGGGCGAGATTGAAGTGGTCACCTCCT
CCCTTCCTGAACTGTATGTGGAGAAAGTGCTGGAGTTTTTAGCTTCCTCCTTTGAAGTGTCTCGCCACCTGGAAT
TCTACCTCCTCTGGACTCACAAACTGCTCATGTTGCACGGACAGAAGCTGAAGTCCAGAGCCGGGACGCTGCTGC
CTGTCATTCAGTTCCTCCAGAAGAGCATCCAGCGGCACCTGGACGACCTGTCGAAACTCTGTAGCTGGAACCACT
ATAACATGCAGTACGCACTAGCAGTTTCCAAGCAGCGGGGCACAAAACGCTCCCTAGACCCGCTGGGAAGTGAGG
AGGAGGCAGAAGCATCTGAAGATGACAGCCTGCATCTGCTTGGAGGAGGAGGCAGAGACTCAGAAGAAGAGATGC
TGGCCTAGAGCCAGCCGGTTGCAGCGTTGGATTGTGCCGGCTAAGACCTGCCAGGGAGATGGGACCCTTGTGCCA
CCTGGGCCAGCAAAGAGGAGGGGTCCAGAGAACAGCTGAAATACTGTCACTAGTGGTAGTGACTTGCTTTTCCTG
TGCACACATGTAGCCCATCAGGACAGCGAGCCGACGGGTCACGCCAGGGGCCGGCACGCACTGGCACCTGGCCCC
AGGAGCGGGGCCGTGTGAACGGTGATGAATGTTGAAAATGCGTCTCAGAGAGGTATTCACATGAACTTTGTATGA
GACTTATTTATATCTTTAACATAAAGGTTTGATAAAGAACTTAGGGATTAAAAAAAAGATGGAGTTTTCTAACGT
GAGGATGAAGTCTACACTTCAGATTAAAAAGGGTTATGTTGTA

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FIGURE 2825

TCCCGACGAGCAACGCGTTTGTAGAGGGGTGGGTGCGCACGCTCTGTCCCTGCGTGACCTTCCGACCCCGCTGTC
CTCACCGCA**ATG**GCGGCTGTGAGGGTCCTGGTGGCCTCGAGGCTCGCTGCGGCATCTGCATTCACGTCCCTGTCC
CCCGGCGGTCGGACGCCTTCCCAGCGCGCAGCCCTTCACCTCTCCGTGCCGCGCCCCGCGGCCAGGGTCGCGCTG
GTGCTGTCTGGATGCGGAGTCTACGATGGGACCGAGATCCACGAGGCCTCGGCGATCCTGGTGCACCTGAGCCGT
GGAGGGGCTGAAGTCCAGATCTTTGCTCCTGACGTCCCTCAGATGCACGTGATTGACCACACCAAGGGGCAGCCG
TCCGAAGGCGAGAGCAGGAATGTTTTGACCGAGTCTGCGAGGATCGCCCGTGGCAAAATCACAGACCTGGCCAAC
CTCAGTGCAGCCAACCATGATGCTGCCATCTTTCCAGGAGGCTTTGGAGCGGCTAAAAACCTGAGCACGTTTGCC
GTGGACGGGAAAGATTGCAAGGTGAATAAAGAAGTGGAGCGTGTCCTGAAGGAGTTCCACCAGGCCGGGAAGCCC
ATCGGCTTGTGCTGCATTGCACCTGTCCTCGCGGCCAAGGTGCTCAGAGGCGTCGAGGTGACTGTGGGCCACGAG
CAGGAGGAAGGTGGCAAGTGGCCTTATGCCGGGACCGCAGAGGCCATCAAGGCCCTGGGTGCCAAGCACTGCGTG
AAGGAAGTGGTCGAAGCTCACGTGGACCAGAAAAACAAGGTGGTCACGACCCCAGCCTTCATGTGCGAGACGGCA
CTCCACTACATCCATGATGGGATCGGAGCCATGGTGAGGAAGGTGCTGGAACTCACTGGAAAG**TGA**CGCGCATGG
ACGGGGCCCAGCTAGGCGCCAGGACTTGGCCTCACCCTCTGGCTGAGGAGCTGTCGGCTGCTTTCCATCCAGCTG
GGAGTCTGGCAGGCCCTTTTTTTTTTTTCTTTGCCGAAACCTGCAGGCGTTCTCTCTCTAAGGAGGATGTGCTGC
AGTGCATGGGGGATGTTTCTTCCTGGGTGTGGCTGGGCTGCTCTCACATACAGAGGCCGAGGGGCCAATTCGTTC
TCTGCCACAGGGACTTGCCTCACTGTGTCCCAAAAACAAATCGCAGCCAGCTTTTCCAGAAATAGAAAATTCTGC
CGTCTGAGGTTTTATACTTCAGGTTAGTTAGTTTTTGGAAGGAAGAACATTTTTAGGTTTGCAAGCCTCCTGATC
AGGAAACCAGAAATACCACATTTATGGACCATGAAAGGTTGGTTCTTGACTCTGAAGGGACTTTTGAGTTAATCA
GCGTAAGGGGATTTCTAAAGCAGGCAATCCCTGTAGCCGCAGAGAATAAACGCCTTCCCAAAATGGCAACTTCCC
ACAGCCACATTTCAGACCTGCTGAGACTGCTGAGTGAGGAATGGCAGTGAGGTTTCTTCAATTAGTCTCAGTTCT
CTTAATTTTCAGGAAGAAAGGGAAATTGCAGCCCCTCAGCCCCCAGGATTGACCTCTGGGGAGTGATGGTAGCGT
TGGTGCCAGGCCGTGGGTTCAGGTGTGGCAGAAGCTTGCAGATGCGTCCGAAGGGAAATAAAGTGTGTTGGCGTT
AG

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FIGURE 2826

GCGACGCGGCGCAGGCGGCGGGAGTGCGAGCTGGGCCCGTGTTTCGGCCGCCGCCATGGCCGCGGTGGACCTGGA
GAAGCTGCGGGCGTCGGGCGCGGGCAAGGCCATCGGCGTCCTGACCAGCGGCGGCGACGCGCAAGGTCCCCTGAC
AAGCCCACCAGGCCCCCTGCTGAGATGGCTGTGACCCTGGGCTGACCCGCCCAGTGGCACATTGACTCCGCCTGG
AGCTGGGGAGACCAGAGAGGCCCTGTGGTTGGACGGTGGCCTGGGTGCGCTGCTCCTGCCCTCTCCTTGCCCTGC
CTCAGCTGCTGCCTGCCAGAGGCGTGGCACCTCACCTCACACCTGCTCCCTGCTGCTGAGCCCCACGCCAAGCTG
GAGAGCGGATGAGAAGCATGTGTAACCAGGGTAGAGGTCGAGAGTCCTCTCGTGGGGGTCTCCATGTTCAAGGGA
GCTGCCGAGGCTTGAGCAGGAGCCCCCAGCAGGAAACTGGCTTTGCCAAGGCCCCCGCTGGGACAGACTGTTTCT
TTCACTGCAGTCCTGGGAGCCGAGGGCAAGGGGACAGGAAAGAGGAAGTGACCTCAGAGCCTGGTGGCACCAGCA
TCATGTCCAGGCTGGGGGGCATGAACGCTGCTGTCCGGGCTGTGACGCGCATGGGCATTTATGTGGGTGCCAAAG
TCTTCCTCATCTACGAGGGCTATGAGGGCCTCGTGGAGGGAGGTGAGAACATCAAGCAGGCCAACTGGCTGAGCG
TCTCCAACATCATCCAGCTGGGCGGCACTATCATTGGCAGCGCTCGCTGCAAGGCCTTTACCACCAGGGAGGGGC
GCCGGGCAGCGGCCTACAACCTGGTCCAGCACGGCATCACCAACCTGTGCGTCATCGGCGGGGATGGCAGCCTTA
CAGGTGCCAACATCTTCCGCAGCGAGTGGGGCAGCCTGCTGGAGGAGCTGGTGGCGGAAGGTAAGATCTCAGAGA
CTACAGCCCGGACCTACTCGCACCTGAACATCGCGGGCCTAGTGGGCTCCATCGATAACGACTTCTGCGGCACCG
ACATGACCATCGGCACGGACTCGGCCCTCCACCGCATCATGGAGGTCATCGATGCCATCACCACCACTGCCCAGA
GCCACCAGAGGACCTTCGTGCTGGAAGTGATGGGCCGGCACTGCGGGTACCTGGCGCTGGTATCTGCACTGGCCT
CAGGGGCCGACTGGCTGTTCATCCCCGAGGCTCCACCCGAGGACGGCTGGGAGAACTTCATGTGTGAGAGGCTGG
GTGAGACTCGGAGCCGTGGGTCCCGACTGAACATCATCATCATCGCTGAGGGTGCCATTGACCGCAACGGGAAGC
CCATCTCGTCCAGCTACGTGAAGGACCTGGTGGTTCAGAGGCTGGGCTTCGACACCCGTGTAACTGTGCTGGGCC
ACGTGCAGCGGGGAGGGACGCCCTCTGCCTTCGACCGGATCCTGAGCAGCAAGATGGGCATGGAGGCGGTGATGG
CGCTGCTGGAAGCCACGCCTGACACGCCGGCCTGCGTGGTCACCCTCTCGGGGAACCAGTCAGTGCGGCTGCCCC
TCATGGAGTGCGTGCAGATGACCAAGGAAGTGCAGAAAGCCATGGATGACAAGAGGTTTGACGAGGCCACCCAGC
TCCGTGGTGGGAGCTTCGAGAACAACTGGAACATTTACAAGCTCCTCGCCCACCAGAAGCCCCCCAAGGAGAAGT
CTAACTTCTCCCTGGCCATCCTGAATGTGGGGGCCCCGGCGGCTGGCATGAATGCGGCCGTGCGCTCGGCGGTGC
GGACCGGCATCTCCCATGGACACACAGTATACGTGGTGCACGATGGCTTCGAAGGCCTAGCCAAGGGTCAGGTGC
AAGAAGTAGGCTGGCACGACGTGGCCGGCTGGTTGGGGCGTGGTGGCTCCATGCTGGGGACCAAGAGGACCCTGC
CCAAGGGCCAGCTGGAGTCCATTGTGGAGAACATCCGCATCTATGGTATTCACGCCCTGCTGGTGGTCGGTGGGT
TTGAGGCCTATGAAGGGGTGCTGCAGCTGGTGGAGGCTCGCGGGCGCTACGAGGAGCTCTGCATCGTCATGTGTG
TCATCCCAGCCACCATCAGCAACAACGTCCCTGGCACCGACTTCAGCCTGGGCTCCGACACTGCTGTAAATGCCG
CCATGGAGAGCTGTGACCGCATCAAACAGTCTGCCTCGGGGACCAAGCGCCGTGTGTTCATCGTGGAGACCATGG
GGGGTTACTGTGGCTACCTGGCCACCGTGACTGGCATTGCTGTGGGGGCCGACGCCGCCTACGTCTTCGAGGACC
CTTTCAACATCCACGACTTAAAGGTCAACGTGGAGCACATGACGGAGAAGATGAAGACAGACATTCAGAGGGGCC
TGGTGCTGCGGAACGAGAAGTGCCATGACTACTACACCACGGAGTTCCTGTACAACCTGTACTCATCAGAGGGCA
AGGGCGTCTTCGACTGCAGGACCAATGTCCTGGGCCACCTGCAGCAGGGTGGCGCTCCAACCCCCTTTGACCGGA
ACTATGGGACCAAGCTGGGGGTGAAGGCCATGCTGTGGTTGTCGGAGAAGCTGCGCGAGGTTTACCGCAAGGGAC
GGGTGTTCGCCAATGCCCCAGACTCGGCCTGCGTGATCGGCCTGAAGAAGAAGGCGGTGGCCTTCAGCCCCGTCA
CTGAGCTCAAGAAAGACACTGATTTCGAGCACCGCATGCCACGGGAGCAGTGGTGGCTGAGCCTGCGGCTCATGC
TGAAGATGCTGGCACAATACCGCATCAGTATGGCCGCCTACGTGTCAGGGGAGCTGGAGCACGTGACCCGCCGCA
CCCTGAGCATGGACAAGGGCTTCTGAGGCCAGCCATGCCCACGCCCCTCCCCAGCCCCCACCCATGCCAGCGCAG
CGCCAGGGCTCAGATGGGGCCTGGGCTGTTGTGTCTGGAGCCTGCAGGCAGGTGGGGGCTGCGTCCCTGCTCAGC
CCATCCCCTGCCTCTATCCCTGGCCACCTGCCAGGCCTCCCTCGGGCTGGTGTCTTGAGACCAGCCTGCCAGGCC
CTCCAGCAGGAGGACAGAGTGCCCTGGGGCATCCACCTTCCTGCCCAGGGGACGTGGCGCTGTCGGTGTTTGGAG
GCTGCTGCCCCCTGGCTTTGGCGCCCCATGGGCCCTCAGCGTCTCCCCATGCTGGGCTCACTACATGGGCCAGCC
CTTGCTCTACCTGGCCGGTAGGCTGCTGGCGCCTAGGTTGTGTTGAGAGGGGGATGCCCCTGGCCCTGCCTCACT
GTGACCTGCTCCTGCCCACGTGCAGCACCTGTCACCTTTTCTAGAAATAAAATCACCCTGACTGTGGGGTGCATC
GGTCTCCGG

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FIGURE 2827

CCGCGCAGTCGTCACCCGCCCGGGATCAGGAGGCCGGGGGCGCCCGCCGGTCGGGCCTGGGCGGCCGCCATGAAG
CTGACGCGGAAGATGGTTCTGACCCGGGCCAAGGCCTCGGAGCTGCACAGCGTGCGCAAGCTCAACTGCTGGGGC
AGCCGCCTCACAGATATCTCCATTTGCCAGGAGATGCCCAGCCTGGAGGTGATCACGCTCAGTGTCAACAGCATC
TCCACCCTGGAGCCTGTGAGCCGGTGCCAGCGCCTGAGTGAGCTGTACCTGCGGAGGAACCGCATCCCCAGCCTG
GCTGAGCTCTTCTACCTGAAGGGGCTGCCGCGTCTGCGGGTGCTGTGGCTGGCCGAGAACCCGTGCTGCGGCACC
AGCCCCCACCGCTACCGCATGACCGTGCTGCGCACCCTGCCGCGCCTACAGAAGCTGGACAACCAGGCTGTGACG
GAGGAGGAGCTGTCCCGTGCACTGAGTGAGGGAGAGGAGATCACTGCGGCCCCAGAGAGAGAGGGCACAGGCCAC
GGCGGCCCCAAGCTATGCTGCACACTGAGCTCCCTCAGCTCCGCTGCTGAGACTGGCCGGGACCCGCTGGACAGC
GAGGAGGAGGCAACCAGCGGCGCCCAGGATGAACGTGGCCTGAAGCCGCCTTCCCGGGGCCAGTTTCCTTCCCTC
TCAGCCAGGGATGCCTCGAGCAGCCACAGGGGCAGGAACGTCCTGACTGCCATCCTGCTGCTGCTGCGGGAGCTG
GATGCAGAGGGGCTGGAGGCCGTGCAGCAGACTGTGGGCAGCCGGCTGCAGGCCCTGCGTGGGGAAGAGGTGCAG
GAGCACGCCGAGTGACCGCAGGACCTGAACGCCGCTCCAGCCTCCACGGGGACCCCAGCGTCTTCCCCAGCCCCC
GGGAGCTGGAGGGTGGCTGCCATGGCCGCAGCCCCGGCCCCACACAAAAGCCTCCCCGGTTTGCCACATCGGCCG
AGGGCAGGAGTGGGTGTTAGGTACTGGCTAACCGGGGCGGTGGAGATGCCTGTCTACACCAGTCCTGTCCCCAGG
ACTCCCCTTCTGTGGTCTGGAGGTTCTAGGCTGGCCTGGGCTCTTAAAGGGAGGATTTTGCAGGCTGTCCTCCCT
AATAAAAGATTTTCCCAAGGTTGATCTGGAGGTGACGTTTCCCAAGGCATGGTTGTGACAGTCTTCCTGAAAGCA
AGGGCCGTTTCTCCACAGAATGAGGAGGTCTTCACGGATGGCTTTGCCGATTCCAGCCCTTGGTCCTTGGATAGA
TTTCTGTTGGGCAAGGGAGACTTCGAGAATGCTGGCACCCATAGCGACATCTGCCCTGAGCTGCTCAGCAGGCAG
GCAGCAGCCTCCCGCACCCATGGGAGAGAGTTTTGTTTTCTTGGCCGGGCTGGGCAGGTGCGCCTTCCTTTCTCT
CTCCTGTGAAGAACTGCAGGAGGGCCCTCAGCTGTGAGGTTGTGGATGAACAGGCCTGTTCGCCCTGGGGTCCGG
GCCTGGCACAGGAAGCAGCTAGACTAGGGGAGTCCTTGGAGCATCTGAGAGGGGTTTTCTTTCCTCTGGGAAGAG
TCGCAAGTCTTATGAGGATGCCACAATCTGGGCAGTGACCCGTGGCCCTGGGGACCTTCCTAGTGCCCCCCAAAA
CCAAGGAAGCATTCACGTGAGATGGGGAGTCAGCCTTCCAGCTGGTGTGTAGGAAAGCCAGGTCCCTGGGCCCTT
GTCCCATGTGGGGTTGAGATCCAGATCTCCATGAGATATTCCCATCCTCCGCCGAGCGGTGATGCGTGACCGTGT
GTGCAGGCCGCTGTTCTCCCAAGCTCGGGGCCATGCCGTGCCACCGTCACCAGAGCCAGCTGCAGCACTGGGGCA
GCCACTGTCGCCGGACTTGGGGAAGCCCAGGGTGAAGACAGTCACTCATCCGTGCAAGCTCTCCAGAAGGGATGC
AAGCTCTCCAGAAGGGGTGTGATCTCTGAGCAGTGGGGAGTGGAGTCACCACTCGGGACATAGAGGGTGGACAGT
TCAGGCCTGTGTCTGCCTCCTTGGGACTGTGGAGTGGGTGCCCTCAGTAAAGCGCTTTGTTGGAATGGT

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FIGURE 2828

AGGAACCAGGAAGGCAGACGCGGCTGCTGTAGCTCAGACCTGCGCCCCCTGGACATCCTGGCGGAAGTGGTCCCT
TCTGATGGCGCCACAAGCGGGATCAGGATAGTTCAGGTTCACGGTGCACGGGGACTCCAGCTCTCAGTAGCCGCC
CCCCGCACC**ATG**AGCTTCCCAGCATCCAGGATTTTCTCCCAGTGTGACCTCTTCCCTGAAGAATTTTCCATCGTC
GTAACTTTGAGAGTTCCCAATCTTCCACCCAAGAGGAACGAGTACCTGCTGACGGTGGTGGCAGAGGAGAGCGAC
CTGCTGCTGCTCGGCCTGCGGTTGTCACCTGCCCAGCTGCACTTCCTGTTCCTTCGCGAGGACACGGCCGGCGCC
TGGCAGACCCGAGTGTCCTTCCGCAGCCCGGCCCTGGTGGATGGCCGCTGGCACACACTGGTCCTGGCTGTGTCC
GCAGGCGTCTTCTCCCTCACCACGGACTGCGGCCTCCCGGTGGACATAATGGCCGATGTGCCCTTCCCAGCCACC
CTGTCAGTGAAAGGAGCTCGATTCTTCGTCGGCAGCCGGAGGAGAGCCAAAGGCCTGTTCATGGGACTGGTGAGG
CAACTGGTCCTGCTGCCGGGCTCAGACGCCACCCCAAGGCTGTGTCCCAGCAGGAACGCCCCGCTGGCGGTGCTG
TCCATCCCACGGGTCCTGCAGGCTCTCACGGGGAAGCCAGAAGATAACGAGGTGCTAAAATATCCCTATGAAACC
AACATTCGAGTGACGCTGGGACCCCAGCCACCGTGTACCGAGGTGGAAGACGCCCAGTTCTGGTTTGATGCCAGC
CGGAAGGGCCTGTATCTGTGTGTTGGCAACGAGTGGGTCTCCGTGTTAGCAGCCAAAGAAAGACTGGACTACGTG
GAGGAGCATCAGAACTTGTCCACCAACTCAGAGACCCTGGGCATTGAGGTGTTCCGCATCCCTCAGGTGGGGCTC
TTTGTGGCCACAGCCAATCGCAAAGCCACATCCGCCGTCTACAAGTGGACCGAAGAGAAGTTCGTCTCATATCAG
AACATCCCCACGCACCAAGCACAGGCCTGGAGGCATTTCACCATCGGGAAAAAGATCTTCCTGGCAGTGGCTAAT
TTTGAACCAGATGAGAAGGGTCAGGAGTTCTCTGTCATTTACAAATGGAGCCACAGAAAGCTGAAGTTTACCCCA
TATCAGAGCATTGCCACACACAGCGCCCGAGACTGGGAGGCCTTCGAGGTGGATGGGGAGCACTTCCTGGCGGTG
GCCAACCACCGGGAAGGCGACAACCACAACATCGACAGTGTCATCTACAAGTGGAACCCGGCAACCCGGCTCTTC
GAGGCCAACCAGACCATCGCCACCTCCGGCGCCTACGACTGGGAGTTCTTCAGTGTGGGGCCCTACTCGTTCCTG
GTGGTGGCCAACACCTTCAACGGCACCTCCACCAAGGTGCACTCGCACCTCTACATCCGACTCCTGGGCTCCTTC
CAGCTCTTCCAGTCCTTCCCGACGTTCGGTGCTGCAGACTGGGAGGTCTTCCAGATCGGGGAGAGGATCTTCCTC
GCTGTGGCAAACAGTCACAGCTACGATGTGGAGATGCAAGTCCAGAATGATTCCTATGTCATCAACTCCGTCATC
TACGAGCTGAACGTGACCGCGCAGGCCTTTGTCAAGTTCCAGGACATTCTCACCTGCAGTGGAGGCAGGAGGGGG
CTTCATGCCCGTCGTGCGGAGGGA**TAG**CCGAGGCCCCAGAGGGACAGGTGCGAGGTGCAGGCTTCGAGTGCCCGC
TGCCTGCCAGTGCCAGCTGCCACCAGACATGATTACTTCCTTCCCCCGATGTTGCATCCTCCCCGACAACAAACA
CCAGGACACGGAGACTGGCCTGTTGAGACAGATGTGAGATCCAGGGAACATGGAGGGTGGGTCTGTATGTACGAG
AAAGTGATGGTTCCAGACCGACACGCTCCGTGGAGCCACAGGAGGTTGCGTGGGCACCACATTTTGGACAGTGGG
CACTGAGAATCCACAACCATCCTGACCAGTGTGGGGCGTCCTCTGGGGTGGAATTCCGGTCTGTGAATAAACCTG
CAATCGAATCCGT

FIGURE 2829

CGCGCGGCTGAGGCGAGGTCGCTCGGCGCAGCTGTTGCGGGGCC**ATG**GCGGGGACCGCGCTCAAGAGGCTGATGG
CCGAGTACAAACAATTAACACTGAATCCTCCGGAAGGAATTGTAGCAGGCCCCATGAATGAAGAGAACTTTTTTG
AATGGGAGGCATTGATCATGGGCCCAGAAGACACCTGCTTTGAGTTTGGTGTTTTTCCTGCCATCCTGAGTTTCC
CACTTGATTACCCGTTAAGTCCCCCAAAGATGAGATTTACCTGTGAGATGTTTCATCCCAACATCTACCCTGATG
GGAGAGTCTGCATTTCCATCCTCCACGCGCCAGGCGATGACCCCATGGGCTACGAGAGCAGCGCGGAGCGGTGGA
GTCCTGTGCAGAGTGTGGAGAAGATCCTGCTGTCGGTGGTGAGCATGCTGGCAGAGCCCAATGACGAAAGTGGAG
CTAACGTGGATGCGTCCAAAATGTGGCGCGATGACCGGGAGCAGTTCTATAAGATTGCCAAGCAGATCGTCCAGA
AGTCTCTGGGACTG**TGA**GACCTGGCCTCGCACAGGCGCGCACACACCGCCAAGCAGCTCAGCATTCTCCCCCGGC
ACACTTAGTGACAGTGATGCTCTGTGCTGGTACCAAACAAGGCAGACTTGCAAGAACCATGGCATCTTTTTTTTT
TTTCAAACCTTTCCTACTTCAAACAGGCTTCTCTTCTGAAATGATGACTTAATGTCGAATATTGACAGCTTACTG
CAGTTTTACAGTATTCCTCACAAAGGGCTTCAGGTAGATTATCAGAGCTGTCAGCACTACCTCTCCCCGCTGAAA
CCAGCAGTTCATGGCTTCCTGTGGATTCCCTCCCTCCCTGGAGTGTTGAGGGGGTTGTACCTGCCAGACTTCCAG
GGGACGATGGAATACCCAGAACGCTCCTTCTGAAGAAATGGGGCCCTGTAGCTGCAGCACAGGGGAAGGGCCCGG
CACCCTTTCTGGGTCCTTCCTGGTTCCCTGTGGGCCCCATGAGGAGTCCATTACTTCCTTTCTTCCTTCATATTT
TACAGGCAGATGCTTTTCTTATAATCTAATTACATCTTTTCATTTGTTATATATTACAAACCATCACACTTAGAA
ATACTTCCAGGAAATGCTTTTTTGAAGTGTGAATTAATAAGAAATGGGGTAAATAGAAAAGAAATTTATTGCTGA
TTGGCCAGGTGCGGTGGTTCGTGCCTGTAATCCCAGCTCTTTGGGAGGCCAAGGCAGGTAGATCACAAGGTCAGG
AAATTGAGACCATCCTGGCTAATACAGTGAAACCCCATGTCTGCTAAAATTACAAAAAATTAGCTGGGCGTGGTG
GTGCACGCCTGTAGTCTCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCCGGGAGGCAGAGGTAGCA
GTGAGCTGAAGTCCCGCCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTCAGTCTCAAAAAGAAAAAAGAAAT
TTATTGCTGATCACAAGGACAGACAGTTTTTTCCCGACCATACTCATCAAAGATTTACGTTTGTATATTAGTAAC
TAGTGCATTACTAGAGCAGGTGCAGGTGAGGTCTTTAAAGTTTCAATGAAAGTTTCTTCTGGATCTACAGAAAAA
ATTTTTTTTTTTCAATCTAAAAACTGGAAATTCTAGGGTTTTTGTACATTTTGGATGCACTGGGAATTTATTAGC
ACAAAATCATTCTTTGCAACTCAAAATTCAGAAGGGACTCTACCATATCTTAGCTCAGAGCACAGAGGAGTGCCT
TATCCCCACACTTGACTGGGCTGTGGAGGTGGGCATGTGGGCCCCTGGGCCCAGGCTGGGGACAGAGCCCTTGTT
TTGTGACTTAGGATTTTGATGTGGTTCCCATGTTCTCTAACAGGGCCAGCTGAGCAGCACAGGCCAGGAGGCCAC
AGTGTAAGCAATAACAGATCTGCCACATGCAGAAGCAAATATCAGGCCTGTCGCACACGGGCGGCATTTAAATAG
GAATTTCTATTTTTGAAATAAGGGATGGTCTATGAGGCATACAGTAGATTTGATGTGATCCTTTTCTCCCTCCCT
TCCATAATGGATCGTGGTCTGTGTGACTGAACCCACACAGAGTGTCATGGGTGACAGTTTCTGGTTGAAGTAGCT
CCACGCCTGGCTTCTGTGGACAGCAGATTCTTTTCCTTCTCACAAGGGGCTCATTTAAAATTTGGAGGCTGGGTG
CTGTGGCTCACGCCTGCAATCCCAGCACTTTGGGAGACTGAGGCGGGCGGATCATGAGGTCAGGAGATCGCGACC
ATCCTGGCTAACAGTGAAACCCTGTCTCCACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGGCGCCTGTA
GTCCCAGCTACTCTGAAGACTGAGGCAGGAGAATGGCGTGAACCCAGGAGGCGGAGCTTGCAGTGAGCTGAGATC
ACGCCACTGCACTCCAGCCTGGGCAACAGAGTGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAATGGAACGCAG
GGCAAGAACTCGTATTTGGAAGGAGATGGGGGAAAGGAGCGGTATTATACCTATGTTGTATTTGCAGGCAAATGA
GATGGAGCCCTCTCTGTAAAGAAGAGTCATTTGTGCAAGTAGACGGGGTCTGTGGGTGCAGGCCCTGGAGGGGCA
CACAATTGCCTGGAGGCTTCTGTGAGATCGGGAGAGGGAGGAGAGGCAGTCTCTTGACAAAATAAAGTATTTTTA
TTCATTTGTATTTATTAAATGAAAAAACAATCCCATGGTGTCCCTGTTGTGTGGTGGAACCTAATGACTGTTGAA
ATAAAGTTCTGTGTTTTCCCTGCCCTGC

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FIGURE 2830

AGCCACGTGACCCCCGTGCCGGCCAACGGGTGCGCCGGGATTTGGGGGATAAAGCGCGGCCCCGCGCACAGTTGC
GGCGGGAGAGCGGCGGGGCCGAGAGCGTGACTCGCCCGCTCCGCGCTGCTTCCCCCGCGCCGCCTCCCCGCGCCG
CTCGCGCAGCC**ATG**TCCGAGGAGAAGCCCAAGGAGGGTGTGAAGACAGAGAATGACCACATCAACCTGAAGGTGG
CCGGGCAGGACGGCTCCGTGGTGCAGTTCAAGATCAAGAGGCACACGCCGCTGAGCAAGCTGATGAAGGCCTACT
GCGAGAGGCAGGGCTTGTCAATGAGGCAGATCAGATTCAGGTTCGACGGGCAGCCAATCAATGAAACTGACACTC
CAGCACAGCTGGAGATGGAGGACGAGGACACCATCGACGTGTTCCAGCAGCAGACGGGAGGTGTGCCGGAGAGCA
GCCTGGCAGGGCACAGTTTC**TAG**AGGGCCCGTCCCCAGCCCGGGCCGTCCATCCTCGCATTGCTGTTGAATGGTG
AGCACGTGACCATGCCGACCACAAAGGTGTCTGCGGAAACTCGAGGACATTCACCACGATGATTTTCCTCTCTTT
GATGTACTTCAAGTGCAACTCAAAACTATATCTGCAGGGATGAATCTGTAACTTAAATTGGGCCAATCAGAATTG
TTATCTTTGTTCAGGTAAAATGAGTTGCAAGATATTGTGGGTACTTTTGTGTGCTCATTTGTGTTTTCCCCCCCT
CCTACAACATTTTTTTAACCCCAAAATTATAGCCTGAATGTTCGCTTTTAGTCTGGCCAGGGATCTGACTCCTGA
GTTGGTTGCCTCTCCCCTGCTCACTCCAGTCACATAGAGAATTGGTGTTTCCCGCAGTGGGGATGCAGCTGTTGG
ACAGGTATTGGGGGCAAGGTTGGTAGGGAGGACAGACTGTCACTTGCTGTTACAGGCACAGGTGATTAAAATGCT
AAATATTGCAAATTTAAGCTTTGTCAGTATATGGAAAAGTTGAAGGGAAAATACTGGAATGCTTCTTCAAAGGTT
AAAAAATAACCGAGTCTTTTGGTAATTTGACCCCACGTGCTCTCTGGCCCTCAAGCATGTAACCTCGGGGTCTGA
GGCCCAGGACCCACCCCCCTGCCACCCCTCCCACCCCACTCCCTGCTCAGTACCTGGCGTTGGTACACAGGCAAG
GATTGGCACAACCAAAATTGGCCTTTTTCTCCCTCTTAATATTGAAGAAATTCCCACATTTCTCATTTGGTAATG
GTGTTGTGGCCTCAGATTTCTTCTAGTATTTGCTTCTGATGAATGATTATGGTCTATACATAAAAAAGTAAGACT
AAGTATTGCTGAATTTGCAGTTATGTTGTCGTGTATAAGAGCTACTTCCAAGTGTGGTTACAAATGAACCCATGG
AATGATGACTTCATGTTCTTCTCGTGGGTTTGTGCCGTGCTGCTTTCCAAATAGGTATTGAATTTATGCATTAGT
CTGGTGATTTCAGTTCTGTGAAATATTTTGGGATCTATACCAATTAAACATTTTCATAGTTCTGCCTATTGTCCT
TCCCTGAGGCTCCATTGCTGCTTGGTGGCCATTCTCTGCCTTTTTACAGTCACCTGAACAATGACCCATCATCTC
TTGCTTGCTTGAAATCTTGCTGAAATGTTCTCATTTCCTGTTTGCTGTATGGGCTCGGGTGGGATGTTTGTTGGC
TCTGTTGTGTTTATTCACCAATTTGTACATTATTTGTTGTCCTTTACTACTGTAAACAGTAAATATAGTTTGGT

FIGURE 2831

CTGAACCTCAGCCGCGCCGGGAGGCGAGCCCGTTGGCGAGGGGCGGGGCAGATGGCGAGGGAGCGGGGCGAGCTG
CTTTTTGAGGCTGCGCACTCGCATGGCCCCACCTCGCAGGTCCACTTCCGGCGCCGCGGCTGTTCCGGGCGGAGA
CCGCTTGTGCTGGAGTCGGAGTTGTAACGCTCCACTGACTGATAGAGCGACCGGCCGACC**ATG**GCGCCCGGAGTG
GCCCGCGGGCCGACGCCGTACTGGAGGTTGCGCCTCGGTGGCGCCGCGCTGCTCCTGCTGCTCATCCCGGTGGCC
GCCGCGCAGGAGCCTCCCGGAGCTGCTTGTTCTCAGAACACAAACAAAACCTGTGAAGAGTGCCTGAAGAACGTC
TCCTGTCTTTGGTGCAACACTAACAAGGCTTGTCTGGACTACCCAGTTACAAGCGTCTTGCCACCGGCTTCCCTT
TGTAAATTGAGCTCTGCACGCTGGGGAGTTTGTTGGGTGAACTTTGAGGCGCTGATCATCACCATGTCGGTAGTC
GGGGGAACCCTCCTCCTGGGCATTGCCATCTGCTGCTGCTGCTGCTGCAGGAGGAAGAGGAGCCGGAAGCCGGAC
AGGAGTGAGGAGAAGGCCATGCGTGAGCGGGAGGAGAGGCGGATACGGCAGGAGGAACGGAGAGCAGAGATGAAG
ACAAGACATGATGAAATCAGAAAAAAATATGGCCTGTTTAAAGAAGAAAACCCGTATGCTAGATTTGAAAACAAC
TAAAGCGCTCCAGCACATCAGTCCCGACGCTTCCTGTGAGGTGCACGCTCCGCAGCCCAGCCCAGCCGGGAGACC
ACGTGGCCATTGCGGTCTCCTGACCTTGGCCAGTGAACCTGCCAGCCTTCCAGGACAGGCGGCCGGAGAGCTGCC
CCTGAAGGACAGTCCTCTCGTCTTGCAGACTGGTGACCTTCTATTCCCTGTTCATCTCTGTTTCTAGATTTAGTC
ACTTGAAATAAGAAATCTTTGGGGTTTGGGCTTTTTTATACTCTTCTCAGTTTGTGAAACGCTAACTGCACACGA
AGCCGCCTGACGGCACCCAGCGCTGTGGCTGTCATTCTCCCAGGGCAGAACCCTGCGTTTCTCTCTGTCCACTAA
CAAGCTTCACACGCAACACAGGGAAGTCGGTTTGACTTTTGTCATGAGGAGAACTGACCAGCCCTCATCATTCCC
CATAAAACCACGGACAGCGTCTGTGTGCGCATCTTGAGTCTTCACACCTGTTGACTCACACGGCTTTTGCTGATG
ACACGGGGCTCCAGTACACAGTCTGATAAGGACTTAACGTCCTAACCTCAATTGTATTAAATAGCATTGGGGAAT
AGCTAAACCTTTTTAAAAAAATTTATTGGATTTTCCTCCCTGCTTAAAAGATTTCACCAGAAAACCTTCATATAA
AAATTCAGGCCCTTTTTGGACAATTTTTAAAATTTGTATCTTTACTAGAACATGAGAATCTTTTTCCCTTGGAAG
CTTGAATTATAAATGTGGTGTTTGGCCTGCCTCAGCAGCACCAGTTGACTGCTCGTGTGCCAGCGGTGTGGGGAG
GACGGGGCAGGACGCTGCAGCTCTCTCCAGCCCTGTTGGCATCCTCAGTGCCTGCAGGCCTCTCGCTGCCTGTTG
GGCTGTCTGGGGGGTGGCCATTTAGGGATCGTGGGGACGGGGTCCACCCCAAGAAGAAAGAAAGGCCCGTCCACA
GGCCCGGCTCTGGGCCACGTGCCCCGGAAGCAGGTGTGTCCAGAGTCAGCTGAGGGCTCTCCCCACACCACCCAG
CAGGCGCTGGTGCTCCTTCTGCCTCATGGGACCAGTCCAGCTTCCAGCCGCTCTGGCTCGAGGGTGGTCTGACCA
CTTCCTTCTGAGTGGGCTTCTCTGGGAGCTCTCCAGTGGCACTGCTGGACCTGCCCACGTTTCTGTAAAATCAGG
ATACGTGGCTTTAGTAAGCAGACCAAGCGCTTCGTGGCAGGGAAAGCAGCGTGCGGGGAAGTCACTGAAAAGTGC
TGCCTAAGGAAGTTTGGAAATAGTCCCTGTTCCAGATTGCCTTGAATTTTAAAACATTTTGCTTTGGGAAAGTAG
GTCAGCAGCACCTAAGATCAAGGATGCGTTCCATTTTCACACTTCACAGTCATGAAAACTGAGAAGACTGTCTTC
AGCGTGAACTAAAGTTCACAGGCAGATCACTGATCCAGAACACTTCAAGAACTCGTCAAACAGCTCGATAAGCCT
TTTTGACTGTGTACATCTGTACCGGGAATAACATTCCTAGGCTGAAATTTCCACAAAGAATAGAACCTGTACCCA
GTTCTTCAGGCTGATTTCCCTGACCTCTTGGGCATTTGTATTTGTAGTAAAGTATTGCAGAGATTCCTAAGTATT
TTATAGCAGCCATCAAAATTGGACTTTGTATTGTTTATTCATAAAAGACACTTGGTAATAGACTTCAGTGAACTC
TGTATGAATGCAGTAGTGTGTGTGCAAAATCCGCTTCCTGAGCGTAGGGTGCTGAGCTGGCGCTAGGGCTCGGTT
GTGAAATACAGCGTAGTCAGCCCTTGCGCTCAGTGTAGAAACCCACGTCTGTAAGGTCGGTCTTCGTCCATCTGC
TTTTTTCTGAAATACACTAAGAGCAGCCACAAAACTGTAACCTCAAGGAAACCATAAAGCTTGGAGTGCCTTAAT
TTTTAACCAGTTTCCAATAAAACGGTTTACTACCTG

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FIGURE 2832

TGTCAGGACTTTACGACCCGCGCCTCCAGCTGAGGTTTCTAGACGTGACCCAGGGCAGACTGGTAGCAAAGCCCC
CACGCCCAGCCAGGAGCACCGCCGAGGACTCCAGCACACCGAGGGACATGCTGGGCCTGCGCCCCCCACTGCTCG
CCCTGGTGGGGCTGCTCTCCCTCGGGTGCGTCCTCTCTCAGGAGTGCACGAAGTTCAAGGTCAGCAGCTGCCGGG
AATGCATCGAGTCGGGGCCCGGCTGCACCTGGTGCCAGAAGCTGAACTTCACAGGGCCGGGGGATCCTGACTCCA
TTCGCTGCGACACCCGGCCACAGCTGCTCATGAGGGGCTGTGCGGCTGACGACATCATGGACCCCACAAGCCTCG
CTGAAACCCAGGAAGACCACAATGGGGGCCAGAAGCAGCTGTCCCCACAAAAAGTGACGCTTTACCTGCGACCAG
GCCAGGCAGCAGCGTTCAACGTGACCTTCCGGCGGGCCAAGGGCTACCCCATCGACCTGTACTATCTGATGGACC
TCTCCTACTCCATGCTTGATGACCTCAGGAATGTCAAGAAGCTAGGTGGCGACCTGCTCCGGGCCCTCAACGAGA
TCACCGAGTCCGGCCGCATTGGCTTCGGGTCCTTCGTGGACAAGACCGTGCTGCCGTTCGTGAACACGCACCCTG
ATAAGCTGCGAAACCCATGCCCCAACAAGGAGAAAGAGTGCCAGCCCCCGTTTGCCTTCAGGCACGTGCTGAAGC
TGACCAACAACTCCAACCAGTTTCAGACCGAGGTCGGGAAGCAGCTGATTTCCGGAAACCTGGATGCACCCGAGG
GTGGGCTGGACGCCATGATGCAGGTCGCCGCCTGCCCGGAGGAAATCGGCTGGCGCAACGTCACGCGGCTGCTGG
TGTTTGCCACTGATGACGGCTTCCATTTCGCGGGCGACGGGAAGCTGGGCGCCATCCTGACCCCCAACGACGGCC
GCTGTCACCTGGAGGACAACTTGTACAAGAGGAGCAACGAATTCGACTACCCATCGGTGGGCCAGCTGGCGCACA
AGCTGGCTGAAAACAACATCCAGCCCATCTTCGCGGTGACCAGTAGGATGGTGAAGACCTACGAGAAACTCACCG
AGATCATCCCCAAGTCAGCCGTGGGGGAGCTGTCTGAGGACTCCAGCAATGTGGTCCAACTCATTAAGAATGCTT
ACAATAAACTCTCCTCCAGGGTCTTCCTGGATCACAACGCCCTCCCCGACACCCTGAAAGTCACCTACGACTCCT
TCTGCAGCAATGGAGTGACGCACAGGAACCAGCCCAGAGGTGACTGTGATGGCGTGCAGATCAATGTCCCGATCA
CCTTCCAGGTGAAGGTCACGGCCACAGAGTGCATCCAGGAGCAGTCGTTTGTCATCCGGGCGCTGGGCTTCACGG
ACATAGTGACCGTGCAGGTTCTTCCCCAGTGTGAGTGCCGGTGCCGGGACCAGAGCAGAGACCGCAGCCTCTGCC
ATGGCAAGGGCTTCTTGGAGTGCGGCATCTGCAGGTGTGACACTGGCTACATTGGGAAAAACTGTGAGTGCCAGA
CACAGGGCCGGAGCAGCCAGGAGCTGGAAGGAAGCTGCCGGAAGGACAACAACTCCATCATCTGCTCAGGGCTGG
GGGACTGTGTCTGCGGGCAGTGCCTGTGCCACACCAGCGACGTCCCCGGCAAGCTGATATACGGGCAGTACTGCG
AGTGTGACACCATCAACTGTGAGCGCTACAACGGCCAGGTCTGCGGCGGCCCGGGGAGGGGGCTCTGCTTCTGCG
GGAAGTGCCGCTGCCACCCGGGCTTTGAGGGCTCAGCGTGCCAGTGCGAGAGGACCACTGAGGGCTGCCTGAACC
CGCGGCGTGTTGAGTGTAGTGGTCGTGGCCGGTGCCGCTGCAACGTATGCGAGTGCCATTCAGGCTACCAGCTGC
CTCTGTGCCAGGAGTGCCCCGGCTGCCCCTCACCCTGTGGCAAGTACATCTCCTGCGCCGAGTGCCTGAAGTTCG
AAAAGGGCCCCTTTGGGAAGAACTGCAGCGCGGCGTGTCCGGGCCTGCAGCTGTCGAACAACCCCGTGAAGGGCA
GGACCTGCAAGGAGAGGGACTCAGAGGGCTGCTGGGTGGCCTACACGCTGGAGCAGCAGGACGGGATGGACCGCT
ACCTCATCTATGTGGATGAGAGCCGAGAGTGTGTGGCAGGCCCCAACATCGCCGCCATCGTCGGGGGCACCGTGG
CAGGCATCGTGCTGATCGGCATTCTCCTGCTGGTCATCTGGAAGGCTCTGATCCACCTGAGCGACCTCCGGGAGT
ACAGGCGCTTTGAGAAGGAGAAGCTCAAGTCCCAGTGGAACAATGATAATCCCCTTTTCAAGAGCGCCACCACGA
CGGTCATGAACCCCAAGTTTGCTGAGAGTTAGGAGCACTTGGTGAAGACAAGGCCGTCAGGACCCACCATGTCTG
CCCCATCACGCGGCCGAGACATGGCTTGCCACAGCTCTTGAGGATGTCACCAATTAACCAGAAATCCAGTTATTT
TCCGCCCTCAAAATGACAGCCATGGCCGGCCGGGTGCTTCTGGGGGCTCGTCGGGGGGACAGCTCCACTCTGACT
GGCACAGTCTTTGCATGGAGACTTGAGGAGGGAGGGCTTGAGGTTGGTGAGGTTAGGTGCGTGTTTCCTGTGCAA
GTCAGGACATCAGTCTGATTAAAGGTGGTGCCAATTTATTTACATTTAAACTTGTCAGGGTATAAAATGACATCC
CATTAATTATATTGTTAATCAATCACGTGTATAGAAAAAAAATAAAACTTCAATACAGGCTGTCCATGG

FIGURE 2833

CTCCTCCTTGGAGGAAGTGGTGGGTTGCACCACCGTGGCCCTTCACCCCTGCCCCTCTCCGCTCTACAGCAGCTC
TGATGTCAGAGAGCGGCCCCTTGAGACAGACCTGCGTGCTCTGAGGCTGCCCGACCCTGAGCTCCAGAACAGACC
ATCGAGTTCAGGAGACAAGCATGTCAGCCATGACACAAGGCAG**ATG**AGAGGGACCCCCAGCGTCCACACGTGGAG
GCAGCGGGGGCAGCCGACGTCCCTGAACCAAAGCCAAAGTCTACAGGTCACTGGGGCAGAGGCCGCCCGAAACCA
GCTGTCCCCTCCCGGCCTAGGCGCGCCAGGTCCCCGCCCAGCCGGGGCGATCCTTTGGTCGGACAGTGAGGTTGG
GAGCCCACCGCACCCAAGTGCCGCCGCATCCACCCGGCGCAGGCGACCCCCGACGGGCAGCCGCTCACCTTCTCC
TGGCCCCGGGCTTCAGGAAAACTGCCTGGAGGTGGCCGGGGTCTCCCTAGCGGAGGCTGGGCGGCGGGCTTCGCG
CCTGCCTCAGTCTCCCAATCCGTGGCCCGGGGGATGGAGCCCGCTGCGCGCAGAGGCTGCGGCAGGTCCCAGCCA
GGTGCCCTGGAACGTGGCTCCTCCTTCCCTGAGGCGCTCCCCTGGGCACGAGGATGGGTCTCGAAGCAGGAGGAA
GCCGCCTTCCCTCACCCGCTGTCCGGAGCTGCTCAGCCGGTGCGCGGAGCCTCCCCCGCCGCGGACACCACGATC
CGACCCCCACCCTGACCCCGACCCAGACCCCCACCGCCCGACCCCGGCCGTATTCCGTTGCGTTTGCTCCCTGCC
AGCTCCGGGGCCACCACTGAGCACGCGCTGTGAG**TAG**

FIGURE 2834

AATGGGCGGCAAAGCGCCGCAGGCACAGAGCCTCCTTTCATCTCTGCAGCAGGCTGAGTTTAAAAAGCAGATTTT
CTACACAATGTCGTACGCGAGTCTCAGCAGAGCTCAGGCCACGACCTCCAGCTGCCTGCAAGCCTGCATCTTCCT
CTGGGAGGCTTCCCCCCTCACCCTGCATCAGGGCCCGGGCTTGAGGGGTG**ATG**GAGGCAGGTTCCCCTGCAGCCG
GCGGTTCTGGGAGCAGGTGCCCGAGGCGGAGGCCATGGCCTCTGAGCAGGTGGCAGCTTCGCCCCCACCAGAGCC
TGCAGCCCTCACAGCATCCCACATTGCCCCAGCCTCTGCCTGGGCCAATGGCTCCTGGTGTCATTAAAGACTCTG
TTTTTACCTCCTCTGGGCCTCGGGAGACCAGCCTGGCACCAGAGGAGGGGCTGGCAGAGCCCCAGGCTCCAGTCC
ACACCCACCGGCCCCAGGTCTGGCCATGGGCTGGGCCCTGGTGTGCAGACAGCAGTGGCCACTGCTCCAGGGCCT
TTGCACCAGCCTGCTGCAGGTCCAGGCGGTCATGGGGAGTGGAGCCGCAGCGGCCTCTTGTTTTCCTTCCCCTCT
TGGGAGACGGCTGCTCCTCCTGGCTGTTTCCAGAAAGTGTGTTTGTTATTTGGCTCCTGGAAACACCATCTGATG
AAACAGGCTCTGTTGGGCTGGCCTGCCAGGCGGAGGCTGTGGGCGCCCAGGAGTCTCACCACGAAGCAGGTGGCA
GAGGCCCGATAGCCCCACCCTGCAGGCCGGGACCTGGCACC**TAA**ACGGGGAGATGGAAGAACATGGAAAATTCCC
TAAGAGCAAATTGATGCTCAGCTTCCGCGGGCACCAACTTGCTGCGGAATCCTGCTTTGCAGATCATCGTTCCTC
GAGCATTCGGACGCCTCGGGCCCCAGAAGTTCAAGAACAAGAAAGCTCTGTTTCATGCAGACACGCTCACGCATG
CACACATGCTCACACATGCACTTATACGTGCACACACACACACACAACACACACACACGCACACTCACACAACCA
TGGCCATGTAGCCCCAGTCTCAGCATCATGTCCTCTATTTAGAAATATTGGCTAAACACCTAATAAATAACTAAA
CAGAAATG

FIGURE 2835A

GCGGCGGCGGCGGCGGCGGCGGCAGCGGCGGCCAAGCGGCCAGGTTGGCGGCCGGGGCTCCGGGCCGCGCGAGGC
CACGGCCACGCCGCGCCGCTGCGCACAACCAACGAGGCAGAGCGCCGCCCGGCGCGAGACTGCGGCCGAAGCGTG
GGGCGCGCGTGCGGAGGACCAGGCGCGGCGCGGCTGCGGCTGAGAGTGGAGCCTTTCAGGCTGGCATGGAGAGCT
TAAGGGGCAACTGAAGGAGACACACTGGCCAAGCGCGGAGTTCTGCTTACTTCAGTCCTGCTGAGATACTCTCTC
AGTCCGCTCGCACCGAAGGAAGCTGCCTTGGGATCAGAGCAGACATAAAGCTAGAAAAATTTCAAGACAGAAACA
GTCTCCGCCAGTCAAGAAACCCTCAAAAGTATTTTGCC**ATG**GATATAGAAGATGAAGAAAACATGAGTTCCAGCA
GCACTGATGTGAAGGAAAACCGCAATCTGGACAACGTGTCCCCCAAGGATGGCAGCACACCTGGGCCTGGCGAGG
GCTCTCAGCTCTCCAATGGGGGTGGTGGTGGCCCCGGCAGAAAGCGGCCCCTGGAGGAGGGCAGCAATGGCCACT
CCAAGTACCGCCTGAAGAAAAGGAGGAAAACACCAGGGCCCGTCCTCCCCAAGAACGCCCTGATGCAGCTGAATG
AGATCAAGCCTGGTTTGCAGTACACACTCCTGTCCCAGACTGGGCCCGTGCACGCGCCTTTGTTTGTCATGTCTG
TGGAGGTGAATGGCCAGGTTTTTGAGGGCTCTGGTCCCACAAAGAAAAAGGCAAAACTCCATGCTGCTGAGAAGG
CCTTGAGGTCTTTCGTTCAGTTTCCTAATGCCTCTGAGGCCCACCTGGCCATGGGGAGGACCCTGTCTGTCAACA
CGGACTTCACATCTGACCAGGCCGACTTCCCTGACACGCTCTTCAATGGTTTTGAAACTCCTGACAAGGCGGAGC
CTCCCTTTTACGTGGGCTCCAATGGGGATGACTCCTTCAGTTCCAGCGGGGACCTCAGCTTGTCTGCTTCCCCGG
TGCCTGCCAGCCTAGCCCAGCCTCCTCTCCCTGTCTTACCACCATTCCCACCCCCGAGTGGGAAGAATCCCGTGA
TGATCTTGAACGAACTGCGCCCAGGACTCAAGTATGACTTCCTCTCCGAGAGCGGGGAGAGCCATGCCAAGAGCT
TCGTCATGTCTGTGGTCGTGGATGGTCAGTTCTTTGAAGGCTCGGGGAGAAACAAGAAGCTTGCCAAGGCCCGGG
CTGCGCAGTCTGCCCTGGCCGCCATTTTTAACTTGCACTTGGATCAGACGCCATCTCGCCAGCCTATTCCCAGTG
AGGGTCTTCAGCTGCATTTACCGCAGGTTTTAGCTGACGCTGTCTCACGCCTGGTCCTGGGTAAGTTTGGTGACC
TGACCGACAACTTCTCCTCCCCTCACGCTCGCAGAAAAGTGCTGGCTGGAGTCGTCATGACAACAGGCACAGATG
TTAAAGATGCCAAGGTGATAAGTGTTTCTACAGGAACAAAATGTATTAATGGTGAATACATGAGTGATCGTGGCC
TTGCATTAAATGACTGCCATGCAGAAATAATATCTCGGAGATCCTTGCTCAGATTTCTTTATACACAACTTGAGC
TTTACTTAAATAACAAAGATGATCAAAAAAGATCCATCTTTCAGAAATCAGAGCGAGGGGGGTTTAGGCTGAAGG
AGAATGTCCAGTTTCATCTGTACATCAGCACCTCTCCCTGTGGAGATGCCAGAATCTTCTCACCACATGAGCCAA
TCCTGGAAGAACCAGCAGATAGACACCCAAATCGTAAAGCAAGAGGACAGCTACGGACCAAAATAGAGTCTGGTG
AGGGGACGATTCCAGTGCGCTCCAATGCGAGCATCCAAACGTGGGACGGGGTGCTGCAAGGGGAGCGGCTGCTCA
CCATGTCCTGCAGTGACAAGATTGCACGCTGGAACGTGGTGGGCATCCAGGGATCCCTGCTCAGCATTTTCGTGG
AGCCCATTTACTTCTCGAGCATCATCCTGGGCAGCCTTTACCACGGGGACCACCTTTCCAGGGCCATGTACCAGC
GGATCTCCAACATAGAGGACCTGCCACCTCTCTACACCCTCAACAAGCCTTTGCTCAGTGGCATCAGCAATGCAG
AAGCACGGCAGCCAGGGAAGGCCCCCAACTTCAGTGTCAACTGGACGGTAGGCGACTCCGCTATTGAGGTCATCA
ACGCCACGACTGGGAAGGATGAGCTGGGCCGCGCGTCCCGCCTGTGTAAGCACGCGTTGTACTGTCGCTGGATGC
GTGTGCACGGCAAGGTTCCCTCCCACTTACTACGCTCCAAGATTACCAAGCCCAACGTGTACCATGAGTCCAAGC
TGGCGGCAAAGGAGTACCAGGCCGCCAAGGCGCGTCTGTTCACAGCCTTCATCAAGGCGGGGCTGGGGGCCTGGG
TGGAGAAGCCCACCGAGCAGGACCAGTTCTCACTCACGCCC**TGA**CCCGGGCAGACATGATGGGGGGTGCAGGGGG
CTGTGGGCATCCAGCGTCATCCTCCAGAACCTCACATCTGAACTGGGGGCAGGTGCATACCTTGGGGAGGGAGTA
GGGGGACACGGGGGACCACCAGGTGTCCACGGTTGTCCCCAGCATCTCACATCAGACCTGGGGCAGGTGCGCAGT
GTGGGGAGGGGATGGGGTGCGTCAGGGCCCAGCATCGCCGCCTGGCATCTCTCTGCCGCAGCATTTCCCCTTCTG
AACCGTCCAGTGACTGCTTTCAATCTCGGTTTACGTTTAGAAATTGAGTTCTACTGAGTAGGGCTTCCTTAAGTT
TAGGAAAATAGAAATTACTTTGTGTGAAATTCTTGAATAAATAATTTATTCAGAGCTAGGAATGTGGTTTATAAA
ATAGGAAGTAATTGTGTCAGGTCACTTTTATGCCACATTATTTTAATTGCAAAAAAGCATCTATATATGGAGGAG
GGTGGGAAAATAGAGGTAGGAAATAGTAGCCTAAAGGAAATCGCCACACGTCTGTCTAAACTTAGGTCTCTTTTC
TCCGTAGGTACCTCCCTGGGTAGTTCCACACACTAGGTTGTAACAGTCTCTCCCTGAGGAGCAGACTCCCAGCAT
GGTGTAGCGTGGCCCTGTCATGCACATGGGGTCCCGCAGCAGTGACTGTGTGTCCTGCAGAGGCGTGACCCAGGC
CCCTGTAGCCCTCAGCCTCCTCTAGAAGCTTCTGTACTCCTTGTAGGATCAGATCATGGAAAACTTTTCTCAGTT
TACTTCTAAGTAATCACAGATAATACATGGCCAGTAATCCCAGGCTGGCCATTCATTCAGGTTTTTTAAAGGATA
TTTAACTTTTATGGACTAGAAGGAATCACGAGGGCTACTGCACAATACATGGCCTAAGTTCCCTCTGTTCCTTCC
TCTGAATCGAATGGATGTGGGTGACCGCCCGAAGGCCTTCACAGGATGGAAGTAGAATGATTTCAGTAGATACTC
ATTCTTGGAAAATGCCATAGTTTTAAATTATTGTTTCCAGCTTTATCAAAGACATGTTTGAAAAATAAAAAGCAT

FIGURE 2835B

CCAAGTGAGAGCTGGTGAGACCACGTGCTGCTGGCGTAGTGTAGGCCAGACATTGACAGTCCTGACGGGAGCTCA
GGGCTGCCCAGCGCCCAGCGTGCACGGGACGGCCCCACGACAGAGGGAGTCAGCCCGGGAGGTCAGGAGCGCGGC
GGGCGAGGGCCCTGTGTGGACCACCTCCACCAAGC

FIGURE 2836A

AGCTCCAGCCGCACTGCCCCGATGGCTCCCTACCCCTGTGGCTGCCACATCCTGCTGCTGCTCTTCTGCTGCCTG
GCGGCTGCCCGGGCCAACCTGCTGAACCTGAACTGGCTTTGGTTCAATAATGAGGACACCAGCCATGCAGCTACC
ACGATCCCTGAGCCCCAGGGGCCCCTGCCTGTGCAGCCCACAGCAGATACCACCACACACGTGACCCCCCGGAAT
GGTTCCACAGAGCCAGCGACAGCCCCTGGCAGCCCTGAGCCACCCTCAGAGCTGCTGGAAGATGGCCAGGACACC
CCCACTTCTGCCGAGAGCCCGGACGCGCCAGAGGAGAACATTGCCGGTGTCGGAGCCGAGATCCTGAACGTGGCC
AAAGGCATCCGGAGCTTCGTCCAGCTGTGGAATGACACTGTCCCCACTGAGAGCTTGGCCAGGGCGGAAACCCTG
GTCCTGGAGACTCCTGTGGGCCCCCTTGCCCTCGCTGGGCCTTCCAGCACCCCCCAGGAGAATGGGACCACTCTC
TGGCCCAGCCGTGGCATTCCTAGCTCTCCGGGCGCCCACACAACCGAGGCTGGCACCTTGCCTGCACCCACCCCA
TCGCCTCCCTCCCTGGGCAGGCCCTGGGCACCACTCACGGGGCCCTCAGTGCCACCACCATCTTCAGAGCGCATC
AGCGAGGAGGTGGGGCTGCTGCAGCTCCTTGGGGACCCCCCGCCCCAGCAGGTCACCCAGACGGATGACCCCGAC
GTCGGGCTGGCCTACGTCTTTGGGCCAGATGCCAACAGTGGCCAAGTGGCCCGGTACCACTTCCCCAGCCTCTTC
TTCCGTGACTTCTCACTGCTGTTCCACATCCGGCCAGCCACAGAGGGCCCAGGGGTGCTGTTCGCCATCACGGAC
TCGGCGCAGGCCATGGTCTTGCTGGGCGTGAAGCTCTCTGGGGTGCAGGACGGGCACCAGGACATCTCCCTGCTC
TACACAGAACCAGGTGCAGGCCAGACCCACACAGCCGCCAGCTTCCGGCTCCCCGCCTTCGTCGGCCAGTGGACA
CACTTAGCCCTCAGTGTGGCAGGTGGCTTTGTGGCCCTCTACGTGGACTGTGAGGAGTTCCAGAGAATGCCGCTT
GCTCGGTCCTCACGGGGCCTGGAGCTGGAGCCTGGCGCCGGGCTCTTCGTGGCTCAGGCGGGGGGAGCGGACCCT
GACAAGTTCCAGGGGGTGATCGCTGAGCTGAAGGTGCGCAGGGACCCCCAGGTGAGCCCCATGCACTGCCTGGAC
GAGGAAGGCGATGACTCAGATGGGGCATCCGGAGACTCTGGCAGCGGGCTCGGGGACGCCCGGGAGCTTCTCAGG
GAGGAGACGGGCGCGGCCCTAAAACCCAGGCTCCCCGCGCCACCCCCCGTCACCACGCCACCCTTGGCTGGAGGC
AGCAGCACGGAAGATTCCAGAAGTGAAGAAGTCGAGGAGCAGACCACGGTGGCTTCGTTAGGAGCTCAGACACTT
CCTGGCTCAGATTCTGTCTCCACGTGGGACGGGAGTGTCCGGACCCCTGGGGGCCGCGTGAAAGAGGGCGGCCTG
AAGGGGCAGAAAGGGGAGCCAGGTGTTCCGGCAGGGCCTCCGGGGAGGGACGGCACCCCTGGAAGGGACGGCGAG
CCGGGCGACCCCGGTGAAGACGGAAAGCCGGGCGACACCGGGCCACAAGGCTTCCCCGGGACTCCAGGGGACGTA
GGTCCCAAGGGCGACAAGGGAGACCCTGGGGTTGGAGAGAGAGGGCCCCCAGGACCCCAAGGGCCTCCAGGGCCC
CCAGGACCCTCCTTCAGACACGACAAGCTGACCTTCATTGACATGGAGGGATCTGGCTTCGGGGGCGATCTGGAG
GCCCTGCGGGGTCCTCGAGGCTTCCCTGGACCTCCCGGACCCCCCGGTGTCCCAGGCCTGCCCGGCGAGCCAGGC
CGCTTTGGGGTGAACAGCTCCGACGTCCCAGGACCCGCCGGCCTTCCTGGTGTGCCTGGGCGCGAGGGTCCCCCC
GGGTTTCCTGGCCTCCCGGGACCCCCAGGCCCTCCGGGAAGAGAGGGGCCCCCAGGAAGGACTGGGCAGAAAGGC
AGCCTGGGTGAAGCAGGCGCCCCAGGACATAAGGGGAGCAAGGGAGCCCCCGGTCCTGCTGGTGCTCGTGGGGAG
AGCGGCCTGGCAGGAGCCCCCGGACCTGCTGGACCACCAGGCCCCCCTGGGCCCCCTGGGCCCCCAGGACCAGGA
CTCCCCGCTGGATTTGATGACATGGAAGGCTCCGGGGGGCCCTTCTGGTCAACAGCCCGAAGCGCTGATGGGCCA
CAGGGACCTCCCGGCCTGCCGGGACTTAAGGGGGATCCTGGCGTGCCTGGGCTGCCGGGGGCGAAGGGAGAAGTT
GGAGCAGATGGAGTCCCCGGGTTCCCCGGCCTCCCTGGCAGAGAGGGCATTGCTGGGCCCCAGGGGCCAAAGGGA
GACAGAGGCAGCCGGGGAGAAAAGGGAGATCCAGGGAAGGACGGAGTCGGGCAGCCGGGCCTCCCTGGCCCCCCC
GGACCCCCGGGACCTGTGGTCTACGTGTCGGAGCAGGACGGATCCGTCCTGAGCGTGCCGGGACCTGAGGGCCGG
CCGGGTTTCGCAGGCTTTCCCGGACCTGCAGGACCCAAGGGCAACCTGGGCTCTAAGGGCGAACGAGGCTCCCCG
GGACCCAAGGGTGAGAAGGGTGAACCGGGCAGCATCTTCAGCCCCGACGGCGGTGCCCTGGGCCCTGCCCAGAAA
GGAGCCAAGGTGAGGGCCGGGCTTCCGAGGACCCCCGGGTCCATACGGACGGCCGGGGTACAAGGGAGAGATTGG
CTTTCCTGGACGGCCGGGTCGCCCCGGGATGAACGGATTGAAAGGAGAGAAAGGGGAGCCGGGAGATGCCAGCCT
TGGATTTGGCATGAGGGGAATGCCCGGCCCCCCAGGACCTCCAGGGCCCCCAGGCCCTCCAGGGACTCCTGTTTA
CGACAGCAATGTGTTTGCTGAGTCCAGCCGCCCCGGGCCTCCAGGATTGCCAGGGAATCAGGGCCCTCCAGGACC
CAAGGGCGCCAAAGGAGAAGTGGGCCCCCCCGGACCACCAGGGCAGTTTCCGTTTGACTTTCTTCAGTTGGAGGC
TGAAATGAAGGGGGAGAAGGGAGACCGAGGTGATGCAGGACAGAAAGGCGAAAGGGGGGAGCCCGGGGGCGGCGG
TTTCTTCGGCTCCAGCCTGCCCGGCCCCCCCGGCCCCCCAGGCCCCCCAGGCCCACGTGGCTACCCTGGGATTCC
AGGTCCCAAGGGAGAGAGCATCCGGGGCCAGCCCGGCCCACCTGGACCTCAGGGACCCCCCGGCATCGGCTACGA
GGGGCGCCAGGGCCCTCCCGGCCCCCCAGGCCCCCCAGGGCCCCCTTCATTTCCTGGCCCTCACAGGCAGACTAT
CAGCGTTCCCGGCCCTCCGGGCCCCCCTGGGCCCCCTGGGCCCCCTGGAACCATGGGCGCCTCCTCAGGGGTGAG
GCTCTGGGCTACACGCCAGGCCATGCTGGGCCAGGTGCACGAGGTTCCCGAGGGCTGGCTCATCTTCGTGGCCGA

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FIGURE 2836B

GCAGGAGGAGCTCTACGTCCGCGTGCAGAACGGGTTCCGGAAGGTCCAGCTGGAGGCCCGGACACCACTCCCACG
AGGGACGGACAATGAAGTGGCCGCCTTGCAGCCCCCCGTGGTGCAGCTGCACGACAGCAACCCCTACCCGCGGCG
GGAGCACCCCCACCCCACCGCGCGGCCCTGGCGGGCAGATGACATCCTGGCCAGCCCCCCTCGCCTGCCCGAGCC
CCAGCCCTACCCCGGAGCCCCGCACCACAGCTCCTACGTGCACCTGCGGCCGGCGCGACCCACAAGCCCACCCGC
CCACAGCCACCGCGACTTCCAGCCGGTGCTCCACCTGGTTGCGCTCAACAGCCCCCTGTCAGGCGGCATGCGGGG
CATCCGCGGGGCCGACTTCCAGTGCTTCCAGCAGGCGCGGGCCGTGGGGCTGGCGGGCACCTTCCGCGCCTTCCT
GTCCTCGCGCCTGCAGGACCTGTACAGCATCGTGCGCCGTGCCGACCGCGCAGCCGTGCCCATCGTCAACCTCAA
GGACGAGCTGCTGTTTCCCAGCTGGGAGGCTCTGTTCTCAGGCTCTGAGGGTCCGCTGAAGCCCGGGGCACGCAT
CTTCTCCTTTGACGGCAAGGACGTCCTGAGGCACCCCACCTGGCCCCAGAAGAGCGTGTGGCATGGCTCGGACCC
CAACGGGCGCAGGCTGACCGAGAGCTACTGTGAGACGTGGCGGACGGAGGCTCCCTCGGCCACGGGCCAGGCCTC
CTCGCTGCTGGGGGGCAGGCTCCTGGGGCAGAGTGCCGCGAGCTGCCATCACGCCTACATCGTGCTCTGCATTGA
GAACAGCTTCATGACTGCCTCCAAGTAGCCACCGCCTGGATGCGGATGGCCGGAGAGGACCGGCGGCTCGGAGGA
AGCCCCCACCGTGGGCAGGGAGCGGCCGGCCAGCCCCTGGCCCCAGGACCTGGCTGCCATACTTTCCTGTATAGT
TCACGTTTCATGTAATCCTCAAGAAATAAAAGGAAGCCAAAGAGTGTATTTTTTTAAAAGTTTAAAACAGAAGCC
TGATGCTGACATTCACCTGCCCCAACTCTCCCCTGACCTGTGAGCCCAGCTGGGTCAGGCAGGGTGCAGTATCAT
GCCCTGTGCAACCTCTTGGCCTGATCAGACCACGGCTCGATTTCTCCAGGATTTCCTGCTTTGGGAAGCCGTGCT
CGCCCCAGCAGGTGCTGACTTCATCTCCCACCTAGCAGCACCGTTCTGTGCACAAAACCCAGACCTGTTAGCAGA
CAGGCCCCGTGAGGCAATGGGAGCTGAGGCCACACTCAGCACAAGGCCATCTGGGCTCCTCCAGGGTGTGTGCTC
GCCCTGCGGTAGATGGGAGGGAGGCTCAGGTCCCTGGGGCTAGGGGGAGCCCCTTCTGCTCAGCTCTGGGCCATT
CTCCACAGCAACCCCAGGCTGAAGCAGGTTCCCAAGCTCAGAGGCGCACTGTGACCCCCAGCTCCGGCCTGTCCT
CCAACACCAAGCACAGCAGCCTGGGGCTGGCCTCCCAAATGAGCCATGAGATGATACATCCAAAGCAGACAGCTC
CACCCTGGCCGAGTCCAAGCTGGGAGATTCAAGGGACCCATGAGTTGGGGTCTGGCAGCCTCCCATCCAGGGCCC
CCATCTCATGCCCCTGGCTGGGACGTGGCTCAGCCAGCACTTGTCCAGCTGAGCGCCAGGATGGAACACGGCCAC
ATCAAAGAGGCTGAGGCTGGCACAGGACATGCGGTAGCCAGCACACAGGGCAGTGAGGGAGGGCTGTCATCTGTG
CACTGCCCATGGACAGGCTGGCTCCAGATGCAGGGCAGTCATTGGCTGTCTCCTAGGAAACCCATATCCTTACCC
TCCTTGGGACTGAAGGGGAACCCCGGGGTGCCCACAGGCCGCCCTGCGGGTGAACAAAGCAGCCACGAGGTGCAA
CAAGGTCCTCTGTCAGTCACAGCCACCCCTGAGATCCGGCAACATCAACCCGAGTCATTCGTTCTGTGGAGGGAC
AAGTGGACTCAGGGCAGCGCCAGGCTGACCACAGCACAGCCAACACGCACCTGCCTCAGGACTGCGACGAAACCG
GTGGGGCTGGTTCTGTAATTGTGTGTGATGTGAAGCCAATTCAGACAGGCAAATAAAAGTGACCTTTTACACTG

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FIGURE 2837

GGCTCAGTCCCGACGTGGAACTCAGCAGCGGAGGCTGGACGCTTGCATGGCGCTTGAGAGATTCCATCGTGCCTG
GCTCACATAAGCGCTTCCTGGAAGTGAAGTCGTGCTGTCCTGAACGCGGGCCAGGCAGCTGCGGCCTGGGGGTTT
TGGAGTGATCACGA**ATG**AGCAAGGCGTTTGGGCTCCTGAGGCAAATCTGTCAGTCCATCCTGGCTGAGTCCTCGC
AGTCCCCGGCAGATCTTGAAGAAAAGAAGGAAGAAGACAGCAACATGAAGAGAGAGCAGCCCAGAGAGCGTCCCA
GGGCCTGGGACTACCCTCATGGCCTGGTTGGTTTACACAACATTGGACAGACCTGCTGCCTTAACTCCTTGATTC
AGGTGTTCGTAATGAATGTGGACTTCACCAGGATATTGAAGAGGATCACGGTGCCCAGGGGAGCTGACGAGCAGA
GGAGAAGCGTCCCTTTCCAGATGCTTCTGCTGCTGGAGAAGATGCAGGACAGCCGGCAGAAAGCAGTGCGGCCCC
TGGAGCTGGCCTACTGCCTGCAGAAGTGCAACGTGCCCTTGTTTGTCCAACATGATGCTGCCCAACTGTACCTCA
AACTCTGGAACCTGATTAAGGACCAGATCACTGATGTGCACTTGGTGGAGAGACTGCAGGCCCTGTATACGATCC
GGGTGAAGGACTCCTTGATTTGCGTTGACTGTGCCATGGAGAGTAGCAGAAACAGCAGCATGCTCACCCTCCCAC
TTTCTCTTTTTGATGTGGACTCAAAGCCCCTGAAGACACTGGAGGACGCCCTGCACTGCTTCTTCCAGCCCAGGG
AGTTATCAAGCAAAAGCAAGTGCTTCTGTGAGAACTGTGGGAAGAAGACCCGTGGGAAACAGGTCTTGAAGCTGA
CCCATTTGCCCCAGACCCTGACAATCCACCTCATGCGATTCTCCATCAGGAATTCACAGACGAGAAAGATCTGCC
ACTCCCTGTACTTCCCCCAGAGCTTGGATTTCAGCCAGATCCTTCCAATGAAGCGAGAGTCTTGTGATGCTGAGG
AGCAGTCTGGAGGGCAGTATGAGCTTTTTGCTGTGATTGCGCACGTGGGAATGGCAGACTCCGGTCATTACTGTG
TCTACATCCGGAATGCTGTGGATGGAAAATGGTTCTGCTTCAATGACTCCAATATTTGCTTGGTGTCCTGGGAAG
ACATCCAGTGTACCTACGGAAATCCTAACTACCACTGGCAGGAAACTGCATATCTTCTGGTTTACATGAAGATGG
AGTGC**TAA**TGGAAATGCCCAAAACCTTCAGAGATTGACACGCTGTCATTTTCCATTTCCGTTCCTGGATCTACGG
AGTCTTCTAAGAGATTTTGCAATGAGGAGAAGCATTGTTTTCAAACTATATAACTGAGCCTTATTTATAATTAGG
GATATTATCAAAATATGTAACCATGAGGCCCCTCAGGTCCTGATCAGTCAGAATGGATGCTTTCACCAGCAGACC
CGGCCATGTGGCTGCTCGGTCCTGGGTGCTCGCTGCTGTGCAAGACATTAGCCCTTTAGTTATGAGCCTGTGGGA
ACTTCAGGGGTTCCCAGTGGGGAGAGCAGTGGCAGTGGGAGGCATCTGGGGGCCAAAGGTCAGTGGCAGGGGGTA
TTTCAGTATTATACAACTGCTGTGACCAGACTTGTATACTGGCTGAATATCAGTGCTGTTTGTAATTTTTCACTT
TGAGAACCAACATTAATTCCATATGAATCAAGTGTTTTGTAACTGCTATTCATTTATTCAGCAAATATTTATTGA
TCATCTCTTCTCCATAAGATAGTGTGATAAACACAGTCATGAATAAAGTTATTTTCCAC

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FIGURE 2838

GTCAGACTGGTC**ATG**CAAGGTCCTGGGCCTGCCCTTGGGTCCTGGGGAGCCACGGAAGGTTGTGGGTGCCAGAGG
GTTGCGGTCAGAGTCACAGTCAAGGGCCTTCTGAGACCTGTGCCCCCTCCCCACCTCCTCAGGCCAGCTCTGGGG
TCTCAGCAGGTGGTCCGCAACATGACCTCTGAGTTCTTCGCTGCCCAGCTCCGGTCCCAGATCTCTGACCACACC
ACTCACCCGATCTCCTACTACAAGCCCGAGTTCTACACGCCGGATGACGGGGGCACTGCTCACCTGTCTGTCGTC
GCAGAGGACGGCAGTGCTGTGTCCGCCACCAGCACCATCAACCTCTACTTTGGCTCCAAGGTCTGCTCCCCGGTC
AGTGGGATCCTGTTCAATAATGAATGGACGACTTCAGCTCTCCCAGCATCACCAATGAGTTTGGGGCACCCCCCT
CACCTGCCAATTTCATCCAGCCAGGGAAGCAGCCGCTCTTGTCCATGTGCCCGACGATCATGGTGGGCCAGGACG
GCCAGGTCCGGATGGTGGTGGGAGCTGCTGGGGGCACGCAGATCACCACAGACACTGCACTGGCCATCATCTACA
ACCTCTGGTTCGGCTATGACG**TGA**AGAGGGCCGTGGAGGAGCCCCGGCTGCACAACAAGCTTCTGCCCAACGTCA
CGACAGTGGAGAGAAACATTGACCAGGCAGTGACTGCAGCCCTGGAGACCCGGCACCATCACACCCAGATCGCGT
CCACCTTCATCGCTGTGGTGCAAGCCATCGTCCGCACGGCTGGTGGCTGGGCAGCTGCCTCGGACTCCAGGAAAG
GCGGGGAACCTGCTGGCTACTGAGTGCTCCAGGCAGACAAGGCTGACAAGCAATCCAGGGACAAGATACTCACCA
GGATGAGGAAGAGGACTTTGGGGGACGGGCTTCCCCTGTGAGCAGCAGAGCAGCATAATAAATGAGGCCACTGTG
CCAGGCTCCAGGTGGCCTCCCTGGCCTGTCTCCCC

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FIGURE 2839

TTCGTGGCCAACACCCCAGGCAAGGCTTGGGGCCCCCGTCTGCTGCTGGACGGTAAGTCCTGGCCCCGTGGCAGT
GAATCTGTGGGGCGCTCTGATTGTGGGCACTATGGAAGCTAAACCCCATGCTCCAGGTGGGGTGGAGGGTCTTCA
GAGGACTCCTGGACAGTGCCAGGCTCTAGGCTGGGGTGGGGGACACAGGAGAAACCAGGCCAGGCCCATCCCTGC
TGGAGCTTCTCCCTAAGCAGTGGAGGCTCAGCCACTGTGAGGAGGTAGGCCAGGCCCTGCAGAAAGAGGGGTGTG
GAAATCTGGGGGCTCCCAGGAAGGGCCGCTGCTGGAGATGGGGTTCTTACCAGGATGGGCTCTGAAGATAAGCAG
GGAGGATTTGGGAGGGCAGAGATGAGGCCCAGAGCTTCTGGCAGAGGGCATGGCCTGCGCAAAGGTCTGGGGGCC
GGACAGCCTGCACGTATTCTGGGAAGCGGGAAGGAGACACAGGCCTTGTGTTTCTGAGGCCTGACTTTAGACTGT
GCCCTGTTGGGGAGGGGCCAGGGCATGTCTGAGGCTGGGCCTGACCCTGCTCCTTACCCCGTGGGTGCAGCAGAG
CCATGAAGAAGAAGTTAGTGGTGCTGGGCCTGCTGGCCGTGGTCCTGGTGCTGGTCATTGTCGGCCTCTGTCTCT
GGCTGCCCTCGGCCTCCAAGGAACCTGACAACCATGTGTACACCAGGGCTGCCGTGGCCGCGGATGCCAAGCAGT
GCTTGGAGATTGGGAGGAGGGCTGTCGGTGGCGGTGCCTGGGGAGATCCGAGGCTATGAGCTGGCACACCAGCGG
CATGGGCGGCTGCCCTGGGCTCGCCTCTTCCAGCCCAGCATCCAGCTGGCCCGCCAGGGCTTCCCCGTGGGCAAG
GGCTTGGCGGCAGTCCTGGAAAACAAGCGGACCGTCATCGAGCAGCAGCCTGTCTTGTGGTATGTCTGTGGGTGC
GGCCCCCTGACACAGGCAGGGCAGGCACAGCCCAAGGACCTTGCAGGCCGTAGCAGCAGTGGAGCGGCCCTCTGC
CTTCAGGACCCTGTGCTGATAATGGGATGAGGAGATACAGACCCTTCCCACCACGTGTGGGGACACATTCTGAGC
GTGGGGTCCCAGTGGCCACTGTGGCTGGCCACGTGTCCTGAGTGGCAAGGGACACTAGGAGGCTCCCGGAAGGGA
CACTAGGAGGACGAGCGCTGAGTGACAGGGCCACCCACCTGTGACAGGCGCTGCCCCTGTTCTGCTCCGTTCTCC
TGTGTGGGCAGGTGTGGGGGGTGGTCTAGCTGAGTCCACCCCACCTGCTGCCTCAC**ATG**AGCCCCCTCTGCCCCA
GTGAGGTGTTCTGCCGGGATAGAAAGGTGCTTCGGGAGGGGGAGAGACTGACCCTGCCGCGGCTGGCTGACACCT
ACGAGATGCTGGCCATCGAGGGTGCCCAGGCCTTCTACAACGGCAGCCTCATGGCCCAGATTGTGAAGGACATCC
AGGCGGCTGGTGAGTGGGTAACCTCAAGGACCTGGGTGAGGAACTCTGCAGTGGAAACCCTGAGCTGTAGCCCAG
AGCCATGGGGTCCTCCTGTCTTGCCTGAGCCTGCAGGAAGTTCCTGGTGGAGGAGGGTCAGTGACTGGCCATGTG
GGTCCACAGCTCCTGCTTATATCAAAACCAAGAGAGGCCACACAGTCCAGGAGAGCAAGTCCCTGTTGGGG**TAA**A
TGCAGGTGTAGGCAAGAGCCAGGGCTAGGGAAGCACTAGAATACAGCCTGAAGATCCAGGAGGACTTCTTGGAGG
AGGTGGCGGCTGGGCTGCAGATAACTTCGTTAGGCAGAGAGAGGAAGGGATTCCTAGCAGAGGAACAGCTGGGCT
AAGGCCCAGTAGAGGGCGCTTTGATTCACCAAGAGGGTTACAAGGGATGAGGGTCGCCTTGAGAGAGGCATGGGG
AAGGGGATTTGTGGGGCAGGGGCCTGGAGCTTGGCTGTGGCTTTCTTCAGGTAATTTTTGTCACTGTTTCATGGA
GGAGGGTGATTAGCGTGTCGACCTTTACCACTGAGGCTGGAAATTGGCATGCCAATACCCTGTCTGGAGCTGACT
CCAGGAGAATTAAGAGCCTCCCTCCCTCCCTCTATCCATTCATCGTGAGGAGAAGAGGCCAAGCAGCAGGGACAC
CGGCAGGAATTCTCCAGTTAGAAAAGGCCCTCTGAGCCAGGTGCGGTGGCTCACGTCTGTAATCCCAGCACTTTG
GGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTC
TACTAAAAATGCAAAATTAGTCAGGCATGGTGGGTTGTGCCTGTAATCCCAGCTACTTGGGAGGCTGTGGCAGGA
GAATCGCTAGAACCTGTGGGGCTGAGGTTGCAGTGAGCCGAGATTGCACCACTGCACTCCACAGAGTGAGACTCC
ATCTC

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FIGURE 2840

CGGGAAGATGGCGGGCCGGGCGACTTGAGATCCGCGGGTCTCCCTGCTCCTTTTCCGTCTGCGTCGGGAGCTCCC
GGGCACGTGAGGCCGTGCCGCGTTTACTGGCGGGAGGGACGGCCTAGCCGGGCGACGCCTCGGAGGAGGCCGCGG
ACCCCTTAGGTGCTGGGCCCTTGGAAATCGGCGCGTGGGGGGCGGTGCTCGAGCTGAGCGCGAGAGGGCGGGAGA
GCTCGTGGGGTGCGAGAGGAGCAGGACGCCCGGCCGGGCAGCATGAGTCAGCAGCGGCCGGCGAGGAGATTACCC
AGTCTCCTCCTGCACCCGACGGAGGAGACCCCATCAACGTGGAGGGCCTGCTGCCATCAAAAATAAGGATTAATT
TAGAAGATAATGTACAATATGTGTCCATGAGAAATCTGCTCCCGGGGGTATTCTTGACTTAAACAAGGTTGCAAC
GAAACTGGGAGTCCGAAAGCGGAGAGTGTATGACATCACCGATGTCTTAGATGGAATCGACCTCGTTGAAAAGAA
ATCCAAGAACCATATTAGATGGATAGGATCTGATCTTAGCAATTTTGGAGCAGTTCCCCAACAAAAGAAGCTACA
GGAGGAACTTTCTGACTTATCAGCAATGGAAGATGCTTTGGATGAGTTAATTAAGGATTGTGCTCAGCAGCTGTT
TGAGTTAACAGATGACAAAGAAAATGAAAGACTAGCATATGTGACCTATCAAGACATTCATAGCATTCAGGCCTT
CCATGAACAGATCGTCATTGCAGTTAAAGCTCCAGCAGAAACCAGATTGGATGTTCCAGCTCCCAGAGAAGACTC
TATCACAGTGCACATAAGGAGCACCAACGGACCTATCGATGTCTATTTGTGAGAAGTGGAGCAGGGTCAGACCAG
TAACAAAAGGTCTGAAGGTGTCAGGACCTCTTCATCTGAGAGCACTCATCCAGAAGGCCCTGAGGAAGAAGAAAA
TCCTCAGCAAAGTGAAGAATTGCTTGAAGTAAGCAACTGATGGCATTTGAGAATTTATGTATCACTGAGTTTTTT
GGGAATATCTTCGTGGAGAATTACGCATCAAATTTGATTCTCAGAGCAATAAATTATCCATGAAGTGCTCTCGTT
CTCAGTAGCGGCATCATGGCCAGTAGTGTCTTTGAGGAGTTCACCACTTAGATTACTGAGTAATTGTGGTTTCCA
CATTTGAAAACAACTCCTTTTATAATTATTCACTGCTTTTTGTCAGTGAAATAGACATCTTGCCTCCTGAAGTAG
CTTCATCACAGAGTGTCATGAAGACAGACAGTCAGGCTGAAAAGGACAGTTCTTTGTGGACTCTACCCTTCCCTT
CAAGGAGTATGTCATATGTCACAAAAGAAATTGCCTTACACTGGTTCATGTTTGCAGTTACTGTTGTACATTGCA
TAGATGTACACACGAATTTAAATGTGATGTCTTTGTATATATCTGTATAATGTTGAGATTACTTACGAAATATGT
CTGAGTGACACTTTTCACTCTTGTACAGCCAAAATAATGTATATATGGAAAATGACAGACAAATTCTCTAATCTC
TTTGGTATCTATAACTTATTAGAATCCTCTGGATGAGGGTTAGAAGAGACTTTTTCCAAACTTCTACATGTAGAA
GTATCATAAATGTGCTACACATTTATGTTTGTGGATTTAATTAAAGTATTTTAATATGGTTTTCAGTGCTAAAAT
TGGAGTCAGATACTTCTTGGTTTTAAGCTGTCTACCTAATTGCTGTCTCCCAGCAGATCGGTGGCATGCCCAGTG
GCTTTGGGGGCAAGGATAGAAATGCCATCAGGAAATAGCTGAATTCATTGTGAAAC**ATG**AATTCAGTCATGGTGA
TAATTGGAAACTCCTTTCAGGTTTTTGCAAGTAGATTTTGTAATGTTTGTGTATGCAGCCTTGCTGTTGAGTCAG
TCCAAGGGGTTTTACTTAGGACAAGTTGTACCTTGCCCTCTCTCCAGCTCTGCTCCCACATTTTCACATACCTAG
CTATTTCTACCTCATTGGGTAAGTCATTTACCACTCTGTGCCTCAGTTTACTCTGTAGTTTACCATTAGACTGTG
AGCTCCTTGAGGGACTTTGTCATAATCACTGTTACATCCCAGTGCCTCACACTATGCCTGGCCCT**TAA**GAAGTGC
TCAATAAATGTCTGAACAAAAAAAAAAAAAAAAAAA

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FIGURE 2841A

GGACACTTGACATCCGTGGTGTCAAGACAACTCTAAGAAGGTTTTCCGTGATCCTGCAAGCCCTGCCTTCCTTCC
TGGGATCCTGCCTTCAATTTGATTGCACAGGTACCACAGCAAGCCAGTGCTGCGTGCTCCGAGTTCCAGGGCATC
CTCCAGCTCAGCCACTGCACTGAGAACATGGACTCTCTGTGGGGCCCAGGAGCCGGGAGTCACCCCTTTGGGGTC
CACAACACCCGGCTGTCCCCAGACTTGTGTCCAGGGAAGATAGTGTTGAGGGCCCTCAAGGAGAGCGGGGCAGGG
ATGCCTGAGCAGGACAAGGACCCTAGAGTCCAAGAGAATCCTGGTGATCAGAGAAGGGTCCCCGAGGTCACCGGG
GATGCACCGTCTGCATTTCGGCCCCTGCGGGACAATAGAGGCCTCTCTCCCTTTGTGCCCGGGCCCGGGCCTCTG
CAGACAGACCTCCATGCCCAGAGGTCAGAAATCAGATATAACCAGACATCCCAGACCTCCTGGACGAGCTCCTGC
ACCAACCGAAATGCCATCTCCAGCTCCTACAGCTCCACGGGAGGCTTGCCGGGGCTAAAGCGGAGGAGGGGGCCA
GCCTCATCCCACTGCCAGCTGACCCTCAGTTCCTCAAAGACAGTGAGTGAGGACAGGCCTCAGGCTGTCTCTTCA
GGTCACACCCAGTGTGAAAAGGCAGCAGATATAGCACCAGGGCAGACACTCGCCCTCAGGAATGACTCCTCCACA
TCCGAGGCCTCTAGGCCCAGTACACACAAGTTTCCCCTGCTGCCACGCAGGCGAGGGGAGCCTTTGATGCTGCCA
CCTCCCTTAGAGCTGGGGTACCGGGTCACTGTTGAAGACCTGGACCAGGAGAAGGAGGCGGCATTCCAGCGCATC
AACAGTGCACTGCAGGTTGAGGACAAGGCCATCTCGGACTGCAGACCCTCACGGCCTTCCCACACTTTGTCCTCA
CTTGCAACAGGGACTTCTGGTCTGCCTGCCATTTCTAAAGCACCCAGTATGGATGCACAGCAGGAGACACACAAG
TCCCAAGACTGCCTGGGCCTACTGGCCCCCTTAGCATCTGCTGCAGGGGTCCCCTCTACAGCTCCCATGTCTGGG
AAGAAGCACAGACCACCAGGCCCCCTGTTCTCCTCCTCAGATCCCCTTCCTGCCACCTCTTCCCATTCCCAGGAC
TCAGCCCAGGTCACCTCGCTGATTCCTGCCCCCTTCCCAGCTGCAAGCATGGATGTGGGCATGAGAAGAACAAGG
TGTGGCACTTCTGCTCCTGCAGCTGCCGCAGCAGCCCCTCCCCCCTCCACATTGAACCCCACGTTGGGGTCACTA
CTGGAGTGGATGGAGGCCCTTCACATTTCTGGGCCTCAGCCACAGCTGCAGCAGGTGCCCAGAGGTCAGAACCAG
AGATCCCAGACCTCCCGGACCAGCTCGTGCCCCAAACGAAATGCCATCTCGAGCCCCTACCGCTCTACGGGAGGC
CTCCCGGAACGAAAGCGGAGAAGGGGGCCAGCCTCATCCCACTGCCAGCTGACCCTCAGTTCCTGAAACACAGAC
CCAGGGTGCGTGCCCATCTCCAGCCCAGGGCAGCTCCCCTGTAAGCTGGGTGAGCTACTGAAGCCAAGGCGGGAG
GCAGCTGACAACACCCACAGCCCATGCGGAGGTGGTGGAAAGGCTGGACTCAGCAGCAACACCAAATCCCGGACC
AGGCAAAAACCACCCAAGACTGAGGGGCTCGTGCCAGAGCGGTGGCCACAGGGCTGAATGGTTGCTGAGACAGAG
ATGGAAGCCAGGACAAGGGAGCCCACCGGGCCCAGATAGAGACTTCAGAACCCACTCCTGAGAACAGCGGAGCCA
GGCGCTTAGAGGAAGACCAAATGCTGCCAGGACACGGATTGCCCAGGGATTACATTCCAGCATCTTATTAGATGG
CCTGATTAGCCAGAGGTTTCCAGGCCGTCTGTCCGCCTCCAGGAGATGGACTGGGACCTTTAGACATCGGTGGAG
AACAGGATGCTCTGTCCCTTGCTGTCCAGGGCAGGGATGGCCTCCAGCCGCAAGAAGTACAGCAGCACCTCGACC
TGCCCTCGCGGAGTGGGGAAGAGGAGAGTGGCTCAGAGGGGGGCTCACAGCTGCTGGTGGGAGGTCTTTGGGGCC
CAAGCTCCCAAGTCCACCTCAGGTGCTAGAAACCCCTGCTGGTGTCATGAACCCCTTACAGTGGGACGGGGGTGG
GGTGGGGTCCTGACAAGGCATGACTTGTTGGGTGGGGGGTGGTTATTTATTTTAGAGATGCACAGGGCCTTGCTC
TGTCCCCCAGGCTGGAGTACAGTGGCTCCATCATGGATCACTGCAGCCTCTAACTCCTGGGCTCAAGCAATCCTC
CTGTGTCAGCCTCCCAGATACCTAGGATTACAGATGTGTGCCCCAATGCCTGCCTAATTTTTCTTTGTATTTTTT
CTGGAGATGGGGTTTGCTACATTGCCCAGACTGGTCTCAAACACCTGGGTTCAGTTGTCCTGCCTCGGCCTCCCA
AAGTGCTGGGATTACAGGCATGAGCCACCACACTCGAACACTTGGGGTGGTTTTAAGCCCCCAGCAAGGTGCACC
AGCAGGACCAGGAGGTGGCCTGGGCACCCCCTATCACTCCCATCCATGCAAACCTAGGCAAGTCCCTGTCTCTGA
ATCTCAGCCACCACCACATACAATGCAAGTGGGAAGATGGGCAGGACTGGGGGTGGGGCAGGCAGAGGCCACCTC
TGTCAGGCTGGGGTTGCATGGGCTGGAGGCTGTCTTCCCATACCTGGGACATGACCTCCAAGGACCAGCTGTCAG
TCATGGTGATGGGCTGGCTGGGGTTGGCAGGGAGCTTGCTCTCCTTCTCGGAGGGCCGGAGCAGCGTGGGGCCAA
ACACCGTGCCAAGGTTGTGCAGGGACATCTTATTGACTGCCTCCTTCTCTGCCATCCTGTAGAGGACCGAAGCAG
AGGGTGCTGTTTCAACGCCACCACCAGGAGAGAGGCAGAGGGGCTGTGCCGTGCTAGAGTCCTCAGGGAGGGAGT
GACCTCGACCCTGGCTGTGCTGCAAGCTGACTCCAGCCTTGGGGTCAGCAGCACCCGGCAAACAGCAGCAGGAGG
AGCCGCTAGAGCAGCTGCTCATGGGCAGAGCTGCCCTCGGGCAACTCCTGCCACCACCCCCTCCCCAGGGAGCCC
AAGGCAGGGGAGGCTCAGCATGGAATGAAACAGGGGAGTGAGGGACACAAGGAGGTGGGAAGTGGGAGGGTCCCA
GCCCCACCAAGTACGCAGAGAACCCCTCGTTGTCCTGGACACCACAGGGGCACCTGCAGGCTGGGAGACCAGGTC
CTCTGTGCATGGGCCCGGGAGGCAGACCTGCCCTAAGGGTGATGCACAGGCTACAGGTGCTGCACGCTCCAGCGC
CCACTCTAGACATCAGCCTCCAGGTTGACTAAGGGTCAGGTCATGTTTGAAACCATGCTTGGCTGGACCAGGACC
CATGGCAAGAGCACCTGGGCACCAGTGTTTAGCCCTGGTCTGCAGGAAGGAGGACAGCAGACTTTAGGACCCCAC

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FIGURE 2841B

AGCACGGCAGTGCTGACCATTTCACCCACTTGGCCTCCTTGAGAAATATGGATGGGGACCCCTCTGGGGATGGGC
AAGGCCTTCCAGGATAGGCTCAGTTTTGGTCCCCTGCTTTTTGAGGTTGGGTTAAAATTCCGACCATGGCAGAGG
AAGCACAGCTCAGGTTCCCACACCTCACTTTTCACAGCCTCTGAGGGCAGCAGTGCACGTGGAGGAGACGTCTCC
CATGAGGCCAAGGCCTCCAGTGCTCACCGATGCCCTCTGCGAAGTTGGGGTAGAACTCGTCAGTGAAGAGGGGCT
CGGGCAGCTCACGGAAATACAGCTTCAGCGTGCCTGCGATGGCGTTCACGTCCATCTCGCTCATCATCACCGACA
CGTCCTTGTTATCTGGAAAGAGCACGGAAATGCAGCGGCCTCCTTGAAGATCCTGATAAATGAAGAAAAGACACA
GAGAAGGATGTGACATGCCTGGGCCGTGGAGCACTCTGAGATCTCATCGCGGACACCACTGCCCACACCTCCATC
CCGTCCTGCGCAGGCCGACACTCACTGACGTTGAAGGCTGCCTTCAGTGCCTGGATGTCTGCGGCCACCCCAGAC
ATGCGGTAGATGCCCACCTCCTCCATGCCTCGGCGCTCGATCTCCTCCACGCACTGGCGCACGATGTAGGGCACC
TTGGACCTCTCTCTCCTGCGGGAGGAGGGAATGTTCTCAGTGTCCTAACAGCCCTGCTTGGGCCATAACACAGGA
GACCTGCTCCCTATGTGCACACCCGGAGGTGGGGTGAGGACGGTGATGAAGGTACCCAGGTCTGGGGCTGCACAC
AGAGCCTTCTGCATGCCTGTCCTCCCTCTGCAAGCTCTGTCCTCATTGCATGTGCTTTCTCAGGAACCTTTCAAG
CGGCCAGAACCCCTGCAAATCACACATGACCTTTGTGGGAAGGTCAGGAGGCCTGTCTAAGTCAAGTCAGCACGG
GAAGGGCATCTGACAGATTCCAGGCCTGGGGTGAGCAGCCTGTGCCCCCGGCTGGGAGGTCAGACCCGGTGTTGG
TCCTGCCACCCACGTGCTGTGTGAGAGGAGAATCCGTGACCCCTGCCCTGGGCCTTAACACACATCCGACGAATG
AATGAAGGGTTGCCTCAGCACCGGTGCTCCAAGTCCTGCGATGCTAAGTGCTTTTCTCCTCTGAGTCTTAGCAAT
GGACAATTCCAATACCTCCACACAGGACACTAGAGTAAGAATCCTTCACAGTTAGAACGCAGTGCTGTGCGGAGG
CCTTAACTTGAGTTCTGTTTTGCACCTGGATTTACCAGCACATCAAAGCTGCTTCGCAAGCCCCCTCATCAGCAG
GGCTCATGTGGGGGAGCTGCTGATGGAGTCCTCGCTGCTCATGCCCACAGCCCTCCCAGAGTGCTATGCGAGTGG
CTGCCGTGCAGTTGGGGGTGGGGCGTGGTGTTTAGACACAGATAGGAGTCCAGGGTATGACTGATGGAGGCCCCG
GCCCACGTGACCAGCAAGGTCAGAGGCCCAGCCAGATTCCATCCTGAGGAAGCAAATGAATTCTCAGAGGAAGTG
GTCTGTGTCTGCATGAACTGCTCTCAAACCAACAAATAGGCTTCTCTTGGCAACTGACTCGTGACAAAGGGTTCA
AGATTGTTTGAAAAAAAAAAAGGGGGGGGGGGGACAGGGAGGCAGTAGGTCCTGGAAAAGTAAATTCTTTATTTT
ACAATAAGAAAGTGATTACATATTTTATTTTTTTTTACAATGGTGGAAAATTAGAAGTGATTGTGAAAATGATGT
CTACCCGCCTTGCTGATGAGTAGGATGTGATTTGGCTCTTTAGGAAACTGAATTTGCAGAACTTAAGAATATTGA
TTTATAAAGGGCATGGCCATTGACCCAGTCCATCTTATGCAAATCTGGATGCCATAAATAATATTTAAAAATGAA
AGTATTGGGGTGGAGGTTGCAGTGAGCGGAGATCGCCCCACTACACTCCAGCCTGGTCAACAGAGTGAGACTCTG
TCTCAAAACAAAAAAAAAAAAAAAAAAAAGAAGAAGTCATTCCCAACATTGCTCATCAAATTATGACCATAAATTT
CCAGGATCAGACTAACGGCTAAAGAGACTGATGCATCAACACCAGGCAGAGAATAAAGCAGATTTTTTTTGTTTT
GTTTTGGAGAGCCTCTAGGAACTTGAAAAATACATATGCCACACTCTTAAGACCCGGTGGTTCTTAATCAGGGAT
GTTCATTAAAATGCTGGAAAACTCTAAAGATTTCCAGGTCCCATCCAAGGAGATTTTGCTTCTGATTGACTGGCT
AGTGGCCTGGCCATTGGTATTTTGAAAAATCCCTCCAAGTGATTCTTTTACATCCCAGCTAGAAAACCCTAAATT
AAAGGTGAAAAACCAGACACCAAGTGGCATTTAAATAAATGTCAACTTTAACTCC

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FIGURE 2842

GGGACTGTCATAAAAGGGGCGGGACGCGCCGCGGTCGGGATGACGTGAGCTGGGGGCGCTCGTCGCTGCAGCCGG
CGGCTAGCGGGCGTCCGCGCC**ATG**GAGCGCTACGCCGGCGCCTTGGAGGAGGTGGCGGACGGTGCCCGGCAGCAG
GAGCGACACTACCAGCTGCTGTCGGCGTTACAGAGCCTGGTGAAGGAGTTGCCCAGCTCATTCCAGCAGCGCTTG
TCCTACACCACGCTGAGCGACCTGGCCCTGGCGCTTCTCGACGGCACCGTGTTCGAAATCGTGCAGGGGCTACTG
GAGATCCAGCACCTCACCGAAAAGAGCCTGTACAACCAGCGCCTGCGCCTACAGAACGAGCATCGAGTGCTCAGG
CAGGCGCTGCGGCAGAAGCACCAGGAAGCCCAGCAGGCCTGCCGGCCCCATAACCTGCCTGTGCTTCAGGCGGCT
CAGCAGCGAGAACTAGAGGCGGTGGAGCACCGGATCCGTGAGGAGCAGCGGGCGATGGACCAGAAGATCGTCCTG
GAGCTGGACCGGAAGGTGGCTGACCAGCAGAGCACACTGGAGAAGGCGGGGGTGGCTGGCTTCTACGTGACCACC
AACCCACAGGAGCTGATGCTGCAGATGAACCTGCTGGAACTCATCCGGAAGCTGCAGCAGAGGGGCTGCTGGGCA
GGGAAGGCAGCCCTGGGGCTAGGAGGTCCCTGGCAGTTGCCTGCTGCCCAGTGTGACCAGAAAGGCAGCCCTGTC
CCACCA**TAG**CCACAGGCAGCAGAAGTCTGGGCAGAGTTCATCTTCTTGACCTTTGGCCACTGCCTTCCCAGCTGC
CCGCAGGGGGTTCCCCCTGCTGAGGAGAGACCAGGTGGACCCCAGCTGCCTGTCACCCTTCATCTGGGACTTGCT
GTCAAACCCTAGGATAGTCTCATAAAGGGGAGGCTGGGCCAGCCTGCTGCTGTCTGCTTCAGGGCCAGGCAGAGA
GTGAGGCTGGGGGTTCTCACACCTTACTCCACCGGGCACATCCCAACCTGCACTGGGGCCCACTCGAGCGCTTGT
TCTGGTCTCAGCCGCTCCCTTGGCAGCTGCAGCCCCCATGCAGAAGAGGCTCCCAGGCCCAAGCTCTGTGTGACC
CAGAGAAATAAAGATGCCTCAGTG

FIGURE 2843A

GGGGCGGGGCGGCGCGGCGCGGAGCCGAGCAGGACGGCCGCCATCTTGCGCGCAGCTGGAGTCGGTGCCTGAGGT
TGCAGCCGAGAGTGTGCGCCAGCCCGCGGCCCAGCCGAAGCTCTTTCCCGCCGCCTCTCCGCGCCTCGCCCAGGT
TCAGCTCCGCCTGACCCTCCGCTTGGCACGGTCCCCTGACCCTCAGTCCGGCCTGGTCCGGCCTTCCAGCCGCCC
CGGGGACGATGAACGGAGGATAA**ATG**GTGCCCAAGGCAGACAGCGGCGCCTTCCTGCTGCTCTTCCTGCTCGTGC
TCACTGTCACCGAGCCGCTGCGGCCAGAGCTGCGGTGCAACCCTGGGCAGTTTGCGTGTCGCAGCGGCACCATCC
AGTGCATCCCCCTCCCCTGGCAGTGTGACGGCTGGGCGACTTGCGAGGATGAGAGCGACGAAGCCAACTGTCCAG
AAGTGACCGGGGAGGTGCGTCCTCATCATGGGAAGGAGGCTGTGGATCCGCGGCAGGGGCGGGCCAGAGGAGGCG
ACCCTTCGCACTTCCACGCGGTGAACGTGGCGCAGCCCGTTCGCTTCAGCAGTTTCCTAGGGAAGTGCCCGACAG
GGTGGCACCACTACGAAGGCACGGCCAGCTGCTACCGGGTCTACCTGAGCGGGGAGAACTACTGGGATGCCGCGC
AGACCTGCCAGCGCCTGAATGGCTCTCTCGCCACCTTCTCCACTGACCAGGAGCTGCGCTTTGTCCTGGCCCAGG
AATGGGACCAGCCCGAGCGGAGCTTTGGTTGGAAGGACCAGCGCAAGTTGTGGGTTGGCTATCAGTATGTTATCA
CTGGCCGGAACCGCTCCTTGGAAGGTCGCTGGGAGGTGGCATTCAAAGGCTCTTCAGAGGTGTTCCTGCCCCCAG
ACCCCATCTTTGCCTCGGCCATGTCTGAGAACGACAACGTGTTCTGTGCCCAGCTTCAGTGCTTCCATTTCCCCA
CCCTGCGGCACCACGACCTCCACAGCTGGCACGCCGAGAGCTGCTACGAGAAGTCTTCATTTCTGTGTAAAAGAA
GTCAAACATGTGTTGACATCAAGGACAACGTGGTGGATGAAGGGTTCTACTTCACCCCTAAGGGGGACGACCCAT
GCCTGAGCTGCACCTGCCATGGAGGGGAGCCTGAGATGTGTGTGGCTGCTCTCTGTGAGAGGCCCCAGGGCTGCC
AACAGTACCGCAAGGACCCCAAAGAGTGCTGCAAGTTCATGTGTCTGGACCCAGATGGCAACAGTCTGTTTGACT
CCATGGCCAGCGGGATGCGCCTGGTCGTCAGCTGCATCTCCTCCTTCCTCATCCTGTCACTGCTGCTCTTCATGG
TCCACCGGCTGCGCCAGCGGCGCCGGGAGCGCATCGAGTCCCTGATTGGAGCAAACTTGCACCACTTCAACCTCG
GCCGCAGGATCCCTGGCTTTGATTACGGCCCAGACGGGTTTGGCACGGGCCTCACGCCGCTGCATCTTTCTGACG
ACGGAGAGGGTGGGACTTTCCATTTCCACGACCCTCCACCTCCCTACACGGCATACAAGTACCCGGACATCGGCC
AGCCCGACGACCCTCCGCCGCCCTACGAGGCCTCCATCCACCCGGACAGTGTGTTCTATGACCCTGCAGACGATG
ATGCTTTTGAGCCTGTGGAGGTCAGCCTGCCAGCCCCTGGGGATGGTGGGAGTGAAGGTGCATTACTCCGGCGCC
TGGAGCAGCCTCTGCCCACTGCGGGGGCCTCTCTGGCAGACCTGGAAGACTCTGCCGACAGCAGCAGCGCCCTGC
TCGTGCCCCCTGACCCTGCCCAGAGCGGGAGCACCCCAGCTGCAGAGGCACTGCCAGGGGGTGGCCGCCACAGCC
GCAGCTCCCTCAATACTGTGGTG**TAG**ACGGCCTGGCCTGTACCCCAACGGTCTGGGAGCACCTGTCTGTTGTAGA
AAACACCGGTCCCTGGGGAGACTTGAAAGGCCCCTGTCCCAGCCTGGACGCCACGCACTGCCGCACGTCACTGGC
GGGCTCGCGTGTGTACATAGAGACCACAGCCCGCCTTCTGCCAAAAGAAGTGATGGCCTGCACCGAGCTTCCTTG
AGGGCTTCAGAAACATGCATAGCTTTGGATCACTGTCTTCTCCTTTATAAATGGCAGAAGAGTGACAAAATTCAT
TCAGACCGCACATGTTAGAGGCAGGGAATGAAGAAGGTACTGTGGGCCATGGCCACACCTGATGCGTTTTTGGTG
GGCTTACTTGGTGCAGTGTGCTGTCCAGAGAGACCTGCTGACCCAGTCTGGGACAGGCACAGTGGGAGCTGCCAC
AGTGCCCCTTGCTGGCCGCCCTCAGGAGGGGGCCTCTGGACCGTCAGTGTGGCGTAGGCAGTGGGTCTGCTTCAG
GGAGGCAGCCTCTTGACTTTGTCACAACGGTTGCACTGAAGATGGCCCCCACAAGCCCAGTTGTGAATATCAAGG
TGACCCTGCCCCTGGCTGGGAGCTCCCCTGGGGCTCTGGAACCTGAAGCCCTGAGAAGGAGAGCTTGGAAGGAGG
TTGAGCTCTTCACTGTGTCTTTCCATCTGGGCTCTGCAGCCCAGCTCTGTGGCAGGAGGCCTGACCCCACCCCAT
CAGTCCCTCTCCCAGCATTGCTGTGCATGGCTCCCTCAGGAAGAAGCTCTGGAGTGGGGCCGAGGCCCCAGATGC
TCTGCTGGGGTCTGGGGACTGAGCTGCCTCCTGTCTCTCCACTCTGGAGCCCTGGGCTCTTGCCTCCTGTTGAAT
TGCCCCTGGGCCTGCCCCCGGCCCCATTTGTGCCATAAAGGGTTGCTTCATTGCAGGAGGGGTGGCTGAAACCAC
CATCCTGGGCTGCATCTATCTCCTTAAAGTCCACTCCTTACATCACCGCCACTACTGCAGCTCAGTGCCCAGCGG
CCGCATGCACACCTCCCGGCCCCTCCTCAGCAGCGCAGGGGCTGGGGGCCCTTCCTGGCACCCTTTTGCCTGACG
GACCCTGTTGCCTGCTCCTGGGCAGTGGTTTTGTTGCCTGACACAGGGCCTTTAACATTTCTGAGGTTTGGAGAT
TAAGCGGGTTCTGTGCGATTTTTAGCACATCCATATCTTTTCTACGTTGAATGTCTGGATCTTTCCTTTGTATGT
TTGTGTCTCTGTGTGTGTATGTGGCCAAGCGTCTGCAGGTGAGGGTGGCACATGGAACTTCACGGGTCACTGGGG
GCCCACTCTTCCAGGGTCATCGATGCATCCTGGGCTGTGCTGAGGCAGTGCTGTCTCGCTCAGTCTTTCCAGACC
AGCGGGGCAGCACCTGGGAGGCCTGTCTGAAGCATGCAGTTCTGTGGTGCTGCTCGGGGATGGACTCCATGCACA
GTCCACTTCTTGACACATTCTCACACTGTGGCTGGAGACCCATTTTTTCCATCCCATGTGGAATGAGAATCTTGA
GTTGCCCACAGACAGACTTGACCTTTGTGCCAGAACTGTCCAGAGCTGTGAGTTTTGTTACTGAATTGCCTGTCC
CTGAGCTTGGCCTGCTGGAGCATGATGCTGGAGGCTGTGTGCGGGCAGGCTTGTGCTCCCCTTGGAGAAGGGCTG

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FIGURE 2843B

CTACTTAACAAGGAAGTCCTGGCCACAGGAGTCCCCTACTGGCTGCAGAGGACGAAGCAGGAAGCATGCCGTGGA
TCCCACATGCACTGGGGCAGGGCAGCCAGGTTCCAGAGCAGCAGGCATGTGCATTATGGGTGCCAGGTGGCCAGT
GAGGGCCCGAGGACCACGCAGCAGAGTCCCCCACGGGCCTGAGCCTGAGAGCTCAGAGGATTCCTGCCAGGCCTC
AGAACTGTGTGTGCGGGACAGGGTGGCTGGCACGAGATGTGTGGGACTGGGACGCTTCCTTTGGGGACCAGAGGA
ACATTAGGGGCCGGTCAGACACGTAGGGGGCAGTGAGGAAACGGGGTAAAGTGGACCATGCAGGCTGCAGAGGGT
GGGCCTTGGGCTGGCCGGGGTTGCTGGGTGGCCCCTTCCCCATGGGCCTCCACAAGCACTCAGGCCACTGGCACG
TTGGGCCAGGCAGAAGGTCCACATGGCAGGGCTGCCTGGAACACCGCTGCCACTGTGGCTCCAGGAGGCCCTTGG
GAGCATGAGGAGAGCTGGACTCGCTCATCTGTTCTTGCACCACCATCCAGAATGCCCCCTTTGCAAGGCCTGCTG
CAGTCCCCAGTCTGACCAGCAAGTCCCGGGGTCACCCTTGCTGAACCTTGTGCTCCAGGGGTCCTCCTCCTCTAG
GACCAGCTTGCCACGGTTTCTCAGAGCCCAGGTGCCCTCTGACCTGCCATGCGGAGGTGGGATTTGATACTGTAC
ATTGTCTTGATGCCTGTTTTTTTATGTTTTCATTAAGGGTTTTTAGTTTTTGGTTGGGTTGACACTAACTTTTCT
TAAGATGCTGTGAGAATCATTTCATCCAAATGCCAAATAAACTTGTGTTCCGG

FIGURE 2844

GGGATAGCGATGGAGACGCCGGGCGCATCAGCGTCGTCCTTGTTGCTTCCCGCCGCGTCCAGGCCCCCGAGGAAG
CGCGAGGCGGGAGAGGCTGGGGCTGCGACGAGCAAGCAGCGGGTCCTGGACGAGGAAGAGTATATCGAGGGCCTC
CAGACGGTCATCCAAAGGGATTTCTTTCCTGATGTGGAGAAGCTCCAGGCACAGAAGGAGTACCTGGAAGCCGAG
GAGAATGGAGACTTGGAACGGATGCGCCAGATTGCCATCAAGTTTGGCTCTGCCTTGGGCAAGATGTCCCGGGAG
CCCCCGCCACCCTATGTGACTCCAGCCACATTTGAAACCCCTGAGGTGCATGCAGGCACTGGAGTGGTGGGCAAC
AAGCCCAGGCCCCGCGGCCGAGGCCTGGAGGATGGAGAGGCTGGAGAGGAGGAGGAGAAGGAGCCGCTGCCCAGC
CTAGATGTCTTCCTGAGCCGCTACACGAGTGAGGACAATGCCTCCTTCCAGGAGATCATGGAGGTGGCCAAGGAG
AGAAGCCGGGCACGCCACGCTTGGCTCTACCAGGCTGAGGAAGAGTTTGAGAAGAGGCAGAAAGATAATCTCGAA
CTCCCGTCAGCAGAGCACCAGGCCATCGAGAGCAGCCAGGCCAGTGTGGAGACCTGGAAGTACAAGGCCAAGAAT
TCCCTCATGTACTATCCAGAGGGTGTCCCTGACGAGGAGCAGCTGTTTAAGAAGCCCCGGCAGGTGGTACATAAG
AACACGCGCTTCCTTAGGGACCCCTTCAGCCAAGCCCTGAGCAGGTGCCAGCTCCAGCAGGCAGCCGCCCTCAAT
GCCCAGCACAAACAGGGCAAGGTGGGCCCCGATGGCAAGGAGCTGATCCCCCAGGAGTCCCCTCGAGTGGGTGGA
TTTGGATTTGTTGCCACTCCTTCCCCTGCCCCTGGTGTGAACGAGTCCCCGATGATGACCTGGGGGGAGGTTGAG
AACACACCCTTGAGAGTTGAAGGGTCGGAAACGCCCTACGTGGACAGGACACCCGGCCCAGCTTTTAAGATCCTG
GAGCCAGGCCGCAGGGAGCGGCTGGGTCTGAAGATGGCCAACGAGGCCGCTGCCAAGAACCGGGCCAAGAAGCAG
GAAGCCTTGCGGAGAGTGACGGAGAATCTGGCCAGCCTCACCCCCAAAGGCCTGAGCCCAGCCATGTCGCCAGCC
CTACAGCGCCTTGTGAGCAGGACGGCCAGCAAGTACACAGACCGGGCCCTGCGGGCCAGCTACACACCATCCCCA
GCACGCTCCACCCACCTCAAGACCCCGGCCAGTGGGCTGCAGACCCCCACAAGCACACCGGCGCCTGGCTCTGCC
ACACGCACCCCTCTCACACAGGACCCGGCCTCCATCACGGACAACCTGCTGCAGCTCCCTGCCCGGCGCAAAGCT
TCGGACTTCTTTTAGAGCCAGGCCTGGGCTGGGCTCATAGACGCTTCACAGAGCCTGCAGGGCAGCTGTACACCC
AGCAGAGGACTCCAGCCTTCTCGGGGCCCAGGCCTGGGCCAGAAGCTGTTGACCATACCAGGAGTCACTGGAGAA
AGGGGCTGTGCTGGGGCCAGACTGGCACAAGGCACTCGTGCCCACACCACACCCCAGGGCCTTGCCAAGCTGTTT
GCTGTTTAATTGGCCCCTTGAACTGTCATTAAAGAACACCTAGGTAC

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FIGURE 2845

GGGGCCTGGCTCGGACCACGCGGGGCGGGACCTGGAGCTGACGCGGCCGCCCCGCCCCTGGGACCATAACCGGCC
GCCGCCGCCACCGCGGACCGAGCGCGGAGTTCTGGAGTCTCGGACCCGAAGCCGCCACAGGGCGCCCCGCCTCCC
GCCCGCC**ATG**CCCGCGCCCCGCGCCCCGCGCGCTCTGGCGGCCGCCGCGCCCGCGTCCGGGAAGGCCAAGCTGAC
GCACCCGGGGAAGGCGATCCTGGCAGGCGGCCTGGCGGGTGGCATCGAGATCTGCATCACCTTCCCCACCGAGTA
CGTGAAGACGCAGCTGCAGCTGGACGAGCGCTCGCACCCGCCGCGGTACCGGGGCATCGGGGACTGCGTGCGGCA
GACGGTTCGCAGCCATGGCGTCCTGGGCCTGTACCGCGGCCTTAGCTCCCTGCTCTACGGTTCCATCCCCAAGGC
GGCCGTCAGGTTTGGAATGTTCGAGTTCCTCAGCAACCACATGCGGGATGCCCAGGGACGGCTGGACAGCACGCG
TGGGCTGCTGTGCGGCCTGGGCGCTGGCGTGGCCGAGGCCGTGGTGGTCGTGTGCCCCATGGAGACCATCAAGGT
GAAGTTCATCCACGACCAGACCTCCCCAAACCCCAAGTACAGAGGATTCTTCCACGGGGTTAGGGAGATTGTGCG
GGAACAAGGGCTGAAGGGGACGTACCAGGGCCTCACAGCCACTGTCCTGAAGCAGGGCTCGAACCAGGCCATCCG
CTTCTTCGTCATGACCTCCCTGCGCAACTGGTACCGAGGGGACAACCCCAACAAGCCCATGAACCCTCTGATCAC
TGGGGTCTTCGGAGCTATTGCAGGCGCAGCCAGTGTCTTTGGAAACACTCCTCTGGATGTGATTAAGACCCGGAT
GCAGGGCCTGGAGGCGCACAAATACCGGAACACGTGGGACTGCGGCTTGCAGATCCTGAAGAAGGAGGGGCTCAA
GGCG**TGA**GTGGGGGAGGGGCAGGGCTATTGTCCCCACCTCAAACCTTTCCCGGCCTACCTGGCCTGCCCACTCTG
TCCCCTTCAGGCCTCTGTGCCTCTCACTTCAGTATCTGGGGATTGCCCTGTGCAGGGACACTGTGCTGACCTGCC
TTCCTCTCCCCGCCCCTCCTCCCACCCAGATTCTACAAGGGCACTGTCCCCCGCCTGGGCCGGGTCTGCCTGGAT
GTGGCCATAGTGTTTGTCATCTATGATGAAGTGGTGAAGCTGCTCAACAAAGTGTGGAAGACGGACTAAGCCTAG
AGAGGCCGCAAGGGGACCGCCCCAGGCACCGCCAGAGTGTCCTGCTACCTTTGTCTCACGATTCCAGTGCAGTAG
TGCCAAAAGGCCCCTTCCCACGTCCCTCGAGCTCTGTAGCCTGGTCTGTGCATTGTGGCTGTCAAATCCATGTGT
CCCCCCTGTGGTCTGTGTGTGACACCACCACTGTGTCCCAGTGTCTGGCCCAGCCATGGCTGGATGTGCATCTGG
CCTATGACCCTGTGCCTGTGTTTCATGTTCTGTGTCACGTGACCCTGTGCCCCGCCTCCCGGGGTGCCCGTGTGG
CCTGGGTCCTCGGCCCTGTAGCCCTGGCCCGGTCCCAGTCCGGTGCCTTCCACCCTGCCCTGGCCTACCACAGCT
GCCTCCGGGCCTCGGCCTGGCTTCACCGCATTCCAGGGGCTGCAGCCCCCTGCTTCTCCCGCCATTGGCCTTAAC
TGGCCCTCGGGCCCTCTCTCCGCCCCGGACAGGGTGGCACCCACCACTCTCAGGACCACCCTGCCAAGGCAGAAT
AAACCGGATCCTGTTGC

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FIGURE 2846A

ATTCCTGCCGCTGCCGCCGCCGCCGCCGAGGTCCCGCACCAGCCATGGCGCAGATCCTCCCTGTTCGCTTTCAGG
AGCACTTCCAGCTCCAAAACCTTGGAATTAATCCAGCTAACATTGGATTCAGCACACTGACCATGGAATCTGACA
AGTTCATATGTATCCGAGAGAAAGTTGGTGAGCAGGCACAGGTCACGATCATTGACATGAGTGACCCAATGGCTC
CGATCCGACGGCCTATCTCTGCAGAGAGTGCCATCATGAATCCAGCCTCTAAGGTGATAGCTCTGAAAGCTGGGA
AGACACTTCAGATCTTTAATATTGAGATGAAGAGTAAAATGAAGGCTCATACTATGGCAGAAGAAGTGATTTTCT
GGAAATGGGTTTCTGTGAACACTGTTGCCTTGGTGACCGAGACCGCGGTCTACCACTGGAGCATGGAAGGTGACT
CCCAGCCCATGAAGATGTTTGATAGACATACCAGTCTGGTGGGCTGCCAGGTGATTCACTACCGGACTGATGAGT
ACCAGAAGTGGCTGCTGCTCGTAGGCATCTCGGCTCAGCAAAACCGTGTGGTTGGAGCAATGCAGCTCTACTCTG
TGGATAGGAAGGTTTCACAACCCATAGAAGGCCATGCTGCGGCTTTTGCAGAGTTCAAGATGGAGGGGAATGCCA
AGCCTGCCACCCTTTTCTGCTTTGCTGTACGTAATCCCACAGGAGGCAAGTTGCACATCATTGAAGTTGGACAGC
CTGCAGCGGGAAACCAACCTTTTGTAAAGAAAGCAGTAGATGTGTTTTTTCCTCCAGAGGCACAGAATGATTTTC
CAGTGGCTATGCAGATTGGAGCTAAACATGGTGTTATTTACTTGATCACAAAGTATGGCTATCTTCATCTGTACG
ACCTAGAGTCTGGCGTGTGCATCTGCATGAACCGTATTAGTGCTGACACAATATTTGTCACTGCTCCACACAAAC
CAACCTCTGGAATTATTGGTGTCAACAAAAAGGGACAGGTACTGTCAGTTTGTGTTGAGGAAGATAACATTGTGA
ATTATGCAACCAACGTGCTTCAGAATCCAGACCTTGGTCTGCGTTTGGCCGTTCGTAGTAACCTGGCTGGGGCAG
AGAAGTTGTTTGTGAGAAAATTCAATACCCTCTTTGCACAGGGCAGCTATGCTGAAGCCGCCAAAGTTGCAGCGT
CTGCACCAAAGGGAATCCTGCGTACCAGAGAGACGGTCCAGAAATTCCAGAGTATACCCGCTCAGTCTGGCCAGG
CTTCTCCATTGCTGCAGTACTTCGGAATCCTGCTCGACCAGGGTCAGCTCAATAAACTTGAATCCTTAGAACTTT
GCCATCTGGTTCTTCAGCAGGGGCGTAAGCAACTCCTAGAGAAGTGGCTGAAAGAAGATAAGCTGGAGTGCTCAG
AGGAGCTCGGAGACTTGGTCAAAACCACTGACCCCATGCTCGCTCTGAGTGTGTACCTTCGGGCAAATGTGCCAA
GCAAAGTGATCCAGTGTTTTGCAGAAACAGGCCAATTCCAGAAAATTGTGCTCTATGCCAAAAAGGTTGGGTACA
CCCCAGACTGGATCTTTCTGCTGAGGGGTGTAATGAAGATCAGTCCGGAACAGGGCCTGCAGTTTTCTCGAATGC
TAGTGCAGGACGAGGAGCCGCTGGCCAACATTAGCCAGATTGTGGACATTTTCATGGAAAACAGTTTAATTCAGC
AGTGTACTTCCTTCTTATTGGATGCCTTGAAGAATAATCGCCCAGCTGAGGGACTCCTGCAGACATGGCTGTTGG
AGATGAACCTTGTTCATGCACCCCAGGTTGCAGATGCCATCCTTGGAAATAAAATGTTTACTCATTACGACCGGG
CCCACATTGCCCAGCTCTGTGAGAAGGCAGGCCTCCTGCAGCAAGCACTGGAGCACTACACCGACCTCTATGACA
TCAAGAGGGCTGTGGTCCACACTCACCTCCTCAATCCCGAGTGGCTTGTCAATTTCTTTGGCTCCTTATCGGTGG
AGGATTCTGTGGAGTGTCTGCATGCCATGCTGTCTGCTAACATCAGACAGAACCTTCAGCTGTGTGTGCAGGTGG
CCTCTAAGTACCACGAGCAGCTGGGCACGCAGGCCCTGGTGGAGCTCTTTGAATCCTTCAAGAGTTACAAAGGCC
TCTTCTACTTCCTGGGCTCAATCGTGAACTTCAGCCAAGACCCAGATGTGCATCTGAAATACATTCAGGCTGCCT
GTAAGACAGGGCAGATCAAGGAGGTGGAGAGGATATGCCGAGAGAGCAGCTGCTACAACCCAGAGCGTGTGAAGA
ACTTCCTGAAGGAGGCCAAGCTCACAGACCAGCTTCCCCTCATCATCGTGTGTGATCGTTTTGGCTTTGTCCATG
ACCTTGTCCTATATTTATACCGCAACAACCTGCAGAGGTACATTGAGATCTACGTGCAGAAGGTCAACCCTAGCC
GGACCCCAGCTGTGATTGGAGGGCTGCTTGATGTGGATTGTTCTGAGGAAGTGATTAAACACTTAATCATGGCAG
TGAGAGGACAGTTCTCTACTGATGAGTTGGTGGCTGAAGTAGAAAAAAGAAATAGGCTCAAGCTGCTGCTTCCCT
GGCTGGAGTCCCAGATTCAGGAAGGCTGTGAGGAGCCTGCCACTCACAATGCACTGGCTAAAATCTACATCGACA
GCAACAACAGCCCCGAGTGCTTCCTGAGAGAGAATGCCTACTATGACAGCAGCGTGGTGGGCCGCTACTGTGAGA
AGCGAGACCCCCATCTGGCCTGTGTTGCCTATGAGCGGGGGCAGTGTGACCTTGAGCTCATCAAGGTGTGCAATG
AGAATTCTCTGTTCAAAAGCGAGGCCCGCTACCTGGTATGCAGAAAGGATCCGGAGCTCTGGGCTCACGTCCTTG
AGGAGACCAACCCATCCAGGAGACAGCTAATTGACCAGGTGGTACAGACAGCATTGTCAGAAACACGGGATCCTG
AAGAGATTTCGGTCACTGTCAAAGCCTTTATGACAGCCGACCTGCCTAATGAACTGATTGAACTGCTGGAGAAGA
TAGTTCTGGATAACTCTGTCTTCAGCGAGCACAGGAATCTACAGAATCTGTTGATCCTGACTGCCATCAAGGCAG
ACCGCACACGGGTCATGGAGTACATCAGCCGCCTGGACAACTATGACGCACTGGACATCGCGAGCATCGCTGTCA
GCAGCGCACTGTATGAGGAGGCCTTCACCGTTTTCCACAAGTTTGATATGAATGCCTCAGCAATCCAGGTCCTGA
TCGAGCACATTGGAAACCTGGACCGGGCATATGAGTTTGCGGAGAGATGCAATGAGCCTGCTGTGTGGAGTCAGC
TGGCCCAAGCCCAGCTCCAGAAAGATTTGGTGAAGGAAGCCATCAACTCCTATATCAGAGGGGACGACCCTTCCT
CTTACCTGGAAGTTGTTCAGTCAGCCAGCAGGAGCAACAACTGGGAGGATCTAGTTAAATTTCTGCAGATGGCCA
GGAAAAAGGGCCGTGAGTCCTATATAGAGACTGAACTTATTTTTGCCTTGGCTAAAACCAGCCGTGTTTCTGAGC

FIGURE 2846B

TAGAAGATTTTATTAATGGACCCAACAATGCCCACATCCAGCAGTTGGAGACCGCTGTTACGAGGAGGGAATGTA
CGAGGCTGCCAAGCTGCTCTATAGCAATGTTTCTAACTTTGCCCCGCCTGGCTTCCACCTTGGTTCACCTCGGTGA
GTATCAGGCAGCAGTGGACAACAGCCGCAAGGCCAGCAGCACCCGGACGTGGAAGGAGGTGTGCTTTGCCTGCAT
GGATGGACAAGAGTTCCGCTTCGCACAGCTGTGTGGTCTTCACATCGTCATTCATGCAGATGAGCTGGAGGAGCT
GATGTGCTATTACCAGGATCGTGGCTACTTTGAGGAGCTGATCTTGCTGTTGGAAGCGGCCCTGGGCCTGGAGCG
GGCCCACATGGGCATGTTCACTGAGCTGGCCATCCTCTACTCCAAATTCAAGCCACAGAAGATGCTGGAGCATCT
GGAGCTTTTCTGGTCCCGTGTCAACATCCCAAAGGTGCTGAGGGCTGCAGAGCAGGCACACCTGTGGGCTGAGCT
GGTGTTCCTCTATGACAAGTACGAGGAGTATGACAATGCTGTGCTCACCATGATGAGCCACCCCACTGAGGCCTG
GAAGGAGGGTCAGTTCAAGGACATCATTACCAAGGTTGCCAACGTCGAGCTCTGTTACAGAGCCCTGCAGTTCTA
TTTGGATTACAAACCACTGCTCATCAATGACCTGCTGCTGGTGCTTTCACCCCGGCTGGACCACACCTGGACAGT
CAGTTTCTTTTCAAAGGCAGGTCAGCTGCCCCTGGTGAAGCCTTACCTGCGGTCAGTCCAGAGCCACAACAACAA
GAGTGTGAATGAGGCACTCAACCACCTGCTGACAGAGGAGGAGGACTATCAGGATGCCATGCAGCATGCTGCAGA
GTCGCGGGATGCTGAGCTGGCCCAGAAGTTGCTGCAGTGGTTCCTGGAGGAAGGCAAGAGGGAGTGCTTCGCAGC
TTGTCTCTTCACCTGCTATGACCTGCTTCGCCCAGACATGGTGCTTGAGCTGGCCTGGAGGCACAACCTCGTGGA
CTTGGCCATGCCCTACTTCATCCAGGTGATGAGGGAGTACCTGAGCAAGGTGGACAAACTGGATGCCTTGGAGAG
TCTGCGCAAGCAAGAGGAGCATGTGACAGAGCCTGCCCCTCTCGTGTTTGATTTTGATGGGCATGAATGAGACCC
AGCTGATTGCACTAATCTGCAGGCCCTGCCGTGGGCCCAGCCCCTGCCAGCTTCCCCTATGGATATGCCTCTGCT
CCCAACTTCGCCAGCCTCCAATGTACAACTTCCGCGTGTAGTGGGCGTTGTCACCACCCACCCTACCTGCAGAGT
TACTAACTTCTCCAAGGAGCATGTCACTCCAGCAGCACAGGGGACGCAATGGGAGGCAGGGACACCTGGACAATA
TTTATTTTTGCTGAAACCCAATGACGGCAACCTCTGAGCCATCCCAGAGCCTGGGGAGGCCAGGGTAGAGGCTGA
CGGCGCAAGACCAGCTTTAGCCGACAACAGAGACTGGACTGTGGGCCCTCCTGCTGGAGCCAGGCCTTCCTCCTG
GGCGCCTCCGACTGGCTGGAGCTGCCCCCTCCAGGCCAGTTTGAAGACTACATGAACACGTCTTGTTTGGAGGTA
CCGGACCTCATAAAAGGACTCTCAGCCTCTTGGCAATCATAAATATTAAAGTCGGTTTATCCAGGC

FIGURE 2847

TAGCCATGACGGCCTCCGTGCTGCGAAGTATCTCGCTAGCCCTGCGCCCGACTAGCGGGCTTCTGGGAACTTGGC
AGACGCAGCTTAGAGAGACTCACCAGCGAGCGTCATTGTTGTCTTTCTGGGAACTCATTCCCATGAGATCAGAAC
CTCTTCGAAAAAAGAAGAAGGTAGATCCTAAAAAAGACCAAGAAGCAAAGGAGCGCTTGAAAAGGAAGATCCGAA
AACTGGAAAAGGCTACTCAAGAGCTAATTCCTATTGAAGATTTTATTACCCCTCTAAAGTTCTTGGATAAAGCAA
GAGAGCGGCCTCAGGTGGAGCTCACCTTTGAGGAGACTGAGAGGAGAGCTCTGCTTCTGAAGAAGTGGTCCTTGT
ACAAGCAGCAAGAGCGTAAGATGGAGAGGGACACCATCAGGGCTATGCTAGAAGCCCAGCAGGAAGCTCTGGAGG
AACTGCAACTGGAATCCCCGAAGCTCCATGCTGAGGCCATCAAGCGGGATCCTAACCTGTTCCCCTTTGAGAAGG
AAGGGCCACATTACACACCACCGATCCCTAACTACCAACCCCCTGAAGGCAGGTACAATGACATCACCAAGGTGT
ACACACAAGTGGAGTTTAAGAGATAGACTTGCAGGCTGCTATCCTTAACATGCTGCCCCTGAGAGTAGGAATGAC
CAGGGTTCAAGTCTGCTTTCCACAGAATCAGGCATGCTGTTAATAAATACTGGTTTAATCAAAAAAAAAAAAACT

FIGURE 2848

CTGGGGCGTACCGGCTTGGCGCGGCGGCAGCGGCAGCGGCGGCTGGGAGAGCGGTCGGCGGGGTTTCTTCGTTGC
ATTGCCTGAGAGGAGCGGAGTCTGCCAGGTGGTGTCCATC**ATG**TTCTCTTTCAACATGTTCGACCACCCTATTCC
CAGGGTCTTCCAAAACCGCTTCTCCACACAGTACCGCTGCTTCTCTGTGTCCATGCTAGCAGGGCCTAATGACAG
GTCAGATGTGGAGAAAGGAGGGAAGATAATTATGCCACCCTCGGCCCTGGACCAACTCAGCCGACTTAACATTAC
CTATCCCATGCTGTTCAAACTGACCAATAAGAATTCGGACCGCATGACGCATTGTGGCGTGCTGGAGTTTGTGGC
TGATGAGGGCATCTGCTACCTCCCACACTGGATGATGCAGAACTTACTCTTGGAAGAAGGCGGCCTGGTCCAGGT
GGAGAGCGTCAACCTTCAAGTGGCCACCTACTCCAAATTCCAACCTCAGAGCCCTGACTTCCTGGACATCACCAA
CCCCAAAGCCGTATTAGAAAACGCACTTAGGAACTTTGCCTGTCTGACCACCGGGGATGTGATTGCCATCAACTA
TAATGAAAAGATCTACGAACTGCGTGTGATGGAGACCAAACCCGACAAGGCAGTGTCCATCATTGAGTGTGACAT
GAACGTGGACTTTGATGCTCCCCTGGGCTACAAAGAACCCGAAAGACAAGTCCAGCATGAGGAGTCGACAGAAGG
TGAAGCCGACCACAGTGGCTATGCTGGAGAGCTGGGCTTCCGCGCTTTCTCTGGATCTGGCAATAGACTGGATGG
AAAGAAGAAAGGGGTAGAGCCCAGCCCCTCCCCAATCAAGCCTGGAGATATTAAAAGAGGAATTCCCAATTATGA
ATTTAAACTTGGTAAGATAACTTTCATCAGAAATTCACGTCCCCTTGTCAAAAAGGTTGAAGAGGATGAAGCTGG
AGGCAGATTCGTCGCTTTCTCTGGAGAAGGACAGTCATTGCGTAAAAAGGGAAGAAAGCCC**TAA**GTGAGGACTGT
TGGCTGATTGGAAAATAATAAAAGAATCATTTGCAACATCTTGGCTTTTAGTTACTGGCACTGACAGGGACGAGC
CTCATCAGAGAATACTCTGTTACTTAAGATTTATTTAGAGTTACCTAAGAATTATTAAGTTTGACTTGGAAGTGG
AGCAGCAGGACTTTGTAGTTGTATGCTTGATTTGGGGAAAGACAAAGAGCTGTCCCTGAGGGCCTGTAGATAGCT
GCCTCCTCACCTCTTCACGCTTTCAGCTTGAGGGGAGCTCCCACTGCCTCAGCAGGAGCAATTCTGCATCCCTAA
TTCTGTCAAAACCTATGAAGGTGACTAAATTGTCTAACATGAAGTGTTCTTTCTTTTTCTTCATTTATCCTTTCT
TTTCCTACATCAATTGCATAGGTGTCAGTCTTTGGCCTAAAAAAAGGCTTTAAATAGACATGTGTTCTATAAGTA
GTGGCTGTCCCACTACTGTGGCTGCAATTTAAGTATTTGACAAAGAATGTTTCTATTTTTATTTTACATATTTTT
TTCAAAAACACCACTCAGAAGAACCTGATCTGAATGAGTTTGCACTTTTATTCTCATTTCATATGGACATAACTG
GCTCCTTAGTGAACCTGTTCATAGTGAAACAACTCCATGGAGAAGCAAACATGTGAATGTTAGAATGAACAAATG
CTAAAGAGATGTTCCTCTCCTTCTTCCCTACTCCCCAACTCCCAATTTTAATTTATTAAATCATCCAAGCTTCT

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FIGURE 2849

GCCGCCGGGCTCTTGGTACCTCAGCGCGAGCGCCAGGCGTCCGGCCGCCGTGGCTATGTTCGTGTCCGATTTCCG
CAAAGAGTTCTACGAGGTGGTCCAGAGCCAGAGGGTCCTTCTCTTCGTGGCCTCGGACGTGGATGCTCTGTGTGC
GTGCAAGATCCTTCAGGCCTTGTTCCAGTGTGACCACGTGCAATATACGCTGGTTCCAGTTTCTGGGTGGCAAGA
ACTTGAAACTGCATTTCTTGAGCATAAAGAACAGTTTCATTATTTTATTCTCATAAACTGTGGAGCTAATGTAGA
CCTATTGGATATTCTTCAACCTGATGAAGACACTATATTCTTTGTGTGTGACACCCATAGGCCAGTCAATGTCGT
CAATGTATACAACGATACCCAGATCAAATTACTCATTAAACAAGATGATGACCTTGAAGTTCCCGCCTATGAAGA
CATCTTCAGGGATGAAGAGGAGGATGAAGAGCATTCAGGAAATGACAGTGATGGGTCAGAGCCTTCTGAGAAGCG
CACACGGTTAGAAGAGGAGATAGTGGAGCAAACCATGCGGAGGAGGCAGCGGCGAGAGTGGGAGGCCCGGAGAAG
AGACATCCTCTTTGACTACGAGCAGTATGAATATCATGGGACATCGTCAGCCATGGTGATGTTTGAGCTGGCTTG
GATGCTGTCCAAGGACCTGAATGACATGCTGTGGTGGGCCATCGTTGGACTAACAGACCAGTGGGTGCAAGACAA
GATCACTCAAATGAAATACGTGACTGATGTTGGTGTCCTGCAGCGCCACGTTTCCCGCCACAACCACCGGAACGA
GGATGAGGAGAACACACTCTCCGTGGACTGCACACGGATCTCCTTTGAGTATGACCTCCGCCTGGTGCTCTACCA
GCACTGGTCCCTCCATGACAGCCTGTGCAACACCAGCTATACCGCAGCCAGGTTCAAGCTGTGGTCTGTGCATGG
ACAGAAGCGGCTCCAGGAGTTCCTTGCAGACATGGGTCTTCCCCTGAAGCAGGTGAAGCAGAAGTTCCAGGCCAT
GGACATCTCCTTGAAGGAGAATTTGCGGGAAATGATTGAAGAGTCTGCAAATAAATTTGGGATGAAGGACATGCG
CGTGCAGACTTTCAGCATTCATTTTGGGTTCAAGCACAAGTTTCTGGCCAGCGACGTGGTCTTTGCCACCATGTC
TTTGATGGAGAGCCCCGAGAAGGATGGCTCAGGGACAGATCACTTCATCCAGGCTCTGGACAGCCTCTCCAGGAG
TAACCTGGACAAGCTGTACCATGGCCTGGAACTCGCCAAGAAGCAGCTGCGAGCCACCCAGCAGACCATTGCCAG
CTGCCTTTGCACCAACCTCGTCATCTCCCAGGGGCCTTTCCTGTACTGCTCTCTCATGGAGGGCACTCCAGATGT
CATGCTGTTCTCTAGGCCGGCATCCCTAAGCCTGCTCAGCAAACACCTGCTCAAGTCCTTTGTGTGTTCGACAAA
GAACCGGCGCTGCAAACTGCTGCCCCTGGTGATGGCTGCCCCCCTGAGCATGGAGCATGGCACAGTGACCGTGGT
GGGCATCCCCCCAGAGACCGACAGCTCGGACAGGAAGAACTTTTTTGGGAGGGCGTTTGAGAAGGCAGCGGAAAG
CACCAGCTCCCGGATGCTGCACAACCATTTTGACCTCTCAGTAATTGAGCTGAAAGCTGAGGATCGGAGCAAGTT
TCTGGACGCACTTATTTCCCTCCTGTCCTAGGAATTTGATTCTTCCAGAATGACCTTCTTATTTATGTAACTGGC
TTTCATTTAGATTGTAAGTTATGGACATGATTTGAGATGTAGAAGCCATTTTTTATTAAATAAAATGCTTATTTT
AGGCTCCGTCCCC

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FIGURE 2850

GAGGTGCGACAGACCCGCGGGGCAAACGGACTGGGGCCAAGAGCCGGGAGCGCGGGCGCAAAGGCACCAGGGCCC
GCCCAGGGCGCCGCGCAGCACGGCCTTGGGGGTTCTGCGGGCCTTCGGGTGCGCGTCTCGCCTCTAGCC**ATG**GGG
TCCGCAGCGTTGGAGATCCTGGGCCTGGTGCTGTGCCTGGTGGGCTGGGGGGGTCTGATCCTGGCGTGCGGGCTG
CCCATGTGGCAGGTGACCGCCTTCCTGGACCACAACATCGTGACGGCGCAGACCACCTGGAAGGGGCTGTGGATG
TCGTGCGTGGTGCAGAGCACCGGGCACATGCAGTGCAAAGTGTACGACTCGGTGCTGGCTCTGAGCACCGAGGTG
CAGGCGGCGCGGGCGCTCACCGTGAGCGCCGTGCTGCTGGCGTTCGTTGCGCTCTTCGTGACCCTGGCGGGCGCG
CAGTGCACCACCTGCGTGGCCCCGGGCCCGGCCAAGGCGCGTGTGGCCCTCACGGGAGGCGTGCTCTACCTGTTT
TGCGGGCTGCTGGCGCTCGTGCCACTCTGCTGGTTCGCCAACATTGTCGTCCGCGAGTTTTACGACCCGTCTGTG
CCCGTGTCGCAGAAGTACGAGCTGGGCGCAGCGCTGTACATCGGCTGGGCGGCCACCGCGCTGCTCATGGTAGGC
GGCTGCCTCTTGTGCTGCGGCGCCTGGGTCTGCACCGGCCGTCCCGACCTCAGCTTCCCCGTGAAGTACTCAGCG
CCGCGGCGGCCCACGGCCACCGGCGACTACGACAAGAAGAACTACGTC**TGA**GGGCGCTGGGCACGGCCGGGCCCC
TCCTGCCAGCCACGCCTGCGAGGCGTTGGATAAGCCTGGGGAGCCCCGCATGGACCGCGGCTTCCGCCGGGTAGC
GCGGCGCGCAGGCTCCTCGGAACGTCCGGCTCTGCGCCCCGACGCGGCTCCTGGATCCGCTCCTGCCTGCGCCCG
CAGCTGACCTTCTCCTGCCACTAGCCCGGCCCTGCCCTTAACAGACGGAATGAAGTTTCCTTTTCTGTGCGCGGC
GCTGTTTCCATAGGCAGAGCGGGTGTCAGACTGAGGATTTCGCTTCCCCTCCAAGACGCTGGGGGTCTTGGCTGC
TGCCTTACTTCCCAGAGGCTCCTGCTGACTTCGGAGGGGCGGATGCAGAGCCCAGGGCCCCCACCGGAAGATGTG
TACAGCTGGTCTTTACTCCATCGGCAGGGCCCGAGCCCAGGGACCAGTGACTTGGCCTGGACCTCCCGGTCTCAC
TCCAGCATCTCCCCAGGCAAGGCTTGTGGGCACCGGAGCTTGAGAGAGGGCGGGAGTGGGAAGGCTAAGAATCTG
CTTAGTAAATGGTTTGAACTCTC

FIGURE 2851

CACCCCGCAGCCCGGCCTCGGCCTCCGCCGCTTGTCGTCGCGCCCCGCCCGCGAGCCCGCCCCGCACGTCCCCCG
CCGGCGGCCACC**ATG**AGCACAGGCCTGCGGTACAAGAGCAAGCTGGCGACCCCAGAGGACAAGCAGGACATTGAC
AAGCAGTACGTGGGCTTCGCCACACTGCCCAACCAGGTGCACCGCAAGTCGGTGAAGAAAGGCTTTGACTTCACA
CTCATGGTGGCTGGTGAGTCAGGCCTGGGGAAGTCCACACTGGTCCACAGCCTCTTCCTGACAGACTTGTACAAG
GACCGGAAGCTGCTCAGTGCTGAGGAGCGCATCAGCCAGACGGTAGAGATTCTAAAACACACGGTGGACATTGAG
GAGAAGGGAGTCAAGCTGAAGCTCACCATCGTGGACACGCCGGGATTCGGGGACGCTGTCAACAACACCGAGTGC
TGGAAGCCCATCACCGACTATGTGGACCAGCAGTTTGAGCAGTACTTCCGTGATGAGAGCGGCCTCAACCGAAAG
AACATCCAAGACAACCGAGTGCACTGCTGCCTATACTTCATCTCCCCCTTCGGGCATGGGCTGCGGCCAGTGGAT
GTGGGTTTCATGAAGGCATTGCATGAGAAGGTCAACATCGTGCCTCTCATCGCCAAAGCTGACTGTCTTGTCCCC
AGTGAGATCCGGAAGCTGAAGGAGCGGATCCGGGAGGAGATTGACAAGTTTGGGATCCATGTATACCAGTTCCCT
GAGTGTGACTCGGACGAGGATGAGGACTTCAAGCAGCAGGACCGGGAACTGAAGGAGAGCGCGCCCTTCGCCGTT
ATAGGCAGCAACACGGTGGTGGAGGCCAAGGGGCAGCGGGTCCGGGGCCGACTGTACCCCTGGGGGATCGTGGAG
GTGGAGAACCAGGCGCATTGCGACTTCGTGAAGCTGCGCAACATGCTCATCCGCACGCATATGCACGACCTCAAG
GACGTGACGTGCGACGTGCACTACGAGAACTACCGCGCGCACTGCATCCAGCAGATGACCAGCAAACTGACCCAG
GACAGCCGCATGGAGAGCCCCATCCCGATCCTGCCGCTGCCCACCCCGGACGCCGAGACTGAGAAGCTTATCAGG
ATGAAGGATGAGGAACTGAGGCGCATGCAGGAGATGCTGCAGAGGATGAAGCAGCAGATGCAGGACCAG**TGA**CGC
TCGCCGCGGACACACCGTCCGTCTCCGGGACGCCCTCGCACCCCTGGACACCAGACCGGACTGTTCCCGACCCGG
AGACGCGGGGCCACAGCCCCCAGCTGACCCTAATTTATTCTCAGCACCACCCCCTCCCAGGTCATTGTGTCTGTT
TCCGAGGGGCCTGGACCGTAGCCCCCGCCCAGCTGGCCCTCTCTGACCTTGGGGGATCAGGAGCGAAGTTGGGCG
GGACTTCAGAGATCCGCCTCCCTTGCCCTTCCCCCGCCCCCGGACGGTCACAGCACCCAAACCGCAGGCCCTGCT
CTGGCAGGCAGGCAAAGCTAGGCAGAAGAGGATTCCCAGGATCCTGGGTCTGTTCCCTGCCCCAGTGCTGCAGAA
CGGACTTGGGAGCCCTCCTTTGCCTGCTCCCGCGGGTCACCCAGCGAGTGCTGAGACCCCATTTTCTGTCGAGGC
GGGCCGAGTCTTCCCTTATCCCCAGACGCCTAGCGGGCAGGGTTGGGCTGAATCAAATGGGAGCCCTCCAGACAT
AAGGAGGCCAGAGGCTGCAAGGAGCGGGGTCGTGACCGCTTACACCCCTTCTCCACAGCCCGGCCCGACCTGGAG
GGCCCCCGGGGCACTGGGCGGTGAGCCACCTCCTGGCAACTCTCGGTGCCGTCCCCTGCCCTCGCTCGAGGCCTC
TTCTCCCCAGCACCGCTGTGGTGTGCCGGGATCCTGAGCCTAGGCCTCCCGATGTTCCCACCCGCATGATCCCTT
CCCGCCACACGATGCTCCGTTTTCTTCCGTTGTGAATGCCGCGTCCTGTCCTGGTGACAGGAGAACAATGTTGGT
GAACGTC

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FIGURE 2852

CCGGCAGGGGGAGCGAGGAGGAAGGGAACCGCGGCCGGGCCAGCGGAGGCGGCGGAGCGCACCGCCCACCAGGGC
TCAGGGTCCTCCGACCGGGTGAAGCTTCGCTGGCTGCCAGGATCCCCGGCAGGGATGCACTTCAGCACCGTCACC
AGGGACATGGAAGCCTTCACGGCCAGCAGCCTGAGCAGCCTGGGGGGCCGCGGGGGGCTTCCCGGGCGCCGCGTCG
CCCGGCGCCGACCCGTACGGCCCGCGCGAGCCCCCGCCGCCGCCGCCGCGCTACGACCCGTGCGCCGCCGCCGCC
CCCGGCGCCCCGGGCCCGCCGCCGCCGCCGCACGCCTACCCGTTTGCGCCGGCCGCCGGGGCCGCCACCAGCGCC
GCCGCCGAGCCCGAGGGCCCCGGGGCCAGCTGCGCGGCCGCAGCCAAGGCGCCGGTGAAGAAGAACGCGAAGGTG
GCCGGTGTGAGCGTGCAGCTAGAGATGAAGGCGCTGTGGGACGAGTTCAACCAGCTGGGCACCGAGATGATCGTC
ACCAAGGCCGGCAGGCGGATGTTTCCCACCTTCCAAGTGAAGCTCTTCGGCATGGATCCCATGGCCGACTATATG
CTGCTCATGGACTTCGTGCCGGTGGACGATAAGCGCTACCGGTACGCCTTCCACAGCTCCTCCTGGCTGGTGGCG
GGGAAGGCCGACCCTGCCACGCCAGGCCGCGTGCACTACCACCCGGACTCGCCTGCCAAGGGCGCGCAGTGGATG
AAGCAAATCGTGTCCTTCGACAAGCTCAAGCTGACCAACAACCTACTGGACGACAACGGCCACATTATTCTGAAT
TCCATGCACAGATACCAGCCCCGCTTCCACGTGGTCTATGTGGACCCACGCAAAGATAGCGAGAAATATGCCGAG
GAGAACTTCAAAACCTTTGTGTTCGAGGAGACACGATTCACCGCGGTCACTGCCTACCAGAACCATCGGATCACG
CAGCTCAAGATTGCCAGCAATCCCTTCGCGAAAGGCTTCCGGGACTGTGACCCTGAGGACTGGCCCCGGAACCAC
CGGCCCGGCGCACTGCCGCTCATGAGCGCCTTCGCGCGCTCGCGGAACCCCGTGGCTTCCCCGACGCAGCCCAGC
GGCACGGAGAAAGACGCGGCTGAGGCCCGGCGAGAATTCCAGCGCGACGCGGGCGGGCCAGCAGTGCTCGGGGAC
CCGGCGCATCCTCCGCAGCTGCTGGCCCGGGTGCTAAGCCCCTCGCTGCCCGGGGCCGGCGGCGCCGGCGGCTTA
GTCCCGCTGCCCGGCGCGCCCGGAGGCCGGCCCAGTCCCCCGAACCCCGAGCTGCGCCTGGAGGCGCCCGGCGCA
TCGGAGCCGCTGCACCACCACCCCTACAAATATCCGGCCGCCGCCTACGACCACTATCTCGGGGCCAAGAGCCGG
CCGGCGCCCTACCCGCTGCCCGGCCTGCGTGGCCACGGCTACCACCCGCACGCGCATCCGCACCACCACCACCAC
CCCGTGAGTCCAGCCGCCGCGGCCGCCGCCGCCGCTGCCGCAGCTGCCGCGGCCGCCAACATGTACTCGTCGGCC
GGAGCCGCGCCGCCCGGCTCCTACGACTATTGCCCCAGATAACACGGGCCCTGTCGCGCTCCCGCCCCGGTCCTG
CACAGCCCCGAAGTTCGCCGGGCCCGGCCACCCTGCCCCAAGGGCAAGCAAGGAATACGTTCCCCCAGCCCCAGG
GGCCACCGCGGCTCTCCCCTTCCCCAGCCTCGAAGCCATGGGGGCCCCCTCGCCACCCCCAGCCCCTTGGGCTAT
CGAAGTATCCGGTTCCCCAGTCCCTGGAGCCACCGCGGGTCCTTCCCCGGCCCCGAGGGCCAAGGGGGTCCCCGC
CCGCCAGTGCCAAAGCGCCCGGTCGGAGGCGGAAGGAAGTGATATTTATTGTTCTCCCCGAGACCGCGTCGCCCG
CGGCCCGGCCGGCAGTTGCAGTGTAGACAGCCCGAGAGCCCCGCCTGCAGGCGGTGTAGATACATGTAGATACTG
TAGATACTGTAGATACCGCCCCGGCGCCGACTTGATAAACGGTTTCGCCTCTTTTGG

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FIGURE 2853

CATGCGCCGGGTCGTACACGGCGGCCGCGCGCACGCTGGGGGCGTGGCTGCGCGATGTAATCGGTCTCTGGACGC
TGCGCGGCGCTCCTAGGAGCAGGCGTTCCCGACTCCGGCAAGAGGGTGGCGCCTGGACTCTCGCCCTCAGAGGGA
GGCCCGTCCCACGGTCTGTGGCTACGGATCCCAGGACCCTCTTCGCGGGCGATTCGCGTAGCCTCAGGTAACTGC
ATCCTGCCCAGC**ATG**ACGGCCCCCTGCCCGCCGCCACCTCCAGACCCCCAGTTTGTCCTCCGAGGCACCCAGTCA
CCGGTGCATGCGCTGCACTTCTGCGAAGGAGCCCAGGCTCAGGGGCGCCCGCTCCTCTTCTCAGGGTCTCAGAGT
GGCCTGGTACACATCTGGAGCCTGCAGACGCGGAGAGCGGTTACCACCCTGGATGGCCACGGCGGCCAGTGTGTG
ACCTGGCTGCAGACGCTGCCCCAGGGGCGCCAGCTCCTCAGTCAGGGCCGGGACCTGAAGCTGTGCCTGTGGGAC
CTCGCGGAGGGCAGGAGCGCTGTCGTGGACTCCGTGTGCTTGGAGAGTGTGGGCTTCTGCCGGAGCAGCATCCTG
GCCGGGGGCCAGCCACGCTGGACGCTTGCCGTGCCAGGGAGGGGCAGCGACGAGGTTCAGATTCTGGAGATGCCC
TCCAAGACGTCAGTGTGCGCCCTGAAGCCGAAGGCAGATGCCAAGCTGGGCATGCCCATGTGCCTGCGGCTGTGG
CAGGCCGACTGCAGCTCCCGCCCACTCCTTCTGGCCGGCTATGAGGATGGATCGGTGGTCCTGTGGGACGTCTCT
GAGCAGAAGGTGTGCAGCCGCATCGCCTGCCATGAGGAGCCCGTCATGGACCTTGACTTTGACTCCCAGAAGGCC
AGGGGCATCTCAGGCTCCGCGGGGAAGGCGCTGGCTGTCTGGAGCCTGGACTGGCAGCAGGCCCTGCAGGTGCGT
GGGACTCATGAACTCACCAATCCCGGGATCGCCGAGGTCACGATCCGGCCAGATCGCAAGATCCTGGCCACCGCA
GGCTGGGACCACCGCATCCGCGTGTTCCACTGGCGGACGATGCAGCCACTGGCCGTGCTGGCCTTCCACAGCGCC
GCTGTCCAGTGCGTGGCCTTCACCGCCGATGGCTTGCTGGCCGCGGGCTCCAAGGATCAGCGGATCAGCCTCTGG
TCACTCTACCCACGCGCA**TGA**CTCACCCACTCCCTTCCCGGGAGACGAGGAGGGCGGGCAGGGAGGTGGGCATCA
GGCCCCAGCCTTGGCCTGAAACCTCAAGGGCCTCTGAGGACCAGCAAGTCATGGCCCAAGGACCATGGAGTCCCC
GCTGTCTTCATGAGGTTGGTATTTCCTTTTGTGGAGTGCCTCATCACAGGACGGTGACTCTGGGGGCCAGCCAGA
GCCCTGGCCGTCCGAGGCCTGCAGGAGACGTTGGCTTGGGCCTGCTGTGTTGCCAGCTGAGGGTATTTTATAATA
AATTTCCATTGCC

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FIGURE 2854

CCCAAG**ATG**CCAAAAGGAAAGAAGGCCAAGGGAAAGAAGGTGGCTCTGGCCCCTGCTGTCATGAAGAAGCAGGAG
GCTAAGAAAGTGGTGAATCCCCTGTTTGAGAAAAGGCCTAAGAATTTTGGCATCGGACAGGACATCCAGCCCAAA
AGAGACCTCACCCACTTTGTGAAATGGCCCCGCTATATCAGGCTGCTGGCAAACGGGACGTCCCCACCAAGAGAC
CACCTGTCCTTCGAGCAGGAGTTAACATCGTCACCACCTTGGTGGAGAACAAGAAAGCTCAGCTGGTGG**TGA**TTG
CAGACGACGTGGATCCCATCGAGCTGGTTGTCTTCTTGCCTGCCTTGTGTCGTAAAATGGGGGTCCCTTACTGCA
TTATCAAGGGGAAGGCAAGACTGGGACGTCTAGTCCACAGGAAGACCTGCACCACTGTCACCTTCACATAGGTGA
ACTCGGAAGACAAAGGCACTTTGGCTAAGCTGATGGAAGCTATCAGGACCAATTACAATGACAGATACGATGAGA
TCCGCCGTCACTGGGGCGGCAACATCCTGGGTCCTAAGTCTGTGGCTCGTATCGCCAAGCTCGAAAAGGCAAAGG
CTAAAGAACTTGCCACTAAACTGGGTTAAATGTACACTGTTGAGTTTTCTGTACATTAAAATAATTAAAATAATA
CAAATTTTCCTTC

FIGURE 2855

CTGCCGTGTGTCTGAGGGCCAGTCATGCAGCATCCACCTAGGCAGGCTTGAGAGTCCTTGGGAGAGTCCAGGTGA
CCTGGTTTTTAATTAAAACGCGTCCTGTTTATTGTGGTTGGGCTCTGCCCAGAAAGGAAGGTAGGGCCTTGAAGT
GGTGATGTCCAGGTTTCCTGCACAGGTAGGGTGGAGGCAACGATGGACTCTGGCATGGCCTTCCAGACAGGCAGT
GCACACAGCTCCTTTCAGAGTGGCTTTGTTGCCAGCTGCTGCAGCACCTGCTTTCAGACAGATGATGACCAAGCT
GCTTTCCTGCTGGGGGAAGGAGGCATTCCCCCTGGGTTGTTTTTCTCTTCTGGCCCCCACACACTGGCAGACCCG
AAGGCAGGGTGCTCAGGAGCTGCAGAGCCTGGCAGGGTTTGCTGGACATGCTCAGGGACGGGCCATGGTGCTGGC
TCTGCTTTCTAATCATGGTGTCAGTCCTTCACTTCCCTTGGAAATACCCAGAGATTTTATTTCCTGAAGATAGGA
CATGATGGGTGCTGTGAGATGGTATTTAAAGTACCTGTCTGCAAGGAAAACTTTAAAATAGGAAGTACTAAGGAT
AAGGTCCTATGGGATATTGGAATATTTTATAAAGCCACAATAGTTAAAGCACTTAGATGTGGACAGATGAGCAGA
GAATAGAGGACTTTGAAACGGGCCAAATAAATATGGAAATTTAGTACAGGCTAGAGGTGTTTCCAATTAACGAGT
AAAATGGATTATTCAGTAAAAGCAGTTGGCCCTCTGGAAAATAGTAAAGCCATGTATGTGCCTCACTCTTTATGC
CAGTACATATTCCAGATTAAAGATTTCAATGTTACAATTATGAAAGTACTAGAGGAAAATATGGGTGAATTTTTT
TTTTTTTTTTTTTTTGCCTATGATTCCAGGATTTTAAAAGTTTTAGATGCCCAGAGTTGTGGAGGTATGGAGAAG
TGGACCTTCTCATACTGTTGGTGGGAATACACAATAATATAATTTGACCACGTAACAATTCTAGGCACATGCATG
CTGTGACTACTTGCTAGGTGCATGAAGGCTCTTGCCAGGGGTGGTCATGGTTCGGTACCACTACATGGGGGTTTA
GAGCAGGGACTGGAGGTTGGCCTTGCCTCCTCCCCTCCCCGCATGAGCTGAGGGTCCTTACCTGACCTTTTTGAG
CTGTGACCAGAGTTTTTCCTCATGGGGTGGTTAGAAGGGTTGAATGAGAATGATGCCCATGCAGTGCCTTGGCTG
GGGTCTGGGCCCTCTAACACCCACCTCATGGGTGTCACTGTTTTTTGAACAGCAGAACTGGAAAAGCCCAAAGAT
CCAGCAATAAAGGAGCAAGGCAAATAAAGCTGTTACCCTGCAGGATCAGTCAGCATGAGCCAGATTGTGCTGCAG
TAACAAAGATCTCCAACAGCGCAGCGGCTACAGTTGGCACTGCTTATTTCTTGCTTGCACCTGTGGGCCACCGTG
GCTGGGGCCTGTCAGACCTGTGCTGACGACAGCCTACCTGGACATATTTCTCCATGCTCACTGAGGCAGGGGAAA
GGCCACAGCAGGCCACAAGTAATGTGTGTCACCCCACTTCCATTTCTGTGGCCAAAGGAAGCCACAGAGCCACAC
CTGAGTTCCATAGGACGGCAGCAGCTGATCATCCTATGGGCTGGGGTGCTCAGTATGGAGAAGTACAAGCAGCCA
CCCAGCGTGGGGCTGGTTGGTGCTGCTGAGGATGGGAGGATGGGAGGGGCCTGCATCCATCCCAGGGCAACATAC
CTGTTTGTCTGCTGGGGCTGCCTGACAAAGGACCGCAGGCTAGGGGACTTAAACAACAGACATTTCCTCATGATT
CTGGAGCTAGAAGCCTGAGATCAAGGTGTGGGCAGGGTTGGTTTCTCCTGAGGCCTCGCTCCTTGGCCTGCAGAT
AGCCATCTTCTTGCCGTGTCCCTGTCTGTGTCTGTGTCCTAATCTCTCATAAGCTCACTAGTCTATTGGATCAGG
GCCCACCCTCATGACCTCATTTAACCCTGAATTACCTCTTTAAAGACCCTGTCTTCAAATGTAAGTACTAGGGGT
TAGGACTTGAACATAAAAATATTGAAGGGACATAGTTCTGCCCACAGCGGTGCCCGCGATAGGCTTCTCTGGTTT
TGTCTTTGCTGTTCCTGGCAGCGCTATATTGGGCAGGCTTCTGTGGTCTCCACATGCCTGTGTGCAGAGTCCCCC
AGGCCCTGGGTTCTGGGGCCCATACTGAGGAGTGGGGATGGCCAAGCCTTGGCTGTTGAGTAGGCAGTGCCCAGT
TGTGCTGTATGGGATGCTGTTTCTCACTTAAGAAATCTTTCCCTACCTGGGGGGTACAAAGGCATTATCCTGTAT
TCCCAGGTTGTAACTTTCTGCCTTTGACATTCAACCTTGAGTCCACCTGTAAGTGTAACTGCGGCAGAAGGGAGG
GGTCTGCTGTCATCCTTGATAGCCTGTGATGAGCAGAGCCCCTCTGCCGACCGCGATGCACATGTAATATGAGCA
AGAAATAAATTTTTGATGTGCGAAGCCACTG

FIGURE 2856

GTCTGTGGCTACGGATCCCAGGACCCTCTTCGCGGGCGATTCGCGTAGCCTCAGATTGCCTCGGATGATGGCCTG
CGACTGACAGTCTCTCAGCTCTTCTCAGCTCTCCTGAGGCTGCAGCTGTCAGCTCCCTGATCCTCAGCACTTGCC
TGGACCAGTGCGGGTCTGCCACGCCCTGTTCAGCCATCCCTGTCCTGTTGTGTCGTGCAAGCCACATCTGTCCAC
ACCCCCACCACCCACCAGTGCTGGCTCTCCTCTCTTCTCCCCTGTGCTCCCAGCATGCCTCGTGGCCGGTGCCGT
CAGCAGGGCCCTCGCATTCCCATCTGGGCAGCCGCCAATTATGCCAACGCACATCCATGGCAGCAGATGGACAAG
GCGTCTCCTGGGGTGGCATACACCCCCCTTGTGGATCCCTGGATTGAGCGGCCCTGCTGTGGGGACACCGTGTGT
GTGCGAACGACC**ATG**GAGCAGAAGAGCACAGCTAGTGGCACTTGTGGCGGTAAACCTGCAGAAAGGGGTCCCCTA
GCTGGGCACATGCCCAGCTCCCGACCCCACAGGGTGGACTTCTGCTGGGTACCAGGCTCAGACCCAGGCACCTTT
GATGGCTCCCCGTGGCTACTGGACCGCTTCTTGGCCCAGCTGGGCGATTACATGTCCTTCCACTTTGAGCACTAT
CAGGACAACATCAGCCGTGTCTGCGAGATCCTCAGGCGCCTAACAGGCCGAGCCCAGGCCTGGGCAGCCCCCTAC
CTTGATGGGGACCTGCCCCTGCCTGACGATTACGAGCTCTTCTGCCAGGATCTCAAGGAAGTTGTTCAAGACCCG
AACAGTTTTGCTGAGTACCATGCTGTGGTTACCTGTCCCCTGCCCCTGGCCTCCAGCCAGCTGCCAGTGGCCCCT
CAGCTGCCTGTGGTGAGGCAATACTTAGCTAGGTTCTTAGAGGGCCTGGCACTCGACATGGGTACTGCCCCCAGG
TCTTTACCAGCCGCCATGGCCACCCCTGCTGTGTCTGGGTCCAACTCTGTATCTAGAAGTGCTCTGTTCGAGCAG
CAGCTGACCAAGGAGAGCACCCCTGGGCCCAAGGAGCCCCCAGTCCTGCCCAGTTCTACATGTAGCTCCAAGCCT
GGTCCTGTGGAACCAGCCTCTTCCCAGCCAGAGGAGGCAGCCCCCACACCTGTCCCTAGACTGTCGGAGTCAGCT
AATCCTCCTGCCCAGAGACCAGACCCAGCTCATCCAGGAGGTCCAAAACCCCAGAAAACAGAGGAGGAGGTTTTG
GAGACAGAGGGAGACCAGGAGGTGTCCTTAGGTACCCCACAGGAGGTGGTGGAGGCCCCGGAGACCCCAGGAGAG
CCACCACTTTCTCCTGGGTTC**TGA**ACACAGCCCAGGTGGGAACAATGCTGCCCCTCATGATGAAGTGGCCTGTGT
GGCTTGAGCGCCCCATAGTCCCCAGTCAGAGCAGAGTGGTGTCCCCAGATGACTTCAGACCCCATAGCTGGGCAA
GATGCGCTTGTTTTGGACTCTGCGCTGAGCAGAACCAGCTCCCCCAACTCCAGCAGAGCTTGACCTCCGCCCTGT
GCCCTTTCCCTGCTGCTGGCTCTCTGCTGCATCCCTGCCCGTCTTCTGGGAGTGCCGTCTCACCCAGGCCTGCTC
CCACGAGGGGGTCGTTTTGTAGATCAACTCTCAGCAGATAGTTGCATCATCTTTGTCACCTCCACCCCCATAAAA
CACCCCCCTTGGTGTCTTCCACACTGGCTGGGACTGAACTGGGTCTGCCACGTCTGCCCTGTTGGGACCTCGTTC
CTGTATGGGGTTTCTGTGTCTGTCCCCCTAGCCCCACCCTCTCTGCTCCCTGTGACTTCTGTCCCAGCTGGAATG
TGAGGAAGGCTGCCTGGAGGAAGTGGCCACTTTGATTCTGGGGGATGAGTGGGATAGCATCTTGGCAAAGAATGA
TGTTTCCTGTGGGATTACCAGCAGTTCTGGGCAGCTGGAAGGTTTGGATGCAGGAAGGTGGGATGCAAGCCCCTT
GCCAGGCTCAGCTGCAGGCATTCGCCCTTTGTGTGTTAACACTGTAGCTCTAATCGTGCCTGGTGTTCTGAAGCA
GGCTCCTCTTCCCTGCTGCTGTGCTGCCATCCCCTGCTCACTCCGCACTCGCATGCATTGCGGATTCAGCACTTA
AGCCCTAGTGTGTAAATGACTTGGATCTCCCTCCTGGCAGACTGTGACCCTCAGCACAGGGGCTCTGTCTTAGTC
AGCTCTGTGGCCTGGTACACAATTGGTGCTCATTAAACACGTGTTGGATTACTGGC

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FIGURE 2857

ATTCCCCACACCCTATCCCAGTGTTCCACCCTAGGTCTGAAGGCCCCCGCCCCGAATCCGGCCGCATTCGGCCCC
GGTCTAGCCAGCGCTCTCACCTCTCCCGCGACGGCCCGCCCGGGACTGGACCCGCCCCGGTCCGGCGCAGGCAGC
GCGGCGGGCAGCCCTAGCTGCCCCAGAAGCCCCACGACGATGGCGGCAATGGCGGTGGCGCTGCGGGGATTAGGA
GGGCGCTTCCGGTGGCGGACGCAGGCCGTGGCGGGCGGGGTGCGGGGCGCGGCGCGGGGCGCAGCAGCAGGTCAG
CGGGACTATGATCTCCTGGTGGTCGGCGGGGGATCTGGTGGCCTGGCTTGTGCCAAGGAGGCCGCCCAGCTGGGA
AGGAAGGTGGCCGTGGTGGACTACGTGGAACCTTCTCCCCAAGGCACCCGGTGGGGCCTCGGCGGCACCTGCGTC
AACGTGGGCTGCATCCCCAAGAAGCTGATGCACCAGGCGGCACTGCTGGGAGGCCTGATCCAAGATGCCCCCAAC
TATGGCTGGGAGGTGGCCCAGCCCGTGCCGCATGACTGGAGGAAGATGGCAGAAGCTGTTCAAAATCACGTGAAA
TCCTTGAACTGGGGCCACCGTGTCCAGCTTCAGGACAGAAAAGTCAAGTACTTTAACATCAAAGCCAGCTTTGTT
GACGAGCACACGGTTTGCGGCGTTGCCAAAGGTGGGAAAGAGATTCTGCTGTCAGCCGATCACATCATCATTGCT
ACTGGAGGGCGGCCGAGATACCCCACGCACATCGAAGGTGCCTTGGAATATGGAATCACAAGTGATGACATCTTC
TGGCTGAAGGAATCCCCTGGAAAAACGTTGGTGGTCGGGGCCAGCTATGTGGCCCTGGAGTGTGCTGGCTTCCTC
ACCGGGATTGGGCTGGACACCACCATCATGATGCGCAGCATCCCCCTCCGCGGCTTCGACCAGCAAATGTCCTCC
ATGGTCATAGAGCACATGGCATCTCATGGCACCCGGTTCCTGAGGGGCTGTGCCCCCTCGCGGGTCAGGAGGCTC
CCTGATGGCCAGCTGCAGGTCACCTGGGAGGACAGCACCACCGGCAAGGAGGACACGGGCACCTTTGACACCGTC
CTGTGGGCCATAGGTCGAGTCCCAGACACCAGAAGTCTGAATTTGGAGAAGGCTGGGGTAGATACTAGCCCCGAC
ACTCAGAAGATCCTGGTGGACTCCCGGGAAGCCACCTCTGTGCCCCACATCTACGCCATTGGTGACGTGGTGGAG
GGGCGGCCTGAGCTGACACCCATAGCGATCATGGCCGGGAGGCTCCTGGTGCAGCGGCTCTTCGGCGGGTCCTCA
GATCTGATGGACTACGACAATGTTCCCACGACCGTCTTCACCCCGCTGGAGTATGGCTGTGTGGGGCTGTCCGAG
GAGGAGGCAGTGGCTCGCCACGGGCAGGAGCATGTTGAGGTCTATCACGCCCATTATAAACCACTGGAGTTCACG
GTGGCTGGACGAGATGCATCCCAGTGTTATGTAAAGATGGTGTGCCTGAGGGAGCCCCCACAGCTGGTGCTGGGC
CTGCATTTCCTTGGCCCCAACGCAGGCGAAGTTACTCAAGGATTTGCTCTGGGGATCAAGTGTGGGGCTTCCTAT
GCGCAGGTGATGCGGACCGTGGGTATCCATCCCACATGCTCTGAGGAGGTAGTCAAGCTGCGCATCTCCAAGCGC
TCAGGCCTGGACCCCACGGTGACAGGCTGCTGAGGGTAAGCGCCATCCCTGCAGGCCAGGGCACACGGTGCGCCC
GCCGCCAGCTCCTCGGAGGCCAGACCCAGGATGGCTGCAGGCCAGGTTTGGGGGGCCTCAACCCTCTCCTGGAGC
GCCTGTGAGATGGTCAGCGTGGAGCGCAAGTGCTGGACAGGTGGCCCGTGTGCCCCACAGGGATGGCTCAGGGGA
CTGTCCACCTCACCCCTGCACCTCTCAGCCTCTGCCGCCGGGCACCCCCCCCCAGGCTCCTGGTGCCAGATGATG
ACGACCTGGGTGGAAACCTACCCTGTGGGCACCCATGTCCGAGCCCCCTGGCATTTCTGCAATGCAAATAAAGAG
GGTACTTTTTCTGA

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FIGURE 2858

CACCGCCATTGCCGCCATCGTCGTGGGGCTTCTGGGGCAGCTAGGGCTGCCCGCCGCGCTGCCTGCGCCGGACCG
GGGCGGGTCCAGTCCCGGGCGGGCCGTCGCGGGAGAGAAATAACATCTGCTTTGCTGCCGAGCTCAGAGGAGACC
CCAGACCCCTCCCGCAGCCAGAGGGCTGGAGCCTGCTCAGAGGTGCTTTGAAGATGCCGGAGGCCCCGCCTCTGC
TGTTGGCAGCTGTGTTGCTGGGCCTGGTGCTGCTGGTGGTGCTGCTGCTGCTTCTGAGGCACTGGGGCTGGGGCC
TGTGCCTTATCGGCTGGAACGAGTTCATCCTGCAGCCCATCCACAACCTGCTCATGGGTGACACCAAGGAGCAGC
GCATCCTGAACCATGTGCTGCAGCATGCGGAGCCCGGGAACGCACAGAGCGTGCTGGAGGCCATTGACACCTACT
GCGAGCAGAAGGAGTGGGCCATGAACGTGGGCGACAAGAAAGGCAAGATCGTGGACGCCGTGATTCAGGAGCACC
AGCCCTCCGTGCTGCTGGAGCTGGGGGCCTACTGTGGCTACTCAGCTGTGCGCATGGCCCGCCTGCTGTCACCAG
GGGCGAGGCTCATCACCATCGAGATCAACCCCGACTGTGCCGCCATCACCCAGCGGATGGTGGATTTCGCTGGCA
TGAAGGACAAGGTCACCCTTGTGGTTGGAGCGTCCCAGGACATCATCCCCCAGCTGAAGAAGAAGTATGATGTGG
ACACACTGGACATGGTCTTCCTCGACCACTGGAAGGACCGGTACCTGCCGGACACGCTTCTTTTGGAGGAATGTG
GCCTGCTGCGGAAGGGGACAGTGCTACTGGCTGACAACGTGATCTGCCCAGGTGCGCCAGACTTCCTAGCACACG
TGCGCGGGAGCAGCTGCTTTGAGTGCACACACTACCAATCGTTCCTGGAATACAGGGAGGTGGTGGACGGCCTGG
AGAAGGCCATCTACAAGGGCCCAGGCAGCGAAGCAGGGCCCTGACTGCCCCCCCCGGCCCCCCTCTCGGGCTCTC
TCACCCAGCCTGGTACTGAAGGTGCCAGACGTGCTCCTGCTGACCTTCTGCGGCTCCGGGCTGTGTCCTAAATGC
AAAGCACACCTCGGCCGAGGCCTGCGCCCTGACATGCTAACCTCTCTGAACTGCAACACTGGATTGTTCTTTTTT
AAGACTCAATCATGACTTCTTTACTAACACTGGCTAGCTATATTATCTTATATACTAATATCATGTTTTAAAAAT
ATAAAATAGAAATTAA

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FIGURE 2859

ATTTTTGTAAGAAAATTTAAAAATTAAAGCAGCAAAGGAACTTTTTGCTTTCTGCCACTCAGGTCTGGCACAAGT
GGCTGGCTTCTCCCTTGTGTCGGGCCTCTGCGCGTCTGGGGCAGGGCCCTGGGTGGAGGTGGTCCCAGGTGCCCA
TCTGCTGTGTCCTGCAGAGGCTCTGTTTCTGGTCCCTGGGTGGCCCCAAACTTGTCCACTTGGGCTCACTGGTCT
GTCTATCCATAGGAGTGGGCTGGCTGGGGGCTAGCCAGGCCTTGAGCCCAGGAGTAGAATCTTGGCTAGGGGCTG
GTCTCGGTGCAGGTGAACTCAGCTAGCACAGGGTTGATTCCTGTCCTGGGCCTGGGAACTGGGCCCTTGGAGCCT
CTGAGGTGGCTAGCAGTCTGACCCCTTGGAGGAGATGGGGACAGCTCTAGGTGTAGGTGGACAGAAACCAGCACT
GCATCCTCACTCATGGGCCAGGGAGGCAACTACAGGGATGCGGGAGCTGGTCTGAGCCATTGCCTCTTCTGTAAG
CAAGGCCCAGTGGGGAGTAGGGAAGGAGATGCTTCCACTCTGTGCCACATGGGGCCCAGAGGGGCTGGTGCTGCT
GCGGGGTCCACCTGTCCCCAGCGCCTGCTTGGTCAGAAAGGTGTGAATGCTGGCTGACTCCTCTTCGTTTCCCAG
GCTGGCAGTCGTCCCCATGGGGCTAACAGGTGCCCCTGGCCTAGCTGCAGGAGGGCTGACCTCTGCACCACTGTG
GCTGGGAGGCCAGTGGGCCAGGCGTGCCACCCAGAACCCAGCCAGCTAGGGGCCCCGCCCTTAGCGTTAGCGTCC
GTCAAGGGGAGCTTTGAATGTTTGGTGCCCAAGTCAAGGGCAGCAGGGGAATGGCAGTTGAGAAGGATGTACTAA
GTCGAGTTATATCTAAATATTTAGATTCTTAATTTCTATTTTATATTTTTAAAACATGATATTAGTATATAAGAT
AATATAGCTAGCCAGTGTTAGTAAAGAAGTCATGATTGAGTCTTAAAAAAGAACAATCCAGTGTTGCAGTTCAGA
GAGGTTAGCATGTCAGGGCGCAGGCCTCGGCCGAGGTGTGCTTTGCATTTAGGACACAGCCCGGAGCCGCAGAAG
GTCAGCAGGAGCACGTCTGGCACCTTCAGTACCAGGCTGGGTGAGAGAGCCCGAGAGGGGGGCCGGGGGGGGCAG
TCAGGGCCCTGCTTCGCTGCCTGGGCCCTTGTAGATGGCCTTCTCCAGGCCGTCCACCACCTCCCTGTATTCCAG
GAACGATTGGTAGTGTGTGCACTCAAAGCAGCTGCTCCCGCGCACGTGTGCTAGGAAGTCTGGCGCACCTGGGCA
GATCACGTTGTCAGCCAGTAGCACTGTCCCCTTCCGCAGCAGGCCACATTCCTGCAAACAGACCGGGGGGTGGGG
GAGGTGAGGGTCAGAGGTGCCCAGAGAACCTGCCCCAAACCAGGATGGGTGCTCCTCACTAGGCCACGGCACCAC
GCCTGTGCCTAGCCCCTGGGGCCAGGTTTCCACTTTCTGCCCAGCGTGACTCCTGCAGGAAAGGACTGTACAAGA
CTTGGGTGCCACCTTCAGAACATGGGCCCCGTGAGGACAGGGACCTTTCTCTCATCAACTCCTGTATCCATCTCA
GGAGTATCCATCCCTTAGAACAGCATGTGGCACACAGTAGGTGCTCAATAAATGCTAGCTGGGTGAGTGGAAACA
ATGGGGCCCTCAACACCCAGTGCCAGGAACTCAGGCCTATGAGGGAGAGGCACCCAAGGAGAGGGGTTGCTGGTA
TGGTCCCTGGAGACAATATTGGCCTGACCAGGGTGACCCTGCAGGGCTGAGGTGGGGCAGACCTCCCATCAACAA
GCCTGCCCCTTGGGGTCAGTTCTGGACATCCCCAAGCTCCTGCATTTGCAGACCCCCCATCTTCACCAGTGCCTG
GGCCCTGGGAGGACACAGAGTTCCTCTGCCTGGGTTCTGTGCAGAAGGAAGGAGTTGTTACTGGACACGCAGCCA
TAGGGCATGGCCCGTGGGGTCCACTATCGGGAGAAACCTCATAGGATGCTTGCCTATCTATGCTATCAGAAAAGG
GTTTGCTTACATCACATAAACAAGAAACCTTGAGAGGAAGTGTTTGCCTATGGGGAGGAAGGACCTACCAGGGCA
AGGGACACCCCAGTCACCTTGTCTTGGAAATTTGACTTAGTCACCAAACAAAAGTTAACAAGCAATCTCAAACAT
CTAAAGTATAATAAAATCAATTTGCAGGCAGGTGCCTTGAAACACTGGTATCCGACCCCACATGCCTCTGGGATG
GGCCTGGAGAGTCCCACAGGGCTTGCAGCTGTCCTGGTGGTGGGTGGCGGTCGTTTCCAGCCTGTATGCTGCAGA
GAAAGCAGGGGGCTTTCATGTGACAGTATGGACACCACACGGCTGCAAGGTCAGTGAGGTCAGGGGACAGCCCCA
AGGTCCGGAGTTGAGCAGGAAGTACCACCATGAATCATGATGTGTTTTCATTTAGAAAAAAAAAAAAAATGTCCTA
GCAATGTCAGCTGAAAAGACGTAGAACAAAGCGCCACCCGGGAGGAGGACAATGGCCTAGGCCTTGAGCAGGGCG
GCTGCCTTCCAGTCTGGGCCAGGGAATGCATGAGTGAGGGGCCTGGGCTCCTGGACTTCTCGGGTTGCGCCAGGG
GACTCAGGAGCCCAATCTGGTCATCAGGGATACAGAAGACGTCAGCGGACTGAAAGACACCAGACCACTGCACCT
GCACGAGTTAAACAGGAAAGAAGGAGGGAAGGGCAGAAAGGAGC**ATG**GGTCACCTTTGGAGGCTGCCAGGGGCCC
ACTCCTTTACGAAACTGGTCAAGAGGGGAAAGAAGGCAGCACCTGTCCTGCCTGTCGCCCGACACTGCAAGCCTC
CTACCAGCTACTCAGACCACCTGGAGAACTGGCTAAACATGCATCAGCGTCTGAGCAGGACTGAAAATCTAATGC
CATGGAGAAGCGACAGTGTCAGAGGAGCAGGTGACACTATGCTGAGGTGGTTTTCATCTGGCCCACCCTCCTTAG
ACTCTCCTCCCTTCAAGAGTTGGAGCCTCACAGAGGTTGCAGGGAGCCAAGATCGCGCCACTGCACTCCAGCCTG
GGCAACAGAGCGAGAGACTGTCTCGAGAAACAACAACAAAAAGTTGGAGCCTCAGACCAAGCACACACCTGTACT
CCCAGCACTTTGGGAGGTTGAGGCAAGAGGATCGCTTGAGGCCAGGAGTT**TGA**GACCAGTCTGGGCAACATAGGG
AGACCCCATTTCTACAAAAAATTTTTAAATTAGC

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FIGURE 2860

ACCTCGCGACCTGTGTCAGCAGAGCCGCCCTGCACCACCATGTGCATCATCTTCTTTAAGTTTGATCCTCGCCCT
GTTTCCAAAAACGCGTACAGGTAACCCCCTCGCTCTGCATCTGCTGCGCCCTGCAGGGTCCTGGGTGCCCAGCCA
GTTCTC**ATG**CCACCCAAGCTGCTGTGTGCAGGAAGGTGTGTGGGCCAGGACGGGGCTGCACAGGCCTGGCACTGC
CCTCCAGGACAGGGTCACTCAGTGTGGGATGCTGTCAGAATGCCTCTCGGGGCGGGGACTCCAGTCAATGTACAA
AGACGTGAAGACTCAGCCACAGAAGGCAGCCACAGGCTCATCTTGGCAGCCAACAGGGATGAATTCTACAGCCGA
CCCTCCAAGTTAGCTGACTTCTGGGGGAACAACAACGAGATCCTCAGTGGGCTGGACATGGAGGAAGGCAAGGAA
GGAGGCACATGGCTGGGCATCAGCACACGTGGCAAGCTGGCAGCACTCACCAACTACCTGCAGCCGCAGCTGGAC
TGGCAGGCCCGAGGGCGAGGTGAACTTGTCACCCACTTTCTGACCACTGACGTGGACAGCTTGTCCTACCTGAAG
AAGGTCTCTATGGAGGGCCATCTGTACAATGGCTTCAACCTCATAGCAGCCGACCTGAGCACAGCAAAGGGAGAC
GTCATTTGCTACTATGGGAACCGAGGGGAGCCTGATCCTATCGTTTTGACGCCAGGCACCTACGGGCTGAGCAAC
GCGCTGCTGGAGACTCCCTGGAGGAAGCTGTGCTTTGGGAAGCAGCTCTTCCTGGAGGCTGTGGAACGGAGCCAG
GCGCTGCCCAAGGATGTGCTCATCGCCAGCCTCCTGGATGTGCTCAACAATGAAGAGGCGCAGCTGCCAGACCCG
GCCATCGAGGACCAGGGTGGGGAGTACGTGCAGCCCATGCTGAGCAAGTACGCGGCTGTGTGCGTGCGCTGCCCT
GGCTACGGCACCAGAACCAACACTATCATCCTGGTAGATGCGGACGGCCACGTGACCTTCACTGAGCGTAGCATG
ATGGACAAGGACCTCTCCCACTGGGAGACCAGAACCTATGAGTTCACACTGCAGAGC**TAA**CCCCACCTCTGGGCC
TGGCCAGTGGGCTCCTGGGGGGCCCTGCCTTGAGGGGCACTGTGGACAGGAAACCTTCCTTTGCCATACTGCATT
GCACTGCCCGTGGCTTGGCCAGCATCCCCCGGATCAGGGCCCTGTGGTTTGCGTGTTACCCATCTGTGTCCCCAT
GCCCAGTTCAGGGTCTGCCTTTATGCCAGTGAGGAGCAGCAGAGTCTGATACTAGGTCTAGGACCGGCCGAGGTA
TACCATGAACATGTGGATACACCTGAGCCCACTCTTGCACATGTACACAGGCACTCACATGGCACACACATACAC
TCCTGCGTGTGCACAAGCACACACATGCAAGCCATATACATGGACACCGACACAGGCACATGTACGTGCACAGGT
GTGCTACACATGTGCACACATGCACAGTTGCACAGACACACACACACAGGTGCACACACACGATGCCGAACAAGG
CAGAAGGGCGACTCTCACCTCTCATGTGCTTCTGGCCAGTAGGTCTTTGTTCTGGTCCAACGACAGGAGTAGGCT
TGTATTTAAAAGCGGCCCCTCCTCTCCTGTGGCCACAGAACACAGGCGTGCTTGGACTCTTGACAAGCAGACCTG
CTCCTGCAGAGGAGACAGCCACATTTGGAATTGGGCACCGAGAAGACCTGAGAAAAACCCACTCTCTCTTTTTTT
TTTTTTTGAGACGGAGTCTTGCTCTGTCACCCAGGCTGGAGTGCAGTGGCACGATCTCGGCTCACTGCAACCTCC
GCCTCCCAAGTTCAAGCAATTCTCCTGCCCCAGCCTCCTGATTAGCTGGGATTACAGGCGTGTGCCACCATGCCC
AGCTAATTTTTGTGTTTTTAGTAGAGACGGGGTTTCACCATGTTGGTCAGGCTGGTCTTGAACTCCTGACGTGGT
GATCCACCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACGCCTGGCCGAAAAACCCACTC
TCATAACAGAAGTGCAGACTCATTGCTAGATTCAGTGCCCTTGAGTGTGCCAGAGGTCCTCTGTGTTTGAGACAA
TCCTGTGTGTGCCAGGAGGCTCCGTGTGCACCAGGGGCTCTCAGAATCCCGCTTACCCAGCTGGAGACCATGCCT
CTGGCAGCCCCATCTCAGCCAGCCCTGCTCTCTCCCTCTTCCCTCCAGGTGAGGCAAACTTCATAGGAATCTGTA
CCTGAATGTGAGCTCCTGATAATAAAACTCTGAGGCTTTGGTGAGCGC

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FIGURE 2861

GTTGCCAGAAGCCAGGATCATAGAGACGCTCGGCCTCCGCCGCACGCGCTGGCGGACTAAGAGTGGCTGGCGAAG
CGAGCGGCCGGCGCGGGCCCCTGGCGGGCGGGCGGTACAGCCCCAAGCCTGAGACCCGGACCTGAGCATCGCAGG
TTCGAGTCCCGCCCCGCCTGGGGCGAAGCCGGGGGTGGCGGCGACCTCGCGGCGTTGCACCGGCTCTGTGAGCAC
CTCCCCTCTGAGCACTTCCCTTGTGACAGGCCACTTCCCTTGTGACAGGCCCAGGACGAGGTGGCCAGGCGGCCC
CCATGGCGTCCCTGGTCTAGGCGGAGAACCGCCTGGGCGATGAGTGAGAACCTCGACAACGAGGGCCCGAAGCCC
ATGGAGAGCTGTGGCCAGGAGAGCAGCAGTGCCCTGAGCTGCCCTACCGTCTCGGTGCCCCCTGCAGCCCCGGCA
GCCCTGGAGGAGGTGGAGAAAGAGGGCGCTGGGGCGGCTACAGGGCCGGGGCCTCAGCCCGGGCTCTACAGCTAC
ATCAGGGATGACTTGTTTACCTCTGAGATCTTTAAACTGGAGCTGCAGAACGTGCCTCGCCACGCCAGCTTCAGC
GACGTCCGGCGCTTCCTGGGCCGCTTTGGTCTGCAGCCCCACAAAACCAAACTCTTTGGGCAACCACCCTGCGCC
TTTGTGACATTCCGCAGCGCTGCAGAGAGGGACAAGGCCCTGCGCGTTTTGCATGGTGCCCTCTGGAAAGGCCGC
CCACTCAGTGTGCGCCTGGCCCGGCCCAAGGCCGACCCC**ATG**GCCAGGAGGAGGCGACAGGAGGGTGAGAGTGAG
CCACCAGTAACACGAGTGGCCGACGTGGTGACCCCTCTATGGACAGTGCCCTATGCTGAGCAGCTTGAGCGGAAG
CAGCTGGAGTGCGAGCAGGTGCTGCAGAAACTTGCCAAGGAAATCGGGAGCACCAACCGTGCCTTGCTGCCCTGG
CTGCTCGAGCAGAGGCACAAGCACAACAAGGCCTGCTGCCCGCTGGAGGGGGTCAGGCCATCACCCCAGCAGACT
GAGTATCGTAATAAGTGTGAGTTTCTGGTTGGCGTCGGGGTGGATGGGGAGGATAACACCGTGGGCTGTCGGCTC
GGCAAGTACAAGGGCGGGACGTGTGCTGTGGCAGCCCCGTTTGACACCGTGCACATCCCCGAAGCCACCAAGCAG
GTGGTGAAGGCCTTCCAGGAGTTCATCCGGTCCACTCCATACTCGGCATACGACCCAGAGACGTACACAGGCCAC
TGGAAGCAGCTGACTGTGCGCACCAGCCGCCGCCACCAGGCCATGGCCATTGCCTACTTCCACCCCCAGAAGCTG
AGCCCTGAGGAGCTGGCAGAGCTGAAGACCTCCCTAGCGCAGCACTTCACAGCAGGGCCAGGCAGGGCCAGTGGA
GTGACCTGCCTCTACTTCGTGGAGGAGGGACAGCGAAAGACTCCTAGCCAGGAGGGCCTGCCCCTGGAGCATGTG
GCTGGGGACCGGTGCATCCACGAGGACCTGCTAGGGCTGACCTTCCGGATCTCTCCACACGCCTTCTTCCAGGTG
AACACACCCGCAGCCGAGGTGCTCTACACAGTCATCCAGGACTGGGCCCAATTGGATGCGGGGAGCATGGTGCTG
GACGTGTGCTGTGGCACCGGCACCATTGGCCTGGCCCTGGCCCGGAAGGTAAAGAGGGTCATTGGGGTCGAGCTA
TGCCCAGAGGCTGTGGAGGACGCCCGGGTGAACGCCCAGGACAATGAGTTGAGTAATGTGGAGTTCCACTGCGGG
AGGGCCGAGGACCTGGTGCCCACCCTGGTGAGCAGACTGGCCTCCCAGCACCTCGTGGCCATCCTGGACCCACCC
CGTGCTGGCTTGCATTCCAAGGTGATCCTGGCCATCCGGAGAGCTAAGAACCTCAGGCGGCTGCTGTACGTCTCA
TGCAACCCCCGGGCAGCCATGGGCAACTTTGTGGACCTCTGCAGAGCCCCATCTAACCGGGTGAAGGGCATTCCC
TTCCGGCCGGTCAAGGCTGTGGCAGTGGACCTGTTCCCGCAGACCCCGCACTGTGAGATGCTCATCCTGTTTGAG
AGGGTGGAGCACCCCAATGGCACAGGGGTCTTGGGGCCCCACAGCCCTCCAGCTCAACCCACACCAGGACCCCCA
GATAACACCCTACAAGAAACTGGGACCTTCCCCTCATCC**TAG**GCCCAGGACCCATTATGGGGACAGGAGCTGAAG
GGCTCCCAGGGCCCCAGGGGCGGGGAAGGCATGGCTTGCTGGCCAGGATATTCAGAGGTAGGCAGCCAAAGGGCA
CAGAACCCTGTGCCCCACCAGGATTGGCCTGCTGCTAGGGGCCAGGGGCCCTGACCAGGAAGACAGGTGGGTTCC
TGTAGCCTGTTGCCCATCCCCAGGGCCTTTGTGGACTAGCCAAGGCTGTGAGGGCCAGAATAAACAACTGCTCAA
C

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FIGURE 2862

CGAGGTTCGGGTCGTGGGGCGGAGGGAAGAGCGGGCGGGCGGGAGGCGCCGGCGCCAGACGCGGAGGGAAGGAGC
TACGAGTAGCCGCCGAGAGGCCGCGGAGCCAGCGACGACCGACCCAGCCGAGCCGCCGCCGCCGCGCCCCCA
TGGCGGCCGCCAAGGACACTCATGAGGACCATGATACTTCCACTGAGAATACAGACGAGTCCAACCATGACCCTC
AGTTTGAGCCAATAGTTTCTCTTCCTGAGCAAGAAATTAAAACACTGGAAGAAGATGAAGAGGAACTTTTTAAAA
TGCGGGCAAAACTGTTCCGATTTGCCTCTGAGAACGATCTCCCAGAATGGAAGGAGCGAGGCACTGGTGACGTCA
AGCTCCTGAAGCACAAGGAGAAAGGGGCCATCCGCCTCCTCATGCGGAGGGACAAGACCCTGAAGATCTGTGCCA
ACCACTACATCACGCCGATGATGGAGCTGAAGCCCAACGCAGGTAGCGACCGTGCCTGGGTCTGGAACACCCACG
CTGACTTCGCCGACGAGTGCCCCAAGCCAGAGCTGCTGGCCATCCGCTTCCTGAATGCTGAGAATGCACAGAAAT
TCAAAACAAAGTTTGAAGAATGCAGGAAAGAGATCGAAGAGAGAGAAAAGAAAGCAGGATCAGGCAAAAATGATC
ATGCCGAAAAAGTGGCGGAAAAGCTAGAAGCTCTCTCGGTGAAGGAGGAGACCAAGGAGGATGCTGAGGAGAAGC
AATAAATCGTCTTATTTTATTTTCTTTTCCTCTCTTTCCTTTCCTTTTTTTAAAAAATTTTACCCTGCCCCTCTT
TTTCGGTTTGTTTTTATTCTTTCATTTTTACAAGGGACGTTATATAAAGAACTGAACTC

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FIGURE 2863

GCGGCGGCGCGGCGCCCAGGATGCCCCGCAGCCCCGGGACGCGCCTCAAACCCGCCAAGTACATCCCGGTGGCCA
CGGCCGCCGCGCTGCTGGTCGGCTCCAGCACCCTCTTCTTCGTGTTCACGTGCCCGTGGTTGACACGAGCTGTGT
CCCCAGCTGTTCCCGTCTACAATGGCATCATCTTCCTCTTTGTCCTGGCCAACTTCAGCATGGCCACTTTCATGG
ACCCTGGTGTTTTCCCCCGAGCGGATGAGGATGAGGACAAGGAGGACGACTTCCGGGCTCCGCTGTACAAGAACG
TGGATGTGCGAGGTATCCAGGTCCGCATGAAGTGGTGTGCCACGTGCCACTTCTACCGCCCGCCGCGCTGCTCCC
ACTGCAGCGTCTGTGACAACTGTGTAGAGGTGACTGGGAAGTTCCGCGGGGGTGTGAACCCTTTCACCCGAGGCT
GCTGTGGGAATGTGGAGCACGTGCTGTGTAGCCCCCTGGCGCCCCGGTACGTGGTGGAGCCACCCCGGCTGCCGC
TCGCGGTGAGTTTGAAGCCGCCTTTCCTTAGGCCTGAACTCCTGGACCGAGCTGCACCGCTCAAGGTCAAGCTTA
GTGACAACGGGCTGAAGGCTGGCCTGGGCCGTAGCAAGTCCAAGGGCAGCCTGGACCGGCTGGATGAGAAGCCAC
TGGACTTGGGGCCACCACTGCCCCCCAAGATAGAGGCTGGCACGTTCAGCAGTGACCTGCAGACCCCGCGCCCAG
GCAGTGCTGAGAGTGCCCTGTCGGTGCAGAGGACCAGCCCCCCGACACCTGCCATGTACAAGTTTAGGCCGGCTT
TCCCCACGGGTCCCAAGGTGCCCTTCTGTGGACCAGGCGAGCAGGTTCCAGGCCCTGATTCCCTGACCCTGGGGG
ACGACAGCATCCGTAGCCTGGACTTTGTGTCCGAGCCGAGCCTGGACCTCCCTGACTATGGGCCAGGGGGCCTGC
ATGCAGCCTACCCGCCATCCCCACCGCTCAGCGCCTCTGATGCCTTCTCGGGCGCTTTGCGCTCCCTGAGCCTCA
AGGCCTCGAGCCGGCGGGGCGGGGATCATGTGGCCCTGCAGCCCCTGCGCTCTGAGGGGGGGCCCCCCCACGCCCC
ACCGTAGCATTTTTGCCCCCCATGCACTGCCCAACCGCAACGGCAGCCTGTCCTATGACAGCCTGCTCAATCCTG
GCTCGCCTGGTGGCCACGCCTGCCCTGCCCACCCAGCAGTTGGCGTGGCCGGATACCACTCACCCTACCTGCATC
CTGGGGCAACGGGCGACCCGCCACGGCCCCTACCCCGCAGCTTCAGCCCCGTGCTGGGCCCCCGCCCCCGGGAGC
CCTCGCCTGTGCGCTACGACAACCTGTCCAGGACCATCATGGCATCCATCCAGGAGCGCAAGGACAGGGAGGAGC
GTGAGCGCCTGCTGCGCTCCCAGGCCGACTCACTCTTCGGCGACTCAGGCGTCTATGACGCTCCCAGCTCCTACA
GCCTGCAGCAGGCCAGTGTGCTGTCCGAGGGCCCCCGAGGTCCCGCGCTGCGCTATGGCTCCAGAGACGACCTTG
TGGCTGGGCCCGGCTTCGGTGGCGCCCGCAACCCTGCCCTGCAGACGTCACTGTCCTCGCTGTCCAGCTCCGTGA
GCCGTGCACCGCGGACGTCGTCCTCCTCCCTGCAGGCTGATCAGGCCAGCAGCAACGCCCCGGGGCCCCGGCCCA
GCAGTGGCTCACACAGGTCACCTGCACGCCAGGGCCTGCCCTCCCCGCCCGGCACTCCCCACTCACCATCCTACG
CGGGCCCCAAAGCTGTCGCCTTCATCCACACGGACCTCCCAGAGCCACCGCCCTCGCTGACCGTGCAGAGGGACC
ACCCTCAGCTGAAGACTCCCCCAAGTAAGCTTAATGGGCAGTCCCCGGGCCTGGCCCGGCTGGGACCTGCCACCG
GCCCCCCAGGGCCCTCTGCCAGCCCTACACGGCACACGCTGGTTAAGAAGGTGTCCGGCGTGGGTGGGACCACCT
ACGAGATCTCGGTGTGAGGACTGACTGCCACACATCCGCCATGGTGCCACGGGGACCAGGACCCCACAGCGCACC
CCCCCTCCCCACCAACTTCTCTGCCCCAGGGACCCGAGGCCACCCCAGCCTGGTGTGGACCCATCGGCGGGAGAG
AGTGCCACGCCTCCACAGCTTGCCCCAAGCGCTCTGCCTGCCCGTCCACTCATCTGCCCATGGGGAAGTCGGCTC
ACTGGGACAAGGGCCACTGGGCTGGTCTGTGTCTGGGCCTGTCCCATGGCTGGGGCAGTGAGGGGGCCCAGTCAG
CCTCTTTGGGGCACCCTCTCTCAGCCAGGCTTGGCCCACTGCCATCACCCAGCACCCCAGATCACCGCCAGGCCA
GCCCCCAATGGTCCCCTTACGGACAGGTCCCAGAGATGGACAGAGGCACCCAGGGCCCCCACCGTCCTTCTGACA
CAGCCTGTGGGCTCCCGGACCGAGTGTCCCCCGCCAGGCTACTCCTAACTAACGCGTTGCCTTTCACGGACCCCG
CTGGAAGCTTGTAGCTTGGCAAGGCTGATGCTTCTGCCCTGGCCTGCTCTGGGTGGTGGTGGATAGGTGGACAGA
CGGCCAGCCAGCCAGCTGTGGCCGGGGGCCCGGCTCCATGTGTCCCGTGTCTGTGTGCTGTGCTGCCGCGCCGTG
TCTGATGTGTCAGTGCTCCGGCCGCCGCTGTCCCTTTCATCAAAGCCTTAACCTTTGCTTTATGCTCTTGTGGGA
GGCGACGGGGGGGCAGGCGGGAGCAGGCACGGGGGTGATGCTGCCACAGGGGGCTGGTGACACCCAGAGCCCCCT
CCCCAGCCCTCAGGCCCTCCCTGCCAAACTGGAGAACCCCACCCCAAGGCATGCCACGTCCGCAGCCCCGGCCTG
GCTGCGGTGCTCGCGCCGTGGGAAAGCACACTGGGGAGGGGTCAGTGCTTCCCTTGGTGTCAGGGACCTGAGAGT
AAGCACATGACAGCGTCTGCTTGCGTTGTGTCTGTTTTATGTTTTTATATCTACATCTATATATCTATAATTTTA
TTAAAAAAAAGAAAAAG

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FIGURE 2864

GTGTGGAGGAGGGAGCAGGCTGCCTGGGTGGTTGTGGGACGCGACTCCTCCTAAGCCCTGGACACACTTGCCCTC
CACCCCCGCCCTCGGGCATCCAGGCGCCCGTTTTTGAGATAGACGTGCCCAGAGGGACCCCAGCCCCATTGCAGT
GTTTCCTAGGCCCTGTGGGTGGAACCCCCACTGGGACCCCCCGGGGACTCCTGCAATGCGGGCTCTGTGTTCACT
GGAGTCCTGAGGAGGTACCTGCAGTCACCAGTGTCCATTCCAGGAGGCCTTCAAGGAGCCGGCTGCTGGCATGGG
TGCTGTGGCTGCAGGCCTGGCAGGTGGCAGCCCCATGCCCAGGTGCCTGCGTATGCTACAATGAGCCCAAGGTGA
CGACAAGCTGCCCCCAGCAGGGCCTGCAGGCTGTGCCCGTGGGCATCCCTGCTGCCAGCCAGCGCATCTTCCTGC
ACGGCAACCGCATCTCGCATGTGCCAGCTGCCAGCTTCCGTGCCTGCCGCAACCTCACCATCCTGTGGCTGCACT
CGAATGTGCTGGCCCGAATTGATGCGGCTGCCTTCACTGGCCTGGCCCTCCTGGAGCAGCTGGACCTCAGCGATA
ATGCACAGCTCCGGTCTGTGGACCCTGCCACATTCCACGGCCTGGGCCGCCTACACACGCTGCACCTGGACCGCT
GCGGCCTGCAGGAGCTGGGCCCGGGGCTGTTCCGCGGCCTGGCTGCCCTGCAGTACCTCTACCTGCAGGACAACG
CGCTGCAGGCACTGCCTGATGACACCTTCCGCGACCTGGGCAACCTCACACACCTCTTCCTGCACGGCAACCGCA
TCTCCAGCGTGCCCGAGCGCGCCTTCCGTGGGCTGCACAGCCTCGACCGTCTCCTACTGCACCAGAACCGCGTGG
CCCATGTGCACCCGCATGCCTTCCGTGACCTTGGCCGCCTC**ATG**ACACTCTATCTGTTTGCCAACAATCTATCAG
CGCTGCCCACTGAGGCCCTGGCCCCCCTGCGTGCCCTGCAGTACCTGAGGCTCAACGACAACCCCTGGGTGTGTG
ACTGCCGGGCACGCCCACTCTGGGCCTGGCTGCAGAAGTTCCGCGGCTCCTCCTCCGAGGTGCCCTGCAGCCTCC
CGCAACGCCTGGCTGGCCGTGACCTCAAACGCCTAGCTGCCAATGACCTGCAGGGCTGCGCTGTGGCCACCGGCC
CTTACCATCCCATCTGGACCGGCAGGGCCACCGATGAGGAGCCGCTGGGGCTTCCCAAGTGCTGCCAGCCAGATG
CCGCTGACAAGGCCTCAGTACTGGAGCCTGGAAGACCAGCTTCGGCAGGCAATGCGCTGAAGGGACGCGTGCCGC
CCGGTGACAGCCCGCCGGGCAACGGCTCTGGCCCACGGCACATCAATGACTCACCCTTTGGGACTCTGCCTGGCT
CTGCTGAGCCCCCGCTCACTGCAGTGCGGCCCGAGGGCTCCGAGCCACCAGGGTTCCCCACCTCGGGCCCTCGCC
GGAGGCCAGGCTGTTCACGCAAGAACCGCACCCGCAGCCACTGCCGTCTGGGCCAGGCAGGCAGCGGGGGTGGCG
GGACTGGTGACTCAGAAGGCTCAGGTGCCCTACCCAGCCTCACCTGCAGCCTCACCCCCCTGGGCCTGGCGCTGG
TGCTGTGGACAGTGCTTGGGCCCTGC**TGA**CCCCCAGCGGACACAAGAGCGTGCTCAGCAGCCAGGTGTGTGTACA
TACGGGGTCTCTCTCCACGCCGCCAAGCCAGCCGGGCGGCCGACCCGTGGGGCAGGCCAGGCCAGGTCCTCCCTG
ATGGACGCCTGCCGCCCGCCACCCCCATCTCCACCCCATCATGTTTACAGGGTTCGGCGGCAGCGTTTGTTCCAG
AACGCCGCCTCCCACCCAGATCGCGGTATATAGAGATATGCATTTTATTTTACTTGTGTAAAAATATCGGACGAC
GTGGAATAAAGAGCTCTTTTCTT

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FIGURE 2865

GGGACAATCGTAAAAGGGGCGGGACGCGCCGCGCTCGGGATGTCGTGAAGCTGGGGGAGCTCGTCGCCGCCGCCG
GCGGCTAGCGGGCGTCCGCGCC**ATG**GAGCGCTACGCGGCCGCCTTGGAGGAGGTGGCGGACGGTGCCCGGCAGCA
GGAGCGACACTACCAGTTGCTGTCGGCGCTACAGAGCCTGGTGAAGGAGTTGCCCAGCTCTTTCCAGCAGCGCCT
GTCCTACACCACGCTCAGCGACCTGGCCCTGGCGCTTCTCGACGGCACCGTGTTCGAAATCGTGCAGGGGCTACT
GGAGATCCAGCACCTCACCGAAAAGAGCCTGTACAACCAGCGCCTGCGCCTACAGAACGAGCACCGAGTGCTCAG
GCAGGCGCTGCGGCAGAAGCACCAGGAAGCCCAGCAGGCCTGCCGGCCCCACAACCTGCCTGTGGTTCAGGCGGC
TCAGCAGCGAGAACTAGAGGCCGTGGAACACCGGATCCGTGAGGAGCAGCGGGCGATGGACCAGAAGATCATCCT
GGAGCTGGACCGGAAGGTGGCTGACCAGCAGAGCACACTGGAGAAGGCGGGGGTGGCTGGCTTCTACGTGACCAC
CAACCCACAGGAGCTGATGCTGCAGATGAACCTGCTGGAACTCATCCGAAAGCTGCAGCAGAGGGGCTGCCGGGC
AGGGAATGCAGCCCTGGGACTGGGAGGTCCCTGGCAGTCGCCTGCTGCCCAGTGTGACCAGAAAGGCAGCCCTGT
CCCACCA**TAG**CCACAGGCAGCAGAAGTCTGGGCAGAGTTCATCTTCTTGACCTTTGGCCACTGCCTTCCCAGCTG
CCCGCAGGGGGTTCCCCCTGCTGAGGAGAGACCAGGTGGACCCCAGCTGCCTGTCACCCTTCATCTGGGACTTGC
TGTCAAACCCTAGGATAGTCTCATAAAGGGGAGGCTGGGCCAGCCTGCTGCTGTCTGCTTCAGGACCAGGCAGAG
AGTGAGGCTGGGGGTTCTCACACCTTACTCCACCGGGCACATCCCAACCTGCACTGGGGCCCACCCGAGCGCTTG
TTCTGGTCTCAGCCGCTCCCTTGGCAGCTGCAGCCCCCATGCAGAAGAGGCTCCCAGGCCCAAGCTCTGTGTGAC
CCAGAGAAATAAAGATGCCTCAGTGTGGCCC

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FIGURE 2866

CCCTTATAGGCCTGGTTGGTTTACACAACATTGGACAGACCTGCTGCCTTAACTCCTTGATTCAGGTGTTTGTAA
TGAATGTGGACTTCGCCAGGATATTGAAGAGGATCACGGTGCCCAGGGGAGCTGACGAGCAGAGGAGAAGCGTCC
CTTTCCAGATGCTTCTGCTGCTGGAGAAGATGCAGGACAGCCGGCAGAAAGCAGTGTGGCCCCTGGAGCTGGCCT
ACTGCCTGCAGAAGTACAACGTGCCCCTGTTTGTCCAACATGATGCTGCCCAACTGTACCTCAAACTCTGGAACC
TGATTAAGGACCAGATCGCTGATGTGCACTTGGTGGAGAGACTGCAGGCCCTGTATATGATCCGGATGAAGGACT
CCTTGATTTGCCTTGACTGTGCCATGGAGAGTAGCAGAAACAGCAGCATGCTCACCCTCCGACTTTCTTTTTTTG
ATGTGGACTCAAAGCCCCTGAAGACACTGGAGGACGCCCTGCACTGCTTCTTCCAGCCCAGGGAGTTATCAAGCA
AAAGCAAATGCTTCTGTGAGAACTGTGGGAAGAAGACCCGTGGGAAACAGGTCTTGAAGCTGACCCATTTGCCCC
AGACCCTGACAATCCACCTCATGCGATTCTCCATCAGGAATTCACAGACGAGAAAGATCTGCCACTCCCTGTACT
TCCCCCAGAGCTTGGATTTCAGCCAGATCCTTCCAATGAAGCGAGAGTCTTGTGATGCTGAGGAGCAGTCTGGAG
GGCAGTATGAGCTTTTTGCTGTGATTGCGCACGTGGGAATGGCAGACTCCGGTCATTACTGTGTCTACATCCGGA
ATGCTGTGGATGGAAAATGGTTCTGCTTCAATGACTCCAATATTTGCTTGGTGTCCTGGGAAGACATCCAGTGTA
CCTACGGAAATCCTAACTACCACTGGTAAGAAAC

FIGURE 2867A

CCTTTTGTGGGAGTCCGGTCTGTCCACTTGCCGGTCCCTCAGACCGTCGGCGGTCTCTGTCCGCTTCGGGACCTG
TCCGCTGGTCGCTCCGCGTCCGATGGCTCCTGGCCGCGGAACCTTAGGCCTGGCCCTGGTCTCCGAGCGCGGGTT
CGCCGGGAGGAGCGTGTGGCGGGGGTGTGCCGGGGCGTGAGTGCGCCGAGCATGGGGCTGAGCCTGGTGTGGGGA
GTGGGTATCTGCGGAGCCGGCCTGAACCCCACCTCAGCCGGGCGCGGGGAGGGGGCTCCGTGCGTGTGATCGTGC
AGCTGTGAGCGCGTGGCCGCCCCGCGGGGCTCCGCTGCAGGCCCCTCAGCCCCAGGAGCAGTACTCGCTCTTCAG
GGCCTGCCCTGGATCCTGGAGGCTACACAGCTGCCCACTCCTCCTGGGGAGGCTGCCGTGGAGGCCATGGAGATC
CCTGCCCCGGAGCCCGAGAAGACAGGTACAGCTTCACTCTTGTAGTCAGTATGTCTGTGGATTTGCACTTGAGGA
TATTGACACTCAGAGAGATCAGGCCAGTTTCCCAGAAGCATCCAGCATCTTTTTTTTTTTTTTTAAATGGAATCT
CACTCTGTCACCCAGGCGGGAGTGGTGCAATGGCTTGATCTCCGCTCACTGCAACCTCTGCTTCCCGGGTTCAAA
CTATTCTCCCGCCTCAACCTCCCAAGTAGTTGGGATTGCAGGCGCGCGCCACCACGCCCGGCTAATGTTTGTATT
TTTAGTAGAGACGGGGTTTTGCCATGTTTCCCAGGCTGGTCTTAAGCTCAAGCGATCCGCCCGCCTCGGCCTCCC
AAAGTGCTGGGATTACAGGCGTGAGCCATCGCTCCTGGCCTCCTGCTTCTTTCTTCCCCGCGCCCAATCATTTGT
TCCCACTCAGACGTGCTTGATTGGGGGTAGCAGCTCTTTTCGTCATGAATTGGAGTGTCTGAGACACAGGCAGAT
TATTCCTCGATGCTGTTTCTGTTGGTGCTAGCTACTGGGGCTCGTTCCCCACCTGGCCTTGCTGGCAGGTTCTGC
CTCCTCTCTGATTCTCACTTGTGCCACGACAGGTGGGCTTTAAGCTCAGCCGTGAGCCTGGTAGCCGTGACCTTG
ACTCATTTCTCCTTCGCCAGCTCTTTCCTCTCAGGATCCTGCTCTTTCCCTGAAAGAGAATCTCGAGGATATATC
GGGTTGGGGTCTTCCCGAAGCCAGGTCCAAGGAATCGGTGAGTTTCAAGGATGTGGCTGTGGACTTCACCCAGGA
GGAGTGGGGTCAACTAGACTCCCCTCAGAGGGCCTTGTACCGGGATGTG**ATG**TTGGAGAACTACCAGAACCTTCT
TGCCCTAGGACCTCCACTGCACAAGCCAGATGTGATCTCTCATCTGGAACGAGGCGAGGAGCCATGGAGCATGCA
GAGGGAAGTCCCCAGAGGGCCCTGTCCAGAATGGGAGCTGAAGGCGGTGCCCTCTCAACAGCAGGGCATTTGCAA
AGAAGAACCGGCCCAGGAGCCCATCATGGAGCGGCCCCTCGGCGGGGCGCAGGCGTGGGGGCGCCAGGCAGGTGC
TCTGCAGAGGAGTCAGGCTGCGCCCTGGGCGCCCGCACCTGCCATGGTCTGGGACGTCCCTGTAGAGGAATTCCC
CCTCAGGTGTCCCCTCTTCGCCCAGCAACGCGTTCCCGAGGGGGGACCCTTGCTGGACACACGCAAGAACGTCCA
GGCCACTGAGGGCAGAACCAAGGCCCCCGCGAGACTGTGTGCAGGGGAAAACGCCTCCACGCCAAGTGAGCCAGA
AAAGTTCCCCCAGGTGCGCCGGCAGCGCGGGGCGGGCGCCGGGGAGGGCGAGTTCGTGTGCGGCGAGTGCGGGAA
GGCGTTCCGCCAGAGCTCCTCCCTCACGCTGCACCGGCGCTGGCACAGCCGGGAGAAGGCTTACAAGTGCGATGA
ATGCGGCAAGGCCTTCACCTGGAGCACCAACCTTCTGGAGCACCGGCGCATCCACACCGGCGAGAAGCCCTTCTT
CTGCGGCGAGTGCGGGAAGGCCTTCAGCTGCCACTCGTCCCTCAACGTGCACCAGCGCATCCACACGGGCGAGCG
GCCCTACAAGTGCAGCGCCTGCGAGAAGGCCTTCAGCTGCAGCTCGCTGCTCAGCATGCACCTGCGGGTGCACAC
CGGCGAGAAGCCCTACCGGTGCGGCGAGTGCGGCAAGGCCTTCAACCAGCGTACACACCTCACACGCCACCACCG
CATCCACACGGGCGAGAAGCCCTACCAGTGCGGCTCCTGCGGCAAGGCCTTCACCTGCCACTCATCCCTCACCGT
GCATGAGAAGATCCACAGCGGGGACAAGCCGTTCAAGTGCAGCGACTGCGAGAAGGCCTTCAACAGCCGCTCGCG
CCTCACCCTCCACCAGAGGACGCACACGGGCGAGAAGCCCTTCAAGTGCGCCGACTGCGGGAAGGGCTTCAGCTG
CCACGCGTACCTGCTCGTGCACCGGCGCATCCACAGCGGCGAGAAGCCCTTCAAGTGCAACGAGTGCGGCAAAGC
CTTCAGCTCCCACGCCTACCTCATCGTGCACCGGCGCATCCACACAGGCGAGAAGCCCTTCGACTGCAGCCAGTG
TTGGAAGGCCTTCAGCTGCCACTCGTCCCTCATCGTGCACCAGCGCATCCACACCGGTGAGAAGCCCTACAAGTG
CAGCGAGTGCGGCAGAGCCTTCAGCCAGAACCACTGTCTCATTAAACATCAGAAAATCCACTCCGGGGAGAAGTC
GTTTAAGTGTGAGAAATGTGGGGAGATGTTCAACTGGAGCTCGCACCTCACTGAGCACCAGAGGCTGCACAGCGA
GGGGAAGCCCTTGGCCATCCAGTTCAACAAACACCTGCTCAGCACATACTACGTGCCTGGCAGCCTGCTGGGTGC
AGGGGATGCTGGACTGAGGGACGTGGATCCCATCGACGCGCTGGATGTGGCAAAGCTCTTGTGCGTGGTTCCCCC
CAGAGCTGGCAGGAATTTCTCCCTGGGGAGCAAACCTCGAAAC**TAA**CATGATGTGCTTTGGTGTCAGTAGCTGCT
TTCTGAGCTACTCAACAAGGAAAGCACCCTGGTCCTCCCTGGCTCCTAGATCCAGACCACCTTCCTCCAGGTGTG
GGAGCCTTGCCTTATCACCCCCATCAGGTCTGCATGCCAGGGTGCCTCCTCTAGTTAAAGTCAGTCACCTCCCCA
GAAGGGCCACACTCCAGGAGGAGTGTTGAGAGTCATTTGAGGTAGTCTTGCCACCTGTTTTCCTTGATGGGCCTG
GAAGTTGTTGACAAGGGGAAAGATCTTTCTTGCCAATAAAAAGAAGGGATATCGTTGGGTGCCATGGCTCACACC
TGTAATCTTAACACTGTGGGAGGCCAAGGCAAGGGGATCACTTGAGCCCAGGAGTCTAGGACCAGCCTGGACAAC
ATGGTGAGACCTCGTCTCTACAAAAAATGCAAAAATTAGCCAGATGTGGCGGCATGTCCCTGTGGTCCCAGCTAC
TCAGGAGGCTGAGGTGGGAGGATCATTTGAGCCTAGGAGGTCAAGGCTGCAGTGAGCCATGATTCACAGCACTGC

FIGURE 2867B

ACTGCAGCCTGGGTGACAAAGCAAGACCCTGTGTGAAATTAAAAGGAGGTATATCAACTGTTGTATCCTCGGACG
GGCTCCTGACACGGCTTTAATCAGGAGTTTCCTCCATAAACTATTATTTTCAGAATAATAATAAAACAAGAATTA
TGACTAGC

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FIGURE 2868

CCCGCCTCCCGCCTCCCGCCTCCCTCCAGCTGCGAGTGCGGCCTCGGCTGGCGGCGGCACCAGGCCACAGTTGTA
AGGGATCTTGTGGCTGTCAGGATGGCAGAGGAGCAGGAGTTCACCCAGCTCTGCAAGTTGCCTGCACAGCCCTCA
CACCCACACTGCGTGAACAACACCTACCGCAGCGCACAGCACTCCCAGGCTCTGCTCCGAGGGCTGCTGGCTCTC
CGGGACAGCGGAATCCTCTTCGATGTTGTGCTGGTGGTGGAGGGCAGACACATCGAGGCCCATCGCATCCTGCTG
GCTGCGTCCTGCGATTACTTCAGAGGAATGTTTGCTGGGGGATTGAAGGAGATGGAACAGGAAGAGGTCCTGATC
CACGGTGTGTCCTACAATGCTATGTGCCAAATCCTACATTTCATATACACCTCCGAGCTGGAGCTCAGCCTGAGC
AATGTACAAGAGACACTGGTGGCTGCCTGCCAGCTTCAGATCCCAGAAATTATCCATTTCTGCTGTGATTTCCTC
ATGTCCTGGGTGGACGAAGAGAACATTCTCGATGTCTACCGGCTGGCAGAGCTGTTTGACTTGAGCCGCCTGACT
GAGCAACTGGACACCTATATCCTCAAAAACTTTGTGGCCTTCTCTCGGACTGACAAGTACCGCCAGCTTCCATTG
GAGAAGGTCTACTCCCTCCTCAGCAGCAATCGCCTGGAGGTCTCCTGCGAGACCGAGGTATATGAGGGGCCCTT
CTCTACCATTATAGCCTGGAGCAGGTGCAGGCTGACCAGATCTCGCTGCACGAGCCCCCAAAGCTCCTTGAGACA
GTGCGGTTTCCGCTGATGGAAGCTGAGGTCCTGCAGCGGCTGCATGACAAGCTGGACCCCAGCCCTTTGAGGGAC
ACAGTGGCCAGCGCCCTCATGTACCACCGGAACGAGAGCCTACAGCCCAGCCTGCAGAGCCCGCAAACGGAGCTG
CGGTCGGACTTCCAGTGCGTTGTGGGCTTCGGGGGCATTCACTCCACGCCGTCCACTGTCCTCAGCGACCAGGCC
AAGTATCTAAACCCCTTACTGGGAGAGTGGAAGCACTTCACTGCCTCCCTGGCCCCCCGCATGTCCAACCAGGGC
ATCGCGGTGCTCAACAACTTCGTATACTTGATTGGAGGGGACAACAATGTCCAAGGATTTCGAGCAGAGTCCCGA
TGCTGGAGGTATGACCCACGGCACAACCGCTGGTTCCAGATCCAGTCCCTGCAGCAGGAGCACGCCGACCTGTCC
GTGTGTGTTGTAGGCAGGTACATCTACGCTGTGGCGGGCCGTGACTACCACAATGACCTGAATGCTGTGGAGCGC
TACGACCCTGCCACCAACTCCTGGGCATACGTGGCCCCACTCAAGAGGGAGGTGTATGCCCACGCAGGCGCGACG
CTGGAGGGGAAGATGTATATCACCTGCGGCCGCAGAGGGGAGGATTACCTGAAAGAGACACACTGCTACGATCCA
GGCAGCAACACTTGGCACACACTGGCTGATGGGCCTGTGCGGCGCGCCTGGCACGGCATGGCAACCCTCCTCAAC
AAGCTGTATGTGATCGGGGGCAGCTGGGGTTGGAGGATGAGAGCTCCTGAGGGGCAGAGGAGCAGAGATGCATCA
GCTCGCCTGGGACTGGCTCTGTGATAAAAAGACCCCTCCCGCTGGGTTTTCAGACCCCATGTTGTTGGTCAATGA
AATAAAGCATCTTACAG

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FIGURE 2869

AGCCTTTCATCCACTATGGTTTACAATGCAGGGATCTGGTTGATGAAGCAAAGAAGTTTCATCTGAGGCCTGAAC
TTCAGAGTCAGATGCAGGGACCCAGGACAAGGGCTCGCCTAGGAGCCAATGAAGTGCTTTTGGTGGCTGGGGGCT
TCGGAAGCCAGCAGTCTCCCATCGATGCAGTAGAGAAATATGACCCCAAGACTCAGGAGTGGAGCTTTTTGCCAA
GCATCACTTGTAAGAGATGTTATGTGGCCTCAGTGTCCCTACATGACCAGATCTACGTCATTGGTGGCTGTGATG
GTCGTTCCAGCCTTAGTTCAGTGGAATGTCTAGACTACACAGCAGATGAGGATGGGGTCTGGTATTCTGTGGCCC
CTATGAATGTCTGATGAGGTCTTGCTGGAGCCACCACCCTGGGAGATTTGATCTATGTCTCTGGAGGCTTTGATG
GAAGCAGGCGTCACACCAGT**ATG**GAGCGGTATGATCCAAACATTGACCAGAGGAGCATGCTGGGAGATATGCAGA
CAGCCCGGGAAGGTGCCGGACTCGTAGTGGCCAGTGGAGTGATCCACTGTCTAGGAGGATATGACGGCTTGAATA
TCTTAAATTCAGTTGAGAAATATGACCCTCATACAGGACACTGGACTAATGTTACACCAATGGCCACCAAGCGTT
CTGGATATGAAGGTAAGTCCCTGCTAAGTAGCATTGAATGTTACAACCCTATCATCAACAGCTGGGAAGTCGTGA
CATCCATGGGAACCCAGCGCTGTGATGCTGGTGTGTGTTCTCCACAAGAAG**TGA**CCATTGTTGGAGCACCATC
CAGAGCTAGTGACCAGTCCAGTGGACAGTTAGTGGGAGAATCAAGAATCCTTTCTAGAATGTCTGTTTCTCACTA
TGTGCACAGGGTGATTACAGGCACCAGTGCAGTGATGATTGTACTTATTTGACACATACTCCCCCTCGTCCTGGT
TGTTGTTCCTGAGAAGGGTGGGTAACAGATACTCCAGGGAAAAGAATGCACATTGAATGGATGTGAGAGACCACA
TTACCTCTCCCACTACTTTGGGGAGCACTTTCCTGTCATTTCTAACTTACCACGTGCTTGGTGTACTATATGTAT
GTTGTGCCTCATATGTTGCAAAGAACTAAGGTGAGTATAGCCTACTAGATGTGAGCAATATCCAGCCTAGATGAT
TGGAAAGATACCAATTTAAGTAAACTTGGTAAAATCCAAGTCTTTTTTTTTCCAGGAACAAATACATTTTCTAA
TCTACAGGTAGCTAGGGGCAACACAGTTCCATTCTAAAGGGAAACAAAAGGGAGAGCCCCACAAAACTTTGGGGG
CAAGGGAGAGATACTCATCTGACACTTCTTTTGGAGGTCAGGGTTTGTATATCAGAATTGAAGTTAGAATCAGTG
AATTAAACTGAATTTGATGGAATGTGAGTGAACCTAGAACAGCACTGAAGTATTACATAACCTGGAAGACTGAGA
AGGGTATATTCTTTGAATGATCTTTTTATTTCCCCAAGGTCTTTCACACTGGAGACAGCATAAAAGAGTGAACCA
ATGTTGGGATGAGAGAAGATGACATAAATGTGGGAGTTCAGTATAACTGGGGATAAACTAGAAGTACCTGTGATT
TTACAGTCATCTTATTGCCTGCCAGGGGTCATCTAGCCATGGCAGTGTTAACCTTGAATGGGGGTGAAAGCCTTT
CTTTGTTGAATCAAATACTACTACACTATTACACTTCCACACTATTTATTTGGGGATGGACTGGGAGTGACAGTA
GCCTAGTAGTTCAGCTACCTGATTACTGCCCCATTCTTTTAGAAGCACACTTCTGCCAAGGAGTGGTTTGTACTG
CTGTGATTGGTACATTTAGTCTTTTTTCTGCTATAAGTTTTCCTTACCTGTCCTTTAGTGTAGATTTTATTCATT
ACAGGACAGAATAATCAAGGACAACCAAAATCCTTTTGTTAGTTTCAGTACCTCAGCTATCAACATTTCTGAGCT
ATCATTCAATGTTCCTCTGTGTCATGGAGTGAAATTCTTGTTTTATGGGTATTGGGAGTGTGGGAATGTGATAAC
CTAAACAACCTTTGCTCTGAAATTCCATTTTTCCCTCTTTCCCTGAAGTGTACTGACCTGTACTACAGAGTTAAT
TTCTTTTGTATTTTTTTAAGAAAATATTAAAAATCAATGGTCTC

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FIGURE 2870

TTGGGCCTGGCTCTGTGACTGAGGCGGCGGCGGTGGCGGCCAAGCGGGATACGGGCGGCGGGAGCTGGGGAACAG
GCATGGACGTTTCCGGGCAAGAGACCGACTGGCGGAGCACCGCCTTCCGGCAGAAGCTGGTCAGTCAAATCGAGG
ATGCCATGAGGAAAGCTGGTGTGGCACACAGTAAATCCAGCAAGGATATGGAGAGCCATGTTTTCCTGAAGGCCA
AGACCCGGGACGAATACCTTTCTCTCGTGGCCAGGCTCATTATCCATTTTCGAGACATTCATAACAAGAAATCTC
AAGCTTCCGTCAGTGATCCTATGAATGCACTCCAGAGCCTGACTGGCGGACCTGCTGCGGGAGCCGCTGGAATTG
GCATGCCTCCTCGGGGCCCGGGACAGTCTCTGGGCGGGATGGGTAGCCTTGGTGCCATGGGACAGCCAATGTCTC
TCTCAGGGCAGCCGCCTCCTGGGACCTCGGGGATGGCCCCTCACAGCATGGCTGTCGTGTCTACGGCAACTCCAC
AGACCCAGCTGCAGCTCCAGCAGGTGGCGCTGCAGCAGCAGCAGCAACAGCAGCAGTTCCAGCAGCAGCAGCAGG
CGGCGCTACAGCAGCAGCAGCAGCAGCAGCAACAGCAGCAGTTCCAGGCTCAGCAGAGTGCCATGCAGCAGCAGT
TCCAAGCAGTAGTGCAGCAGCAGCAGCAGCTCCAGCAGCAGCAGCAGCAGCAGCAGCATCTAATTAAATTGCATC
ATCAAAATCAGCAACAGATACAGCAGCAGCAACAGCAGCTGCAGCGAATAGCACAGCTGCAGCTCCAACAACAGC
AACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGGCTTTGCAGGCCCAGCCACCAATTCAGCAGCCAC
CGATGCAGCAGCCACAGCCTCCGCCCTCCCAGGCTCTGCCCCAGCAGCTGCAGCAGATGCATCACACACAGCACC
ACCAGCCGCCACCACAGCCCCAGCAGCCTCCAGTTGCTCAGAACCAACCATCACAACTCCCGCCACAGTCGCAGA
CCCAGCCTTTGGTGTCACAGGCGCAAGCTCTCCCTGGACAAATGTTGTATACCCAACCACCACTGAAATTTGTCC
GAGCTCCGATGGTGGTGCAGCAGCCCCCAGTGCAGCCCCAGGTGCAGCAGCAGCAGACAGCAGTACAGACAGCTC
AGGCTGCCCAGATGGTGGCTCCCGGAGTCCAGATGATCACGGAAGCCTTGGCCCAAGGTGGGATGCACATAAGAG
CCCGGTTCCCGCCTACCACCGCTGTGTCCGCCATCCCGTCAAGCTCCATCCCTTTGGGCAGACAGCCCATGGCAC
AGGTCAGCCAGAGCAGCCTCCCCATGCTGTCCTCGCCGTCACCGGGCCAGCAGGTGCAGACCCCGCAGTCGATGC
CCCCTCCCCCCCAGCCGTCCCCGCAGCCCGGCCAGCCCAGCTCACAGCCCAACTCCAACGTCAGCTCTGGCCCTG
CCCCATCTCCCAGTAGCTTCCTGCCCAGCCCCTCACCGCAGCCCTCCCAGAGCCCAGTGACGGCGCGGACCCCAC
AGAACTTCAGTGTCCCCTCACCTGGACCTTTAAACACACCTGTGAACCCCAGCTCTGTCATGAGCCCAGCTGGCT
CCAGCCAGGCTGAGGAGCAGCAGTACCTGGACAAGCTGAAGCAGCTGTCGAAGTACATCGAGCCCCTGCGCCGCA
TGATCAACAAGATCGACAAGAACGAAGACAGAAAAAAGGACCTGAGTAAGATGAAGAGCCTTCTGGACATTCTGA
CAGACCCCTCGAAGCGGTGTCCCCTGAAGACCTTGCAAAAGTGTGAGATCGCCCTGGAGAAACTCAAGAATGACA
TGGCGGTGCCCACTCCCCCACCGCCCCCGGTGCCACCGACCAAACAGCAGTACCTATGCCAGCCGCTCCTGGATG
CCGTCCTGGCCAACATCCGCTCACCTGTCTTCAACCATTCCCTGTACCGCACATTCGTTCCAGCCATGACCGCCA
TTCACGGCCCACCCATCACGGCCCCAGTGGTGTGCACCCGGAAGCGCAGGCTTGAGGATGATGAGCGGCAGAGCA
TCCCCAGTGTGCTCCAGGGTGAGGTGGCCAGGCTGGACCCCAAGTTCCTGGTAAACCTGGACCCTTCTCACTGCA
GCAACAATGGCACTGTCCACCTGATCTGCAAGCTGGATGACAAGGACCTCCCAAGTGTGCCACCACTGGAGCTCA
GTGTGCCCGCTGACTATCCTGCCCAAAGCCCGCTGTGGATAGACCGGCAGTGGCAGTACGACGCCAACCCCTTCC
TCCAGTCGGTGCACCGCTGCATGACCTCCAGGCTGCTGCAGCTCCCGGACAAGCACTCGGTCACCGCCTTGCTCA
ACACCTGGGCCCAGAGCGTCCACCAGGCCTGCCTCTCAGCCGCCTAGCCAAGACTGCAGGGATGGCCCGCAGCCT
CATCGGGGCCAAGGACACACGCCTCCTGTCAGACACTTCTAGGTGTTGGCTTCCTTAGAGAGCCTGGGGTTAGGT
TAGCTTTCCTGCTTTTATCTTCTGCCTTGGGGACCTGCCAAACGAAATCCCACACCTGTACAGAACTGGGATAGG
CGCAGTGGAGCGGGTTGCTTGGGGGGCGTTGGCCGACTTCTTAGAGAAGGCCCTCCATGTGACTTCCTCCCAGGA
GCCAGATGCGATCCTCAGGCTGCTCTCACCGTGGCCTGTCCACGGTCCAGGTCCATCTCAGCAGCGTGAGGGTGC
ACTCAGGGTGTTGTTAGAGCGTCTCGTGTGTGCTAGACGCACCCCTACTCGTTCCTATAGAACACAGAGGACATA
GGAAACCCTTAAAACACACATGGGATTCTCTGGTCACAGTTTTGGGTTCAGGCTATGCTGCTTTGGGCAGGTGGA
GCACCCCCCGAGGAAGCCTGCAAGTCCAGGGCACAGGCTGCCTTTTGGAGGGAGGGCTGGCCCATAGGTGCTGCT
GGCTCCCCGCCACCAGCTGGGCCTCAGCCCTCACGGCATTCCTGCTGAGCACCGTGGGGCACCCAGGGAGCAGGG
GCGTCAGGGATCCTGCTGCCGGCACCCCTGTGCCGCTGGCATGAGGGCCGTGTCCCCACTGTGAAGGATGAAGAG
CAAGGCCCTCAGGACCCGTGTCCTCAGAGCACCACACACTGAGCACCCAGAGACAGCGGGCCTGGCAGCGGGCCG
GGCCATGCAGGGAGCGCCTCCCTATGTTGCCTGCCACTCTGGGCACCGGCCAGCACCCTCTGGTGAGAAGAGGTC
CCCCCTTTTTATGTGCACTACCCCACCATCTGTGATTATAATAAATTTATTATTCCTGTG

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FIGURE 2871

ATTGAAAGAACTAACCTGCAGAAAAGGCTGCTGCCCTTCAAACTGTGTACTGTTGTCTAAGCTAGTTCAGAAGAA
TACACGAGCTTCCTTCACATACTCCAATCTGTTGGTTTGACTTCTGAAGAACCAGCAGAGTTGGAAAGGCCTCGA
GATCTCTGTCCTGGTGCTGGCCTGGGGCTCCCCTAGGTCTCGCCTGAAAGTGTCCCATTCACCACCAGTCTTCTA
CA**ATG**TTATCCGGAATGGAACGAAGTACTACACCCACAAGTCCTGAAGGTACTGACCAAAACAGGAGGGAGAGAC
GGGACCGGGGCTGCTGTGACTGGAGGCTGATGGGGCTCCACCGTGCCCCATCCTCTCATCCCACAGTCTTCCTTC
ACATCTGCTCTGCCCACCACAGCCCTGCTCTGGAGTTCTCTGCTCTGCCACTTCTGCCATCCCCACCTAGGCAGA
CAGGTTTCATCCAGCCTCCAGGACGGCCCACCCACTTGCTCCTGCAGCAGGCTGCTCTTCCCAGGTGCACAGCCC
AGAGAATTAAGTGCATATATTTACCAGAAGACATGACCAAAGCCATTCCTGGGGTTGCCTTCATG**TAG**CCAACAT
CTGGAACTAACACCAAAGTTCATTAGGCACAAAATAAAAGAGTTATCTGGAA

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FIGURE 2872

CTCCCGCCTCCACTGCAACATCATCTACGACTACTCCGGCTACGGTGCCAGCGCGGGCAGGCCTTCCGAGTGGAA
CCTCT**ATG**CCGACATCGACGCCGCCTGGCAGGCCCTGCGCACCAGGTACGGCATCAGCCCGGACAGCATCATCCT
GTACGGGCAGAGCATCGGCACGGTGCCCACCGTGGACCTGGCCTCGCGCTACGAGTGTGCCGCGGTGGTGCTGCA
CTCGCCGCTCACCTCGGGCATGCGCGTCGCCTTCCCCGACACCAAGACCTACTGCTTCGACGCCTTCCCTAACAT
CGAGAAGGTGTCCAAGATCACGTCGCCCGTGCTCATCATCCACGGCATGGAGGACGAGG**TGA**TCGACTTCTCACA
CGGGCTGGCGCTCTACGAGCGCTGCCCCAAGGCGGTGGAGCCGCTGTGGGTGGAGGGCGCCGGGCACAACGACAT
CGAGCTCTACAGCCAGTACCTGGAGCGCCTGCGTCGCTTCATCTCCCAGGAGCTGCCCAGCCAGCGCGCCTAGCG
GCGGGCCCCAACCGGCCGGACCTCAGCAATAAGGCGGCCCCCGGACCTCACCCCGCGCCGGCCCCCCAGGGGCTG
CATGTGGACCCCCGGGCGGCCTAGGGGACCCTGCCCCGACCCAGGGGCTGTGGACGATGTACACAGTCAACAGAG
CTACGCACTCCTTTCCTTTTGGAAGCAAAAAGAAAATATGTGAAAACAGAAATTAAAGATTTAAAATTTAA

FIGURE 2873

TGGTTTCTAAATCTTATTCAGTGAGCACGTGTTCCTTTTTTTAATTAGAGAAAACTTGACAGTAGCCCCTTTTTG
TGTTTCACAGAGGAGCTAACATTCCTTCTGTACCTGTAGTTCATGCGGGAGATGGCAGGGGCCTGGCACATGACG
GTGGAGCAGAAATTTGGCCTGTTTTCTGCTGAGATAAAGGAAGCAGACCCCCTGGCTGCCTCGGAAGCAAGTCAA
CCCAAACCCTGTCCCCCCGAAGTGACCCCCCACTACATCTGGATCGACTTCCTGGTGCAGCGGTTTGAGATCGCC
AAGTACTGCAGCTCTGACCAAGTGGAGATCTTCTCCAGCCTGCTGCAGCGCTCCATGTCCCTGAACATCGGCGGG
GCCAAGGGGAGCATGAACCGGCACGTGGCGGCCATCGGGCCCCGCTTCAAGCTGCTGACCCTGGGGCTGTCCCTC
CTGCATGCCGATGTGGTTCCAAATGCAACCATCCGCAATGTGCTTCGCGAGAAGATCTACTCCACTGCCTTTGAC
TACTTCAGCTGTCCCCCAAAGTTCCCTACTCAAGGAGAGAAGCGGCTGCGTGAAGACATAAGCATCATGATTAAA
TTTTGGACCGCCATGTTCTCAGATAAGAAGTACCTGACCGCCAGCCAGCTTGTTCCCCCAGATAATCAGGACACC
CGGAGCAACCTGGACATAACTGTCGGCTCTCGGCAACAAGCCACCCAAGGCTGGATCAACACATACCCCCTGTCC
AGCGGCATGTCCACCATCTCCAAGAAATCAGGCATGTCTAAGAAAACCAACCGGGGCTCCCAGCTGCACAAATAC
TACATGAAGCGCAGGACGCTGCTGCTGTCCCTGCTGGCCACTGAGATCGAGCGTCTCATCACATGGTACAACCCG
CTGTCAGCCCCGGAACTGGAACTAGACCAGGCCGGAGAGAACAGCGTGGCCAACTGGAGATCTAAGTACATCAGC
CTGAGTGAGAAGCAGTGGAAGGACAACGTGAACCTCGCCTGGAGCATCTCTCCCTACCTAGCCGTGCAGCTGCCT
GCCAGGTTTAAGAACACAGAAGCCATTGGGAACGAAGTGACCCGTCTCGTTCGGTTGGACCCGGGAGCCGTTAGT
GATGTGCCTGAAGCAATCAAGTTCCTGGTCACCTGGCACACCATCGACGCCGATGCTCCAGAGCTCAGCCATGTG
CTGTGCTGGGCGCCCACGGACCCACCCACAGGCCTCTCCTACTTCTCCAGCATGTACCCGCCGCACCCTCTCACG
GCGCAGTACGGGGTGAAAGTCCTGCGGTCCTTCCCTCCGGACGCCATCCTCTTCTACATCCCCCAGATTGTGCAG
GCCCTCAGGTACGACAAGATGGGCTATGTGCGGGAGTATATTCTGTGGGCAGCGTCTAAATCCCAGCTTCTGGCA
CACCAGTTCATCTGGAACATGAAGACTAACATTTATCTAGATGAAGAGGGCCACCAGAAAGACCCTGACATCGGC
GACCTCCTGGATCAGTTGGTAGAGGAGATCACAGGCTCCTTGTCCGGCCCAGCGAAGGACTTTTACCAGCGGGAG
TTTGATTTCTTTAACAAGATCACCAACGTGTCGGCTATCATCAAGCCCTACCCTAAAGGCGACGAGAGAAAGAAG
GCTTGTCTGTCGGCCCTGTCTGAAGTGAAGGTGCAGCCGGGCTGCTACCTGCCCAGCAACCCTGAGGCCATTGTG
CTGGACATCGACTACAAGTCTGGGACCCCGATGCAGAGTGCTGCAAAAGCCCCATATCTGGCCAAGTTCAAGGTG
AAGCGATGTGGAGTTAGTGAACTTGAAAAAGAAGGTCTGCGGTGCCGCTCAGACTCCGAGGATGAGTGCAGCACG
CAGGAGGCCGACGGCCAGAAGATCTCCTGGCAGGCAGCCATCTTCAAGGTGGGAGACGACTGCCGGCAGGACATG
CTGGCCCTGCAGATCATCGACCTCTTCAAGAACATCTTCCAGCTGGTCGGCCTGGACCTCTTTGTTTTTCCCTAC
CGCGTGGTGGCCACTGCCCCTGGGTGCGGGGTGATCGAGTGCATCCCCGACTGCACCTCCCGGGACCAGCTGGGC
CGCCAGACAGACTTCGGCATGTACGACTACTTCACACGCCAGTACGGGGATGAGTCCACTCTGGCCTTCCAGCAG
GCCCGCTACAACTTCATCCGAAGCATGGCCGCCTACAGCCTCCTGCTGTTCCTGCTGCAGATCAAGGACAGACAC
AACGGCAACATTATGCTGGACAAGAAGGGTCATATCATCCACATCGACTTTGGCTTCATGTTTGAAAGCTCGCCG
GGCGGCAATCTCGGCTGGGAACCCGACATCAAGCTGACGGATGAGATGGTGATGATCATGGGGGGCAAGATGGAG
GCCACACCCTTCAAGTGGTTCATGGAGATGTGTGTCCGAGGCTACCTGGCTGTGCGGCCCTACATGGACGCGGTC
GTCTCCCTGGTCACTCTCATGTTGGACACGGGCCTGCCCTGTTTTCGCGGCCAGACAATCAAGCTCTTGAAGCAC
AGGTTTAGCCCCAACATGACTGAGCGCGAGGCTGCAAATTTCATCATGAAGGTCATCCAGAGCTGCTTCCTCAGC
AACAGGAGCCGGACCTACGACATGATCCAGTACTATCAGAATGACATCCCCTACTGAGGAGGGGACCTTCGAGGG
CCTCTGCCCCATGTGCCCTCAAAGCTGTCCCACAATCATGGAGCCCTGCGACCTCCCTGCCCTGCCGCCACATGC
AGTGGAGGAGAGGCCTGTGGCCCAAAGAACCTGGTAGCGCCTCCTGGGGCAGCACGTGGGTGGCGCAGCCTTGGT
AACGCCATGGACTGCAGCGACAATCAATGGATGGTGCTGTCTATGCACAGGTGTGAGTCCTCTGTTTGCACTGGA
CATATTCCCTACCTGTCTTATTTCATAGGTACATGAAGTATTGTGTATAAAAAAAGAGATAAGATTTAACCAACA
TCAACAAAATAAAAACCCAAAATAGT

FIGURE 2874

AGCTTTAGCTCCGCCAAAATGAAACACTCATTAAACGCACTTCTCATTTTCCTCATCATAACATCTGCGTGGGGT
GGGAGCAAAGGCCCGCTGGATCAGCTAGAGAAAGGAGGGGAAACTGCTCAGTCTGCAGATCCCCAGTGGGAGCAG
TTAAATAACAAAAACCTGAGCATGCCTCTTCTCCCTGCCGACTTCCCCAAGGAAAACACCGTCACCAACGACTGG
ATTCCAGAGGGGGAGGAGGACGACGACTATCTGGACCTGGAGAAGATATTCAGTGAAGACGACGACTACATCGAC
ATCGTCGACAGTCTGTCAGTTTCCCCGACAGACTCTGATGTGAGTGCTGGGAACATCCTCCAGCTTTTTCATGGC
AAGAGCCGGATCCAGCGTCTTAACATCCTCAACGCCAAGTTCGCTTTCAACCTCTACCGAGTGCTGAAAGACCAG
GTCAACACTTTCGATAACATCTTCATAGCACCCGTTGGCATTTCTACTGCGATGGGTATGATTTCCTTAGGTCTG
AAGGGAGAGACCCATGAACAAGTGCACTCGATTTTGCATTTTAAAGACTTTGTTAATGCCAGCAGCAAGTATGAA
ATCACGACCATTCATAATCTCTTCCGTAAGCTGACTCATCGCCTCTTCAGGAGGAATTTTGGGTACACACTGCGG
TCAGTCAATGACCTTTATATCCAGAAGCAGTTTCCAATCCTGCTTGACTTCAAAACTAAAGTAAGAGAGTATTAC
TTTGCTGAGGCCCAGATAGCTGACTTCTCAGACCCTGCCTTCATATCAAAAACCAACAACCACATCATGAAGCTC
ACCAAGGGCCTCATAAAAGATGCTCTGGAGAATATAGACCCTGCTACCCAGATGATGATTCTCAACTGCATCTAC
TTCAAAGGATCCTGGGTGAATAAATTCCCAGTGGAAATGACACACAACCACAACTTCCGGCTGAATGAGAGAGAG
GTAGTTAAGGTTTCCATGATGCAGACCAAGGGGAACTTCCTCGCAGCAAATGACCAGGAGCTGGACTGCGACATC
CTCCAGCTGGAATACGTGGGGGGCATCAGCATGCTAATTGTGGTCCCACACAAGATGTCTGGGATGAAGACCCTC
GAAGCGCAACTGACACCCCGGGTGGTGGAGAGATGGCAAAAAAGCATGACAAACAGAACTCGAGAAGTGCTTCTG
CCGAAATTCAAGCTGGAGAAGAACTACAATCTAGTGGAGTCCCTGAAGTTGATGGGGATCAGGATGCTGTTTGAC
AAAAATGGCAACATGGCAGGCATCTCAGACCAAAGGATCGCCATCGACCTGTTCAAGCACCAAGGCACGATCACA
GTGAACGAGGAAGGCACCCAAGCCACCACTGTGACCACGGTGGGGTTCATGCCGCTGTCCACCCAAGTCCGCTTC
ACTGTCGACCGCCCCTTTCTTTTCCTCATCTACGAGCACCGCACCAGCTGCCTGCTCTTCATGGGAAGAGTGGCC
AACCCCAGCAGGTCCTAGAGGTGGAGGTCTAGGTGTCTGAAGTGCCTTGGGGGCACCCTCATTTTGTTTCCATTC
CAACAACGAGAACAGAGATGTTTTGGCATCATTTACGTAGTTTACGCTACCAATCTGAATTCGAGGCCCATATGA
GAGGAGCTTAGAAACGACCAAGAAGAGAGGCTTGTTGGAATCAATTCTGCACAATAGCCCATGCTGTAAGCTCAT
AGAAGTCACTGTAACTGTAGTGTGTCTGCTGTTACCTAGAGGGTCTCACCTCCCCACTCTTCACAGCAAACCTGA
GCAGCGCGTCCTAAGCACCTCCCGCTCCGGTGACCCCATCCTTGCACACCTGACTCTGTCACTCAAGCCTTTCTC
CACCAGGCCCCTCATCTGAATAACAAGCACAGAAATGAGTGGTGTGACTAATTCCTTACCTCTCCCAAGGAGGGT
ACACAACTAGCACCATTCTTGATGTCCAGGGAAGAAGCCACCTCAAGACATATGAGGGGTGCCCTGGGCTAATGT
TAGGGCTTAATTTTCTCAAAGCCTGACCTTTCAAATCCATGATGAATGCCATCAGTCCCTCCTGCTGTTGCCTCC
CTGTGACCTGGAGGACAGTGTGTGCCATGTCTCCCATACTAGAGATAAATAAATGTAGCCACATTTACTGTG

FIGURE 2875

GGAGTTCGCGCGACGACCGCGGGGTCGGCGGGCGGGGCGAGGCCCTGGACGGCGGCGGCAGTGGGGCTCCTCCTT
CTGTTTCCCAGACCGAGAGCCGCGCCGGCACC**ATG**TCAGCTTACCCTAAAAGCTACAATCCGTTCGACGACGACG
GGGAGGACGAAGGCGCCCGGCCGGCCCCTTGGAGGGACGCCCGAGACCTCCCCGACGGGCCCGACGCGCCCGCGG
ACAGGCAGCAGTACTTGCGGCAGGAGGTCCTCCGCAGGGCTGAGGCCACGGCCGCCAGCACCAGCAGGTCCCTGG
CCCTCATGTACGAGTCCGAGAAGGTTGGGGTCGCCTCTTCCGAGGAGCTCGCCCGTCAGCGAGGAGTCCTGGAGC
GCACAGAGAAGATGGTGGACAAGATGGACCAAGATTTGAAGATCAGCCAGAAACACATCAATAGCATTAAGAGCG
TGTTTGGGGGGCTGGTCAATTACTTCAAATCCAAACCAGTAGAGACCCCACCTGAACAGAATGGCACCCTCACCT
CCCAGCCCAACAACAGATTGAAAGAAGCTATAAGTACAAGTAAAGAACAGGAAGCAAAGTACCAGGCCAGCCACC
CAAACCTTAGAAAGCTGGATGATACAGACCCTGTCCCCAGAGGGGCTGGTTCTGCCATGAGTACTGATGCTTACC
CAAAGAACCCACACCTTCGAGCCTATCACCAGAAGATCGACAGCAACCTAGATGAGCTGTCCATGGGACTGGGTC
GTCTGAAGGACATAGCCCTGGGGATGCAGACAGAAATTGAGGAGCAAGATGACATTCTTGACCGGCTGACAACCA
AAGTGGACAAGTTAGATGTCAACATAAAAAGCACAGAAAGAAAAGTTCGACAACTC**TGA**AGACAGACGGATTTCC
ACTCTATTGTGATGAAAAGATTTGAAAGATCTTTTTTTGAACTTCCAAGAAATTTCATTTACTATTTTAGTATGT
AAATTAATGTGTGTTTGCAAATGTTATAATAGAGTAGGTCTTAAGACATTTTTGCTGTTATAAGGAAGTGTTTGT
CCCACATTTTCCTAGGGTTAACACCTCACCAAGTTCTTCCAGCAAAATGCTTATTAGAGTTTTTGTCTGAGCACA
GTAGCCTGGCCCTGCATATCTTGGGCGTTTGATTACCATGCTGGAATAAGAAGAGTTGCATTTCTCATTTTAATG
AGCATATGGAAAGATGGGAACAGAATTTCAGTCTTGCAGCCATGAGCCTCTATTTCTCATTCCTAAGCCTTACCA
TGAGTCAGAGTGTTAAGGGGGCCTGTGAGCCAGTCGTTTGGTGGAGGAGGGTCCTTCCCACACCTTTGTTTAGGA
GTCATCATTCACACACACACACACACACACACACACACACACACACACACACTCTGAGCACATTATCTGTGATTCTT
TCATCCTCCCAGAAAGGATCAGTGTTAGAATGGGAAATAGAGTGTGCCATCTTGCTCTTTTGTTGGCAGATGTCC
CCGCTTCCCTCCAGCCCCCCATCCTTGGCATGTATATTAGTAGGAGGGCTTCACACCAGCACTGCTCACTGCGAC
TCCTGGAAATGTGTGGGGAATTGGGTGAGCCCCTCTTCCCCACGTGCTCCCATCTGTAACTCTCCATCTGTGATT
TGCAACAGGTCTTCCACTGGCTCGAGGCTGCGAGGCTGACCGACAGGGGCGCCCAATAGAGTTTGTGGGAATGGA
GTATTGCACAGATGCAGCTGCACAATGGTCTTCCTCCACCCCTCTGGGAATCACCATTAGGCAGGCCTCAGTAGG
GCAAAATGTTTATTTGGTACCGGGGGTCTCCTGACCTGTCTAGCATTCCCACCCACTCTTCTGCACTTCTTGCAA
GGTAACTTGAATCATCACTTATTTCTCTGCCACCTGGTTTTAGGACTGGCACTCTATAAATGACGCTGACTTTGT
ATAGAAGGATTTTGCTAAGGGGGCAAAAAGCCCAGATACCATTTTAACTGGCCCAGCTCATTTTCTCCTTTCATT
TTACAAAAGAAATCATGCAGAAGCATCAATTAAAACTGATTTATTTATGTTGGTACATCCAACAAAATAGTTGGA
GCCACAAGGCCCTTGTCTTTTTAAAAAAACAAAATATTTTGAAGATGGTGAAAGTGACTGATTTTAATAATGAGA
TAGGTCACTTAAAATAACAGTGCCTTTGACCTTAAAACATGGCACTGGCCCATGTGACCTTTGCCATTTCCCAGT
ACTTCCCTTTACAGTCTGCAGCCTATAAACAGTGGTGTCTCAAAGCAAAGGAAACCTCCACAAGTGCTGCAACAG
TGCATTAGTTTTTATGTAGCAATTTGTTTATAAAAATTCCCATCCCATAATGCATGACCTTCCTAAAAATACCCA
CAGCCTCCATAGGCAAGGTGAGCTTTCTGTGCTACCCACTGGTTAGATTCCAGCCACCTCAGGGATTCTGATCCA
TGTCATTAACGACCATCCCAGGGTGTGAGGGCCTGATTAAAGCTTATCGAACTAGACATTTGTTTATTAGATGAG
CTCGGCATTATTATTTTCTCAATAACTGGTAGAAGGGAAATTTTAAACATAACACTCAACCCAAACAAAACTACT
TCGTGAGGCTTTCAGCAAAAAGGCTGCTTAAAAGCATGAACCCGGGATGCAGAGCAGCTTTTGTGCACGGTTCCA
CTTACTGTAATTGTTTCTGGTTCTTTCCTCTAACACCTTCCATGTATGTCAACTTTTTATCACCGTCAGGCATAG
ACTCGTGGAGATTAGTCATTATAGCTCAGACCTAAGCTAATTATTTAAAATAAATACATGTAAAGGCCACTGCCA
CATTCTCAGCAGA

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FIGURE 2876

CGGAGGGGGAGGTGGCTGCCGCTTCTCCCGCGTCCGCCATTTTGTTGCTGTGGCTATTGGGAACAAGCTGGGCAA
AAGCACCCCGGAGGCGCGACGCTCCTTCGAGTTCGGTGCCTCGTGTGACGGCGGGGGTCGGTGAAGACCCGTCGA
GCTGCGGCGCCGGCGCGTTCCAGGCCGGGAGTCACTGGAGGCACCCCTGGGACGCCGAGCAGCCCGAGAACCCCG
GGGTGGCCTCCGCTGCGGCTCGGGTTTGCCTGCCCCGACCCCCCGGCTCTGCCGTGCATTCCCGGGCGGCTCTCT
CCGTGTGGCGGCCCCGGAGCAGGCGGGCGGCGTCGGAGGATGCTGCGGGCCCGGAGCCGAGAGGAAAGTGCTGGC
CCAGCCCTCTGAGCGCTCCTCGAGGTGTGCGAGAGGCCCTTCCTCGGCCCCAAAGCCGTCTGCCGGGCTAAGGCG
TGCAGAGCAGGCGAGGACAGCCGCCGCCCCTACCGCCGCAGAGTCCCCGGTCCAACACC**ATG**TCCTCCGCCAGGT
TCGACTCCTCGGACCGCTCCGCCTGGTATATGGGGCCGGTGTCTCGCCAGGAGGCGCAGACCCGGCTCCAGGGCC
AGCGCCACGGTATGTTCCTCGTCCGCGATTCTTCCACCTGCCCTGGGGACTATGTGCTGTCGGTGTCCGAGAACT
CGCGGGTCTCCCACTACATCATCAACTCGCTGCCCAACCGCCGTTTTAAGATCGGGGACCAGGAATTTGACCATT
TGCCGGCCCTGCTGGAGTTTTACAAGATCCACTACCTGGACACCACCACCCTCATCGAGCCTGCGCCCAGGTATC
CAAGCCCACCAATGGGATCTGTCTCAGCACCCAACCTGCCTACAGCAGAAGATAACCTGGAATATGTACGGACTC
TGTATGATTTTCCTGGGAATGATGCCGAAGACCTGCCCTTTAAAAAGGGTGAGATCCTAGTGATAATAGAGAAGC
CTGAAGAACAGTGGTGGAGTGCCCGGAACAAGGATGGCCGGGTTGGGATGATTCCTGTCCCTTATGTCGAAAAGC
TTGTGAGATCCTCACCACACGGAAAGCATGGAAATAGGAATTCCAACAGTTATGGGATCCCAGAACCTGCTCATG
CATACGCTCAACCTCAGACCACAACTCCTCTACCTGCAGTTTCCGGTTCTCCTGGGGCAGCAATCACCCCTTTGC
CATCCACACAGAATGGACCTGTCTTTGCGAAAGCAATCCAGAAAAGAGTACCCTGTGCTTATGACAAGACTGCCT
TGGCATTAGAGGTTGGTGACATCGTGAAAGTCACAAGGATGAATATAAATGGCCAGTGGGAAGGCGAAGTGAACG
GGCGCAAAGGGCTTTTCCCCTTTACGCACGTCAAAATCTTTGACCCTCAAAACCCAGATGAAAACGAG**TGA**TTGC
TGTTGCCCTGTTTCCTGCTGCTTTGTTGTTCTGCCTGTCCTAGTCTCCTTTGAAGTGGGAAAGCATTTTCTCTCA
TAGGCAAGTCACACTGCATTGCCGAAGTCCAGCTTTCTGCAGACTGGCAGTCGCACACACATTTGGAATGCACAC
AGCGGCTGCCTCCTGATGTTTGTATCATAGTCGTATTGTCAAAGAGTAGCCGATTTTAGAGTTCTTTTGGATCAT
AAACTGGAAATACTGATGGAAGCACACAAGTGGAGAGAAGTTGACATGGAAAGGGTCTTCCTTCTCATTGCTGCC
CGTTTGTACATGGGACTGATTCTGTTGTGTTCACCAGAGAAAGCTTGAGGCCATGGCGAGATACTGCATGTTTGC
TGTTCCACAAAGCAGTGGCTTAGCTGCCATCTTGCTTTTCTTTGGACAACAGGAAGTGAACCTTAAGGAAGAGAG
AATTC

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FIGURE 2877

AACAGGTTAAGTAGCAGGTTGGGTTTTTATGATAGTGCAAGGAATGACTCATGCCTCTGAGCTTCTAAACTGAAG
CTGCTGTAACTAAAGGAATCTGAAAAGAACAACCCTGAAGCAGAGGCCTTTATTGTCTTGGTTGCCAGTAGTACC
TTGTTTTGCCATGTAGCAGACAACACACAAAATAATGCAGTTGTGGTGTGCCATGCTATGTGCACAGCCCCTTGG
ATTACTTTGTTTTAAAAAGCATCAGAGTTGGGGGTACTTTAGGGAAACCTTTGCTTACCTTGTTTTGCCAGTGAT
AAGAGCAGTGGGTTGGAGGGCACTTGGCCAGTTTTCTGTTCAGCTTTTCAGTGAATGTACCCCTTTAAGGTTCAG
ACTTAAACTTCCTTAAAAAGTGGCGTTGTTCATAGAATCGTTGGACTCATTAATGAATCGTTCAACTCCACTCAC
TGAAGCCCAGACCTCCGTGCCCAGGCCCAATCTCGTCAGGCTGCCAGAGAAAGTTGGTGCTGCTCATACTGGTCT
CACAGTCTAAGTAAGTGTCTGTGATGCTCCCAAGCAAAGGAAATGCAAGCTCTGGAAATTCGTTAATGTATTTGA
TGTCTTAGTGTTTTAGTGACTAGGGAGACCATTAACTAGTTTATCATTAACCACTTATCAGTGTATTGATGTTAA
AGCATTTCCCTGTTAGCTAAAAGAGGCCTGTTCATACAAGCCAACTGGTATATACGTGTGGTTCATCCATCATCT
GCTGCACATAGCAGACTAGAATTCTGGGAACCCTGTGCAATTCAGTCTGCTCTCCCTTGTGGACCCTGGTAAAGA
AAAGCCTCAGCTCATAGTGAACACAGCAGACCTAGAAATGTAGCAGCAGCCTACTGAGTAGCTTTCATTTACTGA
TCATCTGCTGTGACTGTGGCCCTGTCTGGAGGTTCCTAGGTTTTGAGATTTAGAGCAATGCATTCTGGAGACAGA
ACCAGCAGAACAGCCATTTTTCAATTTTTCTTTAAATCAGTATTCCATCAGGCAGATAACTGCTGTATTCATGAA
TCTTGAGAGTGTTCCTGAGACAGAATTAATGGTCATTTGGGAAAACTATCGCCATGGCTTCCCATCTGTGGTTTT
CCTCTAAAAGCCTTGGAGATTAGCCCTTCCTTGCCAGTGAGAACGGTGACCGCCTCCTGCTCTGCACGGTCTGCG
GCAGTTGCCGCTTCTGGTTAGGTGTGTCAGGTTGGCTTATTTTGGGTTCAGGCCTGGCGTAGCACCCACAAGTGG
CAGACATATCACAAGAGTCCCCAGACTCTGCCTAGAAACAGTGTTTGCCCTTTGGCCAGTGACGTGGTTCATCCC
GGCCC**ATG**TTGAGCCATGAGTGGAGTTTCCAACAGAGGGAGGAATGTGTGCCTTGTTCAAGGAGGGCACGACCCT
TAGGCCTTTTTCAACCAGATTTAGCTGAAGGGCTTGACACCTTTGAATTACAGCAGTTGACTCAGAGTGCAAGAA
GTCTGGCCATTTTGGAAAGCAAGGTTTCCTTTCAGCCCTGTCTACTGACCAATACCCCGACTCACCTTGTGTGGC
GCACTTCAGAATCAGATATACCTAGAGTATACCTGTGGTTTGGTTTTATAATTAATCAGCTCGTTACTTCAGCCC
ATGAAAATGGCATCCAGGGCTGCCAGGAGATTCAGAGCTCAAAACAAGGCGAGCTTGAGTTCTGCACTCCAGATA
TGTGCCAAAAC**TAG**TAAAACTTAACGGACTTACAACCTTGTCAGTTTTTTTAATGAGGCAGGGATACTCTGTTTT
TCACACTAAACATATGAATGCAGCACTGCTGCCTCAGCTCAGCTTCGTGCCTGGGTTCCCCACTGGTCTGGGAAG
ACTGTTGTGCTCCATAGAGCAGTGCACATCTGACCCAGAGGGTGGGTGTTCATAACTGCTACTTGCTCTGCTCTA
CCATGTTTAAAGAAATATTTGGATGTTAAATTAACTCACTATGGTTTTTCACCTGGGAAGGAAACAAATTACGTA
CTAGAGGGCATTGACTGGTTAAAAACTTGTGTATCCCGGGAAGGACCTGCGGTACAGGAGTCAGCCATGTCTGTG
CTGTGTGGAACCACCTGATGACATGGTTAACGAGGAAGACGATGTGTTGACCGGCTGCCGTTTGAGGACTTTGGT
CACCCAGACTAGACACCTTCTGTGCTCATGTTTGGAAAGCTGAAAGGGAAGGACAGCTGTGCCCTCCTGGGAGCT
CATGTGTCCCTGGCGCTGTGCTAGCTTTCCTTTACAGCTGTTTACAGACAAGGCAGGCCTGAGGCAGATGGCCAC
TGCTCTTGTGATGTTTGCTCAGAGGAATATGAACATTTTATTTTTGAAAAGGGATGATGTGGTTTTTTGCCAGGT
GTTTATAATTAATCCTTTAATATTATGGTTATTAACCTCTTAAACATGAATGAATTCTTGATTGTTTTAACACAG
TACCTAAGACTAATGCTTTCTGTGGACACCACTGAGCTCTGCCTCAACTCCACCCTCTGCGACCGGAGGACTATG
CCCCTAGTAACTGCTGTCGGTGTGGACGCTGTGCTGGTTCTGTTTTCTAAAGGAGCAGAAGGACAGGTCTCTGAG
ACAGGATCGTTGTCCCTACAGGAGGAACAGTGGCCTTGCTTCTTAGACGGTCTTCACTGTGTGTTTTAAAACAAC
AACAACAACAACAACAACATAAAACTCTTTTGACCTGTAACTTAAAGATCATAAACTTCAGGCAATAATATT
TTCTGTGTAAGCTTTTAAAATTATTTTTGGGGATCATAGCTTGTTTTATTTTGTGCTATAAAATTAACAGTATTA
AATGACTTATATTCTTAGAATA

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FIGURE 2878A

CGCGGGTCTTCGGGCTGCGTGGGCCTGGGAGGCGCCGGGAAGAGCAGTCGCGACGGGGCTAGGGACGACACACTG
CATTCACTGGAAGGGACAACGCAGCGCCAGTACATAGCCTGAAACGCTCCCCAGAAGGTCCCACGCTCGCCGCGC
GGTCGACAACCGCATCCTGCGCTCGCCCGCGGTGTCTCGGCAAGCGCTAGGCTTGTCGGGAAGAGCTGGAGGGCG
CAAGTGCGGCGCTGGCCGGACGTGCCGCACCGTCAGCGCAGGGCTCGCCGGGAAATGTGGTTTCTCCAGCCGGCC
CGGGGCGGTGGCCGCAAGTTGGGCTTACAGCGCGGCCGATCCGGCGTGGACCCGGGATGGCTGGACCGGGCAGCA
CGGGGGGGCAGATCGGGGCTGCGGCCCTGGCAGGCGGCGCGCGGTCCAAGGTAGCCCCGAGCGTGGACTTCGACC
ATAGCTGCTCGGACAGTGTCGAGTACCTGACGCTCAACTTCGGGCCCTTCGAAACAGTGCATCGCTGGCGGCGCC
TCCCGCCCTGCGACGAGTTCGTGGGTGCCCGGCGCAGCAAGCACACAGTGGTGGCCTATAAAGATGCCATTTATG
TATTTGGTGGAGACAATGGGAAGACCATGCTCAATGACCTCCTGCGGTTCGATGTGAAAGACTGCTCCTGGTGCA
GGGCCTTTACCACTGGGACCCCACCGGCCCCCCGTTACCACCACTCGGCCGTCGTCTATGGGAGCAGCATGTTTG
TCTTTGGGGGTTACACTGGGGACATTTATTCCAATTCTAACTTGAAGAATAAAAACGACCTCTTTGAATACAAGT
TTGCAACTGGCCAGTGGACGGAGTGGAAAATTGAAGGACGGTTGCCAGTCGCTAGGTCAGCCCATGGGGCCACGG
TGTACAGTGACAAGCTGTGGATCTTTGCTGGCTATGACGGCAACGCCAGGTTGAATGACATGTGGACAATTGGCC
TCCAGGACCGAGAGCTCACCTGCTGGGAGGAGGTGGCCCAGAGTGGCGAGATCCCCCCATCTTGCTGCAACTTCC
CCGTGGCTGTGTGCCGGGACAAGATGTTTGTATTCTCTGGGCAAAGCGGAGCCAAAATAACCAACAACCTCTTCC
AGTTTGAATTCAAGGACAAGACGTGGACACGCATCCCAACTGAACACCTGCTCCGGGGCTCCCCACCACCCCCGC
AGCGGCGCTACGGGCATACC**ATG**GTGGCCTTTGACCGCCACCTCTATGTGTTTGGGGGTGCGGCCGACAACACGC
TGCCCAACGAGCTGCACTGCTATGACGTGGACTTCCAGACCTGGGAGGTCGTCCAGCCCAGCTCCGACAGCGAGG
TTGGTGGGGCTGAAGTGCCCGAGCGAGCCTGTGCTTCCGAGGAGGTGCCCACCCTGACCTATGAGGAGCGGGTTG
GCTTCAAGAAGTCCCGAGATGTGTTTGGCCTGGACTTTGGCACCACCTCAGCCAAGCAGCCCACCCAGCCTGCCT
CGGAGCTGCCCAGTGGGAGGCTCTTCCACGCGGCTGCTGTCATCTCGGACGCCATGTACATCTTCGGGGGCACGG
TGGACAACAACATCCGCAGCGGGGAGATGTACAGGTTCCAGTTCTCCTGTTACCCTAAATGCACGCTGCACGAGG
ACTACGGGCGGCTGTGGGAGAGCCGCCAGTTCTGCGACGTGGAGTTCGTGCTGGGTGAGAAGGAGGAGTGCGTGC
AGGGCCACGTAGCCATTGTCACAGCGCGGAGCCGCTGGCTTCGCAGGAAGATCACGCAGGCGCGGGAGAGGCTGG
CCCAGAAGCTGGAGCAGGAGGCCGCCCCAGTTCCCAGGGAGGCCCCCGGCGTGGCTGCTGGTGGGGCCCGGCCGC
CCCTGCTGCACGTGGCCATCCGGGAGGCCGAGGCCCGGCCCTTCGAGGTGCTCATGCAGTTCCTCTACACCGACA
AGATCAAATACCCACGGAAAGGCCATGTGGAGGATGTGCTGCTCATCATGGATGTGTACAAACTGGCACTGAGCT
TCCAGTTGTGCCGCCTGGAGCAGCTGTGCCGCCAGTACATCGAGGCCTCCGTGGACCTGCAGAACGTGCTGGTTG
TGTGCGAGAGTGCCGCCCGGCTGCAGCTGAGCCAACTCAAGGAGCACTGCCTGAACTTCGTGGTAAAGGAGTCCC
ACTTCAACCAGGTGATCATGATGAAGGAGTTCGAGCGCCTCTCCTCTCCACTGATAGTGGAGATTGTGCGGCGGA
AGCAGCAGCCGCCCCCTCGCACTCCCTTGGACCAGCCAGTGGACATTGGCACATCTCTGATCCAGGACATGAAGG
CATACCTGGAGGGAGCGGGCGCGGAATTCTGTGACATCACTCTGTTGCTTGACGGGCACCCACGGCCAGCCCACA
AGGCTATCCTGGCCGCCCGCTCCAGCTACTTTGAAGCCATGTTCCGGTCCTTCATGCCCGAAGATGGGCAGGTGA
ACATCTCCATCGGGGAGATGGTGCCCAGCAGGCAGGCCTTCGAGTCCATGCTGCGCTACATCTACTACGGCGAGG
TCAACATGCCGCCCGAGGACTCGCTCTACTTGTTTGCGGCCCCCTACTACTACGGCTTCTACAACAACCGGCTGC
AGGCGTACTGCAAGCAGAACCTGGAGATGAACGTGACGGTGCAGAACGTGCTGCAGATCCTGGAGGCAGCTGACA
AAACGCAGGCACTGGACATGAAGCGGCACTGCCTGCACATCATTGTGCACCAGTTCACCAAGGTCTCCAAGTTGC
CCACCCTGCGGTCGCTGAGCCAGCAGCTGCTGCTGGACATCATAGACTCCCTGGCCTCCCACATCTCAGACAAGC
AGTGCGCAGAGCTGGGCGCCGACATC**TGA**GGCCCTGTGGCGCCTGCCCATTGTGAAGAATCGCCGTGCCTGCCTG
CCCTGCCTACTGAGAAGACTACCGGCTATGCGCATGCCTATGGCAGTGGGTGCACCTGCCAGGCCAAGGGTCAGG
GTGCCCAGAGCCTCCAAAGAGAGCTGAGGGGATGTGGGGCCCCAAACTCATTAATTCACTGAAGACACAGGTCCC
ACAGGGAGCGGATGATGAAGCAGACCCCCTCCTGTCATCACCCTCTCCTGGTGTAGTGTGGATGCGAGGCCACGG
CTCAGTGATGGGCTCACCACCCAGAAGTGGGGAGAGACTTTGGGCCTCCCACCCAGTGGGGCTTGGCCTGGCTTC
TGTGGCCTGGGCGTGTTGTGGACTCAGGCACTGGGGCCTGTCACCAAGGCTCCTCCAACATGCGGGAGGAGGCTT
AGCAGACTTGCGCTGCACCAGCGAATCTGCCTGGGCTGCTCCTGTCCCACCCACCCTCACTGAGATCCATGTAAG
GGGCTCCTCTTCCCACCTGGAACTTGTGAGTGGGGACCCATGATGTACGGGTCTCACCTGACTTGAGGTGAATTT
TGGAGTGAAGGGCCCTGAGGTCAGCTCCCAGGTCGGTCGTGCTGGGCCAGGCCTGGTTTTCACAGGGGCTGAAGG
ATCCCAGTCCACCTGTGTGCATGTCAGGGCTCGGCCGGGAAGAAGCCAGCAAAGTCCCCCGTGTCCCTTGCTGAG

FIGURE 2878B

TATTCTGTCACAGACAAGCCTCCATTAAAGCCACAGCAGTGCTACCCACCACACACACCTTGCTGGCCCGGCCAC
CACTGCTGGCTTCAGCCCCTTGAGCAGCCCATGGCTTAGCAGACCCCCAGATGTAGGTCAGTGGCCTTACCTGTC
TCTATCCATGCTGTCAACTCCTGCCTCCACCTGGGGTCACCCAGTCACATTGGGAAGGGCTGTGAAGGCCTCCAG
GCTGGCCCCTTCCAGGGGAATCCTGGAGGCCTGGGGTGGGCTCCTGCCCCTTCTGCCCTGCCTTGCCCCTGCACT
ATGCTCTTGGCTCCTGTGGAAGGAGGGCTGCCCTCTTGCCCTAGTGAGGGCCCCATGTGGATCCACTCTAGTGCT
GGGAGCCAGCGCTCCCTTACTGGGAACAGGATTCCAGGACCCCTTTCTTGTTGTGGCTGCCATGAAGCCACAGCT
CCTTGGGGAAGTGACCTGCTCTCCTTTGGGTGTATGCAGGTGTGTGGGGGGCCCTGAGTGGCAAGTTGCTTAGCT
AACAGGAGATCCATAGGCAGCCTGCAGGCTAGGAAGTGGCCTAGTGCAAGATGAGCTGGGAACAAGGGAGGAGAG
AGCAGGAGCTGGGGCAGAGGCTGAGCCGGGAGGCCCTTGAGGTGAGGACACAGCAGGCCCAGGACCATGGCTGGG
GAGGATATGTCAGCACCTGGAAGTGGAGTGCAGGCTGCAGCGCCCAGCCATGTGGGCCAGGTGCATTCACTCAGA
GTGGGGCCACACACCCATCTACCCAGTTTCCACAAGATGTGGCTCCTGCCACACCCACAGGGCAGCCTCCTCCAA
ATCCCTCCTGGAGGGGCCTACCCAGAAGCCTCCTTGAACCAGTCTGCAACCCTGCTCTATGCTGACCCTTGTCAC
TGAACCCTGATCTAGACTTATATGAATAAATGAAATTACATGCCAAGGGCCCTAAAAAAGCAAATTTTACAAAATT
GTGTGGCAGTTTCTGGG

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FIGURE 2879

CGTGAGTGCCGCTGACAGAAGTCAAGAGAATCGGCTGGGACGGGGTTGGGGCGACAACGGGCCGGGGGGGACCCG
ACAGGCCAGAGCCCCTTGGGGAGGAGCGGCGGCTGGAGGCGCGAGGCTCCTCCGGATGCCCGGAGAGCCGCTTGC
GACTTAACTCCCGCCTCTTTCCCAG**ATG**CCGCGTCACTGCTCCGCCGCCGGCTGCTGCACACGGGACACGCGCGA
GACGCGCAACCGCGGCATCTCCTTCCACAGACTTCCCAAGAAGGACAACCCGAGGCGAGGCTTGTGGCTGGCCAA
CTGCCAGCGGCTGGACCCCAGCGGCCAGGGCCTGTGGGACCCGGCATCCGAGTACATCTACTTCTGCTCCAAACA
CTTTGAGGAGGACTGCTTTGAGCTGGTGGGAATCAGTGGATATCACAGGCTAAAGGAGGGGGCAGTCCCCACCAT
ATTTGAGTCTTTCTCCAAGTTGCGCCGGACAACCAAGACCAAAGGACACAGTTACCCACCTGGCCCCGCTGAAGT
CAGCCGGCTCAGACGATGCAGGAAGCGCTGCTCCGAGGGCCGAGGGCCCACAACTCCATTTTCTCCACCTCCACC
TGCTGATGTCACCTGCTTTCCTGTGGAAGAGGCCTCAGCACCTGCCACTTTGCCGGCCTCCCCAGCTGGGAGGCT
GGAGCCTGGCCTTAGCAGCCCCTTTTCAGACCTACTGGGCCCCTTGGGTGCCCAGGCAGATGAAGCAGGCTGCAG
CGCCCAGCCTTCACCAGAGCGGCAGCCCTCCCCTCTCGAACCACGGCCAGTCTCCCCCTCAGCGTATATGCTGCG
CCTGCCCCCACCCGCCGGAGCCTACATCCAGAATGAACACAGCTACCAGGTGGGCAGCGCCTTACTCTGGAAGCG
GCGAGCCGAGGCAGCCCTTGATGCCCTTGACAAGGCCCAGCGCCAGCTGCAGGCCTGCAAGCGGCGGGAGCAGCG
GCTGCGGTTGAGACTGACCAAGCTGCAGCAGGAGCGGGCACGGGAGAAGCGGGCACAGGCAGATGCCCGCCAGAC
TCTGAAGGAGCATGTGCAGGACTTTGCCATGCAGCTGAGCAGCAGCATGGCC**TGA**GGGGCTGCTGGACTGACCGA
GGGGCTGCCCAGCAAGACTGCAGCCTCTTCCTCCCTCAGATCCCACCAGACCCACCAGGTGCCATAATAAAGCGG
ATTCTAGACGGAG

FIGURE 2880

GGGTCGCGCTCTAAGTGAGGCGCCAAGCGGTCTCCGCCTCAGGGTCTGAGGCTGCGAAAGGGGCGTAACGATGAG
CGGTTCCTGCCAGAGGTCTGGGGAGGATAAAAAGCAGGAGGAAGAGGCGACGGCGGCCTGTGGACGTCTTGCAGG
GGTCCCCGAAGCCAAGCAGGGTCCCAAGGCCGATTCAGACTCCGACCTAGAGACGGAAGGTGCTCGGGGCAGGGG
CCAGGCCCGTCTCCTCCCCTTGGGGGCTTCTCCCGCAGGGGTTGTGGGAGGTGGGCTGGCGCCGCCGAGGAGGCA
GGAGACCTCTGTCCAGCAGGGCACGTAGCCCTCTGCGGGGCGTCTCCAGCCCCCTGCCCTCTCCTCGGCGCTCCT
GGCGGCATCAGGAACTTTACCATGAGAAGGCGCTTCTAGAAGGAGGTTAAAATGGAAAATCCCGCCAGACAGTGC
ACCAAAGGCTGTCCCGCCCTGAAATGCAATCAGAGCTGGGTTTTCCCAATCCACAGGCACCCATGGACTTGGAGA
ACTGGTCGGGGACACCCTGTACCTGAGGTCTTGCTGGATCCATAGCATTGTGCCCATCTTCTGCTTTCTGTGCCA
AGGGAGTGCCCCAGAGCTGAACCTGCTGCACGGTGGCCTGGGGCCCCAGATGTGGACCTGTTGGAGAACCAGCTG
GGAGTGGCAGGAGCCCAGGCCCTCTGTGCCGCCCTCACAGTGAACCAGGCC**ATG**CGGAAGATGCAGCTGTCAGGG
AATGGCCTGGAGGAGCAGGCGGCCCAGCACCTTGCCGAACTCCTGCTGGCCCACACAGACCTGAAGTCCCTGGAC
CTGAGCTACAACCAGCTGAATGACCAAGCAGATCTGTGCATGGGACTGCAGGGCTTCCTCATCTTCCACAGCTTT
GGGGGCGGCACTGGCTCTGGGTTCGTGTCTCTGCTCATGAAGCGGCTCTCGGTGGACTACGGGAAGAAGTCCAAG
CTGGAGTTTGCCATTTGCCCAGCCCCCCAGGTCTCCATGGCCATGACGGAGCCCTACAACTCCATCCTGACCACC
TACACGACCCTGGAACATTCTGACTGTGCCTTCATAGTCGACAGCAAAGCCACCTATGACATGTCAGCACAACCT
GGACATCGAGTGTCCCATGTACACCAACCTCAGTCGTCTGGGCAGATCGTGTCCTCCATCACGGCCTCCCTG**TGA**

TTCGATGGGGCCCTGAATGTGTACTTGACAGAATTCCAAACCAACTTGGTGCCATACCCCCACATCCACCTCCCC
CTGGCCACCTACGCCCTGGTCATCTCAGCCAAGAAGGCCTACCATGAGCAGCTGTCCGTGGCCAAGATCGCCAGT
GCCCGCTTCGAGCCAGCCAATCAGATGGTCAAGTGTGACCCTCACCATGGCAAGTACATGGCCTGCTGCATGTTG
TACAGAGGGGATGTGGTCCTGAAAGATGTCAGTGCGGCTGTCGCCACCATCAAGAGCAAGCACACCAACCAGTTT
GTGGACTGGTGTCCGATTGGATTTAAGGTAGGACTGGGTGATGTGGAGTCCTTGTGCCATCAGGAAGCAGGAGAC
CTGCAGAATAATGCTGCCCCTGAAGGCCCGCATCCTTTATGGAGACAACCCCTTTTCACGTCAGCTAGGTTGCAA
GGATAATAATTTTAGTAATTTATTTCCTACCGCCTTATACTTTACCAAATACTTTATGTTCCCTCATACCTTAAC
CACTACCCTTTAAAGTTCATGGGGCAATATTACCAGTATCTTACACTTTAGAAAACAGAGGCTGAGGCTGGGCAC
GGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCACGAGGTCAGGAGATTGAGACCA
TCCTGGCTAACACGGTGAAACCCCGGCTCTACTAAAAAATACAAAAAATTAGCCGGGTGTGGTGGCAGACACCTG
TGGTCCCAGCTATTCGGGAGGCTGAGGCAGGAGGATGGCGTGAACCCGGGAGGCAGAGCTTGCAGTGAGTCGAGA
TTGCACCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTACATCTCAAAAAAAAAAAAAAAGAAAGAAAAAG

FIGURE 2881

CTGCCATGCTGACTCATGTGCCCGCAGCTAGCAGGAGCTGGCAGCATGGGCTCCCCAGGGGCTACGACAGGCTGG
GGGCTTCTGGATTATAAGACGGAGAAGTATGTGATGACCAGGAACTGGCGGGTGGGCGCCCTGCAGAGGCTGCTG
CAGTTTGGGATCGTGGTCTATGTGGTAGGGTGGGCTCTCCTCGCCAAAAAAGGCTACCAGGAGCGGGACCTGGAA
CCCCAGTTTTCCATCATCACCAAACTCAAAGGGGTTTCCGTCACTCAGATCAAGGAGCTTGGAAACCGGCTGTGG
GATGTGGCCGACTTCGTGAAGCCACCTCAGGGAGAGAACGTGTTCTTCTTGGTGACCAACTTCCTTGTGACGCCA
GCCCAAGTTCAGGGCAGATGCCCAGAGCACCCGTCCGTCCCACTGGCTAACTGCTGGGTCGACGAGGACTGCCCC
GAAGGGGAGGGAGGCACACACAGCCACGGTGTAAAAACAGGCCAGTGTGTGGTGTTCAATGGGACCCACAGGACC
TGTGAGATCTGGAGTTGGTGCCCCGTGGAGAGTGGCGTTGTGCCCTCGAGGCCCCTGCTGGCCCAGGCCCAGAAC
TTCACACTGTTCATCAAAAACACAGTCACCTTCAGCAAGTTCAACTTCTCTAAGTCCAATGCCTTGGAGACCTGG
GACCCCACCTATTTTAAGCACTGCCGCTATGAACCACAATTCAGCCCCTACTGTCCCGTGTTCCGCATTGGGGAC
CTCGTGGCCAAGGCTGGAGGGACCTTCGAGGACCTGGCGTTGCTGGGTGGCTCTGTAGGCATCAGAGTTCACTGG
GATTGTGACCTGGACACCGGGGACTCTGGCTGCTGGCCTCACTACTCCTTCCAGCTGCAGGAGAAGAGCTACAAC
TTCAGGACAGCCACTCACTGGTGGGAGCAACCGGGTGTGGAGGCCCGCACCCTGCTCAAGCTCTATGGAATCCGC
TTCGACATCCTCGTCACCGGGCAGGCAGGGAAGTTCGGGCTCATCCCCACGGCCGTCACACTGGGCACCGGGGCA
GCTTGGCTGGGCGTGGTCACCTTTTTCTGTGACCTGCTACTGCTGTATGTGGATAGAGAAGCCCATTTCTACTGG
AGGACAAAGTATGAGGAGGCCAAGGCCCCGAAAGCAACCGCCAACTCTGTGTGGAGGGAGCTGGCCCTTGCATCC
CAAGCCCGACTGGCCGAGTGCCTCAGACGGAGCTCAGCACCTGCACCCACGGCCACTGCTGCTGGGAGTCAGACA
CAGACACCAGGATGGCCCTGTCCAAGTTCTGACACCCACTTGCCAACCCATTCCGGGAGCCTGTAGCCGTTCCCT
GCTGGTTGAGAGTTGGGGGCTGGGAAGGGCGGGGCCCTGCCTGGGGATCTCAAGGATGAGGCCCCAGCATGGAGG
ATTGGGGGTAGAATTCCACCCTTGAACCCCAGCAGACAGTCCCTCCCCTGACTCCCACCTTGGTAGGGTGCTGCC
TCAGGGAGCCATAGAAGTCGGCTGTGTTTTGAGACGGCGACAGAACCTGACCCGTGGAGACTGGGAGAGCCCAGC
AGGCACCTGTATTGCAGGGCTCCGACTGCATGTGGCAGGGGCTCCTGCTGCGTCTGGGCCTGGAGGTCTCTCTCC
CAGTGCTCTGTCCCCAGTGTTCCTAGCAGAGGTATGCTTACCAGCTGTCAGCACAGACCCTCCTGCTGCCTGGGT
CCTGGCCCTCCTCCCCCATCTGCACCCCCATCATAGGTAGAGACCCCACCCTCCCATCGGTCCTACATGGGGCTG
TGCAGCTGGAGCCAAAAAGGCAAGGTAGAAAGAGGAGTGATGGGGGAGGGGGATTGTTTCAGCTTCTCTGGTGCT
GTGATGCCCCAGGAGAGTCCTAATCTAGGGAATGGGGTGGAGTAGGCAGATAATCCACCTCCCTATCCCCCAGGC
AAGGGCGGAGCATGTGTCTTGGGCCCACACCTGCTTAGTTTATGAGGACCGGCTGCTTTCCAGTGGTAGCCCTTT
TGCCATGGAGGTCTGGGAGAGAGAGCAGAGGGCGGCAGGGCTAAGTTGGTGATCATTGGGTTCTTCAGGACCTTC
TATATCCCTCCTCGGTAACCCCCCAGCCCAACCCCTTGGAATCTTTCCTCCAGGCTTCCTGAGAGCCCTGGGGGT
GGGAGGCTGTGGGAGGCTGTACATCTGAAATTCACTTCAGTCCAAGTCATACCTAGGAAGCTGTCTGGGCAGCTG
CTCGAGGGAGGCCCTGGCTCTGATCCCAGGCTGGATGGAGTGGCTGGAAGGAATGGTTCCAAACAACACCACCGA
GATCTCCCTCAGGCTGGCCAGGTTTTGCAGCTGGAATTCTCCTCTTGGTCCCAGGGCGGGGCAGGGAATTCTAAG
TGTCCACCCCAGGGAGGCAAGGGGCTGCTTTCCACTGTGGGTACCTGGTGATCAGGGCAAGCTGTGGAGGGCCAG
GGGTGGGGCTGAGACTGGGCTGACATCTAGAATCACCTGCCACCTGGAGCCTCAGTAAAATGCCTGGGGTCCCTG
CTGCCTCTCAATCTCCAGAGCCATGTCCATGGGGAGGTGGGCTCTGAAGGGCGAAGGTGGGAGAGCAGGGCCCCT
GAGGCCTGGGTATCCAAGGAGGGGCACGTGCACCTGATTCTCCTTGGGGCCCAGAGGAAGCTGATGTCATGGCTG
GACAAAGTCACGGAGTAAAGCCAGCAAAGCCACCCTCTTCCTGTGTAGTCCTTACAGGCATGACTGGAAAGTTGG
GGGGCATCTATGGTAGACATGGCACAGCCATGAAGAGACCAGTGGGGTGGTGCAGGGTGGACTTGGGGACCCTAC
CCCTGAAGACTGAGGCCCTGCAGCTACCAGGTGGGCTAGAAGGTAACTGGAACAGGCCTGGGCACTTGTGCACCC
ATGTAGGAGCATGAGGGCCACACTCTTTTCACCTCAAAGCCCTTGAAGAGTGGGCAAAGACAGCAAGAGAGCTGC
AGCCTGGGCCCGAGCTCAGAAACAGCTGTCGCCTCAGTCTGCGCACAGGCATGCACCCCAGGGTAGTGCCTGCAG
GGATGCATGTGTCCCCGTGGGGGTGCCTGTGCCAGGCAGGCCTCAGGTGCATGCCATGCTCAGAACCCTGCTGCC
CTTTCTAGGCAGCCTCCTTGGGGCCCAAGCTCTGCTCCCTGGATCTGCCACCTAGCAGACGTGGGGAGCCTGACC
CCATGCCTGTCATGGAACCCTCCTTGCCTGGTGTGTGTGGCTCCCCTCTTCACTGGGCACCTGGATCCAGGCCCA
CCTGTGTCCCTGACTCAGGGTGGTCCCAGGACTGGCACCTACTCTTTAGAGAGCCCCAGCATCTTTGATGTGGAT
TGGAGACAATTGCCTGGTTCCCTGGGGCAGGTGAAGACTTGGTGCCACAAAGAATGCCACAGTGGATACGCCAGC
AGGCCACATGGCTGGCCAAGCAATTATTATTATGGATCCCTTGGGCTGTGGGCCTTCCCATCCACCCCACCACAA
CTGCCCAGGTAGCTGGAGCTGATCATAAA

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FIGURE 2882

GCGGAGGCAGCGGCTGCGGCAGCAGCAGGTTCCAGTAGCTGGCTCGGTGCTCTTCTCGGCCACCTGCCATGGCCC
GGGGGCTGCCCACCATTGCTAGCCTGGCACGCTTATGCCAGAAGCTGAACCGCCTGAAGCCGCTGGAGGACTCCA
CCATGGAGACGTCACTGCGGCGCTGCCTGTCCACGCTGGACCTGACTCTTCTGGGCGTGGGTGGCATGGTGGGCT
CGGGTCTCTACGTGCTCACAGGTGCCGTGGCCAAGGAGGTGGCTGGCCCTGCTGTGCTCTTGTCCTTCGGTGTGG
CCGCTGTGGCCTCCCTGCTGGCAGCCCTATGCTATGCAGAATTTGGGGCACGTGTGCCACGCACGGGCTCTGCCT
ACCTGTTCACCTACGTATCCATGGGCGAGCTGTGGGCCTTCCTCATCGGCTGGAATGTTCTCCTCGAATACATCA
TCGGTGGCGCCGCCGTGGCCCGTGCCTGGAGTGGCTACCTGGACTCTATGTTCAGCCACAGCATCCGCAACTTCA
CTGAGACCCACGTGGGTTCTTGGCAGGTGCCCCTCCTGGGCCACTACCCGGACTTCCTGGCTGCTGGCATCATCC
TCCTGGCCTCTGCCTTTGTCTCCTGTGGAGCCCGCGTGTCCTCCTGGCTCAATCACACCTTCTCGGCCATCAGCC
TGCTTGTCATTCTCTTCATTGTCATCCTGGGCTTCATCCTGGCCCAGCCTCACAACTGGAGCGCTGACGAAGGCG
GCTTTGCACCCTTCGGCTTCTCCGGCGTCATGGCCGGCACTGCCTCCTGCTTCTATGCTTTCGTGGGCTTCGACG
TCATTGCCGCCTCCAGTGAGGAGGCCCAGAACCCACGGCGGTCTGTGCCTCTGGCCATCGCCATCTCGCTTGCCA
TTGCAGCTGGTGCCTACATCCTTGTCTCCACCGTGCTAACCCTCATGGTGCCCTGGCACAGCCTGGACCCCGACT
CAGCGCTTGCAGATGCCTTCTACCAGCGGGGCTACAGGTGGGCTGGCTTCATCGTGGCAGCTGGCTCCATCTGCG
CCATGAACACCGTCCTGCTCAGCCTCCTCTTCTCCCTGCCACGCATTGTCTATGCCATGGCCGCCGATGGGCTCT
TCTTCCAGGTGTTTGCCCATGTGCACCCCCGGACACAGGTGCCTGTGGCGGGCACCCTGGCGTTCGGGCTCCTCA
CGGCCTTCCTGGCACTGCTGCTGGACCTGGAGTCGCTGGTTCAGTTCCTGTCCCTTGGCACACTCCTGGCCTACA
CATTCGTGGCCACCAGTATCATTGTGCTGCGCTTCCAGAAGTCTTCCCCGCCCAGCTCCCCAGGCCCAGCCAGCC
CTGGCCCCCTGACCAAGCAGCAGAGCTCCTTCTCAGACCACCTACAGCTGGTGGGCACTGTACACGCCTCCGTCC
CTGAGCCAGGGGAGCTGAAGCCAGCCCTGAGGCCCTACCTGGGCTTCTTGGATGGGTACAGCCCTGGAGCAGTGG
TGACTTGGGCGCTTGGCGTTATGTTGGCCTCAGCCATCACCATAGGCTGCGTGCTTGTCTTTGGGAACTCGACCC
TGCACCTCCCACACTGGGGTTACATCCTGCTGCTCCTGCTCACCAGTGTCATGTTTCTGCTCAGCCTCCTTGTCC
TGGGGGCTCACCAGCAACAGTATCGGGAAGACTTATTTCAGATCCCCATGGTTCCCCTGATTCCAGCCCTGAGCA
TCGTCCTCAACATCTGCCTCATGCTGAAACTTAGCTATCTGACCTGGGTGCGCTTCTCCATCTGGCTGCTGATGG
GACTTGCAGTGTATTTCGGCTATGGCATCCGGCATAGCAAGGAGAACCAGCGGGAGCTGCCAGGGCTGAACTCCA
CACACTACGTGGTATTCCCCAGGGGCAGCCTGGAGGAGACAGTGCAGGCTATGCAGCCCCCCAGCCAGGCACCAG
CACAGGACCCTGGCCATATGGAGTAGCTGATCAGCCCACACTTGCCCCGCCCTCCCACACCTGCTTGGGAGGCCA
GAGAGGCCAGACAAGCCGAGAGCCCCTTCTGTTGTGGGCAGCCTGGGTTTGCAGGCCTGCACAGGCTGGGGAGTC
CTCAGGACCTTAGGACCTTCATCCAGGGGCTGGGCTTCGGGTCTTCAGGAGTGGGCCTTGGCTGGTGCTGGTGCC
ATGGACTCTGCCCAGAGCCTTCTTGTTTATGATCAGCTCCAGCTACCTGGGCAGTTGTGGTGGGGTGGATGGGAA
GGCCCACAGCCCAAGGGATCCATAATAATAATTGCTTGGCCAGCCATGTGGCCTGCTGGCGTA

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FIGURE 2883

ATGACCAGGAACTGGTGGGGGGGCGCCCTGCAGAGGCTGCTGCAGTTTGGGATCGTCGTCTATGTGGTAGGGTGG
GCGCTCCTCGCCAAAAAAGGCTACCAGGAGCGGGACCTGGAACCCCAGATTTCCATCACAACCAAACTCAAAGGG
GTTTCCGTGACTCAGATCAAGGAGCTTGGAAACCGGCTGTGGGATGTGGCCGACTTCGTGAAGCCACCTCAGGGA
GAGAACGTGTTCTTCTTGGTGACCAACTTCCTTGTGACGCCAGCCCAAGATCAGGGCAGATGCCCAGAGAGTACG
ATAGTCCAGTAG

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FIGURE 2884

GGCCAACAACGTGTTGGAGGAACTCAACATGAGAGACAGTCTCCTGCTGGCCTTGAACTCTTGGGCTGAAGCAGT
CTTCCTGCCTCAGCCTCCCAAAGTGCTGGAATTACAGTCATGGGGAGTTCATCGTTGTTACATAGAGACCTGTGA
TTCCTATAGCACAGGCGGATGGCTGCGAATTGCACACGGTGTATAAAGCATCTCCGGCAGAGCCTGGTGCATGTA
ACAACCGCATCTCTGCGATGGGAGCCCTGAGCCTGGGCCTGGGCCTCCGGGTCAACCAGACGCTGAGGATTCTTG
TACCTCACCAGAGCATTCTGTCTGACTATCTGATGGAGACACCTTCTGAGCCGAAACAGTGTGGCCATAGTGGCT
GTGTCCTCAGAGATGAGGAGCCCCTCCTTCCCTTTCACATTGCTCTCTGGCCTTCCCGGACCTGGCTTCTCGCAG
CTTTGTGTGCGTGTTTCTCAGGTGTCCAGGAATCCCATGCGAAGTGAAGGCTGCTTTGGTCTCCTCAAGTCTGTC
CAGGACAATCCAGCCTCTGCCCTGGAACTGCTGGATTTCTCAGATATCCAGGTGAACGCAGAGTTTGATGGCCTT
GCTAGCTCAGTGAGGGGAATTCTTCCAGAACTCTGCATAAAGACTGGCGCTTGCAGAGTGGAGTATAAAAAGGAG
TTGCTGCCAGTCTTCAGATCAGCCCTGCCAGCGTCTGTCCCTAAGTGACCTTGGAGTGTGGCTTCCTCATCTCCA
ATCAGCTGCTTTGACCTCCAGGGTATATACTTGAAAGAAATGAAGACATATGTCCCCACAAGAACTCGTGCATGA
ATATCCATAGCAACATTATTTATAATATTCTAAGAGTGAAAATGCCCACCAGTGGATAAATGCAATGTGGTATAT
CCATACAGTGGAATATTATTTGGCAATAAAAAGGAATTTGAGGTGATACCAA

FIGURE 2885A

GGACACTTGACATCAGTGGTGTCAAGACAACTCTAAGAAGGTTTTCCGTGATCCTGCAAGCCCTGCCTTCCTTCC
TGGGATCCTGCCTTCAATTTGATTGCACAGGTACCACAGCAAGCCAGTGCTGTGTGCTCCGAGTTCCAGGGCGTC
CTCCAGCTCAGCCACTGCACTGAGAAC**ATG**GACTCTCTGTGGGGCCCAGGAGCCGGGAGTCACCCCTTTGGGGTC
CACAACACCCGGCTGTCCCCAGACTTGTGTCCAGGGAAGATAGTGTTGAGGGCCCTCAAGGAGAGCGGGGCAGGG
ATGCCTGAGCAGGACAAGGACCCTAGAGTCCAAGAGAATCCTGGTGATCAGAGAAGGGTCCCCGAGGTCACCGGG
GATGCACCGTCTGCATTTCGGCCCCTGCGGGACAATGGAGGCCTCTCTCCCTTTGTGCCCGGGCCCGGGCCTCTG
CAGACAGACCTCCATGCCCAGAGGTCAGAAATCAGATATAACCAGACATCCCAGACCTCCTGGACGAGCTCCTGC
ACCAACCGAAATGCCATCTCCAGCTCCTACAGCTCCACGGGAGGCTTGCCGGGGCTAAAGCGGAGGAGGGGGCCA
GCCTCATCCCACTGCCAGCTGACCCTCAGTTCCTCAAAGACAGTGAGTGAGGACAGGCCTCAGGCTGTCTCTTCA
GGTCACACCCAGTGTGAAAAGGCAGCAGATATAGCACCAGGGCAGACACTCGCCCTCAGGAATGACTCCTCCACA
TCCGAGGCCTCTAGGCCCAGTACACACAAGTTTCCCCTGCTGCCACGCAGGCGAGGGGAGCCTTTGATGCTGCCA
CCTCCCTTAGAGCTGGGGTACCGGGTCACTGTTGAAGACCTTGACCGGGAGAAGGAGGCGGCATTCCAGCGCATC
AACAGTGCACTGCAAGTTGAGGACAAGGCCATCTCGGACTGCAGACCCTCACGGCCTTCCCACACTTTGTCCTCA
CTTGCAACAGGGGCTTCTGGTCTGCCTCCCGTTTCTAAAGCACCCAGTATGGATGCACAGCAGGAGACACACAAG
TCCCAAGACTGCCTGGGCCTACTGGCCCCCTTAGCATCTGCTGCAGGGGTCCCCTCTACAGCTCCCATGTCTGGG
AAGAAGCACAGACCACCAGGCCCCCTGTTCTCCTCCTCAGATCCCCTTCCTGCCACCTCTTCCCATTCCCAGGAC
TCAGCCCAGGTCACCTCGCTGATTCCTGCCCCCTTCCCAGCTGCAAGCATGGATGCGGGCATGAGAAGAACAAGG
TGTGGCACTTCTGCTCCTGCAGCTGCCGCAGCAGCCCCTCCCCCCTCCACATTGAACCCCACGTTGGGGTCACTA
CTGGAGTGGATGGAGGCCCTTCACATTTCTGGGCCTCAGCCACAGCTGCAGCAGGTGCCCAGAGGTCAGAACCAG
AGATCCCAGACCTCCCGGACCAGCTCGTGCCCCAAACGAAATGCCATCTCGAGCCCCTACCGCTCTACGGGAGGC
CTCCCGGAACGAAAGCGGAGAAGGGGGCCAGCCTCATCCCACTGCCAGCTGACCCTCAGTTCC**TGA**AACACAGAC
CCAGGGTGCATGCCCATCTCCAGCCCAGGGCAGCTCCCCTGTAAGCTGGGTGAGCTACTGAAGCCAAGGCGGGAG
GCAGCTGACAACACCCACAGCCCATGCGGAGGTGGTGGAAAGGCTGGACTCAGCAGCAACACCAAATCCTGGACC
AGGCAGAAACCACCCAAGACTGAGGGGCTCGTGCCAGAGCGGTGGCCACAGGGCTGAATGGTTGCTGAGACAGAG
ATGGAAGCCAGGACAAGGGAGCCCACCGGGCCCAGATAGAGACTTCAGAACCCACTCCTGAGAACAGCGGAGCCA
GGCGCTTAGAGGAAGACCAAATGCTGCCAGGACACGGATTGTCCAGGGATTACATTCCAGCATCTTATTAGATGG
CCTGATTAGCCAGAGGTTTCCAGGCCGTCTGTCCGCCTCCAGGAGATGGACTGGGACCTTTAGACATCGGTGGAG
AACAGGATGCTCTGTCCCTTGCTGTCCAGGGCAGGGATGGCCTCCAGCCGCAAGAAGTACAGCAGCACCTCGACC
TGCCCTCGCGGAGTGGGGAAGAGGAGAGTGGCTCGGAAGGGGGCGCACAGCTGCTGGTGGGAGGTCTTTGGGGCC
CAAGATCCCAAGTCCACCTCAGGTGCTAGAAACCCCTGCTGGTGTCATGAACCCCTTACAGTGAGACGGGGGTGG
GGTGGGGTCCTGACAAGGCATGACTTGTTGGGTGGGGGGTGGTTATTTATTTTAGAGATGCACAGGGCCTTGCTC
TGTCCCCCAGGCTGGAGTACAGTGGCTCCATCATGGATCACTGCAGCCTCTAACTCCTGGGCTCAAGCAATCCTC
CTGTGTCAGCCTCCCAGATACCTAGGATTACAGATATGTGCCCCAATGCCTGCCTAATTTTTCTTTGTATTTTTT
CTGGAGATGGGGTTTGCTACATTGCCCAGACTGGTCTCAAACACCTGGGTTCAGTTGTCCTGCCTCGGCCTCCCA
AAGTGCTGGGATTACAGGCATGAGCCACCACACTCGAACACTTGGGGTGGTTTTAAGCCCCCAGCAAGGTGCACC
AGCAGGACCAGGAGGTGGCCTAGGCACCCCCTATCACTCCCATCCATGCAAACCTAGGCAAGTCCCTGTCTCTGA
ATCTCAGCCACCACCACATACAATGCAAGTCGGAAGATGGGCAGGACTGGGGGTGGGGCAGGCAGAGGCCACCTC
TGTCAGGCTGGGGTTGCATGGGCTGGAGGCTGTCTTCCCATACCTGGGACATGACCTCCAAGGACCAGCTGTCAG
TCATGGTGATGGGCTGGCTGGGGTTGGCAGGGAGCTTGCTCTCCTTCTCGGAGGGCCGGAGCAGCGTGGGGCCAA
ACACCGTGCCAAGGTTGTGCAGGGACATCTTATTGACTGCCTCCTTCTCTGCCATCCTGTAGAGGACCGAAGCAG
AGGGTGCTGTTTCAACGCCACCACCAGGAGAGAGGCAGAGGGGCTGTGCCGTGCTAGAGTCCTCAGGGAGGGAGT
GACCTCGACCCTGGCTGTGCTGCAAGCTGACTCCAGCCTTGGGGTCAGCAGCACCCGGCAAACAGCAGCAGGAGG
AGCCGCTAGAGCAGCTGCTCATGGGCAGAGCTGCCCTCGGGCAACTCCTGCCACCACCCCCTCCCCAGGGAGCCC
AAGGCAGGGGAGGCTCAGCATGGAATGAAACAGGGGAGTGAGGGACACAAGGAGGTGGGAAGTGGGAGGGTCCCA
GCCCCACCAAGTACGCAGAGACCCCCTCGACATCCTGGACACCACAGGGGCACCTGCAGGCTGGGAGACCAGGTC
CTCTGTGCATGGGCCCGGGAGGCAGACCTGCCCTAAGGGTGATGCACAGGCTACAGGTGCTGCACGCTCCAGCGC
CCACTCTAGACATCAGCCTCCAGGTTGACTAAGGGTCAGGTCATGTTTGAAACCATGCTTGGCTGGACCAGGACC
CATGGCAAGAGCACCTGGGCACCAGTGTTTAGCCCTGGTCTGCAGGAAGGAGGACAGCAGACTTTAGGACCCCAC

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FIGURE 2885B

AGCACGGCAGTGCTGACCATTTCACCCACTTGGCCTCCTTGAGAAATATGGATGGGGAGCCCTCTGGGGATGGGC
AAGGCCTTCCAGGATAGGCTCAGTTTTGGTCCCCTGCTTTTTGAGGTTGGGTTAAAATTCCGACCATGGCAGAGG
AAGCACAGCTCGGGTTCCCACACCTCACTTTTCACAGCCTCTGAGGGCAGCAGTGCACGTGGAGGAGACGTCTCC
CATGAGGCCAAGGCCTCCAGTGCTCACCGATGCCCTCTGCGAAGTTGGGGTAGAACTCGTCAGTGAAGAGGGGCT
CGGGCAGCTCACGGAAGTACAGCTTCAGCATGCCTGCGATGGCGTTCACGTCCATCTCGCTCATCATCACTGACA
CGTCCTTGTTATCTGGAAAGAGCACGGAAATGCAGCGGCCTCCTTGAAGATCCTGATAAATGAAGAAAAGACACA
GAGAAGGATGTGACATGCCTGGGCCATGGAGCACTCTGAGATCTCATCGTGGACACCACTGCCCACACCTCCATC
CCGTCCTGCGCAGGCCGACACTCACTGACGTTGAAGCCTGCCTTCAGTGCCTGGATGTCTGCGGCCACCCCAGAC
ATGCGGTAGATGCCCACCTCCTCCATGCCTCGGCGCTCGATCTCCTCCACGCACTGACGCACGATGTAGGGCACC
TTGGACCTCTCTCTCCTGCGGGAGGAGGGAATGTTCTCAGTGTCCTAACAGCCCTGCTTGGGCCATAACACAGGA
GACCTGCTCCCTATCTGCGCACCCGGAGGTGGGGTGAGGACGGTGACGAAGGTACCCAGGTCTGGGGCTGCACAC
AGAGCCTTCTGCATGCCTGTCCTCCCTCTGCAAGCTCTGTCCTCATTGCATGTACTTTCTCAGGAACCTTTCAAG
CGGCCAGAACCCCTGCGAATCACACATGACCTTTGTGGGAAGGTCAGGAGGCCTGTCTAAGTCAAGTCAGCACGG
GAAGGGCATCTGACAGATTCCAGGCCTGGGGTTAGCAGCCTGTGCCCCCGGCTGGGAGGTCAGACCCGGTGTTGG
TCCTGCCACCCACGTGCTGTGTGAGAGGAGAATCCCTGACCCCTGCCCTGGGCCTTAACACACATCCGACGAATG
AATGAAGGGTTGCCTCAGCACCGGTGCTCCAAGTCCTGCGATGCTAAGTGCTTTTCTCCTCTGAGTCTTAGCAAT
GGACAATTCCAATACCTCCACACAGGACACTAGAGTAAGAATCCTTCACAGTTAGAACGCAGTGCTGTGCGGAGG
CCTTAACTTGAGTTCTGTTTTGCACCTGGATTTACCAGCACATCAAAGCTGCTTCGCAAGCCCCCTCATCAGCAG
GGCTTATGTGGGGGAGCTGCTGATGGAGTCCTCGCTGCTCATGCCCACAGCCCTCCCAGAGTGCTATGCGAGTGG
CTGCCGTGCAGTTGGGGGTGGGGCGTGGTGTTTAGACACAGATAGGAGTCCAGGGTATGACTGATGGAGGCCCCG
GCCCACGTGACCAGCAAGGTCAGAGGCCCAGCCAGATTCCATCCTGGGGAAGCAAATGAATTCTCAGAGGAAGTG
GTCTGTGTCTGTATGAACTGCTCTCAAACCAACAAATAGGCTTCTCTTGGCAACTGACTCGTGACAAAGGGTTCA
AGATTGTTTGAAAAAAAAAAAAAAAGGGGGGGAACAGGGAGGCAGTAGGTCCTGGAAAAGTAAATTCTTTATTTTA
CAATAAGAAAGTGATTACATATTTTATTTTTTTTACAATGGTGGAAAATTAGAAGTGATTGTGAAAATGATGTCT
ACCCGCCTTGCTGATGAGTAGGATGTGATTTGGCTCTTTAGGAAACTGAATTTGCAGAACTTAAGAATATTGATT
TATAAAGGGCATGGCCATTGACCCAGTCCATCTTATGCAAATCTGGATGCCATAAATAATATTTAAAAATGAAAG
TATTGGGGTGGAGGTTGCAGTGAGCGGAGATCGCCCCACTACACTCCAGCCTGGTCAACAGAGTGAGACTCTGTC
TCAAAACAAAAAAAAAAAAAAAAAAAAGGAAGAAGTCATTCCCAACATTGCTCATCAAATTATGACCATAAATTTC
CAGGATCAGACTAACGGCTAAAGAGACTGATGCATCAACACCAGGCAGAGAATAAAGCAGATTTTTTTTGTTTTG
TTTTGGAGAGCCTCTAGGAACTTGAAAAATACATATGCCACACTCTTAAGACCCGGTGGTTCTTAATCAGGGATG
TTCATTAAAATGCTGGAAAACTGTAAAGACTTCCAGGTCCCATCCAAGGAGATTTTGCTTCTGATTGACTGGCTA
GTGGCCTGGCCATTGGTATTTTGAAAAATCCCTCCAAGTGATTCTTTTACATCCCAGCTAGAAAACCCTAAATTA
AAGGTGAAAAACCAGACACCAAGTGGCATTTAAATAAATGTCAACTTTAACTCC

FIGURE 2886

CGGGAAGATGGCGGGCCGGGCGACTTGAGATCCGCGGGTCTCCCTGCTCCTTTTCCGTCTGCGTCGGGAGCTCCC
GGGCACGTGAGGCCGTGCCGCGTTTACTGGCGGGAGGGACGGCCTAGCCGGGCGACGCCTCGGAGGAGGCCGCGG
ACCCCTTAGGTGCTGGGCCCTTGGAAATCGGCGCGTGGGGGGCGGTGCTCGAGCTGAGCGCGAGAGGGCGGGAGA
GCTCGTGGGGTGCGAGGGGAGCAGGACGCCCGGCCGGGCAGCATGAGTCAGCAGCGGCCGGCGAGGAGATTACCC
AGTCTCCTCCTGCACCCGACGGAGGAGACCCCATCAACGTGGAGGGCCTGCTGCCATCAAAAATAAGGATTAATT
TAGAAGATAATGTACAATATGTGTCCATGAGAAATCTGCTCCCGGGGGTATTCTTGACTTAAACAAGGTTGCAAC
GAAACTGGGAGTCCGAAAGCGGAGAGTGTATGACATCACCGATGTCTTAGATGGAATCGACCTCGTTGAAAAGAA
ATCCAAGAACCATATTAGATGGATAGGATCTGATCTTAGCAATTTTGGAGCAGTTCCCCAACAAAAGAAGCTACA
GGAGGAACTTGCTGACTTACCAGCAATGGAAGATGCTTTGGATGAGTTAATTAAGGATTGTGCTCAGCAGCTGTT
TGAGTTAACAGATGACAAAGAAAATGAAAGACTAGCATATGTGACCTATCAAGACATTCATAGCATTCAGGCCTT
CCATGAACAGATCGTCATTGCAGTTAAAGCTCCAGCAGAAACCAGATTGGATGTTCCAGCTCCCAGAGAAGACTC
TATCACAGTGCACATAAGGAGCACCAACGGACCTATCGATGTCTATTTGTGAGAAGTGGAGCAGGGTCAGACCAG
TAACAAAAGGTCTGAAGGTGTCAGGACCTCTTCATCTGAGAGCACTCATCCAGAAGGCCCTGAGGAAGAAGAAAA
TCCTCAGCAAAGTGAAGAATTGCTTGAAGTAAGCAACTGATGGCATTTGAGAATTTATGTATCACTGAGTTTTTT
GGGAATATCTTCCTGGAGAATTACGCATCAAATTTGATTCTCAGAGCAATAAATTATCCATGAAGTGCTCTCGTT
CTCAGTAGCGGCATCATGGCCAGTAGTGTCTTTGAGGAGTTCACCACTTAGATTACTGAGTAATTGTGGTTTCCA
CATTTGAAAACAACTCCTTTTATAATTATTCACTGCTTTTTGTCAGTGAAATAGACATCTTGCCTCCTGAAGTAG
CTTCATCACAGAGTGTCATGAAGACAGACAGTCAGGCTGAAAAGGACAGTTCTTTGTGGACTCTACCCTTCCCTT
CAAGGAGTATGTCATATGTCACAAAAGAAATTGCCTTACACTGGTTCATGTTTGCAGTTACTGTTGTACATTGCA
TAGATGTACACACGAATTTAAATGTGATGTCTTTGTATATATCTGTATAATGTTGAGATTACTTACGAAATATGT
CTGAGTGACACTTTTCACTCTCGTACAGCCAAAATAATGTATATATGGAAAGTGACAGACAAATTCTCTAATCTC
TTTGGTATCTATAACTTATTAGAATCCTCTGGATGAGGGTTAGAAGAGACTTTTTCCAAACTTCTACATGTAGAA
GTATCATAAATGTGCTACACATTTATGTTTGTGGATTTAATTAAAGTATTTTAATATGGTTTTCAGTGCTAAAAT
TGGAGTCAGATACTTCTTGGTTTTAAGCTGTCTACCTAATTGCTGTCTCCCAGCAGATCGGTGGCATGCCCAGTG
GCTTTGGGGGCAAGGATAGAAATGTCATCAGGAAATAGCTGAATTCATTGTGAAAC**ATG**AATTCAGTCATGGTGA
TAATTGGAAACTCCTTTCAGGTTTTTGCAAGTAGATTTTGTAATGTTTGTGTATGCAGCCTTGCTGTTGAGTCAG
TCCAAGGGGTTTTACTTAGGACAAGTTGTACCTTGCCCTCTCTCCAGCTCTGCTCCCACATTTTCACATACCTAG
CTATTTCTACCTCATTGGGTAAGTCATTTACCACTCTGTGCCTCAGTTTACTCTGTAGTTTACCATTAGACTGTG
AGCTCCTTGAGGGACTTTGTCATAATCACTGTTACATCCCAGTGCCTCACACCATGCCTGGCCCT**TAA**GAAGTGC
TCAATAAATGTCTGAACAAAAAAAAAAACAAAAAAAA

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FIGURE 2887

GGTCCGG**ATG**GTGGTGGGAGCTGCTGGGGGCACGCAGATCACCACAGACACTGCACTGGTATGTGTCACCCCTTT
TCTCCCTGGCCCTGCCCACTCTGCACAGCCCCCAAGCCACCCTGATCACACTCCCATGCCCCAGGCCATCATCTA
CAACCTCTGGTTCGGCTATGACGTGAAGAGGGCCGTGGAGGAGCCCCGGCTGCACAACAAGCTTCTGCCCAACGT
CACGACAGTGGAGAGAAACATTGACCAGGCAGTGACTGCAGCCCTGGAGACCCGGCACCATCACACCCAGATCGC
GTCCACCTTCATCGCTGTGGTGCAAGCCATCGTCCGCACGGCTGGTGGCTGGGCAGCTGCCTCGGACTCCAGGAA
AGGCGGGGAACCTGCTGGCTAC**TGA**TTGCTCCAGGCAGACAAGGCTGACAAGCAATCCAGGGACAAGATACTCAC
CAGGATGAGGAAGAGGACTTTGGGGGACGGGCTTCCCCTGTGAGCAGCAGAGCAGCATAATAAATGAGGCCACTG
TGCCAGGCTCCAGGTGGCCTCCCTGGCCTGTC

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FIGURE 2888

TTCGTGGCCAACACCCCAGGCAAGGCTTGGGGCCCCCGTCTGCTGCTGGACGGTAAGTCCTGGCCCCGTGGCAGT
GAATCTGTGGGGCGCTCTGATTGTGGGCACTATGGAAGCTAAACCCCATGCTCCAGGTGGGGTGGAGGGTCTTCA
GAGGACTCCTGGACAGTGCCAGGCTCTAGGCTGGGGTGGGGGACGCAGGAGAAACCAGGCCAGGCCCATCCCTGC
TGGAGCTTCTCCCTAAGCAGTGGAGGCTCAGCCACTGTGAGGAGGTAGGCCAGGCCCTGCAGAAAGAGGGGTGTG
GAAATCTGGGGGCTCCCAGGAAGGGCCGCTGCTGGAGATGGGGTTCTTACCAGGATGGGCTCTGAAGATAAGCAG
GGAGGATTTGGGAGGGCAGAGATGAGGCCCAGAGCTTCTGGCAGAGGGCATGGCCTGCGCAAAGGTCTGGGGGCC
GGACAGCCTGCACGTATTCTGGGAAGCGGGAAGGAGACTCCGGCCTTGTGTTTCTGAGGCCCGACTTTAGACTGT
GCCCTGTTGGGGAGGGGCCAGGGCATGTCTGAGGCTGGGCCTGACCCTGCTCCTTACCCCGTGGGTGCAGCAGAG
CCATGAAGAAGAAGTTAGTGGTGCTGGGCCTGCTGGCCGTGGTCCTGGTGCTGGTCATTGTCGGCCTCTGTCTCT
GGCTGCCCTCGGCCTCCAAGGAACCTGACAACCATGTGTACACCAGGGCTGCCATGGCCGCGGATGCCAAGCAGT
GCTTGGAGATTGGGAGGAGGGCTGTCGGTGGCGGTGCCTGGGGAGATCCGAGGCTATGAGCTGGCACACCAGCGG
CATGGGCGGCTGCCCTGGGCTCGCCTCTTCCAGCCCAGCATCCAGCTGGCCCGCCAGGGCTTCCCTGTGGGCAAG
GGCTTGGCGGCAGTCCTGGAAAACAAGCGGACTGTCATCGAGCAGCAGCCTGTCTTGTGGTATGTCTGTGGGTGC
GGCCCCCTGACACAGGCAGGGCAGGCACAGCCCAAGGACCTTGCAGGCCGTAGCAGCAGTGGAGCGGCCCTCTGC
CTTCAGGACCCTGTGCTGATAATGGGATGAGGAGATACAGACCCTTCCCACCACGTGTGGGGACACATTCTGAGC
ATGGGGTCCCAGTGGCCACTGTGGCTGGCCACGTGTCCTGAGTGGCAAGGGACACTAGGAGGCTCCCGGAAGGGA
CACTAGGAGGATGAGCGCTGAGTGACAGGGCCACCCACCTGTGACAGGTGCTGCCCCTGCTTTGTGCTGGTCTCC
TGTGTGGGCAGGTGTGGGGGGTGGTCTAGCTGAGTCCACCCCACCTGCTGCCTCAC**ATG**AGCCCCCTCTGCCCCG
GTGAGGTGTTCTGCCGGGATAGAAAGGTGCTTCGGGAGGGGGAGAGACTGACCCTGCCGCGGCTGGCTGACACCT
ATGAGATGCTGGCCATCGAGGGTGCCCAGGCCTTCTACAACGGCAGCCTCATGGCCCAGATTGTGAAGGACATCC
AGGCGGCTGGTGAGTGGGTAACCTCAAGGACCTGGGTGAGGAACTCTGCAGTGGAAACCCTGAGCTGTAGCCCAG
AGCCATGGGGTCCTCCTGTCTTGCCTGAGCCTGCAGGAAGTTCCTGGTGGAGGAGGGTCAGTGACTGGCCATGTG
GGTCCACAGCTCCTGCTTATATCAAAACCAAGAGAGGCCACACAGTCCAGGAGAGCAAGTCCCTGTTGGGG**TAA**A
TGCAGGTGTAGGCAAGAGCCAGGGCTAGGGAAGCACTAGAATACAGCCTGAAGATCCAGGAGGACTTCTTGGAGG
AGGTGGCGGCTGGGCTGCAGATAACTTCGTTAGGCAGAGAGAGGAAGGGATTCCTAGCAGAGGAACAGCTGGGCT
AAGGCCCAGTAGAGGGCGCTTTGATTCACCAAGAGGGTTACAAGGGATGAGGGTCGCCTTGAGAGAGGCATGGGG
AAGGGGATTTGTGGGGCAGGGGCCTGGAGCTTGGCTGTGGCTTTCTTCAGGTAATTTTTGTCACTGTTTCATGGA
GGAGGGTGATTAGCGTGTCGACCTTTACCACTGAGGCTGGAAATTGGCATGCCAATACCCTGTCTGGAGCTGACT
CCAGGAGAATTAAGAGCCTCCCTCCCTCCCTCTATCCATTCATCGTGAGGAGAAGAGGCCAAGCAGCAGGGACAC
CGGCAGGAATTCTCCAGTTAGAAAAGGCCCTCTGAGCCAGGTGCGGTGGCTCACGTCTGTAATCCCAGCACTTTG
GGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTC
TACTAAAAATGCAAAATTAGTCAGGCATGGTGGGTTGTGCCTGTAATCCCAGCTACTTGGGAGGCTGTGGCAGGA
GAATCGCTAGAACCTGTGGGGCTGAGGTTGCAGTGAGCCGAGATTGCACCACTGCACTCCACAGAGTGAGACTCC
ATCTC

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FIGURE 2889

CGGGAAGATGGCGGGCCGGGCGACTTGAGATCCGCGGGTCTCCCTGCTCCTTTTCCGTCTGCGTCGGGAGCTCCC
GGGCACGTGAGGCCGTGCCGCGTTTACTGGCGGGAGGGACGGCCTAGCCGGGCGACGCCTCGGAGGAGGCCGCGG
ACCCCTTAGGTGCTGGGCCCTTGGAAATCGGCGCGTGGGGGGCGGTGCTCGAGCTGAGCGCGAGAGGGCGGGAGA
GCTCGTGGGGTGCGAGGGGAGCAGGACGCCCGGCCGGGCAGCATGAGTCAGCAGCGGCCGGCGAGGAGATTACCC
AGTCTCCTCCTGCACCCGACGGAGGAGACCCCATCAACGTGGAGGGCCTGCTGCCATCAAAAATAAGGATTAATT
TAGAAGATAATGTACAATATGTGTCCATGAGAAATCTGCTCCCGGGGGTATTCTTGACTTAAACAAGGTTGCAAC
GAAACTGGGAGTCCGAAAGCGGAGAGTGTATGACATCACCGATGTCTTAGATGGAATCGACCTCGTTGAAAAGAA
ATCCAAGAACCATATTAGATGGATAGGATCTGATCTTAGCAATTTTGGAGCAGTTCCCCAACAAAAGAAGCTACA
GGAGGAACTTTCTGACTTACCAGCAATGGAAGATGCTTTGGATGAGTTAATTAAGGATTGTGCTCAGCAGCTGTT
TGAGTTAACAGATGACAAAGAAAATGAAAGACTAGCATATGTGACCTATCAAGACATTCATAGCATTCAGGCCTT
CCATGAACAGATCGTCATTGCAGTTAAAGCTCCAGCAGAAACCAGATTGGATGTTCCAGCTCCCAGAGAAGACTC
TATCACAGTGCACATAAGGAGCACCAACGGACCTATCGATGTCTATTTGTGAGAAGTGGAGCAGGGTCAGACCAG
TAACAAAAGGTCTGAAGGTGTCAGGACCTCTTCATCTGAGAGCACTCATCCAGAAGGCCCTGAGGAAGAAGAAAA
TCCTCAGCAAAGTGAAGAATTGCTTGAAGTAAGCAACTGATGGCATTTGAGAATTTATGTATCACTGAGTTTTTT
GGGAATATCTTCCTGGAGAATTACGCATCAAATTTGATTCTCAGAGCAATAAATTATCCATGAAGTGCTCTCGTT
CTCAGTAGCGGCATCATGGCCAGTAGTGTCTTTGAGGAGTTCACCACTTAGATTACTGAGTAATTGTGGTTTCCA
CATTTGAAAACAACTCCTTTTATAATTATTCACTGCTTTTTGTCAGTGAAATAGACATCTTGCCTCCTGAAGTAG
CTTCATCACAGAGTGTCATGAAGACAGACAGTCAGGCTGAAAAGGACAGTTCTTTGTGGACTCTACCCTTCCCTT
CAAGGAGTATGTCATATGTCACAAAAGAAATTGCCTTACACTGGTTCATGTTTGCAGTTACTGTTGTACATTGCA
TAGATGTACACACGAATTTAAATGTGATGTCTTTGTATATATCTGTATAATGTTGAGATTACTTACGAAATATGT
CTGAGTGACACTTTTCACTCTCGTACAGCCAAAATAATGTATATATGGAAAGTGACAGACAAATTCTCTAATCTC
TTTGGTATCTATAACTTATTAGAATCCTCTGGATGAGGGTTAGAAGAGACTTTTTCCAAACTTCTACATGTAGAA
GTATCATAAATGTGCTACACATTTATGTTTGTGGATTTAATTAAAGTATTTTAATATGGTTTTCAGTGCTAAAAT
TGGAGTCAGATACTTCTTGGTTTTAAGCTGTCTACCTAATTGCTGTCTCCCAGCAGATCGGTGGCATGCCCAGTG
GCTTTGGGGGCAAGGATAGAAATGTCATCAGGAAATAGCTGAATTCATTGTGAAAC**ATG**AATTCAGTCATGGTGA
TAATTGGAAACTCCTTTCAGGTTTTTGCAAGTAGATTTTGTAATGTTTGTGTATGCAGCCTTGCTGTTGAGTCAG
TCCAAGGGGTTTTACTTAGGACAAGTTGTACCTTGCCCTCTCTCCAGCTCTGCTCCCACATTTTCACATACCTAG
CTATTTCTACCTCATTGGGTAAGTCATTTACCACTCTGTGCCTCAGTTTACTCTGTAGTTTACCATTAGACTGTG
AGCTCCCTGAGGGACTTTGTCATAATCACTGTTACATCCCAGTGCCTCACACCATGCCTGGCCCT**TAA**GAAGTGC
TCAATAAATGTCTGAACAAAAAAAAAAAAAAAAAAA

FIGURE 2890

GGGCTGAATGGTCGCTGAGACAGAGATGGAAGCCAGGACAAGGGAGCCCACCGGGCCCAGATAGAGACTTCAGAA
CCCACTCCTGAGAACAGCGGAGCCAGGCGCTTAGAGGAAGACCAAATGCTGCCAGGACACGGATTGTCCAGGGAT
TACATTCCAGCATCTTATTAGAGGACCGAAGCAGAGGGTGCTGTTTCAACGCCACCACCAGGAGAGAGGCAGAGG
GGCTGTGCCGTGCTAGAGTCCTCAGGGAGGGAGTGACCTCGACCCTGGCTGTGCTGCAAGCTGACTCCAGCCTTG
GGGTCAGCAGCACCCGGCGAACAGCAGCAGGAGGAGCCGCTAGAGCAGCTGCTCATGGGCAGAGCTGCCCTCGGG
CAACTCCTGCCACCACCCCCTCCCCAGGGAGCCCAAGGCAGGGGAGGCTCAGCATGGAATGAAACAGGGGAGTGA
GGGACACAAGGAGGTGGGAAGTGGGAGGGTCCCAGCCCCACCAAGTACGCAGAGACCCCCTCGACATCCTGGACA
CCACAGGGGCACCTGCAGGCTGGGAGACCAGGTCCTCTGTGCATGGGCCCGGGAGGCAGACCTGCCCTAAGGGTG
ATGCACAGGCTACAGGTGCTGCACGCTCCAGCGCCCACTCTAGACATCAGCCTCCAGGTTGACTAAGGGTCAGGT
CATGTTTGAAACCATGCTTGGCTGGACCAGGACCCATGGCAAGAGCACCTGGGCACCAGTGTTTAGCCCTGGTCT
GCAGGAAGGAGGACAGCAGACTTTAGGACCCCACAGCACGGCAGTGCTGACCATTTCACCCACTTGGCCTCCTTG
AGAAATATGGATGGGGAGCCCTCTGGGGATGGGCAAGGCCTTCCAGGATAGGCTCAGTTTTGGTCCCCTGCTTTT
TGAGGTTGGGTTAAAATTCCGACCATGGCAGAGGAAGCACAGCTCGGGTTCCCACACCTCACTTTTCACAGCCTC
TGAGGGCAGCAGTGCACGTGGAGGAGACGTCTCCCATGAGGCCAAGGCCTCCAGTGCTCACCGATGCCCTCTGCG
AAGTTGGGGTAGAACTCGTCAGTGAAGAGGGGCTCGGGCAGCTCACGGAAGTACAGCTTCAGCATGCCTGCGATG
GCGTTCACGTCCATCTCGCTCATCATCACTGACACGTCCTTGTTATCTGGAAAGAGCACGGAAATGCAGCGGCCT
CCTTGAAGATCCTGATAA**ATG**AAGAAAAGACACAGAGAAGGATGTGACATGCCTGGGCCATGGAGCACTCTGAGA
TCTCATCGGGGACACCACTGCCCACACCTCCATCCCGTCCTGCGCAGGCCGACACTCACTGACGTTGAAGCCTGC
CTTCAGTGCCTGGATGTCTGCGGCCACCCCAGACATGCGGTAGATGCCCACCTCCTCCATGCCTCGGCGCTCGAT
CTCCTCCATGCACTGGCGCACGATGTAGGGCACCTTGGACCTCTCTCTCCTGCGGGAGGAGGGAATGTTCTCAGT
GTCCTAACAGCCCTGCTTGGGCCA**TAA**CACAGGAGACCTGCTCCCTATCTGCGCACCCGGAGGTGGGGTGAGGAC
GGTGACGAAGGTACCCAGGTCTGGGGCTGCACACAGAGCCTTCTGCATGCCTGTCCTCCCTCTGCAAGCTCTGTC
CTCATTGCATGTACTTTCTCAGGAACCTTTCAAGCGGCCAGAACCCCTGCGAATCACACATGACCTTTGCGGGAA
GGTCAGGAGGCCTGTCTAAGTCAAGTCAGCACGGGAAGGGCATCTGACAGATTCCAGGCCTGGGGTTAGCAGCCT
GTGCCCCCGGCTGGGAGGTCAGACCCGGTGTTGGTCCTGCCACCCACGTGCTGTGTGAGAGGAGAAACCCTGACC
CCTGCCCTGGGCCTTAACACACATCCGACGAATGAATGAAGGGTTGCCTCAGCACCGGTGCTCCAAGTCCTGCGA
TGCTAAGTGCTTTTCTCCTCTGAGTCTTAGCAATGGACAATTCCAATACCTCCACACAGGACACTAGAGTAAGAA
TCCTTCACAGTTAGAACGCAGTGCTGTGCGGAGGCCTTAACTTGAGTTCTGTTTTGCACCTGGATTTACCAGCAC
ATCAAAGCTGCTTCGCAAGCCCCCTCATCAGCAGGGCTTATGTGGGGGAGCTGCTGATGGAGTCCTCGCTGCTCA
TGCCCACAGCCCTCCCAGAGTGCTATGCGAGTGGCTGCCGTGCAGTTGGGGGTGGGGCGTGTGTTTAGACACAGA
TAGGAGTCCAGGGTATGACTGATGGAGGCCCCGGCCCACGTGACCAGCAAGGTCAGAGGCCCAGCCAGATTCCAT
CCTGGGGAAGCAAATGAATTCTCAGAGGAAGTGGTCTGTGTCTGCATGAACTGCTCTCAAACCAACAAATAGGCT
TCTCTTGGCAACTGACTCGTGACAAAGGGTTCAAGATTGTTTGAAAAAAAAAAAAAGGGGGGGGGGAACAGGGAGG
CAGTAGGTCCTGGAAAAGTAAATTCTTTATTTTACAATAAGAAAGTGATTACATATTTTATTTTTTTACAATGG
TGGAAAATTAGAAGTGATTGTGAAAATGATGTCTACCCGCCTTGCTGATGAGTAGGATGTGATTTGGCTCTTTAG
GAAACTGAATTTGCAGAACTTAAGAATATTGATTTATAAAGGGCATGGCCATTGACCCAGTCCATCTTATGCAAA
TCTGGATGCCATAAATAATATTTAAAAATGAAAGTATTGGGGTGGAGGTTGCAGTGAGCGGAGATCGCCCCACTA
CACTCCAGCCTGGTCAACAGAGTGAGACTCTGTCTCA

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FIGURE 2891

GAACCCAGGAGGCAGAGGTTGCAGTGAGCCAAGATCGTGCCACTGCACTCCAGCCTGGCGACAGAGCGAGACTCC
ATTTAAAAAAAAAAACACCAGGGCATCTGTAAGCCACTTTGGGAGTCAAAAGAATGTAGAGCTGGGCTGGACTCC
TTAGAAGAAAGTTAAGTTCTGAGTGTGGGAGGAAGTGCCTGCACCCCCACATCCAGACAGCCCGTCACTCCTGCT
GCCGAAGACTGACTTGCTGATTCGGGCTCTGCCTCCATAGTGGGGGCACAGAGCCAGGGAGAGTGCCCACAGGCC
CAGGGATCCTGGGTGTGGGACCAGGGAGAATGCCCACAGGCCCCAGGGCCTTTTTGAGCCCAGGGCGCTCTCTGC
ACAGGCCCGCTACAACTTCATCCGAAGCATGGCCGCCTACAGCCTCCTGCTGTTCCTGCTGCAGATCAAGGACAG
ACACAACGGCAACATTATGCTGGACAAGAAGGGCCATATCATCCACATCGGTCAGCCAGCCACAGCGCCACCCTC
CTCTCCCTTCACCCCGGCACCCAGGGGTGGATAGGGATCCCCACCCCACAGAGAGGAGAATGCCCAGGACCACCC
TGCCAGGAGTGTCAGGGTCCAGCTCTGAGGTCCGAACTGTCGGCCACCAAGCTGTTCTGCTGTAGAGGGTGCCTG
GCCCCGGCCCCAGGGAGCTGGGGCGAGAGCCGCCATTGCTCTGAGTCAGAAGCTGGAGCTGGGCGGAGTGGGGCT
GGTCCAGGTTCAGTGCCCCAGCTTGGCTCCTTCCTCCACTTCCTCCCTTCTCTTTCTCTGCCTGCTGCCCCACCA
CCCACCCCATCACTGTCTCCAAGAAAACACAACCTGCCTTTTGGGGGTGGAGGGGGTGCTCCTGTTGAAGAGTCC
TTTTCCACTCCTCAAAACAGACCACTCGTCCTTGCCCGCCCTGGCTCCTACCCAGTCACAGGCAGCTCTTTGGGG
TTTTGCAGACTTTGGCTTCATGTTTGAAAGCTCGCCGGGCGGCAATCTCGGCTGGGAACCCGACATCAAGCTGAC
GGATGAGATGGTGATGATCATGGGGGGCAAGATGGAGGCCACACCCTTCAAGTGGTTCATGGAGATGTGTGTCCA
GGCTACCTGGCTGTGCGGTGAGCCTGGGTGAGGGCCAGGGTGGAGGCGGAGGGGGTGTGTGGAACGTTCTGAGAT
CCCCTTTAGGATGAAGGGAATCGGGTTCCAGAGAGTGAGGTAGGTGCTAGCAGCCACCTGCTGACCTACACCTGT
CCTTTGGTCACCTCTGTCTGCCCACCTGTGCCAATAAATTCTTGCTCTGGGCATCTAATTCCAACCACCTTCCCC
ACAATCCTGCCCACGCCTTCAGCC**ATG**GGCTCTCCCTTTCTGGGCATCCCATCCACCTTGTCACCAAAGCCTGAG
CACCTGCCACCCCACAGGCTACGTGCCAAAGATGGGCTTTGTCCCAGTTTCATATACAGGTCACTTGGCCAAGGC
CACAGTCCAACCTGGGTTCATCCCCACTGCCCCGCAGAGAAAGGCAGGTCAGCGTGTCTGCATCCCACCCAGGTG
CAGAAGCCATGGCCGGCAGCCTTATGTGGGGGACAGGGCAGGACACTCAGCCTGTCCAGAGTGCGTATGGGCAGC
CCTTGCCTGGGCAGTACGGGTGACCGAGTGCAGCAGATCGAAAGTTGCCTCGGGGATGTGCAAGATGTGGCAGGC
GAGGTGGGTGGCAGGAGCCCACACCTGAGGCTGTTGGCATCAGCCAGTCCACAGGACTACAGGCAGGGCCACCAC
CTAGGCTGGCCTCAGCCCACCGCTCCCTCCTGTCTCTCCCCAGGCCCTACATGGATGTGGTCGTCTCCCTGGTCA
CTATCATGTTGGACACGGGCCTGCCCTGTTTTCGCGGCCAGACAATCAAGCTCT**TGA**AGTTTAGCCCCAACATGA
CTGAGCGCGAGGCTGCAAATTTCATCATGAAGGTCATCCAGAGCTGCTTCCTCAGCAACAGGAGCCGGACCTACA
ACATGATCCAGTACTATCAGAATGACATCCCCTACTGAGGAGGGGACCTTCGAGGGCCTCTGCCCCATGTGCCCT
TGAAGCTGCCCCACAATCATGGAGCCCTGCGACCTACCCGCCCTGCCGCCACATGCAGTGGAGGAGAGGCCTGTG
GCCCGAAGAGCCTGGTAGCGCCTCCTGGGGCAGCACGTGGGTGGCGCAGGCTTAGTAACGCCGTGGACTGCAGCG
ACAATCAGTGGATGGTGCTGTCTATGCACAGGTGTGAGTCCTCTGTTTGCACTGGACATATTCCCTACCTGTTTT
ATTTCATAGGTACATGAAGTATTGTGTATAAAAAAAGAGATAAGATTTAACCAACATCAACAAAATAAAAACCCA
AAATAGTG

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FIGURE 2892

GAGCTTGAAGAAATCCGCAAATGTGGGATGAAAAACTTCCGTAACATCCAGGTTGATGAAGCTAATTTATTGACT
TGGCAAGGGCTTATTGTTCCTGACAACCCTCCATATGATAAGGGAGCCTTCAGAATCGAAATCAACTTTCCAGCA
GAGTACCCATTCAAACCACCGAAGATCACATTTAAAACAAAGATCTATCACCCAAACATCGACGAAAAGGGGCAG
GTCTGTCTGCCAGTAATTAGTGCCGAAAACTGGAAGCCAGCAACCAAAACCGACCAAGTAATCCAGTCCCTCATA
GCACTGGTGAATGACCCCCAGCCTGAGCACCCGCTTCGGGCTGACCTAGCTGAAGAATACTCTAAGGACCGTAAA
AAATTCTGTAAGAATGCTGAAGAGTTTACAAAGAAATATGGGGAAAAGCGACCTGTGGACTAAAATCTGCCACGA
TTGGTTCCAGCAAGTGTGAGCAGAGACCCCGTGCAGTGCATTCAGACACCCCGCAAAGCAGGACTCTGTGGAAAT
TGACACGTGCCACCGCCTGGCGTTCGCTTGTGGCAGTTACTAACTTTCTACAGTTTTCTTAATCAAAAGTGGTCT
AGGTAACCTGTAAAGAAAGGATTAAAAATTTAAGATGTTCTAGTTCTGCTCTCTTTGTTTTAAAAATCACTGCTT
CAATCTACTTCAAAAGAATGGTGTTTCTTTTCTTGTCCAATTTTATCCAAAATCTTCAAGTTACATTTAACCCAT
AAGGTTTAAAAAAAAGGAAAAAAAACGGTTGTGGTTCCCTTTCTTCCCTACCCTTGCCACTCCCACTTTCTGGCA
CCGAGTTTATTTTTCACTTACTTACTTCCCCAGACCCCGGGCTCGCCTCCACAAAGGAGAAAAGACTGCCCTGGC
GGTCCTGGTGGCTTTTCTTAGCATGTGTGGCACTGTTGCCCAGTGTGGGAGTTGGTTTAAATTCTCCTGACTCCA
GTTTATAACATCCTTTTAAAAAATTTAAAAACAAACAGCCACACCCCTCCTCCAGTCCTTCTCCTCAGTTCTTGT
GTGAAACTCCAGCTGATGTTACCACAGTAACATCAGTTAATTGGGCAAGCCCTGATGTCAGTGTGTGTAACTGAC
CTCTGGCCTGGCCTGCACAGAGAAGCCCTATAATCACAGGTCTGTGGTGGCCCCGAAATGGGGGGCCTGCTAGTC
AGGAGGATGCTGTGCACACTGTGTGTGATGAATCTCGCCAGAAAGGCTCCTGAGGTCCCAGGTTGGCACTTCTCC
CTGCAGCCATTGTAGAAGATCTGCTGGTCCTTGCAGGCAAAGCTACAGCCAGAATGTCCGTTTGAAACTCCTAGC
TCATCTGTCACCGAGCTTCATCCGAATGTGCCACGGAGCTTGCTCTCCACTTCCTCCGTGCAGTGGCCCTGCCAC
AGCCCTCCCTCGGCACACTTTGACCCTTTGTAGGATTGGAATTAGCAGGACTCGGCTATTTAAAGCACCAGTCTG
GGGTCGCCTGGGCCCCTGCTGACCCCCTCCTCCAGAGCAGCCAGCCCAGCCCGGGAACAAGACGGACTTCCTCTC
CCTTCGGACTCACAGCCTTTGCAGAGTCAAGCTCCACTTGAAGCTCACTCAGTAATATCCTTTCAATGTGTTTTA
TATTGTTTTGACTGCCTTTTTTTGTAGAAATAAAAATTGACCTTAGAATTTATCGTCAGATAAACTTGTAAAGAT
TTGAATATTAATGTCTTTTCAAGGCAAATGGGATTGTCCCCGCACTAGTAGAGAATCCATGTCGCTCTGACACCC
CAAGGAAGCCGACGATCCAAATGCCGTGTGTCACCAACCCCGCTTCTGCCACTGGCGGCTTCCCTTCTTGGCTCT
TGGGGGGGACTAGATCCTGTGGAGAAGATGACTTAAACTTTGCTTTTTGTTTTAATTTTAATTCTATAACTTGAG
ATCTTTCCGGGGCCTACAGGCGTGTAAGACAGCTTGGTCTGGTCTGTGCAGAAGTGGGGAGTGATGGGCAGGTTC
GGCAGCCTAACATTGTTCAGGCGCATGGCCCCTGCGGTGTGTACACGAACTCGGCTTCTTTTGTCCTAGGTACGC
CAAGGGCAGGTTTCTGGAGACTCCCTTGTGCCCGGGATGGCAAGGGCACCGGGCTGGCGTTTCCACATCTGTCTT
CATTAGCAGAAAAGTGATGATGGATTTTATTTCACTCACACTCCAGTTTGTAATAAAA**ATG**CCAAATTCTGTCAGC
TATCCAAACAAGCCACCATTTGTTCTTGTTGCTTCTCTGGATCCAGAAATGTTGCCATTCTTGGAAACTGTCCCA
TTGCTTCGTATTTCTGCCAACGTAGCTCTGCCTGCCTGTCAACCCCTCACTGCACTCTGCTCATCACGGGAGGAT
ACCTGTGTGCCGGCAGCCCCTCAGGGACTCTCAGCCCTGGCACTGGCACCCCAGGGTTGGCCCCGTCAGCAGAGG
CTTGGCTTTCGAGCCAGTGGGTGTCTCTCCTTTGGGCCTGGGCGGCTTGCTCCTGCCAGCCATGCCTTCAGGGTA
GGCTCTGAGCAAGCTGGCGAACAGCCCTGGCTGCTCCAAAACCAAAAAGCTGGGTCCTCTGGAGGAGGGGCGAGC
TGTGGAGCAGCCACCCACTGCTGCCCCAAGCTCACTCAGGAATTCACACCCGCCTGGTTTCTTGAAGTGTGCTGG
GTCCTTCCCTCTGCTCCCTACTCCCCACCACGGCAGAGAATAGGCTTTCTAAGATGCTGCGATCCCGTTCTGCTG
CCCGTAATAAAAATGCTCTCAGACACTG

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FIGURE 2893

GGGCTGTCCGGCCCACTCCCCTGGGAGCGCGAGCGGTGGACCCAGGCGGCCATGTCCCGCCCTCGCATGCGCCTG
GTGGTCACCGCGGACGACTTTGGTTACTGCCCGCGACGCGATGAGGGTATCGTGGAGGCCTTTCTGGCCGGGGCT
GTGACCAGCGTGTCCCTGCTGGTCAACGGTGCGGCCACGGAGAGCGCGGCGGAGCTGGCCCGCAGGCACAGCATC
CCCACGGGCCTCCACGCCAACCTGTCCGAGGGCCGCCCCGTGGGTCCGGCCCGCCGTGGCGCCTCATCGCTGCTC
GGCCCGGAAGGCTTCTTCCTTGGCAAGATGGGATTCCGGGAGGCGGTGGCGGCCGGAGACGTGGATTTGCCTCAG
GTGCGGAGCCGCAGCTACAGGAGGATGCTCGCGAGGACCCCCAGAGCTCCGCCCGGAGGGTACTGTGAGGCCGTT
AGGAGCTGGCGGTGGATGACTTCCGCATTCAAACACTGGAGCCATCACACGGAAGCACGAGGAGGGTATCCTCGG
CAGCTACTCCCGGTCGCTCAAGGTGTCTCTCGCTCGCCCTCTAGGTGCGGGAGGAGCTCGAGGCCCAACTAAGCT
GCTTCCGGGAGCTGCTGGGCAGGGCCCCCACGCACGCGGACGGGCACCAGCACGTGCACGTGCTCCCAGGTGGAC
AGACGCCTTCGTGGGCCTGAGCACTTGCGGCCGGCACATGTCCGCTCACCGCGTGTCCGGGGCCCTGGCGCGGGT
CCTGGAAGGTACCCTAGCGGGCCACACCCTGACAGCCGAGCTGATGGCGCACCCCGGCTACCCCAGTGTGCCTCC
CACCGGCGGCTGCGGTGAAGGCCCCGACGCTTTCTCTTGCTCTTGGGAGCGGCTGCATGAGCTGCGCGTCCTCAC
CGCGCCCACGCTGCGGGCCCAGCTTGCCCAGGATGGCGTGCAGCTTTGCGCCCTCGACGACCTGGACTCCAAGAG
GCCAGGGGAGGAGGTCCCCTGTGAGCCCACTCTGGAACCCTTCCTGGAACCCTCCCTACTCTGACCCCCTACAGA
CAACCAAGCACTAATCCCCTTAGTACCAAGAAAGGGGAGCCAGGATTTAGTCCTGGCCCAGCCCAGAGCTGGGAC
CTGGAGCACGATCTGTTGACTTCCCTGGGTAGGACACTGCCACCTCTGGGCTCAGGTCCTCATGCCTCCAAATGG
CATCTAGAGTTTGAGCAGCCTTCTTGGCTGCAGGCAGGCCTAGCCTGTGGCAGCGGGCTAGGGCCCGCAGAGCAT
TTGGTGCCCCTCCATGTTGCAATGCAAACACCTTCACCACTGGGGCAGTGGGGAGAGATGGCTATATTAATAAAA
TAACGTGTGTCTTTC

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FIGURE 2894

GCTGGAGCCGGGCCGGGGCG**ATG**TGGAGCGCGGGCCGCGGCGGGGCTGCCTGGCCGGTGCTGTTGGGGCTGCTGC
TGGCGCTGTTAGTGCCGGGCGGTGGTGCCGCCAAGACCGGTGCGGAGCTCGTGACCTGCGGGTCGGTGCTGAAGC
TGCTCAATACGCACCACCGCGTGCGGCTGCACTCGCACGACATCAAATACGGATCCGGCAGCGGCCAGCAATCGG
TGACCGGCGTAGAGGCGTCGGACGACGCCAATAGCTACTGGCGGATCCGCGGCGGCTCGGAGGGCGGGTGCCCGC
GCGGGTCCCCGGTGCGCTGCGGGCAGGCGGTGAGGCTCACGCATGTGCTTACGGGCAAGAACCTGCACACGCACC
ACTTCCCGTCGCCGCTGTCCAACAACCAGGAGGTGAGTGCCTTTGGGGAAGACGGCGAGGGCGACGACCTGGACC
TATGGACAGTGCGCTGCTCTGGACAGCACTGGGAGCGTGAGGCTGCTGTGCGCTTCCAGCATGTGGGCACCTCTG
TGTTCCTGTCAGTCACGGGTGAGCAGTATGGAAGCCCCATCCGTGGGCAGCATGAGGTCCACGGCATGCCCAGTG
CCAACACGCACAATACGTGGAAGGCCATGGAAGGCATCTTCATCAAGCCTAGTGTGGAGCCCTCTGCAGGTCACG
ATGAACTC**TGA**GTGTGTGGATGGATGGGTGGATGGAGGGTGGCAGGTGGGGCGTCTGCAGGGCCACTCTTGGCAG
AGACTTTGGGTTTGTAGGGGTCCTCAAGTGCCTTTGTGATTAAAGAATGTTGGTCTATGA

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FIGURE 2895

GAACTCGGCTGCGGCTCCATGGTCTGAGTTGTCAGCCGTTGTTTTTTCGTGCTCGCTAGTCGCCGCCGCCGCTCC
GCCATGGGGAAGCGACAGCACCAAAAGGACAAAATGTACATTACCTGTGCTGAATACACTCACTTTTATGGTGGC
AAGAAGCCAGATCTCCCACAAACAAATTTTCGTCGTTTACCTTTTGACCACTGCAGTCTCTCTCTGCAGCCCTTT
GTCTACCCAGTCTGCACTCCCGATGGCATCGTCTTTGACTTACTGAACATTGTTCCATGGCTTAAGAAGTACGGG
ACCAACCCCAGCAATGGAGAGAAGCTGGACGGGAGGTCCCTGATCAAGCTGAACTTTTCCAAGAACAGTGAGGGG
AAGTACCACTGCCCAGTGCTGTTTACCGTGTTCACCAACAACACCCACATCGTGGCTGTGAGGACGACCGGCAAC
GTCTACGCCTATGAGGCAGTGGAACAGCTAAATATCAAGGCCAAGAACTTCCGGGACCTGCTGACCGACGAGCCC
TTCTCCCGGCAGGACATCATCACCCTCCAGGACCCCACCAATTTGGACAAGTTCAATGTCTCTAACTTCTATCAT
GTGAAGAATAACATGAAAATAATAGACCCAGATGAAGAGAAGGCCAAACAGGACCCGTCTTATTATCTGAAAAAT
ACAAATGCCGAGACCCGAGAGACCCTGCAGGAGCTCTACAAGGAGTTCAAAGGGGACGAGATTCTGGCAGCCACC
ATGAAGGCCCCGGAGAAGAAGAAAGTGGACAAGCTGAACGCTGCCCACTATTCCACAGGGAAGGTCAGCGCTTCC
TTCACCTCCACCGCGATGGTCCCGGAGACCACACATGAAGCAGCTGCCATCGACGAGGATGTGCTGCGCTACCAG
TTTGTGAAGAAGAAGGGCTACGTGCGGCTGCACACCAACAAGGGCGACCTCAACCTGGAGCTGCACTGCGACCTG
ACACCAAAAACCTGCGAAAACTTCATCAGGCTTTGCAAGAAGCATTATTACGATGGCACCATCTTCCACAGATCC
ATCCGGAACTTTGTGATCCAAGGGGGCGACCCCACAGGCACAGGCACGGGTGGGGAGTCATACTGGGGGAAGCCC
TTCAAAGACGAGTTCCGGCCCAACCTCTCGCACACGGGCCGCGGCATCCTCAGCATGGCCAACTCCGGGCCCAAC
AGCAACAGGTCTCAATTCTTCATCACGTTTCGCTCCTGTGCCTACCTGGACAAGAAGCATACCATCTTTGGACGG
GTTGTTGGGGGCTTTGACGTACTGACAGCCATGGAGAATGTGGAGAGTGACCCCAAAACTGACCGCCCTAAGGAG
GAGATCCGCATTGATGCCACTACAGTGTTCGTGGACCCCTATGAGGAGGCCGATGCCCAGATTGCGCAGGAGCGG
AAGACACAGCTCAAGGTAGCCCCGGAGACCAAAGTGAAGAGCAGCCAGCCCCAGGCAGGGAGCCAGGGCCCCCAG
ACCTTCCGCCAGGGCGTGGGCAAGTACATCAACCCAGCAGCCACGAAGCGAGCAGCAGAGGAAGAGCCCTCAACC
AGTGCCACTGTCCCCATGTCCAAGAAGAAGCCCAGTCGGGGTTTTGGGGACTTCAGCTCCTGGTAGCAGCAGGTT
GGCCGCTGTGGACCTTGGTGGGGTTGCAGGGCTGGGGGCCCATGTCCACATCTCCATTTCCAGCCTTTCTAGCCT
GCCCTCTGCTGCCAGCCAATAAATTGCTTGCCTGCTGCCTGCATCCCCTTTCCTGGCCCCTGGGAGCCCACAGCC
TTCCCATCCCTTAACCTGTTGCCAAGGGCCTTGGCCCTGTTTCCAGGACCTGGCCCAGCCAGAGCCCACTGCTGG
GACCTTCAAGCACAAGGCCTGCCCTACACCCAGGCTGGTGCCTCAGGCCTCCCCTCTAGTAGGCAGGCCAGGTTA
GTGAGGAAGGACTGTGTCTCCAGATTGTGGTTTCCTCTTTAAGACAGGGTCTTGCTCTGTTGCCCAGGCTCCAGT
GCAGTGGTGTGATCATGGCTCACTGCAGCCTCGACCTCCTGGGCTCAAGCAATCCTCCTGCCTCAGCCTCGCAAG
TAGCTGGGACTACAGCCGTGCACCACTACATCCAGCTGTATATGTCTGGTTTTCTTACCCCTACTTCTGTCATCT
TCTCAGGGACAGCCTATTTATACAACCAGTGTGGTCCCCTGACCAACGCCATTACCTGGGACAAGTTTTCAGACC
CCAGACTTACTGAGCCTAAGCCTCTGCAGGGTGGGCTTCTCGGTCTGTTTTGACAAAACTTCAGGGGCTTCTGAA
GGCTGGTGTTGGACGGCAGCATTGAGTTTCCTGCCGTGCCCTGCCTGAGCTCTCAGGGCCCTGCTCACCTGCTCT
GGCTGTGAACCACCTGGGCTTCATCTCAAGCCTGCCTGGCGTCTCTGTGCCCCTGTGAGAATCTTGAGGGGACCC
ACACTGGGTTGAGGCCAGTGTCTCCTGCTGTGAGAACAAGTGGATGTCCCTCTCCCCGCCCTCCTGCTGAAGTGG
CCTTGCTGCTCTCAGGCCCGGCCA

FIGURE 2896

TAAATTTGCAGAACTTCAAATTGGCTATTCCTCTTGCAAATGAACCCTTAAAGTACAGTGTTATTTAAGAATCTT
CCAGAGGCAGTCAACAGACTTATACACTAAGGGCATTTTTGGTTTTTAGCTTGTTCAAAAACAGAGGCCAGCACA
GATGACATTTTAGATACACTCTAAATTGAGAATGGTGTCTAGTGGAACATGTTTATTTAAGCCAGTAGATTCCTT
ATCTAGAAAGCAGGTGAGCTAGCCCTTAGAGAAGGCTGTCCCGGGGCCCGCAGAGGTGCCCTTACTGAGGTGACA
GCCTCACAGGGTCTGGTACCAGGGGTTGTGCCCTCAGCAGTGACAGCAGCTTAGGTGTCAGGCAGTTGCTGAGTG
GCTGGTCCATGTCTATAGAGTAACACACTGGACCGAGGAAAAGTCAGATTTCATTTTCTACCCTGGATGTACTTG
AAGAAAAAGAATTATTTTTGCATATGAAAGAGGCCAGAACCCACAGGAAAAACTTCAAAACTTGACATTTGCCAG
AATGTTTAAAATTTGTTCAGAAAAGGTTAAAGCAACAAGTTTAGCCTTTGTGCATGAAGACGCCTGGCCTGCTAG
ACGCGTTGCCCGTCCCTGCGTGGTGCTGTCCCATGTCACTTGAACTGATAGAGGGGCCTGTGCAATCTCCTAAGG
CCTGTGTTTCTGCCATATATTTTATTATAAATTACAATCCACTCATCCACCTGCCCTCCACCAGGAGTGGGCACC
CCATAAGGGTTTAGGCCACTTTGCAGAGGATGGAGGTCAAAAACCACTCCCAGATAAGTTTGGTTTTCAACATTT
AGTAACTTGTCTCAGGGCAGAGGGCAGGCAGGGGGACCGAGGGGCAGCAGATAGGAGAGCACTGAGCCCGGATAG
TTCTCAGCCTGGCAAGTGGCTCTGAAGCTGCCTTCAGACAAGGCTAGTCTAGGGGCAAGAGTGCGAGCTGGCTGA
CAATAAGAACGTGGCCACCTGCCCAGCTTCACACCTCCCCCGACTTCAGCCCTTCCTAAACCCAGACCTGCGGTC
CAGGCAGGCACTGGGCTGTGCCCACTCGAGCTCACTGCCCACACACAGCATGCCTTTGGGTGCCATCTCTTTGCC
CAAGCCTGGAAGCCTTGGCAGGTGGGAAATGCCGCTGCCCTGGTGGGC**ATG**GCACTGAGATGCATCCACTCAGCA
GGAGTGACAGAGGCAGAAGTTCCTTTAAAGCACATCTTCCACTTAGGAAAGGAAGGAAATCTTTGTACTGTCTTG
GAAGCCTCCACATCCGGCTATGGCCCTGCAAGCTGCTTTATCCCTGCGCTAGTCTCCCCCGAGGGTTTAGGCTGG
CCCAGCACATCCTGTCCTCCTGAGCTCGCGTGCAGCCACCCAGAGCGCAGGGGTCACTGCACGCTGCAGGGCTCT
TGCTGCCATGGTCTCAAGCCTGAAGAGGCTCCGCCCACAAGCTGGCCCATGAAGTTAGCAATGCCTGTGGCTTCA
GTCAATTGTCTTGAGACTGTGAAGAGGCTGAAAGACACCTTCCCGGGTGGAAGAAGGAGTTCACTGAAAACTTAT
CTTAAACTGACCCTTCCCTTTGAG**TGA**GTCTTCATTCCTCTCCCATGTGGGAACCCAGCCTCCGATGCCCCGGGG
ACTAGGGGAAACAGTTGGAGGTTCGTGCCGTCCCCAGCCTGCCACGGGTGCGAGGACAGCCAAGTCCTGAGTGAC
TCAAGATGCTTCACTTACATGGAAGAAACTTCTAAAACTCTACCGAGTGGTTTTTGTATATACTAAAGTTCTATT
TAGAGCTTTTCTGTTTTGGGCAAGTTCGCTGCTCCTTCTATTTGGGCACTTTGGTTTTTGTACTGTCTTTTGTGA
CGGCATTGATTGAACATTTTTTACTAGTAGTCTTATGACTTTTGTATTTTTTTTTTTTTTTGTAATTTATACCAA
CAACACTTTTATCACTTTTTTTTTGTTGGGCTTCTGCAAAATACAAGCTCATTTTTAAACCAAATGAACAGACCA
TGAGCTGGCTTCAGGGGAAGTGCTATTCACAGGACCATATCCACCACCCTCTTAAATTCCTAAACAATATCATCT
AGGACTTCTATTTAAGTTATTTAAAATAAATCTTCCTTGAGAGCCTTGGGAGGTGATGTCAGGGTTATAAATGGC
ACAGTGCATTTGCTGTAGGAATGTGGTTTGGCATTGTTTTATACACACAGTATTTTTTATACCTTAATGCTTATT
CTTGATGGCATCTGTCAGATATTAGAATTGAAAATAAGAATCTTCCCAAAATCCTTTAATTTACCTGATGCCCTC
ATCAGGTCGTTAAAAATTCAAATGGTTTTAATAGCTAAAAAACTACAAATTAAGCTCTAAAACAAACAAACTACA
GAAATGTAAACCTTCATTTGCCAAAGGTCCTTGGTGGCCTGTCCCCTGCCCTGGGAGCAGATGGCCCTGAAGCCC
TTCCCTCACTGTGCAGGCCACCGGGTGAGGCTGGACGGTCACCCATGGTGGCTTCACTGCAAGGAGCAGGACTGC
CGAGCTCAAGCACGGGGCCTTCAGCTTCCCCTGTCCTCTGGCCACACCGCCAGCCCTTGGTCCTTATCTGTGTGA
GGTTTACAAATAAAGCTTCTGATGTCAAATGTT

FIGURE 2897A

CTGTTTTCTCTTTATTTGCTTATATGTTAATATGGTTTTTAAATTGGTAACTTTTATATAGTATGGTAACAGTAT
GTTAATACACACATACATACGCACACATGCTTTGGGTCCTTCCATAATACTTTTATATTTGTAAATCAATGTTTT
GGAGCAATCCCAAGTTTAAGGGAAATATTTTTGTAAATGTAATGGTTTTGAAAATCTGAGCAATCCTTTTGCTTA
TACATTTTTAAAGCATTTGTGCTTTAAAATTGTTATGCTGGTGTTTGAAACATGATACTCCTGTGGTGCAGATGA
GAAGCTATAACAGTGAATATGTGGTTTCTCTTACGTCATCCACCTTGACATGATGGGTCAGAAACAAATGGAAAT
CCAGAGCAAGTCCTCCAGGGTTGCACCAGGTTTACCTAAAGCTTGTTGCCTTTTCTTGTGCTGTTTATGCGTGTA
GAGCACTCAAGAAAGTTCTGAAACTGCTTTGTATCTGCTTTGTACTGTTGGTGCCTTCTTGGTATTGTACCCCAA
AATTCTGCATAGATTATTTAGTATAATGGTAAGTTAAAAAATGTTAAAGGAAGATTTTATTAAGAATCTGAATGT
TTATTCATTATATTGTTACAATTTAACATTAACATTTATTTGTGGTATTTGTGATTTGGTTAATCTGTATAAAAA
TTGTAAGTAGAAAGGTTTATATTTCATCTTAATTCTTTTGATGTTGTAAACGTACTTTTTAAAAGATGGATTATT
TGAATGTTTATGGCACCTGACTTGTAAAAAAAAAAAACTACAAAAAAATCCTTAGAATCATTAAATTGTGTCCCT
GTATTACCAAAATAACACAGCACCGTGCATGTATAGTTTAATTGCAGTTTCATCTGTGAAAACGTGAAATTGTCT
AGTCCTTCGTTATGTTCCCCAGATGTCTTCCAGATTTGCTCTGCATGTGGTAACTTGTGTTAGGGCTGTGAGCTG
TTCCTCGAGTTGA**ATG**GGGATGTCAGTGCTCCTAGGGTTCTCCAGGTGGTTCTTCAGACCTTCACCTGTGGGGGG
GGGGGTAGGCGGTGCCCACGCCCATCTCCTCATCCTCCTGAACTTCTGCAACCCCACTGCTGGGCAGACATCCTG
GGCAACCCCTTTTTTCAGAGCAAGAAGTCATAAAGATAGGATTTCTTGGACATTTGGTTCTTATCAATATTGGGC
ATTATGTAATGACTTATTTACAAAACAAAGATACTGGAAAATGTTTTGGATGTGGTGTTATGGAAAGAGCACAGG
CCTTGGACCCATCCAGCTGGGTTCAGAACTACCCCCTGCTTATAACTGCGGCTGGCTGTGGGCCAGTCATTCTGC
GTCTCTGCTTTCTTCCTCTGCTTCAGACTGTCAGCTG**TAA**AGTGGAAGCAATATTACTTGCCTTGTATATGGTAA
AGATTATAAAAATACATTTCAACTGTTCAGCATAGTACTTCAAAGCAAGTACTCAGTAAATAGCAAGTCTTTTTA
AATGCTGCTTTATTTCACTAAATTTTGTTGTGAGGTGTCACTAAAATGCCTGCAAACAAACGTAACTGCTAATCT
GAGAGGAAACCCTCTTACTAATCAGAGAAGAAACCCTCCTGTCAGAAACCTTCAGGGAAGTGAGCTGATCACACC
TAAACTGGGAGTTTGCAATGGGGTATTTGAAGCACTGTGGGAGTATTCCACTGGCCCTCTCCCTGAGAGACTTAA
CAGTCTTCCCTGTTGTCCAGATTCTGTATAAGGCAATCAGAATAATCATCTTCCTTGTTCAGCAGAGGAGCCTGG
TCCCATTTTCCCCACTTTGTGATGGGCTTCTCTCAGCGGTAGCTCAGCAGTTCCAGATGGCAGTTTGGACCAGCA
TCTAGGCTGGCCAGTTCGCTGTGTTTACTTAGAACCAACACGTTCAGAGCTGGCCTGGACCATCTGAGGGGAACA
GGAAACACCCCTAGGCTGTGGAAGCAAGTGCAGACCCCCACCCCCGGCCCTGAAGCCAAGGGGGCAGGGTTTGGG
AGTGGCCAAAGAGAAGCAGTGCAGGGATGGGTTTTCCTAGGGACAGGCTTAGCATTCCTGACTCTAGGAAGAAGG
AGCAGTGAGGCGGAGAAACAGTGGAGGGGATGGTGGCATTGGGCCCCATGGGGCCGAGATGGACACAGGGCTCGT
TCTCTTGAGTCTGGTGCCAAGGACAGCTGAAGACGACATCATTTTCAGGTGGAGAGGAGAGAGTGGAGGGAGATC
ATGCCCTGTGATGTGTCTTTTGCAGGTGAAGGTGGGAGACAAGGTCTCTGCTGACGATGAGGCAGAGCCACCGTG
AAAGTTGTAATAGGAGGACTGCCCGCCGCTGGAAGGGCCTGCAGTGACGCTAGGACACCCTCTGCCTGCATGTCA
CGTTAGCTGGGCTGGGCGAAGTAGAAGACCAAGGGGAAGAGGTGCAGTGGGGAGACCAGGTGGGATGCAACCACA
GGACCAGTGGAGGGGCTGTGGCACGTGGGCGGAGACTGAGTGGCTGGGCATGTGTTGTGGCTGAGCATGTGGTGT
GGGCAGTGGTCCTAGACCCCGCCATGTCCGGACAATGATATAGAGCGTCTCAGCATCGCCAGTCTAGACTGTCTA
TGGAGAGCAGAAAGTTGTCTGGGGCTGCCTGGGGAACTGTGAGGCCAGCTATATCACCGTCGCTGATGGTGACAT
TACGGTGGTGGCAGGAGCAAGGAGAGAGGGAAGAAGGACCCCGTCCAGCTTTAGTCACAAAATACCCAATGGAAG
ATGCCAGTGCCAATCCTGTGGGTTTCCTTGGGACTTCACACTGGCTTTCTTATCTGCTCCAGATCCATTCAGTAG
TCACTGAGTTCCTGCCAAATACTTTGTAGCGCCAGAAGCCAGGAGCGGGGTCTGCAGCAGGGCAGTCCCCATTTT
CAGGAAATGCCTGGAGCTGCTGGTCCCTGAGAGAAAGGAAAACATCTTTCAGCCGTACGCAGGCCAAGAAGGCCA
ATGTCCAGTAGCTTTGTGATTTTTTTTATATTTTTTTATTTATTTATTTTTGAGATAGAGTCTTGCTCTGTCGCT
CAGGCTGGAGTGCAGTGGCGTGATCTCCACTCACTGCAACTTCCGCCTCCTGGGGTCAAGCAGTTCTGCCTCAGC
CTCCCGAGTAGCTGGGATTACAGGCACACGCCACCACACCCAGCTAATTTTTGTGTTTTTAGTAGAGACGGTTTC
ACCATGTCGGCCAGGCTGGTCTCAAACTCCTGACCTCAGATGATTCAGCCTCCCAAAGTGCTGGGATTACAGGTG
TGAGCCACTGCACCCAGCCTGTGATGTTTCTGTGGGGTTCCACAAATGTGTGTGTGTGTAAAAGCTGATGATTAC
AGCAAGAATGTGAACAGTAGCAGTTTTCCATTTGAAGGCAAGTTTTGTCTTTATCTGGGTATCAGAAGGACCCTC
TGGGCCATTGTCGCTTCCTGTACTCAGAGCCACCCTAGTACTACGGGCACACACAGAAAACAGCAGCCTGCGTAC
TTTCAAAGGAAAGGCATCTTTAATCACCAATGCCTGGAAAAATTATTTTGTTTCCCTCTTCCTTCCGTCTTGTTT

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FIGURE 2897B

CCTAACTTCTTACCAAAGTTTAGAGTCTGAGTTTTTCGTATAATAATGTCCCACATCCACACATCGGGCCTACAG
ATGCTCTCCCTTGAATCGACTGGAAACATGACACCGGTTCCATGCTCTGGAACTGTCACCTGTGATGTGCTGGGC
TGTGTCCCAAGCACAGGAATCCCAGCAGTTTCAGCTCGATGCAGAACCACCATGCTCCAGACACAGGCTTGGGAA
AGACACGTCAAAATTAAAATACTAGGTAAGAGAAGCACCTGATTGGGTAGAAGTTGGAGAGGAATCCTGGAATTT
TGTGGCCAGAAGGAGCCACTGCCCCTTTTGTTTAGTAAGACTAGACAGTAACAGAAGCCAGTTGTCAGCTATGAA
AGTGGTGGGTGAAGCAGGGGAGGCTCCTCTATGGTGGGACCCTGGACAAGGGAAGCCGAATGTGTGAAGAAGGGG
TGCGGGGGTGTGCGGTGCCCTAGGACACTAGGGCAAAGGTTTCAAACCTGGAACAAGGCACTGGAGGAAGATCTG
CTGCCAGTCAGCAGTGCGGGCCCTCGAGTTAGCAGTCCGTGCGCAGAGGGGCCAGTTCTGAGACCAGTTTGGAGA
GTCAGGCAGTGACCCATTGGCCATGTCATAATTCCTTCAGCCTGCCTCCTCTTTAATCCCAGAGAGTGCTCTTTC
TTCATACTTCCTTTAAAATACTAAATTGTTCCCATTCCATGGGGAGCTGGCTAGGCTTTACAGGCTAGGAAATGT
AGGTTTTCTGAGATGGAACCATCTACACAAGGAGGAGGAAGGCACTAAGACTACAGATGAGACCCATGACAGGGC
TGAGCATTTGGAAGCCAACCCTGGTTGCTTTTCAAGAATTGCTTTGTGGCTGGGTGCAGTGGTTCACACCTGTAA
TTGCAGCACTTTGGGAGGCTGAGGCAGGTGGATTGCTTGAACCCAGGAGTTCGAGACCAGCCTGGGCAACATATG
GGACACCCCACCGCCCCCGGCTCTGCAAAAAAATTAAAAATTAGCCAGGCGTGGTGTCATGAGCCTGTGGTCTCA
ACTACTCAGGAGGCTGAGGCTGGAGGATCGCTTGAACCTGGGAGGTCAAGGCTCCAGTGAACCATAATTGTGCCA
CTGCACTGCAGCCTGGGCGACAATTTGTTTTCTAAATTGCTTTTGAAAGTCTACTGCATTACATATTCCAAAAAG
CAGTGGTTTTCAAATACTTTTATCACCGATATCCTTTTATGAAATGAAATCAGTAGAACTTTCTCTGCTCTGAAT
AAGCAAGGGTGGGAACCTGTCTACCTCCCACAGATAGCATAATGTGCCTGCCATAGAGGAGCCAAAAAATGGTGA
TGGGAACTGAGAGGAGAGCAAATGTCACAAAAGACTGAGCAATTGAGAAAACAAAACAAGACCACAGATGACTGT
TAACGCCTCCACAGTGGACCAAGAAAGGACAGAGAGCTGGCAGCATGGGCATCACTGTCTGGTCGGCAGCAGGAA
GGCCTCGCTAGGGAATTGAGTACAGTCATCTAACTAGTTTAAAAGTACAGGAAGGATGATTAAGGCTATTGGAGA
GGTCATACAAATAGGGGAGGGGCAGGCAATGGCTGATAAGACATGAATTTGTAAGGCGATGAGTATTGCAGTCAG
CAAAACAAACGAGACTGCTCTCCCAACACATAACTCAGCAGGGAGGCCAGGCATTGGTTTAACCATTTAATATAA
AGAAGTTAAAATTACAAATGCGCTAAGTGCCTAAAGAAGAATAAGTGCAGGAATGAGAGCAGCATGGACTGCCAC
AGTTTTAGAATAAGCACTGTCACTGCTAGATTGGAAACAAAAATCCATAAATTTGGCCCGGTGTGGTGGCGGACG
CCTGTAGTCCCAGCTACTTGGAGGCTGAGGCGTGAGAATCGCTTGAACCCGGGAGGCGGAGGTTGCAGTGAGCCG
AGATGGCGCCACTGCACTCCAGCCTGGGCGTCAGAGTGAGAACTCTGTATCAAAAAATAAAAATAAAAAAAAGTC
CATAAATCTGCAATGTCTCAGTTAAGAAAGAAAGACTGGGCCAATGCAGATTTCAAACCGGAGAAAGTCATACTG
TCAGTGAAGGCCGCCTGTGGCCGGAAGGCGCCAGGGGATTAGCACCCTGGACTCAGTGTTGCTGGGAAACAGGGC
CCCAAGGCTGGGAGCACAGTGTTTAAAGGGCATCTACCCAAGAAGGGAGCACAGGGCAAGGAGGAGCTGCAGGGG
GGCTTGGCTGCCAAAGTGAATTCTGAGGAGAGAGCTATTGCTGCCTACGATATGCAGGCTGCACAGAACACAAGT
GGAATCAGCAGGCAGGAGAGGCAGCTAACGACGCAGCCCGTTTCTTATTTCTGTTTTCTCACAAGCGATGAAAGT
GGAAAAGAGGGTGAGCAGGTGGCCCACACATGTGCCTCCAGTGCTGCGGCCCCTCCGGGGACCATCAGCCAGGCC
CCGGGGAGGGAGCCAGCCACAGTGTGTCCGGCTCTTCTCTGAAGGGAAGAGAGCCTTGAATAGACTGAAGCGAAG
ACGGTTCTGCAAGGACAAGGCAGACCGAAGGCATTGGTTTTTTTTTTCAGATAAGGAGAATTAGACTCCCAAGTA
GACACCAGAGTCACTGTTTGGTTGGTGGGTGATAGTGGGGTCACAGTGGCTGCCTGTGCTCCCCCAGGGTGAGCG
TGACTGTGCTAACCTGGGTGGGGCAGCATGCACACCCCTCTGGCAGCCCTTTGTTGCTCGCTGATGACAAGTTTG
GATGATCCCGCCAAACAGCTTGCTAAGATGTAGTCCCCAGTGTTGGAGGTGGGGCCTGATGGGAGGTGCTACCCT
TGTGAGATAAGGTTGTGTAAAAGCCTGTGGCACCTCCCCACACTGACGCTCTCACCCCTGCTCTGGCCATGTGCC
GCGCCTGCTCCCACTTCCCCTTCTGCCAGGAGTAAAAGCCCCCGAGACCTCCCAGAAGCCAAGCAGATGCTAGTG
CCATGCTTCCTCTGCAGCCTGCAGAACTGTGAGCCAATTAAACCTCTTTTCTCTAT

FIGURE 2898

GCCCCTCCCTCCGCCCGCCCGCCGGCCCGCCCGTCAGTCTGGCAGGCAGGCAGGCAATCGGTCCGAGTGGCTGTC
GGCTCTTCAGCTCTCCCGCTCGGCGTCTTCCTTCCTCCTCCCGGTCAGCGTCGGCGGCTGCACCGGCGGCGGCGC
AGTCCCTGCGGGAGGGGCGACAAGAGCTGAGCGGCGGCCGCCGAGCGTCGAGCTCAGCGCGGCGGAGGCGGCGGC
GGCCCGGCAGCCAAC**ATG**GCGGCGGCGGCGGCGGCGGGCGCGGGCCCGGAGATGGTCCGCGGGCAGGTGTTCGAC
GTGGGGCCGCGCTACACCAACCTCTCGTACATCGGCGAGGGCGCCTACGGCATGGTGTGCTCTGCTTATGATAAT
GTCAACAAAGTTCGAGTAGCTATCAAGAAAATCAGCCCCTTTGAGCACCAGACCTACTGCCAGAGAACCCTGAGG
GAGATAAAAATCTTACTGCGCTTCAGACATGAGAACATCATTGGAATCAATGACATTATTCGAGCACCAACCATC
GAGCAAATGAAAGATGTATATATAGTACAGGACCTCATGGAAACAGATCTTTACAAGCTCTTGAAGACACAACAC
CTCAGCAATGACCATATCTGCTATTTTCTCTACCAGATCCTCAGAGGGTTAAAATATATCCATTCAGCTAACGTT
CTGCACCGTGACCTCAAGCCTTCCAACCTGCTGCTCAACACCACCTGTGATCTCAAGATCTGTGACTTTGGCCTG
GCCCGTGTTGCAGATCCAGACCATGATCACACAGGGTTCCTGACAGAATATGTGGCCACACGTTGGTACAGGGCT
CCAGAAATTATGTTGAATTCCAAGGGCTACACCAAGTCCATTGATATTTGGTCTGTAGGCTGCATTCTGGCAGAA
ATGCTTTCTAACAGGCCCATCTTTCCAGGGAAGCATTATCTTGACCAGCTGAACCACATTTTGGGTATTCTTGGA
TCCCCATCACAAGAAGACCTGAATTGTATAATAAATTTAAAAGCTAGGAACTATTTGCTTTCTCTTCCACACAAA
AATAAGGTGCCATGGAACAGGCTGTTCCCAAATGCTGACTCCAAAGCTCTGGACTTATTGGACAAAATGTTGACA
TTCAACCCACACAAGAGGATTGAAGTAGAACAGGCTCTGGCCCACCCATATCTGGAGCAGTATTACGACCCGAGT
GACGAGCCCATCGCCGAAGCACCATTCAAGTTCGACATGGAATTGGATGACTTGCCTAAGGAAAAGCTCAAAGAA
CTAATTTTTGAAGAGACTGCTAGATTCCAGCCAGGATACAGATCT**TAA**ATTTGTCAGGTACCTGGAGTTTAATAC
AGTGAGCTCTAGCAAGGGAGGCGCTGCCTTTTGTTTCTAGAATATTATGTTCCTCAAGGTCCATTATTTTGTATT
CTTTTCCAAGCTCCTTATTGGAAGGTATTTTTTTAAATTTAGAATTAAAAATTATTTAG

FIGURE 2899A

GGACACGGAGCCGCGAGGAGACAGCTGAGGCCCGCGGAGACCAGGGGGTGAAGCCTGGAGACCCTCTTGCCCTGG
CCTAGCTGCAGGCCCCCGGGATGCTTTGGGC**ATG**TCCTCTGGAGCCCCACAGAAGAGCAGCCCAATGGCCAGTGG
AGCTGAGGAGACCCCAGGCTTCCTGGACACGCTCCTGCAAGACTTCCCAGCCCTGCTGAACCCAGAGGACCCTCT
GCCATGGAAGGCCCCAGGGACGGTGCTCAGCCAGGAGGAGGTGGAGGGCGAGCTGGCTGAGCTGGCCATGGGCTT
TCTGGGCAGCAGGAAGGCCCCGCCACCACTTGCTGCTGCTCTGGCCCACGAAGCAGTTTCACAGCTGCTACAGAC
AGACCTTTCCGAATTCAGGAAGTTGCCCAGGGAGGAAGAAGAAGAGGAGGAGGACGATGACGAGGAGGAAAAGGC
CCCTGTGACCTTGCTGGATGCCCAAAGCCTGGCACAGAGTTTCTTTAACCGCCTTTGGGAAGTCGCCGGCCAGTG
GCAGAAGCAGGTGCCATTGGCTGCCCGGGCCTCACAGCGGCAGTGGCTGGTCTCCATCCACGCCATCCGGAACAC
TCGCCGCAAGATGGAGGACCGGCACGTGTCCCTCCCTTCCTTCAACCAGCTCTTCGGCTTGTCTGACCCTGTGAA
CCGCGCCTACTTTGCTGTGTTTGATGGTCACGGAGGCGTGGATGCTGCGAGGTACGCCGCTGTCCACGTGCACAC
CAACGCTGCCCGCCAGCCAGAGCTGCCCACAGACCCTGAGGGAGCCCTCAGAGAAGCCTTCCGGCGCACCGACCA
GATGTTTCTCAGGAAAGCCAAGCGAGAGCGGCTGCAGAGCGGCACCACAGGTGTGTGTGCGCTCATTGCAGGAGC
GACCCTGCACGTCGCCTGGCTCGGGGATTCCCAGGTCATTTTGGTACAGCAGGGACAGGTGGTGAAGCTGATGGA
GCCACACAGACCAGAACGGCAGGATGAGAAGGCGCGCATTGAAGCATTGGGTGGCTTTGTGTCTCACATGGACTG
CTGGAGAGTCAACGGGACCCTGGCCGTCTCCAGAGCCATCGGGGATGTCTTCCAGAAGCCCTACGTGTCTGGGGA
GGCCGATGCAGCTTCCCGGGCGCTGACGGGCTCCGAGGACTACCTGCTGCTTGCCTGTGATGGCTTCTTTGACGT
CGTACCCCACCAGGAAGTTGTTGGCCTGGTCCAGAGCCACCTGACCAGGCAGCAGGGCAGCGGGCTCCGTGTCGC
CGAGGAGCTGGTGGCTGCGGCCCGGGAGCGGGGCTCCCACGACAACATCACGGTCATGGTGGTCTTCCTCAGGGA
CCCCCAAGAGCTGCTGGAGGGCGGGAACCAGGGAGAAGGGGACCCCCAGGCAGAAGGGAGGAGGCAGGACTTGCC
CTCCAGCCTTCCAGAACCTGAGACCCAGGCTCCACCAAGAAGC**TAG**GTGGTTTCCAGGCCCCTGCCCTCCCCTTC
CTCCCATCCTTGTCCTTCTCTCCCTCAGAAGCCTCAGGACCCAACAGGTGGCAGGCAGTGGACAGGGTGCCCGCC
CCACAGTGCTTTCCCCAGCACCCCAGAGCCAGTCGGGACACCCCCCGCAGCCCGTCCTGGTGGCTGTGGAACTGC
ACTGGGTGGCGGGCAGATGGTGGAAGGCAGCTTAGGAGACCTCACCAAAGAGAAGATGGACCGGCTCTTGCTCCC
AGCTCCTATTAGGCCCGGGGTGGGACCAGAGGTCATAGGTGCCCAACGGCAGCCAAACCAAAGACACTGGTGTGC
ATGGGGCAGCATGGTTGTGCACGTGGGACCCTGGGGCGGACCCAGGAGCCAAACTCTTGAAGCACCCCCTGGGTC
AGGCCCAGCAGCGGAGTGGCCAGCCCCAGTTTCCCATTGCTCCTCTCTGCGGCCAGGGCCAGGTGGGTTCATATT
TACAGATATGCCCAGCCAGTCCTGGTCGGCCACACCAGTGTCCCAAAGAGGAGAGCGCAGCAGAGCCAGGGGTCT
GTTCTGTAGCAGCCACCCCCCTGCCCCCACTCCAGGGCAGCCATGATGTGCTTGGGCCCACCAGGGCCTTCCGGG
CTGCTCTCTTCCCTGAGCCCGGAACCGGCGACGCACATGTGTCTTTTGTTGGTGTGTTTGTTTTTTTCCAGGGAG
GTCTAATTCCGAAGCAGTATTCCAGGTTTTCTCTTTGTTTTATCAGTGCCAAGATGACCTGTTGTGTCATATAAT
TTAAGCAGAGCTTAGCATTTATTTTATTCTTTAGAAAACTTAAGTATTTACTTTTTTAAAGCTATTTTTCAAGGA
ACCTTTTTTTGCAGTATTATTGAATTTATTTTCTAAATCAGGATTGAAACAGGAACTTTTCCAGGTGGTGTTAAT
AAGCCATTCAAGTGCCTTACACAGCTTTGAAGAAACTAGGACTGCAGTGGGCTCGGATAGGCCCATTGAGGTTTT
TAGAAAAGCAGGATTTGTTTTGTTAGGGAGGCATGATTTTGGTGAGATCTTTCTGGAAGAGTTTTCCGCCTCTTT
GTGATGCTGAACACCCCCAAGGTTCTCCCCTCCCCCCGCTGCCCAGGTGACTGGCAGGAGCTGCGACTGCCACGT
AGTGGTGCCTGGGCCCGACAGCGGGGCTCTGGGCATCCCGGGTGACCTTGGCCCATCTGCCTGCATTCCCACCCC
CTTGGGCCTGGCTGGATCCCAGGCAGAGGGACCTTGCTGCTGTGTGATTGGAACATTCCCAAATATCTTGTGAAT
TTGTAATCAAATTGGTCTCATTGGGAAAGACTCTTAATTAAGAGGCTCAGGCAAGCACAGAGGCAGCCCGTGGGT
CTCTGTCTCAGTCTGGAGGCAGCAGGGATGCTGCTGGGAGTCCATGGCACAGGCCACAGCCCCTCACCTTGCCGC
GGTGGCTGGCAGCACGCCTGCCTTGCTCTGCCCCATGCCCTGAACAGGCATGAGAGCTCCACGTCCCCTAGTGCA
CCCTGAGAGGGGGCTCACAAGTGACCGATCCTGGGTGCCTCAGGGAGCTCACTGAGGGCGTGCAAAGTTGAAAGT
GGCAAGGCTGGGGGAGGGTGTCGGGTAGAGGGAAGAGGGCAGGGGGCTAGGGGAGGACTCAGAGGCCATCTGCAG
GGCCAAGCCACAGGAAGGGCTGAGCTGGAGGTGGGCAGGGCTGCTCCAGGCAGGTCAGAGCAGTGCAGGGGGAGG
AGAGGAGAAAGGGAGGAAGCTGGGCTGTGTGGTCCCCATGAAGGCATTCAGAGTCCACCTGCAGACAGCGAGAGC
CCCAGGAAGGTTTGCACAGCTGTGCCCCAAGCACCTTGGCCTCCTCTCAGCTCGCCGAGGAGGCACGCTAGAGCC
GCCTTCCCGGTGGGAGCCCTCTGTCCCACAGGGAGCGGGGAGCCAGCTTTGCTGGGGCCCTACCTGCATGCCCAG
CCTTACCCCTCATTCTCACAGCACAGATGAGGTTGAGACCATGCAGTCAATGCATTGCTTAAGGTCTCTTATTTA
CAAAAAAAAACCTTAAACATAGTCGCTGTCATTCAGACATTCAGAGAATGGTTGGCCACAAACAATGACCAAGTA

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FIGURE 2899B

TTGCTTGGCTTAACTTGAAGGCCTGCTGTCTCCTTCTGGGGGTCAGGGACGCAGCTCCACCCTCACCACTAGCCC
ACCCTGCCCGTGGGCATAACCTTGACGAAGAGAGAGAATGATTGGCATCTGCTTTTCTCTTTTCTTTGCTAATAA
TTCTGTTCCTGGCTGCCGAGAGTGAAGTTTCACCATGTGGAGGTTTGGCTCCTATCACCTGGTGGTCTGATTCAT
ACCCTAGCCTGAGGCTCCACTGGAAGATCTCGCAGCCTCAGTGTATGGGAAACCCTTTCCCCAGGCTTGTCCCAG
CACTGCCGCTCCCCACCCCTGAGCCAGGACCCCAGAGGATGGCCATGCCCCGTGCCTGGCAGAGGTCTGGTGCCA
GCACTGGGAGCTGCTCCGCCCTTGCCTTGGGGCCGAGGGAGCCCTCGTCCACCCCTGCACAGCAGCTGGGCACAG
AGGAGCGCTCTTCCATCTTGACCAGGACTGCACCAAGAAGCACCAGGTGTCTTCAGCCTCCAACCTCCGGGGCGA
CCTTCTCTTCCAGCCACAGTCCCATGAGGGCCCCTAGCCAGGGACACTGGTCTGTAAATTGTAATCCTTTCTCCA
GCCCAGCTCTCCACTTGTTCCTTGTGTGAGCTGAGCAGGCAGTGCACCTCTGAGTGTCCCTTTTGTAAGGCCCAG
GGGTTGCACTGAGTCTGCAGAGGCCGCGACCTCCTAGAACGCTGTGGGTGCAGGTGAGCCGGCGTGTCCTGGGGA
GATGCTGCCAGCACACAGGGGCCCTCCTGCTGCCAGCAGGTTGGGGTGGTTAAGTCTTATTAGTGTCTATTCTTA
AAATTAAGTGGGCTGGAGAAGAATGGAGCTCCACATGCCAGCACCGTATATGGAATACAAAAGCTGGGGAAGCAG
GGCCTGCCTTACAGGTGTGGCTGACTCTGAGCCCAGGCCTGCAGGGGTGGAGGGCAGTCCCTCAGAATCCCAGAG
GCAGTCCCAGCCTCAGAACCCAGGATAGGAAATGGGTGTGTTTAGTGGGGAAAGGGACGGGGTGCAGACGGCAGG
GCCAGTATGGGGCCCCCTCCCTCTCCTCTCCTCTCCTATGGTGAGCCCAGCGTGGGCACCGGGCCGTCTCAGCCG
TGTTCCCAGGGCTGGGAGGACAGCTCTGGCCCTTCTTAGGCCTAGCCTCGTCCCAAGCTAAATGTAAGCCAGTTG
GGCTGTGTTAAAGGAAGCAGTGTTTTTGGTTCGATTCTGCCTCTGTAGCTCAAGGGGGGCAGCCCCCAGAGTCCT
GTGCATTCTGCCAAGGCTCCATAGCTTTGCCAAATGCACGGAGCTCTGCCATTCCGGTGCAGTGCAGGCCTTGCG
AAGGGTTTATCTGCGTTCGTCTCGGTGGGCTTCTCCTGCATGGGAGTTGTGTTCCTGTGCAAGGGGGAGCTTTGC
TCCAGGACAGGATGACTGTCTTCCCTATTCTTAGGGACAAGTCCCAAGATGCCAGAAAGGCAGTCTCCCAAGGAC
CCACCATGCAGAAGTGTCAATAAACCACAAGTTCTG

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FIGURE 2900

GGCTGCGGAGAGTGTGCGGCTCCAGGTGGGCTCACGCGGTCGTGATGTCTCGGGAGTCGGATGTTGAGGCTCAGC
AGTCTCATGGCAGCAGTGCCTGTTCACAGCCCCATGGCAGCGTTACCCAGTCCCAAGGCTCCTCCTCACAGTCCC
AGGGCATATCCAGCTCCTCTACCAGCACGATGCCAAACTCCAGCCAGTCCTCTCACTCCAGCTCTGGGACACTGA
GCTCCTTAGAGACAGTGTCCACTCAGGAACTCTATTCTATTCCTGAGGACCAAGAACCTGAGGACCAAGAACCTG
AGGAGCCTACCCCTGCCCCCTGGGCTCGATTATGGGCCCTTCAGGATGGATTTGCCAATCTTGAATGTGTGAATG
ACAACTACTGGTTTGGGAGGGACAAAAGCTGTGAATATTGCTTTGATGAACCACTGCTGAAAAGAACAGATAAAT
ACCGAACATACAGCAAGAAACACTTTCGGATTTTCAGGGAAGTGGGTCCTAAAAACTCTTACATTGCATACATAG
AAGATCACAGTGGCAATGGAACCTTTGTAAATACAGAGCTTGTAGGGAAAGGAAAACGCCGTCCTTTGAATAACA
ATTCTGAAATTGCACTGTCACTAAGCAGAAATAAAGTTTTTGTCTTTTTTGATCTGACTGTAGATGATCAGTCAG
TTTATCCTAAGGCATTAAGAGATGAATACATCATGTCAAAAACTCTTGGAAGTGGTGCCTGTGGAGAGGTAAAGC
TGGCTTTCGAGAGGAAAACATGTAAGAAAGTAGCCATAAAGATCATCAGCAAAAGGAAGTTTGCTATTGGTTCAG
CAAGAGAGGCAGACCCAGCTCTCAATGTTGAAACAGAAATAGAAATTTTGAAAAAGCTAAATCATCCTTGCATCA
TCAAGATTAAAAACTTTTTTGATGCAGAAGATTATTATATTGTTTTGGAATTGATGGAAGGGGGAGAGCTGTTTG
ACAAAGTGGTGGGGAATAAACGCCTGAAAGAAGCTACCTGCAAGCTCTATTTTTACCAGATGCTCTTGGCTGTGC
AGTACCTTCATGAAAACGGTATTATACACCGTGACTTAAAGCCAGAGAATGTTTTACTGTCATCTCAAGAAGAGG
ACTGTCTTATAAAGATTACTGATTTTGGGCACTCCAAGATTTTGGGAGAGACCTCTCTCATGAGAACCTTATGTG
GAACCCCCACCTACTTGGCGCCTGAAGTTCTTGTTTCTGTTGGGACTGCTGGGTATAACCGTGCTGTGGACTGCT
GGAGTTTAGGAGTTATTCTTTTTATCTGCCTTAGTGGGTATCCACCTTTCTCTGAGCATAGGACTCAAGTGTCAC
TGAAGGATCAGATCACCAGTGGAAAATACAACTTCATTCCTGAAGTCTGGGCAGAAGTCTCAGAGAAAGCTCTGG
ACCTTGTCAAGAAGTTGTTGGTAGTGGATCCAAAGGCACGTTTTACGACAGAAGAAGCCTTAAGACACCCGTGGC
TTCAGGATGAAGACATGAAGAGAAAGTTTCAAGATCTTCTGTCTGAGGAAAATGAATCCACAGCTCTACCCCAGG
TTCTAGCCCAGCCTTCTACTAGTCGAAAGCGGCCCCGTGAAGGGGAAGCCGAGGGTGCCGAGACCACAAAGCGCC
CAGCTGTGTGTGCTGCTGTGTTGTGAACTCCGTGGTTTGAACACGAAAGAAATGTACCTTCTTTCACTCTGTCAT
CTTTCTTTTCTTTGAGTCTGTTTTTTTATAGTTTGTATTTTAATTATGGGAATAATTGCTTTTTCACAGTCACTG
ATGTACAATTAAAAACCTGATGGAACCTGG

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FIGURE 2901

GGCGCTGGGCGGCTGCGGCGCGCGGTGCGCGGTGCGTAGTCTGGAGCTATGGTGGTGGTGGCAGCCGCGCCGAAC
CCGGCCGACGGGACCCCTAAAGTTCTGCTTCTGTCGGGGCAGCCCGCCTCCGCCGCCGGAGCCCCGGCCGGCCAG
GCCCTGCCGCTCATGGTGCCAGCCCAGAGAGGGGCCAGCCCGGAGGCAGCGAGCGGGGGGCTGCCCCAGGCGCGC
AAGCGACAGCGCCTCACGCACCTGAGCCCCGAGGAGAAGGCGCTGAGGAGGAAACTGAAAAACAGAGTAGCAGCT
CAGACTGCCAGAGATCGAAAGAAGGCTCGAATGAGTGAGCTGGAACAGCAAGTGGTAGATTTAGAAGAAGAGAAC
CAAAAACTTTTGCTAGAAAATCAGCTTTTACGAGAGAAAACTCATGGCCTTGTAGTTGAGAACCAGGAGTTAAGA
CAGCGCTTGGGGATGGATGCCCTGGTTGCTGAAGAGGAGGCGGAAGCCAAGGGGAATGAAGTGAGGCCAGTGGCC
GGGTCTGCTGAGTCCGCAGCACTCAGACTACGTGCACCTCTGCAGCAGGTGCAGGCCCAGTTGTCACCCCTCCAG
AACATCTCCCCATGGATTCTGGCGGTATTGACTCTTCAGATTCAGAGTCTGATATCCTGTTGGGCATTCTGGACA
ACTTGGACCCAGTCATGTTCTTCAAATGCCCTTCCCCAGAGCCTGCCAGCCTGGAGGAGCTCCCAGAGGTCTACC
CAGAAGGACCCAGTTCCTTACCAGCCTCCCTTTCTCTGTCAGTGGGGACGTCATCAGCCAAGCTGGAAGCCATTA
ATGAACTAATTCGTTTTGACCACATATATACCAAGCCCCTAGTCTTAGAGATACCCTCTGAGACAGAGAGCCAAG
CTAATGTGGTAGTGAAAATCGAGGAAGCACCTCTCAGCCCCTCAGAGAATGATCACCCTGAATTCATTGTCTCAG
TGAAGGAAGAACCTGTAGAAGATGACCTCGTTCCGGAGCTGGGTATCTCAAATCTGCTTTCATCCAGCCACTGCC
CAAAGCCATCTTCCTGCCTACTGGATGCTTACAGTGACTGTGGATACGGGGGTTCCCTTTCCCCATTCAGTGACA
TGTCCTCTCTGCTTGGTGTAAACCATTCTTGGGAGGACACTTTTGCCAATGAACTCTTTCCCCAGCTGATTAGTG
TCTAAGGAATGATCCAATACTGTTGCCCTTTTCCTTGACTATTACACTGCCTGGAGGATAGCAGAGAAGCCTGTC
TGTACTTCATTCAAAAAGCCAAAATAGAGAGTATACAGTCCTAGAGAATTCCTCTATTTGTTCAGATCTCATAGA
TGACCCCCAGGTATTGTCTTTTGACATCCAGCAGTCCAAGGTATTGAGACATATTACTGGAAGTAAGAAATATTA
CTATAATTGAGAACTACAGCTTTTAAGATTGTACTTTTATCTTAAAAGGGTGGTAGTTTTCCCTAAAATACTTAT
TATGTAAGGGTCATTAGACAAATGTCTTGAAGTAGACATGGAATTTATGAATGGTTCTTTATCATTTCTCTTCCC
CCTTTTTGGCATCCTGGCTTGCCTCCAGTTTTAGGTCCTTTAGTTTGCTTCTGTAAGCAACGGGAACACCTGCTG
AGGGGGCTCTTTCCCTCATGTATACTTCAAGTAAGATCAAGAATCTTTTGTGAAATTATAGAAATTTACTATGTA
AATGCTTGATGGAATTTTTTCCTGCTAGTGTAGCTTCTGAAAGGTGCTTTCTCCATTTATTTAAAACTACCCATG
CAATTAAAAGGTACAATGC

FIGURE 2902A

GCGGCCGCGGGGCCCGGCGCGGCGCGGGCCAAGGAGACGGCGTTCGTGGAGGTGGTGCTGTTCGAGTCGAGCCCA
AGCGGCGATTACACCACCTACACCACCGGCCTCACGGGCCGCTTCTCGCGGGCCGGGGCCACGCTCAGCGCCGAG
GGCGAGATCGTGCAGATGCACCCACTGGGCCTATGTAATAACAATGACGAAGAGGACTTGTATGAATATGGCTGG
GTAGGAGTGGTGAAGCTGGAACAGCCAGAATTGGACCCGAAACCATGCCTCACTGTCCTAGGCAAGGCCAAGCGA
GCAGTACAGCGGGGAGCTACTGCAGTCATCTTTGATGTGTCTGAAAACCCAGAAGCTATTGATCAGCTGAACCAG
GGCTCTGAAGACCCGCTCAAGAGGCCGGTGGTGTATGTGAAGGGTGCAGATGCCATTAAGCTGATGAACATCGTC
AACAAGCAGAAAGTGGCTCGAGCAAGGATCCAGCACCGCCCTCCTCGACAACCCACTGAATACTTTGACATGGGG
ATTTTCCTGGCTTTCTTCGTCGTGGTCTCCTTGGTCTGCCTCATCCTCCTTGTCAAAATCAAGCTGAAGCAGCGA
CGCAGTCAGAATTCCATGAACAGGCTGGCTGTGCAGGCTCTAGAGAAGATGGAAACCAGAAAGTTCAACTCCAAG
AGCAAGGGGCGCCGGGAGGGGAGCTGTGGGGCCCTGGACACACTCAGCAGCAGCTCCACGTCCGACTGTGCCATC
TGTCTGGAGAAGTACATTGATGGAGAGGAGCTGCGGGTCATCCCCTGTACTCACCGGTTTCACAGGAAGTGCGTG
GACCCCTGGCTGCTGCAGCACCACACCTGCCCCCACTGTCGGCACAACATCATAGAACAAAAGGGAAACCCAAGC
GCGGTGTGTGTGGAGACCAGCAACCTCTCACGTGGTCGGCAGCAGAGGGTGACCCTGCCGGTGCATTACCCCGGC
CGCGTGCACAGGACCAACGCCATCCCAGCCTACCCTACGAGGACAAGCATGGACTCCCACGGCAACCCCGTCACC
TTGCTGACCATGGACCGGCACGGGGAGCAGAGCCTCTATTCCCCGCAGACCCCCGCCTACATCCGCAGCTACCCA
CCCCTCCACCTGGACCACAGCCTGGCCGCTCACCGCTGCGGCCTGGAGCACCGGGCCTACTCCCCAGCCCACCCC
TTCCGCAGGCCCAAGTTGAGTGGCCGCAGCTTCTCCAAGGCAGCTTGCTTCTCCCAGTATGAGACCATGTACCAG
CACTACTACTTCCAGGGCCTCAGCTACCCGGAGCAGGAGGGGCAGTCCCCACCTAGCCTCGCACCCCGGGGCCCG
GCCCGTGCCTTTCCTCCGAGCGGCAGTGGCAGCCTGCTCTTCCCCACCGTGGTGCACGTGGCCCCGCCCTCCCAC
CTGGAGAGCGGCAGCACGTCCAGCTTCAGCTGCTATCACGGCCACCGCTCGGTGTGCAGTGGCTACCTGGCCGAC
TGCCCAGGCAGCGACAGCAGCAGCAGCAGCTCCGGCCAGTGCCACTGTTCCTCCAGTGACTCTGTGGTAGAC
TGCACTGAGGTCAGCAACCAGGGCGTGTACGGGAGCTGCTCCACCTTCCGCAGCTCCCTCAGCAGCGACTATGAC
CCCTTCATCTACCGCAGCCGGAGCCCCTGTCGTGCCAGTGAGGCGGGGGGCTCGGGCAGCTCGGGCCGGGGACCT
GCCCTGTGCTTCGAGGGCTCCCCGCCTCCCGAGGAGCTCCCGGCGGTGCACAGTCATGGTGCTGGGCGGGGCGAG
CCTTGGCCGGGCCCTGCCTCTCCCTCGGGGGATCAGGTGTCCACCTGCAGCCTGGAGATGAACTACAGCAGCAAC
TCCTCCCTGGAGCACAGGGGGCCCAATAGCTCTACCTCAGAAGTGGGGCTCGAGGCTTCTCCTGGGGCCGCCCCT
GACCTCAGGAGGACCTGGAAGGGGGGCCACGAGTTGCCGTCGTGTGCCTGCTGCTGCGAGCCCCAGCCCTCCCCA
GCCGGGCCTAGCGCCGGAGCAGCTGGCAGCAGCACCTTGTTCCTGGGGCCCCACCTCTACGAGGGCTCTGGCCCG
GCGGGTGGGGAGCCCCAGTCAGGAAGCTCCCAGGGCTTGTACGGCCTTCACCCCGACCATTTGCCCAGGACAGAT
GGGGTGAAATACGAGGGTCTGCCCTGCTGCTTCTATGAAGAGAAGCAGGTGGCCCGCGGGGGCGGAGGGGGCAGC
GGCTGCTACACTGAGGACTACTCGGTGAGTGTGCAGTACACGCTCACCGAGGAACCACCGCCCGGCTGCTACCCC
GGGGCCCGGGACCTGAGCCAGCGCATCCCCATCATTCCAGAGGATGTGGACTGTGATCTGGGCCTGCCCTCGGAC
TGCCAAGGGACCCACAGCCTCGGCTCCTGGGGTGGGACGCGAGGCCCGGATACCCCACGGCCCCACAGGGGCCTG
GGAGCAACCCGGGAAGAGGAGCGGGCTCTGTGCTGCCAGGCTAGGGCCCTACTGCGGCCTGGCTGCCCTCCGGAG
GAGGCGGGTGCTGTCAGGGCCAACTTCCCTAGTGCCCTCCAGGACACTCAGGAGTCCAGCACCACTGCCACTGAG
GCTGCAGGACCGAGATCTCACTCAGCAGACAGCAGCAGCCCGGGAGCCTGAGCTCAGGAGGAACTCTTACCTGGA
AATTGGGAACTGTATGGAGACTCCAAACTGACTTCTTTCAAAAAACAAAAACAAAAAATTTTTTTAGCTTTGACA
AACACACAAAAGTGGTAATAAAGAGAGCCCTCCTTGTCAACCCAAAATGTGAGCCCCCTGTGGCAAAACCACCCC
CTACCCCATTAACAAATCAACAGACAAAATTCTCCGAGTCCTTTGCCTCTTTTGATAACATGTTGTTCTGTTTTG
TAAAGTGTGTGTGCTTGGGGTTCCGAGGTGTGGGATTGAGTTCTCTGCTTTGTTTTTTTTTAAGATATTGTATGT
AAATGTAAAAAGTTATTTAAATATATATTTTAAAGAACCCTAACTGCCAACTTTTGCTGAAAAAGAAAAAAAAAT
CACTGCTGCATTAAATGAACCACATCATGTGTAGATACTGTTGTCTCCCTGAAGGGAGCTCAGGCCTTTGAAAAG
CTCAGGGCTTCACCTGCCTTAGAAAATGAACCAGAAACTTGAAGTAAAGCTAGTTGATAGGGGTACAGGCTCTGA
GGAGCAGTGCAAAACTGCCTCTTTCTTTCTCGTGGCAAATCCCAATGTACACGATTTCAGGTCTCAGACGCCATG
CCTCTCCAGCCCACGCCTTTAGGCAGGTGATGGCAGCAGCTAGGAATAGGGTGTACATGATCCACAGCCCTGCGG
AGCCAGGTCAAGCCGCTGCTATGAAAGCTCCAGGGTGATGGGGACGATTCTGCCCAGTGTCCTCAGTCTGTCCCC
TCAGGTCATGGTCCCAAGTGAAATGACAGAGTTCACAGCCCTGGTCTTGGCTGAGGTCCAGGTCATAGTAAGGGC
ATGTTCTTGGGGCCCTCGACCTGAACTCTGACCCTCCGGGCAGGGAAGAGGAGGTTGTCCCCTTTGGTTGTCCTG

FIGURE 2902B

GCTTTGGAGTCCTTTGCAAAAATATTTTGGGCCCCCTGCCACTGGCTGCAGAAATGGCTCGACGGGGTGTGTGGG
GACAGACACCCAGAAGGAATGTACTTTTGTGGCCTTGGTGTCCGATGGGGCTGGGGGAGAGTGCTCTCCACTGAC
CCAGCAGCACACCCATGTGCAGTGCGCCTGCATCTGTGTGGGGGCAGCCACACCCCTTGGCTGCTGCTTCCTTGG
GCTGCCTTTCTGGGGGCATGTGACTGGACCTACGAGGTCTGCACTGAGCTCCATTTGAATGATACCTTTCCTATC
CCATTTCCCCCACGGAAGCACCGCTTCAGGGTTATTCAGTCCTCTGCCTCATGGCTGAAATTGCTCATCTCGTCT
GCAGATGTCTACTATCCTGTCTACCTAATGCACTATTATGTATTGATTCTCCATGAGACAGAGAGAGAGAGAGAC
TATCAGATAGTTTACACCCAAAGGGTAGGTTTTTGTATATTTTTCCAGCCTTTTTTATTAAGGGGAAGGGGAGAG
TTTAAAAACCCAAACCGTTGTGGTTTTAAGGTGTTTCATTTTTAAAAGGGAGAGAGAATCTATTTAAAGCTATTT
CAGATCAGGGATTGTCATCCTTTTTTGTCCAATGTATTCCTTGTTCTTTAAAAAAATTTTTTTTAGAGGAAACTA
ATATTAGTCTTTGTGTTCACTAACTCTTCTGGTCACTTGTATTTATTTATTCATTCATTCATCAGATATTTGTTG
CCATCTGAAAGAACTGGCCCAGTGGGTCTGAAAGCTCGCTTGAGAATAGGAAACTTGAGACCTGGCCCCCTGTGG
GTAGGAGAACAAGGACCACCTGGGTTCTCCAGTCTTGAACGAGAATCTCACTCTTATCAGAATGTTTTTCTTAAC
CTCAGCGTATGATGAGGAAATTTACTTATCTCTAGCTAGGATTTGACAAATTCCAACATCAAATGATCAAAACAT
TTGCCACTGAGGCTTCACTGGTGAGATCCGTTCTCCGTCCTCGGGTGCAGTCCCTTGGGGGCTGCTCCTCGGACT
GCGCCCCGCACACCTGTTATCGAGGGTGTGAGAAGCGCCTAAGCTGGTGACATGTGATCTGGGACGCCTTCATTT
CTCGGGCCAGGAGTAGCAGCTGCTAAGGACAGCAGCTTGCATTGCGTGGTTTTAGGGAAGCAGGGTCTGGCTTTT
AATATGAACTGCAAAAAGCAGCTTCTCACTGATATTTTTTTGTTGTTGTTTCTGGGGGGTTTTTTTGTTTTGTTT
TTAATGCCTTTGAGTGCATATTTTCTTCCTCGTCTGAAACCGAACTCCCAAAGTGGCTTTCTTTAGCCCTGGCTG
GAAAACCACCTCTCAATAGCCTTAAGCAATAAATAGATGAGTAGAGAATGTGGCTTCAACTGGGCTTATTAAAGT
AAGTGTGTCTAGTTTTCACTTGAACAAGTGATAGCTGCAGATGGCGAAAGAAACCCATTTAATTTTTGTAGCTTA
CAGGTGGTAGAAACAAAAATGCAATTTTAAAACCTTAAATACCAAATACCAACCATTGCCTTTTTTTTTTTTGAG
ATGGAATTTTGCTCTTGTCACCCAGGCTGGAGTGCAATGGCGCGATCTCACCTCACTGCAACCTCTGCCTCCCGG
GTCCAAGTGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCATGCGCCACCACACCCAGCTAATTT
TGTATTTTTGGTAGAGACAGGGTATCTCCATGTTGGTCAGGCTGGTCTTGGATTCCCGACCTCAGGTGATCCGCC
CACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCATGCCTGCCCAGCAATACCAACCATTGTCTT
TTAAATTCGTGTTGGCTTCTCAGACAGGGAGATCACTGGAATAAAATAACCGATGGTCTTATTTTGTCACACGTA
AATCAAAAGAAATGTCCTCTTTGAAGTTGTAAGACTCCACCAATGACAGACACCCTTTTCGGTGGACTCTGAGTG
GTGTGTAGTGGTTTTATAGCCATGGAAACTAGGAGTATCTCACTTTCCACTGAGAACCCCTGCCCCCAATCCCTC
TAAGTTGGGGTGTGGCAGTTGGGCAGGGTCAAGTGACCCAGCCCTGGCTGTAGGACAGCCATATACAGTGAAGAG
TTCTAGAACCAGCTAAAAATGGAAGTTTGGGTGTTTACCAACAAGGTACCTCTTTATGGATGCAGCCCCAGTAAG
CTGGCTTTAACTCTCAGCTCCTTCCCTGTCTCCTCCTAATCCAAGCCCTTTTATAAAATAAAGCCCCTTCTGTCC
CACTGCTCACATACTTATGTGCTGCTAGTCTCTACTCGAAGTTCGTGCAGGACTAATGCTTTTAAAATGAGGTCT
AAAAAATAATTACTAGTCGAGACTATTATTCTTTAAACAGAACTGCCTTTTTCTACTCTTTATGTAAACTCTTTC
TATTGTGTTGGTCTAACAAGGCACTATTTTAAAATTTTTTAATTTTTCCCATAGCACTTAAAAGAGATTTTGTAA
AGACCTTGCTGTAAAGATTTTGTAATAAAATGGTCTAAGGGCTCTTTTTCCAACATTACCATTTTTAAAAAATGT
TTTAAAAGCTAGAAGACAACTTATGTATATTCTGTATATGTATAGCAGCACATTTCATTTATGGAAATATGTTCT
CAGAATATTTATTTACTAATATATTTATCTTAAGCCATGTCTTATGTTGAGAGTGTGACATTGTTGGAATAATCA
TTGAAAATGACTAACACAAGACCCTGTAAATACATGATAATTGCACACAGATTTTACATATTTGCAGACCAAAAA
TGATTTAAAACAAGTTGTAGTCTTCTATGGTTTTGTAACAAATTGTACACATGACTGTAAAAAAAAAATACAATT
TTATCAAGTATGTGTT

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FIGURE 2903

TGCTGACTAATCCGCGGGCCGCGGGGAATGGGTGGCGCGCCAGCCGGTCGGCAGGGGTCACGCGGCCGGGTGTGC
GCGGAATGGATTCAGGGTTCTCGGGTCGCGCCCGGGAGCTAGAGTCCTGACTCCCAGCCGGGGTCCCCGACCGGC
CTTTCGGGGTTGCCGGGCGCGCTCTGCAAAGGGGAAACTGAGGCCCAAGGAAATTGAGTATCTCTGCAAAGTCAC
CAGCTGAGTTCGAACCAGACAGATCCTGGGACCCCCTACTCTATCCGCCACCGGAAGAATCTCCGTCCTTGTCTT
TCCATTCTGCCCTCCCGGCTTCCCAGTAAGCACACAGCCCCAGGACCACCCTTGACCGTCCTCAACCAAGCG**ATG**

CATGCCAGGGGCCCCCATGGCCAACTGTCCCCAGCACTGCCTCTGGCCTCCTCAGTCCTGATGCTGCTGATGAGC
ACCCTGTGGCTGGTGGGGGCCGGCCCCGGCCTGGTCCTGGCCCCGGAGCTGTTGCTGGACCCCTGGCAGGTGCAC
CGGCTGCTGACCCATGCCCTGGGCCACACGGCCCTGCCAGGCCTGCTCCTGAGCCTGCTGCTCCTGCCCACTGTG
GGCTGGCAGCAGGAGTGCCACCTGGGCACGCTGAGATTCCTGCATGCCTCAGCCCTGCTCGCCCTGGCTTCTGGG
CTGCTGGCAGTGCTGCTGGCAGGCCTTGGGCTGTCCAGTGCAGCCGGCAGCTGTGGATACATGCCTGTCCACCTG
GCCATGCTGGCTGGGGAGGGACACCGCCCTAGACGGCCCCGTGGGGCACTGCCACCGTGGCTGTCGCCGTGGCTG
CTGCTTGCCCTGACCCCACTGCTCAGCTCTGAGCCACCCTTCCTGCAGCTCCTTTGCGGCCTCCTTGCCGGCCTG
GCCTATGCAGCTGGGGCCTTCCGGTGGCTGGAACCCTCAGAGCGACGGCTGCAGGTGCTGCAGGAGGGCGTCTTG
TGCAGGACCTTGGCGGGGTGCTGGCCCCTGAGGCTCCTTGCCACCCCGGGTAGCCTGGCGGAGCTGCCTGTCACC
CATCCTGCCGGAGTGAGGCCTCCCATCCCTGGACCGCCTTATGTGGCCTCCCCTGACCTCTGGTCCCACTGGGAA
GACTCAGCCCTGCCCCCACCAAGCCTGAGGCCTGTGCAGCCCACCTGGGAGGGCTCCTCAGAGGCAGGCCTGGAC
TGGGCTGGGGCCAGCTTCTCCCCAGGGACTCCGATGTGGGCGGCCTTGGATGAGCAGATGCTGCAGGAGGGCATC
CAGGCCTCGCTTCTTGACGGGCCAGCCCAGGAACCCCAGAGCGCACCATGGCTGTCCAAGTCCTCTGTCTCCTCT
CTGCGGCTGCAGCAGCTGGAGCGCATGGGCTTCCCTACGGAGCAGGCGGTGGTGGCACTGGCAGCCACAGGCCGT
GTGGAGGGTGCCGTGTCACTGTTGGTTGGAGGACAAGTGGGCACTGAGACCCTGGTGACCCATGGAAAGGGTGGG
CCTGCCCACTCCGAGGGTCCTGGGCCTCCC**TAG**CCCAGGCAGAGAGTGGGGCACAGGCAGGCCCTTGGGTGCTAA
GGGCTGGGCTGCATGTGGGTAGCCCGAGCTCCTACTCTGTCTAAAGAGGGCCACAGTGGGGAGCAGGGGCACCTC
TGGAGGCAGGAGAGGCCCCCCAGCATGCTGCCCTAGTACGTGTTTAGAATAAAAACCAGTTTGTTTTTCAACCTG
GACCTCCTTGGAG

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FIGURE 2904

AGAGGGAGACGGACGTTGAGAGAACGAGGAGGAAGGAGAGAAAATGGCGTCCACGGATTACAGTACCTATAGCCA
AGCTGCAGCGCAGCAGGGCTACAGTGCTTACACCGCCCAGCCCACTCAAGGATATGCACAGACCACCCAGGCATA
TGGGCAACAAAGCTATGGAACCTATGGACAGCCCACTGATGTCAGCTATACCCAGGCTCAGACCACTGCAACCTA
TGGGCAGACCGCCTATGCAACTTCTTATGGACAGCCTCCCACTGGTTATACTACTCCAACTGCCCCCCAGGCATA
CAGCCAGCCTGTCCAGGGGTATGGCACTGGTGCTTATGATACCACCACTGCTACAGTCACCACCACCCAGGCCTC
CTATGCAGCTCAGTCTGCATATGGCACTCAGCCTGCTTATCCAGCCTATGGGCAGCAGCCAGCAGCCACTGCACC
TACAAGACCGCAGGATGGAAACAAGCCCACTGAGACTAGTCAACCTCAATCTAGCACAGGGGGTTACAACCAGCC
CAGCCTAGGATATGGACAGAGTAACTACAGTTATCCCCAGGTACCTGGGAGCTACCCCATGCAGCCAGTCACTGC
ACCTCCATCCTACCCTCCTACCAGCTATTCCTCTACACAGCCGACTAGTTATGATCAGAGCAGTTACTCTCAGCA
GAACACCTATGGGCAACCGAGCAGCTATGGACAGCAGAGTAGCTATGGTCAACAAAGCAGCTATGGGCAGCAGCC
TCCCACTAGTTACCCACCCCAAACTGGATCCTACAGCCAAGCTCCAAGTCAATATAGCCAACAGAGCAGCAGCTA
CGGGCAGCAGAGTTCATTCCGACAGGACCACCCCAGTAGCATGGGTGTTTATGGGCAGGAGTCTGGAGGATTTTC
CGGACCAGGAGAGAACCGGAGCATGAGTGGCCCTGATAACCGGGGCAGGGGAAGAGGGGGATTTGATCGTGGAGG
CATGAGCAGAGGTGGGCGGGGAGGAGGACGCGGTGGAATGGGCAGCGCTGGAGAGCGAGGTGGCTTCAATAAGCC
TGGTGGACCCATGGATGAAGGACCAGATCTTGATCTAGGCCCACCTGTAGATCCAGATGAAGACTCTGACAACAG
TGCAATTTATGTACAAGGATTAAATGACAGTGTGACTCTAGATGATCTGGCAGACTTCTTTAAGCAGTGTGGGGT
TGTTAAGATGAACAAGAGAACTGGGCAACCCATGATCCACATCTACCTGGACAAGGAAACAGGAAAGCCCAAAGG
CGATGCCACAGTGTCCTATGAAGACCCACCCACTGCCAAGGCTGCCGTGGAATGGTTTGATGGGAAAGATTTTCA
AGGGAGCAAACTTAAAGTCTCCCTTGCTCGGAAGAAGCCTCCAATGAACAGTATGCGGGGTGGTCTGCCACCCCG
TGAGGGCAGAGGCATGCCACCACCACTCCGTGGAGGTCCAGGAGGCCCAGGAGGTCCTGGGGGACCCATGGGTCG
CATGGGAGGCCGTGGAGGAGATAGAGGAGGCTTCCCTCCAAGAGGACCCCGGGGTTCCCGAGGGAACCCCTCTGG
AGGAGGAAACGTCCAGCACCGAGCTGGAGACTGGCAGTGTCCCAATCCGGGTTGTGGAAACCAGAACTTCGCCTG
GAGAACAGAGTGCAACCAGTGTAAGGCCCCAAAGCCTGAAGGCTTCCTCCCGCCACCCTTTCCGCCCCCGGGTGG
TGATCGTGGCAGAGGTGGCCCTGGTGGCATGCGGGGAGGAAGAGGTGGCCTCATGGATCGTGGTGGTCCCGGTGG
AATGTTCAGAGGTGGCCGTGGTGGAGACAGAGGTGGCTTCCGTGGTGGCCGGGGCATGGACCGAGGTGGCTTTGG
TGGAGGAAGACGAGGTGGCCCTGGGGGGCCCCCTGGACCTTTGATGGAACAGATGGGAGGAAGAAGAGGAGGACG
TGGAGGACCTGGAAAAATGGATAAAGGCGAGCACCGTCAGGAGCGCAGAGATCGGCCCTACTAGATGCAGAGACC
CCGCAGAGCTGCATTGACTACCAGATTTATTTTTTAAACCAGAAAATGTTTTAAATTTATAATTCCATATTTATA
ATGTTGGCCACAACATTATGATTATTCCTTGTCTGTACTTTAGTATTTTTCACCATTTGTGAAGAAACATTAAAA
CAAGTTAAATGGTAGTGTGCGGAGTTTTTTTTTCTTCCTTCTTTTAAAAATGGTTGTTTAAGACTTTAACAATGG
GAACCCCTTGTGAGCATGCTCAGTATCATTGTGGAGAACCAAGAGGGCCTCTTAACTGTAACAATGTTCATGGTT
GTGATGTTTTTTTTTTTTTTTTAAATAAAATTCCAAATGTTTATAAA

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FIGURE 2905

AGGGAGGCGGGGCGGAGACGGCGGCGAGGAGGAGGCCGCGGCGCGGGACGCATAGAGCTGCGGCTCGGGCGGCGC
CTCCCTGCGGCGGCCCGGCCCGGCTCCGGCCCCCGCTGGGGCAATGCTCCCCGGGGCCGCGGGATGAGCCAGCGA
TCCTGAACTGTGTTCCTGCCCACAGTGACTCGGCCGGTCCGGGCATGGCAGACCCAGTGGCGGGCATCGCGGGCT
CGGCGGCCAAGAGCGTGCGGCCATTTCGCTCCAGTGAGGCCTACGTGGAGGCCATGAAGGAGGACCTGGCCGAGT
GGCTCAATGCCTTGTACGGCCTGGGTCTCCCGGGTGGTGGCGATGGCTTCCTGACAGGGCTGGCCACGGGCACGA
CCCTGTGCCAACATGCCAACGCCGTGACCGAGGCTGCCCGTGCATTGGCAGCCGCCCGCCCGGCCCGAGGTGTGG
CCTTCCAGGCGCACAGTGTAGTGCCTGGCTCCTTCATGGCGCGCGACAACGTGGCCACCTTCATCGGCTGGTGCC
GCGTGGAGCTGGGTGTGCCGGAGGTGCTCATGTTTGAGACTGAGGACCTGGTGCTGCGCAAGAACGAGAAGAGCG
TGGTGCTGTGCCTGCTGGAGGTGGCGCGGCGTGGGGCACGCCTGGGCCTGCTGGCCCCACGCCTCGTGCAGTTTG
AGCAGGAGATTGAGCGGGAGCTGCGTGCTGCACCCCCAGCCCCCAACGCCCCTGCCGCTGGGGAGGACACCACTG
AAACCGCCCCCCGCACCAGGGACTCCTGCCCGCGGCCCCCCGCATGACACCCAGCGACCTGCGCAACCTCGACGAGC
TGGTGAGGGAGATTCTGGGCCGCTGCACCTGCCCTGACCAGTTTCCCATGATCAAGGTCTCAGAGGGGAAGTACC
GTGTGGGGGACTCGAGCCTGCTCATCTTTGTGCGGGTGCTGAGGAGCCACGTGATGGTGCGAGTGGGTGGTGGCT
GGGACACGCTGGAGCATTACCTGGACAAGCACGACCCGTGCCGCTGCTCCTCCACTGCTCATCGCCCACCCCAGC
CGAGGGTCTGCACCTTTTCTCCACAGAGGGTGTCGCCCACCACCAGTCCCCGCCCTGCTAGCCCAGTCCCTGGGA
GTGAGCGCCGGGGCTCCCGGCCTGAGATGACTCCCGTTAGCTTACGAAGCACAAAGGAGGGGCCCGAGACCCCAC
CCAGGCCCCGGGATCAGCTGCCCCCCCATCCCCGCTCCCGCCGCTACTCCGGGGACAGTGACTCCTCAGCCTCCT
CCGCCCAGAGCGGCCCCCTTGGTACCCGCAGTGATGACACAGGCACTGGCCCCCGGAGGGAGCGACCCAGCCGGC
GGCTGACCACAGGCACCCCGGCCTCTCCGAGACGGCCTCCTGCCTGCGCAGCCAGTCCCGAGACCGGCTGGATCG
CGGCCGGCCCCGGGGGGCCCCAGGAGGCAGGGGAGCCCAGCTGTCGGTCCCCAGCCCTGCCCGGCGGGCCCGGAG
CCAGAGCCGCGAGGAGCAGGCTGTGCTGCTTGTGCGCAGGGATCGAGACGGGCAGCACTCATGGGTGCCAAGGGG
CAGGGGCAGTGGGGGCTCGGGCAGGAGCACCCCCCAGACTCCCCGTGCCCGCAGCCCTGCAGCACCCCGGCTTTC
CCGGGTCTCCAGCCCCAGTCCAGAGTTGGGCACCACACCGGCCAGCATCTTCCGCACACCCCTGCAGCTCGACCC
GCAGCAGGAGCAGCAGCTGTTCCGGCGCCTGGAAGAGGAGTTCCTGGCCAATGCCCGGGCCCTTGAGGCTGTTGC
TAGCGTGACCCCCACTGGACCAGCCCCTGACCCAGCTCGGGCCCCCGACCCTCCAGCTCCTGACTCTGCCTATTG
TTCCTCCAGTTCCTCCTCTTCGTCCCTCAGCGTCCTGGGTGGCAAATGTGGCCAACCTGGGGACTCTGGCCGGAC
GGCCAATGGGCTGCCTGGGCCCCGAAGCCAAGCCCTTTCCAGCTCCTCCGATGAAGGCAGCCCCTGCCCTGGCAT
GGGGGGGCCACTAGATGCACCTGGGAGCCCCCTGGCTTGCACTGAACCCTCGAGGACCTGGGCACGGGGTCGGAT
GGACACACAGCCAGACCGTAAACCCTCACGTATCCCCACGCCTCGGGGCCCCCGCCGCCCCTCCGGACCCGCAGA
GCTGGGGACATGGCATGCCCTGCACTCAGTCACCCCGAGGGCTGAGCCAGATTCCTGGATGTGATGGACCAGCTC
AGCTGTCCCCAGACCCCATCCCTTCTCCTTTTCCTTTGTGGCCTTAACCCTTCTGCATCAGGGAGCCCCCTCTGC
CTCTTGAGTACCAGACCTCATGGGACCAGACCCCTTGGGACCACATGGCACAATGGGACCTCTGTTGTACATTCC
GGTTGGGGGATGAGCGTTGCTATTTAATTACTAATATTATTGAATGCCTTAGAGGAGGCCGGGCGAGCCCGGTGT
TCTGAAGACCTGTGGCCCAGCAGAGCCTCTGACAGTAAAGTTTTGCTCCAGC

FIGURE 2906A

AAGCCTGGCTACAGATAAGGGACCAAAATGACTGACTCAAAATATTTCACCACGACCAAGAAAGGGGAGATCTTC
GAGCTGAAGGCAGAGCTCAACAGTGACAAGAAGGAGAAGAAGAAGGAGGCAGTGAAGAAAGTGATTGCATCGATG
ACCGTGGGCAAAGATGTCAGTGCCCTCTTCCCCGATGTGGTCAACTGCATGCAGACGGACAACCTGGAGCTGAAG
AAGCTAGTATACCTCTACTTGATGAATTACGCCAAGAGTCAGCCTGACATGGCCATTATGGCCGTCAACACCTTT
GTGAAGGACTGTGAGGACCCCAACCCCCTCATCCGAGCCCTGGCAGTGCGGACCATGGGCTGCATCCGCGTTGAC
AAGATCACAGAGTACCTGTGCGAGCCACTCCGGAAGTGCCTGAAGGACGAGGATCCATATGTGCGCAAGACAGCA
GCTGTGTGCGTGGCCAAGCTCCACGACATCAACGCCCAGCTGGTGGAGGACCAGGGCTTCCTGGACACCCTTAAA
GACCTCATCTCCGACTCTAACCCCATGGTGGTGGCCAATGCAGTGGCAGCGCTCTCAGAAATTGCCGAGTCTCAC
CCCAGCAGCAACCTGCTCGATCTGAACCCACAGTCCATCAACAAGCTGCTGACAGCCCTCAATGAGTGCACCGAG
TGGGGCCAGATCTTCATCCTGGACTGCCTCGCCAACTATATGCCCAAGGACGACCGCGAGGCCCAGAGCATCTGT
GAGCGGGTCACCCCCAGGCTCTCCCATGCCAACTCCGCTGTGGTGCTCTCTGCTGTGAAGGTGCTGATGAAGTTC
ATGGAGATGTTGTCTAAGGACTTGGACTACTACGGCACACTGCTCAAGAAGCTGGCCCCACCCCTGGTCACACTG
CTGTCAGCCGAGCCAGAGCTGCAGTATGTGGCCCTGCGCAACATCAATCTCATCGTGCAGAAAAGGCCTGAGATC
CTGAAGCATGAGATGAAGGTGTTCTTCGTGAAGTACAACGACCCTATCTACGTGAAGCTGGAGAAGCTGGACATC
ATGATCCGCCTGGCCTCTCAGGCCAACATCGCCCAGGTGTTGGCAGAGCTGAAAGAGTACGCAACAGAAGTGGAT
GTGGACTTTGTACGGAAGGCTGTGCGTGCTATTGGCCGCTGCGCCATCAAGGTGGAGCAATCTGCGGAGCGCTGT
GTGAGCACGCTGCTCGACCTCATCCAGACCAAGGTCAACTATGTGGTCCAGGAGGCCATCGTGGTCATCAAGGAC
ATCTTCCGCAAGTACCCCAACAAGTATGAGAGTGTGATTGCCACACTGTGTGAGAATCTGGACTCCCTGGATGAG
CCTGAGGCCCGGGCTGCCATGATCTGGATTGTGGGCGAGTACGCGGAACGGATCGACAACGCAGATGAGCTGCTG
GAGAGCTTCCTCGAGGGCTTCCATGACGAGAGCACACAGGTCCAGCTGCAGCTGCTGACAGCCATTGTGAAACTC
TTTCTAAAGAAGCCAACAGAGACCCAGGAGCTGGTGCAGCAGGTCCTCAGTTTGGCCACTCAGGACTCAGATAAC
CCAGACCTGCGGGACCGTGGCTACATCTACTGGCGCCTGCTGTCCACGGACCCGGTGGCAGCCAAGGAGGTGGTG
TTGGCTGAGAAGCCACTCATCTCTGAAGAGACGGACCTCATCGAGCCCACACTGTTAGACGAGCTTATCTGCTAC
ATCGGCACGCTGGCTTCCGTCTACCATAAGCCTCCCAGTGCCTTTGTGGAGGGGGGCCGGGGCGTCGTGCACAAG
AGCCTGCCACCTCGCACGGCCTCGTGAAGCGCAGAGAGCCCTGAGACAGCCCCTACTGGAGCACCTCCTGGGGAG
CAGCCAGATGTCATCCCCGCCCAGGGCGACCTGCTGGGTGACCTCCTCAACCTGGACCTCGGCCCCCCAGTGAGC
GGCCCACCCCTGGCCACCTCCTCGGTGCAGATGGGAGCTGTGGACCTTCTTGGCGGTGGCCTTGACAGCCTGATG
GGGGATGAGCCTGAAGGGATTGGGGGCACCAACTTCGTGGCACCTCCAACAGCAGCAGTACCAGCCAATCTTGGA
GCACCCATCGGCAGTGGCCTGAGTGACCTCTTTGACCTGACCAGTGGCGTGGGCACCCTGTCAGGATCATATGTG
GCCCCCAAAGCAGTCTGGCTCCCAGCCATGAAGGCTAAGGGGCTGGAGATCTCAGGCACCTTCACCCGCCAGGTG
GGCTCCATCTCCATGGACCTGCAGCTGACCAACAAGGCCTTGCAGGTCATGACCGACTTTGCCATCCAGTTCAAC
CGCAACAGCTTTGGCCTGGCCCCCGCCACCCCCCTCCAGGTCCACGCGCCACTCAGCCCCAACCAGACAGTGGAG
ATCTCCCTGCCTCTCAGCACGGTGGGCTCGGTCATGAAGATGGAGCCTCTGAACAACCTCCAGGTGGCCGTGAAG
AACAACATCGATGTCTTCTACTTCAGCACCTTGTACCCACTGCACATCCTCTTTGTGGAGGACGGGAAGATGGAC
CGGCAGATGTTCCTGGCCACATGGAAGGATATTCCCAATGAGAATGAGGCCCAGTTCCAGATCAGAGACTGCCCC
CTCAATGCAGAGGCTGCGAGCAGCAAGCTGCAGAGCAGCAACATCTTCACTGTCGCCAAGAGGAACGTGGAGGGC
CAGGACATGCTCTACCAGTCCCTGAAGCTGACCAACGGCATCTGGGTGCTGGCGGAGCTGCGGATCCAGCCGGGC
AACCCCAGCTGCACGCTGTCCCTGAAGTGTCGAGCACCAGAGGTGTCCCAGCACGTGTACCAGGCCTACGAGACC
ATCCTCAAGAACTGAGACCCCGGCCAGCGCCCACCCCAGCCTTCTGCCCGCCCCATCGAGGAGGCCCCTCGGGGG
CAGCACATCTTCCTCCTCGCAGGAGGGACCAGGCGGGGCTCCAGGCCACTCAGTGGGCTCCCTGGTCCTGATGGC
AGAACCCACCCGATCCCTGGGGTAGGGCACCACCCCCTCCTGGGGTGAGAGCGCAGTGCACTCCCGTGCTCTGGG
ACACCCCTGCTCCTGTGGCTGTGATGTGGGGTTAAGTGAGGTGGGGACCAAAGGAAACAGAGCCAGAGCAGCCAC
AGAAGCTGTGCCTGAAGGGTGAGTGTGGAGCTTGCCCCTCCGGCTCACAGCCCCGGCAGCCCCTGGCTCCTTGGT
CTCTCCGGTTGGTGTTAAAGGGCCCTCCACTGCCACCTCTCATGGGATGGACCCTGCCAACCTGGCCTGGGTGTG
CAGGGAGGGGTTCCCCTTGGTACCAGGAGAGCTGCTCACTTAGGGCCTGGGGCTCAAGGAGCTGTAGGTGCCGGC
AGAGGGGCAGAGCTAGGCTGGGAGGAGCCCAGGGCCTGCACCACCCACTTGCAACCACCAGGCTGGTGCCCTGCA
GCTGTGCCAGTTGGGCCACAGCCTCCCGAGTGCTGACCCACATGGTCAAGACCAGGCAGAAGCTCCCAGAGCCCC
TGTCTCGGGCTCCCCACCGACTGGCAGCTGCACTATCCCCAACTCCCCACTTCTGCCCCAAGGGTGGTCACTGCC

FIGURE 2906B

TGTGATACATTCCTCAGTGTCGCCTCTGAGCCCAGGCCTCCTGCCACAAAGACTGGGCCGAGAGATGGGGCTGGG
TAAGCGGGTGCGCCTCCTGTTTGGGTTTCTTCGGGGTTTCTCTGTAGTGTCTGCTGCCCTCCTCCTGGCCTCCCA
GGTTTCAGTTGTGTCTGACAGAGCATTAGGTTTTCCTGTTACTGCTGTGTAATAATAAAGAAAGATTCGGCTTTT
GGC

FIGURE 2907A

ATGATGAGCTTCGGCGGCGCGGACGCGCTGCTGGGCGCCCCGTTCGCGCCGCTGCATGGCGGCGGCAGCCTCCAC
TACGCGCTAGCCCGAAAGGGTGGCGCAGGCGGGACGCGCTCCGCCGCTGGCTCCTCCAGCGGCTTCCACTCGTGG
ACACGGACGTCCGTGAGCTCCGTGTCCGCCTCGCCCAGCCGCTTCCGTGGCGCAGGCGCCGCCTCAAGCACCGAC
TCGCTGGACACGCTGAGCAACGGGCCGGAGGGCTGCATGGTGGCGGTGGCCACCTCACGCAGTGAGAAGGAGCAG
CTGCAGGCGCTGAACGACCGCTTCGCCGGGTACATCGACAAGGTGCGGCAGCTGGAGGCGCACAACCGCAGCCTG
GAGGGCGAGGCTGCGGCGCTGCGGCAGCAGCAGGCGGGCCGCTCCGCTATGGGCGAGCTGTACGAGCGCGAGGTC
CGCGAGATGCGCGGCGCGGTGCTGCGCCTGGGCGCGGCGCGCGGTCAGCTACGCCTGGAGCAGGAGCACCTGCTC
GAGGACATCGCGCACGTGCGCCAGCGCCTAGACGACGAGGCCCGGCAGCGAGAGGAGGCCGAGGCGGCGGCCCGC
GCGCTGGCGCGCTTCGCGCAGGAGGCCGAGGCGGCGCGCGTGGACCTGCAGAAGAAGGCGCAGGCGCTGCAGGAG
GAGTGCGGCTACCTGCGGCGCCACCACCAGGAAGAGGTGGGCGAGCTGCTCGGCCAGATCCAGGGCTCCGGCGCC
GCGCAGGCGCAGATGCAGGCCGAGACGCGCGACGCCCTGAAGTGCGACGTGACGTCGGCGCTGCGCGAGATTCGC
GCGCAGCTTGAAGGCCACGCGGTGCAGAGCACGCTGCAGTCCGAGGAGTGGTTCCGAGTGAGGCTGGACCGACTG
TCGGAGGCAGCCAAGGTGAACACAGACGCTATGCGCTCAGCGCAGGAGGAGATAACTGAGTACCGGCGTCAGCTG
CAGGCCAGGACCACAGAGCTGGAGGCACTGAAAAGCACCAAGGACTCACTGGAGAGGCAGCGCTCTGAGCTGGAG
GACCGTCATCAGGCCGACATTGCCTCCTACCAGGAAGCCATTCAGCAGCTGGACGCTGAGCTGAGGAACACCAAG
TGGGAGATGGCCGCCCAGCTGCGAGAATACCAGGACCTGCTCAATGTCAAGATGGCTCTGGATATAGAGATAGCT
GCTTACAGAAAACTCCTGGAAGGTGAAGAGTGTCGGATTGGCTTTGGCCCAATTCCTTTCTCGCTTCCAGAAGGA
CTCCCCAAAATTCCCTCTGTGTCCACTCACATAAAGGTGAAAAGCGAAGAGAAGATCAAAGTGGTGGAGAAGTCT
GAGAAAGAAACTGTGATTGTGGAGGAACAGACAGAGGAGACCCAAGTGACTGAAGAAGTGACTGAAGAAGAGGAG
AAAGAGGCCAAAGAGGAGGAGGGCAAGGAGGAAGAAGGGGGTGAAGAAGAGGAGGCAGAAGGGGGAGAAGAAGAA
ACAAAGTCTCCCCCAGCAGAAGAGGCTGCATCCCCAGAGAAGGAAGCCAAGTCACCAGTAAAGGAAGAGGCAAAG
TCACCGGCTGAGGCCAAGTCCCCAGAGAAGGAGGAAGCAAAATCCCCAGCCGAAGTCAAGTCCCCTGAGAAGGCC
AAGTCTCCAGCAAAGGAAGAGGCAAAGTCACCGCCTGAGGCCAAGTCCCCAGAGAAGGAGGAAGCAAAATCTCCA
GCTGAGGTCAAGTCCCCCGAGAAGGCCAAGTCCCCAGCAAAGGAAGAGGCAAAGTCACCGGCTGAGGCCAAGTCT
CCAGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGTCACCGGCTGAGGCCAAGTCCCCAGTGAAGGAAGAA
GCAAAATCTCCAGCTGAGGTCAAGTCCCCGGAAAAGGCCAAGTCTCCAACGAAGGAGGAAGCAAAGTCCCCTGAG
AAGGCCAAGTCCCCAGAGAAGGAAGAGGCCAAGTCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGCAGAAGCAAAG
TCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGCAGAAGCAAAGTCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGAA
GAAGCAAAGTCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGTCCCCTGAGAAGGCCAAGTCCCCA
GTGAAGGAAGAAGCAAAGACCCCCGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCCAAGTCCCCAGAGAAGGCC
AAGTCCCCAGAGAAGGCCAAGACTCTTGATGTGAAGTCTCCAGAAGCCAAGACTCCAGCGAAGGAGGAAGCAAGG
TCCCCTGCAGACAAATTCCCTGAAAAGGCCAAAAGCCCTGTCAAGGAGGAGGTCAAGTCCCCAGAGAAGGCGAAA
TCTCCCCTGAAGGCGGATGCCAAGGCCCCTGAGAAGGAGATCCCAAAAAAGGAAGAGGTGAAGTCCCCAGTGAAG
GAGGAGGAGAAGCCCCAGGAGGTGAAAGTCAAAGAGCCCCCAAAGAAGGCAGAGGAAGAGAAAGCCCCTGCCACA
CCAAAAACAGAGGAGAAGAAGGACAGCAAGAAAGAGGAGGCACCCAAGAAGGAGGCTCCAAAGCCCAAGGTGGAG
GAGAAGAAGGAACCTGCTGTCGAAAAGCCCAAAGAATCCAAAGTTGAAGCCAAGAAGGAAGAGGCTGAAGATAAG
AAAAAAGTCCCCACCCCAGAGAAGGAGGCTCCTGCCAAGGTGGAGGTGAAGGAAGACGCTAAACCCAAAGAAAAG
ACAGAGGTGGCCAAGAAGGAACCAGATGATGCCAAGGCCAAGGAACCCAGCAAACCAGCAGAGAAGAAGGAGGCA
GCACCGGAGAAAAAAGACACCAAGGAGGAGAAGGCCAAGAAGCCTGAGGAGAAACCCAAGACAGAGGCCAAAGCC
AAGGAAGATGACAAGACCCTCTCAAAAGAGCCTAGCAAGCCTAAGGCAGAAAAGGCTGAAAAATCCTCCAGCACA
GACCAAAAAGACAGCAAGCCTCCAGAGAAGGCCACAGAAGACAAGGCCGCCAAGGGGAAGTAAGGCAGGGAGAAA
GGAACATCCGGAACAGCCAAAGAAACTCAGAAGAGTCCCGGAGCTCAAGGATCAGAGTAACACAATTTTCACTTT
TTCTGTCTTTATGTAAGAAGAAACTGCTTAGATGACGGGGCCTCCTTCTTCAAACAGGAATTTCTGTTAGCAATA
TGTTAGCAAGAGAGGGCACTCCCAGGCCCCTGCCCCCAGGCCCTCCCCAGGCGATGGACAATTATGATAGCTTAT
GTAGCTGAATGTGATACATGCCGAATGCCACACGTAAACACTTGACTATAAAAACTGCCCCCCTCCTTTCCAAAT
AAGTGCATTTATTGCCTCTATGTGCAACTGACAGATGACCGCAATAATGAATGAGCAGTTAGAAATACATTATGC
TTGAGATGTCTTAACCTATTCCCAAATGCCTTCTGTTTTCCAAAGGAGTGGTCAAGCCCTTGCCCAGAGCTCTCT
ATTCTGGAAGAGCGGTCCAGGTGGGGCCGGGGACTGGCCACTGAATTATGCCAGGGCGCACTTTCCACTGGAGTT

FIGURE 2907B

CACTTTCAATTGCTTCTGTGCAATAAAACCAAGTGCTTATAAAATGAAAATGTTGCTGCTGTTATTCTCTTTCCC
TGGGAAGGCTGGGGGCAGGGCAGGGGAGGTCTGGATGTGACACCCCAGACTGCATGGGACTGAGCAAGCATCAGT

FIGURE 2908A

ACCACTTGAAGAGAGGTTCCTAATACTAGACAGATGGAGAGTGGCTTGGCTGTTTCCCCCTGCATATTGGGGTTG
AAAACTTAAATGTGTAGTTCCAGTCCTTCTATGCAGAGTCTCTCCTGCCCTCCCTCCTTCCTGCAGTCTCACCAC
GCCACCACCTCCCTCGGGGGCCTCCGCGCTGAGCTTCCGGCCTCTACGCCTCGCTTCCGGTCGGCCGCCCCTTCC
TTACTTCCGGTTCTCTATGGTGCGCGGGCAAGCTTTGCTCCGCCTCCGGCAGTGGCTTACTCCCGGTGCCAGGTT
CTTGGAGCTGTGAGGAGGAACAACC**ATG**TCATCAGAATCGAGCAAAAAACGGAAGCCCAAAGTGATCCGAAGCGA
TGGAGCCCCAGCTGAAGGAAAGCGGAATCGATCTGACACCGAGCAGGAAGGTAAATACTACAGTGAGGAGGCCGA
GGTGGATCTGCGGGACCCTGGCAGAGACTATGAGTTATACAAGTACACCTGCCAGGAGCTACAGAGGCTGATGGC
TGAGATCCAAGACCTGAAGAGCAGGGGTGGCAAGGATGTGGCAATAGAAATAGAAGAACGGAGGATCCAGAGCTG
TGTGCATTTCATGACTCTAAAGAAGCTTAACCGATTAGCCCACATCAGGTTGAAGAAAGGAAGAGATCAGACCCA
CGAGGCTAAGCAGAAAGTAGATGCCTATCATCTGCAGCTCCAGAACCTGTTGTATGAGGTGATGCACCTACAGAA
GGAGATCACCAAATGTTTGGAGTTTAAGTCAAAGCATGAAGAAATTGATCTGGTCAGTTTAGAGGAGTTTTATAA
GGAGGCTCCACCAGATATCAGCAAGGCCGAAGTCACCATGGGAGACCCTCACCAGCAAACACTGGCACGTCTGGA
CTGGGAGCTGGAGCAGCGGAAAAGGCTGGCAGAGAAGTACCGAGAGTGCCTATCTAACAAGGAGAAGATTCTCAA
GGAGATTGAGGTGAAGAAGGAGTACCTGAGCAGCCTCCAGCCCCGCCTCAACAGCATCATGCAGGCTTCCCTTCC
GGTGCAGGAGTACCTGTTTATGCCATTCGACCAGGCTCACAAGCAGTATGAGACAGCCAGACACCTGCCGCCTCC
CCTCTATGTCCTCTTTGTTCAGGCCACTGCGTATGGGCAGGCCTGTGATAAGACGTTATCTGTGGCAATCGAAGG
CAGTGTGGATGAAGCCAAGGCTCTGTTCAAACCTCCAGAGGACTCCCAAGATGACGAGAGTGACTCAGATGCCGA
GGAGGAGCAGACTACGAAGCGCCGGAGACCCACACTGGGGGTTCAGTTGGACGACAAACGCAAGGAGATGCTGAA
GAGGCACCCACTGTCTGTCATGCTCGACCTGAAGTGCAAAGATGACAGTGTGCTTCACCTGACTTTCTACTACCT
CATGAACCTCAACATCATGACAGTAAAAGCCAAAGTGACAACTGCCATGGAGCTGATCACCCCCATCAGTGCAGG
TGACTTGCTGTCTCCTGACTCAGTCCTGAGTTGCTTGTATCCTGGGGATCATGGAAAGAAAACTCCGAATCCAGC
CAATCAGTATCAGTTTGATAAAGTTGGCATCCTGACTTTGAGCGACTATGTACTTGAGCTAGGTCACCCCTATTT
GTGGGTGCAGAAGCTGGGTGGCCTCCACTTCCCCAAAGAGCAGCCCCAGCAAACAGTGATTGCTGACCACTCGCT
GAGCGCCAGCCACATGGAGACCACCATGAAACTTCTGAAGACCAGGGTGCAGTCCCGCCTGGCCCTCCACAAACA
GTTTGCATCCCTAGAACATGGCATTGTGCCAGTTACCAGTGATTGCCAGTACCTCTTCCCTGCCAAGGTTGTCTC
TCGCCTGGTGAAATGGGTGACAGTTGCCCATGAGGATTACATGGAGCTGCACTTCACCAAAGACATTGTGGATGC
GGGACTGGCTGGGGACACCAATCTCTACTACATGGCGCTCATCGAAAGGGGCACAGCCAAACTGCAGGCCGCTGT
GGTGTTGAACCCTGGCTACTCCTCCATCCCACCTGTTTTCCAGCTCTGTTTGAACTGGAAAGGGGAGAAAACCAA
CAGCAACGATGACAACATTCGGGCCATGGAGGGCGAAGTCAATGTGTGCTACAAGGAGCTGTGTGGCCCTTGGCC
CAGCCACCAGCTGTTGACCAACCAGCTGCAGCGGCTGTGTGTGCTGCTGGATGTTTACCTGGAGACCGAGAGCCA
TGACGACAGTGTGGAGGGGCCCAAGGAATTTCCCCAGGAGAAGATGTGTCTGCGGCTCTTCAGGGGTCCTAGCAG
GATGAAGCCATTTAAATACAACCATCCTCAGGGATTCTTCAGCCATCGC**TGA**TCTCCCGCGCAGACCGTTGTTTC
CCCCAAGGCCTCACCCTGAGCACTGGGCTTCTGCTTTCTGCTCTGGCCCACATGTGACTCTTGATATTCTCCAAA
GACACCAGCCAATTAAAAAGCGTCACCTGACCAGTGGCCTTTGTCTGTGGTTCCTGGCAAGGTGGCTTTGCAGTC
TGGAAGGGCAGGTGGGAGCTGTGACACAGTGTGAAAAAGCATTTGTAGAGAGACTTTTTCTCAGCAGCCAATAAA
AGCAGAGTGGAAAAAGATTCCAATTCTGCAGAGAGATGCTCACCTCTTGTCTACGCACACCCTATTTGTGCTTTG
CGGGGTGAGGTCCTCATGATCTTGTATTTATTATCCCAAGTTCCTGCTGTTAAGAGGTGGTAGGAGAAGCCAAAG
GCAGCAGAGCACAAAAAGCAAAACTCTTCCCTCCCCACCCGCTCTTCCCATTAGTCCTGTCAGGGTTGCCGATGG
ACAAATTGTCTCTGATCGTTGGATGTTATAAATGTCTGACAGTGCAGTGCAAACAGAAGACAAACTCAGTTGATC
CTTGAACAACTCAGGGGTTAGGGGCACCAACACCCCCTGCCCTGCACAGTTGAAAAATCCGTGTATAACTTTTGA
CTCCCTAAAAACTTAACTAATAGCCTGCTGTTGACCAGTAGTATGCTATTAGTAGTTACTTACTGCTAACATAGT
CAGTACATATTTTCAGTATATATTTTGTATCTTATACACTGTATTCTTACAATACAGTAAACTAGAGAAAAGAAA
ATGTTATAAGGAAAGTCACAAGGGGGCCTGAGTGCAGTGGCTCACGTCTGTAATCCCAGCACTTTGGGAGGCCAA
GGCGGGTGGATCACTTGAGGTCAGGAGTTTGAGACCAGCCTGGCCGACATGGTGAAACCCTGTCTCTACTAAAAA
CATGGAAATTAGCCAAGCGTGGTGGCGCATGCCTGTAGTCCCAGTTACTCAGGAGGCTGAGGCAGAATTACTTGA
ACCCATGAGGCAGAGGTTGCAGTAAGCCAAGATCACGCTCCTGCGCTCCGGCTTGGGCGAGAGTGAGACTCCGTC
TCAAAAATAAATAAATAAGAAAGCCATAAGGAAGAAAATATATATCTACTATTAAGTAGAAGTGGATCACCATAA
AGGTCTTCACATACTGTCTCAGGGTTGAATAGTCTAAGGAAGAGGAGGGGTTGGTCTTGGTGTCTCAGGGATGGC

FIGURE 2908B

AGAGGCAGAAAAAGTGGGGGAGGTGGAGGGGGAGGCAGGCACCACTGTTATTTTTATTGAACAAAATCTGTGCAG
GGACTCATGACTGTAATCCTAGTACTTTGGAAAGCTAAGGCGGGAGGATCCCTTGAGGCCAGGAGTTCAGGTCCA
GCCTGGGCAACGTAGTGAGAGACCCTGTATCTACAAAAAATTTAAAAATCAGCCAGGTGTGGTGGTATGCACCAA
TAGTCCCAGTTACTCAGAAGGCTGAGGTGGGCGGATGACTGGAGTCCAGGAGTTCAAGGTAGCAGTGAGCTATTC
ATCGTGCCTGTACTGTACTCCAGCCTGGGAAACAATGCGAGTCCCTATCTCTAAAAAATTTTAAAAAAAGAAATC
TGCATATAATAGACCCACAGAGTCCAAACTATTGTTCAGAGATCAACTGTACTTCACAGAGAGTAATTCTAAGTC
TTACAGGATTTCATGGAGATGGCGAGAGTGGTGTTGGAGAATCAATCACATACAGAGATACAGGACAGTGAGACC
AGGTAACATTTGAGGAGAATATTTTTTTTTTATTGAGACAGGGTCTTGCTCTGTTGTCCAGGCTGGAGTGCAGTG
GCACGAACACAGCTCACTGCCGCCTCAACCTCTCCTGGGTTCAAGTGATCCTCCTGCCTCAGCCTCCCAAGTAGC
TGGGACCACAGGTGTGTGCCACCATTTCTGGCTAATTTTTAAATTTTTTGTAGAGGCGGGATCCCACTATTTTTC
CCAGGCTGGTCTCAAACTCCTGGGCTCAAATGATCCTCCCACCTCGGCCTCCCAAAGTGCTAGGATTATAGGCAT
GAGCCACCACACCCGGCCTGAGTAGAGTCTTTAAGGTAATGACAAAAGTGCCTCAAAATATAATTATTTGATTAA
GAGAAGTCTTGGGAAGATAGGTAACAACCTTTAAAATGTTCATAAAATTACATCCTTTGTAATACTCCTGCAAGT
CAAAGTAAAGGATGGCATAGACTATTCTTGGACAGTTTTGTCAAAAAGTGTATCTTGACCCCACCATCAGTACTC
CATTCTTCATTTTAAAAAATAAGATGGGCTGGGCACAGTGGCTTACGCCTTTAATATCAGTACTTTGGGAGGCTG
GTGGGCGGATCACCTGAGATCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAAT
ACAAAAATTAGCTGGGCATGGTGGTGCGCGCCTGTAATCCCAGCCACTCGGGAGGCTGAGGCAGGAGAATTGCTT
GAATCCCCGAGGCGGAGGTTGCACTGAGCCGAGATGGTGCCACTGCACCATCTGGACAACAGAGCAAGACTCCGT
CTTGG

3324/5332

FIGURE 2909

CCACGCTCCCATTTTACCGAGGTGGATCCTGAGGCCCAGAGTGGGCAAAGGGCTTGCCAAGGTCGCAGAGCGCGC
AGAGGATTAGAACCCTGACTTCCGTCCAGCACCTGCGGAGTTGGAGACGCCCACAGGAAACGCCCACCTGACCGG
GTGAGTGAGGGGGCGGGCGAGCCGGAGGGGTGGAGTTTATTCGCGCCCCGCCTCCGCCACCAGGGCTTGGGGGCG
GGGCCTTCCTGCAACCTTTGCGGCTCCAACATGGCTCCGCGGCTGTGCAGCATCTCTGTGACGGCGCGGCGGCTG
CTGGGGGGCCCCGGGGCCTCGCGCTGGGGACGTTGCGTCTGCAGCTGCGGCGCGTTTCTATTCCAAGGACAATGAA
GGCAGCTGGTTCCGCTCCCTCTTTGTTCACAAAGTGGATCCCCGGAAGGATGCCCACTCCACCCTGCTGTCCAAG
AAGGAAACCAGCAACCTCTATAAGATCCAGTTTCACAATGTAAAGCCTGAATACCTGGATGCCTACAACAGCCTC
ACGGAGGCTGTGCTGCCCAAGCTTCACCTGGATGAGGACTACCCATGCTCACTCGTGGGCAACTGGAACACGTGG
TATGGGGAGCAGGACCAGGCAGTGCACCTGTGGCGATTCTCAGGTGGCTACCCAGCCCTCATGGACTGCATGAAC
AAGCTCAAAAACAATAAGGAGTACCTGGAGTTCCGAAGGGAGCGGAGCCAGATGCTGCTGTCCAGGAGAAACCAG
CTGCTCCTCGAGTTCAGCTTCTGGAATGAGCCACAGCCCAGAATGGGTCCCAACATCTATGAGCTGAGGACATAC
AAGCTCAAGCCAGGAACCATGATCGAGTGGGGGAACAACTGGGCTCGGGCCATCAAGTACCGGCAGGAGAACCAG
GAGGCAGTGGGCGGCTTCTTCTCACAGATAGGAGAGCTCTACGTGGTGCACCATCTCTGGGCCTATAAAGACCTG
CAGTCTCGGGAGGAGACTCGAAACGCTGCCTGGAGGAAGAGAGGCTGGGATGAAAATGTCTACTATACAGTCCCC
CTGGTGCGACACATGGAGTCTAGGATCATGATCCCCTTGAAGATCTCGCCTCTGCAGTGATGCTGCCTACACCTC
CACCTCCTTCCCCTTCTCCCTCAGGCAACCCCGACAGACAGTGGCACTCCTGGTCCTGCTGTCTTGGTTTTGTCT
TGGCTCTGGGAGGACTCTGAGGGGCAGTGCTCAGTTCAGACAAGGGGGAACTGAAGGCTGACAAGTTCTGAGGAT
TACAGCTCTGCCCAGGCCCTTTCTACTTTCCCTGCCTGCCTCCCTCCCCCTGCTAGAAGTAGTTTCTGATTTCCC
TGAATGAAAGATAGTGATCTTTTAGGCCTTCATTTATCTTCTAAAATTCCTCATCTCAAGGCCACCAGTCCCCAG
TTATCACCCTTGGAAATCCTCTGTTTAGCTTAGTTGCACAAAAGGTAGTATGTCCAGTGGCTAGAGGTGGGGTGG
GAAGAGAGGAGGCCAGGCCAGGCCCTCAGGAATTCCCTGGTTTCCACTGGGCCACCCACTTGCTGGACAGTCTGA
GCCAAGTCCCTCCTGCTGGAGAAAAGCCTGGAACTGCCAAAACAAAAAAACAAATACAAACAAACCTCGTCACCA
CGGTCAGGAGGAGGTTCAGACATTCTGCCCAGAGGGGCTGGGGAAAGGGATGGGAGCCAGGAAAGATTTAGGGGC
AGGAGACAGACACGTAACAGGAACTCGGAAGGTAGAACTTAGAATTCAGAACTTGGGTTTCAATTGTAGAATTTG
GAATCTGGAATACAGAATTGGGAAGAAGAACAGAGATGACAAAAGACCACTTGAAGAGAGGTTCCTAATACTAGA
CAGATGGAGAGTGGCTTGGCTGTTTCCCCCTGCATATTGGGGTTGAAAACTTAAATGTGTAGTTCCAGTCCTTCT
ATGCAGAGTCTCTCCTGCCCTCCCTCCTTCCTGCAGGCAAATATACAAGCTAGACCCTGTTCCCTCACCCTGTAT
CCTGTCTCCCCTAATTGACATTCTATCAGCCCAACCCTCATTCTGCAGGGCCACCTGGTGTGTGGAGGTGGCGGG
AGGGGTCAGTGACTCTGGGGGTCTCCTCAGTGACCCCCATACCTCATCATGAACCCTTGGGTAGCTTGATTCTGC
CTACCATCCAGGAAAACTTGTGCTGGAATTGCTGATGGAAACAATTAAATATTTACTAT

10/531147

FIGURE 2910

GCAGCCGTCAGGGCCCGTCCCCCAACTCCCCTTTCCGCTCAGGCAGGGTCCTCGCGGCCCATGCTGGCCGCTGGG
GACCCGCGCAGCCCAGACCGTTCCCGGGCCGGGCAGCCGGCCACCATGGTGGCCCTGAGGCCTGTGCAGCAACTC
CAGGGGGGCTAAAGGGCTCAGAGTGCAGGCCGTGGGGCGCGAGGGTCCCGGGCCTGAGCCCCGCGCC**ATG**GCCGG
GGCCATCGCTTCCCGCATGAGCTTCAGCTCTCTCAAGAGGAAGCAACCCAAGACGTTCACCGTGAGGATCGTCAC
CATGGACGCCGAGATGGAGTTCAATTGCGAGATGAAGTGGAAAGGGAAGGACCTCTTTGATTTGGTGTGCCGGAC
TCTGGGGCTCCGAGAAACCTGGTTCTTTGGACTGCAGTACACAATCAAGGACACAGTGGCCTGGCTCAAAATGGA
CAAGAAGGTACTGGATCATGATGTTTCAAAGGAAGAACCAGTCACCTTTCACTTCTTGGCCAAATTTTATCCTGA
GAATGCTGAAGAGGAGCTGGTTCAGGAGATCACACAACATTTATTCTTCTTACAGGTAAAGAAGCAGATTTTAGA
TGAAAAGATCTACTGCCCTCCTGAGGCTTCTGTGCTCCTGGCTTCTTACGCCGTCCAGGCCAAGTATGGTGACTA
CGACCCCAGTGTTCACAAGCGGGGATTTTTGGCCCAAGAGGAATTGCTTCCAAAAAGGGTAATAAATCTGTATCA
GATGACTCCGGAAATGTGGGAGGAGAGAATTACTGCTTGGTACGCAGAGCACCGAGGCCGAGCCAGGGATGAAGC
TGAAATGGAATATCTGAAGATAGCTCAGGACCTGGAGATGTACGGTGTGAACTACTTTGCAATCCGGAATAAAAA
GGGCACAGAGCTGCTGCTTGGAGTGGATGCCCTGGGGCTTCACATTTATGACCCTGAGAACAGACTGACCCCCAA
GATCTCCTTCCCGTGGAATGAAATCCGAAACATCTCGTACAGTGACAAGGAGTTTACTATTAAACCACTGGATAA
GAAAATTGATGTCTTCAAGTTTAACTCCTCAAAGCTTCGTGTTAATAAGCTGATTCTCCAGCTATGTATCGGGAA
CCATGATCTATTTATGAGGAGAAGGAAAGCCGATTCTTTGGAAGTTCAGCAGATGAAAGCCCAGGCCAGGGAGGA
GAAGGCTAGAAAGCAGATGGAGCGGCAGCGCCTCGCTCGAGAGAAGCAGATGAGGGAGGAGGCTGAACGCACGAG
GGATGAGTTGGAGAGGAGGCTGCTGCAGATGAAAGAAGAAGCAACAATGGCCAACGAAGCACTGATGCGGTCTGA
GGAGACAGCTGACCTGTTGGCTGAAAAGGCCCAGATCACCGAGGAGGAGGCAAAACTTCTGGCCCAGAAGGCCGC
AGAGGCTGAGCAGGAAATGCAGCGCATCAAGGCCACAGCGATTCGCACGGAGGAGGAGAAGCGCCTGATGGAGCA
GAAGGTGCTGGAAGCCGAGGTGCTGGCACTGAAGATGGCTGAGGAGTCAGAGAGGAGGGCCAAAGAGGCAGATCA
GCTGAAGCAGGACCTGCAGGAAGCACGCGAGGCGGAGCGAAGAGCCAAGCAGAAGCTCCTGGAGATTGCCACCAA
GCCCACGTACCCGCCCATGAACCCAATTCCAGCACCGTTGCCTCCTGACATACCAAGCTTCAACCTCATTGGTGA
CAGCCTGTCTTTCGACTTCAAAGATACTGACATGAAGCGGCTTTCCATGGAGATAGAGAAAGAAAAAGTGGAATA
CATGGAAAAGAGCAAGCATCTGCAGGAGCAGCTCAATGAACTCAAGACAGAAATCGAGGCCTTGAAACTGAAAGA
GAGGGAGACAGCTCTGGATATTCTGCACAATGAGAACTCCGACAGGGGTGGCAGCAGCAAGCACAATACCATTAA
AAAGCTCACCTTGCAGAGCGCCAAGTCCCGAGTGGCCTTCTTTGAAGAGCTC**TAG**CAGGTGACCCAGCCACCCCA
GGACCTGCCACTTCTCCTGCTACCGGGACCGCGGGATGGACCAGATATCAAGAGAGCCATCCATAGGGAGCTGGC
TGGGGGTTTCCGTGGGAGCTCCAGAACTTTCCCCAGCTGAGTGAAGAGCCCAGCCCCTCTTATGTGCAATTGCCT
TGAACTACGACCCTGTAGAGATTTCTCTCATGGCGTTCTAGTTCTCTGACCTGAGTCTTTGTTTTAAGAAGTATT
TGTCT

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FIGURE 2911

ATGCCGTTCCACCCGGTGACGGCGGCGTTGATGTACCGGGGCATCTACACCGTGCCCAACCTGCTGTCGGAGCAG
CGCCCGGTGGACATCCCGGAGGACGAGCTGGAGGGTGCCGGTTGCCAGGTGGGCGCCCCAGCTAGCAGCTGTGCC
CCGCGGCAAGACCTGTCCGCACCCCGGGGCGCCGCGGTGGGGGTCGCTCAGGCGGAGAGCGGCCCAGCCCCTGCC
CGCGTGGTCCCCAGCGCTGCGGAAACTTGCCGGGCCCCGCAGCGGGGTCACGGGGCCGCGCAGTCGGCGGTGACG
GGCGGTCTGGGCGAGACCCAGGCCCTCTGCCGGGAGGACGCCATTCGCGGAGGAGCCACATGTGCCAGGAAGAGG
GAGCTGGGCAGCCCGGGATGGAATGCTGCAGACACCTGCCCAGAGGTCCCAGAATACGGCACCCTTGTGCACCCT
CGGGCCATGCTCTCACCAGATCTGCAGGCTCTGGGTTGGGCTCTCAAGGCCATGCTCAGGCTGCAGGAGATCCGA
GAGGCCTTCAAGGTGTTTGACCGTGACGGCAATGGCTTCATCTCCAAGCAGGAGCTGGGCACAGCCATGCGCTCA
CTGGGTTACATGCCCAACGAGGTGGAGCTGGAGGTCATCATCCAGCGGCTGGACATGGATGGTGATGGTCAAGTG
GACTTTGAGGAGTTTGTGACCCTTCTGGGACCCAAACTCTCCACCTCAGGGATCCCAGAGAAGTTCCATGGCACC
GACTTTGATACTGTCTTCTGGAAGTGCGACATGCAGAAGCTGACGGTGGATGAGCTGAAGCGGCTGCTCTACGAC
ACCTTCTGCGAGCACCTGTCCATGAAGGACATAGAGAACATCATCATGACGGAGGAGGAGAGCCACCTGGGCACA
GCCGAGGAGTGTCCCGTGGATGTGGAGACCTGCTCCAACCAGCAGATCCGCCAGACTTGCGTGCGCAAGAGTCTC
ATCTGCGCCTTCGCCATCGCCTTCATCATCAGTGTCATGCTCATTGCGGCCAACCAGGTGCTGCGCAGTGGCATG
AAGGGCTCCTGGGAAATTAAGGAGGGATTTGCACAGGAACCCCCAGGACCCAGTCGCTGCTGTGACCCCCTTTTC
TCCATGTACCTGCTGGGCCAGCCCATTTCACAGGGATTTTCAGGAAAGGCAGAAGCTCGTGGAGGATGGGCATCT
GAGGTGGCCCTGCAGCCCCCCACCTTCTGGCCCTCCCACCAGAGGCCCAGCTACCAAGGCCACATTGTCCACCAC
CCCAGCCTAGAGCCTAGAACTGTAGTCCAGCTGAGGAAGGAGGCAGAGCTGGGGCCTGAAGGCTCTGAGCAGCCT
CCAGCCAGGGGGCTCCTCCAGGGCTGA

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FIGURE 2912

GGAGCCCGGAGCTGCAGCCACCGGGGAGCCAGGTACCTTCCGCGAGACGTCGAGGGGCGAGTCCTAGTCTCTTTT
CTCCGCACTGGAAGACTTGAACACTTCCTTCTCTGGTCTCTGTCACCCAGGCTGGAGTGTAGTGGCGCAATCTCA
GCTGGCTGGAGCCTTGACCTCCTTGGGCTCAAGCTATCCTCCCACCTCAGCCTCTCAAATAGCTGGGACTACAGG
CAGCAAAGCACCTGCTCTGAGTGGCCATGGGGAAGCGATACTTCTGTGACTACTGCGACCGCTCCTTCCAGGACA
ACCTCCACAACCGCAAGAAGCACCTGAACGGGCTGCAGCACCTCAAGGCCAAGAAGGTCTGGTACGACATGTTCC
GAGATGCAGCTGCCATCTTGCTGGATGAGCAGAACAAGCGGCCCTGCAGGAAGTTTCTACTGACAGGCCAGTGCG
ACTTTGGCTCCAACTGCAGATTTTCCCACATGTCAGAGCGAGACCTGCAGGAGCTGAGCATCCAGGTGGAGGAGG
AGAGGCGAGCCAGGGAGTGGCTACTAGATGCTCCTGAGCTCCCCGAGGGCCATCTGGAGGACTGGCTGGAGAAGA
GAGCCAAGCGGCTGAGCTCAGCCCCAAGTAGCAGGGCTGAACCCATCAGAACCACTGTCTTCCAGTACCCCGTGG
GCTGGCCACCAGTTCAGGAGCTGCCTCCATCCCTGCGGGCACCCCCACCTGGGGGGTGGCCTCTGCAGCCCAGAG
TCCAGTGGGGCTGAGCCCCTTGCCCCCGACTGACCCCCACGTGGTCACTTTTCTCATCAGTCACAATAGGAAGCC
AAGCCCGGTTCCTGCTACGCCCCATGGAGGCTCCGAGACCATCTGCCCAGCCTCACTGAGGCTCAGGACACGGCC
ACACCAAGTGCAGCCCTCGTCCTGGGTCTGCACCGGGCAGCTCTCCCCTCACTCTCCTCCACCTGCCCCCCTGCT
TCTTAAGAAGATGGGGGAGAAAACTTCCAAATGTTTATAAAGAAAGTCTGTCACCA

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FIGURE 2913

CTGTGAAGAAACATGGCGGCCGCGACGTTGACTTCGAAATTGTACTCCCTGCTGTTCCGCAGGACCTCCACCTTC
GCCCTCACCATCATCGTGGGCGTCATGTTCTTCGAGCGCGCCTTCGATCAAGGCGCGGACGCTATCTACGACCAC
ATCAACGAGGGGAAGCTGTGGAAACACATCAAGCACAAGT**ATG**AGAACAAGTAGTTCCTTGGAGGCCCCCATCCA
GGCCAGAAGGACCAGGTCCACCCAGCAGCTGTTTGCCCAGAGCTGGAGCCTCAGCTTGAAGATGATGCTCAAGGT
ACTCTTCATGGACCACCATTCGCTGTTGGCAAGAAACGGCTTTACTTACAAAACAGACTCTTTACCTTCTGCTGT
GTTTGAAGTATGTTTAGTCAGCATGCTCAGGAAA**TAA**ATGTGAATTGCCCTTG

FIGURE 2914

CCGGAAGTGCGGGCGCTCAGGGAGCTGTCACCGTGGTCGGCGGCGGCGGCGGCGGCGGCACAGAGCCGGTGG
TGGAGCCGCCGAGGAGGGTCACGCAGCACA**ATG**CCAGCTCTGCCCCTGGACCAACTCCAGATCACCCACAAGGAC
CCGAAGACAGGAAAGCTGAGGACTTCACCAGCGCTGCACCCCGAGCAGAAGGCAGACCGGTATTTTGTGTTATAC
AAACCGCCCCCTAAAGACAACATTCCCGCCCTAGTGGAGGAGTACCTGGAACGCGCCACCTTCGTAGCCAATGAC
CTCGACTGGCTCCTGGCCTTGCCTCACGATAAATTCTGGTGCCAGGTGATCTTTGACGAGACTCTACAGAAGTGC
CTGGACTCCTACCTGCGCTATGTCCCCCGCAAATTCGACGAGGGGGTGGCCTCAGCCCCTGAGGTTGTTGACATG
CAGAAGCGCCTCCATCGAAGTGTTTTTCTCACCTTCCTCCGCATGTCCACTCACAAGGAATCCAAAGATCACTTC
ATTTCCCCTTCTGCGTTTGGAGAAATCCTCTACAATAACTTCCTCTTTGACATTCCAAAGATCCTGGACCTCTGC
GTGCTCTTTGGAAAAGGCAACTCACCACTGCTCCAGAAGATGATAGGAAACATCTTTACACAGCAGCCAAGTTAC
TACAGTGACCTGGATGAAACCCTGCCTACCATCCTTCAGGTCTTCAGCAATATCCTCCAGCACTGTGGTTTGCAA
GGGGACGGGGCCAATACCACACCCCAGAAGCTTGAGGAGAGGGGCCGATTGACCCCCAGTGACATGCCTCTCCTG
GAATTAAAGGACATTGTTCTCTACCTTTGTGATACCTGCACCACACTTTGGGCCTTTCTGGATATCTTCCCTTTG
GCTTGCCAGACCTTCCAGAAGCACGACTTTTGTTACAGACTAGCTTCCTTCTACGAAGCAGCAATTCCCGAAATG
GAGTCTGCAATTAAGAAGAGGAGGCTTGAAGATAGCAAGCTTCTTGGTGACCTGTGGCAGAGGCTCTCCCATTCC
AGGAAGAAGCTAATGGAGATTTTCCACATCATCCTGAACCAGATCTGCCTCCTTCCCATCCTAGAAAGCAGCTGT
GACAACATTCAGGGCTTCATCGAAGAGTTCCTTCAGATCTTCAGCTCCTTGCTGCAGGAGAAGAGGTTCCTCCGG
GACTATGATGCACTCTTCCCCGTGGCCGAAGACATCAGCTTGCTGCAGCAGGCCTCATCAGTCTTGGACGAGACG
CGGACTGCCTACATCCTCCAGGCAGTCGAGAGTGCATGGGAAGGGGTGGACAGACGGAAAGCCACAGATGCTAAA
GACCCATCGGTGATTGAGGAGCCTAATGGGGAGCCTAACGGGGTCACGGTGACAGCAGAGGCAGTCAGTCAAGCA
TCATCACATCCGGAGAACTCGGAGGAAGAGGAGTGCATGGGAGCAGCCGCGGCTGTGGGCCCTGCCATGTGTGGG
GTGGAACTGGACTCTCTCATCTCCCAAGTGAAGGACCTGCTGCCAGACCTTGGTGAGGGCTTCATCCTGGCCTGC
CTGGAGTACTACCACTACGACCCAGAGCAGGTGATCAACAATATCCTGGAGGAGCGGCTGGCCCCCACCCTCAGC
CAGCTGGACCGCAACCTAGACAGAGAAATGAAACCAGACCCTACACCCCTGCTGACGTCTCGCCACAACGTCTTC
CAGAATGACGAGTTTGATGTGTTCAGCAGGGACTCAGTAGACCTGAGCCGGGTGCACAAGGGCAAGAGCACCAGG
AAGGAGGAAAACACGCGGAGTTTGCTGAACGACAAGCGTGCAGTGGCGGCACAGCGGCAGCGCTACGAGCAGTAC
AGCGTGGTGGTGGAGGAGGTGCCACTGCAGCCAGGCGAGAGCCTGCCCTACCACAGTGTCTACTACGAGGATGAG
TACGATGACACATACGATGGCAACCAGGTGGGCGCCAATGATGCAGACTCTGATGACGAGCTCATCAGCCGCAGG
CCATTCACCATCCCTCAGGTGCTGAGAACCAAAGTGCCTAGAGAAGGGCAGGAGGAGGATGACGACGATGAGGAA
GACGATGCTGACGAGGAGGCTCCCAAGCCCGACCATTTTGTTCAGGACCCTGCAGTGCTGAGAGAGAAGGCAGAA
GCCAGGCGCATGGCCTTTCTCGCCAAGAAAGGGTACCGGCATGACAGCTCAACAGCAGTGGCCGGCAGCCCCCGA
GGCCATGGGCAGAGCCGCGAGACAACCCAGGAACGCAGGAAGAAGGAAGCCAACAAGGCGACAAGAGCCAACCAC
AACCGGAGAACCATGGCCGACCGCAAGAGGAGCAAAGGCATGATCCCATCC**TGA**GACCTGGTGCAGGGCCAGTGG
GGAGGCAGCGGCACCAGACTCACCAGGCCGCGCTCCCATCGCCTGGGGCCTCCTCACTAGGGGCCCCAAGTTCAA
CTCAACCCCTCAACAGCCTCAGCTTTGCAGCCCCTGAGAAGGCCGCCTCTCATCTACCAGCCAGCCATGAGCGCC
TTCCTGCAGAACACACAGTGCCTTATGCCACAGCCGAAGAATCCGTGGGGCCGGCAAGCAGGCACCTTCCCCCAG
CTGCGCTAGCGGGAAAGAGATGGGGATGGAGTCCCAAGGCAAGCGCCCCAAACCTCGGGCCACAAGACACCACTT
CCCCTTTACCCTGGACAGCAGGAAACCTGTATATTCAAAAACACAAAAAGTCCTGCTAATAAAATTTTTGACCCT
TTC

FIGURE 2915A

GACGTCCCAGCGGCTCAGGCGCTGCCCAGCGCCGGCCCTGGCAGGGAGCCTGGTGGGGTGGCGGAGGGGGAGACT
GTGCCGTGGAGGGCCTCGCCATGTCCTGCTGCCCGACTTCCTTGTGAAACCTCCTAGTAGAAAAAGTTCTTGGGA
CAAACTTCATTTGACTTCACCATAAGGGAAAGAAGAGAGCCTTGTTGGACACTGAAGAAGGGACGGGGATTTCTC
CTCCTAATCTGGGCCTCTTGTC**ATG**GATGAAGAGACTCGGCACAGCCTTGAGTGCATCCAGGCCAATCAGATCTT
TCCCAGGAAGCAGCTGATCCGGGAGGATGAGAATCTTCAGGTTCCTTTCCTTGAACTTCATGGAGAGAGCACAGA
GTTTGTGGGCCGTGCCGAGGATGCCATCATTGCCCTTTCCAATTACAGACTTCACATCAAGTTCAAGGAGTCTCT
TGTTAATGTTCCATTACAGCTTATAGAAAGTGTTGAATGCCGAGATATATTTCAGCTTCATTTGACTTGCAAAGA
CTGCAAAGTTATCAGGTGTCAGTTTTCAACCTTTGAGCAGTGTCAAGAGTGGCTGAAGAGACTGAACAACGCAAT
CCGACCACCTGCTAAAATAGAAGATCTCTTCTCATTTGCATACCATGCTTGGTGCATGGAGGTCTATGCCAGTGA
AAAAGAGCAACATGGAGACCTGTGCAGACCAGGGGAGCATGTAACTTCAAGGTTTAAAAACGAGGTGGAGAGGAT
GGGTTTTGATATGAACAACGCCTGGAGGATTTCCAACATCAATGAGAAGTACAAATTATGTGGTAGCTATCCTCA
AGAGCTCATAGTGCCTGCCTGGATCACTGACAAAGAACTGGAAAGTGTATCAAGTTTCAGGTCCTGGAAGCGCAT
CCCTGCCGTCATCTACAGGCACCAGAGCAATGGAGCTGTCATTGCCCGCTGTGGACAGCCAGAGGTTAGCTGGTG
GGGCTGGCGAAATGCAGATGATGAGCATCTGGTACAGTCAGTAGCCAAAGCTTGTGCCTCTGACTCCCGATCGAG
TGGCAGCAAGCTGTCAACTAGGAACACTTCTCGAGACTTTCCCAATGGGGGAGACCTTTCTGACGTGGAGTTCGA
TTCTTCTCTGTCAAATGCTTCAGGAGCAGAGAGTTTAGCCATCCAACCGCAGAAGCTTTTGATCTTGGATGCACG
CTCCTATGCAGCTGCTGTGGCAAACCGAGCCAAAGGAGGAGGCTGCGAATGCCCAGAGTATTACCCAAACTGTGA
AGTTGTGTTTATGGGGATGGCAAACATTCATTCTATTCGGAGGAGTTTTCAGTCTCTGCGGTTGCTGTGCACTCA
GATGCCAGATCCGGGAAATTGGCTATCAGCTCTTGAAAGCACAAAATGGCTCCATCACTTGTCTGTGCTTCTGAA
ATCAGCGCTTCTGGTAGTGCATGCTGTGGATCAGGATCAGCGGCCGGTGCTAGTACACTGCTCAGATGGCTGGGA
CCGCACCCCCCAGATTGTGGCATTGGCTAAGCTCTTGCTGGACCCTTATTACCGAACCATAGAGGGTTTCCAGGT
CCTCGTGGAAATGGAGTGGCTGGATTTTGGCCATAAATTTGCTGACCGGTGTGGTCATGGGGAGAACTCGGATGA
TCTGAATGAACGTTGCCCAGTGTTTCTGCAGTGGCTTGACTGTGTTCATCAGCTTCAGAGGCAATTTCCTTGCTC
TTTTGAGTTCAATGAAGCATTCCTTGTGAAACTGGTGCAGCATACCTATTCCTGCCTGTTTGGAACATTCCTGTG
CAACAACGCCAAGGAGAGAGGGGAAAAGCATACTCAGGAACGGACATGTTCCGTGTGGTCACTTCTTCGGGCAGG
CAACAAGGCTTTCAAAAACCTACTGTATTCCTCTCAGTCAGAAGCCGTGCTGTACCCTGTGTGCCATGTGCGTAA
CCTGATGCTGTGGAGTGCAGTGTACCTGCCCTGCCCATCCCCAACCACCCCTGTGGACGACAGCTGTGCACCATA
CCCAGCCCCAGGCACCAGCCCTGATGATCCCCCCCTGAGCCGGCTACCAAAGACTAGATCATACGACAATCTGAC
CACAGCCTGTGACAACACAGTGCCTCTGGCCAGCCGGCGCTGCAGCGACCCCAGCCTGAACGAGAAGTGGCAGGA
GCACCGGCGCTCACTAGAGCTGAGCAGCCTGGCTGGCCCTGGAGAGGATCCCCTTTCTGCCGACAGCCTAGGGAA
GCCCACCAGAGTGCCGGGGGGTGCCGAGCTTTCTGTTGCAGCCGGAGTAGCTGAGGGGCAGATGGAGAACATCTT
GCAGGAGGCCACCAAAGAGGAGAGTGGAGTAGAGGAACCTGCCCACAGGGCAGGCATTGAGATACAGGAGGGTAA
AGAGGACCCTCTCTTAGAAAAGGAGAGCAGGAGGAAGACACCTGAGGCCTCAGCCATTGGACTTCACCAAGACCC
AGAACTGGGTGATGCTGCTCTGAGGAGCCATCTGGATATGAGCTGGCCTCTGTTCTCACAGGGCATTTCTGAACA
GCAGAGTGGGCTCAGTGTTCTCCTCAGTTCTCTCCAGGTCCCCCCCAGGGGAGAGGATTCCCTGGAGGTCCCTGT
GGAGCAGTTTCGAATAGAAGAGATTGCAGAGGGTAGGGAGGAAGCAGTTCTTCCAATCCCAGTAGATGCAAAAGT
TGGCTATGGTACCTCACAGTCATGTTCTCTGCTACCTTCCCAAGTCCCTTTTGAGACCAGAGGACCAAACGTGGA
CAGTTCTACAGACATGTTAGTGGAAGATAAGGTGAAGTCAGTAAGTGGGCCCCAAGGTCATCATAGATCTTGCCT
TGTAAATAGTGGCAAGGACAGGCTTCCTCAGACCATGGAACCCAGCCCTTCAGAGACAAGCCTGGTCGAGAGGCC
CCAAGTGGGGTCTGTGGTGCATAGGACTTCCCTTGGCAGCACTCTCAGCCTGACACGTTCCCCTTGTGCCTTGCC
TTTAGCCGAATGTAAAGAGGGGCTTGTGTGCAATGGTGCCCCAGAGACTGAAAACAGGGCCTCAGAGCAGCCCCC
AGGTCTTAGCACCCTCCAGATGTACCCCACACCCAATGGGCATTGCGCCAATGGGGAGGCTGGTAGGAGCAAGGA
CTCACTGAGCCGTCAGCTGTCTGCTATGAGCTGCAGCTCTGCCCACTTACACTCAAGGAACTTGCACCACAAGTG
GCTGCATAGCCACTCAGGAAGGCCATCTGCAACCAGCAGCCCCGACCAGCCTTCCCGCAGCCACCTGGACGATGA
TGGCATGTCAGTGTACACAGACACGATCCAACAGCGCCTGCGTCAGATTGAGTCAGGCCACCAGCAGGAAGTAGA
AACTTTGAAGAAACAAGTCCAGGAGCTGAAGAGTCGCCTGGAGAGCCAGTACCTGACCAGCTCCCTACACTTTAA
TGGAGACTTTGGGGATGAGGTGACTTCAATCCCCGACTCGGAAAGCAATCTGGATCAGAACTGTTTGTCTCGCTG
CAGCACAGAGATTTTCTCTGAAGCCAGCTGGGAGCAGGTGGATAAACAGGACACAGAGATGACCCGTTGGCTTCC

FIGURE 2915B

TGACCACCTGGCCGCCCACTGCTATGCGTGCGACAGTGCCTTCTGGCTTGCCAGCAGGAAGCACCACTGCAGGAA
TTGTGGGAACGTATTCTGCTCCAGTTGTTGTAACCAGAAGGTTCCAGTTCCCAGCCAGCAGCTCTTTGAACCCAG
TCGAGTATGCAAGTCTTGCTATAGCAGCCTACATCCCACAAGCTCCAGCATTGACCTTGAACTGGATAAGCCCAT
TGCTGCCACTTCCAACTGAAGCTCAGTGACCTGGGTGGGCAGTGGCCAAGCTGCTGTTCCTATGACAGGCCCACT
CAACCTGGGCAGACCGAGAGGCCCGTGCACTTTGGAATGGGAGCGTGGAACCACCTGTACAGAGTGACAGATTTG
GGATGCACCACTGGATTGTAGATTGATTTTTCTTTCCTGTCCCCCTACTCCCTCCCTACCTTTTCCATCCTCCTC
CTCTGCCTTCAAAAAAGGAAACTTTCCCTTGGTTGTCTTAATTTTTTTTTTTTTTGATGGAAGACCAAGGGTTGC
CAGGCCCACTGTAACTGCCGAGCTGCCTGCTGTCACGTGACACTGAGGGATGGCTTGTTTCTTCCGGGTGGGAGG
ATGGTGGTCAGAGCCAGGAGTATGGAGATCTGAGACCGTGAGCAGGGAAGAAAGCCAGTGCTAACATGCAACCAT
TCCTCACGCCACCGCCACATCAGAGCTGGTTGGGAACCCTTTGCTGCTGGGGAGGCTGGAAGCATATTCCCCAAG
AGCACTGCCCTGGGCATCATCTCCCTCCTGCGAGGAGCTGAGCCAGTCCCCTCACAGATGGATAAATGAGGCTGA
TGTTTGGAGGGAGAGGCACACGGTAAATGGCATCCCCTTAGGCGCCTCTTTGGGAAAGGAAAGTGGATGCTCCTT
TGAGGCAGGCGAGGGGCTGGGAGTGGGTAGCCGTCATGTTGTCCCCCGTGGGATCCCATTTTTAACTTGACCCAG
ATTGTCTTGGGCTCCTTTTACTTTCAGGGGGCTGCTTTCCTGGGCCAGGCTGTGTAGCACTTCCCACCCTCAGGC
ATGAGTACAGACTGGTCAAAATGTTTATGCAGTCAAGGCCAAAGCCTGCCCTGAGCCCAGACACACCTGGGTCCC
CATTCTGGGGCCTGGTCCCCTAAACAATCTCTTCCTCAGCCAGCACAGGGAAATCCAGACTCAGGGTTCCAGAAA
TCCCCCGTTCCCAAACCAAACCAATCATGGATCTTCCCTTTAAGGGGTAGAATCAGCCTTTAGAGTTACAAGCCC
CTGGAAAAGGGAGCAGGTCCCATACAATCAGCCTTTCTCCTCTTCTCTTCTTGGGACAGGAATAACTGCTGAGCA
GTCCCCCTTTGCCACTCCTGGCTGTCTGAGTGGGCACTTGTCTGGCTGCTGGCCAGCAGTGAAGGGCCACTTGGT
GACTTCGTAGGGTTCCTTAGAGAAGTGACATGGCCTTGAGGAGATTCAGGGCACCTTTCCTCAGTGAGCTTTGAT
ATGGTCCAAAAACAGCCTTAAATCAAGAATATTTGTGGAGGTAGGTGTGGGGAAGGTTGGAGAAGAGTTAGGTTT
GTGCTTTGTAATCTTGGCATCCATGTTTTGTGCCTGCCCTCCCTCTTGGGGAGGCCATGCTTGACTCTGCTGAAA
GCTGCTAACTGGTGACAGGGTGGATCATGGTGAGGACTAGGGGTAAGGTCAGGGAATGCTTAAGCTCTGGCCCTG
CCCTGTATTCCTCTTCCCCTTGGTAGCAGTTCCCTGACCAAGGGCAAGGTGTGTCTCAGGAAGGTGGTTCTGTGC
ATGCCTGGGTGTGGTTAAGGCGTGGCCCAGAAGGCTTCCCTGGTGCTCTCAGTCCAGGCAAAGCCCAGAGCATCT
GAGCACGTCTCTGACTTCCAGTGGCAACACAGTTTGAACGTGGTGAAACAGGGTGTAGTTCTTTTCCACATTCTG
TGTCATCTAGTCGTGCAGGTAGGGAAAAAGTTGGTCTAATTGAAGATTGTGCATTTCCTAGTGACAGGTGCCAAG
AGGTTATGATACGGGTTTCTTGGGTCTGATGTACAGTGTGAATAAATGCTTGCAGCTCTTAGCTCTTTTTTGATC
GATGAAGCACTTTTTTATTAATATTTTCCTTTGTTAAAGGAGGAACCGTAACTCTCCATAGCTGTACATATAACC
CTTTTCTCCTAAAGAGGAGTCAGTCAGTGCTCCTATATTTTTCATTTTTTGTCAAAGCAAGAAGTAAATACTTTA
GAATTGTTAAATATATAAATAAAGCAAATAAAGTTG

FIGURE 2916

ATGGCTTGGGGAGTCAGTGCCAAATGGAGTAACGAGGGCATCACAAGTGTGGGTGACCCACAGTGGGAATGCCAG
AGTTGGAGCCTGAGCAGGAAAGATTGGTATGATGTGAAAGCACCTGCTATGTTCAGTATAATAACTATGGGAAAG
ACACTCATCGCCAGGACTCAAGGAATCAAAATTGCATCTGATGGCCTCAAGGGTCATGTGTTTGAAGTCTGCCAA
ATCCAGAAGAAGATGATGGAAATCATGACCCAAGAGGTGCAGACAAATGACTTGAAAGAAGTGGTCAATAAATTG
ATTCCAGACAGCACTGGAAAAGACATAGAAAAGGCTTGCCTATCTGTTTATCCTCTCCATGGTGTCTTCATTAGG
AAAGTAAAAATAAAGAAGCCCAAGTTTGAATTGGGAAAACTCATGTAG

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FIGURE 2917A

ATGAACCTCTGAAAACTGCCGGCATCTGAGGTTTCCTCCAAGGCCCTCTGAAGTGCAGCCCATAATGAAGGTCTT
GGCGGCAGGAGTTGTGCCCCTGCTGTTGGTTCTGCACTGGAAACATGGGGCGGGGAGCCCCCTCCCCATCACCCC
TGTCAACGCCACCTGTGCCATACGCCACCCATGTCACAACAACCTCATGAACCAGATCAGGAGCCAACTGGCACA
GCTCAATGGCAGTGCCAATGCCCTCTTTATTCTCTATTACACAGCCCAGGGGGAGCCGTTCCCCAACAACCTGGA
CAAGCTATGTGGCCCCAACGTGACGGACTTCCCGCCCTTCCACGCCAACGGCACGGAGAAGGCCAAGCTGGTGGA
GCTGTACCGCATAGTCGTGTACCTTGGCACCTCCCTGGGCAACATCACCCGGGACCAGAAGATCCTCAACCCCAG
TGCCCTCAGCCTCCACAGCAAGCTCAACGCCACCGCCGACATCCTGCGAGGCCTCCTTAGCAACGTGCTGTGCCG
CCTGTGCAGCAAGTACCACGTGGGCCATGTGGACGTGACCTACGGCCCTGACACCTCGGGTAAGGATGTCTTCCA
GAAGAAGAAGCTGGGCTGTCAACTCCTGGGGAAGTATAAGCAGATCATCGCCGTGTTGGCCCAGGCCTTCTAGCA
GGAGGTCTTGAAGTGTGCTGTGAACCGAGGGATCTCAGGAGTTGGGTCCAGATGTGGGGGCCTGTCCAAGGGTGG
CTGGGGCCCAGGGCATCGCTAAACCCAAATGGGGGCTGCTGGCAGACCCCGAGGGTGCCTGGCCAGTCCACTCCA
CTCTGGGCTGGGCTGTGATGAAGCTGAGCAGAGTGGAAACTTCCATAGGGAGGGAGCTAGAAGAAGGTGCCCCTT
CCTCTGGGAGATTGTGGACTGGGGAGCGTGGGCTGGACTTCTGCCTCTACTTGTCCCTTTGGCCCCTTGCTCACT
TTGTGCAGTGAACAAACTACACAAGTCATCTACAAGAGCCCTGACCACAGGGTGAGACAGCAGGGCCCAGGGGAG
TGGACCAGCCCCCAGCAAATTATCACCATCTGTGCCTTTGCTGCCCCTTAGGTTGGGACTTAGGTGGGCCAGAGG
GGCTAGGATCCCAAAGGACTCCTTGTCCCCTAGAAGTTTGATGAGTGGAAGATAGAGAGGGGCCTCTGGGATGGA
AGGCTGTCTTCTTTTGAGGATGATCAGAGAACTTGGGCATAGGAACAATCTGGCAGAAGTTTCCAGAAGGAGGTC
ACTTGGCATTCAGGCTCTTGGGGAGGCAGAGAAGCCACCTTCAGGCCTGGGAAGGAAGACACTGGGAGGAGGAGA
GGCCTGGAAAGCTTTGGTAGGTTCTTCGTTCTCTTCCCCGTGATCTTCCCTGCAGCCTGGGATGGCCAGGGTCTG
ATGGCTGGACCTGCAGCAGGGGTTTGTGGAGGTGGGTAGGGCAGGGGCAGGTTGCTAAGTCAGGTGCAGAGGTTC
TGAGGGACCCAGGCTCTTCCTCTGGGTAAAGGTCTGTAAGAAGGGGCTGGGGTAGCTCAGAGTAGCAGCTCACAT
CTGAGGCCCTGGGAGGCCTTGTGAGGTCACACAGAGGTACTTGAGGGGGACTGGAGGCCGTCTCTGGTCCCCAGG
GCAAGGGAACAGCAGAACTTAGGGTCAGGGTCTCAGGGAACCCTGAGCTCCAAGCGTGCTGTGCGTCTGACCTGG
CATGATTTCTATTTATTATGATATCCTATTTATATTAACTTATTGGTGCTTTCAGTGGCCAAGTTAATTCCCCTT
TCCCTGGTCCCTACTCAACAAAATATGATGATGGCTCCCGACACAAGCGCCAGGGCCAGGGCTTAGCAGGGCCTG
GTCTGGAAGTCGACAATGTTACAAGTGGAATAAGCCTTACGGGTGAAGCTCAGAGAAGGGTCGGATCTGAGAGAA
TGGGGAGGCCTGAGTGGGAGTGGGGGGCCTTGCTCCACCCCCCCCCATCCCCTACTGTGACTTGCTTTAGGGTGT
CAGGGTCCAGGCTGCAGGGGCTGGGCCAATTTGTGGAGAGGCCGGGTGCCTTTCTGTCTTGATTCCAGGGGGCTG
GTTCACACTGTTCTTGGGCGCCCCAGCATTGTGTTGTGAGGCGCACTGTTCCTGGCAGATATTGTGCCCCCTGGA
GCAGTGGGCAAGACAGTCCTTGTGGCCCACCCTGTCCTTGTTTCTGTGTCCCCATGCTGCCTCTGAAATAGCGCC
CTGGAACAACCCTGCCCCTGCACCCAGCATGCTCCGACACAGCAGGGAAGCTCCTCCTGTGGCCCGGACACCCAT
AGACGGTGCGGGGGGCCTGGCTGGGCCAGACCCCAGGAAGGTGGGGTAGACTGGGGGGATCAGCTGCCCATTGCT
CCCAAGAGGAGGAGAGGGAGGCTGCAGATGCCTGGGACTCAGACCAGGAAGCTGTGGGCCCTCCTGCTCCACCCC
CATCCCACTCCCACCCATGTCTGGGCTCCCAGGCAGGGAACCCGATCTCTTCCTTTGTGCTGGGGCCAGGCGAGT
GGAGAAACGCCCTCCAGTCTGAGAGCAGGGGAGGGAAGGAGGCAGCAGAGTTGGGGCAGCTGCTCAGAGCAGTGT
TCTGGCTTCTTCTCAAACCCTGAGCGGGCTGCCGGCCTCCAAGTTCCTCCGACAAGATGATGGTACTAATTATGG
TACTTTTCACTCACTTTGCACCTTTCCCTGTCGCTCTCTAAGCACTTTACCTGGATGGCGCGTGGGCAGTGTGCA
GGCAGGTCCTGAGGCCTGGGGTTGGGGTGGAGGGTGCGGCCCGGAGTTGTCCATCTGTCCATCCCAACAGCAAGA
CGAGGATGTGGCTGTTGAGATGTGGGCCACACTCACCCTTGTCCAGGATGCAGGGACTGCCTTCTCCTTCCTGCT
TCATCCGGCTTAGCTTGGGGCTGGCTGCATTCCCCCAGGATGGGCTTCGAGAAAGACAAACTTGTCTGGAAACCA
GAGTTGCTGATTCCACCCGGGGGGCCCGGCTGACTCGCCCATCACCTCATCTCCCTGTGGACTTGGGAGCTCTGT
GCCAGGCCCACCTTGCGGCCCTGGCTCTGAGTCGCTCTCCCACCCAGCCTGGACTTGGCCCCATGGGACCCATCC
TCAGTGCTCCCTCCAGATCCCGTCCGGCAGCTTGGCGTCCACCCTGCACAGCATCACTGAATCACAGAGCCTTTG
CGTGAAACAGCTCTGCCAGGCCGGGAGCTGGGTTTCTCTTCCCTTTTTATCTGCTGGTGTGGACCACACCTGGGC
CTGGCCGGAGGAAGAGAGAGTTTACCAAGAGAGATGTCTCCGGGCCCTTATTTATTATTTAAACATTTTTTTAAA
AAGCACTGCTAGTTTACTTGTCTCTCCTCCCCATCGTCCCCATCGTCCTCCTTGTCCCTGACTTGGGGCACTTCC
ACCCTGACCCAGCCAGTCCAGCTCTGCCTTGCCGGCTCTCCAGAGTAGACATAGTGTGTGGGGTTGGAGCTCTGG
CACCCGGGGAGGTAGCATTTCCCTGCAGATGGTACAGATGTTCCTGCCTTAGAGTCATCTCTAGTTCCCCACCTC

FIGURE 2917B

AATCCCGGCATCCAGCCTTCAGTCCCGCCCACGTGCTAGCTCCGTGGGCCCACCGTGCGGCCTTAGAGGTTTCCC
TCCTTCCTTTCCACTGAAAAGCACATGGCCTTGGGTGACAAATTCCTCTTTGATGAATGTACCCTGTGGGGATGT
TTCATACTGACAGATTATTTTTATTTATTCAATGTCATATTTAAAATATTTATTTTTTATACCAAATGAATACTT
TTTTTTTTAAGAAAAAAAAAGAGAAATGAATAAAGAATCTACTCTTG

FIGURE 2918

GTCACCCCCAGCGGGCGCGGGCCGGAGCACGGGCACCCAGC**ATG**GGGGTACTGCTCACACAGAGGACGCTGCTCA
GTCTGGTCCTTGCACTCCTGTTTCCAAGCATGGCGAGCATGGCGGCTATAGGCAGCTGCTCGAAAGAGTACCGCG
TGCTCCTTGGCCAGCTCCAGAAGCAGACAGATCTCATGCAGGACACCAGCAGACTCCTGGACCCCTATATACGTA
TCCAAGGCCTGGATGTTCCTAAACTGAGAGAGCACTGCAGGGAGCGCCCCGGGGCCTTCCCCAGTGAGGAGACCC
TGAGGGGGCTGGGCAGGCGGGGCTTCCTGCAGACCCTCAATGCCACACTGGGCTGCGTCCTGCACAGACTGGCCG
ACTTAGAGCAGCGCCTCCCCAAGGCCCAGGATTTGGAGAGGTCTGGGCTGAACATCGAGGACTTGGAGAAGCTGC
AGATGGCGAGGCCGAACATCCTCGGGCTCAGGAACAACATCTACTGCATGGCCCAGCTGCTGGACAACTCAGACA
CGGCTGAGCCCACGAAGGCTGGCCGGGGGGCCTCTCAGCCGCCCACCCCCACCCCTGCCTCGGATGCTTTTCAGC
GCAAGCTGGAGGGCTGCAGGTTCCTGCATGGCTACCATCGCTTCATGCACTCAGTGGGGCGGGTCTTCAGCAAGT
GGGGGGAGAGCCCGAACCGGAGCCGGAGACACAGCCCCCACCAGGCCCTGAGGAAGGGGGTGCGCAGGACCAGAC
CCTCCAGGAAAGGCAAGAGACTCATGACCAGGGGACAGCTGCCCCGG**TAG**CCTCGAGAGCACCCCTTGCCGGTGA
AGGATGCGGCAGGTGCTCTGTGGATGAGAGGAACCATCGCAGGATGACAGCTCCCGGGTCCCCAAACCTGTTCCC
CTCTGCTACTAGCCACTGAGAAGTGCACTTTAAGAGGTGGGAGCTGGGCAGACCCCTCTACCTCCTCCAGGCTGG
GAGACAGAGTCAGGCTGTTGCGCTCCCACCTCAGCCCCAAGTTCCCCAGGCCCAGTGGGGTGGCCGGGCGGGCCA
CGCGGGACCGACTTTCCATTGATTCAGGGGTCTGATGACACAGGCTGACTCATGGCCGGGCTGACTGCCCCCCTG
CCTTGCTCCCCGAGGCCTGCCGGTCCTTCCCTCTCATGACTTGCAGGGCCGTTGCCCCCAGACTTCCTCCTTTCC
GTGTTTCTGAAGGGGAGGTCACAGCCTGAGCTGGCCTCCTATGCCTCATCATGTCCCAAACCAGACACCTGGATG
TCTGGGTGACCTCACTTTAGGCAGCTGTAACAGCGGCAGGGTGTCCCAGGAGCCCTGATCCGGGGGTCCAGGGAA
TGGAGCTCAGGTCCCAGGCCAGCCCCGAAGTCGCCACGTGGCCTGGGGCAGGTCACTTTACCTCTGTGGACCTGT
TTTCTCTTTGTGAAGCTAGGGAGTTAGAGGCTGTACAAGGCCCCCACTGCCTGTCGGTTGCTTGGATTCCCTGAC
GTAAGGTGGATATTAAAAATCTGTAAATCAGGACAGGTGGTGCAAATGGCGCTGGGAGGTGTACACGGAGGTCTC
TGTAAAAGCAGACCCACCTCCCAGCGCCGGGAAGCCCGTCTTGGGTCCTCGCTGCTGGCTGCTCCCCCTGGTGGT
GGATCCTGGAATTTTCTCACGCAGGAGCCATTGCTCTCCTAGAGGGGGTCTCAGAAACTGCGAGGCCAGTTCCTT
GGAGGGACATGACTAATTTATCGATTTTTATCAATTTTTATCAGTTTTATATTTATAAGCCTTATTTATGATGTA
TATTTAATGTTAATATTGTGCAAACTTATATTTAAAACTTGCCTGGTTTCT

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FIGURE 2919

GCTCAGGCGGCGGGCGCGGCTGGGATGGCGAAGAGCAACGGAGAGAATGGGCCGCGCGCGCCCGCGGCCGGGGAA
AGCCTGTCGGGAACCCGGGAGAGCCTGGCCCAGGGCCCCGACGCCGCAACCACCGACGAACTCAGCTCTCTCGGG
TCTGACTCGGAGGCCAACGGCTTCGCCGAGCGCCGCATCGACAAGTTCGGCTTCATCGTGGGCTCGCAGGGCGCC
GAGGGCGCGCTGGAGGAAGTACCCCTGGAGGTGCTGAGGCAGAGGGAGTCCAAGTGGCTGGACATGCTCAACAAC
TGGGACAAATGGATGGCCAAGAAGCACAAAAAGATTCGTCTGCGGTGCCAAAAGGGCATCCCGCCTTCTCTGCGG
GGCCGTGCTTGGCAGTACCTGTCAGGAGGCAAGGTGAAGTTACAGCAGAACCCTGGAAAGTTTGACGAGCTGGAC
ATGTCCCCTGGGGACCCCAAGTGGCTGGACGTGATTGAGCGTGACCTGCACCGGCAGTTCCCATTCCATGAGATG
TTTGTGTCCCGGGGGGGCCACGGCCAGCAGGACCTATTCCGTGTGCTGAAGGCCTACACGCTGTACCGGCCCGAG
GAGGGCTACTGCCAGGCCCAGGCGCCCATTGCCGCTGTCTTGCTCATGCATATGCCTGCTGAGCAAGCCTTCTGG
TGCCTGGTACAGATCTGTGAGAAGTACCTGCCCGGCTACTACAGCGAGAAACTGGAGGCGATCCAGCTGGACGGG
GAGATCCTTTTCTCGCTGTTGCAGAAGGTGTCGCCGGTGGCCCACAAGCACCTCAGCCGTCAGAAGATCGACCCG
CTCCTCTATATGACAGAATGGTTCATGTGCGCCTTCTCCCGAACCTTGCCCTGGAGCTCTGTGCTGCGTGTCTGG
GACATGTTCTTCTGTGAAGGGGTCAAGATCATCTTCCGGGTGGGGCTGGTGCTGCTGAAGCACGCGCTGGGCTCC
CCTGAGAAGGTCAAAGCCTGCCAGGGCCAGTACGAGACCATCGAGCGACTGCGGAGCCTCAGCCCCAAGATCATG
CAGGAGGCCTTTCTGGTCCAGGAGGTGGTGGAGTTGCCCGTGACAGAGCGCCAGATTGAGCGCGAACACCTCATT
CAGCTGCGGCGCTGGCAGGAGACCCGGGGTGAGCTGCAGTGCCGCTCCCCGCCCAGGCTGCATGGTGCCAAGGCT
ATCTTGGATGCAGAACCTGGTCCCCGGCCTGCCCTACAACCTTCACCATCCATCCGCCTGCCCCTAGATGCCCCC
CTCCCTGGCTCCAAAGCCAAGCCCAAGCCACCCAAGCAGGCCCAGAAGGAGCAGCGGAAACAGATGAAGGGGAGA
GGGCAGCTGGAGAAGCCCCCAGCCCCAAATCAAGCCATGGTGGTGGCCGCTGCAGGAGATGCATGTCCCCCACAG
CATGTGCCCCCGAAGGACTCAGCCCCCAAGGACTCAGCCCCTCAGGATTTGGCTCCCCAGGTCTCAGCCCACCAC
CGCTCCCAGGAGAGCTTGACGTCCCAAGAGAGTGAGGACACCTACTTGTAACCCTGGCAGCTAAGGCCTCCAGGG
CGGGGTCTCCATATAACTACACGGTTCATGAACTGACATTCCACATCCTGCCCACCCTCTGAGGGCCAAGCTGCC
TGGCCACTGGGCTGGGCTGGAGTCTGGCTGGTCCAACACAGATTCTGCCTGGTCCAACACAGATTCTGCCTGAGC
CTCCTTATTTATTTTCTTTACAGTGGCACTCAGGCTGGCCCAGCCAGGGCAGGCAGAAGCTAGGGCCTGGGGGGT
GGGGCCTCCTTCAGCCCCCTCCTCCTGGGGGATGCTCCCCAGGGTTAGGGTGCTGGTGTGAGGGGAAAGGGTGGG
GTGTTCTTTGTGTAAAATAGAAACATGGTTTTGTACAGAAATAAACAGCCTTGTATAGAG

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FIGURE 2920A

GGCCGCAACTCGCTCGGCCGCCGCCATCTTGCGAGCTCGTCGTACTGACCGAGCGGGGAGGCTGTCTTGAGGCGG
CACCGCTCACCGACACCGAGGCGGACTGGCAGCCCTGAGCGTCGCAGTC**ATG**CCGGCCGGACCCGTGCAGGCGGT
GCCCCCGCCGCCGCCCGTGCCCACGGAGCCCAAACAGCCCACAGAAGAAGAAGCATCTTCAAAGGAGGATTCTGC
ACCTTCTAAGCCAGTTGTGGGGATTATTTACCCTCCTCCAGAGGTCAGAAATATTGTTGACAAGACTGCCAGCTT
TGTGGCCAGAAACGGGCCTGAATTTGAAGCTAGGATCCGACAGAACGAGATCAACAACCCCAAGTTCAACTTTCT
GAACCCCAATGACCCTTACCATGCCTACTACCGCCACAAGGTCAGCGAGTTCAAGGAAGGGAAGGCTCAGGAGCC
GTCCGCCGCCATCCCCAAGGTCATGCAGCAGCAGCAGCAGACCACCCAGCAGCAGCTGCCCCAGAAGGTCCAAGC
CCAAGTAATCCAAGAGACCATCGTGCCCAAAGAGCCTCCTCCTGAGTTTGAGTTCATTGCTGATCCTCCCTCTAT
CTCAGCCTTCGACTTGGATGTGGTGAAGCTGACGGCTCAGTTTGTGGCCAGGAATGGGCGCCAGTTTCTGACCCA
GCTGATGCAGAAAGAGCAGCGCAACTACCAGTTTGACTTTCTCCGCCCACAGCACAGCCTCTTCAACTACTTCAC
GAAGCTAGTGGAACAGTACACCAAGATCTTGATTCCACCCAAAGGTTTATTTTCAAAGCTCAAGAAAGAGGCTGA
AAACCCCCGAGAAGTTTTGGATCAGGTGTGTTACCGAGTGGAATGGGCCAAATTCCAGGAACGTGAGAGGAAGAA
GGAAGAAGAGGAGAAGGAGAAGGAGCGGGTGGCCTATGCTCAGATCGACTGGCATGATTTTGTGGTGGTGGAAAC
AGTGGACTTCCAACCCAATGAGCAAGGGAACTTCCCTCCCCCCACCACGCCAGAGGAGCTGGGGGCCCGAATCCT
CATTCAGGAGCGCTATGAAAAGTTTGGGGAGAGTGAGGAAGTTGAGATGGAGGTCGAGTCTGATGAGGAGGATGA
CAAACAGGAGAAGGCGGAGGAGCCTCCTTCCCAGCTGGACCAGGACACCCAAGTACAAGATATGGATGAGGGTTC
AGATGATGAAGAAGAAGGGCAGAAAGTGCCCCCACCCCCAGAGACACCCATGCCTCCACCTCTGCCCCCAACTCC
AGACCAAGTCATTGTCCGCAAGGATTATGATCCCAAAGCCTCCAAGCCCTTGCCTCCAGCCCCTGCTCCAGATGA
GTATCTTGTGTCCCCCATTACTGGGGAGAAGATCCCCGCCAGCAAAATGCAGGAACACATGCGCATTGGACTTCT
TGACCCTCGCTGGCTGGAGCAGCGGGATCGCTCCATCCGTGAGAAGCAGAGCGATGATGAGGTGTACGCACCAGG
TCTGGATATTGAGAGCAGCTTGAAGCAGTTGGCTGAGCGGCGTACTGACATCTTCGGTGTAGAGGAAACAGCCAT
TGGTAAGAAGATCGGTGAGGAGGAGATCCAGAAGCCAGAGGAAAAGGTGACCTGGGATGGCCACTCAGGCAGCAT
GGCCCGGACCCAGCAGGCTGCCCAGGCCAACATCACCCTCCAGGAGCAGATTGAGGCCATTCACAAGGCCAAAGG
CCTGGTGCCAGAGGATGACACTAAAGAGAAGATTGGCCCCAGCAAGCCCAATGAAATCCCTCAACAGCCACCGCC
ACCATCTTCAGCCACCAACATCCCCAGCTCGGCTCCACCCATCACTTCAGTGCCCCGACCACCCACAATGCCACC
TCCAGTTCGTACTACAGTTGTCTCCGCAGTACCCGTCATGCCCCGGCCCCCAATGGCATCTGTGGTCCGGCTGCC
CCCAGGCTCAGTGATCGCCCCCATGCCGCCCATCATCCACGCGCCCAGAATCAACGTGGTGCCCATGCCTCCCTC
GGCCCCTCCTATTATGGCCCCCCGCCCACCCCCCATGATTGTGCCAACAGCCTTTGTGCCTGCTCCACCTGTGGC
ACCTGTCCCAGCTCCAGCCCCAATGCCCCCTGTGCATCCCCCACCTCCCATGGAAGATGAGCCCACCTCCAAAAA
ACTGAAGACAGAGGACAGCCTCATGCCAGAGGAGGAGTTCCTGCGCAGAAACAAGGGTCCAGTGTCCATCAAAGT
CCAGGTGCCCAACATGCAGGATAAGACGGAATGGAAACTGAATGGGCAGGTGCTGGTCTTCACCCTCCCACTCAC
GGACCAGGTCTCTGTCATTAAGGTGAAGATTCATGAAGCCACAGGCATGCCTGCAGGGAAACAGAAGCTACAGTA
TGAGGGTATCTTCATCAAAGATTCCAACTCACTGGCTTACTACAACATGGCCAATGGCGCAGTCATCCACCTGGC
CCTCAAGGAGAGAGGCGGGAGGAAGAAG**TAG**ACAAGAGGAACCTGCTGTCAAGTCCCTGCCATTTTGCCTCTCCT
GTCTCCCACCCCCTGCCCCAGACCCAGGAGCCCCCCTGAGGCTTTGCCTTGCCTGCATATTTGTTTCGCTCTTAC
TCAGTTTGGGAATTCAAATTGTCCTGCAGAGGTTCATTCCCCTGACCCTTTCCCCACATTGGTAAGAGTAGCTGG
GTTTTCTAAGCCACTCTCTGGAATCTCTTTGTGTTAGGGTCTCGATTTGAGGACATTCATTTCTTCAGCAGCCCA
TTAGCAACTGAGAGCCCAGGGATGTCCTACAGGATAGTTTCATAGTGACAGGTGGCACTTGGCTAATAGAATATG
GCTGATATTGTCATTAATCATTTTGTACCTTGACATGGGTTGTCTAATAAAACTCGGACCCTTCTTGTGAAATCA
GTTAAATAAGACTTGTCTCGGTCACCTGTGCCCTGTCCAGACTCGAGGCAGTGGTAACACTGCACAGTGCTATGT
GGCTTCTCTTTGAGGATTTTTGGGTTTTGTAACTAAATTCTTGCTGCCCTCATACTTTTTATGTATTAGAATCAT
ATTCGTATTGCCCTTTTAAAACATTGGGATCCTCCAAAGGCCTGCCCCATGTATTTAACAGTAATACAGGAAGCA
TGGCAGGCACCATGCAAACCAAGGATGGATGGTGCAGTCCCTGTGTCAGTGGGCGGTGGTTTCCTGCTGGCCTGG
AATCACTCATCACCTGATTGATTGGCTCTGTGGTCCTGGGCAGGTGCCTCATAGGTGTGTGGATATGATGACGTT
TCTTTAAAATGTATGTATTTAACAAATACTTAATTGTATTAAGGTCATGTACCAAGGATTTGATAAAGTTTAAAT
AATTTACTCTCTACTTTTATCCATTTTATCCATTTTAACTCATGTAATCCTCATGTGAGTATTCCTGTTTAACAC
TTGAGTAAACTGAGGCACAGAGAACATAAGTTGCATGCCATAGTCACACACTGTGAAAGTGAAAAGAGAATGTGT
GCAAAACACGTCACAGTCCTGGTTTCTGAGTAAAGGCAGGCTGTTATCTTTAGAATCAAGCTATCACAGGGAGAT

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FIGURE 2920B

AGGCAATGCTGTGGGTGTTGGAGGAAGGTGAGAGCCTGTTGCTAACAATTTCCTGGTTTTAAAGCTAAGGCTGAT
TTTATTGGGAAGATCTCACATGTGTGTGGCCCCTGAGAGTTCCCAGTGCCTTTTATTTGCAGTCCTTCCATTTGG
ACCTCCTAGCTGCCCCATCAGGTCATCTCCAGGGCTCAGAGGGGTGAGACCATTTCCCAAGGTCACAGAACCAGC
TCTCTAGTCACCACCCTGCCTCTCCCTCTCACCCAGAGTCAGTACCAGTTTTATGGCTTTATTACAAACTGCTGG
GTCCCTCCCATTTTCAACTTGATTGATGGGATGTCATCCCTTATCCTGTCTGACATTTGCCTCTGGCCTGGTTGC
TAGAAGTTTGCCCCAGGGGCAAGAGTTGAAATTTGGCTTCCTGAGGTGGGCTTTGTGGTTTGCGTCCCTAAAGTG
AGCCCACTACTGGTTGCTTGTCCATGGCCAACACCAGAAATCCCCTGAGCACTACCTGGGTCTCATTCCAAGAAG
GAAGAGGGTCAGGAGACCTGGGGAGTCTCATATTCCAAGTTCTTCTTTCTTTCTGGGAGCAGTGGGCAGTTCATG
GTGTTAGGGCACTCACCCCCACAGACTGGCAAACCCTGCAGGACTTCCGTGGCTGAGGCTGTGACCGGAGGCCAG
GAATGCCGTTGGGTGGATTGTGAGTGAATGGGCCCTTTGAGCTGCCCTCTAGAGAGCAAATCCAGTTTCCTGGAG
CTCCTGAATGAATATCTGTACTGGCTCGCTCAGATGCAGAAGCTCCATTGACCATGAGGCCTTGTGAACATCAGT
GGCCACAGGCCCAGTGTGCTGCTTGGCACTGCACTAGTTTAGGACCTGCAGCATGTAGGTAGCGTCCTAGTGTTT
ATAATACAAAGCTGCTCTGCACAGCTTTTCTGATTCTTCTTGCAATCTCCTGAGGATTATCTGCCCCATTTTTAA
AACGAGGTGGAATACCCAAGGTCATGTAGCCAGTGAGTGCTCTGGAAAGCCAAAGCAGCTCATCCCTTCCTGGGG
ACCACACTGCTCTGCTCCACCAGACCACACTATGAAATAGGAATAAGTGCTCCTGTTGCAGGACTGCTGGGAAAA
CAGGTGGTGTGGGACTTAAGTCACCATAATTTTGAAGACTTGCATGCAGAGGGCTCCAGGAATTGTAGACATTAA
GGAATTTCACTTTCAGTTCTACCCACTACTTAAGTACTTGTCATGTACTCTTAGAGGAGGCCAGTAATGATCAGA
ACCATTTTACTTTAAAATTAATAATATTGTATTAGAGAATATATTAAATGGTTATATTGGGTTATGTTAGGATAT
ATACTTGAATGGAAATACATGTACTATTAGCAATCATATTTCATTTATCCCTGTAATTAGACAAGAAAGCATAAT
ATAGCTCTACTCATGGGTACACATACCAGTGTATAAGATTTTTAGAAGTTTACTTTTTAAAAATAAAAGCAAAAT
GT

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FIGURE 2921

GGCTGATGCTCCAGCAGACCTGCCCACTGTGCAAATTCAACGTCCTGGGGAACCGCTACTCCG**ATG**ATTAGCTGC
CCAGCTGGACTCTGCACATGGGGATGGACCCTTCCTGCCTGCACCCCGGTCCTCAGCCTGGGCTCCCAGGACAGG
ACAGGATGGGACAGCAGGATAGACAGGACAGCAAGCCCAGTGGGTGGGAGGAAGGATGAGGGCCCCACCATGTCC
ACACTGGGAAGGAGGGCCCCACAGCTTCAGACTGAGGATCTAGGGCTGGGACCTGTCAGTCAAGGAAGAGAGGTC
ACTTTGGGACCTTCTCTGCAATCCTGTGACGTGAGTCTGCCCTCCTTACAGGCAGCTCCCAGGTCAATAAGGAAA
GAGAATATGGGGCCAGTG**TAG**CTGTCGCCAGGGTTCTGGGAGCTCCCTGTGGCCTGTCTGGGAATTCCTGGGGGC
TGAGACTACAGTGGCCAGGTTTTGTGCTTATTTATTGGGGGGTGGGTTGAGGGAAGAGCTATCTGGCCTTGGGGT
ACCCTGGCCTGACCGTCTTTCAGGATACTTCTTGTCAAGGCTGTCTGCCTGTTGCCTTTGGTCCTCAAGCACTGG
GAGCCATGGGTCCCACTGCCTGTCCAGCCTGGCTCCCTTCCTGGGCCTGGCTAGGACCAGAGGTCTTAGAAACCG
TCCTGTTCTGGAATCCTTGGCTGCGGCTTTGTGTTGCTGACCGGGATACTCGAAGCCACAGGATCAATGTGGTGC
CTCATCCAGGGGCATCCTTTTTTTTTTTTTTTTTTTTTTTAAAGAGTTGGAGTAGGGAAGGTTTAATAGTAAAA
TAAACGTGGCTATATTTTAACATAAGATG

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FIGURE 2922

ATGAGGTGGGCGAGGCTTTCCGCTCTCTTGTGCCAGCGGCGGTGGTGTGGCTGAGCTATGGCGTGGCCAGCTCCT
ACGTGCTGGCGGATGCCATTGACAAAGGCAAGAAGGCTGGAGAGGTGCCCAGCCCTGAAGCAGGCCGCAGCGCCA
GGGTGACTGTGGCTGTGGTGGACACCTTTGT**ATG**GCAGGCTCTAGCCTCTGTGGCCATTCCGGGCTTCACCATCA
ACCGCGTGTGTGCTGCCTCTCTCTATGTCCTGGGCACTGCCACCCGCTGGCCCCTGGCTGTCCGCAAGTGGACCA
CCACCGCGCTTGGGCTGTTGACCATCCCCATCATTATCCACCCCAT**TGA**CAGGTCGGTGGATTTCCTCCTGGACT
CCAGCCTGCGCAAGCTCTACCCAACAGTGGGGAAGCCCAGCTCCTCCTGATCATACTCTGGTACCTGGCCTGTGC
ATCGGCCTCCTGCTTCATGTCAACCTCCTACTCCTGCCAGGGAATGTGGACACCTGGCTCCCTGGTGTCCAAAGA
CCCTGGCACCTGGGTGGGTTTGAGCTGGACAGAAGCTTAGAGACAAAGGCTTCAAGAAGCAGTGGCTGCAGGGAG
TCACAGAAGGGCAGGACCTGA

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FIGURE 2923

GAGGAAGTGGAGCTCCCTGTACGCGCGGCCCTAGTCGGCTCCTCAACGTGGAGCGATGGGAGGCCTTGAGAAGAA
GAAGTATGAACGAGGCTCGGCCACCAACTACATCACCCGGAACAAAGCCCGGAAGAAGCTCCAGCTGAGCTTGGC
TGACTTTAGGCGGCTGTGCATTCTGAAGGGCATTTATCCCCATGAACCCAAACACAAGAAGAAGGTTAACAAGGG
TTCTACAGCAGCCCGAACGTTTTACCTTATCAAAGACATCAGGTTTCTCCTCCACGAACCCATTGTCAACAAGTT
CCGTGAATACAAGGTGTTCGTCCGGAAGCTCCGGAAGGCTTATGGGAAGAGCGAGTGGAACACTGTAGAGCGTTT
AAAGGACAATAAGCCCAACTACAAACTCGACCACATCATCAAGGAACGGTATCCCACGTTCATCGATGCCCTGCG
GGACCTGGACGATGCCCTCTCCATGTGCTTCCTGTTTTCCACCTTCCCGCGGACTGGCAAGTGCCACGTGCAGAC
CATTCAGCTGTGCCGCCGGCTCACTGTGGAGTTCATGCACTACATTATCGCTGCCCGTGCCCTGCGCAAGGTCTT
CCTGTCCATCAAAGGCATTTACTACCAGGCCGAGGTACTGGGGCAGCCCATCGTGTGGATCACTCCCTATGCCTT
CTCCCATGACCACCCGACAGACGTGGACTACAGGGTCATGGCCACCTTCACCGAGTTCTACACCACGCTGCTGGG
CTTTGTCAACTTCCGCCTTTACCAGTTGCTCAACCTCCACTATCCCCCGAAGCTCGAGGGTCAGGCCCAAGCAGA
GGCAAAGGCCGGTGAGGGCACCTACGCGTTGGACTCCGAGAGTTGTATGGAGAAACTGGCAGCCCTCAGTGCCAG
CCTGGCCCGCGTGGTGGTGCCTGCCACAGAGGAGGAGGCCGAGGTGGATGAGTTTCCCACCGATGGGGAGATGTC
AGCGCAGGAGGAAGACCGCAGGAAGGAGCTGGAGGCGCAGGAGAAGCACAAGAAGCTTTTTGAGGGCCTGAAGTT
CTTCCTGAACCGAGAGGTGCCCCGTGAGGCCCTGGCCTTCATCATCAGGAGTTTTGGTGGGGAAGTGTCCTGGGA
CAAATCTTTGTGCATTGGGGCCACCTATGACGTCACAGACTCCCGCATCACCCATCAGATTGTCGACCGGCCTGG
GCAGCAGACCTCAGTCATTGGCAGGTGCTACGTGCAGCCCCAGTGGGTGTTTGACTCAGTGAACGCCAGGCTCCT
TCTCCCCGTGGCAGAGTACTTCTCTGGGGTGCAGCTGCCCCCACACCTTTCACCCTTTGTGACCGAGAAGGAAGG
AGATTACGTTCCACCTGAGAAGCTGAAGCTGCTGGCTCTGCAGCGGGGAGAGGACCCAGGAAACCTGAATGAGTC
AGAAGAGGAGGAGGAAGAGGACGACAACAACGAAGGTGATGGTGATGAAGAGGGAGAAAATGAGGAGGAGGAGGA
AGATGCAGAGGCTGGTTCAGAAAAGGAGGAAGAGGCCCGGCTGGCAGCCCTGGAAGAGCAGAGGATGGAGGGGAA
GAAGCCCAGGGTGATGGCAGGCACCTTGAAGCTGGAGGATAAGCAGCGGCTGGCCCAGGAGGAGGAGAGTGAGGC
CAAGCGCCTGGCCATTATGATGATGAAGAAGCGGGAGAAGTACCTGTACCAGAAGATCATGTTTGGCAAGAGGCG
AAAAATCCGAGAGGCCAACAAGCTGGCGGAGAAGCGGAAAGCCCACGATGAGGCGGTGAGGTCTGAGAAGAAGGC
CAAGAAGGCAAGGCCGGAGTGAGTGCCTGCGGCCCCTCACAGGGCTGAGGCCAGCCCCTAGCAGCTGGATGTGGC
AGAGGCAGGCCAGAGGACCTAAGTGTGATGGACCAGAGTCACTTCTCCTCCTCCTTTCTCCAGCCAGCCCTGACC
CCTCATGCTCTCTGGCTGGGCCAGTGGGCAGCCCTCGCTTCCCTTGGATGGAGCTGCCCTGCTGGTGCCTGGTCA
GAGAAGAGGCCTCTGTGCCCAGCCTGATTCTCTGCTCCCAGGAGCCAGTGACATGAGGTGCAGAGGCCCACCCAG
CCCCCTACCTACTGCCCCCCATTCATCCTGGCTTTCCACAGCCCCCTCCCACACAGTTGGACCCGTGATTCTCAGG
GTGCTGTGATGGGGTGAGGGTAGGGGGAGCATTTGTTATTAAATGACTGGACTTTTG

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FIGURE 2924

CCGATTCTTGCTCACTGCTCACCCACCTGCTGCTGCCATGAGGCACCTTGGGGCCTTCCTCTTCCTTCTGGGGGT
CCTGGGGGCCCTCACTGAGATGTGTGAAATACCAGAGATGGACAGCCATCTGGTAGAGAAGTTGGGCCAGCACCT
CTTACCTTGGATGGACCGGCTTTCCCTGGAGCACTTGAACCCCAGCATCTATGTGGGCCTACGCCTCTCCAGTCT
GCAGGCTGGGACCAAGGAAGACCTCTACCTGCACAGCCTCAAGCTTGGTTACCAGCAGTGCCTCCTAGGGTCTGC
CTTCAGCGAGGATGACGGTGACTGCCAGGGCAAGCCTTCCATGGGCCAGCTGGCCCTCTACCTGCTCGCTCTCAG
AGCCAACTGTGAGTTTGTCAGGGGCCACAAGGGGGACAGGCTGGTCTCACAGCTCAAATGGTTCCTGGAGGATGA
GAAGAGAGCCATTGGGCATGATCACAAGGGCCACCCCCACACTAGCTACTACCAGTATGGCCTGGGCATTCTGGC
CCTGTGTCTCCACCAGAAGCGGGTCCATGACAGCGTGGTGGACAAACTTCTGTATGCTGTGGAACCTTTCCACCA
GGGCCACCATTCTGTGGACACAGCAGCCATGGCAGGCTTGGCATTCACCTGTCTGAAGCGCTCAAACTTCAACCC
TGGTCGGAGACAACGGATCACCATGGCCATCAGAACAGTGCGAGAGGAGATCTTGAAGGCCCAGACCCCCGAGGG
CCACTTTGGGAATGTCTACAGCACCCCATTGGCATTACAGTTCCTCATGACTTCCCCCATGCGTGGGGCAGAACT
GGGAACAGCATGTCTCAAGGCGAGGGTTGCTTTGCTGGCCAGTCTGCAGGATGGAGCCTTCCAGAATGCTCTCAT
GATTTCCCAGCTGCTGCCCGTTCTGAACCACAAGACCTACATTGATCTGATCTTCCCAGACTGTCTGGCACCACG
AGTCATGTTGGAACCAGCTGCTGAGACCATTCCTCAGACCCAAGAGATCATCAGTGTCACGCTGCAGGTGCTTAG
TCTCTTGCCGCCGTACAGACAGTCCATCTCTGTTCTGGCCGGGTCCACCGTGGAAGATGTCCTGAAGAAGGCCCA
TGAGTTAGGAGGATTCACATATGAAACACAGGCCTCCTTGTCAGGCCCCTACTTAACCTCCGTGATGGGGAAAGC
GGCCGGAGAAAGGGAGTTCTGGCAGCTTCTCCGAGACCCCAACACCCCACTGTTGCAAGGTATTGCTGACTACAG
ACCCAAGGATGGAGAAACCATTGAGCTGAGGCTGGTTAGCTGGTAGCCCCTGAGCTCCCTCATCCCAGCAGCCTC
GCACACTCCCTAGGCTTCTACCCTCCCTCCTGATGTCCCTGGAACAGGAACTCGCCTGACCCTGCTGCCACCTCC
TGTGCACTTTGAGCAATGCCCCCTGGGATCACCCCAGCCACAAGCCCTTCGAGGGCCCTATACCATGGCCCACCT
TGGAGCAGAGAGCCAAGCATCTTCCCTGGGAAGTCTTTCTGGCCAAGTCTGGCCAGCCTGGCCCTGCAGGTCTCC
CATGAAGGCCACCCCATGGTCTGATGGGCATGAAGCATCTCAGACTCCTTGGCAAAAAACGGAGTCCGCAGGCCG
CAGGTGTTGTGAAGACCACTCGTTCTGTGGTTGGGGTCCTGCAAGAAGGCCTCCTCAGCCCGGGGGCTATGGCCC
TGACCCCAGCTCTCCACTCTGCTGTTAGAGTGGCAGCTCCGAGCTGGTTGTGGCACAGTAGCTGGGGAGACCTCA
GCAGGGCTGCTCAGTGCCTGCCTCTGACAAAATTAAAGCATTGATGGCCTGTGGACCTGC

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FIGURE 2925

CGAGTGGCCCCCTGGCAGCCCTCAGGCCCTCCGGCAGCCTGGCCGGGCCCGAGTGGCCATGGCAGCACTGGTGTG
GCTGCTGGCGGGAGCCAGCATGTCAAGCCTCAACAAGTGGATCTTCACAGTGCACGGCTTTGGGCGGCCCCTGCT
GCTGTCGGCCCTGCACATGCTGGTGGCAGCCCTGGCATGCCACCGGGGGGCACGGCGCCCCATGCCAGGCGGCAC
TCGCTGCCGAGTCCTACTGCTCAGTCTCACCTTTGGCACGTCCATGGCCTGCGGCAACGTGGGCCTAAGGGCTGT
GCCCCTGGACCTGGCACAACTGGTTACTACCACCACACCTCTGTTCACCCTGGCCCTGTCGGCGCTGCTGCTGGG
CCGCCGCCACCACCCACTTCAGTTGGCCGCCATGGGTCCGCTCTGCCTGGGGGCCGCCTGCAGCCTGGCTGGAGA
GTTCCGGACACCCCCTACCGGCTGTGGCTTCCTGCTCGCAGCCACCTGCCTCCGCGGACTCAAGTCGGTTCAGCA
AAATCCTGATCTGGTCCATTCAGCAGAGGACTGCAGAAGTCTGAGGAGCCTTAAGATATCAACTTAAAGCAATGG
GCTCGTCGCAGAAAGGAATAGCCTGTGCCGGGTCTTCAGAGAAATCCTGGCCTCGGCTCCACGCCC

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FIGURE 2926

GCTGTCTAGCAACCAGATCACCATGGTCATCAATGTCTCAGTGGAGGTAGTGAACACCTTGTATGAGGATATCCA
GTACATGCAGGTACCTGTGGCTGACTCCCCTAACTCACGTCTCTGTGACTTCTTTGACCCTATTGCTGACCATAT
CCACAGCGTGGAGATGAAGCAGGGCCGTACTTTGCTGCACTGTGCTGCTGGTGTGAGCCGCTCAGCTGCCCTGTG
CCTCGCCTACCTCATGAAGTACCACGCCATGTCCCTGCTGGACGCCCACACGTGGACCAAGTCATGCCGGCCCAT
CATCCGACCCAACAGCGGCTTTTGGGAGCAGCTCATCCACTATGAGTTCCAATTGTTTGGCAAGAACACTGTGCA
CATGGTCAGTTCCCCAGTGGGAATGATCCCTGACATCTATGAGAAGGAAGTCCGTTTGATGATTCCACTGTGAGC
CATCCCACGAGCCCCTGCATTGGAGTCAGAGGTACAGATCTATTGTTGATCTTACACCAAGATCCAAACTTGAAC
ATTCTACTTTTGTTGATACAGAAAAAAACAGATGATGCCTTTTATGAGCACAAAAAAGAGTTGCTGTAGCTTTTA
ACTTTATAATCCATTTTTTTTAAGATTAAACTAATTGTGAGATGGTGAAGATAAATTTTCTGCCCTGTGAGTGAC
ACTGGCCAGGGGATAGGTTGAGGCAGATGGTGCCCAGAAGAAAGAGGGCAGCACCCATTGCACATGGCAGGCCTG
GAATCCTGCAGCCCTCCCCAAAAACAGATTGACCCAGGAATGAATCTGCTACAATTCCACCTCATTCTTTCACAC
CCAGAGCCAGAGCCTTAAGCATCATGGTACCTCTTGCGCTTCTTACAGTGAGTGCCAATCTACTAGATAAATGGC
CTTCAGGCAGTGCTCCAGGAATCCTGGGGGGTCCCAGGCCACCTCTGCTTCCACCTTCACTATAAGTGGCCCAGT
TCTGGTTTTCTAGATTGTACTTATGCATAAGATAGTTTTTAAAGAAAGCATTCCACTGTGTAAATTTTTTTTTGT
CTTTTTTTGAAACTGTCCTGCTCTGTCACCCATCCTAGAGTGCAGTAGTGTGATCATGGCTCACTGTAGCCACAA
CCTCTCAGGCTCAAGTGATCCTCTTACCTTAGCCTCCTGCGTGGCTGGGACTACAGATGTTTGCCACCATGCCCG
CCTCATTTTTTTTCTTTTTTTATAGAGATGAGATTTTACTATGTCGCCCAGACTGGTCTCAAACTCCTGGCCTCA
AGCAATCCTCACGCCTCAGCCTCCCAAAGTGTTGATGAGCCACTGTACCCCGATACCACTGTATAAAAAATTTAA
AAAAAATTGTGAGTGCTATTGTACATGGCAAAGTTTCAAAGAGCTCTTGGCCATCCCTCACCAAACTTTGGCAAA
AGATGGTGTTAGTCCCCTTCTCCAGGGCACATGAGAAAAACAGGCCTAACATCAGGTCTCAGCGGTTCCTCTCAC
AGGCCTTGGCTTGGAAGGCTGGAGCTTCGGACCAAGGCCCAGCCCTGTCACCTCCTCTTCATGTGATGTGGACCC
CTGGGAGCATCAGTGTCCTCATCTGTCCAATGACAGCCCTTTTCTCACAGAGTTATTGTGAAGATTCAACAATTT
CTTGGCATAGTGCCTGGCACATGGTGTGTGCTTAGCGCAAATGGCAGCTCTCATCATGAATGATAGACTCTTTCA
CCCTGCTGGTCCCAGGTCGGCACACACATCCCCATAATGGCATTTCTCCTTTCTGTGCACAGCACTTTATTGTTA
CAAAGTACTCTTCCAAAAAGTTACCCTGTGTGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2927

GGGATTGCGGAAGCCCTCCACAGTTCATAACCGTTGGCTGGTTATGAACCGTTCATAACGGGCGTTAATAACCAT
ACCCTGTTAGACTAAGCATGGTCCACCCGCGAATCCTCTACAGAGATGGCCAAGCGCTGGGGTCGTGGCTGCGTC
CTCTAGGCCAGCCTTGTGCAAAGGACCTTCTCACCACAGATCAGCCAGACCATCTTCCTCCTTCCAAGTCATCAA
AGAGTTCCAAGCTGGTCACCTGTCCCTTGATGTTCCCAGGAAACCAGGAAAGAGGACCCCTGCATTTTATCTTCC
CATCCAGAGTGGCAGGATCTCTGCCTGGGAAACAGGCTTCATTCAGCACAGCTGTGGTAGCATTAACAAAGCAAA
GTGGGCACATGTAGAAGTTGAAGCTAAAACATTCAAGAACTCCAGTCTGTTTCTGTGGATGTTAAGGGGGTGAAG
ATAAAACAATGGAGGTGATGAGGAGGAATAACTTGAAGACAGTTTAAAGCCACAGTGATACAAAGAATGAAGAGA
AGGAAGGTGCTGGATTTTACTAAGAAAACAGACTGAGTTCAGGAGTCTCACCAGTAGAACTTTATAGTATTGCGT
TTCGATTACATGTGTGTGAATTTTAAAAACTGATTACCCTCCAGTAAAAATGTGGAACCAATTTGCATTTGGATT
AAAACATTAGGTTTGGGGACAAAAGTGGACCCCATGCTGCCTGAGATGAAGAGAGAGAGCAGGATGGCAGAGGAA
TCACCAGCTCAAGAAACCCCAAGACTTGGACAGTCTTCCAGCAGAAGAGGCCAGGGTCTCTCAGTGTACTACTCC
AAACAGGCCTCTCCTAGAGATGTAGTCTGGGAAGGTCCAAAACCCACCAGACAGGCACATCCAGTGGGGAAAAGA
CTTCCCATTCCAGTGTGGCCTGCATCCCTCACCTCTGCTTCCCAGTCTTCTGCTGACCTCAGAGGAGCAGGGTGG
CCATTGCTGATCTGGGTTAGGGAGATGCCAGAAACACACCCAGGTTTGAACCACAGGTTAGTGGTACAAAGTCAC
AGTCCTTGTGCCTTCAGAAAACCCAGAGGCCCCAAATACGAGTGGGAAGAGAGTTGGGAAAAACTGAACCAGACT
CTTCCAATGGCCATTAAAGAGAAAATTCAGCAA

FIGURE 2928A

CGAGACTCAGATTGTCTGAATTGAGCTATCGCAACTTAATGCTAAAAGCTCCTTAAAGCTACAGATTTATGACAT
AGTTCCTTCCAAAATATTACATCATAAATCATTGAGAAGATTAAAAAAAAACACTTGAAGAAATTGTAGTTTTAA
ACATCTCTGCATATATTTTGGATAGCTACTAGGTTACTTTAACTGTCATTAAGGAGCACAGACTTACTGAAGCTT
TACTGGACAGAATCCTGGGAAATCGATATCATTATAAGGTTATATTTCCCAGTTAGCGGGTGAAGGGCTGGAGAC
CTTATTGCAGTCATGGCTTTCACAAATTACAGCAGTCTGAATCGAGCTCAGCTAACCTTTGAATATCTGCACACA
AATTCGTAAGTATCCTCTAGGTGCCACTGAGGTAACCAGTAACTCGTTCCTTGATATTATATGGAAATCGTTTCC
CCAGAAAATTTTGCTTTTTCACTTTTTGAGATGTATCCCACTGGAGTGAAATGTGTCACTGGATATCTTGAGCTC
TGTATTGAAGAACTGAGATCAGTGAAATACTTGTTGCTAATCCAGAAGAATCTGATTTTTGTTTATTGGATCAAA
ATTTTCTAAATGCAAACTTTAGTTATTTGAAGTCAATATGTTGAGTTGTTTCATTCAAGTGTTTATAGGAATCCA
ACAAATACTGCTCTATTGGATCGCCAAATGTTGGACTATTTTAGTATCAACCGTTTCCCCTCTGTAGTGACAACG
TCCTAAACAGTTAGGTTTATAACAAGTGTTTACTTTCTAACAAGAAAACAGAAGACATTTAAATGACAACTTTCA
AGAAGAAAATTTTTATTTTTTCAGAAGTTGGCATTATCTTCCTGGCAGATTGCTCACATCCAATATTATTTGTAT
ATGCTAAACAGGAAACGGCAACTTGTTTATATCTCTATTTAGATAGTCTTTCCCCAAAATTTCCACAGAAACATA
CAGTGTTCATGGTTCTTGAGTTCATGAAGGAGTAATCTAATCACTCCAACATGGTCTGGAATGTTTCAGGTTTAA
TCCATATGCCCACTCTCTTGGAGGCTGTCCAGTAGCGTCAAAACTTTAGTGTTTTAATACATTCACCTGTTACTT
TTGAGATGAAGTTCACCTTTCTTGGATCACATGCAAAGGATGTTTAGGTCTGTGAAGAAAAGAATTTCTAGGCCG
GGTGCTGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGAACCACTCACGAATTCTTGTTTGGTGCCC
TTGCTGAACTGGTTGATAATGCAAGAGATGCTGATGCCACCAGAATAGATATTTATGCAGAAAGACGAGAGGACC
TTCGAGGAGGATTT**ATG**CTTGCTTTTTGGATGATGGAGCAGGAATGGATCCAAGTGATGCTGCCAGTGTGATCC
AGTTTGGGAAGTCGGCCAAGCGAACACCTGAGTCTACTCAGATTGGGCAGTACGGGAATGGGTTAAAATCGGGCT
CAATGCGCATTGGGAAGGATTTTATCCTGTTCACCAAGAAGGAAGACACCATGACCTGCCTCTTCCTGTCTCGCA
CGTTTCATGAGGAAGAAGGCATTGATGAAGTGATAGTCCCACTGCCCACCTGGAATGCTCGGACCCGGGAACCTG
TCACAGACAATGTAGAGAAATTTGCCATTGAGACAGAACTCATCTATAAGTACTCTCCATTCCGCACTGAGGAGG
AAGTGATGACCCAGTTTATGAAGATTCCTGGGGACAGCGGAACATTGGTGATCATCTTCAATCTCAAACTCATGG
ATAATGGAGAGCCAGAACTAGACATAATCTCAAATCCAAGAGATATCCAGATGGCAGAGACGTCCCCAGAGGGCA
CGAAGCCAGAGCGGCGCTCGTTCCGTGCCTATGCCGCTGTGCTCTATATTGATCCCCGGATGAGGATCTTCATCC
ATGGGCACAAGGTGCAGACCAAGAGGCTCTCCTGCTGCCTGTACAAGCCCAGGATGTACAAGTACACGTCAAGCC
GTTTCAAGACCCGTGCGGAGCAGGAGGTGAAGAAAGCAGAGCACGTAGCAAGGATTGCTGAAGAGAAGGCGCGGG
AGGCAGAGAGCAAAGCTCGGACATTAGAAGTACGCCTAGGTGGAGACCTCACGCGGGACTCCAGGGTGATGTTGC
GACAGGTCCAGAACAGAGCCATCACTCTGCGCAGAGAAGCCGATGTCAAGAAGAGGATCAAGGAGGCCAAGCAGC
GAGCACTTAAAGAACCTAAGGAACTGAATTTTGTTTTTGGTGTCAACATTGAACACCGGGATCTGGATGGCATGT
TCATCTACAACTGTAGCCGACTGATCAAAATGTATGAGAAAGTGGGCCCACAGCTGGAAGGGGGCATGGCATGTG
GCGGGGTTGTTGGGGTTGTTGATGTGCCCTACCTGGTCCTGGAGCCTACACACAACAAACAGGACTTTGCTGATG
CCAAGGAGTACCGGCACCTGCTCCGAGCAATGGGGGAGCACCTGGCGCAGTATTGGAAGGATATTGCCATCGCCC
AGAGGGGAATCATCAAGTTCTGGGATGAGTTTGGCTACCTCTCTGCCAACTGGAACCAGCCCCCATCCAGTGAGC
TGCGTTACAAACGCCGGAGAGCTATGGAAATCCCCACCACCATCCAGTGCGATTTGTGTCTGAAATGGAGAACCC
TCCCCTTCCAGCTGAGTTCTGTGGAAAAAGATTACCCTGACACCTGGGTTTGCTCCATGAACCCTGATCCTGAAC
AGGACCGGTGTGAGGCTTCTGAACAAAAGCAGAAGGTTCCCCTGGGAACATTCAGAAAGGACATGAAGACGCAGG
AAGAGAAGCAGAAACAACTGACAGAGAAAATTCGCCAGCAGCAGGAGAAGCTGGAGGCCCTTCAGAAAACCACAC
CCATCCGCTCCCAAGCAGACCTGAAGAAATTGCCCTTGGAAGTGACCACCAGACCTTCCACTGAGGAACCTGTGC
GTAGACCTCAGCGTCCTCGGTCGCCCCCTTTACCTGCTGTGATCAGGAACGCCCCCAGCAGACCCCCTTCTTTGC
CAACTCCTAGACCAGCCAGCCAGCCCCGAAAGGCTCCTGTCATCAGCAGTACCCCAAAGCTCCCTGCTTTGGCAG
CCCGGGAGGAGGCCAGCACATCTAGGCTGCTCCAGCCACCTGAGGCACCCCGAAAGCCTGCCAACACTCTCGTCA
AGACTGCATCCCGACCTGCCCCTCTGGTGCAGCAACTGTCACCATCTTTACTGCCCAACTCCAAGAGCCCTCGGG
AGGTTCCTTCTCCCAAAGTCATCAAGACTCCAGTGGTGAAGAAGACAGAGTCACCCATCAAACTCTCCCCGGCTA
CCCCTAGTCGGAAGCGGAGTGTCGCAGTTTCTGATGAGGAAGAAGTTGAGGAGGAAGCTGAGAGGAGGAAGGAGA
GGTGCAAGCGGGGCAGATTTGTTGTGAAGGAGGAAAAGAAGGACTCGAATGAGCTCTCAGACAGTGCTGGGGAAG
AGGACTCGGCTGACCTCAAGAGAGCTCAGAAAGATAAAGGGCTGCACGTGGAGGTGCGTGTGAACAGGGAGTGGT

FIGURE 2928B

ACACGGGCCGTGTCACAGCCGTGGAGGTGGGCAAGCATGTGGTGCGGTGGAAGGTGAAGTTTGACTACGTGCCCA
CAGACACGACACCAAGAGACCGCTGGGTGGAGAAAGGCAGTGAGGATGTGCGGCTGATGAAACCCCCTTCTCCGG
AACATCAGAGCCTTGATACACAACAGGAGGGCGGGGAGGAGGAGGTGGGCCCTGTGGCCCAGCAGGCCATAGCTG
TCGCAGAGCCCTCCACTTCCGAATGCCTCCGCATTGAGCCTGACACCACTGCCCTGAGCACCAATCACGAGACCA
TCGACCTGCTTGTCCAGATCCTCCGGAATTGTTTACGGTACTTCCTGCCTCCAAGTTTCCCCATCTCCAAGAAGC
AGCTGAGTGCTATGAATTCAGATGAGCTAATATCTTTTCCTCTGAAGGAGTACTTCAAGCAATATGAAGTAGGGC
TCCAAAACCTGTGCAATTCCTACCAGAGCCGTGCTGACTCCCGGGCCAAGGCCTCCGAGGAAAGCCTGCGCACCT
CCGAGAGGAAGCTCCGCGAGACGGAGGAGAAGCTGCAGAAGCTGAGGACCAACATCGTGGCACTCCTGCAAAAGG
TGCAGGAGGACATAGACATCAACACAGATGATGAGCTGGACGCCTACATTGAGGACCTCATCACCAAGGGGGACT
GAAGGCAGGAGAGAGAGCAGCTCCCCTGCCCACCTGCCCCTCAACCCTGTAGCTGCAGGGGGAGGGGACTTCATT
CATGGGTTGGTGGTCGCACCTTGGTTTGACTTACACGGGACATTTGTGTTTTTGGAGGAAAAGATACCCTGATTC
TTTGAATCTTCCTTAAGTTTATAAATATTTATTTTTTAAAAG

FIGURE 2929

TGTCTGAAAAAATCAATTGACTATTCCCTTTTCCTAAAGGGCAGAGACAGATAATCTCACTTCCAGAGAAATGAC
TTGGAGAAAAAAAAAGTGTTGGTCTTTTTGCTCTTTTGTAATTAAATCCGGATGTACCTCAAAAGACTTAAGACTG
TGGTGATAAGATGCTTTCCTCAGCAGAAAGGAGGGAAAAAAAACAACTGGAACTCAAAGCTTGAAATTCTGTGGC
AAAACATGAGATGTCCAGGATTGGAGGTTGAAAAGATTTCACTACAGTGTTCTGCAATAGTTGGAGCAGATAACT
TTCAGTGTAGCCACAGCC**ATG**GACTCCAGATTTCCAGATTTTCAAGACCTGGACCTGGAACCCGAAAGAGCTTGT
CACGATGCGGCAGGAACACTGGAGGTAGATTTTTTTTTATTTTTGAATTTTGGGACTGTTGACCTTGCTGTGAGA
AAAGAGACAACGACTGAGCAAGCACTACCACCAGCACTGTTACTGGGAATTAGAAGACCTGAGTTTCTGTCCAGA
CCCTCAGTGCAAACTGAGGATGCTCCATCCAAAGTGAATTATGTCCTGTGCCTCCTGATTGCTGAGTGTTCACCT
GGACCTTCTGACTACCTTCCCTGTGCTATTCCATCAGCCTACAGACCTGGTACCTGGATTTTTGCCCGAGATGAT
TCCTACCACCTTACTACTGACGAAGACACCCATTCCAGTGGACCACTG**TGA**CCCAGGAGGCATTCAGCCATCATG
ATGTGGCCTTTACCTCCACTCCTGTCTTGTTCTACCCAGATTCAGCACAGCCCTTTATAGTGAAGTCAGAGTCCT
CAAGCCAAATAGCTAAAGCTGTTTTATCACAACAAAGGCCTAGTTTGTTCCATGAGTGTGCATTTCATTTCTTCA
GTTAAAGCCTTCAGAGACACACAATAAATTTGGACCAGGGGATTTTTTAGTTATTAATGCTCTCTGAAGAAAGGC
AACATCTTTTTGAGAGCAGCATTGGACCACACCCCACAATCTCAAATGATTGAAATTCATGAACATCTAGGATCC
CGTGAAGGTCACTGGACCCTGTTTTTTCTACTTCAAATCCTGTAGTAGCCTACTGAATGAGAAAACATATTCTGA
CCCATTGGGATCAAATCAAAGGCACAGTGAACTCCTCATAGCATCTTCTTTGGAATTACTCAGGAACCAGAACTT
TTTACACAAATGTAAGAAATTCTACCAAGGAGTCCCCTTACCTAACAGCATCTCACAAGGCTGCACCAGATTCCA
GAAAAGGCTTCTCTTGATACATCAAGCATTTTGTGACCGACTTATTCTTAGATCATTGGTTTTCCAAAGGCTTTG
TGGCCATGAAGCCCTTTGAGTGAAAACTGTGCAGAAGCCCAGAGTAAAAGTGAAGCTGCTCTGGATGAAGTAGTG
AAGCAAGAGTAGGGGCCTGAATCCTGCTACAACTATCTTCCTTTACCACCGTGGTGACACCTAAGGGGACTTCCT
TACAACACCTTGAACTCTTCCGAACACAGTTTGAAAACCACTGCCCCAGACAGCAATATGTTTGACCTGAATGGC
ATTCCAATCTTTTCTGTACCTCCACTCAGCACAGTTCATGTTCAGTAGATGCTGAACATTCTTAGAAATACTGTG
TGTGAACTTAGAAAAGTGCAAGAAGACAGGCATGTCTTTGACCCCAGGAATGATCATTTGCTGAAGATGGTGTCA
AGTGAACCTAGATTAACAGCCCTCCACTCCAGATGGATATCCAGTGATTCCTAGAATGGGATATAGCCAGAGAAC
AATTCTATGCACCCTACACTGACAGACTCCCTTAAGCAACACCAGATGCTCTACTGGTACTTGAAGTACATGACT
TTGAAGTCTTGACCCTCCATGAATACCTGAATTATCAGCAAGCGGGTTTTGAAGCTGGTGCCTCATTGAGGCCAT
ATTAGAGCAACTTGTACATTTGACCTCTTGTTATCAGCCATGGTACTCTACTTCGTGTGCAAGAGATAACTATGA
AAGCCAAATTCAAATACTGGCAACATTTCCTAAAGGGGCTCAATATCTATCATTCGTCTTCTTTTCCAAACTACA
CATCACTGTATGACTCAACCAGTAGCAGTTATATTGCCCCTTGGTTTTTATTCAGTTTAACTACTGTTTCCAAGA
TAAATGAGCTAATAAGCTTT

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FIGURE 2930

CAGAATCCAGGGGACGGTTGCTGAGCGGGCCTGGGACAGCGGGTCGCGGCACCTCCGGCCTGCGCGTGTCTAATC
CGTCTGTCGGGTCCCGAAAGAGCTAAGCCGAGCCTGCGCCGGACGGGTGGGCTGGACTGAGAGAATTCTCTGAGC
TGGTGACAGGTGCCACAGGCACTGGGGATCTCACCAGAAAGGAACCGACGGAGCTAGGGGCCAGCGAGATGGCGG
ACGAGGCCTTAGCTGGGCTGGATGAGGGAGCCCTTCGGAAGCTGCTGGAGGTCACAGCAGATCTGGCAGAGCGGC
GGCGCATCCGCTCAGCCATCCGGGAACTGCAGCGGCAGGAGCTGGAGCGCGAGGAGGAGGCCCTGGCATCCAAGC
GTTTCCGTGCCGAGCGGCAGGACAACAAGGAGAACTGGCTGCAGCTCTCAGCAGCGGGAAGCTGAGCAGCGGGCT
GCCCTGGCACGGCTGGCAGGGCAGCTGGAGTCCATGAACGATGTGGAGGAATTGACTGCACTGTTGCGAAGCGCT
GGTGAGTATGAGGAGCGCAAGCTGATCCGAGCTGCCATCCGCCGTGTACGGGCTCAGGAGATTGAGGCTGCCACC
TTGGCTGGGAGGTTGTACAGCGGGCGTCCCAACAGTGGCTCAAGAGAGGACAGCAAGGGGCTAGCGGCACACAGG
CTGGAACAGTGTGAGGTGCCAGAGCGAGAGGAACAGGAACAGCAGGCAGAGGTTTCAAAGCCAACCCCCACCCCT
GAAGGCACCAGCCAGGATGTGACCACAGTGACACTCCTGCTGCGAGCCCCACCTGGGAGCACATCCAGCTCACCT
GCCTCACCCAGCAGTTCACCCACCCCTGCCTCTCCTGAGCCTCCATTGGAGCCTGCCGAGGCCCAGTGCCTTACA
GCTGAGGTTCCAGGCAGCCCAGAGCCACCCCCCAGCCCACCCAAGACCACCAGCCCTGAGCCTCAGGAGTCTCCA
ACGCTCCCCAGCACTGAGGGCCAGGTGGTCAACAAGCTTCTGTCTGGCCCCAAAGAGACCCCTGCTGCCCAGAGC
CCCACCAGAGGCCCCTCTGACACCAAGAGAGCAGACGTGGCTGGACCCCGACCCTGCCAACGCTCCCTGTCGGTG
CTCAGCCCCCGCCAACCAGCCCAGAACCGAGAGTCCACCCCCCTTGCCAGCGGACCTTCCTCATTCCAGCGGGCT
GGCTCTGTGCGGGATCGTGTCCACAAGTTCACATCTGATTCTCCTATGGCTGCTAGGCTCCAGGATGGCACACCC
CAGGCTGCCCTAAGTCCCCTGACCCCCGCAAGGCTCCTGGGCCCCTCCCTCACCAGCACCACCCCTGCCTCCTCC
TCCAGCGGCTCCTCCTCTCGGGGCCCCAGTGATACCTCCTCCCGGTTCAGCAAGGAGCAACGAGGAGTAGCCCAG
CCCCTGGCCCAGCTTCGAAGCTGCCCCCAGGAGGAGGGCCCCAGGGGGCGGGGCTTGGCTGCTAGGCCCCTTGAA
AACAGAGCAGGGGGGCCTGTGGCACGTTCAGAGGAGCCTGGTGCCCCGCTGCCCGTGGCCGTCGGCACTGCCGAG
CCAGGGGGCAGTATGAAGACCACATTCACCATCGAGATCAAGGACGGCCGTGGCCAGGCCTCCACAGGCCGGGTG
CTGCTGCCCACAGGCAACCAGAGGGCAGAACTGACACTGGGGCTGCGGGCGCCCCCGACCCTACTCAGCACCAGT
AGTGGGGGCAAGAGCACCATCACCCGTGTCAACAGCCCTGGGACCCTGGCTCGGCTGGGCAGTGTCACTCATGTC
ACCAGCTTCAGCCATGCCCCCCCCAGTAGCCGAGGAGGCTGCAGCATCAAGATGGAAGCAGAGCCAGCAGAGCCT
CTCGCTGCAGCAGTGGAAGCGGCCAATGGGGCTGAGCAGACCCGAGTGAACAAAGCACCAGAAGGGCGGAGCCCT
CTGAGCGCTGAGGAGCTGATGACTATTGAGGATGAAGGAGTCTTGGACAAGATGCTGGATCAGAGCACGGACTTT
GAAGAGCGGAAGCTCATCCGGGCTGCACTTCGTGAGCTCCGACAAAGGAAGAGAGACCAGCGGGACAAGGAGCGG
GAACGGCGGCTGCAGGAGGCACGGGGCCGGCCAGGGGAGGGGCGCGGCAACACAGCCACTGAGACCACCACGAGG
CACAGCCAGCGGGCAGCTGATGGCTCTGCTGTCAGCACTGTTACCAAGACTGAGCGGCTCGTCCACTCCAATGAT
GGCACACGGACGGCCCGCACCACCACAGTGGAGTCGAGTTTCGTGAGGCGCTCGGAGAATGGCAGTGGCAGCACC
ATGATGCAAACCAAGACCTTCTCCTCTTCCTCCTCATCCAAGAAGATGGGCAGCATCTTCGACCGCGAGGACCAG
GCCAGCCCACGGGCCGGCAGCCTGGCGGCGCTCGAGAAACGGCAGGCCGAGAAGAAGAAAGAGCTGATGAAGGCG
CAGAGTCTGCCCAAGACCTCAGCCTCCCAGGCGCGCAAGGCCATGATTGAGAAGCTGGAGAAGGAGGGCGCGGCC
GGCAGCCCTGGCGGACCCCGCGCAGCCGTGCAGCGATCCACCAGCTTCGGGGTCCCCAACGCCAACAGCATCAAG
CAGATGCTGCTGGACTGGTGTCGAGCCAAGACTCGCGGCTACGAGCACGTCGACATCCAGAACTTCTCCTCCAGC
TGGAGTGATGGGATGGCCTTCTGTGCCCTGGTGCACAACTTCTTCCCTGAGGCCTTCGACTATGGGCAGCTTAGC
CCTCAGAACCGACGCCAGAACTTCGAGGTGGCCTTCTCATCTGCGGAGACCCATGCGGACTGCCCGCAGCTCCTG
GATACAGAGGACATGGTGCGGCTTCGAGAGCCTGACTGGAAGTGCGTGTACACGTACATCCAGGAATTCTACCGC
TGTCTGGTCCAGAAGGGGCTGGTAAAAACCAAAAAGTCCTAACCCCTGCTCGGGGCCCCACGGATGCTGGTGGAC
TGTGTGCCCCTGGTGGAGGTGGACGACATGATGATCATGGGCAAGAAGCCTGACCCCAAGTGTGTCTTCACCTAT
GTGCAGTCGCTCTACAACCACCTGCGACGCCACGAACTGCGCCTGCGCGGCAAGAATGTCTAGCCTGCCCGCCCG
CATGGCCAGCCAGTGGCAAGCTGCCGCCCCCACTCTCCGGGCACCGTCTCCTGCCTGTGCGTCCGCCCACCGCTG
CCCTGTCTGTTGCGACACCCTCCCCCCCACATACACACGCAGCGTTTTGATAAATTATTGGTTTTCAACG

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FIGURE 2931

CGTGGCGCAGCGACTCGGAGGTTCGCCTCCAGCTTGCGCATCATCTGCGGCCGGGTCCCGATGAGCCTCCTGTTG
CCTCCGCTGGCGCTGCTGCTGCTTCTCGCGGCGCTTGTGGCCCCAGCCACAGCCGCCACTGCCTACCGGCCGGAC
TGGAACCGTCTGAGCGGCCTAACCCGCGCCCGGGTAGAGACCTGCGGGGGATGACAGCTGAACCGCCTAAAGGAG
GTGAAGGCTTTCGTCACGCAGGACATTCCATTCTATCACAACCTGGTGATGAAACACCTCCCTGGGGCCGACCCT
GAGCTCGTGCTGCTGGGCCGCCGCTACGAGGAACTAGAGCGCATCCCACTCAGTGAAATGACCCGCGAAGAGATC
AATGCGCTAGTGCAGGAGCTCGGCTTCTACCGCAAGGCGGCGCCCGACGCGCAGGTGCCCCCCGAGTACGTGTGG
GCGCCCGCGAAGCCCCCAGAGGAAACTTCGGACCACGCTGACCTGTAGGTCCGGGGGCGCGGCGGAGCTGGGACC
TACCTGCCTGAGTCCTGGAGACAGAATGAAGCGCTCAGCATCCCGGGAATACTTCTCTTGCTGAGAGCCGATGCC
CGTCCCCGGGCCAGCAGGGATGGGGTTGGGGAGGTTCTCCCAACCCCACTTTCTTCCTTCCCCAGCTCCACTAAA
TTCCCTCCTGCCTT

FIGURE 2932

GAGAGGGGCGGCTCCGCGTCATGTGACTGGAGTCCGCGTAGGAGGGGTCGGAGGTCTTACCCAACAGATTGACGC
GGCGTTAGTATTGGCCGTGTACCCGAAAAACTGATTGACTGGGCTGGCGTTAACTGTGCGGAGGCAGGATTTCCC
TGGGGAAAGTCTTCACTCAGAGCTTCGCTGACAGCCAAGGATGGCAAGCAAGGGGCCCTCGGCCTCTGCATCTCC
TGAGAACTCCAGTGCAGGGGGGCCCAGTGGGAGCAGCAATGGCGCTGGCGAGAGCGGAGGGCAGGACAGCACTTT
CGAGTGCAACATCTGCTTGGACACAGCCAAGGATGCCGTCATCAGCCTGTGTGGCCACCTCTTCTGTTGGCCGTG
TTTACATCAGTGGTTGGAGACCAGACCTAACAGACAGGTGTGTCCTGTTTGCAAAGCTGGCATCAGCCGAGACAA
GGTCATCCCCCTCTATGGAAGGGGCAGCACTGGGCAACAGGACCCCAGAGAGAAGACCCCTCCTCGTCCTCAAGG
ACAGAGGCCAGAGCCGGAGAATAGAGGGGGATTTCAAGGATTTGGATTTGGAGATGGTGGCTTCCAGATGTCTTT
TGGAATTGGGGCATTTCCCTTTGGGATATTTGCCACAGCATTTAATATAAATGATGGGCGGCCTCCTCCAGCTGT
CCCTGGGACACCCCAGTATGTGGACGAGCAGTTCCTGTCACGCCTCTTCCTATTTGTGGCCCTGGTGATCATGTT
CTGGCTCCTGATTGCCTAATGCTGGGCTCCTGCCTACATCCGTGGCAGGGCTCTGGACTGGTGACGTGCCACCCC
AACTCCTGGTGTTTGGCTTCCTGGCTAATCTTGACTCCTGGAATCAGTGGGATCAGTAACACATCAAGGAGTCTT
GTTTCTTCATCAGAGCTTTGGAACTCGAGACCAGTTGGCGATGACCCCTGAATATCGCCACCGCTGTAAACACTC
TATAACTTCAGGCCTTGGCATTGAGTCATCTCTCATGGGTGACACCATGAAATCTTGTTTCAGCCAGTTCTGCAG
GTCCTGACTCTGCAGAGGGAAGAGGCAGAAAGAGAGAAACTGTCAGAGTATAATTTCACCTGAGTTTAATATTAC
AGAAACAAAGGGATGCACCAAATGGTATTTCTGGAAATTTTCATGTCTTTAAATACCCCTTGGTAAGTTGCTTCT
GAAGCCAGTGGGGGCTCCTCAGATAGAGAGGTTCCCCTTTCAAATCCCAGTGCCGCTCTGTTCTCTTTCCTTCCC
CTCCCACTCCCCCTCTTCTTCCTCTGTAGAGATGCAAGAAATTGCTGTCCCATAAAAATCATAATTGCAGTAGCT
AAAGCTGGGGTCACTTCGTGAATTCACCAGAGACTCAAAGATCTTTTATTGGCTCTGGGCTGTGCTCAGTGTCTT
TGGCCTCAGAGAACAACTTGAATGACTTCCTGGTTTCCTGGCATAAATTATTCCTGGTGAGACATGTGGCTTAAC
TCACAGGTTTCCCATCAGCTTTCTCCCTAAAACTATGTTCATCTGCCTCTCTCTGCCAGAGAACATACAGCCGAG
AATACTGCCGAAGCTGAGACTGACTACTGTGCATTAGGAAAGACCTGGAGTCAGGACTTTGGTGGGATTTGGAGC
TCCGAGGCAGTAATAACTGAACAAGCAGCCCTGTCCCCTAGGCTGCAGAAGCTTGAATGCATCCTCTCCCAGAAC
CTGCCACAGGAAACTGGGGGCTTTGTCAGGTCAGCCCAACTGCATGCAAAAGACCACCATCCTCAGAAGCCAAGT
TGTCTTTTATGAAGAGGCAAGGAAAGGGGAAACCCACATGTGACCCTGATTTTGGTATGGCTTGATAGAGTTCCC
TGAAAACTCCTTGTATGTGTGCTAAAACCAGGGAAGCATGTGACTGCCAAGCAGGCAACCCCTGATGATTTGTAA
AGCCAGGTGGCAGGGCCTTGGGGAGCCCCAGCACAATGATATTGTGTGGTCTTCCCTCCTGTGGAATCGAGGGGA
AATTATTCTTCCCAATACCTTGATTTGATTTTCAGTTTCATAAGCTTCTTCCTCTGAATCTTATTGAGGGACTAT
GGTACCAAGCAGGTAGGACTGTTCACCTGGTGGAACAGTTCTTGCTCTGCCTTCTAGGCTTCATCCCAGAAATCC
AGCCTCTTTCTGGAGACCCCAAAGCTGGAGGGAGATGGGCTTTCCTCTGGGCCTCTCTCCTACTTTGCCATCCAC
ACTGCTCCTGGCTAACCCCAGCAATAACCAACAAATGGTAGGAAGCCCCATCTATTGCTTTTTCTCAATTATGAC
TGCATAGTTTATGGAAACAAAGATCTTGAGGAAGATGAGGGAAGCCCTCCCCTCTTCACAGTCCCCATCTCTTCT
CCTTTGTACCTGTCAACACCAGAGTTCAGTGTTTAAACAGACAAAATATAAAGTATTGAGTAGGTGGTTCATATG
CCGAATCCACTTGGTAGGAAGAAACCACCAGCTTTATAGTGTGCCTGATAGATTTTAAACATTCCTGGGCACCCA
CTCAAGAGTGCTCTTTTTATCACCTTCTGGAAATCCGCAAAGTTGCAGGGGCCTCTGGAGTGTCTCTTCTCTAGA
GAGAATTGGTGGGACCCCCCTCAGTGCAGTGGCCCCAACTAGTGGAGGGAGAGAGGACTTAAGTCAGATGGACTC
AACAGAAATGGGTTTCCAGAAGAATAATGAAAAGTTGTGGGTAGGAAAATGAATCATTTGGACTCTTCAATGAAA
TGGAGTGAGCCCAGGAGAGCTCAGCCAACAGAGGCACTCTGGGAACCTGTTAGTAAAGCCAGGCTGGCCAAATGC
CATTTGATTTTGAACCTCGTAGGTCCCCACTCACCCTCTGCCAGGAGCTAAGTAAGGCAGGAGAGCTGACTTGGG
ACTCCTGGCTCGGCCCCAACAGGGAGCCCCCTTCCCACCATCCCTCGGCAAGCTCACCACCTCATCCTTCTGCCA
AGGCAGCTTTCCTTTCTTTTGTGTGTTTTCTGTGTTCTTAGCCTCCACCCTCCTCCTGCCACCCTTGTGGACTAG
GACCAGGTCCTGACCCCAGTCAGAAAATGATGATATGTACAGTGGCACACCTTAACCAGTCACTAATTTTCACTG
TTGTGAAAGTGATTTGATTTAGAATTAAACAAATGGTTTTACATTA

FIGURE 2933A

CTCAAGAATGCCAGTGTGTGTGTAGCCTCCACAGAGAGGTCGTTTTCTCGGAGTCCAGAGGGGCCGCCTGAGCTT
CTGAGAACTAGGGAGGAGCCATCCCAGCCATGAGCCCCTGTGGGAATCTGCTGGGGGCCAAGTGGCCTGGAGTCC
TCAGGCTCCCGCAGCTGCTCCGGAGGGAGAGGTGAGCTCAGGGCAGCCTGCCTGCAGCCAGAGGTGCCGGGAGCC
CCGGGCCTGTCATGGTGGCCATCTACAGCCGGCCTGAGGCAGTCACAGACGGATTTGCAGCTGAGCCTGTCTATC
TGGTGTGGGAAGAAGATGGGGAGTTACTTGTCAGTCCCGGCTTACTTCACCTCCAGAGACCTGTTTCGGTGTTCA
GAATGCCAGGATTCCCTCACCAACTGGTACTATGAGAAGGATGGGAAGCTCTACTGCCCCAAGGACTACTGGGGG
AAGTTTGGGGAGTTCTGTCATGGGTGCTCCCTGCTGATGACAGGGCCTTTTATGGTGGCTGGGGAGTTCAAGTAC
CACCCAGAGTGCTTTGCCTGTATGAGCTGCAAGGTGATCATTGAGGATGGGGATGCATATGCACTGGTGCAGCAT
GCCACCCTCTACTGTGGGAAGTGCCACAATGAGGTGGTGCTGGCACCCATGTTTGAGAGACTCTCCACAGAGTCT
GTTCAGGAGCAGCTGCCCTACTCTGTCACGCTCATCTCCATGCCGGCCACCACTGAAGGCAGGCGGGGCTTCTCC
GTGTCCGTGGAGAGTGCCTGCTCCAACTACGCCACCACTGTGCAAGTGAAAGAGGTCAACCGGATGCACATCAGT
CCCAACAATCGAAACGCCATCCACCCTGGGGACCGCATCCTGGAGATCAATGGGACCCCCGTCCGCACACTTCGA
GTGGAGGAGGTGGAGGATGCAATTAGCCAGACGAGCCAGACACTTCAGCTGTTGATTGAACATGACCCCGTCTCC
CAACGCCTGGACCAGCTGCGGCTGGAGGCCCGGCTCGCTCCTCACATGCAGAATGCCGGACACCCCCACGCCCTC
AGCACCCTGGACACCAAGGAGAATCTGGAGGGGACACTGAGGAGACGTTCCCTAAGGCGCAGTAACAGTATCTCC
AAGTCCCCTGGCCCCAGCTCCCCAAAGGAGCCCCTGCTGTTCAGCCGTGACATCAGCCGCTCAGAATCCCTTCGT
TGTTCCAGCAGCTATTCACAGCAGATCTTCCGGCCCTGTGACCTAATCCATGGGGAGGTCCTGGGGAAGGGCTTC
TTTGGGCAGGCTATCAAGGTGACACACAAAGCCACGGGCAAAGTGATGGTCATGAAAGAGTTAATTCGATGTGAT
GAGGAGACCCAGAAAACTTTTCTGACTGAGGTGAAAGTGATGCGCAGCCTGGACCACCCCAATGTGCTCAAGTTC
ATTGGTGTGCTGTACAAGGATAAGAAGCTGAACCTCCTGACAGAGTACATTGAGGGGGGCACACTGAAGGACTTT
CTGCGCAGTATGGATCCGTTCCCCTGGCAGCAGAAGGTCAGGTTTGCCAAAGGAATCGCCTCCGGAATGGCCTAT
TTGCACTCTATGTGCATCATCCACCGGGATCTGAACTCGCACAACTGCCTCATCAAGTTGGACAAGACTGTGGTG
GTGGCAGACTTTGGGCTGTCACGGCTCATAGTGGAAGAGAGGAAAAGGGCCCCCATGGAGAAGGCCACCACCAAG
AAACGCACCTTGCGCAAGAACGACCGCAAGAAGCGCTACACGGTGGTGGGAAACCCCTACTGGATGGCCCCTGAG
ATGCTGAACGGAAAGAGCTATGATGAGACGGTGGATATCTTCTCCTTTGGGATCGTTCTCTGTGAGATCATTGGG
CAGGTGTATGCAGATCCTGACTGCCTTCCCCGAACACTGGACTTTGGCCTCAACGTGAAGCTTTTCTGGGAGAAG
TTTGTTCCCACAGATTGTCCCCCGGCCTTCTTCCCGCTGGCCGCCATCTGCTGCAGACTGGAGCCTGAGAGCAGA
CCAGCATTCTCGAAATTGGAGGACTCCTTTGAGGCCCTCTCCCTGTACCTGGGGGAGCTGGGCATCCCGCTGCCT
GCAGAGCTGGAGGAGTTGGACCACACTGTGAGCATGCAGTACGGCCTGACCCGGGACTCACCTCCCTAGCCCTGG
CCCAGCCCCCTGCAGGGGGGTGTTCTACAGCCAGCATTGCCCCTCTGTGCCCCATTCCTGCTGTGAGCAGGGCCG
TCCGGGCTTCCTGTGGATTGGCGGAATGTTTAGAAGCAGAACAAGCCATTCCTATTACCTCCCCAGGAGGCAAGT
GGGCGCAGCACCAGGGAAATGTATCTCCACAGGTTCTGGGGCCTAGTTACTGTCTGTAAATCCAATACTTGCCTG
AAAGCTGTGAAGAAGAAAAAAACCCCTGGCCTTTGGGCCAGGAGGAATCTGTTACTCGAATCCACCCAGGAACTC
CCTGGCAGTGGATTGTGGGAGGCTCTTGCTTACACTAATCAGCGTGACCTGGACCTGCTGGGCAGGATCCCAGGG
TGAACCTGCCTGTGAACTCTGAAGTCACTAGTCCAGCTGGGTGCAGGAGGACTTCAAGTGTGTGGACGAAAGAAA
GACTGATGGCTCAAAGGGTGTGAAAAAGTCAGTGATGCTCCCCCTTTCTACTCCAGATCCTGTCCTTCCTGGAGC
AAGGTTGAGGGAGTAGGTTTTGAAGAGTCCCTTAATATGTGGTGGAACAGGCCAGGAGTTAGAGAAAGGGCTGGC
TTCTGTTTACCTGCTCACTGGCTCTAGCCAGCCCAGGGACCACATCAATGTGAGAGGAAGCCTCCACCTCATGTT
TTCAAACTTAATACTGGAGACTGGCTGAGAACTTACGGACAACATCCTTTCTGTCTGAAACAAACAGTCACAAGC
AAAGGAAGAGGCTGGGGGACTAGAAAGAGGCCCTGCCCTCTAGAAAGCTCAGATCTTGGCTTCTGTTACTCATAC
TCGGGTGGGCTCCTTAGTCAGATGCCTAAAACATTTTGCCTAAAGCTCGATGGGTTCTGGAGGACAGTGTGGCTT
GTCACAGGCCTAGAGTCTGAGGGAGGGGAGTGGGAGTCTCAGCAATCTCTTGGTCTTGGCTTCATGGCAACCACT
GCTCACCCTTCAACATGCCTGGTTTAGGCAGCAGCTTGGGCTGGGAAGAGGTGGTGGCAGAGTCTCAAAGCTGAG
ATGCTGAGAGAGATAGCTCCCTGAGCTGGGCCATCTGACTTCTACCTCCCATGTTTGCTCTCCCAACTCATTAGC
TCCTGGGCAGCATCCTCCTGAGCCACATGTGCAGGTACTGGAAAACCTCCATCTTGGCTCCCAGAGCTCTAGGAA
CTCTTCATCACAACTAGATTTGCCTCTTCTAAGTGTCTATGAGCTTGCACCATATTTAATAAATTGGGAATGGGT
TTGGGGTATTAATGCAATGTGTGGTGGTTGTATTGGAGCAGGGGGAATTGATAAAGGAGAGTGGTTGCTGTTAAT
ATTATCTTATCTATTGGGTGGTATGTGAAATATTGTACATAGACCTGATGAGTTGTGGGACCAGATGTCATCTCT

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FIGURE 2933B

GGTCAGAGTTTACTTGCTATATAGACTGTACTTATGTGTGAAGTTTGCAAGCTTGCTTTAGGGCTGAGCCCTGGA
CTCCCAGCAGCAGCACAGTTCAGCATTGTGTGGCTGGTTGTTTCCTGGCTGTCCCCAGCAAGTGTAGGAGTGGTG
GGCCTGAACTGGGCCATTGATCAGACTAAATAAATTAAGCAGTTAACATAACTGGC

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FIGURE 2934A

GGGCCTACTCTGCCGCCGCCGCCGCCCGCCCGCTCCAGCCGCCGCCGCCGCCGCCACCGCCCTCCAGGCTCCGGG
ACCCGGCCCGCGCCACCGCCCCCGTGCGCGCCCCGCCGCCGCCGCCTTCGCCTTCGCCTTTTGTTTCCTCCGCTC
CGGCGCCCCCGCCCCGGCTCGCGCTTTGCAGGGGACGCAGCGCGCGCCCCCAGCGGGCCCGGGAAAAGCCGCGGC
GCGCGCGCGCGCCTGCGCGGCGGACCCCTCCTTCTCCTCCCCGCGTGCGCGTGCCCTTCTTGGCTGCGCGCCGGC
GCCGCCTGGCGGGCGGGAGGGGAGGTGGCAGGCGCGTTTGCAGGAGGGGCGCACCTCTTCGCTCGCGCACCCCCC
CGGAAGGTAGACCGGGAAGGGGAGGCGGGCGGGCGGAGAGGAGAGAGTGGCGCGCAGTCCAGCGAGGGCGGGGGT
TGGCTATGTGGGGGGTGGTGCACCCCGCAGTCTAGACAGTCTGATCCGGGCTGGGGGCGTGTACACTCGGCGCAC
CTGCGAGACTACAGAGCCTCGGGCCGGCACGTGTGGGGAGTGTGGACACGTCTGCTGCGCCCCGCTTCTCGCTGC
TGAGGGGAAGGGAGGGGGCGGGCAGGTGCAGCGGCCGGGCTAGTGGGAGGGGGCGGCGGCCATGGAGCGGGTGAA
CGACGCTTCGTGCGGCCCGTCTGGCTGCTACACATACCAGGTGAGCAGACACAGCACGGAGATGCTGCACAACCT
GAACCAGCAGCGCAAAAACGGCGGGCGCTTCTGCGACGTGCTCTTGCGGGTAGGCGACGAGAGCTTCCCAGCGCA
CCGCGCCGTGCTGGCCGCCTGCAGCGAGTACTTTGAGTCGGTGTTCAGCGCCCAGTTGGGCGACGGCGGAGCTGC
GGACGGGGGTCCGGCTGATGTAGGGGGCGCGACGGCAGCACCAGGCGGCGGGGCCGGGGGCAGCCGGGAGCTGGA
GATGCACACTATCAGCTCCAAGGTATTTGGGGACATTCTGGACTTCGCCTACACTTCCCGCATCGTGGTGCGCTT
GGAGAGCTTTCCCGAACTCATGACGGCCGCCAAGTTCCTGCTGATGAGGTCGGTTATCGAGATCTGCCAGGAAGT
CATCAAACAGTCCAACGTACAGATCCTGGTACCCCCTGCCCGCGCCGATATAATGCTCTTTCGCCCCCCTGGGAC
CTCGGACTTGGGCTTCCCTTTGGACATGACCAACGGGGCAGCCTTGGCAGCCAACAGCAATGGCATCGCCGGCAG
CATGCAGCCAGAGGAGGAGGCAGCTCGGGCGGCTGGTGCAGCCATTGCAGGCCAAGCCTCTTTGCCTGTGTTACC
TGGGGTGGACCGCTTGCCCATGGTGGCTGGACCCCTATCCCCCCAACTGCTGACTTCCCCATTCCCCAGTGTGGC
ATCCAGTGCCCCTCCCCTGACTGGCAAGCGAGGCCGGGGCCGCCCAAGGAAGGCCAACCTGCTGGACTCAATGTT
TGGGTCCCCAGGGGGCCTGAGGGAGGCAGGCATCCTTCCATGCGGTCTATGTGGTAAGGTGTTCACTGATGCCAA
CCGGCTCCGGCAGCACGAGGCCCAGCACGGTGTCACCAGCCTCCAGCTGGGCTACATCGACCTTCCTCCTCCGAG
GCTGGGTGAGAATGGGCTACCCATCTCTGAAGACCCCGACGGCCCCCGAAAGAGGAGCCGGACCAGGAAGCAGGT
GGCTTGTGAGATCTGCGGCAAGATCTTCCGTGATGTGTATCATCTTAACCGGCACAAGCTGTCCCACTCTGGGGA
GAAGCCCTACTCCTGCCCTGTGTGTGGGTTGCGGTTCAAGAGAAAAGACCGCATGTCCTACCATGTGCGGTCCCA
TGATGGGTCCGTGGGCAAGCCTTACATCTGCCAGAGCTGTGGGAAAGGCTTCTCCAGGCCTGATCACTTGAACGG
ACATATCAAGCAGGTGCACACTTCTGAGCGGCCTCACAAGTGTCAGACCTGCAATGCTTCTTTTGCCACCCGAGA
CCGTCTGCGCTCCCACCTGGCCTGTCATGAAGACAAGGTGCCCTGCCAGGTGTGTGGGAAGTACTTGCGGGCAGC
ATACATGGCAGACCACCTGAAGAAGCACAGCGAGGGGCCCAGCAACTTCTGCAGTATCTGTAACCGAGGTTTCTC
CTCTGCCTCCTACTTAAAGGTCCATGTTAAAACCCACCACGGTGTTCCCCTTCCCCAGGTCTCCAGGCACCAGGA
GCCCATCCTGAATGGGGGAGCAGCGTTCCACTGCGCCAGGACCTATGGCAACAAAGAAGGCCAGAAATGCTCACA
TCAGGATCCGATTGAGAGCTCTGACTCCTATGGTGACCTCTCAGATGCCAGCGACCTGAAGACGCCAGAGAAGCA
GAGTGCCAATGGCTCTTTCTCCTGCGACATGGCAGTCCCCAAAAACAAAATGGAGTCTGATGGGGAGAAGAAGTA
CCCATGCCCTGAATGTGGGAGCTTCTTCCGCTCTAAGTCCTACTTGAACAAACACATCCAGAAGGTGCATGTCCG
GGCTCTCGGGGGCCCCCTGGGGGACCTGGGCCCTGCCCTTGGCTCACCTTTCTCTCCTCAGCAGAACATGTCTCT
CCTCGAGTCCTTTGGGTTTCAGATTGTTCAGTCGGCATTTGCGTCATCTTTAGTAGATCCTGAGGTTGACCAGCA
GCCCATGGGGCCTGAAGGGAAATGAGGCAGCTGCTGTGTCCCCACGGAAACAACCATCTGGGGACTGCTGGGAAA
TGCTGTGAATGCGGAGGGAAGTGATGTTTGGGTTCTGTAGCTGAGAGATTTTTATTCATTTTTAACTGCCCCCCA
ACCCCACTCCAACTCCTTCTCCACCACCCATTCTCCCAATGGTCTTTAGAAATAGATTTTCATCTGATATTCTGC
AGAAATATCAATGAGACTTGGTATGGGACAGGGGCAGAAAACACTACATAGGCCTCCAAGGCAAAACCAGTCCCA
GTTTCTTTAATGGGAAGAAGCTGGAATTCCTGGTGCTCAATTCTTAGTGACCCCAATCCTATACCCAAATCTATG
ATATTCTGGGACCTCAGTGATTTTGGTCCCCTCCCACTTCTCTAGTTCGTCATCCTCCCTTCCCATATCCTTCAA
AAGAACCACACTAGGGTCTCCACCTACTTATACAATGCGGATGCCCAACTGTTTTTAAGGAAGCCAGAAGCATCC
CATGGACCATGGGGTGAGTGTCCTCCAAGAGCCCCCTGAGCTCAGCCCTCTGCCTGGAGGGCTCCAGACCTTTCT
GAGCCCTGCTTGGAGGCGAGCATTTTCACTGCTAGGACAAGCTCAGCTGTTGAGGACACCCCCACCCCAAATTTC
AGTTCTTACGTGATTTTAACCATTCAACATGCTGTTGGGTTTTAATTCTCTAATTATTATTATTATTGTTATTAT
TTTTTAGGACCAGTTGTAGTGAATTGCTACTGAAAGCTATCCCAGGTGATACAGAGCTCTTTGTAAACCGCAGTC
ACACATTAGGGTTAGTATTAAACTTTGTTTAGATGTACCATAATTAACTTGGCTAGTTGATTGTTTGAAGTCTAT

FIGURE 2934B

GGAAGAAATAGTTTTATGCAAAATTTTAAAAAATGCCAGTCTGGTCAGGGAAGTAGGGGGTTTCAATGCTGTTGG
GAACCAGGAAGGTGGGACAGCCGGCAGGTAGGGACATTGTGTACCTCAGTTGTGTCACATGTGAGCAAGCCCAGG
TTGACCTTGTGATGTGAATTGATCTGATCAGACTGTATTAAAAATGTTAGTACATTACTCTA

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FIGURE 2935

GCGGTGGCAGTTTGCCCGCGGGTGTGTGAAGGGAGACAGTGTGGAGGCCACAGGGTACTCGCCACGATGAGCAGC
ACCTTAGCTAAGATCGCGGAGATAGAAGCAGAGATGGCTCGGACTCAAAAGAACAAGGCCACAGCACACCACTTA
GGGCTGCTTAAGGCTCGTCTTGCTAAGCTTCGTCGAGAACTCATTACTCCAAAGGGTGGTGGTGGTGGAGGTCCA
GGAGAAGGTTTTGATGTGGCCAAGACAGGTGATGCTCGAATTGGATTTGTTGGTTTTCCATCTGTGGGGAAGTCA
ACACTGCTTAGTAACCTGGCAGGGGTATATTCTGAGGTGGCAGCCTATGAATTCACTACTCTGACCACTGTGCCT
GGTGTCATCAGATACAAAGGTGCCAAGATCCAGCTCCTGGATCTCCCAGGTATCATTGAAGGTGCCAAGGATGGG
AAAGGTAGAGGTCGTCAAGTCATTGCAGTGGCCCGAACCTGTAACTTGATCTTGATTGTTCTGGATGTCCTGAAA
CCTTTGGGACATAAGAAGATAATTGAAAATGAGCTGGAAGGCTTTGGCATTCGCTTGAACAGCAAACCCCCCAAC
ATTGGCTTTAAGAAGAAGGACAAGGGAGGCATTAATCTCACAGCCACTTGCCCCCAGAGTGAGCTGGATGCTGAA
ACTGTGAAGAGCATTCTGGCTGAATACAAGATTCATAATGCCGATGTGACTCTACGTAGTGATGCTACAGCTGAT
GACCTCATTGATGTGGTGGAAGGAAACAGAGTTTATATCCCCTGTATCTATGTGTTAAATAAGATTGACCAAATC
TCCATTGAGGAATTGGATATCATCTATAAGGTGCCTCACTGTGTACCCATCTCTGCCCATCACCGCTGGAATTTT
GATGACCTATTGGAAAAGATCTGGGACTATCTGAAACTAGTGAGAATTTACACCAAACCCAAAGGCCAGTTACCA
GATTACACATCCCCAGTGGTGCTTCCTTACTCCAGGACCACAGTGGAGGATTTCTGCATGAAGATTCACAAAAAT
CTTATCAAAGAATTTAAATATGCTCTGGTCTGGGGTCTCTCTGTGAAACACAATCCTCAGAAAGTGGGTAAAGAC
CATACGTTGGAGGATGAGGATGTCATTCAAATTGTGAAGAAGTGAAACCTTTCCCTTTTCCCATCTGCCGGACGA
ACCACAACAGCGTTCCCCATGATCAAGCACCCTACCCCAGTTCTTTCTGGTTTTGGCAGTCACTGGATCAGGATC
CAGGGGAGGGAGATGGAGGCACCCAAACTGGAACTTCATTTGTCTTACCTTGGTGTCACCTTGTATGTCGAACTG
CATAAAAGATCTGGTAGGCTGGTCAGCTACATGC

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FIGURE 2936A

GAGACAGCCCAAGCCGGTCGGGGTGGGGGCGCGAGAGCGAAGGCTGCGGGGAGCGGCGCTGGGACCGGTGCGGGC
AGCGGGGAGGGGAGCGGCGGCCGAGGCAAAGGGCCGCCGAGCGGCGGAGGCACCGAGTGCAGAGCATTGTAGACC
AAGGAGCC**ATG**GATAGGAGAAGTATGGGTGAAACAGAAAGTGGAGATGCTTTCCTTGACCTGAAGAAGCCTCCTG
CCTCCAAATGCCCCCATCGCTATACAAAAGAAGAACTCTTGGATATAAAAGAACTCCCCCATTCCAAACAGAGGC
CTTCATGCCTTTCTGAAAAATATGACAGTGATGGTGTCTGGGACCCTGAGAAGTGGCATGCCTCTCTCTACCCAG
CTTCAGGGCGGAGCTCACCAGTGGAAAGTCTGAAGAAAGAGTTGGATACAGACCGGCCTTCCCTGGTGCGCAGGA
TAGTAGATCCACGAGAGCGTGTGAAAGAAGATGACTTAGATGTTGTTCTCAGCCCTCAGAGACGGAGCTTTGGAG
GGGGCTGCCACGTGACAGCCGCTGTTAGCTCCCGGCGCTCAGGAAGTCCATTAGAGAAAGATAGTGATGGGCTTC
GTCTGCTTGGTGGACGTAGGATTGGCAGTGGGAGGATAATCTCTGCCCGGACCTTTGAGAAGGATCACCGTCTTA
GCGATAAGGACCTGCGGGACTTGAGAGACAGAGACCGAGAGAGGGACTTCAAGGACAAGCGTTTCAGGAGAGAGT
TTGGAGATAGTAAGCGTGTCTTTGGTGAGCGTAGAAGAAATGATTCTTACACAGAAGAAGAACCAGAGTGGTTCT
CTGCTGGACCCACAAGTCAGTCTGAAACCATCGAACTGACTGGCTTTGATGATAAGATACTAGAAGAAGATCACA
AAGGGAGAAAAAGAACAAGGCGACGGACAGCCTCTGTGAAGGAAGGTATAGTAGAGTGCAATGGAGGAGTGGCCG
AAGAGGATGAAGTGGAGGTCATCCTTGCACAGGAGCCTGCGGCTGATCAGGAAGTGCCAAGGGATGCTGTCTTGC
CTGAGCAGTCCCCAGGAGACTTTGACTTTAATGAGTTCTTTAACCTTGATAAGGTGCCATGCTTGGCTTCGATGA
TAGAAGATGTTTTGGGAGAAGGGTCAGTCTCTGCCAGTCGGTTCAGTAGGTGGTTCTCTAACCCGAGCAGATCAG
GAAGCCGATCCAGCAGTCTTGGGTCAACACCACATGAAGAGCTAGAGAGACTTGCAGGTCTGGAGCAAGCCATCC
TCTCTCCTGGACAGAACTCGGGGAATTACTTTGCTCCTATACCATTGGAAGACCATGCTGAAAATAAAGTGGATA
TTTTAGAAATGCTACAGAAAGCCAAAGTGGATTTGAAACCTCTTCTTTCCAGCCTTTCTGCAAATAAAGAAAAAC
TTAAAGAAAGCTCACATTCAGGGGTTGTGCTTTCAGTGGAGGAGGTAGAAGCAGGTCTGAAGGGCTTGAAGGTTG
ACCAGCAAGTGAAGAATTCAACTCCCTTCATGGCAGAACACCTAGAAGAGACCTTGAGTGCCGTAACCAACAATC
GACAACTGAAGAAAGACGGAGACATGACTGCGTTCAACAAGCTAGTGAGCACAATGAAGGCAAGTGGGACTTTGC
CTTCTCAGCCCAAAGTCAGCCGAAACCTTGAAAGCCATTTGATGTCCCCTGCTGAGATTCCAGGCCAGCCTGTCC
CTAAGAACATCCTGCAGGAACTTCTGGGTCAACCAGTTCAGAGACCTGCTTCTTCCAATCTTCTGAGTGGCCTTA
TGGGGAGCTTGGAGCCTACAACATCTTTACTGGGCCAAAGAGCACCCTCTCCTCCCTTGTCACAGGTGTTTCAAA
CTCGAGCAGCCTCAGCTGACTACCTTCGCCCAAGAATACCATCACCAATTGGTTTCACACCAGGACCACAGCAGC
TACTCGGAGATCCATTCCAAGGCATGCGCAAACCCATGAGCCCCATCACAGCCCAGATGAGCCAGCTGGAGTTGC
AACAGGCAGCTTTAGAAGGGCTGGCCTTGCCACATGACCTTGCTGTACAGGCAGCAAACTTCTACCAGCCTGGTT
TTGGCAAACCACAGGTGGACAGAACCAGAGATGGATTCAGAAACAGATTCAATGTTCTTATCAAACTCCCT**TGA**T
GCAGGTTTGCTACATCAGCAGTTTTTTGGCCAGAGCTGACAGGCAACAGCGAGTGACCAAGTCACCAGCACCCGT
GCATCGAGGGAATTCCTCTTCCCCTGCCCCTGCTGCCTCCATCACAAGCATGCTTTCTCCTTCCTTTACCCCTAC
CTCAGTGATTCGTAAGATGTACGAGAGCAAAGAGAAAAGCAAGGAGGAGCCAGCATCTGGAAAAGCAGCTCTTGG
TGACAGTAAAGAGGATACTCAGAAGGCCAGTGAAGAAAACCTCCTGTCATCCAGCTCTGTACCCAGTGCCGATCG
AGACTCTTCTCCCACTACAAATTCCAAACTGTCAGCATTACAGAGGTCTTCGTGTTCCACCCCACTGTCCCAGGC
CAACCGTTACACCAAAGAACAAGATTATCGACCTAAAGCAACTGGGAGAAAAACACCCACCTTGGCATCCCCAGT
TCCTACAACACCTTTTCTCCGCCCTGTCCACCAAGTTCCCCTTGTCCCCCATGTCCCTATGGTTAGGCCTGCTCA
CCAGCTTCACCCAGGGTTGGTACAGAGGATGCTGGCCCAGGGAGTACATCCACAGCATCTTCCAAGTTTGCTCCA
AACTGGTGTGCTTCCTCCTGGGATGGACTTGAGTCATTTACAGGGAATATCTGGCCCCATCCTGGGTCAGCCCTT
TTACCCTTTACCTGCTGCTAGTCACCCTCTCTTAAACCCTCGTCCTGGAACACCTCTGCATCTGGCAATGGTGCA
ACAGCAGCTACAGCGCTCAGTTCTGCATCCTCCAGGCTCTGGTTCCCATGCAGCAGCTGTCAGCGTTCAGACAAC
CCCTCAGAACGTGCCCAGCCGGTCAGGCCTGCCCCACATGCACTCCCAGCTGGAGCATCGCCCCAGCCAGAGGAG
CAGCTCCCCTGTGGGCCTTGCCAAATGGTTTGGCTCAGATGTGCTACAGCAACCCCTGCCCTCCATGCCCGCCAA
AGTTATCAGTGTAGATGAATTGGAATACCGACAGTGAGCAGGGCAGGCAGACTCAACTAAGCCCGGACCTGTGGT
GGCACACTGGGCAGGACCCTGCTTCATCTCGGGTTGGTTTATGGGCTTTTACTTTGGAGCACTCTGTGTGAAGCT
GTTTGGTGGAACCCATGCATCTGGTGTGGTCCGCATTATGATGGAAGGATCTTAACCAGTCGAGTGGAGTGTACA
TTGTCTGAATACAGGATGCACAATGTTGTCAATCCTGGAAATGGTCTTTCTTTTTTGTAAGATATGTGAATGAAG
TGTTGGTGTCCTCACCAAGAGGTGGCACCTAAGGGTTCTGAGGAAATAAATGTATAGACCCTTATGTACAGACCT
GTGTATAAACAACTTTTGTATATACATATAGGATAGCTTTTTTGAACTATACAGCTGTACATAAAAGTAGCTGAT

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FIGURE 2936B

ATTAGTTAGGCCTGTGTCAACAGTTTGGATTTTTTTCACTTGTACATTTGGGATTTTCTTTTGGTTGATTAAAAT
TGCATATGCTAAGTGTGTGAATG

FIGURE 2937A

AGCAAGCTGAGCTCAGAGCGAAGCTGGCGAGCCAAGGAGATAAAGAACCCTCGGTGGGGATGCCCAGAGGGTGCA
TGCTCCACGCCCCTCGAAACCGATTCTCATTGCTGCTGCTGCAAAGCAACCCGAAGTGCGCCACCTACCCGACTG
AGGCTGCGCAAGCCCCGGGGTCTGGGCGGGGTGGTCCTCGTGCGCGCCGCGTCGCCGTGGAGACGAGGGCGGGCC
CGCGCGAGACTGGCGTCTAGAGGCGCGCGAAGCGCTGAGGCGGGCGTGGACCGCGCGGGAGTTAAGAAGCAGGTC
CCGGATCGCCGTATACCGCCGGGTTTTCTCCCAACGTCAGGCCCGATGGCTCGGCTTCCCCAGTTAGAAGGGGAA
GATAAAAGACTTTGATTC**ATG**AAGAATCTGCTCACTGAGAAGTGTATATCAAGCCACAATTTCCATCAAAAAGTG
ATTAAGCAGAGAATGGAGAAGAAGGTTGATTCCAGGTATTTTAAGGATGGTGCAGTTAAGAAACCTTATTCTGCA
AAGACACTGTCCAACAAGAAGTCTTCTGCATCCTTTGGGATCCGGAGGGAGTTACCTAGTACCAGTCATCTAGTG
CAGTATCGTGGCACACATACTTGTACCCGACAGGGCCGGTTAAGAGAACTGCGCATCAGATGCGTGGCCAGAAAG
TTCTTATATTTATGGATTCGAATGACTTTTGGAAGAGTATTTCCCTCTAAAGCCAGATTTTACTATGAGCAGCGA
TTACTACGGAAGGTCTTCGAAGAATGGAAAGAGGAGTGGTGGGTTTTCCAGCACGAGTGGAAACTCTGTGTTCGA
GCTGACTGTCACTACAGGTATTACCTGTACAACCTGATGTTCCAGACGTGGAAGACCTATGTGCGTCAGCAGCAG
GAGATGAGGAACAAGTACATTAGAGCCGAGGTTCATGATGCAAAGCAAAAGATGCGACAGGCCTGGAAGTCCTGG
TTGATCTACGTGGTTGTTCGTAGGACCAAACTTCAGATGCAGACTACAGCTCTGGAGTTTAGGCAACGGATTATC
TTACGGGTGTGGTGGAGCACGTGGAGGCAGCGACTAGGACAGGTCCGTGTGAGCCGTGCCCTCCATGCCTCTGCT
TTGAAGCACAGGGCCCTGAGCCTCCAGGTGCAGGCTTGGTCACAGTGGCGGGAACAGCTCCTGTATGTCCAGAAG
GAGAAACAAAAGGTTGTCTCTGCAGTGAAACATCATCAGCACTGGCAAAAACGGAGATTTCTAAAGGCCTGGCTT
GAATACCTGCAAGTCCGCAGAGTGAAGAGACAGCAGAATGAGATGGCTGAGCGATTCCATCATGTCACTGTGCTC
CAGATATACTTCTGTGACTGGCAGCAGGCCTGGGAGCGGAGGGAGAGCTTGTACGCTCACCATGCCCAGGTGGAG
AAACTGGCCAGGAAGATGGCCCTGCGGCGCGCCTTTACTCACTGGAAACACTACATGCTGCTGTGTGCAGAAGAA
GCTGCCCAGTTTGAGATGGCAGAAGAGCACCACAGGCACAGCCAGCTGCTGCTGCACAGGTTCTGGAACCTCTGG
CGGTCTCAGATTGAGCAGAAAAAGGAAAGAGAGCTGCTCCCCTTACTGCATGCTGCCTGGGACCACTACAGAATA
GCACTGCTGTGCAAATGTATCGAATTGTGGCTACAGTATACTCAGAAGAGGCGGTACAAGCAGCTGCTACAGGCC
AGAGCGGATGGTCATTTCCAGCAGAGAGCCCTGCCTGCTGCCTTCCACACATGGAACAGACTCTGGCGATGGCGC
CACCAGGAAAATGTCCTCAGTGCAAGAGCAACACGTTTCCACAGGGAGACATTAGAGAAGCAAGTATTTTCTCTC
TGGAGGCAGAAGATGTTTCAGCATCGAGAAAACCGCCTGGCAGAGAGAATGGCCATCCTTCACGCAGAGCGACAG
CTTCTGTATAGGTCTTGGTTCATGTGGCACCAGCAGGCAGCAGCACGTCACCAGGAGCAGGAGTGGCAAACAGTG
GCCTGTGCCCACCACCGCCACGGGCGGCTCAAGAAAGCTTTCTGCCTCTGGAGGGAAAGTGCCCAAGGGCTCAGA
ACAGAGAGGACGGGCAGGGTGCGGGCAGCAGAATTCCACATGGCCCAGCTCCTGCGTTGGGCCTGGAGCCAGTGG
AGGGAGTGCCTGGCCCTGCGGGGAGCGGAGCGGCAGAAGCTGATGCGAGCAGACCTGCACCACCAGCACAGCGTG
CTGCACAGGGCGCTGCAGGCATGGGTGACTTACCAGGGCAGGGTGCGAAGCATCCTCCGGGAGGTGGCAGCCAGG
GAGAGCCAGCACAACAGGCAGCTGCTGCAGCGGGGCATTACGTCGCTGGAAAGAGAACACCATGGCCCGAGTGGA
TGAAGCCAAAAAAACCTTTCAAGCAAGTACTCATTACAGAAGGACCATATGTTCCAAGGTCCTGGTCCAGTGGCG
GGAAGCTGTGTCAGTGCAGATGTATTACCGACAGCAGGAGGACTGTGCCATCTGGGAGGCCCAGAAGGTGCTGGA
CAGGGGCTGTCTGCGGACCTGGTTTCAGCGCTGGTGGGACTGCAGCCGGAGGTCAGCCCAGCAGAGACTGCAGCT
GGAGAGGGCAGTGCAACACCACCACCGGCAGCTGCTGCTGGAGGGGCTGGCCCGGTGGAAGACGCACCATCTGCA
GTGTGTCAGGAAGAGGCTCCTGCACAGGCAGAGCACCCAACTGCTGGCACAGAGACTCAGCCGGACCTGCTTCCG
CCAGTGGAGACAACAGCTGGCAGCCAGGAGGCAGGAGCAGCGGGCGACAGTGCGGGCCCTGTGGTTCTGGGCCTT
CTCGCTGCAGGCAAAGGTGTGGGCCACGTGGCTGGCCTTTGTACTGGAAAGGAGGAGAAAGAAGGCGCGGCTGCA
GTGGGCGCTCCAGGCCTACCAGGGGCAGCTCCTCCAGGAGGGTGCCACGCGGCTCCTGCGCTTTGCAGCCAGCAT
GAAGGCCTCCCGGCAGCAGCTGCAGGCCCAGCAGCAGGTCCAGGCGGCTCACAGTCTCCATCGTGCCGTCCGCCG
CTGTGCCACGCTCTGGAAACAGAAAGTGCTGGGCCGGGGCGGGAAGCCTCAGCCCCTGGCAGCCATCGCACCCAG
CAGGAAAGTGACGTTTGAGGGTCCCCTTCTCAACCGCATTGCTGCTGGGGCTGGGGATGGCACCCTTGAGACCAA
GAGGCCACAGGCTTCTCGGCCTCTGGGAGCTCTGGGCCGCCTGGCTGCTGAGGAGCCCCACGCCCTGGAGCTGCC
TCAGAAGCCACAGGAACATGGCCTAGGCATGGCTCAGCCAGCAGCCCCCTCCCTGACGCGGCCCTTCCTGGCAGA
GGCCCCGACAGCACTGGTCCCACACAGCCCCCTGCCTGGGGCCCTGTCAAGCGCCCCTGGCCCGAAGCAGCCCCC
GACGGCAAGCACAGGCCCGGAGCTGCTGCTGCTGCCTCTTTCCTCCTTCATGCCCTGCGGGGCGGCTGCACCAGC
CAGGGTGTCAGCACAGCGGGCTACTCCTAGGGATAAGCCCCCGGTCCCCTCATCCCTGGCCAGTGTCCCTGACCC

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FIGURE 2937B

CCATCTACTCCTTCCTGGGGACTTCTCAGCCACCAGGGCTGGGCCTGGACTTTCAACTGCAGGCAGCCTGGACCT
TGAGGCTGAACTTGAGGAGATCCAGCAGCAACTACTGCACTACCAGACCACCAAGCAGAACCTCTGGTCCTGTCG
GCGGCAAGCGAGCAGCCTGCGCAGGTGGCTGGAGCTGAACAGAGAGGAGCCGGGGCCTGAGGACCAGGAAGTAGA
GCAGCAGGTGCAGAAAGAGCTGGAACAGGTGAGGCCCCAGGCCATCCCCAGGTGTCCCTGGGGACGCCCCGGGCT
GTGCTCCCTCTCAGCCCTGCCTGTCCCTCCATGGCCCCAGGTGGAAATGCAGATCCAGCTGCTGGCAGAGGAGCT
CCAGGCTCAGCGCCAGCCCATTGGCGCCTGCGTTGCCCGCATCCAGGCCCTGCGGCAGGCCCTGTGCTAGCGTGT
TCGCACCAGGAACGCAGGTGCTGGGCTGTCGGGGAGGCCTCAGGCCACCTCCAGGAACAGAACACAGTTTTAAGT
TTGATTTTTTTTATTTCAAAATGCTTTGCAATTAAATGAATTACTGTTC

FIGURE 2938

CGGAAGCTGGAGCCACCTGCAGCTCTGAGAGGGACAGACGGTGCTCAGCCTGTGTCCTGGGGCAAAGCTGGATTC
ATTTTCCTCCCTGGCGATCTTCTGGGGCCCACAGCTGGTGATATGGAGGCACTGACACCCTGGTCTCGGCGCTTG
TTTTAGAAGAGGCAGAACAGTGATAAAGACAAGGATCTAAATGGGCAAGGACGCCCTGCCCTCACTGGGCTCACT
GGCAGCCCTGACCCTCTATTCTGCACCCTGTGAGCCACCGAGACTGAACCAAACCCAGGAAGCGGCGCCACCAAC
CAGCCTCGCAGAGGCAGAGGCCCTGGAGCAGTGACAGCACAGGAGATCTGCTGGCTCGGGGGAAGGGGAGGAAAG
AGGAAAACAAAGGGAGTGATCGAGTGAGCCTCGCCCCGCCCTCCCTGCGCCGGCCC**ATG**ATGTGTCAGTCAGAGG
CGCGGCAAGGACCAGAGCTCCGCGCGGCGAAATGGTTGCACTTCCCCCAGCTGGCCCTGAGGCGGAGGCTGGGGC
AGCTGAGCTGCATGTCCAGACCCGCTCTGAAACTGCGCTCCTGGCCCTTGACCGTCCTCTACTACCTCCTGCCCT
TCGGCGCCCTCAGACCGCTCAGCCGGGTGGGATGGAGGCCCGTAAGCAGGGTGGCTTTGTACAAGTCAGTGCCAA
CGCGCTTGCTGTCACGGGCCTGGGGTCGCCTCAATCAGGTGGAGCTGCCACACTGGCTGCGCAGGCCCGTCTACA
GCCTGTACATCTGGACGTTTGGGGTGAACATGAAAGAGGCCGCTGTGGAGGACCTGCATCACTACCGCAACCTCA
GCGAGTTCTTCCGGCGCAAGCTGAAGCCGCAGGCCCGGCCTGTCTGTGGCCTGCACAGCGTGATTAGCCCATCGG
ATGGAAGGATCCTCAACTTTGGGCAGGTGAAGAACTGTGAGGTGGAGCAGGTAAAGGGGGTCACCTACTCCCTGG
AGTCGTTCCTGGGCCCGCGTATGTGCACAGAGGACCTGCCCTTCCCACCAGCCGCGTCGTGTGACTCCTTCAAGA
ACCAGCTGGTCACCCGGGAAGGGAATGAGCTCTATCACTGTGTCATCTACCTGGCCCCTGGGGACTACCACTGCT
TCCACTCCCCCACCGACTGGACTGTGTCCCACCGGCGCCACTTCCCAGGCTCCCTGATGTCAGTGAACCCTGGCA
TGGCTCGCTGGATCAAAGAGCTCTTCTGCCATAACGAGCGGGTGGTCCTGACGGGGGACTGGAAACATGGCTTCT
TCTCACTGACAGCTGTGGGGGCCACCAACGTGGGCTCCATTCGCATCTACTTTGACCGGGACCTGCACACAAACA
GCCCAAGGCACAGCAAGGGCTCCTACAATGACTTCAGCTTCGTGACGCACACCAATAGAGAGGGCGTCCCCATGC
GTAAGGGCGAGCACCTGGGCGAGTTCAACCTGGGCTCCACCATCGTGCTCATCTTCGAGGCCCCCAAGGACTTCA
ATTTCCAGCTGAAAACAGGACAGAAAATCCGCTTTGGGGAAGCCCTGGGCTCGCTC**TAG**AGTCTCTTTCCTGATT
ATGGCTGCTAAGGGATCTTTTCCAAACAGAGTGAGGGTCTTTTCAAGAGGGAGGCCCATGAGGCCATCCAGGTAA
GGGCCTGCCTCAGCGTGGTTGGGAGTCTGACCAGGTAGGACTTGAATGATTCGGCTACCACCTGTTCCAGAGGTG
CAGACAAGAGGTGGCGAGAGCCCCCATCATGCCCCTCAACCTATCCCGTTCCTTCTGCCTACAAATAAAAAGTGC
AGGCTGGAATGATCTCAGTCACATTTGGATCTTTTTAAACACTGTATAGACGGAAGAGCCTGCATTCCTGACCGA
ACCTTCAGTTGGTCTCGGTTGTCGTTTTTTCTTGCTGCTCCTCCCCCCATCACCTGAGCTGTTTTCTGTTGGCCC
CTTTTGTTTTTTGGCCTTAACGCTCCTGCTGCACAGGGTGAGGTGCCTCCTTGGCACAGACTGTGGATGCCTCTC
CCCCAGCAGAGCCACACAGCCTTCGTGACAACTGCTTTCCGTTCCCACATTCACCTCATCCTGCTCTTTAGAAAA
AGCAGTCTTTGTGCTTGTGGCTGAACGCATCACCCTGGACTCTGCTAGTGTCTTCTGAGGACACTGATGACACTG
ATTAATGATACAGACCTTTGCAGGACCTGATGAGTGACCCTTCTGGAGCTGGCCAGGTCCTCTGCAGCAGGCAAG
ACCAATCAATCACTGAACCTGCCTCATGGCACCAGAGTGAACAGGGCAGGCAGGTAGTAGGCCCAGCTGGGGAAA
TGGGAGAGTTCCTGTCCCCCTCCACATATCCCTACATGAAATATGGGAAAGTTGCTGCTATTGATTCAGGGTCTG
TCTTGGAGGCAGAGGACCCTTGGTGGATAGTTGGTCAGTGCCTGGAAAACCTGTCCCAGTTTATCAGGAACGCAG
GCCTGGGGAGCCCCCAGTGGCGGGGACAGGGCCAGATTTCATGTTGACCCTGGGGATGCTGTGAATTTCTCCTGC
AGGAGAGACATCATTGAATTTTTTCAACTGTATCAGTAGCACAGTATTTTTGTATGAAAAGTGGGAGACTTCTGA
ACAGTAATTCATTTAATTGCAAAGCATTTTGAAATAAAAAAAATCAAACTTAAAA

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FIGURE 2939

GCAGACTAGCAGTGAGTCAACAGAGCCCTGTTTGCCAGCTCTGTTGCCAGTATAGATGCAGTGATGTGGCGGCTA
TGTTTCCCAGAGACAACAGTGGGCACAGCTATAGTGTCACCAACATGGCAGAGATAGTTTCAACTGTGCCTGTTA
CAGGTGTGGCACTCGAAGGACCAGAAGCAGCGGTTTGGAACATGGGTAACTGGGAGCAGAGGACTGGAAGAAACA
GAGCTGGGCTCCTTCCCTGTCCTGACAATGTAGGAGAGGAGTTGTTGTGAGGCCAGCCCTGCCCGTCGTTGAAAT
TCTGGACCTACCCTCTAGCTAGGTCCCTTCCCCTGCTCCAAAGTTGAGAAGGGGGCCCCACTGCAAACTTGAAAT
TACTTACCTGAAGGTGATGTATATACCTAGGCTCCAGCTGCGCTCAGCCACACCTGTCTTAACATTCAGTTTCGG
CACTGAGCCAGCTGCAGTGTTGTCAGGGGTCCCCAGGCCCGTGGTCCCTAACCACGATGGGACATGGTAATCGGC
TGCTGGCACACCACCTGCCCAGAGCTACAGGAGGTCTGGTTCTGGGGTGGAGTTGGTACAGTTTCTGAGTATGGG
AACTTCCCTCCCCAAGTGGTGGGAAGTTACAGTTAACTACAGCTTACTCAACTATCACTTCCAGAGGTTTAGTGT
TTTTAATATGGGAAAGAGGAGAAATCTCAGGTCTAATCAGGGTTCTGCCCATCAGCTTTTCACTGAAACTTTCAA
CTGTGTTTTGTTTTTTGTTTTTTTTTCCATCTTTCAGTTTCTAGCTGTGTTTGCCTTCTCCCTCCGCGTTCCCTC
CTCTTTTTTTGCTTTTGGTCTCCTTTCCAGCTTCATGTCTCCATGAGTTCAGCTGTACCTCATCTCCTGTTAAAG
CAGATCATGTCCACTTTTTCTTACTGACCTTACTCTAAGCTACAGTAGCTGAGGGAGGTACGGTGAAGACATGTA
GCGTTTGCCTTATTCGGAGCCTGAGGAGCCCAGAAACCCATGCTGTGAATCCCAAAACTCAGCGCTCCTCAAGAG
CTGTGAAAATCATGATACTTTGTCACAATTTTGCCTGAAAGGGTCTTTGGCACGGGCTCCAGAGCCAACCTGAGG
TCCATTCCAGATCCCACTATCTGGGCGTGAGACCTCCCCCGTGGCTCCTTCCTTGCCCACTGAGCCAAGAGCAGC
AGGGAGCGTACAGGACGGGAGCAGCAGATCCAAGGCCGCGGTGCAGCCAATGAATGCACGGCCGTCGCTCCGTCT
CCAGGCTGGAATTCCGTCTCATAATCAATGCCATGTACATTAAGATCTGCGAAAGACCAACTTTTAGGCAGTGAT
ACTTTTCTCCCATTCCCTGGGGTGGGGGGAGTATGCAGTTGGTGCTTTCTGTAATTCCCTTGTTCTGTTTTGTTT
CTGTAAGCTTTTCCCCTGGTGTCATGGAAAGGACTTCTTAAATAACCACATTGTGGGTGGCTGTATCCAAAGTTT
AAATAATTGGCCAGAAGTGCAGAGTATCCTTTCCTGGATTCGTGTCAGAAAAGGGCTCCTTGCCACAACTGAACT
TACTGTATAAAAACCTGGCTAGGGAGATTTAATTTTACTAAAATTACAGTTTAATGTTACCGTCTAGCCACAAAT
CAAGCAGCAAAAGCTATTTTGATGATGAAAGGGGGTCCCCGTTGAGCTGGCCATCTAGTGCAGTGTGCTCTCAGA
TTCCATGTTTGTTGATTGTGTGTCTTCACAAGCCCCTCTCTGGTGCTGAATTGGATTTGAATTCTTGGTGAGAGG
CCTCAGCATCTCCTTGGGCTGGTCTGGGCCAGTAAAAATAGCTGCCTGACATGTTTATATATTATCATGGTCAGT
AGTTCAATGAAATTTGTACATTTTTGGTAACATTGGTATACATGATGCCCCTGCAGTTCCTTTTCTGTTTGGTAG
TTTGTGACTCTAAGATTTCCACTGTTATGTGTGTTAATTTATGAAAATAAATTTTTTTGAAAACCTTTC

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FIGURE 2940A

GAGGCAAGATGACTTCTCTGCCCCAAGCTTGGAACAGCTAAAGGGAAAAACAGTGCAAGATGAGAACAACAAAGG
TCTACAAACTCGTCATCCACAAGAAGGGCTTTGGGGGCAGTGATGATGAGCTAGTTGTGAACCCCAAAGTGTTCC
CTCACATCAAGCTTGGAGACATTGTAGAGATTGCACACCCCAACGATGAATACAGCCCTCTGCTTTTGCAGGTCA
AGTCTCTTAAGGAAGATTTACAGAAGGAAACTATCAGTGTGGACCAGACTGTGACTCAAGTGTTCCGGCTGAGAC
CTTATCAGGATGTCTATGTTAATGTCGTAGACCCTAAGGATGTGACCCTTGACCTAGTGGAATTAACTTTTAAGG
ATCAGTATATTGGCCGTGGGGATATGTGGCGACTAAAGAAAAGTTTGGTCAGCACATGTGCCTATATCACCCAGA
AGGTGGAGTTTGCTGGCATCAGAGCACAGGCTGGTGAACTGTGGGTTAAGAATGAGAAGGTCATGTGTGGCTACA
TCAGTGAAGATACCAGGGTGGTGTTTCGTTCTACGTCGGCTATGGTTTACATATTTATTCAGATGAGCTGTGAAA
TGTGGGATTTTGATATTTATGGGGATTTGTATTTTGAGAAAGCTGTGAATGGTTTCCTTGCTGATCTATTTACCA
AGTGGAAGGAGAAGAACTGTAGTCATGAAGTGACAGTGGTCCTGTTTTCTAGAACTTTCTATGATGCAAAATCTG
TTGATGAATTTCCTGAAATAAACCGAGCCTCAATTCGACAGGATCACAAGGGGAGATTCTATGAAGACTTTTACA
AAGTGGTGGTGCAGAATGAGAGAAGAGAAGAATGGACTTCACTTCTCGTAACCATTAAAAAACTCTTCATCCAGT
ATCCAGTGTTGGTGCGACTGGAACAGGCAGAGGGCTTTCCTCAAGGAGATAATTCTACCTCAGCACAAGGAAACT
ACCTGGAGGCCATCAATCTGTCATTCAATGTGTTTGATAAGCACTACATCAACCGCAACTTTGACCGAACTGGGC
AGATGTCAGTGGTGATCACGCCCGGGGTGGGTGTCTTTGAAGTGGACCGCCTACTCATGATCCTGACCAAGCAGC
GGATGATAGATAATGGAATTGGTGTGGATTTGGTGTGCATGGGAGAGCAACCGTTACATGCTGTCCCATTGTTCA
AGCTCCATAATCGGAGTGCTCCCCGTGATTCTCGTCTGGGCGATGACTATAATATCCCTCACTGGATAAACCACA
GTTTCTACACATCCAAAAGCCAGCTCTTTTGTAATAGTTTCACCCCACGAATAAAACTGGCAGGAAAGAAGCCCG
CCTCTGAGAAAGCAAAAAATGGCCGTGATACATCTCTCGGGAGTCCAAAAGAATCTGAGAACGCCCTTCCCATCC
AAGTAGATTATGACGCCTATGACGCTCAAGTGTTCAGGCTGCCCGGCCCATCCCGGGCCCAGTGCCTCACCACCT
GCAGATCTGTGCGAGAGCGAGAGAGTCACAGTCGAAAGAGTGCCAGCTCCTGTGATGTTTCATCCAGCCCTTCCC
TACCAAGCCGCACACTGCCCACTGAGGAAGTGAGGAGCCAGGCTTCTGACGACAGCTCCCTAGGCAAGAGTGCCA
ACATCCTGATGATCCCACACCCCCACCTGCACCAGTATGAAGTCAGCAGCTCCTTGGGATACACCAGCACTCGAG
ATGTCCTGGAGAACATGATGGAGCCACCACAGCGAGACTCCAGTGCACCAGGGAGGTTTCACGTTGGCAGTGCAG
AATCCATGCTGCATGTTCGACCTGGTGGATACACGCCCCAGAGAGCACTGATTAACCCCTTCGCTCCCTCTCGGA
TGCCCATGAAGCTTACGTCCAACAGAAGGCGCTGGATGCACACTTTTCCTGTGGGGCCATCCGGAGAAGCCATCC
AGATCCACCACCAGACCCGACAGAATATGGCGGAGCTACAAGGCAGCGGGCAGAGGGATCCAACTCACTCCTCTG
CAGAGCTGCTGGAGTTAGCATATCATGAAGCTGCTGGAAGGCACAGCAATTCCCGCCAGCCTGGTGACGGCATGT
CCTTCTTGAACTTCAGTGGAACAGAGGAGCTTTCTGTCGGCCTGCTTAGCAACAGTGGTGCAGGTATGAATCCTA
GGACCCAGAATAAGGATTCTCTAGAGGACAGTGTTTCTACCTCTCCAGACCCAATGCCAGGCTTCTGTTGCACAG
TTGGAGTGGACTGGAAGTCTCTCACTACTCCGGCGTGCCTCCCCCTTACCACCGACTACTTCCCTGACCGCCAGG
GCCTGCAGAATGACTACACAGAGGGCTGTTATGATCTCCTTCCAGAAGCAGACATCGACAGGAGGGACGAAGATG
GTGTGCAGATGACAGCCCAGCAGGTATTTGAAGAGTTTATTTGCCAACGTCTCATGCAGGGCTACCAAATCATAG
TGCAGCCCAAGACACAGAAACCCAATCCTGCTGTCCCGCCCCCGCTGAGCAGTAGCCCACTCTATAGCCGAGGCC
TTGTGTCCCGAAACCGCCCTGAGGAGGAGGACCAGTATTGGCTGAGTATGGGCAGAACGTTCCACAAAGTGACGC
TGAAGGATAAGATGATCACAGTGACGCGATACCTTCCCAAGTATCCTTATGAATCTGCCCAGATCCACTACACCT
ACAGCCTCTGTCCTTCCCACTCAGACTCAGAGTTCGTCTCCTGCTGGGTGGAATTCTCCCACGAACGGCTGGAGG
AGTACAAGTGGAATTACTTAGATCAGTATATCTGTTCTGCCGGCTCTGAAGACTTCAGCTTAATTGAGTCCCTGA
AGTTCTGGAGGACCCGCTTCCTGCTGCTGCCAGCCTGTGTCACCGCCACCAAGCGCATCACGGAGGGGGAGGCCC
ACTGCGACATCTATGGGGACAGGCCCCGTGCAGACGAGGACGAGTGGCAACTCCTGGATGGTTTTGTCCGCTTTG
TGGAGGGCTTGAATCGCATTCGCAGGCGGCATCGCTCGGATCGCATGATGCGGAAAGGGACCGCCATGAAAGGCT
TGCAGATGACTGGGCCCATTTCCACGCATTCTCTGGAGTCAACTGCACCCCCAGTGGGGAAGAAGGGAACCTCAG
CTCTCTCTGCCCTGTTGGAGATGGAGGCCAGTCAGAAGTGCCTGGGAGAACAGCAGGCAGCTGTGCATGGTGGGA
AGAGCTCCGCCCAGTCAGCCGAGAGCAGCAGCGTTGCCATGACTCCCACCTACATGGACAGCCCACGAAAGGTAT
CTGTGGACCAAACAGCCACTCCTATGTTGGACGGCACCAGTTTGGGCATATGCACAGGCCAATCCATGGACAGAG
GCAACAGCCAGACCTTTGGGAACTCCCAGAACATAGGAGAACAGGGCTACTCCTCCACAAACTCCAGTGACAGCA
GCTCTCAGCAGCTGGTGGCAAGCTCCTTGACCTCATCCTCTACCCTGACAGAGATCCTGGAAGCCATGAAGCACC
CCTCGACAGGAGTCCAGCTGCTCTCTGAACAGAAGGGCCTCTCACCGTACTGCTTCATCAGCGCGGAGGTGGTAC

FIGURE 2940B

ACTGGTTGGTGAACCACGTGGAGGGGATCCAGACACAGGCGATGGCCATTGACATCATGCAGAAAATGCTGGAAG
AGCAGCTCATCACACATGCATCTGGCGAAGCCTGGCGGACCTTCATCTACGGCTTCTATTTCTACAAGATAGTAA
CGGACAAAGAGCCCGACCGAGTGGCCATGCAGCAGCCCGCCACCACCTGGCACACAGCAGGAGTGGACGACTTCG
CCAGCTTCCAGCGCAAGTGGTTTGAGGTGGCCTTTGTGGCAGAAGAGCTCGTGCACTCTGAGATTCCTGCCTTTC
TCCTGCCCTGGCTGCCTAGCCGGCCAGCCTCCTATGCAAGTAGGCACAGCTCCTTTAGCCGAAGTTTTGGAGGAC
GGAGCCAGGCGGCAGCACTTTTAGCTGCCACTGTCCCAGAGCAGAGGACTGTGACCCTGGATGTTGACGTGAACA
ACCGCACAGACCGGCTGGAGTGGTGCAGCTGTTATTACCATGGCAACTTTTCTCTGAATGCAGCCTTTGAGATCA
AGCTGCACTGGATGGCGGTGACCGCAGCAGTACTCTTCGAGATGGTCCAAGGTTGGCATCGGAAAGCCACCTCCT
GTGGCTTCTTGTTAGTCCCAGTTTTGGAGGGGCCTTTTGCACTGCCCAGTTACCTGTATGGCGACCCCCTTCGTG
CCCAGCTCTTCATCCCACTCAACATCAGCTGCTTGCTCAAGGAGGGCAGCGAGCACCTGTTTGATAGCTTTGAAC
CCGAAACGTACTGGGATCGAATGCACCTCTTCCAGGAAGCCATTGCACACAGGTTTGGGTTTGTACAAGATAAAT
ATTCTGCCTCTGCTTTTAACTTCCCTGCTGAGAACAAGCCTCAGTATATCCACGTTACAGGAACAGTGTTTCTGC
AGCTGCCCTACTCCAAGCGCAAGTTCTCAGGGCAGCAGCGGCGGCGGCGGAACTCCACCAGCTCCACCAACCAGA
ACATGTTCTGCGAGGAGCGGGTCGGCTACAACTGGGCCTACAACACCATGCTCACCAAAACATGGCGCTCCAGCG
CCACAGGGGATGAAAAGTTTGCTGATCGGCTGCTGAAGGACTTCACGGACTTCTGCATCAACCGTGACAACCGGC
TGGTCACGTTCTGGACAAGTTGCCTGGAGAAGATGCATGCCAGTGCCCCG**TGA**GGCCAGGCTGCACCTGTGCTGG
GGGAAGGTGGGTGAGCCACTGCCCTCAAACCCGGGGCGGAGGATTCCAGGCAGGCTCTAGGAGTCAGGTGTCCGT
TTGCTGCTATCAGTGAGTGGGGGCCATTGTTTTTTGTTTGTTTGTTTGTTTGTTTGTTTTTGGCCCCCACG
ACAAGTCTTCTACTCTAGAAGAAAGACTTTGGAAGCAGCTGCTGCTGCTGCCACCACTCCTGTCAGCAAGTGCTC
AGAGCAGGTGGGAGGCACAGATTGTCCGTGGGAGGGCTCCAGTGTCTGGGAAGAGGGCAGGCGGCCCCCATGAAT
GTCCTCGGAAGGGGGTGGCTCCTGGTAGCATCCTTTTCCTTCACCATCTATGGGATATTAGGGGCAGAATCTGCC
ACTTCTTGCCCAGGAGTGTGCACAGATGTAAGATAATTTTGTGAAATAATGTACCATAGACTCTCACCAACTGTA
TATACCTGTACATATCAGAAGCAAATAAAGAGCTCCACGTGC

FIGURE 2941

GCGCGAGCCACAGCGCGCGGGGCGAGCCAGCGAGAGGGCGCGAGCGGCGGCGCTGCCTGCAGCCTGCAGCCTGCA
GCCTCCGGCCGGCCGGCGAGCCAGTGCGCGTGCGCGGCGGCGGCCTCCGCAGCGACCGGGGAGCGGACTGACCGG
CGGGAGGGCTAGCGAGCCAGCGGTGTGAGGCGCGAGGCGAGGCCGAGCCGCGAGCGAC**ATG**GGGGACCGGGAGCA
GCTGCTGCAGCGGGCGCGGCTGGCCGAGCAGGCGGAGCGCTACGACGACATGGCCTCCGCTATGAAGGCGGTGAC
AGAGCTGAATGAACCTCTCTCCAATGAAGATCGAAATCTCCTCTCTGTGGCCTACAAGAATGTGGTTGGTGCCAG
GCGATCTTCCTGGAGGGTCATTAGCAGCATTGAGCAGAAAACCATGGCTGATGGAAACGAAAAGAAATTGGAGAA
AGTTAAAGCTTACCGGGAGAAGATTGAGAAGGAGCTGGAGACAGTTTGCAATGATGTCCTGTCTCTGCTTGACAA
GTTCCTGATCAAGAACTGCAATGATTTCCAGTATGAGAGCAAGGTGTTTTACCTGAAAATGAAGGGTGATTACTA
CCGCTACTTAGCAGAGGTCGCTTCTGGGGAGAAGAAAAACAGTGTGGTCGAAGCTTCTGAAGCTGCCTACAAGGA
AGCCTTTGAAATCAGCAAAGAGCAGATGCAACCCACGCATCCCATCCGGCTGGGCCTGGCCCTCAACTTCTCCGT
GTTCTACTATGAGATCCAGAATGCACCTGAGCAAGCCTGCCTCTTAGCCAAACAAGCCTTCGATGATGCCATAGC
TGAGCTGGACACACTAAACGAGGATTCCTATAAGGACTCCACGCTGATCATGCAGTTGCTGCGAGACAACCTCAC
CCTCTGGACGAGCGACCAGCAGGATGAAGAAGCAGGAGAAGGCAAC**TGA**AGATCCTTCAGGTCCCCTGGCCCTTC
CTTCACCCACCACCCCCATCATCACCGATTCTTCCTTGCCACAATCACTAAATATCTAGTGCTAAACCTATCTGT
ATTGGCAGCACAGCTACTCAGATCTGCACTCCTGTCTCTTGGGAAGCAGTTTCAGATAAATCATGGGCATTGCTG
GACTGATGGTTGCTTTGAGCCCACAGGAGCTCCCTTTTTGAATTGTGTGGAGAAGTGTGTTCTGATGAGGCATTT
TACTATGCCTGTTGATCTATGGGAAATCTAGGCGAAAGTAATGGGGAAGATTAGAAAGAATTAGCCAACCAGGCT
ACAGTTGATATTTAAAAGATCCATTTAAAACAAGCTGATAGTGTTTCGTTAAGCAGTACATCTTGTGCATGCAAA
AATGAATTCACCCCTCCCACCTCTTTCTTCAATTAATGGAAAACTGTTAAGGGAAGCTGATACAGAGAGACAACT
TGCTCCTTTCCATCAGCTTTATAATAAACTGTTTAACGTGAGGTTTCAGTAGCTCCTTGGTTTTGCCTCTTTAAA
TTATGACGTGCACAAACCTTCTTTTCAATGCAATGCATCTGAAAGTTTTGATACTTGTAACTTTTTTTTTTTTTT
GGTTGCAATTGTTTAAGAATCATGGATTTATTTTTTGTAACTCTTTGGCTATTGTCCTTGTGTATCCTGACAGCG
CCATGTGTGTCAGCCCATGTCAATCAAGATGGGTGATTATGAAATGCCAGACTTCTAAAATAAATGTTTTGGAAT
TCAATGGGTAAATAAATGC

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FIGURE 2942

CTCTTTTACCAAGGACCCGCCAACATGTGCCGCGTTTGCACCAAAACCGTGAAGAAGGCGGCCCGGGTCATCATA
GAAAAGTACTACACACGCCTGGGCAACGACTTCCACACGAACAAGCGCGTGTGCAAGGAGATCGCCATTATCCCC
AGCAAGAAGCTCCGCAACAAGATAGCAGGCTATGTCACGCATCTGATGAAATGGATTCAGAGAGGCCCAGTAAGA
GGTATCTCCATCAAGCTGCAGGAGGAGGAGAGAGAAAGGAGAGACAATTATGTTCCTGAGGTCTCAGCCTTGGAT
CAGGAGATAATTGAAGTAGATCCTGACACTAAGGAAATGCTGAAGCTTTTGGACTTCGGCAGTCTGTCCAACCTG
CAGGTCACTCAGCCTACAGTTGGGATGAACTTCAAAATGCCTCGGGGACCTGTTTGAATTTTTTCTGCAGTGCTG
TATTATTTTCAATAAATCTGGCACAACAGC

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FIGURE 2943

ATGGCGGCCCATCACCGGCAGAACACAGCAGGGCGGAGGAAAGTGCAGGTTTCCTATGTTATTCGAGATGAAGTG
GAGAAGTACAACCGAAATGGAGTCAATGCTCTGCAGCTGGATCCAGCACTAAATAGACTTTTCACAGCCGGTCGA
GACTCTATCATAAGAATATGGAGTGTCAATCAGCACAAGCAAGATCCATATATAGCATCTATGGAACACCATACT
GATTGGGTAAACGACATTGTACTCTGTTGTAATGGGAAAACATTAATATCTGCTTCTTCTGACACGACAGTAAAA
GTATGGAATGCACACAAGGGATTTTGCATGTCAACATTAAGGACACATAAGGATTACGTAAAGGCCTTAGCATAT
GCCAAGGATAAAGAACTAGTAGCATCAGCTGGGTTGGACAGACAAATATTCCTTTGGGATGTGAATACTCTAACA
GCATTGACTGCCTCAAATAACACTGTCACAACTTCTTCTTTAAGTGGAAACAAAGATTCCATTTATAGCCTGGCC
ATGAATCAACTGGGAACAATCATTGTATCAGGGTCCACTGAAAAGGTGTTACGGGTATGGGATCCAAGAACATGT
GCAAAACTAATGAAGCTTAAAGGGCACACGGATAATGTGAAGGCATTGCTATTAAACAGAGATGGCACGCAATGC
CTGTCAGGCAGTTCTGATGGGACAATTCGCCTTTGGTCCCTTGGCCAGCAGAGATGTATAGCAACATACCGAGTC
CATGATGAAGGTGTTTGGGCGCTGCAAGTCAATGATGCCTTCACACATGTGTATTCTGGTGGAAGGGACAGGAAG
ATTTATTGTACAGACCTAAGAAACCCTGACATTCGGGTGCTAATTTGTGAAGAAAAAGCACCAGTTCTCAAGATG
GAGCTTGATAGATCAGCTGATCCTCCTCCTGCAATTTGGGTTGCAACAACTAAGTCTACAGTAAATAAATGGACT
TTGAAAGGAATTCATAATTTTAGAGCCTCTGGAGATTATGACAATGACTGTACAAATCCTATAACACCTCTTTGT
ACACAACCTGACCAGGTTATTAAAGGGGGTGCTAGTATTATTCAGTGCCACATTCTTAATGATAAGAGACATATA
TTAACCAAAGATACCAATAATAATGTGGCATATTGGGATGTATTGAAGGCATGTAAAGTTGAAGATCTGGGCAAA
GTGGATTTTGAAGATGAAATTAAGAAAAGATTTAAAATGGTGTATGTGCCAAATTGGTTCTCAGTAGACTTAAAA
ACAGGGATGTTAACTATTACTTTGGATGAAAGTGATTGTTTTGCTGCCTGGGTTTCTGCAAAAGATGCTGGTTTC
AGCAGCCCTGATGGGTCAGATCCAAAATGTGAATTTAGGAGGACTTTTACTCCAAGCACTCCTGGAATATTGGCC
TAGAACACATGTGAATCCAATGGATGAAGAGGAAAATGAAGTAAACCATGTAAATGGGGAGCAGGAGAACCGAGT
GCAGAAGGGAAATGGATATTTTCAAGTGCCCCCACATACACCCGTGATCTTTGGTGAAGCTGGAGGTCGCACACT
GTTCAGGCTGCTCTGCCGAGATTCCGGGGGGTGAGACTGAGTCTATGCTTCTTAATGAAACAGTGCCACAATGGGT
AATTGACATCACTGTGGATAAAAATATGCCCAAATTCAACAAAATTCCTTTCTACCTCCAACCTCATGCATCTTC
AGGAGCAAAAACCTTAAAAAAAGATAGACTCTCTGCTAGTGACATGCTCCAAGTCCGAAAAGTTATGGAACATGT
TTATGAAAAAATTATCAACTTGGATAATGAGTCTCAAACCACTAGCTCTTCTAATAATGAAAAACCAGGAGAACA
GGAAAAAGAAGAAGATATTGCTGTGTTGGCAGAGGAGAAAATTGAACTTTTGTGCCAGGACCAGGTTTTGGATCC
AAATATGGACCTTCGAACAGTGAAACACTTCATATGGAAGAGCGGTGGAGACCTCACCCTCCATTACCGTCAGAA
GTCCACGTGA

FIGURE 2944

GTCAAAGCAGCACCAGCTCTGATCGACCCCCTGTATTTGATGGCTCAGGTCAGGTATTACTCAGAGCTAGAGAAT
GCCCAGAGCATCCTGCAGCGTTGCCTGGAGCTGGACCCCGCCTCCGTGGATGCCCATCTCCTCATGTGTCAGATC
TACTTGGCTCAGGGCAACTTTGGCATGTGCTTCCACTGCTTAGAGCTGGGTGTCAGCCACAACTTCCAGGTCCGA
GATCACCCCCTCTACCACCTCATCAAGGCCAGGGCCCTCAACAAGGCTGGAGACTATCCAGAGGCCATAAAGACG
CTGAAAATGGTCATCAAATTGCCAGCTCTGAAGAAGGAAGAAGGCAGAAAGTTCCTCAGGCCCTCTGTGCAGCCT
AGCCAGCGGGCATCCATCTTATTGGAACTGGTGGAGGCCCTCCGGCTGAATGGGGAGCTACATGAGGCCACCAAG
GTCATGCAGGACACCATCAATGAGTTCGGTGGCACACCAGAAGAGAACCGCATCACCATTGCCAACGTGGACTTG
GTCCTGAGCAAGGGCAATGTGGACGTGGCGCTGAACATGCTAAGGAACATCTTGCCCAAGCAGTCCTGCTATATG
GAAGCCAGAGAGAAGATGGCCAACATCTACCTGCAGACCCTCAGAGACAGGCGCCTCTACATCAGATGCTACCGT
GAGCTCTGTGAACATCTGCCTGGCCCCCACACCAGCCTGCTACTGGGCGATGCCTTAATGAGCATTCTGGAGCCC
GAGAAGGCCCTGGAGGTCTATGATGAGGCCTATAGACAGAACCCACATGACGCCTCCCTGGCCAGCAGAATTGGG
CACGCTTATGTGAAGGCCCACCAGTATACTGAGGTCAGGCTGGGCTAGGGTGTGAAGGGGCAGGGAGGGCCAGCC
CAGCAGGGAAGGAGGAGGACGGTACATG

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FIGURE 2945

CTACATGGAGAAGAAGGAGTTGGAGCAGCAGGGTGTGAGCACCGCCGAGAAACTGCTGCGTGAGTTTTACCCACA
TTCAGACTCCAGCCAGACCCAGCTGCGGCTGCTGCAGGGCCTCTGCCGGCTGGCCACCAGGGAGAAGGCTAACAT
GGAGGCTGCGCTGGGCAGCTTCATCCAGATAGCGCAGGCTGAGAAGGACAGCGTCCCTGCCCTGCTGGCCTTGGC
ACAAGCCTACGTGTTCCTGAAGCAGATCCCCAAGGCGCGTATGCAGTTGAAGCGCCTGGCCAAGACCCCCTGGGT
GCTGAGTGAGGCTGAGGACCTGGAGAAGAGCTGGCTCCTGCTGGCTGACATTTACTGCCAGGGCAGCAAGTTCGA
CCTCGCCTTAGAACTGCTGCGGCGCTGTGTGCAATACAACAAGTCCTGCTACAAGGCCTATGAGTACATGGGCTT
CATCATGGAGAAGGAGCAGTCCTACAAGGATGCAGTCACCAACTACAAACTGGCCTGGAAGTACAGTCATCACGC
CAACCCTGCCATTGGCTTCAAACTTGCTTTCAACTACCTGAAGGACAAGAAATTTGTGGAGGCCATCGAAATCTG
CAACGATGTCCTCAGGGAGCACCCCGACTACCCCAAGATCAGGGAGGAAATTTTGGAAAAGGCCCGAAAGTCCCT
GAGGCCCTAGCTGGGGTCAAGGGGCCTGGACCAGTAGAAGCCATCAACCTACTGAAGTTGTGTGGAGGGATGGAA
AGTGGGTCAGTGGAGAAGGGATTCAGA

FIGURE 2946

GGCGGGGCTGGGCGCAGGCAGTCTCCCGCCGCCGCCGCCGCTGCCGGACGCGCAGAGCGAGGGGCGGCTGGACCG
ACGGCTGCCGGGCCGAGCGCACAGAGTCGCGGCGCAGGGGGCGTCCCCGGCCGGGACGCGGGTCGCGTCGTTGTC
CTCCGCGAGCGTCCGGATTGCAGGCTGTCTGTCCCCAGACCCCAGAGCACGTCCGGCACCACCATGACTGGGCTG
TTGAAGAGGAAATTTGACCAGCTGGATGAGGACAACTCCTCGGTCTCCTCCTCCTCCTCTTCCTCTGGGTGCCAG
TCTCGCTCCTGCTCCCCAAGCTCTTCTGTCTCCCGTGCCTGGGACTCAGAGGAGGAAGGCCCCTGGGATCAGATG
CCCCTGCCTGACCGTGACTTCTGCGGCCCCAGAAGTTTCACCCCCCTGTCTATCCTGAAGCGGGCTCGCCGGGAG
CGCCCAGGCCGTGTAGCCTTTGATGGGATCACCGTCTTCTACTTCCCCCGCTGCCAGGGCTTCACCAGTGTGCCC
AGCCGTGGTGGCTGTACTCTGGGTATGGCCCTTCGCCACAGTGCTTGCCGTCGCTTCTCTTTGGCTGAGTTTGCG
CAGGAGCAAGCCCGTGCACGGCACGAGAAGCTCCGCCAGCGCTTGAAAGAGGAGAAGTTGGAGATGCTGCAGTGG
AAGCTTTCGGCAGCTGGGGTACCCCAGGCAGAGGCAGGGCTGCCACCTGTGGTGGATGCCATTGATGACGCCTCT
GTGGAGGAGGACTTGGCAGTCGCTGTGGCAGGTGGCCGGTTGGAAGAAGTGAGCTTCCTACAGCCCTACCCAGCC
CGGCGACGTCGAGCTCTGCTGAGGGCTTCAGGTGTGCGAAGGATCGATCGGGAGGAGAAGCGGGAGCTGCAGGCA
CTGCGCCAATCCCGGGAGGATTGTGGCTGTCACTGCGATAGGATCTGCGACCCTGAGACCTGCAGCTGCAGCCTG
GCAGGCATCAAGTGCCAGATGGACCACACAGCATTCCCCTGTGGCTGCTGCAGGGAGGGCTGTGAGAACCCCATG
GGCCGTGTGGAATTTAATCAGGCAAGAGTTCAGACCCATTTCATCCACACACTCACCCGCCTGCAGTTGGAACAG
GAGGCTGAGAGCTTTAGGGAGCTGGAGGCCCCTGCCCAGGGCAGCCCACCCAGCCCTGGTGAGGAGGCCCTGGTC
CCTACTTTCCCACTGGCCAAGCCCCCCATGAACAATGAGCTGGGAGACAACAGCTGCAGCAGCGACATGACTGAT
TCTTCTACAGCATCTTCATCAGCATCGGGCACTAGTGAGGCTCCTGACTGCCCCACCCACCCAGGCCTGCCTGGC
CCTGGCTTCCAGCCTGGCGTTGATGATGACAGCCTGGCACGCATCTTGAGTTTCAGTGACTCTGACTTCGGTGGG
GAGGAGGAGGAAGAGGAGGAAGGGAGCGTGGGGAACCTGGACAACCTCAGCTGCTTCCATCCAGCTGACATCTTT
GGTACTAGTGACCCTGGTGGCCTGGCCAGCTGGACCCACAGCTATTCTGGCTGTAGCTTCACATCAGGCGTCCTG
GATGAGAATGCCAACCTGGATGCCAGCTGCTTCCTAAATGGTGGCCTTGAAGGGTCAAGGGAAGGCAGCCTTCCT
GGCACCTCAGTGCCACCCAGCATGGACGCTGGCCGGAGTAGCTCAGTGGATCTCAGCTTGTCTTCTTGTGACTCC
TTTGAGTTACTCCAGGCTCTGCCAGATTATAGTCTGGGGCCTCACTACACATCACAGAAGGTGTCTGACAGCCTG
GACAACATCGAGGCACCTCACTTCCCCCTGCCTGGCCTGTCTCCACCTGGGGATGCCAGCAGTTGCTTCCTGGAG
TCCCTCATGGGCTTCTCCGAGCCAGCCGCCGAAGCCCTAGATCCCTTTATTGACAGCCAGTTTGAGGACACTGTC
CCAGCATCTCTAATGGAGCCTGTGCCGGTGTGAGGACCAGGATGTCTTTTCCCAGCCCCAAGAGACCTGTTGCTG
CTTTCTTGTAATTATGGGGCTCCCCAGAGTCTGCGTAACAGTCTCCCACTGGCTGGCTCACCCACAGGTGCCATG
TGCACACTCCTGGTTTTCAAACAATTCTCTGGATTTATTTATTTGTTTTAACTTTTCTGTGCTGAAGAGAGGACT
GGGGGGAGGGGGCTTCCCCTTTCAGCTGCCCGGCCCCCCACACCCACAGCTTGCTCTTCTATCTCCACAACGTGA
GCCTGGAAGAGGAGAAAATGTGGCTCCTCTGGAGCTTGGCAGACCACTTTTCGGTCTTTGCGTGATGTTCCTTAG
CCCAAAGACGGTGAGACAGGGCTGAAATCAGGTGGCTTCTGCCACCCTGAGCCCTAGACCCATGGGTGGCTAAAT
CCACTGGACTGTGAAGACTATAATTTATTTCCATAATTTATTTGGAGATTGAGGAGGCTTTGGTTGCACTTCTTT
GGCTGGTGGGTAATGCCAGGGGTGGGGTGGGCACAGGCCCTCAAGAGCCCCTTTTGCCTTGTAGTCCTACACCTT
GCCCTGCCTGGGCTTTGGTGCAGACTAGGTGTGGATTTGAGCTCTGTGATCTATGTCTGCTGCCTGGCTCCTAGA
TGGCTCTGTGGGCAGGTGCTGGCCAAGGACATCATCTAGGCAGGGGGAGAGCCTGGGCTGAACAGCTGTGACCAA
AACTCCCTTCTGCCCCACCCTGCCCCCTCCACTTCCTGCCCTCTGTTCCATCTTCCCCCTTCCCAAAGGCCACAG
CCTTTATTCCAGGCCCAGGGATGTAGGAGGGGGAAGGAGGAAACAGGAAGCCCAGAGAGGGCAAAGGGCCTACCT
CGGGGCGCGAACCATGCCCCAGACTATTATCTCAGGGCTTTCTGGGCACTGCACTTCAGCGTGGCCCACCTGCCC
ATGCCCTGAGGCCAGTTGGCGAGGGGTGGCTCCTGAGGGTTTTTATACCCTTTGTTTGCTAATGTTTAATTTTGC
ATCATAATTTCTACATTGTCCCTGAGTGTCAGAACTATAATTTATTCCATTTCTCTCTGTGTCTGTGCCAAGAAA
CGCAGGCTCTGGGCCTGCCCCTTGCCCAGGAGGCCTTGCCAGCCTGTGTGCTTGTGGGAACACCTTGTACCTGAG
CTTACAGGTACCAATAAAGAGGCTTTATTTTT

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FIGURE 2947

ACTCGTCTCTGGTAAAGTCTGAGCAGGACAGGGTGGCTGACTGGCAGATCCAGAGGTTCCCTTGGCAGTCCACGC
CAGGCCTTCACCATGGATCAGTTCCCTGAATCAGTGACAGAAAACTTTGAGTACGATGATTTGGCTGAGGCCTGT
TATATTGGGGACATCGTGGTCTTTGGGACTGTGTTCCTGTCCATATTCTACTCCGTCATCTTTGCCATTGGCCTG
GTGGGAAATTTGTTGGTAGTGTTTGCCCTCACCAACAGCAAGAAGCCCAAGAGTGTCACCGACATTTACCTCCTG
AACCTGGCCTTGTCTGATCTGCTGTTTGTAGCCACTTTGCCCTTCTGGACTCACTATTTGATAAATGAAAAGGGC
CTCCACAATGCCATGTGCAAATTCACTACCGCCTTCTTCTTCATCGGCTTTTTTGGAAGCATATTCTTCATCACC
GTCATCAGCATTGATAGGTACCTGGCCATCGTCCTGGCCGCCAACTCCATGAACAACCGGACCGTGCAGCATGGC
GTCACCATCAGCCTAGGCGTCTGGGCAGCAGCCATTTTGGTGGCAGCACCCCAGTTCATGTTCACAAAGCAGAAA
GAAAATGAATGCCTTGGTGACTACCCCGAGGTCCTCCAGGAAATCTGGCCCGTGCTCCGCAATGTGGAAACAAAT
TTTCTTGGCTTCCTACTCCCCCTGCTCATTATGAGTTATTGCTACTTCAGAATCATCCAGACGCTGTTTTCCTGC
AAGAACCACAAGAAAGCCAAAGCCATTAAACTGATCCTTCTGGTGGTCATCGTGTTTTTCCTCTTCTGGACACCC
TACAACGTTATGATTTTCCTGGAGACGCTTAAGCTCTATGACTTCTTTCCCAGTTGTGACATGAGGAAGGATCTG
AGGCTGGCCCTCAGTGTGACTGAGACGGTTGCATTTAGCCATTGTTGCCTGAATCCTCTCATCTATGCATTTGCT
GGGGAGAAGTTCAGAAGATACCTTTACCACCTGTATGGGAAATGCCTGGCTGTCCTGTGTGGGCGCTCAGTCCAC
GTTGATTTCTCCTCATCTGAATCACAAAGGAGCAGGCATGGAAGTGTTCTGAGCAGCAATTTTACTTACCACACG
AGTGATGGAGATGCATTGCTCCTTCTCTGAAGGGAATCCCAAAGCCTTGTGTCTACAGAGAACCTGGAGTTCCTG
AACCTGATGCTGACTAGTGAGGAAAGATTTTTGTTGTTATTTCTTACAGGCACAAAATGATGGACCCAATGCACA
CAAAACAACCCTAGAGTGTTGTTGAGAATTGTGCTCAAAATTTGAAGAATGAACAAATTGAACTCTTTGAATGAC
AAAGAGTAGACATTTCTCTTACTGCAAATGTCATCAGAACTTTTTGGTTTGCAGATGACAAAAATTCAACTCAGA
CTAGTTTAGTTAAATGAGGGTGGTGAATATTGTTCATATTGTGGCACAAGCAAAAGGGTGTCTGAGCCCTCAAAG
TGAGGGGAAACCAGGGCCTGAGCCAAGCTAGAATTCCCTCTCTCTGACTCTCAAATCTTTTAGTCATTATAGATC
CCCCAGACTTTACATGACACAGCTTTATCACCAGAGAGGGACTGACACCCATGTTTCTCTGGCCCCAAGGGCAAA
ATTCCCAGGGAAGTGCTCTGATAGGCCAAGTTTGTATCAGGTGCCCATCCCTGGAAGGTGCTGTTATCCATGGGG
AAGGGATATATAAGATGGAAGCTTCCAGTCCAATCTCATGGAGAAGCAGAAATACATATTTCCAAGAAGTTGGAT
GGGTGGGTACTATTCTGATTACACAAAACAAATGCCACACATCACCCTTACCATGTGCCTGATCCAGCCTCTCCC
CTGATTACACCAGCCTCGTCTTCATTAAGCCCTCTTCCATCATGTCCCCAAACCTGCAAGGGCTCCCCACTGCCT
ACTGCATCGAGTCAAAACTCAAATGCTTGGCTTCTCATACGTCCACCATGGGGTCCTACCAATAGATTCCCCATT
GCCTCCTCCTTCCCAAAGGACTCCACCCATCCTATCAGCCTGTCTCTTCCATATGACCTCATGCATCTCCACCTG
CTCCCAGGCCAGTAAGGGAAATAGAAAAACCCTGCCCCCAAATAAGAAGGGATGGATTCCAACCCCAACTCCAGT
AGCTTGGGACAAATCAAGCTTCAGTTTCCTGGTCTGTAGAAGAGGGATAAGGTACCTTTCACATAGAGATCATCC
TTTCCAGCATGAGGAACTAGCCACCAACTCTTGCAGGTCTCAACCCTTTTGTCTGCCTCTTAGACTTCTGCTTTC
CACACCTGGCACTGCTGTGCTGTGCCCAAGTTGTGGTGCTGACAAAGCTTGGAAGAGCCTGCAGGTGCTGCTGCG
TGGCATAGCCCAGACACAGAAGAGGCTGGTTCTTACGATGGCACCCAGTGAGCACTCCCAAGTCTACAGAGTGAT
AGCCTTCCGTAACCCAACTCTCCTGGACTGCCTTGAATATCCCCTCCCAGTCACCTTGTGGCAAGCCCCTGCCCA
TCTGGGAAAATACCCCATCATTCATGCTACTGCCAACCTGGGGAGCCAGGGCTATGGGAGCAGCTTTTTTTCCC
CCCTAGAAACGTTTGGAACAATCTAAAAGTTTAAAGCTCGAAAACAATTGTAATAATGCTAAAGAAAAAGTCATC
CAATCTAACCACATCAATATTGTCATTCCTGTATTCACCCGTCCAGACCTTGTTCACACTCTCACATGTTTAGAG
TTGCAATCGTAATGTACAGATGGTTTTATAATCTGATTTGTTTTCCTCTTAACGTTAGACCACAAATAGTGCTCG
CTTTCTATGTAGTTTGGTAATTATCATTTTAGAAGACTCTACCAGACTGTGTATTCATTGAAGTCAGATGTGGTA
ACTGTTAAATTGCTGTGTATCTGATAGCTCTTTGGCAGTCTATATGTTTGTATAATGAATGAGAGAATAAGTCAT
GTTCCTTCAAGATCATGTACCCCAATTTACTTGCCATTACTCAATTGATAAACATTTAACTTGTTTCCAATGTTT
AGCAAATACATATTTTATAGAACTTC

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FIGURE 2948

ATTGCCACATGGTCCACATTGCATGCAAGATTGCTGAGCTGAAGGAAAAGATTGATTGCCGTTCTGGTAAAAAGC
CAGAAGATTGCCCTAAATTCTTGAAGTCTGATGATGCTGCCATCATTGACATGGTTCCTGGCAAGCCCATGTGTG
TTGAGAGCTTCTCAGAACTGTTTGTTTCAATTGGCCATTTAAGTTTAGTAGTAAAAGACTGGTTAATGATAACAA
TGCATCATAAAACCTTCAGATGGAAAGGAGAATGTTTTGTGGACCACTTTGGTTTTCTTTTTTGCATCTGGCAGT
TTTAAGTTATTAGTTTTTAAAATCAGTACTTTTTAATGGAA

FIGURE 2949

GAAGCGAAATCTCCCCTTCTACAGAGTTCCTCCGGCGCTTCCTCCACCCCGGGATACACAGAACCTCATCTCCTA
CGGTGCTGAAGCCTGCAGCAGGGCAGGATGGGCAGGAGAGCAGAGCCGCGGAGTCTGCGGCGCGGGTGAAGAGCG
GCGCGTAATTCCCGCAGCAAGATTGTTCCGCGCCCGCAGCCCCTGGACTAGCAGGATCCGAACCCCGGCGGCTGC
GTGCTTATAGGCGCAGACGTCAGAGAGCCCGCGGCTTAAAGCGCGTCGCCTGGCTAGCGCCACCCCCTAGCCTTC
TTCAAGGCCTCCAGGGCTGGGCCCAAGCGCCCGTCGACGGCACCCTGGGCCCAGAGGACTCGCGGGCCTCATCTC
CAATGATTCAGAACTCACGTCCGTCGCTGCTGCAACCCCAAGATGTCGGAGACACGGTGGAAACGCTTATGTTAC
ATCCGGTGATCAAGGCTTTCCTGTGTGGCTCCATCAGTGGGACCTGCTCTACCCTCCTTTTCCAACCTCTGGATC
TCCTTAAAACACGCCTGCAAACCCTCCAGCCCTCAGATCATGGGTCTAGACGTGTTGGGATGTTGGCTGTACTCT
TGAAGGTGGTTCGCACGGAGAGTCTTTTGGGCCTTTGGAAAGGGATGTCCCCTTCCATTGTGAGATGTGTCCCTG
GCGTTGGAATCTACTTTGGCACTCTCTACTCTTTGAAGCAGTATTTCTTGCGAGGCCATCCCCCAACCGCCCTGG
AGTCAGTCATGCTGGGGGTGGGCTCTCGCTCTGTTGCAGGGGTCTGTATGTCACCTATCACTGTAATCAAGACGC
GCTATGAGAGTGGGAAATATGGCTATGAGAGTATCTACGCTGCCCTGAGGAGCATCTATCACAGTGAGGGGCACC
GGGGCCTCTTCAGTGGCCTGACAGCAACTCTCCTTCGAGATGCGCCCTTCTCAGGAATCTACCTGATGTTTTACA
ACCAGACCAAAAATATAGTGCCTCATGACCAGGTGGATGCAACCCTTATTCCTATTACAAATTTCAGCTGTGGGA
TATTTGCTGGTATTCTGGCCTCACTGGTAACTCAACCTGCGGATGTTATCAAAACTCATATGCAGCTTTATCCAC
TGAAGTTTCAATGGATTGGCCAAGCAGTGACACTTATTTTCAAAGACTATGGACTACGTGGCTTCTTCCAAGGTG
GCATCCCCCGAGCCCTCCGCAGAACTCTAATGGCAGCAATGGCGTGGACGGTGTATGAAGAGATGATGGCCAAGA
TGGGCCTGAAGTCCTGACCAAGAGAGGACTGGGAACGGGTGAAATCTGTTGCCCTGCTTGGTTTCTGCCAAGGGC
TGCTGCTTCTTACTATTCTGCAGTAAGATGAAGTCCTACCTGGAAAACCAGGCAGAAATTGTGTTGCCTTTGCCT
TCAGTAATCCCCTTAAGGAGAAAATATATGGACCTGATTTCAGCCTTCAGAATCTCCAAAAGAGGAGTCATCAAT
TCATAGAGCACACTAGGGTGTTAGGAGAGAGCTTTGCATACTCTGAGAGGCTACTTGGAAAGGCATTTTCCCAGG
AGAGCTCTGTCAGGTGGCTGCGCTTCAGCCCCACCCCTACACCACAGGGTCTCCTTGGGTATGTTCTTGGGCAAG
CAATCACAAAGCCAGAGAAGCTGTAAGCTGCCTGCCGGGCCTGAGGAGCTCCAACCAGGGAAGACTGGATGTGAG
GAGAGGAGTCACTGTCACCAGGTCACAGACTGACTGAGGTGATGGTAGGATGAGGAGGAACAGATGCCCTTCTTT
AATTGGTTCTCAGTTAACTTCTCAGAGGCTCTGGAGAACGGGACAGTGGCTTTCTAGCCTCTGAATGTTCCAAAT
AAAATTTTTTGGTCTTGGCCCCTGTACTGTTTTACCTCTAAATTCTGGCATTTTTTTTTCCCTGCAATTAAAGTG
CTGTACTTTATTTATTGAACTTTATCATTGAAAGCTGTTTGGAAAACCT

FIGURE 2950

GCCTGTCTTTTCCGTGCTACCTGCAGAGGGGTCCATACGGCGTTGTTCTGGATTCCCGTCGTAACTTAAAGGGAA
ATTTTCACAATGTCCGGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGA
ACCCACTTAGGTGGCACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCATCTAT
ATCATAAATCTCAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCAATTGTTGCCATTGAAAACCCTGCT
GATGTCAGTGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACT
CCAATTGCTGGCCGCTTCACTCCTGGAACCTTCACTAACCAGATCCAGGCAGCCTTCCGGGAGCCACGGCTTCTT
GTGGTTACTGACCCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCGCTG
TGTAACACAGATTCTCCTCTGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGTGGGT
TTGATGTGGTGGATGCTGGCTCGGGAAGTTCTGCGCATGCGTGGCACCATTTCCCGTGAACACCCATGGGAGGTC
ATGCCTGATCTGTACTTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGGCTGCTGCTGAGAAGGCAGTG
ACCAAGGAGGAATTTCAGGGTGAATGGACTGCTCCCGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGAC
TGGTCTGAAGGTGTACAGGTGCCCTCTGTGCCTATTCAGCAATTCCCTACTGAAGACTGGAGCGCTCAGCCTGCC
ACGGAAGACTGGTCTGCAGCTCCCACTGCTCAGGCCACTGAATGGGTAGGAGCAACCACTGACTGGTCTTAAGCT
GTTCTTGCATAGGCTCTTAAGCAGCATGGAAAAATGGTTGATGGAAAATAAACATCAGTTTCT

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FIGURE 2951

ATGCCTTCAAAGGAAAAGCAAGGGACACTCACCTTGCAAAACCATCAAAACTATTCCCACAGACGCCACATGAGC
CCCCATTTATCTGACTTAAAAGAAGCAGGGTCTGCTGGGATTCGAATCCTCTGGTTCCAGAGAGAGAAGCTCTTT
CAAAGACTGGATTCTGGCCCACAAAAGAAGGTTCCTGCTTACTGGAATCAAGAGGTCAAAGATTTTTCTGAATCA
TGCATCCACGGAGAAGAGCCCATTAGGGCTATTCCAGCAGACAGCAGTAAGGATGTCCATGAGCTTTATGTTGTT
GTTGGGAGCTGGGATTCTACTCTTCCAGAAGAATATGACCTCAAAAGGAGCCACCACAGAACGAGCTCGGCACCC
ATCTACGAATGTATTGCTAAGGATCATTGGGGATGGGGTGACCCAGAAGTGAACTGGCTCCATGATCCATTAAAC
AATCACCCTGAAATCCACAGTGCCAGTCAACTAATGGGGCTTGGAGCCATCATTAGGTCACTGGAAAATGATATC
TTCCTGGAGGTTGATACTGGCTTCACCATCCTGAGAGCAGAAGGCTTGAGGGAGGAACAGCCTCCTGGGCATGGA
GGCACCTGCCATCCCACATCAAATCACAGAGCCATGCTTAAAAGGGCCAGGTGGATGACTTATGTGGAAGAAGTG
AGCCGGGTGAGGATTTCTACTTCGAGAAACCTTGCTCGAAGCGCTTTCATCATTCTCTCCTACACAACAAACCCT
GAACTCTTAGAAGCAGCTCTTGGCACAGGAGCCTCCAACCCGTTTTTCAGCCGGCTTTCTCTACTTGTTTCTCAT
TCCATGATCACAGAAAACAGCTCCATTAAGACTCTTTTCAGGTCTACCAAAGAGCTAGTGATTGCACTCAATCGA
TGTTTCTTCGGCATTACTCAAAGTGCAGCTACACTCAGCCCACAGCTTCACATCAGATTTATCAGCAGAGAACAA
AAGAAGTACTTGAAATTGCCACTTACAACGTTTATGAGTAAACTGGAATCCAAAGTCTGGCCTCTAGCCAAGCGG
TTACGCCAGTGGCCTGACTCATATACAAAGAAGTTTGAGCACAGAATCTACCCCATCACATTTTCTGTTGGAAAC
CCTCAGGAGTGGAAGAAATTGTTCAAACCCTGTGCTGCCCAGAGACTCTTTCTTCCGATCAACCTGGAGCTCTAC
GCCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATAC
TTTCTTCACCAATCTCATGAGGAGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAACGAGGTGGCCGA
ATCTTCCTTCAGGATATCAAGAAACCAGACTGTGACGACTGGGAGAGCGGGCTGAATGCGATGGATGACAAAAAT
GACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATTGGGTGGC
CACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAATATCTCTTTGACAAGCACACGCTG
GGAGACAGTGATAACGAAAGCTAA

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FIGURE 2952

ATGCTGACCCCGGCGTTCGACCTCAGCCAGGATCCGGACTTCCTGACTATCGCCATCCGCGTGCCCTACGCCCGG
GTCTCCGAGTTCGACGTCTACTTCGAGGGGTCTGACTTCAAGTTCTACGCCAAGCCATACTTTCTCAGGCGAGTT
CGGGGAATTTTTACCATTCGCCTGCCCAAAGAAACCCCTGGCCAGCATTTTGAGGGGCTGAACATGTTAACTGCT
CTTCTGGCACCAAGAAAATCCAGGACAGCAAAACCACTTGTGGAAGAAATAGGTGCTTCTGAGATTCCTGAGGAA
GTAGTTGACGATGAAGAGTTTGATTGGGAAATTGAGCAGACACCCTGTGAAGAGGTATCAGAAAGTGCTTTGAAT
CCGCAGTGCCACTATGGATTTGGAAACTTACGATCAGGAGTGTTGCAACGGTTACAGCTGCTGTTTATGGCAGCC
GTAACAAGTGGTTCAAAACTGAGTGATCATGATGAACTGAGTGATGTTATTGATATTAAGGATCCAGATTTCACC
CCTGCAGCTGAACGAAGACAGAAGCGCCTGGCCGCTGAGCTGGCCAAGTTTGATCCTGATCATTATCTAGCTGAC
TTTTTTGAAGATGAGGCGATTGAACAGATTTTGAAGTATAATCCTTGGTGGACTGACAAATATTCAAAAATGATG
GCCTTTTTGGAAAAGAGTCAGGAACAAGAAAATCATGCTACATTAGCGTGGGCTGTTGTCTGTTTAACACCTCCT
CATCAGGTGTCGCCAGGCAGATACAACAGTGCAGTGCCTCCCTATTCTGTGATCTTAAAAGTGTACACCCTTGCC
ACAACCATAGCATTTGCTCAGTACTCTCAACATAAACCAAGCTTAGATCGCAATGAAACTGCGGACCTGCAGGCT
GCCTTGCTTCACTGA

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FIGURE 2953

ATGATCTTTAATTTTGCCCTGAATACCTTGGTTGCAATCACTGTGCTTGTTTATCCAAACGGCATTCAGGAATAC
ATACGACAACTGCCTCCGAATTTTCCCTACAGAGATGATGTCATGAGGCCTGGAGAACCCAGGAGTTTCCAAGCT
GTGCTGCCACCCGAGCTCTGGATCCACCTGGCTGTGGTGGCCTGTGGCAATCGGCTGGAGGAGACGCTGGTCATG
CTCAAATCAGCTGTGCTTTTTAGCCACAGGAAGATCCAATTCCACATCTTCACTGAAGACTCTCTGAAGCCCGAG
TTTGATAAGCAGTTACGCCAGTGGCCTGACTCATATACAAAGAAGTTTGAGCACAGAATCTACCCCATCACATTT
TCTGTTGGAAACCCTCAGGAGTGGAAGAAATTGTTCAAACCCTGTGCTGCCCAGAGACTCTTTCTTCCGATCAAC
CTGGAGCTCTACGCCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAAC
TTTGCCAAATACTTTCTTCACCAATCTCATGAGGAGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAA
CGAGGTGGCCGAATCTTCCTTCAGGATATCAAGAAACCAGACTGTGACGACTGGGAGAGCGGGCTGAATGCGATG
GATGACAAAAATGACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAA
GAATTGGGTGGCCACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAATATCTCTTTGAC
AAGCACACGCTGGGAGACAGTGATAACGAAAGCTAA

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FIGURE 2954

AGTAGTTGCGCAGCTGGGGTTGGTAAGGTCGGGCCATGGTGGGGCAGAGGTTGGGAAGATGGCGTGGCGAGGCTG
GGCGCAGAGAGGCTGGGGCTGCGGCCAGGCGTGGGGTGCGTCGGTGGGCGGCCGCAGCTGCGAGGAGCTCACTGC
GGTCCTAACCCCGCCGCAGCTCCTCGGACGCAGGTTTAACTTCTTTATTCAACAAAAATGCGGATTCAGAAAAGC
ACCCAGGAAGGTTGAACCTCGAAGATCAGACCCAGGGACAAGTGGTGAAGCATACAAGAGAAGTGCTTTGATTCC
TCCTGTGGAAGAAACAGTCTTTTATCCTTCTCCCTATCCTATAAGGAGTCTCATAAAACCTTTATTTTTTACTGT
TGGGTTTACAGGCTGTGCATTTGGATCAGCTGCTATTTGGCAATATGAATCACTGAAATCCAGGGTCCAGAGTTA
TTTTGATGGTATAAAAGCTGATTGGTTGGATAGCATAAGACCACAAAAAGAAGGAGACTTCAGAAAGGAGATTAA
CAAGTGGTGGAATAACCTAAGTGATGGCCAGCGGACTGTGACAGGTTTGTGTTAGCTTACACGTTTTAACCATTC
AAGGGAAGAGAAATCAAACCAAAAGGTA

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FIGURE 2955

ATGTCTAGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTTA
GGTGGTACCAACCTTGACTTCCAAATGGACAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGA
GCCACTCAAATTGTTGGCCGCTTCACTCCTGGAACCTTCACTAGCCAGACCCAGGCAGCCTTCAGGGAGCCACGG
CTTCTAGTGGTTACTGATCCCAGGGCTGACCACCAGCCTCTCACAGAGACATCTTATGTTAACCTACCTACCATT
GCTCTATGTCACACAGATTTTCCTCTGCGCTATGTGGACATTGCCATCACATGCAACAACAAGGGAGCTCCCTCA
GTGGGTCCGAGCTGGTGGATGCTGGCCCTGGAAGTTCTGCGCGTGTGTGGCACCATTTCCCTCGAACACCCATGG
GAGGTCATGCCTGATCTCTACTTCTACAGAGATCCTGAAGAGATTGGAAAAGAGGAGCAGGTTGCTGCTGAAAAG
ACTGTGACCAAGGAGGAATTTCAGGGCAAATGGACTGCTCCAGCTCCTGAGTTCACCGCTATTCAGCCTGAGGTT
GGAGACTGGTCTGATGGTGTACAGGTGCCCTCTGTGCCTATTCATCAGGTCCCTACTGAAGACTGGAGTGCTCAG
CCTGCCACAGAAGACTGGTCTGCAGCTCCCACTGCTCAGGCCACTGAATGGGTAGAAACAACCACTGAATGGTCT
TAA

FIGURE 2956A

GGCTCATGCTCGGGAGCGTGGTTGAGCGGCTGGCGCGGTTGTCCTGGAGCAGGGGCGCAGGAATTCTGATGTGAA
ACTAACAGTCTGTGAGCCCTGGAACCTCCACTCAGAGAAGATGAAGGATATCGACATAGGAAAAGAGTATATCAT
CCCCAGTCCTGGGTATAGAAGTGTGAGGGAGAGAACCAGCACTTCTGGGACGCACAGAGACCGTGAAGATTCCAA
GTTCAGGAGAACTCGACCGTTGGAATGCCAAGATGCCTTGGAAACAGCAGCCCGAGCCGAGGGCCTCTCTCTTGA
TGCCTCCATGCATTCTCAGCTCAGAATCCTGGATGAGGAGCATCCCAAGGGAAAGTACCATCATGGCTTGAGTGC
TCTGAAGCCCATCCGGACTACTTCCAAACACCAGCACCCAGTGGACAATGCTGGGCTTTTTTCCTGTATGACTTT
TTCGTGGCTTTCTTCTCTGGCCCGTGTGGCCCACAAGAAGGGGGAGCTCTCAATGGAAGACGTGTGGTCTCTGTC
CAAGCACGAGTCTTCTGACGTGAACTGCAGAAGACTAGAGAGACTGTGGCAAGAAGAGCTGAATGAAGTTGGGCC
AGACGCTGCTTCCCTGCGAAGGGTTGTGTGGATCTTCTGCCGCACCAGGCTCATCCTGTCCATCGTGTGCCTGAT
GATCACGCAGCTGGCTGGCTTCAGTGGACCAGCCTTCATGGTGAAACACCTCTTGGAGTATACCCAGGCAACAGA
GTCTAACCTGCAGTACAGCTTGTTGTTAGTGCTGGGCCTCCTCCTGACGGAAATCGTGCGGTCTTGGTCGCTTGC
ACTGACTTGGGCATTGAATTACCGAACCGGTGTCCGCTTGCGGGGGGCCATCCTAACCATGGCATTTAAGAAGAT
CCTTAAGTTAAAGAACATTAAAGAGAAATCCCTGGGTGAGCTCATCAACATTTGCTCCAACGATGGGCAGAGAAT
GTTTGAGGCAGCAGCCGTTGGCAGCCTGCTGGCTGGAGGACCCGTTGTTGCCATCTTAGGCATGATTTATAATGT
AATTATTCTGGGACCAACAGGCTTCCTGGGATCAGCTGTTTTTATCCTCTTTTACCCAGCAATGATGTTTGCATC
ACGGCTCACAGCATATTTCAGGAGAAAATGCGTGGCCGCCACGGATGAACGTGTCCAGAAGATGAATGAAGTTCT
TACTTACATTAAATTTATCAAAATGTATGCCTGGGTCAAAGCATTTTCTCAGAGTGTTCAAAAAATCCGCGAGGA
GGAGCGTCGGATATTGGAAAAAGCTGGGTACTTCCAGAGCATCACTGTGGGTGTGGCTCCCATTGTGGTGGTGAT
TGCCAGCGTGGTGACCTTCTCTGTTCATATGACCCTGGGCTTCGATCTGACAGCAGCACAGGCTTTCACAGTGGT
GACAGTCTTCAATTCCATGACTTTTGCTTTGAAAGTAACACCGTTTTCAGTAAAGTCCCTCTCAGAAGCCTCAGT
GGCTGTTGACAGATTTAAGAGTTTGTTTCTAATGGAAGAGGTTCACATGATAAAGAACAAACCAGCCAGTCCTCA
CATCAAGATAGAGATGAAAAATGCCACCTTGGCATGGGACTCCTCCCACTCCAGTATCCAGAACTCGCCCAAGCT
GACCCCCAAAATGAAAAAAGACAAGAGGGCTTCCAGGGGCAAGAAAGAGAAGGTGAGGCAGCTGCAGCGCACTGA
GCATCAGGCGGTGCTGGCAGAGCAGAAAGGCCACCTCCTCCTGGACAGTGACGAGCGGCCCAGTCCCGAAGAGGA
AGAAGGCAAGCACATCCACCTGGGCCACCTGCGCTTACAGAGGACACTGCACAGCATCGATCTGGAGATCCAAGA
GGGTAAACTGGTTGGAATCTGTGGCAGTGTGGGAAGTGGAAAAACCTCTCTCATTTCAGCCATTTTAGGCCAGAT
GACGCTTCTAGAGGGCAGCATTGCAATCAGTGGAACCTTCGCTTATGTGGCCCAGCAGGCCTGGATCCTCAATGC
TACTCTGAGAGACAACATCCTGTTTGGGAAGGAATATGATGAAGAAAGATACAACTCTGTGCTGAACAGCTGCTG
CCTGAGGCCTGACCTGGCCATTCTTCCCAGCAGCGACCTGACGGAGATTGGAGAGCGAGGAGCCAACCTGAGCGG
TGGGCAGCGCCAGAGGATCAGCCTTGCCCGGGCCTTGTATAGTGACAGGAGCATCTACATCCTGGACGACCCCCT
CAGTGCCTTAGATGCCCATGTGGGCAACCACATCTTCAATAGTGCTATCCGGAAACATCTCAAGTCCAAGACAGT
TCTGTTTGTTACCCACCAGTTACAGTACCTGGTTGACTGTGATGAAGTGATCTTCATGAAAGAGGGCTGTATTAC
GGAAAGAGGCACCCATGAGGAACTGATGAATTTAAATGGTGACTATGCTACCATTTTTAATAACCTGTTGCTGGG
AGAGACACCGCCAGTTGAGATCAATTCAAAAAAGGAAACCAGTGGTTCACAGAAGAAGTCACAAGACAAGGGTCC
TAAAACAGGATCAGTAAAGAAGGAAAAAGCAGTAAAGCCAGAGGAAGGGCAGCTTGTGCAGCTGGAAGAGAAAGG
GCAGGGTTCAGTGCCCTGGTCAGTATATGGTGTCTACATCCAGGCTGCTGGGGGCCCCTTGGCATTCCTGGTTAT
TATGGCCCTTTTCATGCTGAATGTAGGCAGCACCGCCTTCAGCACCTGGTGGTTGAGTTACTGGATCAAGCAAGG
AAGCGGGAACACCACTGTGACTCGAGGGAACGAGACCTCGGTGAGTGACAGCATGAAGGACAATCCTCATATGCA
GTACTATGCCAGCATCTACGCCCTCTCCATGGCAGTCATGCTGATCCTGAAAGCCATTCGAGGAGTTGTCTTTGT
CAAGGGCACGCTGCGAGCTTCCTCCCGGCTGCATGACGAGCTTTTCCGAAGGATCCTTCGAAGCCCTATGAAGTT
TTTTGACACGACCCCCACAGGGAGGATTCTCAACAGGTTTTCCAAAGACATGGATGAAGTTGACGTGCGGCTGCC
GTTCCAGGCCGAGATGTTCATCCAGAACGTTATCCTGGTGTTCTTCTGTGTGGGAATGATCGCAGGAGTCTTCCC
GTGGTTCCTTGTGGCAGTGGGGCCCCTTGTCATCCTCTTTTCAGTCCTGCACATTGTCTCCAGGGTCCTGATTCG
GGAGCTGAAGCGTCTGGACAATATCACGCAGTCACCTTTCCTCTCCCACATCACGTCCAGCATACAGGGCCTTGC
CACCATCCACGCCTACAATAAAGGGCAGGAGTTTCTGCACAGATACCAGGAGCTGCTGGATGACAACCAAGCTCC
TTTTTTTTTGTTTACGTGTGCGATGCGGTGGCTGGCTGTGCGGCTGGACCTCATCAGCATCGCCCTCATCACCAC
CACGGGGCTGATGATCGTTCTTATGCACGGGCAGATTCCCCCAGCCTATGCGGGTCTCGCCATCTCTTATGCTGT
CCAGTTAACGGGGCTGTTCCAGTTTACGGTCAGACTGGCATCTGAGACAGAAGCTCGATTCACCTCGGTGGAGAG

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FIGURE 2956B

GATCAATCACTACATTAAGACTCTGTCCTTGGAAGCACCTGCCAGAATTAAGAACAAGGCTCCCTCCCCTGACTG
GCCCCAGGAGGGAGAGGTGACCTTTGAGAACGCAGAGATGAGGTACCGAGAAAACCTCCCTCTCGTCCTAAAGAA
AGTATCCTTCACGATCAAACCTAAAGAGAAGATTGGCATTGTGGGGCGGACAGGATCAGGGAAGTCCTCGCTGGG
GATGGCCCTCTTCCGTCTGGTGGAGTTATCTGGAGGCTGCATCAAGATTGATGGAGTGAGAATCAGTGATATTGG
CCTTGCCGACCTCCGAAGCAAACTCTCTATCATTCCTCAAGAGCCGGTGCTGTTCAGTGGCACTGTCAGATCAAA
TTTGGACCCCTTCAACCAGTACACTGAAGACCAGATTTGGGATGCCCTGGAGAGGACACACATGAAAGAATGTAT
TGCTCAGCTACCTCTGAAACTTGAATCTGAAGTGATGGAGAATGGGGATAACTTCTCAGTGGGGGAACGGCAGCT
CTTGTGCATAGCTAGAGCCCTGCTCCGCCACTGTAAGATTCTGATTTTAGATGAAGCCACAGCTGCCATGGACAC
AGAGACAGACTTATTGATTCAAGAGACCATCCGAGAAGCATTTGCAGACTGTACCATGCTGACCATTGCCCATCG
CCTGCACACGGTTCTAGGCTCCGATAGGATTATGGTGCTGGCCCAGGGACAGGTGGTGGAGTTTGACACCCCATC
GGTCCTTCTGTCCAACGACAGTTCCCGATTCTATGCCATGTTTGCTGCTGCAGAGAACAAGGTCGCTGTCAAGGG
CTGACTCCTCCCTGTTGACGAAGTCTCTTTTCTTTAGAGCATTGCCATTCCCTGCCTGGGGCGGGCCCCTCATCG
CGTCCTCCTACCGAAACCTTGCCTTTCTCGATTTTATCTTTCGCACAGCAGTTCCGGATTGGCTTGTGTGTTTCA
CTTTTAGGGAGAGTCATATTTTGATTATTGTATTTATTCCATATTCATGTAAACAAAATTTAGTTTTTGTTCTTA
ATTGCACTCTAAAAGGTTCAGGGAACCGTTATTATAATTGTATCAGAGGCCTATAATGAAGCTTTATACGTGTAG
CTATATCTATATATAATTCTGTACATAGCCTATATTTACAGTGAAAATGTAAGCTGTTTATTTTATATTAAAATA
AGCACTGTGCTAATAACAGTGCATATTCCTTTCTATCATTTTTGTACAGTTTGCTGTACTAGAGATCTGGTTTTG
CTATTAGACTGTAGGAAGAGTAGCATTTCATTCTTCTCTAGCTGGTGGTTTCACGGTGCCAGGTTTTCTGGGTGT
CCAAAGGAAGACGTGTGGCAATAGTGGGCCCTCCGACAGCCCCCTCTGCCGCCTCCCCACGGCCGCTCCAGGGGT
GGCTGGAGACGGGTGGGCGGCTGGAGACCATGCAGAGCGCCGTGAGTTCTCAGGGCTCCTGCCTTCTGTCCTGGT
GTCACTTACTGTTTCTGTCAGGAGAGCAGCGGGGCGAAGCCCAGGCCCCTTTTCACTCCCTCCATCAAGAATGGG
GATCACAGAGACATTCCTCCGAGCCGGGGAGTTTCTTTCCTGCCTTCTTCTTTTTGCTGTTGTTTCTAAACAAGA
ATCAGTCTATCCACAGAGAGTCCCACTGCCTCAGGTTCCTATGGCTGGCCACTGCACAGAGCTCTCCAGCTCCAA
GACCTGTTGGTTCCAAGCCCTGGAGCCAACTGCTGCTTTTTGAGGTGGCACTTTTTCATTTGCCTATTCCCACAC
CTCCACAGTTCAGTGGCAGGGCTCAGGATTTCGTGGGTCTGTTTTCCTTTCTCACCGCAGTCGTCGCACAGTCTC
TCTCTCTCTCTCCCCTCAAAGTCTGCAACTTTAAGCAGCTCTTGCTAATCAGTGTCTCACACTGGCGTAGAAGTT
TTTGTACTGTAAAGAGACCTACCTCAGGTTGCTGGTTGCTGTGTGGTTTGGTGTGTTCCCGCAAACCCCCTTTGT
GCTGTGGGGCTGGTAGCTCAGGTGGGCGTGGTCACTGCTGTCATCAATTGAATGGTCAGCGTTGCATGTCGTGAC
CAACTAGACATTCTGTCGCCTTAGCATGTTTGCTGAACACCTTGTGGAAGCAAAAATCTGAAAATGTGAATAAAA
TTATTTTGGATTTTGT

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FIGURE 2957

TGCGTGCGGTGGCAGCTTCCTTGCGGAAGTGGTGACCGTGAGAGAAGAAGATGGCGGCCCCTGTAGTGGCGCCGC
CTGGTGTGGTGGTTAGTCGGGCTAACAAGCGCAGCGGCGCGGGGCCGGGAGGCAGCGGTGGCGGGGGAGCCAGAG
GGGCGGAGGAGGAACCGCCGCCGCCCCTACAAGCAGTTCTGGTGGCCGATAGCTTCGATCGCCGCTTCTTCCCCA
TCTCCAAGGACCAGCCTCGGGTCCTCTTGCCCCTGGCCAATGTGGCATTAATTGACTACACTCTGGAATTCCTGA
CTGCCACAGGTGTACAGGAAACATTTGTCTTTTGTTGCTGGAAAGCTGCTCAAATCAAAGAACATTTACTGAAGT
CAAAGTGGTGCCGCCCTACATCTCTCAATGTGGTTCGAATAATTACATCAGAGCTCTATCGATCACTGGGAGATG
TCCTCCGTGATGTTGATGCCAAGGCTTTGGTGCGCTCTGACTTTCTTCTGGTGTATGGGGATGTCATCTCAAACA
TCAATATCACCAGAGCCCTTGAGGAACACAGGTTGAGACGGAAGCTAGAAAAAAATGTTTCTGTGATGACGATGA
TCTTCAAGGAGTCATCCCCCAGCCACCCAACTCGTTGCCACGAAGACAATGTGGTAGTGGCTGTGGATAGTACCA
CAAACAGGGTTCTCCATTTTCAGAAGACCCAGGGTCTCCGGCGTTTTGCATTTCCTCTGAGCCTGTTTCAGGGCA
GTAGTGATGGAGTGGAGGTTCGATATGATTTACTGGATTGTCATATCAGCATCTGTTCTCCTCAGGTGGCACAAC
TCTTTACAGACAACTTTGACTACCAAACTCGAGATGACTTTGTGCGAGGTCTCTTAGTGAATGAGGAGATCCTAG
GGAACCAGATCCACATGCACGTAACAGCTAAGGAATATGGTGCCCGTGTCTCCAACCTACACATGTACTCAGCTG
TCTGTGCTGACGTCATCCGCCGATGGGTCTACCCTCTCACCCCAGAGGCGAACTTCACTGACAGCACCACCCAGA
GCTGCACTCATTCCCGGCACAACATCTACCGAGGGCCTGAGGTCAGCCTGGGCCATGGCAGCATCCTAGAGGAAA
ATGTGCTCCTGGGCTCTGGCACTGTCATTGGCAGCAATTGCTTTATCACCAACAGTGTCATTGGCCCCGGCTGCC
ACATTGGTGATAACGTGGTGCTGGACCAGACCTACCTGTGGCAGGGTGTTCGAGTGGCGGCTGGAGCACAGATCC
ATCAGTCTCTGCTTTGTGACAATGCTGAGGTCAAGGAACGAGTGACACTGAAACCACGCTCTGTCCTCACTTCCC
AGGTGGTCGTGGGCCCAAATATCACGCTGCCTGAGGGCTCGGTGATCTCTTTGCACCCTCCAGATGCAGAGGAAG
ATGAAGATGATGGCGAGTTCAGTGATGATTCTGGGGCTGACCAAGAAAAGGACAAAGTGAAGATGAAAGGTTACA
ATCCAGCAGAAGTAGGAGCTGCTGGCAAGGGCTACCTCTGGAAAGCTGCAGGCATGAACATGGAGGAAGAGGAGG
AACTGCAGCAGAATCTGTGGGGACTCAAGATCAACATGGAAGAAGAGAGTGAAAGTGAAAGTGAGCAAAGTATGG
ATTCTGAGGAGCCGGACAGCCGGGGAGGCTCCCCTCAGATGGATGACATCAAAGTGTTCCAGAATGAAGTTTTAG
GAACACTACAGCGGGGCAAAGAGGAGAACATTTCTTGTGACAATCTCGTCCTGGAAATCAACTCTCTCAAGTATG
CCTATAACGTAAGTCTAAAGGAGGTGATGCAGGTACTGAGCCACGTGGTCCTGGAGTTCCCCCTGCAACAGATGG
ATTCCCCGCTTGACTCAAGCCGCTACTGTGCCCTGCTGCTTCCTCTGCTAAAGGCCTGGAGCCCTGTTTTTAGGA
ACTACATAAAGCGCGCAGCCGACCATTTGGAAGCGTTAGCAGCCATTGAGGACTTCTTCCTAGAGCATGAAGCTC
TTGGTATTTCCATGGCCAAGGTACTGATGGCTTTCTACCAGCTGGAGATCCTGGCTGAGGAAACAATTCTGAGCT
GGTTCAGCCAAAGAGATACAACTGACAAGGGCCAGCAGTTGCGCAAGAATCAACAGCTGCAGAGGTTCATCCAGT
GGCTAAAAGAGGCAGAAGAGGAGTCATCTGAAGATGACTGAAGTCACACTGCCTGCTCCTTTGGGTGTGATTGAG
TGCCCTCCTGGCTCCTGGGCTGGGACAAGTGAGGAACTAGCTGCAGAGGGATGAGTGACCACCATCCAGGCTGAG
ACTGAAAGGAGCAGAGGCTGGAACTACAGTATTCTTTCCCCTGCTAGCAACCATGTGCCTCCCATCCTGACTGTG
GAGTTGGGATGTGGAAGTGGGGCTGGAACAAAGCTTCTGCCTAGGGAGGAGCTAAGCAGGCCCGGCAGTTGGAGG
AAGGCCAGAGGAACAGCTTTGTGCTCCGGCTTTCCCTCAGGGAACAGCAGAGAGCAGTTGGCTCTTTCTGCTGCT
TGTATATGTTAATATTAAAAGAGAGTGGTGT

FIGURE 2958

GGAGCGTGGCGGCAAGATGGCTGTGCAAATTTCCAAGAAGAGGATGTTTGTCACTGATGACATCTTCAAAGCTGA
ACTGAATGAGTTTCTTACTCAGGAGCTGGCTGAAGATGGCTACTCTGGAGTTGAGATGCAAGTTACACCAACCAG
GACAGAAATCATTATCTTAGCCACCAGAACACAGAATATTCCTGGTGAGAAGGGCTGACGGATTCGGGAACTGAC
TGCTATAGTTCAGAAGAGGTTTGGCTTTCCAGAGGGCAGTGTAGAGCTTTATGCTGAAAAGGTTGCCACTAGAGG
TCTGTGTGCCATTGCCCAGGCAGAGTCTCTGCGTTACAAACTCCTAGGAGGGCTTGCTGTGTGGAGGGCCTGCTA
TGGTGTGCTGCGGTTCATC**ATG**GAGAGTGGGGCCAAAGGCTGCAAGGTCATGGCGTCTGGGAAACTCCGAGGACA
GAGGGCTAAATCCATGAAGTTTGTGGATGGCCTGACGATCCACAGTGGAGACCCTATTAACTACTACGTTGGCAC
TGCTGTGTGCCACGTGTTGCTCAGACAGGGTGTGCTGGGCATCAAGGTGAAGATCATGCTGCCCTGGGACCCAAC
TGGTAAGACTGGCCCTAAGAAGCCCCTGCCTGACCACGTGAGCATCGTGGAACCCAAAGATGAGATACTGCCCAC
CACCCCCATCTCAGAACAGAAGGGTGGGAAGCCAGAGCCATCTGCCATGCCCCAGCCAGTCCCTACAGCA**TAA**CA
GGGTCTCCTTAGCAGCTGTATTCTGGAGTCTGGATGTTGCTCTGTAAAGACCTTTAATAAAATCTCATACAAAGA
C

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FIGURE 2959

TCCGGTCTTGTCCACGCTAGGGGGTGCACGTACTCCCAACTGTGGTCGCGCTCTCACCCCTTCTGCTGCTCTCGT
GGCCCCCTCGCGATGGCGGGCATCCTGTTTGAGGATATTTTCGATGTGAAGGATATTGACCCGGAGGGCAAGAAG
TTTGACCGAGTGTCTCGACTGCATTGTGAGAGTGAATCTTTCAAGATGGATCTAATCTTAGATGTAAACATTCAA
ATTTACCCTGTAGACTTGGGTGACAAGTTTCGGTTGGTCATAGCTAGTACCTTGTATGAAGATGGTACCCTGGAT
GATGGTGAATACAACCCCACTGATGATAGGCCTTCCAGGGCTGACCAGTTTGAGTATGTAATGTATGGAAAAGTG
TACAGGATTGAGGGAGATGAAACTTCTACTGAAGCAGCAACACGCCTCTCTGCGTACGTGTCCTATGGGGGCCTG
CTCATGAGGCTGCAGGGGGATGCCAACAACCTGCATGGATTCGAGGTGGACTCCAGAGTTTATCTCCTGATGAAG
AAGCTAGCCTTCTGAACCTCGCCTGAAGCCAGCCTCTCTGCCAAGTCACTCAGGTCATGGGCATTGTTCAAGCCT
GAGTGGCAGCCGCTCTTGCTCACCTGTTGAGGAAGGGCTGGCTCACTGTCCACCGTGGCGGCATCTTTAACTGGC
CTCCACTCAATGGGAAACTGACTCGCCTGTGAAAGACACAGTGGGAGAGCTGAAAATGAATCAGAAGCTTTATGT
ATATGATTTTTAAATTAAACTTTACTTTTTCAGACTGCCCCTCCCCTTTTTGTAAAAAGTCCATTTACTGT

FIGURE 2960A

TTTATGTATTTATTTATTTGAGACGGAGTTTCGCTCTTGTTGCCCAGGCTGGAATGCAATGGTGCGATCTCGGCT
CACCGCAGCCTCTGCCTCTGGGGTTCAAGCGATTATCCTGCCTCAGCCTCCAGAGTAGCTGGGATTACAGGCATG
CGCTGCCACGCCCGGCTGATTTTGTATTTTTAGTAGAGGCGGGGTTTCACCATGTTGGCCAGGCTGGTCTCCAAC
TCCCGACCTCAGGTGATCCGCCTGCTTCGGCCTCCCAAAATGCTGGGATTACAGGCGTGAGCCACTGCGCCCGGC
CTGAGAAGGGGGGTTTTATTGGGCAGAGGAGATCAGCAGTGGATTCAAAGGAGGCTTGGAAGGAGGCAAGGGTGT
CACAGAGTGGGATCCTTCAGGGCCTGGGTATGATGCCTGCACTAACCTCACTGGACAGTAGCGTAGGCTAGACAA
GATTTTAGAGATGTGTTGTGACCAGCTGCACTCCAGGAAAACTGTTTACATTATATCTTACCTCATTCATCCAGC
CTTTGCATTTTTGTTTGCTTGTTTTTGAGACAGAGTCTTTTTCTGTCGCCCAGGCTGGAGTGCAGTGGCACAATC
TTGGCTCACTGCAATCTCCGCCTCCTGGGTTCAAGCAATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATAACA
GGCACCCGCCACCATGCCCTGCCCATTTTTTAAATTATTTTTAGTGGAGATGGGGTTTCACCATGTTGGCCTGGC
TGGTCTCAAACTCCTGACCTCAGATGATCTACCCACCTTGGCCCCTTGGCCTCCCAAAGTGCTGGAATTACAGGC
GTGAGCCACCACGCCTGGCCCAGCCTATGCATTTTTTTTTTTTTTTTTTTTTTTGAGATGGAGTCTTGCACCGT
AGCCTAAGCTGGAGTGCAGTGGTGCGATCTCGGCTCACCGCAACCTCCGCCTCCCGGGTCCTGGTTCAAGCAATT
TTCTTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGAACGTGCCACCATGCCCAGCTAATTTTTGTATTTTTAG
TAGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACTCGTGACCTCATGATCCGCTCACCTCGGCCTCC
CAAAGTGCTGGGATTACAGGCATGAGCCACTGACGCCTGGCCAGCCTATGCATTTTTAAGAAATTATTCTGTATT
AGGTGCTGTGCTAAACATTGGGCACTACAGTGACCAAAACAGACTGAATTCCCCAAGAGCCAAAGACCAGTGAGG
GAGACCAACAAGAAACAGGAAATGCAAAAGAGACCATTATTACTCACTATGACTAAGGGCCACAAATGGGGTACG
TTGATGGAGAGTGATTTGTTAAGAGACTACAGAGGGAGGACAGACTACCAAGAGGGGGGCCAGGAAAGCTCCTCT
GACGAGGTGGTATTTCAGCCCAAACTGGAAGAATGAGAAAGAGCTAGCCAGCCATCAGAATAGTCCAGAAGAGAT
GGGGAGCACTACACTCACTACACTTTGGCCTGAGAAAATAGCATGGGATTGGAGGAGGCTGGGGGAACACCACTT
CTGCCGACCTGGGCAGGAGGCATTGAGGGCTTGAGAAAGGGCAATGGCAGTAGCAGTAGAAAGAACAGGGTAGGA
GCAGGGACTTTGCAGGTAGAATCATTAGGTCTTATCAACAGATATGGGCAAGCAAAGCCAGGGGAGAATTGATGG
TAATGCTGAGGTTTGGAGCCAGGCTAGATGGGACAGTGGTGGGTGATGCAAAGGAAAGAGGTCAGGAAGCAGGGC
CAGACGTGGGGAGAAGGTGTGGGGGTTTGGTTTCCATCTTGCCGAGTCTGCCGGAATGTGGATGGGAAGACCAAG
AGGAGGAGCAAGGGGCAGAGGGGAAGGGAATCTTAAAGAAGTCCTGGATGCCACACTCTTCTTCCTTCCTCCTCT
TCCCTCTCCTCAGAGGTCTCACTCGTGGTTCTTCATTTCCTGCCCTGCCTCCATCTCCTCTGGGTGCTGGGAAAG
TGGAGGATTAGCTGAAGTTTTGCTTCTCGGGGCCTGTCTGAATCTCCATTGCTTTCTGGGAGGACATAATTCACC
TGTCCTAGCTTCTTATCATCTTACATTTCCCTGTAGCCACTGGGACATATGTGGTGTTCCTTCCTAGCTCCTGTC
TCCTCCTCATGCCTTTGCTGGGTATGGGCATGTTAGGGGGAAGGTCATTGCTGTCAGAGGGGCACTGACTTTCTA
ATGGTGTTACCCAAGGTGAATGTTGGAGACACAGTCGCGATGCTGCCCAAGTCCCGGCGAGCCCTAACTATCCAG
GAGATCGCTGCGCTGGCCAGGTCCTCCCTGCATGGTATGCAGCCCCTCCC**ATG**TTTCTGGCCACTTTGTCCTTTC
TCCTCCCGTTTGCACATCCCTTTGGAACTGTTTCCTGTGAGTACATGCTGGGGTCTCCCCTTTCTTCCCTTGCTC
AGGTGAATCTCAGCCCCTTCTCCCACCCAAAGGTTCACATGGATCCTAACTACTGCCACCCTTCCACCTCCCTGC
ACCTGTGCTCCCTGGCCTGGTCCTTTACCAGGCTTCTCCACCCTCCCCTATCTCCAGGTATTTCCCAGGTGGTGA
AGGACCACGTGACCAAGCCTACCGCCATGGCCCAGGGCCGAGTGGCTCACCTCATTGAGTGGAAGGGCTGGAGCA
AGCCGAGTGACTCACCTGCTGCCCTGGAATCAGCCTTTTCCTCCTATTCAGACCTCAGCGAGGGCGAACAAGAGG
CTCGCTTTGCAGCAGGTGGATGGCAGAAAGGGGATAAGCTACACTCTTGGCACAGGGCTGCTTTCTTTCTTTATT
TTATT**TAA**TTTTTTTTTGAGACGGAGTCTCACTCTGTCGCCCAGGCTGGAGTGCAGTGATGCAATCTCAGCTCAC
TGCAACCTCTGCCACCCCAGTTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGTTGCCTGC
CACCGTGCCTGGCTAATTTTTGTAGTTTTAGTAGAGATGGGGTTTCACCGTCTAGGCCAGGCTGGTCTTGAACTC
CTGACCTAGTGATCCACCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATAAGCCACCACACCCGGCCAGG
GCTGCTTTCTTATCTCCTCGGGTCTGACATGGGGGTTGGAGTCTTCCCATACCCTGTTTCTCCTCTCTCCTGTCT
TCAAGCTGAGCCCTAGACTTAGCTCACCTTCTCTGCTTATGCATTCTGTCCCTGCGACAGGAGTGGCTGAGCAGT
TTGCCATCGCGGAAGCCAAGCTCCGAGCATGGTCTTCGGTGGATGGCGAGGACTCCACTGATGACTCCTATGATG
AGGACTTTGCTGGGGGAATGGACACAGGTGAGGGACATCCTGGGCTAGGGCTGTGGTGGACCCACCTGATAGACC
TTGGCATTCTTTCAGAGCCACATCCAGAACACTCTCAGCCTTTGCAAGGGGAGGGAGAGGGACAGACTCAGTCCA
GGCAGGCCTGGACACTCCAGGGACAGGAAGGCTGTCCACACTCATGGGTGGGAAATGAGCAGACAGAAATGGATT

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FIGURE 2960B

CGTTCCTTTCCCACAGGTGCTGAGGCTTCTCTGCCTGTCTGCACAGTTGTGCCTTGCAGTCCTC

FIGURE 2961A

CAAGCGACACAAATGAACACGCCTTCTCAGCCCCGCCAGCACTTCTACCCTAGCCGGGCCCAGCCCCCGAGCAGT
GCAGCCTCCCGAGTGCAGAGTGCAGCCCCTGCCCGCCCTGGCCCAGCTGCCCATGTCTACCCTGCTGGATCCCAA
GTAATGATGATCCCTTCCCAGATCTCCTACCCAGCCTCCCAGGGGGCCTACTACATCCCTGGACAGGGGCGTTCC
ACATACGTTGTCCCGACACAGCAGTACCCTGTGCAGCCAGGAGCCCCAGGCTTCTATCCAGGTGCAAGCCCTACA
GAATTTGGGACCTACGCTGGCGCCTACTATCCAGCCCAAGGGGTGCAGCAGTTTCCCACTGGCGTGGCCCCCACC
CCAGTTTTGATGAACCAGCCACCCCAGATTGCTCCCAAGAGGGAGCGTAAGACGATCCGAATTCGAGATCCAAAC
CAAGGAGGAAAGGATATCACAGAGGAGATCATGTCTGGGGCCCGCACTGCCTCCACACCCACCCCTCCCCAGACG
GGAGGCGGTCTGGAGCCTCAAGCTAATGGGGAGACGCCCCAGGTTGCTGTCATTGTCCGGCCAGATGACCGGTCA
CAGGGAGCAATCATTGCTGACCGGCCAGGGCTGCCTGGCCCAGAGCATAGCCCTTCAGAATCCCAGCCTTCGTCG
CCTTCTCCGACCCCATCACCATCCCCAGTCTTGGAACCGGGGTCTGAGCCTAATCTCGCAGTCCTCTCTATTCCT
GGGGACACTATGACAACTATACAAATGTCTGTAGAAGAATCAACCCCCATCTCCCGTGAAACTGGGGAGCCATAT
CGCCTCTCTCCAGAACCCACTCCTCTCGCCGAACCCATACTGGAAGTAGAAGTGACACTTAGCAAACCGGTTCCA
GAATCTGAGTTTTCTTCCAGTCCTCTCCAGGCTCCCACCCCTTTGGCATCTCACACAGTGGAAATTCATGAGCCT
AATGGCATGGTCCCATCTGAAGATCTGGAACCAGAGGTGGAGTCAAGCCCAGAGCTTGCTCCTCCCCCAGCTTGC
CCCTCCGAATCCCCTGTGCCCATTGCTCCAACTGCCCAACCTGAGGAACTGCTCAACGGAGCCCCCTCGCCACCA
GCTGTGGACTTAAGCCCAGTCAGTGAGCCAGAGGAGCAGGCCAAGGAGGTGACAGCATCAATGGCGCCCCCCACC
ATCCCCTCTGCTACTCCAGCTACGGCTCCTTCAGCTACTTCCCCAGCTCAGGAGGAGGAAATGGAAGAAGAAGAA
GAAGAGGAAGAAGGAGAAGCAGGAGAAGCAGGAGAAGCTGAGAGTGAGAAAGGAGGAGAGGAACTGCTCCCCCCA
GAGAGTACCCCTATTCCAGCCAACTTGTCTCAGAATTTGGAGGCAGCAGCAGCCACTCAAGTGGCAGTATCTGTG
CCAAAGAGGAGACGGAAAATTAAGGAGCTAAATAAGAAGGAGGCTGTTGGAGACCTTCTGGATGCCTTCAAGGAG
GCGAACCCGGCAGTACCAGAGGTGGAAAATCAGCCTCCTGCAGGCAGCAATCCAGGCCCAGAGTCTGAGGGCAGT
GGTGTGCCCCCACGTCCTGAGGAAGCAGATGAGACCTGGGACTCAAAGGAAGACAAAATTCACAATGCTGAGAAC
ATCCAGCCCGGGGAACAGAAGTATGAATATAAGTCAGATCAGTGGAAGCCTCTAAACCTAGAGGAGAAAAAACGT
TACGACCGTGAGTTCCTGCTTGGTTTTCAGTTCATCTTTGCCAGTATGCAGAAGCCAGAGGGATTGCCACATATC
AGTGACGTGGTGCTGGACAAGGCCAATAAAACACCACTGCGGCCACTGGATCCCACTAGACTACAAGGCATAAAT
TGTGGCCCAGACTTCACTCCATCCTTTGCCAACCTTGGCCGGACAACCCTTAGCACCCGTGGGCCCCCAAGGGGT
GGGCCAGGTGGGGAGCTGCCCCGTGGGCCGGCTGGCCTGGGACCCCGGCGCTCTCAGCAGGGACCCCGAAAAGAA
CCACGCAAGATCATTGCCACAGTGTTAATGACCGAAGATATAAAACTGAACAAAGCAGAGAAAGCCTGGAAACCC
AGCAGCAAGCGGACGGCGGCTGATAAGGATCGAGGGGAAGAAGATGCTGATGGCAGCAAAACCCAGGACCTATTC
CGCAGGGTGCGCTCCATCCTGAATAAACTGACACCCCAGATGTTCCAGCAGCTGATGAAGCAAGTGACGCAGCTG
GCCATCGACACCGAGGAACGCCTCAAAGGGGTCATTGACCTCATTTTTGAGAAGGCCATTTCAGAGCCCAACTTC
TCTGTGGCCTATGCCAACATGTGCCGCTGCCTCATGGCGCTGAAAGTGCCCACTACGGAAAAGCCAACAGTGACT
GTGAACTTCCGAAAGCTGTTGTTGAATCGATGTCAGAAGGAGTTTGAGAAAGACAAAGATGATGATGAGGTTTTT
GAGAAGAAGCAAAAAGAGATGGATGAAGCTGCTACGGCAGAGGAACGAGGACGCCTGAAGGAAGAGCTGGAAGAG
GCTCGGGACATAGCCCGGCGGCGCTCTTTAGGGAATATCAAGTTTATTGGAGAGTTGTTCAAACTGAAGATGTTA
ACAGAGGCAATAATGCATGACTGTGTGGTCAAACTGCTTAAGAACCATGATGAAGAGTCCCTTGAGTGCCTTTGT
CGTCTGCTCACCACCATTGGCAAAGACCTGGACTTTGAAAAAGCCAAGCCCCGAATGGATCAGTATTTCAACCAG
ATGGAAAAAATCATTAAAGAAAAGAAGACGTCATCCCGCATCCGCTTTATGCTGCAGGACGTGCTGGATCTGCGA
GGGAGCAATTGGGTGCCACGCCGAGGGGATCAGGGTCCCAAGACCATTGACCAGATCCATAAGGAGGCTGAGATG
GAAGAACATCGAGAGCACATCAAAGTGCAGCAGCTCATGGCCAAGGGCAGTGACAAGCGTCGGGGCGGTCCTCCA
GGCCCTCCCATCAGCCGTGGACTTCCCCTTGTGGATGATGGTGGCTGGAACACAGTTCCCATCAGCAAAGGTAGC
CGCCCCATTGACACCTCACGACTCACCAAGATCACCAAGCCTGGCTCCATCGATTCTAACAACCAGCTCTTTGCA
CCTGGAGGGCGACTGAGCTGGGGCAAGGGCAGCAGCGGAGGCTCAGGAGCCAAGCCCTCAGACGCAGCATCAGAA
GCTGCTCGCCCAGCTACTAGTACTTTGAATCGCTTCTCAGCCCTTCAACAAGCGGTACCCACAGAAAGCACAGAT
AATAGACGTGTGGTGCAGAGGAGTAGCTTGAGCCGAGAACGAGGCGAGAAAGCTGGAGACCGAGGAGACCGCCTA
GAGCGGAGTGAACGGGGAGGGGACCGTGGGGACCGGCTTGATCGTGCGCGGACACCTGCTACCAAGCGGAGCTTC
AGCAAGGAAGTGGAGGAGCGGAGTAGAGAACGGCCCTCCCAGCCTGAGGGGCTGCGCAAGGCAGCTAGCCTCACG
GAGGATCGGGACCGTGGGCGGGATGCCGTGAAGCGAGAAGCTGCCCTACCCCCAGTGAGCCCCCTGAAGGCGGCT

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FIGURE 2961B

CTCTCTGAGGAGGAGTTAGAGAAGAAATCCAAGGCTATCATTGAGGAATATCTCCATCTCAATGACATGAAAGTA
GGCAGTCCAGTGCGTGCAGGAGCTGGCCTCACCCTCCTTGCTCTTCATCTTTGTACGGCATGGTGTCGAGTCTAC
GCTGGAGCGCAGTGCCATTGCTCGTGAGCATATGGGGCAGCTGCTGCACCAGCTGCTCTGTGCTGGGCATCTGTC
TACTGCTCAGTACTACCAAGGGTTGTATGAAATCTTGGAATTGGCTGAGGACATGGAAATTGACATCCCCCACGT
GTGGCTCTACCTAGCGGAACTGGTAACACCCATTCTGCAGGAAGGTGGGGTGCCCATGGGGGAGCTGTTCAGGGA
GATTACAAAGCCTCTGAGACCGTTGGGCAAAGCTGCTTCCCTGTTGCTGGAGATCCTGGGCCTCCTGTGCAAAAG
CATGGGTCCTAAAAAGGTGGGGACGCTGTGGCGAGAAGCCGGGCTTAGCTGGAAGGAATTTCTACCTGAAGGCCA
GGACATTGGTGCATTCGTCGCTGAACAGAAGGTGGAGTATACCCTGGGAGAGGAGTCGGAAGCCCCTGGCCAGAG
GGCACTCCCCTCCGAGGAGCTGAACAGGCAGCTGGAGAAGCTGCTGAAGGAGGGCAGCAGTAACCAGCGGGTGTT
CGACTGGATAGAGGCCAACCTGAGTGAGCAGCAGATAGTATCCAACACGTTAGTTCGAGCCCTCATGACGGCTGT
CTGCTATTCTGCAATTATTTTTGAGACTCCCCTCCGAGTGGACGTTGCAGTGCTGAAAGCGCGAGCGAAGCTGCT
GCAGAAATACCTGTGTGACGAGCAGAAGGAGCTACAGGCGCTCTACGCCCTCCAGGCCCTTGTAGTGACCTTAGA
ACAGCCTCCCAACCTGCTGCGGATGTTCTTTGACGCACTGTATGACGAGGACGTGGTGAAGGAGGATGCCTTCTA
CAGTTGGGAGAGTAGCAAGGACCCCGCTGAGCAGCAGGGCAAGGGTGTGGCCCTTAAATCTGTCACAGCCTTCTT
CAAGTGGCTCCGTGAAGCAGAGGAGGAGTCTGACCACAACTGAGGGCTGGTGGGGCCGGGGACCTGGAGCCCCAT
GGACACACAGATGGCCCGGCTAGCCGCCTGGACTGCAGGGGGGCGGCAGCAGCGGCGGTGGCAGTGGGTGCCTGT
AGTGTGATGTGTCTGAACTAATAAAGTGGCTGAAGAGGCAGGATGGCTTGGGGCTGCCTGGGCCCCCCTCCAGGA
TGCCGCCAGGTGTCCCTCTCCTCCCCCTGGGGCACAGAGATATATTATATATAAAGTCTTGAAATTTGGTGTGTC
TTGGGGTGGGGAGGGGCACCAACGCCTGCCCCTGGGGTCCTTTTTTTTATTTTCTGAAAATCACTCTCGGGACTG
CCGTCCTCGCTGCTGGGGGCATATGCCCCAGCCCCTGTACCACCCCTGCTGTTGCCTGGGCAGGGGGAAGGGGGG
GCACGGTGCCTGTAATTATTAAACAT

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FIGURE 2962A

GCCGCGGCCACCGGAAGAGTCGCGGTCGCCAGTCCAGTCGGGAGAGTGGGGAGCGGAAGCGGCGGCCGCGGCGGC
GGCGGGCGGCGCTGGGACCCGGTAGCGGCCGGAGAACAAGGGAGCTGGCGCCGCCAGCAGCCGCCGAGCTGGGTT
GAGCCGCTGGGCCGCGCCGCGCGCCGCCGCCGTCTGGGAGGCTCGGCCCGGCCGCCCGAGCAGGCCGCGCGCGGG
CCGCCGGGCCCGAGGCCAGAGCCATGGGCGAGACCAAGATCATCTACCACTTGGATGGGCAGGAGACGCCGTACC
TTGTGAAGCTGCCCCTGCCCGCCGAGCGCGTCACCTTGGCGGACTTTAAGGGCGTTTTGCAGCGACCCAGCTATA
AGTTCTTCTTCAAGTCTATGGACGACGATTTCGGAGTGGTGAAGGAGGAGATCTCGGATGACAATGCCAAGCTAC
CATGCTTCAATGGCCGGGTGGTGTCCTGGCTGGTGTCAGCTGAGGGCTCACACCCAGACCCAGCCCCCTTCTGTG
CTGATAACCCATCGGAGCTGCCACCACCTATGGAGCGCACGGGAGGCATCGGGGACTCCCGACCCCCATCTTCC
ACCCTCATGCTGGTGGGGGCAGCCAGGAGAACCTGGACAATGACACAGAGACGGACTCTTTGGTGTCTGCCCAGC
GAGAGCGGCCACGCCGGAGGGATGGCCCAGAGCATGCAACCCGGCTAAATGGAACTGCGAAGGGGGAACGGCGGC
GAGAACCAGGGGGTTATGATAGCTCATCCACCCTTATGAGCAGTGAGCTGGAGACCACCAGCTTCTTTGACTCAG
ATGAGGATGACTCCACCAGCAGGTTCAGCAGCTCCACAGAACAGAGCAGTGCCTCACGCCTGATGAGAAGACACA
AGCGGCGGCGGCGGAAGCAGAAGGTTTCTCGGATTGAGCGGTCCTCGTCCTTCAGCAGCATCACGGACTCCACCA
TGTCACTCAACATCATCACGGTCACTCTCAACATGGAAAAATATAACTTCTTGGGCATCTCCATTGTGGGCCAAA
GCAACGAGCGTGGTGACGGCGGCATCTACATTGGCTCTATCATGAAGGGTGGGGCCGTGGCTGCTGATGGACGCA
TCGAGCCAGGAGATATGTTGTTACAGGTAAACGAGATCAACTTTGAGAACATGAGTAATGACGATGCAGTCCGGG
TACTGCGGGAGATTGTGCACAAACCGGGGCCCATCACCCTGACTGTAGCCAAGTGCTGGGACCCAAGTCCACGTG
GTTGCTTCACATTGCCCAGGAGCGAGCCCATCCGGCCCATTGACCCTGCGGCCTGGGTCTCCCACACTGCAGCCA
TGACCGGCACCTTCCCTGCATACGGCATGAGCCCCTCCCTGAGCACCATCACCTCCACCAGCTCCTCCATCACCA
GTTCCATCCCTGACACAGAGCGCCTAGACGACTTCCACTTGTCCATCCACAGTGACATGGCTGCCATCGTAAAAG
CCATGGCCTCCCCTGAATCAGGGTTGGAGGTCCGTGACCGCATGTGGCTCAAGATTACCATCCCTAATGCTTTCA
TCGGCTCAGATGTGGTGGACTGGCTGTACCACAATGTGGAAGGCTTCACGGACCGGAGGGAGGCCCGCAAGTATG
CCAGCAACCTGCTGAAAGCTGGCTTCATCCGCCATACCGTCAACAAGATCACCTTCTCCGAGCAGTGCTACTACA
TCTTCGGTGACCTCTGCGGCAACATGGCCAACCTGTCTCTCCACGATCACGATGGCTCCAGTGGCGCCTCTGACC
AGGACACACTGGCCCCTTTGCCGCACCCGGGGGCCGCCCCTTGGCCCATGGCTTTCCCGTACCAGTACCCGCCAC
CCCCGCACCCATACAACCCGCACCCGGGCTTCCCGGAGCTGGGCTACAGCTACGGCGGGGGCAGCGCCAGCAGTC
AGCACAGCGAAGGCAGTCGGAGCAGTGGCTCCAACCGTAGCGGCAGCGATCGGAGGAAGGAGAAGGACCCGAAGG
CCGGGGACTCCAAGTCCGGGGGCAGCGGCAGCGAATCGGACCACACCACACGCAGCAGCCTGCGGGGGCCGCGGG
AGCGGGCGCCCAGCGAGCGCTCAGGGCCGGCGGCCAGCGAGCACAGCCACCGCAGCCACCATTCCCTGGCCAGCA
GCCTTCGCAGCCACCACACACACCCGAGCTACGGTCCTCCCGGAGTGCCCCCTCTCTACGGCCCCCCCATGCTGA
TGATGCCCCCGCCGCCCGCGGCCATGGGGCCCCCAGGAGCCCCTCCGGGCCGCGACCTGGCCTCAGTGCCCCCGG
AACTGACCGCCAGCAGACAGTCCTTCCGCATGGCCATGGGAAACCCCAGTGAGTTCTTTGTGGATGTGATGTGAG
CAGGGCCCCTCCCCCAGCTCCATTCCGCTCCCACCCCAGCCGGCTGCGTTCCTCTCTCCATCCGTCCGTCTTTTT
TACTTTGTCTGGTACCTGAAAGGGAAATAAAAGGAACTAAATCCAGGTGCGCTAACTGCTCGCAGGGTGCTGCGA
GGGTGGGGTGCACCTACCGATTGGCTCTGCAGCCCCCTAACCTGCCTCTGGCCCCAGTTCGTTTCCTCTGCCCAC
TAATCCCTGCGCAGGACTTCCCAGGACCCCTTTTGTCTCTGGGACCAGACTTGTTGGTGCTACCCCTTACTCCCC
TCTGCAACCCCCATTTTGGGAGTTGACCCCAGCAATGACCTTGGTGGCACGCTCACTCCCTCATTCTCTCGTTTC
CCCTTTAGCTCCCTTTCACCATTTATTCAGCTACATCATCCCTCTATTAACCCCACCCCATCAGGCACGTGTGCA
AACCTCTTGACTTTACCCCACATTACTGAAACCAAAATATATTTGCTTCATCTGCCCCTACTAACCATCCCCCTG
CCTGCTGCCTCAGTCCTGCAACCTAAAGCTGTAGTCGCCTCCAATAGCCATCCATGCCATCCCTGCCTGTGCCTA
GATCAGAGGCCCAGAGGGCCCCCTCAGTTGCCTGAGCAGCTGGTGGCTTCCAGGGAGCATCTCTGCTCTACCCCT
GCCCCATGCCTGCCCTGCGTGCTGGTTCCTTCAGACCCCTAACCCTACTAACCAGCAGGCTCATCTCACCTCCAG
GCCTGAAACATTTCTTTTCTTTCTTTTTTCCTCCCCCAATTTTCCCTGGGCCTGGAGCAGCCAAGAATTTCGGGC
TGTTTGACTTTCTGTGAGCCCCCAGCGAGGGGAGGCCCAGCCTCCGAGGAGACCAGGAACCCTGCTTCAGCAGCC
CCTCAGGGCTTCCCAAGGATGTCCAGCCCCCACACCCACACGTTAACATAATGAGTCACTAGGCTTCTGGGGAGG
GCCCAACTTCACCCATGCATGAGAGACTCTCCTCCTTTCCAGAGAGAATCGGATCGCACCACGTGTGGCAGCCTG
CGGCGGGGGGAGGGGGGCCTCTTTAGCTCTCTTTATCTTTCTCTCTCACTCATGTATGCATACATGCACAGAGAT
GCATACACAGGTGCCTATGCAAGTTCATTTAAGCCTCAGGGCTGGTCCCTGCCCAAAGGGCTGGACCCTCCTAAT

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FIGURE 2962B

CCTCTCCTAGGTTGTGGGGCTGGTCCCCTGACACCCTTCTCCCCTTCCTGGTAGACCTTAAACCTCGCACACATG
TCCCCAGCATTTTCTCACCTGGATAAAGCCCATAAGCTGGGTCTCAGGCTGGGCTCAGCAAAGGACTCGCCTTGC
AACCGACAGGCCATTCCCACCCCCACACACAACCTCCCCTGTTTTCACATTCACCATGGCATCCCAGAGCAAGGA
CACAGGAGCCCACAGGCCAGTTGAGGTTGGGCAAGGAGACTTCCAGGACTTCCAGACAGAGTACCAGGTTTTATT
TTTCACCTTATTCTCTACTTTAAACAAATCATAACTTTCTCTTTAAGCCTCTGCTATAAATTCTCCTGGCTCTCC
TGGGCTTCCATATTTTGGGGGCTGGGGTGTCAAAAGTGAGATGAAGTTCTTAGCTCCAGGTTTTGGGGTAAACCA
AGGTAGGAACATTTTGGCATTTATTTCAATTAACAATACTTCCTTGGACGGGTGCGGTGGCTCACGTCTGTAATC
CCAGCACTTTGGGAGGCTGAGACAGGTGGATCACTTGAGGTCGGGAGTTCGAGACCAGCCTGGCCAACATAGCAA
AACCCTGTCTCTACTAAAAATACAAAAATTAGATGGGTGTTTTGGCACCTGCCTGTAATCTCAGCTACTCAGGAG
GCTGAGGCACAAGAATCGCTTGAATCCAGGAAGCAAGCGGAGGTTGCAGTGAGTTGAGATCGCACTCCAGCCTGG
GTGACAGAGTGAGATTCTGTCTCAAAAGCAAACTAACAAAGAAAAACAATACTTCCTGGGGTTTTGGTGTGCAGA
GGGCTTTGTTGGAAGTGTGACTCAATCTTGCCTGCCTTCTGGGAGCTCTAGAATTGTTCCCAACCCAGTCCATGG
CTTCTAGCCACCACTACAGGGCTGTTTCATGTACTTCTCTCTCTGACTCTGTCTTGTCCGACTCTCTTGAGAATT
TCTCAACGATTGCTCATGCCTGTCAGTATCAGTGCTTCCATCGTTCCATCTTTGATTCACTTCTCTTTCCTTTCT
ATTTACTCCCAAAATGGAGTCATTCATCCTGATGTCCTCAATTGCTGCTGATATGCTGGTGATTCCCAAATACAT
AGCTCCAACCCCCAACTTCCCCCAGACTTTAGATCTGTATTGGTATTACCTACTGGACATCTCTATGGACAGTTC
CGTATAGACTCAACTCATCTGCCCAACCAAGTATGTTCCTCCTGAATTCCTCTCCTGGTTACTTCATCACAATCT
ACATAGGCTCACCAGCTAGAAACATTTATGAGCTTACATTCCTTCTTCCCATATCTTATCAGCATATCATATCCA
TTTCACTCCAACACTCTGTCTTGAATTTGGCCCTCCCTCTCCCCTCTCTACTTTAATTCATTGGAGCATGGGATT
TGGAGTTAGGTGGTTTTGGGTTTGAATTCCAGCTCTACTATTTTTGGTTGTGTGATAGAGTTATTTAACCTCTCT
GAGCCTCAGTTCCCTCGTATGTAAAATGATGATAATAATACCTACCTCACAGGGTTGTTGTGAGGATTTAAATTA
GATATTGTACGAAAAGTGCCTAGCACAGTGCCTGGCACACAGTAGAGTAGGTGCTCAATAAATGGTAGCTATTAT
TATT

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FIGURE 2963

CCGAGGCAGCGGGCAGACGAGCAGGGGGCGGGCGGACATCTTGGGATCCGGAGAGTGGCCGGGCCGGCAGAGCAG
GGGGCCGAGGACACCAGGTCTGTTCTCAGAGCGATGGGCCGCGGAGACTGATCTGCCGCCATGATTGGAGGCTTA
TTCATCTATAATCACAAGGGGGAGGTGCTCATCTCCCGAGTCTACCGAGATGACATCGGGAGGAACGCAGTGGAT
GCCTTTCGGGTCAATGTTATCCATGCCCGGCAGCAGGTGCGCAGCCCCGTCACCAACATTGCTCGCACCAGCTTC
TTCCACGTTAAGCGGTCCAACATTTGGCTGGCAGCAGTCACCAAGCAGAATGTCAACGCTGCCATGGTCTTCGAA
TTCCTCTATAAGATGTGTGACGTGATGGCTGCCTACTTTGGCAAGATCAGCGAGGAAAACATCAAGAACAATTTT
GTGCTCATATATGAGCTGCTGGATGAGATTCTAGACTTTGGCTACCCACAGAATTCCGAGACAGGCGCGCTGAAA
ACCTTCATCACGCAGCAGGGCATCAAGAGTCAGATGTAGACAAAAGAAGAGCAGTCACAGATCACCAGCCAGGTA
ACTGGGCAGATTGGCTGGCGGCGAGAGGGTATCAAGTATCGTCGGAATGAGCTCTTCCTGGATGTGCTGGAGAGT
GTGAACCTGCTCATGTCCCCACAAGGGCAGGTGCTGAGTGCCCATGTGTCGGGCCGGGTGGTGATGAAGAGCTAC
CTGAGTGGCATGCCTGAATGCAAGTTTGGGATGAATGACAAGATTGTTATTGAAAAGCAGGGCAAAGGCACAGCT
GATGAAACAAGCAAGAGCGGGAAGCAATCAATTGCCATTGATGACTGCACCTTCCACCAGTGTGTGCGACTCAGC
AAGTTTGACTCTGAACGCAGCATCAGCTTTATCCCGCCAGATGGAGAGTTTGAGCTTATGAGGTATCGCACAACC
AAGGACATCATCCTTCCCTTCCGGGTGATCCCGCTAGTGCGAGAAGTGGGACGCACCAAACTGGAGGTCAAGGTG
GTCATCAAGTCCAACTTTAAACCCTCACTGCTGGCTCAGAAGATCGAGGTGAGGATCCCAACCCCACTGAACACA
AGCGGGGTGCAGGTGATCTGCATGAAGGGGAAGGCCAAGTACAAGGCCAGCGAGAATGCCATCGTGTGGAAGATC
AAGCGCATGGCAGGCATGAAGGAATCGCAGATCAGCGCAGAGATTGAGCTTCTGCCTACCAACGACAAGAAGAAA
TGGGCTCGACCCCCCATTTCCATGAACTTTGAGGTGCCATTCGCGCCCTCTGGCCTCAAGGTGCGCTACTTGAAG
GTGTTTGAACCGAAGCTGAACTACAGCGACCATGATGTCATCAAATGGGTGCGCTACATTGGCCGCAGTGGCATT
TATGAAACTCGCTGCTAGCTGCCACTAGGCAGCTAGCCCACCTCCCCAGCCACCCTCCTCCACAGGTCCAGGTGC
CGCTCCCTCCCCCACCACACACTAGTGTCTCCTCCCTCCTGCTTTGCTGCCTTCCCTTTGCACCAGCCCGAGTCT
AGGTCTGGGCCAAGCACATTACAAGTGGGACCGGTGGAGCAGCCCCTGGGCTCCCTGGGCAGGGGAGTTCTGAGG
CTCCTGCTCTCCCATCCACCTGTCTGTCCTGGCCTAATGCCAGGCTCTGAGTTCTGTGACCAAAGCCAGGTGGGT
TCCCTTTCCTTCCCACCCCTGTGGCCACAGCTCTGGAGTGGGAGGGTTGGTTGCCCCTCACCTCAGAGCTCCCCC
AAAGGCCAGTAATGGATCCCCGGCCTCAGTCCCTACTCTGCTTTGGGATAGTGTGAGCTTCATTTTGTACACGTG
TGACTTCGTCCAGTTACAAACCCAATAAACTCTGTAGAGTGG

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FIGURE 2964

CTGGTGTCCCACGATGAGCGCTTTATCAGGCTGGTGTGCCGGGAGTTGTGGGTATGCGAAGGAGGCGGCGTCACC
CGTGTGGAAGGAGGACTCGCCCAGGACATGGACTGGTCTCTCAGACCCCTGGGCCACCATGTAGGCCACCACTCC
AGGCCGTGGACTTCCCCCAACTTGGGGACAGCCTTATTCCCAAATGTCTCTATCCTTTTGACTGGAGCATCTTCT
GCACAACCTTGGGAGCCCATCCAAGGGTTGGTGAGGACTGGTCTCCCGGGGGTGGGGGTCTGGGGGGTACCCTCT
GGGGTTATAGATTCCCCCACTGCCCCAGCTCTGACTGGACCCCAAGTGGCTGCTATGTAAATTAAATCTCTCCCC
GCGTC

FIGURE 2965

GGAAGGCTGGACCTGCAGGCTCCTCCTGGACAGTGAAACTGGGCACTTGGGGTCCAGAGGCAGGGCCTTCCTTGA
CAGAATTGTGTCCTCTCCTCTCAGAGCCCCATCAGCCACACCTGATGCTGGAGGGCGGCAGCCTGAGCTCAGCAG
AATATGAGGCCCGGGTGAGGGCCCGCCGAGATTTTCAGAGGCTACAGCGAAGGGACAGTGATGGGGACCGGCAGG
TGTGGTTCCTGCAGCGACGCTTCCACAAGGACATCCTGCTGAACCCCGTGCTGGCGCTGAGCTTCTGCCCAGACC
TGAGCTCCAAGCCCGGACACCTGGGGACAGCTACTCGGGAGCTACTCTTCCTTTTGGATAGCAGCAGCGTGGCAC
ACAAGGATGCCATTGTTTTGGCTGTGAAGTCCCTCCCGCCCCAGACGCTTATCAACCTGGCCGTGTTTGGGACGT
TGGTGCAGCCACTCTTCCCAGAGAGCCGGCCTTGCAGTGATGATGCTGTGCAGCTGATCTGCGAGAGCATTGAGA
CCCTGCAGGTTCCGAGTGGGCCCCCAGACGTGCTGGCTGCTCTGGACTGGGCCGTGGGGCAGCCCCAGCACAGGG
CCTACCCTCGGCAGCTGTTCCTGCTCACTGCTGCCTCACCCATGGCCGCCACTACCCACCGAACCCTGGAGCTCA
TGAGGTGGCACAGGGGGACAGCCAGATGCTTCTCCTTTGGGCTGGGGCCCACCTGCCACCAGCTGCTCCAGGGTT
TATCTGCCCTCAGCAGAGGCCAGGCCTACTTCCTGAGGCCTGGGCAGAGGCTGCAGCCCATGCTGGTACAGGCTC
TGCGGAAGGCACTGGAGCCTGCTTTGAGTGACATCTCTGTGGACTGGTTTGTGCCCGACACTGTGGAGGCACTGC
TGACCCCCCGGGAGATCCCAGCACTCTACCCTGGGGACCAGCTGCTCGGTTACTGCTCACTCTTCAGGGTGGATG
GCTTCCGGTCCCGCCCACCAGGGGGCCAAGAGCCTGGCTGGCAGAGCTCGGGTGGGTCCGTGTTTCCATCCCCAG
AAGAGGCCCCGTCTGCTGCCAGCCCTGGCACTGAGCCCACTGGCACCTCAGAGCCACTGGGAACAGGCACTGTCT
CAGCAGAACTGTCCAGCCCATGGGCTGCCAGGGACTCGGAGCAGAGTACTGATGCTCTGACAGACCCAGTCACGG
ATCCTGGACCCAACCCCTCTGACACAGCCATATGGCGCCGCATCTTTCAGTCCTCGTACATTCGGGAGCAGTATG
TGCTCACCCACTGCTCTGCCAGCCCCGAGCCAGGCCCAGGCTCCACAGGCAGCAGTGAGTCCCCAGGCTCACAGG
GCCCTGGCTCCCCCGAAGGTAGTGCTCCCTTGGAGCCCCCTTCTCAGCAGGGCTGCCGCAGTCTGGCCTGGGGAG
AACCTGCAGGCTCCCGCTCCTGTCCCCTGCCTGCACCCACACCAGCTCCATTCAAGGTGGGGGCCTTGAGTACTG
AGGTGCTGGGCCGTCAGCACAGAGCGGCTCTGGCTGGCCGAAGCCTCTCATCCCCTCCAGGCCGGGCAAACCAAG
TCCCCGGCCGACCCCGGAAACCCTCTTTGGGTGCAATACTAGATGGCCCAAGTCCTGAGCCAGGCCAACAGTTGG
GACAAGGCCTGGATGACTCAGGAAACCTGCTCTCCCCAGCCCCTATGGACTGGGACATGCTGATGGAACCACCCT
TCTTATTCACGGCTGTGCCTCCTAGTGGGGAGTTGGCCCCTCCAGCAGTGCCTCCCCAGGCTCCACGCTGCCATG
TGGTGATCCGGGGCCTGTGTGGGGAGCAGCCCATGTGCTGGGAGGTGGGTGTTGGGCTGGAGACACTGTGGGGAC
CTGGAGATGGCTCACAGCCTCCCTCACCTCCTGTAAGAGAAGCTGCTTGGGACCAAGCACTCCATCGGCTGACAG
CAGCCTCTGTGGTCCGGGACAATGAGCAGCTGGCCCTCCGAGGAGGGGCAGAGACCACAGCTGACCGGGGCCATG
CCCGGAGGTGCTGGCTTCGAGCCCTTCAGACAAGTAAGGTCAGCTCTGCCCCCTCCTGCTTCACTTGCCCTGTAG
CTGTGGATGCTACTACTAGGGAGGTCCTGCCTGGGGCCCTGCAGGTGTGCAGCTCAGAGCCCGCTGAGCCCCCAG
GAACCCCTCCTGCCTCTCACAGCCATCTAGATGCAGCTCCTCTGCCCACTGTTGTCTACTCTAAAGGACTTCAGA
GAGGCTCTCCAGCAGGCGCCTGGGACTCGGACCAAAATGGCAACTCCAAGCGTGCTTTGGGGGACCCTGCCACTC
CCACGGAAGGTCCTCGCCGCCCACCTCCCCGTCCTCCCTGTCGGCTCAGCATGGGCCGCCGTCACAAACTCTGTA
GCCCTGACCCGGGCCAGGCCAACAACAGTGAAGGCAGCGACCATGACTACCTGCCCTTGGTGCGGCTGCAGGAGG
CACCAGGCTCCTTCCGCCTGGACGCGCCCTTCTGCGCCGCTGTGCGCATCTCGCAGGAGCGCCTCTGCCGTGCCT
CGCCCTTTGCCGTGCACCGCGCCAGCCTCAGCCCCACCTCGGCCTCATTGCCCTGGGCACTTCTGGGCCCTGGTG
TTGGCCAGGGTGACAGTGCCACGGCCTCCTGCAGCCCGTCCCCCAGCTCGGGCTCTGAGGGGCCAGGCCAGGTGG
ACAGTGGGCGGGGCTCAGACACCGAGGCCTCCGAGGGGGCGGAAGGGCTGGGCGGCACCGACCTGCGGGGCCGGA
CCTGGGCCACTGCCGTAGCACTCGCCTGGCTGGAGCACCGATGCGCCGCTGCCTTCGACGAGTGGGAACTGACAG
CGGCCAAGGCTGATTGCTGGCTGCGGGCCCAGCACTTGCCTGACGGCCTTGACCTGGCCGCCCTCAAGGCCGCAG
CCCGAGGGCTCTTCCTGCTACTGCGCCACTGGGACCAAAACCTGCAGCTACACCTGCTGTGCTACAGCCCAGCGA
ACGTGTGAAGGCTGCCCCCTGCTGCTTGGGCTGGCGCCCCACCCAACACACTCAAGTCACTGCCGCCCAGGGCTG
GCCTCTTGGTGCTGGGAAAGTGTAGGCTGGTGCCAGCCTGTCCCCCACTGCTTCTTACTCCCTCCCTAGAGCCCT
CTTGCCCCCACAAAAAGTGCCTGCCTGTGCTCTCTCCCTCTCCTCCCACCCCACTCACACTCCCCTCCATCCTCT
GAGCTCCCTGCAACACAGTGGAAGGGTAGAGAGCCACAGTCCCCAAATCCTATGCAATAAAGTGCCTCTTAGG

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FIGURE 2966

GGTGGGCCCACACAAGCGGCGCACCGTTAAGATGGCGGCTGGGCTGCGGAAACGCGGCCGGTCCGGTTCCGCGGC
CCAGGCAGAGGGACTCTGCAAGCAATGGCTGCAGCGCGCCTGGCAAGAGCGGCGCCTGCTGCTGCGGGAGCCGCG
CTACACGCTGCTGGTGGCCGCCTGCCTCTGCCTGGCGGAGGTGGGCATCACCTTCTGGGTCATTCACAGGGTGGC
ATACACAGAGATTGACTGGAAGGCCTACATGGCCGAGGTAGAAGGCGTCATCAATGGTACCTATGACTATACCCA
ACTGCAGGGTGACACCGGACCACTTGTGTACCCAGCTGGTTTCGTGTACATCTTTATGGGGTTGTACTATGCCAC
CAGCCGAGGCACTGACATCCGCATGGCCCAGAACATCTTTGCTGTGCTCTACCTGGCTACCTTGCTGCTTGTCTT
CTTGATCTATCACCAGACCTGCAAGGTACCTCCCTTCGTCTTTTTCTTCATGTGCTGCGCCTCTTACCGTGTCCA
CTCCATCTTTGTGCTGCGGCTCTTCAATGACCCAGTGGCCATGGTGCTGCTCTTCCTCAGTATCAACCTCCTGCT
GGCCCAGCGCTGGGGCTGGGGTTGCTGCTTTTTCAGGTCAACACCTCTTCCTTTCTGGTCCCCTCTCGTTTTCTG
CATTTCCATCTCTTCCCAATTTCCTGCAGCAGAGGGAGTAAAGGAGTAGCCAAGACAGCATGGGTCACTCAGGGC
TCCACAAAGCGAGTCCAGGATCTATAGAAAGTTTCTGCCCTGCCATCCCCCAACATACACACATGCCCTCTTTCC
ATCCTGTCTTCCTCCCAGACAGCATTCCTTGTTGGAATTAGTCCTTCACATTCTAAATACTCAGTATATGCTCAT
TCGCATCTAGTAGGCATAGAGACTATGTATCTGCCTCCTGCCTACTCCAGGCTCTTCCCTCCAACAGTTGTGAGT
GTAGGTCCCATCTTGGAGTTTGTTGGCGTGGCGGCGGGGGGGAGGTTGCTGTGGTGATGGTGGGGGGTATGTCTT
TGGGTGTTGTGTGCATGGCCCTGGAGCTGATCTCCACCCTTCCTCTCCCCTGCTCACCCCAGCCTGGCAGTCTCT
GTGAAGATGAATGTGCTGCTCTTCGCCCCTGGGTTACTGTTTCTTCTCCTCACACAGTTTGGCTTCCGTGGGGCC
CTCCCCAAGCTGGGAATCTGTGCTGGCCTTCAGGTGGTGCTGGGGCTGCCCTTCCTGCTGGAGAACCCCAGCGGC
TACCTGTCCCGCTCCTTTGACCTTGGCCGCCAGTTTCTGTTCCACTGGACAGTGAACTGGCGCTTCCTCCCAGAG
GCGCTCTTCCTGCATCGAGCCTTCCACCTGGCCCTGTTGACTGCCCACCTCACCCTGCTCCTGCTGTTTGCCCTC
TGCAGGTGGCACAGGACAGGGGAAAGTATCTTGTCGCTGCTGAGGGATCCCTCCAAAAGGAAGGTTCCACCCCAG
CCCCTTACACCCAACCAGATCGTTTCTACCCTCTTCACCTCCAACTTCATTGGCATCTGCTTCAGCCGCTCCCTC
CACTACCAGTTCTACGTCTGGTATTTCCACACACTGCCCTACCTCCTGTGGGCCATGCCTGCACGCTGGCTCACA
CACCTGCTCAGGTTGTTGGTGCTGGGGCTCATCGAGCTCTCCTGGAACACATACCCTTCCACATCCTGCAGCTCT
GCTGCCCTGCACATATGCCATGCCGTCATCCTGCTGCAGCTCTGGCTGGGCCCGCAGCCTTTCCCCAAGAGCACC
CAACACAGCAAGAAAGCCCACTGAAGTCCACCCCTTTCCCTCAGGACCTGAGTCTACCCTCAGGACCTGGGGTTG
GTTGGACTCTGCCCTTCCAAATAAACCTTGCTAAGTCCAACTCTGTGCAACCTACATGGAGGTGGGGGCAGCCGA
TGCCTGGTCCAGGCTGTGAGGGACACGTATGGAGCAGATAAAGAATTCACTCAAGC

FIGURE 2967

CAGGTGGTGGGCGGAGACACCAGCGCCCCGCCTTCTGCATCCTGCCTTCCGTATTGGCTGAAGGGCCGGCGGCTC
TGGCTGCCCGGCGGTTGAGAGC**ATG**GCCTCTCCAGGGGCAGGTAGGGCGCCTCCGGAGTTACCGGAGCGGAACTG
CGGGTACCGCGAAGTCGAGTACTGGGATCAGCGCTACCAAGGCGCAGCCGATTCTGCCCCCTACGATTGGTTCGG
GGACTTCTCCTCCTTCCGTGCCCTCCTAGAGCCGGAGCTGCGGCCCGAGGACCGTATCCTTGTGCTAGGTTGCGG
GAACAGTGCCCTGAGCTACGAGCTGTTCCTCGGAGGCTTCCCTAATGTGACCAGTGTGGACTACTCATCAGTCGT
GGTGGCTGCCATGCAGGCTCGCCATGCCCATGTGCCGCAGCTGCGCTGGGAGACCATGGATGTGCGGAAGCTGGA
CTTCCCCAGTGCTTCTTTTGATGTGGTGCTCGAGAAGGGCACGCTGGATGCCCTGCTGGCTGGGGAACGAGATCC
CTGGACCGTGTCCTCTGAAGGTGTCCACACTGTGGACCAGGTGTTGAGTGAGGTGAGCCGCGTGCTTGTCCCTGG
AGGCCGGTTTATCTCAATGACTTCTGCTGCCCCCCACTTTCGGACCAGACACTATGCCCAAGCCTATTATGGCTG
GTCCCTGAGGCATGCTACCTATGGCAGCGGTTTCCACTTCCATCTCTACCTCATGCACAAGGGCGGGAAGCTCAG
TGTGGCCCAGCTGGCTCTGGGGGCCCAAATCCTCTCACCCCCCAGACCTCCCACCTCACCTTGCTTCCTTCAGGA
CTCAGATCATGAGGACTTCCTTAGTGCCATTCAGCTC**TGA**GGCCAGAGCATGGTCCTCCACCCTTCCTGCCATTC
TGCCCTGGGCTCCTCAGGTAGTTGGAATTCCTGACTTAGGACTTGGGGTTGGGTCCAAGGTGCTTACATCCCAGG
GGCCTCATGCCTAAGATAGAGGGTGGGAGCGAACCCACATGAACCAATACAGCCCAGCTCCAACTAGATCCAGAT
TCCAGGTTTCTTGCTTCTTTCTTGGGTTCCTCAGTTCTCTCCTGGGTTCCCCAACCTCCTCTGCCACCACACCAA
ACCACCAGTGATGCATCCCCTGGGGCAAAGCTCATCATAACCCCTCTGCACACCAGCCAGCCTGGAGACCGTTGT
TCCTGGGGCCTGTTACTGATCCTCATCTAGCCTTGATTTATCCACAGGAGACTGCAGGCTTTGAACCTAGATTGC
TTTATGT

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FIGURE 2968

GGGGCGCTGGGAGCCCGTTGGGCCGCGAACGCAGCCGCCACGCTGGGGCCGCCGAGATCGGGTGCCCGGGATGAG
CCTCATCCGGAAAAAGGGCTTCTACAAGCAGGACGTCAACAAGACAGCCTGGGAGCTGCCCAAGACCTACGTGTC
CCCGACGCACGTCGGCAGCGGGGCCTATGGCTCCGTGTGCTCGGCCATCGACAAGCGGTCAGGGGAGAAGGTGGC
CATCAAGAAGCTGAGCCGACCCTTTCAGTCCGAGATCTTCGCCAAGCGCGCCTACCGGGAGCTGCTGCTGCTGAA
GCACATGCAGCATGAGAACGTCATTGGGCTCCTGGATGTCTTCACCCCAGCCTCCTCCCTGCGCAACTTCTATGA
CTTCTACCTGGTGATGCCCTTCATGCAGACGGATCTGCAGAAGATCATGGGGATGGAGTTCAGTGAGGAGAAGAT
CCAGTACCTGGTGTATCAGATGCTCAAAGGCCTTAAGTACATCCACTCTGCTGGGGTCGTGCACAGGGACCTGAA
GCCAGGCAACCTGGCTGTGAATGAGGACTGTGAACTGAAGATTCTGGATTTTGGGCTGGCGCGACATGCAGACGC
CGAGATGACTGGCTACGTGGTGACCCGCTGGTACCGAGCCCCCGAGGTGATCCTCAGCTGGATGCACTACAACCA
GACAGTGGACATCTGGTCTGTGGGCTGTATCATGGCAGAGATGCTGACAGGGAAAACTCTGTTCAAGGGGAAAGA
TTACCTGGACCAGCTGACCCAGATCCTGAAAGTGACCGGGGTGCCTGGCACGGAGTTTGTGCAGAAGCTGAACGA
CAAAGCGGCCAAATCCTACATCCAGTCCCTGCCACAGACCCCCAGGAAGGATTTCACTCAGCTGTTCCCACGGGC
CAGCCCCCAGGCTGCGGACCTGCTGGAGAAGATGCTGGAGCTAGACGTGGACAAGCGCCTGACGGCCGCGCAGGC
CCTCACCCATCCCTTCTTTGAACCCTTCCGGGACCCTGAGGAAGAGACGGAGGCCCAGCAGCCGTTTGATGATTC
CTTAGAACACGAGAAACTCACAGTGGATGAATGGAAGCAGCACATCTACAAGGAGATTGTGAACTTCAGCCCCAT
TGCCCGGAAGGACTCACGGCGCCGGAGTGGCATGAAGCTGTAGGGACTCATCTTGCATGGCACCGCCGGCCAGAC
ACTGCCCAAGGACCAGTATTTGTCACTACCAAACTCAGCCCTTCTTGGAATACAGCCTTTCAAGCAGAGGACAGA
AGGGTCCTTCTCCTTATGTGGGAAATGGGCCTAGTAGATGCAGAATTCAAAGATGTCGGTTGGGAGAAACTAGCT
CTGATCCTAACAGGCCACGTTAAACTGCCCATCTGGAGAATCGCCTGCAGGTGGGGCCCTTTCCTTCCCGCCAGA
GTGGGGCTGAGTGGGCGCTGAGCCAGGCCGGGGGCCTATGGCAGTGATGCTGTGTTGGTTTCCTAGGGATGCTCT
AACGAATTACCACAAACCTGGTGGATTGAAACAGCAGAACTTGATTCCCTTACAGTTCTGGAGGCTGGAAATCTG
GGATGGAGGTGTTGGCAGGGCTGTGGTCCCTTTGAAGGCTCTGGGGAAGAATCCTTCCTTGGCTCTTTTTAGCTT
GTGGCGGCAGTGGGCAGTCCGTGGCATTCCCCAGCTTATTGCTGCATCACTCCAGTCTCTGTCTCTTCTGTTCTC
TCCTCTTTTAACAACAGTCATTGGATTTAGGGCCCACCCTAATCCTGTGTGATCTTATCTTGATCCTTATTAATT
AAACCTGCAAATACTCTAGTTCCAAATAAAGTCACATTCTCAGGT

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FIGURE 2969A

GGAACCGCGACCACTGGAGCCTTAGCGGGCGCAGCAGCTGGAACGGGAGTACTGCGACGCAGCCCGGAGTCGGCC
TTGTAGGGGCGAAGGTGCAGGGAGATCGCGGCGGGCGCAGTCTTGAGCGCCGGAGCGCGTCCCTGCCCTTAGCGG
GGCTTGCCCCAGTCGCAGGGGCACATCCAGCCGCTGCGGCTGACAGCAGCCGCGCGCGCGGGAGTCTGCGGGGTC
GCGGCAGCCGCACCTGCGCGGGCGACCAGCGCAAGGTCCCCGCCCGGCTGGGCGGGCAGCAAGGGCCGGGGAGAG
GGTGCGGGTGCAGGCGGGGGCCCCACAGGGCCACCTTCTTGCCCGGCGGCTGCCGCTGGAAAATGTCTCAGGAGA
GGCCCACGTTCTACCGGCAGGAGCTGAACAAGACAATCTGGGAGGTGCCCGAGCGTTACCAGAACCTGTCTCCAG
TGGGCTCTGGCGCCTATGGCTCTGTGTGTGCTGCTTTTGACACAAAAACGGGGTTACGTGTGGCAGTGAAGAAGC
TCTCCAGACCATTTCAGTCCATCATTCATGCGAAAAGAACCTACAGAGAACTGCGGTTACTTAAACATATGAAAC
ATGAAAATGTGATTGGTCTGTTGGACGTTTTTACACCTGCAAGGTCTCTGGAGGAATTCAATGATGTGTATCTGG
TGACCCATCTCATGGGGGCAGATCTGAACAACATTGTGAAATGTCAGAAGCTTACAGATGACCATGTTCAGTTCC
TTATCTACCAAATTCTCCGAGGTCTAAAGTATATACATTCAGCTGACATAATTCACAGGGACCTAAAACCTAGTA
ATCTAGCTGTGAATGAAGACTGTGAGCTGAAGATTCTGGATTTTGGACTGGCTCGGCACACAGATGATGAAATGA
CAGGCTACGTGGCCACTAGGTGGTACAGGGCTCCTGAGATCATGCTGAACTGGATGCATTACAACCAGACAGTTG
ATATTTGGTCAGTGGGATGCATAATGGCCGAGCTGTTGACTGGAAGAACATTGTTTCCTGGTACAGACCATATTA
ACCAGCTTCAGCAGATTATGCGTCTGACAGGAACACCCCCCGCTTATCTCATTAACAGGATGCCAAGCCATGAGG
CAAGAAACTATATTCAGTCTTTGACTCAGATGCCGAAGATGAACTTTGCGAATGTATTTATTGGTGCCAATCCCC
TGGCTGTCGACTTGCTGGAGAAGATGCTTGTATTGGACTCAGATAAGAGAATTACAGCGGCCCAAGCCCTTGCAC
ATGCCTACTTTGCTCAGTACCACGATCCTGATGATGAACCAGTGGCCGATCCTTATGATCAGTCCTTTGAAAGCA
GGGACCTCCTTATAGATGAGTGGAAAAGCCTGACCTATGATGAAGTCATCAGCTTTGTGCCACCACCCCTTGACC
AAGAAGAGATGGAGTCCTGAGCACCTGGTTTCTGTTCTGTTGATCCCACTTCACTGTGAGGGGAAGGCCTTTTCA
CGGGAACTCTCCAAATATTATTCAAGTGCCTCTTGTTGCAGAGATTTCCTCCATGGTGGAAGGGGGTGTGCGTGC
GTGTGCGTGCGTGTTAGTGTGTGTGCATGTGTGTGTCTGTCTTTGTGGGAGGGTAAGACAATATGAACAAACTAT
GATCACAGTGACTTTACAGGAGGTTGTGGATGCTCCAGGGCAGCCTCCACCTTGCTCTTCTTTCTGAGAGTTGGC
TCAGGCAGACAAGAGCTGCTGTCCTTTTAGGAATATGTTCAATGCAAAGTAAAAAAATATGAATTGTCCCCAATC
CCGGTCATGCTTTTGCCACTTTGGCTTCTCCTGTGACCCCACCTTGACGGTGGGGCGTAGACTTGACAACATCCC
ACAGTGGCACGGAGAGAAGGCCCATACCTTCTGGTTGCTTCAGACCTGACACCGTCCCTCAGTGATACGTACAGC
CAAAAAGGACCAACTGGCTTCTGTGCACTAGCCTGTGATTAACTTGCTTAGTATGGTTCTCAGATCTTGACAGTA
TATTTGAAACTGTAAATATGTTTGTGCCTTAAAAGGAGAGAAGAAAGTGTAGATAGTTAAAAGACTGCAGCTGCT
GAAGTTCTGAGCCGGGCAAGTCGAGAGGGCTGTTGGACAGCTGCTTGTGGGCCCGGAGTAATCAGGCAGCCTTCA
TAGGCGGTCATGTGTGCATGTGAGCACATGCGTATATGTGCGTCTCTCTTTCTCCCTCACCCCCAGGTGTTGCCA
TTTCTCTGCTTACCCTTCACCTTTGGTGCAGAGGTTTCTTGAATATCTGCCCCAGTAGTCAGAAGCAGGTTCTTG
ATGTCATGTACTTCCTGTGTACTCTTTATTTCTAGCAGAGTGAGGATGTGTTTTGCACGTCTTGCTATTTGAGCA
TGCACAGCTGCTTGTCCTGCTCTCTTCAGGAGGCCCTGGTGTCAGGCAGGTTTGCCAGTGAAGACTTCTTGGGTA
GTTTAGATCCCATGTCACCTCAGCTGATATTATGGCAAGTGATATCACCTCTCTTCAGCCCCTAGTGCTATTCTG
TGTTGAACACAATTGATACTTCAGGTGCTTTTGATGTGAAAATCATGAAAAGAGGAACAGGTGGATGTATAGCAT
TTTTATTCATGCCATCTGTTTTCAACCAACTATTTTTGAGGAATTATCATGGGAAAAGACCAGGGCTTTTCCCAG
GAATATCCCAAACTTCGGAAACAAGTTATTCTCTTCACTCCCAATAACTAATGCTAAGAAATGCTGAAAATCAAA
GTAAAAAATTAAAGCCCATAAGGCCAGAAACTCCTTTTGCTGTCTTTCTCTAAATATGATTACTTTAAAATAAAA
AAGTAACAAGGTGTCTTTTCCACTCCTATGGAAAAGGGTCTTCTTGGCAGCTTAACATTGACTTCTTGGTTTGGG
GAGAAATAAATTTTGTTTCAGAATTTTGTATATTGTAGGAATCCTTTGAGAATGTGATTCCTTTTGATGGGGAGA
AAGGGCAAATTATTTTAATATTTTGTATTTTCAACTTTATAAAGATAAAATATCCTCAGGGGTGGAGAAGTGTCG
TTTTCATAACTTGCTGAATTTCAGGCATTTTGTTCTACATGAGGACTCATATATTTAAGCCTTTTGTGTAATAAG
AAAGTATAAAGTCACTTCCAGTGTTGGCTGTGTGACAGAATCTTGTATTTGGGCCAAGGTGTTTCCATTTCTCAA
TCAGTGCAGTGATACATGTACTCCAGAGGGACAGGGTGGACCCCCTGAGTCAACTGGAGCAAGAAGGAAGGAGGC
AGACTGATGGCGATTCCCTCTCACCCGGGACTCTCCCCCTTTCAAGGAAAGTGAACCTTTAAAGTAAAGGCCTCA
TCTCCTTTATTGCAGTTCAAATCCTCACCATCCACAGCAAGATGAATTTTATCAGCCATGTTTGGTTGTAAATGC
TCGTGTGATTTCCTACAGAAATACTGCTCTGAATATTTTGTAATAAAGGTCTTTGCACATGTGACCACATACGTG
TTAGGAGGCTGCATGCTCTGGAAGCCTGGACTCTAAGCTGGAGCTCTTGGAAGAGCTCTTCGGTTTCTGAGCATA

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FIGURE 2969B

ATGCTCCCATCTCCTGATTTCTCTGAACAGAAAACAAAAGAGAGAATGAGGGAAATTGCTATTTTATTTGTATTC
ATGAACTTGGCTGTAATCAGTTATGCCGTATAGGATGTCAGACAATACCACTGGTTAAAATAAAGCCTATTTTTC
AAATTT

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FIGURE 2970A

GGTCTCACCATGGAGCGGAAAGTGCTTGCGCTCCAGGCCCGAAAGAAAAGGACCAAGGCCAAGAAGGACAAAGCC
CAAAGGAAATCTGAAACTCAGCACCGAGGCTCTGCTCCCCACTCTGAGAGTGATCTACCAGAGCAGGAAGAGGAG
ATTCTGGGATCTGATGATGATGAGCAAGAAGATCCTAATGATTATTGTAAAGGAGGTTATCATCTTGTGAAAATT
GGAGATCTATTCAATGGGAGATACCATGTGATCCGAAAGTTAGGCTGGGGACACTTTTCAACAGTATGGTTATCA
TGGGATATTCAGGGGAAGAAATTTGTGGCAATGAAAGTAGTTAAAAGTGCTGAACATTACACTGAAACAGCACTA
GATGAAATCCGGTTGCTGAAGTCAGTTCGCAATTCAGACCCTAATGATCCAAATAGAGAAATGGTTGTTCAACTA
CTAGATGACTTTAAAATATCAGGAGTTAATGGAACACATATCTGCATGGTATTTGAAGTTTTGGGGCATCATCTG
CTCAAGTGGATCATCAAATCCAATTATCAGGGGCTTCCACTGCCTTGTGTCAAAAAAATTATTCAGCAAGTGTTA
CAGGGTCTTGATTATTTACATACCAAGTGCCGTATCATCCACACTGACATTAAACCAGAGAACATCTTATTGTCA
GTGAATGAGCAGTACATTCGGAGGCTGGCTGCAGAAGCAACAGAATGGCAGCGATCTGGAGCTCCTCCGCCTTCC
GGATCTGCAGTCAGTACTGCTCCCCAGCCTAAACCAGCTGACAAAATGTCAAAGAATAAGAAGAAGAAATTGAAG
AAGAAGCAGAAGCGCCAGGCAGAATTACTAGAGAAGCGAATGCAGGAAATTGAGGAAATGGAGAAAGAGTCGGGC
CCTGGGCAAAAAAGACCAAACAAGCAAGAAGAATCAGAGAGTCCTGTTGAAAGACCCTTGAAAGAGAACCCACCT
AATAAAATGACCCAAGAAAAACTTGAAGAGTCAAGTACCATTGGCCAGGATCAAACGCTTATGGAACGTGATACA
GAGGGTGGTGCAGCAGAAATTAATTGCAATGGAGTGATTGAAGTCATTAATTATACTCAGAACAGTAATAATGAA
ACATTGAGACATAAAGAGGATCTACATAATGCTAATGACTGTGATGTCCAAAATTTGAATCAGGAATCTAGTTTC
CTAAGCTCCCAAAATGGAGACAGCAGCACATCTCAAGAAACAGACTCTTGTACACCTATAACATCTGAGGTGTCA
GACACCATGGTGTGCCAGTCTTCCTCAACTGTAGGTCAGTCATTCAGTGAACAACACATTAGCCAACTTCAAGAA
AGCATTCGGGCAGAGATACCCTGTGAAGATGAACAAGAGCAAGAACATAACGGACCACTGGACAACAAAGGAAAA
TCCACGGCTGGAAATTTTCTTGTTAATCCCCTTGAGCCAAAAAATGCAGAAAAGCTCAAGGTGAAGATTGCTGAC
CTTGGAAATGCTTGTTGGCACAAACATTTCACTGAAGATATTCAAACAAGGCAATATCGTTCCTTGGAAGTTCTA
ATCGGATCTGGCTATAATACCCCTGCTGACATTTGGAGCACGGCATGCATGGCCTTTGAACTGGCCACAGGTGAC
TATTTGTTTGAACCTCATTCAGGGGAAGAGTACACTCGAGATGAAGATCACATTGCATTGATCATAGAACTTCTG
GGGAAGGTGCCTCGCAAGCTCATTGTGGCAGGAAAATATTCCAAGGAATTTTTCACCAAAAAAGGTGACCTGAAA
CATATCACGAAGCTGAAACCTTGGGGCCTTTTTGAGGTTCTAGTGGAGAAGTATGAGTGGTCGCAGGAAGAGGCA
GCTGGCTTCACAGATTTCTTACTGCCCATGTTGGAGCTGATCCCTGAGAAGAGAGCCACTGCCGCCGAGTGTCTC
CGGCACCCTTGGCTTAACTCCTAAGCCCCTGCCCAGCACCACAGCAGAGATCACACACTGACCCTCCGCCCTTCC
CCTTCAAGCATTTTCCTCTTCCCTTTTCAGGGTGAAGCTCTTCCTTCAAGAGTTTCTAGATCTTGTTTTTTTTTT
AATCCAACATGTTCATTTGGGTTTGCTTACTTGACCCTGTGGAGATCCCCACAGCCATTGGGCATCCTAGGTGAA
TTTGGCCTTGGTTGGGCTCTGCCAAAGACTAATGGACTAAAATGTGAAACAGCCTCTTGCCCTGTACCTTTCCTT
CCCATTAGGACATCCTTTAAATTATAAGCATCCTTTTTGAAAAGAGCTATGAAGGTGTATGAGCCCATCCTTTTA
TTCATTGACTCTAAGAGTCAAATTTTCTAGTGCATATCCTATTGCCAGCATAAGGATGAGGAGGGGGAAAGGGTC
TTAATTCTATGTACAGCAGAGACATTAAACTTGCTGTGTCCGGGCTGCATCATCTTCCTGGACTGTTTCTGTTGT
TCTCTGTGTTCACATTTTTTCCTGCAACTTTTAAGCTACTGTCTTTTTTAAATAGCTATATGAACACCAAATTTG
GGTACCATTTTATCACTGTTCAAAGCACTGTCAAATTCCTTTCATCCTTTAATAGTTAAGATCTTTGAATCTTCA
GTCTGATTTTTAATGTAAGCAAAAACAGAACCATTGAATAGTAATTTCTTGAGAACCTCAGGTGTTCTATAAACA
GTCCTTTCCTGTATGTCTTCTATTACCCTAAGACCAGAGTTATTTTGGTTGGTTGTTTTGTTTTATTTTTTGTTT
TTGTATCCATGGCTGGCACTTTACTCATTGCACTTGAGTTTATTGCCCCATAACTAAAGGATCAGGATGATGGTA
GAACGGAGATCTGGGTTTCAGAGCTTTCCCATTTAAGAAAAATAGATCTTGAGATTCTGATTCTTTTCCAAACAG
TCCCCTGCTTTCATGTACAGCTTTTTCTTTACCTTACCCAAAATTCTGGCCTTGAAGCAGTTTTCCTCTATGGCT
TTGCCTTTCTGATTTTCTCAGAGGCTCGAGTCTTTAATATAACCCCAAATGAAAGAACCAAGGGGAGGGGTGGGA
TGGCACTTTTTTTTGTTGGTCTTGTTTTGTTTTGTTTTTTGGTTGGTTGGTTCGTTATTTTTTAAGATTAGCCAT
TCTCTGCTGCTATTTCCCTACATAATGTCAATTTTTAACCATAATTTTGACATGATTGAGATGTACTTGAGGCTT
TTTTGTTTTAATTGAGAAAAGACTTTGCAATTTTTTTTTTAGGATGAGCCTCTCCTAGACTTGACCTAGAATATT
ACATATTCCTCCAGTAAGTAATACTGAAGAGCAAAAGAGAGGCAGGATTGGGGTCACAGCCGCTTCTTCAGCATG
GACCAAGTGGGCCTTGGGGATTGCAGCGTTCTCGAAGTGGCTGTAGGACTCGAATTTACAGAAAGCCACAGAGGT
GCAACTTGAGGCTCTGCTAGCAAGCCACCAGTGAGGCTATTGGGTAACCACCTTTCTATACAGGAGATTGGAATC
TACTTTGTCATTTATCCACCACAGTGACAAAGGAAAAGTGGTGCCGTTATGCAATCCATTTAACTCATAAACATA

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FIGURE 2970B

TTACTCTGAGTAACTGGCCAGCCATTCATCGGATCCTTCATTGGGTACTCCTGAAATCAGACATGTTCCTGTAGA
AAGAATTTTAAGTTAGGCTTTCTATGCACCTATCAAGAATCAAGAGAATAGATTGTATCAAACAACGGCAGGGAA
ATCCTTCAGCAATTCTAATCCACTTTGGGTTTTCAGCTGTTTTTACATCTAAAGCAATAGACTAGAACTGAATTA
TCTTCTACATAGTAAAATCACAATTGTGGAATTACAGGAATTCTGGTGATATTAAGGTGAAATAACAAAACACAA
AAGGCCCTATTTTAACAGTTGATGTGACAGTAAGTTTTAATAGAACCTGTAACTTCATTTTGGAAATGCTTCTCC
ACCAAATAAGGGCTTTTTCCCCTATTTAAGGAGCCAGATGGATTGAAAGATGTGGAAATAGGCAGCTGTAGATCT
TGATCTTCCAGGTACCCCATGTACCTTTATTGAGCTTAATTATAATACTGTCAAATTGCCACGATCTCACTAAAG
GATTTCTATTTGCTGTCAGTTAAAAATAAAGCCCTAAATACATTTTTATTCTTTCTACTGAGGGCATTGTCTGTT
TTCTTTGTAAATGCCGTACAATAAACAAATTATTTAATAACCTA

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FIGURE 2971A

GGGCCGGCTCGCGGGCGCTGCCAGTCTCGGGCGGCGGTGTCCGGCGCGCGGGCGGCCTGCTGGGCGGGCTGAAGG
GTTAGCGGAGCACGGGCAAGGCGGAGAGTGACGGAGTCGGCGAGCCCCCGCGGCGACAGGTTCTCTACTTAAAAG
ACA**ATG**ACTACTGATGAAGGTGCCAAGAACAATGAAGAAAGCCCCACAGCCACTGTTGCTGAGCAGGGAGAGGAT
ATTACCTCCAAAAAAGACAGGGGAGTATTAAAGATTGTCAAAAGAGTGGGGAATGGTGAGGAAACGCCGATGATT
GGAGACAAAGTTTATGTCCATTACAAAGGAAAATTGTCAAATGGAAAGAAGTTTGATTCCAGTCATGATAGAAAT
GAACCATTTGTCTTTAGTCTTGGCAAAGGCCAAGTCATCAAGGCATGGGACATTGGGGTGGCTACCATGAAGAAA
GGAGAGATATGCCATTTACTGTGCAAACCAGAATATGCATATGGCTCGGCTGGCAGTCTCCCTAAAATTCCCTCG
AATGCAACTCTCTTTTTTGAGATTGAGCTCCTTGATTTCAAAGGAGAGGATTTATTTGAAGATGGAGGCATTATC
CGGAGAACCAAACGGAAAGGAGAGGGATATTCAAATCCAAACGAAGGAGCAACAGTAGAAATCCACCTGGAAGGC
CGCTGTGGTGGAAGGATGTTTGACTGCAGAGATGTGGCATTCACTGTGGGCGAAGGAGAAGACCACGACATTCCA
ATTGGAATTGACAAAGCTCTGGAGAAAATGCAGCGGGAAGAACAATGTATTTTATATCTTGGACCAAGATATGGT
TTTGGAGAGGCAGGGAAGCCTAAATTTGGCATTGAACCTAATGCTGAGCTTATATATGAAGTTACACTTAAGAGC
TTCGAAAAGGCCAAAGAATCCTGGGAGATGGATACCAAAGAAAAATTGGAGCAGGCTGCCATTGTCAAAGAGAAG
GGAACCGTATACTTCAAGGGAGGCAAATACATGCAGGCGGTGATTCAGTATGGGAAGATAGTGTCCTGGTTAGAG
ATGGAATATGGTTTATCAGAAAAGGAATCGAAAGCTTCTGAATCATTTCTCCTTGCTGCCTTTCTGAACCTGGCC
ATGTGCTACCTGAAGCTTAGAGAATACACCAAAGCTGTTGAATGCTGTGACAAGGCCCTTGGACTGGACAGTGCC
AATGAGAAAGGCTTGTATAGGAGGGGTGAAGCCCAGCTGCTCATGAACGAGTTTGAGTCAGCCAAGGGTGACTTT
GAGAAAGTGCTGGAAGTAAACCCCCAGAATAAGGCTGCAAGACTGCAGATCTCCATGTGCCAGAAAAAGGCCAAG
GAGCACAACGAGCGGGACCGCAGGATATACGCCAACATGTTCAAGAAGTTTGCAGAGCAGGATGCCAAGGAAGAG
GCCAATAAAGCAATGGGCAAGAAGACTTCAGAAGGGGTCACTAATGAAAAAGGAACAGACAGTCAAGCAATGGAA
GAAGAGAAACCTGAGGGCCACGTA**TGA**CGCCACGCCAAGGAGGGAAGAGTCCCAGTGAACTCGGCCCCTCCTCAA
TGGGCTTTCCCCCAACTCAGGACAGAACAGTGTTTAATGTAAAGTTTGTTATAGTCTATGTGATTCTGGAAGCAA
ATGGCAAAACCAGTAGCTTCCCAAAAACAGCCCCCCTGCTGCTGCCCGGAGGGTTCACTGAGGGGTGGCACGGGA
CCACTCCAGGTGGAACAAACAGAAATGACTGTGGTGTGGAGGGAGTGAGCCAGCAGCTTAAGTCCAGCTCATTTC
AGTTTCTATCAACCTTCAAGTATCCAATTCAGGGTCCCTGGAGATCATCCTAACAATGTGGGGCTGTTAGGTTTT
ACCTTTGAACTTTCATAGCACTGCAGAAACCTTTAAAAAAAAAATGCTTCATGAATTTCTCCTTTCCTACAGTTG
GGTAGGGTAGGGGAAGGAGGATAAGCTTTTGTTTTTTAAATGACTGAAGTGCTATAAATGTAGTCTGTTGCATTT
TTAACCAACAGAACCCACAGTAGAGGGGTCTCATGTCTCCCCAGTTCCACAGCAGTGTCACAGACGTGAAAGCCA
GAACCTCAGAGGCCACTTGCTTGCTGACTTAGCCTCCTCCCAAAGTCCCCCTCCTCAGCCAGCCTCCTTGTGAGA
GTGGCTTTCTACCACACACAGCCTGTCCCTGGGGGAGTAATTCTGTCATTCCTAAAACACCCTTCAGCAATGATA
ATGAGCAGATGAGAGTTTCTGGATTAGCTTTTCCTATTTTCGATGAAGTTCTGAGATACTGAAATGTGAAAAGAG
CAATCAGAATTGTGCTTTTTCTCCCCTCCTCTATTCCTTTTAGGGAATAATATTCAATACACAGTACTTCCTCCC
AGCATTGCTACTGCTCAGCTTCTTCTTTCATTCTAATCCTTGCTATTAAGAATTTAAGACTTGTGCTTACAATAT
TTTTGACCTGGAGTGGATCTATTTACATAGTCATTTAGGATCCATGCAGCTTTTTTTGTCTTTTTAAGATTATTG
GCTCATAAGCATATGTATACTGGTTTATGGAACTTTATTTACACTCCTCTATCATGCAAAAAAATTTTGACTTTT
TAGTACTAAGCTTAATTTTTAAAAACAAAATCTGTAGGGTTGACAAATAAATAGTTGCTCTTCTACACTAGGGGT
TTCACCTGCAGGTTTGACACGCAGTTGCTCGCTTTTCCTGCCCTGTCAAGCTTCTCTGTTCTGGCGTGAGTTGTG
AAAGAGTTGAAGACAGCTTCCCATGCCGGTACACAGCCAGTAGCCTAAATCTCCAGTACTTGAGCTGACCATTGA
ACTAGGGCAAGTCTTAAATGTGTACATGTAGTTGAATTTCAGTCCTTACGGGTAAACAGATTGAGCATGGCTCTC
TATTCCCTCAGCCTAAGAAACACTCATGGGAATGCATTTGGCAACCCAAGGAACCATTTGCTTAAACCTGGAACA
TCTCACCTTTTTAAATCCTAAAAAACACTGGCAGTTATATTTTAAATTAGTTTTTATTTTTATGATGGTTTTATC
AAAAGACTTTTATTATTAGATTGGGACCCCCTTCAAACCTAAAAATCAAGTTATTTCCTTTTATAATACTTTTCT
TCCCCATGGAACAAATGGGATCAATTTGTGAGTTTTTTCCTTTAATGATAACTAAAATCCCTCTAATTTCTCATT
TATGCTTTTGTCTTTTTTATGAAATATTTCTTTTAAAAGCCCCAGTCTCACCTACGAAATATGAAGAGCAAAAGC
TGATTTTGCTTACTTGCTAAACTGTTGGGAAAGCTCTGTAGAGCATGGTTCCAGTGAGGCCAAGATTGAAATTTG
ATACTAAAAAGGCCACCTAGCTTTTTGCAGATAACAAACAAGAAAGCTATTCCAAGACTCAGATGATGCCAGCTG
TCTCCCACGTGTGTATTATGGTTCACCAGGGGGAACTGGCAAAAGTGTGTGTGGGGAGGGGAAGGGTGTGTGAGT
GGTTCTGAGCAAATAACTACAGGGTGCCCATTACCACTCAAGAAGACACTTCACGTATTCTTGTATCAAATTCAA

FIGURE 2971B

TAATCTTAAACAATTTGTGTAGAAGTCCACAGACATCTTTCAACCACCTTTTAGGCTGCATATGGATTGCCAAGT
CAGCATATGAGGAATTAAAGACATTGTTTTTAAAAAAAAAAAAATCATTTAGATGCACTTTTTTGTGTGTTCTTTA
AATAAATCCAAAAAAAATGTG

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FIGURE 2972

CGCCACCATGGTGTGCGTGAACGTCCTGGCCGATGCTCTCAAGAGCATCAACAATGCCGAAAAGAGAGGCAAACG
CCCAGTGCTTATTAGGCCGTGCTCCAAACTCATCGTCCGGTTTCTCACTGTGATGATGAAGCATGGTTACATTGG
CGAATTTGAAATCATTGATGATCGCAGAGCTGGGAAAATTGTTGCGAACCTCACAGGCAGGCTAAACAAGTGTGG
AGTGATCAGCCCCAGATTCGGTGTGCAACTCAAAGATCTAGAAAATGGCAGAATAATCTGCTTCCATCCCACCAG
TTTGGTTTCATTGTACTGACAACCTCAGCTGGCATCATGGACCATGAAGAAGCAAGACGAAAACACACAGGAGGG
AAAATCCTGGGATTCTTTTTCTAGGGATGTAATACATATATTTACAAATAAAATGTCTCATGGAAAAAAAAGAAA
AAAGACAGGAAAAAAAAAAAAAAAAAAAAAAAT

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FIGURE 2973

GCGGCGTGAGAAGCCATGAGCAGCAAAGTCTCTCGCGACACCCTGTACGAGGCGGTGCGGGAAGTCCTGCACGGG
AACCAGCGCAAGCGCCGCAAGTTCCTGGAGACGGTGGAGTTGCAGATCAGCTTGAAGAACTATGATCCCCAGAAG
GACAAGCGCTTCTCGGGCACCGTCAGGCTTAAGTCCACTCCCCGCCCTAAGTTCTCTGTGTGTGTCCTGGGGGAC
CAGCAGCACTGTGACGAGGCTAAGGCCGTGGATATCCCCCACATGGACATCGAGGCGCTGAAAAAACTCAACAAG
AATAAAAAAACTGGTCAAGAAGCTGGCCAAGAAGTATGATGCGTTTTTGGCCTCAGAGTCTCTGATCAAGCAGATT
CCACGAATCCTCGGCCCAGGTTTAAATAAGGCAGGAAAGTTCCCTTCCCTGCTCACACACAACGAAAACATGGTG
GCCAAAGTGGATGAGGTGAAGTCCACAATCAAGTTCCAAATGAAGAAGGTGTTATGTCTGGCTGTAGCTGTTGGT
CACGTGAAGATGACAGACGATGAGCTTGTGTATAACATTCACCTGGCTGTCAACTTCTTGGTGTCATTGCTCAAG
AAAAACTGGCAGAATGTCCGGGCCTTATATATCAAGAGCACCATGGGCAAGCCCCAGCGCCTATATTAAGGCACA
TTTGAATAAATTCTATTACCAGTTC

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FIGURE 2974

GAATTCTGCGGAGCCTGCGGGACGGCGGCGGTGGCGCCGTAGGCAGCCGGGACAGTGTTGTACAGTGTTTTGGGC
ATGCACGTGATACTCACACAGTGGCTTCTGCTCACCAACAGATGAAGACAGATGCACCAACGAGGGTCTGGAATG
GTCTGGAGTGGTCTGGAAAGCAGGGTCAGATACCCCTGGAAAACTGAAGCCCGTGGAGCAGTGATCTCTACAGGA
CTGCTTCAAGGCTGATGGGAACCACCCTGTAGAGGTCCATCTGCGTTCAGACCCAGACGATGCCAGAGCTATGAC
TGGGCCTGCAGGTGTGGCGCCGAGGGGAGATCAGCC**ATG**GAGCAGCCACAGGAGGAAGCCCCTGAGGTCCGGGAA
GAGGAGGAGAAAGAGGAAGTGGCAGAGGCAGAAGGAGCCCCAGAGCTCAATGGGGGACCACAGCATGCACTTCCT
TCCAGCAGCTACACAGACCTCTCCCGGAGCTCCTCGCCACCCTCACTGCTGGACCAACTGCAGATGGGCTGTGAC
GGGGCCTCATGCGGCAGCCTCAACATGGAGTGCCGGGTGTGCGGGGACAAGGCATCGGGCTTCCACTACGGTGTT
CATGCATGTGAGGGGTGCAAGGGCTTCTTCCGTCGTACGATCCGCATGAAGCTGGAGTACGAGAAGTGTGAGCGC
AGCTGCAAGATTCAGAAGAAGAACCGCAACAAGTGCCAGTACTGCCGCTTCCAGAAGTGCCTGGCACTGGGCATG
TCACACAACGCTATCCGTTTTGGTCGGATGCCGGAGGCTGAGAAGAGGAAGCTGGTGGCAGGGCTGACTGCAAAC
GAGGGGAGCCAGTACAACCCACAGGTGGCCGACCTGAAGGCCTTCTCCAAGCACATCTACAATGCCTACCTGAAA
AACTTCAACATGACCAAAAAGAAGGCCCGCAGCATCCTCACCGGCAAAGCCAGCCACACGGCGCCCTTTGTGATC
CACGACATCGAGACATTGTGGCAGGCAGAGAAGGGGCTGGTGTGGAAGCAGTTGGTGAATGGCCTGCCTCCCTAC
AAGGAGATCAGCGTGCACGTCTTCTACCGCTGCCAGTGCACCACAGTGGAGACCGTGCGGGAGCTCACTGAGTTC
GCCAAGAGCATCCCCAGCTTCAGCAGCCTCTTCCTCAACGACCAGGTTACCCTTCTCAAGTATGGCGTGCACGAG
GCCATCTTCGCCATGCTGGCCTCTATCGTCAACAAGGACGGGCTGCTGGTAGCCAACGGCAGTGGCTTTGTCACC
CGTGAGTTCCTGCGCAGCCTCCGCAAACCCTTCAGTGATATCATTGAGCCTAAGTTTGAATTTGCTGTCAAGTTC
AACGCCCTGGAACTTGATGACAGTGACCTGGCCCTATTCATTGCGGCCATCATTCTGTGTGGAGACCGGCCAGGC
CTCATGAACGTTCCACGGGTGGAGGCTATCCAGGACACCATCCTGCGTGCCCTCGAATTCCACCTGCAGGCCAAC
CACCCTGATGCCCAGTACCTCTTCCCCAAGCTGCTGCAGAAGATGGCTGACCTGCGGCAACTGGTCACCGAGCAC
GCCCAGATGATGCAGCGGATCAAGAAGACCGAAACCGAGACCTCGCTGCACCCTCTGCTCCAGGAGATCTACAAG
GACATGTAC**TAA**CGGCGGCACCCAGGCCTCCCTGCAGACTCCAATGGGGCCAGCACTGGAGGGGCCCACCCACAT
GACTTTTCCATTGACCAGCTCTCTTCCTGTCTTTGTTGTCTCCCTCTTTCTCAGTTCCTCTTTCTTTTCTAATTC
CTGTTGCTCTGTTTCTTCCTTTCTGTAGGTTTCTCTCTTCCCTTCTCCCTTGCCCTCCCTTTCTCTCTCCACCCC
CCACGTCTGTCCTCCTTTCTTATTCTGTGAGATGTTTTGTATTATTTCACCAGCAGCATAGAACAGGACCTCTGC
TTTTGCACACCTTTTCCCCAGGAGCAGAAGAGAGTGGGGCCTGCCCTCTGCCCCATCATTGCACCTGCAGGCTTA
GGTCCTCACTTCTGTCTCCTGTCTTCAGAGCAAAAGACTTGAGCCATCCAAAGAAACACTAAGCTCTCTGGGCCT
GGGTTCCAGGGAAGGCTAAGCATGGCCTGGACTGACTGCAGCCCCCTATAGTCATGGGGTCCCTGCTGCAAAGGA
CAGTGGGCAGGAGGCCCCAGGCTGAGAGCCAGATGCCTCCCCAAGACTGTCATTGCCCCTCCGATGCTGAGGCCA
CCCACTGACCCAACTGATCCTGCTCCAGCAGCACACCTCAGCCCCACTGACACCCAGTGTCCTTCCATCTTCACA
CTGGTTTGCCAGGCCAATGTTGCTGATGGCCCCTCCAGCACACACACATAAGCACTGAAATCACTTTACCTGCAG
GCTCCATGCACCTCCCTTCCCTCCCTGAGGCAGGTGAGAACCCAGAGAGAGGGGCCTGCAGGTGAGCAGGCAGGG
CTGGGCCAGGTCTCCGGGGAGGCAGGGGTCCTGCAGGTCCTGGTGGGTCAGCCCAGCACCTGCTCCCAGTGGGAG
CTTCCCGGGATAAACTGAGCCTGTTCATTCTGATGTCCATTTGTCCCAATAGCTCTACTGCCCTCCCCTTCCCCT
TTACTCAGCCCAGCTGGCCACCTAGAAGTCTCCCTGCACAGCCTCTAGTGTCCGGGGACCTTGTGGGACCAGTCC
CACACCGCTGGTCCCTGCCCTCCCCTGCTCCCAGGTTGAGGTGCGCTCACCTCAGAGCAGGGCCAAAGCACAGCT
GGGCATGCCATGTCTGAGCGGCGCAGAGCCCTCCAGGCCTGCAGGGGCAAGGGGCTGGCTGGAGTCTCAGAGCAC
AGAGGTAGGAGAACTGGGGTTCAAGCCCAGGCTTCCTGGGTCCTGCCTGGTCCTCCCTCCCAAGGAGCCATTCTG
TGTGTGACTCTGGGTGGAAGTGCCCAGCCCCTGCCCCTACGGGCGCTGCAGCCTCCCTTCCATGCCCCAGGATCA
CTCTCTGCTGGCAGGATTCTTCCCGCTCCCCACCTACCCAGCTGATGGGGGTTGGGGTGCTTCCTTTCAGGCCAA
GGCTATGAAGGGACAGCTGCTGGGACCCACCTCCCCCTCCCCGGCCACATGCCGCGTCCCTGCCCCGACCCGGGT
CTGGTGCTGAGGATACAGCTCTTCTCAGTGTCTGAACAATCTCCAAAATTGAAATGTATATTTTTGCTAGGAGCC
CCAGCTTCCTGTGTTTTTAATATAAATAGTGTACACAGACTGACGAAACTTTAAATAAATGGGAATTAAATATTT
AA

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FIGURE 2975

ATGGCCCTGCGCAAGGAACTGCTCAAGTCCATCTGGTACGCCTTTACCGCGCTGGACGTGGAGAAGAGTGGCAAA
GTCTCCAAGTCCCAGCTCAAGGTGCTGTCCCACAACCTGTACACGGTCCTGCACATCCCCCATGACCCCGTGGCC
CTGGAGGAACACTTCCGAGATGATGATGACGGCCCTGTGTCCAGCCAGGGATACATGCCCTACCTCAACAAGTAC
ATCCTGGACAAGGTGGAGGAGGGGGCTTTTGTTAAAGAGCACTTTGATGAGCTGTGCTGGACGCTGACGGCCAAG
AAGAACTATCGGGCAGATAGCAACGGGAACAGTATGCTCTCCAATCAGGATGCCTTCCGCCTCTGGTGCCTCTTC
AACTTCCTGTCTGAGGACAAGTACCCTCTGATCATGGTTCCTGATGAGGTGGAATACCTGCTGAAAAAGGTACTC
AGCAGCATGAGCTTGGAGGTGAGCTTGGGTGAGCTGGAGGAGCTTCTGGCCCAGGAGGCCCAGGTGGCCCAGACC
ACCGGGGGGCTCAGCGTCTGGCAGTTCCTGGAGCTCTTCAATTCGGGCCGCTGCCTGCGGGGCGTGGGCCGGGAC
ACCCTCAGCATGGCCATCCACGAGGTCTACCAGGAGCTCATCCAAGATGTCCTGAAGCAGGGCTACCTGTGGAAG
CGAGGGCACCTGAGAAGGAACTGGGCCGAACGCTGGTTCCAGCTGCAGCCCAGCTGCCTCTGCTACTTTGGGAGT
GAAGAGTGCAAAGAGAAAAGGGGCATTATCCCGCTGGATGCACACTGCTGCGTGGAGGTGCTGCCAGACCGCGAC
GGAAAGCGCTGCATGTTCTGTGTGAAGACAGCCAACCGCACGTATGAGATGAGCGCCTCAGACACGCGCCAGCGC
CAGGAGTGGACAGCTGCCATCCAGATGGCGATCCGGCTGCAGGCCGAGGGGAAGACGTCCCTACACAAGGACCTG
AAGCAGAAACGGCGCGAGCAGCGGGAGCAGCGGGAGCGGCGCCGGGCGGCCAAGGAAGAGGAGCTGCTGCGGCTG
CAGCAGCTGCAGGAGGAGAAGGAGCGGAAGCTGCAGGAGCTGGAGCTGCTGCAGGAGGCGCAGCGGCAGGCCGAG
CGGCTGCTGCAGGAGGAGGAGGAACGGCGCCGCAGCCAGCACCGCGAGCTGCAGCAGGCGCTCGAGGGCCAACTG
CGCGAGGCGGAGCAGGCCCGGGCCTCCATGCAGGCTGAGATGGAGCTGAAGGAGGAGGAGGCTGCCCGGCAGCGG
CAGCGCATCAAGGAGCTGGAGGAGATGCAGCAGCGGTTGCAGGAGGCCCTGCAACTAGAGGTGAAAGCTCGGCGA
GATGAAGAATCTGTGCGAATCGCTCAGACCAGACTGCTGGAAGAGGAGGAAGAGAAGCTGAAGCAGTTGATGCAG
CTGAAGGAGGAGCAGGAGCGCTACATCGAACGGGCGCAGCAGGAGAAGGAAGAGCTGCAGCAGGAGATGGCACAG
CAGAGCCGCTCCCTGCAGCAGGCCCAGCAGCAGCTGGAGGAGGTGCGGCAGAACCGGCAGAGGGCTGACGAGGAT
GTGGAGGCTGCCCAGAGAAAACTGCGCCAGGCCAGCACCAACGTGAAACACTGGAATGTCCAGATGAACCGGCTG
ATGCATCCAATTGAGCCTGGAGATAAGCGTCCGGTCACCAGCAGCTCCTTCTCAGGCTTCCAGCCCCCTCTGCTT
GCCCACCGTGACTCCTCCCTAAAGCGCCTGACCCGCTGGGGATCCCAGGGCAACAGGACCCCCTCGCCCAACAGC
AATGAGCAGCAGAAGTCCCTCAATGGTGGGGATGAGGCTCCTGCCCCGGCTTCCACCCCTCAGGAAGATAAACTG
GATCCAGCACCAGAAAAT**TAG**

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FIGURE 2976

GGGCGGGGCTCCGAAGAGCTCGGTTCAGATCCCGGCCGCCTGGGCTCCAGGAGCCCCGGAACCAGGATAAGTTGG
ATGGCTGCCGCGGCGAAGCGGGGGGCGGGGTGGACCGTGCCCGGTATTTTCTATACGGGTTCCGGGGCCCGGTAG
AGGCGCGCCAAGAGGAAAGGAAAGTGCGGCGGCCCTGGAACCTGGATATCGCGCGAGATTTGTGACCCAGAAGGA
AATCTCTGACCTCAGCTGTGGCTCTTGGTGCTGGCCAGAAGCCAACTTCATGTCTGAGTGCACGAGCAGCAGTTT
GCCATGGAGAGCTTGGGGCTGCACACGGTGACCCTTAGTGATGGGACAACAGCCTACGTCCAGCAAGCTGTCAAA
GGAGAGAAGCTTCTTGAAGGGCAGGTGATCCAGCTCGAGGATGGGACCACCGCATACATTCACCAGGTGACGGTA
CAGAAAGAAGCTCTCTCCTTTGAGGATGGTCAGCCTGTGCAGCTGGAAGATGGCAGCATGGCTTACATACACCGC
ACACCCAGAGAAGGCTATGACCCCAGCACCCTGGAAGCCGTCCAACTGGAAGATGGCTCCACTGCCTACATTCAC
CACCCTGTGGCTGTGCCATCGGAGAGCACCATCCTGGCCGTACAGACAGAGGTGGGCTTGGAGGACCTGGCAGCA
GAGGATGATGAGGGCTTCAGTGCAGACGCAGTGGTGGCCCTGGAGCAGTATGCCAGCAAGGTTCTTCATGACAGC
CAGATTCCCCGTAATGGAAAAGGGCAGCAAGTTGGAGACAGAGCATTCCGCTGTGGCTACAAGGGCTGTGGGCGT
CTCTACACCACCGCTCATCACTTAAAGGTGCATGAACGAGCTCATACAGGTGACCGTCCATACAGATGTGACTTC
CCCAGCTGTGGAAAGGCCTTTGCCACAGGCTATGGACTGAAGAGCCACGTTCGTACCCACACTGGTGAGAAACCA
TACAAGTGCCCAGAGGAGCTGTGCAGCAAGGCCTTCAAGACCTCAGGAGACCTGCAGAAGCATGTCCGTACCCAC
ACTGGTGAACGCCCGTTCCAGTGCCCTTTTGAGGGCTGTGGCCGCTCCTTCACCACATCTAACATCCGCAAGGTA
CATGTGCGCACCCACACAGGCGAGAGGCCCTACACCTGCCCGGAGCCCCACTGTGGCCGCGGCTTCACCAGCGCC
ACCAACTATAAGAATCACGTGCGCATCCACACAGGGGAGAAGCCATACGTTTGCACGGTGCCAGGCTGCGGGAAA
CGCTTCACCGAGTACTCGAGCTTGTATAAGCACCACGTGGTGCACACACACTGCAAGCCCTACACCTGCAGCACC
TGCGGCAAGACCTACCGGCAGACCTCCACCTTGGCCATGCACAAGCGCAGTGCCCACGGCGAGCTGGAGGCCACG
GAGGAGAGCGAGCAGGCCCTCTATGAGCAGCAGCAACTTGAGGCCGCCTCTGCAGCCGAGGAGAGTCCGCCACCC
AAACGACCCCGGATAGCTTACCTTTCGGAGGTGAAGGAAGAGAGAGATGACATCCCAGCCCAGGTGGCGATGGTG
ACTGAAGAAGATGGGGCCCCCCAGGTGGCTCTGATCACTCAGGATGGTGCCCAGCAGGTCAGCCTGTCCCCGGAA
GACCTGCAGGCCCTGGGGAGTGCCATCAGTATGGTCACCCAGCACGGCAGCACCACCCTCACCATCCCCAGTCCT
GATGCCGACCTGGCCACATCTGGCACACATACAGTCACCATGGTCAGCGCCGATGGCACCCAGACGCAGCCCGTC
ACAATCATTACCTCTGGGGCTGTGGTGGCTGAGGACTCAAGTGTAGCATCTCTTCGTCATCAACAGGTGGCACTG
TTGGCCACAGCCAACGGAACGCACATTGCAGTGCAGCTGGAGGAACAGCAGACCTTAGAGGAGGCCATCAATGTG
GCCACTGCGGCCATGCAGCAAGGGGCTGTGACCCTGGAGACAACAGTGTCGGAGAGTGGCTGCTGAGTCCAAGAG
GGCTGGGTCCCACACCATGCTGGAGGAAGTGCCATCTGCATGGCCACTCTTGCCCCCAAGGGCCCAGGCTGTGGC
TGACACATAGAAGGTGGCCACATAGGTCTCTGGGGTGAGAAGACAGCAAGAAAACTGCCTAACTGAAGGGAATGG
GGGCCCTGCTCAAGAAGGGGGCCAGGCAGCTGGAATCAGGGGAGTGCATCATCCTCGGGAGCTGACAACAGCCAG
GCTACACCAGGGCACCCGCCTCTCAAAATCAGCTGGGCGCCCACTCTCCTCCTAAAGAACACCCTTCTGGCCCTC
AGTCTGTTCCCCTTCTCAGGTAGAGATTGGGGCTGCTATGGGGACTGGCCCTGTAGGGTTGAGCCACAGACAGCT
CTTCAGCCCAGTAGCAGTGGAGCAGGCCCTGTCCTGCCCTCCCAGCAATAACCACCTCCCTGGAGGCCAGCTGAG
ATGCCTGGCTACTTGGCACCAGGGACTTCCTGACACCACAGTCAATTAATTCCTCAGGGGCCTGTGGCTGAAGAA
AAGGTGCCCAGCCCCCACCACTCCTCAGCTGCCCCCCAACCTCTCTATGGCAGAGAGGCAGGGAGTGGCCCTGTA
CATAGACTGCTGGGGATTGGGTTTGATTTGTTTTGTTTTTTTTAATTCCATTTTGATAATTTTTTTCCTGCTCTG
GGTGGTGGTGGCACATGGATGAATGAGTATTTAATAAAAGTTCCAAATTTC

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FIGURE 2977A

GGGAAGCGCGCCGCGCACCTCATGGTTCCGGGGACAGTTAGGGCGGCGGATGGAGGTCAGCGGTGGTGCTCGCTG
CGGTTTGGAATCACTTGCTAGGAGTCTTGTCTCTCTGCCACCCAGGACATCATGGCAGCTCACCTGGTAAAGCGA
TGCACGTGCCTCCTGAGAGAAGCTGCTCGTCAGGCCCCTGCCATGGCTCCAGTTGGCCGACTGAGACTTGCCTGG
GTAGCCCATAAGACTCTGACTTCCTCAGCCACCTCACCCATTTCCCACCTCCCAGGTTCCTTGATGGAGCCGGTG
GAGAAGGAACGAGCATCTACTCCCTACATAGAGAAGCAGGTGGACCACCTCATCAAGAAGGCCACAAGGCCAGAG
GAGCTCCTGGAGCTACTTGGTGGCAGTCACGACTTGGACAGCAATCAAGCAGCAATGGTACTTATCCGGCTCTCT
CACTTGCTGTCTGAGAAGCCAGAAGATAAAGGCTTGCTCATACAGGATGCCCACTTTCATCAACTTCTCTGTCTG
CTCAACAGTCAGATTGCCTCGGTCTGGCATGGTACCCTCTCGAAGCTGCTGGGAAGCCTGTATGCTCTGGGCATC
CCCAAGGCCTCCAAGGAGCTGCAGTCGGTGGAGCAGGAGGTCCGCTGGCGCATGCGGAAGCTCAAGTACAAGCAC
CTGGCCTTCCTGGCAGAGTCCTGTGCCACCCTCTCACAGGAGCAGCACTCGCAGGAGCTGCTGGCTGAGCTGCTC
ACACACCTGGAAAGGCGTTGGACAGAAATTGAAGATTCCCACACATTAGTGACCGTCATGATGAAGGTGGGACAC
CTCTCGGAGCCACTAATGAACCGCCTGGAAGACAAGCACGTCCTGAACAGAGCGCAGGACATCACCCTGCCCCAC
CTGTGCAGCGTACTTCTGGCTTTTGCGCGTCTGAACTTCCATCCAGACCAAGAGGATCAGTTCTTCAGCCTGGTA
CATGAGAAGCTGGGGTCAGAGCTGCCAGGCCTGGAGCCAGCCCTGCAGGTGGACCTGGTGTGGGCCCTGTGTGTG
CTGCAGCAGGCACGGGAAGCAGAGCTGCAAGCCGTCCTCCACCCTGAATTTCACATCCAATTTCTAGGGGGCAAG
TCTCAGAAGGATCAGAACACCTTCCAGAAGCTGCTCCACATCAACGCCACTGCCCTGCTGGAGTACCCCGAGTAC
TCGGGTCCCCTTCTGCCTGCCTCGGCTGTGGCCCCTGGGCCCTCAGCCCTTGACAGGAAGGTGACCCCCCTGCAA
AAGGAGCTGCAGGAGACGCTGAAGGGGCTGCTGGGGAGCGCCGACAAGGGCAGCCTCGAGGTGGCCACGCAGTAT
GGCTGGGTGCTGGATGCTGAGGTGCTGCTGGACAGTGACGGCGAGTTTCTGCCCGTAAGGGACTTTGTGGCACCT
CACCTTGCCCAGCCAACTGGGAGCCAGTCACCACCTCCAGGGTCTAAGAGGCTAGCGTTCTTGCGGTGGGAGTTC
CCCAACTTCAACAGCCGAAGCAAGGACTTGCTGGGTCGCTTTGTTCTGGCCCGGCGACACATAGTGGCTGCAGGC
TTCCTGATAGTGGACGTCCCATTCTATGAGTGGCTGGAACTCAAGTCTGAATGGCAGAAAGGCGCCTACCTCAAG
GACAAGATGCGCAAAGCGGTGGCTGAGGAGCTGGCCAAGTGACTTGTGCCAGCAGCATGGACTGCGTGCCTCTCC
GCCGGAGGTCTAGCTGTGGGCGGCCAAGAAGGGTCACCCTTGAGGACAAACCTCTGTGCAGGACCTTGGCCAGAG
TGGGGAGGGTGGCCAGCCACTCTGAGGGACAGAACGTCCTCTTGTGTATAATAAACCTTTAATTTTGGTGTTGGA
CCCCTGGGGCCTTCCCAGGCTTGGTCACCCTCTGCACTGTCAGCACTTGTCTGTCTGCTTTGTTGAGCAGGGCGT
GGTTCTCCAGTCTGCCCTGTGCACTCCCCCGCCACGCCCAGCCCAAGAGGGCTGCTTTAGGGACAGACCTGGGTT
GTTACCTGCCTGTCTCTCCCAGCTTCTTCCCTCCATGAGTGCTTATTCACATATGCCGGCCTCTTGCGTAGGGGT
CTGTATCAGCCCCAGCAGGCAGGTGGAGTCCTAGAATTCTGAACCTCCAGAGCAGAGGAGCTTCCCAGGGAAGCT
GATTGGAGATTCAGTGCATGGCTGGGGGTTCTGATGGAGCTGTGGCTACTGAACCACAGCCATCCTGGGAGGCTT
TCTCCCATCAGTTGTCTCACACTTAGCTGAGTGAAAGGCACCCTGACAGCATGTGGTGACAGGTGATGTGAGGGC
TGGGTGAGCACTTGGGAGGCGCTGGCTCTGGGAGAGGAGAAGATCCCACTTGGCTGACACCACGGCACCAAGAGC
CAAACTCCATCGTTGTCTTCACCACCCTGACCAGAGCCTTGTGCTGTCATCTAGGAACTGGCTGCCCAAACAGGA
CCCTGGCAGCCTCCCTGCTGCTGCGGGGATTACCAGGTGCTGGGAGGCAACAAGCTTTCTACCTTCCAGCCTCTC
CTTAGAGACACCTATTGGCAGAACCTGACTAAATAGCAGTCAGGGAACTGGGTTGCCTCCAGCCATACAGAACAG
AGAGTAGGACAGTGGGGTGGAGCTGAGATGGAGAGGCCCACAGCCCTCAGCACTGTAGGCTCCCAACCCTAGGCT
GTTTCCCCAAAAAGAAAAAGTCTAGTCACTGCTCTGATGCTTGGCCACTCACCCAAGCATTGGGGTAGTTTGTGC
TGGCTTCACTGGGCACCATCAGGCACACCCAGCCTGTAGTTTTTGTTTTATATTACCTAAGTCGGCCAGGTGTGG
TGGGATCACGCCTGTAATCCCAGCACTTAGGGAGGCTGGGGCGGGCGAATCGCCTGAGGCCAGGAATTCAAGACC
AACCTGGCCAACATTGTGAAACCCTGTCTCTACTAAAAATATAAAAATTAGTCGGGCATGATGACAGGCACCTGT
AATCCCAGCTACTCAGGAGGCTGAGGCAGGTGAATCACTTGAACCCGGGAGGTGGAGGCTGCAGTGAGTTAAGAT
TGTGCCACTGCACTCCAGCCTGGGTAACAGAGCAAGACTCTGTCTCAAAAAATATATATGTGTGTGTGTGTGTGT
GTATATATATGTACATGTGTATATAAGTATATATGTGTGTATATATGTATATATACACGTATATACACACACACC
CCTAAGTCATGATTTTGGAGCAATTGTAAGTGGTGTAGTGCTTAATTTTGGCATTCACACATTGATTGTTAGCAT
ATAGAAATGGGATTGATTTTTATGTGATCTTGCTAAACTTTATGCATTTTTAAAATTCCTTTGGATTTCCTATGT
AGATATTTATGTCCTGAAAACAGGAATGTATTTATCCTTTCAAATCAATATGCTTTTTATTTTGTTATTTATGAC
CACTTCATTAAAATATAATTCACATGCCATACACTTCACCCATTTAAAATGTATAATTAGGCCAGGTGTGGTGGC
TCACGTCTGTAATCCCAGCAGTTTGGGAGGCCAAGGCCCTCAGATCTTGAGCCCAGGAGTTCAAGACCACCCTGG

FIGURE 2977B

GCAACAGGCAAAACCCTGTCTCTATTTTTTAAAATACAAGAATTAGCCGCAGTGGCACGCACCTGTCGTCCCAGC
AACCCAGGAGGCTGAGGTAGGAGGATCACTTAAGCCTGGGAAGTCAAGCCTGCAGTGAACCATGATAGCACCACT
GCAGTCCAGCCTGGGCGACAGAGTGAGACCCCATCTCGAAAACAAAAATGTATAATTCAGTGGTTTTTAGTCTCT
TTGCAGATACATGCAACCATCACCACAATTTGCACATTTTCTAAGCCTCATATACTGATGTGATATTTTGGTGTT
TTGTGACTGGCTTCATTTACTTAGCATATTGTTTTCATGTTTCATTCATGTCGCATGTATGAGTATTCATTCCTT
TATTTGGCTGAATAATATTCCATTATAGTTTGTGCCACATTTTGTTTATCCATTCATCCATTGATGGACATGTGG
ATTGTTTCCACCTTCTGGATAATATGAACTGATACAGTTTGGATATTTTGTCCCCTCCAAATCTCATGAAATAGG
ATCACCAGTGTTGGAGAATGGGGCCTGTTAGGAAGTGTTTGGATCATAGGAACATCTGTCATAAATGGCTTGGTG
CCATCCTTGTAATGAGTGAGTTCTTGCTCTATATTAGTTCACTTGAAAGCTGGTTGTTGGGAACTCCTGCCCTAT
CTGTTCTGCCCTCTCTCGTCATGTGACATGCCTGCTCCTTGTTCACCTTCTGTCATGAGTAAAAGCTTCCTAAGG
CCTTCCCAGGAGCCAAGCAGATGTCAGTACCATGCTTGTACAGCCTGCAGAACTGTGAGCCAAATAAACTTCTTT
ATAAATT

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FIGURE 2978

TTCGGGCCCGGCTGGCGGGCGGCGCCGGGAGCGCGGGGGCGGCGGGCCCGGGTCGAGCATGTAGCGGCTGCTGGC
GGCGGGGCTCCCGGGGCGGGCCGGGCGGGCCGCGGGAGCCGCACGCGGCGATATGGAAGAGGAGGGCAAGAAGGG
CAAGAAGCCTGGAATTGTCTCGCCATTTAAACGAGTATTCCTAAAAGGTGAAAAGAGTAGAGATAAGAAAGCCCA
TGAGAAGGTGACAGAGAGGCGCCCTCTGCACACTGTGGTGTTGTCATTGCCTGAGCGCGTCGAGCCAGACAGACT
GCTGAGCGACTATATTGAGAAGGAGGTAAAGTATTTAGGTCAGTTAACGTCCATACCAGGATACCTGAATCCCTC
CAGTAGGACTGAAATCCTGCATTTCATAGACAATGCAAAGAGAGCCCACCAGCTTCCGGGACACTTGACTCAGGA
GCACGATGCTGTGCTCAGCCTGTCTGCGTACAACGTCAAGCTGGCCTGGAGGGACGGGGAGGATATCATCCTCAG
GGTGCCCATCCATGACATCGCCGCCGTCTCCTATGTTCGGGATGACGCTGCACACCTGGTGGTCCTGAAGACAGC
CCAGGACCCAGGGATCTCCCCCAGCCAGAGTCTGTGTGCGGAAAGTTCCAGAGGCCTCAGTGCAGGCTCCCTGTC
GGAGAGTGCAGTTGGGCCCGTGGAGGCATGCTGCCTGGTCATCCTGGCTGCAGAGAGCAAGGTCGCTGCGGAGGA
GCTTTGCTGTCTGCTAGGCCAGGTCTTCCAGGTTGTTTACACGGAGTCCACCATCGACTTTCTGGACAGAGCGAT
ATTTGATGGGGCCTCTACCCCGACCCACCACCTGTCCCTGCACAGCGCCAGCCACGTGACCTCTTCCACAGTCAC
ATCTTCCTTTGACTGTCAGCTTCCTCTGCATTTCAGGACTCTTGCAATCACATTGAGCCCACCCAAATTCTCCAG
GGTCATCTCCCTATTTCAAGATGACTCTTCTACAAAAGTGGACATTAAGGAGACCTACGAGGTGGAAGCCAGCAC
TTTCTGCTTCCCTGAATCTGTGGATGTGGGTGGTGCATCACCCCACAGCAAGACCATCAGTGAGAGCGAGCTGAG
CGCCAGCGCCACTGAGCTGCTGCAGGACTACATGCTGACGCTGCGCACCAAGCTGTCATCACAGGAGATCCAGCA
GTTTGCAGCACTGCTGCACGAGTACCGCAATGGGGCCTCTATCCACGAGTTCTGCATCAACCTGCGGCAGCTCTA
CGGGGACAGCCGCAAGTTCCTGCTGCTTGGTCTGAGGCCCTTCATCCCTGAGAAGGACAGCCAGCACTTCGAGAA
CTTCCTGGAGACCATTGGCGTGAAGGATGGCCGCGGCATCATCACTGACAGCTTTGGCAGGCACCGGCGGGCCCT
GAGCACCACATCCAGTTCCACCACCAATGGGAACAGGGCCACGGGCAGCTCTGATGACCGGTCGGCACCCTCAGA
GGGGGATGAGTGGGACCGCATGATCTCGGACATCAGCAGCGACATTGAGGCGCTGGGCTGCAGCATGGACCAGGA
CTCAGCATGAGTGGACAGTGGATGGGGGGGCACCCACACCTTCCGCGCAGTCGTCATAGGCCTTCCCAGAAGGAGC
TGCCCAGACCTGCGTGTCAGCCCTTGGTGGTGGCCAGGGAGAGGCGCCCGGTGCAGATGGCCCCGGGCGGCCCAG
GTCCTCTACTGTGAAGGAGCAGGGAGCTGCCGAGGGACACGAGCCTCAGTGCGGGGTGGAAGGCTCTTTGCCTTG
TCCACCAGGGCTCAGCCAAGCCCTGCAGTGTGTCCCCGCTCGGGGAGGGCCCGGCCGAGCGGGCAGGGAGAGCCA
GTCCTGTCGGCTGGGCCCTTGGACGGCTGTCAGTTTTGCACATGATGTTCCTATTGTAACTCTCAGAGACCTTAA
AAAGAAGTTTACTGCAATGTGAATAATTT

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FIGURE 2979

TCCACTGAGTTGACACGCAGACGCAGCCTCAGGACCCTAAACTCTACGCCCCAGCACACCCTACCAAGCGAGCGC
CCGCGGCCGCGTGACGTCATCTACCCCAAACGCTGTGGCCCCGGCCACGCACGGCTTCGGGGCGGGACTACGCGG
TGACGTCGAGGTGCGCGGCGCAGCGCGCGGCGTCAGTCTTGGCTGGCAGACCTGTACTCCGTACTCCGTACTTCG
TAGTCGCAGCGGCGCGGTCTTCGGCAGTCTAGTCATCCACCGCCATCCTGGGCCCCACGTGTTGCCTGACCATTC
CTGAGCCCAGGTGGGAGCCGTGGCTGAGGTGACGGTCTCAAAGTGGAAGAGCTTACTGTCACAGCAACTCCTTTG
CAAGATGCCCCGGCCAGGAATAGTTGCTGAACACCCCAGGCCTGCTGAGGTCCCTCCTTGAGTCTCATGTTCAAG
CAGTCTTGTGAGTAAAGCACTGGCTACCCCTTTTCACTTACTATCTTTTCAAGCATGTTCTACCACCTTGGAAGG
TAAGAGGTTAGTACCTTCTTCCAGAGCAGAGGGCAGGCATTCTTGCTGTGCGTTGTGAAAGGGTAGAGTCCTGCG
CTCCTTTCTTGTAGTAGTCCAATGGCTC**ATG**CAGGTGCCTCTGACTCCCCTATGGGAACTGGGGCTTGGGAGGGT
GGTGGAAAATGCTGATGCTCTGGCTATTGCTATTGTTTTGAATAATCAGTGGTCCCTTGTCCCTAATCGAGGAAT
TTTGTATTTTCTACCAGTGTCCATGAAACTGGGAGGCGACCGTGTTAGCTGCCAGTTCCTGACAGCCACCTCTCA
CCAGTGGCTTCACTCTGTGTCCCTGACCCAGCACATGGCACAAGAGTGCCTGCCATCCGTCAGTGTTTCTACAGC
AGCAATCCCAAGATGCTGGAGC**TAG**AGGGGACCTGACCTGAGAGAAGATACCTTCAGTGGCTGCCAGGCTGTTCC
TTGGAACCTGTGCAGGGGTAAGTGTGCAGGAAGGTCTGACCTGGCAAGTCACTTCACTCCTGTTTTATTTAGAGT
CACCTGGCTAATGAAAAGTATTTTGACCTTCCCGTATGGTAAGTCAGGTGATTGAATCCCAGAAAGGTTCATTGT
CTTCAAGCTCACAATACTATTTTGGGACAAACAGTTGTCTAGTGTTTGGACTCATGAACCCTGATTCTTGAGGGT
GGTATTTTACTGCTTTTGTGATTTGGTTTCAACATATATAGTCTTTTCTCCGGAGTTACCTTAGGTCAGTGGCCA
GTGTTTCAGCCCCTGGAAAGGGCATGGGCTGCCACTGAGGTTGGTCACAGGCCTCTCAGCTCATGGTGGGAGTGG
GTTCAGGAGTTGGTAAGTAGGGTTCAGTTCTGTTGTTGCCACCGATGGCAACAGGGGTTTGTAATAATCCCTAGT
TGTGTCAATTATGTCACTTAATTTTCACAACAGGTCTCTGAAGTGTTTCTCATCTCATTTTTACAGATGAGGCCT
GCCTGTGTTAATACACCTAGTGAGGAGTGGAGCTGAATTTGAATGCAAGCCTTGGCACCTTAATTGAGCAAGTTT
GAAACCTCGCTTGTTGCCCTTCTGGAAGGAGTCAGGAATTTCCAGTTCTGGGCCTGGGCTGTGGGTCTGGCAGAC
AGACCTCTGGCCCTAGGTTTGGGTGCCAGGTTCTCTGCTTCCAGAATGAGAAGCTTTGCTGTGCACCAGGACCTG
GGCCCTTCTGGTATCTCCTGAATGAAAAACAAGGGATATTTAATAAATATGGATTTAAATATG

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FIGURE 2980

GCGGAGTCGGCGCCGAGAACATGGCTGGAGGCAAAGCTGGAAAGGACAGTGGGAAGGCCAAGGCTAAGGCAGTAT
CTCGCTCACAGAGAGCTGGGCTACAGTTTCCTGTGGGCCGCATCCACAGACACTTGAAGACTCGCACCACAAGCC
ATGGAAGGGTGGGTGCCACTGCTGCCGTGTACAGTGCTGCGATTCTGGAGTACCTCACTGCAGAGGTGCTGGAGC
TGGCAGGTAATGCTTCTAAGGATCTCAAAGTAAAGCGTATCACTCCGCGTCACTTGCAGCTTGCAATCCGTGGTG
ATGAAGAGTTGGATTCTCTTATCAAGGCTACCATAGCTGGGGGTGGTGTGATCCCTCACATCCACAAATCTCTGA
TTGGAAAGAAGGGACAGCAGAAAACTGCTTAGAGGGATGCTTTAACCAACCCTCTTCCTCCCCGTCATTGTACTG
TAACTGGGACAGAAGAAATAATGGGGATATGTGGAATTTTTAACAACAGTTAAATGGAAAAGCATAGACAATTAC
TGTAGACATGATAAAAGAAACATTTGTATGTTCTTAGACTCGAAGTTTGA

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FIGURE 2981

GTTTTGCAGACGCCACCGCCGAGGAAAACCGTGTACTATTAGCCATGGTCAACCCCACCGTGTTCTTCGACATTG
CCGTCGACGGCGAGCCCTTGGGCCGCGTCTCCTTTGAGCTGTTTGCAGACAAGGTCCCAAAGACAGCAGAAAATT
TTCGTGCTCTGAGCACTGGAGAGAAAGGATTTGGTTATAAGGGTTCCTGCTTTCACAGAATTATTCCAGGGTTTA
TGTGTCAGGGTGGTGACTTCACACGCCATAATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAATTTGAAGATG
AGAACTTCATCCTAAAGCATACGGGTCCTGGCATCTTGTCCATGGCAAATGCTGGACCCAACACAAATGGTTCCC
AGTTTTTCATCTGCACTGCCAAGACTGAGTGGTTGGATGGCAAGCATGTGGTGTTTGGCAAAGTGAAAGAAGGCA
TGAATATTGTGGAGGCCATGGAGCGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACT
GTGGACAACTCGAATAAGTTTGACTTGTGTTTTATCTTAACCACCAGATCATTCCTTCTGTAGCTCAGGAGAGCA
CCCCTCCACCCCATTTGCTCGCAGTATCCTAGAATCTTTGTGCTCTCGCTGCAGTTCCCTTTGGGTTCCATGTTT
TCCTTGTTCCCTCCCATGCCTAGCTGGATTGCAGAGTTAAGTTTATGATTATGAAATAAAAACTAAATAACAATT
GTC

FIGURE 2982

GGACCGGCAGATGAACACCAACTGGCCAGCCTCGGTGCAGGTCAGCGTCAATGCCACGCCGCTCACCATCGAGCG
TGGCGACAACAAGACCTCGCACAAGCCACTCTACCTGAAGCATGTGTGCCAGCCAGGCCGCAACACCATCCAGAT
CACCGTCACCGCCTGCTGCTGCTCCCACCTCTTCGTGCTGCAGCTAGTGCACCGCCCATCCGTCCGCTCGGTGCT
GCAGGGCCTCCTCAAAAAGCGCCTCCTGCCTGCTGAGCACTGCATCACCAAGATAAAGCGGAACTTCAGCAGCGG
CACCATCCCTGGCACCCCTGGGCCCAACGGAGAGGACGGGGTGGAGCAGACAGCTATCAAGGTGTCCCTGAAGTG
CCCCATCACCTTCCGCAGGATCCAGCTCCCTGCCCGAGGTCATGACTGTCGCCACATACAGTGCTTTGACCTGGA
GTCGTACCTGCAGCTCAACTGTGAGCGGGGGACTTGGAGGTGTCCTGTGTGCAACAAGACAGCTTTGCTGGAGGG
CCTGGAGGTGGACCAGTACATGCTGGGCATCCTGATTTACATTCAGAACTCTGACTATGAGGAGATCACCATCGA
CCCCACGTGCAGCTGGAAGCCAGTGCCCGTGAAGCCTGACATGCACATCAAGGAGGAGCCGGATGGGCCAGCACT
GAAGCGCTGCCGCACCGTGAGCCCCGCCCACGTGCTCATGCCCAGCGTGATGGAGATGATCGCCGCCCTGGGCCC
CGGCGCTGCCCCCTTTGCCCCCCTGCAGCCCCCCTCAGTCCCTGCCCCCAGCGACTACCCTGGCCAGGGTTCCAG
CTTCCTGGGGCCTGGAACTTTCCCTGAGTCCTTCCCACCCACCACGCCCAGCACCCCAACCCTTGCTGAGTTCAC
CCCGGGACCACCCCCCATCTCCTACCAGTCTGACATTCCCAGCAGCCTCCTGACTTCAGAGAAGTCTACCGCCTG
CCTCCCAAGCCAGATGGCACCAGCAGGTCACCTGGACCCCACTCACAATCCTGGGACACCAGGACTACACACCTC
CAACCTTGGGGCCCCTCCAGGTCCCCAGCTGCACCATTCAAACCCTCCCCCAGCGTCCCGGCAGTCCTTGGGCCA
AGCGAGCTTAGGACCTACGGGTGAACTGGCCTTCAGTCCTGCCACAGGCGTGATGGGGCCCCCCAGCATGTCTGG
AGCCGGGGAGGCCCCAGAACCAGCTCTGGACCTGCTCCCGGAACTGACCAACCCTGATGAGCTACTGTCCTACTT
GGGCCCACCCGACCTCCCTACGAACAACAATGACGACCTGCTTTCTCTGTTTGAGAACAACTGATCCTGTGTTTA
CCCCAAGCCCGGCGGGGACACGCTCACAGATGTCACCACAGCCCTGCCCTTCATGCCCAGCCCCATGGGACACCC
GGTGGTCTTTCCCAAACCTCCCCCAAAACACACCTGGAGCCAGAGCCTTCTGCCGCCAGCCCTGCCCCTGAATTG
GAAGCAGCCCTGTGCTCGATGGGAGGGGCTCCCAGGCCGGCAGCCCTTGCCACCTCCCTCTGCCAAGCCTGCTGC
TGCAGAACGGTTTTTGCTGAGGTGCCCCTGCCCAGCCCTGTCCAGCCTTGTCCACACACACATCTCACGCCCCTG
GTCTCACAGCCTCACACCTTGTCCTTCCACCCCTGCCTGCCCCCACCCAGCCTGCTTCTTGTCCAGCATTGATCC
TTCTGTTTCAACAACTCCTCCACTGGGCAGAGCTGGGCATCTGGCAGGGCTGGCTCTGTCCCCTGGGCCTTTGGC
TCCAGTGGCCCCTGTGCCCAGCAGTCCAGCTCTTGGAACCTCGCTGAATGGCAGCCTCTTGGGGGCCTGGAGCTC
TGGCAGCCCAGCCGTGTGTGGTGTCAGGTTCCTCTCCCCACCCCAGCTTCAAGCAGAGGCCTCGGGGTGGGGGAG
CTACAAAGCACAACAATGTACATAGTGTAGAAACACTAACAGCTGGGAGAGGGGAGCCAGCTGTCCAGCCAGCAT
GTTCCTGTTGTACAGCCCGGTCTCCCTGCGCGCTCTGCTCCTTCCCATGTGCAGACAGATCAGGGAGGAACCTCC
AATGGGTGGGGGACAGTGAGCTTCGGCCTGGCCGAGGTGGGTGGGTGGGCTCTCAGATTCAGCTCTGTGTAAAGA
TTCTCTAGCGGGCTGCGCTCCCAAGTTCCCCTTCTCTGTGAAAGTGAAGAATTAGTACAGCTGTGTTTTTTAAAG
CCACCTCTCTGTCTCCACCCCATGGGCCCACACCCAGGTGGGGGAGGAGGAAGCCACTGCATCTGTTGGCTCAGG
GCCCCAGCCTGTGCGAGCAGGGCGCCTGGGCTGTTGTGTCTCCTGTCTGTGCCGATCTCTATTAAAGGACTCCCT
CTTG

FIGURE 2983A

GCAGTTGTGAAAAACTTCAGGACAAAA**ATG**TTTCATTTAAGGACTTGTGCTGCTAAGTTGAGGCCATTGACGGCT
TCCCAGACTGTTAAGACATTTTCACAAAACAGACCAGCAGCAGCTAGGACATTTCAACAGATTCGGTGCTATTCT
GCACCTGTTGCTGCTGAGCCCTTTCTCAGTGGGACTAGTTCGAACTATGTGGAGGAGATGTACTGTGCTTGGCTG
GAAAACCCCAAAAGTGTACATAAGTCATGGGACATTTTTTTTCGCAACACGAATGCCGGAGCCCCACCGGGCACT
GCCTACCAGAGTCCCCTTCCCCTGAGCCGAGGCTCCCTGGCTGCTGTGGCCCATGCACAGTCCCTGGTAGAAGCA
CAGCCCAACGTGGACAAGCTCGTGGAGGACCACCTGGCAGTGCAGTCGCTCATCAGGGCATATCAGATACGAGGG
CACCATGTAGCACAGCTGGACCCCCTGGGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTGACATTATC
TCATCCACAGACAAACTTGGGTTCTATGGCCTGGATGAGTCTGACCTCGACAAGGTCTTCCACTTGCCCACCACC
ACTTTCATCGGGGGACAGGAATCAGCACTTCCTCTGCGGGAGATCATCCGTCGGCTGGAGATGGCCTACTGCCAG
CATATTGGGGTGGAGTTCATGTTCATCAATGACCTGGAGCAGTGCCAGTGGATCCGGCAGAAGTTTGAGACCCCT
GGGATCATGCAGTTCACAAATGAGGAGAAACGGACCCTGCTGGCCAGGCTTGTGCGGTCCACCAGGTTTGAGGAG
TTCCTACAGCGGAAGTGGTCCTCTGAGAAGCGCTTTGGTCTAGAAGGCTGCGAGGTACTGATCCCTGCCCTCAAG
ACCATCATTGACAAGTCTAGTGAGAATGGCGTGGACTACGTGATCATGGGCATGCCACACAGAGGGCGGCTGAAC
GTGCTTGCAAATGTCATCAGGAAGGAGCTGGAACAGATCTTCTGTCAATTCGATTCAAAGCTGGAGGCAGCTGAT
GAGGGCTCCGGAGATGTGAAGTACCACCTGGGCATGTATCACCGCAGGATCAATCGTGTCACCGACAGGAACATT
ACCTTGTCCTTGGTGGCCAACCCTTCCCACCTTGAGGCCGCTGACCCCGTGGTGATGGGCAAGACCAAAGCCGAA
CAGTTTTACTGTGGCGACACTGAAGGGAAAAAGGTCATGTCCATCCTGTTGCATGGGGATGCTGCATTTGCTGGC
CAGGGCATTGTGTACGAGACCTTCCACCTCAGCGACCTGCCATCCTACACAACTCATGGCACCGTGCACGTGGTC
GTCAACAACCAGATCGGCTTCACCACCGACCCTCGGATGGCCCGCTCCTCCCCCTACCCCACTGACGTGGCCCGA
GTGGTGAATGCCCCCATTTTCCACGTGAACTCAGATGACCCCGAGGCTGTCATGTACGTGTGCAAAGTGGCGGCC
GAGTGGAGGAGCACCTTCCACAAGGACGTGGTTGTCGATTTGGTGTGTTACCGGCGCAACGGCCACAACGAGATG
GATGAGCCCATGTTCACGCAGCCGCTCATGTACAAGCAGATCCGCAAGCAGAAGCCTGTGTTACAGAAGTACGCT
GAGCTGCTGGTGTCGCAGGGTGTGGTCAACCAGCCTGAGTATGAGGAGGAAATTTCCAAGTATGATAAGATCTGT
GAGGAAGCTTTTGCCAGATCTAAAGATGAGAAGATCTTGCACATTAAGCACTGGCTGGACTCTCCCTGGCCTGGC
TTCTTCACCCTGGACGGGCAGCCCAGGAGCATGTCCTGCCCCTCCACGGGTCTGACGGAGGATATTCTGACACAC
ATCGGGAATGTGGCTAGTTCTGTGCCTGTGGAAAACTTTACTATTCATGGAGGGCTGAGCCGGATCTTGAAGACT
CGTGGGGAAATGGTGAAGAACCGGACTGTGGACTGGGCTCTAGCGGAGTACATGGCGTTTGGCTCGCTCCTGAAG
GAGGGCATCCACATTCGGCTGAGCGGCCAGGACGTGGAGCGGGGCACATTCAGCCACCGCCACCATGTGCTCCAT
GACCAGAATGTGGACAAGAGAACCTGCATCCCCATGAACCATCTCTGGCCCAATCAGGCCCCCTATACTGTGTGC
AACAGCTCACTGTCTGAGTACGGCGTGCTGGGCTTTGAGCTGGGCTTCGCCATGGCCAGTCCTAATGCCCTGGTC
CTCTGGGAAGCCCAATTTGGTGACTTCCACAACACGGCCCAGTGTATCATCGACCAGTTCATCTGCCCGGGACAA
GCCAAGTGGGTGCGGCAGAATGGCATCGTGTTGCTGCTGCCCCATGGCATGGAGGGCATGGGTCCAGAACATTCC
TCCGCCCGCCCAGAGCGGTTCTTGCAGATGTGCAACGATGACCCAGATGTCCTGCCAGACCTTAAAGAAGCCAAC
TTCGACATCAATCAGCTATATGACTGCAATTGGGTTGTTGTCAACTGCTCCACTCCTGGCAACTTCTTCCACGTG
CTACGACGCCAGATCCTGCTGCCATTCCGGAAGCCGTTAATTATCTTCACCCCCAAATCCCTGTTGCGCCACCCC
GAGGCCAGATCCAGCTTTGATGAGATGCTTCCAGGAACCCACTTCCAGCGGGTGATCCCAGAAGATGGCCCTGCA
GCTCAGAACCCAGAAAATGTCAAAAGGCTTCTCTTCTGCACCGGCAAAGTGTATTATGACCTCACCCGGGAGCGC
AAAGCACGCGACATGGTGGGGCAGGTGGCCATCACAAGGATTGAGCAGCTGTCGCCATTCCCCTTTGACCTCCTG
CTGAAGGAGGTGCAGAAGTACCCCAATGCTGAGCTGGCCTGGTGCCAGGAGGAGCACAAGAACCAAGGCTACTAT
GACTACGTGAAGCCAAGACTTCGGACCACCATCAGCCGCGCCAAGCCCGTCTGGTATGCCGGCCGGGACCCAGCG
GCTGCTCCAGCCACCGGCAACAAGAAGACCCACCTGACGGAGCTGCAGCGCCTCCTGGACACGGCCTTCGACCTG
GACGTCTTCAAGAACTTCTCG**TAG**ATGCTGCCTAGGGTTGCTTGGGCCACTGCCCTCTCCACACCCATGACTGCC
CCTTGCTTCTCAACTAAAGAATAGTGCCTCAGCGCTGCCCACACCACCGCCCTCCTCGCTGTGCCACCACCCCTC
CCTCTGCTCTCATAGGAGTTAGGCTGTCGTCCCCCTCCAGTGCTTGGCTGCCCCACAGGCCACACGCTGCCCAGG
CTCTGCTGACTTCTGAGCAGTTTTCCAGGAGGCCGGGGGGAGCAGGAGGAGGAAAGGTAGCCCCCGAGGGATGTC
CTTGGGGAGGGGTCAGCTCTGGCCACAATCCTCCCCACCAGTCTCACCCACTAGGATAGGAACTGGGCCTTGTGT
GCTGGCTTCCGCTGTCACCCAGCAAGGCACAGGCTCCTGTATTTGAGACTAGGATAGCTTCATCTTGAGCCTGAG
CCTTAGAATCTGTAGAGGAGCCTGGAGTCGGATCTAGCCATGGCTGGCAGAGGTTTCTAGGGTGGGCCCCAGCCG

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FIGURE 2983B

TGGCGTGAACTGAGGATGACCCGGGGCAGCTGGCAGGAGAGAGCCTTGGCCTGACCTGGCACAGAAAGGGCAGCT
TCAGTCTCTGCAGTGTCCATTATCTGCTGTTCCTTCGAGGGTTCCAGGCTGTGTGTGGGGCCCAAGCATGCCCCA
CCCACCCCTCCTGGGCCCAGGCAGCACCTGGAGCCCACAGAGTCTGTGTGTAGCCAGGAAGCCCCGCTCAGGTAG
CCACCACCGGGGCACTGGCTGCTCTGTCTTGGTCCTGTTAACCCTCCACCTCCTCTCTTGGACTCCCTCCCCACC
CCAACCACTCTTTCTTTCTCCTTTAACCCAATGGAGACTTTCTGATGCATCGTTTTCTTTGCTGTGCCAAAGCAG
GTCAGAAGAGGGAGAGGAGGGGCTGGGGGTGAGGGGCCAGGCCATGGCCAAGGGGCCAGCTGCCCCTCATTTATC
ACTCTGACCTTCACAGGGACAGATCTGATTTATTTATTTTGGTT

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FIGURE 2984

CTGAGGCGCGATGGCAGGTGTCGGGGCTGGGCCTCTGCGGGCGATGGGGCGGCAGGCCCTGCTGCTTCTCGCGCT
GTGCGCCACAGGCGCCCAGGGGCTCTACTTCCACATCGGCGAGACCGAGAAGCGCTGTTTCATCGAGGAAATCCC
CGACGAGACCATGGTCATCGGCAACTATCGTACCCAGATGTGGGATAAGCAGAAGGAGGTCTTCCTGCCCTCGAC
CCCTGGCCTGGGCATGCACGTGGAAGTGAAGGACCCCGACGGCAAGGTGGTGCTGTCCCGGCAGTACGGCTCGGA
GGGCCGCTTCACGTTCACCTCCCACACGCCCGGTGACCATCAAATCTGTCTGCACTCCAATTCTACCAGGATGGC
TCTCTTCGCTGGTGGCAAACTGCGGGTGCATCTCGACATCCAGGTTGGGGAGCATGCCAACAACTACCCTGAGAT
TGCTGCAAAAGATAAGCTGACGGAGCTACAGCTCCGCGCCCGCCAGTTGCTTGATCAGGTGGAACAGATTCAGAA
GGAGCAGGATTACCAAAGGTATCGTGAAGAGCGCTTCCGACTGACGAGCGAGAGCACCAACCAGAGGGTCCTATG
GTGGTCCATTGCTCAGACTGTCATCCTCATCCTCACTGGCATCTGGCAGATGCGTCACCTCAAGAGCTTCTTTGA
GGCCAAGAAGCTGGTGTAGTGCCCTCTTTGTATGACCCTTCCTTTTTACCTCATTTATTTGGTACTTTCCCCACA
CAGTCCTTTATCCACCTGGATTTTTAGGGAAAAAAATGAAAAAGAATAAGTCACATTGGTTCCATGGCCACAAAC
CATTCAGATCAGCCACTTGCTGACCCTGGTTCTTAAGGACACATGACATTAGTCCAATCTTTCAAAATCTTGTCT
TAGGGCTTGTGAGGAATCAGAACTAACCCAGGACTCAGTCCTGCTTCTTTTGCCTCGAGTGATTTTCCTCTGTTT
TTCACTAAATAAGCAAATGAAAACTCTCTCCATTACCTTCTGCTTTCTCTTTGTCCACTTACGCAGTAGGTGACT
GGCATGTGCCACAGAGCAGGCCCTGCCTCACTGTCTGCTGGTCAGTTCTGGGTTCACTTAATGGCTTTGTGAATG
TAAATAAGGGGCAGGTCTTGGCCCTAGAGGATTGAGATGTTTTTCTAAATCTTAGAACTATTTTTGGATAAATTA
TATATTTTCCTTCCTAGTAGAAGTGTTACTGCCTGTAACTAGCTCAAAATACCAATGCAGTTTCTGCATTCTGGG
TTTTGTTTTTCCTTTTTTTTTTTTTTTTTTTTTTTTGAGTTTTGCTCTTGTCGCCCAGGCTGGAGTGCAATGGCG
TGATCTCAGCTCACTGGCAACATCTGCCTCCCGGGTTCAAATGATTCTCCTGCCTCAGTCTCCTGAGTAGCTGGG
ATTACAGGTGCCCGCCACCACGCTCAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTTACCATGTTGGCCAG
GCTGGTCTTAGACTCCTGACCTCAGTTGATCCACCTGCCTCAGCCTCTGCATTCAGTTTATTCACATATTTTTGG
TAACTCCCATGGCAGCTCCTAGGATTTCAGCGGTCTGTGGGCCAGAAAGCAGGCACCAGGGCTGACCTCAAGGCC
GTATCAGAGGGCCAAGCAGAGTTCTTTTGGATACCTGCTTTTCATCCCACAGGGCCTTAGAGTCAGAGGTAAGGT
AGCAACAGAGCTAGAATGGGGCAATGCACTCTTACCCTCCTTCTCAACTTTTATTTAAGCTGTGCTAAATGTTTT
CTTCAAGGGAACCAGATTTAGTTCTTTACAGAATTTTCCAGTGAAATAAAACATGTTGTAATAGCTGTGTTTGAG
ATGAAATAAGAGGTTGTGGGTAGAGGGGAGGCACCTAAAGGAAAAGAGGAAAGGTGCCTGGGCTACCTATGCAGA
TAACCTGGAGTGGACTTCACTGTGGACTCGTGGTACTAAGGCTTGGCCTGGACAGGCAGTCTAGGGGGTATGGGA
ATACACGGTGTGGTTGTTCAACTATTTGCAAAGGTCAACCAAATAGACCACATGTTCGCAAAGTATCATCTGAGG
AAATTAAGTACCTTCTTAGCCCTCTCAGTCATAAATTTGAACAAATTTTAATACACTTCCCTCATGCCCTTCTAT
ATAAAACTTAATACCATTAGTTCCCCATTCTTGACATTTTATTTCAGTTTTTATTATATATTTATTTGAAATATT
TATTAAATTATCTGACCTACAGAACT

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FIGURE 2985

TGCTCCCGCTCGCGTCGGTGGCGTTTTTCCTGCAGCGCGTGCGTGCTGCGCTACTGAGCAGCGCCATGGAGGACT
CTGAAGCACTGGGCTTCGAACACATGGGCCTCGATCCCCGGCTCCTTCAGGCTGTCACCGATCTGGGCTGGTCGC
GACCTACGCTGATCCAGGAGAAGGCCATCCCACTGGCCCTAGAAGGGAAGGACCTCCTGGCTCGGGCCCGCACGG
GCTCCGGGAAGACGGCCGCTTATGCTATTCCGATGCTGCAGCTGTTGCTCCATAGGAAGGCGACAGGTCCGGTGG
TAGAACAGGCAGTGAGAGGCCTTGTTCTTGTTCCTACCAAGGAGCTGGCACGGCAAGCACAGTCCATGATTCAGC
AGCTGGCTACCTACTGTGCTCGGGATGTCCGAGTGGCCAATGTCTCAGCTGCTGAAGACTCAGTCTCTCAGAGAG
CTGTGCTGATGGAGAAGCCAGATGTGGTAGTAGGGACCCCATCTCGCATATTAAGCCACTTGCAGCAAGACAGCC
TGAAACTTCGTGACTCCCTGGAGCTTTTGGTGGTGGACGAAGCTGACCTTCTTTTTTCCTTTGGCTTTGAAGAAG
AGCTCAAGAGTCTCCTCTGTCACTTGCCCCGGATTTACCAGGCTTTTCTCATGTCAGCTACTTTTAACGAGGACG
TACAAGCACTCAAGGAGCTGATATTACATAACCCGGTTACCCTTAAGTTACAGGAGTCCCAGCTGCCTGGGCCAG
ACCAGTTACAGCAGTTTCAGGTGGTCTGTGAGACTGAGGAAGACAAATTCCTCCTGCTGTATGCCCTGCTCAAGC
TGTCATTGATTCGGGGCAAGTCTCTGCTCTTTGTCAACACTCTAGAACGGAGTTACCGGCTACGCCTGTTCTTGG
AACAGTTCAGCATCCCCACCTGTGTGCTCAATGGAGAGCTTCCACTGCGCTCCAGGTGCCACATCATCTCACAGT
TCAACCAAGGCTTCTACGACTGTGTCATAGCAACTGATGCTGAAGTCCTGGGGGCCCCAGTCAAGGGCAAGCGTC
GGGGCCGAGGGCCAAAGGGGACAAGGCCTCTGATCCGGAAGCAGGTGTGGCCCGGGGCATAGACTTCCACCATGT
GTCTGCTGTGCTCAACTTTGATCTTCCCCCAACCCCTGAGGCCTACATCCATCGAGCTGGCAGGACAGCACGCGC
TAACAACCCAGGCATAGTCTTAACCTTTGTGCTTCCCACGGAGCAGTTCCACTTAGGCAAGATTGAGGAGCTTCT
CAGTGGAGAGAACAGGGGCCCCATTCTGCTCCCCTACCAGTTCCGGATGGAGGAGATCGAGGGCTTCCGCTATCG
CTGCAGGGATGCCATGCGCTCAGTGACTAAGCAGGCCATTCGGGAGGCAAGATTGAAGGAGATCAAGGAAGAGCT
TCTGCATTCTGAGAAGCTTAAGACATACTTTGAAGACAACCCTAGGGACCTCCAGCTGCTGCGGCATGACCTACC
TTTGCACCCCGCAGTGGTGAAGCCCCACCTGGGCCATGTTCCTGACTACCTGGTTCCTCCTGCTCTCCGTGGCCT
GGTGCGCCCTCACAAGAAGCGGAAGAAGCTGTCTTCCTCTTGTAGGAAGGCCAAGAGAGCAAAGTCCCAGAACCC
ACTGCGCAGCTTCAAGCACAAAGGAAAGAAATTCAGACCCACAGCCAAGCCCTCCTGAGGTTGTTGGGCCTCTCT
GGAGCTGAGCACATTGTGGAGCACAGGCTTACACCCTTCGTGGACAGGCGAGGCTCTGGTGCTTACTGCACAGCC
TGAACAGACAGTTCTGGGGCCGGCAGTGCTGGGCCCTTTAGCTCCTTGGCACTTCCAAGCTGGCATCTTGCCCCT
TGACAACAGAATAAAAATTTTAGCTGCCCCAGTTTGTGCCTCCAGCATATGAAAAGGACTATTTGAATCCCCAAA
ACATCAGGAGTCGGGAAACTTCGGAAGACAGCTGTGCCTGGCTCTGTGGCTGCATGCAGTGCTTCACTTGGCCAG
CAGAGGTCAGCTGTGCCGAGCTGCCCCAGCCATGAGAAGAGAAGCCTGCCCTTGCTGGCAGGTGGCTATGGCCGG
CCCAGAGCCTTCCTGCCCAGCTCCTGCAGCCCTGCTGCCTGGGATCAGGCTGGGAGATGGGCCTTCCTGACCGCC
AGCCTTCCTCTCCCCGAGCACACGCACATGTAGATTCGGGGGGAAGCTGCCTGCTCTTCCTTAGAGGAGCCGGGG
CAGCTATCTGCTGGTCCCTTTCTGAACAACTGTTGATGTGTGA

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FIGURE 2986A

CTGAGGCGGCGCTGTGTGTGTGAAGCGTACCTAGGGCGGGAGGCGACATGGAGACAGGGGCGGCCGAGCTGTATG
ACCAGGCCCTTTTGGGCATCCTGCAGCACGTGGGCAACGTCCAGGATTTCCTGCGCGTTCTCTTTGGCTTCCTCT
ACCGCAAGACAGACTTCTATCGCTTGCTGCGCCACCCATCGGACCGCATGGGCTTCCCGCCCGGGGCCGCGCAGG
CCTTGGTGCTGCAGGTATTCAAAACCTTTGACCACATGGCCCGTCAGGATGATGAGAAGAGAAGGCAGGAACTTG
AAGAGAAAATCAGAAGAAAGGAAGAGGAAGAGGCCAAGACTGTGTCAGCTGCTGCAGCTGAGAAGGAGCCAGTCC
CAGTTCCAGTCCAGGAAATAGAGATTGACTCCACCACAGAATTGGATGGGCATCAGGAAGTAGAGAAAGTGCAGC
CTCCAGGCCCTGTGAAGGAA**ATG**GCCCATGGTTCACAGGAGGCAGAAGCTCCAGGAGCAGTTGCTGGTGCTGCTG
AAGTCCCTAGGGAACCACCAATTCTTCCCAGGATTCAGGAGCAGTTCCAGAAAAATCCCGACAGTTACAATGGTG
CTGTCCGAGAGAACTACACCTGGTCACAGGACTATACTGACCTGGAGGTCAGGGTGCCAGTACCCAAGCACGTGG
TGAAGGGAAAGCAGGTCTCAGTGGCCCTTAGCAGCAGCTCCATTCGTGTGGCCATGCTGGAGGAAAATGGGGAGC
GCGTCCTCATGGAAGGGAAGCTCACCCACAAGATCAACACTGAGAGTTCTCTCTGGAGTCTCGAGCCCGGGAAGT
GCGTTTTGGTGAACCTGAGCAAGGTGGGCGAGTATTGGTGGAACGCCATCCTGGAGGGAGAAGAGCCCATCGACA
TTGACAAGATCAACAAGGAGCGCTCCATGGCCACCGTGGATGAGGAGGAACAGGCGGTGTTGGACAGGCTTACCT
TTGACTACCACCAGAAGCTGCAGGGCAAGCCACAGAGCCATGAGCTGAAAGTCCATGAGATGCTGAAGAAGGGGT
GGGATGCTGAAGGTTCTCCCTTCCGAGGCCAGCGATTCGACCCTGCCATGTTCAACATCTCCCCGGGGGCTGTGC
AGTTT**TAA**TGACCAGAAGGAAAGGAAACCCTCGCCGGTGGGGAGGCAGAGCCTTATCCTCGGCTGCCCTTCTTGG
CTCCCTGCATTCCAGGGACTTGCTCGTCTTGTTTACCCCTAGCCATCCTTTCTTTCAAGGGTGAACCAGGCCTTC
CACCCTGACCTTGCATCTCCAGACTGTTCCAGAGAAGGTGCGGGGCCAGCTGCTATGTGGTGGCCGCTGTGGCTG
ACACTGAGTGAAGGTGTTTGAAATGCAGGAGAGGATATCCCAGCAAATTGGGATCACATGCTTTTGTCTCCACAG
CAACCAGCCACTGCAGGCAGCATGTCTTTCCTCCCCTGCTCTCTGCTTGCTGTTGTTTTGACGCTATTCTGCTTG
CATGTCTTCTGGTTGGGATGTGGAGTTGTTGCTGGACTCTCAGGCGAAGCTGAAGTCATTGAAGTGTGTGAAGCT
CTGTGCTTGCATGAGGGCAAGCAAGGAATGGCTGTGCCTGAGGCTGCTCTGGGAAACTCCTTGCCCCTTGACCTC
TTTTGAGAGCATTCACGTGGTCTTCTTGCTCATCCCCTTATAAATGTGCTTTGCCTGCCTCAGCCTCATGGTCAG
AGCAGTGGAGACTGGAGCCCTGTTTGCACGTTCTAGTTGTTCGGAGAAAGCCTAGGTTCTGGGCTCAGGTCCAGA
TGCAGCGGGGATTCTGTTCTCTGACTGTGGCGACCTTGCTTTGGTTCTTGTTGAAGTGAACCAAGCCCGGCCACC
ACGCATGGCATGCTGTGCTTGGCTCCCCATAAGACGTCCTCTTTGGGTGCACGGTGTCAAAGTGTGGGCAGGAGT
GGAGAGCTGGTGCCCTCAGGAGGAGACCACAGCATGTCCATCAGCTCAGCAGAGCTCGACAGCCACAAGTCCTGA
GAAGCTTTGACCTTGAAGGGCTTCTGGGAGAGGAGGAATTTCTGCATGGGGCGTGAAGGCACACTGTCCCACCAC
AACTGAACCAGAAGAGAGTGAAGACTCCCCTCTTCCCATCCTCTGTGCCAGGTGCCAGACTGTGCTCCTTGGAAC
TTATGGCCCAATCTTACCTGTTCTCCAGGGACTGGTCACTGCCTCAGGACCCCCAAGCCTATGCCCTGAGCCATG
GCTGCTGACTGACTCCAGCCAAGGTGCAAAGACGAGATTATGAGACAGGTCCTCAGGCCTGTGTTCCAAGTACTC
ACAGGGGCTCTGGGTGCCCATCGCCGGGAGTATGGTTCAGCTGCCACCGGCACTGTCCATTTGCCTGTCTGTCAA
GCTCAGAGCATGGATAAGCCACACAGCAGGGCAGTGCACCCTGGCACCATGCACGGCCAGCAAGAATCAAGGCCC
GCAGATGCTAAGAGGGCCTATTGTCAGGGGAAGGTCCCCGCTCCTGCACACTCTCTATGGATACTTGGGTTGTGG
GGGCTCTCTTGGAGAGTAAGTTTGTGGTTTGTTTCTGGTTTACAGTGGTGGCTGACACCCCTTGTAAGAAAGCAT
TCCTGGGAAGTCTTCTGTGGGTCCAAACATGTTGCTCCGATCATCACAGGAGAGCAAAAGGCCCTAGATACCCCC
TTTGGAATGTGAGAGTCTTGTTGTCTGATATTTGCCACTGAGCTGGTGAAGCCCCTCTAAAGAGATCTCGACCCT
GGGGAGCAGAATTCTTGTCATCTATGAGGGGTCCTGAGAAAGACTTGTCATTTTTTTTCCTGGAGTTCTTCCCAT
TGAGGTCCTAGGATTTGCACACCACTGTCCCACAAGAGCTTTCCTGCCTAATGAAAGGAGGTCTTGTGGTGTGTG
TCTCCTCTCTTCTCTATAGTTCCCGAGTTGGCCCCCATTGCAGCCCCCACCCTGTGGGTAGTCTTCCAGAAGTGA
TGCAGTGGTGTGAGATGCCCTACACCTTGTTATTTGGGAGACTTTGAGAGTCATTCACTTCCATGGTGACTAGTG
TTTGTTTTGCCTGATTTTATATTCTGTGTTGCATTTCTCCCCACTCCCTGCCCTGCTTTAATAAACAGCAAACCA
ATATCTAGGAAGAATGACTGAGGGATAGTATTGGGTATTGGCCCCATGGCAGGAACAGCCACTTGCATCTGGTCC
CGGTGCCACACTGCGGTGCTTGGTGTGGTTGTGGAGCCTGTCCCTGCGCGCCTTGCTCCCGTTGAGCCACGCTGT
CTGGTGGGTGATTCTCTGCCCTGAGCCACCACCCTGGACTGGCCCAGTCTCCAGAGCTGGCACACCCTGCCTGTT
TTCTCTTTTTAGACACAACAGCCGCAGTTTGGCCAGCCACTAAGTCCCACCAGCTGAGGTCCGAGGAAAGCGGGG
TGACTCATTTCCCTTGTCCAGGGCCCGAGGAGAGTGAGGTGTCCAGCCTGCAAAGCTATTCCAGCTCCTTGGTGT
TGGTTTGCAATAAATTGGTATTTAAGCAGTTCTGGGTCTGCGTGTGACATTTGCTGCTGAGACAGTTCTGTCTGT

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FIGURE 2986B

GCATGGTCATTATTGTTGCATTCTAGCCTTGAGGTCCCAGGCCAACGTACACAGCAAACACCAGCATGGGGAATT
CTTAGGGGTTGTTTCCCATCTGGTCTGAATGCACTGGGCAAGATCTCAATACAGCTTTAGAAATCCTGTAAGATT
TTGACCAGTGGGGAGAAAAAGAATGTAGCTATAGATCTTACATCCTTTCAAACAGGTTCTGGAATTCTGTAGTTA
CTGGAAAGCTTAGGGTGAGTGCAGAGTTGGGAATGATTCCACTGAAGGGCCACCTTTGCCCACCAGGCTCCAAGG
CCCTCCTTGGTCTCCAGGTGCATACCTGCTGTTAACTTTGCTGAGCCCTCGCAATGGGCTTCCTCCAGGACATAA
CGCCGTGTCTGACACAGAAGTCTCCCAGGTGGCTGGCCACCTGCTTCTTCCTCAGTCAGATCTTTGACTCTCCTT
CTCTGTGCCCACCCCATCTCCAGCCTCCTCTGACCCTGCTCACCCCTGGGGACAGGACCTAGGGGTGTGAGAAGT
ACTTGGCTGAATAAAGACTGTTTCAAAGGCAATCCTTAGAATTGCCTAGCATACTCCCAGGGCCAGAAATAACCC
GCCAGAAAGGAGAGGCGTATTTGCCCCTGAAGAGTGCAGGAGGGAGAACAGTTGAGAAGTGTTTTGTGTGGAAAT
GTGTCCAAGAGGCGTCAGCTGCTGCACAGAGAACTCACTGCCCAGAACACTGCGCTTGGGGAACAGACCTCACCC
CCACCTCAAATCTGCTCTCCACTGGGCCTGTTGGCAGCCAGCTCAGCTGGGGAAGGGACAGCATGACTCGCTTTG
TCGATGAAAAGCACGAAGTTGTCAGCACAGAACCTGGCCAGTCCTTGAGAAACTCCCTCCTTGGTGGTCAGAGGT
CAAGCAGCCCATGTGGCCCACGGTCCTGAAGAACTGGGCTATGTCCCTGAGGCTCCTCTCTACCGTCTGACTGTG
GGGTCTGGGGAACAGGCATTTAAACCAGGCTGCTGCCCTGGGGAGTGCCCACTGGACGCCAGGGTGCCCCATAGG
GACAGGGTCACAAAGCCCTGGGGCTTCCCCTGCCAGTCCTGGTGAGGACAGTGTGGTCACTATCTCAGAGAGACG
AAAAATGAATATTCTGTCATTTCAGACTAAACTACTCACCCAGCTCACACTAATATGGATTTGTTAATTTTACCT
TTTTTTTTCTTTCCAACTTTAGGTTCAAGGGTTGTTACATGGGTAAATTGGATCATAGGG

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FIGURE 2987

TCTTCCTCGGCGCTGCCTACGGAGGTGGCAGCCATCTCCTCCTCGGCATC**ATG**GCCGCCCTCAGACCCCTTGTGA
AGCCCAAGATCGTCAAAAAGAGAACCAAGAAGTTCATCCAGCACCAGTCAGACCAATATGTCAAAATTAAGCGTA
ACTGGCGGAAACCCAGAGGCACTGACAACAGGGTTCGTAGAAGATTCAAGGGCCAGATCTTGATGCCCAACATTG
GTTATGGGAGCAACAAAAAAACAAAGCACATGCTGCCCAGTGGCTTCCGGAAGTTCCTGGTCCACAACATCAAGG
AGCTGGAAGTGCTGCTGATGTGCAACAAATCTTACTGTGCCGAGATCGCTCACAATGTTTCCTCCAAGAACCGCA
AAGCCATCGTGGAAACAGCTGCCCAACTGGCCATCAGAGTCACCAACCCCAATGCCAGGCTGCGCAGCGAAGAAA
ATGAG**TAG**ACAGCTCGTGTGCACGTTTTCTGTTTAAATAAATGTAAAAACTGC

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FIGURE 2988

GCGGCGCGCTCCTGGCGAGGACGGAGCGAGCAGATCTCGCGTGCGCTCGCCGCCCGGCGCAGCCCAGCCCGGCCC
CCGCCTGGCGCCGCGAGCCGAGGTGTCTCCCGCGCCCGCGCCCGTGTCGCCGCCGTGCCCGCGAGCGGGAGCCGG
AGTCGCCGCCGCCCGAGCGCAGCCGAGCGCACGCCGAGCCCGTCCGCCGCCGCCATGGCCACCACGGTGACCTGC
ACCCGCTTCACCGACGAGTACCAGCTCTACGAGGATATTGGCAAGGGGGCTTTCTCTGTGGTCCGACGCTGTGTC
AAGCTCTGCACCGGCCATGAGTATGCAGCCAAGATCATCAACACCAAGAAGCTGTCAGCCAGAGATCACCAGAAG
CTGGAGAGAGAGGCTCGGATCTGCCGCCTTCTGAAGCATTCCAACATCGTGCGTCTCCACGACAGCATCTCCGAG
GAGGGCTTCCACTACCTGGTCTTCGATCTGGTCACTGGTGGGGAGCTCTTTGAAGACATTGTGGCGAGAGAGTAC
TACAGCGAGGCTGATGCCAGTCACTGTATCCAGCAGATCCTGGAGGCCGTTCTCCATTGTCACCAAATGGGGGTC
GTCCACAGAGACCTCAAGCCGGAGAACCTGCTTCTGGCCAGCAAGTGCAAAGGGGCTGCAGTGAAGCTGGCAGAC
TTCGGCCTAGCTATCGAGGTGCAGGGGGACCAGCAGGCATGGTTTGGTTTCGCTGGCACACCAGGCTACCTGTCC
CCTGAGGTCCTTCGCAAAGAGGCGTATGGCAAGCCTGTGGACATCTGGGCATGTGGGGTGATCCTGTACATCCTG
CTCGTGGGCTACCCACCCTTCTGGGACGAGGACCAGCACAAGCTGTACCAGCAGATCAAGGCTGGTGCCTATGAC
TTCCCGTCCCCTGAGTGGGACACCGTCACTCCTGAAGCCAAAAACCTCATCAACCAGATGCTGACCATCAACCCT
GCCAAGCGCATCACAGCCCATGAGGCCCTGAAGCACCCGTGGGTCTGCCAACGCTCCACGGTAGCATCCATGATG
CACAGACAGGAGACTGTGGAGTGTCTGAAAAAGTTCAATGCCAGGAGAAAGCTCAAGGGAGCCATCCTCACCACC
ATGCTGGCCACACGGAATTTCTCAGTGGGCAGACAGACCACCGCTCCGGCCACAATGTCCACCGCGGCCTCCGGC
ACCACCATGGGGCTGGTGGAACAAGCCAAGAGTTTACTCAACAAGAAAGCAGATGGAGTCAAGCCCCAGACGAAT
AGCACCAAAAACAGTGCAGCCGCCACCAGCCCCAAAGGGACGCTTCCTCCTGCCGCCCTGGAGCCTCAAACCACC
GTCATCCATAACCCAGTGGACGGGATTAAGGAGTCTTCTGACAGTGCCAATACCACCATAGAGGATGAAGACGCT
AAAGCCCGGAAGCAGGAGATCATTAAGACCACGGAGCAGCTCATCGAGGCCGTCAACAACGGTGACTTTGAGGCC
TACGCGAAAATCTGTGACCCAGGGCTGACCTCGTTTGAGCCTGAAGCACTGGGCAACCTGGTTGAAGGGATGGAC
TTCCACAGATTCTACTTCGAGAACCTGCTGGCCAAGAACAGCAAGCCGATCCACACGACCATCCTGAACCCACAC
GTGCACGTCATTGGAGAGGATGCCGCCTGCATCGCTTACATCCGGCTCACGCAGTACATTGACGGGCAGGGCCGG
CCCCGCACCAGCCAGTCTGAGGAGACCCGCGTGTGGCACCGCGCGACGGCAAGTGGCAGAACGTGCACTTCCACT
GCTCGGGCGCGCCTGTGGCCCCGCTGCAGTGAAGCCAAGGGAGGGGCACAGAATGGGGAACAGGACACAGGATCC
TAAACTCCAAGGGGACTGTCCACCGATGAACACTCAGAGTGGACACCATCTTCCGTCCACGCTGTGCCCAGGACA
GCTGTCCCCATCCATGAACACAGGGTAAACATCTGCCGGGCTCCGCACCAGTGGCTCCCTGGGCCATGGGACAGC
GGCAGGGCTCACCACGGACAGCACGTGGCCCAGCAGCCGGCCACCCTGGCGTCCTGGGGCCTCCTCCCCTCCTCT
CCCTCTCACCTTGTCACCTCCACGGAGCTGCCTGTCTGGGATAATTTGGGGATTTTTTTTCTGGGGGATAATTCT
TTTGCATGACCCC

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FIGURE 2989

GCTGCTCCCTGAGAACGGGTCCCGCAGCTGGGCAGGCGGGCGGCCTGAGGGCGCGGAGCCATGAAGCTGTACAGC
CTCAGCGTCCTCTACAAAGGCGAGGCCAAGGTGGTGCTGCTCAAAGCCGCATACGATGTGTCTTCCTTCAGCTTT
TTCCAGAGATCCAGCGTTCAGGAATTCATGACCTTCACGAGTCAACTGATTGTGGAGCGCTCATCGAAAGGCACT
AGAGCTTCTGTCAAAGAACAAGACTATCTGTGCCACGTCTACGTCCGGAATGATAGTCTTGCAGGTGTGGTCATT
GCTGACAATGAATACCCATCCCGGGTGGCCTTTACCTTGCTGGAGAAGGTACTAGATGAATTCTCCAAGCAAGTC
GACAGGATAGACTGGCCAGTAGGATCCCCTGCTACAATCCATTACCCAGCCCTGGATGGTCACCTCAGTAGATAC
CAGAACCCACGAGAAGCTGATCCCATGACTAAAGTGCAGGCCGAACTAGATGAGACCAAAATCATTCTGCACAAC
ACCATGGAGTCTCTGTTAGAGCGAGGTGAGAAGCTAGATGACTTGGTGTCCAAATCCGAGGTGCTGGGAACACAG
TCTAAAGCCTTCTATAAAACTGCCCGGAAACAAAACTCATGCTGTGCCATCATGTGATGCAGCCTGCCAGAGGCC
CAATGCTGGAATGGCACCATCATTCACATCAGAACTGCAGCCCCTGGAAAAGAAGAGACA

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FIGURE 2990

ACTCCACACCTGGCTGGAGCAGGAAATGCCGAGCGGCGCCTGAGCCCCAGGGAAGCAGGCTAGGATGTGAGAGAC
ACAGTCACCTGCAGCCTAATTACTCAAAAGCTGTCCCCAGGTCACAGAAGGGAGAGGACATTTCCCACTGAATCT
GTCTGAAGGACACTAAGCCCCACAGCTCAACACAACCAGGAGAGAAAGCGCTGAGGACGCCACCCAAGCGCCCAG
CAATGGCCCTGCCTGGAGAACATCCAGGCTCAGTGAGGAAGGGTCCAGAAGGGAATGCTTGCCGACTCGTTGGAG
AACAATGAAAAGGAGGAAACTGTGACTGAACCTCAAACCCCAAACCAGCCCGAGGAGAACCACATTCTCCCAGGG
ACCCAGGGCGGGCCGTGACCCCTGCGGCGGAGAAGCCTTGGATATTTCCACTTCAGAAGCCTACTGGGGAAGGCT
GAGGGGTCCCAGCTCCCCACGCTGGCTGCTGTGCAGATGCTGGACGACAGAGCCAGGATGGAGGCCGCCAAGAAG
GAGAAGGTAGAGCAGATCCTGGCAGAGTTCCAGCTGCAGGAGGAGGACCTGAAGAAGGTGATGAGACGGATGCAG
AAGGAGATGGACCGCGGCCTGAGGCTGGAGACCCATGAAGAGGCCAGTGTGAAGATGCTGCCCACCTACGTGCGC
TCCACCCCAGAAGGCTCAGAAGTCGGGGACTTCCTCTCCCTGGACCTGGGTGGCACTAACTTCAGGGTGATGCTG
GTGAAGGTGGGAGAAGGTGAGGAGGGGCAGTGGAGCGTGAAGACCAAACACCAGATGTACTCCATCCCCGAGGAC
GCCATGACCGGCACTGCTGAGATGCTCTTCGACTACATCTCTGAGTGCATCTCCGACTTCCTGGACAAGCATCAG
ATGAAACACAAGAAGCTGCCCCTGGGCTTCACCTTCTCCTTTCCTGTGAGGCACGAAGACATCGATAAGGGCATC
CTTCTCAACTGGACCAAGGGCTTCAAGGCCTCAGGAGCAGAAGGGAACAATGTCGTGGGGCTTCTGCGAGACGCT
ATCAAACGGAGAGGGGACTTTGAAATGGATGTGGTGGCAATGGTGAATGACACGGTGGCCACGATGATCTCCTGC
TACTACGAAGACCATCAGTGCGAGGTCGGCATGATCGTGGGCACGGGCTGCAATGCCTGCTACATGGAGGAGATG
CAGAATGTGGAGCTGGTGGAGGGGGACGAGGGCCGCATGTGCGTCAATACCGAGTGGGGCGCCTTCGGGGACTCC
GGCGAGCTGGACGAGTTCCTGCTGGAGTATGACCGCCTGGTGGACGAGAGCTCTGCAAACCCCGGTCAGCAGCTG
TATGAGAAGCTCATAGGTGGCAAGTACATGGGCGAGCTGGTGCGGCTTGTGCTGCTCAGGCTCGTGGACGAAAAC
CTGCTCTTCCACGGGGAGGCCTCCGAGCAGCTGCGCACACGCGGAGCCTTCGAGACGCGCTTCGTGTCGCAGGTG
GAGAGCGACACGGGCGACCGCAAGCAGATCTACAACATCCTGAGCACGCTGGGGCTGCGACCCTCGACCACCGAC
TGCGACATCGTGCGCCGCGCCTGCGAGAGCGTGTCTACGCGCGCTGCGCACATGTGCTCGGCGGGGCTGGCGGGC
GTCATCAACCGCATGCGCGAGAGCCGCAGCGAGGACGTAATGCGCATCACTGTGGGCGTGGATGGCTCCGTGTAC
AAGCTGCACCCCAGCTTCAAGGAGCGGTTCCATGCCAGCGTGCGCAGGCTGACGCCCAGCTGCGAGATCACCTTC
ATCGAGTCGGAGGAGGGCAGTGGCCGGGGCGCGGCCCTGGTCTCGGCGGTGGCCTGTAAGAAGGCCTGTATGCTG
GGCCAGTGAGAGCAGTGGCCGCAAGCGCAGGGAGGATGCCACAGCCCCACAGCACCCAGGCTCCATGGGGAAGTG
CTCCCCACACGTGCTCGCAGCCTGGCGGGGCAGGAGGCCTGGCCTTGTCAGGACCCAGGCCGCCTGCCATACCGC
TGGGGAACAGAGCGGGCCTCTTCCCTCAGTTTTTCGGTGGGACAGCCCCAGGGCCCTAACGGGGGTGCGGCAGGA
GCAGGAACAGAGACTCTGGAAGCCCCCCACCTTTCTCGCTGGAATCAATTTCCCAGAAGGGAGTTGCTCACTCAG
GACTTTGATGCATTTCCACACTGTCAGAGCTGTTGGCCTCGCCTGGGCCCAGGCTCTGGGAAGGGGTGCCCTCTG
GATCCTGCTGTGGCCTCACTTCCCTGGGAACTCATCCTGTGTGGGGAGGCAGCTCCAACAGCTTGACCAGACCTA
GACCTGGGCCAAAAGGGCAGCCAGGGGCTGCTCATCACCCAGTCCTGGCCATTTTCTTGCCTGAGGCTCAAGAGG
CCCAGGGAGCAATGGGAGGGGGCTCCATGGAGGAGGTGTCCCAAGCTTTGAATACCCCCAGAGACCTTTTCTCTC
CCATACCATCACTGAGTGGCTTGTGATTCTGGGATGGACCCTCGCAGCAGGTGCAAGAGACAGAGCCCCCAAGCC
TCTGCCCCAAGGGGCCCACAAAGGGGAGAAGGGCCAGCCCTACATCTTCAGCTCCCATAGCGCTGGCTCAGGAAG
AAACCCCAAGCAGCATTCAGCACACCCCAAGGGACAACCCCATCATATGACATGCCACCCTCTCCATGCCCAACC
TAAGATTGTGTGGGTTTTTTAATTAAAAATGTTAAAAGTTTTAAACATG

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FIGURE 2991

GGCCAGCAGGAAGGCGGGGACCCGGGGCAAGGTGGCAGCCACCAAGCAGGCCCAACGTGGTTCTTCCAACGTCTT
TTCCATGTTTGAACAAGCCCAGATACAGGAGTTCAAAGAAGCCTTCAGCTGTATCGACCAGAATCGTGATGGCAT
CATCTGCAAGGCAGACCTGAGGGAGACCTACTCCCAGCTGGGGAAGGTGAGTGTCCCAGAGGAGGAGCTGGACGC
CATGCTGCAAGAGGGCAAGGGCCCCATCAACTTCACCGTCTTCCTCACGCTCTTTGGGGAGAAGCTCAATGGGAC
AGACCCCGAGGAAGCCATCCTGAGTGCCTTCCGCATGTTTGACCCCAGCGGCAAAGGGGTGGTGAACAAGGATGA
GTTCAAGCAGCTTCTCCTGACCCAGGCAGACAAGTTCTCTCCAGCTGAGGTGGAGCAGATGTTCGCCCTGACACC
CATGGACCTGGCGGGGAACATCGACTACAAGTCACTGTGCTACATCATCACCCATGGAGACGAGAAAGAGGAATG
AGGGGCAGGGCCAGGCCCACGGGGGGGCACCTCAATAAACTCTGTTGCAAAATTGG

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FIGURE 2992

GAGTTGCGGCGATGGGCGGGGCAGGCGCGCGGGGATTGGCGGGATGCGGCGCGCCGCGCGTGAACCTCCTTGGCC
TGGGCGAAGCTGTGTGGACCAAGCAAGTCAGGAGTGTGGCC**ATG**TTTTCTGAGCAGGCTGCCCAGAGGGCCCACA
CTCTACTGTCCCCACCATCAGCCAACAATGCCACCTTTGCCCGGGTGCCAGTGGCAACCTACACCAACTCCTCAC
AACCCTTCCGGCTAGGAGAGCGCAGCTTTAGCCGGCAGTATGCCCACATTTATGCCACCCGCCTCATCCAAATGA
GACCCTTCCTGGAGAACCGGGCCCAGCAGCACTGGGGCAGTGGAGTGGGAGTGAAGAAGCTGTGTGAACTGCAGC
CTGAGGAGAAGTGCTGTGTGGTGGGCACTCTGTTCAAGGCCATGCCGCTGCAGCCCTCCATCCTGCGGGAGGTCA
GCGAGGAGCACAACCTGCTCCCCCAGCCTCCTCGGAGTAAATACATACACCCAGATGACGAGCTGGTCTTGGAAG
ATGAACTGCAGCGTATCAAACTAAAAGGCACCATTGACGTGTCAAAGCTGGTTACGGGGACTGTCCTGGCTGTGT
TTGGCTCCGTGAGAGACGACGGGAAGTTTCTGGTGGAGGACTATTGCTTTGCTGACCTTGCTCCCCAGAAGCCCG
CACCCCCACTTGACACAGATAGGTTTGTGCTACTGGTGTCCGGCCTGGGCCTGGGTGGCGGTGGAGGCGAGAGCC
TGCTGGGCACCCAGCTGCTGGTGGATGTGGTGACGGGGCAGCTTGGGGACGAAGGGGAGCAGTGCAGCGCCGCCC
ACGTCTCCCGGGTTATCCTCGCTGGCAACCTCCTCAGCCACAGCACCCAGAGCAGGGATTCTATCAATAAGGCCA
AATACCTCACCAAGAAAACCCAGGCAGCCAGCGTGGAGGCTGTTAAGATGCTGGATGAGATCCTCCTGCAGCTGA
GCGCCTCAGTGCCCGTGGACGTGATGCCAGGCGAGTTTGATCCCACCAATTACACGCTCCCCCAGCAGCCCCTCC
ACCCCTGCATGTTCCCGCTGGCCACTGCCTACTCCACGCTCCAGCTGGTCACCAACCCCTACCAGGCCACCATTG
ATGGAGTCAGATTTTTGGGGACATCAGGACAGAACGTGAGTGACATTTTCCGATACAGCAGCATGGAGGATCACT
TGGAGATCCTGGAGTGGACCCTGCGGGTCCGTCACATCAGCCCCACAGCCCCTGACACTCTAGGTTGTTACCCCT
TCTACAAAACTGACCCGTTCATCTTCCCAGAGTGCCCGCATGTCTACTTTTGTGGCAACACCCCCAGCTTTGGCT
CCAAAATCATCCGAGGTCCTGAGGACCAGACAGTGCTGTTGGTGACTGTCCCTGACTTCAGTGCCACGCAGACCG
CCTGCCTTGTGAACCTGCGCAGCCTGGCCTGCCAGCCCATCAGCTTCTCGGGCTTCGGGGCAGAGGACGATGACC
TGGGAGGCCTGGGGCTGGGCCCC**TGA**CTCAAAAAAGTGGTTTTGACCAGAGAGGCCCAGATGGAGGCTGTTCATT
CCCTGCAGTGTCGGCATTGTAAATAAAGCCTGAGCACTTGCTG

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FIGURE 2993A

TCCCTCGCTCACCCCATCCTCTCTCCCGCCCCTTCCTGGATTCCCTCACCCGTCTCGATCCCCTCTCCGCCCTTT
CCCAGAGACCCAGAGCCCCTGACCCCCCGCGCCCTCCCCGGAGCCCCCCGCGCGTGCCGCGGCCATGGCGGCCGT
GCGCGGGGCGCCCCTGCTCAGCTGCCTCCTGGCGTTGCTGGCCCTGTGCCCTGGAGGGCGCCCGCAGACGGTGCT
GACCGACGACGAGATCGAGGAGTTCCTCGAGGGCTTCCTGTCAGAGCTAGAACCTGAGCCCCGGGAGGACGACGT
GGAGGCCCCGCCGCCTCCCGAGCCCACCCCGCGGGTCCGAAAAGCCCAGGCGGGGGGCAAGCCAGGGAAGCGGCC
AGGGACGGCCGCAGAAGTGCCTCCGGAAAAGACCAAAGACAAAGGGAAGAAAGGCAAGAAAGACAAAGGCCCCAA
GGTGCCCAAGGAGTCCTTGGAGGGGTCCCCCAGGCCGCCCAAGAAGGGGAAGGAGAAGCCACCCAAGGCCACCAA
GAAGCCCAAGGAGAAGCCACCTAAGGCCACCAAGAAGCCCAAGGAGAAGCCACCCAAGGCCACCAAGAAGCCCAA
AGAGAAGCCACCCAAGGCCACCAAGAAGCCCCCGTCAGGGAAGAGGCCCCCCATTCTGGCTCCCTCAGAAACCCT
GGAGTGGCCACTGCCCCCACCCCCCAGCCCTGGCCCCGAGGAGCTACCCCAGGAGGGAGGGGCGCCCCTCTCAAA
TAACTGGCAGAATCCAGGAGAGGAGACCCATGTGGAGGCACGGGAGCACCAGCCTGAGCCGGAGGAGGAGACCGA
GCAACCCACACTGGACTACAATGACCAGATCGAGAGGGAGGACTATGAGGACTTTGAGTACATTCGGCGCCAGAA
GCAACCCAGGCCACCCCCAAGCAGAAGGAGGAGGCCCGAGCGGGTCTGGCCAGAGCCCCCTGAGGAGAAGGCCCC
GGCCCCAGCCCCGGAGGAGAGGATTGAGCCTCCTGTGAAGCCTCTGCTGCCCCCGCTGCCCCCTGACTATGGTGA
TGGTTACGTGATCCCCAACTACGATGACATGGACTATTACTTTGGGCCTCCTCCGCCCCAGAAGCCCGATGCTGA
GCGCCAGACAGACGAAGAGAAGGAGGAGCTGAAGAAACCCAAAAAGGAGGACAGCAGCCCCAAGGAGGAGACCGA
CAAGTGGGCAGTGGAGAAGGGCAAGGACCACAAAGAGCCCCGAAAGGGCGAGGAGTTGGAGGAGGAGTGGACGCC
TACGGAGAAAGTCAAGTGTCCCCCCATTGGGATGGAGTCACACCGTATTGAGGACAACCAGATCCGAGCCTCCTC
CATGCTGCGCCACGGCCTGGGGGCACAGCGCGGCCGGCTCAACATGCAGACCGGTGCCACTGAGGACGACTACTA
TGATGGTGCGTGGTGTGCCGAGGACGATGCCAGGACCCAGTGGATAGAGGTGGACACCAGGAGGACTACCCGGTT
CACAGGCGTCATCACCCAGGGCAGAGACTCCAGCATCCATGACGATTTTGTGACCACCTTCTTCGTGGGCTTCAG
CAATGACAGCCAGACATGGGTGATGTACACCAACGGCTATGAGGAAATGACCTTTCATGGGAACGTGGACAAGGA
CACACCCGTGCTGAGTGAGCTCCCAGAGCCGGTGGTGGCTCGTTTCATCCGCATCTACCCACTCACCTGGAATGG
CAGCCTGTGCATGCGCCTGGAGGTGCTGGGGTGCTCTGTGGCCCCTGTCTACAGCTACTACGCACAGAATGAGGT
GGTGGCCACCGATGACCTGGATTTCCGGCACCACAGCTACAAGGACATGCGCCAGCTCATGAAGGTGGTGAACGA
GGAGTGCCCCACCATCACCCGCACTTACAGCCTGGGCAAGAGCTCACGAGGCCTCAAGATCTATGCCATGGAGAT
CTCAGACAACCCTGGGGAGCATGAACTGGGGGAGCCCGAGTTCCGCTACACTGCTGGGATCCATGGCAACGAGGT
GCTGGGCCGAGAGCTGTTGCTGCTGCTCATGCAGTACCTGTGCCGAGAGTACCGCGATGGGAACCCACGTGTGCG
CAGCCTGGTGCAGGACACACGCATCCACCTGGTGCCCTCACTGAACCCTGATGGCTACGAGGTGGCAGCGCAGAT
GGGCTCAGAGTTTGGGAACTGGGCGCTGGGACTGTGGACTGAGGAGGGCTTTGACATCTTTGAAGATTTCCCGGA
TCTCAACTCTGTGCTCTGGGGAGCTGAGGAGAGGAAATGGGTCCCCTACCGGGTCCCCAACAATAACTTGCCCAT
CCCTGAACGCTACCTTTCGCCAGATGCCACGGTATCCACGGAGGTCCGGGCCATCATTGCCTGGATGGAGAAGAA
CCCCTTCGTGCTGGGAGCAAATCTGAACGGCGGCGAGCGGCTAGTATCCTACCCCTACGATATGGCCCGCACGCC
TACCCAGGAGCAGCTGCTGGCCGCAGCCATGGCAGCAGCCCGGGGGGAGGATGAGGACGAGGTCTCCGAGGCCCA
GGAGACTCCAGACCACGCCATCTTCCGGTGGCTTGCCATCTCCTTCGCCTCCGCACACCTCACCTTGACCGAGCC
CTACCGCGGAGGCTGCCAAGCCCAGGACTACACCGGCGGCATGGGCATCGTCAACGGGGCCAAGTGGAACCCCCG
GACCGGGACTATCAATGACTTCAGTTACCTGCATACCAACTGCCTGGAGCTCTCCTTCTACCTGGGCTGTGACAA
GTTCCCTCATGAGAGTGAGCTGCCCCGCGAGTGGGAGAACAACAAGGAGGCGCTGCTCACCTTCATGGAGCAGGT
GCACCGCGGCATTAAGGGGGTGGTGACGGACGAGCAAGGCATCCCCATTGCCAACGCCACCATCTCTGTGAGTGG
CATTAATCACGGCGTGAAGACAGCCAGTGGTGGTGATTACTGGCGAATCTTGAACCCGGGTGAGTACCGCGTGAC
AGCCCACGCGGAGGGCTACACCCCGAGCGCCAAGACCTGCAATGTTGACTATGACATCGGGGCCACTCAGTGCAA
CTTCATCCTGGCTCGCTCCAACTGGAAGCGCATCCGGGAGATCATGGCCATGAACGGGAACCGGCCTATCCCACA
CATAGACCCATCGCGCCCTATGACCCCCCAACAGCGACGCCTGCAGCAGCGACGCCTACAACACCGCCTGCGGCT
TCGGGCACAGATGCGGCTGCGGCGCCTCAACGCCACCACCACCCTAGGCCCCCACACTGTGCCTCCCACGCTGCC
CCCTGCCCCTGCCACCACCCTGAGCACTACCATAGAGCCCTGGGGCCTCATACCGCCAACCACCGCTGGCTGGGA
GGAGTCGGAGACTGAGACCTACACAGAGGTGGTGACAGAGTTTGGGACCGAGGTGGAGCCCGAGTTTGGGACCAA
GGTGGAGCCCGAGTTTGAGACCCAGTTGGAGCCTGAGTTTGAGACCCAGCTGGAACCCGAGTTTGAGGAAGAGGA
GGAGGAGGAGAAAGAGGAGGAGATAGCCACTGGCCAGGCATTCCCCTTCACAACAGTAGAGACCTACACAGTGAA

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FIGURE 2993B

CTTTGGGGACTTCTGAGATCAGCGTCCTACCAAGACCCCAGCCCAACTCAAGCTACAGCAGCAGCACTTCCCAAG
CCTGCTGACCACAGTCACATCACCCATCAGCACATGGAAGGCCCCTGGTATGGACACTGAAAGGAAGGGCTGGTC
CTGCCCCTTTGAGGGGGTGCAAACATGACTGGGACCTAAGAGCCAGAGGCTGTGTAGAGGCTCCTGCTCCACCTG
CCAGTCTCGTAAGAGATGGGGTTGCTGCAGTGTTGGAGTAGGGGCAGAGGGAGGGAGCCAAGGTCACTCCAATAA
AACAAGCTCATGGC

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FIGURE 2994

GTTTCCCTCTGCGTTCGCTCCGCGCTGCTGGAGGCTGTCGTCCCAATGCTCCCCAAACGGCGGCGAGCGCGGGTC
GGGTCCCCTAGCGGCGATGCCGCTTCCTCCACGCCGCCCTCGACGCGCTTCCCGGGAGTCGCCATCTACCTGGTC
GAGCCTCGCATGGGTCGCAGCCGCCGGGCCTTCCTCACAGGCCTGGCGCGCTCCAAAGGCTTCCGCGTCCTTGAC
GCCTGCAGCTCCGAAGCGACACATGTTGTGATGGAAGAGACCTCAGCAGAGGAGGCCGTCAGCTGGCAGGAGCGC
AGGATGGCAGCTGCTCCCCCGGGTTGCACCCCCCCAGCTCTGCTGGACATAAGCTGGTTAACAGAGAGCCTGGGA
GCTGGGCAGCCTGTACCTGTGGAGTGCCGGCACCGCCTGGAGGTGGCTGGGCCAAGGAAGGGGCCTCTGAGCCCA
GCATGGATGCCTGCCTATGCCTGCCAGCGCCCTACGCCCCTCACACACCACAACACTGGCCTCTCCGAGGCTCTG
GAGATACTGGCCGAGGCAGCAGGCTTTGAAGGCAGTGAGGGCCGCCTCCTCACCTTCTGCAGAGCAGCCTCGGTG
CTCAAGGCCCTTCCCAGCCCTGTCACAACCCTGAGCCAGCTGCAGGGGCTTCCCCACTTTGGAGAACACTCCTCT
AGGGTTGTCCAGGAGCTGCTGGAGCATGGAGTGTGTGAGGAGGTGGAGAGAGTTCGGCGCTCAGAGAGGTACCAG
ACCATGAAGCTCTTCACCCAGATCTTCGGGGTCGGTGTGAAGACTGCTGACCGGTGGTACCGGGAAGGACTGCGA
ACCTTAGATGACCTCCGAGAGCAGCCCCAGAAACTAACCCAACAGCAGAAAGCGGGGCTCCAGCACCACCAGGAC
CTGAGCACCCCAGTCCTGCGGTCCGATGTAGATGCCCTGCAGCAGGTGGTGGAGGAAGCTGTGGGGCAGGCCCTG
CCTGGGGCCACCGTCACGCTGACCGGCGGCTTCCGCAGGGGGAAGTTGCAGGGCCATGACGTGGACTTCCTCATC
ACCCACCCCAAGGAGGGTCAGGAGGCGGGGCTGCTGCCTAGAGTGATGTGCCGCCTGCAGGACCAGGGCCTCATC
CTGTACCACCAGCACCAGCACAGCTGCTGTGAGTCCCCTACCCGCCTGGCCCAACAGAGCCACATGGACGCTTTT
GAGAGAAGTTTCTGCATTTTCCGCCTACCACAACCTCCAGGGGCTGCTGTGGGGGGATCCACGAGGCCCTGCCCA
TCCTGGAAGGCCGTGAGAGTGGACTTGGTAGTTGCACCCGTCAGCCAGTTCCCTTTCGCCCTGCTCGGTTGGACT
GGCTCCAAGCTTTTCCAGCGGGAGCTGCGCCGCTTCAGCCGGAAGGAGAAGGGCCTGTGGCTGAACAGCCATGGG
CTGTTTGACCCGGAGCAGAAGACATTTTTCCAAGCGGCTTCAGAGGAAGACATCTTCAGACACCTGGGCCTTGAG
TACCTTCCTCCAGAGCAGAGAAACGCCTGAGCCTGCCTGTGTCCCCCACTTCCACTCAGGAAATTGGGCTGCCCC
CAACCTGGCCACTGAATGTCTCCAGGCAGATATGCTGCCCCCTGACCCCCACCTTCACCCCTCCCCGCCAAGGCC
TGGCTCTTCCGGAGGTCAATTGTGCCTGCAGGATCAGTTGAGCCCCTGCTGGTGTGCTGCAGGGTGTGATGAGGT
GGGAGCCCTCAGTGCCAGCCTCATCACTGTGTGACCCTGGGTCTGCTCTTAGCCTCCCCATGGCTCACGTTCCTG
CCCTGGATGGGATGTGAGTGGGGCCCACATCGTGGAGCTGTGGTGGGGCCTGCAGTCATGAATGGCAAGTGGTCC
CTGATGTGCAGTGTCTCATTAGTTGCACTGCAGTTAACTGTGGCTCCTGCAGGGCACCCTGCCCAGAATGCCCAG
AAGAGAACCATGCATACCTGCACTGCATTTGAGAGCCATGAGCTGGAGGCTGTGGTTCGTGCCAGCAAGGAGCCT
ACTGTCTGGTGTGCTGTAGGCATCTGGAGAGGGAGAGGGCCTGGGTAGGAGCTGGGAGGAAGATAATTTTCAACT
ATGGGGCTTCAGTACTGCAGCGCCCCGAGCCAGGCTCTGTGCTTCTGCCTTTAAGGCCTGTTCTCAGCACAATGT
CTCAAAAATAGGTCATATCCTGCCACTCCCGTCGCAGAGCCCTTTAATGGTTCCAAACCCTAAGTCCACACATAG
CCCCTGGCTCTGGCATCTCTCCAGCCCCACTGGCCCCGAGCTGCTTGACTCACCGGCTTCCTATTTGATGCACCC
AGGCCCCCTTGTGGCCAACTCCCTCCCCTTCTCACTGAGGCAGAAGCACTGAGGTGGGCTGGACATGGGTGCCCT
CCACGTCCCTCATATCCCCAGGCACACTCTGGCCTCAGGTTTTGCCCTGGCCATGTCATCTACCTGGAGTGGGCC
CTCCCCTTCTTCAGGCCTTGAATCAAAAGCCACTTTGTTAGGCGAGGATTTCCCAGACCACTCATCACATTAAAA
AATATTTTGAAAACATGCAGT

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FIGURE 2995

CCCGTCCAGAGTCCTCTGTGGTCCCTGCTGCCACC**ATG**GCCACTCACCGCCTCGTGATGGTCCGGCACGGCGAGA
GCACATGGAACCAGGAGAACCGTTTCTGTGGCTGGTTCGATGCAGAGCTGAGTGAAAAGGGGACCGAGGAGGCCA
AGCGGGGAGCCAAGGCCATCAAGGATGCCAAGATGGAGTTTGACATCTGCTACACGTCAGTGCTGAAGCGGGCCA
TCCGCACCCTCTGGGCCATCCTGGACGGCACGGACCAGATGTGGCTGCCTGTGGTGCGCACTTGGCGCCTCAATG
AGCGGCATTACGGGGGCCTCACAGGCCTCAACAAGGCAGAAACGGCCGCCAAGCACGGGGAGGAGCAGGTGAAGA
TCTGGAGGCGCTCCTTCGACATCCCGCCGCCCCCGATGGACGAGAAGCACCCCTACTACAACTCCATTAGCAAGG
AGCGTCGGTACGCAGGCCTGAAGCCCGGGGAACTCCCCACCTGCGAGAGCCTCAAGGACACCATTGCCCGGGCCC
TGCCCTTCTGGAACGAGGAGATTGTTCCCCAGATCAAGGCCGGCAAGCGAGTGCTCATTGCAGCCCACGGGAACA
GCCTGCGGGGCATTGTCAAGCACCTGGAAGGGATGTCAGACCAGGCGATCATGGAGCTGAACCTGCCCACGGGGA
TCCCCATTGTGTATGAGCTGAACAAGGAGCTGAAGCCCACCAAGCCCATGCAGTTCCTGGGTGATGAGGAAACGG
TGCGGAAGGCCATGGAGGCTGTGGCTGCCCAGGGCAAGGCCAAG**TGA**GGGGTGGGCTTGGGCAATAAAGGCACCT
CCCCCAAC

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FIGURE 2996

GGAGGCGAGGCTTGTCGGCTGTCAAAGGGGCGGCCCGGCCCGGCCCGGAAGCTACAGCAGCGGCGCGGAGACTGC
GGGGCGGGCCATGGCGGCGAACCTGAGCCGGAACGGGCCAGCGCTGCAAGAGGCCTACGTGCGGGTGGTCACCGA
GAAGTCCCCGACCGACTGGGCTCTCTTTACCTATGAAGGCAACAGCAATGACATCCGCGTGGCTGGCACAGGGGG
TGGAAATGACCCTGTTTTTATTTCCAGAATTACCTCTGGGTTTAGAGAAGTGGTTTTTAAACGAGTGTGGGTAAA
AAAAATTACCTGAGGTACTTGTCAGAATCGCAGACTTCTAGGTCCCACCCAGCTCTCATCAATCAGTTTAGTGAG
GGTGGTGCCCAGGACTCTGATTTTAAACATACCCCTAGAAAGATTCTGATACAGGTAGAGGTGAGAAGCCCTGGT
TTAGAAGCAGCTCGGCCTCCCTTCATGGTGGGACCAGGGCCAGCAGGGAATGTCAGGGCCACCCCTGACCTTCAC
TGTGACTCTGCTGCAGAGGGTGGCCTGGAGGAGATGGTGGAGGAGCTCAACAGCGGGAAGGTGATGTACGCCTTC
TGCAGAGTGAAGGACCCCAACTCTGGACTGCCCAAATTTGTCCTCATCAACTGGACAGGCGAGGGCGTGAACGAT
GTGCGGAAGGGAGCCTGTGCCAGCCACGTCAGCACCATGGCCAGCTTCCTGAAGGGGGCCCATGTGACCATCAAC
GCACGGGCCGAGGAGGATGTGGAGCCTGAGTGCATCATGGAGAAGGTGGCCAAGGCTTCAGGTGCCAACTACAGC
TTTCACAAGGAGAGTGGCCGCTTCCAGGACGTGGGACCCCAGGCCCCAGTGGGCTCTGTGTACCAGAAGACCAAT
GCCGTGTCTGAGATTAAAAGGGTTGGTAAAGACAGCTTCTGGGCCAAAGCAGAGAAGGAGGAGGAGAACCGTCGG
CTGGAGGAAAAGCGGCGGGCCGAGGAGGCACAGCGGCAGCTGGAGCAGGAGCGCCGGGAGCGTGAGCTGCGTGAG
GCTGCACGCCGGGAGCAGCGCTATCAGGAGCAGGGTGGCGAGGCCAGCCCCCAGAGCGTGGGAGCAGCAGCAAGA
AGTGGTTTCAAGGAACCGAAATGAGCAGGAGTCTGCCGTGCACCCGAGGGAGATTTTCAAGCAGAAGGAGAGGGC
CATGTCCACCACCTCCATCTCCAGTCCTCAGCCTGGCAAGCTGAGGAGCCCCTTCCTGCAGAAGCAGCTCACCCA
ACCAGAGACCCACTTTGGCAGAGAGCCAGCTGCTGCCATCTCAAGGCCCAGGGCAGATCTCCCTGCTGAGGAGCC
GGCGCCCAGCACTCCTCCATGTCTGGTGCAGGCAGAAGAGGAGGCTGTGTATGAGGAACCTCCAGAGCAGGAGAC
CTTCTACGAGCAGCCCCCACTGGTGCAGCAGCAAGGTGCTGGCTCTGAGCACATTGACCACCACATTCAGGGCCA
GGGGCTCAGTGGGCAAGGGCTCTGTGCCCGTGCCCTGTACGACTACCAGGCAGCCGACGACACAGAGATCTCCTT
TGACCCCGAGAACCTCATCACGGGCATCGAGGTGATCGACGAAGGCTGGTGGCGTGGCTATGGGCCGGATGGCCA
TTTTGGCATGTTCCCTGCCAACTACGTGGAGCTCATTGAGTGAGGCTGAGGGCACATCTTGCCCTTCCCCTCTCA
GACATGGCTTCCTTATTGCTGGAAGAGGAGGCCTGGGAGTTGACATTCAGCACTCTTCCAGGAATAGGACCCCCA
GTGAGGATGAGGCCTCAGGGCTCCCTCCGGCTTGGCAGACTCAGCCTGTCACCCCAAATGCAGCAATGGCCTGGT
GATTCCCACACATCCTTCCTGCATCCCCCGACCCTCCCAGACAGCTTGGCTCTTGCCCCTGACAGGATACTGAGC
CAAGCCCTGCCTGTGGCCAAGCCCTGAGTGGCCACTGCCAAGCTGCGGGGAAGGGTCCTGAGCAGGGGCATCTGG
GAGGCTCTGGCTGCCTTCTGCATTTATTTGCCTTTTTTCTTTTTCTCTTGCTTCTAAGGGGTGGTGGCCACCACT
GTTTAGAATGACCCTTGGGAACAGTGAACGTAGAGAATTGTTTTTAGCAGAGTTTGTGACCAAAGTCAGAGTGGA
TCATGGTGGTTTGGCAGCAGGGAATTTGTCTTGTTGGAGCCTGCTCTGTGCTCCCCACTCCATTTCTCTGTCCCT
CTGCCTGGGCTATGGGAAGTGGGGATGCAGATGGCCAAGCTCCCACCCTGGGTATTCAAAAACGGCAGACACAAC
ATGTTCCTCCACGCGGCTCACTCGATGCCTGCAGGCCCCAGTGTGTGCCTCAACTGATTCTGACTTCAGGAAAAG
TAACACAGAGTGGCCTTGGCCTGTTGTCTTCCCCTATTTTCTGTCCCAGCTCATCCGTGTCTCTGAAGAACAAAT
ATGCTTTTGGACCACG

FIGURE 2997

TAAAAATGCAATTCACTCACAACTCTAAATGATAATTGACATTTCAGCCTCTTTCTTTTAGGCAAAACAGAAGAT
ACACACTATTAACAGTTATTTGAAGCCTTAAATTACAATAGCCTGTTAGGTGATCGGCTTTCTGCCTTGGCTTTC
TGATGCAGCACATTTTAAGATTTGCCTTTAAAGCTTTGAGCCTTGAGATTAGGTTAGTTAGGAAGAGGACAACAA
AGGGAAGAGATTATTCTAATAAAACTTCCACAGAGGGAAGAAAATTGAGGAGCTTCAGATCTCTAAAGCCAAATT
CAACCTGATCTTTCTAGGTTGGTTATAAAGCTGGTCCACTTCCAGGAAGTGATGTGTAGGTGAATAGGAACAAAA
GGTGAAGAAGCAGTAAAACTGTGACCAAGTGGCCAGATGGGGCTTTTGCCGGCTGATTGAAAGGAAGTCTACAGA
CCTAACATAAGCAGTCAGCCAAAGGTGGCTGTGGGAGGTTGATTTCTTCCAGAAACTTCCAAGTTGTGGCTACAA
ATTTATTGCCAGATATTTTCCCACTGAGAATACTGAGGTTATTCACATAATCACTTCCTTAACAAAGGAAGAAGC
ACTTTTAACTTGGGCTGCATTCCCTTTGTGAGGGTCCACATTTAGGATCCTCCTGCTACCATAAGGCCCCTTTTG
GGGTTCTTTGGGTGTGGCTGCATCTCACCATGTTGAGGATTGCCTTTTTTTTTTTTTTTTTTTTTTTTAAC
ACAGAGCCTTGCTCTGTCTCCCAGGCTGGAGTGCAGTGGTGCGATCTTGGCTCACTGCAACCTCTGCCTCCCAGG
TTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCCGGAATTACAGGCATGTGCCACCATGCTGGGCTAATTTT
TGTATTTTTAGTGGAGACGGTGTTTCACCATGTTGGCCAGGCTGTTCTTGAACTCCTGGCCTCAAGTGACCCGCC
CACATTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCCCCGTGCCCAGCAAGGATTGCTGTTTTAATTCTT
GTATCTTCGTTGCTTCTTTGGTCTTTGCTTAAACAAAACAATAAAGCTTAATAGTTGGGGAGAATGCTGTTACCA
GTGTCCTCTAGGAAGGCTGTTAGCATATGGCTCTACTGAGCAGCAGTGCCATCTGGTGCCTGAGATCATGTGCTT
CAGGCAGTTGTCACACTGCATCTACAGCCAAGCATCACAGAAACACTTCACTCATGTGGTCAGGGAAGGTGGGAC
TGATTCACATGTTAGAGACAGGTCAGATGGGAAAATTAAGGCCCAACTTGGTGTTGGGGAATAACCATACTCTGG
TCTTTCAAGTGTAGTAGCTGATGATTCCCAAGAAACTGATGAATTTTCTGAGTCCAGACAAAATTTCCCCAAGCC
TGCTCTCTCTGTTGGATATACATAATAGAGAAAGTCAAATCAGCCCTTTGGGGTTTGTGGTAAAAATTCACTCAC
CCATTGAAGCCTAAGGTGGCTTTGTACCTTCCAGATCTCTCAGCAAATCCCCTGGGCAGAAATGTCACCTGCTTG
CCATGTCTTTGAGGGGTTCAGGTCAGCCTGGAGAACAGGCTCCTTAGGTCAAAAACCTTGTTTTAAGAGCCACTG
TGGTACAGTCAATGTAACCCACTTGTGCAGAAGCCATGCTTCCAAGGAAGGTCTCAGGTTGACAACTAGACATCA
AATCTGAGAAGCCAACTGTGGAGTAATGTGTTTTTTTCTCTGTGGACAAGAGTGATCAGAAAGGTGCTTGATCTT
GAACAATTGATCCATGATGAAAAAATGACCATTAGCTCTCCCCCAGAAGCGTCTGTGTTTGCTGAATGGAGCTGA
GATTTTGATCCGCTATCAGACTCCAGAAAGATCCAGGAGTTCCAAGAACATGGCAAAGAGTCAAAATCTTAGGAC
AAGGAATTAAAATGCCAGAATGCAAATGTCCAACAGGCCTGGTAGCTCACAGCTATCAACACCCTAGAATTCCAC
ACTGCCTCACTGCAGTTGCTCAAGGATGGGTATGTTTCTGTCTCTGAAATTCGGGAAAAAGCCTTAAGTGCCAGA
GAAGGTGCTTCCAAGACTGTCTGCAGAATTCCTTTCCTAGGGTCTGTCTCTGGTACCCAAAAGGGCAGAGAAGGA
ACCCTAAGATTAGCATAGAGCCACTCATCTCTCCTCCCCTCCCCACCCCTTCTTCCCCTGCTTCCATTCCCC**ATG**

GCTCTCTCCTCTGACTGTGAAACACTTCCTCTCCAGCAGTGTTGGGAAAGTTCTGGACCTCTACTGGATCTAGCC
ATAAATGGTGGTCTTCAGAAAAATGGAGATTGTGGCTGCCAGCACCCACAAGACAGCAGCCTCATGCCATGCAGG
CAGCAAGCCATCCTGAACAGCGTTCCTCCCAGAGTCTGTTTCCTCACCTGCTGTTCACTGGTGAGAGGAAAAGGG
ACTTGTTCTCCCTTGACCAGTTTTCTAGTTTTCCTGTTCCCACCCTGGTCTTTGCCTGATGACAGAGAAACTTTC
TAAAAAAAAACAAAAACAAAAGCTATAAAAAATCTGCAAAAC

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FIGURE 2998

GTGCAGCTTGGTGGCGGCTGAGCCGGCAGCGGGCCGCCTCAGGCAGCCCCGGCCGGGCCGCCCGGGTCCCCGGCA
GCGGGGTAGGATGGCGCTAAAGCGGATCCAGAAGGAATTAACCGACTTGCAGAGGGATCCTCCTGCCCAGTGTTC
TGCAGGACCTGTCGGTGATGACTTGTTCCACTGGCAGGCCACCATCATGGGCCCGAATGACAGTCCTTACCAAGG
AGGTGTTTTCTTCCTGACCATCCACTTTCCTACAGATTACCCGTTCAAGCCCCCAAAGGTTGCTTTCACAACCAA
AATTTATCACCCTAATATCAACAGCAATGGCAGCATCTGCCTTGATATCCTGCGGTCTCAGTGGTCTCCAGCGTT
GACTGTGTCAAAAGTTCTCTTGTCCATCTGCTCGCTGCTCTGCGACCCCAACCCCGATGACCCCCTGGTGCCAGA
GATAGCACACACCTACAAGGCCGACAGAGAGAAGTACAACAGACTAGCAAGAGAGTGGACACAAAAATATGCTAT
GTAAGTGCCTTGGAGGTTTTACATGAGACACTGTCCAAGAGAAGCTGGCAGAGAGGTCTTCCCTTAAAACTTTGG
GCTGTTGGCTGAGCCATTCAAAGAGCATCATCTGTTCTTCAAACAAATGTTGGTCACCCACTCTCTCCAGCTGCA
GCATGTTGGTGCCATTTTCAGCAATTACGGCTTTGACAGTGCCACCTCTTTGATGCCAAATCAGCAACCATTGTT
GTTATGATCTGCAGTCTTCCTGGTGACACTGGAATCTCTCTCTCTGCCGCCTCAGTTTGTCTGCTGGTCTCTTGG
GGGGCCAGGCCCTGCACGTCTCTCCTACCCGGCCTCAAATGGTGCTGCTGCCCATGATGGTACCACACCAGGGCC
TCAGCCTGGCCCCTCACCACATACCCTTTGCCTTTTAGAACTCAGTGCCATCCTGGGTGCCCAGGGCAGAGCAGG
CTTTGTTCGCACCTCATCTGCTGCAGAACCACATCCTGAGGAGTCTCAGCTTATCCTGGAGGGAATTGGGAACAG
TGTCACTGGGAAGTGAAGGCCTAGCCCTGTGGCTTCCACCAGTCTCCTCCTGCAGTGCCACGTGGTGGCATTTCT
CGCCTCACACCAAGAAGCAGCAAGTGGAAAATTTCAGGATACAAAGCACATAACACCCCATAAGAGATGATTATG
TTTTTAGAAGCAAGAGCAAAATTATGAAACCTCTAGAGATTTGGGTCATGTTACTCCATTTGATGAAGATTCTCA
CTACCGCCCGCTCCTCCCATAGGAGCCTACACTAAGTCCAAGTGTGAGCCATTCACAGACTAGAACACAAGGAGG
GAGAGAGACTCTTAAACGTAAATAAAAATGCAATTCACTCACAACTCT

FIGURE 2999A

TTCTGCCTCCTTCCCAGGCAGGTGTATCCGCGACTCGCGGAGCCTCCGTCACCTTTCACTTCACGGCAGCGGCGC
CCCGCCCACACCTCGACGCTTCGGACACCCAAAGAGTTGGAGGGTGGGAAAGTGCGTACCTTCTGGATCCGCTTT
AGCGCCATCCTACCCCGCTGCCGGGGACCCGGGCGGCCCGGCCGGGGCTGCCTGAGGCGGCCCGCTGCCGGCTCA
GCCGCCACCAAGCTGCACGCCGGGAGCCGCAGCCTGCGCTTGCGCGCGCGGGGCACTGTGGGGCCGTCGTCGCCG
CGTGCCGAGCGTCCTGGCGCGGCCGAGGGGAAGCAGCGGGGCTGCCCGGGTTACGCTGGCCACCCGCACCTGGTC
CTGTGGCTTCGACCACTAGTCAGCAAGGCCCCGGAGAGGCCAGCGAAGAGGAGGGGCTCGTTGGCTTTACGGAGA
CGCGCGGAGCACCCTCAAGGTGCCACACGCTCGCCTGCTCCCTGTTCCTACATCCTGGGCGTCTTCCCAGGCTGT
CATATAACTCCTGAGAATAGTGGTTCTTAACTCTGATAGAAGTGGAATTACTGGGCAAAGGGCATTCAGATTTGG
GAGAAGTAGCCCCAGAAATAAAAGCATCAGAGAGACGAACAGCTGTGGCCATTGCAGATTTGGAATGGAGAGAAA
TGGAAGGAGATGATTGCGAGTTCCGTTATGGAGATGGTACAAATGAGGCTCAGGACAATGATTTTCCAACAGTGG
AGAGAAGCAGGCTTCAAGAA**ATG**CTGTCACTTTTGGGCCTAGAGACGTACCAGGTCCAGAAACTCAGCCTCCAGG
ACTCTCTGCAGATCAGTTTTGACAGTATGAAGAACTGGGCCCCTCAGGTTCCCAAAGACTTGCCCTGGAATTTCC
TCAGGAAGTTGCAGGCCCTCAATGCTGATGCCAGGAATACCACTATGGTGCTGGACGTGCTCCCAGACGCCAGGC
CTGTGGAGAAGGAGAGCCAGATGGAAGAGGAGATCATCTACTGGGACCCAGCTGATGACCTTGCTGCCGACATTT
ATTCCTTTTCTGAGCTGCCCACCCCTGATACGCCAGTGAACCCCTTAGACCTTCTCTGTGCCCTGCTGCTCTCCT
CAGACAGTTTCCTGCAACAAGAAATAGCGTTGAAAATGGCCCTCTGCCAGTTTGCACTCCCACTCGTGTTGCCTG
ACTCGGAGAACCACTACCATACATTTCTGCTGTGGGCCATGCGGGGCATTGTGAGGACATGGTGGTCCCAGCCCC
CAAGGGGCATGGGGAGCTTCCGGGAAGACAGCGTGGTCTTGTCCAGGGCGCCCGCCTTCGCCTTCGTGCGCATGG
ACGTCAGTAGCAACTCCAAGTCCCAGCTTCTCAACGCCGTCCTCAGCCCGGGCCACAGGCAGTGGGACTGCTTCT
GGCATCGGGACCTCAACTTGGGCACCAATGCCCGGGAGATTTCGGATGGGTTGGTAGAAATTTCCTGGTTTTTTC
CCAGCGGAAGGGAGGACTTGGACATTTTCCCAGAACCTGTGGCCTTTCTGAACCTGAGAGGTGACATCGGGTCTC
ACTGGCTGCAGTTTAAGCTCTTGACAGAAATCTCCTCCGCTGTGTTTATATTGACTGACAATATCAGTAAGAAGG
AATACAAATTGCTGTACTCCATGAAGGAGTCAACCACAAAATACTACTTCATCCTGAGTCCCTACCGTGGGAAGC
GCAACACAAACCTGAGATTTCTGAATAAGTTAATTCCTGTGCTGAAAATAGACCACTCACATGTCCTGGTAAAGG
TCAGCAGCACTGACAGCGACAGCTTCGTGAAGAGGATCCGGGCCATCGTTGGGAATGTGCTGCGGGCACCCTGCA
GGCGGGTATCTGTGGAGGACATGGCGCACGCAGCCCGCAAACTGGGCCTAAAGGTCGACGAGGACTGTGAGGAGT
GTCAGAAAGCGAAAGACCGGATGGAGAGGATTACCAGGAAAATCAAAGACTCGGATGCCTACAGAAGGGACGAGC
TGAGGCTGCAGGGGGACCCCTGGAGAAAGGCAGCCCAAGTGGAGAAGGAGTTCTGCCAGCTCCAGTGGGCCGTGG
ACCCCCCTGAGAAGCACAGGGCTGAGCTGAGGCGGCGGCTGCTAGAACTTCGAATGCAGCAGAACGGCCATGATC
CCTCCTCGGGGGTGCAGGAGTTCATCTCGGGGATCAGCAGCCCCTCCTTGAGTGAGAAGCAGTACTTCCTGAGGT
GGATGGAGTGGGGCCTGGCACGGGTGGCCCAGCCGCGACTGAGACAGCCTCCGGAGACGCTTCTCACCCTGAGAC
CAAAGCATGGGGGCACCACAGACGTGGGGGAGCCGCTCTGGCCTGAGCCCCTAGGGGTGGAACACTTCTTGCGGG
AGATGGGACAGTTTTATGAGGCTGAGAGCTGTCTTGTGGAGGCAGGGAGGCTGCCGGCAGGCCAGAGGCGTTTTG
CCCACTTCCCAGGCTTGGCCTCGGAGCTGCTGCTGACAGGGCTGCCTCTGGAGCTAATCGATGGGAGCACGCTGA
GCATGCCCGTCCGCTGGGTCACAGGGCTCCTGAAGGAGCTGCACGTCCGACTGGAGAGACGGTCAAGGCTGGTGG
TTCTGTCAACCGTCGGGGTGCCAGGCACGGGCAAGTCCACACTCCTCAACACCATGTTTGGGCTGCGGTTTGCCA
CAGGGAAGAGCTGCGGTCCTCGAGGGGCCTTCATGCAGCTCATCACAGTGGCTGAGGGCTTCAGCCAGGACCTGG
GCTGTGACCACATCCTGGTGATAGACTCCGGGGGCTTGATAGGTGGGGCCTTGACGTCAGCTGGGGACAGATTTG
AGCTGGAGGCTTCCTTGGCCACTCTGCTCATGGGACTGAGCAATGTCACCGTGATCAGTCTAGCTGAAACCAAGG
ACATTCCAGCAGCTATTCTGCATGCATTTCTGAGGTTAGAAAAAACGGGGCACATGCCCAACTACCAGTTTGTAT
ACCAGAACCTTCATGATGTATCTGTTCCCGGCCCTAGGCCCAGAGACAAGAGACAGCTCCTGGATCCACCTGGTG
ACCTGAGCAGGGCTGCAGCCCAGATGGAGAAACAGGGCGACGGCTTCCGGGCACTGGCAGGCCTGGCCTTCTGCG
ACCCTGAGAAGCAGCACATCTGGCACATCCCAGGCCTGTGGCACGGAGCACCTCCCATGGCCGCAGTGAGCTTGG
CCTACAGTGAAGCCATATTTGAATTGAAGAGATGCCTACTCGAAAACATCAGGAACGGCTTGTCGAACCAAAACA
AAAACATCCAGCAGCTCATTGAGCTGGTGAGACGGCTG**TGA**GTGTGCAGAGAAACCCAGTTCAGGTGTAGGAGGC
TGCTGTGGGCAGCCCTGTCTGATGGGGCACCCGTGTGGGGCTGTGCTCTGGTGCCTGAGAATGGCTGGTGCCCAA
TCGACATGAGAAGACGAGGAAAAGACAGGGTTTGGAGTCTCCTCAACAGTGTTAAAAGAGGAAGTGACCTCACAG
ACCAGCTCAGAGATGTTACCAAGAATATCACAGCCCCCAGGGTAGGGAGACAAGCAGCAGTTTGTTCTGTCTCAG

FIGURE 2999B

CTCCTGTCAAGGATCCTGCGGGGTGGGCCCTCTGTATAGCTGCTCTCTGTCACTGGCCCCTGGAGTGGGAGCAGC
GTCCTTAGTCACTGCAGGCCCAGGCGGGCAGGTGGTCCCAGGACAGAGGTGGGGAAGTTGTCCTGAGGAAGCAGA
AGTAGGCCTTGCTCCCGCCCAACCCAAGGGCCTCCAGTGGACCAGCATTCAAGATGTGAGTGCCCGTGGTGTGCA
AGGCACTCCCATGGCACCGTATTTATTGACTGATCTGTGAAGGCTTCCCTGACCCCTGCCCAGGAAGAGTTCACT
GGTCGCTCTGTTGTGCCCCACAGCACTTTGTTATACCTCTGCCACACACTTCACGCAGCGCGTTGTAACTCATGT
GTTTACATGTCTGTCCCCCCAGACTGTGAGCTCCTTGAGGGCAGGGACTGTACATTCTCCAGCTCTGTGTCCCCA
GGGCCTGGCACATTGTAGACGCTTAATAAATGTCTGTTAAATG

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FIGURE 3000

AAGATGGCGGCCTCCGTGTGCAGCGGGTTGCTGGGGCCACGGGTGCTGTCCTGGAGCCGAGAGCTGCCTTGCGCT
TGGCGCGCCCTGCACACCTCCCCGGTCTGCGCCAAGAACCGGGCGGCCCGAGTACGCGTAAGCAAGGGGGACAAG
CCGGTGACCTACGAGGAGGCACACGCGCCGCACTACATCGCCCACCGTAAAGGCTGGCTGTCGCTGCACACAGGT
AACCTGGATGGAGAGGACCATGCCGCAGAGCGAACGGTGGAGGATGTTTTCCTTCGCAAGTTCATGTGGGGTACC
TTCCCAGGCTGCCTGGCTGACCAGCTGGTTTTAAAGCGCCGGGGTAACCAGTTGGAGATCTGTGCCGTGGTCCTG
AGGCAGTTGTCTCCACACAAGTACTACTTCCTCGTGGGCTACAGTGAAACTTTGCTGTCCTACTTTTACAAATGT
CCTGTGCGACTCCACCTCCAAACTGTGCCCTCAAAGGTTGTGTATAAGTACCTCTAGAACAATCCCCTTTTTTCC
ATCAAGCTGTAGCCTGCAGAGAATGGAAACGTGGGAAAGGAATGGTATGTGGGGGAAATGCATCCCCTCAGAGGA
CTGAGGCATAGTCTCTCATCTGCTATTGAATAAAGACCTTCTATCTTG

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FIGURE 3001

CAACAACGAACTGTCTACAGACTGATGCTCGTGAAAGCATGGAACGTGGACGAGCTCCAGGCCTACGCGCAGCTC
GTGTCCCTGGGGAATCCTGACTTCATCGAAGTGAAGGGCGTTACCTACTGCAGAGAAAGTTCAGCAAGCAGTCTT
ACCATGGCCCATGTGCCCTGGCATGAGGAAGTGGTACAGTTTGTCCGCGAGCTGGTGGATCTGATCCCCGAATAT
GAAATTGCATGTGAACACGAACACTCTAATTGCCTCCTGATAGCACACAGAAAGTTTAAAATTGGTGGTGAATGG
TGGACATGGATCGATTATAACCGCTTCCAGGAGCTCATCCAGGAATATGAAGATAGTGGTGGATCAAAAACGTTC
AGCGCAAAGGATTATATGGCCAGAACTCCTCACTGGGCATTATTTGGTGCCAATGAAAGAAGCTTTGATCCCAAG
GACACAAGACATCAGAGAAAGAACAAATCAAAGGCTATTTCTGGATGTTGAGATTATCTGATTTCAAGGTACTGA
AGGACAAAAACTTGGATGGCCTCAAAAGGTTCTTGAACACCACTCTGATTCTCCAAGGACGAATTACGTAAATTA
TACTTTCATACAAAGGAGACGATAAGGCAGTAAACATGGAGACACGGGGGACAGCGTCCACACTCAGAGGGCCTG
GGCCACAGCCCCGATGTTTCTTTTCAGAACTCAGCCCCTTTCCTGATTTTACTTCTAAGAGGAAAATTATTTTGG
GGAGGAACTACACAGTCGTGATTAGAATTTAACTGATGGTTTTGTATTATAACTTCTAAGACCTGCCAGAATGCT
AGTCCTGAGAGTGTCAGACAAGGAAGAAATCCCTGGGCCTCTTCCCCTCACCTGGCCCTTGGATTTCATGGAGCA
GCCACTTAGCATTGAATTGCACTACCCTGAGCTAAACGTGTCTGTGCTTTCTAAGATAAGAGCTTGATCCCTTTC
TTCTGTCTTAAGACAGCACCTCCTGAAAAGAATCGAAGTTGTCACAACTCTCAATTATTTTTTAAATACTGCATA
GATTGAGTTTTGGTTTATTACTAACCCTTCCCAAAATTGCATCGGATCTAAAACTACTAGATCTCATCCCATTCC
CATGTAAATTACCACAGACCGCAGTACCGGGGCTGGAGCGGAGTGAAGCTGTCTGCTGTAAGAGGAGTGGCCATG
TGAGGGCATGGAGTCATTAGTCTCACAAACACACTTTGGACTGAAGAGGATCATTTCTTTTTGTTCGTGAGGTCA
CTGTCCGGGCCTCTCATATCACGACCAGACGGCGGGTCTCCATCTTCTTTGACTCCTGTGGCCCTCGCTGCTTTA
CACAATCTGTTCTATAAGGTTCAGGTGTTTTCAAGTTGGAAAGATCATAAATACTCAAAATTGTTTTCAAGTTAG
CAAATTCTTTTAACAGTCTTTTATGCAAAAATTGAATTAATAAAATAATATTTTGT

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FIGURE 3002

CAGACACGCTGTGGCGGCTGCCTGAAGCTAGTGAGTCGCGGCGCCGCGCACTTGTGGTTGGGTCAGTGCCGCGCG
CCGCTCGGTCGTTACCGCGAGGCGCTGGTGGCCTTCAGGCTGGACGGCGCGGGTCAGCCCTGGTTTGCCGGCTTC
TGGGTCTTTGAACAGCCGCGATGTCGATCTTCACCCCCACCAACCAGATCCGCCTAACCAATGTGGCCGTGGTAC
GGATGAAGCGCGCCAGGAAGCGCTTCGAAATCGCCTGCTACAGAAACAAGGTCGTCGGCTGGCGGAGCGGCTTGG
AAAAAGACCTTGATGAAGTTCTGCAGACCCACTCAGTGTTTGTAAATGTTTCCTAAGGTCAGGTTGCCAAGAAGG
AAGATCTCATCAGTGCGTTTGGAACAGATGACCAAACTGAAATCTGTAAGCAGATTTTGACTAAAGGAGAAGTTC
AAGTATCAGATAAAGACACACACAACTGGAGCAG**ATG**TTTAGGGACATTGCAATTATTGTGGCAGACAAATGTGT
GACTCCTGAAACAAAGAGACCATACACCGTGATCCTTATTGAGAGAGCCATGAAGGACATCCACTATTTGGTGAA
AACCAACAGGAGTACAAAACAGCAGGCTTTGGAAGTGATAAAGCAGTTAAAAGAGAAAATGAAGATAGAACGTGC
TCACATGAGGCTTCAGTTCATCCTTCCAGTGAATGAAGGCAAGAAGCTGAAAGAAAAGCTCAAGCCACTGATCAA
GGTCATAGAAAGTAAAGATTATGGCCAACAGTTAGAAATCGTATGTCTGATTGACCTGGGCTGCTTCCGAGAAAT
TGATGAGCTAATAAAAAAGGAAACCAAAGGCAAAGGTTCTTTGGAAGTACTCAATCTGAAAGATTTGAAGAAGGA
GATGAGAAATTTGAATGACACCCATCAGTCTCTTCACCTC**TAA**AACAC

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FIGURE 3003

AGGAGCTCGCCCCTGAGCCTGAGGAGACCTGGGTAGTGGAGACGCTGTGTGGGCTCAAGATGAAGCTGAAGCAAC
AGCGAGTGTCACCCATCCTCCCTGAGCACCACAAGGACTTCAACAGTCAGCTTGAGGATCCTGTCATTAAAAGAT
TCCTGGCCTGGGACAAAGGTCTGAGGGTGTCGGACAAGTATCTCCTGGCTATGGTCATAGTGTATTTCAGCCGGG
CCGGCCTCCCCTCCTGGCAATACCAATGCATTCATTTCTTCCTGGCTCTCTACCTGGCCAATGACATGGAGGAGG
ACGACGAGGACCCCAAACAAAACATCTTCTACTTCCTGTATGGGAAGACCCGCTCTCGCATACCCTTGCTCCGTA
AGCGTCGGTTCCAGTTATGCCGTTGCATGAACCCGAGGGCCAGGAAGAACCGCTCTCAGATAGTCCTGTTCCAGA
AACTTCGGTTCCAGTTCTTCTGTTCCATGAGCTGCAGGGCTTGGGTTTCCCCGGAGGAGTTGGAGGAGATCCAGG
CTTATGACCCAGAGCACTGGGTGTGGGCGCGAGATCGCGCTCGCCTTTCCTAGAGCTCCAGGGACCGTGGAGGCC
TGAGGTCATCGGCCTGAGAGAAGAACACCGGACCCAGGGGAGATGTGGATTTTCAGCAGGAACTTTATTCCAATG
CTAATGGCAGACACCAGGAAGAAGGAGAGGAACCATTTGTGCAGATCATCTAGAAGAACCTGGACCATTCTTGAT
GGAGCTGAATACAGTGATCATGTTGTCCTACCTAGGAGCAGGGGGAGGGGGGTGGGGTCCTTCTAGGAGTCCTTG
GAGAAAAGTAAGAAACCAGGAGTGTTTCCAGTTCCACCCTTTCCTGCGGCACCACCACCCTTTTTATATTGCTGA
ATTCCAACCTCCCTGGGGCGGAACCTGGAGGTCCTATTTCTTACGGACTTGGTTGCCACAGTCCAGGAGCATTTG
AAGGCACAATGCAGGGGCTCAGATTGGCACAGAATTCTTTTGTGAAATATCAGTGCCACAGATTGTAACAGATAG
CTTCATGCACACTCTGCATTTTATTGGTTTGTTTGGAAAATGTTGGCCATTGAATTATTCATAGATTTATTTCAA
ATAGTTTGGAAATTGTTGTACCTTTGAAAACATGCTGTTCCTGTAGTTTTTTGATGAGAGTTATAGTTGTTATAT
ATACATAAAGATAATTTTCTTTTCATTTTTAAGAGACAATTCTTTTTATCCTAAATATTTTATTATCTTTAAATT
TGTTCCTGTATTATTATATGTGCTCCTGAAGCGAGCACTCTTTTTATCTATGATACTTCCATAATAATCTCTTCT
ATTTATAGCTATTGGTAGTTCCCTACCAGAAAAAAACATAATTCTGGTGATTGAAATTTTTATTTGCTATTTAGG
TTTGTGACTGAATTGTGAGAATTCAGTTGTGATTTTTAACATGTCTCAGATATATATACTAACATGTCTAATATA
TACTATCTATTTTATTGGTTTATTTTGAAAAACATGGGTATAGAATTATTTAAATATTATTTTATTTATTTAAAT
ATTTATTAAATATATTTATTTATTTAAATATTATTACTACTTTAAATATTATTTTAAATATTTTGGAAATACTGG
TATTTTTGAATAGATGCTGTTTCTATAAAGCTGTGTGATGGGTGTTATAACTGTTATATACACATACATATAATT
TTGTTTTCCTTTTTAAGAGAGGATTCTTTTCATCCTAAATCTTTTACCTTTCAATCTTTGTATCTATTATTACAC
ATGCTGCTGAAGGGAGCATGGTTTTTATCTATGATACTTAGTTAACATATATATTACATTTATAGCTATGTAGTA
GTTCCCTTAAATTCTTGTAAAAATAAATTTTTATTTGATATTTCATATATGTCTGAAATGTGAGAATACAGATGT
AATTTTTTACCTTGTTTTGGCATGTTTGTATGTTACTTTAAAGAGGATGTGTGTGCTAAAGGAGGACATGAGCTG
TGTGTTTTCAAGAGAACAATAGAGTGCGTCTCTTGGGGAAACATAATAAAAATGAACTTTTCTCACCTTC

FIGURE 3004A

CGCTTCCTGCGCCTCTTCAGGTCACCGCTTGCTCTAGTTCCCAGGCTTTGGCCTCTAGTGGATGAGAATCACCGA
GTCTGCGGGGCTGGACGCTGACCGCCCGGGCCAGCACCTAGGCGGGCGGGAGCTGTGCGGCCCAGGGTTCGCGCG
GGCCGGGTAGAGGCTCGAGCCGGGACCCCCGAGCGTGAACCCCGGAGCCAGCGGCGCTGGGGCCAGAGGGGCCAG
GCGGGAGGTGGTGGCGGAGGCGAAGGGGCGACGGGACCTGGGCCTGGCCCGTGTGTGTCCTCGGCGGCCTGGCGC
CGGCCGTCGCTGTACGGTGAGCCCCAGGGAGGCGGATCTGGGCCCCGAGAAGGACACCCGCCTGGATTTGCCCCG
TAGGCCCGGCCCGGGCCCCTCGGGAGCAGAACAGCCTTGGTGAGGTGGACGGGAGGGGACTTCGCGAGCAGACGC
GCGCGCCAGCGACAGCAGCCCGCCCCGGCCTCTCGGGAGCCGTGGGGCAGAGGCTGCAGAGCCCCAGGAGGGGGC
CAGTGTCATTCAAAGATGTGGCTGTGGATTTCACCCAGGAGGAGTGGTGGCAACTGGACCCTGATGAGAAGATAA
CATACGGGGATGTGATGTTGGAGAACTACAGCCATCTAGTTTCCCTGGCTTATGAGGTGGCAACATCTTGTACTT
CGGAGATCTGAAGCCGAGCAACTTGCCCAAGTCCTTCTTCTTTTCCCATTAACAAGATATGATATCACCAAGCCA
AACGTCATCATTAAGTTGGAGCAGGGAGAGGAGCTGTGGATAACGGGAGGTGAATTTCCATGTCAACATAGTCCA
GCCCTTCACATCCTCAGCCGAAGATCTCACTTCCTCCCAGAGGCCTTTGCTGACTGACCCCTCAGGGATTGTGGG
ACTTTACCAAATCGGTTTGTAATAACACCTAGAAGACGCTATCCGATCCATCAGGCCCAGTATTCCTGTCTGGGG
GTACTTCCCACCGTGTGCTGGAATGGTTATCACAAGAAGGCTGTGCTGTCCCCTCGCAACTCCAGGATGGTGTGT
AGCCCAGTGACTGTGAGGATCGCCCCTCCTGACAGAAGATTTTCGCGTTCTGCGATACCAGAGCAGATAATCAGC
TCAACACTGTCCTCACCATCAAGTAACGCCCCAGACCCATGTGCAAAGGAGACAGTACTGAGTGCCCTCAAAGAG
AAGGAGAAGAAAAGGACAGTGGAGGAAGAAGACCAAATATTCCTTGATGGCCAGGAAAATAAAAGAAGGCGCCAT
GATAGCAGTGGCAGTGGACATTCAGCATTTGAGCCCCTGGTGGCCAATGGAGTCCCCGCTTCTTTTGTGCCTAAG
CCTGGGTCTCTGAAGAGAGGCCTCAATTCTCAGAGCTCAGATGACCACTTGAATAAGAGATCCCGAAGCTCTTCC
ATGAGCTCCTTGACAGGCGCTTACGCAAGTGGCATCCCTAGCTCCAGCCGCAATGCCATTACCAGTTCCTACAGC
TCCACTCGAGGCATCTCACAGCTCTGGAAGAGAAATGGCCCCAGTTCATCACCCTTCTCTAGCCCAGCCTCCTCC
CGCTCCCAGACACCGGAGAGGCCAGCAAAGAAAATAAGAGAAGAGGAGCTGTGTCATCATTCCAGTTCTTCAACT
CCATTGGCAGCAGACAGGGAGTCCCAGGGAGAAAAGGCTGCAGATACAACCCCAAGGAAGAAACAAAACTCGAAT
TCTCAGTCTACACCTGGCAGCTCTGGGCAGCGTAAGCGGAAAGTTCAGCTGCTGCCTTCTCGGCGAGGGGAACAG
CTGACCTTGCCTCCACCTCCCCAGCTTGGCTATTCGATCACTGCCGAGGACCTAGACTTAGAGAAGAAGGCTTCA
TTACAGTGGTTCAACCAGGCCTTGGAGGACAAGAGCGATGCTGCCTCGAACTCTGTCACTGAGACCCCACCTATC
ACTCAGCCTTCATTTACCTTTACCCTGCCTGCTGCTGCACCTGCCTCCCCACCCACCTCCCTCCTGGCCCCAAGC
ACCAACCCACTGTTAGAGAGCTTGAAGAAGATGCAGACTCCCCCGAGCCTGCCACCCTGCCCAGAATCTGCTGGA
GCAGCAACCACTGAGGCCCTCTCACCTCCAAAGACACCCAGCCTCCTACCCCCGCTGGGTTTATCACAGTCAGGG
CCGCCAGGGCTGCTCCCCAGCCCCTCCTTTGACTCCAAACCCCCGACCACTTTGCTGGGGCTGATCCCTGCTCCA
TCCATGGTACCAGCCACTGACACCAAGGCACCTCCAACCCTTCAGGCAGAGACGGCTACCAAACCCCAAGCCACA
TCTGCCCCGTCCCCCGCCCCCAAGCAAAGCTTCCTGTTTGGAACACAGAACACCTCACCTTCCAGCCCTGCCGCC
CCTGCTGCATCTTCAGCACCTCCCATGTTCAAGCCCATTTTCACGGCTCCACCCAAGAGTGAGAAGGAAGGCCCC
ACACCGCCTGGCCCTTCAGTCACAGCCACAGCGCCCTCCAGCTCCTCCCTCCCCACGACCACCAGCACCACAGCC
CCGACCTTCCAGCCTGTCTTTAGCAGCATGGGGCCACCTGCATCTGTGCCCTTGCCTGCTCCCTTCTTCAAGCAG
ACAACTACTCCCGCCACTGCTCCCACCACAACTGCCCCGCTCTTCACTGGCCTGGCCAGCGCCACCTCTGCTGTG
GCTCCCATCACCTCTGCCAGTCCATCCACAGACTCTGCTTCGAAGCCTGCGTTTGGCTTTGGCATAAACAGTGTG
AGCAGCAGCAGTGTGAGTACCACGACCAGCACCGCCACTGCCGCCTCACAGCCTTTCCTCTTCGGGGCGCCCCAG
GCCTCTGCTGCCAGCTTCACCCCGGCCATGGGCTCCATATTCCAGTTTGGCAAACCTCCTGCCTTGCCCACAACC
ACCACAGTCACCACCTTCAGCCAGTCCCTGCACACTGCCGTGCCAACGGCCACCAGCAGCAGCGCTGCCGACTTT
AGTGGTTTTGGCAGCACCCTCGCCACCTCCGCCCCGGCCACCAGCAGCCAGCCCACTCTGACGTTCAGTAACACG
AGCACCCCCACGTTCAACATTCCCTTTGGCTCAAGCGCCAAGTCCCCGCTCCCATCATATCCGGGAGCCAACCCC
CAGCCCGCATTTGGGGCCGCTGAGGGGCAGCCACCGGGGGCCGCCAAGCCGGCCCTTGCCCCCAGCTTTGGCAGC
TCTTTCACTTTTGGAAACTCTGCAGCCCCGGCTGCTGCACCCACACCTGCACCTCCGTCCATGATCAAGGTCGTG
CCTGCGTACGTGCCTACGCCCATCCATCCTATCTTTGGCGGTGCCACGCACTCGGCGTTTGGGTTGAAAGCCACG
GCTTCGGCCTTCGGCGCTCCCGCCAGCTCACAGCCCGCCTTTGGCGGCTCCACTGCTGTCTTCTTCGGTGCAGCC
ACCAGCTCCGGCTTTGGAGCCACCACCCAGACCGCCAGCAGCGGGAGCAGCAGCTCGGTGTTTGGCAGCACAACA
CCATCACCCTTCACGTTTGGGGGTTCGGCAGCCCCCGCTGGCAGTGGGAGCTTTGGGATCAATGTGGCCACCCCA

FIGURE 3004B

GGCTCCAGCACCACCACCGGAGCTTTCAGCTTTGGAGCAGGACAGAGTGGGAGCACAGCCACCTCCACCCCCTTC
GCAGGGGGCTTAGGTCAGAACGCCCTGGGCACCACCGGCCAGAGCACACCGTTTGCCTTCAACGTGAGCAGCACA
ACTGAGAGCAAACCTGTGTTTGGAGGCACCGCCACCCCCACCTTTGGTCTGAACACCCCTGCGCCTGGAGTGGGC
ACATCAGGCAGCAGCCTCTCCTTTGGGGCATCCTCAGCACCCGCCCAAGGCTTTGTTGGTGTTGCACCTTTCGGC
AACACTTTTGCTCACCAGCAAGAACACAGCCCGAGGAAGGGACCCAATAACCTTTCAAAACGCAAACTGCTGCCT
GCGGTGAGGGCCCAGGGTCTTCCACGGAGAGGACAGGCATCTTCCTTTCCCACCAGGAAGGAGTGAGCCCGGAGC
CTCTGCTATGTGCAAGGCGGTGTGCAAGCACCGGCTGCAGCTTTTTGCTCTCTTCTTTCTCTTTGGGGCTGGGCT
GGGTGTGCGTTCTGGTGCTGATGCTTTGGCCTGTGAGGCTGAGCTAGAGAAATGTAGATGTTAGATGTGCCAGTA
CCATCCTGCGCCTCCCAAGCATGCCCCCACTCACTCACGTCGGCATCTCGACCCGTTCAATTACAGCAACGAAGA
AGCCACCGCTAAGCGTGGTCTTGGGGGAAGCCCGGAGGCAGTGCTCGGCACCCGGGAACGTGCTCAGGCCTCGGT
GGGGCCGGGCAGGCAGGGCGGGAGCTAGCCTGCAAGAGAAACAGCCCCAATGCTGGGTAAGAGAGCAGTTCACCC
CATCCCCCCCTCCACGACCCTGGCGCACGCCCTGTACCTGAAGGCGCCCGGGTTCTGCTGCAGCGCATCTTGTAC
CATGTCTTCATTCTCCTCCTGGCAGAGGGAGCACATGGAGTAGACGAGCCGCTGCAGGGAAGGGAAAGTGAGCGC
GTGGCACAGGGCTCGCTGCTGGAACCCTGCCAGGGCATGCAGACGCACCGGGCTAGGTGTCCCTGCCCCGGGCTC
CTCCAGCTGTCTGCTCGGCATACCTAAGGAAAAGCGTGTCTCGGTTACACAGCTTCACAGGCTGCCTCAGTCCTG
AAATCCTCGCTCCTGAAATCCTCGCTTCACAGAGGAGAACTTTTGCTCCAGGGTCCCAAGCCCATTAAAGTGTCA
GAACTAAGACCAAAACAGATGACTCCAGGTCTAAGCTGCTGTGGACCTCTGAGTCCCTCAGCCACGCCTTCTCAC
CATCTCACCCGAGCCACTGCAGGAAGGATCCAGCAGGACATAGTGGACCTCACGATAGCGCGGATCTAAGGGGGA
GACCGCCAGGAAGTCCTCCTCAGCCAGCTCACAGCAGGAGACGCCAGCCCAGGCCAGCAGCGTGGCCATGGATGC
CAGCCGCCTGGCATCCAGGTCAAAGGCAAAGATCTTCCTAGGGCAGAGGGCAGAGCAGGGGTGAGCTGAGCATGC
ATGGAGCAGCTAAGGGCCTGTCACAGCTGACACAGACAACCAGAACATGCAGGTTAAGCCAGGACACACAATATT
GAAACAGCCTATATTTAAAGGGCCCAGGGTCAGAGGTAACTGGCCTGGGGTCTCTGCCCCAAGGGCTAAGGGATC
CACATCTCACACCTGCAGTGGGGAAAGCTTAGCTTGGGGCAAATACCGTGAACTACTTTGGTGCAGCAGGAAAGA
GTTAAGCGAAAGTCATCCTTTCAGCCTTCATTACCCACTGAAAGGCACAAAATCAAACCCCATGTCCTCCTCCTC
CTCCTGTGGCACTCACCCTTGGTTCTTCAGAAGAGCAGCCAAGTGACTGGTCTTTATTGCCTGGGGTGGCACAGG
CATCCATGACATGGGAGCCTGGCGGGGGTCCAGCAGCATGGCTGGGAGACAGCTGGCCTGGCAGGCAGAACACAG
GGGCCGGGTAAACAGAGACCCCAGGCTAGGCCCTTCCCGTGCCTACACATTCTTCCCTTTTCTATTCCTCTTGCC
TACCCTGTCCTGCAGAATGAGGTGTCCGGCCCGGTACAGTGGGTGTTCATGCAGATCTGTCTGGGCGGGAAACAC
CAGCAGCTCCGGCATCAAGGGGTCCAGGAGAAAATGCTTCCCCTTGAGGGCTCGTAAGTCATCGAGGCTGCCAGG
GAAGAACCATTCATTCATCATTTCCTGAATTTCTCCCTGCCAGGCCCTATTTCAACGGTCCATTCATGCAACAAA
TGTTACCACAGCTATGGAGAAATCAACAGGGTGATAAGGGAATCCGGGATCCGCAGTTGAGGGAATGGGTTGTCA
AGCCAGACTTATGGGTCAGGAGCCCCCTCTACTGTTTACCAGCAGTGGGAGCCTGGGCAAGTGATTCAATCTCAA
GCCCCACTGGCATCTCTGTAAAATAGTAGGTGTGAGGATTCAATGAGCCAATATATCCAAGATACTTACGTGCCA
CAATTTAATAAATGTTAGCTATTCCTGTTGAAGCATAACCTTGGAGAAAGGTTACTTTACAGGGGGGTGAGGAGT
GGGGAAGTGAGAGCTGAGCTCATTCTTGATGGATGAGGAGTTAGTCATGTGAGGCGCTTAGGTTAAAACTACATT
CACTATAACTCAGTAAAGCAGTCCCGCCCACTCTCCGACCCATGCAGAAATAGGCCTAGGGAGTCACATGTCTCA
GTTCAGAAATCTATCGAAGTGGCAGAGCTGGAATTCAAACACAAGCAGCCGTTCTCTGCTATTCCACCCTGGTGT
CCAAGCAACATGGTAGGGCAGAAGGAAGAGGATCTTACAAAGAGTAAGGGAAAGGGAGAGGGGCAGAGGCTGCTT
CTCAGAGCCACCAAAGGACAAAATAAGACAGGTGTGAGCCCAGTGGAGGAGGCACGGGGCAGAGACCAGCCACTG
TTGCTGGCACGCTGGTGCACGTAGCACTGTGGCAGATGGACCTGGAGAGGAAGCAGGAGGGACAGCACAATGGAG
CCAAGAAAGGACTTAGCATGGCCGGGCGCGGTGGTTCATGCCTGTAATCCCAGCATTTTGGGAGGCCAAGGTGGG
CAGATCACCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGAGAAATCCCGTCTCTACTAAAAATACAAA
ATTAGCCAGGCATGGTGCTGCATGCCTGCAATCCTGTAGGGAAAAGAAAGAGAGATCAGACTGTTACTGTGTCTG
TGTAGAAAGGGAAGACATAAGAAATTCCATTTTGACCTGTACCTTGAACAATTGGTTGGCTGAGATGCTGTTAAT
TTGTGACTTTGCCCCAAATTTGAGCTCACAAAAACATGTGTTGTATGGAATCAAGGTTTAAAGGATCTAGGGCTG
TGCAGGACATGCCTTGTTAATAAAACGTTTACAAGC

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FIGURE 3005

AACATGGGGCTGTACGCTGCGGTGGCAGGCGTGCTGGCCGGCGTGGAGAGCCGCCAGGGCTCTATCAAGGGGCTG
GTGTACTCCAGCAACTTCCAGAACGTGAAGCAGCTGTACGCGCTGGTGTGCGAAACGCAGCGCTACTCCGCCGTG
CTGGATGCCGTGATCTCCAGCGCCGGCCTCCTCAGTGCGAAGAAGCTGCAGCCGCACCTGGCCAAGGGTGCTAGT
GTATGAGTTGTTGGGAAAGGGCTTTCGAGGGGGTGGGGGCCAATGGAAGGCTCTGTTGGGACGGCACCAGGCGAG
GTGTTGAGTTGGCTCGGCTCAAGGTTCTTCGGGGTGTGAGCTGGCATGAGGACCTGTTGGAAGTGGGATCCAGGC
CTGGTCCAGCCTCCCAGCTGCCTCGATTTGTGCGTGTGAACACTCTCAAGACCTGCTCCGTTTATGTAGTTATTT
CAAGAGACAAGGTTTCTCCTATCAGGGTCGGGCTTCCAGGCTGGATGGAGTGCCCTGGCGCGATCTTGGCTCACC
GCAACCTCTGCCTCCTGGGTTCAAGCGATTCTCCTGCTTCAGCCTTCTGAGCAGCTGGGATTATGAAGGGGTGGC
CTGCCCCTCCACATCTGTGGGATATCTCATCAGCCTCGATGACTTACGAGCCCTCAAGGGGAAGCATTTTCTCCT
GGACCCCTTG**ATG**CCGGAGCTGCTGGTGTTTCCCGCCCAGACAGATCTGCATGAACACCCACTGTACCGGGCCGG
ACACCTCATTCTGCAGGACAGGGCCAGCTGTCTCCCAGCCATGCTGCTGGACCCCCGCCAGGCTCCCATGTCATG
GATGCCTGTGCCACCCCAGGCAATAAAGACCAGTCACTTGGCTGCTCTTCTGAAGAACCAAGGGAAGATCTTTGC
CTTTGACCTGGATGCCAGGCGGCTGGCATCCATGGCCACGCTGCTGGCCTGGGCTGGCGTCTCCTGCTGTGAGCT
GGCTGAGGAGGACTTCCTGGCGGTCTCCCCCTTAGATCCGCGCTATCGTGAGGTCCACTATGTCCTGCTGGATCC
TTCCTGCAGTGGCTCGGGTATGCCGAGCAGACAGCTGGAGGAGCCCGGGGCAGGGACACCTAGCCCGGTGCGTCT
GCATGCCCTGGCAGGGTTCCAGCAGCGAGCCCTGTGCCACGCGCTCACTTTCCCTTCCCTGCAGCGGCTCGTCTA
CTCCATGTGCTCCCTCTGCCAGGAGGAGAATGAAGACATGGTACAAGATGCGCTGCAGCAGAACCCGGGCGCCTT
CAGGCTAGCTCCCGCCCTGCCTGCCCGGCCCCACCGAGGCCTGAGCACGTTCCCGGGTGCCGAGCACTGCCTCCG
GGCTTCCCCCAAGACCACGCTTAGCGGTGGCTTCTTCGTTGCTGTAATTGAACGGGTCGAGATGCCGACCTCAGC
CTCACAGGCCAAAGCATCAGCACCAGAACGCACACCCAGCCCAGCCCCAAAGAGAAAGAAGAGAGCAAAAAGCTG
CAGCCGGTGCTTGCACACCGCCTTGCACATAGCAGAGGCTCCGGGCTCACTCCTTCCTGGTGGGAAAGGAAGATG
CCTGTCCTCTCCGTGGAAGACCCTGGGCCCTCACCGCAGGCAGCAGTTTGCGTTT**TGA**AAGGTTATTGGGTCCCT
TCCTCGGGCTGTGTTCTTGCTGGTGAGCAAAAGTGTTGCCTGCAGAAATAAAATGCAGAACGTACTCT

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FIGURE 3006

GCAATTCTCATGTCTCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTAGGAGGCAGAGGTTGCAGT
GAGCTGAGATTGCACCACTGCACCCCAGCCTGGGCAATAAGAGTGAAACTCCATCTCAAAAAAAAAAAAAAAAAA
AGGTGCATGAAACATATGAAGCAAAAAGTGAAAGTCCCCATTCTTTTCCTTTTTCCAGAGGTGATTTTTGTGGCC
AATCTGGTTTCATTCCCTCCCAGACACTTTTCTAGGCATCTATGCGCCTCTATTCACATATAAACAAAATAGGAG
TTTTCCTGTGCTTCCCTTAAATGGCATATGTATCTTTCACTCTTTTTTTTCACCTAGTGGATCTTTAATACCTTA
AAAGCTCAACCTGGGCTTGGTGCGGTGGCTCATACGTGTAATCCCAGGCCTTTGGGAGGCCAAGGTGGGAGGATC
ACTTGAGCTCAGGAGTTCCAGACCATTCCAAAGCAAAAACAAAAGGATTTTGAGATCAGTGTGGGCAACTTAGCA
AAACACCATCTCTT

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FIGURE 3007

TTTCATCGTTTCTGCTTACCCTACTTTTCTTTCCCATCCTGATCCCTCTCCCACCAGACTGGACTCTGAAACGGG
CATGTACAGAGAAGAGGAGACCCCAACACGCTTCAAGCTTTGAGTGGAGAGGACACAGCCTCTGCTGGGACAGGG
AACAGAGGGATGCGGAGACCCTGAAGATGCTTTTGGACAGTGGTCTGAGGTTGGGACAGTGGCAGGAGATACCAT
TCACCCAGGATCTCCAGGACAAGAGATCAGCCTGGCAGTTACATGTGTTTTTTTTCAAACTGGTTGCCAGGTTGG
CATGAGCGATGACATCAGAGATTCCGACCTTCCTGATTGGAGGGACCGGACTCTGTCGGCACCTGGGAGTTCAGT
TGGACAACAGTAACTTCTCAGAGCTGTTCTCCACTCCTGACTTCTCCCAGCCTCGAGAATTGATAACACACTCTT
CTGGATCCCAGCAGTGTCCAGAAGAAGACCAAGGACAGAACAGAGACTAGGTTTGGTGAGATGGGACAGATTTTG
GGAAAGATCATGATGAGCCATCAACCGCAGCCCCAGGAAGAGCGGAGCCCCCAGCGGAGCACCTCAGGGTACCCC
CTCCAGGAGGTGGTGGATGATGAAGTGTCGGGACCATCAGGTGAGGGGACTGGAGGAAGAAGAGGTGGCATAGGA
TTGACTAAGATGAAGGAAGGGGGCCAGGCGTGGTGGCTCACCCCTGTAACCCCAACACTTTGGGAGGCTGAGGCG
GGCAGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAGTACA
AAAATTAGCCAGGCGGTAGTGGTGTGTGCCTATAATCCCAGCTACTTGGGAGGCTAAGACAGGAGAATCACTTGA
GCCTGGGAGGAAGAGGTTGCAGTGAGCCGAGATCGTGCTACTGCACTCCAGTCTGGGTGACAGAGTGAGATGCTA
TCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAGAAAAAAAAGAAGGGTCAGAGGTCAGGAAGGAGA
ACCTGGGGAGGGTGTGTGGGAAGAATGGAGAAATTCAGGCTGGGTGCAGTGGCTCACACTTGTAATCCCAGCACT
TTGGGAAGCCAAGGCAGGCGGATCACTTGAGGCCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGT
CTCTATTAAAAGTACAAAATGGAGCTGGGCATTATGGCAGGCACCTGTAATCCCAGCTACCTGAGAGGCTGAGGC
AGGAGAATAACTGGAATCCGGGAGATGCATGTTGCAGTGAGCTGAGATTGCACCACTACACTCCAGCCTGGGTGA
CAAAGCAAGATTCTGTCTCGAAAC

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FIGURE 3008

CCCCAAGCCACATCTGCCCCGTCCCCCGCCCCCAAGCAAAGCTTCCTGTTTGGAACACAGAACACCTCACCTTCC
AGCCCTGCCGCCCCTGCTGCATCTTCAGCATCTCCCATGTTCAAGCCCATTTTCACGGCTCCACCCAAGAGTGAG
AAGGAAGGCCCCACACCGCCTGGCCCTTCAGTCTCAGCCACAGCGCCCTCCAGCTCCTCCCTCCCCACGACCACC
AGCACCACAGCCCCGACCTTCCAGCCTGTCTTTAGCAGCATGGGGCCACCTGCATCTGTGCCCTTGCCTGCTCCC
TTCTTCAAGCAGACAACTACTCCCGCCACTGCTCCCACCACAACTGCCCCGCTCTTCACTGGCCTGGCCAGCGCC
ACCTCTGCTGTGGCTCCCATCACCTCTGCCAGTCCATCCACAGACTCTGCTTCGAAGCCTGCGTTTGGCTTTGGC
ATAAACAGTGTGAGCAGCAGCAGTGTGAGTACCACGACCAGCACCGCCACTGCCGCCTCACAGCCTTTCCTCTTC
GGGGCGCCCCAGGCCTCTGCTGCCAGCTTCACCCCGGCCATGGGCTCCATATTCCAGTTTGGCAAACCTCCTGCC
TTGCCCACAACCACCACAGTCACCACCTTCAGCCAGTCCCTGCCCACTGCCGTGCCAACGGCCACCAGCAGCAGC
GCTGCCGACTTTAGTGGTTTTGGCAGCACCCTCGCCACCTCCGCCCCGGCCACCAGCAGCCAGCCCACTCTGACG
TTCAGTAACACGAGCACCCCCACGTTCAACATTCCCTTTGGCTCAAGCGCCAAGTCCCCGCTCCCATCATATCCG
GGAGCCAACCCCCAGCCCGCATTTGGGGCCGCTGAGGGGCAGCCACCGGGGGCCGCCAAGCCAGCCCTTACCCCC
AGCTTTGGCAGCTCTTTCACTTTTGGAAACTCTGCAGCCCCGGCTGCTGCACCCACACCTGCACCTCCGTCCATG
ATCAAGATCGTGCCTGCGCACGTGCCTACGCCCATCCAGCCTACCTTTGGCGGTGCCACGCACTCGGCGTTTGGG
TTGAAAGCCACGGCTTCGGCCTTCGGCGCTCCCGCCAGCTCACAGCCCGCCTTTGGCGGCTCCACTGCTGTCTTC
TCCTTCGGTGCAGCCACCAGCTCTGGCTTTGGAGCCACCACCCAGACCGCCAGCAGCGGGAGCAGCAGCTCGGTG
TTTGGCAGCACAACACCATCACCCTTCACGTTTGGGGGTTCGGCAGCCCCCGCTGGCAGTGGGAGCTTTGGGATC
AACGTGGCCACCCCAGGCTCCAGCGCCACCACCGGAGCTTTCAGCTTTGGAGCAGGACAGAGTGGGAGCACAGCC
ACCTCCACCCCCTTCGCAGGGGGCTTAGGTCAGAACGCCCTGGGCACCACCGGCCAGAGCACACCGTTTGCCTTC
AACGTGGGCAGCACAACTGAGAGCAAACCTGTGTTTGGAGGCACCGCCACCCCCACCTTTGGTCTGAACACCCCT
GCGCCTGGAGTGGGCACATCAGGCAGCAGCCTCTCCTTTGGGGCATCCTCAGCACCCGCCCAAGGCTTTGTTGGT
GTTGCACCTTTCGGATCGGCGGCCCCTTCATTTTCCATTGGTGCGGGATCCAAGACCCTAGGGGCTCGACAGCGA
CTGCAGGCCCGAAGGCAGCACACCCGCAAAAAGTAGCCTTTGTCCCCTGTCCCTGTTCCCCCCACCCCTTCCCTA
AATCTGGACCTTGGCACGTGCTAGAAAGAGCCTTGGACCCTTCCAGCTGCGTAAAGCAAACCTACCCCGGATCTC
TGGCTTCAGCCGCCAGGGGGCAGTGGCAGCCCTGGGGCCCTTTCCCTTCTGGAGGAAGCACAAGCCTCAGGGAAG
GGGAAGCAGGATGCGGAGGGCCAAAGCCCGGGACCTCTACTTGAACAGTTCCACTGGGGAGGCTGGAGAACTAAG
GAAACACCTGTACATAGTGTCCGCTGCCCTGACTCCCGCTTAGCGCACCCTTAGGCAGGCGCCCCTTCCACCTTT
CCCCGAGAGCCGTCGTCGCTGGAGGGGGCAGGGTCCAGCCCGCCTGGATCGGTGGTGTGCACCTGATGGGATTTG
GGAAATGGGCTATCCGTAAAGCTTTATCTTGCTTGGCTTAGCTGTGAGAAGTGGTTCTCTTCCTCTGGTCCCTTC
TGGGGACTCTGTTTCCCCATTTCTTGCTGCTGTGTCCCTCACCGGTTCCTTGCAGGATTCCCTCCTTTTTAAATG
CCCTTGAATCTAGCTTTGCCTTGGAGACCCCAGTGGGTGCTGCTCCTGCCATTTTCTTCCTGCCAAGCCTGAATC
AATGTTTCATCTCCAACCCTCTGCCAGTTTGGCCCCTCAGAGCTTGGTGGCTCAAGACTGTTAGCCTGGCAGAGC
CAGGGGTGAAGGGAGAAGCTCTTGGAGCAGGCAGGATGCCCACCGCTGCTTCAGCTGCCTCCTCGCCCAGCTACC
CTTTGGCCCCATTGGGCCCTCGTCTGCCTCTCCAGGATTGTATGTTTCAAGCCTTGCCCTGTGTTCCTTTGTCTG
ACGCTCTGTGTATTGCTCTTTGAATCGAGTTTGGAGGAAGAGTTGAGTTGTATGAGTGGCGGCATGTTGGTAGTG
CCGGACTTCCTGTTTCAAGTTTTCTGGGGCCTCGCTAATTGAATGTGGAAAGTAGCACCACTTGACGGCTACAAG
TGCCGACTCCTGAATTTTCCCATGGTGTTCTGACTTCAAGGGCTGGCAGCCAGGGAGAATGGGCCCAGGGGAAGC
AAAGACCTCTTCCCTCTGCCGTTTCTGTCCCACTTAACTGACCTCACTGGAGGCTACATCACCCAAAGTAGATGT
TAGAAAACCTAAATTAATGAACCATATTTTTAAAATCCTATTTTTCCCAAAC

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FIGURE 3009

AAAGGCGCGCGGGAACATGGGGCTGTATGCTGCAGCTGCAGGCGTGTTGGCCGGCGTGGAGAGCCGCCAGGGCTC
TATCAAGGGGTTGGTGTACTCCAGCAACTTCCAGAACGTGAAGCAGCTGTACGCGCTGGTGTGCGAAACGCAGCG
CTACTCCGCCGTGCTGGATGCTGTGATCGCCAGCGCCGGCCTCCTCCGTGCGGAGAAGAAGCTGCGGCCGCACCT
GGCCAAGGTGCTAGTGTATGAGTTGTTGTTGGGAAAGGGCTTTCGAGGGGGTGGGGGCCGATGGAAGGCTCTGTT
GGGCCGGCACCAGGCGAGGCTCAAGGCTGAGTTGGCTCGGCTCAAGGTTCATCGGGGTGTGAGCCGGAATGAGGA
CCTGTTGGAAGTGGGATCCAGGCCTGGTCCAGCCTCCCAGCTGCCTCGATTTGTGCGTGTGAACACTCTCAAGAC
CTGCTCCGATGATGTAGTTGATTATTTCAAGAGACAAGGTTTCTCCTATCAGGGTCGGGCTTCCAGCCTCGATGA
CTTACGAGCCCTCAAGGGGAAGCATTTTCTCCTGGACCCCTTGATGCCGGAGCTGCTGGTGTTTCCCGCCCAGAC
AGATCTGCATGAACACCCACTGTACCGGGCCGGACACCTCATTCTGCAGGACAGGGCCAGCTGTCTCCCAGCCAT
GCTGCTGGACCCCCCGCCAGGCTCCCATGTCATCGATGCCTGTGCCGCCCCAGGCAATAAGACCAGTCACTTGGC
TGCTCTTCTGAAGAACCAAGGGAAGATCTTTGCCTTTGACCTGGATGCCAAGCGGCTGGCATCCATGGCCACGCT
GCTGGCCCGGGCTGGCGTCTCTTGCTGTGAACTGGCTGAGGAGGACTTCCTGGCGGTCTCCCCCTCGGATCCACG
CTACCATGAGGTCCACTACATCCTGCTGGATCCTTCCTGCAGTGGCTCGGGTATGCCGAGCAGACAGCTGGAGGA
GCCCGGGGCAGGCACACCTAGCCCGGTGCGTCTGCATGCCCTGGCAGGGTTCCAGCAGCGAGCCCTGTGCCACGC
GCTCACTTTCCCTTCCCTGCAGCGGCTCGTCTACTCCACGTGCTCCCTCTGCCAGGAGGAGAATGAAGACGTGGT
GCGAGATGCGCTGCAGCAGAACCCGGGCGCCTTCAGGCTAGCTCCCGCCCTGCCTGCCTGGCCCCACCGAGGCCT
GAGCACGTTCCCGGGTGCCGAGCACTGCCTCCGGGCCTCCCCTGAGACCACACTCAGCAGTGGCTTCTTCGTTGC
TGTAATTGAACGGGTCGAGGTGCCAAGGTGAGTGAGTGGGGGCGTGCTTGGGAGGCGCAGGATGGCACCGGCACA
TCTAACATCTACACTTCTCTAGCTCAGCCTCACAGGCCAAAGCATCAGCACCAGAACGCACACCCAGCCCAGCCC
CAAAGAGAAAGAAGAGACAGCAAAGAGCCGCAGCCGGTGCTTGCACACCGCCTTGCACATAGCAGAGGCTCCGGG
CTGACTCCTTCCTGGTGGGAAAGGAAGATGCCTGTCCTCTCCGTGGAGGACCCTGGGCCCTCACCGCAGGAAGCA
GTTTGGGTTTTGAAAGGTTATTGGGTCCCTTCCTTGGGCTGTGTTCTTGCTGGTGAGCAAAGTGTTGCCTGCAAA
AATAAAATGCAGAACGTACTCT

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FIGURE 3010A

CGTTGGCCGGGCCCGGGGGAGGAGGGGAATCTCCCGCCATTTTTCAATAATTTCCTCCGGTGCTGCTGAGGAGGA
GTCGTGACTGCCGGCCGCCGGGACCCGAAGCGGAGGTCGGCGGGGGGCTGCTGGGAGGCGCGGCGGTGTGCGCGG
GAGCTCTGCGCCGTGGCGTTCCGCTCCATGACTGTCGCGCGGCCGCGCCGGCGGTGAGGGAGCCGGAGTTCGCGC
CGCCCTCTCACCCCTCCCTTCCCCCACCCCACCCCCGGGCGCCTGGCGCTCGCTCCGGGCCGCGGGGCCTAGTGC
TGCGCCGCGGGGCCGGCCCCAGCAGCCGCCAGTCCCCACCGCCGCCGCCGCGATGGCGCCGCTCCTGGGCCGCAA
GCCCTTCCCGCTGGTGAAGCCGTTGCCCGGAGAGGAGCCGCTCTTCACCATCCCGCACACTCAGGAGGCCTTCCG
CACCCGGGAAGAGTATGAAGCCCGCTTGGAAAGGTACAGTGAGCGCATTTGGACGTGCAAGAGTACTGGAAGCAG
TCAGCTAACACACAAGGAAGCCTGGGAGGAAGAACAGGAAGTTGCTGAGCTTTTGAAGGAGGAGTTTCCTGCCTG
GTATGAGAAGCTTGTTCTGGAAATGGTTCACCATAACACAGCCTCCTTAGAGAAGTTAGTAGATACTGCTTGGTT
GGAGATCATGACCAAATATGCTGTGGGAGAAGAGTGTGACTTCGAGGTTGGGAAGGAGAAAATGCTCAAGGTGAA
GATTGTGAAGATTCATCCTTTGGAGAAAGTGGATGAAGAGGCCACTGAGAAGAAATCTGATGGTGCCTGTGATTC
TCCATCAAGTGACAAAGAGAACTCCAGTCAGATTGCTCAGGACCATCAGAAGAAGGAGACAGTTGTGAAAGAGGA
TGAAGGAAGGAGAGAGAGTATTAATGACAGAGCACGTAGATCGCCACGAAAACTTCCTACTTCATTAAAAAAAGG
AGAAAGGAAATGGGCTCCTCCAAAATTTCTGCCTCACAAATATGATGTGAAACTACAAAATGAAGATAAGATCAT
CAGTAACGTGCCAGCAGACAGCTTGATTCGTACAGAGCGCCCACCAAATAAGGAGATAGTTCGATACTTTATACG
GCATAATGCATTACGAGCTGGTACTGGTGAAAATGCACCTTGGGTCGTAGAAGATGAATTGGTGAAGAAATACTC
TCTGCCCAGCAAGTTCAGTGACTTTTTACTTGATCCATACAAGTATATGACTCTCAACCCTTCTACTAAGAGGAA
GAATACTGGATCCCCAGACAGGAAGCCCTCAAAGAAATCCAAGACAGACAACTCTTCTCTTAGTTCACCACTAAA
TCCTAAGTTATGGTGTCACGTACACTTGAAGAAGTCATTGAGTGGCTCGCCACTCAAAGTGAAGAACTCAAAGAA
TTCCAAATCTCCTGAAGAACATCTAGAAGAAATGATGAAGATGATGTCGCCCAATAAGCTGCACACTAACTTTCA
CATTCCTAAAAAAGGCCCACCTGCCAAGAAACCAGGGAAGCACAGTGACAAGCCTTTGAAGGCAAAGGGCAGAAG
CAAAGGCATCCTGAATGGACAGAAATCCACAGGGAATTCCAAATCTCCCAAAAAAGGACTGAAGACTCCTAAAAC
CAAAATGAAGCAGATGACTTTGTTGGATATGGCCAAAGGCACGCAGAAGATGACACGAGCCCCACGGAATTCTGG
GGGTACACCTAGGACCTCTAGTAAACCTCATAAACATCTGCCTCCTGCAGCCCTACACCTCATTGCATACTACAA
AGAAAACAAAGACAGGGAGGACAAGAGGAGCGCCCTGTCCTGTGTTATCTCCAAAACAGCTCGTCTTCTCTCTAG
TGAAGATAGAGCTCGTCTCCCAGAAGAATTGCGAAGTCTTGTTCAAAAACGCTATGAACTTCTAGAGCACAAAAA
GAGGTGGGCTTCTATGTCTGAAGAACAACGGAAAGAATATTTGAAAAAGAAACGGGAGGAGCTGAAAAAGAAGTT
GAAGGAAAAAGCCAAAGAACGAAGAGAGAAAGAAATGCTTGAGAGATTAGAAAAACAGAAGCGGTATGAGGACCA
AGAGTTAACTGGCAAAAACCTTCCAGCATTCAGATTGGTGGATACCCCTGAAGGGCTGCCCAACACGCTGTTTGG
GGATGTGGCCATGGTGGTGGAATTCTTGAGCTGTTATTCTGGGCTACTTTTACCAGATGCTCAGTATCCTATTAC
TGCTGTGTCCCTTATGGAAGCCTTGAGTGCAGATAAGGGTGGCTTTTTATACCTTAACAGGGTGTTGGTCATCCT
CTTACAGACCCTCCTACAAGATGAGATAGCAGAAGACTATGGTGAATTGGGAATGAAGCTGTCGGAAATCCCCTT
GACTCTGCATTCTGTTTCAGAGCTGGTGCGGCTCTGCTTGCGCAGATCTGATGTTCAGGAGGAAAGCGAGGGCTC
AGACACAGATGACAATAAAGATTCAGCTGCATTTGAGGATAATGAGGTACAAGATGAGTTCCTAGAAAAGCTGGA
GACCTCTGAATTTTTTGAGCTGACGTCAGAGGAGAAGCTACAGATCTTGACAGCACTGTGCCACCGGATCCTCAT
GACATACTCAGTGCAAGACCACATGGAGACCAGACAGCAGATGTCTGCAGAGTTGTGGAAGGAACGGCTTGCTGT
GTTGAAGGAAGAAAATGATAAGAAGAGAGCAGAGAAACAGAAACGGAAAGAAATGGAAGCCAAAAATAAAGAAAA
TGGAAAAGTTGAGAATGGGTTAGGCAAAACTGATAGGAAAAAAGAAATTGTGAAGTTTGAGCCCCAAGTAGATAC
AGAAGCTGAAGACATGATTAGTGCTGTGAAGAGCAGAAGGTTGCTTGCCATTCAAGCTAAGAAGGAACGGGAAAT
CCAGGAAAGAGAAATGAAAGTGAAACTGGAACGCCAAGCTGAAGAAGAACGAATACGGAAGCACAAAGCAGCTGC
TGAGAAAGCTTTCCAGGAAGGGATTGCCAAGGCCAAACTAGTCATGCGCAGGACTCCTATTGGCACAGATCGAAA
CCATAATAGATACTGGCTCTTCTCAGATGAAGTTCCAGGATTATTCATTGAAAAAGGCTGGGTACATGACAGCAT
TGACTACCGATTCAACCATCACTGCAAAGACCACACAGTCTCTGGTGATGAGGATTACTGTCCTCGCAGTAAGAA
AGCAAACTTAGGTAAAAATGCAAGCATGAACACACAACATGGAACAGCAACAGAAGTTGCTGTAGAGACAACCAC
ACCCAAACAAGGACAGAACCTATGGTTTTTATGTGATAGTCAAAAGGAGCTGGATGAGTTGCTAAACTGTCTTCA
CCCTCAGGGAATAAGAGAAAGTCAACTTAAAGAGAGACTAGAGAAGAGGTACCAGGACATTATTCACTCTATTCA
TCTAGCACGGAAGCCAAATTTGGGTCTAAAATCTTGTGATGGCAACCAGGAGCTTTTAAACTTCCTTCGTAGTGA
TCTCATTGAAGTTGCAACAAGGTTACAAAAAGGAGGACTTGGATATGTGGAAGAAACATCAGAATTTGAAGCCCG

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FIGURE 3010B

GGTAGATGTGAAGCTTAAAAAGAGATCAGTGAAGCAGGAGGATCGCTTCAGGCCAGGAGTTTGAGACCAGCCTGC
GCAACATAGTCATTTCATTAGAGAAATTGAAGGATTTTGGTGAGTGTGTGATTGCCCTTCAGGCCAGTGTCATAA
AGAAATTTCTCCAAGGCTTCATGGCTCCCAAGCAAAAGAGAAGAAAACTCCAAAGTGAAGATTCAGCAAAAACTG
AGGAAGTGGATGAAGAGAAGAAAATGGTAGAGGAAGCAAAGGTTGCATCTGCACTGGAGAAATGGAAGACAGCAA
TCCGGGAAGCTCAGACTTTCTCCAGGATGCACGTGCTGCTTGGGATGCTTGATGCCTGTATCAAGTGGGATATGT
CCGCAGAAAATGCTAGGTGCAAAGTTTGTCGAAAGAAAGGTGAGGATGACAAATTGATCTTGTGTGATGAGTGTA
ATAAAGCCTTCCACCTGTTTTGTCTGAGGCCGGCCCTCTATGAAGTACCAGATGGTGAGTGGCAGTGCCCAGCTT
GCCAGCCCGCTACTGCCAGGCGCAACTCCCGTGGCAGGAACTATACTGAAGAGTCTGCTTCTGAGGACAGTGAAG
ATGATGAGAGTGATGAAGAGGAGGAGGAGGAAGAAGAGGAGGAGGAGGAAGAAGATTATGAGGTGGCTGGTTTGC
GATTGAGACCTCGAAAGACCATCCGGGGCAAGCACAGCGTCATCCCCCCTGCAGCAAGGTCAGGCCGGCGCCCGG
GTAAGAAGCCACACTCTACCAGGAGGTCTCAGCCCAAGGCACCACCTGTGGATGATGCTGAGGTGGATGAGCTGG
TGCTTCAGACCAAGCGGAGCTCCCGGAGGCAAAGCCTGGAGCTGCAGAAGTGTGAAGAGATCCTCCACAAGATCG
TGAAGTACCGCTTCAGCTGGCCCTTCAGGGAGCCTGTGACCAGAGATGAGGCCGAGGACTACTATGATGTGATCA
CGCACCCCATGGACTTTCAGACAGTGCAGAACAAATGTTCCTGTGGGAGCTACCGCTCTGTGCAGGAGTTTCTTA
CTGACATGAAGCAAGTGTTTACCAATGCTGAGGTTTACAACTGCCGTGGCAGCCATGTGCTAAGCTGCATGGTGA
AGACAGAACAGTGTCTAGTGGCTCTGTTGCATAAACACCTTCCTGGCCACCCATATGTCCGCAGGAAGCGCAAGA
AGTTTCCTGATAGGCTTGCTGAAGATGAAGGGGACAGTGAGCCAGAGGCCGTTGGACAGTCCAGGGGACGAAGAC
AGAAGAAGTAGAGAGGCAGGGCCGTGGTGACAGTATCAGTGAGTGCCATACAGAATTGTGTATTCACCAGCATCA
TGAAACAGTTGTGGTCTTTTGAGTTGATCTTGGCAGAGTAAAGGGACGTGTCCTGGAGCCATTCCTGAATCTCCC
CTTCTTTGTGACAGCTCCTCCCACCCCCCCAAAAAATAAAAAAACCACAAAAAACAAAAAAACAAAACTAAGGCA
CTTCACTTAGAGACTGGAGTCCTGCTTATAATCATGCATATAACCTTTACTTTGATGGATCTGGCCAGAGGGGTG
TTGGAGCCCAGCCCACCCACATACCAGTCAAGCTCTTAGGGGAGCAGAAGAAAAGCAGGAAGAATTTAAATGTTT
AATTTTTTTTTTAAATTGACTTTTCTAGTTATTAAAAGTTGCTTGTTTCAGCAGTGATATTGTATAAAGAACATC
TTGTAAGATACTCCTGACATCTTGCTTTAGCACATGTACAGTACAGTTTCTATGATAATGTGTTTGCTCTAACTT
CCCTGGCTTCTCCTTCAGCCCATCCACTCTCCTCTAGAGCAGTTGGGTTGGAGGCTCATTGAGGCAAGCAGCAAC
ATTGGAGGGGGAGCAGGGCAGTGCTGTGTCTGCTGCCTCCCATGCCCGTTCTGACCTCAGCCTTGGAACTCCTCA
AGAACCTGAAGATTCCAGTGGTCAGTGTCGGTGGGGGGTGGGAGGAGAGAGCGGCAGAGAAGCTCTGAGAGCCCC
TTCCCCCACAACAAATCTAGCTCTAGTTGTTATATTTAGGCAAAACTTTGTAGTCTTCTTTCCCTTTTATGATGG
ATTTTGATAAAAGTACAAAACAGGGTTTTTCTTTTTTATCACCTTTGAATTTGGAAATTTTGAGCACCCAAGCTC
TTCTGTACCTATTTAAAGTCCACCAAGGGGACTGCAGCTCCTAGAACATGAGAATCAAGCCTCTTAATTTTAAAC
TGCGGAATGTGGCCTCTGCTTCCTCCGTCCTCCTGCCCAAGGACGACGAGGATTGCTCCAGGGCTGCTGGGTAGT
TTACCGTCCCTTCTATAGGCATGGAGTTGGCACTGACATCACAGCTTCATAACCCCACCACCGCCAGCTTCCCCT
GCCTCCTACATCCAGTCTGTTCTTGTTCATAGTGAGAATCCTGTGTTCCCACTTCAGTGACACCTGAATTGTTTG
TTGTTGTTTTTTTTTTTTATTGTCTTCAAAGAGGAAGGGCCCCATTAAAGGGTGAACTTGTAATAAATTGGAATT
TCAAATAAACCTCATGTACTTGTGTTTATAAAGAAGAAACCA

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FIGURE 3011

GAGATGGCGCAGGAGTGCGGTTCCACAGGGTCAGGTTCCTAACACGCTGGCCAGAGCAGGGAGCCGACCTCCAAA
CTCTCAGGGAAGAGAACCAGGTTGCCCACCGGCGGCACCTCGCACCTCGCCCTGACCACAAGCACGTGCGCCCAA
CCCGCCTCGCACCCCGGCCCGGGTAGGGGGCTCAGGGGACTCCCGGGGCACTCAGGAGGGACGCCCCGGGCGGGG
CGCGCAGGCGCGCTGAGGCCGTGAGCCCCAAGGGGCGGGCGGGTGCGCGCGCTTTCTCGCGCACGCGCGCACGGA
GGGGGCGACGGCCGCTGTGACGCTGCGGCGGCGGCGGGCGGGCGGCGGCGCGTGAGGCGCGCGATCCCCGGTGTC
TTGGGAGCAGTGCCCCGGCCCCCGCCGCTCCCGCCGCCGCCATGTCGGGCCGGTCGGTCCGGGCGGAGACCCGCA
GCCGGGCCAAGGACGACATCAAGAAGGTGATGGCGGCCATCGAGAAAGTGCGGAAATGGGAGAAGAAGTGGGTGA
CTGTGGGTGACACGTCCCTGAGGATATTTAAGTGGGTTCCTGTGACAGACAGCAAGGAGAAAGAAAAGTCAAAAT
CGAACAGTTCAGCAGCCCGAGAACCTAATGGCTTTCCTTCTGATGCCTCAGCCAATTCCTCTCTCCTTCTTGAAT
TCCAGGACGAAAACAGCAACCAGAGTTCCGTGTCTGACGTCTATCAGCTTAAGGTGGACAGCAGCACCAACTCAA
GCCCCAGCCCCCAGCAGAGTGAGTCCCTGAGCCCAGCACACACCTCCGACTTCCGCACGGATGACTCCCAGCCCC
CAACGCTGGGCCAGGAGATCCTGGAGGAGCCCTCCCTGCCCTCCTCGGAAGTTGCTGATGAACCTCCTACCCTCA
CCAAGGAAGAACCAGTTCCACTAGAGACACAGGTCGTTGAGGAAGAGGAAGACTCAGGTGCCCCGCCCCTGAAGC
GCTTCTGTGTGGACCAACCCACAGTGCCGCAGACGGCGTCAGAAAGCTAGCACCATCCCGGCCCTCCGCCTCCTG
GCCCTGCCTCTATTTATTGCATTCTGGTTCTGGCCGCGCCGCGTTGCTGGGGTAAGGGCAAGCACTGGGGTCAAG
AGCCTGCACACATGAGCCTTCCGGGCTGGAAGGCTGGCGTAGGACTTGGGGCTGTAGCATCATCTTCCTGACCCT
GGCACCTGTGTCTACTTGCTCCCGAGAAGAGGAGCGCTCATGTCTTTTTTGCACCCCAAGTTGGCTGGAGCATCG
GCCACCCCAAGATTCATCTGTGACCTCCAGGCAGCAGTCTCTGCTCCAGAATCTCTGGACGGAGCTGCTGGCAGC
TTCTGCGAGAAGAGAGAGATGTGGAAGGCACCTTCTAGAAGAGAGCGTGCCTCAGGTTACTTGAACTTGAACGGA
GACTGTAGACTCCCGGACTTTCCCCTAGGACTGGGGGCCCTGTAGGCTGCTGTTGGAGGACTGGGTAGAGACATT
GGAGGGAAGGGAAGGGCTTTTCTCCACACAAGGGCAGAGAGTCCGTCTAGATTTCTTGCTGTCCTGCCAGCTCTG
CCCATGCCTGAGGTGGTCCTACCTCTCACGGGCACCCTAGCTGCTGACAGCCCTTTGTGGCCGCCGTCCCCATCC
CCTGCCCTCAGCACACACATCTGCACACACGCAGCTTTGTTCTCACCTCTACCTGTCATTCCAGCATCCCTGCCT
CTTGTCACAAACTGCCCCAGCAAGAATTTGAGGTTCTGACAACAGTACCCATCCCCCACAGTACCCCTTCAGCTC
AGTTTCTAGAAAGCTCCCTTTTCTTTGAAATCTGCATGTTGAATTGAACTTTGTGATTTTATTTTTGTTTCAAA
AAAGTTTAAGAAAATGGAAATGGGCAACAGTGAGTGAAGACATATTTTAGCACTGAATAGAATATTTTTAAAATT
AAACTATTTGAAATATG

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FIGURE 3012

GGCCAGGCCGCGCCCCCGCGTGCGTGCGCGGCCCGGCAGAGCCGTGCGGGCGCCCGCGTACTCACTAGCTGAGGT
GGCAGTGGTTCCACCAACATGGAGCTCTCGCAGATGTCGGAGCTCATGGGGCTGTCGGTGTTGCTTGGGCTGCTG
GCCCTGATGGCGACGGCGGCGGTAGCGCGGGGGTGGCTGCGCGCGGGGGAGGAGAGGAGCGGCCGGCCCGCCTGG
CCCAGGAGCTTTTTTCCTGTTGGAATTGGGGAGCATCTGCAGTCATTTACCACATGCCAGCTTTGTGACTCAATT
AAGTATCTTTTACAAAAGTGACTGGCTCCACTCCCCCGCACAGGACTCAACAGATGTTGACTTCTCATCCCCGAG
TTCTTTCAGGCCAAAAAGCAAATGGATTTCCACCTGACAAATCTTCGGGATCCAAGAAGCAGAAACAATATCAGC
GGATTCGGAAGGAGAAGCCTCAACAACACAACTTCACCCACCGCCTCCTGGCTGCAGCTCTGAAGAGCCACAGCG
GGAACATATCTTGCATGGACTTTAGCAGCAATGGCAAATACCTGGCTACCTGTGCAGATGATCGCACCATCCGCA
TCTGGAGCACCAAGGACTTCCTGCAGCGAGAGCACCGCAGCATGAGAGCCAACGTGGAGCTGGACCACGCCACCC
TGGTGCGCTTCAGCCCTGACTGCAGAGCCTTCATCGTCTGGCTGGCCAACGGGGACACCCTCCGTGTCTTCAAGA
TGACCAAGCGGGAGGATGGGGGCTACACCTTCACAGCCACCCCAGAGGACTTCCCTAAAAAGCACAAGGCGCCTG
TCATCGACATTGGCATTGCTAACACAGGGAAGTTTATCATGACTGCCTCCAGTGACACCACTGTCCTCATCTGGA
GCCTGAAGGGTCAAGTGCTGTCTACCATCAACACCAACCAGATGAACAACACACACGCTGCTGTATCTCCCTGTG
GCAGATTTGTAGCCTCGTGTGGCTTCACCCCAGATGTGAAGGTTTGGGAAGTCTGCTTTGGAAAGAAGGGGGAGT
TCCAGGAGGTGGTGCGAGCCTTCGAACTAAAGGGCCACTCCGCGGCTGTGCACTCGTTTGCTTTCTCCAACGACT
CACGGAGGATGGCTTCTGTCTCCAAGGATGGTACATGGAAACTGTGGGACACAGATGTGGAATACAAGAAGAAGC
AGGACCCCTACTTGCTGAAGACAGGCCGCTTTGAAGAGGCGGCGGGTGCCGCGCCGTGCCGCCTGGCCCTCTCCC
CCAACGCCCAGGTCTTGGCCTTGGCCAGTGGCAGTAGTATTCATCTCTACAATACCCGGCGGGGCGAGAAGGAGG
AGTGCTTTGAGCGGGTCCATGGCGAGTGTATCGCCAACTTGTCCTTTGACATCACTGGCCGCTTTCTGGCCTCCT
GTGGGGACCGGGCGGTGCGGCTGTTTCACAACACTCCTGGCCACCGAGCCATGGTGGAGGAGATGCAGGGCCACC
TGAAGCGGGCCTCCAACGAGAGCACCCGCCAGAGGCTGCAGCAGCAGCTGACCCAGGCCCAAGAGACCCTGAAGA
GCCTGGGTGCCCTGAAGAAGTGACTCTGGGAGGGCCCGGCGCAGAGGATTGAGGAGGAGGGATCTGGCCTCCTCA
TGGCACTGCTGCCATCTTTCCTCCCAGGTGGAAGCCTTTCAGAAGGAGTCTCCTGGTTTTCTTACTGGTGGCCCT
GCTTCTTCCCATTGAAACTACTCTTGTCTACTTAGGTCTCTCTCTTCTTGCTGGCTGTGACTCCTCCCTGACTAG
TGGCCAAGGTGCTTTTCTTCCTCCCAGGCCCAGTGGGTGGAATCTGTCCCCACCTGGCACTGAGGAGAATGGTAG
AGAGGAGAGGAGAGAGAGAGAGAATGTGATTTTTGGCCTTGTGGCAGCACATCCTCACACCCAAAGAAGTTTGTA
AATGTTCCAGAACAACCTAGAGAACACCTGAGTACTAAGCAGCAGTTTTGCAAGGATGGGAGACTGGGATAGCTT
CCCATCACAGAACTGTGTTCCATCAAAAAGACACTAAGGGATTTCCTTCTGGGCCTCAGTTCTATTTGTAAGATG
GAGAATAATCCTCTCTGTGAACTCCTTGCAAAGATGATATGAGGCTAAGAGAATATCAAGTCCCCAGGTCTGGAA
GAAAAGTAGAAAAGAGTAGTACTATTGTCCAATGTCATGAAAGTGGTAAAAGTGGGAACCAGTGTGCTTTGAAAC
CAAATTAGAAACACATTCCTTGGGAAGGCAAAGTTTTCTGGGACTTGATCATACATTTTATATGGTTGGGACTTC
TCTCTTCGGGAGATGATATCTTGTTTAAGGAGACCTCTTTTCAGTTCATCAAGTTCATCAGATATTTGAGTGCCC
ACTCTGTGCCCAAATAAATATGAGCTGGGGATT

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FIGURE 3013

CCCCGCGCTGCGCGGAGCAGGGACCAGGCGGTTGCGGCGGCGACAGCCATGGCCGGCGCGCTGGCAGGTCTGGCC
GCGGGCTTGCAGGTCCCGCGGGTCGCGCCCAGCCCAGACTCGGACTCGGACACAGACTCGGAGGACCCGAGTCTC
CGGCGCAGCGCGGGCGGCTTGCTCCGCTCGCAGGTCATCCACAGCGGTCACTTCATGGTGTCGTCGCCGCACAGC
GACTCGCTGCCCCGGCGGCGCGACCAGGAGGGGTCCGTGGGGCCCTCCGACTTCGGGCCGCGCAGTATCGACCCC
ACACTCACACGCCTCTTCGAGTGCTTGAGCCTGGCCTACAGTGGCAAGCTGGTGTCTCCCAAGTGGAAGAATTTC
AAAGGCCTCAAGCTGCTCTGCAGAGACAAGATCCGCCTGAACAACGCCATCTGGAGGGCCTGGTATATCCAGTAT
GTGAAGCGGAGGAAGAGCCCCGTGTGTGGCTTCGTGACCCCCCTGCAGGGGCCTGAGGCTGATGCGCACCGGAAG
CCGGAGGCCGTGGTCCTGGAGGGGAACTACTGGAAGCGGCGCATCGAGGTGGTGATGCGGGAATACCACAAGTGG
CGCATCTACTACAAGAAGCGGCTCCGTAAGCCCAGCAGGGAAGATGACCTCCTGGCCCCTAAGCAGGCGGAAGGC
AGGTGGCCGCCGCCGGAGCAATGGTGCAAACAGCTCTTCTCCAGTGTGGTCCCCGTGCTGCTGGGGGACCCAGAG
GAGGAGCCGGGTGGGCGGCAGCTCCTGGACCTCAATTGCTTTTTGTCCGACATCTCAGACACTCTCTTCACCATG
ACTCAGTCCGGCCCTTCGCCCCTGCAGCTGCCGCCTGAGGATGCCTACGTCGGCAATGCTGACATGATCCAGCCG
GACCTGACGCCACTGCAGCCAAGCCTGGATGACTTCATGGACATCTCAGATTTCTTTACCAACTCCCGCCTCCCA
CAGCCGCCCATGCCTTCAAACTTCCCAGAGCCCCCCAGCTTCAGCCCCGTGGTTGACTCCCTCTTCAGCAGTGGG
ACCCTGGGCCCAGAGGTGCCCCCGGCTTCCTCGGCCATGACCCACCTCTCTGGACACAGCCGTCTGCAGGCTCGG
AACAGCTGCCCTGGCCCCTTGGACTCCAGCGCCTTCCTGAGTTCTGATTTCCTCCTTCCTGAAGACCCCAAGCCC
CGGCTCCCACCCCCTCCTGTACCCCCACCTCTGCTGCATTACCCTCCCCCTGCCAAGGTGCCAGGCCTGGAGCCC
TGCCCCCCACCTCCCTTCCCTCCCATGGCACCACCCACTGCTTTGCTGCAGGAAGAGCCTCTCTTCTCTCCCAGG
TTTCCCTTCCCCACCGTCCCTCCTGCCCCAGGAGTGTCTCCGCTGCCTGCTCCTGCAGCCTTCCCACCCACCCCA
CAGTCTGTCCCCAGCCCAGCCCCCACCCCCTTCCCCATAGAGCTTCTACCCTTGGGGTATTCGGAGCCTGCCTTT
GGGCCTTGCTTCTCCATGCCCAGAGGCAAGCCCCCCGCCCCATCCCCTAGGGGACAGAAAGCCAGCCCCCCTACC
TTAGCCCCTGCCACTGCCAGTCCCCCCACCACTGCGGGGAGCAACAACCCCTGCCTCACACAGCTGCTCACAGCA
GCTAAGCCGGAGCAAGCCCTGGAGCCACCACTTGTATCCAGCACCCTCCTCCGGTCCCCAGGGTCCCCGCAGGAG
ACAGTCCCTGAATTCCCCTGCACATTCCTTCCCCCGACCCCGGCCCCTACACCGCCCCGGCCACCTCCAGGCCCG
GCCACATTGGCCCCTTCCAGGCCCCTGCTTGTCCCCAAAGCGGAGCGGCTCTCACCCCCAGCGCCCAGCGGCAGT
GAACGGCGGCTGTCAGGGGACCTCAGCTCCATGCCAGGCCCTGGGACTCTGAGCGTCCGTGTCTCTCCCCCGCAA
CCCATCCTCAGCCGGGGCCGTCCAGACAGCAACAAGACCGAGAACCGGCGTATCACACACATCTCCGCGGAGCAG
AAGCGGCGCTTCAACATCAAGCTGGGGTTTGACACCCTTCATGGGCTCGTGAGCACACTCAGTGCCCAGCCCAGC
CTCAAGGTGAGCAAAGCTACCACGCTGCAGAAGACAGCTGAGTACATCCTTATGCTACAGCAGGAGCGTGCGGGC
TTGCAGGAGGAGGCCCAGCAGCTGCGGGATGAGATTGAGGAGCTCAATGCCGCCATTAACCTGTGCCAGCAGCAG
CTGCCCGCCACAGGGGTACCCATCACACACCAGCGTTTTGACCAGATGCGAGACATGTTTGATGACTACGTCCGA
ACCCGTACGCTGCACAACTGGAAGTTCTGGGTGTTCAGCATCCTCATCCGGCCTCTGTTTGAGTCCTTCAACGGG
ATGGTGTCCACGGCAAGTGTGCACACCCTCCGCCAGACCTCACTGGCCTGGCTGGACCAGTACTGCTCTCTGCCC
GCTCTCCGGCCAACTGTCCTGAACTCCCTACGCCAGCTGGGCACATCTACCAGTATCCTGACCGACCCGGGCCGC
ATCCCTGAGCAAGCCACACGGGCAGTCACAGAGGGCACCCTTGGCAAACCTTTATAGTCCTGGCCAGACCCTGCT
GCTCACTCAGCTGCCCTGGGGGCTGCTTTCCCTGGGCACGGGCTCCAGGGATCATCTCTGGGCACTCCCTTCCTG
CCCCAGGCCCTGGCTCTGCCCTTCCCTGGGGGGTGGAGCAGGGTCCAGGTTTCACACTTGCCACCTCCTGGAGGT
CAAGAAGAGCAGAGTCCCCGTCCCTGCTCTGCCACTGTGCTCCAGCACCGTGACCTTGGGTGACTCGTCCGCTGT
CTTTGGACCGCTGTGTTTCAATCTGCAAAATGGGGATGGGGAAGGTTCAATCAGCAGATGACCCCCAGGCCTTGG
CAGCTGTGACATTGGGGGCCTAGGCTGGCAACTCCGGGGGCTCAACGGTGGAAAGAGGAGGATGCTGTTTCTCTG
TCACCTCCACTTGCTCCCCGACAGGTGGGGCACAGACCTCTGTTCCTGAGCAGAGAAGCAGAAAAGGAGGTTCCC
TCTCTCTGCTCCTTCACTGCTGACCCAGAGGGGCTGCAGGATGGTTTCCCCTGGGAGAGGCCAGGAGGGCCTGAT
CCCAGGAGACACCAGGGCCAGAGTGACCACAGCAGGGCAGGCATCATGTGTGTGTGTGTGTGTGGATGTGTGTGT
GTGGGTTTTGTAAAGAATTCTTGACCAATAAAAGCAAAAACTGTCTGCTGGTT

FIGURE 3014

CCTGCCGAATCAATTCAACATGGCAGCCATGCGCTGGCGATGGTGGCAGCGGCTGTTACCTTGGAGGTTGCTGCA
GGCCCGTGGCTTTCCACAAAATTCTGCACCCAGCCTGGGCCTAGGAGCGAGGACTTATTCCCAGGGCGACTGCTC
GTATTCGCGCACGGCGCTGTATGATCTGCTCGGCGTCCCCTCCACAGCCACGCAGGCCCAAATCAAGGCGGCTTA
CTACCGTCAGTGCTTTCTCTACCACCCGGACCGCAACTCCGGGAGCGCGGAGGCCGCCGAGCGCTTCACGCGCAT
CTCCCAGGCCTACGTGGTGCTGGGCAGTGCCACCCTCCGTCGCAAGTATGATCGCGGCCTACTCAGCGACGAGGA
CCTGCGCGGACCTGGCGTCCGGCCCTCCAGGACGCCCGCACCCGACCCCGGCTCGCCGCGTACCCCGCCGCCCAC
CTCTCGGACCCACGACGGTTCTCGGGCCTCCCCCGGCGCCAACCGCACGATGTTCAACTTTGACGCCTTCTACCA
GGCCCACTACGGGGAACAACTGGAGCGGGAACGGCGCCTGAGGGCCCGGCGGGAGGCCCTTCGCAAACGGCAGGA
GTATCGGTCCATGAAAGGCCTCCGCTGGGAGGATACCCGAGACACGGCTGCCATTTTCCTCATCTTTTCAATCTT
CATCATCATCGGCTTTTATATTTAATCGGAGAGAGAAGGGAAGGGGAGTGTCCCCAGCCAACCCCCCAGAAACGG
CCTTTTTTCCTGCCTCTGAACCCTTGGCCATTGATAGTCTACCTTTGCTGGGATCCGAAGGAACTGTACTCCCCC
TGCCCTCCCCGACCCGCCCAGCTTAGCCGATGACCTGCACATCGCTCCACTGTGGTCCAGAAAAGGAGGCCTTTC
GATGTCTGAGAAAGAGGCCCCACGCTGTAGAGTCCCGAAAGCCCAGGAGTGAAGGGGGTTCCTGGAGTCTCTAGG
GTGCTTCTTCCAGAGTCTGTCTTCTTGCTTCCAGATGTGGTCAACTTCTGGAACACTCGCTGTAGCTTTATTGTT
TAGCCCCAAGCAAGATTTATCTCCTCCTGCCCCGCATGTGTATGGTGGGCCTCTGTAACCTTGAAATGTGCAATG
TGACCAATTGTTGACTACCAAAAGAAAAGGTCTGGGGTTGTACG

FIGURE 3015

GCTGCTGAGGCGTGAGAATGGCGTCCCGCGGCCGGCGTCCGGAGCATGGCGGACCCCCAGAGCTGTTTTATGACG
AGACAGAAGCCCGGAAATACGTTCGCAACTCACGGATGATTGATATCCAGACCAGGATGGCTGGGCGAGCATTGG
AGCTTCTTTATCTGCCAGAGAATAAGCCCTGTTACCTGCTGGATATTGGCTGTGGCACTGGGCTGAGTGGAAGTT
ATCTGTCAGATGAAGGGCACTATTGGGTGGGCCTGGATATCAGCCCTGCCATGCTGGATGAGGCTGTGGACCGAG
AGATAGAGGGAGACCTGCTGCTGGGGGATATGGGCCAGGGCATCCCATTCAAGCCAGGCACATTTGATGGTTGCA
TCAGCATTTCTGCTGTGCAGTGGCTCTGTAATGCTAACAAGAAGTCTGAAAACCCTGCCAAGCGCCTGTACTGCT
TTTTTGCTTCTCTTTTTTCTGTTCTCGTCCGGGGATCCCGAGCTGTCCTGCAGCTGTACCCTGAGAACTCAGAGC
AGGTGAGTCCCTCGGCTACTGGGTGTGCCGGGGAGTTGGGGGACTCAACAGGTAAGCTGTCCTGGGGAAGCGACA
AAGAATCTTATGCAGATTGGCGGGAAAAGGAGGAAACATGCACCCTAGTGTGGCCCCTGATGGCACATTTGATGA
CCTGATATCCTAAGGGGGTGGCATCTGCGGAGGTGGGGTGGGATGCCTTCTCTTGGCAGATGACATGGTATTACA
GATAAGGTGATGCGACTGATTTCCATAACCAAATAAGTAAATGCCATTTAGGAAGGGTGAGAGGGCACCGACAGT
TCTCCGTTGTGTGATGTATAAATTAAGGAATGGCGGAGTAGGATGTAGATGTTGAAAGATAAGTGAAGAGCTGTT
CCTGACTAATAACATGAATGACTCTGGATTCCAATTGGTGGCCATCTCCCTAAACTTGAGTGGGGAGCTGGGTCC
CTGCACTGGAAAGTGAGAATGAGGGGAGTTGCTTTGTTCTGTAATTCTCCTGAGGGAGGTGTGGGCCATGCCAGA
TTCTAGCCTGTACTTTTCTCTACGTGGCTTACAGCGACCTTAAGTTCTCCCAGGCAGGATTTGTCCTGGAGCAGA
CTGGCTTCTGAAGGAGGGGAGGGAGGTGAAGCTGTCTGCTCCTCTCAACCTCCGCTGCCTGACCCGCTGCCTTTC
TTTCCTCAGTTGGAGCTGATCACAACCCAGGCCACAAAGGCAGGCTTCTCCGGTGGCATGGTGGTAGACTACCCT
AACAGTGCCAAAGCAAAGAAATTCTACCTCTGCTTGTTTTCTGGGCCTTCGACCTTTATACCAGAGGGGCTGAGT
GAAAATCAGGATGAAGTTGAACCCAGGGAGTCTGTGTTCACCAATGAGAGGTTCCCATTAAGGATGTCGAGGCGG
GGAATGGTGAGGAAGAGTCGGGCATGGGTGCTGGAGAAGAAGGAGCGGCACAGGCGCCAGGGCAGGGAAGTCAGA
CCTGACACCCAGTACACCGGCCGCAAGCGCAAGCCCCGCTTCTAAGTCACCACGCGGTTCTGGAAAGGCACTTGC
CTCTGCACTTTTCTATATTGTTCAGCTGACAAAGTAGTATTTTAGAAAAGTTCTAAAGTTATAAAAATGTTTTCT
GCAGTAAAAAAAAAGTTCTCTGGGCCGGGCGTGGTGGCTCACACCTGTAATCCCAGCACCTTGGGAGGCTGAGGT
GGGAGGATCATTTGAGGCCAGGAGTTTGAGACCTGCCTGGGCAACATAATGAAACTTCCTTTCCAGGGAGGAAAA
AAAAAAAAAAAAAAAGCTCTGAGAGCATCTTATTTTGTTTAAAGGCAAGAAATAAAATTTCCTTTTGTGG

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FIGURE 3016

GTCGCGCATGCGGGGCTCACACGGCTGCAGCCGGCGCCGCTGCCACTCCCGGGAGC**ATG**AAGGACCGAACCCAGG
AGCTCCGCACGGCCAAGGACAGCGATGATGATGATGATGTCGCTGTCACCGTGGACCGAGACCGCTTCATGGATG
AGTTCTTTGAGCAGGTGGAGGAGATTCGAGGCTTCATTGACAAGATCGCAGAGAACGTGGAGGAGGTGAAGCGGA
AGCACAGTGCCATCCTGGCATCCCCCAACCCCGATGAGAAGACGAAGGAGGAGCTGGAAGAACTCATGTCCGACA
TAAAGAAGACAGCAAACAAAGTTCGTTCCAAGTTAAAGAGCATCGAGCAGTCCATCGAGCAAGAGGAAGGCCTGA
ACCGCTCCTCCGCTGACCTGAGGATCCGGAAGACACAGCACTCCACGCTGTCCAGAAAGTTTGTGGAGGTCATGT
CGGAGTACAACGCCACGCAGTCCGACTACCGCGAGCGCTGCAAAGGCCGCATCCAGAGGCAGCTGGAGATCACCG
GCAGGACCACGACCAGTGAGGAGCTGGAGGACATGCTGGAGAGTGGGAACCCCGCCATCTTTGCCTCTGGGATCA
TCATGGACTCCAGCATCTCGAAGCAGGCTCTGAGCGAGATTGAGACGCGGCACAGTGAGATCATCAAGCTGGAGA
ACAGCATCCGTGAGCTACACGACATGTTCATGGACATGGCCATGCTCGTGGAGAGCCAGCCTCAGGGTGCTTTCC
TGAAGTCCTGCCCCGAGCCCCAACCCAACCCTGAGGAGGGGGCCCTCTGGAGCTCGGGTGCCCCCGGCCCCGCAG
GGAGAGATGAT**TGA**CAGGATCGAGTACAATGTGGAACACGCGGTAGACTATGTGGAGAGGGCCGTGTCTGACACC
AAGAAGGCCGTCAAGTACCAGAGCAAGGCGCGCCGGAAGAAAATCATGATCATCATCTGCTGTGTGATCCTGGGC
ATCGTCATCGCCTCCACTGTTGGGGGCATCTTCGCCTAGAAGCCACCCAAACTGCCACTCCACTCCAGGTGGGCC
ACTCCAAGGAGGCCCTGGCTGCTGCCACCTGGCTGGGCTGCCCTCCCAACCCCCGCCTCTGGCTCAGAGCACCCT
CCCTCCCGGCCCCCATGCTCCCTTCTCTGCCATGGGCCCTCCGTCCCCGCCCCGTGTCGTGTGCATGATCTCTGT
GAGTGTGCGTCTGTACGGGAAGAGGCAGAGGGAGGCAGCCAGCGGGGCGTGATGCAGTGTGCACAGCGAGGAGCA
GACCCAGGCAGGGCCGCCAGGGTGACACAGGCCACCCTTCCTTGCCTTCAGTAACTCGGTGGGCCCAGGTTCTGC
TCTTCCCTGGGGACCCTAACCTCGCCTCCAGCTGACCTGCCCTGTCCTCTCCAGCTGTCCCCACAAGCAGAGCCC
TGAGGGGTGGGGACCAGCTGGCCACATGGTGCTGCTTTTCAGGTTAGGGGAGAGGTGGCCCTGAGGGACAGCCCA
GCTCTGAGTCTCAGTCGCTGATCACTGCCAGGGAGGCTCAGGCTGCCATGGCTCCAGGCTCCCTCCCCTGCCTAG
GGGCAAAGTCCATCGGGTCCTGGGCCTCAGCTTCCCTTCCCACATTCCTCCGGCCCCAGGAGCAACCCCTTGGGC
TAGGTCTGACCCCAGGTGTCCCTCTGGAAGGGGCTGGCTGGTGCCCTATTTCCAGCCACCCCAGCAGCTAGGGAG
GCAAAGCAGGCTGCAGTCAGTCCCTCAAGCCAGCGTTGCATGTTTGGGATGGTGGCTCCTGTTGTCTTGCGCTCT
GGGAAGTCAGATGTCATTTCAGGCCTGCAGTCTCATCCTGCCCTTGCCATCCTCCCATCGATGTGCCACGTGGGT
GTCACGTGTCCCAGATGCAGTATTCGGCAGCCAGCCGGGGAGGGCTACCTCCTCCTCCTCACCACCTTGGGGCTT
CTCATGGGAAATGTGCCCCCGCCCCAGGACCCTCTCCCTTGTGGACAGGCAGGGAGATGCATGCGAGTGCATGCA
GCAGGGGATGGGGCCGTGTCCGTGTGCCCCACCCTCCCTCGGCTTTACTCCTGCCCAGTGACTGTGACCACTGTC
CGTGTTGCCTTCTTGAACAGCGATTCCCCCCAACCCCTTCACCAAAGGTCTTGGTACAACCAGCTGCCCATTTTG
TGAAATTTTTATGTAGAATAAACATTTGTATCTGT

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FIGURE 3017

AGCTTGCAAGCATGCTCCGCTGGACCCGAGCCTGGAGGCTCCCGCGTGAGGGACTCGGCCCCCACGGCCCTAGCT
TCGCGAGGGTGCCTGTCGCACCCAGCAGCAGCAGCGGCGGCCGAGGGGGCGCCGAGCCGAGGCCGCTTCCGCTTT
CCTACAGGCTTCTGGACGGGGAGGCAGCCCTCCCGGCCGTCGTCTTTTTGCACGGGCTCTTCGGCAGCAAAACTA
ACTTCAACTCCATCGCCAAGATCTTGGCCCAGCAGACAGGCCGTGCTGACGGTGGATGCTCGTAACCACGGTGAC
AGCCCCCACAGCCCAGACATGAGCTACGAGATCATGAGCCAGGACCTGCAGGACCTTCTGCCCCAGCTGGGCCTG
GTGCCCTGCGTCGTCGTTGGCCACAGCATGGGAGGAAAGACAGCCATGCTGCTGGCACTACAGAGGGTGAGCCGC
CCATGTCTGGGGCCTCCTCCCATTCAGTATATACCCTGAGGGCCCTGCAGGCAACCTGGGACTCACATGATCGTT
GGATGACCAAGTTCAGGCTCCAGGAGCCATGCCTGAGACTCCCTATGTCTGCCTAAGACTGGTCCCAGTTCGGTT
CTCTCCCACAGCCAGAGCTGGTGGAACGTCTCATTGCTGTAGATATCAGCCCAGTGGAAAGCACAGGTGTCTCCC
ACTTTGCAACCTATGTGGCAGCC**ATG**AGGGCCATCAACATCGCAGATGAGCTGCCCCGCTCCCGTGCCCGAAAAC
TGGCGGATGAACAGCTCAGTTCTGTCATCCAGGACATGGCCGTGCGGCAGCACCTGCTCACTAACCTGGTAGAGG
TAGACGGGCGCTTCGTGTGGAGGGTGAACTTGGATGCCCTGACCCAGCACCTAGACAAGATCTTGGCTTTCCCAC
AGAGGCAGGAGTCCTACCTCGGGCCAACACTCTTTCTCCTTGGTGGAAACTCCCAGTTCGTGCATCCCAGCCACC
ACCCTGAGATTATGCGGCTCTTCCCTCGGGCCCAGATGCAGACGGTGCCGAACGCTGGCCACTGGATCCACGCTG
ACCGCCCACAGGACTTCATAGCTGCCATCCGAGGCTTCCTGGTC**TAA**GAGTTGCTGGCAAGAAGATGGCCGGGCG
TGGTGGCTCATGCCTGTAATTCCAGCACTTTGGGAGGCTAAGGCGGGAGGATGACTTGAGGCCAGGAGTTGGAGA
CCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCTGGCGTGGTGGTGCACACCT
GTAATCCCAGCTACTCTGGAGGCTGAGGCAGGAGAATCACTTGAACCCTGGAGGCAGAGGTTGCAATGAGCCGAG
ATCACACCACTACACTCCAGCCTAGGCAACAGAGCAAGACTCTGTCTCAAAAAAAACAAAACAAAAAGGAGGCAC
AAAACCCCAGGCTTCAAGTCTCTGCAGCCTGCTCCACATTTGGGCACAGAAGGACTCAGACAGGCACTGTGTGGG
CACGAGGTTTTACAGGGGTGGTCAGACCTCAGGCTTTAATGAATAAAGACACTACTCCC

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FIGURE 3018

GGCAGGTGCAGGCGCAGCCGCGGCGAGAGCGTATGGAGCCGAGCCGTTAGCGCGCGCCGTCGGTGAGTCAGTCCG
TCCGTCCGTCCGTCCGTCGGGGCGCCGCAGCTCCCGCCAGGCCCAGCGGCCCCGGCCCCTCGTCTCCCCGCACCC
GGAGCCACCCGGTGGAGCGGGCCTTGCCGCGGCAGCCATGTCCATGGGCCTGGAGATCACGGGCACCGCGCTGGC
CGTGCTGGGCTGGCTGGGCACCATCGTGTGCTGCGCGTTGCCCATGTGGCGCGTGTCGGCCTTCATCGGCAGCAA
CATCATCACGTCGCAGAACATCTGGGAGGGCCTGTGGATGAACTGCGTGGTGCAGAGCACCGGCCAGATGCAGTG
CAAGGTGTACGACTCGCTGCTGGCACTGCCACAGGACCTTCAGGCGGCCCGCGCCCTCATCGTGGTGGCCATCCT
GCTGGCCGCCTTCGGGCTGCTAGTGGCGCTGGTGGGCGCCCAGTGCACCAACTGCGTGCAGGACGACACGGCCAA
GGCCAAGATCACCATCGTGGCAGGCGTGCTGTTCCTTCTCGCCGCCCTGCTCACCCTCGTGCCGGTGTCCTGGTC
GGCCAACACCATTATCCGGGACTTCTACAACCCCGTGGTGCCCGAGGCGCAGAAGCGCGAGATGGGCGCGGGCCT
GTACGTGGGCTGGGCGGCCGCGGCGCTGCAGCTGCTGGGGGGCGCGCTGCTCTGCTGCTCGTGTCCCCCACGCGA
GAAGAAGTACACGGCCACCAAGGTCGTCTACTCCGCGCCGCGCTCCACCGGCCCGGGAGCCAGCCTGGGCACAGG
CTACGACCGCAAGGACTACGTCTAAGGGACAGACGCAGGGAGACCCCACCACCACCACCACCACCACCAACACCACCA
CCACCACCGCGAGCTGGAGCGCGCACCAGGCCATCCAGCGTGCAGCCTTGCCTCGGAGGCCAGCCCACCCCCAGA
AGCCAGGAAGCCCCCGCGCTGGACTGGGGCAGCTTCCCCAGCAGCCACGGCTTTGCGGGCCGGGCAGTCGACTTC
GGGGCCCAGGGACCAACCTGCATGGACTGTGAAACCTCACCCTTCTGGAGCACGGGGCCTGGGTGACCGCCAATA
CTTGACCACCCCGTCGAGCCCCATCGGGCCGCTGCCCCCATGCTCGCGCTGGGCAGGGACCGGCAGCCCTGGAAG
GGGCACTTGATATTTTTCAATAAAAGCCTTTCGTTTTGC

FIGURE 3019

GGCAGCTGTCGGCTGGAAGGAACTGGTCTGCTCACACTTGCTGGCTTGCGCATCAGGACTGGCTTTATCTCCTGA
CTCACGGTGCAAAGGTGCACTCTGCGAACGTTAAGTCCGTCCCCAGCGCTTGGAATCCTACGGCCCCCACAGCCG
GATCCCCTCAGCCTTCCAGGTCCTCAACTCCCGTGGACGCTGAACAATGGCCTCCATGGGGCTACAGGTAATGGG
CATCGCGCTGGCCGTCCTGGGCTGGCTGGCCGTCATGCTGTGCTGCGCGCTGCCCATGTGGCGCGTGACGGCCTT
CATCGGCAGCAACATTGTCACCTCGCAGACCATCTGGGAGGGCCTATGGATGAACTGCGTGGTGCAGAGCACCGG
CCAGATGCAGTGCAAGGTGTACGACTCGCTGCTGGCACTGCCGCAGGACCTGCAGGCGGCCCGCGCCCTCGTCAT
CATCAGCATCATCGTGGCTGCTCTGGGCGTGCTGCTGTCCGTGGTGGGGGGCAAGTGTACCAACTGCCTGGAGGA
TGAAAGCGCCAAGGCCAAGACCATGATCGTGGCGGGCGTGGTGTTCCTGTTGGCCGGCCTTATGGTGATAGTGCC
GGTGTCCTGGACGGCCCACAACATCATCCAAGACTTCTACAATCCGCTGGTGGCCTCCGGGCAGAAGCGGGAGAT
GGGTGCCTCGCTCTACGTCGGCTGGGCCGCCTCCGGCCTGCTGCTCCTTGGCGGGGGGCTGCTTTGCTGCAACTG
TCCACCCCGCACAGACAAGCCTTACTCCGCCAAGTATTCTGCTGCCCGCTCTGCTGCTGCCAGCAACTACGTGTA
AGGTGCCACGGCTCCACTCTGTTCCTCTCTGCTTTGTTCTTCCCTGGACTGAGCTCAGCGCAGGCTGTGACCCCA
GGAGGGCCCTGCCACGGGCCACTGGCTGCTGGGGACTGGGGACTGGGCAGAGACTGAGCCAGGCAGGAAGGCAGC
AGCCTTCAGCCTCTCTGGCCCACTCGGACAACTTCCCAAGGCCGCCTCCTGCTAGCAAGAACAGAGTCCACCCTC
CTCTGGATATTGGGGAGGGACGGAAGTGACAGGGTGTGGTGGTGGAGTGGGGAGCTGGCTTCTGCTGGCCAGGAT
AGCTTAACCCTGACTTTGGGATCTGCCTGCATCGGCGTTGGCCACTGTCCCCATTTACATTTTCCCCACTCTGTC
TGCCTGCATCTCCTCTGTTCCGGGTAGGCCTTGATATCACCTCTGGGACTGTGCCTTGCTCACCGAAACCCGCGC
CCAGGAGTATGGCTGAGGCCTTGCCCACCCACCTGCCTGGGAAGTGCAGAGTGGATGGACGGGTTTAGAGGGGAG
GGGCGAAGGTGCTGTAAACAGGTTTGGGCAGTGGTGGGGGAGGGGGCCAGAGAGGCGGCTCAGGTTGCCCAGCTC
TGTGGCCTCAGGACTCTCTGCCTCACCCGCTTCAGCCCAGGGCCCCTGGAGACTGATCCCCTCTGAGTCCTCTGC
CCCTTCCAAGGACACTAATGAGCCTGGGAGGGTGGCAGGGAGGAGGGGACAGCTTCACCCTTGGAAGTCCTGGGG
TTTTTCCTCTTCCTTCTTTGTGGTTTCTGTTTTGTAATTTAAGAAGAGCTATTCATCACTGTAATTATTATTATT
TTCTACAATAAATGGGACCTGTGCACAGG

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FIGURE 3020

ATGGCGGGTCTGACGGCGGCGGCCCCCGCGGCCCGGAGTCCTCCTGCTCCTGCTGTCCATCCTCCACCCCTCTCGG
CCTGGAGGGGTCCCTGGGGCCATTCCTGGTGGAGTTCCTGGAGGAGTCTTTTATCCAGGGGCTGGTCTCGGAGCC
CTTGGAGGAGGAGCGCTGGGGCCTGGAGGCAAACCTCTTAAGCCAGTTCCCGGAGGGCTTGCGGGTGCTGGCCTT
GGGGCAGGGCTCGGCGCCTTCCCCGCAGTTACCTTTCCGGGGGCTCTGGTGCCTGGTGGAGTGGCTGACGCTGCT
GCAGCCTATAAAGCTGCTAAGGCTGGCGCTGGGCTTGGTGGTGTCCCAGGAGTTGGTGGCTTAGGAGTGTCTGCA
GGTGCGGTGGTTCCTCAGCCTGGAGCCGGAGTGAAGCCTGGGAAAGTGCCGGGTGTGGGGCTGCCAGGTGTATAC
CCAGGTGGCGTGCTCCCAGGAGCTCGGTTCCCCGGTGTGGGGGTGCTCCCTGGAGTTCCCACTGGAGCAGGAGTT
AAGCCCAAGGCTCCAGGTGTAGGTGGAGCTTTTGCTGGAATCCCAGGAGTTGGACCCTTTGGGGGACCGCAACCT
GGAGTCCCACTGGGGTATCCCATCAAGGCCCCCAAGCTGCCTGGTGGCTATGGACTGCCCTACACCACAGGGAAA
CTGCCCTATGGCTATGGGCCCGGAGGAGTGGCTGGTGCAGCGGGCAAGGCTGGTTACCCAACAGGGACAGGGGTT
GGCCCCCAGGCAGCAGCAGCAGCGGCAGCTAAAGCAGCAGCAAAGTTCGGTGCTGGAGCAGCCGGAGTCCTCCCT
GGTGTTGGAGGGGCTGGTGTTCCTGGCGTGCCTGGGGCAATTCCTGGAATTGGAGGCATCGCAGGCGTTGGGACT
CCAGCTGCAGCTGCAGCTGCAGCAGCAGCCGCTAAGGCAGCCAAGTATGGAGCTGCTGCAGGCTTAGTGCCTGGT
GGGCCAGGCTTTGGCCCGGGAGTAGTTGGTGTCCCAGGAGCTGGCGTTCCAGGTGTTGGTGTCCCAGGAGCTGGG
ATTCCAGTTGTCCCAGGTGCTGGGATCCCAGGTGCTGCGGTTCCAGGGGTTGTGTCACCAGAAGCAGCTGCTAAG
GCAGCTGCAAAGGCAGCCAAATACGGGGCCAGGCCCGGAGTCGGAGTTGGAGGCATTCCTACTTACGGGGTTGGA
GCTGGGGGCTTTCCCGGCTTTGGTGTCGGAGTCGGAGGTATCCCTGGAGTCGCAGGTGTCCCTGGTGTCGGAGGT
GTTCCCGGAGTCGGAGGTGTCCCGGGAGTTGGCATTTCCCCCGAAGCTCAGGCAGCAGCTGCCGCCAAGGCTGCC
AAGTACGGAGTGGGGACCCCAGCAGCTGCAGCTGCTAAAGCAGCCGCCAAAGCCGCCCAGTTTGGGTTAGTTCCT
GGTGTCGGCGTGGCTCCTGGAGTTGGCGTGGCTCCTGGTGTCGGTGTGGCTCCTGGAGTTGGCTTGGCTCCTGGA
GTTGGCGTGGCTCCTGGAGTTGGTGTGGCTCCTGGCGTTGGCGTGGCTCCCGGCATTGGCCCTGGTGGAGTTGCA
GCTGCAGCAAAATCCGCTGCCAAGGTGGCTGCCAAAGCCCAGCTCCGAGCTGCAGCTGGGCTTGGTGCTGGCATC
CCTGGACTTGGAGTTGGTGTCGGCGTCCCTGGACTTGGAGTTGGTGCTGGTGTTCCTGGACTTGGAGTTGGTGCT
GGTGTTCCTGGCTTCGGGGCAGGTGCAGATGAGGGAGTTAGGCGGAGCCTGTCCCCTGAGCTCAGGGAAGGAGAT
CCCTCCTCCTCTCAGCACCTCCCCAGCACCCCCTCATCACCCAGGGTACCTGGAGCCCTGGCTGCCGCTAAAGCA
GCCAAATATGGAGCAGCAGTGCCTGGGGTCCTTGGAGGGCTCGGGGCTCTCGGTGGAGTAGGCATCCCAGGCGGT
GTGGTGGGAGCCGGACCCGCCGCCGCCGCTGCCGCAGCCAAAGCTGCTGCCAAAGCCGCCCAGTTTGGCCTAGTG
GGAGCCGCTGGGCTCGGAGGACTCGGAGTCGGAGGGCTTGGAGTTCCAGGTGTTGGGGGCCTTGGAGGTATACCT
CCAGCTGCAGCCGCTAAAGCAGCTAAATACGGTGCTGCTGGCCTTGGAGGTGTCCTAGGGGGTGCCGGGCAGTTC
CCACTTGGAGGAGTGGCAGCAAGACCTGGCTTCGGATTGTCTCCCATTTTCCCAGGTGGGGCCTGCCTGGGGAAA
GCTTGTGGCCGGAAGAGAAAATGA

FIGURE 3021

GCGCCGAGCCGGTTTCCCCGCCGGTGTCCGAGAGGCGCCCCCGGCCCGGCCCGGCCCGGCCCCGCGCCCTCCGCCC
CCGCCTCCCCGGGCCGGCGGCGGTGGGCGAGCTCGCGGGCCCGGCCGCCCCCAGCCCCAGCCCCGCCGGGCCCCG
CCCCCCGTCGAGTGCATGAGGTTGACGCTACTTTGTTGCACCTGGAGGGAAGAACGTATGGGAGAGGAAGGAAGC
GAGTTGCCCGTGTGTGCAAGCTGCGGCCAGAGGATCTATGATGGCCAGTACCTCCAGGCCCTGAACGCGGACTGG
CACGCAGACTGCTTCAGGTGTTGTGACTGCAGTGCCTCCCTGTCGCACCAGTACTATGAGAAGGATGGGCAGCTC
TTCTGCAAGAAGGACTACTGGGCCCGCTATGGCGAGTCCTGCCATGGGTGCTCTGAGCAAATCACCAAGGGACTG
GTTATGGTGGCTGGGGAGCTGAAGTACCACCCCGAGTGTTTCATCTGCCTCACGTGTGGGACCTTTATCGGTGAC
GGGGACACCTACACGCTGGTGGAGCACTCCAAGCTGTACTGCGGGCACTGCTACTACCAGACTGTGGTGACCCCC
GTCATCGAGCAGATCCTGCCTGACTCCCCTGGCTCCCACCTGCCCCACACCGTCACCCTGGTGTCCATCCCAGCC
TCATCTCATGGCAAGCGTGGACTTTCAGTCTCCATTGACCCCCCGCACGGCCCACCGGGCTGTGGCACCGAGCAC
TCACACACCGTCCGCGTCCAGGGAGTGGATCCGGGCTGCATGAGCCCAGATGTGAAGAATTCCATCCACGTCGGA
GACCGGATCTTGGAAATCAATGGCACGCCCATCCGAAATGTGCCCCTGGACGAGATTGACCTGCTGATTCAGGAA
ACCAGCCGCCTGCTCCAGCTGACCCTCGAGCATGACCCTCACGATACACTGGGCCACGGGCTGGGGCCTGAGACC
AGCCCCCTGAGCTCTCCGGCTTATACTCCCAGCGGGGAGGCGGGCAGCTCTGCCCGGCAGAAACCTGTCTTGAGG
AGCTGCAGCATCGACAGGTCTCCGGGCGCTGGCTCACTGGGCTCCCCGGCCTCCCAGCGCAAGGACCTGGGTCGC
TCTGAGTCCCTCCGCGTAGTCTGCCGGCCACACCGCATCTTCCGGCCGTCGGACCTCATCCACGGGGAGGTGCTG
GGCAAGGGCTGCTTCGGCCAGGCTATCAAGGTGACACACCGTGAGACAGGTGAGGTGATGGTGATGAAGGAGCTG
ATCCGGTTCGACGAGGAGACCCAGAGGACGTTCCTCAAGGAGGTGAAGGTCATGCGATGCCTGGAACACCCCAAC
GTGCTCAAGTTCATCGGGGTGCTCTACAAGGACAAGAGGCTCAACTTCATCACTGAGTACATCAAGGGCGGCACG
CTCCGGGGCATCATCAAGAGCATGGACAGCCAGTACCCATGGAGCCAGAGAGTGAGCTTTGCCAAGGACATCGCA
TCAGGGATGGCCTACCTCCACTCCATGAACATCATCCACCGAGACCTCAACTCCCACAACTGCCTGGTCCGCGAG
AACAAGAATGTGGTGGTGGCTGACTTCGGGCTGGCGCGTCTCATGGTGGACGAGAAGACTCAGCCTGAGGGCCTG
CGGAGCCTCAAGAAGCCAGACCGCAAGAAGCGCTACACCGTGGTGGGCAACCCCTACTGGATGGCACCTGAGATG
ATCAACGGCCGCAGCTATGATGAGAAGGTGGATGTGTTCTCCTTTGGGATCGTCCTGTGCGAGATCATCGGGCGG
GTGAACGCAGACCCTGACTACCTGCCCCGCACCATGGACTTTGGCCTCAACGTGCGAGGATTCCTGGACCGCTAC
TGCCCCCCAAACTGCCCCCCGAGCTTCTTCCCCATCACCGTGCGCTGTTGCGATCTGGACCCCGAGAAGAGGCCA
TCCTTTGTGAAGCTGGAACACTGGCTGGAGACCCTCCGCATGCACCTGGCCGGCCACCTGCCACTGGGCCCACAG
CTGGAGCAGCTGGACAGAGGTTTCTGGGAGACCTACCGGCGCGGCGAGAGCGGACTGCCTGCCCACCCTGAGGTC
CCCGACTGAGCCAGGGCCACTCAGCTGCCCCTGTCCCCACCTCTGGAGAATCCACCCCCACCAGATTCCTCCGCG
GGAGGTGGCCCTCAGCTGGGACAGTGGGGACCCAGGCTTCTCCTCAGAGCCAGGCCCTGACTTGCCTTCTCCCAC
CCCGTGGACCGCTTCCCCTGCCTTCTCTCTGCCGTGGCCCAGAGCCGGCCCAGCTGCACACACACACCATGCTCT
CGCCCTGCTGTAACCTCTGTCTTGGCAGGGCTGTCCCCTCTTGCTTCTCCTTGCATGAGCTGGAGGGCCTGTGTG
AGTTACGCCCCTTTCCACACGCCGCTGCCCCAGCAACCCTGTTCACGCTCCACCTGTCTGGTCCATAGCTCCCTG
GAGGCTGGGCCAGGAGGCAGCCTCCGAACCATGCCCCATATAACGCTTGGGTGCGTGGGAGGGCGCACATCAGGG
CAGAGGCCAAGTTCCAGGTGTCTGTGTTCCCAGGAACCAAATGGGGAGTCTGGGGCCCGTTTTCCCCCCAGGGGG
TGTCTAGGTAGCAACAGGTATCGAGGACTCTCCAAACCCCCAAAGCAGAGAGAGGGCTGATCCCATGGGGCGGAG
GTCCCCAGTGGCTGAGCAAACAGCCCCTTCTCTCGCTTTGGGTCTTTTTTTTGTTTCTTTCTTAAAGCCACTTTA
GTGAGAAGCAGGTACCAAGCCTCAGGGTGAAGGGGGTCCCTTGAGGGAGCGTGGAGCTGCGGTGCCCTGGCCGGC
GATGGGGAGGAGCCGGCTCCGGCAGTGAGAGGATAGGCACAGTGGACCGGGCAGGTGTCCACCAGCAGCTCAGCC
CCTGCAGTCATCTCAGAGCCCCTTCCCGGGCCTCTCCCCCAAGGCTCCCTGCCCCTCCTCATGCCCCTCTGTCCT
CTGCGTTTTTTCTGTGTAATCTATTTTTTAAGAAGAGTTTGTATTATTTTTTCATACGGCTGCAGCAGCAGCTGC
CAGGGGCTTGGGATTTTATTTTTGTGGCGGGCGGGGGTGGGAGGGCCATTTTGTCACTTTGCCTCAGTTGAGCAT
CTAGGAAGTATTAAAACTGTGAAGCTTTCTCAGTGCACTTTGAACCTGGAAAACAATCCCAACAGGCCCGTGGGA
CCATGACTTAGGGAGGTGGGACCCACCCACCCCCATCCAGGAACCGTGACGTCCAAGGAACCAAACCCAGACGCA
GAACAATAAAATAAATTCCGTACTCCCCACCC

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FIGURE 3022

GACGGCAAATGGCGGACTTCGACACCTACGACGATCGGGCCTACAGCAGCTTCGGCGGCGGCAGAGGGTCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCCACAGAGCCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCAGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGTACGGCTAG
TCAGAGACAAAGACACAGATAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCACTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTCAGAAAAGGTGGACCAGATGACAGAGGAATGGGTAGCTCTCGAGAATCTAGAGGTGGAT
GGGATTCCCGGGATGACTTCAATTCTGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAGGTAGTCGCCCAGGCG
ACCGGCGAACAGGCCCCCCCATGGGCAGCCGCTTCAGAGATGGCCCTCCCCTCCGTGGATCCAACATGGATTTCA
GAGAACCCACAGAAGAGGAAAGAGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAGTCGCGACGCCCCTCA
ATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGAAGTCGTTCAAAAGGAGCAAG
AATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGGTGAGTCCCCGGGCAG
CCGTCCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCTTGTGAGTGCATGTCA
GCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTTTGTGCGTTTTTTTCT
TTCTTCCGCTGCTTCCCCATTTTCCTTCTGTCCTTTTTCTCCTGCTCCTTGTTTTCCCAGCAGCACATGGGGTTC
CTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTGGGCTGCGGTGCTGCGTCATTTTTCCTTTGCTTTCTC
TTTACTTTAGACACTGGCCCAACTCCAGGCGTTTCCTTTCATTCCCTCAGTGCTTCTCTTCTGACCTGCATGTTG
AGTTCTGTATTGCTGGGGCTTCCAACAAAAACCAGAGTCACTGACAGAGGGAACAGCAGAGACCTTGTTGGTATT
CAGCTGTGATGGATATAGAGAATCAGAGGCACCTTGTTTTCACAACTAGGATAAAAATATCTGCAGGGTCCTTTC
CATTCCTATTTAGAGGGAGTCCTGGCTCCATGACCCCCTCCCGAGTGGACTGTCCAAGCAGATAGGCTCACACGA
GAAACAGTGAGGCTGAAAGGGGGGGCTATGGAAGAGCGGTAGGGAGTCCACGGAGAAGATGCAGTGAATGCTTGC
ATGCATTCACACGTGTGTGTGTCCCAGCTAGTTCACTCCTTTCGCCGTGCGTGGTGGAGGCTGGCCTCTCTGGCT
GGGTGCAGTGAATGGCCAGCGGGTTTCTTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGAGGGGGTGGTGCTGGT
GCTGCACTGGGCTGACTGCGGCGCTGACGCAGCGTTTCCCCCCATCCCTGTTGCCTGTGTGTTGTGTGGATCTGT
TCCTAGTATAGGCAACATAATGAGATACTGTGCTTCCCACCTCCCCTTCAGTTCAGAGCCAAAATGGGTCTAGAA
TCTGGCACTTTACTCATTTCCTTTGATAAATTGTACTATGCAGAGCTGTCAGGAACCTTCAGATAGCAGTAGAGG
ACTGCAGCTGTCTAGGTCTGCGGCCACATCTTGGGGACACACTGGACTGTTCCCATGTGCAGGGTTCAGCAGTTA
TGTGGGAGTGCTAGGGGTTAGGCTTTTGAGCTTGAACGCCTGCGTGTGAACAGATGAAAAATCCTTCAGTACCCA
AGTCCCAGTCTGTCCTATGGGGAGCAGTTTGGGGGCGGCCGGCAGCAGGAGCCTGGGAAAGAGGCCCTCGCCAGG
TGATGGCAGGGCCAGGGTGGCCTGGGGCACCCAGCGGAATGTGCTTAGTATTTGGTCACCAGCCGTCATCCTGGG
CTTTTCCTACTGTGTCTTGTTACAAGGCCTCAGCAATCCACAGAACTCTCTCTCCTTCCTTCCACCTGTCAGCTT
CTCTGCTTCTGAGATAAGAACCATTTGTGTAACACCAACACTTAACTTCAGAAAGACATGCATTATGTGGTGTAA
TCAAACCCGATGCTTTCAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACAAAACACATGCATCTA
AACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAACACATTCAGCTATATGAC
AGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAAGAAAACCTTACGTAATATTT

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FIGURE 3023

CAGTGCGGCGGATGTACGGATGATTCAGTGGCTGGCAGGAAGCCCGCCCTGCCCGCCCGCCAGTGTCAGTGGTGT
TGGCATCAGCTTGGGCAGGTGTGCGGGCTCAGGATGGGGCGGCCGTGGTGAGGAACCCTGGACTCTCAGAGATGG
AATTTCACCGTGTTGCCTAGGCTGGTCTGGAGCTCTTGATCTCAAGCGATCCTCCCTGCCTCGGCCTCCCAACGT
GCTGGGATTATAGGCGTGAGCCACCGCTCCTGGCCAGGGTCTGTTCCTAGTTGCAACAGTTCTTGGAAACCCACT
CGAGAGGGCCACGCCTCCATTCACCAGGCCACGCATCACAAGAGGCAACACCAGGAGCCAACATGAGCTCGGGGA
CTGAACTGCTGTGGCCCGGAGCAGCGCTGCTGGTGCTGTTGGGGGTGGCAGCCAGTCTGTGTGTGCGCTGCTCAC
GCCCAGGTGCAAAGAGGTCAGAGAAAATCTACCAGCAGAGAAGTCTGCGTGAGGACCAACAGAGCTTTACGGGGT
CCCGGACCTACTCCTTGGTCGGGCAGGCATGGCCAGGACCCCTGGCGGACATGGCACCCACAAGGAAGGACAAGC
TGTTGCAATTCTACCCCAGCCTGGAGGATCCAGCATCTTCCAGGTACCAGAACTTCAGCAAAGGAAGCAGACACG
GGTCGGAGGAAGCCTACATAGACCCCATTGCCATGGAGTATTACAACTGGGGGCGGTTCTCGAAGCCCCCAGAAG
ATGATGATGCCAATTCCTACGAGAATGTGCTCATTTGCAAGCAGAAAACCACAGAGACAGGTGCCCAGCAGGAGG
GCATAGGTGGCCTCTGCAGAGGGGACCTCAGCCTGTCACTGGCCCTGAAGACTGGCCCCACTTCTGGTCTCTGTC
CCTCTGCCTCCCCGGAAGAAGATGAGGAATCTGAGGATTATCAGAACTCAGCATCCATCCATCAGTGGCGCGAGT
CCAGGAAGGTCATGGGGCAACTCCAGAGAGAAGCATCCCCTGGCCCGGTGGGAAGCCCAGACGAGGAGGACGGGG
AACCGGATTACGTGAATGGGGAGGTGGCAGCCACAGAAGCCTAGGGCAGACCAAGAAGAAAGGAGCCAAGGCAAA
GAGGGACCACTGTGCTCATGGACCCATCGCTGCCTTCCAAGGACCATTTCCCAGAGCTACTCAACTTTTAAGCCC
CTGCCATGGTTGCTCCTGGAAGGAGAACCAGCCACCCTGAGGACCACCTGGCCATGCGTGCACAGCCTGGGAAAA
GACAGTTACTCACGGGAGCTGCAGGCCCGTCACCAAGCCCTCTCCCGACCCAGGCTTTGTGGGGCAGGCACCTGG
TACCAAGGGTAACCCGGCTCCTGGTATGGACGGATGCGCAGGATTTAGGATAAGCTGTCACCCAGTCCCCATAAC
AAAACCACTGTCCAACACTGGTATCTGTGTTCTTTTGTGCTATGAATTTGGATTCCTAATTGCTATTGTTGGTTG
CTGGGGTTTTAAATGATTGATAAGCTTGTACAGTTAACTTATAGAGGGGGAGCCATATTTAACATTCTGGATTTC
AGAGTAGAGATTTCTGTGTTGTCTCCTAGAAAGCATTACATGTAGTTTATTTCAGCATCCTTGTTGGGTGGGGCC
CTGGCTCTCTTCCCCTTTGGTGGGACCTCCCCTTTCTTTGGGCTTCAGTTCACTCAGGAAGAAATGAGGCTGTCG
CCATCTTTATGTGCTTCCAGTGGAAATGTCACTTGCTACAGACAATAGTGCATGAGAGTCTAGAGAAGTAGTGAC
CAGAACAGGGCAGAGTAGGTCCCCTCCATGGCCCTGAATCCTCCTCTGCTCCAGGGCTGGCCTCTGCAGAGCTGA
TTAAACAGTGTTGTGACTGTCTCATGGGAAGAGCTGGGGCCCAGAGGGACCTTGAGTCAGAAATGTTGCCAGAAA
AAGTATCTCCTCCAACCAAAACATCTCAATAAAACCATTTTAGTTG

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FIGURE 3024

GGGAAGAGGAGGCGCGAGAATGGAGGTGGAGGCCGTCTGTGGTGGCGCGGGCGAGGTGGAGGCCCAGGACTCTGA
CCCTGCCCCTGCCTTCAGCAAGGCCCCCGGCAGCGCCGGCCACTACGAACTGCCGTGGGTTGAAAAATATAGGCC
AGTAAAGCTGAATGAAATTGTCGGGAATGAAGACACCGTGAGCAGGCTAGAGGTCTTTGCAAGGGAAGGAAATGT
GCCCAACATCATCATTGCGGGCCCTCCAGGAACCGGCAAGACCACAAGCATTCTGTGCTTGGCCCGGGCCCTGCT
GGGCCCAGCACTCAAAGATGCCATGTTGGAACTCAATGCTTCAAATGACAGGGGCATTGACGTTGTGAGGAATAA
AATTAAAATGTTTGCTCAACAAAAAGTCACTCTTCCCAAAGGCCGACATAAGATCATCATTCTGGATGAAGCAGA
CAGCATGACCGACGGAGCCCAGCAAGCCTTGAGGAGAACCATGGAAATCTACTCTAAAACCACTCGCTTCGCCCT
TGCTTGTAATGCTTCGGATAAGATCATCGAGCCCATTCAGTCCCGCTGTGCAGTCCTCCGGTACACAAAGCTGAC
CGACGCCCAGATCCTCACCAGGCTGATGAATGTTATCGAGAAGGAGAGGGTACCCTACACTGATGACGGCCTAGA
AGCCATCATCTTCACGGCCCAGGGAGACATGAGGCAGGCGCTGAACAACCTGCAGTCCACCTTCTCAGGATTTGG
CTTCATTAACAGTGAGAACGTGTTCAAGGTCTGTGACGAGCCCCACCCACTGCTGGTAAAGGAGATGATCCAGCA
CTGTGTGAATGCCAACATTGACGAAGCCTACAAGATTCTTGCTCACTTGTGGCATCTGGGCTACTCACCAGAAGA
TATCATTGGCAACATCTTTCGAGTGTGTAAAACTTTCCAAATGGCAGAATACCTGAAACTGGAGTTTATCAAGGA
AATTGGATACACTCACATGAAAATAGCGGAAGGAGTGAACTCTCTTTTGCAGATGGCAGGCCTCCTGGCAAGGCT
GTGTCAGAAGACAATGGCCCCGGTGGCCAGTTAGAGCAGAGACTTCACTGACTGACTTACAGGTGCCCTATTCTG
AGGTACAGGAGCCGCGGCTTTCTGATGGGGGAAAATGCCGCCTTAGGCTGGAGCCAACATGACTGTCCTTTAAAC
TCCAGTGGCTGGCCAGGCACGGTAGCTCACGCCTGTAATCCCAACACTTTGGGAGGCCGAGGCAGGTGGATCACC
TGAGGTCAGAAGTTCAAGACCAGCCTGGCCAACATGGGGAAACCCTGTCTTTACTAAAAATATAAAAATTAGCTG
GGTGTGGTGGCGGGCACCTGTAATCCCAGCTACTCGGGAGGCTGTGGCAGGAGAATCGCTTGAACCCAGGAGGTG
GAGGTTGCAGTGAGCCAAGATCACACCATTGCACTCCAGCCTGGGCGACAGAGTCTCCATCTGGGGAAAAAAATT
AAATAAATAAACTCCCG

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FIGURE 3025

ATGGCTCAGAGGCTCAGGCAAGAGCTACAGATGCTCATGACCGAATGTCTCACCTGGGCCCGGAATGGCAGCAGC
AAGCACCCTCTCAGCCTAGCCCAGAAGCCAGAGTTCCTATTTCATCAGTTGCAAAGCAGAGACAATGCCATCTGC
CCGATAGCAGAGCAAAAGGCAGAGGGGAAGTTCTCTTCAAGGTACAGAAACCACGACTCCGCAGAGAACCGCAGA
GATGGCAGCATGACCAGACCACGGACAGACTGGACTCTGAAACGGGCATGTACAGAGAAGAGGAGACCCCAACAC
GCTTCAAGCTTTGAGTGGAGAGGACACAGCCTCTGCTGGGACAGGGAACAGAGGGATGCGGAGACCCTGAAGATG
CTTTTGGACAGTGGTCTGAGTGTCCAGAAGAAGACCAAGGACAGAACAGAGACTAGGTTTGGTGAGATGGGACAG
ATTTTGGGAAAGATCATGATGAGCCATCAACCGCAGCCCCAGGAAGAGCAGAGCCCCCAGCGGAGCACCTCAGGG
TACCCCCTCCAGGAGGTGGTGGATGATGAAGTGTCGGGACCATCAGCCCCTGGGGTAGATCCCAGCCCCCCACGT
AGGTCCCTTGGCTGGAAAAGGAAGAGGGAATGTTTGGATGAATCTGATGATGAGCCAGAGAAGGAGCTCGCCCCT
GAGCCTGAGGAGACCTGGGTGGCGGAGACGCTGTGTGGCCTCAAGATGAAGGCGAAGCGACGGCGAGTGTCGCTC
GTGCTCCCTGAGTACTACGAGGCCTTCAACAGGCTGCTTGAGGATCCTGTCATTAAAAGACTCCTGGCCTGGGAC
AAAGATCTGAGGGTGTCGGACAAGATCCCATCGGAGCCCACCATCCTGGGAGCATCACCGAAAACCCTTCCTCCG
GCTTCTCGGATTTGCATCCGACCTTCGAATACCCCTCCACCCCGCAATTTCCACATGAGCACAGTCACCCCAATG
CTGAGGTCCCTTCTCTGA

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FIGURE 3026

AGAACCTGCTAAGGCCATCAAACCTATTGATCGGAAGTCAGTCCATCAGATTTGCTCTGGGCCGGTGGTACTGAG
TCTAAGCACTGCGGTGAAGAAGATAGTAGGAAACAGTCTGGATGCTGGTGCCACTAATATTGATCTAAAGCTTAA
GGACTATGGAATGGATCTCATTGAAGTTTCAGGCAATGGATGTGGGGTAGAAGAAGAAAACTTCGAAGGCTTAAC
TCTGAAACATCACACATCTAAGATTCAAGAGTTTGCCGACCTAACTCGGGTTGAAACTTTTGGCTTTCGGGGGAA
AGCTCTGAGCTCACTTTGTGCACTGAGTGATGTCACCATTTCTACCTGCCACGTATCGGCGAAGGTTGGGACTCG
ACTGGTGTTTGATCACGATGGGAAAATCATCCAGAAAACCCCCTACCCCCACCCCAGAGGGACCACAGTCAGCGT
GAAGCAGTTATTTTCTACGCTACCTGTGCGCCATAAGGAATTTCAAAGGAATATTAAGAAGAAACGTGCCTGCTT
CCCCTTCGCCTTCTGCCGTGATTGTCAGTTTCTTGAGGGCTCCCCAGCCATGCTTCCTGTACAGCCTGCAAAACT
GTGAGTCAATTAAACCTCTTTTCTTCATAAA

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FIGURE 3027

TTTCATCGTTTCTGCTTACCCTACTTTTCTTTCCCATCCTGATCCCTCTCCCACCAGACTGGACTCTGAAACGGG
CATGTACAGAGAAGAGGAGACCCCAACATGCTTCAAGCTTTGAGTGGAGAGGACACAGCCTCTGCTGGGACAGGG
AACAGAGGGATGCGGAGACCCTGAAGATGCTTTTGGACAGTGGTCTGAGGTTGGGACAGTGGCAGGAGATACCAT
TCACCCAGGATCTCCAGGACAAGAGATCAGCCTGGCAGTTACATGTGTTTTTTTTCAAACTGGTTGCCAGGTTGG
CATGAGCGATGACATCAGAGATTCCGACCTTCCTGATTGGAGGGACCGGACTCTGTCGGCACCTGGGAGTTCAGT
TGGACAACAGTAACTTCTCAGAGCTGTTCTCCACTCCTGACTTCTCCCAGCCTCGAGAATTGATAACACACTCTT
CTGGATCCCAGCAGTGTCCAGAAGAAGACCAAGGACAGAACAGAGACTAGGTTTGGTGAGATGGGACAGATTTTG
GGAAAGATCATGATGAGCCATCAACCGCAGCCCCAGGAAGAGCGGAGCCCCCAGCGGAGCACCTCAGGGTACCCC
CTCCAGGAGGTGGTGGATGATGAAGTGTCGGGACCATCAGGTGAGGGGACTGGAGGAAGAAGAGGTGGCATAGGA
TTGACTAAGATGAAGGAAGGGGGCCAGGCGTGGTGGCTCACCCCTGTAACCCCAACACTTTGGGAGGCTGAGGCG
GGCAGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAGTACA
AAAATTAGCCAGGCGGTAGTGGTGTGTGCCTATAATCCCAGCTACTTGGGAGGCTAAGACAGGAGAATCACTTGA
GCCTGGGAGGAAGAGGTTGCAGTGAGCCGAGATCGTGCTACTGCACTCCAGTCTGGGTGACAGAGTGAGATGCTA
TCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAGAAAAAAAAGAAGGGTCAGAGGTCAGGAAGGAGA
ACCTGGGGAGGGTGTGTGGGAAGAATGGAGAAATTCAGGCTGGGTGCAGTGGCTCACACTTGTAATCCCAGCACT
TTGGGAAGCCAAGGCAGGCGGATCACTTGAGGCCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGT
CTCTATTAAAAGTACAAAATGGAGCTGGGCATTATGGCAGGCACCTGTAATCCCAGCTACCTGAGAGGCTGAGGC
AGGAGAATAACTGGAATCCGGGAGATGCATGTTGCAGTGAGCTGAGATTGCACCACTACACTCCAGCCTGGGTGA
CAAAGCAAGATTCTGTCTCGAAAC

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FIGURE 3028

GCCCCTGGGGTAGATCCCAGCCCCCCACGTAGGTCCCTTGGCTGGAAAAGGAAGAGGGAATGTTTGGATGAATCT
GATGATGAGCCAGAGAAGGAGCTCGCCCCTGAGCCTGAGGAGACCTGGGTGGCGGAGACGCTGTGTGGCCTCAAG
ATGAAGGCGAAGCGACGGCGAGTGTCGCTCGTGCTCCCTGAGTACTACGAGGCCTTCAACAGGCTGCTTGAGGAT
CCTGTCATTAAAAGACTCCTGGCCTGGGACAAAGATCTGAGGGTGTCGGACAAGTATCTCCTGGCTATGGTCATA
GCGTATTTCAGCCGGGCCGGCCTCCCCTCCTGGCAATACCAACGCATTCATTTCTTCCTGGCTCTCTATCTGGCC
AATGACATGGAGGAGGACGACGAGGCCCCCAAACAAAACATCTTCTACTTCCTGTACGAGAAGAACCGCTCTCGC
ATACCCTTGCTCCGTAAGCGTCGGTTCCAGTTAGGCCGTTCCATGAACCCGAGGGCCAGGAAGAACCGCTCTCGC
ATACCCTTGCTCCGTAAGCGTCGGTTCCAGTTAGGCCGTTCCATGAACCTGAGGGCCAGGAAGAACCGCTCTCAG
ATAGTCCTGTTCCAGAAACGTCGGTTCCAGTTCTTCTGTTCCATGAGCGGCAGGGCTTGGGTTTCCCCGGAGGAG
TTGGAGGAGATCCAGGCTTATGACCCAGAGCACTGGGTGTGGGCGCGAGATCGCGCTCGCCTTTCCTAGAGCTCC
AGGGACCGTGGAGGCCTGAGGTCATCGGCCTGAGAGAAGAACACCGGACCCAGGGGAGATGTGGATTTTCAGCAG
GAACTTTATTCCAATGCTAATGGCAGACACCAGGAAGGAGGAGAGGAACCATTTGTGCAGATCATCTAGAAGAAC
CTGGACCATTCTTGATGGAGCTGAATACAGTGATCACGTTGTCCTCCTAGGAGCAGGGGTGGGGGGAGGGGGGTG
GGGTCCTTCTAGGAGTCCTTGGAGAAAAGTAAGAAACCAGGAGTGTTTCCAGTTCCACCCTTTCCTGCAGCACCA
CCACCCTTTCTATATTGCTGAATTCCAACCTCCCTGGGGCGGAACCTGGAGGTGCTGTTTCTTATGGACTTGGTT
ACCACAGTCCAGAAGCATTTGAAGGCACAATGCAGGGGCTCAGATTGGCACAGATTTCTTCTGTGAAATATCAGT
GCCACAGATTGTAACAGATAGCTTCATGCACACTCTGCATTTTATTGGTTTGTTTGGAAAATGTTGGCCATTGAA
TTATTCATAGATTTATTTCAAATAGTTTGGAAATTGTTGTACTTTTGAAAACATGCTGTTCCTGTAGTTTTTTGA
TGAGAGTTATAGTTGTTATATATACATAAAGATAATTTTCTTTTCATTTTTAAGAGACAATTCTTTTTATCCTAA
ATATTTTATTATCTTTAAATTTCTTTCTGTATTATTATATGTGCTCCTGAAGCGAGCACTCTTTTTATCTATGAT
ACTTCCATAATAATCTCTTCTATTTATAGCTATTGGTAGTTCCCCACCACAAAAAAAACATAATTCTGGTGATAG
AAATTTTTATTTGCTGTTTAGGTTTGTGACTGAATTGTGAGAATTCAGTTGTGATTTTTAACATGTCTCAGATAT
ATATACTAACACGTCTAATATATACTATCTATTTTATTGGTTTATTTTGAAAAACATGGGTATAGAATTATTTAA
ATATTATTTTATTTATTGAAATATTTATTAAATATATTTATTTAAATATTATTACTTGAAATATTATTTTAAATA
TTTTTGAAATACTGCTATTTTTGAATAGATGCTGTTTCTATAAAGCTGTGTGATGGGTGTTATAACTGTTATATA
CACATACGTATAATTTTGCTTTCCTTTTTAAGAGAGGATTCTTTTCATCCTAAATCTTTTACCTTTCAATCTTTG
TATCTATTATTACACGTGTTGCTGAAGGGAGCATGGTTTTTATCTGTGATACTTAGTTAACATATATATTACATT
TATAGCTATGTAGTAGTTCCCCTAAATTCTTGTAAAAATAAATTTTTATTTGATATTTCATATATGTTTGAAATG
TGAGAATTCAGGTGTAATTTTTTACCTTGTTTTGGCATGTTTGTATGTTACTTTAAAGAGGATGTGTGTTCTAAA
GGAGGACATGAGCTGTGTGTTTTCAAGAGAACAATAGAGTGCGTCTCTTGGGGAAACATAATAAAAATGAACTTT
TCTCACCTTC

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FIGURE 3029

GGATCCGGTGTTGCATCCTTGGAGAGAGCTGAGAGCTCGAGTACAGAACCTGCTAAGGCCATCAAACCTATTGAT
CGGAAGTCAGTCCATCAGATTTGCTCTGGGCCGGTGGTACTGAGTCTAAGCACTGCGGTGAAGAAGATAGTAGGA
AACAGTCTGGATGCTGGTGCCACTAATATTGATCTAAAGCTTAAGGACTATGGAATGGATCTCATTGAAGTTTCA
GGCAATGGATGTGGGGTAGAAGAAGAAAACTTCGAAGGCTTAATGATGTCACCATTTCTACCTGCCACGTATCGG
CGAAGGTTGGGACTCGACTGGTGTTTGATCACGATGGGAAAATCATCCAGAAAACCCCCTACCCCCACCCCAGAG
GGACCACAGTCAGCGTGAAGCAGTTATTTTCTACGCTACCTGTGCGCCATAAGGAATTTCAAAGGAATATTAAGA
AGAAACGTGCCTGCTTCCCCTTCGCCTTCTGCCGTGATTGTCAGTTTCTTGAGGGCTCCCCAGCCATGCTTCCTG
TACAGCCTGCAAAACTGTGAGTCAATTAAACCTCTTTTCTTCAT

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FIGURE 3030

CAGTGTGGCAGTGGAGGCCGTCAGATTACTGATACTTATCCTTAAGAACATGGAAGGGGTGCTGATGGACGTGGA
CTGTGAGAGCGTCTACCCCATTGTGTAGGCCTCTAATTGAGGCCTGGCCTCTGCTGTGGGTGAATTTCTGTACTG
GAAACTTTTCTACCCTGAGTGCGAGATAAGAACGATGGGTGGAAGAGAGCAACGCCAGAGCCCAGGTGCCCAGAG
GACTTTCTTCCAGCTTCTGCTGTCCTTCTTTGTGGAGAGCAAGCTCCACGACCACGCTGCTTACTTAGTAGACAA
CCTGTGGGACTGTGCAGGGACTCAGCTGAAGGACTGGGAGGGTCTGACAAGCCTGCTGCTGGAGAAGGACCAGAG
CACGTGCCACATGGAGCCAGGGCCAGGGACCTTCCACCTCCTAGGGTGAAACCAGGAGAGATTGCTTGCTTCACT
TGTACAAGAATCGGCTCCCAGACACCTGCCACTCGTGAATGCATCTGATAAACTCACTCACACTGAGGCCTTGGG
GACTGAGGCCCTGGCGGATCACGGGTGCCCAGGGGCTCGGAGGCCGCCTCCTCTGGGAAGCCTGCCCAGGTTCCG
ATGGACTCCCACAGGCAATACCCCTGGGCCTTCCTCGCGGCCCCTGTTGGCCCCAATTCCCCCACCCCCTGCAAG
GTCTGTGCCTCTCCTGCAGCCCCGCCACCAACTAGGGCGAGAGGAGCTCGCCCCCACCCAAACGTATTGGTTCGA
TGAAGGAAGGGCCCATGGTTCTGCCACTGGCCCTGGACACCCAGTGCTGGTTTCCCGTGGAAGTCCCCCTGGACT
GAGTGGCGGCTGGGTGCTCTAGTGATTTGCGACCTGGGGCCTCTGACTCCCATCATGTTGGGAAAGTCGTTGAAC
CTCACCGGTGAAACGGGCACAGTGAAGTCATTTCCCCGAAGTCTCAGGACTCTGTGTAAGGCTGGGGACAGGGGC
TTGTTGGGGCCTAAGGGCACCTTGGGAACTGCAGGAGCCCGTTCTGCCTCCATAAGACACTCACTCCTGGCAGGG
TCCCCTCTCCGGGCACAGCCCAGATCCACCCCCATCATCCCTCTCCATCTGTGGCTCCCTGCCCCTCACAGAGGA
TTCATCACTCTGTTCAGAATCCCCAGGACTCCCTAGGGAAGGAGGTCCCAGCCTGGCCTCCCAAGACCGTGCTTG
CCCAATTCCAGGACTTCCTCACATGGCTCCTACCTCCAGCACAGAAGCGGCACTAAACCAGGTGGTCAATCAGGG
AGCACCACCGAGGTTCTGAATGGTCCAGGGATGAGCAGTGATGCCTCAAGCTAAGCCAATCAAAGCCTTCCCTGG
GATTGTCTCAAGGAGTCCGCAGTGAGATTCTGGGTCTCAGTACTGGGAAAGGGTGAGGCTGAGGCTGCCTGCTGT
CCTGGGGGCCTCACCCTGCCACCAACAGGAAGCCACACAGAGGGAAGCAGAAATGAGACGCAGCCAGTGAGGGCA
GGGTACAAAGGTGAGATCCCGGAGAGACAGATGCTGGGACATCATCCTTGGGTACTGGTTCCAACAGTGCCTGCA
GATGGAGCCACCCTCGGAGAGTCCACAACAGCAGCCAATCCATTCTATGCGTGTCTGAGCTACTTTAAGTCGGGT
TTTTGACTGTTTGAATGAGAGTCTCATCTTGGCTAGGCACCATGGCGCAACAACTGGGGAGGTGGAGGTAGGAAG
ATTGCTTGAGGCCAAGAGTCCCAGAGCAGCCTGGGCAACCTATCAAGACGCTGTCTTTACGAAAAGAAAAAAAAC
TAGCTAGGTGTGGTGGTGCGTGCCTGTGGTCCCAGCTACTGGGGAGGCTGAGGTGGGAGGATTGCTTGAGCCCAG
GAAGTGGAGGCTGCAGTGACCTATGATGGCACCACTGTACTCCAGCCTGGGTGACAGAGCAAGACCCTGTCT

FIGURE 3031

AACATGGGGCTGTACGCTGCGGTGGCAGGCGTGCTGGCCGGCGTGGAGAGCCGCCAGGGCTCTATCAAGGGGCTG
GTGTACTCCAGCAACTTCCAGAACGTGAAGCAGCTGTACGCGCTGGTGTGCGAAACGCAGCGCTACTCCGCCGTG
CTGGATGCCGTGATCTCCAGCGCCGGCCTCCTCAGTGCGAAGAAGCTGCAGCCGCACCTGGCCAAGGGTGCTAGT
GTATGAGTTGTTGGGAAAGGGCTTTCGAGGGGGTGGGGGCCAATGGAAGGCTCTGTTGGGACGGCACCAGGCGAG
GTGTTGAGTTGGCTCGGCTCAAGGTTCTTCGGGGTGTGAGCTGGCATGAGGACCTGTTGGAAGTGGGATCCAGGC
CTGGTCCAGCCTCCCAGCTGCCTCGATTTGTGCGTGTGAACACTCTCAAGACCTGCTCCGTTTATGTAGTTATTT
CAAGAGACAAGGTTTCTCCTATCAGGGTCGGGCTTCCAGGCTGGATGGAGTGCCCTGGCGCGATCTCGGCTCACC
GCAACCTCTGCCTCCTGGGTTCAAGCGATTCTCCTGCTTCAGCCTTCTGAGCAGCTGGGATTATGAAGGGGTGGC
CTGCCCCTCCACATCTGTGGGATATCTCATCAGCCTTGATGACTTACAAGCCCTCAAGGGGAAGCATTTTCTCCT
GGACTCCTTGATGCCGGAGCTGCTGGTGTTTCCCGCCCAGACAGATCTGCATGAACACCCACTGTACCGGGCCGG
ACACCTCATTCTGCAGGACAGGGCCAGCTGTCTCCCAGCCATGCTGCTGGACCCCCGCCAGGCTCCCATGTCATC
GATGCCTGTGCCGCCCCAGGCAATAAGACCAGTCACTTGGCTGCTCTTCTGAAGAACCAAGGGAAGATCTTTGCC
TTTGACCTGGATGCCAAGCGGCTGGCATCC**ATG**GCCACGCTGCTGGCCTGGGTTGGCGTCTCCTGCTGTGAGCTG
GCTGAGGAGGACTTCCTGGCGGTCTCCCCCTTAGATCCGCGCTATCGTGAGGTCCACTATGTCCTGCTGGATCCT
TCCTGCAGTGGCTCGGGTATGCCGAGCAGACAGCTGGAGGATCCCGGGGCAGGGACACCTAGCCCGGTGCGTCTG
CATGCCCTGGCAGGGTTCCAGCAGCGAGCCCTGTGCCACGCGCTCACTTTCCCTTCCCTGCAGCGGCTCGTCTAC
TCCATGTGCTCCCTCTGCCAGGAGGAGAATGAAGACATGGTACCAGATGCGCTGCAGCAGAACCCGGGCGCCTTC
AGGCTAGCTCCCGCCCTGCCTGCCCGGCCCCACCGAGGCCTGAGCACGTTCCCGGGTGCCGAGCACTGCCTCCGG
GCTTCCCCCAAGACCACGCTTAGCGGTGGCTTCTTCGTTGCTGTAATTGAACGGGTCGAGATGCCGACCTCAGCC
TCACAGGCCAAAGCATCAGCACCAGAACGCACACCCAGCCCAGCCCCAAAGAGAAAGAAGAGACAGCAAAGAGCC
GCAGCCGGTGCTTGCACACCGCCTTGCACA**TAG**CAGAGGCTCCAGGCTGACTCCTTCCTGGTGGGAAAGGAAGAT
GCCTGTCCTCTCCGTGGAGGACCCTGGGCCCTCACCGCAGGCAGCAGTTTGCATTTTGAAAGGTTATTGGGTCCC
TTCCTCGGGCTGTGTTCTTGCTGGTGAGCAAAAGTGTTGCCTGCAGAAATAAAATGCAGAACGTACTCT

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FIGURE 3032A

GAGCCCCAGGGAGGCGGATCTGGGCCCCGAGAAGGACACCCGCCTGGATTTGCCCCGTAGGCCCGGCCCGGGCCC
CTCGGGAGCAGAACAGCCTTGGTGAGGTGGACAGGAGGGGACCTCGCGAGCAGACGCGCGCGCCAGCGACAGCAG
CCCGCCCCGGCCTCTCGGGAGCCGTGGGGCAGAGGCTGCGGAGCCCCAGGAGGGGGCCAGTGTCATTCAAAGATG
TGGCTGTGGATTTCACCCAGGAGGAGTGGCGGCAACTGGACCCTGATGAGAAGATAACATACGGGGATGTGATGT
TGGAGAACTACAGCCATCTAGTTTCCTTGGCTTATGAGGTGGCAACATCTTGTACTTCGGAGATTCTGAAGCCGA
GCAACTTGCCCAAGTCCTTCTTCTTTTCCCATTAACAAGATATGATATCACCAAGCCAAACGTCATCATTAAGTT
GGAGCAGGGAGAGGAGCTGTGGATAACGGGAGGTGAATTTCCATGTCAACATAGTCCAGCCCCTCACATCCTCAG
CCGAAGATCTCACTTCGTCCCAGAGGCCTTTGCTGACTGACCCCTCAGGGATCGTGGGACTTTACCAGATCGGTT
TGTAATAACACCTCGAAGACGCTATCCGATCCATCAGACCCAGTATTCCTGTCCGGGGGTACTTCCCACAGTGTG
CTGGAATGGTTATCACAAGAAGGCTGTGCTGTCCCCTCGCAACTCCAGG**ATG**GTGTGTAGCCCAGTGACTGTGAG
GATCGCCCCTCCTGACAGAAGATTTTCACGTTCTGCGATACCAGAGCAGATAATCAGCTCAACACTGTCGTCACC
ATCAAGTAATGCCCCAGACCCATGTGCAAAGGAGACTGTACTGAGTGCCCTCAAAGAGAAGAAGAAGAAAAGGAC
AGTGGAGGAAGAAGACCAAATATTCCTTGATGGCCAGGAAAATAAAAGAAGGCGCCATGATAGCAGTGGCAGTGG
ACATTCAGCATTTGAGCCCCTGGTGGCCAGTGGAGTCCCCGCTTCTTTTGTGCCTAAGCCTGGGTCTCTGAAGAG
AGGCCTCAATTCTCAGAGCTCAGATGACCACTTGAATAAGAGATCCCGAAGCTCTTCCATGAGCTCCTTGACAGG
CGCTTACACAAGTGGCATCCCTAGCTCCAGCCGCAATGCCATTACCAGTTCCTACAGCTCCACTCGAGGCATCTC
ACAGCTCTGGAAGAGAAATGGCCCCAGTTCATCACCCTTCTCTAGCCCAGCCTCATCCCGCTCCCAGACACCGGA
GAGGCCAGCAAAGAAAATAAGAGAAGAAGAGCTGTGTCATCATTCCAGTTCTTCAACTCCATTGGCAGCAGACAA
GGAGTCCCAGGGAGAAAAGGCTGCAGATACAACCCCAAGGAAGAAACAAAACTCGAATTCTCAGTCTACACCTGG
CAGCTCTGGGCAGCGTAAGCGGAAAGTTCAGCTGCTGCCTTCTCGGCGAGGGGAACAGCTGACCTTGCCTCCACC
TCCCCAGCTTGGCTATTCGATCACTGCCGAGGACCTAGACTTAGAGAAGAAGGCTTCATTACAGTGGTTCAACCA
GGCCTTGGAGGACAAGAGTGATGCTGCCTCGAACTCTGTCACTGAGACCCCACCTACCACTCAGCCTTCATTTAC
CTTTACCCTGCCTGCTGCTGCAACTGCCTCCCCACCCACCTCCCTCCTGGCCCCAAGCACCAACCCACTGTTAGA
GAGCTTGAAGAAGATGCAGACTCCCCCGAGCCTGCCACCCTGCCCAGAATCTGCTGGAGCAGCAACCACTGAGGC
CCTCTCACCTCCAAAGACACCCAGCCTCCTACCCCCGCTGGGTTTATCACAGTCAGGGCCGCCAGGGCTGCTCCC
CAGCCCCTCCTTTGACTCCAAACCCCCGACCACTTTGCTGGGGCTGATCCCTGCTCCATCCATGGTACCAGCCAC
TGACACCAAGGCACCTCCAACCCTTCAAGCAGAGACGGCTACCAAACCCCAAGCCACATCTGCCCCGTCCCCCGC
CCCCAAGCAAAGCTTCCTGTTTGGAACACAGAACACCTCACCTTCCAGCCCTGCCGCCCCTGCTGCATCTTCAGC
ATCTCCCATGTTCAAGCCCATTTTCACGGCTCCACCCAAGAGTGAGAAGGAAGGCCCCACACCGCCTGGCCCTTC
AGTCACAGCCACAGCGCCCTCCAGCTCCTCCCTCCCCACGACCACCAGCACCACAGCCCCGACCTTCCAGCCTGT
CTTTAGCAGCATGGGGCCACCTGCATCTGTGCCCTTGCCTGCTCCCTTCTTCAAGCAGACAACTACTCCCGCCAC
TGCTCCCACCACAACTGCCCCGCTCTTCACTGGCCTGGCCAGCGCCACCTCTGCTGTGGCTCCCATCACCTCTGC
CAGTCCATCCACAGACTCTGCTTCGAAGCCTGCGTTTGGCTTTGGCATAAACAGTGTGAGCAGCAGCAGTGTGAG
TACCACGACCAGCACCGCCACTGCCGCCTCACAGCCTTTCCTCTTCGGGGCGCCCCAGGCCTCTGCTGCCAGCTT
CACCCCGGCCATGGGCTCCATATTCCAGTTTGGCAAACCTCCTGCCTTGCCCACAACCACCACAGTCACCACCTT
CAGCCAGTCCCTGCCCACTGCCGTGCCAACGGCCACCAGCAGCAGCGCTGCCGACTTTAGTGGTTTTGGCAGCAC
CCTCGCCACCTCCGCCCCGGCCACCAGCAGCCAGCCCACTCTGACGTTCAGTAACACGAGCACCCCCACGTTCAA
CATTCCCTTTGGCTCAAGCGCCAAGTCCCCGCTCCCATCATATCCGGGAGCCAACCCCCAGCCCGCATTTGGGGC
CGCTGAGGGGCAGCCACCGGGGGCCGCCAAGCCAGCCCTTACCCCCAGCTTTGGCAGCTCTTTCACTTTTGGAAA
CTCTGCAGCCCCGGCCCCGGCTACTGCACCCACACCTGCACCTGCGTCCACGATCAAGATCGTGCCTGCGCACGT
GCCTACGCCCATCCAGCCTACCTTTGGCGGTGCCACGCACTCGGCGTTTGGATTGAAAGCCACGGCTTCCGCCTT
CGGCGCTCCCGCCAGCTCACAGCCCGCCTTTGGCGGCTCCACTGCTGTCTTCTCCTTCGGTGCAGCCACCAGCTC
CGGCTTTGGAGCCACCACCCAGACCGCCAGCAGCGGGAGCAGCAGCTCGGTGTTTGGCAGCACAACACCATCACC
CTTCACGTTTGGGGGTTCGGCAGCCCCCGCTGGCAGTGGGAGCTTTGGGATCAACGTGGCCACCCCAGGCTCCAG
CGCCACCACCGGAGCTTTCAGCTTTGGAGCAGGACAGAGTGGGAGCACAGCCACCTCCACCCCCTTCACAGGGGG
CTTAGGTCAGAACGCCCTGGGCACCACCGGCCAGAGCACACCGTTTGCCTTCAACGTGGGCAGCACAACTGAGAG
CAAACCTGTGTTTGGAGGCACCGCCACCCCCACCTTTGGTCAGAACACCCCTGCGCCTGGAGTGGGCACATCGGG
CAGCAGCCTCTCCTTTGGGGCATCTTCAGCACCCGCCCAAGGCTTTGTTGGTGTTGGACCGTTCGGCAACACTTT

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FIGURE 3032B

TGCTCACCAGCAAGAACACAGCCCGAGGAAGGGACCCAATAACCTTTCAAAATGCAAACTGCTGCCTGCGGTGAG
GGCCCAGGGTCCTCCACGGAGAGGACAGGCATCTTCCTTTCCCACCAGGAAGGAGTCAGCCTGGAGCCTCTGCTA
TGTGCAAGGCGGTGTGCAAGCACCGGCTGCGGCTCTTTGCTGTCTCTTCTTTCTCTTTGGGGCTGGGCTGGGTGT
GCGTTCTGGTGCTGATGCTTTGGCCTGTGAGGCTGAGCTAGAGAAGTGTAGATGTTAGATGTGCCAGTACCATCC
TGCGCCTCCCAAGCATGCCCCCACTCACTCACGTCGGCATCTCGACCCGTTCAATTACAGCAACGAAGAAGCCAC
CGCTAAGCGTGGTCTTGGGGGAAGCCCGGAGGCAGTGCTCGGCACCCGGGAACGTGCTCAGGCCTCGGTGGGGCC
GGGCAGGCAGGGCGGGAGCTAGCCTGCAAGAGAAACAGCCCCAATGCTGGGTAAGAGAGCAGTTCACCCCATCCC
CCCCCTCCACGACCCTGGCGCCCGCCCTGTACCTGAAGGCGCCCGGGTTCTGCTGCAGCGCATCTGGTACCATGT
CTTCATTCTCCTCCTGGCAGAGGGAGCACATGGAGTAGACGAGCCGCTGCAGGGAAGGGAAAGTGAGCGCGTGGC
ACAGGGCTCGCTGCTGGAACCCTGCCAGGGCATGCAGACGCACCGGGCTAGGTGTCCCTGCCCCGGGATCCTCCA
GCTGTCTGCTCGGCATACCTAAGGAAAAGCGTGTCTCGGTTACACAGCTTCACAGGCTGCCTCAGTCCTGAAATC
CTCGCTCCTGAAATCCTTGCCTCACAGAGGAGAACTTTTGCTCCAGGGTCCCAAGCCCATTAAAGTGTCAGAACT
AAGACCAAAACAGATGACTCCAGGTCTAAGCTGCTGTGGACCTCCGAGTCCCTCAGCCACGCCTTCTCACCATCT
CACCCGAGCCACTGCAGGAAGGATCCAGCAGGACATAGTGGACCTCACGATAGCGCGGATCTAAGGGGGAGACCG
CCAGGAAGTCCTCCTCAGCCAGCTCACAGCAGGAGACGCCAACCCAGGCCAGCAGCGTGGCCATGGATGCCAGCC
GCTTGGCATCCAGGTCAAAGGCAAAGATCTTCCTAGGGCAGAGGGCAGAGCAGGGGTGAGCTGAGCATGCACGGA
GCAGCTAAGGGCCTGTCACAGCTGACACAGACAACCAGAACATGCAGGTTAAGCCAGGACACACAATATTGAAAC
GGCCTATATTTAAAGGGCCCAGGGTCAGAGGTAACTGGCCTGGGGTCTCTGCCCCAAGGGCTAAGGGATCCACAT
CTCACACCTGCAGTGGGGAAAGCTTAGCTTGGGGCAAATACCGTGAACTACTTTGGTACAGCAGGAAAGAGTTAA
GCGAAAGTCATCCTTTCAGCCTTTATTACCCACTGAAAGGCACAAAATCAAACCCCATGTCCTCCTCCTCCTCCT
CCTGTGGCACTCACCCTTGGTTCTTCAGAAGAGCAGCCAAGTGACTGGTCTTATTGCCTGGGGCGGCACAGGCAT
CGATGACATGGGAGCCTGGCGGGGGTCCAGCAGCATGGCTGGGAGACAGCTGGCCTGGCAGGCAGAGCACAGGGG
CCGGGTAAACAGAGACCCCAGGCTAGGCCCTTCCCGTGCCTACACATTCTTCCCTTTTCTATTCCTCTTGCCTAC
CCTGTCCTGCAGAATGAGGTGTCCGGCCCGGTACAGTGGGTGTTCATGCAGATCTGTCTGGGCGGGAAACACCAG
CAGCTCCGGCATCAAGGAGTCCAGGAGAAAATGCTTCCCCTTGAGGGCTTGTAAGTCATCAAGGCTGCCAGGGAA
GAACCATTCATTCATTTCCTGAATTTCTCCCTGCCAGGCCCTATTTCAACGGTCCATTCATGCAACAAATGTTAC
CACAGCTATGGAGAAATCAACAGGGTGATAAGGGAATCCGGGATCCGCAGTTGAGGGAATGGGTTGTCAAGCCAG
ACTGATGGGTCAGGAGCCCCCTCTACTGTTTACCAGCAGTGGGAGCCTGGGCAAGTGATTCAATCTCAAGCCCCA
CTGGCATCTCTGTAAAATAGTAGGTGTGAGGATTCAATGAGCCAATATATCCAAGATACTTACGTGCCACAATTT
AATAAATGTTAGCTATTCCTGTTGAAGCATAACCTTGGAGAAAGGTTACTTTACAGGGGGGTGAGGAGTGGGGAA
GTGAGAGCTGAGCTCATTCTTGATGGATGAGGAGTTAGTCATGTGAGGCGCTTAGGTTAAAACTACATTCACTAT
AACTCAGTAAAGCAGTCCCGCCCACTCTCCGACCCATGCAGAAATAGGCCTAGAGAGTCACATGTCTCAGTTCAG
AAATCTATCGAAGTGGCAGAGCTGGAATTCAAACACAAGCAGCCGTTCTCTGCTATTCCACCCTGGTGTCCAAGC
AACATGGTAGGGCAGAAGGAAGAGGATCTTACAAAGAGTAAGGGAAAGGGAGAGGGGCAGAGGCTGCTTCTCAGA
GCCACCAAAGGACAAAATAAGACAGGTGTGAGCCCAGTGGAGGAGGCACGGGGCAGAGACCAGCCACTGTTGCTG
GCACGCTGGTGCACGTAGCACTGTGGCAGATGGACCTGGAGAGGAAGCAGGAGGGACAGCACAATGGAGCCAAGA
AAGGACTTAGCATGGCCGGGCGCGGTGGTTCATGCCTGTAATCCCAGCATTTTGGGAGGCCAAGGTGGGCAGATC
ACCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGAGAAATCCCGTCTCTACTAAAAATACAAAATTAGC
CAGGCATGGTGCTGCATGCCTGCAATCCTGTAGGGAAAAGAAAGAGAGATCAGACTGTTACTGTGTCTGTGTAGA
AAGGGAAGACATAAGAAATTCCATTTTGACCTGTACCTTGAACAATTGGTTGGCTGAGATGCTGTTAATTTGTGA
CTTTGCCCCAAATTTGAGCTCACAAAAACATGTGTTGTATGGAATCAAGGTTTAAAGGATCTAGGGCTGTGCAGG
ACATGCCTTGTTAATAAAACGTTTACAAGC

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FIGURE 3033

ATGTGTCCTTGGCGGCCTAGACTAGGCCGTCGCTGTATGGTGAGCCCCAGGGAGGCGGATCTGGGCCCCCAGAAG
GACACCCGCCTGGATTTGCCCCGTAGGCCCGGCCCGGGCCCCTCGGGAGCAGAACAGCCTTGGTGAGGTGGACAG
GAGGGGACCTCGCGAGCAGACGCGCGCGCCAGCGACAGCAGCCCCGCCCCGGCCTCTCGGGAGCCGGGGGGCAGA
GGCTGCGGAGCCCCAGGAGGGTCTATCAGCCACAGTCTCTGCATGTTTCCAAGAGCAACAGGAAATGAACACATT
GCAGGGGCCAGTGTCATTCAAAGATGTGGCTGTGGATTTCACCCAGGAGGAGTGGCGGCAACTGGACCCTGATGA
GAAGATAGCATACGGGGATGTGATGTTGGAGAACTACAGCCATCTAGTTTCTGTGGGGTATGATTATCACCAAGC
CAAACATCATCATGGAGTGGAGGTGAAGGAAGTGGAGCAGGGAGAGGAGCCGTGGATAATGGAAGGTGAATTTCC
ATGTCAACATAGTCCAGAACCTGCTAAGGCCATCAAACCTATTGATCGGAAGTCAGTCCATCAGATTTGCTCTGG
GCCAGTGGTACTGAGTCTAAGCACTGCAGTGAAGGAGTTAGTAGAAAACAGTCTGGATGCTGGTGCCACTAATAT
TGATCTAAAGCTTAAGGACTATGGAGTGGATCTCATTGAAGTTTCAGACAATGGATGTGGGGTAGAAGAAGAAAA
CTTTGAAGGCTTAATCTCTTTCAGCTCTGAAACATCACACATGTAA

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FIGURE 3034A

CAGCATCAATAAGGCCATTAATACGCAGGAAGTGGCTGTAAAGGAAAAACACGCCAGAACGTGCATACTGGGCAC
CCACCATGAGAAAGGGGCACAGACCTTCTGGTCTGTTGTCAACCGCCTGCCTCTGTCTAGCAACGCAGTGCTCTG
CTGGAAGTTCTGCCATGTGTTCCACAAACTCCTCCGAGATGGACACCCGAACGTCCTGAAGGACTCTCTGAGATA
CAGAAATGAATTGAGTGACATGAGCAGGATGTGGGGCCACCTGAGCGAGGGGTATGGCCAGCTGTGCAGCATCTA
CCTGAAACTGCTAAGAACCAAGATGGAGTACCACACCAAAAATCCCAGGTTCCCAGGCAACCTGCAGATGAGTGA
CCGCCAGCTGGACGAGGCTGGAGAAAGTGACGTGAACAACTTTTTCCAGTTAACAGTGGAGATGTTTGACTACCT
GGAGTGTGAACTCAACCTCTTCCAAACAGTATTCAACTCCCTGGACATGTCCCGCTCTGTGTCCGTGACGGCAGC
AGGGCAGTGCCGCCTCGCCCCGCTGATCCAGGTCATCTTGGACTGCAGCCACCTTTATGACTACACTGTCAAGCT
TCTCTTCAAACTCCACTCCTGCCTCCCAGCTGACACCCTGCAAGGCCACCGGGACCGCTTCATGGAGCAGTTTAC
AAAGTTGAAAGATCTGTTCTACCGCTCCAGCAACCTGCAGTACTTCAAGCGGCTCATTCAGATCCCCCAGCTGCC
TGAGAACCCACCCAACTTCCTGCGAGCCTCAGCCCTGTCAGAACATATCAGCCCTGTGGTGGTGATCCCTGCAGA
GGCCTCATCCCCCGACAGCGAGCCAGTCCTAGAGAAGGATGACCTCATGGACATGGATGCCTCTCAGCAGAATTT
ATTTGACAACAAGTTTGATGACATCTTTGGCAGTTCATTCAGCAGTGATCCCTTCAATTTCAACAGTCAAAATGG
TGTGAACAAGGATGAGAAGGACCACTTAATTGAGCGACTATACAGAGAGATCAGTGGATTGAAGGCACAGCTAGA
AAACATGAAGACTGAGAGCCAGCGGGTTGTGCTGCAGCTGAAGGGCCACGTCAGCGAGCTGGAAGCAGATCTGGC
CGAGCAGCAGCACCTGCGGCAGCAGGCGGCCGACGACTGTGAATTCCTGCGGGCAGAACTGGACGAGCTCAGGAG
GCAGCGGGAGGACACCGAGAAGGCTCAGCGGAGCCTGTCTGAGATAGAAAGGAAAGCTCAAGCCAATGAACAGCG
ATATAGCAAGCTAAAGGAGAAGTACAGCGAGCTGGTTCAGAACCACGCTGACCTGCTGCGGAAGAATGCAGAGGT
GACCAAACAGGTGTCCATGGCCAGACAAGCCCAGGTAGATTTGGAACGAGAGAAAAAAGAGCTGGAGGATTCGTT
GGAGCGCATCAGTGACCAGGGCCAGCGGAAGACTCAAGAACAGCTGGAAGTTCTAGAGAGCTTGAAGCAGGAACT
TGCCACAAGCCAACGGGAGCTTCAGGTTCTGCAAGGCAGCCTGGAAACTTCTGCCCAGTCAGAAGCAAACTGGGC
AGCCGAGTTCGCCGAGCTAGAGAAGGAGCGGGACAGCCTGGTGAGTGGCGCAGCTCATAGGGAGGAGGAATTATC
TGCTCTTCGGAAAGAACTGCAGGACACTCAGCTCAAACTGGCCAGCACAGAGGAATCTATGTGCCAGCTTGCCAA
AGACCAACGAAAAATGCTTCTGGTGGGGTCCAGGAAGGCTGCGGAGCAGGTGATACAAGACGCCCTGAACCAGCT
TGAAGAACCTCCTCTCATCAGCTGCGCTGGGTCTGCAGATCACCTCCTCTCCACGGTCACATCCATTTCCAGCTG
CATCGAGCAACTGGAGAAAAGCTGGAGCCAGTATCTGGCCTGCCCAGAAGACATCAGTGGACTTCTCCATTCCAT
AACCCTGCTGGCCCACTTGACCAGCGACGCCATTGCTCATGGTGCCACCACCTGCCTCAGAGCCCCACCTGAGCC
TGCCGACTCACTGACCGAGGCCTGTAAGCAGTATGGCAGGGAAACCCTCGCCTACCTGGCCTCCCTGGAGGAAGA
GGGAAGCCTTGAGAATGCCGACAGCACAGCCATGAGGAACTGCCTGAGCAAGATCAAGGCCATCGGCGAGGAGCT
CCTGCCCAGGGGACTGGACATCAAGCAGGAGGAGCTGGGGGACCTGGTGGACAAGGAGATGGCGGCCACTTCAGC
TGCTATTGAAACTGCCACGGCCAGAATAGAGGAGATGCTCAGCAAATCCCGAGCAGGAGACACAGGAGTCAAATT
GGAGGTGAATGAAAGGATCCTTGGTTGCTGTACCAGCCTCATGCAAGCTATTCAGGTGCTCATCGTGGCCTCTAA
GGACCTCCAGAGAGAGATTGTGGAGAGCGGCAGGGGTACAGCATCCCCTAAAGAGTTTTATGCCAAGAACTCTCG
ATGGACAGAAGGACTTATCTCAGCCTCCAAGGCTGTGGGCTGGGGAGCCACTGTCATGGTGGATGCAGCTGATCT
GGTGGTACAAGGCAGAGGGAAATTTGAGGAGCTAATGGTGTGTTCTCATGAAATTGCTGCTAGCACAGCCCAGCT
TGTGGCTGCATCCAAGGTGAAAGCTGATAAGGACAGCCCCAACCTAGCCCAGCTGCAGCAGGCCTCTCGGGGAGT
GAACCAGGCCACTGCCGGCGTTGTGGCCTCAACCATTTCCGGCAAATCACAGATCGAAGAGACAGACAACATGGA
CTTCTCAAGCATGACGCTGACACAGATCAAACGCCAAGAGATGGATTCTCAGGTTAGGGTGCTAGAGCTAGAAAA
TGAATTGCAGAAGGAGCGTCAAAAACTGGGAGAGCTTCGGAAAAAGCACTACGAGCTTGCTGGTGTTGCTGAGGG
CTGGGAAGAAGGAACAGAGGCATCTCCACCTACACTGCAAGAAGTGGTAACCGAAAAAGAATAGAGCCAAACCAA
CACCCCATATGTCAGTGTAAATCCTTGTTACCTATCTCGTGTGTGTTATTTCCCCAGCCACAGGCCAAATCCTTG
GAGTCCCAGGGGCAGCCACACCACTGCCATTACCCAGTGCCGAGGACATGCATGACACTTCCAAAGACTCCCTCC
ATAGCGACACCCTTTCTGTTTGGACCCATGGTCATCTCTGTTCTTTTCCCGCCTCCCTAGTTAGCATCCAGGCTG
GCCAGTGCTGCCCATGAGCAAGCCTAGGTACGAAGAGGGGTGGTGGGGGGCAGGGCCACTCAACAGAGAGGACCA
ACATCCAGTCCTGCTGACTATTTGACCCCCACAACAATGGGTATCCTTAATAGAGGAGCTGCTTGTTGTTTGTTG
ACAGCTTGGAAAGGGAAGATCTTATGCCTTTTCTTTTCTGTTTTCTTCTCAGTCTTTTCAGTTTCATCATTTGCA
CAAACTTGTGAGCATCAGAGGGCTGATGGATTCCAAACCAGGACACTACCCTGAGATCTGCACAGTCAGAAGGAC
GGCAGGAGTGTCCTGGCTGTGAATGCCAAAGCCATTCTCCCCCTCTTTGGGCAGTGCCATGGATTTCCACTGCTT

FIGURE 3034B

CTTATGGTGGTTGGTTGGGTTTTTTGGTTTTGTTTTTTTTTTTAAGTTTCACTCACATAGCCAACTCTCCCAAAG
GGCACACCCCTGGGGCTGAGTCTCCAGGGCCCCCCAACTGTGGTAGCTCCAGCGATGGTGCTGCCCAGGCCTCTC
GGTGCTCCATCTCCGCCTCCACACTGACCAAGTGCTGGCCCACCCAGTCCATGCTCCAGGGTCAGGCGGAGCTGC
TGAGTGACAGCTTTCCTCAAAAAGCAGAAGGAGAGTGAGTGCCTTTCCCTCCTAAAGCTGAATCCCGGCGGAAAG
CCTCTGTCCGCCTTTACAAGGGAGAAGACAACAGAAAGAGGGACAAGAGGGTTCACACAGCCCAGTTCCCGTGAC
GAGGCTCAAAAACTTGATCACATGCTTGAATGGAGCTGGTGAGATCAACAACACTACTTCCCTGCCGGAATGAAC
TGTCCGTGAATGGTCTCTGTCAAGCGGGCCGTCTCCCTTGGCCCAGAGACGGAGTGTGGGAGTGATTCCCAACTC
CTTTCTGCAGACGTCTGCCTTGGCATCCTCTTGAATAGGAAGATCGTTCCACCTTCTACGCAATTGACAAACCCG
GAAGATCAGATGCAATTGCTCCCATCAGGGAAGAACCCTATACTTGGTTTGCTACCCTTAGTATTTATTACTAAC
CTCCCTTAAGCAGCAACAGCCTACAAAGAGATGCTTGGAGCAATCAGAACTTCAGGTGTGACTCTAGCAAGGCTC
ATCTTTCTGCCCGGCTACATCAGCCTTCAAGAATCAGAAGAAAGGCCAAGGTGCTGGACTGTTACTGACTTGGAT
CCCAAAGCAAGGAGATCATTTGGAGCTCTTGGGTCAGAGAAAATGAGAAAGGACAGAGCCAGCGGCTCCAACTCC
TTTCAGCCACATGCCCCAGGCTCTCGCTGCCCTGTGGACAGGATGAGGACAGAGGGCACATGAACAGCTTGCCAG
GGATGGGCAGCCCAACAGCACTTTTCCTCTTCTAGATGGACCCCAGCATTTAAGTGACCTTCTGATCTTGGAAAA
ACAGCGTCTTCCTTCTTTATCTATAGCAACTCATTGGTGGTAGCCATCAAGCACTTCCCAGGATCTGCTCCAACA
GAATATTGCTAGGTTTTGCTACATGACGGGTTGTGAGACTTCTGTTTGATCACTGTGAACCAACCCCCATCTCCC
TAGCCCACCCCCCTCCCCAACTCCCTCTCTGTGCATTTTCTAAGTGGGACATTCAAAAAACTCTCTCCCAGGACC
TCGGATGACCATACTCAGACGTGTGACCTCCATACTGGGCTAAGGAAGTATCAGCACTAGAAATTGGGCAGTCTT
AATGTTGAATGCTGCTTTCTGCTTAGTATTTTTTTGATTCAAGGCTCAGAAGGAATGGTGCGTGGCTTCCCTGTC
CCAGTTGTGGCAACTAAACCAATCGGTGTGTTCTTGATGCGGGTCAACATTTCCAAAAGTGGCTAGTCCTCACTT
CTAGATCTCAGCCATTCTAACTCATATGTTCCCAATTACCAAGGGGTGGCCGGGCACAGTGGCTCACGCCTGTAA
TCCCAGCACTTTGAGAGGCTGAGGTGGTAGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGTCCAACATGGT
GAAACCCCCATCTCTACTAAAAATACCAAAAATTAGCCGAGCGTAGTGACGGGTGCCCGTAATCCCAGCTACTCA
GGAGGCTGAGACAGGAGAATCACCTGAACCCCAGAGGCAGAGGTTGCAGTGAGCTGAGATCACGCCATTGTACTC
CAGCCTGGGCAACAAGAGCAAAACTCCGTCTCAAAAAAAAAAAAAAAATTACAAATGGGGCAAACAGTCTAGTGTA
ATGGATCAAATTAAGATTCTCTGCCCAGCCGGGCACAGTGGCGCATGCCTGTAATCCCAGAACTTTGGGAGGCCA
AGACGGGATGATTGCTTGAGCTCAGGAGTTTGAGACCAGGCTGGGCATCATAGCAAGACCTCATCTCTACTAAAA
TTCAAAAACAAAATTAGCCGGGCATGATGGTGCATGCCTGTAGTCTCAGCTAGTTGGGGAGCTAAGGTGGGAGAA
TTGCTTGAGCTTGGGAAGTCGAGGCTGCAGTCAGCCCTGATTGTGCCAGTGCACTCCGGCCTGGGTGACAGAGTG
AGACCCTGTCTCAAAAAAAAAAAAGATTCTGTGTCAGAGCCCAGCCCAGGAGTTTGAGGCTGCAATGAGCCATGAT
TTCCCACTGCACTCCAGCCTGAGTGACAGAGCGAGACTCCATCTCTTTAAAAACAAACAAAAAATTATCTGAATG
ATCCTGTCTCTAAAAAGAAGCCACAGAAATGTTTAAAAACTTCATCGACTTAGCCTGAGTCATAACGGTTAAGAA
AGCACTTAAACAGAAGCAGAGGCTAATTCAGTGTCACATGAGGAAGTAGCTGTCAGATGTCACATAATTACTTTC
GTAATAGCTCAGATTAGAATGGCTACCCCATTCTCTAGACAAAATCAAATTGTCCTATTGTGACTCTTCTAAAAA
TGAAGATGAAGAGCTATTTAATGACACACCTTGGATTAAAACGGGAATCACATCTTAAAGCTAAAAATGAACCTG
CAAGCCTTCTAAATGAGTCACTGAGCATCACTAGTGACAAGTCTCGGGTGAGCGTAAATGGGTCATGACAAGATG
GGACAGCAACAAAATCATGGCTTAGGATCGACAAGAAGTTAAAAAACAGCTGCATCTGTTACTTAAGTTTGTAAG
ACAGTGCCCTGAGACCTCTAGAGAAAAGATGTTTGTTTACATAAGAGAAAGAGGCCAGACATGGTGTCTCACACG
TTTAATCCCAGCACTTTGGGAGGCAGGGGCGGGTGGATCACCTGAGGTCAGGAGTTCAAGACTAGCCTGGCCAAC
ATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGGCAGGCGCCTATAATCCCAGCTAC
TGGGGAGGCTGAGGCAGGAGAATC

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FIGURE 3035

ATGGGGCGGGGCCTCTGGGAGGCGTGGCCTCCGGCCGGCTCCTCTGCTGTTGCCAAGGGAAACTGCCGCGAGGAG
GCGGAAGGAGCAGAGGACCGGCAGCCGGCGTCGAGGCGGGGCGCGGGAACGACGGCGGCCATGGCGGCCTCGGGG
CCCGGGTGTCGCAGCTGGTGCTTGTGTCCCGAGGTGCCATCCGCCACCTTCTTCACTGCGCTGCTCTCGCTGCTG
GTTTCCGGGCCTCGCCTGTTCCTGCTGCAGCAGCCCCTGGCGCCCTCGGGCCTCACGCTGAAGTCCGAGGCCCTT
CGCAACTGGCAAGTTTACAGGCTGGTAACCTACATCTTTGTCTACGAGAATCCCATCTCCCTGCTCTGCGGCGCT
ATCATCATCTGGCGCTTTGCTGGCAATTTCGAGAGAACCGTGGGCACCGTCCGCCACTGCTTCTTCACCGTGATC
TTCGCCATCTTCTCCGCTATCATCTTCCTGTCATTCGAGGCTGTGTCATCACTGTCAAAGCTGGGGGAAGTGGAG
GATGCCAGAGGTTTCACCCCAGTGGCCTTTGCCATGCTGGGAGTCACCACCGTCCGTTCTCGGATGAGGCGGGCC
CTGGTGTTTGGCATGGTTGTGCCCTCAGTCCTGGTTCCGTGGCTCCTGCTGGGTGCCTCGTGGCTCATTCCCCAG
ACCTCTTTCCTCAGTAATGTCTGCGGGCTGTCCATCGGGCTGGCCTATGGCCTCACCTACTGCTATTCCATCGAC
CTCTCAGAGCGAGTGGCACTGAAGCTCGATCAGACCTTCCCCTTCAGCCTGATGAGGAGGATATCCGTGTTCAAG
TACGTCTCAGGGTCTTCAGCCGAGAGGAGGGCAGCCCAGAGCCGGAAACTGAACCCGGTGCCTGGCTCCTACCCC
ACACAGAGCTGCCACCCTCACCTGTCCCCAAGCCACCCTGTGTCCCAGACGCAGCACGCCAGTGGTCAGAAGCTG
GCCTCCTGGCCCTCCTGCACCCCCGGGCACATGCCCACCTTGCCTCCGTACCAGCCTGCCTCCGGCCTGTGCTAT
GTGCAGAACCACTTTGGTCCAAACCCCACCTCCTCCAGTGTCTACCCAGCTTCTGCGGGCACCTCCCTGGGCATC
CAGCCCCCCACGCCTGTGAACAGCCCTGGCACGGTGTATTCTGGGGCCTTGGGCACACCAGGGGCTGCAGGCTCC
AAGGAGTCCTCCAGGGTCCCCATGCCCTGAGAGAATTTCTAGGGAAGTCATCTCACTTGGCCTTCTGAAGGTCCT
CCCTAAGAGTCTCCTGACAAAAGTTACTTATTGA

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FIGURE 3036

GTTTCATGATCAACATGGGAGACTCCCACGTGGACACCAGCTCCACCGTGTCCGAGGCGGTGGCCGAAGAAGTAT
CTCTTTTCAGCATGACGGACATGATTCTGTTTTCGCTCATCGTGGGTCTCCTAACCTACTGGTTCCTCTTCAGAA
AGAAAAAAGAAGAAGTCCCCGAGTTCACCAAAATTCAGACATTGACCTCCTCTGTCAGAGAGAGCAGCTTTGTGG
AAAAGATGAAGAAAACGGGGAGGAACATCATCGTGTTCTACGGCTCCCAGACGGGGACTGCAGAGGAGTTTGCCA
ACCGCCTGTCCAAGGACGCCCACCGCTACGGGATGCGAGGCATGTCAGCGGACCCTGAGGAGTATGACCTGGCCG
ACCTGAGCAGCCTGCCAGAGATCGACAACGCCCTGGTGGTTTTCTGCATGGCCACCTACGGTGAGGGAGACCCCA
CCGACAATGCCCAGGACTTCTACGACTGGCTGCAGGAGACAGACGTGGATCTCTCTGGGGTCAAGTTCGCGGTGT
TTGGTCTTGGGAACAAGACCTACGAGCACTTCAATGCCATGGGCAAGTACGTGGACAAGCGGCTGGAGCAGCTCG
GCGCCCAGCGCATCTTTGAGCTGGGGTTGGGCGACGACGATGGGAACTTGGAGGAGGACTTCATCACCTGGCGAG
AGCAGTTCTGGCCGGCCGTGTGTGAACACTTTGGGGTGGAAGCCACTGGCGAGGAGTCCAGCATTCGCCAGTACG
AGCTTGTGGTCCACACCGACATAGATGCGGCCAAGGTGTACATGGGGGAGATGGGCCGGCTGAAGAGCTACGAGA
ACCAGAAGCCCCCCTTTGATGCCAAGAATCCGTTCCTGGCTGCAGTCACCACCAACCGGAAGCTGAACCAGGGAA
CCGAGCGCCACCTCATGCACCTGGAATTGGACATCTCGGACTCCAAAATCAGGTATGAATCTGGGGACCACGTGG
CTGTGTACCCAGCCAACGACTCTGCTCTCGTCAACCAGCTGGGCAAAATCCTGGGTGCCGACCTGGACGTCGTCA
TGTCCCTGAACAACCTGGATGAGGAGTCCAACAAGAAGCACCCATTCCCGTGCCCTACGTCCTACCGCACGGCCC
TCACCTACTACCTGGACATCACCAACCCGCCGCGTACCAACGTGCTGTACGAGCTGGCGCAGTACGCCTCGGAGC
CCTCGGAGCAGGAGCTGCTGCGCAAGATGGCCTCCTCCTCCGGCGAGGGCAAGGAGCTGTACCTGAGCTGGGTGG
TGGAGGCCCGGAGGCACATCCTGGCCATCCTGCAGGACTGCCCGTCCCTGCGGCCCCCCATCGACCACCTGTGTG
AGCTGCTGCCGCGCCTGCAGGCCCGCTACTACTCCATCGCCTCATCCTCCAAGGTCCACCCCAACTCTGTGCACA
TCTGTGCGGTGGTTGTGGAGTACGAGACCAAGGCTGGCCGCATCAACAAGGGCGTGGCCACCAACTGGCTGCGGG
CCAAGGAGCCTGCCGGGGAGAACGGCGGCCGTGCGCTGGTGCCCATGTTCGTGCGCAAGTCCCAGTTCCGCCTGC
CCTTCAAGGCCACCACGCCTGTCATCATGGTGGGCCCCGGCACCGGGGTGGCACCCTTCATAGGCTTCATCCAGG
AGCGGGCCTGGCTGCGACAGCAGGGCAAGGAGGTGGGGGAGACGCTGCTGTACTACGGCTGCCGCCGCTCGGATG
AGGACTACCTGTACCGGGAGGAGCTGGCGCAGTTCCACAGGGACGGTGCGCTCACCCAGCTCAACGTGGCCTTCT
CCCGGGAGCAGTCCCACAAGGTCTACGTCCAGCACCTGCTAAAGCAAGACCGAGAGCACCTGTGGAAGTTGATCG
AAGGCGGTGCCCACATCTACGTCTGTGGGGATGCACGGAACATGGCCAGGGATGTGCAGAACACCTTCTACGACA
TCGTGGCTGAGCTCGGGGCCATGGAGCACGCGCAGGCGGTGGACTACATCAAGAAACTGATGACCAAGGGCCGCT
ACTCCCTGGACGTGTGGAGCTAGGGGCCTGCCTGCCCCACCCACCCCACAGACTCCGGCCTGTAATCAGCTCTCC
TGGCTCCCTCCCGTAGTCTCCTGGGTGTGTTTGGCTTGGCCTTGGCATGGGCGCAGGCCCAGTGACAAAGACTCC
TCTGGGCCTGGGGTGCATCCTCCTCAGCCCCCAGGCCAGGTGAGGTCCACCGGCCCCTGGCAGCACAGCCCAGGG
CCTGCATGGGGGCACCGGGCTCCATGCCTCTGGAGGCCTCTGGCCCTCGGTGGCTGCACAGAAGGGCTCTTTCTC
TCTGCTGAGCTGGGCCCAGCCCCTCCACGTGATTTCCAGTGAGTGTAAATAATTTTAAATAACCTCTGGCCCTTG
GAATAAAGTTCTGTTTTCTGT

FIGURE 3037

GAGGAGCCTCGGGTGGGCCGGGGTTGCTGCGCCGTCCTCCACTACTGGCTACTGGCGCTGCAGCCATGCAGCCCC
CGCCCCCGGGCCCGCTGGGCGACTGCCTGCGGGACTGGGAGGATCTACAGCAGGACTTCCAGAACATCCAGGAGA
CCCATCGGCTCTACCGCCTGAAGCTGGAGGAGCTGACCAAACTTTAGAACAATTGCACCAGCTCCATCACGCGGC
AGAAGAAGCGGCTCCAGGAGCTGGCCCTCGCCCTGAAGAAATGCAAACCCTCCCTCCCAGCAGAGGCCGAGGGGG
CCGCACAGGAGCTGGAGAACCAGATGAAAGAGCGCCAAGGCCTCTTCTTTGACATGGAGGCCTATTTGCCTAAGA
AGAATGGATTGTACCTGAGCCTGGTTCTGGGGAACGTCAACGTCACGCTCCTGAGCAAGCAGGCTAAGTTTGCCT
ACAAGGACGAGTATGAGAAGTTCAAGCTCTACCTCACCATCATCCTCATCCTCATCTCCTTCACTTGCCGCTTCC
TGCTCAACTCCAGGGTGACAGATGCTGCCTTCAACTTCCTGCTGGTCTGGTACTACTGCACCCTGACCATCCGGG
AGAGCATCCTCATCAACAACGGCTCCCGGATCAAAGGCTGGTGGGTGTTCCATCACTACGTGTCCACCTTCCTGT
CGGGAGTCATGCTGACGTGGCCCGACGGTCTCATGTACCAGAAATTCCGGAACCAATTCCTCTCCTTTTCCATGT
ACCAGAGCTTCGTGCAGTTTCTCCAGTACTACTACCAGAGCGGCTGCCTCTACCGCCTGCGGGCGCTGGGCGAGC
GGCACACCATGGACCTCACTGTGGAGGGCTTCCAGTCCTGGATGTGGCGGGGCCTCACCTTCCTGCTGCCTTTTC
TTTTCTTTGGACACTTCTGGCAGCTTTTTAACGCGCTGACGTTGTTCAACCTGGCCCAGGACCCTCAGTGCAAGG
AGTGGCAGGTGCTTATGTGCGGCTTTCCCTTCCTCCTCCTTTTCCTCGGCAATTTCTTCACCACCCTGAGGGTTG
TGCACCACAAGTTTCACAGTCAGCGGCACGGGAGCAAGAAGGATTGAGGCTGGGCCTTCCCCTGCCGGCCCAGAG
GGGCTTCTGTCCTGTGTGTTGTGGGAGGGGATGGGAGGCGCCCCTCGAGTGTGCGTGTATCAGGGGGTCTCTTCT
ATTCTCCCTTGGGTTTTATGGGCGCTGTGGGCCCTGAAGGAAGACCTGGGCCCAGTGCCCTCAATAAAGAGAGGC
CCAG

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FIGURE 3038

GCCACTTCCGGGAGTCGGAAAGGAAAGCTGTGGGACCATCCTGGCAACCCCGGTGTTTGGCTGGGTTCTAGCGTA
GCCGTCTGTGTGGCCGGTGGGGGACCTGCGGTCGGAGTGGGAGGGCCAGTCTGCACCCAAGAGGTGGAAGAGGAC
GGGCTTTAGGCTGGAAGCGCCTTAGAGGAGCCATTTTTCCAGGTGGGGCCCCAGGCAGAGGCTCCGACAGGGAGC
CTGGCCATAGTCGCGCAGCCGGGGAGGTGGAGCGCGTCCCAGACCCGAGCCCCCGACCTCAGCCAAACCCATTCC
TTCTGCCCTTGGAGGCCAGAGGGGACTCTGAGCTCCGGAAAGGATGCCTGGTTTGCTTTTATGTGAACCAACAGA
GCTTTACAACATCCTGAATCAGGCCACAAAACTCTCCAGATTAACAGACCCCAACTATCTCTGTTTATTGGATGT
CCGTTCCAAATGGGAGTATGACGAAAGCCATGTGATCACTGCCCTTCGAGTGAAGAAGAAAAATAATGAATATCT
TCTCCCGGAGTCTGTGGACCTGGAGTGTGTGAAGTACTGCGTGGTGTATGATAACAACAGCAGCACCCTGGAGAT
ACTCTTAAAAGATGATGATGATGATTCAGACTCTGATGGTGATGGCAAAGATCTTGTGCCTCAAGCAGCCATTGA
GTATGGCAGGATCCTGACCCGCCTCACCCACCACCCCGTCTACATCCTGAAAGGGGGCTATGAGCGCTTCTCAGG
CACGTACCACTTTCTCCGGACCCAGAAGATCATCTGGATGCCTCAGGAACTGGATGCATTTCAGCCATACCCCAT
TGAAATCGTGCCAGGGAAGGTCTTCGTTGGCAATTTCAGTCAAGCCTGTGACCCCAAGATTCAGAAGGACTTGAA
AATCAAAGCCCATGTCAATGTCTCCATGGATACAGGGCCCTTTTTTGCAGGCGATGCTGACAAGCTTCTGCACAT
CCGGATAGAAGATTCCCCGGAAGCCCAGATTCTTCCCTTCTTACGCCACATGTGTCACTTCATTGAAATTCACCA
TCACCTTGGCTCTGTCATTCTGATCTTTTCCACCCAAGGTATCAGCCGCAGTTGTGCCGCCATCATAGCCTACCT
CATGCATAGTAACGAGCAGACCTTGCAGAGGTCCTGGGCCTATGTCAAGAAGTGCAAAAACAACATGTGTCCAAA
TCGGGGATTGGTGAGCCAGCTGCTGGAATGGGAGAAGACTATCCTTGGAGATTCCATCACAAACATCATGGATCC
GCTCTACTGATCTTCTCCGAGGCCCACCGAAGGGTACTGAAGAGCCTCACCTGGGGGCATTTTGTGGGTGGAGGG
CCAGAGTGTGTATACCCAGGCTTGTCTGGAAGGAGAAGGCCTTTGCTGCCTGAAAGTCTC

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FIGURE 3039

GGCGCTGGGCAGTGTGGAGGTCGTTGGAGTCACTTCCCCGTCACCAGCTCCTGTGCCTGCCAGTCGGTGCCCCTC
CCGCTCCAGCCATGCTCTCCGCCCTCGCCCGGCCTGCCAGCGCTGCTCTCCGCCGCAGCTTCAGCACCTCGGCCC
AGAACAATGCTAAAGTAGCTGTGCTAGGGGCCTCTGGAGGCATCGGGCAGCCACTTTCACTTCTCCTGAAGAACA
GCCCCTTGGTGAGCCGCCTGACCCTCTATGATATCGCGCACACACCCGGAGTGGCCGCAGATCTGAGCCACATCG
AGACCAAAGCCGCTGTGAAAGGCTACCTCGGACCTGAACAGCTGCCTGACTGCCTGAAAGGTTGTGATGTGGTAG
TTATTCCGGCTGGAGTCCCCAGAAAGCCAGGCATGACCCGGGACGACCTGTTCAACACCAATGCCACGATTGTGG
CCACCCTGACCGCTGCCTGTGCCCAGCACTGCCCGGAAGCCATGATCTGCGTCATTGCCAATCCGGTTAATTCCA
CCATCCCCATCACAGCAGAAGTTTTCAAGAAGCATGGAGTGTACAACCCCAACAAAATCTTCGGCGTGACGACCC
TGGACATCGTCAGAGCCAACACCTTTGTTGCAGAGCTGAAGGGTTTGGATCCAGCTCGAGTCAACGTCCCTGTCA
TTGGTGGCCATGCTGGGAAGACCATCATCCCCCTGATCTCTCAGTGCACCCCCAAGGTGGACTTTCCCCAGGACC
AGCTGACAGCACTCACTGGGCGGATCCAGGAGGCCGGCACGGAGGTGGTCAAGGCTAAAGCCGGAGCAGGCTCTG
CCACCCTCTCCATGGCGTATGCCGGCGCCCGCTTTGTCTTCTCCCTTGTGGATGCAATGAATGGAAAGGAAGGTG
TTGTGGAATGTTCCTTCGTTAAGTCACAGGAAACGGAATGTACCTACTTCTCCACACCGCTGCTGCTTGGGAAAA
AGGGCATCGAGAAGAACCTGGGCATCGGCAAAGTCTCCTCTTTTGAGGAGAAGATGATCTCGGATGCCATCCCCG
AGCTGAAGGCCTCCATCAAGAAGGGGGAAGATTTCGTGAAGACCCTGAAGTGAGCCGCTGTGACGGGTGGCCAGT
TTCCTTAATTTATGAAGGCATCATGTCACTGCAAAGCCGTTGCAGATAAACTTTGTATTTTAATTTGCTTTGGTG
ATGATTACTGTATTGACATCATCATGCCTTCCAAATTGTGGGTGGCTCTGTGGGCGCATCAATAAAAGCCGTCCT
TGATTTTATTTTTCAAGGTCCCTTCTGTAAATGCTGTGCTTTCTTCCCTGTGAGAGCCAACTTTAGAGTGTCTGC
TACCTCTTCATTACCAATCAGAATTAGATGATGTTTAACTGTTAGACTGAAGCGTGACGCTTTCATCAGTAGCTT
CAAGAAAGTCTAAATTGTTAATTTATGGAATTGGACACAGTATTCAGTTTACCCGTACATGCTCCTCCCGCCCCT
CCTGTTGGCACCCTTGCATCGCCCAGGCCTGATTCCTCCTGGGGGTAGTTCACCCCCACGGGTTCATAGTTCAGC
GGCGAATGCCAGGCAGCTGTTTTCTGGCTGAGCAAACAGCACCTTTCTCATTGAGCTTCCTCTACTGACCTCTGT
CCCCCTTGGGATTTCATCTTCTGACCGAACCCTGATGTTCAGTGGCAGAGACAGCCCATAGCCAGAACTGTGGGT
AGACCAGGGTTGGGGTGTGCGGTTTGGGACAGCCCAAACCCCAGCCGCTGTGTCAAGGCCTAGGACGCCATGCTG
CCATCAAAAGGGGGTTCCAGGTTTCCATCAGTGGCCTAAAGAAGGGACTTCTTGTTGTACTGAGGAGTGCGGAAT
TAAAGAGATTTGACTCCCTTTAGTATTGGGGGCAGTCCGTTCCCCAGACACTGTGGCCTCTGAAGTGGAAACTGA
AAGCTGCATACCTGGGAAAGAACTTTCTAGGAATAGGCAATGGCCTTCAGTGGAAGAGGGAGGGCTGGAGGTGTG
CCCAGTACTTGGATGTTCATCTGTCCACAACAGCTTTTTGTTTTTTTAAAAAAGCTAAAATGGAAATGGATTTTA
TCATAAAGGATGACATCGTTTTCTTCTACAATTAATACATGTTCATTGTATAAAACCCAAAAAGCAGCTAAAAAA
TAAAGCGGGAAAGG

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FIGURE 3040

ATGCCGGGCTTCATGCAGCCGGGCTGCGTGGCTGCGCAGAGCAGACTCCAGTGGGAGGAAGAGGCCTTTGCCAGC
AGTCAGAGCAGCCAAGGGGCCCAATCCCTCACATTCTCCAAGTTTGAAGGAAAGAAAACCAACGAGAAGACCCAC
GAGGTTACCACAGTGAAGAAATCTTCAGTGCGTCTTCCAGGGTCGGATCAAAGAAGGCTACAAAACAAAAGAACA
GTTGCCAGCACTTGGAAGAGGATGTGGATCCAAACCAAATGGAGGACAGATACTCCCTCTATGGACAAGATACTC
ATGGAAGAAGTCAAGTTAGAAGAGCAGCTGAAGGAGGCTGTGGAAGAAGATAAGCAAGCACTGGCAGATACTGAG
GGCTCAGAGCAGAGCAGCCAAAAATTGGTGGAGGAGGGAAATATGTATAGCATTCAGGGCTTCTGCAAGGACTCG
TTAGAGGTTGCAGATGTTTTGGAGAAGGCAACACAGTGTGTTCCAGAAGAAGAAATTAAAGACAATAACCCTCAC
CTGAAGAACCTCTCTCTACTCACAATGAGTGAAGTCCAGATTCAGGAAGTGTTCAGCAAGCACTGCCAAGATGAA
CTCTGTCACAGCAAGTTCCACCCTTATGAGCTTCTTGGACTCACTGAGGCAGTAAAAGAACCATATCCTGTGTTT
GAATCAAATCCCAAGTTCCTGTACGTAGAAGGTTTGCCAGACAGGATTCCCTTTCGAAGCCCTCCTGGTTTGGAA
TTCCATGACTTGAAAGGATCGTCCATGGGAGTAATAAAATCAAATTTGTTGGTAAAAAGCCCAGCTGCCGCCCGC
CCCAACAGCATCTCCTGGCCCAAGGCTATTTCAAGTGGGCCCCTCCAGGGCCCAGCTGCTGCACCCCAACCAATG
GCCTGTGCAAACCCAAAGCGTCTTGAAGTTGGCCTCGCCAGGCCCAGCTCCTGCCTGTCATCCCGGCAGCATTCG
TACGACCAAAACCTCCTCCAGCCCAGCTCTCCAGGCCCACCTGTGGCCTCGCAGTGGCCTCCCCGGGGCCAGATC
TTGCCTCACGGTGGCCTTCCCCGGCCGTGTTCCTGCCAGCCTCCCAGCGGCCTCGACAAGCCCATCGCATGCCTC
TCACTGGGCTCTGGAGGTCCAGCTCAAGCCTCACGGTGGCCTCTCCAGGCCCAGCTCCCGCCCGCCCCGACGGCG
TCTCCCGGCCAAGGGTTTCTCAAGTGGGCCCCTCCAGGGCCCAGCTGCTGCCCCCCGGCCGATGGCCTGTGCGGG
CCCAAAGTGTCCTGA

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FIGURE 3041

CTCAAACACCGCCTGCTAAAAATACCCGACTGGAGGAGCATAAAAGCGCAGCCGAGCCCAGCGCCCCGCACTTTT
CTGAGCAGACGTCCAGAGCAGAGTCAGCCAGCATGACCGAGCGCCGCGTCCCCTTCTCGCTCCTGCGGGGCCCCA
GCTGGGACCCCTTCCGCGACTGGTACCCGCATAGCCGCCTCTTCGACCAGGCCTTCGGGCTGCCCCGGCTGCCGG
AGGAGTGGTCGCAGTGGTTAGGCGGCAGCAGCTGGCCAGGCTACGTGCGCCCCCTGCCCCCCGCCGCCATCGAGA
GCCCCGCAGTGGCCGCGCCCGCCTACAGCCGCGCGCTCAGCCGGCAACTCAGCAGCGGGGTCTCGGAGATCCGGC
ACACTGCGGACCGCTGGCGCGTGTCCCTGGATGTCAACCACTTCGCCCCGGACGAGCTGACGGTCAAGACCAAGG
ATGGCGTGGTGGAGATCACCGGCAAGCACGAGGAGCGGCAGGACGAGCATGGCTACATCTCCCGGTGCTTCACGC
GGAAATACACGCTGCCCCCCGGTGTGGACCCCACCCAAGTTTCCTCCTCCCTGTCCCCTGAGGGCACACTGACCG
TGGAGGCCCCCATGCCCAAGCTAGCCACGCAGTCCAACGAGATCACCATCCCAGTCACCTTCGAGTCGCGGGCCC
AGCTTGGGGGCCCAGAAGCTGCAAAATCCGATGAGACTGCCGCCAAGTAAAGCCTTAGCCCGGATGCCCACCCCT
GCTGCCGCCACTGGCTGTGCCTCCCCCGCCACCTGTGTGTTCTTTTGATACATTTATCTTCTGTTTTTCTCAAAT
AAAGTTCAAAGCAACCACCTGT

FIGURE 3042A

CAGCAGCCGCAGCCGCCTCGCGCCCGGTCCCGCGGTCGCAGCTCCAGCCGCCTCCTCCGCGCAGCCGCCGCCTCA
GCTGCTCGCTCTGTGGGTCGGTCCTCTCCGGCACTTGGGCTCCAGTCGCGCCCTCCAAGCCCTTCAGGCCGCCCC
AGTGTCCTCCTCCTTCTCCGGCCAGACCCAGCCCCGCGAAGATGGTGGACCGCGAGCAACTGGTGCAGAAAGCCC
GGCTGGCCGAGCAGGCGGAGCGCTACGACGACATGGCCGCGGCCATGAAGAACGTGACAGAGCTGAATGAGCCAC
TGTCGAATGAGGAACGAAACCTTCTGTCTGTGGCCTACAAGAACGTTGTGGGGGCACGCCGCTCTTCCTGGAGGG
TCATCAGTAGCATTGAGCAGAAGACATCTGCAGACGGCAATGAGAAGAAGATTGAGATGGTCCGTGCGTACCGGG
AGAAGATAGAGAAGGAGTTGGAGGCTGTGTGCCAGGATGTGCTGAGCCTGCTGGATAACTACCTGATCAAGAATT
GCAGCGAGACCCAGTACGAGAGCAAAGTGTTCTACCTGAAGATGAAAGGGGACTACTACCGCTACCTGGCTGAAG
TGGCCACCGGAGAGAAAAGGGCGACGGTGGTGGAGTCCTCCGAGAAGGCCTACAGCGAAGCCCACGAGATCAGCA
AAGAGCACATGCAGCCCACCCACCCCATCCGATTAGGCCTGGCTCTTAACTACTCCGTCTTCTACTATGAGATCC
AGAACGCCCCAGAGCAAGCGTGCCACTTGGCCAAGACCGCGTTCGACGACGCCATCGCCGAGCTTGACACCCTCA
ACGAGGACTCCTACAAGGACTCCACGCTCATCATGCAGCTCCTCCGCGACAACCTCACGCTCTGGACGAGCGACC
AGCAGGACGACGATGGCGGCGAAGGCAACAATTAAGGCCCCAGGGGAACTGGCAGCGCACGCGGATGCTACTACT
GCAGTCTTTATTTTTTCCCATGAGTTGGGGGTCGGGTGGGGGAGGGAAAGGGAGGGATGACCTTCCCAGGGAGA
AACCCACGACCTGTCCTGTCTTTGATCGCCTCTTTGACATTTTTGCCAAAATACCACTAGTGGAAAGTCAGGCTA
GCTGTGCTGGTATTGGAATAGCAGCCTCACACTGGCGTCTGGACTGTTCTGTAGATTCATGCAAGTGGAGCTGTC
TGTCTCTAATTTAACTTATTGCTAGATAATAGGGTTTTCAGATGAAAAGAAAACTTAAAGAGGAATGGCCCTCAT
TCAGTAAGTTCTGTGGTTCCAGTAAGGATTTTTATGTACATACGCTCTCGTCTCTCGTTTTGGGTACTTTCTATC
TCATCTGTCTCGGCTCTGCATGTTTTCCAGGGTGTAGCCTACAGACATGGAACAGTGTAAATCCCAGACTGACAG
ACTTAGAACCTGAGGTCTCATTCATCCTTATGGTTTAGGCCTTGCCAGTTTTCCGAAGTCTCTGATTAGTTGACA
GTATTAACACTAAATTGCAGTTTACAGTATTTCTACATTACAGCCATATGTAACATCAAGCCATCGATTGTGTAC
TTTTCCTTTGCTAGTTGTTTGGGCTTTAACATCCTTATTCAGCCTTATCCAGGTTGGTTTTGCTGTTGATCGGTC
TCCTAGGCTAAATGAGAATGAAAGCGACTTCAGGTCAGGTGGCTGTGGGATTTTTTTTTTTTGGTCCTTCTTTCC
TCTTAACGTAAATCCACCACCAAAATTATTAATCCTCTTGAGAGAAACGTGAAACGCCACAAAAATAGAGAAAAT
TCAGGTCTGTATGTCATGGATCGTGTTGGTATTTTCAGAGAACATCCCGCTTCTGAAGCTGCTGCAGCTCCCTCC
TCAGGGATCACACTGCCGTCACCCACTCTGCACTGGGGCGTTTCCTACTGCGCCTCGTGCTGGCGGACGCAGCTG
GGTGCAGAAGCTGTGGGGTCGGAGAGGCGTTTGGAGAAGGTCTGTGGTGCAGTGTGTGAAAATTCAGGTGCTAGA
AGCCTACTGGTAGAAAAACCCAAAAGGAAGAGCTATATCCTTAACCATTCTGTCCAATTTCGGGAGCCTTGTCAG
TGTGTCAGTTTTTCCTCCCCGAAGACACTCCTTCCCCAAGTAATTGTAGGAAGATAAAAAAACTGTTACCAGATA
ACAAACACTGAACTCCTATTTGACCAGAACTTTTTCCTCTCGAGATAGTTTTTTCTTTTTAATGAAAAAAGCATA
GGAATTGGAGATTGGCTTGTCTCACGCAGCCAGTGCACATTTGGAATTGACGGAAACAACGTTGCTATTTCCACC
CATTTGTTTTCGGCAGCCTTAAGGCCCTCATTCTCATTTCGGGTGAATCTGTCTATCTGTGAACGTGGCCCGCAT
GTGCATTCTTTTTTTTATATATATAAAGTCAGTGACGAGGAACTCCCGAGACGTGTAATGACACCACACTTGTTT
TCTTTGTTTCTTTGTTTTATTTAGGCAAGAAGAGGTGTGAGTAATTGAGGAAAAACTGACAGATGCTTTTGCTAA
TACCAAAATTGAGCTTACAATTAGGAACTGAGTATGTGTAACAGGATACAGGTGACAGTGAAGATAGAAGAACCA
CGATGACCACAGACTCAATGTGCTCTGTAACATCGCACAGTTTACCCAGCATGACTTTCCTTAGGAGGCCCCCTC
CTCACGCTAGAGTAAAAGTCCCAGTTAAGTGAAGCCTACCAGAAGAACTAGTAGAAGAAGCTTTGCCGCTTTTGT
GCCTCTCACAGGCGCCTAAAGTCATTGCCATGGGAGGAAGACGATTTGGGGGGGGAGGGGGGGGGGGGCAGGGTA
GGTGGGGCTTTCCCTAATTTATCTTCATGTCCAGTGAGCAGTGTTGCGTTTTTCCTTGTAGCATTTGGAAATGAT
TTACTGGAATTACAAAACCTATTTTTCCTTTAAATTTCAGCTTTGGCTCTGGCTGCTTTTTAGAATAATGCAAGA
TAAAAATCACACCTGAGGGCTGAAAACGGAGAGGGAATGGGAGACTTGATATTTAAGCAGCTTGAATGGTTTTTC
TTTTCTTTATTTTTAAAGAAATGCACTTGCCTATGATACTGTCTCTCCAGTGAAATGATTACTCCTCCATTACTC
TATTGATACAATATTGTGCATGCTAGTGTTGTATTTCTATACAGTAGCTTGAAATTGATTAACTTATACTGTAGG
TGTTATGTATTCCTATGACAAAAAAAATTAAGTCTTCAAATTTTTTAAAGGTTTTTTTTTTTTAATTTAATTTTT
CCTTTTGGGGGTAAAGTTTGCTCTACCAAATAGTGATTGTAACAAATTGATCTGTTTTGGATGTTGCTATAGTGA
CATGCAGTTATATATTTTGTTTTTAAAAGGGGGGGAGCAAAAGAAACACCAGTGTTAGCTTAATCTTAATGTCTG
GTGTTTGTCATGGTGAAATTATAACTATTACAGTGTTGGAGAACAACAAATATGTTCTCTGAATGAGCCTTTGTG
CTTTTTGTCATGTTATGCAGTGAACTATTTTTAAGGTCTAATCAGTGATTATTTTTCCAGCTCCGTGTTTCTCTA

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FIGURE 3042B

AGGAATTATTTCACACACGGACCATCTTTAGCAGTTTCCTCAGTGATGGAATATCATGAATGTGAGTCATTATGT
AGCTGTCGTACATTGAGCAAATAAACTTACAGATCTG

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FIGURE 3043

TTTTCTGGGGCCGCTCCAGCTGGTGCCGGCCACCTCCACTCCCCTTTGCTTCTTGCTGTCCCTAAGGTCGGATGG
GGACAGGCTGGGGCCACCAGCCAGCTCCATGGACAGGGACTTTGCCTCTGCTCACCTTCCAGCTGTGGAAAGAAA
AGAAGAAACGCCTGTGTTGATTTCCATTTGGAAGATCCTTCCTCCTCCTAAACTTCCAGGGGCAGACAAAGTGAT
TCGATCTTGGATTGACTGTAGAAGAAGGGACAGAAAGAGCCCAGAACATTCCCCCAGATGTTCCAACTGTGACTT
CTCCCTGGCGCCTTGATGGGAGCATCTGAAACACCCTTCACCATCTAGATGCACAAGGAAGCAGAGATGCTAATT
GGTCCCCAGCTGGATGAGAAGCGCTGGGGGTGGAGGTTGGGAGATGGGAGTGCTGCCCCTCCCTTCCTCCCCCAA
GCCCTGTCTTTCCTTCTCCTCCTGCCACTGGCCAGCGCCCTACAGCCCACTCCACTGCCCTTTCAAGAGCTGAGG
CTGGTGGGGGGCCCCAGCCGCTGCCGGGGCCGCCTGGAAGTCATGCACGGTGGCTCCTGGGGCAGCGTCTGTGAT
GACGACTGGGACGTGGTGGACGCCAACGTAGTGTGTCGCCAGCTGGGCTGTGGCCTGGCACTGCCCGTGCCACGG
CCCCTTGCCTTTGGCCAAGGCCGAGGCCCCATCCTGCTGGACAACGTGGAGTGCCGCGGGCAGGAAGCTGCGCTG
AGCGAGTGCGGCAGCCGCGGCTGGGGCGTCCACAATTGCTTTCACTACGAGGATGTGGCTGTCCTGTGTGATGAA
TTCTTGCCAACGCAGCCCCCAACAAGGAAGATGTTAACCAGTAGAGCACCTCCTACGACACTGCCGAATGGAAAA
AGTGAGGGCAGCGTACGCCTGGTAGGGGGCGCGAACCTGTGTCAGGGCCGAGTGGAGATCCTGCACAGTGGCCTG
TGGGGCACCGTGTGTGACGACGACTGGGGGCTGCCGGATGCCGCTGTGGTCTGTCGTCAGCTGGGCTGCGGGGCG
GCCATGGCCGCCACCACCAACGCCTTCTTCGGCTATGGCACCGGACACATCCTGCTGGACAACGTGCACTGCGAA
GGCGGCGAGCCCCGCCTGGCAGCCTGCCAGAGCCTGGGCTGGGGTGTGCACAACTGCGGCCACCACGAGGACGCG
GGCGCGCTCTGCGCAGGCCTGGGTCCCCCAACGCTCACAGCACTGCCATCCTCAGCCACAAGAGAGGACTGGGCT
TGGCAGACAGATCCGTCCGCTACAGGAGTTGGCCCCCAGCCTTCCCGGGAGACAGCACTGCTCACCACCGCCGCC
TGGGCCGCGGGGAAGAAAAGTGGACGGCTGCGACTGGTGGGCGGCCCGGGTCCGTGCCGCGGCCGCGTGGAGGTG
TTGCACGCCGGGGGCTGGGGCACCGTGTGCGACGATGACTGGGACTTTGCGGACGCGCGCGTGGCCTGCCGCGAA
GCGGGCTGCGGGCCTGCGCTGGGCGCTACGGGACTGGGCCACTTCGGCTACGGCCGCGGCCCCGTGCTGCTGGAC
AACGTGGGCTGCGCCGGCACCGAGGCTCGCCTGAGCGACTGCTTCCACCTGGGCTGGGGCCAGCACAACTGCGGC
CACCACGAGGACGCGGGAGCGCTCTGCGCAGGCCCAGAGGAGCTGGGACTGCAAGTCCAGCAGGATGGTTCTGAG
ACCACGCGGGTGCCCACTCCTCGGCCCAGGGACGGGCATCTACGTCTGGTCAATGGAGCCCACCGATGCGAGGGA
CGTGTAGAGCTCTACCTAGGGCAACGGTGGGGCACTGTCTGTGATGATGCTTGGGACCTGCGGGCAGCCGGTGTC
CTGTGCCGCCAGCTGGGCTGTGGCCAGGCCCTCGCAGCCCCTGGCGAGGCTCACTTTGGCCCAGGCCGAGGCCCC
ATTCTCCTGGACAATGTCAAGTGCCGTGGGGAAGAAAGTGCTCTGCTGCTCTGCTCTCATATCCGCTGGGATGCC
CACAACTGTGACCACAGCGAGGATGCCAGTGTCCTGTGCCAGCCTTCATGACCCAGCCCGCTCTGCAGACCACCT
CTTCTTCTGGGAGCTGTGACCTCCCTTCCTCCTCCAGGAAGCCCTCCTCTTGTGATGACTACAGTTCACTTTGCC
CCTCCTTCCCTTGCCTGGGAGAGAGCCTACCTAGACAGTGCAGTCCTGCTTGGGGGAGCCTGGCTGTACCCCCGT
CCACTTACTGCGTGACCTCAGCCTGTCATCGACTGTTGTGAGCCCAATTCAGTGAAAGCTCCTGTGGTTTTGCTC
AGCCAAAACCAAAACGAGGGGAAGAGGATGATTCCTAACTCTTCTGTTTGGTGGGGCTCTTTTTATAGCACCAGA
CTCTGCCTTCCTTGACCTAGATCCAGGAGGCTCAGGGGCTCTTTAAATGGGGTATCTCCTCTTCCCCCAACCCAT
CTTGGGATCCCCAAGAAGAGGGAAGGCAGGAGGGGCCTACAGCTCCTACCTTGGGCCCTCAGGGGCTGCAGAGGA
ACCTGGGTCCCTGTCCTGCCCTGCTCCGCGAGGGCCTGGACTAACTCAGATGGTGCTCGGCTGGACAAGGGGACT
GGGGGAGGGGCCAAAGCAGGGACAGTGGCCCCTCCCTGCAGCTGGAACCAGCATCTCTGATTTATGCCGTCTCCA
CCACAGAGCCTCCACTTTGCAGGAGTGAAGAACCCTGGGGGCCTGTAGCCACCAGTTCATAGGTGCCAAGTCAAT
AAAGCATTGTCCCCCGTCTCTTATAACTGCA

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FIGURE 3044

GAGGCGGCTGCCTGCTGCTCTGCAGGTACCATGGAGCTGAGCTATAGGCTCTTCATCTGCCTCCTGCTCTGGGGT
AGTACTGAGCTGTGCTACCCCCAACCCCTCTGGCTCTTGCAGGGTGGAGCCAGCCATCCTGAGACGTCCGTACAG
CCCGTACTGGTGGAGTGTCAGGAGGCCACTCTGATGGTCATGGTCAGCAAAGACCTTTTTGGCACCGGGAAGCTC
ATCAGGGCTGCTGACCTCACCTTGGGCCCAGAGGCCTGTGAGCCTCTGGTCTCCATGGACACAGAAGATGTGGTC
AGGTTTGAGGTTGGACTCCACGAGTGTGGCAACAGCATGCAGGTAACTGACGATGCCCTGGTGTACAGCACCTTC
CTGCTCCATGACCCCCGCCCCCGTGGGAAACCTGTCCATCGTGAGGACTAACCGCGCAGAGATTCCCATCGAGTGC
CGCTACCCCAGGCAGGGCAATGTGAGCAGCCAGGCCATCCTGCCCACCTGGTTGCCCTTCAGGACCACGGTGTTC
TCAGAGGAGAAGCTGACTTTCTCTCTGCGTCTGATGGAGGAGAACTGGAACGCTGAGAAGAGGTCCCCCACCTTC
CACCTGGGAGATGCAGCCCACCTCCAGGCAGAAATCCACACTGGCAGCCACGTGCCACTGCGGTTGTTTGTGGAC
CACTGCGTGGCCACACCGACACCAGACCAGAATGCCTCCCCTTATCACACCATCGTGGACTTCCATGGCTGTCTT
GTCGACGGTCTCACTGATGCCTCTTCTGCATTCAAAGTTCCTCGACCCGGGCCAGATACACTCCAGTTCACAGTG
GATGTCTTCCACTTTGCTAATGACTCCAGAAACATGATATACATCACCTGCCACCTGAAGGTCACCCTAGCTGAG
CAGGACCCAGATGAACTCAACAAGGCCTGTTCCTTCAGCAAGCCTTCCAACAGCTGGTTCCCAGTGGAAGGCTCG
GCTGACATCTGTCAATGCTGTAACAAAGGTGACTGTGGCACTCCAAGCCATTCCAGGAGGCAGCCTCATGTCATG
AGCCAGTGGTCCAGGTCTGCTTCCCGTAACCGCAGGCATGTGACAGAAGAAGCAGATGTCACCGTGGGGCCACTG
ATCTTCCTGGACAGGAGGGGTGACCATGAAGTAGAGCAGTGGGCTTTGCCTTCTGACACCTCAGTGGTGCTGCTG
GGCGTAGGCCTGGCTGTGGTGGTGTCCCTGACTCTGACTGCTGTTATCCTGGTTCTCACCAGGAGGTGTCGCACT
GCCTCCCACCCTGTGTCTGCTTCCGAATAAAAGAAGAAA

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FIGURE 3045

GGGCATGCGCAGCGGCTCGCTCGGAAGCTGCGACGCCGAGTTTCACTCTGGCTGCCTTCTCCTGAGAGTCGGAGC
CACAGCCAGAGCCCTGCCCAGGCCGAGCCGGAGCTGCAGCCCGAGCGCGGTGGTGCCCTCAGCCCCGTCCTCTTG
TCCTCCTCAGCCTCGGTGCCTTGGAATTTGTGTCGCTGAGTCAGCAAGCCTTTCAGATTTGCCCGGTTTTTGTTG
TTTGTGGTTTGTATCAAGATGGGAACTCAAACAAGTCATTCCTCCTAAGGAGCTGGTGTCTTCATCCAGAAGGGA
CAGTTTGTGCCAGCTCTCCAGAGAGAAAAGATCTGCCGGAGGCGCTGGGCAATGACCCCGGGACTCCAGGCCAGA
GGGGTCTGAAGCTGTTTGGGAAAGCAGCGGGACTCCTTGGGAAGATGGCCATGGCCCCAAGCCCTTCCCTGGTGC
AGGTGTACACCAGCCCCGCGGCTGTGGCCGTGTGGGAATGGCAGGACGGGCTGGGCACCTGGCACCCCTACAGTG
CCACCGTCTGCAGCTTCATCGAGCAGCAGTTTGTCCAGCAGAAGGGCCAACGTTTTGGGCTTGGGAGCCTGGCCC
ACAGCATCCCCTTGGGCCAGGCAGACCCCTCGCTGGCCCCTTACATTATTGACCTCCCCAGCTGGACCCAGTTCC
GCCAGGACACCGGCACCATGCGGGCTGTGCGGAGACACCTGTTCCCCCAGCACTCAGCCCCTGGCCGAGGTGTCG
TCTGGGAGTGGCTGAGCGACGATGGCTCCTGGACTGCCTATGAAGCCAGCGTCTGTGACTATCTGGAGCAGCAGG
TGGCCAGGGGCAACCAGCTCGTGGACTTGGCCCCCCTGGGGTACAACTACACTGTCAACTACACCACCCACACGC
AGACCAACAAGACTTCCAGCTTCTGCCGCAGCGTGCGGCGCCAAGCAGGGCCGCCTTACCCGGTGACCACCATCA
TCGCTCCGCCGGGCCACACAGGCGTCGCCTGCTCTTGCCACCAGTGCCTCAGTGGCAGCAGAACTGGCCCCGTGT
CAGGCCGCTACCGCCACTCCATGACCAACCTCCCTGCATACCCCGTCCCCCAGCACCCCCCACACAGGACCGCTT
CTGTGTTTGGGACCCACCAGGCCTTTGCACCGTACAACAAACCCTCACTCTCCGGGGCCCGGTCTGCGCCCAGGC
TGAACACCACCAACGCCTGGGGCGCAGCTCCTCCTTCCCTGGGGAGCCAGCCCCTCTACCGCTCCAGCCTCTCCC
ACCTGGGACCGCAGCACCTGCCCCCAGGATCCTCCACCTCCGGTGCAGTCAGTGCCTCCCTCCCCAGCGGTCCCT
CAAGCAGCCCAGGGAGCGTCCCTGCCACTGTGCCCATGCAGATGCCAAAGCCCAGCAGAGTCCAGCAGGCGCTCG
CAGGAGCGACCCCGAAGCCAGAGCCAGAGCCAGAGCAGGTCATAAAAAACTACACGGAAGAGCTGAAAGTGCCCC
CAGATGAGGACTGCATCATCTGCATGGAGAAGCTGTCCACAGCGTCTGGATACAGCGATGTGACTGACAGCAAGG
CAATCGGGTCCCTAGCTGTGGGCCACCTCACCAAGTGCAGCCATGCCTTCCACCTGCTGTGCCTCCTGGCCATGT
ACTGCAACGGCAATAAGGATGGAAGTCTGCAGTGTCCCTCCTGCAAAACCATCTATGGAGAGAAGACGGGGACCC
AGCCCCAGGGAAAGATGGAGGTATTACGGTTCCAGATGTCGCTCCCCGGCCACGAGGACTGCGGGACCATCCTCA
TAGTTTACAGCATTCCCCATGGTATCCAGGGCCCTGAGCACCCCAATCCCGGAAAGCCGTTCACTGCCAGAGGGT
TTCCCCGCCAGTGCTACCTTCCAGACAACGCCCAGGGCCGCAAGCCTCCAGGGGCTTCCAGAACCCGGAGACACT
GGCTGACATTCCGGCCTCCCCACAGCTGCTGACCGATGGCCACTACATGACGCTGCCCCTGTCTCCGGACCAGCT
GCCCTGTGGCGACCCCATGGCGGGCAGCGGAGGCGCCCCCGTGCTGCGGGTGGGCCATGACCACGGCTGCCACCA
GCAGCCCTTCTGCAACGCGCCCCTCCCTGGCC

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FIGURE 3046

CCGGCGGCTGCGGCGGCTGGAGCAGGCGAGCGGCGGCGGCCGATAGCGAGTGTCAGGGCCGGCCGGGGCGGCGCT
TCTCGGCCTGTCGCTGGTCGGCCTCCTACTGTACCTCGTGCCTGCTGCGGCTGCGCTGGCCTGGCTGGCCGTGGG
GACTACCGCGGCCTGGTGGGGACTGAGCCGCGAGCCCCGAGGTTCGCGCCCCTTGTCCTCCTTCGTTCAGAAGGC
GCGACATCGGCGAACACTGTTCGCTTCGCCTCCGGCCAAGTCGACAGCCAACGGAAACCTCCTAGAGCCGCGGAC
CCTGCTCGAAGGACCTGACCCTGCCGAACTGCTCCTCATGGGCAGTTACCTGGGCAAGCCCGGGCCGCCGCAGCC
CGCCCCCGCTCCGGAGGGCCAGGACCTGCGGAATAGGCCTGGCCGCCGCCCGCCCGCCCGGCGCCGCGCTCCACA
CCGCCCTCCCCGCCGACCCATCGCGTTCACCACTTTTACCCCTCTCTCCCCACTCCTCTTCTCCGACCCTCCGGG
AGGCCTTCCCCACGGGATCGTGGGACTTTACCAGATCGGTTTGTAATAACACCTCGAAGACGCTATCCGATCCAT
CAGGCCCAGTATTCCTGTCCGGGGGTACTTCCCACAGTGTGCTGGAATGGTTATCACAAGAAGGCTGTGCTGTCC
CCTCGCAACTCCAGGATGGTGTGTAGCCCAGTGACTCTGAGGATCGCCCCTCCTGACAGAAGATTTTCGCGTTCT
GCGATACCAGAGCAGATAATCAGCTCAACACTGTCCTCACCATCAAGTAATGCCCCAGACCCATGTGCAAAGGAG
ACTGTACTGAGTGCCCTCAAAGAGAAGAAGAAGAAAAGGACAGTGGAGGAAGAAGACCAAATATTCCTTGATGGC
CAGGAAAATAAAAGAAGCTGTCTTGTCGACGGTCTCACTGATGCCTCTTCTGCATTCAAAGTTCCTCGACCCGGG
CCAGATACACTCCAGTTCACAGTGGATGTCTTCCACTTTGCTAATGACTCCAGAAACATGATATACATCACCTGC
CACCTGAAGGTCACCCTAGCTGAGCAGGACCCAGATGAACTCAACAAGGCCTGTTCCTTCAGCAAGCCTTCCAAC
AGCTGGTTCCCAGTGGAAGGCCTGGCTGACATCTGTCAATGCTGTAACAAAGGTGACTGTGGCACTCCAAGCCAT
TCCAGGAGGCAGCCTCGTGTCGTGAGCCAGTGGTCCACGTCTGCTTCCCTGTAACCGCAGGCATGTGACAGAAGA
AGCAGATGTCACCGTGGGGCCACTGATCTTCCTGGACAGGAGGGGTGACCATGAAGTAGAGCAGTGGGCTTTGCC
TTCTGACACCTCAGTGGTGCTGCTGGGCGTAGGCCTGGCTGTGGTGGTGTCCCTGACTCTGACTGCTGTTATCCT
GGTTCTCACCAGGAGGTGTCGCACTGCCTCCCACCCTGTGTCTGCTTCCGAATAAAAGAAGAAAGCAA

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FIGURE 3047

ATGGGCACCGAATCACCCCTCTCTGGCCTCTCCAAGGCTCTCTGCACCCACTCCCCGACCTGGCCCCTGCTGACC
GGCCACCAGGCCCAGGGAGCTCTTCCCCACATCCCGAGCTCCACCTCCCGAGACCTTCTCCTTGCAGTCACTCCA
GCCCACCCTCTTCCCTTGCGAACACTCCACGTCCTCCAGGCCCAGCTTGCATCGCTCAGGATGACCCATCACACG
CCCTCTGCACCCTCCACAGCACCCACCAGAACCCTAGTAACCGCGTCCACGTGTGGCTGTGACCACAGTCCTTCT
GCTCCTCCCCAGGTGGCAGCAACCCCAAGCCTGCTTCATTCACAGCTGCATCACCGGGACCCAGCAGGGGCATGC
CACGTGTCTCAAGGAGGAACGGCCACAAGGGCAGCCCTGAGTACACAGCATGAGAACACAGGTGAGTCAGGCCTG
CAACAACTCCGAACACAGGAATTGGCAGCTCTGGCACTTACGCAAACACAACCGCACTCCCTGGTTTCAGTGGCC
TTCTCCCCACCAAAACAGAAACTCCCTGAGGGCAGAGCTGCGGCTGCAGTTCTTCAGGTGCCCAATATCCCAGAG
GCTCTGAAACACCAAAGGAGGGTCTCTCGTCAGGTCTTCGCCGCAAATCTCTCTCCAGAGGATCGTGGCTGA

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FIGURE 3048A

ATGTCTGTCCTGTTCACAGATCTGCCGGAGGCGCTGGGCAATGACCCCGGGACTCCAGGCCAGAGGGGTCTGAAG
CTGTTTGGGAAAGCAGCGGGACTCCTTGGGAAGATGGCCATGGCCCCAAGCCCTTCCCTGGTGCAGGATGGGCTG
GGCACCTGGCACCCCTACAGTGCCACCATCTGCAGCTTCATCGAGCAGCAGTTTGTCCAGCAGAAGGGCCAACGT
TTTGGGCTTGGGAGCCTGGCCCACAGCATCCCCTTGGGCCAGGCAGACCCCTCGCTGGCCCGTTACATTATTGAC
CTCCCCAGCTGGACCCAGTTCCGCCAGGACACCGGCACCATGCGGACTGTGCGGAGACACCTGTTCCCCCAGCAC
TCAGCCCCTGGCCGAGGTGTCGTCTGGGAGTGGCTGAGCGACGATGGCTCCTGGACCGCCTATGAAGCCGGCGTC
TGTGACGATCTGGAGCAGCAGGTGGCCAGGGGCAACCAGCTCGTGGACTTGGCCCCCCTGGGGTACAACTACACT
GTCAACTACACCACCCACACGCAGACCAACAAGACTTCCAGCTTCTGCTGCAGCGTGCGGCGCCAAGCAGGGCCG
CCTTACCCAGTGACCACCATCATCGCTCCGCCGGGCCACACAGGCGTCGCCTGCTCTTGCCACCAGTGCCTCAGT
GGCAGCAGAACTGGCCCTGTATCAGGCCGCTACCGCCACTCCATGACCAACCTCCCTGCATACCCCGCCCCCCAG
CACCCCCCCCACAGGACCGCTTCTGTGTTTGGGACCCACCAGGCCTTTGCACCATACAACAAACCCTCACTCTCC
GGGGCCCGGTCTGCGCCCAGGCTGAACACCACGAACGCCTGGGACGCAGCTCCTCCTTCCCTGGGGAGCCAGCCC
CTCTACCGCTCCAGCCTCTCCCACCTGGGACCGCAGCACCTGCCCCCAGGATCCTCCACCTCCGGTGCAGTCAGA
AAACTCGGAGTCCTCATGTCTCACGTTTCCCACTCTGTCTGGGATCTCCTGGAGATGGTCACAGACAGGAAAGCC
AGGGAGGGCCTAATAGGTGGACCAGGAGTTGGGGAGAGGAGGAGGGTGCCTGAGGCCATGACTATAGGGACTTCT
CAGAGAAGGACACTTCAGGAGGCAGTTGGTGCCCCCATCTGGGAACGTTCTGCAGGTCCGAGCCCTCTGAGGACG
GGGCCCCTATCTTGGGAACCTCTGGATCCTTGTACGGTTCAGTTCCTAGAGGTCACAGCAGGGACACACACCGGG
GAGGAACTGCGATTATATGGGGGAAGTGGTGACATTTTTAGAGCTTTCTACAGAACATTCTCCTGGTTCCTGCTC
TCCATTCACAGGTCCTTGGAAGCAAGGACTTCTTGTTCGTTCTTTAGGAACGGAAGCAAACGTTCTCGTTCAGAT
ATGTGCCTCTCCCTGGTGAAGGAAGACCTCACTTCCTGGGATTTTTCTGTGGGATGGAGCAGCCAGGGACCCCAT
CTCTGTGCCTCCCTCCCCAGCGGTCCCTCAAGCAGCCCAGGGAGCGTCCCTGCCACTGTGCCCATGCAGATGCCA
AAGCCCAGCAGAGTCCAGCAGGCGCTCGCAGAGACCGTGGGCGGGACTGAAGAGAAAATGAAGGAGCGGCCAGAG
AGGGAGGACCGGGGAGCTGGCACTATGGAAAGTGGGGTAGGCCGAGGGTGTGGCAGGAACGGGTTCGTCCAGCAG
GACACGCTGTGTCCCAGGAAGCGCTGGGTCATCAGGGAGCACGAAGGAAGCAGTGTCAGAGGAGAGTCCCCCAGG
GCAAGTGTGGGGTTCCCTGCAGGCATCCGGCAGTGTCCCCAGGGAGACCTGTGCGTCCCCGTGGCCATTGATGCC
CCAGAGTTCAGCTCCTCTCCTCCAGTCACAGCTGGCATGAGGGGGCTTGTTCTTGAGGACTTTGTGATTTTTGTA
AGCAGCAAGTTGTGGGTGAGAGGCGGCGCCCGGCTCAGGATGCGGGGACAACCGTCCCTTCCGCCAGGGCCAGCA
CGTGTCTCGGGAAAGGCCCCCAGACAGCGGCCCAGGTCTGCTGCCCAGGTCCTCTCGGAGCCTCCGCTTAGCAGA
GGGGCTTGGCGAGGTCTAGGAAATACTCGAAGCGCCTGGCATGCGGCAAGGGTGGCTTCCGATCGTGTCCGACCT
CCAGCCCACAGGCGAGGAGAGTCGCTGGACTTAGGAGCTAGTCTGCATGTGACAGACCTTCCCAGTCAGTGGCAG
GCGTTTCCCGGGACAGTGTCTGTGTGGCGGTCGGCGTGTGTGCAGCTGCCTGTACATGCTGGACCCCAGACTCCC
TTGTCCTTGCGATGTTCATGCCAGGGAGCGACCCCGAAGCCAGAGCCAGAGCCAGAGCAGGTCATAAAAAACTAC
ACGGAAGAGCTGAAAGTGCCCCCAGATGAGCTGCCGTCTGCACAGCCAGCACGCAGCTTGGATCATGGGAGCACT
CCCTGCCTGGAACCCCCAGCAGGACCCCCAACTCACACACAACCCCAAGCCCCTGAGTGTGGCAGCCAGACCCCC
GAGGGCGCGCCTCTCCCTGATCCTGTCTCATCTCCTGCTCCCAGCCCACCCCCTGCCAGCTTTAGTGCCCATGCG
CTGGCTCCTCGTTCAGAACGTCCTCCTCCCTCTTCCGGGTGCCCACTCTGTGCTTGTCCATCTGGCAATTCCTGT
CTCCCTTACCCCACTCCGAGGGCCTCCCCCAGGATCCTGCCCTGTCCGTCCTTCCCATTTGGTGGCTTCTGCTGT
CATGTCGGGCCTGTGCTGCTGGACTGCATCATCTGCATGGAGAAGCTGTCCGCAGCGTCTGGATACAGCGATGTG
ACTGACAGCAAGGCAATCGGGCCCCTGGCTGTGGGCTGCCTCACCAAGTGCAGCCACGCCTTCCACCTGCTGTGC
CTCCTGGCCATGTACTGCAACGGCAATAAGCCAAGGCCCAGCTCCGCAGATCAGACGCTGCAAGGCTGTCTATCC
GACTGCAAATGCGATTCACCCGTGGAGATTTCTGCTCAGGATCCAAGTTTTCCCACTCGCCACCTGTCTCCTGAT
AGCATGTCCCTTAACGAAAATGGCATAAGTTGCTGGTGCAAAACAAAGCTTTCCAGGGAAGCTGTTGGAAGCCAG
TTTCCGGGCAGGAGGCTGCCAGCAACTCCCTGGGATGGTGGCCAGCCCATTCCCGGGGCCCTTTACCATCTGATG
GTGGAGGTGACGGTCTTGGGTGTTCTCAGACTGCCAGCTCAGTGGGTTGCGTCTGCCTCTCTCAGGATGGAAGTC
TGCAGTGTCCCTCCTGCAAAACCATCTATGAGAGAAGACGGGGACCCAGCCCCAGGGAAAGATGGAGCTCAGAGG
GAAATTCAGGAACATTCGGGGTTGGCATCTCGGAGCGGGGGAGGAGCTGGAGCTGTGCAGGGGCCTGTCCCTGTG
CGGGCTCTCGGAGCACCCTATCCTGGTGTCTGTTCCTCCCGCAGGGCCCTGAGCACCCCAATCCCGGAAAGCCGT
TCACTGCCAGAGGGTTTCCCCGCCAGTGCTACCTTCCAGACAACGCCCAGGGCCGCAAGCCAGACCCAAGGGGCT

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FIGURE 3048B

GGGGGCCCTGCTGGAGTGATTGGACCCTGGGCGCCCACCCCCCTCCGATTGGGAGAGGCAGCCCCAGGGACCCCC
ACGCCTGTCTCCGTGGCTCACCTTTTGTCCCCCGTGGCCACAGAGCTGGTGCCCTACACACCACAGATAACAGCT
TGGGACCTGGAAGGGAAGGTCACAGCCACCACCTTCTCCCTGGAGCAGCCGCGCTGTGTCTTCGATGGGCTTGCC
AGCGCCAGCGATACCGTCTGGCTCGTGGTGGCCTTCAGCAATGCCTCCAGGGGCTTCCAGAACCCGGAGACACTG
GCTGACATTCCGGCCTCCCCACAGCTGCTGACCGATGGCCACTACATGACGCTGCCCGTGTCTCCGGACCAGCTG
CCCTGTGACGACCCCATGGCGGGCAGCGGAGGCGCCCCCGTGCTGCGGGTGGGCCATGACCACGGCTGCCACCAG
CAGCCCTTCTGCAACGCGCCCCTCCCTGGCCCTGGACCCTATCGGCCTTGCAGAGCTCCCAGCCCTGCAAAGAGA
CAAACCGAGCCCCTCTGCGGGGCTCCTGGTGCCCTGGGTCCTCAGGCTGCTGCCACCTTCACCTGCTCTTTTGGC
TTG**TGA**

FIGURE 3049

AGTACAGAACCTGCTAAGGCCATCAAACCTATTGATCGGAAGTCAGTCCATCAGATTTGCTCTGGGCCAGTGGTA
CTGAGTCTAAGCACTGCAGTGAAGGAGTTAGTAGAAAACAGTCTGGATGCTGGTGCCACTAATATTGATCTAAAG
CTTAAGGACTATGGAATGGATCTCATTGAAGTTTCAGGCAATGGATGTGGGGTAGAAGAAGAAAACTTCGAAGGC
TTAACTCTGAAACATCACACATCTAAGATTCAAGAGTTTGCCGACCTAACTCGGGTTGAAACTTTTGGCTTTCGG
GGGAAAGCTCTGAGCTCACTTTGTGCACTGAGTGATGTCACCATTTCTACCTGCCACGTATCGGCGAAGGTTGGG
ACTCGACTGGTGTTTGATCACGATGGGAAAATCATCCAGAAAACCCCCTACCCCCACCCCAGAGGGACCACAGTC
AGCGTGAAGCAGTTATTTTCTACGCTACCTGTGCGCCATAAGGAATTTCAAAGGAATATTAAGAAGAAACGTGCC
TGCTTCCCCTTCGCCTTCTGCCGTGATTGTCAGCTTCTTGAGGGCTCCCCAGCCATGCTTCCTGTACAGCCTGCA
AAACTGACTCCTAGAAGTACCCCACCCCACCCCTGCTCCTTGGAGGACAACGTGATCACTGTATTCAGCTCCATC
AAGAATGGTCCAGGTTCTTCTAGATGATCTGCACAAATGGTTCCTCTCCTCCTTCCTGATGTCTGCCATTAGCAT
TGGAATAAAGTTCCTGCTGAAAATCCACATCTCCCCTGGGTCCGGTGTTCTGGAAGTGAGAGAGACAATGTCACA
CTTCAAGGAGGCAGCTCTCTAGACAGGAAGGTTATTCACGTCCCATGTCAAGTCTAGCTAGAGTTCAGAGCAATT
GAGAAGTGCAATTTTATCTCCTGCCTTTCATTCTATACCCTGCTTCTGAACCATCGTGTTCAACTGTGAAACTCA
CACTTTGGTGACCCTGACTCCAAAACTTAATACACCCAAGGTCAGCCCCAGTGATCTGCTTCATAGCCAGGACTT
TGGGTGGGTCTTCCCAGGGAGTAGGGCACCCTCAGAGAATGTGGCTTTGGACTTCATCACAGCTGGGGCCTTTTG
TGTCACTTCAGATCTAAACTTGTAACCGTGCTAGATCTGCTTCTAACGTGACAACATCACGAACCACGAGTCCAG
AAGCCTAATCCATAATCCTCCCTCCTCATGACGAAGTCTCATGCTCTGTGCTCAACATGGTTAGCTGCACAAGAT
GTAAACCAAAGCTTCACTGAACCCTCGACCCAAATCGGTAACTCAAGTGCATCAATCATAATGAACCTCCCCGAA
CTCAGTATTTATGATTATTTTTGAGGCAGGGTCTCACTCTGTCGCCCGGGCTGGAGTGCAGTGGCAGGATCAGGG
CTCCCTGCAGCCCCGACCTCCCAGGCTCCAGCGATCCTCCCGCCTCAGCCTCCTGAGTAGTTGGGAGTAGAGATG
CCTCCCACATCGCCTGGCTAATTTTTGTATTTTTGTGGAGAGGGGATCTCGCCACGTTGCCCAGGCTTGAAGCCA
GATCAAGCAATTGGGTTCCTTGGATTTCCGAAATAGACCCCAATATTCTGCCTTTACCCCGGAGGATGCAGATGT
ACCTTCTCTCAGGCCGATGACCTCAGGCCTCCACGGTCCCTGGAGCTCTAGGAAAGGTGGGCGCGATCTCGCGCC
CACACCCAGTGCTCTGGGTCATAAGCCTGGATCTGGAAAAACAAACGCGCTTTGAGAAGACGGGGACTCCCCAGG
ATACCCCTCTCTCCCCTCGTCCAGCCTCCAGCCCACCCGATTCCTCCCCACATCCTCCACGTCCCCAGGCCCCAC
CCACCTCTTCCAACTCCTCCAGGGAAACCCAAGCCCTGCAGCGCATGGAACAAAAGAAGTGGAACCGATACTTCC
GGAACAAGGCTATCTGAGAGCAGTTCTTCCTGGCCCTCGGGTTCATGTAACGGCATAACTGGAACCAAAGCTCAC
TGAGCAAGGGTATATGAGAGCGGGTCTCCTCGTACAGGAAGTAGAAGATGTTTTGTTTGGGGGCCTCGTCGTCCT
CCTCCATGTCATTGGCCAGATAGCTGAGGACAGAAATCAGGTTGCTGCTCAGGGGCACCACCAGGAGAGACCTCC
GGCTGAGGTCAGCTTCTCAGAGAGGAAGGTAAGGGACCGTCCCTAGCTCAGGACTGGCACCCACCCTGCAGAGAG
CCACGCCTTCCTCAGGAGGGCTCTGCTGGACAGAGACCTGATCAAGGGCGTCTCCCACTCCTTCAGGATGGAGAC
AAAAACCCAACTGGTGACCAAGAGTGGTGGCTTATGCCTGGAATCCCAGCACACTGGGAGGCCGAAGCAGGAGGA
TCACTTGAGGCCAGGAGTTTGAGACAGGCCTGGGCAACATAGCAAGACCCTCGTCTCTATTAAAAATATAAAAAA
TACGCCAGACGTGGCTCATGCCTGTAATCCCAGCGCTTTGGAAGGCTGAAGCAGGTGGATTGCTTGAGACCAGGA
GTTTGAGACCAGCCTGGTCAACACAGAGAAACCCCATCTATACTAAAAATACAAAAATCAGCCTGGTGCGGTGGC
ACACCCATTAGTCCTAGCTACTCAGGAGGCTGAAGCATAAGAATTGTGTGAACCCAGGAGGCGGAGGTTGCAGTG
AGCCAAGATTGGGCCCCTCCATTCCAGCCTGAGAGACACAGCAACACTCTTGTCTTGATAAATAAATAAATAAAT
AAATAAATAAATAAA

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FIGURE 3050

ACATGATAATCTCACTCTTGTAAGGTTTCATCGTTTCTGCTTACCCTACTTTTCTTTCCCATCCTGATCCCTCTC
CCACCAGACTGGACTCTGAAACGGGCATGTACAGAGAAGAGGAGACCCCAACACGCTTCAAGCTTTGAGTGGAGA
GGACACAGCCTCTGCTGGGACAGGGAACAGAGGGATGCGGAGACCCTGAAGATGCTTTTGGACAGTGGTCTGAGG
TTGGGACAGTGGCAGGAGATACCATTCACCCAGGATCTCCAGGACAAGAGATCAGCCTGGCAGTTACATGTGTTT
TTTTTCAAACTGGTTGCCAGGTTGGCATGAGCGATGACATCAGAGATTCCGACCTTCCTGATTGGAGGGACCGGA
CTCTGTCGGCACCTGGGAGTTCAGTTGGACAACAGTAACTTCTCAGAGCTGTTCTCCACTCCTGACTTCTCCCAG
CCTCGAGAATTGATAACACACTCTTCTGGATCCCAGCAGTGTCCAGAAGAAGACCAAGGACAGAACAGAGACTAG
GTTTGGTGAGATGGGACAGATTTTGGGAAAGATCATGATGAGCCATCAACCGCAGCCCCAGGAAGAGCGGAGCCC
CCAGCGGAGCACCTCAGGGTACCCCCTCCAGGAGGTGGTGGATGATGAAGTGTCGGGACCATCAGGTGAGGGGAC
TGGAGGAAGAAGAGGTGGCATAGGATTGACTAAGATGAAGGAAGGGGGCCAGGCGTGGTGGCTCACCCCTGTAAC
CCCAACACTTTGGGAGGCTGAGGCGGGCAGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTG
AAACCCCATCTCTACTAAAAGTACAAAAATTAGCCAGGCGGTAGTGGTGTGTGCCTATAATCCCAGCTACTTGGG
AGGCTAAGACAGGAGAATCACTTGAGCCTGGGAGGAAGAGGTTGCAGTGAGCCGAGATCGTGCTACTGCACTCCA
GTCTGGGTGACAGAGTGACATGCTATCTCAAAAAAAAAAAAAAAAAAAAAGAAGAAACAAAAGAAGGGTCAGAGG
TCAGGAAGGAGAACCTGGGGAGGGTGTGTGGGAAGAATGGAGAAATTCAGGCTGGGTGCAGTGGCTCACACTTGT
AATCCCAGCACTTTGGGAAGCCAAGGCAGGCAGATCACTTGAGGCCAGGAGTTTGAGACCAGCCTGGCCAACATG
GTGAAACCCTGTCTCTATTAAAAGTACAAAATTGAGCTGGGCATTATGGCAGGCACCTGTAATCCCAGCTACCTG
AGAGGCTGAGGCAGGAGAATAAATGGAATCCGGGAGATGGATGTTGCAGTGAGCTGAGATTGCACCACTACACTC
CAGCCTGGGTGACAAAGCAAGATTCTGTCTCGAAAC

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FIGURE 3051

GCTCCGGGCCAGCCGCGGTCCAGAGCGCGCGAGGTTCGGGGAGCTCGGCCAGGCTGCTGGTACCTGCGTCCGCCC
GGCGAGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATGAAGATCTTCTT
GCCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTGATGTGCTTCTCCTGCTTGAACCAGAA
GAGCAATCTGTACTGCCTGAAGCCGACCATCTGCTCCGACCAGGACAACTACTGCGTGACTGTGTCTGCTAGTGC
CGGCATTGGGAATCTCGTGACATTTGGCCACAGCCTGAGCAAGACCTGTTCCCCGGCCTGCCCCATCCCAGAAGG
CGTCAATGTTGGTGTGGCTTCCATGGGCATCAGCTGCTGCCAGAGCTTTCTGTGCAATTTCAGTGCGGCCGATGG
CGGGCTGCGGGCAAGCGTCACCCTGCTGGGTGCCGGGCTGCTGCTGAGCCTGCTGCCGGCCCTGCTGCGGTTTGG
CCCCTGACCGCCCAGACCCTGTCCCCCGATCCCCCAGCTCAGGAAGGAAAGCCCAGCCCTTTCTGGATCCCACAG
TGTATGGGAGCCCCTGACTCCTCACGTGCCTGATCTGTGCCCTTGGTCCCAGGTCAGGCCCACCCCCTGCACCTC
CACCTGCCCCAGCCCCTGCCTCTGCCCCAAGTGGGGCCAGCTGCCCTCACTTCTGGGGTGGATGATGTGACCTTC
CTTGGGGGACCGCGGAAGGGACGAGGGTTCCCTGGAGTCTTACGGTCCAACATCAGGACCAAGTCCCATGGACAT
GCTGACAGGGTCCCCAGGGAGACCGTGTCAGTAGGGATGTGTGCCTGGCTGTGTACGTGGGTGTGCAGTGCACGT
GAGAGCACGTGGCGGCTTCTGGGGGCCATGTTTGGGGAGGGAGGTGTGCCAGCAGCCTGGAGAGCCTCAGTCCCT
GTAGCCCCCTGCCCTGGCACAGCTGCATGCACTTCAAGGGCAGCCTTTGGGGGTTGGGGTTTCTGCCACTTCCGG
GTCTAGGCCCTGCCCCAAATCCAGCCAGTCCTGCCCCAGCCCACCCCCACATTGGAGCCCTCCTGCTGCTTTGGT
GCCTCAAATAAATACAGATGTCCCC

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FIGURE 3052

TGTTGAGAGGCTGGCCTGCGGTGATGTGGCCAAAGAGGAAGAGCTGGGCTGGGGTGAGTGTTGGTCACATGGTTG
AAACTAGGTGGGGAGGGGAGTGGTCCAGGGGAGAGTCCAGGCCCAGCTCTGCTGGGACTTGCCATGGGGGTCACG
ACTCATCTGCAGGGAAGGTCTGGGCTTTATCTCTGAGCACCTCTGTGTGCTGCTCACCCTGAAGTGGGGGTGGGC
CTGTGCCTGGCCTGTCCCCTCATCCTGGGAGCTCCCAATGCCCATCTGCAAGGCTGTGGACCCCTCAGGAGTGGC
CTGGAGCCTGGCTCCCATTGCCAC**ATG**GTGGCTGTGTGTGTGGAGAGGGTTGATAGTGGAGTGGTCAGGCCCAGG
CTGCCCTGGGGGATGAAGTGCCATCCTCTGGGTGCCCTGGAGAAAGAAGAGAACTCAGTGAGCCCTGTCTGGTAC
TTTCCTGGAGGAGGGCTCCCATGCTGGCCCTCCACCCCTCTGTCCCCTGTCACCCTGAGGCCTCTGGATTTCCTC
TCTGCCCTTCCCAACCTGCCAACTTCACGGGTTTCTGGCTGGGTTCTGGGGATGGCCCCTAGGGGAGACGGGCCA
GGCACAAGCGGGGCTGTGTCAAGGTGGGTATGCAGGGGTAGCACAAGTGTGCAGAGCCTGGGGAGGCATGGGCAA
AGCATGGCAGGCGGCGGGGCAGGGGATCTTGGAAGGTCACGGGCTGGGGAGCAGTGTGGGCAGCGGCCCAGAGGT
GGGAAGGCCGTAGCT**TAG**CTGGGTGTCCCCTTTCTGTCCTCTGCAGGTGGAGCCCCCTGAGCTGCCCGCTGATCT
GCAGCACTGGATCTCCTACAACGAGGCCAGCAGCCAGCTGCTCCGCATGGAGAGTGGGCTCAGTGATGTCACCAA
GGACCAGTGACCGCCACCTTCACACCGTCTGCCCTGGCCACCATCCTGGGCCTGGGGGCTGCCCACAGATGGGCA
GTCTCAGCCATACTCTGTTCCAGCTGGAGTAGCCTCCTGACCAGCCTGGCCCACCCTGCTCCACCCACTGGGCCC
CCCCAGTTATTGATACCCCTCTGTGCTGGGCTCCACGCTAGGCAGAAGGAGGAGTGGCATTGGCATCCTGACCCA
GCTCTGCCCTCAAGGTGGGGATGGATGGGCAAAGGAGAGTCCTGCCTGGCCCTACGATGAGGCCACTCATGTGGG
CCTAGGTAGGGGAGGATGGTGCCTGGAGCAGAGGGACCCACAAGTGCCTCCCGAGCCTAGATCCTGGCTCGGACC
ACTGCAAGGGCCGAGGCAGGGCCAGACCAGAGCATCCTGGGTACAGGCCTGGGCTCTCCAGGGCCTGGGCCTGAT
TCAGGTGCAGTGGGCACTCCTGAAGGGTCAGAGCGGCATCTGCCAGGCAGCCCCTCTGGCTTCCGCTGAGGTGGT
TGCAGGCCTGGGGCAGAGCCTGGGTGGTCAGAGGCCGGGGCTAGAGGCAGATGGAAGGGAGGCATTTGCTGACAG
AGGACGGGGCACCCGGGCTCCCCACTGCAGTCGGCCTTGCCTCCTCCTCCTCCTCTACCTCCAGTCAGGCTGGAC
GGGAGGGTAGCCTTGTGGCTGAGAGGGGTCAGACTAGGTGGCACAGGGGCTCCTGGAAAGACAGCAGGCTTCCTG
CTGGGCGTTCCCTTGTTGGAGGGAATAGAGTGGGGGTGGGACTCTGCAGGGGTGTCCTTGTCCACTCGCACCCCT
CGCCGCCCACCAGGGCCATGCTCTGTGACTTGGGCTGATCCCCACCCTTTCTGGGCCTACAGCACCACAGGCCGC
TGTACCCCCTTAGAGCTGCCCCTCTCTGGCCTGGCCGGCAGGCGTCTTCTTAACTCCTTTGTCCTCTATATTCAG
CATGTTCCTTGTCAGCTGCTGGGCCGGCCCTGCCTTGCGCTAGCAGAGCCTCTCCTGGCAGCTTCTCAGGTCTCC
CTAATGGAGACACCAGCCTGAGGCTCCAGCTGATGCCCTCAGCTCCCAGAGAGGGGGTGCCCCATCTAGCTGGGT
GCAGGGGTCACTGCTTGTCAGCTCAGGGCCCTGTGCCCGCTTGCCTGTTCCCCTACATCTGTGCCTGCACATCCA
GAACTGCCTCCTTGCCGCTGCCTCCAGGAAGCCCACCTTGAGCCAGAGTCAAGGGCTGCAGCACTGCCCGATAGA
ACACGCCCGCCCTCACTGCTGTTCTTGCCTTACAGCCACCATGGGAAAGCTGCAACCTTTCTGTTTTATTTAAAG
AAAGCCCAACATTAAAGGGTTTTCATTGC

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FIGURE 3053

GGCCAACTGCGCCTGGGGAGCAGCGGGATCCGGGGATGGGGCTGCCCTGTGTGCTCACCTGCCTGACCTGCCCCA
GGCCTCCTCCTGTCCCACCCTGCCTAATGCTCTAGAGTCCCCCTGGGCTGGCCTCAGGATTGCAAGCAGTGCGAG
GGCCTGGTCTCGGCCCTGGTCTCAGCCCTATCCAGATGTCCGAGGCAGATGGACCACCCGCTGAGCGTCAGAAAT
GGGTTGCCTCCAGGGACTCCAGATTTTCCTGTTTGCTCTTGGCCTTCTGCCCACCCACCCCACTGCCATGGGCCC
AAAGCAGCCGGGTTCCCTGGAGATCCTGTCTTCCACCTAGTGCAGGGCATGAGGCCGGGGCCAGGACAGCCGGAC
CAGGCCCTGGGGCTTCTGGGAGCTGACTCACCTTGCAGGGAGTCCCACCACCACCTTCTGGGGCCCCACACGGTC
CCATGCTGGAACACACATCCCTGTGTGTAATTTTTTTTATTTCATGCAGCATTAATTAAAAAAATAAAGATAGCA
TGTCACTTGCAAA

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FIGURE 3054

CTTTCCCGGAGGCTGGCAGATGCGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGCTGCTCGGGGAGGT
CCCCCGCCGCCCGGCCTCCCGGGGTGTCCCGGGCTCGCGCAGGACGCAGAAGGGCAGTGGAGCCAGGTGGGAGAA
GGAGAAGCACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCCGTACTTCGCACCCCCATACGAGCC
CCTTCCCGACGGAGTGCGTTTCTTCTATGAAGGAAGGCCTGTGAGATTGAGCGTGGCAGCGGAGGAGGTCGCCAC
TTTTTATGGGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCG
AAAGGAAATGGCGGTGGAAGAGAGGGAAGTCATCAAGAGCCTGGACAAGTGTGACTTCACGGAGATCCACAGATA
CTTTGTGGACAAGGCCGCAGCCCGGAAAGTCCTGAGCAGGGAGGAGAAGCAGAAGCTAAAAGAAGAGGCAGAAAA
ACTTCAGCAAGAGTTCGGCTACTGTATTTTAGATGGTCACCAAGAAAAAATAGGCAACTTCAAGATTGAGCCGCC
TGGCTTGTTCCGTGGCCGTGGCGACCATCCCAAGATGGGGATGCTGAAGAGAAGGATCACGCCAGAGGATGTGGT
TATCAACTGCAGCAGGGACTCGAAGATCCCCGAGCCGCCGGCGGGGCACCAGTGGAAGGAGGTGCGCTCCGATAA
CACCGTCACGTGGCTGGCAGCTTGGACCGAGAGCGTTCAGAACTCCATCAAGTACATCATGCTGAACCCTTGCTC
GAAGCTGAAGGGGGAGACAGCTTGGCAGAAGTTTGAAACAGCTCGACGCCTGCGGGGATTTGTGGACGAGATCCG
CTCCCAGTACCGGGCTGACTGGAAGTCTCGGGAAATGAAGACGAGACAGCGGGCGGTGGCCCTGTATTTCATCGA
TAAGCTGGCACTGAGAGCAGGAAATGAGAAGGAGGACGGTGAGGCGGCCGACACCGTGGGCTGCTGTTCCCTCCG
CGTGGAGCACGTCCAGCTGCACCCGGAGGCCGATGGCTGCCAACACGTGGTGGAATTTGACTTCCTGGGGAAGGA
CTGCATCCGCTACTACAACAGAGTGCCGGTGGAGAAGCCGGTGTACAAGAACTTACAGCTCTTTATGGAGAACAA
GGACCCCCGGGACGACCTCTTCGACAGGCTGACCACGACCAGCCTGAACAAGCACCTCCAGGAGCTGATGGACGG
GCTGACGGCCAAGGTGTTCCGGACCTACAACGCCTCCATCACTCTGCAGGAGCAGCTGCGGGCCCTGACGCGCGC
CGAGGACAGCATAGCAGCTAAGATCTTATCCTACAACCGAGCCAACCGAGTCGTGGCCATTCTCTGCAACCATCA
GCGAGCAACCCCCAGTACGTTCGAGAAGTCGATGCAGAATCTCCAGACGAAGATCCAGGCAAAGAAGGAGCAGGT
GGCTGAGGCCAGGGCAGAGCTGAGGAGGGCGAGGGCTGAGCACAAAGCCCAAGGGGATGGCAAGTCCAGGAGTGT
CCTGGAGAAGAAGAGGCGGCTCCTGGAGAAGCTGCAGGAGCAGCTGGCGCAGCTGAGTGTGCAGGCCACGGACAA
GGAGGAGAACAAGCAGGTGGCCCTGGGCACGTCCAAGCTCAACTACCTGGACCCCAGGATCAGCATTGCCTGGTG
CAAGCGGTTCAGGGTGCCAGTGGAGAAGATCTACAGCAAAACACAGCGGGAGAGGTTCGCCTGGGCTCTCGCCAT
GGCAGGAGAAGACTTTGAATTCTAACGACGAGCCGTGTTGAAACTTCTTTTGTATGTGTGTGTTTTTTTCACT
ATTAAAGCAGTACTGGGGAATTTTGTACAATAAAA

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FIGURE 3055

GGCCGGACACTTCCGTCCGGCGCGCGGCGTCCTCCTCCCGCTCGGAAGGTCCCAGGTGTGACACCTTCAGCAGGT
CTCAGGGAAGATGGCAGCCCTAGGGGACATTCAGGAGTCCCCTTCTGTCCCGTCCCCTGTCAGTCTCTCATCACC
GGGGACACCTGGAACCCAGCACCACGAGCCTCAGCTTCACCTCCATGGGCATCAACATGGCTCCCCTGGCTCCAG
CCCTAAGGTGCTCTCCCAGCCGTCCGACCTGGATCTCCAAGACGTAGAGGAAGTGGAGATCGGCAGAGACACCTT
CTGGCCCGACTCCGAGCCCAAGCCGGAGCAGGCTCCACGCTCTCCTGGCTCTCAGGCCCCTGACGAGGGGGCGGG
CGGGGCGCTGCGCAGCCTCCTGAGGAGCCTTCCCCGCAGGGCCCGGTGCAGCGCCGGCTTCGGGCCTGAATCCAG
CGCGGAGCGGCCGGCGGGCCAGCCGCCTGGGGCCGTCCCTTGCGCCCAGCCGCGGGGCGCCTGGCGCGTGACGCT
CGTGCAGCAAGCAGCGGCCGGGCCCGAGGGTGCGCCCGAGCGGGCTGCCGAGCTGGGAGTCAACTTCGGTCGGAG
CCGGCAGGGCAGCGCGCGGGGGGCCAAGCCGCACAGGTGCGAGGCCTGCGGCAAGAGTTTCAAGTATAACTCGCT
GCTCCTGAAGCACCAGCGCATCCACACGGGCGAGAAGCCCTACGCCTGCCACGAGTGCGGCAAGCGCTTCCGCGG
CTGGTCGGGCTTCATCCAGCACCACCGCATCCACACGGGCGAGAAGCCCTACGAGTGCGGCCAGTGCGGCCGCGC
CTTCAGCCACAGCTCGCACTTCACGCAGCACCTGCGCATCCACAACGGCGAGAAGCCCTACAAGTGCGGCGAGTG
CGGCCAGGCCTTCAGCCAGAGCTCCAACCTGGTGCGCCACCAGCGGCTGCACACGGGTGAGAAGCCCTACGCCTG
CAGCCAGTGCGGCAAGGCCTTCATCTGGAGCTCCGTGCTCATCGAGCACCAGCGCATCCACACTGGCGAGAAGCC
CTACGAGTGCTCCGACTGCGGCAAAGCCTTCCGCGGCCGCTCGCACTTCTTCCGGCACCTGCGGACCCACACGGG
CGAGAAGCCCTTCGCGTGTGGCGCCTGCGGCAAGGCCTTCGGCCAGAGCTCCCAGCTCATCCAGCACCAGCGGGT
GCACTACCGCGAGTAGCCGGGCGGGGGCTCGGGGCTCGGCCTCCTACCTGCCCCCAACCCACCCTCCACCCCGTC
CCCCACGGTGGGCACTGCCCAGCACCGCATGCCACGTGTCCGGAATAAATTCTTTTTGATTGTTGG

FIGURE 3056A

GCCCTGACCAGCAGACACCATCCTTCCAGCCTCTCTTGGCCACCCGGACCAGCGGGCACCACCCTCCCAGCCTCA
CGCGGCCACCCTGACCAGCAGGCACCATCCTTCCAGCCTTGCTCAGTCACCCTGACCCAGAGGGCTGCCCTGACC
AGCGGGCACCATCCTCCCAGCCCCACTCAGCTGCCCTGACCAGCGGGCACCATCCTCCCAGCCTCACTCGGCCAG
CCGAGCTCTGTAGGCCTCAGAGTGCAGAGAACCTCAAATGTTGTGACTTTGCTCTGCTGCAGGGACCTGCCATGG
AGTGTCCCTTGTGCGAGCATTTTGAGAGCTATGCCAGCATCCATCCCTGCAGGTCCCATCCCTGAGCCATTTCTC
AGGAGAGCAGGAAGGGAGCAGGGAGAGGGGTGCTCCCAGCCAGCCCCGGAACCAGAGGTCTGGGGACGCAGCCGA
CCAGCCCTCCTTGTCTGGGCCTCTGTTTCCTCTTCGACACAGGGAAGCAGGGAGGGGCCGATCAGCGACTTAGGC
CTGTTGGCTGTGGTGGGGTCCACCTGCGTTTCTGGGGAGCCCACGGACCCTGGGGTGTACCTGGGTTTCATTCCC
AGTGACCTCTCCTATTGGTCCCCATTTGGGGCGCTGAGATGTGATCGTTTCTTTCCTGAGAATGAGCTGAGGTAA
AAACATGCTGGGGAGGAAGATGGGCCCTGGGGGCAGCGAGCTGCGCCTCTGCACCGGGAGAAAGGCCGTGTCCCC
AGAGCTGAGGCGGTGGTGGGCAGGGCTCCTGAGAAGCCGGGGCAGGGCAGGGTGTCTCTGAGGTCAATGAGGAAC
AGCTGAGGTCCAGGGACGCAGGAAGGATGGGGTGAACTCCGGGATGGGGCCGGCAGGGAGCCTCACGCTTACAGA
GCCTGGTGTTGGCACTCTCCTGGCTTCCTCCGCAAACCTAGCCACGTGGTCAGGGAGCCCGGGCCTAGCAGACGG
CCCCCACCTTGACAGAATCCCCAGGGTCGTGCGTGGCGGTGGGGGCGACTTCACAGCCGAGACCGGGCCTAACGC
TGCTGTCTCGCAGTCACCCCTGCAGGCCGCTCAGGGCAGGGCTCTGGCCTGACGGGGGTTCCTGGACACGCCTCT
GAGCCGGCAGCCCCTACCCGCACCCGTGCACCTTCCACGCCCGTCTCCAGCAGCCCCTGCCCCCACCCGCACCCC
TGCACCTGCCACGCCTGTCTCCGGCAGCCCCTGCCCGCACCCGCACCCCTGCACCTGCCACGCCCGTCTCCGGCA
GCACCTGCCACGCCCGTCTCCGGCAGCACCTGCCACGCCCGTCTCCGGCAGCACCTGCCACGCCCGTCTCCGGCA
GCCCCTGCCCGCACCCGCACCCCTGCACCTGCCACGCCCGTCTCCGGCAGCCCCTGCCTGCACCCGCACCCCTCA
CGGCTGTCTCCGGCAGCCCCTGCCCGCGCCCGCACCTCTGCACCTCCCACGCCCCTCTCCGGCAGCCCCTGCCCA
CACCCGCACCCCTGCACCTCCCACGCCCGTCTTGCCCTGGGGCCCAGGTGCAGGTCTGTGAGGAGGGCAGCCCCG
TGCTCCCGTGGCCACCGCTCAGCCAAATGGATTCAGCGAGGGTTTTTAGTGTTTGTGCCTGTGTCCCCGTGTGCC
TGTTTCCTGGTGAGGCTGGATGCCTGGCATGTCTGAACACTCACATTCCCCAGGCATGCATGTGCAGCCGCCGCC
GCCACCCATGTACTGTGGCGCTGACCCCTCCTGTAACAGCTGTGGTCTTGGCCTCTCGTGTTGGTGGCAGATGTC
CCATTTCCCAGTTACTTTCTGTTGTCCAAAAGTTTAACTGTCCTGCCAGCCAAAGCTGCTGAGCATTACTCTGAT
AGACCATCAGTCCTTGGTAAGTGTCCTGTGCATCTGGGATAAGCATCCGTTTGTTTTCAGCTGCGCTTTCTGTGA
CTTGCTCTGCGTGAGTCCTCGGTCCACGTGGGCCGTTGCGCTGGTTCCCAGCCTGCCCGACACACTCACTGCGAC
GCCTCCCTTGCCTACTGCTTGCTGGCTTCTGTGTTCTCTGCAGTAAACATTGATTTCTGACTCGAGTGCTGTCTT
CATTGAGCTCTCTGCACTCTGGGGATGCAGTCAGCGACCCCACGAAGGCTACCGGCTTCCTCCCAGGGAACAGTG
CAGGTGCTGCTTCCCAGGACCACAGGACCCTGGCTGGTCGCTGCCTGTGATGGGTCTCCACAAGACCACTCCCCA
TTAGCCAGACTCACAGGAGACTGACACATAAATGAGAAAGTTGTTCACTAACTCACAATGGGAGCAACCCTTTGC
AGTGCGGAAATGCTCTCAGCCTTTCTGGCCCCGGATACCTGGGAAGCTAAGGGTTCATTAGGTGGCCTAGTGCCT
GCACTCAGGATGCCCCAGAGGAGGCCCCGGGGGTTCCTGAACGCCTTCTTCAGGCCCTGTCTTCAGCCCTTCTCCA
GGCCCTCTGAGTTCCAAACAGCACTCACTTTTGTCTGGTCCTCTGTTCCCCGGCTCGCACCTCCTTCGTCAGGGC
AGTTGCTCTCAACCAGGGGTACTTCTGCCCCTGGGGCCCACTCGGCA**ATG**TCCGGGACCGTGTTGGCGGTCACAG
CTGGGCGGGGGCACCACCGGAATCTGGTGTGCAGAGGCGGGGGTCCTGCCCAGATGCCAGAGGTGCTGCAGGTGA
GAGATACAGATTTAGACCCTGTGACGACAAAGAAAAGGACGGGAAAGGTGGCTCTCAAGGCCCCAGGGAACCGCC
CAGAGACGCCTGGGGTTCCAGAAGCTGGAAAGGCATGGAGCGGTGCGGGAACAAGCCTCTGCGGTGGCTGGAGAT
GTGGGGATGGAGACTGGTCATGCCTTCACACACTTAACCAGAACCCTCCCAGCTCTCCCTCCCCTGCAACCAAGC
CAGCAAGGCGACACGGTGGCTGGCGCTGGCGAGAGGCAAGTGTGCTTGACTGCCTTTCTCCACTCTTGAGGACAA
CACCCAGAGTGGCCCCGTCTTTGCCCCACCAGCCCAGGCCTAAAGCTTCCTCATCATCCGCATCCCGGCCTGGGA
CT**TAG**GCGGACTTCTGCCAGCTGTGTCACGTGCAGGGGACTGCAGCCACTGACCCCCTCTCCCTTCTGTCCTGCT
CTTCTCTACCCCACAGCCCCAGGCAGATCTTCAGTGCATGTCAGCTCTCCTCCCTCCCTCCCTGCAGACCCCTGT
GCCCCGCAGTGCCCTGAGAATGACGTCTGAGCCCCCAGTGGAGGTGTCAAGGCTGTTCGGTCTGTCCCCATCCCG
TTCTGTCCTCCCCTTGCTCACCACACTCCCCTGCCTGGTCTTCCAAACTCGAACCCCAGGCAACTCCTTCAGGCA
TCAGACCTCTGCCCCTGCGCCCCTCCTGCCTCTCTGTGATGGGCTGGCCCTTCCCTTCTGCTGCCTCCCCTCCCT
CCTTCCTGCTCCAACCCCTATCTCTCTCTGATGCTGCCCCTTAGAGAAGCCTTCTTGGACCTTAAGCCTGGCCAC
TCCTCTAAGCCCCTCATCTCCAGGTGTGGTCTAGGAAGTGCTCTCAGCCTCTCTACTCCAGTGGCTCGGGGTCTC

FIGURE 3056B

TGACCAGCCCTCCTGCCAGGGAAGCTTTGAAGGTTCCCACAGGGACCCCTAGAGACAAGGGCACTGCCCGTCCAG
ATGGCACCCTCACCCCAACCCCAGCAGCACTGGCTGGAGCAGGCCATGCCTGTGTGGGTATCTGAACAGGCACTG
GATTCCCCGATCTCAACAAAAGAAGCCCATGGAGGCCTTTTCTAATCCACAGTCCAAGAGGACAAATCAAGACAA
CAGGCTGGGGGGGCTGGCTGTGGGCCGACTCCCACGTCTTAGGACCAGGGGCTCTGGGGCTGTTTGGGCTGGAAC
CCCTCCTCCCAGCATAACAAACACTAGCTCATTATTTACAGTGAATACCCAACAAAACCCTGCTCGAGGTGAGGA
GCGGGGACCTGCTGCTCCAACAGACCAGACTGGCTGCTGGCTCCGAGCTCATTAAATCAGCAACCTTTGCACTCC

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FIGURE 3057

GATGGCGGCGGAGCAGGACCCCGAGGCGCGCGCGGGGCGGCCGCTGCTCACTGACCTCTACCAGGCCACCATGGC
GTTGGGCTATTGGCGCGCGGGCCGGGCGCGGGACGCCGCCGAGTTCGAGCTCTTCTTCCGCCGCTGCCCGTTCGG
CGGCGCCTTCGCCTTGGTAGCCGGCTTGCGCGACTGTGTGCGCTTCCTGCGCGCCTTCCGCCTGCGGGACGCCGA
CGTGCAGTTCCTGGCCTCGGTGCTGCCCCCAGACACGGATCCTGCGTTCTTCGAGCACCTTCGGGCCCTCGACTG
CTCCGAGGTGACGGTGCGAGCCCTGCCCGAGGCTCCCTCGCCTTCCCCGGAGTGCCGCTCCTGCAGGTGTCCGGG
CCGCTCCTGGTGGTGCAGCTGCTGGAGACACCGCTGCTCTGCCTGGTCAGCTACGCCAGCCTGGTGGCCACCAAC
GCAGCGCGCGTTCGCTTGATCGCAGGGCCAGAGAAGCGGCTGCTAGAGATGGGCCTGAGGCGGGCTCAGGGCCCG
ATGGGGCCTGACAGCCTCCACCTACAGCTACCTGGGCGGCTTCGACAGCAGCAGCAACGTGCTAGCGGGCCAGCT
GCGAGGTGTGCCGGTGGCCGGGACCCTGGCCCACTCCTTCGTCACTTCCTTTTCAGGCAGCGAGGTGCCCCCTGA
CCCG**ATG**TTGGCGCCAGCAGCTGGTGAGGGCCCTGGGGTGGACCTGGCGGCCAAAGCCCAGGTGTGGCTGGAGCA
GGTGTGTGCCCACCTGGGGCTGGGGGTGCAGGAGCCGCATCCAGGCGAGCGGGCAGCCTTTGTGGCCTATGCCTT
GGCTTTTCCCCGGGCCTTCCAGGGCCTCCTGGACACCTACAGCGTGTGGAGGAGTGGTCTCCCCAACTTCCTAGC
AGTCGCCCTGGCCCTGGGAGAGCTGGGCTACCGGGCAGTGGGCGTGAGGCTGGACAGTGGTGACCTGCTACAGCA
GGCTCAGGAGATCCGCAAGGTCTTCCGAGCTGCTGCAGCCCAGTTCCAGGTGCCCTGGCTGGAGTCAGTCCTCAT
CGTAGTCAGCAACAACATTGACGAGGAGGCGCTGGCCCGACTGGCCCAGGAGGGCAGTGAGGTGAATGTCATTGG
CATTGGCACCAGTGTGGTCACCTGCCCCCAACAGCCTTCCCTGGGTGGTGTCTATAAGCTGGTGGCCGTGGGGGG
CCAGCCACGAATGAAGCTGACCGAGGACCCCGAGAAGCAGACGTTGCCTGGGAGCAAGGCTGCTTTCCGGCTCCT
GGGCTCTGACGGGTCTCCACTCATGGACATGCTGCAGTTAGCAGAAGAGCCAGTGCCACAGGCTGGGCAGGAGCT
GAGGGTGTGGCCTCCAGGGGCCCAGGAGCCCTGCACCGTGAGGCCAGCCCAGGTGGAGCCACTACTGCGGCTCTG
CCTCCAGCAGGGACAGCTGTGTGAGCCGCTCCCATCCCTGGCAGAGTCTAGAGCCTTGGCCCAGCTGTCCCTGAG
CCGACTCAGCCCTGAGCACAGGCGGCTGCGGAGCCCTGCACAGTACCAGGTGGTGCTGTCCGAGAGGCTGCAGGC
CCTGGTGAACAGTCTGTGTGCGGGGCAGTCCCCC**TGA**GACTCGGAGCGGGGCTGACTGGAAACAACACGAATCAC
TCACTTTTCCCC

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FIGURE 3058

CAGAAAAATGGCTACAAACTTCCTAGCACATGAGAAGATCTGGTTCGACAAGTTCAAATATGACGACGCAGAAAG
GAGATTCTACGAGCAGATGAACGGGCCTGTGGCAGGTGCCTCCCGCCAGGAGAACGGCGCCCGTGATCCTCCGTG
ACATTGCGAGAGCCAGAGAGAACATCCAGAAATCCCTGGCTGGAAGCTCAGGCCCCGGGGCCTCCAGCGGCACCA
GCGGAGACCACGGTGAGCTCGTCGTCCGGATTGCCAGTCTGGAAGTGGAGAACCAGAGTCTGCGTGGCGTGGTAC
AGGAGCTGCAGCAGGCCATCTCCAAGCTGGAGGCCCGGCTGAACGTGCTGGAGAAGAGCTCGCCTGGCCACCGGG
CCACGGCCCCACAGACCCAGTGACA**ATG**AGGAGGAGGACAAGGAGGCGGCACAGCTGCGGGAGGAGCGGCTACGG
CAGTACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGCCAAGTCCTCCATCCTGCTGGATGTCAAGCCTTGG
GATGATGAGACGGACATGGCCCAGCTGGAGGCCTGTGTGCGCTCTATCCAGCTGGACGGGCTGGTCTGGGGGGCT
TCCAAGCTGGTGCCCGTGGGCTACGGTATCCGGAAGCTACAGATTCAGTGTGTGGTGGAGGACGACAAGGTGGGG
ACAGACTTGCTGGAGGAGGAGATCACCAAGTTTGAGGAGCACGTGCAGAGTGTCGATATCGCAGCTTTCAACAAG
ATCTGAAGCC**TGA**GTGTGTGTACGTGCGCGCGTGCGTGAGGCCCTGCCACGATTAAAGACTGAGAC

FIGURE 3059

CCCCGTGACCCCTCTTCAGGCACCCACCACCCTGATGGTGACAGAGGGGGACAGCCAGCACCCATCTGTCCCCGT
CAGGGCTCTTGTTCTCACAGCCCCCTGGAGCATGCCCCATGCCCCAACCTTGGGCCTGGCTCCTGGCCCAGATGG
CACCTGGCCTCTTGAGTCTGCTGGGGGACCCCAAAGTTGGTGGTCCCATAGCCTGCCCTCCTGGGTCTCCACCTC
ATGCCTGGACAGGACGCTGTGGCCTGTCCGGGCCTTGGCCAGCCCTGCAGCTGCACCCCCGATCCTCATCCCTCA
CCCCATTCCCTGCCAGCATCCTAAGGCTCCTGGCGGGCATCCTCTCTGCTCAAAATTATTGACCTGTCTCCCGGC
CACACCTGCTGTGCCCTCTCAGCCAGGCCATCATCACCCCCTGTTCATTATGTCAGGCCTCATGGGAGCCTGGCC
TTCTCCAGAAGCTGGCCCCGGCGTCCTCCCAAGCTGGACCACGGCTGAATGAGGAACGCGCCACTGGACACATGA
GGAAGAGGCTGCTCTGGGAGCTACTGATGCTGTGACCTCACCTCTCTGGCTTTGGGCGGCAGGTCCCTGCACCTA
GGATGCCTGCCTGGAAATGTCCTTGCATTCGTGGCCTCCTTCACAGCCTCCTCCTCAGAGAAGCCTCTGCGAGTG
CACAGGGAGTGTGTGCAGCCTTGTGAAGGGCTGGGACCACTTGCCCAGACTGGGGCCCCTCAGGCACAGGCGTGG
GGTCCTACTGACCTGTCTCCCCAGCTCCCACACAGAAAGCATCTAAAAT

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FIGURE 3060

CCTGGGCGGGCCCTGCGTCAGGTTGCAGTTTCACTTTTAGCTCTGGGCACCTCCAGCTCCTGCTCGCCGGACGGC
TCCCAGGGAGAGCAGACGCGCCAGACGCGCCACCCTCGGGGCGCCGACGGTCACGGAGCATGGGGTCGGCCTTTG
AGCGGGTAGTCCGGAGAGTGGTCCAGGAGCTGGACCATGGTGGGGAGTTCATCCCTGTGACCAGCCTGCAGAGCT
CCACTGGCTTCCAGCCCTACTGCCTGGTGGTTAGGAAGCCCTCAAGCTCATGGTTCTGGAAACCCCGTTATAAGT
GTGTCAACCTGTCTATCAAGGACATCCTGGAGCCGGATGCCGCGGAACCAGACGTGCAGCGTGGCAGGAGCTTCC
ACTTCTACGATGCCATGGATGGGCAGATACAGGGCAGCGTGGAGCTGGCAGCCCCAGGACAGGCAAAGATCGCAG
GCGGGGCCGCGGTGTCTGACAGCTCCAGCACCTCAATGAATGTGTACTCGCTGAGTGTGGACCCTAACACCTGGC
AGACTCTGCTCCATGAGAGGCACCTGCGGCAGCCAGAACACAAAGTCCTGCAGCAGCTGCGCAGCCGCGGGGACA
ACGTGTACGTGGTGACTGAGGTGCTGCAGACACAGAAGGAGGTGGAAGTCACGCGCACCCACAAGCGGGAGGGCT
CGGGCCGGTTTTCCCTGCCCGGAGCCACGTGCTTGCAGGGTGAGGGCCAGGGCCATCTGAGCCAGAAGAAGACGG
TCACCATCCCCTCAGGCAGCACCCTCGCATTCCGGGTGGCCCAGCTGGTTATTGACTCTGACTTGGACGTCCTTC
TCTTCCCGGATAAGAAGCAGAGGACCTTCCAGCCACCCGCGACAGGCCACAAGCGTTCCACGAGCGAAGGCGCCT
GGCCACAGCTGCCCTCTGGCCTCTCCATGATGAGGTGCCTCCACAACTTCCTGACAGATGGGGTCCCTGCGGAGG
GGGCGTTCACTGAAGACTTCCAGGGCCTACGGGCAGAGGTGGAGACCATCTCCAAGGAACTGGAGCTTTTGGACA
GAGAGCTGTGCCAGCTGCTGCTGGAGGGCCTGGAGGGGGTGCTGCGGGACCAGCTGGCCCTGCGAGCCTTGGAGG
AGGCGCTGGAGCAGGGCCAGAGCCTTGGGCCGGTGGAGCCCCTGGACGGTCCAGCAGGTGCTGTCCTGGAGTGCC
TGGTGTTGTCCTCCGGAATGCTGGTGCCGGAACTCGCTATCCCTGTTGTCTACCTGCTGGGGGCACTGACCATGC
TGAGTGAAACGCAGCACAAGCTGCTGGCGGAGGCGCTGGAGTCGCAGACCCTGTTGGGGCCGCTCGAGCTGGTGG
GCAGCCTCTTGGAGCAGAGTGCCCCGTGGCAGGAGCGCAGCACCATGTCCCTGCCCCCCGGGCTCCTGGGGAACA
GCTGGGGCGAAGGAGCACCGGCCTGGGTCTTGCTGGACGAGTGTGGCCTAGAGCTGGGGGAGGACACTCCCCACG
TGTGCTGGGAGCCGCAGGCCCAGGGCCGCATGTGTGCACTCTACGCCTCCCTGGCACTGCTATCAGGACTGAGCC
AGGAGCCCCACTAGCCTGTGCCCGGGCATGGCCTGGCAGCTCTCCAGCAGGGCAGAGTGTTTGCCCACCAGCTGC
TAGCCCTAGGAAGGCCAGGAGCCCAGTAGCCATGTGGCCAGTCTACCATGGGGCCCAGGAGTTGGGGAAACACAA
TAAAGGTGGCATACGAAGG

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FIGURE 3061

CAGGTGCAACTGACATGGGTGAACCCCAGGGATCCATGCGGATTCTAGTGACAGGGGGCTCTGGGCTGGTAGGCA
AAGCCATCCAGAAGGTGGTAGCAGATGGAGCTGGACTTCCTGGAGAGGACTGGGTGTTTGTCTCCTCTAAAGACG
CCGATCTCACGGATACAGCACAGACCCGCGCCCTGTTTGAGAAGGTCCAACCCACACACGTCATCCATCTTGCTG
CAATGGTGGGGGGCCTGTTCCGGAATATCAAATACAATTTGGACTTCTGGAGGAAAAACGTGCACATGAACGACA
ACGTCCTGCACTCGGCCTTTGAGGTGGGCGCCCGCAAGGTGGTGTCCTGCCTGTCCACCTGTATCTTCCCTGACA
AGACGACCTACCCGATAGATGAGACCATGATCCACAATGGGCCTCCCCACAACAGCAATTTTGGGTACTCGTATG
CCAAGAGGATGATCGACGTGCAGAACAGGGCCTACTTCCAGCAGTACGGCTGCACCTTCACCGCTGTCATCCCCA
CCAACGTCTTCGGGCCCCACGACAACTTCAACATCGAGGATGGCCACGTGCTGCCTGGCCTCATCCACAAGGTGC
ACCTGGCCAAGAGCAGCGGCTCGGCCCTGACGGTGTGGGGTACAGGGAATCCGCGGAGGCAGTTCATATACTCGC
TGGACCTGGCCCAGCTCTTTATCTGGGTCCTGCGGGAGTACAATGAAGTGGAGCCCATCATCCTCTCCGGTGGGC
GAGGAAGATGAGGTCTCCATCAAGGAGGCAGCCGAGGCGGTGGTGGAGGCCATGGACTTCCATGGGGAAGTCACC
TTTGATACAACCAAGTCGGATGGGCAGTTTAAGAAGACAGCCAGTAACAGCAAGCTGAGGACCTACCTGCCCGAC
TTCCGGTTCACACCCTTCAAGCAGGCGGTGAAGGAGACCTGTGCTTGGTTCACTGACAACTACGAGCAGGCCCGG
AAGTGAAGCTGGAAGACAGGATCAGGTGCCAGCGGACCATCGGCTGGCAGAGCCCAGCGGCCACCACCCGTCAAC
CCTGCCAGGAGCTGAGGGCACCACCCAGCAACCTGGGCCTGCATTCCATCCGCTCTGCAGCCCCAAGCATCTTTC
CAGTGGGGCCCCCATTCACGTTGGTCCTCAGGGAAACCAGGGTCCCGGGCAGGCCCGGCGCTTTGCTCCCCACAC
CAGCCCCCTGCGCGTGTCCACTCTGATCCTGCATCCCACTCCCTGGGAGCCAATAAAGTGCATTTTCACAG

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FIGURE 3062

AGCGCAGCGGCGTCCGAGGCAACAAGATGGCAGCTGCGGAGCCGTCTCCGCGGCGCGTGGGCTTCGTGGGCGCGG
GCCGCATGGCGGGGGCCATCGCGCAGGGCCTCATCAGAGCAGGAAAAGTGGAAGCTCAGCACATACTGGCCAGTG
CACCAACAGACAGGAACCTATGTCACTTTCAAGCTCTGGGTTGCCGGACCACGCACTCCAACCAGGAGGTGCTGC
AGAGCTGCCTGCTCGTCATCTTTGCCACCAAGCCTCATGTGCTGCCAGCTGTCCTGGCAGAGGTGGCTCCTGTGG
TCACCACTGAACACATCTTGGTGTCCGTGGCTGCTGGGGTGTCTCTGAGCACCCTGGAGGAGCTGCTGCCCCCAA
ACACACGGGTGCTGCGGGTCTTGCCCAACCTGCCCTGTGTGGTCCAGGAAGGGGCCATAGTGATGGCGCGGGGCC
GCCACGTGGGGAGCAGCGAGACCAAGCTCCTGCAGCATCTGCTGGAGGCCTGTGGGCGGTGTGAGGAGGTGCCTG
AAGCCTACGTCGACATCCACACTGGCCTCAGTGGCAGTGGCGTGGCCTTCGTGTGTGCATTCTCCGAGGCCCTGG
CTGAAGGAGCCGTCAAGATGGGCATGCCCAGCAGCCTGGCCCACCGCATCGCTGCCCAGACCCTGCTGGGGACGG
CCAAGATGCTGCTGCACGAGGGCCAACACCCAGCCCAGCTGCGCTCAGACGTGTGCACCCCGGGTGGCACCACCA
TCTATGGACTCCACGCCCTGGAGCAGGGCGGGCTGCGAGCAGCCACCATGAGCGCCGTGGAGGCTGCCACCTGCC
GGGCCAAGGAGCTCAGCAGAAAGTAGGCTGGGCTCTGGCCATCCTTTCCTGCCTCTGTGCCCCTGCCTCTCCCTG
TGTCCCTTCCCCTGAGGACTGCGGCTCCCTCCCTCCTGCATGAGGGTCTCCTACTGCTCCTTCTCCCCTTGCACA
GGGAAATGCAGGGGGCAGGACTTGGGAGGTTCCAGCAGGCGGGGGAGCCCCGACCAGTGGGGACACTCCTCCCTC
CCCAGTGAGCAGAAGGCACCGTGGTGGTGGCTCTGCCCCTTGCTGCAGTGAGCCCACCTTGCTGCAACATTGGTT
CTGAGGGGCCCAAGAGATGGCGTCTTGGTCATTTGCCCGCATGGTTGGGCAGTTGGTTGAGGCCATGAACAGAAC
TTACGGTAACAGGCACGGCTGGCCCAATGCCTGGTCTGGAGCTGGAGCTTGCCTTTGGCTTTCCAGGTGGCTCCG
TGCAGCTACAGCCAGGCCGGCTGCCTCATCTCAGCTCTAGGGGGCACGAGCCATATGGGGTCTGCACAAGAGACC
CTCTCCCCTGCAGTAAAGCCAGGGGCCCTGGCCTGATGGGGCCCCCATGGGGAGCTGGAGCCTGCCCTGCAGCCT
GGAGAAGAGGGTGGCTGTGGTGGGCGTGCTCATCCCCTGCTAAGGAGCAGGAGCTGCTGGGCCAGGTCTGCGGCA
GTGCTGGGGTGGCACCAGGTGGGCAGTGGTAGGTGGGGTGGCTTGAGGTCTGGGAGGGTGGCCCTGGCCAGCCAG
GACACATGCAGACCCCTGGCTTTAGTCTGGATACAGGCTCCCTCTTTCCTCCCAATCCTAAGCTCCTGACAAGTG
GCCAGGTGGCTCTGGGCCCTCCTGCCCCGTGCCTAGGTCAGGGGTCCTGGAATACCCCGTAGCTCTGGCACCACC
ACACTGGCCTCTGATGGCAAGACTTGGCCCCTCCACCTGTCCCTAACGGACGGCAGGTCAGGAAAGCCAGGACTC
AGGGGAGAAGCAAACCCCCAGGATTGAAGGCTAGGGTTCTAGGGCCTTTGGGTGGGGAGGGCCCGGGCCGGACAG
CCTCAGCTCCGTCCCCTGCCCCACAAGATTCACCTGGGCCTCCAGTCCCACGCTGGCCCCAACTGCTGCAGCTCT
CGGCTTCCGCCCAACAGCCTCTGGAGGTGAGGCGGGAGCATGCCCTCAGCGAGGCTGGGCGGCGGGTCCTGCTGT
GCCATCTCCCTGTGCGCCTGAGCAGATCAATCCACCAGTGCAAAACAGGGCTAACGGCACCTGCAGGACAGCAGC
ACGCTCCATCCCTCATGCTCAGCTGCCTCTGCGGCCACGGACTTCTGCCCTTCATCTGCTCTCTCTTACTCTCCT
GAGCCTAGCCCGTCCGTAAGCTCCCTCCCCTGCCTGGTTCCCAGGGCAGGCTGACTCAGTTGACTGCTTGGTCCA
AGCCTGGCCCTGGCACTTGTCAGGGTCAGCCTAAGGAGATGGGAATAAAGAGGCCAGAGAGCACCAAGTGAGCTC
ATGTTTC

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FIGURE 3063

CGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGTGCTCGGGGAGGTCCCCGCCGCCCGCCTCCCGGGATGTCCGCTCGCGCAGGACGCAGAAGGGCAGTGGAGCCAGAAACAGCCAGAAAGGCCCTTTCAGAAATGTCTGTTGCACATGCTTTCCCCTCTCAGACCCTTCAGAGACTTCCTGTTGCTCTGAGGACACTCATCCCAGCCGACCAGGCCACCAGGCCCCCAACAGCACTACCTGGCTGGGGTCACGTGCAGGTCTCCTGGCTCTGGCAGGTGGGAGAAGGAGAAGCACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCCGTACTTCGCACCCCCATACGAGCCCCTTCCCGATGGAGTGCGTTTCTTCTATGAAGGAAGGCCTGTGAGATTGAGCGTGGCAGCGGAGGAGGTCGCCACTTTTTATGGGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCGAAAGG

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FIGURE 3064

GCGGACTCGGGAGATGGAGGAAAAGGAGATATTACGGCGGCAGATCCGCCTACTGCAGGGTCTGATTGATGACTA
CAAAACCCTCCACGGCAATGCCCCGGCCCCTGGTACCCCAGCAGCTTCTGGGTGGCAGCCACCCACTTACCACAG
TGGCAGAGCCTTTAGTGCCCGCTACCCTCGTCCAAGCCGGAGGGGCTACTCTTCCCACCATGGGCCTTCGTGGCG
CAAGAAATACTCCCTCGTGAATCGGCCCCCGGGACCCTCAGACCCTCCTGCCGACCATGCTGTGCGGCCGTTGCA
CGGGGCCCGGGGGGGCCAGCCTCCTGTCCCGCAGCAGCATGTCCTTGAGAGACAGGTCCAGCTCAGTCAGGGTCA
GAACGTGGTCATCAAAGTTAAACCGCCATCAAAGTCTGGCTCTGCCAGTGCCTCAGGGGCCCAGCGGGGCTCTTT
GGAAGAATATGAGGACACCCCCTGGAGTGACCAAAGGCCCCGGGAAGGTGAAGGTGAGCCCCCTCGGGGACAGCT
GCAGCCCTCGAGGCCAACAAGAGCCAGGGGGACCTGCAGTGTGGAAGATCCTCTTCTGGTCTGCCAGAAGGAGCC
TGGTAAGCCCAGGATGGTGAAGTCAGTGGGCAGTGTGGGCGACAGCCCCTGGGAGCCCCGCCGGACAGTCAGTGA
GAGCGTGATTGCCGTCAAGGCGAGCTTCCCATCCTCCGCTCTGCCCCCACGCACTGGCGTGGCCCTGGGCCGGAA
GCTGGGTTCTCATTCCGTGGCCAGCTGTGCTCCACAGCTCCTTGGGGACAGGAGAGTAGATGCTGGCCACACAGA
TCAGCCAGTTCCGTCTGGCTCAGTGGGGGGTCCCGCCAGACCGGCCTCAGGACCCAGGCAGGCCCGGGAGGCCTC
GCTGGTTGTGACCTGTCGAACTAACAAGTTCCGGAAAAACAACTACAAATGGGTGGCTGCCTCCTCGAAGAGTCC
CCGGGTTGCTCGGAGGGCCCTCAGTCCCAGAGTGGCTGCAGAGAATGTGTGCAAGGCCTCTGCTGGCATGGCAAA
CAAGGTGGAGAAGCCGCAGCTCATAGCTGACCCAGAGCCCAAGCCCAGGAAGCCAGCCACGTCCTCCAAGCCAGG
GTCTGCCCCCAGCAAGTACAAGTGGAAGGCCTCCAGCCCCTCTGCCTCCTCCTCTTCCTCCTTCCGTTGGCAGTC
GGAGGCCGGCAGCAAGGACCATGCCTCCCAGCTCTCCCCAGTCCTGTCTAGGTCCCCGTCGGGGGACAGACCAGC
AGTAGGACACAGTGGCTTGAAGCCCCTCTCTGGGGAGACCCCGCTCTCGGCTTACAAAGTGAAGAGCCGCACCAA
GATCATCCGGAGACGCGGCAGCACAAGCCTTCCTGGAGACAAGAAAAGCGGCACCTCACCTGCCGCCACCGCCAA
GAGCCACCTCAGCCTCCGGCGGAGACAGGCCCTCAGGGGGAAGAGCAGCCCTGTCCTGAAGAAGACCCCCAACAA
GGGCCTGGTACAGGTCACCACGCACCGACTATGTCGCCTGCCACCGAGCCGGGCCCACCTCCCCACCAAGGAAGC
GTCCAGCCTGCATGCTGTGCGGACTGCACCCACCAGCAAGGTGATCAAGACCCGCTACCGCATTGTCAAGAAGAC
GCCGGCCTCGCCTCTCAGCGCCCCGCCCTTCCCCCTGTCTCTGCCCTCCTGGCGGGCCCGGCGGCTCTCACTATC
CAGGTCCCTGGTGCTGAACCGCCTGCGTCCAGTTGCCAGCGGGGGTGGGAAAGCCCAACCGGGCTCCCCTTGGTG
GCGGAGCAAAGGCTACCGCTGCATCGGAGGGGTCCTCTACAAAGTATCTGCCAACAAGCTCTCCAAGACCTCCGG
CCAGCCCAGTGATGCGGGCAGCAGGCCCCTCCTGCGCACAGGCCGGCTGGATCCTGCAGGCAGCTGTAGCCGTTC
CCTGGCCAGCCGGGCAGTGCAGCGCAGCCTGGCCATCATCCGGCAGGCGCGGCAGCGCAGGGAGAAGAGGAAGGA
GTACTGCATGTACTACAACCGCTTCGGCAGGTGCAACCGTGGCGAGCGCTGCCCCTACATCCACGATCCCGAGAA
GGTGGCCGTGTGCACCAGGTTTGTCCGGGGCACCTGCAAGAAAACGGATGGGACCTGCCCCTTCTCCCACCATGT
GTCCAAGGAGAAGATGCCGGTGTGCTCCTACTTCCTGAAGGGCATCTGCAGCAACAGCAACTGTCCCTATAGCCA
CGTGTACGTGTCCCGCAAGGCCGAGGTCTGCAGCGACTTCCTCAAAGGCTACTGCCCCCTGGGTGCAAAGTGCAA
GAAGAAACACACGCTGCTGTGCCCCGACTTTGCCCGCAGGGGGGCGTGTCCCCGCGGCGCCCAGTGCCAGCTGCT
CCACCGTACCCAGAAACGCCACAGTCGGCGGGCAGCCACGTCCCCCGCCCCAGGGCCCAGCGACGCAACCGCCAG
GAGCAGGGTCTCGGCCAGCCACGGGCCCAGGAAGCCTTCAGCATCCCAGCGCCCCACCAGGCAGACGCCCAGCTC
GGCTGCCCTCACTGCGGCTGCCGTGGCTGCACCTCCCCACTGCCCAGGGGGGTCAGCCTCTCCCTCATCCTCGAA
GGCTTCCTCCTCCTCCTCCTCCTCCTCATCCCCTCCCGCTTCCTTGGACCACGAGGCACCATCTCTCCAGGAGGC
TGCCTTAGCAGCAGCGTGCTCCAACAGGCTCTGCAAGCTGCCTTCCTTCATCTCCCTGCAGTCCTCGCCGAGCCC
AGGAGCCCAGCCCAGGGTCCGGGCCCCTAGGGCCCCCCTCACCAAGGACTCAGGGAAGCCTCTGCACATCAAACC
ACGTCTGTGAGGACCCCAGGGACCGGCCTGCACCTACCTCAGACCCTCATCCTTGGAGAGGAAAGAGGCTCTGTC
CACCACTCTACCCCACAGGAGGGCCGCCCGCCACCAAGCCTCACCTGGGGGCCACAGGGACACTGCTCTGCCTGC
CTGGCCCTCAACCTTCCATGACCAGCGTGTGCGCAGGGCCTGGTCTTCCTCCCCCAAGCCAGGCCCCTGTCCCCA
CCCCACCACCTTCCAGGGTGCCAGGCAGGGCTGGCCTCCAGGCCTGTCCCCGACTGCCATTGGCAACAGTGGCCC
TGCAGCCCCCAGCCCTCCCCACCCAGGTTTTCGGCCCAGTGAAGAGGCCACTGGCCAGGCCTCCCAGGCAGGTGT
TTTATGTTCAGCAATAAAGGTTCTATCCGT

FIGURE 3065A

GGCCGCTACGCCGAGGCTCTGGAGCAGCACTGGCAGGAGCTGCAGCTTCGGGAGCGCGCTGACGACCCCTCTGGG
CTGTGCCGTGGCCCACCGCAAGATCGGAGAGCGCCTGGCCGAGATGGAGGACTACCCGGCTGCCTTGCAGCACCA
GCACCAGTACCTGGAGCTGGCACATTCCCTGCGCAACCACACGGAGCTGCAGAGGGCCTGGGCCACCATCGGCCG
CACCCACCTGGACATCTATGACCACTGCCAGTCGAGGGATGCTTTGCTGCAGGCACAGGCTGCCTTTGAGAAGAG
CTTGGCTATTGTGGATGAGGAGCTGGAGGGGACACTGGCCCAGGGAGAGCTGAATGAGATGAGGACCCGCCTCTA
TCTCAACCTGGGCCTCACCTTTGAGAGCCTGCAGCAGACAGCCCTGTGCAACGATTACTTCAGGAAGAGCATCTT
CCTTGCGGAGCAGAACCACCTTTACGAGGACCTATTCCGCGCCCGCTACAACCTGGGCACCATCCACTGGCGCGC
GGGCCAGCACTCCCAGGCTATGCGCTGCTTGGAGGGTGCCCGGGAGTGTGCGCACACCATGAGGAAGCGGTTCAT
GGAGAGCGAGTGCTGCGTGGTTATTGCACAGGTCCTCCAAGACCTGGGAGACTTTTTTGGCTGCCAAGCGAGCCC
TGAAGAAGGCCTACAGGCTGGGCTCCCAGAAGCCTGTGCAGAGGGCAGCCATCTGTCAGAACCTCCAGCATGTGC
TGGCAGTGGTCCGGCTGCAGCAACAGCTGGAAGAGGCTGAGGGCAGAGACCCTCAGGGTGCC**ATG**GTCATCTGTG
AGCAGCTAGGGGACCTCTTCTCCAAGGCAGGAGACTTTCCCAGGGCAGCTGAGGCTTACCAGAAGCAGCTGCGTT
TTGCTGAGCTGCTGGACAGACCGGGTGCTGAGCGGGCCATCATCCACGTGTCCCTGGCCACCACACTGGGAGACA
TGAAGGACCACCATGGGGCCGTGCGCCACTATGAGGAGGAACTGAGGCTGCGCAGCGGCAACGTGCTGGAGGAGG
CCAAGACCTGGCTGAACATTGCACTGTCCCGCGAGGAGGCCGGCGATGCCTACGAGCTGCTGGCCCCGTGCTTCC
AGAAAGCGCTCAGCTGTGCCCAGCAGGCCCAGCGTCCCCAGCTGCAGAGGCAGGTCTTGCAGCATCTCCATACCG
TGCAGCTGAGGCTGCAGCCCCAGGAGGCCCCTGAGACCGAAACCAGACTGCGGGAGCTCAGTGTAGCTGAAGATG
AAGATGAGGAGGAGGAGGCGGAGGAGGCGGCAGCCACAGCGGAGAGCGAAGCCCTGGAGGCCGGCGAGATGGAGC
TCTCAGAGGGCGAGGACGACACCGATGGCCTGACCCCGCAGCTGGAGGAGGACGAGGAGCTTCAGGGCCACCTGG
GCCGGCGGAAGGGGAGCAAGTGGAACCGGCGAAACGACATGGGGGAGACCCTGCTGCACCGAGCCTGCATCGAGG
GCCAGCTGCGCCGCGTCCAGGACCTTGTGAGGCAGGGCCACCCCCTTAACCCTCGGGACTACTGTGGCTGGACAC
CTCTGCACGAGGCCTGCAACTACGGGCATCTAGAAATTGTCCGCTTCCTGCTGGACCACGGGGCCGCAGTGGACG
ACCCAGGTGGCCAGGGCTGCGAAGGCATCACCCCCCTCCACGATGCCCTCAACTGTGGCCACTTCGAGGTGGCTG
AGCTGCTGCTTGAACGGGGGGCGTCCGTCACCCTCCGCACTCGAAAGGGCCTCAGCCCGCTGGAGACGCTGCAGC
AGTGGGTGAAGCTGTACCGCAGGGACCTGGACCTGGAGACGCGGCAGAAGGCCAGGGCCATGGAGATGCTGCTCC
AGGCGGCTGCCTCGGGCCAAGATCCCCACAGCTCCCAGGCCTTCCACACCCCAAGCAGCCTTCTGTTTGACCCCG
AGACCTCTCCTCCTTTGAGCCCCTGCCCAGAACCCCCCTCTAATAGCACTAGACTCCCAGAGGCCTCTCAGGCCC
ATGTCAGGGTCTCCCCAGGGCAGGCGGCACCAGCCATGGCCAGGCCTCGGAGGAGCAGGCATGGGCCAGCCAGCA
GCAGCAGCAGCTCAGAAGGCGAGGACAGCGCAGGCCCCGCACGGCCGTCCCAGAAGAGGCCTCGGTGCTCGGCCA
CAGCACAACGGGTGGCAGCCTGGACGCCTGGCCCCGCCAGCAACAGGGAAGCAGCCACAGCCAGCACCAGCCGGG
CAGCCTACCAGGCAGCCATCCGGGGTGTGGGCAGTGCTCAGAGCCGGCTGGGGCCTGGCCCACCGCGGGGCCACA
GCAAAGCCCTTGCCCCCCAGGCAGCGCTCATCCCGGAGGAGGAGTGCCTGGCTGGGGACTGGCTGGAGCTGGACA
TGCCCCTGACCCGCAGCCGCCGGCCCCGCCCCCGGGGCACTGGAGACAACCGCAGGCCCAGTAGTACCTCTGGGT
CGGACAGTGAGGAGAGCAGGCCCCGTGCCCGAGCCAAGCAGGTCCGCCTGACCTGCATGCAGAGTTGCAGTGCGC
CAGTTAACGCAGGGCCCAGCAGCCTGGCTTCAGAACCTCCAGGGAGCCCCAGCACCCCCAGGGTCTCAGAGCCCA
GTGGGGACAGCTCTGCGGCAGGCCAGCCCTTGGGTCCGGCCCCGCCCCCTCCCATCCGGGTTCGAGTTCAAGTTC
AGGATCATCTCTTCCTCATCCCTGTCCCACACAGCAGTGACACCCACTCTGTGGCCTGGCTGGCCGAGCAGGCGG
CCCAGCGCTACTACCAGACCTGCGGGCTGCTGCCCAGGCTCACCCTACGGAAAGAGGGGGCCCTGCTGGCCCCAC
AGGACCTCATCCCTGATGTGCTGCAGAGCAATGACGAGGTGTTGGCTGAGGTGACTTCGTGGGACCTGCCCCCAT
TGACTGACCGCTACCGCAGGGCCTGCCAGAGCCTGGGGCAAGGGGAGCACCAACAGGTGCTGCAGGCCGTGGAGC
TCCAGGGCTTGGGCCTCTCGTTCAGCGCCTGCTCCCTGGCCCTGGACCAGGCCCAGCTTACACCCCTGCTGCGGG
CCCTCAAGCTGCACACAGCACTCCGGGAGCTGCGCCTGGCAGGGAACCGGCTGGGGGACAAGTGTGTGGCTGAGC
TGGTGGCTGCCCTGGGCACCATGCCCAGCCTGGCCCTCCTTGACCTCTCCTCCAATCACCTGGGTCCCGAAGGCC
TGCGCCAGCTTGCCATGGGGCTCCCAGGCCAAGCCACCTTGCAGAGTTTGGAGGAGCTGGACTTAAGCATGAACC
CCCTGGGGGGACGGCTGTGGCCAGTCCCTGGCCTCCCTCCTGCACGCCTGCCCCTTACTCAGCACCCTGCGCCTGC
AGGCGTGTGGCTTCGGCCCCAGCTTCTTTCTGAGCCACCAGACAGCACTGGGTAGTGCTTTCCAAGATGCTGAGC
ACCTGAAGACCCTGTCCCTGTCCTACAACGCCCTGGGAGCCCCTGCCCTGGCCAGGACCCTGCAGAGCCTGCCCG
CCGGCACCCTCCTGCACTTAGAGCTCAGCTCCGTGGCAGCCGGCAAGGGTGATTCGGACCTCATGGAGCCTGTAT

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FIGURE 3065B

TCCGATACCTGGCCAAGGAAGGCTGTGCTCTAGCCCACCTGACCCTGTCTGCAAACCACCTGGGGGACAAGGCTG
TTAGAGACCTGTGCAGATGTCTCTCTCTGTGCCCCTCACTCATCTCACTGGATCTGTCTGCCAACCCTGAGATCA
GCTGTGCCAGCTTGGAAGAGCTCCTGTCCACCCTCCAAAAGCGGCCCCAAGGCCTTAGCTTCCTTGGCCTGTCAG
GCTGCGCCGTCCAGGGTCCCCTGGGCCTGGGCCTGTGGGACAAGATAGCCGCGCAGCTCCGGGAACTGCAGCTGT
GCAGCAGACGCCTCTGCGCTGAGGACAGGGACGCCCTGCGCCAGCTGCAGCCCAGTCGGCCGGGCCCCGGCGAGT
GCACGCTGGACCACGGCTCCAAGCTCTTCTTTCGGCGCCTC**TGA**CCCTGGCGCTGCCTTTCCCCACCCTCACCGA
AGCCCCTAATAAATGAAGCTGCTGGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAACACTTTGGGAGGCCCAGG
CGGGCGGATCACGAGGTCAGGAGATCGAGACCATCCTGGCTAACATGGTGAAACCCCGTCTCTACTAAAAATACC
AAAAATTAGCCGGGCGTGGTGGTGGAAGCCTGTAGTCCCAGCTACTCCGGAGGCTGAGGCAGGAGAATGGCGTGA
ACCCGGGAGGCGGAGCTTGCAGTGAGCCGAGATCGCACCACTGCACTCCAGCCTGGGCGACAGACCGAGACTCCG
TCTC

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FIGURE 3066

GCGCACCCCGCCCCCGGCGCCATCTTCCCGACCGCGAGCCGTCCAGGTCTCAGTGCTGTGCCCCCCCCAGAGCCT
AGAGGATGTTTCATGGGATCCCAGCCACGCCGGGCATAGGAGCCCCTGGGAACAAGCCGGAGCTGTATGAGGAAG
TGAAGTTGTACAAGAACGCCCGGGAGAGGGAGAAGTACGACAACATGGCAGAGCTGTTTGCGGTGGTGAAGACAA
TGCAAGCCCTGGAGAAGGCCTACATCAAGGACTGTGTCTCCCCCAGCGAGTACACTGCAGCCTGCTCCCGGCTCC
TGGTCCAATACAAAGCTGCCTTCAGGCAGGTCCAGGGCTCAGAAATCAGCTCTATTGACGAATTCTGCCGCAAGT
TCCGCCTGGACTGCCCGCTGGCCATGGAGCGGATCAAGGAGGACCGGCCCATCACCATCAAGGACGACAAGGGCA
ACCTCAACCGCTGCATCGCAGACGTGGTCTCGCTCTTCATCACGGTCATGGACAAGCTGCGTCTGGAGATCCGCG
CCATGGATGAGATCCAGCCCGACCTGCGAGAGCTGATGGAGACCATGCACCGCATGAGCCACCTCCCACCCGACT
TTGAGGGCCGCCAGACGGTCAGCCAGTGGCTGCAGACCCTGAGCGGCATGTCGGCGTCAGATGAGCTGGACGACT
CACAGGTGCGTCAGATGCTGTTCGACCTGGAGTCAGCCTACAACGCCTTCAACCGCTTCCTGCATGCCTGAGCCC
GGGGCACTAGCCCTTGCACAGAAGGGCAGAGTCTGAGGCGATGGCTCCTGGTCCCCTGTCCGCCACACAGGCCGT
GGTCATCCACACAACTCACTGTCTGCAGCTGCCTGTCTGGTGTCTGTCTTTGGTGTCAGAACTTTGGGGGCCGGG
CCCCTCCCCACAATAAAGATGCTCTCCGACCTTC

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FIGURE 3067

AGTCTGGCCCTGGACAACCCCAGCAAAGCCGCCCTCAGCCAGCCCAGAAGCACTGGGCCTTGGCCACAGCAACAC
CCACTGAGCACGCTGGGAGCTGAGTATGGCGTCCCTGGTCTCGCTGGAGCTGGGGCTGCTTCTGGCTGTGCTGGT
GGTGACGGCGACGGCGTCCCCGCCTGCTGGTCTGCTGAGCCTGCTCACCTCTGGCCAGGGCGCTCTGGATCAAGA
GGCTCTGGGCGGCCTGTTAAATACGCTGGCGGACCGTGTGCACTGCGCCAACGGGCCGTGTGGAAAGTGCCTGTC
TGTGGAGGACGCCCTGGGCCTGGGCGAGCCTGAGGGGTCAGGGCTGCCCCCGGGCCCGGTCCTGGAGGCCAGGTA
CGTCGCCCGCCTCAGTGCCGCCGCCGTCCTGTACCTCAGCAACCCCGAGGGCACCTGTGAGGACGCTCGGGCTGG
CCTCTGGGCCTCTCATGCAGACCACCTCCTGGCCCTGCTCGAGAGCCCCAAGGCCCTGACCCCGGGCCTGAGCTG
GCTGCTGCAGAGGATGCAGGCCCGGGCTGCCGGCCAGACCCCCAAGATGGCCTGCGTAGATATCCCTCAGCTGCT
GGAGGAGGCGGTGGGGGCGGGGGCTCCGGGCAGTGCTGGCGGCGTCCTGGCTGCCCTGCTGGACCATGTCAGGAG
CGGGTCTTGCTTCCACGCCTTGCCGAGCCCTCAGTACTTCGTGGACTTTGTGTTCCAGCAGCACAGCAGCGAGGT
CCCTATGACGCTGGCCGAGCTGTCAGCCTTGATGCAGCGCCTGGGGGTGGGCAGGGAGGCCCACAGTGACCACAG
TCATCGGCACAGGGGAGCCAGCAGCCGGGACCCTGTGCCCCTCATCAGCTCCAGCAACAGCTCCAGTGTGTGGGA
CACGGTATGCCTGAGTGCCAGGGACGTGATGGCTGCATATGGACTGTCGGAACAGGCTGGGGTGACCCCGGAGGC
CTGGGCCCAACTGAGCCCTGCCCTGCTCCAACAGCAGCTGAGTGGAGCCTGCACCTCCCAGTCCAGGCCCCCCGT
CCAGGACCAGCTCAGCCAGTCAGAGAGGTATCTGTACGGCTCCCTGGCCACGCTGCTCATCTGCCTCTGCGCGGT
CTTTGGCCTCCTGCTGCTGACCTGCACTGGCTGCAGGGGGGTCACCCACTACATCCTGCAGACCTTCCTGAGCCT
GGCAGTGGGTGCAGTCACTGGGGACGCTGTCCTGCATCTGACGCCCAAGGTGCTGGGGCTGCATACACACAGCGA
AGAGGGCCTCAGCCCACAGCCCACCTGGCGCCCTCCTGGCTATGCTGGCCGGGCTCTACGCCTTCTTCCTGTTTTG
AGAACCTCTTCAATCTCCGGCAGCCCAGGGACCCGGAGGACCTGGAGGACGGGCCCTGCGGCCACAGCAGCCATA
GCCACGGGGGCCACAGCCACGGTGTGTCCCTGCAGCTGGCACCCAGCGAGCTCCGGCAGCCCAAGCCCCCCCACG
AGGGCTCCCGCGCAGACCTGGTGGCGGAGGAGAGCCCGGAGCTGCTGAACCCTGAGCCCAGGAGACTGAGCCCAG
AGTTGAGGCTACTGCCCTATATGATCACTCTGGGCGACGCCGTGCACAACTTCGCCGACGGGCTGGCCGTGGGCG
CCGCCTTCGCGTCCTCCTGGAAGACCGGGCTGGCCACCTCGCTGGCCGTGTTCTGCCACGAGTTGCCACACGAGC
TGGGGGACTTCGCCGCCTTGCTGCACGCGGGGCTGTCCGTGCGCCAAGCACTGCTGCTGAACCTGGCCTCCGCGC
TCACGGCCTTCGCTGGTCTCTACGTGGCACTCGCGGTTGGAGTCAGCGAGGAGAGCGAGGCCTGGATCCTGGCAG
TGGCCACCGGCCTGTTCCTCTACGTAGCACTCTGCGACATGCTCCCGGCGATGTTGAAAGTACGGGACCCGCGGC
CCTGGCTCCTCTTCCTGCTGCACAACGTGGGCCTGCTGGGCGGCTGGACCGTCCTGCTGCTGCTGTCCCTGTACG
AGGATGACATCACCTTCTGATACCCTGCCCTAGTCCCCCACCTTTGACTTAAGATCCCACACCTCACAAACCTAC
AGCCCAGAAACCAGAAGCCCCTATAGAGGCCCCAGTCCCAACTCCAGTAAAGACACTCTTGTCCTTGG

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FIGURE 3068

CCCCGGCACCCCAGGGCAGGTGCAGACCCGCGAGTGCATCGAGGCCGTGATCCGCTTCGCCTTCGAAGAGCGGCT
CTTTCTGCTGGCGGACGAGGTGTACCAGGACAACGTGTACGCCGCGGGTTCGCAGTTCCACTCATTCAAGAAGGT
GCTCATGGAGATGGGGCCGCCCTACGCCGGGCAGCAGGAGCTTGCCTCCTTCCACTCCACCTCCAAGGGCTACAT
GGGCGAGTGCGGGTTCCGCGGCGGCTATGTGGAGGTGGTGAACATGGACGCTGCAGTGCAGCAGCAGATGCTGAA
GCTGATGAGTGTGCGGCTGTGCCCGCCGGTGCCAGGACAGGCCCTGCTGGACCTGGTGGTCAGCCCGCCCGCGCC
CACCGACCCCTCCTTTGCGCAGTTCCAGGCTGAGAAGCAGGCAGTGCTGGCAGAGCTGGCGGCCAAGGCCAAGCT
CACCGAGCAGGTCTTCAATGAGGCTCCTGGCATCAGCTGCAACCCAGTGCAGGGCGCCATGTACTCCTTCCCGCG
CGTGCAGCTGCCCCCGCGGGCGGTGGAGCGCGCTCAGGAGCTGGGCCTGGCCCCCGATATGTTCTTCTGCCTGCG
CCTCCTGGAGGAGACCGGCATCTGCGTGGTGCCAGGGAGCGGCTTTGGGCAGCGGGAAGGCACCTACCACTTCCG
GATGACCATTCTGCCCCCCTTGGAGAAACTGCGGCTGCTGCTGGAGAAGCTGAGCAGGTTCCATGCCAAGTTCAC
CCTCGAGTACTCCTGAGCACCCCAGCTGGGGCCAGGCTGGGTCGCCCTGGACTGTGTGCTCAGGAGCCCTGGGAG
GCTCTGGAGCCCACTGTACTTGCTCTTGATGCCTGGCGGGGTGGGGTGGGGGGGGTGCTGGGCCCCTGCCTCTCT
GCAGGTCCCTAATAAAGCTGTGTGGCAGTCTG

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FIGURE 3069

AGCCGCCGGCCGCCGGTGTCCGGACCGCTCGCCCCCCGTTTGGACCCGACTTCGGTTCTTCTGGGGTGTTGATGCT
CCTAAAGCCCGAGAGCACGTGTCCAGACCCTAGCCTGTACGACGCTGACTCTGCCCGGTCCCAGAACCAAAGCCA
TGCCGGGGTGTGGCCTCTGACCCCACGCGGAGGGGACCTCGCCTTGCGGGACCCCACCTGGAACCCGACCTCCCA
GCCTCGCAGCCGGCCTGAGCCGCC<u>ATG</u>CGCGGGAAGTTGCTGCCGCTGGCCGGCCTCTACCTGGTGCAGGGCCTG
CCCTACGGGCTCCAGTCCGGCCTCCTGCCAGTGCTGCTGCGTGCCGGCGGCCTCTCGCTGACGCGCGTGGGGCTG
GCCAAGGTTCTGTACGCTCCGTGGCTGCTCAAGCTGGCTTGGGCCCCGCTGGTGGACGCGCAGGGCTCGGCGAGG
GCCTGGGTGACGCGCAGCACGGCGGGCCTGGGCCTGGTGTGTGGGCTGCTTGCCGGGCTGCCCCCTCCTGGAGCT
GGCCAGGCCGGGCTGCCCGCCGCTGTGGCGGGGTTGCTGCTGTTGTTGAACCTGGGTGCCGCCATGCAGGATGTG
GCCCTGGACGCGCTGGCTGTGCAGCTGCTGGAGCCGGCCGAACTGGGGCCGGGCAATACCGTGCAGGTGGTCGCG
TACAAGCTGGGGGCCGCGCTAGCTGGGGGCGCGCTGCTGGCGCTGCTGCCCACCTTCTCGTGGCCGCAACTCTTT
CTGCTCCTGGCTGCCACCTACTGGCTGGCCGCGGCCCTGGCCTGGGCTGCACCAGCCCTGCGGCGGCTCCCACAG
CAGCCCCCTTCCGAGCAGCGTCCCCACACCGCGCACCTTCTGCGGGACGTGCTAGCCGTGCCGGGGACCGTGTGG
ACGGCAGGCTTTGTGCTCACCTACAAGCTGGGTGAGCAGGGTGCCAGCAGCCTGTTTCCTCTTCTCCTGCTGGAC
CACGGCGTTTCTGCTCCCGAGTTGGGACTGTGGAATGGTGTGGGTGCTGTGGTCTGCTCCATCGCTGGCTCCTCC
CTGGGTGGGACCTTGCTGGCCAAGCACTGGAAACTGCTGCCTCTGTTGAGGTCGGTGCTGCGCTTCCGCCTCGGG
GGCCTAGCCTGTCAGACTGCCTTGGTCTTCCACCTGGACACCCTGGGGGCCAGCATGGACGCTGGCACAATCTTG
AGAGGGTCAGCCTTGCTGAGCCTATGTCTGCAGCACTTCTTGGGAGGCCTGGTCACCACAGTCACCTTCACTGGG
ATGATGCGCTGCAGCCAGCTGGCCCCCAGGGCCCTGCAGGCCACACACTACAGCCTTCTGGCCACGCTGGAGCTG
CTGGGGAAGCTGCTGCTGGGCACTCTGGCCGGAGGCCTGGCTGATGGGTTGGGGCCACATCCCTGCTTCTTGCTC
CTGCTCATCCTCTCTGCCTTTCCCGTTCTGTACCTGGACCTAGCACCCAGCACCTTTCTC<u>TGA</u>GCTGAGTGGCTG
GAGTGGTCAATAAAGCCACATGTGCCTGTG

FIGURE 3070A

CGGGGCTGGAGGCGGTGGCTGCGGTTGCGGGACCGGCACTATGCTGGGCCTTCCTACCACTTGTGTGTGGCTTGG
TAGTGGCCTAGGGTCTCTCCTCCCTGCTGAAGTCCCTCTCCTGCAGGTGGCCGTCTGCCCGGCCCAGCACCATGC
ACACGCTTGTGTTCTTGAGCACACGGCAGGTGCTGCAGTGCCAGCCAGCTGCCTGCCAGGCCCTGCCCTTGCTGC
CACGCGAACTCTTCCCCCTGCTGTTCAAGGTGGCCTTCATGGACAAGAAGACAGTGGTACTGCGCGAGTTGGTAC
ACACGTGGCCCTTCCCGCTGCTCAGTTTCCAGCAGCTGCTACAGGAGTGTGCCCACTGCAGCCGTGCCCTCCTGC
AGGAGCGGCCTAGCACTGAGAGCATGCAGGCTGTTATCCTGGGGCTGACTGCCCGGCTCCACACCTCAGAGCCTG
GGGCCAGCACACAGCCCCTCTGCAGGAAGCATGCGCTGCGGGTGCTGGACATGACGGGCCTCTTGGATGATGGTG
TGGAACAGGATCCTGGCACCATGAGCATGTGGGACTGTACTGCTGCCGTAGCTCGCACATGCATTGCCCAGCAGC
AGGGTGGGGCCGCAGAGCCTGGGCCAGCCCCCATCCCCGTGGAGGTGCGCGTGGACCTGCGGGTGAACCGGGCCT
CCTATGCGTTCCTGCGGGAGGCACTCCGAAGCAGCGTGGGCAGCCCGCTGCGGCTCTGCTGCCGGGACCTGCGAG
CTGAGGACCTGCCCATGCGCAACACTGTGGCCCTGCTGCAGCTTCTGGATGCAGGCTGCCTGCGCCGCGTGGACC
TGCGCTTCAACAATCTGGGCCTGCGCGGCCTGTCTGTGATCATCCCACACGTGGCCCGCTTCCAGCACCTGGCCA
GCCTGCGGCTCCACTATGTGCATGGGGATTCAAGGCAGCCCTCCGTGGATGGCGAGGACAACTTCCGCTACTTCC
TTGCCCAGATGGGCCGCTTCACCTGTCTGCGTGAGCTCAGCATGGGCTCCTCTCTCCTTTCAGGGAGGCTGGACC
AGCTGCTCAGCACCCTGCAGAGCCCCCTGGAGAGCCTGGAGTTGGCCTTCTGTGCTCTGCTGCCTGAGGACCTAC
GCTTCCTGGCACGGAGCCCACATGCTGCCCACCTCAAGAAGTTGGACCTGAGTGGTAACGACCTGTCTGGCAGCC
AGCTGGCACCCTTCCAGGGTCTGTTGCAGGCATCAGCAGCCACACTGTTGCATCTGGAGCTGACTGAGTGTCAGC
TCGCAGACACCCAGCTGTTGGCCACACTACCCATCCTGACTCAGTGCGCCAGTCTCCGGTACCTTGGCCTCTATG
GCAACCCACTGTCCATGGCGGGCCTCAAGGAGCTGCTGCGGGACTCAGTGGCACAGGCTGAGCTGCGTACTGTGG
TGCACCCCTTCCCTGTGGACTGCTATGAGGGCTTGCCCTGGCCGCCGCCTGCCTCTGTCCTGCTGGAGGCCTCCA
TCAATGAGGAGAAGTTTGCCCGCGTAGAAGCTGAGTTGCACCAGCTGCTTCTAGCCTCAGGCCGTGCCCATGTGC
TCTGGACCACGGACATCTACGGGCGACTGGCTGCGGACTACTTCAGCCTATGAATGAAGTAGCTCTGGGTGAGACA
CAGGCCGCCCTGCAGTCTCTTTAGGTAGGCAGGGCCTTTGCTGGGACCCCTGGTGGAGGCCTTCACAAAAGCACT
GGTTACTGGTTTCCTGCTGGGTCTACCTTGCTTCTGGGCACACCTCAAGCCTCCCCTGCTTTCTGCAGTGCCCCA
CGCGGTTTTCCCTGCACTTGCTCCATAATTGGCTGATCATCTGTGGGCCCCGGGGCTGGATGTCAGGCCTCCATT
GCCCTGCTCAGTTTGGCTGCATTTGGCTGCCGTCTGGGGTCCTGGTCCTTTGTGCAAATGCTTTGGGATTCCAGT
TGTGAGCTGAGAGAGATGATGGCCTCTCTGGGCCTTTCCTCTCCCTTTACTGAGAGCTCAGTGCTTCTGGGGTTG
AAGTTGGACAGAGGCCTGCTTCAGGGAAGCTGGGAGTCCCCAGGCACTCACGCCTCTTACGTGTTCCCTACCCTG
CCACCCAGCCACCCCACTGGGCTGGGCTCGGGCTGGAGGGGGTCATCAAGGTACACATGTGCCTGGAAGTTGAAT
TTGTGGCTGTTTTTTTTTCTGTCCACGTTGGTCACCCTTATCCTTATCTCTGCTGTCACCCCCAACATGGCCACC
CGGCAACAACTGCCATCCAGCCTGTCGCCCCGCCCTTCGCGGGGCAGCCCCGTCGGCACTGCCGGCCAGTCCTTG
CTCTTCCCACCTTTCGGAGGCCCAAGATCCTACTGTGGCCGGCCAGGGCCAGCGAGGGACCCCCCCCCATGCAGAG
CTGGAGGTTGGGGTGATGTCTTTTCGGAAGAGCTTCAAGGGAGGTGTTGGGGCCTCCCCGGCCACCTTCCATTGC
TACCCCAGGATTCCCGAGTGCAACGTTCCCGGCTCGCGCCCCACACACGGCTCAGCGCACACTGCGCGGCTTCCA
CCTTTACTGACGGAGCATGCGCGAGGCCGCACCGGCCAATCTCCGGCGCCCACGTCATCCGCGCGCCCGCGGCCC
TAGCAGTGGATCTCGTAGGCGACCGGCGGGGGCACGCGGAGTCCCGGCCCCGCCCCCTGTTCCGGGCCGCAGTCA
GCGGGCGCCTCCGCCGGACCCTCGGCGAAGAGCGGCTTGGAGCGGTTGATGACGAACATCTCGTGGCCGCGCTCG
TCGCGGAGCTCCTCTAGCTGTGCGAACGTACAGGGGCCGTCCAAGTAGTCGTTGACGAACAGCGCTCCCTCCCCC
GGAGGCCCCCGCGCCTTTTTTCGCCTGCGGCGCCGGCGACAGATCATGGCGACCAGGAGCAGCGCCGTGAGCGCC
AGCAGCGCGATGGCCGCCGCAATGGCCGTCTGTGTGGCCACGCCCAGGGCGCGGAAGGCCATGCTGCCCGCCTCG
GGCCGGGGCTCGCTGCCGGCGGGGCGGGCGGCCGGAGGCGGCGGTTGCGCGGGCTGCTGCGGCTGCTGCCGGGAC
GCGTTGACCAGGAGCCGGAAGGGCACGCGGGCAGCGCCGCCGGCGTTGGAGGCCTCGCACTCGTACTTACCGGCG
TGCGCCAGCGTGATGTTGCTGAGGAAGAGCATGCCGCTGCCCGTGTCGGATGCCGAGTGTCCGCCCAGGCCCAGC
AACCCGCCTTCTAGCTGGGCCTGGGCTCGCGGCCGGCCCTCGCGAGGCTGGGGCACCTTTCTCCAGGTCACCAAT
GGCTGCGGGTAGCCGGAGGCTTGGCAGGCAACCCGCAGGTCCTCACCCAGGTTGGCTGTGAGCTCCAGCGGCTGC
ACGTGGACAGAGGGCGGAATGCAGATGAGGCTGCTGTGGGATACGTCCAGGAGACTCTGGAGCGCCAGGCGCGGG
GGCTCTGCACACATGATCTTCCTGTCCCTGGAGGTGAGCAGCCGCTGGCCGCCCTCCTTGATCCAGGCACCCAGC
CAGTGCAGGGCGCAGTCACAGCGCCATGGGTTCTCTGTGGGAGAGCAGCGTTAGGCAGGTGGCTTGAGGGTGCTG

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FIGURE 3070B

CTAAAACAGCCTGTGCAGTTGGGGTTTTGCAGGCCAGGACAGAGGCCTCTTTCCCACCTCCCACAGCGTTTTCAC
ACGGAGTCCAAGGCCCTGCCACCCCTTCCTTGACCCCAAGCTCCTTGGGGCGGCAGGCCCTTCACCCTCNGCCCC
CCTCCCCTTTAGCTCTGTGATGCCTGCCTGTTACAGATCACTTCTCCGTCGGTCTCTGAGAAAGCACCTGCTCCT
TAAGTCTTCCTGCAACAAGTGCCACTGTTTTTAGGAACCTGGGCGTCCACATAGACATCTCACCAGCACTGAAAC
CTCACAAGTCCTCTCAGCCTTGCCTTTGGATGCCCTCTCTTGGGAATGTCCCCAGTCCTGGTCAGCTGTCTCTCT
CCTTTGCAATTTTGTCTGCCTCCCCTCAGCCTAAAAGTGTGCAGAACCCTCAATTCTGTTAAGTCACCCTGTGGA
GTTCCTGTCTTCTGTTTTCCCCAGGCAGGGTGCCTGAGCTGTATTCCCCAGCACACCCACTCCCGCAGCCCTCCA
GTGTGGCTGCAGGCGGTGGTGCAGCCTTCCAGACTGCTGCCCAGTTGCCTGATGTCAGAGCCCCTCCACACATGA
GCCTGCTCCCTACTGCCAACACCGTGGCCCAGACAGAGACGCTTTCCGAGGAAGAGGTACCTGTGAGGCGCAGGA
CTTGCAGACTGGCCAGGGGCTGCAGGGCCTCTCGGCTGATGGTGCCCAGCTGGTTCCTGCTGAGGTCCAGCAGTG
CTAGGGAGGACAGCCCCGCTAGAGCCTGGTCCTCCAGCAGCTCAATGCTGTTTTCTTGCAGGTGAAGCTCCTGCA
GTCGCTGAAGTAAGGACAGCAGATCGTGAGGAAAAAGGGCGCCGAGGTTGGGGGCATGTCTCTCTTCTTACCAAG
CTAGACTGGGTTGCCTTTTCTAACTATTCCAGCCCTACAGGGCGAGGGGCCATAATGGAGTATCCCGCCCCTTTA
GACCCCAGGCGCTCACCGGCAGGTGCAAGAAGGTGAAATCCAGCAGCCGCGCCAGCTGGTTGCCCGCCAGGTAGA
GCACGCGCAGCTGGGCCAGGCCTACGAAGGCGCCGCTGCGCAAGCCGCGCAGCCGGTTGCTAGTGAGCGCCAGCT
CCAGCAGGCGCGGCTGCGCGCGGAAGGCGCCGGCCTCCAGGGCGCGCAGGCTGTTGTTGTGCAGGTAGAGCCGGC
GCAGAGCGGCGAGTGGCGCCAGGGCTCCCGGCTCTAGGCGGGCGATGTTGTTGTCCTGCAGGAACAGTGTCTGCA
GGCCGGGGAAAGAGGAGGCGCTTACCCCGTTGCGGGGGTCTTCCTCTCCCTGGGGGCACCCCGTCCTCCCGCAGC
TCCACACGGTGCCCACCTGCGTCCCTGGCGGGATTCCCAGCGGGACGACGCGCAACCGCAGGGCGCCACACTCCA
CCGTGGCGCTGTAGCAGCGGCAGGCTGCTGGGCAGCCGGCGGCGCGGAGCGGCAGTAGTAGCAGCAGCAGCGGCA
GCAGTGCGGGGGCCCTCAGGGCCATCTCCCGAGGCCCGGTTCCTCACCGGCCCTTCCGCGGTTCAGCCGCAGACG
CGTGCCCTCCTGAAACACAGGTTGGCAGGCCAGTCTCGGCAGTCGAGAGCCAGCCAATAGATGGAATGGAGGCCT
GCACCTGCGTCTAACTTTTGACGCTATAAATAGGTTCAAGAAACTAATAAAACGTTCTGGTTTTCTCCTTTGAC

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FIGURE 3071A

AGCCTGAGAAGCCAGGCCCCGGCAGCAAGGACCCCAAGGCCGACAGCGTGCGGGCCATCAGCGTGCGCACCCTCT
ACCTGGTCAGCACCACCGTGGACAGGATGAGTCACGTCCTCTGGCCATACCTGCTCCAGTTCCTCACCCCTGTGC
GCTTCACTGGGGCCCTGACTCCGCTCTGCAGGAGCCTCGTGCATCTGGCGCAGAAGAGGCAGGAGGCCGGGGCCG
ACGCCTTCCTCATCCAGTACGACGCCCATGCGAGCCTCCCGTCTCCCTATGCTGTAACCGGAAGACTGTTGGTTG
TGTCTTCCAGCCCCTACCTAGGGGACGGACGTGGGGCAGCGGCGCTGCGCCTCCTCAGTGTTCTGCACCCAAACA
TTCACCCTTTGCTGGGTCAGCATTGGGAAACGACTGTCCCGCTGCTGCTGGGGTACCTGGATGAGCACACAGAAG
AGACCCTGCCACAGGAGGAGTGGGAGGAGAAGCTGTTGATGTTCCTGCGAGACACCCTGGCCATCATTTCTGACA
ACGCGTGGATCTGCCAGCTGAGCCTGGAGCTGTGCAGGCAGCTGCCCTGCTACGATGAGGCACCCCAGGAGAAGA
ACTTCCTGTACAAATGCATAGGCACCACCCTGGGTGCTGCTTCAAGTAAGGAGGTGGTGAGGAAGCACCTTCAAG
AGCTGCTGGAGACGGCCAGATACCAGGAGGAGGCAGAACGCGAGGGCCTCGCCTGCTGCTTCGGGATCTGTGCCA
TCTCCCACCTCGAGGACACGCTGGCCCAGCTGGAGGACTTCGTGAGGTCAGAGGTCTTCAGAAAATCCATTGGCA
TTCTCAACATTTTTAAGGATCGAAGTGAGAACGAAGTGGAGAAGGTGAAGAGTGCTCTGATCCTGTGCTATGGGC
ACGTGGCGGCCCGGGCCCCCCGGGAGCTGGTGCTGGCCAAGGTAGAGTCAGACATCCTCCGGAACATCTGCCAGC
ACTTCAGCACCAAGGACCCAGCCCTGAAGCTGTGCCTTGTCCAGAGTGTGTGCATGGTCAGCCGCGCCATCTGCA
GCAGCACCCAGGCTGGCTCCTTCCACTTCACCCGGAAAGCAGAGCTGGTGGCACAGATGATGGAGTTCATCAGGG
CAGAGCCCCCGGACTCCTTGAGGACACCTATTCGGAAGAAAGCCATGCTCACCTGCACTTACTTGGTCTCCGTGG
AGCCAGCGCTGGACGAGCAGGCCCGGGCGGATGTGATCCATGGCTGCCTGCACAGCATCATGGCCCTGCTGCCTG
AGCCCAAGGAGGAGGACGGAGGCTGCCAGAAGTCCCTGTATCTGGAGACACTGCACGCCCTTGAGGATCTGCTGA
CGAGCCTCCTGCAGCGGAACATGACCCCCCAAGGCCTGCAGATCATGATTGAGCACCTGAGCCCATGGATCAAGT
CCCCAAGAGGTCACGAGCGGGCGCGGGCCCTGGGCCTGAGCGCCCTCCTGCTGCGCTACTTCCTGGAGCACCTGC
GTGTCAGCGCCCTGGTGCCCTTCCACAACCTGGGCCTTCTCATCGGCCTCTTCTCCCCACGGTGTGCGGACCTGT
GGCCTGCCACCCGCCAGGAGGCCGTGGACTGTGTCTACTCCCTGCTGTACCTCCAGCTCGGCTATGAGGGCTTCT
CCCGGGACTACCGCGATGACGTGGCGGAGCGGCTCCTCAGCCTCAAGGACGGCCTCGTGCACCCTGACCCCGCCA
TTCTCTTCCACACCTGCCACAGTGTAGGCCAGATTATTGCCAAGCGCCTCCCCCCAGACCAGCTCATCAGCCTCT
TGCTAACCATGTTTGAGGCCCTGGGAGACCCCGAAAAGAACTGCTCCCGAGCAGCTACCGTCATGATCAACTGCC
TGCTGCAGGAGCGGGGCGGTGTGCTCCAGGAGAAGGTGCCCGAGATCGTGAGCGTCCTGCGCTCCAAGCTTCAGG
AGGCCCAGGGAGAGCACGTCCTGCCGGCCGCCCAGCACAGCGTGTACCTCCTGGCCACCCAGCACTGCGCAGCCG
TGGTGTCCAGCCTCCTGGGCAGCCCCTTGCCCTTGGACAGGTACCCAGCTCAGACTCCAGGCTTAGGGGTCCCTC
TGGAATGATGCTCCCCCTGGAATGATGCTCCCCGAGCCCTCCACCCGGCTCTGCACCCCGACTTTCTGCATGAGT
TCCCATGGCTGTAGGCCACGTGGGACAGAAAGTGACATGGAGCCAGGCCCCAGTCTCTCAGGTACCCACGGGGAC
CTCTCCTCTCCAGGCGTTTTGGGATCCTCACTGGCTCCGGTGGGCCCTGCACAGCACCCCCACAGGGAAGCTGCT
GTTTCTGCCTTCCTCTAAGGTCCCAAAACTGCCTGGCTGCTCTGTTGGCCCCAGGCTCCAGCACACACTGGAGGC
TGCCCCTCACCCTGTGTCTTGGTTCCGGCTACTCCAAGCCTTGTCCTCTGCAGGGCATCCACTGCTGCCTGTGAG
CAGACCCCTGGGAACTGCCTGATCTGAGCCCCCTCAGGAGCCCAAGGACAACCTTGTCTGTACCATACATCACTA
TGTCTTCCCAAGCTCACACCTCCCAGCTCCCAGCAAAGGGCAGGGCGTGTCTACCACCCACCAGCCCACTGGGGT
CCCCCTTCCTCGCCGAGGCCTCCGGAGCATGGGTCTGCTGGCCCTTCCTTTCTTTGCCATCTTAGTCATGGACAG
AGGCTGGCCCAGGGGCACCTGGCTTCCTGTGACCTCCGGGAGACTCCATGCTGGGCAAGGCAGAGTGACCCTTCC
CCTGGCAGGCGGGGGCATGAGGCTGCCACGGGGAACACAGGTTTCCTTGCACCTGGCCCTTTACCCTGTCAGCTT
TGCTGTTTTCATGTGCTCTGACGCCCTCCCATTAGGTGCATCCAAGCTGCAATGCCCACTTCCTCCTGGCAGGGG
GGACCCGCAGGCACCTTCTGCTCAGAGGTGCACTTGTCTGGTGGCCCTGCTCCTTCCTGGTACTGTTGACCTTTC
TGTGTGTTTGTTTTAAATCTCTTGCATGGTAAATAGCTGCATTTTGTTACTGATAAGAGTGAGTTTAAATCCACT
GTCATATCTTTTGCGTCTTTGTTACACATTTTGTTTTTTAAAAATCTTCTTTCTTGTCCTTTTTTAGATTGACAG
TGTCCCTCTTACCTCACTTTCTCCACTCAGTTTGTAATCCTGCAGTCTGTTGCTTTTCTTTTAGCGTTTGCCCTA
AAGGTGGCTGCATGTGTCCTCACTGAAGTCCAGCATGGGCCCCAAATGCAGGCTGAGGTCTGGGTCTGGCTGGGC
TGCTGGGCGCCCGAGTCATCATGACCATTGTTCCTGGGCACAGCCGGCGTTGACTTGTATTTCCTCCGTGATTAC
CGCCTGGCTCATCAATCACTGTTTTCGTTTTCCGTGGAGGCGTGGCTCACACAAAGGGCAAGCACGGAGTCACTG
GGTCCTGCAGGACTTTCCAGGTCAAGGCAGAGGAGGTGTCCGGTCCCCAGCAGGCTCCTGTGTGCCCCTCAGTCC
CCTAGAGGGTCACGGCCACCTGACCGCCACCACTAGAGGTTTTGGCGATTGTGCTGTGTGGTGGGTCTTCCCGGC

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FIGURE 3071B

CTCTGCTTAGCACAGCAGTGCTGCTGCCCATCCTTCCTCCTTGCCAGGTAGTGCCGGGTGCTGCTGCCCATCCTT
CCTCTGCCGGGCAGTGCCGGGTGCTGCTGCCCATCCTTTCTCCTTGCCGGGTAGTGCCGGGTGCTGCTGCCCATC
CTTTCTCCTTGCCGGACAGTGCTGGGTGCCGTGTGGGCTGCACTGTGTGTGTGTTTCTAGGTGATGGACATTCAG
ATTGTTTTTTGGTTTGGGGCTGCTGGGGATGGCGATGCTTTGAATGTTCCTGGGAGTGTCTGTTGGTGGGTAGAG
CATGCATTTCTCTTTCGTGTGTATATAGGAGTGGAATCAAGGCCGGGCACTGTGGCTCATACCTGTAATCCCAGC
AGTGTGGGAGGCTGAGGCAGGAGGATTACCTGAGGTCAGAAGTTTGCGACCAGCCTGGCCAACATGGCAAAACCC
CGTCTCTACTGAAAATATAAAAATTGGCCAGGCATGGCCAGGCGCAGTGGCTCACCCCTGTAATCCCAGCACTTT
GGGAGGCTGAGGTGGGTGGATCACGAGGTCAGGAGATCGAGACCATCCTGGCTAACATGGTAAAACCCCGTCTCT
ACTAAAAATATAAAAAATTAGCCAGGCGAGGTGGCAGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGG
AGAATGGTGTGAACCCAGGAGGCGGAGCTTGCAGTGAGTTGAGATTGCACCACTGCACTCCAGCCTGGGCGACAG
AGCAAGAACTCTGTCTC

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FIGURE 3072

CTCCTGCGCACGCGGCCCGGTCGCTGTCGGAAGCGGCTGTGCGGGTGGCGGCCGGCGCGCGGTGGGGC**ATG**GCGG
GTTCGCGGGGTGCGGGGCGCACGGCGGCGCCGAGCGTGCGGCCGGAGAAGCGGCGGTCTGAGCCCGAACTGGAGC
CTGAGCCCGAGCCGGAGCCCCCCCTCCTCTGCACCTCTCCTCTCAGCCACAGCACCGGCAGCGATTCTGGCGTCT
CCGACAGCGAGGAGAGTGTGTTCTCAGGCCTGGAAGATTCCGGCAGTGACAGCAGTGAGGATGATGACGAAGGCG
ACGAGGAGGGAGAGGACGGAGCCCTTGATGACGAGGGCCACAGTGGGATTAAAAAGACCACTGAGGAGCAGGTGC
AGGCCAGCACTCCTTGCCCGAGGACAGAGATGGCGAGCGCCCGGATTGGGGATGAGTATGCGGAGGACAGCTCTG
ATGAGGAGGACATCCGGAACACGGTGGGCAACGTGCCCTTGGAGTGGTACGATGACTTCCCCCACGTGGGCTACG
ACCTGGATGGCAGGCGCATCTACAAGCCCCTGCGGACCCGGGATGAGCTGGACCAGTTCCTGGACAAGATGGACG
ATCCTGACTACTGGCGCACCGTGCAGGACCCGATGACAGGGCGGGACCTGAGACTGACGGATGAGCAGGTGGCCC
TGGTGCGGCGGCTGCAGAGTGGCCAGTTTGGGGATGTGGGCTTCAACCCCTATGAGCCGGCTGTCGACTTCTTCA
GCGGGGACGTCATGATCCACCCGGTGACCAACCGCCCGGCCGACAAGCGCAGCTTCATCCCCTCCCTGGTGGAGA
AGGAGAAGGTCTCTCGCATGGTGCACGCCATCAAGATGGGCTGGATCCAGCCTCGCCGGCCCCGAGACCCCACCC
CCAGCTTCTATGACCTGTGGGCCCAGGAGGACCCCAACGCCGTGCTCGGGCGCCACAAGATGCACGTACCTGCTC
CCAAGCTGGCCCTGCCAGGCCACGCCGAGTCGTACAACCCACCCCCTGAATACCTGCTCAGCGAGGAGGAGCGCT
TGGCGTGGGAACAGCAGGAGCCAGGCGAGAGGAAGCTGAGCTTTTTGCCACGCAAGTTCCCGAGCCTGCGGGCCG
TGCCTGCCTACGGACGCTTCATCCAGGAACGCTTCGAGCGCTGCCTTGACCTGTACCTGTGCCCACGGCAGCGCA
AGATGAGGGTGAATGTAGACCCTGAGGACCTCATCCCCAAGCTGCCTCGGCCGAGGGACCTGCAGCCCTTCCCCA
CGTGCCAGGCCCTGGTCTACAGGGGCCACAGTGACCTTGTCCGGTGCCTCAGTGTCTCTCCTGGGGGCCAGTGGC
TGGTTTCAGGCTCTGACGACGGCTCCCTGCGGCTCTGGGAGGTGGCCACTGCCCGCTGTGTGAGGACTGTTCCCG
TGGGGGGCGTGGTGAAGAGTGTGGCCTGGAACCCCAGCCCCGCTGTCTGCCTGGTGGCTGCAGCCGTGGAGGACT
CGGTGCTGCTGCTGAACCCAGCTCTGGGGGACCGGCTGGTGGCGGGCAGCACAGATCAGCTGTTGAGCGCCTTCG
TCCCGCCTGAGGAGCCCCCCTTGCAGCCGGCCCGCTGGCTGGAGGCCTCAGAGGAGGAGCGCCAAGTGGGCCTGC
GGCTGCGCATCTGCCACGGGAAGCCAGTGACGCAGGTGACCTGGCACGGGCGTGGGGACTACCTGGCCGTGGTGC
TGGCCACCCAAGGCCACACCCAGGTGCTGATTCACCAGCTGAGCCGTCGCCGCAGCCAGAGTCCGTTCCGCCGCA
GCCACGGACAGGTGCAGCGAGTGGCCTTCCACCCTGCCCGGCCCTTCCTGTTGGTGGCGTCCCAGCGCAGCGTCC
GCCTCTACCACCTGCTGCGCCAGGAGCTCACCAAGAAGCTGATGCCCAACTGCAAGTGGGTGTCCAGCCTGGCGG
TGCACCCTGCAGGTGACAACGTCATCTGTGGGAGCTACGATAGCAAGCTGGTGTGGTTTGACCTGGATCTTTCCA
CCAAGCCATACAGGATGCTGAGACACCACAAGAAGGCTCTGCGGGCTGTGGCCTTCCACCCGCGGTACCCACTCT
TTGCGTCAGGCTCGGACGACGGCAGTGTCATCGTCTGCCATGGCATGGTGTACAATGACCTTCTGCAGAACCCCT
TGCTGGTGCCCGTCAAGGTGCTGAAGGGACACGTGCTGACCCGAGATCTGGGAGTGCTGGACGTCATCTTCCACC
CCACCCAGCCGTGGGTCTTCTCCTCGGGGGCAGACGGGACTGTCCGCCTCTTCACC**TAG**CTGTTCTGCCTGCCTG
GGGCTGGGGTGGTCGTGCTGAAGTCAACAGAGCCTTTACCCTGTGCTGCCTGGTGCTCCCACCTTCTTGAATTGG
GGTTGCCAACAAAGCCGCCCCCACCACA

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FIGURE 3073

GCCCGTTGCAAGATGGCGGCGGCCATGCTGGGCCCCGGGGCTGTGTGTGCGCAGCGGGCGGCGGCGCGGCCCGGA
AGGCTGGCGCGGCGACGGCGTTAGCCCGGCCCTCGGCCCCTCTTTGCGGCCGCTCCCTCCGCCTATTCCCTCCTT
GCTCGAGATGGATCTGCCCGTGGGCCCCGGCGCGGCGGGGCCCAGCAACGTCCCGGCCTTCCTGACCAAGCTGTG
GACCCTCGTGAGCGACCCGGACACCGACGCGCTCATCTGCTGGAGCCCGAGCGGGAACAGCTTCCACGTGTTCGA
CCAGGGCCAGTTTGCCAAGGAGGTGCTGCCCAAGTACTTCAAGCACAACAACATGGCCAGCTTCGTGCGGCAGCT
CAACATGTATGGCTTCCGGAAAGTGGTCCACATCGAGCAGGGCGGCCTGGTCAAGCCAGAGAGAGACGACACGGA
GTTCCAGCACCCATGCTTCCTGCGTGGCCAGGAGCAGCTCCTTGAGAACATCAAGAGGAAAGTGACCAGTGTGTC
CACCCTGAAGAGTGAAGACATAAAGATCCGCCAGGACAGCGTCACCAAGCTGCTGACGGACGTGCAGCTGATGAA
GGGGAAGCAGGAGTGCATGGACTCCAAGCTCCTGGCCATGAAGCATGAGAATGAGGCTCTGTGGCGGGAGGTGGC
CAGCCTTCGGCAGAAGCATGCCCAGCAACAGAAAGTCGTCAACAAGCTCATTCAGTTCCTGATCTCACTGGTGCA
GTCAAACCGGATCCTGGGGGTGAAGAGAAAGATCCCCCTGATGCTGAACGACAGTGGCTCAGCACATTCCATGCC
CAAGTATAGCCGGCAGTTCTCCCTGGAGCACGTCCACGGCTCGGGCCCCTACTCGGCCCCCTCCCCAGCCTACAG
CAGCTCCAGCCTCTACGCCCCTGATGCTGTGGCCAGCTCTGGACCCATCATCTCCGACATCACCGAGCTGGCTCC
TGCCAGCCCCATGGCCTCCCCCGGCGGGAGCATAGACGAGAGGCCCCTATCCAGCAGCCCCCTGGTGCGTGTCAA
GGAGGAGCCCCCCAGCCCGCCTCAGAGCCCCCGGGTAGAGGAGGCGAGTCCCGGGCGCCCATCTTCCGTGGACAC
CCTCTTGTCCCCGACCGCCCTCATTGACTCCATCCTGCGGGAGAGTGAACCTGCCCCCGCCTCCGTCACAGCCCT
CACGGACGCCAGGGGCCACACGGACACCGAGGGCCGGCTTCCTTCCCCCCCGCCCACCTCCACCCATGAAAAGTG
CTTCAGGGTAGCCTGCCTGGACAAGAATGAGCTCAGTGACCACTTGGATGCTATGGACTCCAACCTGGATAACCT
GCAGACCATGCTGAGCAGCCACGGCTTCAGCGTGGACACCAGTGCCCTGCTGGACCTGTTCAGCCCCTCGGTGAC
CGTGCCCGACATGAGCCTGCCTGACCTTGACAGCAGCCTGGCCAGTATCCAAGAGCTCCTGTCTCCCCAGGAGCC
CCCCAGGCCTCCCGAGGCAGAGAACAGCAGCCCGGATTCAGGGAAGCAGCTGGTGCACTACACAGCGCAGCCGCT
GTTCCTGCTGGACCCCGGCTCCGTGGACACCGGGAGCAACGACCTGCCGGTGCTGTTTGAGCTGGGAGAGGGCTC
CTACTTCTCCGAAGGGGACGGCTTCGCCGAGGACCCCACCATCTCCCTGCTGACAGGCTCGGAGCCTCCCAAAGC
CAAGGACCCCACTGTCTCCTAGAGGCCCCGGAGGAGCTGGGCCAGCCGCCCACCCCCACCCCCAGTGCAGGGCTG
GTCTTGGGGAGGCAGGGCAGCCTCGCGGTCTTGGGCACTGGTGGGTCGGCCGCCATAGCCCCAGTAGGACAAACG
GGCTCGGGTCTGGGCAGCACCTCTGGTCAGGAGGGTCACCCTGGCCTGCCAGTCTGCCTTCCCCCAACCCCGTGT
CCTGTGGTTTGGTTGGGGCTTCACAGCCACACCTGGACTGACCCTGCAGGTTGTTCATAGTCAGAATTGTATTTT
GGATTTTTACACAACTGTCCCGTTCCCCGCTCCACAGAGATACACAGATATATACACACAGTGGATGGACGGACA
AGACAGGCAGAGATCTATAAACAGACAGGCTCT

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FIGURE 3074

GTCCCTGGGCCGGACGGCGGTGTCCCGGCGTGGCGGGAAGCCGGCACTGGAGCGGGAGCGCACTGGGCGCGGGAC
CGGGAGGCGCAGGGACCGGACGGCTCCCGAGTCGCCCACCTGACGCTAGAAGAAGTCTTCACTTCCCAGGAGAGC
CAAAGCGTGTCTGGCCCTAGGTGGGAAAAGAACTGGCTGTGACCTTTGCCCTGACCTGGAAGGGCCCAGCCTTGG
GCTGAATGGCAGCACCCACGCCCGCCCGTCCGGTGCTGACCCACCTGCTGGTGGCTCTCTTCGGCATGGGCTCCT
GGGCTGCGGTCAATGGGATCTGGGTGGAGCTACCTGTGGTGGTCAAAGAGCTTCCAGAGGGTTGGAGCCTCCCCT
CTTACGTCTCTGTGCTTGTGGCTCTGGGGAACCTGGGTCTGCTGGTGGTGACCCTCTGGAGGAGGCTGGCCCCAG
GAAAGGACGAGCAGGTCCCCATCCGGGTGGTGCAGGTGCTGGGCATGGTGGGCACAGCCCTGCTGGCCTCTCTGT
GGCACCATGTGGCCCCAGTGGCAGGACAGTTGCATTCTGTGGCCTTCTTAGCACTGGCCTTTGTGCTGGCACTGG
CATGCTGTGCCTCGAATGTCACTTTCCTGCCCTTCTTGAGCCACCTGCCACCTCGCTTCTTACGGTCATTCTTCC
TGGGTCAAGGCCTGAGTGCCCTGCTGCCCTGCGTGCTGGCCCTAGTGCAGGGTGTGGGCCGCCTCGAGTGCCCGC
CAGCCCCCATCAACGGCACCCCTGGCCCCCCGCTGGACTTCCTTGAGCGTTTTCCCGCCAGCACCTTCTTCTGGG
CACTGACTGCCCTTCTGGTCGCTTCAGCTGCTGCCTTCCAGGGTCTTCTGCTGCTGTTGCCGCCACCACCATCTG
TACCCACAGGGGAGTTAGGATCAGGCCTCCAGGTGGGAGCCCCAGGAGCAGAGGAAGAGGTGGAAGAGTCCTCAC
CACTGCAAGAGCCACCAAGCCAGGCAGCAGGCACCACCCCTGGTCCAGACCCTAAGGCCTATCAGCTTCTATCAG
CCCGCAGTGCCTGCCTGCTGGGCCTGTTGGCCGCCACCAACGCGCTGACCAATGGCGTGCTGCCTGCCGTGCAGA
GCTTTTCCTGCTTACCCTACGGGCGTCTGGCCTACCACCTGGCTGTGGTGCTGGGCAGTGCTGCCAATCCCCTGG
CCTGCTTCCTGGCCATGGGTGTGCTGTGCAGGTCCTTGGCAGGGCTGGGCGGCCTCTCTCTGCTGGGCGTGTTCT
GTGGGGGCTACCTGATGGCGCTGGCAGTCCTGAGCCCCTGCCCGCCCCTGGTGGGCACCTCGGCGGGGGTGGTCC
TCGTGGTGCTGTCGTGGGTGCTGTGTCTTGGCGTGTTCTCCTACGTGAAGGTGGCAGCCAGCTCCCTGCTGCATG
GCGGGGGCCGGCCGGCATTGCTGGCAGCCGGCGTGGCCATCCAGGTGGGCTCTCTGCTCGGCGCTGTTGCTATGT
TCCCCCCGACCAGCATCTATCACGTGTTCCACAGCAGAAAGGACTGTGCAGACCCCTGTGACTCCTGAGCCTGGG
CAGGTGGGGACCCCGCTCCCCAACACCTGTCTTTCCCTCAATGCTGCCACCATGCCTGAGTGCCTGCAGCCCAGG
AGGCCCGCACACCGGTACACTCGTGGACACCTACACACTCCATAGGAGATCCTGGCTTTCCAGGGTGGGCAAGGG
CAAGGAGCAGGCTTGGAGCCAGGGACCAGTGGGGGCTGTAGGGTAAGCCCCTGAGCCTGGGACCTACATGTGGTT
TGCGTAATAAAACATTTGTATTT

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FIGURE 3075

GCTTCCCCGAGCGCCGTCGGTGGTCATGGCTGCCCCAGCCTCCCGGCAGGTCCGACGCAGAGCCCGGGCAGCGCC
GCGGCCCCGCTCGGCCGAGGATTGGTGGTGGGACCGGCTGGCGCCGAGGGGCTCGGGGTACCACCTGCTGCAGTC
CGACAGCATGCTGCTGGTGCTGTCCGAACCAGGCCCCGCCCGGCCCCGCGCACAGCGGCGCGATTCCCGCCGCAC
TCCCCGGCAGCCGCCCCGGGGCCCCAGCGCCGCGGCCAAGCCCAAGGCCGGGCTCAGGTCCGAGGCGGCGGCCGC
GCCCGCACCCGCACCGGCACCCACGCCCACGCCCGAGGAAGGGCCCGACGCGGGCTGGGGAGACCGCATTCCCTT
GGAAATCCTGGTGCAGATTTTCGGGTTGTTGGTGGCGGCGGACGGCCCCATGCCCTTCCTGGGCAGGGCTGCGCG
CGTGTGCCGCCGCTGGCAGGAGGCCGCTTCCCAACCCGCGCTCTGGCACACCGTGACCCTGTCGTCCCCGCTGGT
CGGCCGGCCTGCCAAGGGCGGGGTCAAGGCGGAGAAGAAGCTCCTTGCTTCCCTGGAGTGGCTTATGCCCAATCG
GTTTTCACAGCTCCAGAGGCTGACCCTCATCCACTGGAAGTCTCAGCTGGTAGGTGAGTGCTGTCCTCGGCTCAC
TTTCCTCAAGCTCTCCGGCTGCCACGGTGTGACTGCTGACGCTCTGGTCATGCTAGCCAAAGCCTGCTGCCAGCT
CCATAGCCTGGACCTACAGCACTCCATGGTGGAGTCCACAGCTGTGGTGAGCTTCTTGGAGGAGGCAGGGTCCCG
AATGCGCAAGTTGTGGCTGACCTACAGCTCCCAGACGACAGCCATCCTGGGCGCACTGCTGGGCAGCTGCTGCCC
CCAGCTCCAGGTCCTGGAGGTGAGCACCGGCATCAACCGTAATAGCATTCCCCTTCAGCTGCCTGTCGAGGCTCT
GCAGAAAGGCTGCCCTCAGCTCCAGGTGCTGCGGCTGTTGAACCTGATGTGGCTGCCCAAGCCTCCGGGACGAGG
GGTGGCTCCCGGACCAGGCTTCCCTAGCCTAGAGGAGCTCTGCCTGGCGAGCTCAACCTGCAACTTTGTGAGCAA
CGAGGTCCTGGGCCGCCTACTCCACGGCTCTCCCAACCTGCGCTTACTGGATCTTCGTGGCTGTGCGCGCATCAC
GCCGGCTGGCCTTCAGGATCTGCCATGTCGGGAGCTGGAGCAGCTTCATCTGGGCCTGTATGGCACGTCAGACCG
GCTGACTCTAGCCAAGGAGGGCAGCCCCTTTTTGACCCAGAAGTGGTGCCATACACTGCGAGAACTGGACTTGAG
TGGCCAGGGGTTCAGTGAGAAGGACCTGGAGCAGGCCCTGGCTGCCTTCTTAAGCACCCCTGGGGGCTCACACCC
AGCCCTGTGCTCTCTTAACCTCAGGGGCACCCGGGTCACACCAAGCACTGTCAGCTCTGTGATCAGCAGCTGCCC
GGGCCTGCTTTACCTCAACCTGGAGTCCTGCCGGTGCCTTCCCCGGGGTTTGAAGCGGGCCTACCGGGGCCTGGA
GGAAGTCCAGTGGTGTCTGGAGCAGGTGCTCACCAGCCCCTCACCCAGCTAGGCAGCCACAGACCTGGGACACCT
CAGCCAGCTTGCCCACCCTCCACCTTTGCCCAATTTCAGATATTTGAGCATTTTGTTAAAATAAAACATTTTTAG
G

FIGURE 3076

GAAGCTCTGGGAAGGGGATGCCCCCGAGGGTGCCAGTCCAGCTAGCTGCCCCACCCCTCAGGCCCAGCCTGGCCC
CCAAGCTCCCCACTCTGGTGCCCCGAGCAGCCCTGTGGGCAAGCAGCCGCCGCCATGGCCGAGCACCTGGAGCTG
CTGGCAGAGATGCCCATGGTGGGCAGGATGAGCACACAGGAGCGGCTGAAGCATGCCCAGAAGCGGCGCGCCCAG
CAGGTGAAGATGTGGGCCCAGGCTGAGAAGGAGGCCCAGGGCAAGAAGGGTCCTGGGGAGCGTCCCCGGAAGGAG
GCAGCCAGCCAAGGGCTCCTGAAGCAGGTCCTCTTCCCTCCCAGTGTTGTCCTTCTGGAGGCCGCTGCCCGAAAT
GACCTGGAAGAAGTCCGCCAGTTCCTTGGGAGTGGGGTCAGCCCTGACTTGGCCAACGAGGACGGCCTGACGGCC
CTGCACCAGTGCTGCATTGATGATTTCCGAGAGATGGTGCAGCAGCTCCTGGAGGCTGGGGCCAACATCAATGCC
TGTGACAGTGAGTGCTGGACGCCTCTGCATGCTGCGGCCACCTGCGGCCACCTGCACCTGGTGGAGCTGCTCATC
GCCAGTGGCGCCAATCTCCTGGCGGTCAACACCGACGGGAACATGCCCTATGACCTGTGTGATGATGAGCAGACG
CTGGACTGCCTGGAGACTGCCATGGCCGACCGTGGCATCACCCAGGACAGCATCGAGGCCGCCCGGGCCGTGCCA
GAACTGCGCATGCTGGACGACATCCGGAGCCGGCTGCAGGCCGGGGCAGACCTCCATGCCCCCCTGGACCACGGG
GCCACGCTGCTGCACGTCGCAGCCGCCAACGGGTTCAGCGAGGCGGCTGCCCTGCTGCTGGAACACCGAGCCAGC
CTGAGCGCTAAGGACCAAGACGGCTGGGAGCCGCTGCACGCCGCGGCCTACTGGGGCCAGGTGCCCCTGGTGGAG
CTGCTCGTGGCGCACGGGGCCGACCTGAACGCAAAGAGGTGCGGGCCAAGCTTCTGGAACTGAAACACAAGCACG
ACGCCCTCCTGCGCGCCCAGAGCCGCCAGCGCTCCTTGCTGCGCCGCCGCACCTCCAGCGCCGGCAGCCGCGGGA
AGGTGGTGAGGCGGGTGAGCCTAACCCAGCGCACCGACCTGTACCGCAAGCAGCACGCCCAGGAGGCCATCGTGT
GGCAACAGCCGCCGCCCACCAGCCCGGAGCCGCCCGAGGACAACGATGACCGCCAGACAGGCGCAGAGCTCAGGC
CGCCGCCCCCGGAGGAGGACAACCCCGAAGTGGTCAGGCCGCACAATGGCCGAGTAGGGGGCTCCCCAGTGCGGC
ATCTATACTCCAAGCGACTAGACCGGAGTGTCTCCTACCAGCTGAGCCCCCTGGACAGCACCACCCCCCACACCC
TGGTCCACGACAAGGCCCACCACACCCTGGCTGACCTGAAGCGCCAGCGAGCTGCTGCCAAGCTGCAGCGACCCC
CACCTGAGGGGCCCGAGAGCCCTGAGACAGCTGAGCCTGGCCTGCCTGGTGACACGGTGACCCCCCAGCCTGACT
GTGGCTTCAGGGCAGGCGGGGACCCACCCCTGCTCAAGCTCACAGCCCCGGCGGTGGAGGCTCCCGTGGAGAGGA
GGCCGTGCTGCCTGCTCATGTGAGGCTGTTGCTCAGCATGCAGGGGCCCTGTCTCGGGCACAGCCCAAGGCTGCC
TCCCCACGGTGCGTGCCCTGGTGCTGCGGGTGCAGCACGGAAACCCCGGCTTCTACTGTACAGGACACTGGCCCC
TCTCAGGTCAGAAGACATGCCTGGAGGGATGTCTGGCTGCAAAGACTATTTTTATCCTGCAACTCTTGATAAAGG
GCTGTTTTGCCATGG

FIGURE 3077

GGGCCACACAGCGGACCCCTAAGCGGACCGCTGGCACCGGTCGGGTGGCAGCAGAGTGTCGCTCGACATGGGGGA
GGCCGGGGCTGGCGCTGGCGCCTCGGGAGGGCCGGAGGCAAGCCCGGAGGCAGAGGTGGTGAAGCTGCTGCCCTT
CCTGGGCGCCGGGCGCGCGGGCGGACCTGCAGGCGGCGGCGGTGCGGCACGTGCTGGCGCTGACTGGCTGCGGAC
CCGGCCGCGCGCTGTTGGCGGGGCAGGCGGCGCTGCTGCAGGCGCTGATGGAGCTGGCGCCGGCCTCTGCCCCGG
CCCGGGACGCCGCCCGCGCGCTCGTGAACTTGGCCGCCGACCCCGGCCTGCACGAGACATTGCTGGCGGCCGACC
CCGGGCTGCCAGCGCGCCTGATGGGCCGCGCGTTGGACCCGCAGTGGCCCTGGGCCGAGGAGGCGGCCGCCGCGC
TAGCCAACCTCAGTCGCGAGCCGGCGCCGTGTGCAGCGCTCATGGCGGCGCTGGCGGCCGCGGAGCCGGCAGACT
CGGGCCTGGAGCGGCTGGTGCGCGCGCTGTGCACGCCCGGCTACAACGCCCGCGCGCCCCTGCACTACCTAGCGC
CGCTGCTCTCCAACCTCAGCCAACGCCCTGCGGCGCGGGCCTTCCTACTGGACCCCGACAGGTGCGTGGTCCAGC
GGCTGCTGCCCCTTACCCAGTACCCCGACTCCTCTGTACGCAGGGGCGGGGTGGTGGGGACGCTGCGGAATTGCT
GCTTCGAGCACCGACATCACGAGTGGTTGCTTGGACCTGAGGTGGACATTCTCCCCTTTTTGCTCCTGCCCTTGG
CTGGGCCTGAGGATTTCTCCGAGGAAGAGATGCAACGGCTGCCTGTCGACTTGCAGTACCTGCCACCAGACAAGC
AGCGAGAACCTGATGCAGACATCCGCAAGATGCTTGTTGAAGCCATCATGCTGCTGACAGCCACAGCACCAGGTC
GGCAGCAGGTGCGGGACCAGGGAGCCTACCTGATCCTTCGAGAGCTGCACAGCTGGGAGCCGGAGCCCGACGTGC
GGACGGCTTGTGAGAAGCTCATCCAGGTGCTTATTGGGGACGAGCCTGAACGTGGCATGGAAAACCTGCTGGAGG
TGCAGGTGCCTGAGGATGTGGAGCAGCAGCTGCAGCAGCTGGATTGCAGGGAGCAGGAGCAGTTGGAGCGGGAGC
TGGCCCCAGAGCCATGGGTGGAGAGGGCCACACCCACCTGAGGCCCCTGCAGCCGGACACCAGCTCCAGGGTCCC
CTTTGCCAGGCTTTCTCAGACCAGGCCTTCCTGCAGCTGTCTGCAGGCCCCCTGGGTCCCCTTGTTCAGAGACTG
TGCTCTTCTGAGAAGCAGAGCTACGCTTAGGCTCCAGTAAGGATTGGAGGCACTTTCCAGCCCTGTGCAGTGTTG
CTACCAGCAAGAATGAAGGTTGTGCAGAGCAGTACTGTGAGGTAGGCACCGTGACTCGGCTGCCTGTGCAGAAGG
TGGAGGTGGCAGGCGGATGGCCAGGGAGCCATGAGAAGACTCTTCCTGGGCACGGCGTGGGGACTGGACAGAAAA
CCACTGCAAGCCCCAAGGAGCCAGCTGAAGCCTCCCAATCCCCAGGGCACTGCAGAGTCTGGGCAGAGGTGGGCG
CATAGGTACAAGTGCTGCTTTGTCAGCCTCACTCCCTGCAGCTCTCAGCTCCCTGTTCCCTGAGACCTGGCCTCA
AAGGGCTGACCCAGCCATACGTAGATCCTGGGGTCTTTCTAGGACTGTGCCTCCCTGCTTGACCTATGCTCCAGG
ACCCTGCCCTCAACCCTTGTCAGCTCCCTAAGTCTTCCTGTTTCCCAGTCTCAGATTGAGTGGGTGCTCTCATTG
GCCTCTCTAGCTAGGCCGTCTCCCTGGTCAGCTTCCTTGAGCCTGGGCCACTCCTCCCTGGCCTTCTTACCTCTG
CCAAGAGCCTCCAGATGTGCCTGCAGCCTAGTCCCTGCCCAAGCTTCTCCCCCAGCCACCCTCTGCCCCTGTGGT
AGAGCCCACTATAGGCCCAGGCGCCTTACGTGCTTCTCCCCTGGACCTATGTGCATCCCTCACCTGCCAGTTATG
TGGCTGCCAAGCCCCACAGGCTGTCATGGTGGCTCTTGCCACACTTCCCTTCCTGAGCTGACCTGACCTCACTGC
CACCTCTTGCATTGGGATCCTGAGGGCTGGCCCCTGCTCACTGATGGGCCCTCCCAGGCCCGTCAAGCCCTGGTG
AAGGAGCTTAGCTTGTCTTCTTGGCAATTCACAATGCCTCACTCCACACCCTAAAACTGGAGCGTCCCCTATGGT
CTCCTGCTGTGGCTTGGGTGCCGGGCGTCTCCCGCCTCCAGGATCTCCTCTCACCTGCCCCCATTAAAGCTCTGC
CACTCATGCAGGCATGTGTGGACCATGTTTTCCCCTGGCCAGAGCCCCCACCTGCCACTGGAGGCCAGTTGCCCT
CTTAGCACTCAGACATCAGCACTGTCTTCACAGAATAAATGCTTTATCTGGCCTTG

FIGURE 3078

GGCGCCGAGTCTGGGCGCGGGGACGCGGGGCGGCGCGAAGCGGGGCCCTCTGCCGCCCCGCGCTCCCATGTACGC
CTTTTACTCGTTGCTCATCTACATCTTCTACAGCCTCTTCCGCAGGGATGGTGGCGCCGCGGCGGCCGCGGAGCC
CGGGGACCCCGCCCAGAGAGCCCGCAAGCCCCGGGGTCGCCGGCGCCCAGACCTGCCCGCGCCAGAGCTGTGGAC
CGAGCTGACCGGCCTGGCCGCCAGCTCCGAGCCTGAGGATGGGTCGGAAGGCGCAGCCGAGGGTCGCGCGGCCGC
GGTGTCCCTGGAAGAGGCCCTACTGCGCCTCGCCGAGTTCCTCTCCGTCCAGCTGGGGGCGGAAGAGAGCTGCGG
GGGCCCGGCGGACCTGGGCCAGTCTGGCGAGGTCCCCTCACTGTTGACAGTGACCAGTCAGCTCTTGGCCCTTCT
GGCATGGCTTCGAAGCCCCAGGGGGAGGCAGGCCCTGCTCCAGGGGACTCAGCCAGCCCCTCGGGTCCGGCCCCC
CTCTCCAGATGGATCCACATCCCAAGAAGAAAGCCCTTCCCACTTCACCGCAGTCCCAGGCGAGCCACTGGGGGA
TGAGACCCAGGGACAGCAGCCCCTCCAGTTGGAGGAGGATCAGAGGGCGTGGCAGCGGCTGGAGCAGCTCATCCT
GGGACAGGAGGAGCTGAAGCAGCAGCTGGAACAGCAGGAGGAGGAGTTGGGTCGACTGCGCCTGGGCGTGGGCGA
CGGACTCAGAGAAAAGGGTTCAGCATCTGACTCTGGAGAACGAGGCCCTGAAGCAGAGCCTGAGTCTC**ATG**CGGG
ACCTCCTGCTGCACTGGGGCCCCGGGCCCCCCATCAGGGCTCCGCAGGAGGAGGCGGAGGCATTGCTAGAGCTCC
AGGGCCGGCTTCAGGAGGCCCAAGACACCACAGAAGCCCTCCGAGCCCAGCTGGGGGTGCAGGAGGTGCAGCTGC
AGGGCCTTCAAGGGGCCCTCCAGCAGCTCCAGCAGGAGACGGAGCAGAACTGCAGGCGTGAGCTACAGCAGATGC
ATGGGCAGCTGGCAGGACTTCGGGCACGGATGGCCAGCCTGCGTCAGGGCTGCGGGGACCTCCGAGGTTTGGTCA
GCACCTTTACCCAGAGCTGTCAGGGTTCGCTGAGTGAGGCCCGGGGCCAGGTGTCCTGGGCCTTGGGGGCACTGT
CATCTGGAGGGCCTGGCACTCAGCTCCCTGAGGGGCAGCAAGGGCCCCCAGCCGGATGCCCAGGGCGGCTGCCAG
AACTCAAGGGAAATATCCGTGTGCTGTGTCGGCTGAGGCCAGGGACATCTTCTAGCCTTGTGAGTGTGGAGCCTG
GCCCAGGGGGCACCGTCACCACCTGCTACCGGGGGCGCCATCGTCGATTCCGCCTAGACTGGGTCTTCCCTCCAG
ACGCCAGCCAGGAGGAGGTCTTCAGAGAGCTGGAACCTGCGGTGCTGTCCTGCCTCCGAGGCTACAGCGTCTGCA
TCTTCACCTATGGCCAGACAGGCACCGGGAAGACCTACAGCATGGAGGGCCCTCCTGAGGACCCCGGCATAGTTC
CTAGGGCGCTGCAGTCGCTGTTCCGGGAGATGGGGGCCGGCCGGCAGCACCGGGTGACACTCAGCATGGTGGAGA
TCTACAATGAGGCTGTCAGGGACCTCCTTGCTCCAGGGCCTCCCGAGCGCCTGGCCGTGAGGCAGGGCCCAGAAG
GCCAGGGCGGGATCCAGGTGGCTGGCCTCACCCACTGGGACGTGCCCAACCTGGAGACATTGCACCAGATGCTGA
AACTGGGGAGGAGCAACCGGGCCACCGCCGCCACCGCCATGAACCAGCGCAGCTCCCGCTCGCATGCCCTGGTCA
CGCTGACGCTGCGCGCGGCGTCTCCACCGCGCGCTCCAGGCACCGCAGGCACGCTGCACCTGGTGGACCTGGCGG
GATCCGAACGCGCACGGAAGGCAGGGGCGGTCGGCCCGCCGCGGAGAGACCCAGACGGCGCCCGGCGCCTGCGGG
AGGCCCAGACCATAAACCGCTCGCTGCTGGCGCTAGGAGGCGTGATGGCCGCACTGCGGGCCCACCGGCCGCACG
TGCCCTTCCGCGACTCGCAGCTCACGCGACTGCTGCAGCCGGCGCTGGGCCCAGGCACCACCGCGGTGCTGCTGC
TGCAGGTGGGCGCCGGGGCGGGGCAGGTGTGTGCGTGCCGGTCGCCGCCCACCCGGGCCCGCCCACCCGCGCCTC
TTGCCCGCAGATCTCCACGCGGCCGGAGGATCTCGGGGAGACAGTCTGCTCCCTCAAGTTCGCCGACCGAGTGGG
TCAAGTGGAGCTGGGGCCAGCCCGGCGCCGCAGGGTCCCGCGCTCCTCCGGGACGCCTTCTTCCCTCAGCACCGA
CACTCCGCTCACCGGGACCCCCTGCACCCCTACGCCGTCCCCTGGCAGTCCTCCATGCCCCAGTCCCGACAACGG
CTCGGGCTCGGCTCTCGCGCCCGCAGAGGGCCTGCCCCTCTAGTCCTGGGTCGCGGCCCTGCCCATGGGGTCTCA
GGCCAGGTCTCTGCTGGCAGAGGCGG**TAG**TAAAGTCCCTGTACCCCGTCTCCCAGGGCACAAGCTCCCTAGCCTC
TTTGGATCCATTGCCCCTGAGCTCCCAGAGTCACCCCTCCACCTCCGCAGCCAGTGAAGTGTGTTGTGCCTGCTG
AAGTGATCACCCCCCGCCCCCAGCCCTGCATCAGGCCACAGGTCTTGGCTTTCTCCTTATCACCATTTGCTGTTA
TCACGGCACACAGCAGGGAATCCCAGGCCCCCCCGCCAAGTGGTTACCCAAGTCACCACTCCTGACCCAAAAATC
AGGCATGGCATTAAAACGTTGCAAATTCCTTTACTGTTATCCCCCCCACCACCAGGACCATGTAGGGTGCAGTCT
TTACTCCCTAACCCGTTTCCCGAAAAAGGTGCTACCTCCTTTCCAGACAGATGAGAGAGGGCAGGACTTCAGGCT
GGATCCACCACTGGGCTCTCCCTCCCCAGCCTGGAGCACGGGAGGGGAGGTGACGCCTGGTGACTGATGGATGGG
TATGGGCTGAGAAGAGGGGACTAGGAAGGGCTATTCCAGGCTCAGGCCCTGCTCCTGCAGGCTTTGCCGCTGAGT
GTAGGAAAAACAGGCATGGCAGACCAGGGTGAGGGTTGTGCCCAGCTGGGCCACGGCCATGCGTGGGGTGGCCCA
ATAAACACCGTGGACTCCC

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FIGURE 3079

CGGAGCAGTGGTCGGAGATGTGGCGACCGGCTGGAGTGCAGTGTCTCAATCTTGGCTCACTGCAATCTCCGCCTA
CCAAGATCAAGCGATTCTCCTGTCTCAGCCTCCCAACTACCTGGGATTACAGGTGCAGCTCTGTCATTTCCACTC
TGCTCTGCTGCACAGAAGGCAGAAGCCCTGGCCGTCCCCTGCTGTGTTCTTCAGGAGAAACGTCAGGGGCCTTCC
TCCAAGGTTCTCCAGCCCCACACCCCTGTGGAGGAAGGTGCTCTCCACCGCGGTAGTGGGGGCGCCCCTGCTCCT
CGGAGCCCGCT**ATG**TCATGGCAGAGGCACGGGAGAAGAGGAGGATGCGGCTCGTGGTGGATGGCATGGGGCGCTT
TGGCAGACCTTGCCTCCCCAGGCCTTGGAGACCCACCCTCCTGGTGTCCTCCTCTCTTCCTAGTGGACCTCAGGC
TGCAGGTCTCTGAAGGTCGGCCTGCAGATCTCCCTGGACTACTGGTGGTGCACCAATGTTGTCCTTCGAGGGGTG
GAAGAGAACAGCCCAGGCTACTTGGAGGTGATGTCTGCGTGTCACCAGCGGGCGGC**TGA**TGCCCTGGTGGCAGGG
GCCATCAGCAACGGGGGCCTCTACGTGAAGCTGGGCCAGGGGCTGTGCTCCTTCAACCACCTGCTTCCCCCCGAG
TATACCCGGACCCTGCGCGTGCTAGAGGACAGGGCCCTCAAGCGGGGCTTCCAGGAG

FIGURE 3080

ATGGTCACCATGGAGCCCGGGTACCTGTTCCTGGGTTCTCGCCTGGGCAATTCCCTCCTCCTCAAGTACACGGAG
AAGCTGCAGGAGCCCCCGGCCAGTGCTGTCCGTGAGGCTGCCGACAAGGAAGAGCCTCCCTCAAAGAAGAAGCGA
GTGGATGCGACGGCCGGCTGGTCAGCTGCGGGTAAGTCGGTGCCGCAGGATGAGGTGGACGAGATTGAAGTGTAC
GGCAGCGAGGCCCAGTCGGGAACACAGCTGGCCACCTACTCCTTTGAGGTGTGTGACAGCATCCTGAACATTGGA
CCCTGTGCCAATGCCGCCGTGGGCGAACCTGCCTTCCTCTCTAAAGAGTTTCAGAACAGCCCCGAGCCGGACCTG
GAGATTGTGGTTTGCTCCGGCCACGGGAAGAACGGGGCTTTGTCGGTGCTGCAGAAGAGCATCCGGCCCCAGGTG
GTGACAACATTTGAGCTTCCCGGCTGCTATGACATGTGGACAGTCATCGCCCCGGTGCGTAAGGAGGAGGAGGAC
AATCCCAAGGGGGAGGGCACAGAGCAGGAACCCAGCACCACCCCTGAAGCAGACGACGACGGCCGCAGACACGGA
TTCCTGATTCTGAGCCGGGAAGACTCCACCATGATCCTGCAGACGGGGCAGGAGATCATGGAGCTGGACACCAGT
GGCTTCGCCACTCAGGGCCCCACGGTCTTTGCTGGGAACATCGGGGACAACCGCTACATTGTCCAAGTGTCACCA
CTGGGCATCCGCCTGCTGGAAGGAGTGAATCAGCTGCACTTCATCCCCGTGGACCTGGGCGCCCCCATCGTGCAG
TGCGCCGTGGCCGACCCCTATGTGGTCATCATGAGTGCCGAGGGCCACGTCACCATGTTCCTGCTGAAGAGTGAC
TCCTACGGTGGCCGCCACCACCGCCTGGCGCTGCACAAGCCCCCGCTGCACCATCAGTCCAAGGTGATTACGCTG
TGCCTGTACCGAGACCTCAGCGGCATGTTCACCACTGAGAGCCGCCTGGGTGGGGCCCGTGACGAGCTCGGGGGC
CGCAGTGGCCCGGAGGCCGAGGGCCTGGGCTCAGAGACTAGCCCCACAGTGGATGACGAGGAGGAGATGCTGTAT
GGGGATTCGGGCTCCCTCTTCAGCCCCAGCAAGGAGGAGGCCCGAAGAAGCAGCCAGCCCCCTGCTGACCGGGAC
CCTGCACCCTTCCGGGCAGAGCCTACCCACTGGTGCCTGCTGGTGCGGGAGAATGGCACCATGGAGATCTACCAG
CTTCCCGACTGGCGGCTGGTGTTCCTGGTGAAGAACTTCCCTGTGGGGCAGCGGGTCCTTGTGGACAGCTCCTTT
GGACAGCCCACTACACAGGGCGAGGCCCGCAGGGAGGAGGCCACGCGCCAGGGGGAGCTGCCCCTCGTCAAGGAG
GTGCTGCTGGTGGCGCTGGGCAGCCGCCAGAGCAGGCCCTACCTGCTGGTGCATGTGGACCAAGAGCTGCTTATC
TACGAGGCCTTCCCCCACGACTCTCAGCTCGGCCAGGGCAATCTCAAAGTCCGCTTTAAGAAGGTCCCTCACAAC
ATCAACTTCCGTGAGAAGAAGCCAAAGCCATCCAAGAAGAAAGCAGAAGGTGGCGGCGCAGAGGAGGGGGCTGGG
GCCCGGGGCCTCGTGGCGCGTTTCCGCTACTTCGAGGATATTTATGGCTACTCAGGGGTCTTCATCTGCGGCCCC
TCCCCTCACTGGCTCTTGGTGACCGGCCGAGGGGCTCTGCGGCTACACCCCATGGCCATCGACGGCCCGGTCGAC
TCTTTCGCTCCATTCCACAATGTCAACTGTCCCCGCGGCTTCCTGTACTTCAACAGACAGGGCGAGCTGAGGATC
AGTGTCCTGCCTGCCTACCTGTCCTATGATGCCCCATGGCCTGTCAGGAAGATCCCGCAGCGTTGCACGGCCCAC
TATGTGGCTTACCACGTGGAGTTTAAGGTGTATGCTGTGGCCACCAGCACCAACACGCCGTGTGCCCGCATCCCA
CGCATGACTGGCGAGGAGAAGGAGTTTGAGACCATCGAGAGAGATGAGCGGTACATCCACCCCCAGCAGGAGGCC
TTCTCCATCCAGCTCATCTCCCCGGTCAGCTGGGAGGCTATTCCCAATGCCAGGATCGAGCTGCAGGAGTGGGAG
CATGTGACCTGCATGAAGACAGTGTCTCTGCGCAGTGAGGAGACCGTGTCGGGCCTCAAAGGCTACGTGGCCGCC
GGGACCTGCCTCATGCAGGGGGAGGAGGTCACGTGCCGAGGGCGGATCTTGATCATGGATGTGATTGAGGTGGTG
CCCGAGCCTGGCCAGCCCTTGACCAAGAACAAGTTCAAAGTCCTTTACGAGAAGGAGCAGAAGGGGCCCGTGACC
GCCCTGTGCCACTGCAATGGCCACCTGGTGTCGGCCATCGGCCAGAAGATTTTCCTGTGGAGCCTGCGGGCCAGC
GAGCTGACGGGCATGGCCTTCATCGACACGCAGCTCTACATACACCAGATGATCAGCGTCAAGAACTTCATCCTG
GCAGCCGACGTCATGAAGAGCATTTCGCTGCTGCGCTACCAGGAGGAAAGCAAGACGCTGAGCCTGGTGTCGCGG
GATGCCAAGCCCCTGGAGGTGTACAGCGTGGACTTCATGGTGGACAATGCCCAGCTGGGTTTTCTGGTGTCTGAC
CGCGACCGCAACCTCATGGTGTACATGTACCTGCCCGAAGCCAAGGAGAGTTTCGGGGGCATGCGCCTGCTGCGT
CGGGCAGACTTCCACGTGGGTGCCCACGTGAACACGTTTTGGAGGACCCCGTGCCGGGGGGCCACTGAAGGGCTC
AGCAAAAAGTCGGTCGTGTGGGAGAATAAGCACATCACGTGGTTTGCCACCCTGGACGGCGGCATCGGGCTGCTG
CTGCCCATGCAGGAGAAGACCTACCGGCGGCTGCTGATGCTGCAGAACGCGCTGACCACCATGCTGCCACACCAC
GCCGGCCTCAACCCCCGCGCCTTCCGGATGCTGCACGTGGACCGCCGCACCCTCCAGAATGCCGTGCGCAACGTG
CTGGATGGGGAGCTGCTCAACCGCTACCTGTACCTGAGCACCATGGAGCGCAGCGAGGTAGCCAAGAAGATCGGC
ACCACACCAGACATAATCCTGGACGACTTGCTGGAGACGGACCGCGTCACCGCCCACTTCTAGCCCCGTGGATGC
CGTCACCACCAGCACACGGAACTACCTCCCACCCCCTTTTTGTACAAAACACAAGGAAAAACATTTTTTGC

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FIGURE 3081

CGCTCGCTCCGGCAACTGGAGGCACGGCAGAGGAGGCAGGGCCGACGGCGGTGGGCGGTGCGTTGCGCAGGCTCG
GGCCTCCCGCTCGCCGCTGCGTTGGGACCGCGCAGCCCGGTGTGTGCAGTGGCCTCAGGGATCCGGAAAGTCTAG
GACTGAACTTCTCCTAACATCCAGTAATGGGGACCTGGAACCTGGGCGTACTAGAGTGCCGCGCGTAGGGCTCCA
GGTCGCTGGCTTCTGCGCTTTCTTCCTCTCCAAAGTTGAGTATCTCCTATCTGTGTCCTCATACATACTGCCGCC
TGAGGTGCCATGGCCCCCAAGCCGGGGGCCGAGTGGAGCACAGCCCTGTCCCATCTGGTGCTGGGAGTGGTGTCT
CTGCACGCAGCCGTGAGCACAGCCGAGGCAAGTCGAGGGGCTGCTGCTGGCTTCCTGCTCCAGGTCTTGGCTGCC
ACCACCACGCTGGCCCCAGGGCTGAGCACACATGAAGACTGCCTTGCTGGAGCCTGGGTGGCCACCGTCATCGGC
CTTCCCCTTCTGGCCTTCGATTTCCACTGGGTGAATGGGGACCGCTCCTCTGCCAACCTGCTCCTGGGAGGAGGC
ATGGTGCTGGCAGTGGCTGGCGGCCACCTCGGCCCTGAGGGCCGCTCTGTGGCTGGTCAGGCAATGCTGTTGGTG
GTCGCAGTGACCATCCTCATTGTAGCTGTCTTCACGGCCAACACTTATGGGATGTGGGGGGGGGCGATGCTGGGT
GTGGCAGGCCTCCTGAGCCGGCTGGAGGAGGACAGGCTGCTGCTGCTACCGAAGGAGGATGTCTGTCGCTGGGCC
TTGGCTGTAGGCAGCTGGGCTTACTGCCGGGCCCTGCATACACAGCGCCTCCAGTGGGAGTGACAGTTGGATACA
GCCAGGCAGGGTTTCTGCCCTGCCGAACACTTTCCCTCCCACCTGCCTGCTCCTGGCGCCTTCTCCCTAGGGGTA
GACTCTTCTGCCTACTGAAGTGGGTTTGCTGCACATTGACTGGTCAGGGGCAGAGTCTGGGTGCTGTCCTTTGGC
CACGTGTGGGGACTTGTCTAGACCAGAATGAAAGGGACAGGGTCCCAGACACGTTTGGGGGTCCTGATTCTGGGC
TGGACACGGTTGTGGATCCAGAGAAGAGGCCTAGTCTCCAATAAATCTTAGGAATTTTGCAGG

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FIGURE 3082

CTAATGGTCACTTGATGTGCGCTGGCTGTTTTATCCACCTACTAGCAGATGCCCGGCTGAAGGAGGAGCAGGCCA
CGTGCCCCAATTGTCGTTGTGAGATCAGTAAGAGCCTCTGCTGCCGGAACCTGGCCGTGGAGAAAGCCGTGAGCG
AGCTGCCTTCAGAGTGTGGCTTCTGCCTGCGCCAGTTTCCCCGCTCCCTCCTGGAGAGGCACCAGAAAGAGGAAT
GCCAGGACAGGGTAACCCAGTGCAAGTACAAACGCATCGGCTGCCCATGGCACGGCCCCTTCCATGAGCTGACGG
TGCACGAGGCTGCGTGCGCCCACCCGACCAAGACAGGCAGTGAGCTGATGGAGATCCTGGATGGGATGGACCAGA
GCCACCGCAAGGAGATGCAGCTGTACAACAGCATCTTCAGCCTGCTCAGCTTCGAGAAGATTGGCTACACAGAGG
TCCAGTTCCGGCCGTACCGCACAGACGACTTCATCACGCGCCTGTACTATGAGACGCCCAGGTTCACAGTGCTGA
ACCAGACGTGGGTCCTGAAGGCTCGAGTCAACGACTCGGAGCGTAACCCCAACCTGTCCTGCAAGCGTACGCTCT
CCTTCCAGCTCCTCCTCAAGAGCAAGGTCACGGCACCGCTGGAGTGCTCCTTCCTGCTGCTCAAGGGCCCCTACG
ACGACGTGAGGATCAGCCCCGTCATCTACCACTTTGTCTTCACCAACGAGAGCAACGAGACGGACTACGTGCCAC
TGCCCATCATTGACTCCGTGGAGTGCAACAAGCTGCTGGCTGCCAAGAACATCAACCTGCGGCTCTTCCTGTTCC
AGATACAGAAGTAGGGCGGGGCCTCAGGATGTCCGAGGAGCCCACGGGCGGCATCCCAGCACCGCTGCCCTGTCC
ACCTGGCTGGCAGCTGCTTCACAGGACTATCTGATCACTTTAGCAAAGGAGGAGAACAAACGAAGCCAACACAGG
GCAAGTCTGCATGCGTGCACGACGGGGCCCCCGCCTCCGGCTCACCCCACCGACCCCTGCCTCCCCTCCTTCCGA
GGGCCGCCAGAGGCTGGGCTGACCCGAAGAGGAGACGGTGCACCAGGCGCCCCGAGGCTAAGAGACGGTGGCAGC
AAGGAGGCCGAGAGGCACAGCGACCCTGCCCCAGCCCTTCTGTGCAGTCAGGCGGCGGTGCTGCTCCATCCCTGC
GGGTTCCGGCGGGGCGCGGGGGCCTTGCTGACATCAGACGGGATATCCGAATATCTGATAGCAATTAAAAGGCAG
CCTTGTTTCGTACTTTCTGTTTTGTTCGAGGGGAAGGCATGGCTGTGAATGGACAGCGTGGGGGCTTTGGTTTGG
CCTGGGGGGTCAGAGCCTGCCCCGCCCCCATCTGTGTGCCCGCACACGTCCCCCGAGGAAAGACTCAGAGACACTG
CCTCCCCCTACGCTCTGTCATGGGGTCTTGAGACTGAGGCTTGGGCAGGAAGATCCAGGTAGGGTCGGGGCTGCC
CTGGCCAACCGGCCGCTCCCAGGGAGACAGGACTCAGCCACCAGGGCTCAGCAGGCATTTTCGGAAAGCAGGGTG
AAATTGTCTCTTCCCAGGAAAAAGATTAAACTCCTTGCAGGCTCTTGGATAAGTTACAC

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FIGURE 3083

AATGGACGAGAGAGGCGGCCGTCCATTAGTTAGCGGCTCCGGAGCAACGCAGCCGTTGTCCTTGAGGCCGACGGG
CCTGACGCGGGCGGGTTGAACGCGCTGGTGAGGCGGTCACCCGGGCTACGGCGGCCGGCAGGGGGCAGTGGCGGC
CGTTGTCTAGGGCCCGGAGGTGGGGCCGCGCGCCTCGGGCGCTACGAACCCGGCAGGCCCACGCTTGGCTGCGGC
CGGGTGCGGGCTGAGGCCATGGCGACCGCGGCAGCTCCCGGCGCCGGAGGACAGGGTCGCGGCCCTCGAGCCAC
GGCGGCGGCGGGCCTGCGGCGGCGGAAGAGGAGGTGCGGGACGCCGCTGCGGGCCCCGACGTGGGAGCCGCGGGG
GACGCGCCAGCCCCGGCCCCCAACAAGGACGGAGACGCCGGCGTGGGCAGCGGCCACTGGGAGCTGAGGTGCCAT
CGCCTGCAGGATTCTTTATTCAGCTCTGACAGTGGCTTCAGCAACTACCGTGGCATCCTGAACTGGTGTGTGGTG
ATGCTGATCTTGAGCAATGCCCGGTTATTTCTGGAGAACCTCATCAAGTATGGCATCCTGGTGGACCCCATCCAG
GTGGTTTCTCTGTTCCTGAAGGATCCCTATAGCTGGCCCGCCCCATGCCTGGTTATTGCGGCCAATGTCTTTGCT
GTGGCTGCATTCCAGGTTGAGAAGCGCCTGGCGGTGGGTGCCCTGACGGAGCAGGCGGGACTGCTGCTGCACGTG
GCCAACCTGGCCACCATTCTGTGTTTCCCAGCGGCTGTGGTCTTACTGGTTGAGTCTATCACTCCAGTGGGCTCC
CTGCTGGCGCTGATGGCGCACACCATCCTCTTCCTCAAGCTCTTCTCCTACCGCGACGTCAACTCATGGTGCCGC
AGGGCCAGGGCCAAGGCTGCCTCTGCAGGGAAGAAGGCCAGCAGTGCTGCTGCCCCGCACACCGTGAGCTACCCG
GACAATCTGACCTACCGCGATCTCTACTACTTCCTCTTCGCCCCCACCTTGTGCTACGAGCTCAACTTTCCCCGC
TCTCCCCGCATCCGGAAGCGCTTTCTGCTGCGACGGATCCTTGAGATGCTGTTCTTCACCCAGCTCCAGGTGGGG
CTGATCCAGCAGTGGATGGTCCCCACCATCCAGAACTCCATGAAGCCCTTCAAGGACATGGACTACTCACGCATC
ATCGAGCGCCTCCTGAAGCTGGCGGTCCCCAATCACCTCATCTGGCTCATCTTCTTCTACTGGCTCTTCCACTCC
TGCCTGAATGCCGTGGCTGAGCTCATGCAGTTTGGAGACCGGGAGTTCTACCGGGACTGGTGGAACTCCGAGTCT
GTCACCTACTTCTGGCAGAACTGGAACATCCCTGTGCACAAGTGGTGCATCAGACACTTCTACAAGCCCATGCTT
CGACGGGGCAGCAGCAAGTGGATGGCCAGGACAGGGGTGTTCCTGGCCTCGGCCTTCTTCCACGAGTACCTGGTG
AGCGTCCCTCTGCGAATGTTCCGCCTCTGGGCGTTCACGGGCATGATGGCTCAGATCCCACTGGCCTGGTTCGTG
GGCCGCTTTTTCCAGGGCAACTATGGCAACGCAGCTGTGTGGCTGTCGCTCATCATCGGACAGCCAATAGCCGTC
CTCATGTACGTCCACGACTACTACGTGCTCAACTATGAGGCCCCAGCGGCAGAGGCCTGAGCTGCACCTGAGGGC
CTGGCTTCTCACTGCCACCTCACACCCGCTGCCAGAGCCCACCTCTCCTCCTAGGCCTCGAGTGCTGGGGATGGG
CCTGGCTGCACAGCATCCTCCTCTGGTCCCAGGGAGGCCTCTCTGCCCCTATGGGGCTCTGTCCTGCACCCCTCA
GGGATGGCGACAGCAGGCCAGACACAGTCTGATGCCAGCTGGGAGTCTTGCTGACCCTGCCCCGGGTCCGAGGGT
GTCAATAAAGTGCTGTCCAGTG

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FIGURE 3084

GGCTGCCGTGCTGCTCGGCGGCGCTGAGGCCAAATAGTTGCATCACATGTATCTAATCCGAGAGTCTCATGCTTC
TGCTCCTCAGTGACCAGCTCCTGCTCACTGCCCTCAGAAAGCCCAACCCTCAGGCAATGGCGGCCTTGTTCCTGT
CTGCCCCACCCCAGGCCGAGGTGACCTTCGAGGACGTGGCTGTGTACCTCTCCCGGGAGGAATGGGGCCGCCTGG
GCCCTGCTCAGAGGGGCCTCTACAGGGACGTGATGCTGGAGACCTACGGGAACCTAGTCTCACTGGGAGTAGGAC
CTGCAGGCCCCAAGCCTGGAGTGATCTCGCAGTTGGAGCGAGGGGATGAGCCCTGGGTCCTGGATGTTCAGGGCA
CCTCTGGGAAAGAGCACCTGAGAGTCAACAGCCCAGCTCTTGGGACCAGAACTGAGTACAAGGAGTTGACTTCAC
AGGAGACATTTGGTGAGGAAGATCCCCAGGGATCTGAGCCAGTAGAAGCCTGTGACCACATCAGTAAGTCAGAGG
GGAGCCTGGAAAAGCTAGTGGAGCAGAGAGGCCCCAGGGCAGTCACACTGACCAACGGGGAGAGCAGCAGGGAGT
CTGGGGGAAACCTCAGGTTGCTGTCAAGACCTGTTCCTGATCAGAGACCTCACAAATGTGATATATGTGAGCAAA
GTTTTGAACAGAGATCATATCTCAACAACCATAAGCGTGTACACAGGTCAAAAAAAACAAATACAGTTCGTAACT
CTGGGGAAATCTTCAGTGCAAACTTAGTTGTTAAAGAAGATCAGAAAATTCCTACTGGGAAAAAATTGCATTATT
GCAGTTACTGTGGGAAAACATTCAGGTACAGTGCCAACCTTGTCAAGCATCAGCGGCTTCACACTGAAGAGAAGC
CCTACAAATGTGATGAGTGTGGGAAAGCCTTCAGCCAGAGCTGCGAGTTCATCAATCACCGAAGGATGCACTCAG
GAGAGATTCCCTACCGGTGTGACGAGTGTGGGAAGACATTCACCCGGAGGCCCAACCTCATGAAGCACCAGAGGA
TTCACACTGGGGAGAAACCCTACAAGTGTGGGGAGTGTGGGAAGCACTTTAGCGCCTACTCTTCCCTGATTTATC
ACCAGAGAATCCACACCGGAGAGAAACCCTATAAATGTAATGACTGCGGGAAAGCCTTCAGTGATGGCTCAATCC
TTATCCGACATCGTCGGACTCACACCGGAGAGAAGCCATTTGAGTGCAAGGAATGTGGCAAAGGCTTTACACAAA
GTTCTAACCTTATCCAACATCAGAGAATTCACACTGGAGAGAAACCCTATAAATGTAATGAATGTGAGAAAGCTT
TCATTCAAAAAACCAAACTCGTGGAACATCAGAGAAGCCACACTGGAGAGAAGCCCTATGAATGCAATGACTGTG
GCAAAGTTTTCAGCCAAAGCACACACCTCATCCAGCACCAGAGAATCCACACAGGAGAGAAGCCCTACAAGTGCA
GCGAGTGTGGGAAGGCCTTCCACAACAGTTCCAGACTCATCCACCACCAGAGGCTGCACCACGGAGAGAAACCCT
ACAGATGCAGCGATTGCAAGAAAGCCTTCAGCCAGAGCACGTACTTGATTCAGCACCGGAGGATCCACACCGGGG
AGAAGCCCTACAAGTGCAGCGAGTGTGGGAAGGCCTTCCGGCACAGTTCCAACATGTGTCAGCATCAGCGGATTC
ACCTCCGGGAGGACTTCTCCATGTAACAGTGGCGCGGTGTCCGAGGGCAGAGTCCAGCTGAGCACTTCCTGCATG
CGCCCCCGGCACCTGACTCTGCCCTTTATGTATTATCCACACGATGTTTTCACAGAGTGAAAGGACGTTTCTCAT
TAAACAAACCTCTTTTCTT

FIGURE 3085

GCGGCATGGGCAGTATCCGCCGCCATCCTCTTCCGTGAGGCGCGCTGAGACCCGGACCGGCCCTCCTGAGAGGAT
GCCGGTGCGGGCGCCCGCGGAGAGGGACCCGTCGCC**ATG**GGCCGTGTGATCCGTGGACAGAGGAAGGGCGCCGGG
TCTGTGTTCCGCGCGCACGTGAAGCACCGTAAAGGCGCTGCGCGCCTGCGCGCCGTGGATTTCGCTGAGCGGCAC
GGCTACATCAAGGGCATCGTCAAGGACATCATCCACGACCCGGGCCGCGGCGCGCCCTCGCCAAGGTGGTCTTC
CGGGATCCGTATCGGTTTAAGAAGCGGACGGAGCTGTTCATTGCCGCCGAGGGCATTCACACGGGCCAGTTTGTG
TATTGCGGCAAGAAGGCCCAGCTCAACATTGGCAATGTGCTCCCTGTGGGCACCATGCCTGAGGGTACAATCGTG
TGCTGCCTGGAGGAGAAGCCTGGAGACCGTGGCAAGCTGGCCCGGGCATCAGGGAACTATGCCACCGTTATCTCC
CACAACCCTGAGACCAAGAAGACCCGTGTGAAGCTGCCCTCCGGCTCCAAGAAGGTTATCTCCTCAGCCAACAGA
GCTGTGGTTGGTGTGGTGGCTGGAGGTGGCCGAATTGACAAACCCATCTTGAAGGCTGGCCGGGCGTACCACAAA
TATAAGGCAAAGAGGAACTGCTGGCCACGAGTACGGGGTGTGGCCATGAATCCTGTGGAGCATCCTTTTGGAGGT
GGCAACCACCAGCACATCGGCAAGCCCTCCACCATCCGCAGAGATGCCCCTGCTGGCCGCAAAGTGGGTCTCATT
GCTGCCCGCCGGACTGGACGTCTCCGGGGAACCAAGACTGTGCAGGAGAAAGAGAAC**TAG**TGCTGAGGGCCTCAA
TAAAGTTTGTGTTTATGCC

FIGURE 3086

ATGGGGCGCCTGCAACTGGTTGTGTTGGGCCTCACCTGCTGCTGGGCAGTGGCGAGTGCCGCGAAGGAAGCTGAA
AGCCGAGCTACTCCACACCCGGACCCCATGCTGCACTATGTGGGCTTCGTCCCTGTCATTGATGGAGACTTCATC
CCCGCTGACCCGATCAACCTGTACGCCAACGCCGCCGACATCGACTATATAGCAGGCACCAACAACATGGACGGC
CACATCTTCGCCAGCATCGACATGCCTGCCATCAACAAGGGCAACAAGAAAGTCACGGAGGAGGACTTCTACAAG
CTGGTCAGTGAGTTCACAATCACCAAGGGGCTCAGAGGCGCCAAGACGACCTTTGATGTCTACACCGAGTCCTGG
GCCCAGGACCCATCCCAGGAGAATAAGAAGAAGACTGTGGTGGACTTTGAGACCGATGTCCTCTTCCTGGTGCCC
ACCGAGATTGCCCTAGCCCAGCACAGAGCCAATGCCAAGAGTGCCAAGACCTACGCCTACCTGTTTTCCCATCCC
TCTCGGATGCCCGTCTACCCCAAATGGGTGGGGGCCGACCATAGAGATGAGATCCAGACAGTCTCTAAGGCTATG
ACCGCCTACTGGACCAACTTTGCCAAAACAGGGGACCCCAACATGGGCCACTCGGCTGTGCCCACACACTGGGAA
CCCTACACTACGGAAAACAGCGGCTACCTGGAGATCACCAAGAAGATGGGCAGCAGCTCCATGAAGCGGAGCCTG
AGAACCAACTTCCTGCGCTACTGGACCCTCACCTATCTGGCGCTGCCCACAGTGACCGACCAGGAGGCCAGTTCC
ATGCCCTCCACAGGGGACTCTGAGGCCACTCCCGTCTCCCCCGACAGGCAACTCCGAGTCTGCCCCCGTGACTCT
GAGGCTCCCCCGTACCCCCTACGGGTGACTCTGAGGCCCGTGCCCACCTTGGGTGACACTGAGGCTGCCCCTGTG
TCCCCCACAGATGACTCCGAGGAAGCTCAGATGCTGCAGTCATTAGTTTCTAGTGTCCCATCAGCCTTGACTCCA
GATGATGAAGTTGAAAATACTGACAGGCTGGAGGCCATCTGGGGTCCTGCTGGCTCCCAGTTCCAGGAAGCCTGG
AAGAGCACTGGGGTGAGCTCGGGCCAGCGCATGTTTACTGTCACAGGGGACATGTTTCAGCACTTTCATTGTAAG
GCTGTGGCCTTCTGTGCTTGTGGATCCTCAGTCTCAGTGGCCTTCCTCTTCCCCCCACCCCAACTCCTGTGTTGC
GTGTTTAACACACCTACGCCCAACCGGGACATAACTAAATCCTAG

FIGURE 3087

ATGGCGGCGGAGGCGGCCGATTTGGGGCTGGGGGCCGCCGTCCCCGTGGAGCTGAGGCGGGAGCGACGCATGGTG
TGCGTGGAGTACCCGGGAGTGGTGCGTGATGTGGCTAAGATGCTGCCGACTCTGGGCGGCGAGGAAGGCGTCTCC
CGGATCTACGCAGACCCCACCAAGAGGCTGGAGCTGTACTTCCGGCCCAAGGACCCATACTGCCACCCAGTGTGC
GCCAACCGCTTCAGTACCAGCAGCCTGCTGCTCCGCATCAGGAAGAGAACGAGGCGGCAGAAAGGGGTGCTGGGC
ACTGAGGCCCACTCCGAGGTCACATTTGACATGGAGATCCTTGGCATCATCTCCACCATTTACAAATTTCAGGGG
ATGTCTGACTTCCAGTACTTGGCTGTGCATACGGAAGCAGGCGGCAAGCATACGTCAATGTATGACAAGGTGCTC
ATGCTCCGGCCCGAGAAGGAGGCCTTTTTCCACCAGGAGCTGCCGCTCTACATCCCCCCACCCATCTTCTCCCGG
CTGGACGCCCCGGTGGACTACTTCTACCGACCAGAGACCCAGCACCGGCACTTTAAAAAGAAGGCCCAGGCTCGA
TCCCGTCTTTCTAGTTTTGTTTCACAATGTGAAAATTACTGCTATTCTTTGGAAGGCTACAACAATCCCCCCATC
TCAGGTGAGAATCTGATTGGCCTGAGCAGAGCCCGGCGCCCCCACAATGCCATCTTTGTCAACTTTGAGGATGAG
GAGGTGCCCAAGCAGCCACTGGAGGCTGCAGCCCAGACGTGGAGGAGAGTCTGCACTAACCCCGTGGACCGGAAG
GTGGAGGAGGAGCTGAGGAAGGCAAGTCCTGCGCTGCGCCTGGCCCCGCTGTTTGACATCCGTCCCATCTGGTCC
CGAAATGCTGTCAAGGCCAACATCAGCGTCCACCCAGACAAGCTCAAGGTCTTGCTTCCCTTCATAGCCTATTAC
ATGATAACAGGCCCCTGGCGCAGCCTATGGATTCGATTTGGGTATGACCCCCGAAAAAACCCAGATGCCAAGATT
TATCAAGTCCTCGATTTCCGAATCCGTTGTGGAATGAAACACGGTTACGCCCCCAGTGACTTGCCGGTCAAAGCA
AAGCGCAGCACCTACAACTACAGCCTCCCCATCACCGTCAAGAAGACATCCAGCCAGCTTGTCACCATGCATGAC
CTGAAGCAGGGCCTGGGCCCGTCGGGGACGAGTGGTGCTCGGAAACCAGCTTCCAGCAAGTACAAGCTCAAGGAC
TCTGTCTACATCTTCCGGGAAGGGGCCTTGCCACCCTATCGGCAGATGTTCTACCAGTTATGCGACTTGAATGTG
GAAGAGTTGCAGAAGATCATTCACCGCAATGACGGGGCAGAGAATTCCTGCACAGAACGGGATGGGTGGTGCCTC
CCCAAGACCAGCGACGAGCTCAGGGACACCATGTCCCTCATGATCCGGCAGACCATCCGCTCCAAGAGGCCTGAG
GGCTGTGCGGTGGCTGGAGCTGCCACTGAGTGTCTCGGTGAGGGTGACCTCACACTGGCTGAGCTTAAAGGCCCC
ATCTGA

FIGURE 3088

AGGATGGCAATGCCAGTGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGA
CTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCTGTATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAATGGCAAGGTCACCAAGTCTGCCCAGAAAGCTCAGAAGGCTAAATGAA
TATTATCCCTAATACCTGCCACCCCACTCTTAATC

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FIGURE 3089

GCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACT
ACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAG
ATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATT
GATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTC
ATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTTGGTGAATTT
GAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTA
ATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAA
GTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAAATTCTTGAAGTCTGGTG
ATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTC
GCTTTGCTGTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTC

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FIGURE 3090

AAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAATTT
CTGGTTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTA
AGGATGGCAATGCCAGTGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGA
CTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCTGTATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAACCACC
TTTGGGTCGCTTTGCTGTTCGTGATATGAGACAGACAGTTGCGGTGGG

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FIGURE 3091

CTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCC
ACCACTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCT
GCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATC
ACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGA
GACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTTGGT
GAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAA
CAACTAATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAACTACA
AAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACCCGGTATGGTGGTCACCT
TTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTG
GGGACAATGTGG

FIGURE 3092

ATGGCCCAACAAGCAAATGTCGGGGAGCTTCTTGCCATGCTGGACTCCCCCATGCTGGGTGTGCGGGACGACGTG
ACAGCTGTCTTTAAAGAGAACCTCAATTCTGACCGTGGCCCTATGCTTGTAAACACCTTGGTGGATTATTACCTG
GAAACCAGCTCTCAGCCGGCATTGCACATCCTGACCACCTTGCAAGAGCCACATGACAAGCACCTCTTGGACAGG
ATTAACGAATATGTGGGCAAAGCCGCCACTCGTTTATCCATCCTCTCGTTACTGGGTCATGTCATAAGACTGCAG
CCATCTTGGAAGCATAAGCTCTCTCAAGCACCTCTTTTGCCTTCTTTACTAAAATGTCTCAAGATGGACACTGAC
GTCGTTGTCCTCACAACAGGCGTCTTGGTGTTGATAACCATGCTACCAATGATTCCACAGTCTGGGAAACAGCAT
CTTCTTGATTTCTTTGACATTTTTGGCCGTCTGTCATCATGGTGCCTGAAGAAACCAGGCCACGTGGCGGAAGTC
TATCTCGTCCATCTCCATGCCAGTGTGTACGCACTCTTTCATCGCCTTTATGGAATGTACCCTTGCAACTTCGTC
TCCTTTTTGCGTTCTCATTACAGTATGAAAGAAAACCTGGAGACTTTTGAAGAAGTGGTCAAGCCAATGATGGAG
CATGTGCGAATTCATCCGGAATTAGTGACTGGATCCAAGGACCATGAACTGGACCCTCGAAGGTGGAAGAGATTA
GAAACTCATGATGTTGTGATCGAGTGTGCCAAAATCTCTCTGGATCCCACAGAAGCCTCATATGAAGATGGCTAT
TCTGTGTCTCACCAAATCTCAGCCCGCTTTCCTCATCGTTCAGCCGATGTCACCACCAGCCCTTATGCTGACACA
CAGAATAGCTATGGGTGTGCTACTTCTACCCCTTACTCCACGTCTCGGCTGATGTTGTTAAATATGCCAGGGCAG
CTACCTCAGACTCTGAGTTCCCCATCGACACGGCTGATAACTGAACCACCACAAGCTACTCTTTGGAGCCCATCT
ATGGTTTGTGGTATGACCACTCCTCCAACTTCTCCTGGAAATGTCCCACCTGATCTGTCACACCCTTACAGTAAA
GTCTTTGGTACAACTGCAGGTGGAAAAGGAACTCCTCTGGGAACCCCAGCAACCTCTCCTCCTCCAGCCCCACTC
TGTCATTCGGATGACTACGTGCACATTTCACTCCCCCAGGCCACAGTCACACCCCCCAGGAAGGAAGAGAGAATG
GATTCTGCAAGACCATGTCTACACAGACAACACCATCTTCTGAATGACAGAGGATCAGAAGAGCCACCTGGCAGC
AAAGGTTCTGTCACTCTAAGTGATCTTCCAGGGTTTTTAGGTGATCTGGCCTCTGAAGAAGATAGTATTGAAAAA
GATAAAGAAGAAGCTGCAATATCTAGAGAACTTTCTGAGATCACCACAGCAGAGGCAGAGCCTGTGGTTCCTCGA
GGAGGCTTTGACTCTCCCTTTTACCGAGACAGTCTCCCAGGTTCTCAGCGGAAGACCCACTCGGCAGCCTCCAGT
TCTCAGGGCGCCAGCGTGAACCCTGAGCCTTTACACTCCTCCCTGGACAAGCTTGGGCCTGACACACCAAAGCAA
GCCTTTACTCCCATAGACCTGCCCTGCGGCAGTGCTGATGAAAGCCCTGCGGGAGACAGGGAATGCCAGACTTCT
TTGGAGACCAGTATCTTCACTCCCAGTCCTTGTAAAATTCCACCTCCGACGAGAGTGGGCTTTGGAAGCGGGCAG
CCTCCCCCGTATGATCATCTTTTTGAGGTGGCATTGCCAAAGACAGCCCATCATTTTGTCATCAGGAAGACTGAG
GAGCTGTTAAAGAAAGCAAAAGGAAACACAGAGGAAGATGGTGTGCCCTCTACCTCCCCAATGGAAGTGCTGGAC
AGACTGATACAGCAGGGAGCAGACGCGCACAGCAAGGAGCTGAACAAGTTGCCTTTACCCAGCAAGTCTGTCGAC
TGGACCCACTTTGGAGGCTCTCCTCCTTCAGATGAGATCCGCACCCTCCGAGACCAGTTGCTTTTACTGCACAAC
CAGTTACTCTATGAGCGTTTTAAGAGGCAGCAGCATGCCCTCCGGAACAGGCGGCTCCTCCGCAAGGTGATCAAA
GCAGCAGCTCTGGAGGAACATAATGCTGCCATGAAAGATCAGTTGAAGTTACAAGAGAAGGACATCCAGATGTGG
AAGGTTAGTCTGCAGAAAGAACAAGCTAGATACAATCAGCTCCAGGAGCAGCGTGACACTATGGTAACCAAGCTC
CACAGCCAGATCAGACAGCTGCAGCATGACCGAGAGGAATTCTACAACCAGAGCCAGGAATTACAGACGAAGCTG
GAGGACTGCAGGAACATGATTGCGGAGCTGCGGATAGAACTGAAGAAGGCCAACAACAAGGTGTGTCACACTGAG
CTGCTGCTCAGTCAGGTTTCCCAAAAGCTCTCAAACAGTGAGTCGGTCCAGCAGCAGATGGAGTTCTTGAACAGG
CAGCTGTTGGTTCTTGGGGAGGTCAACGAGCTCTATTTGGAACAACTGCAGAACAAGCACTCAGATACCACAAAG
GAAGTAGAAATGATGAAAGCCGCCTATCGGAAAGAGCTAGAAAAAAACAGAAGCCATGTTCTCCAGCAGACTCAG
AGGCTTGATACCTCCCAAAAACGGATTTTGGAACTGGAATCTCACCTGGCCAAGAAAGACCACCTTCTTTTGGAA
CAGAAGAAATATCTAGAGGATGTCAAACTCCAGGCAAGAGGACAGCTGCAGGCCGCAGAGAGCAGGTATGAGGCT
CAGAAAAGGATAACCCAGGTGTTTGAATTGGAGATCTTAGATTTATATGGCAGGTTGGAGAAAGATGGCCTCCTG
AAAAAACTTGAAGAAGAAAAAGCAGAAGCAGCTGAAGCAGCAGAAGAAAGGCTTGACTGTTGTAATGACGGGTGC
TCAGATTCCATGGTAGGGCACAATGAAGAGGCATCTGGCCACAACGGTGAGACCAAGACCCCCAGGCCCAGCAGC
GCCCGGGGCAGTAGTGGAAGCAGAGGTGGTGGAGGCAGCAGCAGCAGCAGCGAGCTTTCTACCCCAGAGAAA
CCCCCACACCAGAGGGCAGGCCCATTCAGCAGTCGGTGGGAGACGACTATGGGAGAAGCGTCTGCCAGCATCCCC
ACCACTGTGGGCTCACTTCCCAGTTCAAAAAGCTTCCTGGGTATGAAGGCTCGAGAGTTATTTCGTAATAAGAGC
GAGAGCCAGTGTGATGAGGACGGCATGACCAGTAGCCTTTCTGAGAGCCTAAAGACAGAACTGGGCAAAGACTTG
GGTGTGGAAGCCAAGATTCCCCTGAACCTAGATGGCCCTCACCCGTCTCCCCCGACCCCGGACAGTGTTGGACAG
CTACATATCATGGACTACAATGAGACTCATCATGAACACAGCTAA

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FIGURE 3093

CCCAGATACCCGATCCTCGGTCGCGCGGGTCGCCCCCGCCCCGACCTCCCCGGCTGACGCGCTCTGCGGCTCGGA
TTCCTCTTCTCCTGTAAATGACCACAGAGGAAGACAATGAATGAGGTGAAAGAATCCCTTCGCAGCATCGAGCAG
AAGTACAAGCTCTTCCAGCAGCAGCAGCTCACCTTCACCGCCGCTCTGGAGCACTGCAGGGAGAACGCCCACGAC
AAGATCCGGCCCATCTCCAGCATTGGACAGGTGCAGAGCTACATGGAACACTACTGCAACAGCTCCACAGACCGG
CGGGTTCTGCTCATGTTCCTGGACATCTGTTCAGAGCTGAATAAGCTCTGCCAGCACTTTGAGGCCGTGCACTCT
GGCACCCCAGTCACCAACAACCTCCTGGAGAAATGCAAAACCCTCGTTAGCCAAAGCAACGACTTAAGCAGCCTC
AGAGCAAAATACCCTCATGATGTGGTGAACCACCTCAGCTGTGACGAGGCCCGGAACCACTACGGCGGCGTGGTC
AGCCTCATCCCCCTCATCCTAGACTTAATGAAAGAATGGATCGCCCACTCCGAGAAGTTGCCGCGCAAGGTGCTG
CAGCACGTGAGTGAGCCCCAGGCGCACCAGGAGAGCACCAGGGGAGCCGCTCGTCCTGCCCAGGCCATAGGGACC
CAGCCCAGGGCCACTAAACACAAGTGTAGACAGCTCACAAAAGCCAGCCTCAAACCCAGGGGATGTTCAAAACCA
CCCTGGAGGCCTCCTGGTGGGAAATTGTAACTCAGAGCCAGGAGCTCCGTCGGCGGAGAGCTTTGCTGTTTAATT
TGGATTTTACTGGTTGGTCCTTTTTTCACTGGTACCCATGGACCCTGCCACTTACTAACCCCAAGGGAATCAGCC
AATATATTACTGAGACTTCCTCTCTCTCTTCTTGCTTTAACTTCTTTTTTTTTTGAGACGGAGTCTCGCTCTGTC
GCCCAGGCTGGAGTGCGGTGGCGCAACCTCGGCTCACTGCAACCTCCGCCTCCCAGGTTCACGCCATTCTCCTGC
CTCAGCCTCCCAAGTAGCTGGGACTACAGGCGCCCACCACCTCGCCTGGCTAATTTTTTGTATTTTTAGTAGAGA
CAGCGTTTCACCATGTTAGCCAGGATGGTCTCAATCTCCTGACCTCATGATCTACCCTCGTGATCGGCCTCCCAA
AGTGCTGGGATTACAGGCGTGAGCCACAGCGCCCGGCCCTCTTGCTTTAACTTCTAACATTTCCACTTCTAAGCA
TCAGGCTCCGTGCTGATGAAGAGGAAACCCACTTACAGAAGTTGCCCAAACAGGATGGTGTGGTAGAGGGTCCCA
GGAGGGCACTGAACTGTCACCTAGGTCCTCTTTGAGCCACATCCGGCTCCAGTGCCACGCCTGTCCCTGCTGCGG
GCTGCAGTTTTGCAGAGGGTGATCAAGCTGGAGACCATCTGCTCCTTGCCCCACCACCAGCCCCAACTGTAGGCA
AGGCACACGCTGTTTGCGAGCCAGGGATGCTCCCCTCCAGGATGGAGTGGGGGTCGGCATGTGGAACTCAGCGTG
TTTATTTTTTTATTTTTTGAGATGGAGTTTCACTCTGTCTCCCAGGCTGGAGTGCAGTGGCACGATCTTGGCTCA
CTGCAACCTCCACCTCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGAATTACAGGCGCCCAC
CACCCCACCTGGCTAATTTATATATATATATATTTTTTAGTAGAGACGGGGCTTCACCACGTTGGCCAGGCTGGT
CTTGAACTCCTGACCTCAACTGGTCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACGGC
ACCTGGCCAGAACTCAGTAGTGTGTTTAGTTCTCTGGACCACAGCCAAAGGGGAATAAACTCACCTTTCCTTCGC
CTTTACTTGGGAGAGGGAGACCATGACAGAAGCCAGAATTCTGATTTTGTGGCTCCTGAGCAAGGGCGATGACCT
GGTTTTCACAGCGTAGTCGAACCCCAAACATTGTAAAATGTGTCCCTGGCTTCTGAGCTTGCCCAAAGTAATGTC
TGACTGTTGGTTTTCCCTTCACAGGGGACGACTTAGCTTCTGTATTATTGTTGCTTCCTCAGGGGGAGACAGTC
AAGAATAAAAAGTATTCTACCACCT

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FIGURE 3094

GAGCTCAATCCCTGGGCAGGGAAAAGGGGGTCCTCGGGGCTCCCCGCTCGCTGTCCTTTTTCTGGACAGGCAGTT
CCTTGGCCACCTGGTAGGGCCGCGTTGCCTGGCAACGGCGGGGTCCTTCTTGGCTCGGCGGCGCTCGGGGCCTGA
GGGGAGAAAACCGCCGCGGAGGGCGCTGGGGGTGGCGGCGGCGGTCCGGGAGGTGGTCGCGCGACTGCGTGGAGC
GCCAGGGCGTCCGACCTCTGCACCTGAGAGAAGATGAACACGGCCGACCAGGCCCGGGTGGGGCCCGCGGACGAC
GGGCCTGCGCCGTCTGGGGAGGAGGAGGGAGAGGGGGGCGGCGAGGCGGGCGGGAAGGAGCCAGCAGCGGACGCG
GCCCCGGGGCCCAGCGCTGCATTCCGCCTCATGGTGACTCGGCGGGAGCCGGCCGTGAAGCTGCAGTATGCGGTG
AGCGGCCTGGAACCGCTGGCTTGGTCCGAGGACCACCGCGTGTCTGTGTCCACGGCCCGCAGCATCGCTGTGCTG
GAGCTCATCTGCGACGTGCACAACCCGGGCCAGGACCTGGTTATCCACCGCACCTCGGTGCCCGCACCGCTCAAC
AGCTGTCTCCTCAAAGTTGGCTCAAAAACAGAAGTTGCTGAGTGCAAGGAGAAATTCGCCGCCTCCAAGGACCCC
ACGGTCAGTCAGACTTTCATGTTGGATAGGGTGTTCAACCCTGAGGGGAAGGCTTTACCACCAATGAGAGGATTC
AAGTACACCAGCTGGTCTCCCATGGGTTGCGATGCTAATGGCAGGTGCCTCTTGGCAGCACTGACCATGGACAAT
CGCCTGACCATCCAGGCAAATCTCAACAGACTGCAGTGGGTCCAGCTGGTTGACCTGACTGAGATCTATGGAGAA
CGTCTTTATGAGACCAGTTACAGGCTCTCTAAAAATGAGGCCCCGGAAGGAAATCTCGGGGATTTTGCTGAGTTT
CAGAGGAGACACAGCATGCAGACCCCAGTCAGAATGGAGTGGTCGGGCATCTGTACCACCCAGCAGGTCAAGCAT
AACAACGAATGCCGGGACGTTGGCAGTGTGCTCCTGGCTGTCCTCTTTGAAAACGGTAATATCGCCGTGTGGCAG
TTTCAGCTGCCGTTTGTAGGAAAAGAATCCATCTCTTCATGCAACACAATTGAGTCAGGAATCACCTCTCCCAGT
GTATTGTTTTGGTGGGAATATGAGCACAATAATCGAAAAATGAGTGGCCTTATTGTGGGGAGTGCTTTTGGACCC
ATAAAAATTCTTCCTGTCAATCTCAAAGCAGTCAAAGGCTATTTCACTTTAAGGCAGCCTGTTATCTTGTGGAAA
GAAATGGACCAGTTACCTGTGCACAGTATCAAATGTGTGCCACTTTATCATCCTTACCAGAAGTGTAGTTGCAGC
TTAGTAGTGGCTGCAAGAGGCTCTTATGTATTTTGGTGTCTTCTTCTGATCTCCAAAGCAGGGCTGAATGTTCAC
AATTCCCATGTCACAGGCCTTCACTCACTGCCAATTGTCTCCATGACTGCAGACAAACAGAATGGAACAGTCTAT
ACTTGCTCCAGTGACGGAAAGGTGAGGCAGCTGATTCCCATTTTCACAGATGTTGCATTGAAGTTTGAACACCAG
TTGATTAAACTCTCAGATGTGTTTGGCTCAGTGAGGACTCACGGGATAGCAGTGAGCCCCTGCGGTGCATACCTG
GCCATCATCACCACTGAGGGCATGATCAACGGCCTCCACCCTGTTAACAAAAACTACCAGGTCCAATTTGTTACT
CTCAAAACCTTTGAAGAGGCAGCTGCTCAGCTCCTGGAATCTTCAGTTCAAAACCTTTTTAAGCAGGTAGATTTA
ATAGACCTAGTACGCTGGAAGATTTTAAAAGATAAACATATCCCTCAATTTTTACAAGAAGCTTTGGAAAAAAAG
ATTGAAAGCAGTGGAGTCACCTATTTTTGGCGTTTTAAGCTTTTCCTCCTGAGGATTTTATATCAGTCAATGCAG
AAAACCCCTTCAGAAGCCTTGTGGAAACCCACCCATGAGGACTCAAAAATCTTACTAGTGGATTCGCCTGGGATG
GGCAATGCTGACGATGAACAGCAGGAAGAAGGCACTTCTTCCAAACAGGTGGTGAAGCAAGGCCTGCAGGAGAGG
AGCAAGGAAGGAGATGTAGAGGAGCCCACTGATGACTCGCTCCCCACGACTGGAGATGCTGGAGGCCGTGAGCCA
ATGGAAGAGAAACTCCTGGAAATCCAAGGGAAAATCGAAGCTGTGGAGATGCACTTGACCAGGGAACACATGAAG
CGAGTCTTAGGAGAAGTGTATCTGCACACCTGGATCACAGAAAACACTAGCATCCCCACCCGCGGACTCTGTAAC
TTTTTAATGTCTGATGAAGAGTATGATGACAGAACTGCACGGGTGCTGATTGGACATATCTCAAAGAAGATGAAC
AAACAGACTTTCCCTGAGCACTGTAGTTTGTGTAAAGAGATCTTGCCATTCACAGATCGCAAACAGGCAGTCTGT
TCCAATGGCCACATTTGGCTCCGGTGCTTCTTAACCTACCAGTCCTGCCAGAGTTTGATATATAGAAGGTGTTTG
CTCCATGACAGCATTGCCCGGCATCCAGCTCCAGAAGATCCCGACTGGATTAAGAGGTTACTGCAAAGCCCCTGC
CCTTTCTGTGATTCTCCTGTCTTCTAAATAATCAGTGACGGGAAGATGGAAGGGCATGATGAACTCTGCCATAGA
AAACTTCCTCCAGCCTGAAGAGAAGGATGCACTGGAGGAAGCCGGACCCTCACGAGTGGAGAGAAGTCCTTGGTG
ATTGTAAAGAGGGCCCCTGGAGCTCATTTCTGAATCGCACTCTCCATTTCCAGAGACTAAAGGATGTCCTTTGAA
ATGGCTGGACTCAGAGAGTTGGAGTCGTTTTGAGATGAGCATTAGCCCCAGCTTTGTAACCAATGAGGAACACTT
ACTTATTTTTAAGTATCTTGACAGAAGCAATTTGAACACAGTGTCCCGTCATTTCTAGAAACAGAATGGTCTCTT
CTAGAGAGCTTGGATAAGGACCTTGCTGGGTTGAGTTAGGTTTTAATCCTTGCTTTGGTTTGGAACTGCCTTCGG
GCTCCAGAACTTAAATTGCTTGGTCCGTGGCATCTGATGTACCAACAGAGATTAAAAGTG

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FIGURE 3095

AAAAAGGACAGCGAGCGGGGAGCCCCGAGGACCCCCTTTTCCCTGCCCAGGGATTGAGCTCCAGAGCCTGTTAGG
GAGCTACCCAGACAGGCTTTAGTTCCTAAAGTGCTGAGGAAACGCACGGGGCGGTAAAGGGGAGGCTCGTCGGTG
AGATGGCGCCGGATCTCGCTTCTCAGAGGCATTCAGAGAGCTTCCCCAGCGTGAACTCTCGGCCGAATGTAATTT
TGCCAGGCCGCGAGGGACGCAGAGAGGGGCTGCCACCAGGCGGGGGCACGCGCGGTAGTCTTGTCCCTACCCGCC
CGGTGCCGCCGTCCCCGGCTCCCCTCGGGACGAGTCCGTACAGCTGGAGCCGTTCCGGACCCGGAAGGGGCGGTG
GCGCAGGGTCCTCGCGCGTCCCACGTGGGGTCCCGGGCCCAGCAGTCTGCGCACCGGGCTCGCTGCTGCACCACG
CGTCACCCACGCAGACCATGGCAGCCGCCGACGGTTCGCTCTTCGACAACCCCAGGACGTTCTCCAGACGTCCCC
CAGCCCAGGCGAGTCGGCAAGCAAAGGCTACGAAAAGAAAATACCAAGCGTCCAGTGAGGCTCCCCCAGCGAAAC
GGAGGAACGAAACTTCATTTCTCCCAGCCAAGAAAACTAGTGTTAAAGAAACTCAGAGGACTTTTAAGGGGAACG
CACAAAAAAATGTTTTCTCCAAAGAAGCATTCGGTTAGCACAAGTGATAGAAACCAGGAGGAGAGACAGTGCATTA
AGACTTCATCACTGTTTAAAAACAACCCTGACATTCCAGAACTCCACAGACCTGTGGTAAAGCAGGTGCAAGAAA
AAGTGTTTACTTCAGCTGCTTTTCATGAGCTGGGCCTCCACCCACATTTAATTTCCACAATAAATACGGTCTTAA
AAATGTCTAGTATGACCAGTGTTCAGAAGCAAAGTATTCCTGTGTTGCTGGAAGGCAGAGATGCTCTCGTGAGAT
CCCAGACGGGCTCAGGTAAAACTCTTGCCTATTGCATCCCTGTGGTCCAGTCCCTTCAAGCAATGGAGTCAAAAA
TACAGCGCAGTGATGGCCCCTATGCCCTGGTGCTCGTGCCAACGAGAGAGCTAGCTCTACAAAGCTTTGACACTG
TCCAGAAACTGCTTAAGCCTTTCACCTGGATTGTGCCTGGAGTGTTAATGGGAGGAGAGAAGAGAAAATCAGAAA
AGGCCAGACTCCGCAAAGGAATAAATATCCTTATCTCAACTCCTGGACGCCTGGTGGATCATATAAAATCCACAA
AGAACATTCATTTTAGTCGGCTGCGGTGGTTGGTGTTTGATGAAGCAGACAGAATCTTGGATTTGGGTTTTGAAA
AGGACATCACAGTGATACTTAATGCTGTAAATGCTGAATGCCAAAAACGACAGAATGTCTTGCTATCAGCGACAC
TCACAGAAGGTGTAACGCGGCTAGCTGATATCAGTTTGCATGATCCAGTCAGTATTTCTGTCCTGGACAAGAGCC
ATGACCAGTTGAACCCAAAGGACAAAGCGGTCCAGGAGGTCTGTCCTCCACCAGCTGGCGACAAGCTGGACAGCT
TTGCAATACCAGAGAGTCTCAAGCAGCATGTGACTGTGGTTCCCAGCAAACTGAGGCTTGTCTGCCTAGCGGCCT
TCATCCTTCAGAAATGCAAGTTTGAGGAAGACCAGAAGATGGTTGTCTTTTTCTCAAGTTGCGAGCTGGTGGAGT
TCCACTACAGCCTCTTCCTACAGACCCTGCTGAGCAGCTCAGGGGCGCCGGCATCAGGGCAGTTGCCATCTGCCT
CCATGCGATTAAAATTCCTACGGCTGCATGGCGGCATGGAGCAGGAGGAAAGAACAGCAGTGTTTCAGGAATTTT
CACATTCCAGAAGAGGCGTCCTTCTTTGCACGGATGTTGCAGCTCGGGGCTTAGATCTCCCTCAAGTCACGTGGA
TTGTTCAGTACAACGCTCCATCTTCACCTGCAGAATACATCCACCGGATTGGAAGAACCGCCCGGATTGGCTGCC
ATGGGAGCAGCCTGCTCATTTTGGCTCCTTCGGAGGCAGAATATGTCAACTCGTTGGCTTCTCACAAAATCAACG
TTTCTGAGATTAAGATGGAAGATATTTTGTGTGTTCTGACAAGAGATGATTGTTTTAAAGGGAAACGATGGGGAG
CCCAGAAATCCCATGCTGTTGGCCCCCAGGAAATCCGAGAGCGAGCCACAGTCTTGCAGACGGTATTTGAAGATT
ACGTGCACTCCAGTGAGAGGAGGGTCTCCTGGGCAAAGAAAGCTCTGCAGTCCTTCATCCAAGCCTACGCCACCT
ACCCCAGGGAGCTGAAGCACATCTTCCACGTCCGATCCCTCCACCTTGGGCATGTGGCGAAGAGCTTCGGACTAA
GAGATGCCCCCAGGAATCTTAGTGCCTTGACTAGAAAGAAGAGGAAAGCACACGTGAAAAGGCCTGACCTTCATA
AGAAGACCCAGAGTAAACACAGCCTCGCTGAAATCCTACGTTCGGAATACTCAAGCGGCATGGAGGCCGACATCG
CCAAGGTCAAAAAGCAAAACGCACCTGGAGAGCCTGGTGGCCGGCCCCTGCAGCACAGTCTGCAGCCGACACCCT
GCTTTGGCCGTGGGAAAACATTAAAATGGAGAAAAACCCAAAAAGGTGTACAGCGGGACAGCAAGACTTCCCAGA
AAGTTTAAAATCTCTCTGGGTCTTCGAGTGGAACCTGGAAGCCCCGGGTGGCAGTGGATTGATGTCCAGTTCTTG
TCAGAGGAGGCTTGTGAAAAATAACTGCGCCTTTGCCTGAATACCACGTCCCCAAGAATCAGAGGGGCCACAGCC
CTTCTCCTCCATGGGAGGCCCTGGAGCCTGATAGAAATCAGTGGTGTGGGGCACTGTAGAGACTAGCCAGCTCCC
GACGGAAGGGGTCTGTGTCTTGTATTGATCCCATCAGTGCCCGGCACTCCCTTCACCCAGGTGCTGACGTGCCGG
GGTTGAGCTGGCACCCCGGGATGTGATGTAAGAACGCCCTGCGCGTCAGCCTGGAACGGGCTTGATTGCTGCCCT
TAACTGTGTTCTGAAGTTTCACAGCTTGGCTTCAGCCTATCAGCGCATACATTGGCATGAATTTTGTGAATTAGG
GTGTTAAAAACTGGAATTGAATTTGTACAAAAAGAGAATATATTTATCACTAATTATTTTCTTAATGTAGGAATG
TACCGTTAAAAAGGACCAAAAGTTTTTGGTCTGGGTCAAAAAATACGAATGTGTTCTCAG

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FIGURE 3096A

ATGGGGCAGCAGCCTGGAAAAGTACTTGGGGACCAAAGAAGGCCAAGCTTGCCTGCCCTGCATTTTATCAAAGGA
GCAGGGAAGAAGGAATCATCGAGGCATGGGGGTCCACACTGCAATGTTTTTGTGGAACAAGCCCTTCAGCGGCCA
GTAGCATCTGACTTTGAGCCTCAGGGTCTGAGTGAAGCCGCTCGTTGGAACTCCAAGGAAAACCTTCTCGCTGGA
CCCAGTGAAAATGACCCCAACCTTTTCGTTGCACTGTATGATTTTGTGGCCAGTGGAGATAACACTCTAAGCATA
ACTAAAGGTGAAAAGCTCCGGGTCTTAGGCTATAATCACAATGGGGAATGGTGTGAAGCCCAAACCAAAAATGGC
CAAGGCTGGGTCCCAAGCAACTACATCACGCCAGTCAACAGTCTGGAGAAACACTCCTGGTACCATGGGCCTGTG
TCCCGCAATGCCGCTGAGTATCTGCTGAGCAGCGGGATCAATGGCAGCTTCTTGGTGCGTGAGAGTGAGAGCAGT
CCTGGCCAGAGGTCCATCTCGCTGAGATACGAAGGGAGGGTGTACCATTACAGGATCAACACTGCTTCTGATGGC
AAGCTCTACGTCTCCTCCGAGAGCCGCTTCAACACCCTGGCCGAGTTGGTTCATCATCATTCAACGGTGGCCGAC
GGGCTCATCACCACGCTCCATTATCCAGCCCCAAAGCGCAACAAGCCCACTGTCTATGGTGTGTCCCCCAACTAC
GACAAGTGGGAGATGGAACGCACGGACATCACCATGAAGCACAAGCTGGGCGGGGGCCAGTACGGGGAGGTGTAC
GAGGGCGTGTGGAAGAAATACAGCCTGACGGTGGCCGTGAAGACCTTGAAGGAGGACACCATGGAGGTGGAAGAG
TTCTTGAAAGAAGCTGCAGTCATGAAAGAGATCAAACACCCTAACCTGGTGCAGCTCCTTGGGGTCTGCACCCGG
GAGCCCCCGTTCTATATCATCACTGAGTTCATGACCTACGGGAACCTCCTGGACTACCTGAGGGAGTGCAACCGG
CAGGAGGTGAACGCCGTGGTGCTGCTGTACATGGCCACTCAGATCTCGTCAGCCATGGAGTACCTGGAGAAGAAA
AACTTCATCCACAGAGATCTTGCTGCCCGAAACTGCCTGGTAGGGGAGAACCACTTGGTGAAGGTAGCTGATTTT
GGCCTGAGCAGGTTGATGACAGGGGACACCTACACAGCCCATGCTGGAGCCAAGTTCCCCATCAAATGGACTGCA
CCCGAGAGCCTGGCCTACAACAAGTTCTCCATCAAGTCCGACGTCTGGGCATTTGGAGTATTGCTTTGGGAAATT
GCTACCTATGGCATGTCCCCTTACCCGGGAATTGACCTGTCCCAGGTGTATGAGCTGCTAGAGAAGGACTACCGC
ATGGAGCGCCCAGAAGGCTGCCCAGAGAAGGTCTATGAACTCATGCGAGCATGTTGGCAGTGGAATCCCTCTGAC
CGGCCCTCCTTTGCTGAAATCCACCAAGCCTTTGAAACAATGTTCCAGGAATCCAGTATCTCAGACGAAGTGGAA
AAGGAGCTGGGGAAACAAGGCGTCCGTGGGGCTGTGAGTACCTTGCTGCAGGCCCCAGAGCTGCCCACCAAGACG
AGGACCTCCAGGAGAGCTGCAGAGCACAGAGACACCACTGACGTGCCTGAGATGCCTCACTCCAAGGGCCAGGGA
GAGAGCGATCCTCTGGACCATGAGCCTGCCGTGTCTCCATTGCTCCCTCGAAAAGAGCGAGGTCCCCCGGAGGGC
GGCCTGAATGAAGATGAGCGCCTTCTCCCCAAAGACAAAAAGACCAACTTGTTCAGCGCCTTGATCAAGAAGAAG
AAGAAGACAGCCCCAACCCCTCCCAAACGCAGCAGCTCCTTCCGGGAGATGGACGGCCAGCCGGAGCGCAGAGGG
GCCGGCGAGGAAGAGGGCCGAGACATCAGCAACGGGGCACTGGCTTTCACCCCCTTGGACACAGCTGACCCAGCC
AAGTCCCCAAAGCCCAGCAATGGGGCTGGGGTCCCCAATGGAGCCCTCCGGGAGTCCGGGGGCTCAGGCTTCCGG
TCTCCCCACCTGTGGAAGAAGTCCAGCACGCTGACCAGCAGCCGCCTAGCCACCGGCGAGGAGGAGGGCGGTGGC
AGCTCCAGCAAGCGCTTCCTGCGCTCTTGCTCCGCCTCCTGCGTTCCCCATGGGGCCAAGGACACGGAGTGGAGG
TCAGTCACGCTGCCTCGGGACTTGCAGTCCACGGGAAGACAGTTTGACTCGTCCACATTTGGAGGGCACAAAAGT
GAGAAGCCGGCTCTGCCTCGGAAGAGGGCAGGGGAGAACAGGTCTGACCAGGTGACCCGAGGCACAGTAACGCCT
CCCCCCAGGCTGGTGAAAAAGAATGAGGAAGCTGCTGATGAGGTCTTCAAAGACATCATGGAGTCCAGCCCGGGC
TCCAGCCCGCCCAACCTGACTCCAAAACCCCTCCGGCGGCAGGTCACCGTGGCCCCTGCCTCGGGCCTCCCCCAC
AAGGAAGAAGCTGGAAAGGGCAGTGCCTTAGGGACCCCTGCTGCAGCTGAGCCAGTGACCCCCACCAGCAAAGCA
GGCTCAGGTGCACCAGGGGGCACCAGCAAGGGCCCCGCCGAGGAGTCCAGAGTGAGGAGGCACAAGCACTCCTCT
GAGTCGCCAGGGAGGGACAAGGGGAAATTGTCCAGGCTCAAACCTGCCCCGCCGCCCCCACCAGCAGCCTCTGCA
GGGAAGGCTGGAGGAAAGCCCTCGCAGAGCCCGAGCCAGGAGGCGGCCGGGGAGGCAGTCCTGGGCGCAAAGACA
AAAGCCACGAGTCTGGTTGATGCTGTGAACAGTGACGCTGCCAAGCCCAGCCAGCCGGGAGAGGGCCTCAAAAAG
CCCGTGCTCCCGGCCACTCCAAAGCCACAGTCCGCCAAGCCGTCGGGGACCCCCATCAGCCCAGCCCCCGTTCCC
TCCACGTTGCCATCAGCATCCTCGGCCCTGGCAGGGGACCAGCCGTCTTCCACCGCCTTCATCCCTCTCATATCA
ACCCGAGTGTCTCTTCGGAAAACCCGCCAGCCTCCAGAGCGGATCGCCAGCGGCGCCATCACCAAGGGCGTGGTC
CTGGACAGCACCGAGGCGCTGTGCCTCGCCATCTCTAGGAACTCCGAGCAGATGGCCAGCCACAGCGCAGTGCTG
GAGGCCGGCAAAAACCTCTACACGTTCTGCGTGAGCTATGTGGATTCCATCCAGCAAATGAGGAACAAGTTTGCC
TTCCGAGAGGCCATCAACAAACTGGAGAATAATCTCCGGGAGCTTCAGATCTGCCCGGCGACAGCAGGCAGTGGT
CCAGCGGCCACTCAGGACTTCAGCAAGCTCCTCAGTTCGGTGAAGGAAATCAGTGACATAGTGCAGAGGTAGCAG
CAGTCAGGGGTCAGGTGTCAGGCCCGTCGGAGCTGCCTGCAGCACATGCGGGCTCGCCCATACCCGTGACAGTGG
CTGACAAGGGACTAGTGAGTCAGCACCTTGGCCCAGGAGCTCTGCGCCAGGCAGAGCTGAGGGCCCTGTGGAGTC

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FIGURE 3096B

CAGCTCTACTACCTACGTTTGCACCGCCTGCCCTCCCGCACCTTCCTCCTCCCCGCTCCGTCTCTGTCCTCGAAT
TTTATCTGTGGAGTTCCTGCTCCGTGGACTGCAGTCGGCATGCCAGGACCCGCCAGCCCCGCTCCCACCTAGTGC
CCCAGACTGAGCTCTCCAGGCCAGGTGGGAACGGCTGATGTGGACTGTCTTTTTCATTTTTTTCTCTCTGGAGCC
CCTCCTCCCCCGGCTGGGCCTCCTTCTTCCACTTCTCCAAGAATGGAAGCCTGAACTGAGGCCTTGTGTGTCAGG
CCCTCTGCCTGCACTCCCTGGCCTTGCCCGTCGTGTGCTGAAGACATGTTTCAAGAACCGCATTTCGGGAAGGGC
ATGCACGGGCATGCACACGGCTGGTCACTCTGCCCTCTGCTGCTGCCCGGGGTGGGGTGCACTCGCCATTTCCTC
ACGTGCAGGACAGCTCTTGATTTGGGTGGAAAACAGGGTGCTAAAGCCAACCAGCCTTTGGGTCCTGGGCAGGTG
GGAGCTGAAAAGGATCGAGGCATGGGGCATGTCCTTTCCATCTGTCCACATCCCCAGAGCCCAGCTCTTGCTCTC
TTGTGACGTGCACTGTGAATCCTGGCAAGAAAGCTTGAGTCTCAAGGGTGGCAGGTCACTGTCACTGCCGACATC
CCTCCCCCAGCAGAATGGAGGCAGGGGACAAGGGAGGCAGTGGCTAGTGGGGTGAACAGCTGGTGCCAAATAGCC
CCAGACTGGGCCCAGGCAGGTCTGCAAGGGCCCAGAGTGAACCGTCCTTTCACACATCTGGGTGCCCTGAAAGGG
CCCTTCCCCTCCCCCACTCCTCTAAGACAAAGTAGATTCTTACAAGGCCCTTTCCTTTGGAACAAGACAGCCTTC
ACTTTTCTGAGTTCTTGAAGCATTTCAAAGCCCTGCCTCTGTGTAGCCGCCCTGAGAGAGAATAGAGCTGCCACT
GGGCACCTGCGCACAGGTGGGAGGAAAGGGCCTGGCCAGTCCTGGTCCTGGCTGCACTCTTGAACTGGGCGAATG
TCTTATTTAATTACCGTGAGTGACATAGCCTCATGTTCTGTGGGGGTCATCAGGGAGGGTTAGGAAAACCACAAA
CGGAGCCCCTGAAAGCCTCACGTATTTCACAGAGCACGCCTGCCATCTTCTCCCCGAGGCTGCCCCAGGCCGGAG
CCCAGATACGGGGGCTGTGACTCTGGGCAGGGACCCGGGGTCTCCTGGACCTTGACAGAGCAGCTAACTCCGAGA
GCAGTGGGCAGGTGGCCGCCCCTGAGGCTTCACGCCGGGAGAAGCCACCTTCCCACCCCTTCATACCGCCTCGTG
CCAGCAGCCTCGCACAGGCCCTAGCTTTACGCTCATCACCTAAACTTGTACTTTATTTTTCTGATAGAAATGGTT
TCCTCTGGATCGTTTTATGCGGTTCTTACAGCACATCACCTCTTTGCCCCCGACGGCTGTGACGCAGCCGGAGGG
AGGCACTAGTCACCGACAGCGGCCTTGAAGACAGAGCAAAGCGCCCACCCAGGTCCCCCGACTGCCTGTCTCCAT
GAGGTACTGGTCCCTTCCTTTTGTTAACGTGATGTGCCACTATATTTTACACGTATCTCTTGGTATGCATCTTTT
ATAGACGCTCTTTTCTAAGTGGCGTGTGCATAGCGTCCTGCCCTGCCCCCTCGGGGGCCTGTGGTGGCTCCCCCT
CTGCTTCTCGGGGTCCAGTGCATTTTGTTTCTGTATATGATTCTCTGTGGTTTTTTTTGAATCCAAATCTGTCCT
CTGTAGTATTTTTTAAATAAATCAGTGTTTACATTAG

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FIGURE 3097

GGCCTGGAGTTGTGGAGTCGGATATCGCAGCTCCCGACTGAGCTGCGCCTGCGCAACTCATTGGCGCCAAGATGG
CGATGGAGATGAGGCTTCCAGTGGCTCGCAAGCCTCTTAGCGAGAGACTGGGCCGCGACACTAAGAAACATCTAG
TGGTGCCGGGGGATACAATCACTACGGACACAGGATTCATGCGGGGCCATGGAACGTATATGGGAGAAGAGAAGC
TCATTGCATCTGTTGCTGGCTCTGTGGAGAGAGTAAACAAGTTGATCTGTGTGAAAGCTTTGAAAACCAGATACA
TTGGTGAAGTAGGAGACATCGTAGTGGGACGAATCACAGAGGTTCAACAGAAGAGGTGGAAGGTGGAGACCAACT
CCAGGCTGGATTCGGTCTTGCTGCTCTCGTCCATGAACCTTCCTGGAGGAGAGCTGAGGAGAAGATCTGCAGAAG
ATGAGCTTGCAATGAGAGGTTTCTTACAGGAAGGGGACCTTATCAGTGCTGAGGTCCAGGCAGTGTTCTCTGACG
GAGCTGTCTCTTTGCACACGAGGAGCCTGAAATATGGAAAACTAGGTCAGGGGGTTTTGGTCCAGGTTTCCCCCT
CCCTGGTGAAACGGCAGAAGACCCACTTTCATGATTTGCCATGTGGTGCCTCAGTGATTCTCGGTAACAACGGCT
TCATCTGGATTTACCCAACACCTGAGCACAAAGAAGAGGAAGCAGGGGGCTTCATTGCAAACCTGGAGCCTGTCT
CTCTTGCTGATCGAGAGGTGATATCCCGGCTTCGGAACTGCATCATCTCGCTGGTAACTCAGAGGATGATGCTGT
ATGATACCAGCATCCTGTACTGCTATGAAGCATCCCTTCCACATCAGATCAAAGACATCTTAAAGCCAGAAATAA
TGGAGGAGATTGTGATGGAAACACGCCAGAGGCTTTTGGAACAGGAGGGATAAGGAGGTGCTCCAGAAGCACGGG
ACTGTGGACCTTGCAGGAGTGAAGACTGTGATGTGTGGTCCCCATATGTGGCTCAGCAAAGACTCGAGAGATCAT
CCCTTTGTCTGCATTGACGGCCCTGTGACGGCCTCCAGCCCACAGGCCTGCTTTCTCCTGTCCTAACACCAAGCC
TGGGTGGCAGATGAACAGTGCTTCCTTGGGTTGCCAGCTGAGTCCCGGTATTAGGGAATAGTTTCAGCTCTTTCA
AAGTGCACAGTGTTACAGTCGAATGGGCTCCCATCCTGGAATAATATGGAGAATCCTTTGTCTTCCACTCACTGT
CATTCACAAGGCACAGTGCCCCATGAAATTGCCCCAATAGAAAACATGGCATCCCTGACCTCCAAATGGTCTGTT
TTGGCCTCCATTCCTATATCCTTTAAATGACTGAGAATGCAGCTGGTAAAGTTGGAAGAATAAAGTTAACCAAGC
AGGCCAGGCACGGTGGCTCACGCCTATAATCCCAGCACTTAGGGAGGCCAAGGCGGGCAGATCACCTGAGGTCAA
TAGTTCGAGACCAGCCTGGCCAACAAGGTGAAACCCCATCTCTACTAAAAATACAAAAAATTAGCCAGGTGTGGT
GGTGTGCACCTGTAGTCCCAGCTATTTGGGAGGCTGAGGTGGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGC
AGTGAGCTGAAATCGCGTACCACACTCCAGCCTGGGTGACAGAGCGAGACTGTGTTTCAAAGAAAAAAAAAAACA
AGCAGCCTTTTGCTTGGTTGGAATCTGATTTTCTGTTGCGTGTTCCTTGTAGCCATAGATGTGATTATGTCCACA
CCGGGCTGCCTTAATCTGTCCTGCTTGGAGAGTGACTTGTAAGATGCTGAATTATTCATGATAATACAGTGAATG
TTCTGGGTCCATGTACTCAGATAAACATGAAGAAAATAAGCAAAGAAAAATGGAGACTGGGAAAGCAAAGCTGTT
TTCATCCTATAATTGAAGTAGTGTGGAGCATTAACTTGTGGATGATTCAGAGTTAAAAGATAAAAAGACGCCAGA
GTTCTCGCTGAAGAATGTGAGAA

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FIGURE 3098

TTTCCGGCTACGGGTCCCCAAGCGGAGCGGGAGGCCGGACCGGGGAGCCGAGCGGCGGCGTCGGCGGCGTCGGCG
GCGGCGGCGACGGCGGCGGGGGCGGTAATGGCGGAGCTGGTGCAGGGGCAGAGCGCTCCTGTGGGGATGAAGGCC
GAGGGCTTCGTGGATGCCCTGCACCGGGTCCGGCAGATTGCTGCTAAAATTGATTCAATTCCTCACTTGAATAAT
TCCACACCTCTAGTGGACCCCTCAGTATATGGATACGGAGTACAAAAACGGCCCTTGGATGATGGAGTAGGTAAC
CAGTTAGGGGCCTTGGTACATCAAAGGACGGTAATAACGGAAGAATTCAAAGTGCCTGACAAAATGGTTGGATTT
ATTATCGGCAGGGGAGGTGAGCAGATTTCACGGATTCAAGCAGAATCTGGTTGCAAAATTCAGATTGCTTCAGAG
AGTTCTGGGATTCCAGAGAGGCCCTGTGTACTTACCGGAACCCCAGAAAGTATTGAACAAGCCAAACGGCTCCTG
GGACAGATTGTGGACCGCTGTCGAAATGGACCTGGCTTTCATAATGACATAGACAGCAACAGCACAATCCAGGAG
ATTCTCATTCCCGCATCTAAAGTGGGTCTGGTCATCGGCAGAGGAGGGGAAACAATCAAGCAGTTGCAGGAGCGG
ACAGGGGTGAAGATGGTCATGATCCAGGATGGCCCATTGCCCACGGGAGCAGACAAGCCTCTTCGTATCACTGGA
GATGCATTTAAAGTACAGCAAGCAAGAGAAATGGTACTAGAGATTATCCGAGAAAAAGACCAAGCTGACTTTCGG
GGTGTACGCGGCGATTTCAACTCTCGAATGGGAGGAGGCAGTATAGAGGTATCTGTGCCTAGGTTTGCTGTGGGG
ATTGTAATAGGAAGAAACGGGGAAATGATCAAAAAGATCCAGAATGATGCTGGTGTGAGGATTCAGTTTAAACCA
GATGATGGGATTAGTCCAGAAAGAGCTGCCCAGGTCATGGGCCCTCCGGATCGGTGTCAGCATGCAGCGCATATC
ATCAGCGAGCTGATTCTTACAGCCCAGGAAAGAGACGGCTTTGGAGGCCTGGCAGCAGCCAGAGGAAGAGGTCGT
GGCCGTGGCGACTGGAGCGTGGGAGCCCCTGGTGGCGTCCAGGAGATAACATACACGGTGCCAGCCGATAAGTGT
GGCCTCGTCATAGGCAAAGGGGGTGAGAACATCAAAAGCATCAACCAGCAGTCAGGGGCGCACGTGGAGCTTCAG
AGGAACCCCCCTCCCAACAGCGACCCCAACCTGCGGAGATTCACCATCAGGGGGGTTCCCCAGCAGATCGAGGTG
GCCAGGCAGCTCATAGATGAGAAAGTTGGCGGGACCAATCTCGGAGCACCTGGAGCCTTCGGACAGAGTCCATTC
AGCCAGCCACCTGCCCCACCTCATCAAAATACCTTTCCTCCAAGGAGCTCCGGGTGCTTCCCAAACATGGCTGCC
AAGGTGAATGGGAACCCCCACAGCACCCCTGTGAGTGGTCCTCCGGCCTTTCTGACCCAGGGCTGGGGCAGCACC
TACCAGGCGTGGCAGCAGCCCACACAGCAGGTCCCAAGCCAGCAGAGCCAGCCGCAGAGCAGCCAGCCCAACTAC
AGCAAGGCCTGGGAAGACTATTACAAAAAACAGAGTCACGCCGCCAGCGCTGCTCCTCAGGCCAGCTCCCCACCG
GACTACACAATGGCCTGGGCAGAATATTACAGACAGCAGGTCGCTTTCTACGGACAGACGTTAGGGCAGGCGCAG
GCCCACAGCCAGGAGCAGTAGGACAGCGTCCTCGTGGCCAACTCTCCCCTCAAAATCATTGTCAAAGAAAACCTA
TTTGTAACAGAGGTTTTTACATTTGCAAACCTTTTGATGAAGAACTGTTGTTTTGTTCTGTGAAACACTATATTT
AGATTAACGGAATTTTTCTAAAAATCAGGAAAATTAGTTACTAAAAATTGCTGATCATTTTTGTTTCATTATTTT
TGTTATTTCAAATGTATAAGCTCTGGGATTCTTTTTGGAGCAATACCTACAAAGTCAGGCACCAGAATGTGCCTC
AGAGCTGTGACATTTCAACATGATGGTTTTGGTTTGGTTTGGTTTTGTGTCCTTTTTATTTGCAGTTTTTTCTGT
TGCAACAGAAAGTGGCTTGGAAGTCTTAGGTGGTATGTAACAAATTCTTTTTAAAAATTTTAAAGCAGTATTTAA
GTATTCTTAAATGTGTAAATTCATTTAATGTTTTACTTCTAATTTCTTGTATCTTGGCTGTCTGGTTTTATTGCA
TTTTTAAAAAAACTGAACTATTATGTATTGTAATGAATGATGTGAATTCTGAACTGAGACAGATAATTGTATTGC
TGTCCAACAGGGGTTGGGAGGGGCATTTTGTAGGGTTTGTATAATTTCTAGAGTTCGAAAGGGGTAATATAAAAA
TGTGCTCGTGTGTTTAGCCTACGTTTTTCTCATGCCTCCATTACCAGTTGCAATTGTGTATCTAAGACCTCCAAG
CTTGTTTTTAAAACAAAACAAAAAACCTTTCTCTATTATCTCAGAAATATAAATACTGTTATTTTTAATATTAAG
AAATTCAATATAACTTTTAACACACACTGTGGAACATTAAACCGTATAAAAATGTAGTTATAACTATTTTTAATT
CCAAGGTGTTGTTTGCTTTTTTCTTTTAAATATTTTCTTAATATTTTGTCAGATTAACTAGATGAATAAATAAAT
CTAGTATTAACCGCATTATGAATTAAATAATTTTGATTTAATGAAAGGGATAATATGATTTCCAGTGTTTACTGT
AGTGTATCTTGTACAGATAACATGTATTTTTAAAGGAAAAAAAACGGAATTGAAGCTATTTTTTCTTGCATTTCT
AATTGACCTGAGGGACATTCCGTTTGAAATGTACTGAAGTTACAGTTTCTGGTTTTTTCTCCTTATTTTTCTTAT
AATGCTTGAAATGTCTAACTATTAAAAAAGACAATTGGAAAATGTTATGCATGGGGTTTTTAAGAAAACAAAGTG
TTCTTTTTATTTGACTGACAATTCATTTTACACTCTATATAATAAAATCTCCACAAGGCATCTTGTGGGCAAAGT
C

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FIGURE 3099

GCGCCCCCGCCGGCGCGCCCCTGGGAGGGTGAGCCGGCGCCGGGCCCAGGCCCGGACCTGGTGGGAGGCGGGGGG
AGGTGGGGACGAGGCCTGGGGAGGCGGGCCCCGCCCATCTGCAGGTGGCTGTGAACGCTGAGCGGCTCCAGGCGG
GGGCCGGGCCCGGGGGCGGGGTCTGTGGCGCGCGTCCCCGCCACGTGTCCCCGGTCACCGGCCCTGCCCCCGGGC
CCTGTGCTTATAACCTGGGATGGGCACCCCTGCCAGTCCTGCTCTGCCGCCTGCCACCGCTGCCCGAGCCCGACG
CTATGTCCAGCAAAGGCTCCGTGGTTCTGGCCTACAGTGGCGGCCTGGACACCTCGTGCATCCTCGTGTGGCTGA
AGGAACAAGGCTATGACGTCATTGCCTATCTGGCCAACATTGGCCAGAAGGAAGACTTCGAGGAAGCCAGGAAGA
AGGCACTGAAGCTTGGGGCCAAAAAGGTGTTCATTGAGGATGTCAGCAGGGAGTTTGTGGAGGAGTTCATCTGGC
CGGCCATCCAGTCCAGCGCACTGTATGAGGACCGCTACCTCCTGGGCACCTCTCTTGCCAGGCCCTGCATCGCCC
GCAAACAAGTGGAAATCGCCCAGCGGGAGGGGGCCAAGTATGTGTCCCACGGCGCCACAGGAAAGGGGAACGATC
AGGTCCGGTTTGAGCTCAGCTGCTACTCACTGGCCCCCCAGATAAAGGTCATTGCTCCCTGGAGGATGCCTGAAT
TCTACAACCGGTTCAAGGGCCGCAATGACCTGATGGAGTACGCAAAGCAACACGGGATTCCCATCCCGGTCACTC
CCAAGAACCCGTGGAGCATGGATGAGAACCTCATGCACATCAGCTACGAGGCTGGAATCCTGGAGAACCCCAAGA
ACCAAGCGCCTCCAGGTCTCTACACGAAGACCCAGGACCCAGCCAAAGCCCCCAACACCCCTGACATTCTCGAGA
TCGAGTTCAAAAAAGGGGTCCCTGTGAAGGTGACCAACGTCAAGGATGGCACCACCCACCAGACCTCCTTGGAGC
TCTTCATGTACCTGAACGAAGTCGCGGGCAAGCATGGCGTGGGCCGTATTGACATCGTGGAGAACCGCTTCATTG
GAATGAAGTCCCGAGGTATCTACGAGACCCCAGCAGGCACCATCCTTTACCATGCTCATTTAGACATCGAGGCCT
TCACCATGGACCGGGAAGTGCGCAAAATCAAACAAGGCCTGGGCTTGAAATTTGCTGAGCTGGTGTATACCGGTT
TCTGGCACAGCCCTGAGTGTGAATTTGTCCGCCACTGCATCGCCAAGTCCCAGGAGCGAGTGGAAGGGAAAGTGC
AGGTGTCCGTCCTCAAGGGCCAGGTGTACATCCTCGGCCGGGAGTCCCCACTGTCTCTCTACAATGAGGAGCTGG
TGAGCATGAACGTGCAGGGTGATTATGAGCCAACTGATGCCACCGGGTTCATCAACATCAATTCCCTCAGGCTGA
AGGAATATCATCGTCTCCAGAGCAAGGTCACTGCCAAATAGACCCGTGTACAATGAGGAGCTGGGGCCTCCTCAA
TTTGCAGATCCCCCAAGTACAGGCGCTAATTGTTGTGATAATTTGTAATTGTGACTTGTTCTCCCCGGCTGGCAG
CGTAGTGGGGCTGCCAGGCCCCAGCTTTGTTCCCTGGTCCCCCTGAAGCCTGCAAACGTTGTCATCGAAGGGAAG
GGTGGGGGGCAGCTGCGGTGGGGAGCTATAAAAATGACAATTAAAAGAGACACTAGTCTTTTATTTCTAGTGAGT
GTGTGTGTGTGTGTGTGTGTGTGTGTGTG

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FIGURE 3100

ATGTGGCTGACCTTATCTGTACGAGCTTTTCCTGGGGCCCGTGGAGCGGGTAGTCCAAGCTGGGTATTAATCCTG
GAGCCAGGAAAGGCTCTGAGAAGTGAAAGAACACCACGAACAAAGTCTTCAGATGGGGCCTTTAAGCTCAGCCAG
TGTGAGGTCACCCTCACCGAGACACTCAGTGGCAGCTCCAGCCACCGCACAGCCCTCTGCAGTGATGGGAACAGG
GGACCGAGTGGACCTGCAGAGCCACGTCTGTCCCTCTGTCTGTCGACCACAGCCGGTGCCAGCAATTCAGGAGGC
CTAGTGGGCGAGGGAGGCTGGGGAAAGGACTGGAGGGGAGGCCCAGCCTTGGGCCCTGTCACACGTAGTCCAGAA
TCTCTGTCTCCATTTCGTTTTCACTGCCGTCGGATGGCTTGA

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FIGURE 3101

CCAGAGGCTGATGCTCACCATGGGGCGCCTGCAACTGGTTGTGTTGGGCCTCACCTGCTGCTGGGCAGTGGCGAG
TGCCGCGAAGCTGGGCGCCGTGTACACAGAAGGTGGGTTCGTGGAAGGCGTCAATAAGAAGCTCGGCCTCCTGGG
TGACTCTGTGGACATCTTCAAGGGCATCCCCTTCGCAGCTCCCACCAAGGCCCTGGAAAATCCTCAGCCACATCC
TGGCTGGCAAGGGACCCTGAAGGCCAAGAACTTCAAGAAGAGATGCCTGCAGGCCACCATCACCCAGGACAGCAC
CTACGGGGATGAAGACTGCCTGTACCTCAACATTTGGGTGCCCCAGGGCAGGAAGCAAGTCTCCCGGGACCTGCC
CGTTATGATCTGGATCTATGGAGGCGCCTTCCTCATGGGGTCCGGCCATGGGGCCAACTTCCTCAACAACTACCT
GTATGACGGCGAGGAGATCGCCACACGCGGAAACGTCATCGTGGTCACCTTCAACTACCGTGTCGGCCCCCTTGG
GTTCCTCAGCACTGGGGACGCCAATCTGCCAGGTAACTATGGCCTTCGGGATCAGCACATGGCCATTGCTTGGGT
GAAGAGGAATATCGCGGCCTTCGGGGGGGACCCCAACAACATCACGCTCTTCGGGGAGTCTGCTGGAGGTGCCAG
CGTCTCTCTGCAGACCCTCTCCCCCTACAACAAGGGCCTCATCCGGCGAGCCATCAGCCAGAGCGGCGTGGCCCT
GAGTCCCTGGGTCATCCAGAAAAACCCACTCTTCTGGGCCAAAAAGGTGGCTGAGAAGGTGGGTTGCCCTGTGGG
TGATGCCGCCAGGATGGCCCAGTGTCTGAAGGTTACTGATCCCCGAGCCCTGACGCTGGCCTATAAGGTGCCGCT
GGCAGGCCTGGAGTACCCCATGCTGCACTATGTGGGCTTCGTCCCTGTCATTGATGGAGACTTCATCCCCGCTGA
CCCGATCAACCTGTACGCCAACGCCGCCGACATCGACTATATAGCAGGCACCAACAACATGGACGGCCACATCTT
CGCCAGCATCGACATGCCTGCCATCAACAAGGGCAACAAGAAAGTCACGGAGGAGGACTTCTACAAGCTGGTCAG
TGAGTTCACAATCACCAAGGGGCTCAGAGGCGCCAAGACGACCTTTGATGTCTACACCGAGTCCTGGGCCCAGGA
CCCATCCCAGGAGAATAAGAAGAAGACTGTGGTGGACTTTGAGACCGATGTCCTCTTCCTGGTGCCCACCGAGAT
TGCCCTAGCCCAGCACAGAGCCAATGCCAAGAGTGCCAAGACCTACGCCTACCTGTTTTCCCATCCCTCTCGGAT
GCCCGTCTACCCCAAATGGGTGGGGGCCGACCATGCAGATGACATTCAGTACGTTTTCGGGAAGCCCTTCGCCAC
CCCCACGGGCTACCGGCCCCAAGACAGGACAGTCTCTAAGGCCATGATCGCCTACTGGACCAACTTTGCCAAAAC
AGGGGACCCCAACATGGGCGACTCGGCTGTGCCCACACACTGGGAACCCTACACTACGGAAAACAGCGGCTACCT
GGAGATCACCAAGAAGATGGGCAGCAGCTCCATGAAGCGGAGCCTGAGAACCAACTTCCTGCGCTACTGGACCCT
CACCTATCTGGCGCTGCCCACAGTGACCGACCAGGAGGCCACCCCTGTGCCCCCCACAGGGGACTCCGAGGCCAC
TCCCGTGCCCCCCACGGGTGACTCCGAGACCGCCCCCGTGCCGCCCACGGGTGACTCCGGGGCCCCCCCCCGTGCC
GCCCACGGGTGAGTCCGGGGCCCCCCCCCGTGCCGCCCACGGGTGACTCCGGGGCCCCCCCCCGTGCCGCCCACGGG
TGACTCCGGGGCCCCCCCCCGTGCCGCCCACGGGTGACTCCGGGGCCCCCCCCCGTGCCGCCCACGGGTGACTCCGG
GGCCCCCCCCCGTGCCGCCCACGGGTGACTCCGGCGCCCCCCCCCGTGCCGCCCACGGGTGACGCCGGGCCCCCCCC
CGTGCCGCCCACGGGTGACTCCGGCGCCCCCCCCCGTGCCGCCCACGGGTGACTCCGGGGCCCCCCCCCGTGACCCC
CACGGGTGACTCCGAGACCGCCCCCCGTGCCGCCCACGGGTGACTCCGGGGCCCCCCCTGTGCCCCCCACGGGTGA
CTCTGAGGCTGCCCCTGTGCCCCCCACAGATGACTCCAAGGAAGCTCAGATGCCTGCAGTCATTAGGTTTTAGCG
TCCCATGAGCCTTGGTATCAAGAGGCCACAAGAGTGGGACCCCAGGGGCTCCCCTCCCATCTTGAGCTCTTCCTG
AATAAAGCCTCATACCCCT

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FIGURE 3102

CACCCAGAGGCTGATGCTCACCATGGGGCGCCTGCAACTGGTTGTGTTGGGCCTCACCTGCTGCTGGGCAGTGGC
GAGTGCCGCGAAGACCCCATGCTGCACTATGTGGGCTTCGTCCCTGTCATTGATGGAGACTTCATCCCCGCTGAC
CCGATCAACCTGTACGCCAACGCCGCCGACATCGACTATATAGCAGGCACCAACAACATGGACGGCCACATCTTC
GCCAGCATCGACATGCCTGCCATCAACAAGGGCAACAAGAAAGTCACGGAGGAGGACTTCTACAAGCTGGTCAGT
GAGTTCACAATCACCAAGGGGCTCAGAGGCGCCAAGACGACCTTTGATGTCTACACCGAGTCCTGGGCCCAGGAC
CCATCCCAGGAGAATAAGAAGAAGACTGTGGTGGACTTTGAGACCGATGTCCTCTTCCTGGTGCCCACCGAGATT
GCCCTAGCCCAGCACAGAGCCAATGCCAAGAGTGCCAAGACCTACGCCTACCTGTTTTCCCATCCCTCTCGGATG
CCCGTCTACCCCAAATGGGTGGGGGCCGACCATAGAGATGAGATCCAGTACATCTTTGGGGAGCCCTTTGCCACC
CCACTCCGGGCTACCGGCCCCAAGACAGGACAGTCTCTAAGGCCATGACCGCCTACTGGACCAACTTTGCCAAAA
CAGGGGACCCCAACATGGGCGACTCGGCTGTGCCCACACACTGGGAACCCTACACTACGGAAAACAGCGGCTACC
TGGAGATCACCAAGAAGATGGGCAGCAGCTCCATGAAGCGGAGCCTGAGAACCAACTTCCTGCGCTACTGGACCC
TCACCTATCTGGCGCTGCCCACAGTGACCGACCAGGAGGCCAGTTCCATGCCCTCCACAGGGGACTCTGAGGCCA
CTCCCGTCTCCCCCGACAGGCAACTCCGAGTCTGCCCCCGTCCCTGCAACGGGTGACTCTCAGGATGCCCCTGTG
CCCCTCACAAGTGACTCTGAGGCTGCCCCCGTGCCCCCCTCAGGTGACTCTGAGGCTCCCCCGTACCCTACGGGT
GACTCTGAGGCCCGTGCCCACCTTGGGTGACACTGAGGCTGCCCCATCCCCGCTACGGGTGACTCTGAGGCCGCC
CCTGTGTCCCCCACAGATGACTCCGAGGAAGCTCAGATGCTGCAGTCATTAGTTTCTAGTGTCCCATCAGCCTTG
GTCTCAAGAGGCCGAGAGGGTGCAACCCCAGGGGCTCCCCTCCCATCTTGAGCTCTTCCTGAATAAAACCTCATT
CCCC

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FIGURE 3103

AGAGTCGCACGCGCAGCGGGGAAGGTGTGAGTCGTGAACGGCCCGGGTCTCCGCCATGGCCTCTCTACTCGCCAA
GGACGCCTACCTGCAGAGCCTGGCCAAGAAGATCTGCTCCCATTCGGCCCCGGAACAGCAGGCGCGCACGCGGGC
TGGCAAAACTCAAGGCTCAGAAACTGCAGGGCCCCCAAAAAAGAAAAGGAAGAAAACACAAAAGAAATTCCGGAA
GCGAGAAGAGAAGGCTGCTGAGCACAAGGCCAAGTCCTTGGGGGAGAAATCTCCAGCAGCCTCTGGGGCCAGGAG
GCCTGAGGCAGCCAAAGAGGAAGCAGCTTGGGCTTCCAGCTCAGCAGGGAACCCTGCAGATGGCCTGGCCACTGA
GCCTGAGTCTGTCTTTGCTCTGGATGTTCTGCGACAGCGACTGCATGAGAAGATCCAGGAGGCCCGGGGCCAGGG
CAGTGCCAAGGAGCTGTCCCCTGCCGCCTTGGAGAAAAGGCGGCGGAGAAAGCAGGAACGGGACCGGAAGAAGAG
GAAGCGAAAGGAGCTGCGGGCGAAAGAGAAGGCCAGGAAGGCTGAGGAGGCCACGGAGGCCCAGGAGGTGGTGGA
GGCAACCCCAGAGGGGGCCTGCACGGAGCCGCGGGAGCCGCCCGGGCTGATCTTCAATAAGGTGGAGGTGAGCGA
AGACGAGCCGGCCAGCAAGGCGCAGCGCAGAAAAGAGAAGAGGCAGAGGGTGAAGGGGAACCTCACGCCGCTGAC
CGGGAGGAACTACCGGCAGCTGCTGGAGCGCCTGCAGGCACGGCAGAGCCGGCTGGACGAGCTGCGCGGCCAGGA
TGAGGGGAAGGCGCAGGAGCTGGAGGCGAAGATGAAGTGGACCAACCTCCTCTACAAGGCGGAGGGCGTGAAGAT
CCGTGACGACGAACGCCTGCTGCAGGAGGCCCTGAAGCGCAAGGAGAAGCGCAGGGCGCAGCGGCAGCGCCGGTG
GGAGAAGCGCACGGCCGGCGTGGTGGAGAAGATGCAGCAGCGCCAGGACCGGCGGCGGCAGAACCTGCGCAGGAA
GAAGGCGGCCCGCGCCGAGCGCCGCCTGCTCAGAGCCCGCAAGAAGGGCCGCATCCTGCCGCAGGACCTGGAGCG
CGCAGGCCTGGTCTGAGTCTTTCCCACCTGGGGCCGCCGTCTTCCGTCCTAGGAGACTCCAGGACACCCTCTGAG
TCCTTGACGCTGGCTCTGTCCCAGGATCTCCACAGACCTCGGCCTCTCCATGTGAGGGGGACACAGTGGTGCTCT
GCTGAGTTGTGAGGGCCCAGATCACAGATCCCATGTGAGAAAGAGAGAGTTTCAGCGTCATCCTTGAACGCAGGA
TCCGGGACCTTCAGACCCAGGGAAAGGGTGAGGGAGACTGGGGCCTGGTCTGCTTTCCCGGGCCTGAAAGCTTCC
CCGAGGTTTGCAGGGTCAGGGAGGAGGAACGGTGGGGGTGGGCAGTCACTGCCTGTTCCCCACTGCCTGTGTTCG
CAGGAGCCACGGGACAGAAGACGGTGGCCTCTGCTGCCGGGCCACGTTAGTCCGCAGCTCACCCGAACAGAGGAC
AACCCTGAGGTGTGGCATATGGGCACCTGGCACTGGGAGTCGGGGGAGCACGTCCAGGCGTGGTGCATCCTGGGG
CAGAACGCCATGGCTCCTCCCCGCTCTCTTGGCTTCTGCCTGTTGGGGTCTCATTCCTTTCTGTTCCCCAGTGCC
CCGGGGCGGCATTTTACTGCTCAGAATTTGGAGGGAGGGAGCAGTACCTTCCCGGAGTCCACGCATGTGAGTTGG
GTCAAGTGCATTGGACCTAGGGAAAGAGAAAGAAAGAATAAAAGCTGGAGAGAGAGTGAAGTGAATGCAAGATAA
AAAGTGGGATGGAAGAATTAAATCCAGAGTTCCAGGCAATCAAAATGAGTGCAGGTTGAAAGAAAACAGGTGAAT
TTTAGTGGCATATGGATGATAAAGCTGTAAATAAAATTCTTTTGATGAAACTCTCCGGTTACGAGACAAAGACTG
TAACTGAACAGGAGCTGGTGTGACTGTTACCAGACAGAGGCAACTGATGAAAAAGCCCTGTGAAAGATAGGATGT
GAGGTGAGCATGAGCTTGAGCTGAGAGACAGACACAACAGTATCTGAAAAGAATACATACTCTTTCCATGCATAT
ATGGAACATGGATGGAAACTGACCACCTACTTTGTCCAGAAAAGAAGTCTTAAGATATTTCAAGGAATCAGTGTC
GTTATCTGACCGTATCCCAATGTCATTAAAAAAAATTTGAGCTA

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FIGURE 3104

AAAAATCGAGGCGGGGCTGAGAGGCTGCGGCGGCTGACTAGGTTTTCGGACCGCGGCGCGGCGGGGAAGAGAGAC
TGCGGCGGGAGGGCCAGGCCGTGGGAGAGACGCGGGAAAGTGCGGGTCGCAGAGGCACTTGACCACCCCGCCCTA
GGCCGACCCGGCGGACGCGGCGTCTGGTGTGCGGGCGCTGGGGCGGGTCCCAGGTCTCCCCGCTGCGCTGCTTGA
GGCTCAGCC**ATG**GCCCAGCAGAGAGCCCTGCCCCAGAGCAAGGAGACGCTGCTGCAGTCCTACAACAAGCGGCTG
AAGGACGACATTAAGTCCATCATGGACAACTTCACCGAGATCATCAAGACCGCCAAGATTGAGGACGAGACGCAG
GTGTCACGGGCCACTCAGGGTGAACAGGACAATTACGAGATGCATGTGCGAGCCGCCAACATCGTCCGAGCCGGC
GAGTCCCTGATGAAGCTGGTGTCCGACCTCAAGCAGTTCCTGATCCTCAATGACTTCCCCTCCGTGAACGAGGCC
ATTGACCAGCGCAACCAGCAGCTGCGCACACTGCAGGAGGAGTGCGACCGGAAGCTCATCACGCTGCGAGACGAG
ATCTCCATTGACCTCTACGAGCTGGAGGAGGAGTATTACTCGTCCAGCTCAAGCCTTTGCGAAGCTAATGACCTG
CCTCTGTGCGAAGCTTACGGGAGGCTGGACCTCGACACAGACTCTGCTGATGGCCTCTCGGCCCCTCTGCTGGCG
TCCCCGGAGCCCAGTGCTGGCCCCCTACAGGTGGCAGCCCCTGCCCACTCCCATGCTGGTGGCCCTGGCCCCACT
GAGCACGCC**TGA**GCCTCCGGGGCCACGCTTCGTTCTCAGGAACAAAACCTGAGGCAGCCCTTTGGATGCCCTCAC
AGCCTTGCTTCTCTCAGCCTAGGTTCCCATTTGGGGACTTCAGGACCCCAGAGCCACTAGGACTTCCTTGGGAAG
CCCGTTAGCCCAGGGTGGGTCCCACCAGGACAGTAGGGAAACAGTTGTTTCCCTAGCCATTTCCGAATAGCCCAT
CATTCCGAGTCATCATCTCTGTTTGCTGCCTTCCTGGCCAGCCAGGTGGAAGAAAGTTTCCAAGCTAGGTCTGGC
CCGTTGGGGATCTCAGCAGTGGGGCAGGAGGGTGCCTGATTTCGGGGAGTCCTGACCCGAGCCTGTTGTCAGAGT
TGGGAGGGGCTCTGAGCAGTGTTGGGCAGGCCGGGTCTCCCATCCCGAGGCCAGCGTTCCTGTGCAGAGCCCCAT
CCACTGGTTCTTGCCCTGAGCCACATATGTCTGTGCCATGGGCTGAGTGCCACGACAGGCCCGTGTGACAGCTGC
TGCCCACGCATGTGGAAGCTAGGTGGGACTCATTCCTAATTCTGCCGTTGTAATGAGACTTGATTAAAACACCGC
CACTTTTTTGC

FIGURE 3105

TTTCCTTTCTCTCTCCTCCCGCCGCCCAAGATGCCGAAAGGAAAGAAGGCCAAGGGAAAGAAGGTGGCTCCGGCC
CCAGCTGTCGTGAAGAAGCAGGAGGCTAAGAAAGTGGTGAATCCCCTGTTTGAGAAAAGGCCTAAGAATTTTGGC
ATTGGACAGGACATCCAGCCCAAAAGAGACCTCACCCGCTTTGTGAAATGGCCCCGCTATATCAGGTTGCAGCGG
CAGAGAGCCATCCTCTATAAGCGGCTGAAAGTGCCTCCTGCGATTAACCAGTTCACCCAGGCCCTGGACCGCCAA
ACAGCTACTCAGCTGCTTAAGCTGGCCCACAAGTACAGACCAGAGACAAAGCAAGAGAAGAAGCAGAGACTGTTG
GCCCGGGCCGAGAAGAAGGCTGCTGGCAAAGGGGACGTCCCAACGAAGAGACCACCTGTCCTTCGAGCAGGAGTT
AACACCGTCACCACCTTGGTGGAGAACAAGAAAGCTCAGCTGGTGGTGATTGCACACGACGTGGATCCCATCGAG
CTGGTTGTCTTCTTGCCTGCCCTGTGTCGTAAAATGGGGGTCCCTTACTGCATTATCAAGGGAAAGGCAAGACTG
GGACGTCTAGTCCACAGGAAGACCTGCACCACTGTCGCCTTCACACAGGTGAACTCGGAAGACAAAGGCGCTTTG
GCTAAGCTGGTGGAAGCTATCAGGACCAATTACAATGACAGATACGATGAGATCCGCCGTCACTGGGGTGGCAAT
GTCCTGGGTCCTAAGTCTGTGGCTCGTATCGCCAAGCTCGAAAAGGCAAAGGCTAAAGAACTTGCCACTAAACTG
GGTTAAATGTACACTGTTGAGTTTTCTGTACATAAAAATAATTGAAATAATACAAATTTTCCTTC

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FIGURE 3106

GCGTCCCGGAAGCGCCCGCGGGGCCGGGTGCG**ATG**GCGGCGGTGGCTGCGTTGCAGCTGGGGCTGCGGGCGGCGG
GGCTGGGACGGGCCCCGGCCAGCGCCGCCTGGAGGAGCGTCCTCAGGGTCTCCCCGCGCCCAGGGGTGGCCTGGA
GGCCAAGCAGATGTGGCAGTTCTGCAGCAGAAGCATCTGCCACAAAAGCGGAAGATGACTCCTTTCTTCAGTGGG
TCCTGCTCCTCATCCCTGTGACTGCCTTTGGCTTGGGGACATGGCAGGTCCAGCGTCGGAAGTGGAAGCTGAACC
TGATTGCAGAGTTGGAGTCCAGAGTTCTGGCTGAGCCTGTCCCTCTGCCAGCCGACCCAATGGAACTGAAAAATC
TGGAGTATAGGCCAGTGAAGGTCAGGGGGTGCTTTGACCATTCCAAGGAGCTGTATATGATGCCCCGGACCATGG
TGGACCCTGTCCGGGAGGCCCGGGAGGGCGGCCTCATCTCCTCCTCAACTCAGAGTGGGGCCTATGTGGTCACTC
CCTTCCACTGCACCGACCTGGGAGTCACCATCCTGGTAAATAGAGGGTTCGTTCCCAGGAAGAAAGTGAATCCTG
AAACCCGGCAGAAAGGCCAGATTGAGGGAGAAGTGGACCTCATTGGGATGGTGAGGCTGACAGAAACCAGGCAGC
CTTTTGTCCCTGAGAACAATCCAGAAAGGAACCACTGGCATTATCGAGACCTGGAAGCTATGGCCAGAATCACAG
GCGCAGAGCCCATCTTCATTGATGCCAACTTCCAGAGCACAGTCCCTGGAGGACCCATTGGAGGGCAAACCAGAG
TTACTCTGAGGAACGAGCATCTGCAGTACATCGTGACCTGGTATGGACTCTCTGCAGCTACATCCTACCTGTGGT
TTAAGAAATTCCTACGTGGGACACCTGGTGTG**TGA**CAGATCAGCTGCTGAAGCCCTGTCCCTGGATAATGCAGTA
TTTCAAGACTGCCTTTATGCTGGATCATGTGCTACTGGTATAAAGTTCTGGCCTTCTACCTT

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FIGURE 3107

GCGAGCGGCTTCCGCCGGGCTGCTCCGCGGGCGCGTCGGCCATGAGCGAGTTGCCGGGCGACGTGCGGGCGTTTC
TGCGGGAGCACCCGAGCCTGCGGCTCCAGACGGACGCCCGCAAGGTGAGGTGCATCCTGACAGGTCACGAGCTGC
CCTGCCGCCTGCCGGAGCTCCAGGTCTACACCCGCGGCAAAAAGTACCAGCGGCTGGTCCGCGCCTCCCCGGCCT
TCGACTATGCAGAGTTCGAGCCGCACATCGTGCCCAGCACCAAGAACCCGCACCAGTTGTTCTGCAAACTCACCC
TGCGGCACATCAACAAGTGCCCAGAACACGTGCTGAGGCACACCCAGGGCCGGCGGTACCAGCGAGCTCTGTGTA
AATATGAAGAATGTCAGAAGCAAGGGGTGGAGTACGTGCCTGCCTGCCTGGTGCACCGGAGGAGGAGGAGGGAGG
ACCAGATGGACGGTGACGGGCCTCGCCCGCGGGAAGCCTTCTGGGAGCCCACATCCAGTGATGAGGGGGGAGCTG
CAAGTGATGACAGCATGACAGACCTGTACCCACCTGAGCTATTCACCAGAAAGGACCTTGGAAGCACGGAGGATG
GGGATGGCACTGATGACTTTTTGACAGACAAAGAGGATGAGAAGGCAAAGCCCCCAAGAGAGAAGGCCACTGATG
AGAGCAGGAGAGAGACGACCGTGTACCGAGGGCTGGTCCAGAAGCGCGGGAAGAAGCAGTTGGGCTCGTTGAAAA
AGAAGTTCAAGAGTCATCACCGCAAACCCAAGAGCTTCAGCTCCTGTAAACAGCCAGGTTAATAAAAGCACATGC
CGTG

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FIGURE 3108

GGAGCCGCAGCCGACGCGGAGCGAGGCCGGCCGCCGGGCACTTCCTGTGGAGGCCGCAGCGGGTGCGGGCGCCGA
CGGGCGAGAGCCAGCGAGCGAGCGAGCGAGCCGAGCCGAGCCTCCCGCCGTCGCCATGGGCCAGAACGACCTGAT
GGGCACGGCCGAGGACTTCGCCGACCAGTTCCTCCGTGTCACAAAGCAGTACCTGCCCCACGTGGCGCGCCTCTG
TCTGATCAGCACCTTCCTGGAGGACGGCATCCGTATGTGGTTCCAGTGGAGCGAGCAGCGCGACTACATCGACAC
CACCTGGAACTGCGGCTACCTGCTGGCCTCGTCCTTCGTCTTCCTCAACTTGCTGGGACAGCTGACTGGCTGCGT
CCTGGTGTTGAGCAGGAACTTCGTGCAGTACGCCTGCTTCGGGCTCTTTGGAATCATAGCTCTGCAGACGATTGC
CTACAGCATTTTATGGGACTTGAAGTTTTTGATGAGGAACCTGGCCCTGGGAGGAGGCCTGTTGCTGCTCCTAGC
AGAATCCCGTTCTGAAGGGAAGAGCATGTTTGCGGGCGTCCCCACCATGCGTGAGAGCTCCCCCAAACAGTACAT
GCAGCTCGGAGGCAGGGTCTTGCTGGTTCTGATGTTCATGACCCTCCTTCACTTTGACGCCAGCTTCTTTTCTAT
TGTCCAGAACATCGTGGGCACAGCTCTGATGATTTTAGTGGCCATTGGTTTTAAAACCAAGCTGGCTGCTTTGAC
TCTTGTTGTGTGGCTCTTTGCCATCAACGTATATTTCAACGCCTTCTGGACCATTCCAGTCTACAAGCCCATGCA
TGACTTCCTGAAATACGACTTCTTCCAGACCATGTCGGTGATTGGGGGCTTGCTCCTGGTGGTGGCCCTGGGCCC
TGGGGGTGTCTCCATGGATGAGAAGAAGAAGGAGTGGTAACAGTCACAGATCCCTACCTGCCTGGCTAAGACCCG
TGGCCGTCAAGGACTGGTTCGGGGTGGATTCAACAAAACTGCCAGCTTTTATGTATCCTCTTCCCTTCCCCTCCC
TTGGTAAAGGCACAGATGTTTTGAGAACTTTATTTGCAGAGACACCTGAGAATCGATGGCTCAGTCTGCTCTGGA
GCCACAGTCTGGCGTCTGACCCTTCAGTGCAGGCCAGCCTGGCAGCTGGAAGCCTCCCCCACGCCGAGGCTTTGG
AGTGAACAGCCCGCTTGGCTGTGGCATCTCAGTCCTATTTTTGAGTTTTTTTGTGGGGGTACAGGAGGGGGCCTT
CAAGCTGTACTGTGAGCAGACGCATTGGTATTATCATTCAAAGCAGTCTCCCTCTTATTTGTAAGTTTACATTTT
TAGCGGAAACTACTAAATTATTTTGGGTGGTTCAGCCAAACCTCAAAACAGTTAATCTCCCTGGTTTAAAATCAC
ACCAGTGGCTTTGATGTTGTTTCTGCCCCGCATTGTATTTTATAGGAATAGTGAAAACATTTAGGGACACCCAAA
GAATGATGCAGTATTAAAGGGGTGGTAGAAGCTGCTGTTTATGATAAAAGTCATCGGTCAGAAAATCAGCTTGGA
TTGGTGCCAAGTGTTTTATTGGGTAACACCCTGGGAGTTTTAGTAGCTTGAGGCAAGGTGGAGGGGCAAGAAGTC
CTTGGGGAAGCTGCTGGTCTGGGTGCTGCTGGCCTCCAAGCTGGCAGTGGGAAGGGCTAGTGAGACCACACAGGG
GTAGCCCCAGCAGCAGCACCCTGCAAGCCAGCCTGGCCAGCTGCTCAGACCAGCTTGCAGAGCCGCAGCCGCTGT
GGGCAGGGGGTGTGGCAGGAGCTCCCAGCACTGGAGACCCACGGACTCAACCCAGTTACCTCACATGGGGCCTTT
TCTGAGCAAGGTCTCGAAAGCGCAGGCCGCCCTGGCTGAGCAGCACCGCCCTTTCCCAGCTGCACTCGCCCTGTG
GACAGCCCCGACACACCACTTTCCTGAGGCTGTCGCTCACTCAGATTGTCCGTTTGCTATGCCGAATGCAGCCAA
AATTCCTTTTTACAATTTGTGATGCCTTACCGATTTGATCTTAATCCTGTATTTAAAGTTTTCTAACACTGCCTT
ATACTGTGTTTCTCTTTTTGGGGGAGCTTAACTGCTTGTTGCTCCCTGTCGTCTGCACCATAGTAAATGCCACAA
GGGTAGTCGAACACCTCTCTGGCCCCTAGACCTATCTGGGGACAGGCTGGCTCAGCCTGTCTCCAGGGCTGCTGC
GGCCCAGCCCCGAGCCTGCCTCCCTCTTGGCCTCTCATCCATTGGCTCTGCAGGGCAGGGGTGAGGCAGGTTTCT
GCTCATAAGTGCTTTTGGAAGTCACCTACCTTTTTAACACAGCCGAACTAGTCCCAACGCGTTTGCAAATATTCC
CCTGGTAGCCTACTTCCTTACCCCCGAATATTGGTAAGATCGAGCAATGGCTTCAGGACATGGGTTCTCTTCTCC
TGTGATCATTCAAGTGCTCACTGCATGAAGACTGGCTTGTCTCAGTGTTTCAACCTCACCAGGGCTGTCTCTTGG
TCCACACCTCGCTCCCTGTTAGTGCCGTATGACAGCCCCCATCAAATGACCTTGGCCAAGTCACGGTTTCTCTGT
GGTCAAGGTTGGTTGGCTGATTGGTGGAAAGTAGGGTGGACCAAAGGAGGCCACGTGAGCAGTCAGCACCAGTTC
TGCACCAGCAGCGCCTCCGTCCTAGTGGGTGTTCCTGTTTCTCCTGGCCCTGGGTGGGCTAGGGCCTGATTCGGG
AAGATGCCTTTGCAGGGAGGGGAGGATAAGTGGGATCTACCAATTGATTCTGGCAAAACAATTTCTAAGATTTTT
TTGCTTTATGTGGGAAACAGATCTAAATCTCATTTTATGCTGTATTTTATATCTTAGTTGTGTTTGAAAACGTTT
TGATTTTTGGAAACACATCAAAATAAATAATGGCGTTTGTTGT

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FIGURE 3109

GCGCTTCCGGGGACTGGAGCGTGCGTGCTGAGGTATGCGCAACGCGTGCGGGGTCTCTTCCGGAGTCTTTTCCTG
GACGGGGTCCCTGCGGTGGGTGTGTTTCGGCCTGGCCTGGGCAGGCGCTTGTGCTGCCAGGGCGCCGGGCCCGGG
GAGGCCGGGGTCTCGGGTGGCCGCCGGCCCAGGCGCTGGACGGCAGCAGGATGGGGAAGGCGAAGGTCCCCGCCT
CCAAGCGCGCCCCGAGCAGCCCCGTGGCTAAGCCGGGTCCTGTCAAGACGCTCACTCGGAAGAAAAACAAGAAGA
AAAAAAGGTTTTGGAAAAGCAAGGCGCGGGAAGTAAGCAAGAAGCCAGCAAGCGGCCCCGGTGCTGTGGTGCGAC
CTCCAAAGGCACCAGAAGACTTTTCTCAAAACTGGAAGGCGCTGCAAGAGTGGCTGCTGAAACAAAAATCTCAGG
CCCCAGAAAAGCCTCTTGTCATCTCTCAGATGGGTTCCAAAAAGAAGCCCAAAATTATCCAGCAAAACAAAAAAG
AGACCTCGCCTCAAGTGAAGGGAGAGGAGATGCCGGCAGGAAAAGACCAGGAGGCCAGCAGGGGCTCTGTTCCTT
CAGGTTCCAAGATGGACAGGAGGGCGCCAGTACCTCGCACCAAGGCCAGTGGAACAGAGCACAATAAGAAAGGAA
CCAAGGAAAGGACAAATGGTGATATTGTTCCAGAACGAGGGGACATCGAGCATAAGAAGCGGAAAGCTAAGGAGG
CAGCCCCAGCCCCACCCACCGAGGAAGACATCTGGTTTGACGACGTGGACCCAGCGGATATCGAAGCTGCCATAG
GTCCAGAGGCGGCCAAGATAGCGAGGAAACAGTTGGGTCAGAGCGAGGGCAGCGTCAGCCTCAGCCTCGTGAAAG
AGCAGGCCTTCGGCGGCCTGACAAGAGCCTTAGCCTTGGACTGTGAGATGGTGGGCGTGGGCCCTAAGGGGGAGG
AGAGCATGGCCGCCCGTGTGTCCATCGTGAACCAGTATGGGAAGTGCGTTTATGACAAGTACGTCAAACCAACTG
AGCCCGTGACGGACTATAGGACAGCGGTCAGTGGGATTCGGCCTGAGAACCTCAAGCAGGGAGAAGAGCTTGAAG
TTGTTCAGAAGGAAGTGGCAGAGATGCTGAAGGGCAGAATTCTAGTGGGGCACGCTCTGCATAATGACCTAAAGG
TACTATTTCTTGATCATCCAAAAAAGAAGATTCGGGACACACAGAAATATAAACCTTTCAAGAGTCAAGTAAAGA
GTGGAAGGCCGTCTCTGAGACTACTTTCAGAGAAGATCCTTGGGCTCCAGGTCCAGCAGGCGGAGCACTGTTCAA
TTCAGGATGCCCAGGCAGCAATGAGGCTGTACGTCATGGTGAAGAAGGAGTGGGAGAGCATGGCCCGAGACAGGC
GCCCCCTGCTGACTGCTCCAGACCACTGCAGTGACGACGCCTAGCAGTCCTGCCCTGCTGCTGCTGCCGCCCCGC
TACAGAGGCAATGTGACCAGTCACAGGGACAGATCACATCTCCCCAGAGTGGCAACTCTGGTGAAACCTTTTCAG
AATCATGGCAGAGGGGCGTGGCGTGGTGCTACTGAGAAGGTCCTCCTTCCTCTTGACTTTGTGGTCTGAAACCTG
GTCTTACTGTCCATGTGTGTTTGGGCCCGGATGGTCAGGGTGGGGAGCAGGGACGGCCATGGGCACGCCTGGCCA
CGCTTTACCGACTGCTGACCCCCTGGGCCAGGTGAGGTTGGGGCCTGTGGGCCGCCAGTCCATACGGTGCTGTCA
CTGCCCATCTTCGGTGACACCCTGGGGTGAGGTGCTCAGCACCTTCCTCTCGAGGAGCCACATTTTCCTCCTTTG
TGTTAGGGGACATAACAAGCTCTGCTGGGCTTGAGGGACCCAGACCAGGTGTCTGCAGTCAGCTCCTGAGACACA
GCTGGCCGGCACAACAGGTGTTACATCAGGGGTTTCCTGTGGCCGTTTGAACTTTGAGCATTTATCTAAATTAAA
TTGGCCCAGGGTTGGCTGGTGGGTCACCCAGCAGAGGCTTCTCCCCATAGCACGAGGATGTGTTGCCTGGGCACG
GTGACTGCGGTTATTCCTGGAGGTCGGCAGACATGCCAACCTTGGGCTATTTGAGCTGGAGAAGCTATGTGATGC
TAGCCGGTGGCTTTCTGGGCTAGGCCCCAGTTTGAGGCTCCCCTGGGAACTAGAGCCAGGAACAGCCAGTGGCAC
TGACAAGGGGACGGAGTCCAAGGCGTTATTGGGCCACCTGACAGCTGGACAGAAAAGGGGCAGACACACCGAGGA
TGCGATTTAAAATAAATGCAGATGTTTACTTGG

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FIGURE 3110

ACGCGGCCGGCTACCGAGCCCTTTGTGAGGGCTGTGAGCTGCGCCTGACGGTGGCACCATGAGCAGCTCAGGTGG
GGCGCCCGGGGCGTCCGCCAGCTCTGCGCCGCCCGCGCAGGAAGAGGGCATGACGTGGTGGTACCGCTGGCTGTG
TCGCCTGTCTGGGGTGCTGGGGGCAGTCTCTTGCGCGATCTCTGGCCTCTTCAACTGCATCACCATCCACCCTCT
GAACATCGCGGCCGGCGTGTGGATGATCATGAATGCCTTCATCTTGTTGCTGTGTGAGGCGCCCTTCTGCTGCCA
GTTCATCGAGTTTGCAAACACAGTGGCGGAGAAGGTGGACCGGCTGCGCTCCTGGCAGAAGGCTGTCTTCTACTG
CGGGATGGCGGTCGTTCCCATCGTCATCAGCCTGACCCTGACCACGCTGCTGGGCAACGCCATCGCCTTTGCTAC
GGGGGTGCTGTACGGACTCTCTGCTCTGGGCAAAAAGGGCGATGCGATCTCCTATGCCAGGATCCAGCAGCAGAG
GCAGCAGGCGGATGAGGAGAAGCTCGCGGAGACCCTGGAGGGGGAGCTGTGAAGGGCTGGGCGCCCCTCCCTCCC
TGTCCCCTCTTCTGGCTCTGTGTGGGTCCAAGTGAGGCCTGGACTGTCCACGCTGAGGCACAGCCTGGAGAGGGG
CCTTTGCACGTGTCCCTACACCTGGAGTCCTCTGCTCCTTTCTCCAGACTGGCTTAAGCCAGGAGCCACTGGCTG
CTGGTGTGAGGGTCTGGGCTGCTGGACTTGAGGCAGAGCCTGCAGCAGCTGTGTGGACACTACCCAGCCCTACTC
CTCTGCTGGGTGGGTCTGCAGATCTCACACCACAGACAGGGCTGCCTGTGACCTGCTGTGACCTGGGAGCAGCTT
CCCCTGGAGATGCTGGTCCTGGCTTGAGGGGAGGGGCAAGTGGGACCCTGCCACCTGGGCACTGAGCAGAGGGAC
CTCCCCCAGCTCTCTTAGCAGGTGGAGCCCCAGGGCCTGGGACAGCCTGCCGCTGCCAGCAACCTCCCACTGCTG
CCTAGGGTGCAGCGCCCACTGTCACCCTGCCTTCTGAAGAAGCCCACAGGGCTCCTAAGGTGCACCCCGGTACCT
GGAACTGCAGCCTTGGCAGTGACTGGACAGCTGGGTGGGGGATGCTCCCTGCTGGCCCTGGGAACCTTGGACAGG
CCACCTCAAGGCCCCTCGGCTGCCCCTCCTCCCTGGGCCTGCTGGGGCCCCTAGGTTCTGCCCATCACCCCCCGC
CCCTGCTGGCCTTGGTGCTAAGGAAGTGGGGAGAGCAGGCTCTCCCTGGCACCGAGGGTGCCCACCCTCTCCCTG
GTGTGGCCCCGTCAACATCAGCCACAGCCCAGCCCCATTAGTGGGTTAGCGGGTCTGACCTCAGCCCCACTCAGG
TGCTCCTGCTGGCCTGCCCAAGCCCTGCCCTCAGGGAGCTTCTGCCTTTTAAGAACTGGGCAGAGGCCACAGTCA
CCTCCCCACACAGAGCTGTCCCCACTGCCCTGGGTGCCAGGCTGTCCGGAGCCAGGCCTACCCAGGGAGGATGCA
GAGAGCTGGTGCCCAGGATGTGCACCCCCATATTCCCTCTGCCCTGTGGCCTCAGCCCGCTGGCCTCTCTGACCG
TGAGGCTGGCTCTCAGCCATCGGGCAGGTGCCTGGTCGGGCCTGGCTTAGCCCAGGTGGGGCTTGGCAGAAGCGG
GCGGGTGTGGAAGATATTCCATCTGGGGCCAACCCCAGGCTGGGCCTGCGCTGAGCTTCTGGAGCGCAGGTACTG
GGTCTTGCTAAGTGAACTGTTTCCCAGGAACACCTCTCGGGCCCATCTGCGTCTGAGGCTGGGAGTGGCATCTGA
GGCCGGGAGTGGCATCTGAGGCCAGGAGTGGCAGGCTGGTGGGCTGGGCGTGGGGTTTTCTGGGCCCTGCCCAGT
ACTGCCCTGGGGACTTGGTGGGCTCCTGGGTCAGCAGCATCCCACCCCTGGGAGTCTGGCCAGCTGAGCCCCAGG
GTGGCAGGGGCATTATAGCCTGGTGGACATGTGCCTTCAGGGTTCCTCCGGGGCCACCTTCCTCAGGCCAGTGCT
GGGTTCAAAGGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTATGTATATGTGTGTGGGTGCACACATCTGTCCCAT
GTATGCAGTGAGACCTGTCTACCTCCCACAAGGAGCAAGGGCTCTGCCCGCCCTCTGCTCATTCCTACCCAGGTA
GTGGGACCCCGGGCCCCCTTCTGCCTGGCTTGCCTGCTTCTGCCCTTTCCAGAGGGGTCTCACTGACAGCCAGAG
ACAGCAGGAGAAGGGTTGGCTGTGGATCAAGGAAGGCTGCCCCTGTACCCTGTGGGGAAATGGTGGGTGCATGGC
TGGATGCAGAGGTGGAAGGCCCTGGGCCACAGGCGAGAGTGGGCGTGTCACCTGTCCCAGGTTCCCAGCAAGTCT
GCAGCTGTGCAGTCCTGGGGTCCCTGACCCTGTCGCCCAGGGGGCGTGCTGTCCAGCAGGGGCCCTGCCTTGCAA
GGAACGTCTCTTCCGGCGGCTGGGCCGCTCCTGCCTGGTCTGGGCTGTGTGTGGCGCCCTTTCCTTCTTGTTTGT
TCCTCTGTGTTCTGTGTGCGTCTTAAGCAATAAAGCGTGGCCGTGGCTCGCG

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FIGURE 3111

CTGAGCGCCCTCCGCTCGCCCCGAGAGAGACCCGGCCATGCAGGAGCCGCTGCTGGGAGCCGAGGGCCCGGACTA
CGACACCTTCCCCGAGAAGCCGCCCCCGTCGCCAGGGGACAGGGCGCGGGTCGGGACCCTGCAGAACAAAAGGGT
GTTCCTGGCCACCTTCGCCGCAGTGCTCGGCAATTTCAGCTTTGGGTATGCCCTGGTCTACACATCCCCTGTCAT
CCCAGCCCTGGAGCGCTCCTTGGATCCTGACCTGCATCTGACCAAATCCCAGGCATCCTGGTTTGGGTCCGTGTT
CACCCTGGGAGCAGCGGCCGGAGGCCTGAGTGCCATGATCCTCAACGACCTCCTGGGCCGGAAGCTGAGCATCAT
GTTCTCAGCTGTGCCGTCGGCGGCCGGCTATGCGCTCATGGCGGGTGCGCACGGCCTCTGGATGCTGCTGCTCGG
AAGGACGCTGACGGGCTTCGCCGGGGGGCTCACAGCTGCCTGCATCCCGGTGTACGTGTCTGAGATTGCTCCCCC
AGGCGTTCGTGGGGCTCTGGGGGCCACACCCCAGCTCATGGCAGTGTTCGGATCCCTGTCCCTCTACGCCCTTGG
CCTCCTGCTGCCGTGGCGCTGGCTGGCTGTGGCCGGGGAGGCGCCTGTGCTCATCATGATCCTGCTGCTCAGCTT
CATGCCCAACTCGCCGCGCTTCCTGCTCTCTCGGGGCAGGGACGAAGAGGCCCTGCGGGCGCTGGCCTGGCTGCG
TGGGACGGACGTCGATGTCCACTGGGAGTTCGAGCAGATCCAGGACAACGTCCGGAGACAGAGCAGCCGAGTATC
GTGGGCTGAGGCACGGGCCCCACACGTGTGCCGGCCCATCACCGTGGCCTTGCTGATGCGCCTCCTGCAGCAGCT
GACGGGCATCACGCCCATCCTGGTCTACCTGCAGTCCATCTTCGACAGCACCGCTGTCCTGCTGCCCCCCAAGGA
CGACGCAGCCATCGTTGGGGCCGTGCGGCTCCTGTCCGTGCTGATCGCCGCCCTCACCATGGACCTCGCAGGCCG
CAAGGTGCTGCTCTTCGTCTCAGCGGCCATCATGTTTGCTGCCAACCTGACTCTGGGGCTGTACATCCACTTTGG
CCCCAGGCCTCTGAGCCCCAACAGCACTGCGGGCCTGGAAAGCGAGTCCTGGGGGGACTTGGCGCAGCCCCTGGC
AGCACCCGCTGGCTACCTCACCCTGGTGCCCCTGCTGGCCACCATGCTCTTCATCATGGGCTACGCCGTGGGCTG
GGGTCCCATCACCTGGCTGCTCATGTCTGAGGTCCTGCCCCTGCGTGCCCGTGGCGTGGCCTCAGGGCTCTGCGT
GCTGGCCAGCTGGCTCACCGCCTTCGTCCTCACCAAGTCCTTCCTGCCAGTGGTGAGCACCTTCGGCCTCCAGGT
GCCTTTCTTCTTCTTCGCGGCCATCTGCTTGGTGAGCCTGGTGTTCACAGGCTGCTGTGTGCCCGAGACCAAGGG
ACGGTCCCTGGAGCAGATCGAGTCCTTCTTCCGCATGGGGAGAAGGTCCTTCTTGCGCTAGGTCAAGGTCCCCGC
CTGGAGGGGGCCAAACCCCCAGTGGCTGGGCCTCTGTGTTGGCTACAAACCTGCACCCTGGGACCAAGAGGCAGC
AGTCATCCCTGCCACCAGCCAGAGCACAGGAAGAGCAGTGTGATGGGGCCTCAGCAGCGGGTGCCCCTGGCTCGG
GACAGGTAGCACTGCTGTCCAGCCACAGCCCCAGCCCAGGCAGCCCACAGTGCTGCACGTAGCCATGGGCCGCAG
GAGTGCATACAACCCTGCATCCAGGGACACGGCCCTGCTGGGTGACCTCAGGCCTAGTCCCTTTCCCTTGCGTGA
AGGACACGCCCCACAGAAGGCTACGGGGAGGACTGAGAGGACAGGGCTGGAGGCAGCCAAGTAACGTAGTCATAT
CATCGCGCTCTGATCTGGTGGCATCTGGCTGTGCAAGGAAGACCCGGCTTTGCCCTCACAAGTCTTATGGGCACC
ACAGGGAACATCCTGGACTTAAAAAGCCAGGGCAGGCCGGGCACAGTGGCTCACGCCTGTAATCCCAGCACTTTG
GGAGGCCAAAGCAGGTGGATTACCCAAGGCCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTC
TACTAAAAAAATACAAAAAAGCTGGGTGTGGTGGCACACACCCGTAGTTCCAGCTACTTGGGAGGCTGAGGCAGCA
TTGCTTGAACCCGGGAGGTGGAGGCTGCAATGAGCTGAGATCATGCCATTGCACTCCAGCCTGGGCAACGAGAGT
GAAACTCCGTCCCCACCCCCTGCCAAAAAAAAAAAAAAAAAAAGCCAGGGCAAAGGACCTGGCGTGGCCACTTCCT
CCTGCCCCAGCCCAACCTCTGGGAACAGGCAGCTCCTATCTGCAAACTGTGTTCACCCTTTTGTAAAAATAAAGG
AACTGGACCCGT

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FIGURE 3112

GAGAAGTGTGGGCTACCCGGCCACTGCCCTGGAGCTGTGGTGACTGCTGCGTTTTTCTCCCATGCACTTGCACGT
CCAGGACTCCTGGGAGAACTTGGGCCACACTCCTTCCTTGCCCTCTTGAGCTCATTCGTCACCCTGTTGGGTGAG
CACAGCCCTAGCTCAGGCCACTGGGCAAGCCACACCATCCAAAGAGGAGGTCCTCTGCCCCAGGACCCCCACACC
ACCCCAGCTCCCTGTTTCGCTGAGGCCTGGAGCCCCC**ATG**GCCTCACTGAGCCGAGCCCTACGTGTGGCTGCTGC
CCACCCTCGCCAGAGCCCTACCCGGGGCATGGGGCCATGCAACCTGTCCAGCGCAGCTGGCCCCACAGCCGAGAA
GAGTGTGCCATATCAGCGGACCCTGAAGGAGGGACAGGGCACCTCGGTGGTGGCCCAAGGCCCAAGCCGGCCCCT
GCCCAGCACGGCCAACGTGGTGGTCATTGGTGGAGGCAGCTTGGGCTGCCAGACCCTGTACCACCTGGCCAAGCT
GGGCATGAGTGGGGCGGTGCTGCTGGAGCGGGAGCGGCTGACCTCCGGGACCACCTGGCACACGGCAGGCCTGCT
GTGGCAGCTGCGGCCCAGTGACGTGGAGGTGGAGCTTCTGGCCCACACTCGGCGGGTGGTGAGCCGGGAGCTGGA
GGAGGAGACGGGACTACACACGGGCTGGATCCAGAATGGGGGCCTCTTCATCGCGTCCAACCGGCAGCGCCTGGA
CGAGTACAAGAGGCTCATGTCGCTGGGCAAGGCGTATGGTGTGGAATCCCATGTGCTGAGCCCGGCAGAGACCAA
GACTCTGTACCCGCTGATGAATGTGGACGACCTCTACGGGACCCTGTATGTGCCGCACGACGGTACCATGGACCC
CGCTGGCACCTGTACCACCCTCGCCAGGGCAGCTTCTGCCCGAGGAGCACAGGTCATTGAGAACTGCCCAGTGAC
CGGCATTCGTGTGTGGACGGATGATTTTGGGGTGCGGCGGGTCGCGGGTGTGGAGACTCAGCATGGTTCCATCCA
GACACCCTGCGTGGTCAACTGTGCAGGAGTGTGGGCAAGTGCTGTGGGCCGGATGGCTGGAGTCAAGGTCCCGCT
GGTGGCCATGCACCATGCCTATGTCGTCACCGAGCGCATCGAGGGGATTCAGAACATGCCCAATGTCCGTGATCA
TGATGCCTCTGTCTACCTCCGCCTCCAAGGGGATGCCTTGTCTGTGGGTGGCTATGAGGCCAACCCCATCTTTTG
GGAGGAGGTGTCAGACAAGTTTGCCTTCGGCCTCTTTGACCTGGACTGGGAGGTGTTCACCCAGCACATTGAAGG
CGCCATCAACAGGGTCCCCGTGCTGGAGAAGACAGGAATCAAGTCCACGGTCTGCGGCCCTGAATCCTTCACGCC
CGACCACAAGCCCCTGATGGGGGAGGCACCTGAGCTCCGAGGGTTCTTCCTGGGCTGTGGCTTCAACAGCGCAGG
AATGATGCTGGGTGGTGGCTGTGGGCAGGAGCTGGCCCACTGGATCATCCATGGGCGCCCGGAGAAGGACATGCA
TGGCTATGACATCAGGCGCTTCCATCACTCGCTCACGGACCACCCCCGCTGGATCCGAGAGCGAAGCCATGAGTC
CTACGCCAAGAACTACTCCGTCGTCTTCCCCCACGATGAGCCGCTGGCCGGGCGCAACATGAGGAGAGACCCGCT
GCACGAGGAACTCCTTGGACAAGGCTGCGTGTTCCAGGAGCGGCATGGCTGGGAGCGACCGGGATGGTTTCATCC
CCGAGGCCCAGCTCCGGTCCTCGAGTACGACTACTACGGGGCTTACGGGAGCCGCGCGCACGAGGACTACGCCTA
CCGCAGGCTGCTGGCAGACGAGTACACCTTCGCCTTCCCGCCCCACCACGACACGATCAAGAAGGAGTGCCTGGC
CTGCAGAGGGGCCGCCGCTGTGTTTGACATGTCCTACTTCGGGAAGTTCTACCTGGTGGGGCTGGATGCAAGGAA
GGCTGCCGACTGGCTCTTCTCCGCAGATGTCAGCCGACCCCCAGGCTCCACCGTGTACACGTGCATGCTCAACCA
CCGTGGGGGCACCGAGAGTGACCTGACTGTCAGCCGCCTGGCACCCAGCCACCAGGCCTCCCCGCTGGCCCCCGC
CTTTGAAGGGGACGGTTACTACCTGGCCATGGGCGGGGCCGTGGCCCAGCACAACTGGTCCCACATCACCACCGT
GCTGCAGGACCAGAAGTCCCAGTGCCAGCTCATCGACAGCTCCGAGGACCTGGGTATGATCAGTATCCAGGGCCC
AGCCAGCCGAGCCATTTTGCAGGAGGTGCTGGACGCAGACCTGAGCAACGAGGCCTTCCCGTTCTCCACCCACAA
GCTACTGAGAGCCGCAGGGCACCTGGTCCGAGCCATGCGGCTGTCCTTTGTCGGGGAGCTGGGCTGGGAGCTGCA
CATTCCAAAGGCGTCCTGCGTGCCTGTGTACCGGGCTGTGATGGCCGCGGGTGCCAAGCACGGCCTCATCAACGC
AGGGTACCGCGCCATTGACTCCCTGAGCATTGAGAAAGGCTACCGGCACTGGCACGCGGACCTGCGGCCAGACGA
CAGCCCCCTGGAGGCAGGCCTGGCCTTCACCTGCAAGCTCAAGTCGCCGGTGCCCTTCCTGGGGAGGGAGGCCCT
GGAGCAGCAGCGGCCGCAGGCCTCCGCCGGCGCCTGGTGTGCTTCACCATGGAGGACAAAGTACCCATGTTTGGC
CTGGAGGCCATCTGGAGGAACGGCCAAGTGGTGGGCCATGTCCGGAGGGCTGACTTTGGGTTCGCCATCGACAAG
ACCATCGCCTACGGTTACATCCATGACCCCAGCGGTGGGCCGGTCTCGCTGGACTTTG**TGA**AGAGCGGGGACTAT
GCCCTGGAGAGAATGGGGGTGACCTATGGTGCCCAGGCTCACCTGAAGTCGCCCTTCGACCCCAACAACAAGAGG
GTGAAGGGAATCTACTGAGGGCTCAGACCACATGCCCCATCCCATGCTGTCCATCCATTCTCACAGGTCCCAAAT
GGCCCTGGGTCCCAGGACCCTGGACCCAGCCAGAACTTGTGCCCTCCCTGTCCTTAGCCTAGGCCTAGTCCTGCG
AAAACCCCCAAACCAGATACGGACAGAGACCAAGATGGCCCATCCTGTGGTCACTGACTGGAAGGCAGTCTCTAA
TCCACCCCAATCCTCCCAGAAAGCAAACCTGTAAGTGTCTTGGGCTCAGGGACCATGGCTTGTAGCCCTTTCCAA
GCTTCTAGAAGGTGCTTAGTAAATACTTGATAAGCCCCACGTG

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FIGURE 3113

GGGCTCCCAGACATCACCTCTGCCCGCCGCCACCTCCTCCAACTCTCCCAGCTCAGCCGGAGCCGGAGCGCGCAA
CAACCAAGTCCGAGACTGGAGGCAGATCGGGGGGAGGGGAGAAGCGCCAAGCGCGCTGCCCTCCCAGGGAAACTC
ACTGCCGCCTACTCCCAGCCGGCCACAGTCACCAGCTCAAAATGGCGACGACGAGAAGGGAGTCGGCGCTCCGAC
CACCATCCACCTACTAAGGAAGCGCGCTCTGGCCGGCCCCGGCGATTGGTCACCGCCCGCTAGGGGACAGCCCTG
GCCTCCTCTGATTGGCAAGCGCTGGCCACCTCCCCACACCCCTTGCGAACGCTCCCCTAGTGGAGAAAAGGAGTA
GCTATTAGCCAATTCGGCAGGGCCCGCTTTTTAGAAGCTTGATTTCCTTTGAAGATGAAAGACTAGCGGAAGCTC
TGCCTCTTTCCCCAGTGGGCGAGGGAACTCGGGGCGATTGGCTGGGAACTGTATCCACCCAAATGTCACCGATTT
CTTCCTATGCAGGAAATGAGCAGACCCATCAATAAGAAATTTCTCAGCCTGGCCGAAAATGGTTGGCCCCACGAA
GCCACGACAACTGGAGGCAAAGAGGGTTGCTCAACGCCCCGCCTCATTGGAAAACCAAATCAGATCTGGGACCTA
TATAGCGTGGCGGAGGCGGGGCGATGATTGTCGCGCTCGCACCCACTGCAGCTGCGCACAGTCGCATTTCTTTCC
CCGCCCCTGAGACCCTGCAGCACCATCTGTC**ATG**GCGGCTGGGCTGTTTGGTTTGAGCGCTCGCCGTCTTTTGGC
GGCAGCGGCGACGCGAGGGCTCCCGGCCGCCCGCGTCCGCTGGGAATCTAGCTTCTCCAGGACTGTGGTCGCCCC
GTCCGCTGTGGCGGGAAAGCGGCCCCCAGAACCGACCACACCGTGGCAAGAGGACCCAGAACCCGAGGACGAAAA
CTTGTATGAGAAGAACCCAGACTCCCATGGTTATGACAAGGACCCCGTTTTGGACGTCTGGAACATGCGACTTGT
CTTCTTCTTTGGCGTCTCCATCATCCTGGTCCTTGGCAGCACCTTTGTGGCCTATCTGCCTGACTACAGGTGCAC
AGGGTGTCCAAGAGCGTGGGATGGGATGAAAGAGTGGTCCCGCCGCGAAGCTGAGAGGCTTGTGAAATACCGAGA
GGCCAATGGCCTTCCCATCATGGAATCCAACTGCTTCGACCCCAGCAAGATCCAGCTGCCAGAGGATGAG**TGA**CC
AGTTGCTAAGTGGGGCTCAAGAAGCACCGCCTTCCCCACCCCCTGCCTGCCATTCTGACCTCTTCTCAGAGCACC
TAATTAAAGGGGCTGAAAGTCTG

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FIGURE 3114A

CTTATTGATGGGTCTGCTCATTTCCTGCATAGGAAGAAATCGGTGACATTTGGGTGGATACAGTTCCCAGCCAAT
CGCCCCGAGTTCCCTCGCCCACTGGGGAAAGAGGCAGAGCTTCCGCTAGTCTTTCATCTTCAAAGGAAATCAAGC
TTCTAAAAAGCGGGCCCTGCCGAATTGGCTAATAGCTACTCCTTTTCTCCACTAGGGGAGCGTTCGCAAGGGGTG
TGGGGAGGTGGCCAGCGCTTGCCAATCAGAGGAGGCCAGGGCTGTCCCCTAGCGGGCGGTGACCAATCGCCGGGG
CCGGCCAGAGCGCGCTTCCTTAGTAGGTGGATGGTGGTCGGAGCGCCGACTCCCTTCTCGTCGTCGCCATTTTGA
GCTGGTGACTGTGGCCGGCTGGGAGTAGGCGGCAGTGAGTTTCCCTGGGAGGGCAGCGCGCTTGGCGCTTCTCCC
CTCCCCCCGATCTGCCTCCAGTCTCGGACTTGGTTGTTGCGCGCTCCGGCTCCGGCTGAGCTGGGAGAGTTGGAG
GAGGTGGCGGCGGGCAGAGGTGATGTCTGGGAGCCCTTCCTTGACAGCCCGGGCCGAGAAGAGTCCCTGCAGGAA
GCATCACCCAGGCTGGCAGATCATGGTAGCAGCAGCGGGGGTGGCTGGGAAGTGAAACGGAGCCAGCGGCTGAGG
AGGGGCCCCAGCAGCCCCCGAAGGCCCTATCAGGACATGGAGTATGAAAGACGTGGTGGTCGTGGTGACAGGACT
GGCCGCTATGGAGCCACTGACCGCTCGCAGGATGATGGTGGGGAGAACCGCAGCCGAGACCACGACTACCGGGAC
ATGGACTACCGTTCATATCCTCGCGAGTATGGCAGCCAGGAGGGCAAGCATGACTATGACGACTCATCTGAGGAG
CAGAGTGCGGAGGATTCCTACGAGGCCTCCCCGGGCTCCGAGACTCAGCGTAGGCGGCGGCGGCGGCACAGGCAC
AGCCCCACCGGCCCGCCAGGCTTCCCCCGAGACGGCGACTATCGGGACCAGGACTATCGGACCGAGCAAGGGGAG
GAGGAGGAGGAGGAGGAGGATGAGGAGGAGGAGGAGAAGGCCAGTAACATCGTCATGCTGAGGATGCTGCCACAG
GCAGCCACTGAGGATGACATCCGTGGCCAGCTGCAGTCGCACGGCGTGCAAGCACGGGAGGTTCGGCTGATGCGG
AACAAATCTTCAGGTCAGAGCCGGGGCTTCGCCTTCGTCGAGTTTAGTCACTTGCAGGACGCTACACGATGGATG
GAAGCCAATCAGCACTCCCTCAACATCCTGGGCCAGAAGGTGTCGATGCACTACAGTGACCCCAAGCCCAAGATC
AATGAGGACTGGCTGTGCAATAAGTGTGGCGTCCAGAACTTCAAACGCCGAGAGAAGTGCTTCAAATGTGGCGTG
CCCAAGTCAGAGGCAGAGCAGAAGCTGCCCCTCGGCACGAGGCTGGATCAGCAGACACTGCCACTGGGTGGCCGG
GAGCTGAGCCAGGGCCTGCTTCCCCTGCCGCAGCCCTACCAGGCCCAGGGAGTCCTGGCCTCCCAAGCCCTGTCA
CAGGGCTCGGAGCCAAGCTCAGAGAACGCCAATGACACCATCATTTTGCGCAACCTGAACCCACACAGCACCATG
GATTCCATCCTGGGGGCCCTGGCACCCTACGCGGTGCTGTCCTCCTCCAACGTGCGCGTCATAAAGGACAAGCAG
ACCCAACTGAACCGCGGCTTTGCCTTCATCCAGCTCTCCACCATCGTGGAGGCAGCCCAGCTGCTGCAGATCCTG
CAGGCCCTGCACCCACCACTCACTATCGACGGCAAGACCATCAATGTTGAGTTTGCCAAGGGTTCTAAGAGGGAC
ATGGCCTCCAATGAAGGCAGTCGCATCAGTGCTGCCTCTGTGGCCAGCACTGCCATTGCTGCGGCCCAGTGGGCC
ATCTCACAGGCCTCCCAAGGTGGGGAGGGTACCTGGGCCACCTCCGAGGAGCCGCCGGTCGACTACAGCTACTAC
CAACAGGATGAGGGCTATGGCAACAGCCAGGGCACAGAGTCTTCCCTCTATGCCCATGGCTACCTCAAGGGCACC
AAGGGCCCTGGCATCACTGGAACCAAAGGGGATCCCACTGGAGCAGGTCCCGAGGCCTCCCTAGAGCCTGGGGCC
GACTCTGTGTCGATGCAGGCTTTCTCTCGCGCCCAGCCTGGTGCTGCTCCTGGCATCTACCAACAATCAGCCGAG
GCGAGCAGTAGCCAGGGCACTGCTGCCAACAGCCAGTCGTATACCATCATGTCACCCGCTGTGCTCAAATCTGAG
CTCCAGAGCCCTACCCATCCTAGTTCTGCTCTCCCACCGGCTACCAGCCCCACTGCCCAGGAATCCTACAGCCAG
TACCCTGTTCCCGACGTCTCTACCTACCAGTACGATGAGACCTCCGGCTACTACTATGACCCCCAGACCGGCCTC
TACTATGACCCCAACTCCCAGTATTACTACAATGCTCAGAGCCAGCAGTACCTGTACTGGGATGGGGAGAGGCGG
ACCTATGTTCCCGCCCTGGAGCAGTCGGCCGACGGACATAAGGAGACAGGGGCACCCTCGAAGGAGGGCAAAGAG
AAGAAGGAGAAGCACAAGACCAAGACAGCTCAACAGATTGCCAAGGACATGGAACGCTGGGCCCGCAGTCTCAAC
AAACAAAAAGAAAACTTCAAAAATAGCTTCCAGCCTATCAGCTCCCTGCGAGATGACGAGAGGCGGGAGTCAGCC
ACTGCAGATGCTGGCTATGCCATCCTCGAGAAGAAGGGAGCACTAGCCGAGAGACAGCACACCAGCATGGATCTC
CCGAAATTGGCCAGTGACGACCGCCCAAGCCCTCCGCGAGGACTGGTGGCAGCCTACAGCGGGGAGAGTGACAGT
GAGGAGGAGCAGGAGCGTGGGGGCCCTGAGCGGGAGGAGAAGCTCACCGACTGGCAGAAGCTGGCCTGTCTGCTC
TGCCGACGCCAGTTCCCCAGCAAAGAGGCGCTCATCCGGCACCAGCAGCTCTCAGGGCTCCACAAGCAAAACCTT
GAGATTCACCGGCGAGCCCACTTGTCAGAAAACGAGCTAGAAGCACTAGAGAAGAATGACATGGAGCAAATGAAG
TACCGGGACCGTGCAGCTGAACGCAGAGAAAAGTATGGCATCCCCGAGCCGCCAGAGCCCAAGAGGAGGAAGTAC
GGCGGCATATCCACAGCCTCTGTAGACTTCGAGCAGCCTACTCGGGACGGGCTGGGCAGTGACAACATTGGCAGT
CGGATGCTGCAGGCCATGGGCTGGAAAGAGGGCAGCGGCCTGGGCCGCAAGAAGCAGGGCATTGTAACGCCTATC
GAGGCCCAAACACGGGTGCGGGGCTCCGGCCTGGGTGCACGGGGCAGCTCCTACGGGGTCACCTCAACCGAGTCC
TACAAGGAGACACTGCACAAGACAATGGTGACCCGCTTCAACGAGGCCCAGTGAGCAGCTTCAAGAGCAACTTCT
CCACATGTTGGGTGTCCATCCTGGGGCAGGGAAGGACAGAGTGTTGGATGGCTGGGACGGGGCCTTGCTCTTGTC

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FIGURE 3114B

GGCCAGCCCACTCCCCAGCCAGAGAGGGCTTGACCAAATCAAATTGAGGTGGTGACTTTTGTTGGAAAATTGGGC
TGGGATCACGTCCTGTTTTGTAATAAAAGCTGAAAAGTCTGC

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FIGURE 3115A

GTTCCGGCCCCAGGCTCAGCGTCCGCCATCTTGTGTCGGCGGCTCGGCTGTAAGGAGGTGGCAGGGACAACCACA
ACCACAACGGCCGGGGGAGGAGAAGGCGGCAGCGGCGATTCTAGGCGGCCCAGGCGGCGGGGAGGAGGAGAAGGA
GGAGGGTGGCGGCCGGGCTTGGCTTCGGCTCCTTGAGGAGTTGGCGGCGGCGCGACCCGGGGAACCGGCATTGATG
TCCAGCTCGCCGCTGTCCAAGAAACGTCGCGTGTCCGGGCCTGATCCAAAGCCGGGTTCTAACTGCTCCCCTGC
CCAGTCCGTGTTGTCCGAAGTGCCCTCGGTGCCAACCAACGGAATGGCCAAGAACGGCAGTGAAGCAGACATAGA
CGAGGGCCTTTACTCCCGGCAGCTGTATGTGTTGGGCCATGAGGCAATGAAGCGGCTCCAGACATCCAGTGTCCT
GGTATCAGGCCTGCGGGGCCTGGGCGTGGAGATCGCTAAGAACATCATCCTTGGTGGGGTCAAGGCTGTTACCCT
ACATGACCAGGGCACTGCCCAGTGGGCTGATCTTTCCTCCCAGTTCTACCTGCGGGAGGAGGACATCGGTAAAAA
CCGGGCCGAGGTATCACAGCCCCGCCTCGCTGAGCTCAACAGCTATGTGCCTGTCACTGCCTACACTGGACCCCT
CGTTGAGGACTTCCTTAGTGGTTTCCAGGTGGTGGTGCTCACCAACACCCCCCTGGAGGACCAGCTGCGAGTGGG
TGAGTTCTGTCACAACCGTGGCATCAAGCTGGTGGTGGCAGACACGCGGGGCCTGTTTGGGCAGCTCTTCTGTGA
CTTTGGAGAGGAAATGATCCTCACAGATTCCAATGGGGAGCAGCCACTCAGTGCTATGGTTTCTATGGTTACCAA
GGACAACCCCGGTGTGGTTACCTGCCTGGATGAGGCCCGACACGGGTTTGAGAGCGGGGACTTTGTCTCCTTTTC
AGAAGTACAGGGCATGGTTGAACTCAACGGAAATCAGCCCATGGAGATCAAAGTCCTGGGTCCTTATACCTTTAG
CATCTGTGACACCTCCAACTTCTCCGACTACATCCGTGGAGGCATCGTCAGTCAGGTCAAAGTACCTAAGAAGAT
TAGCTTTAAATCCTTGGTGGCCTCACTGGCAGAACCTGACTTTGTGGTGACGGACTTCGCCAAGTTTTCTCGCCC
TGCCCAGCTGCACATTGGCTTCCAGGCCCTGCACCAGTTCTGTGCTCAGCATGGCCGGCCACCTCGGCCCCGCAA
TGAGGAGGATGCAGCAGAACTGGTAGCCTTAGCACAGGCTGTGAATGCTCGAGCCCTGCCAGCAGTGCAGCAAAA
TAACCTGGACGAGGACCTCATCCGGAAGCTGGCATATGTGGCTGCTGGGGATCTGGCACCCATAAACGCCTTCAT
TGGGGGCCTGGCTGCCCAGGAAGTCATGAAGGCCTGCTCCGGGAAGTTCATGCCCATCATGCAGTGGCTATACTT
TGATGCCCTTGAGTGTCTCCCTGAGGACAAAGAGGTCCTCACAGAGGACAAGTGCCTCCAGCGCCAGAACCGTTA
TGACGGGCAAGTGGCTGTGTTTGGCTCAGACCTGCAAGAGAAGCTGGGCAAGCAGAAGTATTTCCTGGTGGGTGC
GGGGGCCATTGGCTGTGAGCTGCTCAAGAACTTTGCCATGATTGGGCTGGGCTGCGGGGAGGGTGGAGAAATCAT
CGTTACAGACATGGACACCATTGAGAAGTCAAATCTGAATCGACAGTTTCTTTTCCGGCCCTGGGATGTCACGAA
GTTAAAGTCTGACACGGCTGCTGCAGCTGTGCGCCAAATGAATCCACATATCCGGGTGACAAGCCACCAGAACCG
TGTGGGTCCTGACACGGAGCGCATCTATGATGACGATTTTTTCCAAAACCTAGATGGCGTGGCCAATGCCCTGGA
CAACGTGGATGCCCGCATGTACATGGACCGCCGCTGTGTCTACTACCGGAAGCCACTGCTGGAGTCAGGCACACT
GGGCACCAAAGGCAATGTGCAGGTGGTGATCCCCTTCCTGACAGAGTCGTACAGTTCCAGCCAGGACCCACCTGA
GAAGTCCATCCCCATCTGTACCCTGAAGAACTTCCCTAATGCCATCGAGCACACCCTGCAGTGGGCTCGGGATGA
GTTTGAAGGCCTCTTCAAGCAGCCAGCAGAAAATGTCAACCAGTACCTCACAGACCCCAAGTTTGTGGAGCGAAC
ACTGCGGCTGGCAGGCACTCAGCCCTTGGAGGTGCTGGAGGCTGTGCAGCGCAGCCTGGTGCTGCAGCGACCACA
GACCTGGGCTGACTGCGTGACCTGGGCCTGCCACCACTGGCACACCCAGTACTCGAACAACATCCGGCAGCTGCT
GCACAACTTCCCTCCTGACCAGCTCACAAGCTCAGGAGCGCCGTTCTGGTCTGGGCCCAAACGCTGTCCACACCC
GCTCACCTTTGATGTCAACAATCCCCTGCATCTGGACTATGTGATGGCTGCTGCCAACCTGTTTGCCCAGACCTA
CGGGCTGACAGGCTCTCAGGACCGAGCTGCTGTGGCCACATTCCTGCAGTCTGTGCAGGTCCCCGAATTCACCCC
CAAGTCTGGCGTCAAGATCCATGTTTCTGACCAGGAGCTGCAGAGCGCCAATGCCTCTGTTGATGACAGTCGTCT
AGAGGAGCTCAAAGCCACTCTGCCCAGCCCAGACAAGCTCCCTGGATTCAAGATGTACCCCATTGACTTTGAGAA
GGATGATGACAGCAACTTTCATATGGATTTCATCGTGGCTGCATCCAACCTCCGGGCAGAAAACTATGACATTCC
TTCTGCAGACCGGCACAAGAGCAAGCTGATTGCAGGGAAGATCATCCCAGCCATTGCCACGACCACAGCAGCCGT
GGTTGGCCTTGTGTGTCTGGAGCTGTACAAGGTTGTGCAGGGGCACCGACAGCTTGACTCCTACAAGAATGGTTT
CCTCAACTTGGCCCTGCCTTTCTTTGGTTTCTCTGAACCCCTTGCCGCACCACGTCACCAGTACTATAACCAAGA
GTGGACATTGTGGGATCGCTTTGAGGTACAAGGGCTGCAGCCTAATGGTGAGGAGATGACCCTCAAACAGTTCCT
CGACTATTTTAAGACAGAGCACAAATTAGAGATCACCATGCTGTCCCAGGGCGTGTCCATGCTCTATTCCTTCTT
CATGCCAGCTGCCAAGCTCAAGGAACGGTTGGATCAGCCGATGACAGAGATTGTGAGCCGTGTGTCGAAGCGAAA
GCTGGGCCGCCACGTGCGGGCGCTGGTGCTTGAGCTGTGCTGTAACGACGAGAGCGGCGAGGATGTCGAGGTTCC
CTATGTCCGATACACCATCCGCTGACCCCGTCTGCTCCTCTAGGCTGGCCCCTTGTCCACCCCTCTCCACACCCC
TTCCAGCCCAGGGTTCCCATTTGGCTTCTGGCAGTGGCCCAACTAGCCAAGTCTGGTGTTCCCTCATCATCCCCC
TACCTGAACCCCTCTTGCCACTGCCTTCTACCTTGTTTGAAACCTGAATCCTAATAAAGAATTAATAACTCCCAC

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FIGURE 3115B

ATCGCCTGCCCTGCTGGTTCCAGGGAAGGAAGGGACTTCCTGGA

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FIGURE 3116

GGAGGGGGCAGTTGGGCGGGGATAGGCCGTCCTAGCTAAGGTGGTAAAGGCCAATAACTCTTCAGGCTGCCTCTC
CTCGAAAAGTCATCTTCTCGCGAACCTTTAAAATGCCTTCCTCCCCAAGCACCTCAAGGGACTAGAACTGAGTGC
TTCATTTGTCTTTTTTCCTCCTTGCAAAAGTCCCGTTTGCCACCATGGGGATGTACCAAGTGAGACCGAGTAGGG
GGAACGAGTGGTGATTGACGCGCCAGGTTACTGGCCACTGCTCACCTAGGCGCTAGCAAACTTCTGCCAAGATCG
GAACTGAGTACTAAACAGCCTCCACAGTTCTCCCTGGTGCCGTCTCCGGCTTGGCGCCGCATCCTCCTCTGGGCT
CGCGATGGCCGCGTCCCCTCCCGCTGCGGACGGGTCCTTTGGTACATGCAGTCCGAGATCGCCATGGATCGGATG
AAGAAGATCAAACGGCAGCTGTCAATGACACTCCGAGGTGGCCGAGGCATAGACAAGACCAATGGTGCCCCTGAG
CAGATAGGCCTGGATGAGAGTGGTGGTGGTGGCGGCAGTGACCCTGGAGAGGCCCCCACACGTGCTGCTCCTGGG
GAACTTCGTTCTGCACGGGGCCCACTCAGCTCTGCACCAGAGATTGTGCACGAGGACTTGAAGATGGGGTCTGAT
GGGGAGAGTGACCAGGCTTCAGCCACGTCCTCGGATGAGGTGCAGTCTCCAGTGAGAGTGCGTATGCGCAACCAT
CCCCCACGCAAGATCTCCACTGAGGACATCAACAAGCGCCTATCACTACCAGCTGACATCCGGCTGCCTGAGGGC
TACCTGGAGAAGCTGACCCTCAATAGCCCCATCTTTGACAAGCCCCTCAGCCGCCGCCTCCGTCGTGTCAGCCTA
TCTGAGATTGGCTTTGGGAAACTGGAGACCTACATTAAGCTGGACAAACTGGGCGAGGGTACCTATGCCACCGTC
TACAAAGGCAAAAGCAAGCTCACAGACAACCTTGTGGCACTCAAGGAGATCAGACTGGAACATGAAGAGGGGGCA
CCCTGCACCGCCATCCGGGAAGTGTCCCTGCTCAAGGACCTCAAACACGCCAACATCGTTACGCTACATGACATT
ATCCACACGGAGAAGTCCCTCACCCTTGTCTTTGAGTACCTGGACAAGGACCTGAAGCAGTACCTGGATGACTGT
GGGAACATCATCAACATGCACAACGTGAAACTGTTCCTGTTCCAGCTGCTCCGTGGCCTGGCCTACTGCCACCGG
CAGAAGGTGCTACACCGAGACCTCAAGCCCCAGAACCTGCTCATCAACGAGAGGGGAGAGCTCAAGCTGGCTGAC
TTTGGCCTGGCCCGAGCCAAGTCAATCCCAACAAAGACATACTCCAATGAGGTGGTGACACTGTGGTACCGGCCC
CCTGACATCCTGCTTGGGTCCACGGACTACTCCACTCAGATTGACATGTGGGGTGTGGGCTGCATCTTCTATGAG
ATGGCCACAGGCCGTCCCCTCTTTCCGGGCTCCACGGTGGAGGAACAGCTACACTTCATCTTCCGTATCTTAGGA
ACCCCAACTGAGGAGACGTGGCCAGGCATCCTGTCCAACGAGGAGTTCAAGACATACAACTACCCCAAGTACCGA
GCCGAGGCCCTTTTGAGCCACGCACCCCGACTTGATAGCGACGGGGCCGACCTCCTCACCAAGCTGTTGCAGTTT
GAGGGTCGAAATCGGATCTCCGCAGAGGATGCCATGAAACATCCATTCTTCCTCAGTCTGGGGGAGCGGATCCAC
AAACTTCCTGACACTACTTCCATATTTGCACTAAAGGAGATTCAGCTACAAAAGGAGGCCAGCCTTCGGTCTTCG
TCGATGCCTGACTCAGGCAGGCCAGCTTTCCGCGTGGTGGACACCGAGTTCTAAGCCACAGACCGAGGCCCCAGC
AGGCAGCGGCTGGAGGGATGCCACACCCCTCACAGGGCAGCCCCCAACTACATCTTCCCTGCTTACTCTCTGCCT
ACCTGCCTGAGCCATGTTCACCTGCCCACTTGTCCCCTGCTGCCTGCCCAAACACCCCACCATTGGCCTGTCAAC
CCACCCATTGGCCTGTCTGCTGGGTGCTAACAAAGCTCTCATCACTCCTTCACTTGGTCTGTCTGTCTCTGTCTT
GGTAGTTGCCGGTGGACAGCATGGCCGTGCCAGCCTCCCACACTGAGGCCAGGTCTACCCCCCATCATACCAGCC
CCCAGGACCACTACCCCACGGCCAGCCAGGGGTCCAGAGCTAGCCCAGGCTGGGGATCTCGACTCAGACAAGATG
GTGACAATGCCTTGAGTCTGAGGCATCCTCTGCCTGCTTTCCTGCCTGCCCCACCTGCCTCATATTGTGTGGGCC
TTTTTTTGTTTGTTTCATTCATTGTTTTTTTTTTTTTAATTATTTTAAATGAGATTTTTGTTTTTTTTAAATGCA
ATATCTCTGTATACAGACTGGCTGGGCCCCACCCCCTGCGTGTGGCCCTCCCACAGTATTTTGTGCAATGAAGCC
CTGCTCCCAGCCTTTCAGAGACAGGGACACAGCCCCTATTTGGAACCCTGATCATCACCAGACCCTGGGATTGGC
TATGGGAAAGCATGCCACAGCCACTCGCCTTCCTACCCCCGCCCGCCATCCCCAGTTGCAGGGGGATCTGGGGAC
TACCAGAGACTCTGGGAAATGGACAAGGTGGGGGGCCCCACTCTTTCTCTCCTGCAGTCCCGTAGCTGGGGCCTC
CTTCCTTCTCAGGGTCTCCCCAGCCCAGTCCCCTTGCTCCCATCCCACTCGGTGCTGTTGGGTAGGGGCCCTGCC
AGGAACTGACCAGCTCAGCGAGGAGCCATAATGTGCATATGTGCACAAGCAGGGTTGGGGGAGGGGGGTGTGAGG
GGTTGTGCCCAGGTGTTGCCCCCTATCTCCTGGGGAGGGTGAGGCAGGGCAGGGACAGTCTCCAGGGTCAGTCCC
TGGATGGGTGGTTACCTCCCCTTCCTCCACCCTAAGCCCTGGGGCCCTGAAATGGGGTGGGAGGGCAGGGGTGGG
AGCCCTCCTAGTGGGTTTGGGGGGTTGGGTTCCTGAATGCACCATAATCGCTGTATGAAATATTAAAAAGTCTAA
AGTG

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FIGURE 3117

CAGCTGCTGCTGCGGCGGCTGTGGCGGCGGCAGCGGCGGTGACTGAGGATAGAGAGCCACAGCACGAGGAGCTGC
CAGGCCTGGACAGCCAGTGGCGCCAGATAGAAAACGGCGAGAGTGGGCGAGAACGTCCACTGCGGGCCGGCGAAA
GCTGGTTCCTTGTGGAGAAGCACTGGTATAAGCAGTGGGAGGCATACGTGCAGGGAGGGGACCAGGACTCCAGCA
CCTTCCCTGGCTGCATCAACAATGCCACACTCTTTCAAGATGAGATAAACTGGCGCCTCAAGGAGGGACTGGTGG
AAGGCGAGGATTATGTGCTGCTCCCAGCAGCTGCTTGGCATTACCTGGTCAGCTGGTATGGTCTAGAGCATGGCC
AGCCACCCATTGAACGCAAGGTCATAGAGCTGCCCAACATCCAGAAGGTCGAAGTGTACCCAGTAGAACTGCTGC
TTGTCCGGCACAATGATTTGGGCAAATCTCACACTGTTCAGTTCAGCCATACCGATTCTATTGGCCTAGTATTGC
GCACAGCTCGGGAGCGGTTTCTGGTGGAGCCCCAGGAAGACACTCGGCTTTGGGCCAAGAACTCAGAAGGCTCTT
TGGATAGGTTGTATGACACACACATCACGGTTCTCGATGCGGCCCTTGAGACTGGGCAGTTGATCATC**ATG**GAGA
CCCGCAAGAAAGATGGCACTTGGCCCAGCGCACAGCTGCATGTCATGAACAACAACATGTCGGAAGAGGATGAGG
ACTTCAAGGGTCAGCCAGGCATCTGTGGCCTCACCAATCTGGGCAACACGTGCTTCATGAACTCGGCCCTGCAGT
GCCTCAGCAATGTGCCACAGCTCACCGAGTACTTCCTCAACAACTGCTACCTGGAGGAGCTCAACTTCCGCAACC
CACTGGGCATGAAGGGTGAGATCGCAGAGGCCTATGCAGACCTGGTGAAGCAGGCGTGGTCTGGCCACCACCGCT
CCATTGTGCCACATGTGTTCAAGAACAAGGTTGGCCATTTTGCATCCCAATTTCTGGGCTACCAGCAGCATGACT
CTCAGGAGCTGCTGTCATTCCTCCTGGACGGGCTGCATGAGGACCTTAATCGGGTGAAGAAGAAGGAGTATGTGG
AGCTGTGCGATGCTGCTGGGCGACCGGATCAGGAGGTGGCACAGGAGGCATGGCAAAACCACAAACGGCGGAACG
ATTCTGTGATCGTGGACACTTTCCACGGCCTCTTCAAGTCCACGCTGGTGTGCCCCGATTGTGGCAATGTATCTG
TGACCTTCGACCCCTTCTGCTACCTCAGTGTTCCACTGCCTATCAGCCACAAGAGGGTCTTGGAGGTCTTCTTTA
TCCCCATGGATCCGCGCCGCAAGCCAGAGCAGCACCGGCTCGTGGTCCCCAAGAAAGGCAAGATCTCGGATCTAT
GTGTGGCTCTGTCCAAACACACGGGCATCTCGCCAGAGAGGATGATGGTGGCTGATGTCTTCAGTCACCGCTTCT
ATAAGCTCTATCAGCTAGAGGAGCCTCTGAGCAGCATCTTGGACCGTGATGATATCTTCGTCTATGAGGTGTCAG
GTCGCATTGAGGCCATTGAGGGCTCAAGAGAGGACATCGTGGTTCCTGTCTACCTGCGGGAGCGCACCCCTGCCC
GTGACTACAACAACTCCTACTACGGCCTGATGCTTTTTGGACACCCCCTCCTGGTATCAGTGCCCCGGGACCGCT
TCACCTGGGAGGGCCTGTATAACGTCCTGATGTACCGGCTCTCACGCTACGTGACCAAACCCAACTCAGATGATG
AGGACGATGGGGATGAGAAAGAAGATGACGAGGAGGATAAAGATGACGTCCCTGGGCCCTCAACTGGGGGCAGCC
TCCGAGACCCTGAGCCAGAGCAGGCTGGGCCCAGCTCTGGAGTCACGAACAGGTGCCCGTTCCTCCTGGACAATT
GCCTTGGCACATCTCAGTGGCCCCCAAGGCGACGACGCAAGCAGCTGTTCACCCTGCAGACGGTGAACTCCAATG
GGACCAGCGACCGCACAACCTCCCCTGAAGAAGTCCATGCCCAGCCGTACATTGCTATCGACTGGGAGCCAGAGA
TGAAGAAGCGTTACTATGACGAGGTAGAGGCTGAGGGCTACGTGAAGCATGACTGCGTCGGGTACGTGATGAAGA
AGGCTCCCGTGCGGCTGCAGGAGTGCATTGAGCTCTTCACCACTGTGGAGACCCTGGAGAAGGAAAACCCCTGGT
ACTGCCCTTCCTGCAAGCAGCACCAGCTGGCAACCAAGAAGCTGGACCTGTGGATGCTGCCGGAGATTCTCATCA
TCCACCTGAAACGCTTTTCCTACACCAAGTTCTCCCGAGAGAAGCTGGACACCCTCGTGGAGTTTCCTATCCGGG
ACCTGGACTTCTCTGAGTTTGTCATCCAGCCACAGAATGAGTCGAATCCGGAGCTGTACAAATATGACCTCATCG
CGGTTTCCAACCATTATGGGGGCATGCGTGATGGACACTACACAACATTTGCCTGCAACAAGGACAGCGGCCAGT
GGCACTACTTTGATGACAACAGCGTCTCCCCTGTCAATGAGAATCAGATCGAGTCCAAGGCAGCCTATGTCCTCT
TCTACCAACGCCAGGACGTGGCGCGACGCCTGCTGTCCCCGGCCGGCTCATCTGGCGCCCCAGCCTCCCCTGCCT
GCAGCTCCCCACCCAGCTCTGAGTTCATGGATGTTAAT**TGA**GAGCCCTGGGTCCTGCCACAGAAAAAAAAAAAAA
AAAGCCCTCTCTGCAATCTCGCTTCTCGTGTCCGCCCCGCTTCTCTTATTCGTGTTAGGTGCCCCCGCCAGGCAT
TGCAGGCTTAGTCGTGGCTACTGTTCTCCTGTGCCGCTGCATCGCTCTCTCCCGGGAAAGAACAGGTCGTGTCTC
CTCCTAGCAGTGCGCGCCCCGCCTGTGTTTGCCCTTCCAGCAGTGACCCTCCCTTCTAGTCTTTATTTATGGTCG
TGCCCTTCCCTCTCCTCAGCCCAGAGTGTTCTGCGTGGGTGGTGATGGGGGTTCACCTGAACACAGAGTGTATTT
TCTTATTGAGGCCCTGTACCTTCTGCTGTGTGTGTGTATATATAAAGCACCAGTCTGCTCCCC

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FIGURE 3118

AGCTTCCAGCTTGGGGAAGAGTGGGGTTGTCAGCAGGAGAGCCTGAGGGCTGAGGCCCAGCGTGAACATGGCAGC
TAATGGGGACTCTCCCCCATGGTCCCCGGCCCTGGCTGCAGAGGGACGTGGCAGCTCATGTGAGGTGAGGAGGGA
GAGGACCCCAGAGGCAAGAATTCATTCAGTGAAGAGATACCCTGACCTGTCCCCAGGGCCTAAGGGCAGAAGCAG
TGCTGACCATGCTGCCTTGAACAGCATTGTGTCGTTACAGGCTTCAGTGTCATTTGAGGACGTGACTGTGGACTT
CAGCAAGGAGGAGTGGCAGCACTTGGACCCTGCCCAGAGACGCCTGTACTGGGATGTGACACTAGAGAACTACAG
CCACCTGCTCTCAGTGGGGTACCAAATTCCCAAGTCAGAGGCTGCCTTCAAGTTGGAGCAAGGAGAGGGGCCATG
GATGCTGGAGGGGGAAGCCCCACATCAGAGCTGTTCAGGTGAGGCTATTGGGAAAATGCAGCAACAGGGAATTCC
TGGAGGAATTTTCTTCCACTGTGAGAGATTTGATCAACCCATAGGAGAAGATTCATTATGTTCTATTTTAGAAGA
ACTGTGGCAAGATAATGACCAGCTAGAGCAACGTCAGGAAAACCAGAATAACCTTTTAAGTCATGTGAAAGTATT
GATTAAGGAGAGGGGCTATGAACATAAAAACATTGAAAAAATAATTCATGTGACTACCAAGCTTGTTCCTTCAAT
TAAAAGACTCCATAACTGTGACACAATTTTGAAGCATACTTTAAACTCACATAATCATAATAGAAACAGTGCAAC
AAAGAACCTTGGCAAGATTTTTGGAAATGGTAACAATTTCCCCCATAGCCCTTCCTCTACTAAGAATGAGAATGC
TAAAACAGGAGCAAATTCCTGTGAACATGACCACTATGAAAAACATCTCAGCCACAAACAAGCTCCCACCCACCA
TCAGAAAATTCATCCTGAGGAGAAGCTTTATGTGTGTACTGAATGTGTAATGGGCTTCACTCAGAAGTCACATCT
GTTTGAGCATCAGAGAATTCATGCTGGAGAAAAGTCCCGTGAATGTGACAAAAGCAACAAAGTCTTCCCCCAGAA
ACCCCAGGTTGATGTACATCCAAGTGTTTATACAGGAGAAAAACCCTATCTGTGTACTCAATGTGGGAAAGTCTT
TACCCTCAAATCAAACCTCATTACACATCAAAAAATTCATACCGGGCAGAAACCCTACAAATGCAGTGAATGTGG
AAAAGCCTTTTTCCAGAGATCAGACCTCTTTAGACATCTGAGAATTCATACAGGAGAAAAACCTTATGAATGCAG
TGAATGTGGAAAAGGCTTCTCCCAGAACTCAGACCTCAGTATACATCAGAAAACTCATACCGGAGAGAAACACTA
TGAATGCAATGAATGTGGGAAGGCTTTCACAAGAAAATCAGCACTCAGGATGCATCAGAGAATCCACACGGGAGA
GAAACCTTATGTATGCGCTGACTGTGGGAAGGCCTTCATCCAGAAATCACATTTCAACACACATCAGAGAATTCA
TACTGGAGAAAAGCCGTATGAATGCAGTGACTGTGGGAAATCCTTCACTAAGAAGTCACAACTCCATGTGCATCA
AAGAATTCACACCGGAGAGAAACCCTATATATGTACAGAATGTGGAAAGGTCTTCACTCACAGGACAAACCTCAC
CACACATCAGAAAACTCATACTGGGGAAAAACCCTATATGTGTGCTGAATGTGGAAAGGCTTTTACTGACCAGTC
AAATCTCATTAAACACCAGAAAACTCACACTGGAGAGAAACCCTATAAGTGCAATGGCTGTGGAAAAGCCTTCAT
ATGGAAGTCGCGCCTCAAAATACATCAGAAATCTCATATTGGAGAGAGACACTATGAATGCAAGGACTGCGGGAA
AGCCTTCATCCAGAAATCAACACTAAGCGTGCATCAGAGAATCCATACAGGAGAGAAACCGTACGTTTGTCCTGA
ATGCGGGAAGGCCTTTATCCAGAAATCGCACTTCATTGCGCATCATAGAATCCATACTGGAGAGAAGCCTTATGA
ATGCAGCGACTGTGGGAAATGCTTCACTAAGAAGTCACAACTCCGTGTGCATCAGAAAATCCACACAGGTGAGAA
GCCCAATATATGTGCTGAATGTGGAAAGGCCTTCACTGACCGATCAAATCTCATAACACATCAGAAAATCCACAC
TAGGGAGAAACCCTATGAATGTGGTGACTGCGGGAAAACCTTCACCTGGAAGTCACGCCTCAATATACATCAGAA
GTCTCATACTGGAGAAAGACACTATGAATGTAGTAAATGTGGGAAAGCTTTCATCCAGAAAGCCACACTAAGTAT
GCATCAGATAATTCATACAGGAAAGAAACCTTATGCTTGTACAGAATGTCAGAAGGCCTTTACTGACAGATCGAA
TCTCATTAAACACCAGAAAATGCATAGTGGAGAAAAACGCTATAAAGCCAGTGACTGAGAAAGTCTTCACCTGGA
AATCACAACTGGGTATGCATCAGGTATCTAATAGCAGGGAGGAGGAAGGCCTGTTGC

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FIGURE 3119

TGGCGGCGGGGGCGAGGTGAGATGTTGGCAGTGGAAAGGGGTTCGGGCTCGGGGGGCGGGGGGACGCGGAGCGATGGCCCGCGCGGCCGCAGGGGCGGATAAAAAGCCGTCGCGCTGCGGGAGTGGGCGGGAGGGAGAGGGGTTGTCCGAGGGCCACAAGAGTATGACGGGGCTGTACGAGCTGGTGTGGCGGGTGCTGCACGCGCTGCTCTGTCTGCACCGCACGCTCACCTCCTGGCTCCGCGTTCGGTTCGGCACCTGGAACTGGATCTGGCGGCGCTGCTGCCGAGCCGCCTCTGCCGCGGTCCTAGCGCCGCTCGGCTTCACGCTCCGCAAGCCCCCGGCAGTCGGCAGGAACCGCCGTCACCACCGGCACCCGCGCGGGGGGTCGTGCCTGGCAGCCGCACACCACCGGATGCGCTGGCGCGCGGACGGTCGTTCCTTGGAGAAGCTGCCTGTGCATATGGGCCTGGTGATCACCGAGGTGGAGCAGGAACCCAGCTTCTCGGACATCGCGAGCCTCGTGGTGTGGTGTATGGCCGTGGGCATCTCCTACATTAGCGTCTACGACCACCAAGGTATTTTCAAAAGAAATAATTCCAGATTGATGGATGAAATTTTAAAACAACAGCAAGAACTTCTGGGCCTAGATTGTTCAAAATACTCACCAGAATTTGCAAATAGTAATGACAAAGACGATCAAGTTTTAAATTGCCATTTGGCAGTGAAGGTGCTGTCTCCGGAAGATGGAAAAGCAGATATTGTAAGAGCTGCTCAGGACTTTTGCCAGTTAGTGGCCCAGAAGCAAAAGAGACCCACAGATTTGGATGTAGATACGTTAGGCAGTTTACTTAGTTCAAATGGTTGTCCTGATCCTGATTTAGTATTGAAGTTCGGTCCTGTGGACAGCACATTAGGCTTTCTTCCCTGGCACATCAGATTGACTGAGATTGTCTCTTTGCCTTCCCACCTAAACATCAGTTATGAGGACTTTTTCTCTGCCCTTCGTCAATATGCAGCCTGTGAACAGCGTCTGGGAAAGTAGTGGTCATTGGTTGCGTAATTTGATTTGAGGCTTGTGGAGGAAAGGACCCAAGTGACTCTGATGTTTACAAAGCACCTATGAAACCCTGTACACACCTGGTTCATAATCCTCATAATTTATCAACAAACACAAAAAAGTGTCTTACTTGAGAGTGAGTGTGTGTGTGTGGGTGTGCACGTGCACACATGTGCACGTTTGTATGCATGGAAATAAACTTATAAATGGGGACGTATTGGAGAAGGAAATACATAGACCTACAACTTTGAGCAAATAGCAGTGATGTTTTAGGAACTGAAATGTCACACTTAAAGTCTTCAGCCCAGCTACTTCCCTATTTTTGTGGGGAGAAGAGGGCCTGATTAGAACTGTTCTGGTTGTGTTTGGCGGGAGGGGAATAATTTTTGTTCAGTCCTTCTTAGTGACCAAACTTTAATTTTTAAGAATAATATATTGACTTACTGAACTGAAGCATTCTGAGTTGAAAGGAGCTCCAGAGGAGTGGAGTTCTGTGTTGCTCACATGTTAAAATCTTGCTCACCTTCAGAGCAGAGGGAATACCTATCTTCAGATATCCGTCCATTTTCATCTCTTAATTGTAGTCAAAAGTATGACTTGAGAGTGTTGCTCTGGTATTCTGGGTTCTGAAGTCTGGTATTCTGGTATTCTGGGTTCAAAAGTATGACTTGAGAGTGTTGCTCTGGTATTCTGAGAGTTGCTCTGTATTCTGGGTTCTGAAGATTATTTGAAAAATAACTCCTACTACATTGAAATGCAGACTTTTAAAAATTTAAACATTGGATTAGGCAGTCAAAAAAACCAAGCAAGCATAAAAGGTCAATAAGTTGTAATCTTGATAGTAAAGGTGGAAAACTTATTATAAATGGAAAGAAAGTTTTGGTTTCCTTTTTTGTTTGATGGGCAGTATGCCATATTATACCCAAAGTTCTTTTAAAAAATATTTCCATCAACCATTTTTATTTAAAATAAACATTTGAGGGAAGTTACCAAGGCAGCTTTTTTCCTCAAAAGTAACCTGTTCCTCTTTGGAATAGCACATTTTAGGGGCATGGTTAATACCTGAGATTTTTACTCAGTAAATCCTGATGGTTACTGTGTGTAAAATATCTTTAAGTAGGATTGAAGGCCTCTGTGGGGAAATAAAATATTACCAAAGTCTATAAAAATAAATTTTACATGTTCTCTTTTATGACAGAGAGCAGCACTGGTTCTGTTATTTTTAAAATGAATAATTGATTTCTTGATAGGTGTTTAATATTTCTTCCCTCACTGCTGATTCTTAGATAGAAACCATTCTTTATATTTGATAGACTGTTTTCAGAAAACCCTTATCAACAAGTGTACAATACTTATCTAAAACTATACATTTAGAATGGAGCAGTTTAATACTAGATCTCAGAAGTTTTGAAAAATAGCAAAGAAGACTGGATTTGGAAAGCATGGTCTACAATTGGTTGTTAAATTCTGAAGCTATGAAGAATAAATGTTTCAACTTTGGATTATGAAACCCCATTTATGATTTTTTAAATACACTTGAAATAAAAATGATTAAACT

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FIGURE 3120

TGACCCAATAAGGGTGGAAGGCTGAGTCCCGCAGAGCCAATAACGAGAGTCCGAGAGGCGACGGAGGCGGACTCT
GTGAGGAAACAAGAAGAGAGGCCCAAGATGGAGACGGCGGCGGCTGTAGCGGCGTGACAGTGAAGCTGAGACCTT
GGCACTCAAGAGTGAGACAAGCAACAGGAGGGCCTGAGCAGAGAAGGAACTGGAAGGACTTCAGATGTGAGCAGG
ATCTCTTGGACTGTCGTGTGAAAATTAGGCTGCAGGGGGCGACAGGAGCCTGGACTTTGAATTTTATTTTGTCCC
CTGCCACTTTGCTTCTAGACTATCATTATTGGACCTCTGAATTCTTGTCTGCCTTCTTGTAGGAGCCCCATGGCA
CCTGCCCAGCCCCACCTCAGCCCATCTTGACAAAATCTAAGGCTCCATGGAGCCACCACGGGGCCCCCCTGCCAA
TGGGGCCGAGCCATCCCGGGCAGTGGGCACCGTCAAAGTATACCTGCCCAACAAGCAACGCACGGTGGTGACTGT
CCGGGATGGCATGAGTGTCTACGACTCTCTAGACAAGGCCCTGAAGGTGCGGGGTCTAAATCAGGACTGCTGTGT
GGTCTACCGACTCATCAAGGGACGAAAGACGGTCACTGCCTGGGACACAGCCATTGCTCCCCTGGATGGCGAGGA
GCTCATTGTCGAGGTCCTTGAAGATGTCCCGCTGACCATGCACAATTTTGTACGGAAGACCTTCTTCAGCCTGGC
GTTCTGTGACTTCTGCCTTAAGTTTCTGTTCCATGGCTTCCGTTGCCAAACCTGTGGCTACAAGTTCCACCAGCA
TTGTTCCTCCAAGGTCCCCACAGTCTGTGTTGACATGAGTACCAACCGCCAACAGCCCTCAAGGTTCTACCACAG
TGTCCAGGATTTGTCCGGAGGCTCCAGACAGCATGAGGCTCCCTCGAACCGCCCCCTGAATGAGTTGCTAACCCC
CCAGGGTCCCAGCCCCCGCACCCAGCACTGTGACCCGGAGCACTTCCCCTTCCCTGCCCCAGCCAATGCCCCCCT
ACAGCGCATCCGCTCCACGTCCACTCCCAACGTCCATATGGTCAGCACCACGGCCCCCATGGACTCCAACCTCAT
CCAGCTCACTGGCCAGAGTTTCAGCACTGATGCTGCCGGTAGTAGAGGAGGTAGTGATGGAACCCCCCGGGGGAG
CCCCAGCCCAGCCAGCGTGTCCTCGGGGAGGAAGTCCCCACATTCCAAGTCACCAGCAGAGCAGCGCGAGCGGAA
GTCCTTGGCCGATGACAAGAAGAAAGTGAAGAACCTGGGGTACCGGGACTCAGGCTATTACTGGGAGGTACCACC
CAGTGAGGTGCAGCTGCTGAAGAGGATCGGGACGGGCTCGTTTGGCACCGTGTTTCGAGGGCGGTGGCATGGCGA
TGTGGCCGTGAAGGTGCTCAAGGTGTCCCAGCCCACAGCTGAGCAGGCCCAGGCTTTCAAGAATGAGATGCAGGT
GCTCAGGAAGACGCGACATGTCAACATCTTGCTGTTTATGGGCTTCATGACCCGGCCGGGATTTGCCATCATCAC
ACAGTGGTGTGAGGGCTCCAGCCTCTACCATCACCTGCATGTGGCCGACACACGCTTCGACATGGTCCAGCTCAT
CGACGTGGCCCGGCAGACTGCCCAGGGCATGGACTACCTCCATGCCAAGAACATCATCCACCGAGATCTCAAGTC
TAACAACATCTTCCTACATGAGGGGCTCACGGTGAAGATCGGTGACTTTGGCTTGGCCACAGTGAAGACTCGATG
GAGCGGGGCCCAGCCCTTGGAGCAGCCCTCAGGATCTGTGCTGTGGATGGCAGCTGAGGTGATCCGTATGCAGGA
CCCGAACCCCTACAGCTTCCAGTCAGACGTCTATGCCTACGGGGTTGTGCTCTACGAGCTTATGACTGGCTCACT
GCCTTACAGCCACATTGGCTGCCGTGACCAGATTATCTTTATGGTGGGCCGTGGCTATCTGTCCCCGGACCTCAG
CAAAATCTCCAGCAACTGCCCCAAGGCCATGCGGCGCCTGCTGTCTGACTGCCTCAAGTTCCAGCGGGAGGAGCG
GCCCCTCTTCCCCCAGATCCTGGCCACAATTGAGCTGCTGCAACGGTCACTCCCCAAGATTGAGCGGAGTGCCTC
GGAACCCTCCTTGCACCGCACCCAGGCCGATGAGTTGCCTGCCTGCCTACTCAGCGCAGCCCGCCTTGTGCCTTA
GGCCCCGCCCAAGCCACCAGGGAGCCAATCTCAGCCCTCCACGCCAAGGAGCCTTGCCCACCAGCCAATCAATGT
TCGTCTCTGCCCTGATGCTGCCTCAGGATCCCCCATTCCCCACCCTGGGAGATGAGGGGGTCCCCATGTGCTTTT
CCAGTTCTTCTGGAATTGGGGGACCCCCGCCAAAGACTGAGCCCCCTGTCTCCTCCATCATTTGGTTTCCTCTTG
GCTTTGGGGATACTTCTAAATTTTGGGAGCTCCTCCATCTCCAATGGCTGGGATTTGTGGCAGGGATTCCACTCA
GAACCTCTCTGGAATTTGTGCCTGATGTGCCTTCCACTGGATTTTGGGGTTCCCAGCACCCCATGTGGATTTTGG
GGGGTCCCTTTTGTGTCTCCCCCGCCATTCAAGGACTCCTCTCTTTCTTCACCAAGAAGCACAGAATTCTGCTGG

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FIGURE 3121

GGGCGCGACCATCTGCGCTGCGGCGCCGGCGACTCAGCGCTGCCTCAGTCTGCGGTGGGCAGCGGAGGAGTCGTG
TCGTGCCTGAGAGCGCAGCTGTGCTCCTGGGCACCGCGCAGTCCGCCCCCGCGGCTCCTGGCCAGACCACCCCTA
GGACCCCCTGCCCCAAGTCGCAGCC**ATG**AACTACCTGCGGCGCCGCCTGTCGGACAGCAACTTTATGGCCAATCT
GCCAAATGGGTACATGACAGACCTGCAGCGTCCGCAGCCGCCCCCACCGCCGCCCGGTGCCCACAGCCCCGGAGC
CACGCCCGGTCCCGGGACCGCCACTGCCGAGAGGTCCTCCGGGGTCGCCCCAGCGGCCTCTCCGGCCGCCCCTAG
CCCCGGGTCCTCGGGGGGCGGTGGCTTCTTCTCGTCGCTGTCCAACGCGGTCAAGCAGACCACGGCGGCGGCAGC
TGCCACCTTCAGCGAGCAGGTGGGCGGCGGCTCTGGGGGCGCAGGCCGCGGGGGAGCCGCCTCCAGGGTGCTGCT
GGTCATCGACGAGCCGCACACCGACTGGGCAAAATACTTCAAAGGGAAAAAGATCCATGGAGAAATTGACATTAA
AGTAGAACAGGCCGAATTCTCTGATCTCAACCTTGTGGCCCATGCCAATGGTGGATTCTCTGTGGATATGGAAGT
TCTTCGGAATGGGGTGAAGGTCGTGCGGTCTCTGAAGCCGGATTTTGTGCTGATCCGCCAGCACGCCTTCAGCAT
GGCACGCAACGGAGACTACCGCAGTTTGGTCATTGGGCTGCAGTATGCTGGAATCCCCAGTGTTAACTCCTTGCA
TTCTGTCTACAACTTCTGTGACAAGCCCTGGGTGTTTGCCCAGATGGTTCGACTGCATAAGAAACTGGGGACAGA
AGAATTCCCTCTAATTGATCAGACCTTCTACCCCAATCACAAAGAAATGCTCAGCAGTACAACGTACCCCGTGGT
TGTGAAGATGGGGCACGCACACTCTGGGATGGGCAAGGTCAAGGTTGACAACCAGCATGACTTCCAGGACATCGC
AAGTGTCGTGGCACTGACCAAGACGTATGCCACTGCCGAGCCCTTCATCGATGCCAAATATGACGTGCGTGTCCA
GAAGATTGGGCAGAACTACAAGGCCTACATGAGGACGTCAGTGTCAGGGAACTGGAAGACCAATACTGGCTCTGC
GATGCTGGAGCAAATTGCCATGTCTGACAGATACAAGCTGTGGGTGGACACGTGCTCAGAGATTTTTGGGGGACT
GGACATCTGCGCAGTGGAAGCGCTACATGGCAAGGACGGAAGGGATCACATCATTGAGGTGGTGGGTTCCTCCAT
GCCGCTCATTGGTGACCACCAGGATGAAGACAAACAGCTCATCGTAGAGCTCGTGGTCAACAAGATGGCTCAGGC
CCTGCCCCGGCAGCGACAGCGGGATGCCTCCCCTGGCAGGGGCTCCCATGGCCAGACTCCGTCCCCAGGGGCCCT
GCCCTTGGGCCGCCAGACCTCCCAGCAGCCCGCAGGGCCCCCGGCTCAGCAGCGACCCCCACCACAGGGCGGCCC
TCCACAGCCGGGTCCAGGCCCCCAGCGCCAGGGACCCCCATTGCAGCAGCGCCCGCCCCCGCAGGGCCAGCAGCA
CCTTTCAGGCCTTGGACCCCCAGCTGGCAGCCCCCTGCCCCAGCGCCTTCCAAGTCCCACCTCAGCGCCCCAGCA
GCCCGCGTCCCAGGCCGCGCCGCCGACCCAGGGTCAAGGCCGCCAATCCCGGCCAGTGGCGGGAGGCCCCGGGGC
GCCTCCAGCAGCCCGCCCGCCCGCCTCTCCGTCTCCCCAGCGCCAGGCGGGCCCCCCACAGGCTACCCGTCAGAC
ATCCGTCTCTGGCCCGGCTCCGCCAAAGGCCTCTGGGGCCCCACCGGGCGGGCAGCAGCGCCAGGGCCCGCCCCA
GAAACCCCCAGGCCCAGCCGGCCCCACACGCCAGGCCAGCCAGGCGGGTCCCGTGCCCCGCACTGGGCCACCCAC
CACGCAGCAGCCTCGGCCCAGCGGCCCGGGCCCCGCTGGACGTCCCAAACCACAGCTGGCCCAGAAACCCAGCCA
GGACGTGCCGCCACCCGCCACCGCCGCTGCAGGGGGACCTCCGCACCCCCAGCTCAAAGCCAGCCCCGCCCAGGC
CCAGCCTTAGCCAGGACGAGGTGAAAGCTGAGACCATCCGCAGCCTGAGGAAGTCTTTCGCCAGCCTCTTCTCCG
AC**TGA**TACCCCACTCTGAGAACCCCAAAATCCCTGGGCAACCCTTCTCTGGGCCCTGAATCCATTTCTCACTTTT
GGAGTCTCCAAATCCCTTGAGAACCCATCTCCCGGTTCTCCAAGATTCCACCTCTCATTCCTCAAGATCCCCGAG
TACCTTGAGAAACCTGACTCCTCCTGGCCCTAAATCCGGTTCTCACATGTGGAATCCCCAAGTCCTTTTAGAACC
CCACTCGTGGTCACTTCAGGATCTACTTCTGTTTTAGAACCTCCACATTCCTGAAGACCTCCGCCCCTGGTTTCC
CCAGAGGGCGTTTTCCTTCCTGGAAGTGCCCAAATACCAGGCAACCCATTGCAGAATCCCTTCCTGGAGCCCTGA
AGTTCCTGGAAAACCCTATTTTTGGTCCCAAATCTCTCCAGCACACCTATTTCCCATCATAATTTTCCAAATCCT
CAAGAAACCCCTACTGTTGAGCCCCTTCCCATGGATCTTCCATCCCTCTGAAGATCCACATCTTCAAATGCCACC
CAACACCTAGCCCCACAAGGATTTCCCTTCACCAGCTCCCCTCAACCTCATTCAATACCTTGGGAGCCCCTCCCA
CTTCCAGGACCCCTCGGTTCCCCCAGGGACCCCCTCCCCAGTTTCCTGCCTCTGACAGCTGTCTTTAAATATGCA
AACTCCACCCATCTTCCCAGAATCCTTTGCACACGGAAGGCCAGTGGTCTCCGCTTCCCCACCTTTGCTGTGGTG
TCTGTGTCTGTGACTGACGTGGCCTCCTTTTGTGCCGTGCTTGGCATATGTGGTCCTCGTTCATCGTGCCGCCTG
TGGTGATGCGTGCAGTGACGCTGTTTATGTGGTCCGCACCTCCCCCTGACCTTCACTCCTTGCCTGGACTCACCC
CACCCCTCAGCGGCTCTGAACCCCAAGAGAAGAGTCGGGAAACAAAATAAACAAGCAAAGGCCCAGC

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FIGURE 3122

CATCGCCGCAGATCCAGCGCCCAGAGAGACACCAGAGAACCCACCATGGCCCCCTTTGAGCCCCTGGCTTCTGGC
ATCCTGTTGTTGCTGTGGCTGATAGCCCCCAGCAGGGCCTGCACCTGTGTCCCACCCCACCCACAGACGGCCTTC
TGCAATTCCGACCTCGTCATCAGGGCCAAGTTCGTGGGGACACCAGAAGTCAACCAGACCACCTTATACCAGCGT
TATGAGATCAAGATGACCAAGATGTATAAAGGGTTCCAAGCCTTAGGGGATGCCGCTGACATCCGGTTCGTCTAC
ACCCCCGCCATGGAGAGTGTCTGCGGATACTTCCACAGGTCCCACAACCGCAGCGAGGAGTTTCTCATTGCTGGA
AAACTGCAGGATGGACTCTTGCACATCACTACCTGCAGTTTTGTGGCTCCCTGGAACAGCCTGAGCTTAGCTCAG
CGCCGGGGCTTCACCAAGACCTACACTGTTGGCTGTGAGGAATGCACAGTGTTTCCCTGTTTATCCATCCCCTGC
AAACTGCAGAGTGGCACTCATTGCTTGTGGACGGACCAGCTCCTCCAAGGCTCTGAAAAGGGCTTCCAGTCCCGT
CACCTTGCCTGCCTGCCTCGGGAGCCAGGGCTGTGCACCTGGCAGTCCCTGCGGTCCCAGATAGCCTGAATCCTG
CCCGGAGTGGAAGCTGAAGCCTGCACAGTGTCCACCCTGTTCCCACTCCCATCTTTCTTCCGGACAATGAAATAA
AGAGTTACCACCCAGC

FIGURE 3123

ACATTGGGCTCCTCCTCCTCGGGCCCACGTGAGCTGTAGGGAAACGCAGGGGCGGCTTCTAGGTGCTGCCGCCGC
CACCGCCACCACCACCTCCACCGCCGCCTCGGAACCCAGGCCTGGGGGGCGGTGGGGCCGCGTATGGAGCCCCCG
CCCCCCGGAGCTGCCAACATTGCCAACGCCACCGCCACGCTACACACAGGTACCCCTGGGATGGCGTGAGCACTC
CCCCAGCG**ATG**GACCCATCTGTGACGCTGTGGCAGTTTCTGCTGCAGCTGCTGAGAGAGCAAGGCAATGGCCACA
TCATCTCCTGGACTTCACGGGATGGTGGTGAATTCAAGCTGGTGGATGCAGAGGAGGTGGCCCGGCTGTGGGGGC
TACGCAAGAACAAGACCAACATGAATTACGACAAGCTCAGCCGGGCCTTGCGGTACTACTATGACAAGAACATCA
TCCGCAAGGTGAGCGGCCAGAAGTTCGTCTACAAGTTTGTGTCCTACCCTGAGGTCGCAGGGTGCTCCACTGAGG
ACTGCCCGCCCCAGCCAGAGGTGTCTGTTACCTCCACCATGCCAAATGTGGCCCCTGCTGCTATACATGCCGCCC
CAGGGGACACTGTCTCTGGAAAGCCAGGCACACCCAAGGGTGCAGGAATGGCAGGCCCAGGCGGTTTGGCACGCA
GCAGCCGGAACGAGTACATGCGCTCGGGCCTCTATTCCACCTTCACCATCCAGTCTCTGCAGCCGCAGCCACCCC
CTCATCCTCGGCCTGCTGTGGTGCTCCCCAGTGCAGCTCCTGCAGGGGCAGCAGCGCCCCCCTCGGGGAGCAGGA
GCACCAGTCCAAGCCCCTTGGAGGCCTGTCTGGAGGCTGAAGAGGCCGGCTTGCCTCTGCAGGTCATCCTGACCC
CGCCCGAGGCCCCAAACCTGAAATCGGAAGAGCTTAATGTGGAGCCGGGTTTGGGCCGGGCTTTGCCCCCAGAAG
TGAAAGTAGAAGGGCCCAAGGAAGAGTTGGAAGTTGCGGGGGAGAGAGGGTTTGTGCCAGAAACCACCAAGGCCG
AGCCAGAAGTCCCTCCACAGGAGGGCGTGCCAGCCCGGCTGCCCGCGGTTGTTATGGACACCGCAGGGCAGGCGG
GCGGCCATGCGGCTTCCAGCCCTGAGATCTCCCAGCCGCAGAAGGGCCGGAAGCCCCGGGACCTAGAGCTTCCAC
TCAGCCCGAGCCTGCTAGGTGGGCCGGGACCCGAACGGACCCCAGGATCGGGAAGTGGCTCCGGCCTCCAGGCTC
CGGGGCCGGCGCTGACCCCATCCCTGCTTCCTACGCATACATTGACCCCGGTGCTGCTGACACCCAGCTCGCTGC
CTCCTAGCATTCACTTCTGGAGCACCCTGAGTCCCATTGCGCCCCGTAGCCCGGCCAAGCTCTCCTTCCAGTTTC
CATCCAGTGGCAGCGCCCAGGTGCACATCCCTTCTATCAGCGTGGATGGCCTCTCGACCCCCGTGGTGCTCTCCC
CAGGGCCCCAGAAGCCA**TGA**CTACTACCACCACCACCACCCCTTCTGGGGTCACTCCATCCATGCTCTCTCC
AGCCAGCCATCTCAAGGAGAAACATAGTTCAACTGAAAGACTCATGCTCTGATTGTGGTGGGGTGGGGATCCTTG
GGAAGAATTACTCCCAAGAGTAACTCTCATTATCTCCTCCACAGAAAACACACAGCTTCCACAACTTCTCTGTTT
TCTGTCAGTCCCCCAGTGGCCGCCCTTACACGTCTCCTACTTCAATGGTAGGGGCGGTTTATTTATTTATTTTTT
GAAGGCCACTGGGAGGAGCCTGACCTAACCTTTTAGGGTGGTTAGGACATCTCCCCCACCTCCCCACTTTTTTCC
CCAAGACAAGACAATCGAGGTCTGGCTTGAGAACGACCTTTCTTTCTTTATTTCTCAGCCTGCCCTTGGGGAGAT
GAGGGAGCCCTGTCTGCGTTTTTGGATGTGAGTAGAAGAGTTAGTTTGTTTTGTTTTATTATTCCTGGCCATACT
CAGGGGTCCAGGAAGAATTTGTACCATTTAATGGGTTGGGAGTCTTGGCCAAGGAAGAATCACACCCTTGGAATA
GAAATTTCCACCTCCCCAACCTTTCTCTCAGACAGCTTATCCTTTTCAACCAACTTTTTGGCCAGGGAGGAATGT
CCCTTTTGTTCTTCCCCCTGAGAAGCCATTCCTTTGTCTGCCAACCTCCCTGGGGTCCTGCCTGTTTCCTCCCAA
TGGAGGGTTTTTTTGGGGGGTGGTCCCCGTCTGGGGGGCCCCTCCAGCCAGTACTCCAGGTCTCCCTGTCTCTCC
CCCGCTGCCATTTTGATAGTATAATCTATTTTTAAATGGGGCTTTTCAATAGGGGAGAGGGAGTCATCTCTTCCT
ATATTTGGTGGGGTGGGTGGGAAGGAAGGGATTTGGGGGGGAATCTTCCTGCCGCCTCCCCCACTCCAAGTGTTT
ATTTTTGATACCAAACATGAATTTTCAGTTCCCTCCCTCCCAGCCCCCCAATTTCCTGCGGGCGGGTACAAAGGA
CCCTTTCAATGTCCCTGGAGTTGGGAGGGAGGAATGGGGGACATAAAGCCTGTCCTGTCTCTATTCTAGGCAAGA
GAGAGTGGGTTCAAAAGACTCCTGGGCTCACCTGTTAGCGCTGGCCCAGCCCAGGCCTTGGGACCTGGGGGTTGG
TGATTTGGGGGACAGTGCTACACTCGTCTCCACTGTTTGTTTTACTTCCCCAAAATGGACCTTTTTTTTTTCTAA
AGAGTCCCAGAGAATGGGGAATTGTTCCTGTAAATATATATTTTTCAAAGTGA

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FIGURE 3124

GGGTCTCAGCAGCTCGGGTGGCGGGAGGAGTGGCAGCGGCCAGGCAGCCCAGTTTCGCGAAGGCTCTCGGCGCGC
CGCAGCCCGCAGGCACCCGGCACACACCCTCCCTGCCACCAGGATGCCCAAGAGGAAGGTCAGCTCCACCAAAGG
GGCCGCCAAGGAAGAGCCCAAGAGGAGATCGGCGCGGTTGTCAGCTAAACCTCCTGCAAAAGTGGAAGTGAAGCC
AAAAAAGGCAGCAGCGAAGGATAAATCTTCAGACAAAAAAGTGCAAACAAAAGGGAAAAGGAGAGCAAAGGGAAA
ACAGGCCGAAGTGGCTAACCAAGAAACTAAAGAAGATTTACCTGCAGTAAACAGGGAAACGAAAACTGAGGAGAG
TCCAGCCTCTGATGAAGCAGGAGAGAAAGAAGCCAAGTCTGATTAATACCATATACCATGTCTTATCAGTGGTCC
CTGTCTCCCTTCTTGTACAATCCAGAGGAATATTTTTATCAACTATTTTGTAAATGCAAGTTTTTTAGTAGCTCT
AGAAACATTTTTAAGAAGGAGGGAATCCCACCTCATCCCACTTTTTAAGTGTAAATGCTTTTTTTAAGAGGTGAA
ATCATTTGCTGGTTGTTTATTTTTTGGTACAACCAGAAAATAGTGTGGGATATTGAATTATGGGAGGCTCTGACT
GTCTCGGGTGTCAGCTTAACATTCCATAGATGGGGGGGTTAGTTTTTATATCCTATAATACAAAGCATATTAAAT
GGCAATATGGAGTCAGTCCTGCATTTAATGTCTTGAACATTTTAAATTACTTCTATTCCCATGTTGTTTTTTAGT
AGAATTGTTTCCTAAAGAAAACCACTCTTTGATCATGGCTCTCCCTGTCAGAATTGTGTGCACTCTGTAACATCT
TTGGTTGTGGTTTTCCTAATCACTTGGTTACTGTGCTGTGAAAGATTACAAATTTGAACATGTAGTGTACGTGCT
ATTCAGTTGTGAACTGGTGGGCCGTATGTAACAGCTGACCAACATGTGAAGATACTGGTACTTGATAGCCTCTTA
AGGAAAATTTGCTTCCAAATTTTAAGCTGGAAAGTCACTGGAATAACTTTAAAAAAGAATTACAATACATGGCTT
TTTAGAATTTCGTTATGTATGTTAAGATTTGTGTACAAATTGAAATGTCTGTACTGATCCTCAACCAATAAAATC
TCA

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FIGURE 3125

GGTGACTGGCCCAGCCGCACCGCGTCTCCCGCCTTCTCCGCAGCCCCGCAGGCCCCGGGCCCTGTCATTCCCAGC
GCTGCCCTGTCTTGCGTTCCAGTGTTCCAGCTTCTGCGAGATGACCCTCAAGGCGAGCGAGGGCGAGAGTGGGGG
CAGCATGCACACGGCGCTCTCCGACCTCTACCTGGAGCATTTGCTGCAGAAGCGTAGTCGGCCAGAGGCTGTATC
GCATCCATTGAATACTGTGACCGAGGACATGTACACCAACGGGTCTCCTGCCCCAGGTAGCCCTGCCCAGGTCAA
GGGACAGGAGGTGCGGAAAGTGCGACTCATACAGTTTGAGAAGGTCACAGAAGAGCCCATGGGAATCACGCTGAA
GCTGAATGAAAAACAGTCCTGTACGGTGGCCAGAATTCTTCATGGTGGCATGATCCATAGACAAGGCTCCCTTCA
CGTGGGGGATGAGATCCTAGAAATCAATGGCACAAATGTGACAAATCATTCAGTGGATCAGCTGCAGAAGGCGAT
GAAAGAAACCAAAGGAATGATCTCATTAAAAGTAATTCCCAACCAGCAAAGCCGTCTTCCTGCACTACAGATGTT
CATGAGAGCGCAGTTTGACTATGATCCCAAAAAGGACAATCTGATCCCTTGCAAGGAGGCGGGACTGAAGTTTGC
TACTGGGGACATTATCCAGATTATCAACAAGGATGACAGCAATTGGTGGCAGGGACGGGTGGAAGGCTCCTCCAA
GGAGTCAGCAGGATTGATCCCTTCCCCTGAGCTGCAGGAATGGCGAGTGGCAAGTATGGCTCAGTCAGCTCCTAG
CGAAGCCCCGAGCTGCAGTCCCTTTGGGAAGAAGAAGAAGTACAAAGACAAATATCTGGCCAAGCACAGCTCGAT
TTTTGATCAGTTGGATGTTGTTTCCTACGAGGAAGTCGTTCGGCTCCCTGCATTCAAGAGGAAGACCCTGGTGCT
GATCGGAGCCAGTGGGGTGGGTCGCAGCCACATTAAGAATGCCCTGCTCAGCCAGAATCCGGAGAAGTTTGTGTA
CCCTGTCCCATATACAACACGGCCGCCAAGGAAGAGTGAGGAAGATGGGAAGGAGTACCACTTTATCTCAACGGA
GGAGATGACGAGGAACATCTCTGCCAATGAGTTCTTGGAGTTTGGCAGCTACCAAGGCAACATGTTTGGCACCAA
ATTTGAAACAGTGCACCAGATCCATAAGCAGAACAAGATTGCCATCCTTGACATTGAGCCCCAGACCCTGAAAAT
TGTTCGGACAGCAGAACTTTCGCCTTTCATTGTGTTCATTGCACCTACTGACCAGGGCACTCAGACAGAAGCCCT
GCAGCAGCTGCAGAAGGACTCTGAGGCCATCCGCAGCCAGTACGCTCACTACTTTGACCTCTCACTGGTCAATAA
TGGTGTTGATGAAACCCTTAAGAAATTACAAGAAGCCTTCGACCAAGCGTGCAGTTCTCCACAGTGGGTGCCTGT
CTCCTGGGTTTACTAAGCTTGTAGAATGGGGGAACCCACTGTATGCCCCTCTCCAGCATTTGGAATTCCACCCGC
CTTGCTTTAAGACAAACAGGGCTGCTCCAACTAGTTTTGTGTCAGCTTCCAGCTCTCTGCAGCTATCCTAATTCA
GCCAGTAAGGTTCAGTCTTCTTGCTCAGGCTCCTGAAGGGTTGATTCTCCTGATAGATGGGGCCCCACTGATCTG
GATTTGAAAAGGATTTCTAGAAATTGGGGGTAAGAAGTACTACCAAAATGTAACTGCTAATCAAGGGTGATGCAC
AGCAAAAGCAATGGACCCCATCCCTCTAAAGCCTGCCCTCCTTTGCCTTCAACTGTATATGCTGGGTATTTCATT
TGTCTTTTTATTTTGGAGAAAGCGTTTTTAACTGCAACTTTCTATAATGCCAAAATGACACATCTGTGCAATAGA
ATGATGTCTGCTCTAGGGAAACCTTCAAAAGCAATAAAAATGCTGTGTTG

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FIGURE 3126

AGCAGCGCGGCCTGACGGGACCAAGGCGGCGGGAGTCTGCGGTCGTTCCCTCGGCTGTGGACCGGGCGGCACGCA
CGCGGTGCAGGGTAACATGGCGGATGCGGAAGTAATTATTTTGCCAAAGAAACATAAGAAGAAAAAGGAGCGGAA
GTCATTGCCAGAAGAAGATGTAGCCGAAATACAACACGCTGAAGAATTTCTTATCAAACCTGAATCCAAAGTTGC
TAAGTTGGACACGTCTCAGTGGCCCCTTTTGCTAAAGAATTTTGATAAGCTGAATGTAAGGACAACACACTATAC
ACCTCTTGCATGTGGTTCAAATCCTCTGAAGAGAGAGATTGGGGACTATATCAGGACAGGTTTCATTAATCTTGA
CAAGCCCTCTAACCCCTCTTCCCATGAGGTGGTAGCCTGGATTCGACGGATACTTCGGGTGGAGAAGACAGGGCA
CAGTGGTACTCTGGATCCCAAGGTGACTGGTTGTTTAATCGTGTGCATAGAACGAGCCACTCGCTTGGTGAAGTC
ACAACAGAGTGCAGGCAAAGAGTATGTGGGGATTGTCCGGCTGCACAATGCTATTGAAGGGGGGACCCAGCTTTC
TAGGGCCCTAGAAACTCTGACAGGTGCCTTATTCCAGCGACCCCCACTTATTGCTGCAGTAAAGAGGCAGCTCCG
AGTGAGGACCATCTACGAGAGCAAAATGATTGAATACGATCCTGAAAGAAGATTAGGAATCTTTTGGGTGAGTTG
TGAGGCTGGCACCTACATTCGGACATTATGTGTGCACCTTGGTTTGTTATTGGGAGTTGGTGGTCAGATGCAGGA
GCTTCGGAGGGTTCGTTCTGGAGTCATGAGTGAAAAGGACCACATGGTGACAATGCATGATGTGCTTGATGCTCA
GTGGCTGTATGATAACCACAAGGATGAGAGTTACCTGCGGCGAGTTGTTTACCCTTTGGAAAAGCTGTTGACATC
TCATAAACGGCTGGTTATGAAAGACAGTGCAGGTAAATGCCATCTGCTATGGGGCCAAGATTATGCTTCCAGGTG
TTCTTCGATATGAGGACGGCATTGAGGTCAATCAGGAGATTGTGGTTATCACCACCAAAGGAGAAGCAATCTGCA
TGGCTATTGCATTAATGACCACAGCGGTCATCTCTACCTGCGACCATGGTATAGTAGCCAAGATCAAGAGAGTGA
TCATGGAGAGAGACACTTACCCTCGGAAGTGGGGTTTAGGTCCAAAGGCAAGTCAGAAGAAGCTGATGATCAAGC
AGGGCCTTCTGGACAAGCATGGGAAGCCCACAGACAGCACACCTGCCACCTGGAAGCAGGAGTATGTTGACTACA
GTGAGTCTGCCAAAAAAGAGGTGGTTGCTGAAGTGGTAAAAGCCCCGCAGGTAGTTGCCGAAGCAGCAAAAACTG
CGAAGCGGAAGCGAGAGAGTGAGAGTGAAAGTGACGAGACTCCTCCAGCAGCTCCTCAGTTGATCAAGAAGGAAA
AGAAGAAGAGTAAGAAGGACAAGAAGGCCAAAGCTGGTCTGGAGAGCGGGGCCGAGCCTGGAGATGGGGACAGTG
ATACCACCAAGAAGAAGAAGAAGAAGAAGAAAGCAAAAGAGGTAGAATTGGTTTCTGAGTAGTGAAGGCCACTTG
AAGCTGGAGGAGAAACTAAAGCCTTATTGAGAAAACATGTTATAGATCCTTTTGTTGCTGAGAGAGTGGAACATA
GGTCCTAGACAGGGTGAAGAGTTCTGGCACATTTTAGCTGCTACTTTGAGACCTCGGTGATGTTACCTGGTGTGG
TCATCCCATCTTGTCCTGTTTTAAGGATATGGGTGGTGAAAGATGAAAGAGGCAGAGTTTATCCCAATGACTTCT
CTGTTTGAGTTGGGAAGCCTCACCTTCAGACCCAGTAACTGTCCGCAGCTGTCTGCTAGTGGTTGTCTTAACATC
GTAGTCCTAGTTTGCATTTTTTAAATCCCCTCTGTTTAAAAGGTTTGTAAAACAAAAACAAAAAACTAAGTCTGC
TCAGTGAAATGCTGTAGAACCCTAAATAAGTGGTAGAAGAGTGTCACTGAATTTTGTCTCTGAATTCAGTATAAC
TGAGTTTTGTCCATGCTGGTGTCTGGGTTATAGGCCTGATGGGCCTGGTAGTTTTCCATCTTGTTCTGGCCTAGA
GGTCAGTCCTTTGCACTTCCTCAAAGCTTGTGTACAGTGCTCACCTAAATCCATCTGACTACTTGTTCCTGTGCC
CTCTTGTTTTAGGCCTCGTTTACTTTTAAAAAATGAAATTGTTCATTGCTGGGAGAAGAATGTTGTAATTTTTAC
TTATTAAAGTCAACTTGTTAAGTTTTTTATGTATTCCTGTTGGGTTTTCTTGTTGATCTCATGCTAGCAGAGCAA
AAATTGTAAAATATTTTGATTAAAAATCTAGGGACCTTTATGTCCTATTTG

FIGURE 3127A

CCCAGCTGGAGGAAGCGGCGGCGGCGGCCACGATGAGTGCGGGCGACGCAGTGTGCACCGGCTGGCTCGTTAAGT
CGCCCCCCGAGAGGAAGCTACAGCGCTACGCCTGGCGCAAGCGCTGGTTTGTCCTCCGGCGAGGCCGCATGAGCG
GCAACCCCGATGTCTTGGAGTACTACAGGAACAAGCACTCCAGCAAGCCCATCCGGGTGATAGACCTCAGCGAGT
GTGCAGTGTGGAAGCATGTGGGCCCCAGCTTTGTTCGGAAGGAATTTCAGAATAATTTCGTGTTCATTGTCAAGA
CTACTTCCCGTACATTCTACCTGGTGGCCAAAACTGAGCAAGAAATGCAGGTGTGGGTGCACAGCATCAGTCAGG
TCTGCAACCTTGGCCACCTGGAGGATGGTGCAGATTCCATGGAGAGCCTCTCTTACACGCCCTCCTCCCTGCAGC
CATCCTCTGCCAGCTCCCTTCTTACCGCCCATGCTGCCAGCTCCTCTTTGCCAAGAGATGACCCAAACACTAATG
CCGTAGCCACTGAGGAAACCAGAAGTGAGTCAGAGCTTCTCTTCCTTCCAGATTATCTGGTTTTGTCCAACTGCG
AGACTGGAAGACTGCACCATACCAGTCTACCCACCAGATGTGATAGCTGGTCAAACTCAGACCGTTCATTGGAAC
AGGCTTCATTTGATGATGTTTTTGTTGACTGCCTGCAGCCGCTCCCCTCCAGTCATTTGGTCCACCCCTCATGCC
ATGGCAGTGGAGCTCAGGAGGTGCCATCCTCGAGGCCTCAGGCTGCCCTGATCTGGAGTAGAGAAATCAATGGGC
CACCCAGGGACCACTTGTCTTCTTCACCATTGCTGGAAAGTTCCTTAAGTTCCACCATTCAGGTAGATAAAAATC
AAGGTTCCTTACCCTGTGGAGCAAAAGAACTAGACATTATGTCCAACACTCCACCTCCCCGCCCCCCTAAGCCAA
GCCATCTGTCTGAACGGCGCCAAGAGGAGTGGAGTACACACAGTGGTAGCAAGAAGCCAGAATGCACTCTGGTTC
CAAGAAGAATCTCCCTCTCTGGTTTAGACAACATGAGAACCTGGAAAGCTGATGTAGAAGGCCAATCCTTAAGAC
ACCGAGACAAGCGGCTTAGTTTGAATTTGCCATGCAGGTTCTCCCCGATGTACCCCACAGCTTCAGCCAGTATCG
AAGACAGCTATGTGCCCATGAGCCCCCAGGCTGGTGCCTCTGGTCTTGGACCCCACTGCAGCCCTGATGACTACA
TTCCAATGAACTCAGGAAGCATCTCAAGCCCGTTGCCTGAGCTGCCTGCAAACCTGGAACCTCCCCCAGTGAATA
GAGATCTCAAGCCTCAGAGGAAATCACGGCCACCTCCTCTGGACCTGAGAAACCTCTCGATCATCCGGGAACATG
CATCTCTTACCAGGACCCGCACTGTGCCTTGCAGTCGAACCAGCTTTCTCTCTCCAGAAAGAAATGGTATTAATT
CTGCAAGATTTTTTGCTAATCCTGTTTCCAGAGAAGACGAAGAAAGCTACATCGAAATGGAGGAGCACCGAACAG
CCAGTTCCCTGAGCAGTGGTGCCCTTACGTGGACAAAGAAATTCAGCCTAGATTATTTGGCCCTGGACTTCAATT
CAGCATCACCAGCCCCCATGCAGCAGAAACTTCTCCTTTCAGAAGAACAAAGAGTAGACTATGTCCAAGTGGATG
AGCAGAAGACACAGGCTCTCCAGAGCACAAAACAGGAGTGGACGGATGAAAGGCAATCCAAAGTATGAGAGGTGC
GGGCTTGTGCCATGTGTGAAACAGGGAAGCTTGGGGCTCAGTTTGAGTTTTTTCTTTTTTTTTTTTTTTGTCCA
CTAAAAACACACTGATGGTCAACACAGGTCAAAACCAAGAGAGAATGTGTAGTTTTCAAGGTCTTGGCCAGAACC
TTTAGGAAAGAAGACCTGTTTATACATTGAAGGAAGAAAAGAAGGAAGCAGTTGCCTTCCGGAGGGGGCTCTGAG
AGAATCTAGCCTCCCCTCTGTCCTATTGGAGCAAAGATTGGAGTGAGTGTTGCCACCAACAGGATTTTATCGTTT
GACTCCAATACCTGAAATTCTGACTTCTCTCCTGTGCTTCAATGAGAATGATAAATTATCCTAGCAAAGGGGCCT
CTGGAGACCATCTTGTTCCAGCCTCTGAAGACAGTTGAGGAGATCAAGCCCAGCAATGGTGGCAGAATCTTACTC
CACAGACTTCAGCAGACTAGTCATTTCAATACCCAAAGAAAGACAAGTGACAGGGGCAATGGATCTCAGGCTCTG
AGATAAGTATATCAGATGACACTGGTGGCTCTAAGGATATTGCAATTAAGCAGCTACCTGTAGCCAGGTATTCTG
CTGCTCTTGGCCTTTTCCCACGCATCGTCTCGTGTCTTCTCCGAAAGACCTTGGAAGATAGGCCTGGAAGAGACT
GTTGATGCCACTTTGAAGAAAAGAACACTGAGAACTAGAGGAGGGAACACTTTGCCCAAGATTACTCACAAAGCC
AAGACCCAGAGTCCAGCTTAGAGAATAGAGTTGTTCAGGCTGCCAATTGCAAGCTCATTCCTCTACCTCATACTT
CCTCTGAGGATTTTGACAAAATGGATTAATTGGGTGAGCCTTGGAGACATGTGGGAAACACCTGCAGACACAAAA
TGAGTAGTCATCCTGTCTCCCTTTCAATAGGGATCTGAACAGGTGTTTTGATACTTGAAAGATGTGCATGTCAAG
TGAGGGTTTCTTTCTGCGATGTTCAACTGGAACTCTCCCATCAGTAGTTACAATTAGAAATACCTACTGATGGTT
AGTCTGAAGGCCATTCTCATGGTCACCTATACAGTGTGTTTCCCTGTGAGCTAGCAGACACAATGACCAGGAAAA
AACCTATGAATTCCATTCTTAGGTTTCCCAGCCAATTGCTCCCTTCTGCTTTAGAAGTGACTAGGTACTGAGAGT
ACAAACACTCCCACTTTATAATGAAGGCGTCATGTCACCCCTTCCTTTACAGGTCCTGGGGTCCAGGAGACCCAG
AATGAAGGTGTCAGTTGGGCATGAAGTGTTATTTAGTGTCCATTCTTGATCCTTCTGAGCACCTACAGCTGGAAA
CTAAGCAGATACTGGTCCTGCATTCTGACTGAGATTGTGTCTTCTTTATGAGGATAGATCAAATTGGCAGTCAGG
CCCATGATAGTCAGTGCAGTTGGGGCAGTTGTAGACTTTGCTACAGGATTTCAGGGTTTCCAATCACCCCACAGG
TAAGTGAATGCCAAAGTCTTCTTTTTTCAGACCATACAAGAAGTCATTTTGATTTTCAAAGAAGCCGTTTTGATT
TTCAAAGAAGCAGGTTCTGGTGACATTATTTTCTTCCTTGGACAAAGTGGGGGGAAATTTCTAAGTATTTTAACT
GAGTTCAGGGTCCTTAGTGAGCCTGGACAGAGCAAGGAGAGGGCTCCCCACTCCCTAAGCCCCACAGCCAGCTCT
GCATCACCACACACAGCCAGAGCCTGTGAGGAGCTGCCTTCTTCCCCATGTGACTTGCAAAGAGTCTCAGGCAAG

FIGURE 3127B

AAACCAGGGCTTCAAACTGCTAGTTCCCATGGAGGGTAGTTCCCTCGTGTGGAGCACTTGTGTTAGGATCACTGA
TTATCTGACAAAGGCTGGTGCAGAAAAAAAATTGTAGGCCCAAGTGTCAAGAACCACACCAGATTGGAGATAGAA
AAGAATAGCTGAAATTATGTCAGTGGTGAAATGTCACTCCATTGACCCACCGAAAAAAGAAAAGAAATCTGTTTC
TACCAAACATTTCCAGAAACGTATTTATAGCATGAAGAAACACACATGGGTAGTGTGACCTGTTTGGATGTGATT
ACTTAAAAATGGAATGCTCTGAATAGGCACTCTCTACATTAAAGGTATGGAAGGCGATAGGGGTCAGAATTTTAA
AAATTTAATTTTGAAAAAGGTGACTCACCCCTCATTTCCAGAGTGTAGGCAATTATGTCCTGCTTTGATAAAACT
GCTAGAGGATGGCTATGCAAAAGCATAACGATTCAAGGAAACAAAGTACAGGTAGTTTTTGAGCTGACAGCAGCA
AAGGCACCATAAGTCAAAATATTGGTTTTGGTGGAGATGATCGATGTGTGTGTGTGAGAGAGAGCTATGTTTCTA
ACCAAGGGCCTAATGTTTGTTACAGAAATGATCCCAGAGACCTACAAGATGTGGGAATCAGCATAACAGGGCAAT
GCAGCAATTAACCCCACATCGTTTTCTGTAGTTCCTTTTTGTTTCATTTTCTTCTGTCTCACCTCGTTAGAAAAT
TCCTCCCAGTCAGGGGTCGTCCAGTGCAGGACGGGGGACCCAAGGGTCTCAAGCCTGCAAGTCCAGAAGGTGACA
AACCCAGGAGCACTGGGAGTTAAGCTTTCCTTGGGGAGGGAAGAGCCTTGATGTCCAGCACACAGCCTGGCTATA
AAGACACGAAGCGACCTACCCACTGTACAGTCCACTTCACAGGATCAGCTGAATCATGACCTTTAAAAGTTCCGA
GTTGAAACTGAAGGCTCTCCTCAGACCTGGCTTTTTCCTCAGTCCCTGTTCATACCATCTCTGCACCCACAATCA
CACTGATTTTTCAAATTCATTTTGTTTTTGCTGTTTCATTTCTGGCATTAATAAAAGTCTTATAAGG

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FIGURE 3128

CATGGCCCTTGTGATCCAGGTGGGGAAACTAAGGCCCAGAGAAGTGAGGACCCCGCAGACTATCAATCCCAGTCT
CTTCCCCTCACTCCCTGTGAAGCTCTCCAGCATCATCGAGGTCCCATCAGCCCTTGCCCTGTTGGATGAATAGGC
ACCTCTGGAAGAGCCAACTGTGTGAGATGGTGCAGCCCAGTGGTGGCCCGGCAGCAGATCAGGACGTACTGGGCG
AAGAGTCTCCTCTGGGGAAGCCAGCCATGCTGCACCTGCCTTCAGAACAGGGCGCTCCTGAGACCCTCCAGCGCT
GCCTGGAGGAGAATCAAGAGCTCCGAGATGCCATCCGGCAGAGCAACCAGATTCTGCGGGAGCGCTGCGAGGAGC
TTCTGCATTTCCAAGCCAGCCAGAGGGAGGAGAAGGAGTTCCTCATGTGCAAGTTCCAGGAGGCCAGGAAACTGG
TGGAGAGACTCGGCCTGGAGAAGCTCGATCTGAAGAGGCAGAAGGAGCAGGCTCTGCGGGAGGTGGAGCACCTGA
AGAGATGCCAGCAGCAGATGGCTGAGGACAAGGCCTCTGTGAAAGCCCAGGTGACGTCCTTGCTCGGGGAGCTGC
AGGAGAGCCAGAGTCGCTTGGAGGCTGCCACTAAGGAATGCCAGGCTCTGGAGGGTCGGGCCCGGGCGGCCAGCG
AGCAGGCGCGGCAGCTGGAGAGTGAGCGCGAGGCGCTGCAGCAGCAGCACAGCGTGCAGGTGGACCAGCTGCGCA
TGCAGGGCCAGAGCGTGGAGGCCGCGCTCCGCATGGAGCGCCAGGCCGCCTCGGAGGAGAAGAGGAAGCTGGCCC
AGTTGCAGGTGGCCTATCACCAGCTCTTCCAAGAATACGACAACCACATCAAGAGCAGCGTGGTGGGCAGTGAGC
GGAAGCGAGGAATGCAGCTGGAAGATCTCAAACAGCAGCTCCAGCAGGCCGAGGAGGCCCTGGTGGCCAAACAGG
AGGTGATCGATAAGCTGAAGGAGGAGGCCGAGCAGCACAAGATTGTGATGGAGACCGTTCCGGTGCTGAAGGCCC
AGGCGGATATCTACAAGGCGGACTTCCAGGCTGAGAGGCAGGCCCGGGAGAAGCTGGCCGAGAAGAAGGAGCTCC
TGCAGGAGCAGCTGGAGCAGCTGCAGAGGGAGTACAGCAAACTGAAGGCCAGCTGTCAGGAGTCGGCCAGGATCG
AGGACATGAGGAAGCGGCATGTCGAGGTCTCCCAGGCCCCCTTGCCCCCCGCCCCTGCCTACCTCTCCTCTCCCC
TGGCCCTGCCCAGCCAGAGGAGGAGCCCCCCCGAGGAGCCACCTGACTTCTGCTGTCCCAAGTGCCAGTATCAGG
CCCCTGATATGGACACCCTGCAGATACATGTCATGGAGTGCATTGAGTAGGGCCGGCCAGTGCAAGGCCACTGCC
TGCCGAGGACGTGCCCGGGACCGTGCAGTCTGCGCTTTCCTCTCCCGCCTGCCTAGCCCAGGATGAAGGGCTGGG
TGGCCACAACTGGGATGCCACCTGGAGCCCCACCCAGGAGCTGGCCGCGGCACCTTACGCTTCAGCTGTTGATCC
GCTGGTCCCCTCTTTTGGGGTAGATGCGGCCCCGATCAGGCCTGACTCGCTGCTCTTTTTGTTCCCTTCTGTCTG
CTCGAACCACTTGCCTCGGGCTAATCCCTCCCTCTTCCTCCACCCGGCACTGGGGAAGTCAAGAATGGGGCCTGG
GGCTCTCAGGGAGAACTGCTTCCCCTGGCAGAGCTGGGTGGCAGCTCTTCCTCCCACCGGACACCGACCCGCCCG
CTGCTGTGCCCTGGGAGTGCTGCCCTCTTACCATGCACACGGGTGCTCTCCTTTTGGGCTGCATGCTATTCCATT
TTGCAGCCAGACCGATGTGTATTTAACCAGTCACTATTGATGGACATTTGGGTTGTTTCCCATCTTTTTGTTACC
ATAAATAATGGCATAGT

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FIGURE 3129

AGGGACAGCCCAGAGGAGGCGTGGCCACGCTGCCGGCGGAAGTGGAGCCCTCCGCGAGCGCGCGAGGCCGCCGGG
GCAGGCGGGGAAACCGGACAGTAGGGGCGGGGCCGGGCCGGCGATGGGGATGCGGGAGCACTACGCGGAGCTGCA
CCCGTGCCCGCCGGAATTGGGGATGCAGAGCAGCGGCAGCGGGTATGGCAGGCAGCCGGCGGGCCGGCCTCCAGC
GCAGGTGCCCGAGAGGCAGGGGCTGGCCTGGGATGCGCGCGCACCTGCCCTCGCCCCGCCCCGCCCGCACGAGGG
GTGGTGGCCGAGGCCCCGCCCCGCACGCCTCGCCTGAGGCGGGTCCGCTCAGCCCAGGCGCCCGCCCCCGCCCCC
GCCGATTAAATGGGCCGGCGGGGCTCAGCCCCCGGAAACGGTCGTACACTTCGGGGCTGCGAGCGCGGAGGGCGA
CGACGACGAAGCGCAGACAGCGTC**ATG**GCAGAGCAGGTGGCCCTGAGCCGGACCCAGGTGTGCGGGATCCTGCGG
GAAGAGCTTTTCCAGGGCGATGCCTTCCATCAGTCGGATACACACATATTCATCATCATGGGTGCATCGGGTGAC
CTGGCCAAGAAGAAGATCTACCCCACCATCTGGTGGCTGTTCCGGGATGGCCTTCTGCCCGAAAACACCTTCATC
ATGGGCTATGCCCGTTCCCGCCTCACAGTGGCTGACATCCGCAAACAGAGTGAGCCCTTCTTCAAGGCCACCCCA
GAGGAGAAGCTCAAGCTGGAGGACTTCTTTGCCCGCAACTCCTATGTGGCTGGCCAGTACGATGATGCAGCCTCC
TACCAGCGCCTCAACAGCCACATGGATGCCCTCCACCTGGGGTCACAGGCCAACCGCCTCTTCTACCTGGCCTTG
CCCCCGACCGTCTACGAGGCCGTCACCAAGAACATTCACGAGTCCTGCATGAGCCAGATAGGCTGGAACCGCATC
ATCGTGGAGAAGCCCTTCGGGAGGGACCTGCAGAGCTCTGACCGGCTGTCCAACCACATCTCCTCCCTGTTCCGT
GAGGACCAGATCTACCGCATCGACCACTACCTGGGCAAGGAGATGGTGCAGAACCTCATGGTGCTGAGATTTGCC
AACAGGATCTTCGGCCCCATCTGGAACCGGGACAACATCGCCTGCGTTATCCTCACCTTCAAGGAGCCCTTTGGC
ACTGAGGGTCGCGGGGGCTATTTCGATGAATTTGGGATCATCCGGGACGTGATGCAGAACCACCTACTGCAGATG
CTGTGTCTGGTGGCCATGGAGAAGCCCGCCTCCACCAACTCAGATGACGTCCGTGATGAGAAGGTCAAGGTGTTG
AAATGCATCTCAGAGGTGCAGGCCAACAATGTGGTCCTGGGCCAGTACGTGGGGAACCCCGATGGAGAGGGCGAG
GCCACCAAAGGGTACCTGGACGACCCCACGGTGCCCCGCGGGTCCACCACCGCCACTTTTGCAGCCGTCGTCCTC
TATGTGGAGAATGAGAGGTGGGATGGGGTGCCCTTCATCCTGCGCTGCGGCAAGGCCCTGAACGAGCGCAAGGCC
GAGGTGAGGCTGCAGTTCCATGATGTGGCCGGCGACATCTTCCACCAGCAGTGCAAGCGCAACGAGCTGGTGATC
CGCGTGCAGCCCAACGAGGCCGTGTACACCAAGATGATGACCAAGAAGCCGGGCATGTTCTTCAACCCCGAGGAG
TCGGAGCTGGACCTGACCTACGGCAACAGATACAAGAACGTGAAGCTCCCTGACGCCTACGAGCGCCTCATCCTG
GACGTCTTCTGCGGGAGCCAGATGCACTTCGTGCGCAGCGACGAGCTCCGTGAGGCCTGGCGTATTTTCACCCCA
CTGCTGCACCAGATTGAGCTGGAGAAGCCCAAGCCCATCCCCTATATTTATGGCAGCCGAGGCCCCACGGAGGCA
GACGAGCTGATGAAGAGAGTGGGTTTCCAGTATGAGGGCACCTACAAGTGGGTGAACCCCCACAAGCTC**TGA**GCC
CTGGGCACCCACCTCCACCCCCGCCACGGCCACCCTCCTTCCCGCCGCCCGACCCCGAGTCGGGAGGACTCCGGG
ACCATTGACCTCAGCTGCACATTCCTGGCCCCGGGCTCTGGCCACCCTGGCCCGCCCCTCGCTGCTGCTACTACC
CGAGCCCAGCTACATTCCTCAGCTGCCAAGCACTCGAGACCATCCTGGCCCCTCCAGACCCTGCCTGAGCCCAGG
AGCTGAGTCACCTCCTCCACTCACTCCAGCCCAACAGAAGGAAGGAGGAGGGCGCCCATTCGTCTGTCCCAGAGC
TTATTGGCCACTGGGTCTCACTCCTGAGTGGGGCCAGGGTGGGAGGGAGGGACAAGGGGGAGGAAAGGGGCGAGC
ACCCACGTGAGAGAATCTGCCTGTGGCCTTGCCCGCCAGCCTCAGTGCCACTTGACATTCCTTGTCACCAGCAAC
ATCTCGAGCCCCCTGGATGTCCCCTGTCCCACCAACTCTGCACTCCATGGCCACCCCGTGCCACCCGTAGGCAGC
CTCTCTGCTATAAGAAAAGCAGACGCAGCAGCTGGGACCCCTCCCAACCTCAATGCCCTGCCATTAAATCCGCAA
ACAGCC

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FIGURE 3130

AACCACATCTTCGTCCCAGCCCCGGAGGCTCCTGTGGGCAAGATCGTGAGCCAACGGGTTCCTGAGGCCCCTCCT
GGCCAGGCAGGGTTTCCCCGCGCGTTTCCGAGGAGCCCTGCCTGGCCGGGCGGCTGGACAAACAGGTCGTAGCAC
CGATCGCGCCCGCCCCCAGCAGGGGTCCCGCACAGGCTTGCCCCTGACCCCCACCCAAACCTGTCCTTCCGCTTT
GCCCCCAAACAGTGCACTTGCCGGCGGTCCCAACCCAGCAGGAGAAGTGGAC**ATG**AGGTTGGCAGGCCCTCTCCG
CATTGTGGTCCTAGTCGTCAGTGTGGGTGTCACATGGATCGTGGTCAGCATCCTCCTGGGTGGGCCTGGCAGTGG
CTTTCCTCGCATCCAGCAACTCTTCACCAGTCCAGAGAGCTCGGTGACTGCAGCGCCACGGGCCAGGAAGTACAA
GTGTGGCCTGCCCCAGCCGTGTCCTGAGGAGCACCTGGCCTTCCGCGTGGTCAGCGGGGCCGCCAACGTCATTGG
GCCCAAGATCTGCCTCGAGGACAAGATGCTGATGAGCAGCGTCAAGGACAACGTGGGCCGCGGGCTGAACATCGC
CCTGGTGAACGGGGTCAGCGGCGAGCTCATCGAGGCCCGGGCCTTTGACATGTGGGCCGGAGATGTCAACGACCT
GTTGAAGTTTATTCGGCCACTGCACGAAGGCACCCTGGTGTTCGTGGCATCCTACGACGACCCAGCCACCAAGAT
GAATGAAGAGACCAGAAAGCTCTTCAGTGAGCTGGGCAGCAGGAACGCCAAGGAGCTGGCCTTCCGGGACAGCTG
GGTGTTTGTCGGGGCCAAGGGTGTGCAGAACAAGAGCCCCTTTGAGCAGCACGTGAAGAACAGTAAGCACAGCAA
CAAGTACGAAGGCTGCCCCGAGGCGCTGGAGATGGAAGGCTGTATCCCGCGGAGAAGCACGGCCAGC**TAG**CACGG
CCAGTGCCAGGACCGGGCCGAGGGAGGCCAGACCAAGGGAGGCACGCGCGCTGCCGGGCGGACAGAGGCTGAGGC
TCACACCCCACACCCGGGCAGGAGCGCTCCCTGGCCCCAACACATCGGGGCTCCGAGGCAGTGACCAGAACGTGG
TCTCAAGGTGGTGGGGGCTATGGGGGCTGCAGGGGGTAGCCCTGCCGCACTTTGTCACGGGAGCCCAGGGTACCC
GCCTCCTTTTCGTAACACTGTTCCCCCCGGTCAGCCCATCTAGCCCTGTCCTCCATTCCTCACGCCATCTCCATC
CCCATCTTGAGTCCTGGAACGGCCCTGGGTGCCTGCCCCTCACTGTGCATCTCTGGGAGCAGCCCGGCAGGTTGG
GGCGTCTTCCAGAACCTCTCCCTTCTGGAGCCACTCTGCACTGCGGGCTAAACATGTTTCCAGTGTGATTCCTTC
CAGTGAGCCAAACCCGGTGGCTGCTTCATGAGCCTGACTGCCTCTCGCCTGCTCTCAGCAGGAAGGGACCCCTGG
AGCAGGCTGGCCCGGGGTGGTGAAGTAGCTGGAGCCCGATCACAGTCCCGCGGTTTGTCAGGGGGCCCACCTTCT
AGATGACCCCTTAATAAAGTGATGGCCCCAC

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FIGURE 3131

ATGCAGCTGACGGTGAAGGCGCTGCAGGGCCGCGAGTGCAGCCTGCAGGTGCCAGAGGACGAGCTGGTGTCCACG
CTGAAGCAGCTGGTCTCCGAGAAGCTGAACGTCCCAGTGCGCCAGCAGCGGCTGCTGTTCAAGGGCAAGGCCCTG
GCAGATGGGAAACGACTCTCGGATTATAGCATCGGGCCCAACTCCAAGCTCAACCTAGTGGTCAAACCCCTGGAG
AAGGTGCTACTAGAAGAAGGCGAGGCCCAGAGGCTGGCCGACTCCCCACCCCCGCAGGTCTGGCAGCTGATCTCC
AAAGTCTTGGCCCGCCACTTCAGTGCGGCAGATGCCAGCAGGGTCCTGGAACAGCTACAGAGGGATTACGAGAGG
TCCCTGAGTCGCCTGACGCTGGACGACATCGAACGGTTGGCCAGCCGCTTCCTGCACCCTGAAGTGACTGAGACA
ATGGAGAAGGGCTTCTCCAAA**TAG**

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FIGURE 3132

CGGGACGCGGATGCAGACGCAGGCGGAGGCGCTGACGGCGGGGATGGCCGGGGTGGCCACAGCTGCCGCGGGGGC
GTGGACACAGCCGCAGCTCCGGCCGGTGGAGCTCCCCCAGCGCACGCGCCAGGTCCGGGCAGAGACGCCGCGTCT
GCGCCAGGGGGTCACGAATGCGGCCGCACATATTCACCCTCAGCGTGCCTTTCCCGACCCCCTTGGAGGCGGAAA
TCGCCCATGGGTCCCTGGCACCAGATGCCGAGCCCCACCAAAGGGTGGTTGGGAAGGATCTCACAGTGAGTGGCA
GGATCCTGGTCGTCCGCTGGAAAGCTGAAGACTGTCGCCTGCTCCGAATTTCCGTCATCAACTTTCTTGACCAGC
TTTCCCTGGTGGTGCGGACCATGCAGCGCTTTGGGCCCCCCGTTTCCCGCTAAGCCTGGCCTGGGCAAATGGAGC
GAGGTCCCACTTTGCGTCTCCTTGTAGGCAGTGCGTCCATCCTTCCCTAGGGCAGGAATTCCCACAGTTGCTACT
TTCCTGGGAGGGCCTCATGTTTTATCTGGTTCTTAAATGTTTGTTACTACAGAAAATAAAACTG

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FIGURE 3133A

AGTGTGTGGGCGGCGGCGGCGGCGGCTGCGCGCTTGGGGCCCGGGGCGCGGGGCGAGGCCGTGGGGACGTGCGAG
CGGGGCCGCGGTGGGGCTCGGGGGCGCGTCCACGTGGCCAGAGGGCGGCCACCCGGAGCCAGCGGAGGGACAGGC
CTGTCCCCAGGCGCGGCTGCCGGCCATGCCCTCTGTCTGCCTCCTCCTGCTGCTCTTCCTTGCCGTGGGGGGGGC
CCTGGGCAACAGGCCCTTCCGTGCCTTCGTGGTGACAGACACCACGCTTACCCACCTGGCTGTGCACCGGGTGAC
TGGGGAGGTGTTCGTGGGCGCAGTGAACCGAGTCTTTAAGCTGGCCCCCAACCTGACTGAGCTGCGGGCCCATGT
CACGGGGCCCGTCGAGGACAACGCTCGCTGCTACCCGCCCCCCAGCATGCGCGTGTGTGCCCACCGCCTGGCCCC
CGTGGACAACATCAACAAGCTGCTGCTCATAGACTATGCGGCCCGCCGCCTGGTGGCCTGCGGCAGCATCTGGCA
GGGCATCTGCCAGTTCCTGCGTCTGGACGACCTCTTCAAGCTGGGTGAGCCGCACCACCGCAAGGAGCACTACCT
GTCGGGGGCCCAGGAGCCCGACTCCATGGCTGGTGTCATTGTGGAGCAGGGCCAGGGGCCCAGCAAGCTGTTTGT
GGGCACTGCTGTCGACGGCAAGTCGGAGTACTTCCCCACCTTGAGCTCCCGCAAGCTCATCAGTGATGAAGACAG
CGCGGACATGTTCAGTCTCGTGTACCAGGATGAGTTTGTGTCCTCCCAGATCAAGATCCCCTCAGACACGCTGTC
CTTGTACCCTGCCTTTGACATCTACTACATCTACGGCTTCGTCAGCGCCTCCTTCGTGTACTTCCTGACGCTGCA
GCTGGACACCCAGCAGACGCTGTTGGACACAGCGGGCGAGAAATTTTTCACGTCCAAGATCGTGCGCATGTGCGC
GGGAGACTCAGAGTTCTACTCATACGTGGAATTCCCCATCGGCTGCTCCTGGCGCGGCGTGGAGTACCGCTTGGT
GCAGAGCGCCCACCTGGCCAAGCCTGGCCTGCTGCTGGCCCAGGCCCTGGGCGTGCCGGCTGATGAGGACGTCCT
CTTCACCATCTTCTCTCAGGGCCAGAAGAACCGGGCCAGCCCACCCCGGCAGACCATCCTCTGCCTCTTCACCCT
CAGCAACATCAATGCCCACATCCGGCGCCGCATCCAGTCCTGCTATCGTGGGGAGGGCACTCTGGCTCTGCCCTG
GCTGCTGAACAAGGAGCTGCCCTGCATCAACACCCCCATGCAGATCAACGGCAACTTCTGTGGGCTGGTGTTGAA
CCAGCCTCTGGGAGGCCTGCATGTGATCGAGGGGCTGCCCCTGCTGGCCGACAGCACCGACGGCATGGCCAGCGT
GGCCGCCTACACCTACCGCCAGCACTCTGTGGTCTTCATTGGCACGCGCAGCGGCAGCTTGAAGAAGGTGCGGGT
CGATGGCTTCCAGGATGCCCACCTGTATGAGACAGTCCCCGTGGTGGATGGCAGCCCCATCCTCCGAGACCTGCT
CTTCAGCCCGGACCACCGGCACATCTATCTCCTGAGTGAGAAGCAGGTGAGCCAGCTCCCGGTGGAGACCTGTGA
GCAGTACCAGAGCTGCGCAGCCTGCCTGGGCTCCGGGGACCCGCACTGTGGTTGGTGTGTGCTGCGACACAGGTG
CTGCCGCGAAGGGGCCTGTCTGGGCGCCTCTGCCCCACACGGCTTTGCTGAGGAGCTGAGCAAGTGTGTCCAGGT
GCGGGTCCGGCCCAACAATGTGTCAGTGACGTCACCTGGGGTGCAGCTGACCGTCACCCTGCACAACGTGCCAGA
CCTCAGTGCGGGCGTGAGCTGCGCCTTCGAGGCGGCGGCGGAGAACGAGGCGGTCCTGCTGCCCTCCGGTGAACT
GCTCTGCCCCTCACCCTCCCTCCAGGAGCTCCGAGCTCTTACCAGGGGGCATGGGGCCACCCGCACTGTGCGGCT
GCAGCTTCTCTCCAAGGAGACAGGCGTGAGGTTTGCCGGTGCTGACTTTGTCTTCTACAACTGCAGCGTCCTCCA
GTCGTGCATGTCCTGTGTTGGCAGCCCTTACCCCTGCCACTGGTGTAAGTACCGCCACACGTGTACCAGCCGCCC
CCACGAGTGCTCCTTCCAGGAGGGCAGGGTCCACAGCCCTGAGGGCTGCCCTGAGATCCTGCCCAGTGGGGACCT
CCTGATCCCCGTTGGGGTCATGCAGCCTCTTACCTTGCGGGCTAAGAACCTACCTCAGCCGCAGTCGGGCCAGAA
GAACTATGAGTGCGTGGTGCGGGTGCAGGGGCGGCAGCAGCGGGTGCCTGCCGTGCGCTTCAACAGCAGCAGTGT
GCAGTGCCAGAACGCCTCGTACTCCTATGAAGGTGATGAGCATGGTGACACCGAGCTGGACTTCTCCGTGGTCTG
GGATGGAGACTTCCCCATAGACAAGCCTCCCAGCTTCCGAGCCCTCCTGTACAAGTGCTGGGCGCAGCGGCCCAG
CTGTGGCCTCTGCCTCAAGGCTGATCCCCGCTTCAACTGTGGCTGGTGCATCTCAGAGCACAGGTGCCAGCTGCG
GACCCACTGCCCGGCCCCGAAGACCAACTGGATGCACCTGAGCCAGAAGGGCACCCGGTGCAGCCACCCCCGCAT
CACGCAGATCCACCCTCTCGTGGGGCCCAAGGAAGGAGGCACCCGGGTCACCATCGTGGGTGACAACCTGGGCCT
CTTGTCCCGAGAGGTGGGCCTGCGGGTGGCTGGCGTGCGTTGCAACTCCATTCCGGCCGAGTACATCAGTGCTGA
GAGGATCGTGTGTGAGATGGAGGAGTCGCTGGTGCCCAGCCCGCCGCCGGGGCCCGTGGAGCTGTGTGTGGGTGA
CTGTTCAGCCGACTTCCGCACGCAGTCGGAGCAGGTCTACAGCTTTGTGACCCCAACGTTTGACCAAGTGAGTCC
CAGCCGTGGCCCGGCGTCCGGGGGCACACGGCTTACCATCTCAGGCAGCTCTCTGGATGCTGGCAGCAGGGTCAC
AGTGACTGTGAGGGACAGCGAGTGCCAGTTTGTAAGGAGAGATGCCAAGGCGATCGTGTGCATCTCACCTCTCTC
CACCCTGGGCCCCAGCCAGGCCCCCATCACACTTGCCATTGACCGGGCTAACATCTCCAGCCCCGGGCTCATCTA
CACCTACACTCAGGACCCCACCGTCACCCGCCTTGAGCCCACCTGGAGCATCATCAATGGAAGCACTGCCATCAC
TGTGAGTGGGACCCACCTGCTGACGGTCCAGGAGCCCCGGGTCCGTGCCAAGTACCGCGGCATTGAGACCACCAA
TACATGCCAAGTGATCAACGACACTGCCATGCTGTGTAAGGCCCCCGGCATCTTTCTTGGGCGGCCCCAGCCTCG
GGCGCAAGGCGAGCACCCTGATGAGTTTGGCTTCCTGCTGGACCACGTGCAAACGGCCCGCTCCCTCAACCGCTC
CTCCTTTACCTACTACCCTGATCCCAGCTTTGAGCCGCTGGGGCCCTCTGGCGTGCTGGACGTCAAACCGGGCTC

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FIGURE 3133B

CCACGTGGTGCTGAAGGGCAAGAACCTGATTCCCGCGGCAGCCGGCAGCTCCCGCCTCAACTACACTGTGCTGAT
AGGAGGCCAGCCGTGTTCGCTCACTGTCTCGGACACACAACTCCTGTGCGACTCACCCAGCCAGACTGGCCGGCA
GCCTGTCATGGTGCTGGTGGGTGGCCTGGAGTTCTGGCTGGGCACCCTGCACATCTCGGCAGAGCGGGCGCTGAC
CCTACCGGCCATGATGGGGCTGGCGGCGGGGGGTGGGCTCCTGCTGCTGGCCATCACAGCCGTGCTGGTGGCGTA
CAAGCGCAAGACTCAGGACGCGGACCGTACCCTCAAGCGTCTGCAGCTGCAGATGGACAACCTGGAGTCCCGTGT
GGCCCTGGAGTGCAAGGAAGCTTTTGCAGAGCTGCAGACGGACATCAATGAGCTGACTAACCACATGGACGAGGT
GCAGATCCCCTTCCTGGACTACCGGACTTACGCCGTGCGCGTGCTCTTCCCGGGCATCGAGGCCCACCCGGTGCT
CAAGGAGCTGGATACGCCACCCAACGTGGAGAAGGCCCTGCGCCTCTTCGGGCAGCTGCTGCACAGCCGCGCGTT
CGTGCTTACCTTCATCCACACGCTGGAGGCCCAGAGCAGCTTCTCCATGCGCGACCGCGGCACCGTGGCCTCGCT
CACCATGGTGGCCCTGCAGAGCCGGCTCGACTATGCCACGGGGCTGCTCAAGCAACTGCTGGCCGACCTCATCGA
GAAGAACCTCGAGAGCAAGAACCACCCCAAGCTGCTGCTACGCAGGACAGAGTCAGTGGCTGAGAAGATGCTTAC
CAACTGGTTCACGTTCCTGCTGCATAAGTTTCTGAAGGAGTGTGCTGGGGAGCCTCTCTTCCTGCTTTACTGTGC
CATCAAGCAGCAGATGGAGAAGGGCCCCATTGATGCCATCACGGGCGAGGCACGATACTCCCTGAGCGAGGACAA
GCTCATCCGTCAGCAGATCGACTACAAGACACTGACCCTTCACTGCGTGTGTCCGGAGAACGAGGGCAGCGCCCA
GGTCCCAGTGAAGGTTCTCAACTGTGACAGCATCACCCAGGCCAAAGATAAGCTGCTGGACACTGTGTACAAGGG
CATTCCGTACTCCCAGCGTCCCAAAGCTGAGGACATGGACCTGGAGTGGCGCCAGGGCCGCATGACTCGCATCAT
CCTCCAGGATGAGGATGTCACCACCAAGATCGAGTGTGACTGGAAGAGGCTCAACTCACTGGCCCACTACCAGGT
GACAGACGGTTCCTTGGTGGCATTGGTGCCCAAACAAGTGTCTGCCTATAACATGGCCAACTCCTTCACCTTCAC
CCGCTCCCTCAGCCGCTACGAGAGCTTGCTCCGCACGGCCAGCAGCCCTGATAGCCTCCGCTCACGGGCACCCAT
GATTACGCCTGACCAGGAGACAGGCACCAAATTGTGGCACCTGGTGAAAAACCACGACCATGCCGACCATCGCGA
GGGGGACCGTGGCAGCAAGATGGTCTCCGAGATCTACCTGACACGGCTGCTGGCCACCAAGGGCACACTGCAGAA
GTTCGTGGATGACCTCTTTGAGACAGTGTTCAGCACAGCCCACCGGGGCTCGGCCCTGCCCCTGGCCATCAAGTA
CATGTTCGACTTCCTGGATGAGCAGGCGGACCAGCGCCAGATCAGCGACCCCGATGTGCGCCACACCTGGAAGAG
CAACTGCCTGCCGCTGCGCTTCTGGGTGAATGTGATCAAGAACCCGCAGTTCGTGTTCGACATCCACAAGAACAG
CATCACGGATGCCTGCCTGTCGGTGGTAGCCCAGACCTTCATGGACTCCTGCTCTACATCCGAGCACCGCCTGGG
GAAGGACTCGCCCTCCAACAAACTGCTCTACGCCAAGGACATCCCCAACTACAAGAGCTGGGTGGAGAGGTATTA
TCGAGACATTGCAAAGATGGCATCCATCAGCGACCAGGACATGGATGCCTACCTGGTGGAGCAGTCCCGCCTCCA
CGCCAGCGACTTCAGCGTCCTGAGTGCGCTCAACGAGCTGTATTTCTATGTCACCAAGTACCGCCAGGAGATTCT
CACGGCTCTGGACCGAGATGCCTCTTGTCGGAAGCATAAGTTGCGGCAGAAACTGGAACAGATCATCAGCCTCGT
GTCCAGCGACAGCTAAGGTGGTGGAATCGGTGAGGAGGGGGCTTCTCAGTCCTGTGCCGTCCTCCCATCCAGGGG
AGTGGCTGGCTCAAGCCTGGGTCCCCGGGCTGAGCCCTGGATTGGGTATCGTGGGGCAGGTCACCCTGGCCACGA
TGCCCCCGGCACACCCAGGCCCCCTTCATTAGTGCCTTGCTTTGGGCCCTGCAGGGGGAGGGGTGACAGGGCGAG
CCCCCACCCCAGCAGCAGCAATACCCCC

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FIGURE 3134

CCGCCGCTGCCGCTGCCGCTGTCGCTGTCGCCGCCGCCGCCGCCCGCCGCCGCCGCCGCCGCCGCCGCTGCC
ATGGCTCAATACAAGGGCGCCGCGAGCGAGGCCGGCCGCGCCATGCACCTGATGAAGAAGCGGGAGAAGCAGCGC
GAGCAGATGGAGCAGATGAAGCAGCGCATCGCGGAGGAGAACATCATGAAATCCAACATTGACAAGAAGTTCTCT
GCGCACTACGACGCGGTGGAGGCAGAGCTCAAGTCCAGCACCGTGGGTCTCGTGACCCTGAATGACATGAAGGCC
AAGCAGGAGGCTCTGGTGAAGGAGCGGGAGAAGCAGCTGGCCAAGAAGGAGCAGTCCAAGGAGCTGCAGATGAAG
CTGGAGAAGCTTCGAGAGAAGGAGCGTAAGAAGGAAGCCAAGCGGAAGATCTCCAGCCTGTCCTTCACCCTGGAG
GAGGAAGAAGAGGGAGGCGAGGAGGAAGAGGAGGCGGCCATGTATGAGGAGGAGATGGAAAGGGAAGAGATCACC
ACGAAGAAGAGAAAACTGGGGAAGAACCCAGACGTTGACACAAGCTTCTTGCCTGATCGAGACCGTGAGGAGGAG
GAGAATCGGCTTCGGGAAGAGCTGCGGCAGGAGTGGGAAGCCAAGCAGGAGAAGATCAAGAGTGAGGAGATCGAG
ATCACCTTCAGCTACTGGGATGGCTCTGGGCACCGGCGGACAGTCAAGATGAGAAAGGGCAACACCATGCAGCAG
TTCCTGCAGAAGGCGCTCGAGATCCTTCGGAAAGACTTCAGTGAGCTGAGGTCCGCAGGGGTGGAGCAGCTCATG
TACATCAAGGAGGACTTGATCATCCCTCACCATCACAGCTTCTACGACTTCATCGTCACCAAGGCACGGGGGAAG
AGTGGACCACTCTTCAACTTTGATGTTCATGACGATGTGCGGTTGCTCAGTGACGCCACTGTGGAGAAGGATGAG
TCCCATGCAGGCAAGGTGGTGCTGAGGAGCTGGTACGAGAAGAACAAGCACATCTTTCCCGCCAGCCGCTGGGAA
CCCTACGACCCTGAAAAGAAGTGGGACAAGTACACGATCCGCTGAGCATCCAGGAGGCTGCGCGGCCCCGGCTCC
TCAGCTCCCTCAGTGTGCCCCGTGGTGTCACCGGGACTCCAGGCACCCGCTCCCCTGCGACCATGCCAGGCACGC
TGGGAGGAGGACGGCAGCTGCTCGTGTCCTGCCCCTGCCACATCAGTGACTGCTTTATTCTTTTCCAATAAAGAA
GTGCACGTGTCAGAGCTGGAGCGCCTGCATTGTGAG

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FIGURE 3135

CGGCGGCGGCGGTGGCGGCGGCGACTGCTGCGGTGAAGGAGGAGGAGGAGCCGAGCGGGCGCTGGCACCGAGGCC
TGACCATGGACGAGGAATACGATGTGATCGTGCTGGGGACCGGTCTCACCGAATGCATCCTGTCGGGCATCATGT
CTGTGAACGGGAAGAAGGTGCTGCACATGGACCGGAACCCCTACTACGGGGGCGAGAGCTCCTCCATCACACCCC
TGGAGGAGCTGTATAAGCGTTTTCAGTTGCTGGAGGGGCCCCCTGAGTCGATGGGCCGAGGCCGAGACTGGAATG
TTGACCTGATTCCCAAATTCCTCATGGCTAACGGGCAGCTGGTAAAGATGCTACTGTATACAGAGGTGACTCGCT
ACCTGGACTTCAAGGTGGTGGAGGGCAGCTTTGTCTACAAGGGGGGCAAGATCTACAAAGTGCCGTCCACTGAGA
CTGAGGCCTTGGCTTCCAATCTGATGGGCATGTTTGAGAAACGGCGCTTCCGCAAGTTCCTGGTGTTTGTGGCAA
ACTTCGATGAGAATGACCCCAAGACCTTTGAGGGCGTTGACCCCCAGACTACCAGCATGCGTGACGTCTACCGGA
AGTTTGATCTGGGCCAGGATGTCATCGATTTCACTGGCCATGCCCTGGCGCTCTACCGCACTGATGACTACCTGG
ACCAGCCCTGCCTTGAGACCGTCAACCGCATCAAGTTGTACAGTGAGTCCCTGGCCCGGTATGGCAAGAGCCCAT
ATTTATACCCGCTCTACGGCTTGGGCGAGCTGCCCCAGGGTTTTGCAAGATTGAGTGCCATCTATGGGGGGACAT
ATATGCTGAACAAACCTGTGGATGACATCATCATGGAGAACGGCAAGGTGGTGGGCGTGAAGTCTGAGGGAGAGG
TGGCCCGCTGCAAGCAGCTGATCTGTGACCCCAGCTACATCCCGGACCGTGTGCGGAAGGCTGGCCAGGTTATCC
GCATCATCTGTATCCTTAGCCACCCCATCAAGAACACCAACGACGCCAACTCCTGCCAAATAATCATCCCCCAGA
ACCAGGTCAACAGGAAGTCAGACATCTACGTGTGCATGATCTCCTATGCACACAACGTGGCGGCCCAGGGCAAGT
ACATAGCTATTGCCAGCACTACTGTGGAGACCACGGACCCTGAAAAGGAGGTGGAGCCGGCTCTGGAGCTGTTGG
AGCCCATTGACCAGAAGTTTGTGGCTATCAGTGACTTGTATGAGCCCATTGATGATGGTTGTGAGAGCCAGGTGT
TCTGTTCCTGCTCCTACGATGCCACCACACACTTTGAGACAACCTGCAACGACATCAAAGACATCTACAAACGCA
TGGCTGGCACGGCCTTTGACTTTGAGAACATGAAGCGCAAACAGAACGACGTCTTTGGAGAAGCTGAGCAGTGAT
TGTGGCCGCCCCCAGCCCCTGCTGCCCCAGCCTGTGTCTGTTCTCCTCGAGGGCTCCAGCATCCTCTGCTTCCCC
CACCACGTTCCCATCACCCACCTCATTGATCCACTGACCAAATCCTTAACCCTAGCGATGGCTTGGGAGATGGGG
GGTTGGATAGCATCCTCTTTCTTGGCCCTTCCTTATCCTAGGAAAAGAGGGTTCCTCTCCTTGTGTGTGTCTCTT
CCCCCCACCCCTAATTCTTCTGCTCTGTTTGGGAAGACGTGGAGGAAAAGGTGACTTCTGCCCCCACCGCTCTTA
CCCCCACTGTAGTGGCCTTTGGAGATGCCCCCACCTCCCCCCCACCAACTCTCGCGTGTTGGAGAGAAGGGGCCC
TCCCAGCACAAAGTTGCATTCCTCCCCCCTAATTTATTCTAATTTATTAACTTTGACCCACCCTTTCTGAGCCTG
CAGCCTTCCCGTGTGGCCTGAGGGCTGTCGAGTGAGCTGCCCCAGCCCCTCCCAGCCCTTGCCCAGCCTGGGGGA
GTGGGGAAGGCTTGGGCATGGCCCCGTTGGAGGTTGATTTGCTGTTTTGTTTCTTGTCTTTGTGTTCTGTGGTAC
TTGCTGAGAGAAAAGAAAAGTGAGCCAAGCAGAAGGAGGTGGGAAAACGGACCCAAACCCCAGTGTGCCCTGCCC
CATGCCTTTCCTTTAGTGGTGGGAAACCCTTATCTTGCAAAGTGAATGTGTCCCCTTCCCCACCCTCTAGTGTAT
TTCACAGAAAACAAAACCTCCCAATAAAACGGTTGAAACCTG

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FIGURE 3136

GGCAGTGGAGGCTGAGGCTATGATGGCGGCCATGGCGACGGCTCGAGTGCGGATGGGGCCGCGGTGCGCCCAGGC
GCTCTGGCGCATGCCGTGGCTGCCGGTGTTTTTGTCGTTGGCGGCGGCGGCGGCGGCGGCAGCGGCGGAGCAGCA
GGTCCCGCTGGTGCTGTGGTCGAGTGACCGGGACTTGTGGGCTCCTGCGGCCGACACTCATGAAGGCCACATCAC
CAGCGACTTGCAGCTCTCTACCTACTTAGATCCCGCCCTGGAGCTGGGTCCCAGGAATGTGCTGCTGTTCCTGCA
GGACAAGCTGAGCATTGAGGATTTCACAGCATATGGCGGTGTGTTTGGAAACAAGCAGGACAGCGCCTTTTCTAA
CCTAGAGAATGCCCTGGACCTGGCCCCCTCCTCACTGGTGCTTCCTGCCGTCGACTGGTATGCAGTCAGCACTCT
GACCACTTACCTGCAGGAGAAGCTCGGGGCCAGCCCCTTGCATGTGGACCTGGCCACCCTGCGGGAGCTGAAGCT
CAATGCCAGCCTCCCTGCTCTGCTGCTCATTCGCCTGCCCTACACAGCCAGCTCTGGTCTGATGGCACCCAGGGA
AGTCCTCACAGGCAACGATGAGGTCATCGGGCAGGTCCTGAGCACACTCAAGTCCGAAGATGTCCCATACACAGC
GGCCCTCACAGCGGTCCGCCCTTCCAGGGTGGCCCGTGATGTAGCCGTGGTGGCCGGAGGGCTAGGTCGCCAGCT
GCTACAAAAACAGCCAGTATCACCTGTGATCCATCCTCCTGTGAGTTACAATGACACCGCTCCCCGGATCCTGTT
CTGGGCCCAAAACTTCTCTGTGGCGTACAAGGACCAGTGGGAGGACCTGACTCCCCTCACCTTTGGGGTGCAGGA
ACTCAACCTGACTGGCTCCTTCTGGAATGACTCCTTTGCCAGGCTCTCACTGACCTATGAACGACTCTTTGGTAC
CACAGTGACATTCAAGTTCATTCTGGCCAACCGCCTCTACCCAGTGTCTGCCCGGCACTGGTTTACCATGGAGCG
CCTCGAAGTCCACAGCAATGGCTCCGTCGCCTACTTCAATGCTTCCCAGGTCACAGGGCCCAGCATCTACTCCTT
CCACTGCGAGTATGTCAGCAGCCTGAGCAAGAAGGGTAGTCTCCTCGTGGCCCGCACGCAGCCCTCTCCCTGGCA
GATGATGCTTCAGGACTTCCAGATCCAGGCTTTCAACGTAATGGGGGAGCAGTTCTCCTACGCCAGCGACTGTGC
CAGCTTCTTCTCCCCCGGCATCTGGATGGGGCTGCTCACCTCCCTGTTCATGCTCTTCATCTTCACCTATGGCCT
GCACATGATCCTCAGCCTCAAGACCATGGATCGCTTTGATGACCACAAGGGCCCCACTATTTCTTTGACCCAGAT
TGTGTGACCCTGTGCCAGTGGGGGGGTTGAGGGTGGGACGGTGTCCGTGTTGTTGCTTTCCCACCCTGCAGCGCA
CTGGACTGAAGAGCTTCCCTCTTCCTACTGCAGCATGAACTGCAAGCTCCCCTCAGCCCATCTTGCTCCCTCTTC
AGCCCGCTGAGGAGCTTTCTTGGGCTGCCCCCATCTCTCCCAACAAGGTGTACATATTCTGCGTAGATGCTAGAC
CAACCAGCTTCCCAGGGTTCGTCGCTGTGAGGCGTAAGGGACATGAATTCTAGGGTCTCCTTTCTCCTTATTTAT
TCTTGTGGCTACATCATCCCTGGCTGTGGATAGTGCTTTTGTGTAGCAAATGCTCCCTCCTTAAGGTTATAGGGC
TCCCTGAGTTTGGGAGTGTGGAAGTACTACTTAACTGTCTGTCCTGCTTGGCTGTCGTTATCGTTTTCTGGTGAT
GTTGTGCTAACAATAAGAAGTACACGGGTTTATTTCTGTGGCCTGAGAAGGAAGGGACCTCCACGACAGGTGGGC
TGGGTGCGATCGCCGGCTGTTTGGCATGTTCCCACCGGGAGTGCCGGGCAGGAGCATGGGGTGCTTGGTTGTTTC
CTTCCTAATAAAATAAACGCGGGTCGCCATG

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FIGURE 3137

CCGGGCCGGGGTGCCAGCGCCCGCTTTCCCGTTTCCTCCCGTTCCGCAGCGCGCCCACGGCCTGTGACTTCGGAG
ACCGCTCCCCAGTGACGAGAGAGCGGGGCCGGGCGCTGCTCCGGCCTGACCTGCGAAGGGACCTCGGTCCAGTAC
CCTGTTGCGCCGCGCCCCCGTCCGTCCGTGCGCGGGCCAGTCAGGGGCCAGTGTGTCGAGGCGGTAGAGGTCGCA
GCCTAGAGGCGTTCCACAGGTCGGCCCGGGGCGCTGGGAGCCCGGCCGGCGGTCGGGTGGGGTGGCCTCTGCACG
TGAAAGTGGCCGTTCCCCGCGGTGCCGCCGCTCACCTGGACCCTGGCCAGCAGCGTCGTCATGGGCTTGGTGGGC
ACCTACAGCTGCTTCTGGACCAAGTACATGAACCACCTGACCGTGCACAACAGGGAGGTGCTGTACGAGCTCATC
GAGAAGCGAGGCCCGGCCACGCCCCTCATCACCGTGTCCAATCACCAGTCCTGCATGGACGACCCTCATCTCTGG
GGGATCCTGAAACTCCGCCACATCTGGAACCTGAAGTTGATGCGTTGGACCCCTGCAGCTGCAAGACATCTGCTT
CACCAAGGAGCTACACTCCCACTTCTTCAGCTTGGGCAAGTGTGTGCCTGTGTGCCGAGGAGCAGAATTTTTCCA
AGCAGAGAATGAGGGGAAAGGTGTTCTAGACACAGGCAGGCACATGCCAGGTGCTGGAAAAAGAAGAGAGAAAGG
AGATGGCGTCTACCAGAAGGGGATGGACTTCATTTTGGAGAAGCTCAACCATGGGGACTGGGTGCATATCTTCCC
AGAAGGGAAAGTGAACATGAGTTCCGAATTCCTGCGTTTCAAGTGGGGAATCGGGCGCCTGATTGCTGAGTGTCA
TCTCAACCCCATCATCCTGCCCCTGTGGCATGTCGGAATGAATGACGTCCTTCCTAACAGTCCGCCCTACTTCCC
CCGCTTTGGACAGAAAATCACTGTGCTGATCGGGAAGCCCTTCAGTGCCCTGCCTGTACTCGAGCGGCTCCGGGC
GGAGAACAAGTCGGCTGTGGAGATGCGGAAAGCCCTGACGGACTTCATTCAAGAGGAATTCCAGCATCTGAAGAC
TCAGGCAGAGCAGCTCCACAACCACCTCCAGCCTGGGAGATAGGCCTTGCTTGCTGCCTTCTGGATTCTTGGCCC
GCACAGAGCTGGGGCTGAGGGATGGACTGATGCTTTTAGCTCAAACGTGGCTTTTAGACAGATTTGTTCATAGAC
CCTCTCAAGTGCCCTCTCCGAGCTGGTAGGCATTCCAGCTCCTCCGTGCTTCCTCAGTTACACAAAGGACCTCAG
CTGCTTCTCCCACTTGGCCAAGCAGGGAGGAAGAAGCTTAGGCAGGGCTCTCTTTCCTTCTTGCCTTCAGATGTT
CTCTCCCAGGGGCTGGCTTCAGGAGGGAGCATAGAAGGCAGGTGAGCAACCAGTTGGCTAGGGGAGCAGGGGGCC
CACCAGAGCTGTGGAGAGGGGACCCTAAGACTCCTCGGCCTGGCTCCTACCCACCGCCCTTGCCGAACCAGGAGC
TGCTCACTACCTCCTCAGGGATGGCCGTTGGCCACGTCTTCCTTCTGCCTGAGCTTCCCCCCCACCACAGGCCCT
TTCCTCAGGCAAGGTCTGGCCTCAGGTGGGCCGCAGGCGGGAAAAGCAGCCCTTGGCCAGAAGTCAAGCCCAGCC
ACGTGGAGCCTAGAGTGAGGGCCTGAGGTCTGGCTGCTTGCCCCCATGCTGGCGCCAACAACTTCTCCATCCTTT
CTGCCTCTCAACATCACTTGAATCCTAGGGCCTGGGTTTTCATGTTTTTGAAACAGAACCATAAAGCATATGTGT
TGGCTTGTT

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FIGURE 3138

CTTGAACGCCTGACCTCGTATCCACCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACGCC
CAGCCCATAATTTATTGATTTTTTAAAATTTGTCCAGCCTTCTATTACCACGTCGAATCCATTAGCTACAGCCAT
CCCATGAGAAGCTGAGTGGATTCAGCCCCACCTCCTGCTCACAGACCCTGTCCGAGCACCTCATTTGTCCCAACA
GCATTACTGCAGGACCCCCAGGACGTTGGACTGCCAGCTCCCTGGGTCTCCTCCTCTCTGGGGCAGATCCTCAGT
CCTCCCTTGACTTCACGACTGTGGCCAGATCATGTGTGGACTGTCCCTCTCTTTGGGTCTCCAGAGCGCTTGCAT
CAAACACCCCTAACTCAGAAGTGTGCAGCCACACTGGGACTCAGAACCCAACAACAGGGACAGAAGACTCACGCC
CTTGGGGTGCCCGGTCTCGTGGCATCAGGCATGACTTCCAGCTCCTGCGCCTTCCCCAGCAACTGCTGACTGGGG
ACCCAGACCGGGAGCTGAGCGACGGGCCTGGCGAGCGAAGCTCGGGGTCTCACTCAGGCACCAGCCCCTCCTTGC
CCCAGGCTTGAGTGACTCACAGCCCTATTCAGGCAGGAGCTGCTCTTCTGGGGTATCGCGATCCACTTAAGGATG
AGGCAGACTTGGTGACAAGCTGGTCTGAGCAGCGCCTCCAGAGCCAGAACTGAGCCCAGTGAGAGCGCACCCTGG
GGCAGCCTGGATTCCTGGGGTGTCCCCGGCAGCCACACACAGCC**ATG**CACTACCCAACTGCACTCCTCTTCCTCA
TCCTGGCCAATGGGGCCCAGGCCTTTCGCATCTGCGCCTTCAATGCCCAGCGGCTGACACTGGCCAAGGTGGCCA
GGGAGCAGGTGATGGACACCTTAGTTCGGATACTGGCTCGCTGTGACATCATGGTGCTGCAGGAGGTGGTGGACT
CTTCCGGCAGCGCCATCCCGCTCCTGCTTCGAGAACTCAATCGATTTGATGGCTCTGGGCCCTACAGCACCCTGA
GCAGCCCCCAGCTGGGGCGCAGCACCTACATGGAGACGTATGTGTACTTCTATCGGTCACACAAAACACAGGTCC
TGAGTTCCTACGTGTACAACGATGAGGATGACGTCTTTGCCCGGGAGCCATTTGTGGCCCAGTTCTCTTTGCCCA
GCAATGTCCTTCCCAGCCTGGTGTTGGTCCCGCTGCACACCACTCCTAAGGCCGTAGAGAAGGAGCTGAACGCCC
TCTACGATGTGTTTCTGGAGGTCTCCCAGCACTGGCAGAGCAAGGACGTGATCCTGCTTGGGGACTTCAATGCTG
ACTGCGCTTCACTGACCAAAAAGCGCCTGGACAAGCTGGAGCTGCGGACTGAGCCAGGCTTCCACTGGGTGATTG
CCGATGGGGAGGACACCACAGTGCGGGCCAGCACCCACTGCACCTATGCCCGCGTCGTGCTGCACGGGGAGCGCT
GCCGGAGTCTGCTGCACACTGCGGCTGCCTTTGACTTCCCCACGAGCTTCCAGCTCACCGAGGAGGAGGCCCTCA
ACATCAGTGACCACTACCCCGTGGAGGTGGAGCTGAAGCTGAGCCAGGCGCACAGCGTCCAGCCTCTCAGCCTCA
CTGTTCTGTTGCTGCTATCACTCCTGTCCCCTCAGCTGTGCCCTGCTGCC**TGA**GCGTCCCCCTACCCCCCCAGGG
CCTGCTGCCTTTTGGGACTTAAACCCCAGCCTCCCCCGTCCATCCAGCCCTGGGGCTGGGGGGCTTCAACTATAG
TTGCCCTGTGACTGTAGTCCACCCCTGCCTGCCTTGTTTGATTTGGCTCTTGTTCTTTGGTTGGGCTTGTGCCTA
GATTAGGAGAGGAAGCCAGGGGCCCTGCACTCATGCCACCTGCCAGGTAGTGTAGTATCAGGAGTGGAGACAAAG
TGGGCTCTGGGTTGGGGTAGGGGAAGGGAGGGTTCAGAAAGAGGAATGAAGATGTTGTATGACAAGAAGGAAAGT
TACTGAGAACAAAAACCCAGATTGGTGAGATAGGACACTTGTGCAGCAGATATGCCAATGGGCCATGTTTATTGT
GGATTGGTAAGAATCACCAGGAAACCATTAAGCCCCAATAGCTACAAGGAGGGTGGTTAATCTGCTATATCAAAC
TCCTTCCCTGAAACCAGCAAACACCGGGAAACATTTTGGCTCATTATAATCCGGTGAACAATGCAGTCAGGCCTG
TTATAACCGCTGAGCAGCCACACTCGCACCTCCTGGGTGCTGTAGTCTGTGTTGGTACAGGCTTCTGCATGCCTG
GTAAAGGTCCAGCCAAGGCTGGTCAAGGCAACATCTCCACACAGAAAATCTGCACCAGTTATGTAAGCTAAAAAG
CTGTGTGAACCCAGGTGTCCCGGAAAGGGGCTGCAGGACACAGCAAAATGCCAGCAGCATGCCGGACCCCTCCCT
TCCATCCTCCTCTCCAAAGAAGAGAGGTCAGGAAAAACACTGGCTGGGACGCTAGAAGGGTCATGTGTTAACTAT
AATCACATTTATGGTTTGGAACCATCACCCCAAGGTAAAAAAAAAATAAAAGGTATTCCCAGGTATGTTTGGCAA
AATAAAATAAAGGTAATTAAAAACCT

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FIGURE 3139

CTCTTTCCCTTCGGTGTGCCACTGAAGATCCTGGTGTCGCCATGGGCCGCCGCCCCGCCCGTTGTTACCGGTATT
GTAAGAACAAGCCGTACCCAAAGTCTCGCTTCTGCCGAGGTGTCCCTGATGCCAAGATTCGCATTTTTGACCTGG
GGCGGAAAAAGGCAAAAGTGGATGAGTTTCCGCTTTGTGGCCACATGGTGTCAGATGAATATGAGCAGCTGTCCT
CTGAAGCCCTGGAGGCTGCCCGAATTTGTGCCAATAAGTACATGGTAAAAAGTTGTGGCAAAGATGGCTTCCATA
TCCGGGTGCGGCTCCACCCCTTCCACGTCATCCGCATCAACAAGATGTTGTCCTGTGCTGGGGCTGACAGGCTCC
AAACAGGCATGCGAGGTGCCTTTGGAAAGCCCCAGGGCACTGTGGCCAGGGTTCACATTGGCCAAGTTATCATGT
CCATCCGCACCAAGCTGCAGAACAAGGAGCATGTGATTGAGGCCCTGCGCAGGGCCAAGTTCAAGTTTCCTGGCC
GCCAGAAGATCCACATCTCAAAGAAGTGGGGCTTCACCAAGTTCAATGCTGATGAATTTGAAGACATGGTGGCTG
AAAAGCGGCTCATCCCAGATGGCTGTGGGGTCAAGTACATCCCCAGTCGTGGCCCTCTGGACAAGTGGCGGGCCC
TGCACTCATGAGGGCTTCCAATGTGCTGCCCCCCTCTTAATACTCACCAATAAATTCTACTTCCTGTCCACCTAT
GTCTTTGTATCTACATTCTTGACGGGGAAGGAACTTCCTCTGGGAACCTTTGGGTCATTGCCCTTTCACTTCAGA
AACAGGTTGACAACTCAGCCCTGCTCATGAGGCAGCAAACCCTGCAAAGGGCTGGGACTGGTGGCCTTATGTCAG
TTGTCTACTCTGGAGCTTGACTTGGACCTCCCCAGGTCCTAGGCAGTAGGTTGAAAAACACTGAAGTGCTTTTCA
TGAAGCACAGCTGCAGCAAAGCCTTGCAATCCCAGGCTGGGGTCAGCCTACAGTTGTGTTGCTTATTACAACACA
TGCGGACCAAGAGGGGCTTGTGGGCTAGAGGCTGACCAGCAGCGTTTATTTAGCAAGGGTAGGTGTGCATCACAT
TGGGCTTGTTCTCACCCATCTGGTTTGGCCATTCCTCCTTGGTGGGAATCATCCAGGTACTGCTGAGGTCACCTG
CGATTTGCCCCATTTCCTATCTCTAGCAACCTCCTGGGCCCCATGCCCCCACCCCTTCTAGAACCTGCATTCCCA
GGGCCTTCACCACCTGACCAAAGGTCTAGGCTAACCTTTGGTCATTTGTAACAAGACCTCGGAACAGACACGTGT
GTGGCATGGTTTGGCCTGGGGATCTTAGATGTCTGACCTGAACTATTGTAGAACAGCGCTGGCTTTTGGGGGAGC
AGCAAAAATGAGAGGAGTGCTAGGTGGGTGGCCTGAGCATCTGTATCCAGGGACAGGACTCCAAAGGCTTTTGGT
CCCAGAGCTGGGGTATGTTGGCCCCAGCCCCCAGCCTGTGGCTCCCAAAAGGCCTCTGGTTTTTTGTAATCTCAG
TTTACAGCCATTTCTTAGGTTTTTAATTACCTTTATTTTATTTTGCCAAACATACCTGGGAATACCTTTTATTTT
TTTTTTACCTTGGGGTGATGGTTCCAAACCATAAATGTGATTATAGTTAACACATGACCCTTCTAGCGTCCCAGC
CAGTGTTTTTCCTGACCTCTCTTCTTTGGAGAGGAGGATGGAAGGGAGGGGTCCGGCATGCTGCTGGCATTTTGC
TGTGTCCTGCAGCCCCTTTCCGGGACACCTGGGTTCACACAGCTTTTTAGCTTACATAACTGGTGCAGATTTTCT
GTGTGGAGATGTTGCCTTGACCAGCCTTGGCTGGACCTTTACCAGGCATGCAGAAGCCTGTACCAACACAGACTA
CAGCACCCAGGAGGTGCGAGTGTGGCTGCTCAGCGGTTATAACAGGCCTGACTGCATTGTTCACCGGATTATAAT
GAGCCAAAATGTTTCCCGGTGTTTGCTGGTTTCAGGGAAGGAGTTTGATATAGCAGATTAACCACCCTCCTTGTA
GCTATTGGGGCTTAATGGTTTCCTGGTGATTCTTACCAATCCACAATAAACATGGCCCATTGGCATATCTGC

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FIGURE 3140

CGGCCGGTTTTGGTAGGCCCGGGCCGCCGCCAGGCCTCCGCCTGAGCCCGCACCCGCCATGGACAACTACGCAGA
TCTTTCGGATACCGAGCTGACCACCTTGCTGCGCCGGTACAACATCCCGCACGGGCCTGTAGTAGGATCAACTCG
TAGGCTTTACGAGAAGAAGATCTTCGAGTACGAGACCCAGAGGCGGCGGCTCTCGCCCCCCAGCTCGTCCGCCGC
CTCCTCTTATAGCTTCTCTGACTTGAATTCGACTAGAGGGGATGCAGATATGTATGATCTTCCCAAGAAAGAGGA
CGCTTTACTCTACCAGAGCAAGGGCTACAATGACGACTACTATGAAGAGAGCTACTTCACCACCAGGACTTATGG
GGAGCCCGAGTCTGCCGGCCCGTCCAGGGCTGTCCGCCAGTCAGTGACTTCATTCCCAGATGCTGACGCTTTCCA
TCACCAGGTGCATGATGACGATCTTTTGTCTTCTTCTGAAGAGGAGTGCAAGGATAGGGAACGCCCCATGTACGG
CCGGGACAGTGCCTACCAGAGCATCACGCACTACCGCCCTGTTTCAGCCTCCAGGAGCTCCCTGGACCTGTCCTA
TTATCCTACTTCCTCCTCCACCTCTTTTATGTCCTCCTCATCATCTTCCTCTTCATGGCTCACCCGCCGTGCCAT
CCGGCCTGAAAACCGTGCTCCTGGGGCTGGGCTGGGCCAGGATCGCCAGGTCCCGCTCTGGGGCCAGCTGCTGCT
TTTCCTGGTCTTTGTGATCGTCCTCTTCTTCATTTACCACTTCATGCAGGCTGAAGAAGGCAACCCCTTCTAGAG
GGAGCCATGAGGGTCTGGGCTTCAGAGCTAGGTCTTTGGGGAAGTCCTGGCTGACTGCCTTAGCAGTGGGGGTGG
GGGTGGGGGCAGGGGCAGGGGCTTTATGTGTTTTTGCTTGGGGGGCGCTGGGCCTAGCCCAGAGTAGTGCTTGCT
CCCCCTGCCTTGTCCCACCAGGGAGGCAGCAGACTCAGGCCCTCCATGGTCCTCTTTGTCATTTTGTTGACATGC
ATTCCTCCTTTTGTCATCTTGTTGGGGGGAGGGGATTAACCAAAGGCCACCCTGACTTTGTTTTTGTGGACACAC
AATAAAAGCCCCGTTTATTTGT

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FIGURE 3141A

GCGATCCGGGCGCCACCCCGCGGTCATCGGTCACCGGTCGCTCTCAGGAACAGCAGCGCAACCTCTGCTCCCTGC
CTCGCCTCCCGCGCGCCTAGGTGCCTGCGACTTTAATTAAAGGGCCGTCCCCTCGCCGAGGCTGCAGCACCGCCC
CCCCGGCTTCTCGCGCCTCAAAATGAGTAGCTCCCACTCTCGGGCGGGCCAGAGCGCAGCAGGCGCGGCTCCGGG
CGGCGGCGTCGACACGCGGGACGCCGAGATGCCGGCCACCGAGAAGGACCTGGCGGAGGACGCGCCGTGGAAGAA
GATCCAGCAGAACACTTTCACGCGCTGGTGCAACGAGCACCTGAAGTGCGTGAGCAAGCGCATCGCCAACCTGCA
GACGGACCTGAGCGACGGGCTGCGGCTTATCGCGCTGTTGGAGGTGCTCAGCCAGAAGAAGATGCACCGCAAGCA
CAACCAGCGGCCCACTTTCCGCCAAATGCAGCTTGAGAACGTGTCGGTGGCGCTCGAGTTCCTGGACCGCGAGAG
CATCAAACTGGTGTCCATCGACAGCAAGGCCATCGTGGACGGGAACCTGAAGCTGATCCTGGGCCTCATCTGGAC
CCTGATCCTGCACTACTCCATCTCCATGCCCATGTGGGACGAGGAGGAGGATGAGGAGGCCAAGAAGCAGACCCC
CAAGCAGAGGCTCCTGGGCTGGATCCAGAACAAGCTGCCGCAGCTGCCCATCACCAACTTCAGCCGGGACTGGCA
GAGCGGCCGGGCCCTGGGCGCCCTGGTGGACAGCTGTGCCCCGGGCCTGTGTCCTGACTGGGACTCTTGGGACGC
CAGCAAGCCCGTTACCAATGCGCGAGAGGCCATGCAGCAGGCGGATGACTGGCTGGGCATCCCCCAGGTGATCAC
CCCCGAGGAGATTGTGGACCCCAACGTGGACGAGCACTCTGTCATGACCTACCTGTCCCAGTTCCCCAAGGCCAA
GCTGAAGCCAGGGGCTCCCTTGCGGCCCAAACTGAACCCGAAGAAAGCCCGTGCCTACGGGCCAGGCATCGAGCC
CACAGGCAACATGGTGAAGAAGCGGGCAGAGTTCACTGTGGAGACCAGAAGTGCTGGCCAGGGAGAGGTGCTGGT
GTACGTGGAGGACCCGGCCGGACACCAGGAGGAGGCAAAAGTGACCGCCAATAACGACAAGAACCGCACCTTCTC
CGTCTGGTACGTCCCCGAGGTGACGGGGACTCATAAGGTTACTGTGCTCTTTGCTGGCCAGCACATCGCCAAGAG
CCCCTTCGAGGTGTACGTGGATAAGTCACAGGGTGACGCCAGCAAAGTGACAGCCCAAGGTCCCGGCCTGGAGCC
CAGTGGCAACATCGCCAACAAGACCACCTACTTTGAGATCTTTACGGCAGGAGCTGGCACGGGCGAGGTCGAGGT
TGTGATCCAGGACCCCATGGGACAGAAGGGCACGGTAGAGCCTCAGCTGGAGGCCCGGGGCGACAGCACATACCG
CTGCAGCTACCAGCCCACCATGGAGGGCGTCCACACCGTGCACGTCACGTTTGCCGGCGTGCCCATCCCTCGCAG
CCCCTACACTGTCACTGTTGGCCAAGCCTGTAACCCGAGTGCCTGCCGGGCGGTTGGCCGGGGCCTCCAGCCCAA
GGGTGTGCGGGTGAAGGAGACAGCTGACTTCAAGGTGTACACAAAGGGCGCTGGCAGTGGGGAGCTGAAGGTCAC
CGTGAAGGGCCCCAAGGGAGAGGAGCGCGTGAAGCAGAAGGACCTGGGGGATGGCGTGTATGGCTTCGAGTATTA
CCCCATGGTCCCTGGAACCTATATCGTCACCATCACGTGGGGTGGTCAGAACATCGGGCGCAGTCCCTTCGAAGT
GAAGGTGGGCACCGAGTGTGGCAATCAGAAGGTACGGGCCTGGGGCCCTGGGCTGGAGGGCGGCGTCGTTGGCAA
GTCAGCAGACTTTGTGGTGGAGGCTATCGGGGACGACGTGGGCACGCTGGGCTTCTCGGTGGAAGGGCCATCGCA
GGCTAAGATCGAATGTGACGACAAGGGCGACGGCTCCTGTGATGTGCGCTACTGGCCGCAGGAGGCTGGCGAGTA
TGCCGTTCACGTGCTGTGCAACAGCGAAGACATCCGCCTCAGCCCCTTCATGGCTGACATCCGTGACGCGCCCCA
GGACTTCCACCCAGACAGGGTGAAGGCACGTGGGCCTGGATTGGAGAAGACAGGTGTGGCCGTCAACAAGCCAGC
AGAGTTCACAGTGGATGCCAAGCACGGTGGCAAGGCCCCACTTCGGGTCCAAGTCCAGGACAATGAAGGCTGCCC
TGTGGAGGCGTTGGTCAAGGACAACGGCAATGGCACTTACAGCTGCTCCTACGTGCCCAGGAAGCCGGTGAAGCA
CACAGCCATGGTGTCCTGGGGAGGCGTCAGCATCCCCAACAGCCCCTTCAGGGTGAATGTGGGAGCTGGCAGCCA
CCCCAACAAGGTCAAAGTATACGGCCCCGGAGTAGCCAAGACAGGGCTCAAGGCCCACGAGCCCACCTACTTCAC
TGTGGACTGCGCCGAGGCTGGCCAGGGGGACGTCAGCATCGGCATCAAGTGTGCCCCTGGAGTGGTAGGCCCCGC
CGAAGCTGACATCGACTTCGACATCATCCGCAATGACAATGACACCTTCACGGTCAAGTACACGCCCCGGGGGGC
TGGCAGCTACACCATTATGGTCCTCTTTGCTGACCAGGCCACGCCCACCAGCCCCATCCGAGTCAAGGTGGAGCC
CTCTCATGACGCCAGTAAGGTGAAGGCCGAGGGCCCTGGCCTCAGTCGCACTGGTGTCGAGCTTGGCAAGCCCAC
CCACTTCACAGTAAATGCCAAAGCTGCTGGCAAAGGCAAGCTGGACGTCCAGTTCTCAGGACTCACCAAGGGGGA
TGCAGTGCGAGATGTGGACATCATCGACCACCATGACAACACCTACACAGTCAAGTACACGCCTGTCCAGCAGGG
TCCAGTAGGCGTCAATGTCACTTATGGAGGGGATCCCATCCCTAAGAGCCCTTTCTCAGTGGCAGTATCTCCAAG
CCTGGACCTCAGCAAGATCAAGGTGTCTGGCCTGGGAGAGAAGGTGGACGTTGGCAAAGACCAGGAGTTCACAGT
CAAATCAAAGGGTGCTGGTGGTCAAGGCAAAGTGGCATCCAAGATTGTGGGCCCCTCGGGTGCAGCGGTGCCCTG
CAAGGTGGAGCCAGGCCTGGGGGCTGACAACAGTGTGGTGCGCTTCCTGCCCCGTGAGGAAGGGCCCTATGAGGT
GGAGGTGACCTATGACGGCGTGCCCGTGCCTGGCAGCCCCTTTCCTCTGGAAGCTGTGGCCCCCACCAAGCCTAG
CAAGGTGAAGGCGTTTGGGCCGGGGCTGCAGGGAGGCAGTGCGGGCTCCCCCGCCCGCTTCACCATCGACACCAA
GGGCGCCGGCACAGGTGGCCTGGGCCTGACGGTGGAGGGCCCCTGTGAGGCGCAGCTCGAGTGCTTGGACAATGG
GGATGGCACATGTTCCGTGTCCTACGTGCCCACCGAGCCCGGGGACTACAACATCAACATCCTCTTCGCTGACAC

FIGURE 3141B

CCACATCCCTGGCTCCCCATTCAAGGCCCACGTGGTTCCCTGCTTTGACGCATCCAAAGTCAAGTGCTCAGGCCC
CGGGCTGGAGCGGGCCACCGCTGGGGAGGTGGGCCAATTCCAAGTGGACTGCTCGAGCGCGGGCAGCGCGGAGCT
GACCATTGAGATCTGCTCGGAGGCGGGGCTTCCGGCCGAGGTGTACATCCAGGACCACGGTGATGGCACGCACAC
CATTACCTACATTCCCCTCTGCCCCGGGGCCTACACCGTCACCATCAAGTACGGCGGCCAGCCCGTGCCCAACTT
CCCCAGCAAGCTGCAGGTGGAACCTGCGGTGGACACTTCCGGTGTCCAGTGCTATGGGCCTGGTATTGAGGGCCA
GGGTGTCTTCCGTGAGGCCACCACTGAGTTCAGTGTGGACGCCCGGGCTCTGACACAGACCGGAGGGCCGCACGT
CAAGGCCCGTGTGGCCAACCCCTCAGGCAACCTGACGGAGACCTACGTTCAGGACCGTGGCGATGGCATGTACAA
AGTGGAGTACACGCCTTACGAGGAGGGACTGCACTCCGTGGACGTGACCTATGACGGCAGTCCCGTGCCCAGCAG
CCCCTTCCAGGTGCCCGTGACCGAGGGCTGCGACCCCTCCCGGGTGCGTGTCCACGGGCCAGGCATCCAAAGTGG
CACCACCAACAAGCCCAACAAGTTCACTGTGGAGACCAGGGGAGCTGGCACGGGCGGCCTGGGCCTGGCTGTAGA
GGGCCCCTCCGAGGCCAAGATGTCCTGCATGGATAACAAGGACGGCAGCTGCTCGGTCGAGTACATCCCTTATGA
GGCTGGCACCTACAGCCTCAACGTCACCTATGGTGGCCATCAAGTGCCAGGCAGTCCTTTCAAGGTCCCTGTGCA
TGATGTGACAGATGCGTCCAAGGTCAAGTGCTCTGGGCCCGGCCTGAGCCCAGGCATGGTTCGTGCCAACCTCCC
TCAGTCCTTCCAGGTGGACACAAGCAAGGCTGGTGTGGCCCCATTGCAGGTCAAAGTGCAAGGGCCCAAAGGCCT
GGTGGAGCCAGTGGACGTGGTAGACAACGCTGATGGCACCCAGACCGTCAATTATGTGCCCAGCCGAGAAGGGCC
CTACAGCATCTCAGTACTGTATGGAGATGAAGAGGTACCCCGGAGCCCCTTCAAGGTCAAGGTGCTGCCTACTCA
TGATGCCAGCAAGGTGAAGGCCAGTGGCCCCGGGCTCAACACCACTGGCGTGCCTGCCAGCCTGCCCGTGGAGTT
CACCATCGATGCAAAGGACGCCGGGGAGGGCCTGCTGGCTGTCCAGATCACGGATCCCGAAGGCAAGCCGAAGAA
GACACACATCCAAGACAACCATGACGGCACGTATACAGTGGCCTACGTGCCAGACGTGACAGGTCGCTACACCAT
CCTCATCAAGTACGGTGGTGACGAGATCCCCTTCTCCCCGTACCGCGTGCGTGCCGTGCCCACCGGGGACGCCAG
CAAGTGCACTGTCACAGGTGCTGGCATCGGCCCCACCATTCAGATTGGGGAGGAGACGGTGATCACTGTGGACAC
TAAGGCGGCAGGCAAAGGCAAAGTGACGTGCACCGTGTGCACGCCTGATGGCTCAGAGGTGGATGTGGACGTGGT
GGAGAATGAGGACGGCACTTTCGACATCTTCTACACGGCCCCCCAGCCGGGCAAATACGTCATCTGTGTGCGCTT
TGGTGGCGAGCACGTGCCCAACAGCCCCTTCCAAGTGACGGCTCTGGCTGGGGACCAGCCCTCGGTGCAGCCCCC
TCTACGGTCTCAGCAGCTGGCCCCACAGTACACCTACGCCCAGGGCGGCCAGCAGACTTGGGCCCCGGAGAGGCC
CCTGGTGGGTGTCAATGGGCTGGATGTGACCAGCCTGAGGCCCTTTGACCTTGTCATCCCCTTCACCATCAAGAA
GGGCGAGATCACAGGGGAGGTTCGGATGCCCTCAGGCAAGGTGGCGCAGCCCACCATCACTGACAACAAAGACGG
CACCGTGACCGTGCGGTATGCACCCAGCGAGGCTGGCCTGCACGAGATGGACATCCGCTATGACAACATGCACAT
CCCAGGAAGCCCCTTGCAGTTCTATGTGGATTACGTCAACTGTGGCCATGTCACTGCCTATGGGCCTGGCCTCAC
CCATGGAGTAGTGAACAAGCCTGCCACCTTCACCGTCAACACCAAGGATGCAGGAGAGGGGGGCCTGTCTCTGGC
CATTGAGGGCCCGTCCAAAGCAGAAATCAGCTGCACTGACAACCAGGATGGGACATGCAGCGTGTCCTACCTGCC
TGTGCTGCCGGGGGACTACAGCATTCTAGTCAAGTACAATGAACAGCACGTCCCAGGCAGCCCCTTCACTGCTCG
GGTCACAGGTGACGACTCCATGCGTATGTCCCACCTAAAGGTCGGCTCTGCTGCCGACATCCCCATCAACATCTC
AGAGACGGATCTCAGCCTGCTGACGGCCACTGTGGTCCCGCCCTCGGGCCGGGAGGAGCCCTGTTTGCTGAAGCG
GCTGCGTAATGGCCACGTGGGGATTTCATTCGTGCCCAAGGAGACGGGGGAGCACCTGGTGCATGTGAAGAAAAA
TGGCCAGCACGTGGCCAGCAGCCCCATCCCGGTGGTGATCAGCCAGTCGGAAATTGGGGATGCCAGTCGTGTTCG
GGTCTCTGGTCAGGGCCTTCACGAAGGCCACACCTTTGAGCCTGCAGAGTTTATCATTGATACCCGCGATGCAGG
CTATGGTGGGCTCAGCCTGTCCATTGAGGGCCCCAGCAAGGTGGACATCAACACAGAGGACCTGGAGGACGGGAC
GTGCAGGGTCACCTACTGCCCCACAGAGCCAGGCAACTACATCATCAACATCAAGTTTGCCGACCAGCACGTGCC
TGGCAGCCCCTTCTCTGTGAAGGTGACAGGCGAGGGCCGGGTGAAAGAGAGCATCACCCGCAGGCGTCGGGCTCC
TTCAGTGGCCAACGTTGGTAGTCATTGTGACCTCAGCCTGAAAATCCCTGAAATTAGCATCCAGGATATGACAGC
CCAGGTGACCAGCCCATCGGGCAAGACCCATGAGGCCGAGATCGTGGAAGGGGAGAACCACACCTACTGCATCCG
CTTTGTTCCCGCTGAGATGGGCACACACACAGTCAGCGTGAAGTACAAGGGCCAGCACGTGCCTGGGAGCCCCTT
CCAGTTCACCGTGGGGCCCCTAGGGGAAGGGGGAGCCCACAAGGTCCGAGCTGGGGGCCCTGGCCTGGAGAGAGC
TGAAGCTGGAGTGCCAGCCGAATTCAGTATCTGGACCCGGGAAGCTGGTGCTGGAGGCCTGGCCATTGCTGTCGA
GGGCCCCAGCAAGGCTGAGATCTCTTTTGAGGACCGCAAGGACGGCTCCTGTGGTGTGGCTTATGTGGTCCAGGA
GCCAGGTGACTACGAAGTCTCAGTCAAGTTCAACGAGGAACACATTCCCGACAGCCCCTTCGTGGTGCCTGTGGC
TTCTCCGTCTGGCGACGCCCGCCGCCTCACTGTTTCTAGCCTTCAGGAGTCAGGGCTAAAGGTCAACCAGCCAGC

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FIGURE 3141C

CTCTTTTGCAGTCAGCCTGAACGGGGCCAAGGGGGCGATCGATGCCAAGGTGCACAGCCCCTCAGGAGCCCTGGA
GGAGTGCTATGTCACAGAAATTGACCAAGATAAGTATGCTGTGCGCTTCATCCCTCGGGAGAATGGCGTTTACCT
GATTGACGTCAAGTTCAACGGCACCCACATCCCTGGAAGCCCCTTCAAGATCCGAGTTGGGGAGCCTGGGCATGG
AGGGGACCCAGGCTTGGTGTCTGCTTACGGAGCAGGTCTGGAAGGCGGTGTCACAGGGAACCCAGCTGAGTTCGT
CGTGAACACGAGCAATGCGGGAGCTGGTGCCCTGTCGGTGACCATTGACGGCCCCTCCAAGGTGAAGATGGATTG
CCAGGAGTGCCCTGAGGGCTACCGCGTCACCTATACCCCCATGGCACCTGGCAGCTACCTCATCTCCATCAAGTA
CGGCGGCCCCTACCACATTGGGGGCAGCCCCTTCAAGGCCAAAGTCACAGGCCCCCGTCTCGTCAGCAACCACAG
CCTCCACGAGACATCATCAGTGTTTGTAGACTCTCTGACCAAGGCCACCTGTGCCCCCCAGCATGGGGCCCCGGG
TCCTGGGCCTGCTGACGCCAGCAAGGTGGTGGCCAAGGGCCTGGGGCTGAGCAAGGCCTACGTAGGCCAGAAGAG
CAGCTTCACAGTAGACTGCAGCAAAGCAGGCAACAACATGCTGCTGGTGGGGGTTCATGGCCCAAGGACCCCCTG
CGAGGAGATCCTGGTGAAGCACGTGGGCAGCCGGCTCTACAGCGTGTCCTACCTGCTCAAGGACAAGGGGGAGTA
CACACTGGTGGTCAAATGGGGGGACGAGCACATCCCAGGCAGCCCCTACCGCGTTGTGGTGCCCTGAGTCTGGGG
CCCGTGCCAGCCGGCAGCCCCCAAGCCTGCCCCGCTACCCAAGCAGCCCCGCCCTCTTCCCCTCAACCCCGGCCC
AGGCCGCCCTGGCCGCCCGCCTGTCACTGCAGCCGCCCCTGCCCTGTGCCGTGCTGCGCTCACCTGCCTCCCCAG
CCAGCCGCTGACCTCTCGGCTTTCACTTGGGCAGAGGGAGCCATTTGGTGGCGCTGCTTGTCTTCTTTGGTTCTG
GGAGGGGTGAGGGATGGGGGTCCTGTACACAACCACCCACTAGTTCTCTTCTCCAGCCAAGAGGAATAAAGTTTT
GCTTCCATTC

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FIGURE 3142A

CCGGAAAATGGCCGCCGCCGCCGCCGCCGCGCCGAGCGGAGGAGGAGGAGGAGGCGAGGAGGAGAGACTGCTCCA
TAAAAATACAGACTCACCAGTTCCTGCTTTGATGTGACATGTGACTCCCCAGAATACACCTTGCTTCTGTAGACC
AGCTCCAACAGGATTCCATGGTAGCTGGGATGTTAGGGCTCAGGGAAGAAAAGTCAGAAGACCAGGACCTCCAGG
GCCTCAAGGACAAACCCCTCAAGTTTAAAAAGGTGAAGAAAGATAAGAAAGAAGAGAAAGAGGGCAAGCATGAGC
CCGTGCAGCCATCAGCCCACCACTCTGCTGAGCCCGCAGAGGCAGGCAAAGCAGAGACATCAGAAGGGTCAGGCT
CCGCCCCGGCTGTGCCGGAAGCTTCTGCCTCCCCCAAACAGCGGCGCTCCATCATCCGTGACCGGGGACCCATGT
ATGATGACCCCACCCTGCCTGAAGGCTGGACACGGAAGCTTAAGCAAAGGAAATCTGGCCGCTCTGCTGGGAAGT
ATGATGTGTATTTGATCAATCCCCAGGGAAAAGCCTTTCGCTCTAAAGTGGAGTTGATTGCGTACTTCGAAAAGG
TAGGCGACACATCCCTGGACCCTAATGATTTTGACTTCACGGTAACTGGGAGAGGGAGCCCCTCCCGGCGAGAGC
AGAAACCACCTAAGAAGCCCAAATCTCCCAAAGCTCCAGGAACTGGCAGAGGCCGGGGACGCCCCAAAGGGAGCG
GCACCACGAGACCCAAGGCGGCCACGTCAGAGGGTGTGCAGGTGAAAAGGGTCCTGGAGAAAAGTCCTGGGAAGC
TCCTTGTCAAGATGCCTTTTCAAACTTCGCCAGGGGGCAAGGCTGAGGGGGGTGGGGCCACCACATCCACCCAGG
TCATGGTGATCAAACGCCCCGGCAGGAAGCGAAAAGCTGAGGCCGACCCTCAGGCCATTCCCAAGAAACGGGGCC
GAAAGCCGGGGAGTGTGGTGGCAGCCGCTGCCGCCGAGGCCAAAAAGAAAGCCGTGAAGGAGTCTTCTATCCGAT
CTGTGCAGGAGACCGTACTCCCCATCAAGAAGCGCAAGACCCGGGAGACGGTCAGCATCGAGGTCAAGGAAGTGG
TGAAGCCCCTGCTGGTGTCCACCCTCGGTGAGAAGAGCGGGAAAGGACTGAAGACCTGTAAGAGCCCTGGGCGGA
AAAGCAAGGAGAGCAGCCCCAAGGGGCGCAGCAGCAGCGCCTCCTCACCCCCCAAGAAGGAGCACCACCACCATC
ACCACCACTCAGAGTCCCCAAAGGCCCCCGTGCCACTGCTCCCACCCCTGCCCCCACCTCCACCTGAGCCCGAGA
GCTCCGAGGACCCCACCAGCCCCCCTGAGCCCCAGGACTTGAGCAGCAGCGTCTGCAAAGAGGAGAAGATGCCCA
GAGGAGGCTCACTGGAGAGCGACGGCTGCCCCAAGGAGCCAGCTAAGACTCAGCCCGCGGTTGCCACCGCCGCCA
CGGCCGCAGAAAAGTACAAACACCGAGGGGAGGGAGAGCGCAAAGACATTGTTTCATCCTCCATGCCAAGGCCAA
ACAGAGAGGAGCCTGTGGACAGCCGGACGCCCGTGACCGAGAGAGTTAGCTGACTTTACACGGAGCGGATTGCAA
AGCAAACCAACAAGAATAAAGGCAGCTGTTGTCTCTTCTCCTTATGGGTAGGGCTCTGACAAAGCTTCCCGATTA
ACTGAAATAAAAAATATTTTTTTTTCTTTCAGTAAACTTAGAGTTTCGTGGCTTCAGGGTGGGAGTAGTTGGAGC
ATTGGGGATGTTTTTCTTACCGACAAGCACAGTCAGGTTGAAGACCTAACCAGGGCCAGAAGTAGCTTTGCACTT
TTCTAAACTAGGCTCCTTCAACAAGGCTTGCTGCAGATACTACTGACCAGACAAGCTGTTGACCAGGCACCTCCC
CTCCCGCCCAAACCTTTCCCCCATGTGGTCGTTAGAGACAGAGCGACAGAGCAGTTGAGAGGACACTCCCGTTTT
CGGTGCCATCAGTGCCCCGTCTACAGCTCCCCCAGCTCCCCCCACCTCCCCCACTCCCAACCACGTTGGGACAGG
GAGGTGTGAGGCAGGAGAGACAGTTGGATTCTTTAGAGAAGATGGATATGACCAGTGGCTATGGCCTGTGCGATC
CCACCCGTGGTGGCTCAAGTCTGGCCCCACACCAGCCCCAATCCAAAACTGGCAAGGACGCTTCACAGGACAGGA
AAGTGGCACCTGTCTGCTCCAGCTCTGGCATGGCTAGGAGGGGGGAGTCCCTTGAACTACTGGGTGTAGACTGGC
CTGAACCACAGGAGAGGATGGCCCAGGGTGAGGTGGCATGGTCCATTCTCAAGGGACGTCCTCCAACGGGTGGCG
CTAGAGGCCATGGAGGCAGTAGGACAAGGTGCAGGCAGGCTGGCCTGGGGTCAGGCCGGGCAGAGCACAGCGGGG
TGAGAGGGATTCCTAATCACTCAGAGCAGTCTGTGACTTAGTGGACAGGGGAGGGGGCAAAGGGGGAGGAGAAGA
AAATGTTCTTCCAGTTACTTTCCAATTCTCCTTTAGGGACAGCTTAGAATTATTTGCACTATTGAGTCTTCATGT
TCCCACTTCAAAACAAACAGATGCTCTGAGAGCAAACTGGCTTGAATTGGTGACATTTAGTCCCTCAAGCCACCA
GATGTGACAGTGTTGAGAACTACCTGGATTTGTATATATACCTGCGCTTGTTTTAAAGTGGGCTCAGCACATAGG
GTTCCCACGAAGCTCCGAAACTCTAAGTGTTTGCTGCAATTTTATAAGGACTTCCTGATTGGTTTCTCTTCTCCC
CTTCCATTTCTGCCTTTTGTTCATTTCATCCTTTCACTTCTTTCCCTTCCTCCGTCCTCCTCCTTCCTAGTTCAT
CCCTTCTCTTCCAGGCAGCCGCGGTGCCCAACCACACTTGTCGGCTCCAGTCCCCAGAACTCTGCCTGCCCTTTG
TCCTCCTGCTGCCAGTACCAGCCCCACCCTGTTTTGAGCCCTGAGGAGGCCTTGGGCTCTGCTGAGTCCGACCTG
GCCTGTCTGTGAAGAGCAAGAGAGCAGCAAGGTCTTGCTCTCCTAGGTAGCCCCCTCTTCCCTGGTAAGAAAAAG
CAAAAGGCATTTCCCACCCTGAACAACGAGCCTTTTCACCCTTCTACTCTAGAGAAGTGGACTGGAGGAGCTGGG
CCCGATTTGGTAGTTGAGGAAAGCACAGAGGCCTCCTGTGGCCTGCCAGTCATCGAGTGGCCCAACAGGGGCTCC
ATGCCAGCCGACCTTGACCTCACTCAGAAGTCCAGAGTCTAGCGTAGTGCAGCAGGGCAGTAGCGGTACCAATGC
AGAACTCCCAAGACCCGAGCTGGGACCAGTACCTGGGTCCCCAGCCCTTCCTCTGCTCCCCCTTTTCCCTCGGAG
TTCTTCTTGAATGGCAATGTTTTGCTTTTGCTCGATGCAGACAGGGGGCCAGAACACCACACATTTCACTGTCTG
TCTGGTCCATAGCTGTGGTGTAGGGGCTTAGAGGCATGGGCTTGCTGTGGGTTTTTAATTGATCAGTTTTCATGT

FIGURE 3142B

GGGATCCCATCTTTTTAACCTCTGTTCAGGAAGTCCTTATCTAGCTGCATATCTTCATCATATTGGTATATCCTT
TTCTGTGTTTACAGAGATGTCTCTTATATCTAAATCTGTCCAACTGAGAAGTACCTTATCAAAGTAGCAAATGAG
ACAGCAGTCTTATGCTTCCAGAAACACCCACAGGCATGTCCCATGTGAGCTGCTGCCATGAACTGTCAAGTGTGT
GTTGTCTTGTGTATTTCAGTTATTGTCCCTGGCTTCCTTACTATGGTGTAATCATGAAGGAGTGAAACATCATAG
AAACTGTCTAGCACTTCCTTGCCAGTCTTTAGTGATCAGGAACCATAGTTGACAGTTCCAATCAGTAGCTTAAGA
AAAAACCGTGTTTGTCTCTTCTGGAATGGTTAGAAGTGAGGGAGTTTGCCCCGTTCTGTTTGTAGAGTCTCATAG
TTGGACTTTCTAGCATATATGTGTCCATTTCCTTATGCTGTAAAAGCAAGTCCTGCAACCAAACTCCCATCAGCC
CAATCCCTGATCCCTGATCCCTTCCACCTGCTCTGCTGATGACCCCCCCAGCTTCACTTCTGACTCTTCCCCAGG
AAGGGAAGGGGGGTCAGAAGAGAGGGTGAGTCCTCCAGAACTCTTCCTCCAAGGACAGAAGGCTCCTGCCCCCAT
AGTGGCCTCGAACTCCTGGCACTACCAAAGGACACTTATCCACGAGAGCGCAGCATCCGACCAGGTTGTCACTGA
GAAGATGTTTATTTTGGTCAGTTGGGTTTTTATGTATTATACTTAGTCAAATGTAATGTGGCTTCTGGAATCATT
GTCCAGAGCTGCTTCCCCGTCACCTGGGCGTCATCTGGTCCTGGTAAGAGGAGTGCGTGGCCCACCAGGCCCCCC
TGTCACCCATGACAGTTCATTCAGGGCCGATGGGGCAGTCGTGGTTGGGAACACAGCATTTCAAGCGTCACTTTA
TTTCATTCGGGCCCCACCTGCAGCTCCCTCAAAGAGGCAGTTGCCCAGCCTCTTTCCCTTCCAGTTTATTCCAGA
GCTGCCAGTGGGGCCTGAGGCTCCTTAGGGTTTTCTCTCTATTTCCCCCTTTCTTCCTCATTCCCTCGTCTTTCC
CAAAGGCATCACGAGTCAGTCGCCTTTCAGCAGGCAGCCTTGGCGGTTTATCGCCCTGGCAGGCAGGGGCCCTGC
AGCTCTCATGCTGCCCCTGCCTTGGGGTCAGGTTGACAGGAGGTTGGAGGGAAAGCCTTAAGCTGCAGGATTCTC
ACCAGCTGTGTCCGGCCCAGTTTTGGGGTGTGACCTCAATTTCAATTTTGTCTGTACTTGAACATTATGAAGATG
GGGGCCTCTTTCAGTGAATTTGTGAACAGCAGAATTGACCGACAGCTTTCCAGTACCCATGGGGCTAGGTCATTA
AGGCCACATCCACAGTCTCCCCCACCCTTGTTCCAGTTGTTAGTTACTACCTCCTCTCCTGACAATACTGTATGT
CGTCGAGCTCCCCCCAGGTCTACCCCTCCCGGCCCTGCCTGCTGGTGGGCTTGTCATAGCCAGTGGGATTGCCGG
TCTTGACAGCTCAGTGAGCTGGAGATACTTGGTCACAGCCAGGCGCTAGCACAGCTCCCTTCTGTTGATGCTGTA
TTCCCATATCAAAAGACACAGGGGACACCCAGAAACGCCACATCCCCCAATCCATCAGTGCCAAACTAGCCAACG
GCCCCAGCTTCTCAGCTCGCTGGATGGCGGAAGCTGCTACTCGTGAGCGCCAGTGCGGGTGCAGACAATCTTCTG
TTGGGTGGCATCATTCCAGGCCCGAAGCATGAACAGTGCACCTGGGACAGGGAGCAGCCCCAAATTGTCACCTGC
TTCTCTGCCCAGCTTTTCATTGCTGTGACAGTGATGGCGAAAGAGGGTAATAACCAGACACAAACTGCCAAGTTG
GGTGGAGAAAGGAGTTTCTTTAGCTGACAGAATCTCTGAATTTTAAATCACTTAGTAAGCGGCTCAAGCCCAGGA
GGGAGCAGAGGGATACGAGCGGAGTCCCCTGCGCGGGACCATCTGGAATTGGTTTAGCCCAAGTGGAGCCTGACA
GCCAGAACTCTGTGTCCCCCGTCTAACCACAGCTCCTTTTCCAGAGCATTCCAGTCAGGCTCTCTGGGCTGACTG
GGCCAGGGGAGGTTACAGGTACCAGTTCTTTAAGAAGATCTTTGGGCATATACATTTTTAGCCTGTGTCATTGCC
CCAAATGGATTCCTGTTTCAAGTTCACACCTGCAGATTCTAGGACCTGTGTCCTAGACTTCAGGGAGTCAGCTGT
TTCTAGAGTTCCTACCATGGAGTGGGTCTGGAGGACCTGCCCGGTGGGGGGGCAGAGCCCTGCTCCCTCCGGGTC
TTCCTACTCTTCTCTCTGCTCTGACGGGATTTGTTGATTCTCTCCATTTTGGTGTCTTTCTCTTTTAGATATTGT
ATCAATCTTTAGAAAAGGCATAGTCTACTTGTTATAAATCGTTAGGATACTGCCTCCCCCAGGGTCTAAAATTAC
ATATTAGAGGGGAAAAGCTGAACACTGAAGTCAGTTCTCAACAATTTAGAAGGAAAACCTAGAAAACATTTGGCA
GAAAATTACATTTCGATGTTTTTGAATGAATACGAGCAAGCTTTTACAACAGTGCTGATCTAAAAATACTTAGCA
CTTGGCCTGAGATGCCTGGTGAGCATTACAGGCAAGGGGAATCTGGAGGTAGCCGACCTGAGGACATGGCTTCTG
AACCTGTCTTTTGGGAGTGGTATGGAAGGTGGAGCGTTCACCAGTGACCTGGAAGGCCCAGCACCACCCTCCTTC
CCACTCTTCTCATCTTGACAGAGCCTGCCCCAGCGCTGACGTGTCAGGAAAACACCCAGGGAACTAGGAAGGCAC
TTCTGCCTGAGGGGCAGCCTGCCTTGCCCACTCCTGCTCTGCTCGCCTCGGATCAGCTGAGCCTTCTGAGCTGGC
CTCTCACTGCCTCCCCAAGGCCCCCTGCCTGCCCTGTCAGGAGGCAGAAGGAAGCAGGTGTGAGGGCAGTGCAAG
GAGGGAGCACAACCCCCAGCTCCCGCTCCGGGCTCCGACTTGTGCACAGGCAGAGCCCAGACCCTGGAGGAAATC
CTACCTTTGAATTCAAGAACATTTGGGGAATTTGGAAATCTCTTTGCCCCCAAACCCCCATTCTGTCCTACCTTT
AATCAGGTCCTGCTCAGCAGTGAGAGCAGATGAGGTGAAAAGGCCAAGAGGTTTGGCTCCTGCCCACTGATAGCC
CCTCTCCCCGCAGTGTTTGTGTGTCAAGTGGCAAAGCTGTTCTTCCTGGTGACCCTGATTATATCCAGTAACACA
TAGACTGTGCGCATAGGCCTGCTTTGTCTCCTCTATCCTGGGCTTTTGTTTTGCTTTTTAGTTTTGCTTTTAGTT
TTTCTGTCCCTTTTATTTAACGCACCGACTAGACACACAAAGCAGTTGAATTTTTATATATATATCTGTATATTG
CACAATTATAAACTCATTTTGCTTGTGGCTCCACACACACAAAAAAAGACCTGTTAAAATTATACCTGTTGCTTA

FIGURE 3142C

ATTACAATATTTCTGATAACCATAGCATAGGACAAGGGAAAATAAAAAAAGAAAAAAAAGAAAAAAAAACGACAA
ATCTGTCTGCTGGTCACTTCTTCTGTCCAAGCAGATTCGTGGTCTTTTCCTCGCTTCTTTCAAGGGCTTTCCTGT
GCCAGGTGAAGGAGGCTCCAGGCAGCACCCAGGTTTTGCACTCTTGTTTCTCCCGTGCTTGTGAAAGAGGTCCCA
AGGTTCTGGGTGCAGGAGCGCTCCCTTGACCTGCTGAAGTCCGGAACGTAGTCGGCACAGCCTGGTCGCCTTCCA
CCTCTGGGAGCTGGAGTCCACTGGGGTGGCCTGACTCCCCCAGTCCCCTTCCCGTGACCTGGTCAGGGTGAGCCC
ATGTGGAGTCAGCCTCGCAGGCCTCCCTGCCAGTAGGGTCCGAGTGTGTTTCATCCTTCCCACTCTGTCGAGCCT
GGGGGCTGGAGCGGAGACGGGAGGCCTGGCCTGTCTCGGAACCTGTGAGCTGCACCAGGTAGAACGCCAGGGACC
CCAGAATCATGTGCGTCAGTCCAAGGGGTCCCCTCCAGGAGTAGTGAAGACTCCAGAAATGTCCCTTTCTTCTCC
CCCATCCTACGAGTAATTGCATTTGCTTTTGTAATTCTTAATGAGCAATATCTGCTAGAGAGTTTAGCTGTAACA
GTTCTTTTTGATCATCTTTTTTTAATAATTAGAAACACCAAAAAAATCCAGAAACTTGTTCTTCCAAAGCAGAGA
GCATTATAATCACCAGGGCCAAAAGCTTCCCTCCCTGCTGTCATTGCTTCTTCTGAGGCCTGAATCCAAAAGAAA
AACAGCCATAGGCCCTTTCAGTGGCCGGGCTACCCGTGAGCCCTTCGGAGGACCAGGGCTGGGGCAGCCTCTGGG
CCCACATCCGGGGCCAGCTCCGGCGTGTGTTCAGTGTTAGCAGTGGGTCATGATGCTCTTTCCCACCCAGCCTGG
GATAGGGGCAGAGGAGGCGAGGAGGCCGTTGCCGCTGATGTTTGGCCGTGAACAGGTGGGTGTCTGCGTGCGTCC
ACGTGCGTGTTTTCTGACTGACATGAAATCGACGCCCGAGTTAGCCTCACCCGGTGACCTCTAGCCCTGCCCGGA
TGGAGCGGGGCCCACCCGGTTCAGTGTTTCTGGGGAGCTGGACAGTGGAGTGCAAAAGGCTTGCAGAACTTGAAG
CCTGCTCCTTCCCTTGCTACCACGGCCTCCTTTCCGTTTGATTTGTCACTGCTTCAATCAATAACAGCCGCTCCA
GAGTCAGTAGTCAATGAATATATGACCAAATATCACCAGGACTGTTACTCAATGTGTGCCGAGCCCTTGCCCATG
CTGGGCTCCCGTGTATCTGGACACTGTAACGTGTGCTGTGTTTGCTCCCCTTCCCCTTCCTTCTTTGCCCTTTAC
TTGTCTTTCTGGGGTTTTTCTGTTTGGGTTTGGTTTGGTTTTTATTTCTCCTTTTGTGTTCCAAACATGAGGTTC
TCTCTACTGGTCCTCTTAACTGTGGTGTTGAGGCTTATATTTGTGTAATTTTTGGTGGGTGAAAGGAATTTTGCT
AAGTAAATCTCTTCTGTGTTTGAACTGAAGTCTGTATTGTAACTATGTTTAAAGTAATTGTTCCAGAGACAAATA
TTTCTAGACACTTTTTCTTTACAAACAAAAGCATTCGGAGGGAGGGGGATGGTGACTGAGATGAGAGGGGAGAGC
TGAACAGATGACCCCTGCCCAGATCAGCCAGAAGCCACCCAAAGCAGTGGAGCCCAGGAGTCCCACTCCAAGCCA
GCAAGCCGAATAGCTGATGTGTTGCCACTTTCCAAGTCACTGCAAAACCAGGTTTTGTTCCGCCCAGTGGATTCT
TGTTTTGCTTCCCCTCCCCCCGAGATTATTACCACCATCCCGTGCTTTTAAGGAAAGGCAAGATTGATGTTTCCT
TGAGGGGAGCCAGGAGGGGATGTGTGTGTGCAGAGCTGAAGAGCTGGGGAGAATGGGGCTGGGCCCACCCAAGCA
GGAGGCTGGGACGCTCTGCTGTGGGCACAGGTCAGGCTAATGTTGGCAGATGCAGCTCTTCCTGGACAGGCCAGG
TGGTGGGCATTCTCTCTCCAAGGTGTGCCCCGTGGGCATTACTGTTTAAGACACTTCCGTCACATCCCACCCCAT
CCTCCAGGGCTCAACACTGTGACATCTCTATTCCCCACCCTCCCCTTCCCAGGGCAATAAAATGACCATGGAGGG
GGCTTGCACTCTCTTGGCTGTCACCCGATCGCCAGCAAAACTTAGATGTGAGAAAACCCCTTCCCATTCCATGGC
GAAAACATCTCCTTAGAAAAGCCATTACCCTCATTAGGCATGGTTTTGGGCTCCCAAAACACCTGACAGCCCCTC
CCTCCTCTGAGAGGCGGAGAGTGCTGACTGTAGTGACCATTGCATGCCGGGTGCAGCATCTGGAAGAGCTAGGCA
GGGTGTCTGCCCCCTCCTGAGTTGAAGTCATGCTCCCCTGTGCCAGCCCAGAGGCCGAGAGCTATGGACAGCATT
GCCAGTAACACAGGCCACCCTGTGCAGAAGGGAGCTGGCTCCAGCCTGGAAACCTGTCTGAGGTTGGGAGAGGTG
CACTTGGGGCACAGGGAGAGGCCGGGACACACTTAGCTGGAGATGTCTCTAAAAGCCCTGTATCGTATTCACCTT
CAGTTTTTGTGTTTTGGGACAATTACTTTAGAAAATAAGTAGGTCGTTTTAAAAACAAAAATTATTGATTGCTTT
TTTGTAGTGTTCAGAAAAAAGGTTCTTTGTGTATAGCCAAATGACTGAAAGCACTGATATATTTAAAAACAAAAG
GCAATTTATTAAGGAAATTTGTACCATTTCAGTAAACCTGTCTGAATGTACCTGTATACGTTTCAAAAACACCCC
CCCCCCACTGAATCCCTGTAACCTATTTATTATATAAAGAGTTTGCCTTATAAATTT

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FIGURE 3143

CGCGGACCCGGCCGGCCCAGGCCCGCGCCCGCCGCGGCCCTGAGAGGCCCCGGCAGGTCCCGGCCCGGCGGCGGC
AGCCATGGCCGGGGGGGCCGGGCCCGGGGGAGCCCGCAGCCCCCGGCGCCCAGCACTTCTTGTACGAGGTGCCGCC
CTGGGTCATGTGCCGCTTCTACAAAGTGATGGACGCCCTGGAGCCCGCCGACTGGTGCCAGTTCGCCGCCCTGAT
CGTGCGCGACCAGACCGAGCTGCGGCTGTGCGAGCGCTCCGGGCAGCGCACGGCCAGCGTCCTGTGGCCCTGGAT
CAACCGCAACGCCCGTGTGGCCGACCTCGTGCACATCCTCACGCACCTGCAGCTGCTCCGTGCGCGGGACATCAT
CACAGCCTGGCACCCTCCCGCCCCGCTTCCGTCCCCAGGCACCACTGCCCCGAGGCCCAGCAGCATCCCTGCACC
CGCCGAGGCCGAGGCCTGGAGCCCCCGGAAGTTGCCATCCTCAGCCTCCACCTTCCTCTCCCCAGCTTTTCCAGG
CTCCCAGACCCATTCAGGGCCTGAGCTCGGCCTGGTCCCAAGCCCTGCTTCCCTGTGGCCTCCACCGCCATCTCC
AGCCCCTTCTTCTACCAAGCCAGGCCCAGAGAGCTCAGTGTCCCTCCTGCAGGGAGCCCGCCCCTTTCCGTTTTG
CTGGCCCCTCTGTGAGATTTCCCGGGGCACCCACAACTTCTCGGAGGAGCTCAAGATCGGGGAGGGTGGCTTTGG
GTGCGTGTACCGGGCGGTGATGAGGAACACGGTGTATGCTGTGAAGAGGCTGAAGGAGAACGCTGACCTGGAGTG
GACTGCAGTGAAGCAGAGCTTCCTGACCGAGGTGGAGCAGCTGTCCAGGTTTCGTCACCCAAACATTGTGGACTT
TGCTGGCTACTGTGCTCAGAACGGCTTCTACTGCCTGGTGTACGGCTTCCTGCCCAACGGCTCCCTGGAGGACCG
TCTCCACTGCCAGACCCAGGCCTGCCCACCTCTCTCCTGGCCTCAGCGACTGGACATCCTTCTGGGTACAGCCCG
GGCAATTCAGTTTCTACATCAGGACAGCCCCAGCCTCATCCATGGAGACATCAAGAGTTCCAACGTCCTTCTGGA
TGAGAGGCTGACACCCAAGCTGGGAGACTTTGGCCTGGCCCGGTTCAGCCGCTTTGCCGGGTCCAGCCCCAGCCA
GAGCAGCATGGTGGCCCGGACACAGACAGTGCGGGGCACCCTGGCCTACCTGCCCGAGGAGTACATCAAGACGGG
AAGGCTGGCTGTGGACACGGACACCTTCAGCTTTGGGGTGGTAGTGCTAGAGACCTTGGCTGGTCAGAGGGCTGT
GAAGACGCACGGTGCCAGGACCAAGTATCTGAAAGACCTGGTGGAAGAGGAGGCTGAGGAGGCTGGAGTGGCTTT
GAGAAGCACCCAGAGCACACTGCAAGCAGGTCTGGCTGCAGATGCCTGGGCTGCTCCCATCGCCATGCAGATCTA
CAAGAAGCACCTGGACCCCAGGCCCGGGCCCTGCCCACCTGAGCTGGGCCTGGGCCTGGGCCAGCTGGCCTGCTG
CTGCCTGCACCGCCGGGCCAAAAGGAGGCCTCCTATGACCCAGGTGTACGAGAGGCTAGAGAAGCTGCAGGCAGT
GGTGGCGGGGGTGCCCGGGCATTCGGAGGCCGCCAGCTGCATCCCCCCTTCCCCGCAGGAGAACTCCTACGTGTC
CAGCACTGGCAGAGCCCACAGTGGGGCTGCTCCATGGCAGCCCCTGGCAGCGCCATCAGGAGCCAGTGCCCAGGC
AGCAGAGCAGCTGCAGAGAGGCCCCAACCAGCCCGTGGAGAGTGACGAGAGCCTAGGCGGCCTCTCTGCTGCCCT
GCGCTCCTGGCACTTGACTCCAAGCTGCCCTCTGGACCCAGCACCCCTCAGGGAGGCCGGCTGTCCTCAGGGGGA
CACGGCAGGAGAATCGAGCTGGGGGAGTGGCCCAGGATCCCGGCCCACAGCCGTGGAAGGACTGGCCCTTGGCAG
CTCTGCATCATCGTCGTCAGAGCCACCGCAGATTATCATCAACCCTGCCCGACAGAAGATGGTCCAGAAGCTGGC
CCTGTACGAGGATGGGGCCCTGGACAGCCTGCAGCTGCTGTCGTCCAGCTCCCTCCCAGGCTTGGGCCTGGAACA
GGACAGGCAGGGGCCCGAAGAAAGTGATGAATTTCAGAGCTGATGTGTTCACCTGGGCAGATCCCCCAAATCCGG
AAGTCAAAGTTCTCATGGTCAGAAGTTCTCATGGTGCACGAGTCCTCAGCACTCTGCCGGCAGTGGGGGTGGGGG
CCCATGCCCGCGGGGGAGAGAAGGAGGTGGCCCTGCTGTTCTAGGCTCTGTGGGCATAGGCAGGCAGAGTGGAAC
CCTGCCTCCATGCCAGCATCTGGGGGCAAGGAAGGCTGGCATCATCCAGTGAGGAGGCTGGCGCATGTTGGGAGG
CTGCTGGCTGCACAGACCCGTGAGGGGAGGAGAGGGGCTGCTGTGCAGGGGTGTGGAGTAGGGAGCTGGCTCCCC
TGAGAGCCATGCAGGGCGTCTGCAGCCCAGGCCTCTGGCAGCAGCTCTTTGCCCATCTCTTTGGACAGTGGCCAC
CCTGCACAATGGGGCCGACGAGGCCTAGGGCCCTCCTACCTGCTTACAATTTGGAAAAGTGTGGCCGGGTGCGGT
GGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCGCTGGAGCCCAGTAGGTCAAGACCAG
CCAGGGCAACATGATGAGACCCTGTCTCTGCCAAAAAATTTTTTAAACTATTAGCCTGGCGTGGTAGCGCACGCC
TGTGGTCCCAGCTGCTGGGGAGGCTGAAGTAGGAGGATCATTTATGCTTGGGAGGTCGAGGCTGCAGTGAGTCAT
GATTGTATGACTGCACTCCAGCCTGGGTGACAGAGCAAGACCCTGTTTCAAAAAGAAAAACCCTGGGAAAAGTGA
AGTATGGCTGTAAGTCTCATGGTTCAGTCCTAGCAAGAAGCGAGAATTCTGAGATCCTCCAGAAAGTCGAGCAGC
ACCCACCTCCAACCTCGGGCCAGTGTCTTCAGGCTTTACTGGGGACCTGCGAGCTGGCCTAATGTGGTGGCCTGC
AAGCCAGGCCATCCCTGGGCGCCACAGACGAGCTCCGAGCCAGGTCAGGCTTCGGAGGCCACAAGCTCAGCCTCA
GGCCCAGGCACTGATTGTGGCAGAGGGGCCACTACCCAAGGTCTAGCTAGGCCCAAGACCTAGTTACCCAGACAG
TGAGAAGCCCCTGGAAGGCAGAAAAGTTGGGAGCATGGCAGACAGGGAAGGGAAACATTTTCAGGGAAAAGACAT
GTATCACATGTCTTCAGAAGCAAGTCAGGTTTCATGTAACCGAGTGTCCTCTTGCGTGTCCAAAAGTAGCCCAGG
GCTGTAGCACAGGCTTCACAGTGATTTTGTGTTCAGCCGTGAGTCACACTACATGCCCCCGTGAAGCTGGGCATT
GGTGACGTCCAGGTTGTCCTTGAGTAATAAAAACGTATGTT

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FIGURE 3144

GAATTTCCCCCAGCGAGGCGAGTGAGGCGAAATACCCGTATGGTGATAGCTGGCCTTTTCGCGCCAATACTGAAA
AAGGCAGAACGTTCCTCCGCTGGCGCCAGCCAATCAGCAGGACTCCTGCCTTCCTTCGGGGCAAGGTCGCAGCAT
CTGCCTCGGAAATCACGAAATCACGGGGCTTCTTTCTGCTGGCTCAGCCGGGAGGCCCAGAGTGTTCTGCAGAGG
CTGCGTATTGAAGGCTGCTCTCTGAAGCTCCCTGCCCCAGGTCACGCCGCCGGTTCCAGATGAATCCAGAGTGGG
GGCAGGCCTTCGTGCACGTGGCCGTGGCCGGTGGCCTCTGTGCCGTGGCTGTGTTCACGGGCATTTTCGACAGTG
TTTCCGTGCAAGTGGGCTATGAGCACTACGCCGAGGCGCCCGTGGCCGGCCTCCCTGCCTTCCTGGCCATGCCGT
TCAACTCACTCGTGAACATGGCCTACACGCTGCTGGGGCTGTCGTGGCTGCACAGGGGCGGCGCGATGGGGCTGG
GTCCCCGCTACCTGAAGGACGTGTTCGCAGCCATGGCCCTGCTCTATGGCCCCGTGCAGTGGCTGCGCCTGTGGA
CGCAGTGGCGCCGTGCCGCGGTGCTGGACCAGTGGCTCACACTGCCCATCTTTGCATGGCCCGTGGCCTGGTGCC
TCTACCTAGACCGCGGCTGGCGGCCCTGGCTGTTCCTCTCTCTTGAGTGCGTCTCCCTGGCCAGTTATGGCCTCG
CTCTGCTGCATCCCCAGGGCTTCGAGGTCGCACTGGGTGCTCACGTGGTGGCCGCTGTGGGGCAGGCGCTGCGCA
CCCACAGGCACTATGGCAGCACCACCTCGGCTACCTACTTAGCTTTGGGGGTGCTCTCTTGCCTGGGCTTTGTGG
TCCTCAAGCTGTGTGACCATCAGCTCGCACGGTGGCGTCTCTTCCAGTGCCTCACAGGCCACTTCTGGTCCAAGG
TCTGTGACGTGCTCCAGTTCCACTTTGCGTTTTTGTTTCTGACGCATTTCAACACTCACCCAAGATTCCATCCCT
CTGGCGGGAAGACGCGTTGAACCCAGGGAAGAACCTGCTGAAAACCGATGACCCCCAGCATTGAAATGGACTCTG
AGATGGCAGCGTGGTGCCAGTGTCAGACATCCTGTGTGTGATGATATGCACTGATCACACAAGACTGCCCTTTCC
TGAGAAGCTGCGGGCTTCGGTGTGGAGGGGTGGAGTGCTGTGATCTCGACAACTTACTTTCAAAGACATAAAGCA
CAGATCTCCGCACAGGGGATGTGTGTGTTCCTGATGTAATTTGCATAACTTTTCTGTAGTTTGAAATGTTTCCAA
ATAAATATTGGCAAGGGGAGTGGAAATGACACCAAGAAGCCCCTCATGCTCATGGTTGGAC

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FIGURE 3145A

AGGGAGGAGGCATGAGCGCCCTGCCGTTACCGCTTCTTCTGCCGTACAGTTGCCGCTTCGGGGCCTAACTCTAGC
TCTTTGAAGCGGCTCCTGTGGGAAGGAGTCATAAGGCGGGAAGTGAGGATCGGACACCGCCTTGAGTTTGGTGTG
CAGTGGAAGAACTGACCTAGGAGGAAGAGAATAGGGGGGAACGGGGAGCTAGTCTCAAGATGGCGGCTCCCACGG
CGGCAGGCGCAGCCTGAGCAGCAGAGGCGGACTAAGGGGAGAGGCGCGAGACTTCACAAGCCGTACGGCGCGAGC
CCCCAAACGGCCCTCGAGAGCTCGAGCTGGTTCCACCGGCCTCCGGCCCGCCTCCATTCGTTAGGTGTGTCGAGG
CTGTTTCGGGAGCGGCGGCTGCACTAAGGCGCTGGGCGGGGAAGCGGGACGGTCTCAAGATGGCGGCTCCCACAA
TTGTGGTCTGAGCGCCGGCGGGGCTGCGACGACCGCGGCGCTTGTGGCTCCTTTCCACCCGCCCCGGAAGCCGGC
CAGTGCTGGGGACTTGGGGGTGTGGGAACCGGGCCGGGGCTCCGCCATTTCCGGCGGGGGAGGGCTACGACTGAG
GAAGGGAGGAGAGAGAGGCGGCTCAAGATGGCGGCTCCCAGGGCCTCCCGCCCGAGCTTGTAAGCGGGAGCGCCC
GGACAAGTAGTCGGGGCGACGGGACTCAGCGGCCTCCAGCTTCTTGAGCCTAGGCGCTCGACAGTTTCGGGCGGC
TCTTGCGGAGACGGGGTGAGCGAGAAGAAAGGGAAGAGCCAAAGGGAAGGAGGGCAGTTAAGATGGCGGCCTCCA
TGGAGTCGTCTACCGCTGTGTGAGAAACCGCTTCTCCGTGAGAGCTGCCTTAGACGAAAGGGGGTGTGTGAAAGG
AATTGAGGGGCTCCCTTCCCGCTTGTTGACTTCTCCCCACCGCACCCTTTCCCGGAACTATGGCTTCGGCCGTGT
CGCCCGCCAACTTGCCAGCGGTGCTTCTGCAGCCCCGCTGGAAGCGAGTGGTGGGCTGGTCGGGTCCGGTGCCAC
GGCCCCGCCACGGCCACCGCGCCGTGGCCATCAAGGAGCTCATCGTGGTGTTTGGCGGCGGCAACGAGGGAATAG
TGGACGAACTGCACGTGTACAACACGGCAACCAACCAGTGGTTCATCCCAGCCGTGAGGGGGGACATTCCCCCTG
GGTGTGCAGCCTATGGCTTCGTGTGTGACGGGACTCGCCTCCTGGTGTTTGGTGGGATGGTGGAGTATGGGAAAT
ACAGCAATGACCTCTACGAACTCCAGGCGAGCCGGTGGGAGTGGAAGAGACTCAAAGCAAAGACGCCCAAAAACG
GGCCCCCTCCGTGTCCTCGACTCGGGCACAGCTTCTCCCTTGTGGGCAACAAATGCTACCTGTTTGGGGGTCTGG
CCAATGATAGCGAGGACCCAAAGAACAACATTCCAAGGTACCTGAATGACTTATATATCCTGGAATTACGGCCAG
GCTCTGGAGTGGTAGCCTGGGACATTCCCATCACTTACGGGGTCCTACCACCACCCCGGGAGTCACATACTGCCG
TGGTCTACACCGAAAAAGACAATAAGAAGTCCAAGCTGGTGATCTACGGCGGGATGAGTGGCTGCAGGCTGGGGG
ACCTGTGGACCCTAGATATTGACACCCTGACGTGGAATAAGCCCAGTCTCAGCGGGGTGGCGCCTCTTCCTCGCA
GTCTCCACTCGGCAACCACCATCGGAAATAAAATGTACGTGTTTGGTGGCTGGGTGCCTCTCGTCATGGATGACG
TCAAAGTGGCCACACACGAGAAGGAGTGGAAGTGTACCAACACGCTGGCTTGTCTCAACCTGGATACCATGGCCT
GGGAGACCATCCTGATGGATACACTGGAGGACAACATCCCCCGTGCTCGGGCTGGCCACTGCGCAGTCGCCATCA
ACACCCGCCTGTACATTTGGAGTGGGCGTGACGGCTACCGCAAGGCCTGGAACAACCAGGTCTGCTGCAAGGACC
TCTGGTACCTAGAGACAGAAAAGCCACCACCCCCAGCCCGAGTACAACTGGTACGCGCCAACACCAACTCCCTGG
AGGTGAGCTGGGGGGCAGTGGCAACAGCCGACAGCTACCTTCTCCAGCTCCAGAAATATGACATTCCTGCCACGG
CTGCTACTGCCACCTCCCCTACACCCAATCCGGTCCCATCTGTGCCTGCCAACCCTCCCAAGAGCCCTGCCCCAG
CAGCAGCCGCACCTGCTGTGCAGCCGCTGACCCAAGTAGGCATCACGCTCCTGCCCCAGGCTGCCCCCGCACCCC
CGACCACCACCACCATCCAGGTCTTGCCAACGGTGCCTGGCAGCTCCATTTCTGTGCCCACCGCAGCCAGGACTC
AAGGTGTCCCTGCTGTTCTCAAAGTGACCGGTCCTCAGGCTACAACAGGAACTCCATTGGTCACCATGCGACCTG
CCAGCCAGGCTGGGAAAGCCCCTGTCACCGTGACCTCCCTTCCCGCCGGAGTGCGGATGGTTGTGCCAACACAGA
GTGCCCAGGGAACGGTGATTGGCAGTAGCCCACAGATGAGTGGGATGGCCGCACTGGCCGCTGCGGCCGCTGCCA
CCCAGAAGATCCCCCCTTCCTCGGCACCCACGGTGCTGAGTGTCCCAGCGGGTACCACCATCGTGAAGACCATGG
CTGTGACACCTGGCACTACCACCCTCCCAGCCACTGTGAAGGTGGCCTCCTCGCCAGTCATGGTGAGCAACCCTG
CCACTCGCATGCTGAAGACTGCAGCCGCCCAGGTGGGGACATCGGTTTCCTCCGCCACCAACACGTCTACCCGCC
CTATCATCACAGTGCACAAGTCAGGCACTGTGACAGTGGCCCAGCAAGCCCAGGTGGTGACCACAGTTGTGGGCG
GGGTCACCAAGACCATCACCCTGGTGAAGAGCCCCATCTCTGTCCCAGGAGGCAGTGCTCTGATTTCCAATCTGG
GCAAAGTGATGTCGGTGGTCCAGACCAAACCAGTTCAGACTTCAGCAGTCACAGGCCAGGCGTCCACGGGTCCTG
TGACTCAGATCATCCAGACCAAAGGGCCCCTGCCAGCGGGAACAATCCTGAAGCTGGTGACCTCAGCAGATGGCA
AGCCCACCACCATCATCACTACCACGCAGGCCAGTGGGGCGGGGACCAAGCCCACCATCCTGGGCATCAGCAGCG
TCTCCCCCAGTACCACCAAGCCCGGCACGACCACCATCATCAAAACCATCCCCATGTCGGCCATCATCACCCAGG
CGGGCGCCACGGGTGTGACCAGCAGTCCTGGCATCAAGTCCCCCATCACCATCATCACCACCAAGGTGATGACTT
CAGGAACTGGAGCACCTGCGAAAATCATCACTGCTGTCCCCAAAATTGCCACTGGCCACGGGCAGCAGGGAGTGA
CCCAGGTGGTGCTTAAGGGGGCCCCGGGACAGCCAGGCACCATCCTCCGCACTGTGCCCATGGGGGGTGTTCGCC
TGGTCACACCCGTCACCGTCTCCGCCGTCAAGCCAGCCGTCACCACGTTGGTTGTGAAAGGCACCACAGGTGTCA

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FIGURE 3145B

CGACCCTAGGCACAGTGACAGGCACCGTCTCCACCAGCCTTGCCGGGGCGGGGGGCCACAGCACTAGTGCTTCCC
TGGCCACGCCCATCACCACCTTGGGCACCATTGCCACCCTCTCAAGCCAGGTGATCAACCCCACTGCCATCACTG
TGTCGGCCGCACAGACCACGCTGACAGCGGCAGGCGGGCTCACAACCCCAACCATCACCATGCAGCCCGTGTCCC
AGCCCACCCAGGTAACTCTGATCACGGCACCTAGTGGGGTGGAGGCCCAGCCTGTGCATGACCTCCCTGTGTCCA
TTCTGGCCTCCCCGACTACAGAACAGCCCACCGCCACAGTTACCATCGCCGACTCAGGCCAGGGTGATGTGCAGC
CTGGCACTGTCACCTTGGTGTGCTCCAACCCACCCTGTGAGACCCACGAGACTGGCACCACCAACACGGCCACCA
CTACTGTTGTGGCTAACCTTGGGGGACACCCCCAGCCCACCCAAGTGCAGTTCGTCTGTGACAGACAGGAGGCAG
CTGCTTCTCTTGTGACCTCGACTGTGGGCCAGCAGAATGGTAGCGTGGTCCGAGTCTGTTCGAACCCGCCCTGCG
AGACCCACGAGACGGGCACCACCAACACCGCCACCACCGCCACCTCCAACATGGCCGGGCAGCATGGCTGCTCAA
ACCCACCCTGCGAGACCCACGAGACGGGCACCACCAACACTGCCACTACAGCCATGTCGAGCGTCGGCGCCAACC
ACCAGCGAGATGCCCGTCGGGCCTGTGCAGCTGGCACCCCTGCCGTGATCCGGATCAGTGTGGCCACTGGGGCGC
TGGAGGCAGCCCAGGGCTCTAAGTCCCAGTGCCAAACCCGCCAGACCAGCGCGACCAGCACCACCATGACTGTGA
TGGCCACCGGGGCCCCGTGCTCGGCCGGCCCACTCCTTGGGCCGAGCATGGCACGGGAGCCCGGGGGCCGCAGCC
CTGCTTTTGTGCAGTTGGCCCCTCTGAGCAGCAAAGTCAGGCTGAGCAGCCCAAGCATTAAGGACCTTCCTGCGG
GGCGCCACAGCCATGCGGTCAGCACCGCTGCCATGACCCGTTCCAGCGTGGGTGCTGGGGAGCCCCGCATGGCAC
CTGTGTGCGAGAGCCTCCAGGGTGGCTCGCCCAGCACCACAGTGACTGTGACAGCCCTGGAGGCACTGCTGTGCC
CCTCGGCCACCGTGACCCAAGTCTGCTCCAACCCACCATGTGAGACCCACGAGACAGGCACCACCAACACCGCCA
CTACCTCGAATGCAGGCAGCGCCCAGAGGGTGTGCTCCAACCCGCCATGCGAGACCCACGAGACGGGCACCACCC
ACACGGCCACCACCGCTACTTCAAACGGGGGCACGGGCCAGCCCGAGGGTGGGCAGCAGCCCCCTGCTGGTCGCC
CCTGTGAGACACACCAGACCACTTCCACTGGCACCACCATGTCGGTCAGCGTGGGTGCCCTGCTTCCCGACGCCA
CTTCTTCCCACAGGACCGTGGAGTCTGGCCTAGAGGTGGCGGCGGCACCCAGCGTCACCCCCCAGGCTGGCACCG
CGCTGCTGGCTCCTTTCCCAACACAGAGGGTGTGCTCCAACCCCCCCTGTGAGACCCACGAGACGGGCACCACTC
ACACGGCCACCACTGTCACTTCCAACATGAGTTCAAACCAAGACCCCCCACCTGCTGCCAGCGATCAGGGAGAGG
TGGAGAGCACCCAGGGCGACAGCGTGAACATCACCAGCTCCAGTGCCATCACGACAACCGTGTCCTCCACACTGA
CGCGGGCTGTGACCACCGTGACGCAGTCCACACCGGTCCCGGGCCCCTCTGTGCCGCCCCCAGAGGAACTCCAGG
TGTCGCCAGGTCCTCGCCAGCAGCTGCCGCCACGGCAGCTTCTGCAGTCGGCTTCCACAGCCCTGATGGGGGAGT
CCGCCGAGGTCCTGTCAGCCTCCCAGACCCCTGAGCTCCCGGCCGCCGTGGATCTGAGCAGCACAGGGGAGCCAT
CTTCGGGCCAGGAGTCTGCCGGCTCTGCGGTGGTGGCCACTGTGGTGGTCCAGCCACCCCCACCCACACAGTCCG
AAGTAGACCAGTTATCACTTCCCCAAGAGCTAATGGCCGAGGCCCAAGCTGGCACCACCACCCTCATGGTAACGG
GGCTCACCCCCGAGGAGCTGGCAGTGACGGCTGCTGCAGAAGCAGCTGCCCAGGCCGCAGCCACGGAGGAAGCCC
AGGCCCTGGCCATCCAGGCGGTGCTCCAGGCCGCGCAGCAGGCCGTCATGGGCACCGGCGAGCCCATGGACACCT
CCGAGGCAGCAGCAACCGTGACTCAGGCGGAGCTGGGGCACCTGTCGGCCGAGGGTCAGGAGGGCCAGGCCACCA
CCATACCCATTGTGCTGACACAGCAGGAGCTGGCTGCCCTGGTGCAGCAGCAGCAGCTGCAGGAGGCCCAGGCCC
AGCAGCAGCATCACCACCTCCCCACTGAGGCCCTGGCCCCTGCCGACAGTCTCAACGACCCAGCCATTGAGAGCA
ATTGCCTCAATGAGCTGGCCGGCACGGTCCCCAGCACTGTGGCGCTGCTGCCCTCAACGGCCACTGAGAGCCTGG
CTCCATCCAACACATTTGTGGCCCCCCAGCCGGTTGTGGTGGCCAGCCCAGCCAAGCTGCAGGCTGCAGCTACCC
TGACCGAAGTGGCCAATGGCATCGAGTCCCTGGGTGTGAAGCCAGACCTGCCGCCCCCACCCAGCAAAGCCCCCA
TGAAGAAGGAAAACCAGTGGTTTGATGTGGGAGTCATTAAGGGCACCAATGTAATGGTGACACACTATTTCCTGC
CACCAGATGATGCTGTCCCATCAGACGATGATTTGGGCACCGTCCCTGACTATAACCAGCTGAAGAAGCAGGAGC
TGCAGCCAGGCACAGCCTATAAGTTTCGTGTTGCCGGAATCAATGCCTGTGGCCGGGGGCCCTTCAGCGAAATCT
CAGCCTTTAAGACGTGCCTGCCTGGTTTCCCAGGGGCCCCTTGTGCCATTAAAATCAGCAAAAGTCCGGATGGTG
CTCACCTCACCTGGGAGCCACCCTCTGTGACCTCCGGCAAGATTATCGAGTACTCCGTGTACCTGGCCATCCAGA
GCTCACAGGCTGGGGGCGAGCTCAAGAGCTCCACCCCGGCCCAGCTGGCCTTCATGCGGGTGTACTGCGGGCCCA
GCCCCTCCTGCCTGGTGCAGTCCTCCAGCCTTTCCAACGCCCACATCGACTACACCACCAAGCCCGCCATCATCT
TCCGCATCGCCGCCCGCAATGAGAAGGGCTATGGCCCGGCCACACAAGTGAGGTGGCTGCAGGAAACCAGTAAAG
ACAGCTCTGGCACCAAGCCAGCCAACAAGCGGCCCATGTCCTCTCCAGAAATGAAATCTGCTCCAAAGAAATCTA
AGGCCGATGGTCAG**TGA**GAGGAAGCTGACTAGCCCCTGGATTCTTCTCCAGACCCCCCTGCTTCAGGAACACCCG
CCAGGGCCCACCCCTCCCACCCCGTCCCAGCATTCGCACTTCACCCTCGCGAGCCGCTGTTCACTCCTCTCCCCT

FIGURE 3145C

TTCTCTTTCTCTCTGTTTTTAAAATAATCTAAAGAAAGCACATTTTACCATTGCTGTTGGGAGGAAGCAGAGGCA
GATGGGAAAGCAGAGAGAGGAGCGCGCTTCCTTTCCTCCCCGCTGCCGCCCACCCTGGGGAGAGACTTTTGCGGG
GAGGGAAGGCGGAGCTGAGGACAGCCAGCTCCGCCCTCCCAAGGCTGTGCGTTCCTGAGGGCCAGGTCGGGGGCA
GGCATGGAGGGGAGGAAAGGCGTCCCTCTTGGCCCTCCCCAGAGTGGCTTTCCTGGCACCCTGGCCTGGGTGTCT
GGTTCTGTTTTCTTTTCTTCCCCTTGTGTTTCCAGTCACCTAACTTCCCTTCCTCAGGCTCCCCCGGCCCACCCT
GCTCAGTGACCCCACAGGAAGCTTACACATTTTCTCAGAGGCCTTTGTGCTCCCACCTCTTCTACCCTCCCCCTC
TTCTTTCCCATTTTAAAAAAGAAAAGAAGGAAAAAGAAAAAAGGGGCAAGGAGCCCCGCGGCGGCCTGGGCAGCG
CCTGTGCAGACCTCCCTGCAGGCCGCACTGCCAACTGCTGCATTTGTTGTGTTTTTTAGGTTGCAATTGGTGAAG
TTCACACTTTCATTGTAATTTTAGCGTGTGGGGTTTTGTCCCTTTTTTGTTGTTGTTAGCTGTGTACAGAATGTG
TAATCTTTTTTCTTTTCTCTTTTTTTTGTTTTGTTTTGTTTTGTTTTTTGTTTTTTTACTTTTTTCTTCTTGGCTA
ATTCTTGGCAGGGATCTTTCTGGAGGAAAAGCTGGGGCCAGCCAGGGCAGGAGAGGTGTGAAATCTGCCACGAGG
GGCCTGCTGTTTGCCACCCAGCCCAACTTCCTGTTGCTGGCCCCTGCCCTCTGCCCTTTTGCCTGTCCTCAGGCC
GCTGGAACAAAGGAAGGACAGCTCATTCCTCATGGGCGATCACTCCGCATCTATAGGGTCGAGCCTAGGGGAGCT
TGAGGGAGGGCTGGGGCCTCCTTGTCCTGGATTTCCAGCTCTCCCCATGCCCCCTCCCTGAGCACCACCGGCACC
GCCTCCCAAACAGGGCTGCTGGTTTCCGCAGCCACTGCTCCACCTCCCCCAAATCGTCATGGAAAGGGTGGAGAA
TGGAGGGGAACCAGGCGTCCTTGGAGGCAGCTTGGGAGGGTGACTGTGTAGTGTCACCCACAAGGGAGGCTAGGG
CAATGGAGCAGGCCACCAGCAGCAGCTGTGCAGCATGGAACTCAGGCCAGGCTCCGAGGCTGGGGGATCTGCTTG
GAGTTTTCTGCCCCCCACCCCAAACTTCTGTCGAGGAGCAAGGCTTGCCAGCAAGTCAGAAGGATTTGAACCGAG
CAGCCAATCTTTCCAGCCCTCCCCTACCGACCTCTGCCTGGAGACGCAGCAGCCTGTGTCCTCCAGGGCCTCTGG
TTTGTTGTATTATAGTATATTTCGCTGTGGAAAATGTCACGTTTAGTCACCTTGGAGCCCACTCACCTGGTCCTG
TTGTTTTACCCCATCCCTTCTCTCGCGCGCCTATTGATTTGTTTCTGAGGAGAGTACACCGTTCACTATTGTAGA
GTAACCCCTGTGACTCAATATTACCATAGTGCGATGTCGTTTTGTGCTATTTTGAACAATTAAAAGACTTTTTTT
GAAATAA

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FIGURE 3146

CGGTCCCAGCCCCGGCCGTCCCGGCGTCGCTTCGGAGCGCGGCGGCAGCTGACTGCGCCTTCACGATCCGCTGGG
ACCCGCGAGCCCCGCCGCCGTTATGAACATCCGCAATGCGAGGCCAGAGGACCTAATGAACATGCAGCACTGCAA
CCTCCTCTGCCTGCCCGAGAACTACCAGATGAAATACTACTTCTACCATGGCCTTTCCTGGCCCCAGCTCTCTTA
CATTGCTGAGGACGAGAATGGGAAGATTGTGGGGTATGTCCTGGCCAAAATGGAAGAGGACCCAGATGATGTGCC
CCATGGACATATCACCTCATTGGCTGTGAAGCGTTCCCACCGGCGCCTCGGTCTGGCTCAGAAACTGATGGACCA
GGCCTCTCGAGCCATGATAGAGAACTTCAATGCCAAATATGTCTCCCTGCATGTCAGGAAGAGTAACCGGGCCGC
CCTGCACCTCTATTCCAACACCCTCAACTTTCAGATCAGTGAAGTGGAGCCCAAATACTATGCAGATGGGGAGGA
CGCCTATGCCATGAAGCGGGACCTCACTCAGATGGCCGACGAGCTGAGGCGGCACCTGGAGCTGAAAGAGAAGGG
CAGGCACGTGGTGCTGGGTGCCATCGAGAACAAGGTGGAGAGCAAAGGCAATTCACCTCCGAGCTCAGGAGAGGC
CTGTCGCGAGGAGAAGGGCCTGGCTGCCGAGGATAGTGGTGGGGACAGCAAGGACCTCAGCGAGGTCAGCGAGAC
CACAGAGAGCACAGATGTCAAGGACAGCTCAGAGGCCTCCGACTCAGCCTCCTAGAGCCTGCCCCATCCCCTCCT
CACCCCACGAGCTTTCACAATAAATTCGCTCCGTGGCACTG

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FIGURE 3147

CGTGGGAGCAGTGGGGTTCGACGGCGCGGCCGCGAGGCCGCCATGGCCGCTCACGGGAAGCTGCGGCGGGAGCGG
GGGCTGCAGGCTGAGTATGAGACGCAAGTCAAAGAGATGCGCTGGCAGCTGAGCGAGCAGCTGCGCTGCCTGGAG
CTGCAGGGCGAGCTGCGGCGGGAGTTGCTGCAGGAGCTGGCAGAGTTCATGCGGCGCCGCGCTGAGGTGGAGCTG
GAATACTCCCGGGGCCTGGAAAAGCTGGCCGAGCGCTTCTCCAGCCGTGGAGGCCGCCTGGGGAGCAGCCGGGAG
CACCAAAGCTTCCGGAAGGAGCCGTCCCTCCTGTCGCCCTTGCACTGCTGGGCGGTGCTGCTGCAGCACACGCGG
CAGCAGAGCCGGGAGAGCGCGGCCCTGAGTGAGGTGCTGGCCGGGCCCCTGGCCCAGCGCCTGAGTCACATTGCA
GAGGACGTGGGGCGCCTGGTCAAGAAGAGCAGGGATCTGGAGCAGCAGCTGCAGGATGAGCTCCTGGAGGTGGTC
TCAGAGCTCCAGACGGCCAAGAAGACGTACCAGGCATATCACATGGAGAGCGTGAATGCCGAGGCCAAGCTCCGG
GAGGCCGAGCGGCAGGAGGAGAAGCGGGCAGGCCGGAGTGTCCCCACCACCACCGCTGGTGCCACTGAGGCAGGG
CCCCTCCGCAAGAGCTCCCTCAAGAAGGGAGGGAGGCTGGTGGAGAAGCGGCAGGCCAAGTTCATGGAGCACAAA
CTCAAGTGCACAAAGGCGCGCAACGAGTACCTGCTTAGCCTGGCTAGTGTCAACGCTGCTGTCAGTAACTACTAC
CTGCATGACGTCTTGGACCTCATGGACTGCTGTGACACAGGGTTCCACCTGGCCCTGGGGCAGGTGCTCCGGAGC
TACACGGCCGCTGAGAGCCGCACCCAAGCCTCCCAAGTGCAGGGCCTGGGCAGCCTGGAAGAAGCTGTGGAGGCC
CTGGATCCTCCAGGGGACAAAGCCAAGGTTCTCGAGGTGCATGCTACCGTCTTCTGTCCCCCGCTGCGCTTTGAC
TACCACCCCCATGATGGGGATGAGGTGGCTGAGATCTGCGTTGAAATGGAGCTGCGGGACGAGATTCTGCCCAGA
GCCCAGAACATCCAGAGCCGCCTGGACCGACAGACCATTGAGACAGAGGAGGTGAACAAGACTCTGAAGGCGACA
CTGCAGGCCCTGCTGGAGGTGGTGGCCTCGGATGACGGGGATGTGCTTGATTCCTTCCAGACCAGCCCCTCCACC
GAGTCCCTCAAGTCCACCAGCTCAGACCCAGGCAGCCGGCAGGCGGGCCGGAGGCGCGGCCAGCAGCAGGAGACC
GAAACCTTCTACCTCACGAAGCTCCAGGAGTATCTGAGTGGACGGAGCATCCTCGCCAAGCTGCAGGCCAAGCAC
GAGAAGCTGCAGGAGGCCCTTCAGCGAGGTGACAAGGAGGAGCAGGAGGTGTCTTGGACCCAGTACACACAGAGA
AAATTCCAGAAGAGCCGCCAGCCCCGCCCCAGCTCCCAGTATAACCAGAGACTCTTTGGGGGAGACATGGAGAAG
TTTATCCAGAGCTCAGGCCAGCCTGTGCCCCTGGTGGTGGAGAGCTGCATTCGCTTCATCAACCTCAATGGCCTG
CAGCATGAAGGCATCTTCCGGGTATCGGGTGCCCAGCTCCGGGTCTCAGAGATCCGTGATGCCTTCGAGAGAGGG
GAGGACCCACTGGTGGAGGGCTGCACTGCCCATGACCTGGACTCGGTGGCCGGGGTGCTGAAGCTCTACTTCCGG
AGCCTGGAGCCCCCACTCTTCCCCCCAGACCTGTTCGGCGAGCTGCTGGCTTCTTCGGAGCTGGAGGCCACAGCG
GAGAGGGTGGAGCACGTGAGCCGCCTGCTGTGGCGGCTGCCCGCGCCGGTGCTGGTGGTTCTGCGCTACCTCTTC
ACCTTCCTCAACCACCTGGCCCAGTACAGCGATGAGAACATGATGGACCCCTACAACCTGGCCGTGTGCTTCGGG
CCCACGCTGCTACCGGTGCCCGCTGGGCAGGACCCGGTGGCGCTGCAGGGCCGGGTGAACCAGCTGGTGCAGACG
CTCATAGTGCAGCCCGATCGGGTCTTCCCGCCCCTGACCTCGCTGCCTGGCCCCGTCTACGAGAAGTGCATGGCA
CCGCCTTCCGCCAGCTGCCTGGGGGACGCCCAGCTGGAGAGCCTGGGGGCGGACAATGAGCCGGAGCTGGAAGCC
GAGATGCCCGCACAGGAGGATGACCTGGAGGGGGTCGTGGAGGCTGTGGCCTGCTTTGCCTACACGGGCCGCACA
GCCCAGGAGCTGAGCTTCCGGCGGGGGGACGTACTGCGGCTGCACGAGAGGGCCTCGAGCGACTGGTGGCGGGGG
GAGCACAACGGCATGCGGGGCCTCATCCCCCACAAGTATATCACGCTGCCCGCCGGGACGGAGAAGCAGGTGGTG
GGCGCAGGGCTGCAGACTGCAGGGGAGTCTGGGAGCAGTCCCGAGGGCCTCCTGGCATCGGAGCTGGTCCACCGG
CCAGAGCCATGCACCTCACCTGAGGCCATGGGACCCTCTGGACACAGACGACGCTGCTTGGTCCCAGCCTCCCCA
GAGCAACACGTGGAGGTGGATAAGGCTGTGGCACAGAACATGGACTCTGTGTTTAAGGAGCTCTTGGGAAAGACC
TCTGTCCGCCAGGGCCTTGGGCCAGCATCTACCACCTCTCCCAGTCCTGGGCCCCGAAGCCCAAAGGCCCCGCCC
AGCAGCCGCCTGGGCAGGAACAAAGGCTTCTCCCGGGGCCCTGGGGCCCCAGCCTCACCCTCAGCTTCCCACCCC
CAGGGCCTAGACACGACCCCCAAGCCACACTGAGGTGCCGCTGCTGGAGATGCGTGCCCCCGGCGGCTACCCGCT
GGACCGGCCACTCTCCCCAGCCCCCTTGCTTCTCTCCAGCCCTGTCCAGCAAGTGCAGGGTGCCTGCACTTCACC
CTGTGCAGAGAGGTGGGATGGGGCCGTGCACACAGGGATGCCCGCTCCACATCCTGCCTGCCCCTCAGCCCTGGC
CCAGGCCCCTTTTGGAGGCAGCTGAGGAAGGATGCTGGGGAAAGCCCTCTTCTGCAGCTTTGTGGAAGGCTGATC
AGTGGCTGCTGGGTGGCGGGTACCCTTGCTCAGATGCCTGGCAGGGCTGGGTGGCGATTCATAAAGACCTCGTGT
TGATTCCCCG

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FIGURE 3148A

GCGCGGTGCCGCCGGGAAAGATGGTCGTGGCGCTGCGGTACGTGTGGCCTCTCCTCCTCTGCAGCCCCTGCCTGC
TTATCCAGATCCCCGAGGAATATGAAGGACACCATGTGATGGAGCCACCTGTCATCACGGAACAGTCTCCACGGC
GCCTGGTTGTCTTCCCCACAGATGACATCAGCCTCAAGTGTGAGGCCAGTGGCAAGCCCGAAGTGCAGTTCCGCT
GGACGAGGGATGGTGTCCACTTCAAACCCAAGGAAGAGCTGGGTGTGACCGTGTACCAGTCGCCCCACTCTGGCT
CCTTCACCATCACGGGCAACAACAGCAACTTTGCTCAGAGGTTCCAGGGCATCTACCGCTGCTTTGCCAGCAATA
AGCTGGGCACCGCCATGTCCCATGAGATCCGGCTCATGGCCGAGGGTGCCCCCAAGTGGCCAAAGGAGACAGTGA
AGCCCGTGGAGGTGGAGGAAGGGGAGTCAGTGGTTCTGCCTTGCAACCCTCCCCCAAGTGCAGAGCCTCTCCGGA
TCTACTGGATGAACAGCAAGATCTTGCACATCAAGCAGGACGAGCGGGTGACGATGGGCCAGAACGGCAACCTCT
ACTTTGCCAATGTGCTCACCTCCGACAACCACTCAGACTACATCTGCCACGCCCACTTCCCAGGCACCAGGACCA
TCATTCAGAAGGAACCCATTGACCTCCGGGTCAAGGCCACCAACAGCATGATTGACAGGAAGCCGCGCCTGCTCT
TCCCCACCAACTCCAGCAGCCACCTGGTGGCCTTGCAGGGGCAGCCATTGGTCCTGGAGTGCATCGCCGAGGGCT
TTCCCACGCCCACCATCAAATGGCTGCGCCCCAGTGGCCCCATGCCAGCCGACCGTGTCACCTACCAGAACCACA
ACAAGACCCTGCAGCTGCTGAAAGTGGGCGAGGAGGATGATGGCGAGTACCGCTGCCTGGCCGAGAACTCACTGG
GCAGTGCCCGGCATGCGTACTATGTCACCGTGGAGGCTGCCCCGTACTGGCTGCACAAGCCCCAGAGCCATCTAT
ATGGGCCAGGAGAGACTGCCCGCCTGGACTGCCAAGTCCAGGGCAGGCCCCAACCAGAGGTCACCTGGAGAATCA
ACGGGATCCCTGTGGAGGAGCTGGCCAAAGACCAGAAGTACCGGATTCAGCGTGGCGCCCTGATCCTGAGCAACG
TGCAGCCCAGTGACACAATGGTGACCCAATGTGAGGCCCGCAACCGGCACGGGCTCTTGCTGGCCAATGCCTACA
TCTACGTTGTCCAGCTGCCAGCCAAGATCCTGACTGCGGACAATCAGACGTACATGGCTGTCCAGGGCAGCACTG
CCTACCTTCTGTGCAAGGCCTTCGGAGCGCCTGTGCCCAGTGTTCAGTGGCTGGACGAGGATGGGACAACAGTGC
TTCAGGACGAACGCTTCTTCCCCTATGCCAATGGGACCCTGGGCATTCGAGACCTCCAGGCCAATGACACCGGAC
GCTACTTCTGCCTGGCTGCCAATGACCAAAACAATGTTACCATCATGGCTAACCTGAAGGTTAAAGATGCAACTC
AGATCACTCAGGGGCCCCGCAGCACAATCGAGAAGAAAGGTTCCAGGGTGACCTTCACGTGCCAGGCCTCCTTTG
ACCCCTCCTTGCAGCCCAGCATCACCTGGCGTGGGGACGGTCGAGACCTCCAGGAGCTTGGGGACAGTGACAAGT
ACTTCATAGAGGATGGGCGCCTGGTCATCCACAGCCTGGACTACAGCGACCAGGGCAACTACAGCTGCGTGGCCA
GTACCGAACTGGATGTGGTGGAGAGTAGGGCACAGCTCTTGGTGGTGGGGAGCCCTGGGCCGGTGCCACGGCTGG
TGCTGTCCGACCTGCACCTGCTGACGCAGAGCCAGGTGCGCGTGTCCTGGAGTCCTGCAGAAGACCACAATGCCC
CCATTGAGAAATATGACATTGAATTTGAGGACAAGGAAATGGCGCCTGAAAAATGGTACAGTCTGGGCAAGGTTC
CAGGGAACCAGACCTCTACCACCCTCAAGCTGTCGCCCTATGTCCACTACACCTTTAGGGTTACTGCCATAAACA
AATATGGCCCCGGGGAGCCCAGCCCGGTCTCTGAGACTGTGGTCACACCTGAGGCAGCCCCAGAGAAGAACCCTG
TGGATGTGAAGGGGGAAGGAAATGAGACCACCAATATGGTCATCACGTGGAAGCCGCTCCGGTGGATGGACTGGA
ACGCCCCCCAGGTTCAGTACCGCGTGCAGTGGCGCCCTCAGGGGACACGAGGGCCCTGGCAGGAGCAGATTGTCA
GCGACCCCTTCCTGGTGGTGTCCAACACGTCCACCTTCGTGCCCTATGAGATCAAAGTCCAGGCCGTCAACAGCC
AGGGCAAGGGACCAGAGCCCCAGGTCACTATCGGCTACTCTGGAGAGGACTACCCCCAGGCAATCCCTGAGCTGG
AAGGCATTGAAATCCTCAACTCAAGTGCCGTGCTGGTCAAGTGGCGGCCGGTGGACCTGGCCCAGGTCAAGGGCC
ACCTCCGCGGATACAATGTGACGTACTGGAGGGAGGGCAGTCAGAGGAAGCACAGCAAGAGACATATCCACAAAG
ACCATGTGGTGGTGCCCGCCAACACCACCAGTGTCATCCTCAGTGGCTTGCGGCCCTATAGCTCCTACCACCTGG
AGGTGCAGGCCTTTAACGGGCGAGGATCGGGGCCCGCCAGCGAGTTCACCTTCAGCACCCCAGAGGGAGTGCCTG
GCCACCCCGAGGCGTTGCACCTGGAGTGCCAGTCGAACACCAGCCTGCTGCTGCGCTGGCAGCCCCCACTCAGCC
ACAACGGCGTGCTCACCGGCTACGTGCTCTCCTACCACCCCCTGGATGAGGGGGGCAAGGGGCAACTGTCCTTCA
ACCTTCGGGACCCCGAACTTCGGACACACAACCTGACCGATCTCAGCCCCCACCTGCGGTACCGCTTCCAGCTTC
AGGCCACCACCAAAGAGGGCCCTGGTGAAGCCATCGTACGGGAAGGAGGCACTATGGCCTTGTCTGGGATCTCAG
ATTTTGGCAACATCTCAGCCACAGCGGGTGAAAACTACAGTGTCGTCTCCTGGGTCCCCAAGGAGGGCCAGTGCA
ACTTCAGGTTCCATATCTTGTTCAAAGCCTTGGGAGAAGAGAAGGGTGGGGCTTCCCTTTCGCCACAGTATGTCA
GCTACAACCAGAGCTCCTACACGCAGTGGGACCTGCAGCCTGACACTGACTACGAGATCCACTTGTTTAAGGAGA
GGATGTTCCGGCACCAAATGGCTGTGAAGACCAATGGCACAGGCCGCGTGAGGCTCCCTCCTGCTGGCTTCGCCA
CTGAGGGCTGGTTCATCGGCTTTGTGAGTGCCATCATCCTCCTGCTCCTCGTCCTGCTCATCCTCTGCTTCATCA
AGCGCAGCAAGGGCGGCAAATACTCAGTGAAGGATAAGGAGGACACCCAGGTGGACTCTGAGGCCCGACCGATGA
AAGATGAGACCTTCGGCGAGTACAGGTCCCTGGAGAGTGACAACGAGGAGAAGGCCTTTGGCAGCAGCCAGCCAT

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FIGURE 3148B

CGCTCAACGGGGACATCAAGCCCCTGGGCAGTGACGACAGCCTGGCCGATTATGGGGGCAGCGTGGATGTTCAGT
TCAACGAGGATGGTTCGTTCATTGGCCAGTACAGTGGCAAGAAGGAGAAGGAGGCGGCAGGGGGCAATGACAGCT
CAGGGGCCACTTCCCCCATCAACCCTGCCGTGGCCCTAGAATAGTGGAGTCCAGGACAGGAGATGCTGTGCCCCT
GGCCTTGGGATCCAGGCCCCTCCCTCTCCAGCAGGCCCATGGGAGGCTGGAGTTGGGGCAGAGGAGAACTTGCTG
CCTCGGATCCCCTTCCTACCACCCGGTCCCCACTTTATTGCCAAAACCCAGCTGCACCCCTTCCTGGGCACACGC
TGCTCTGCCCCAGCTTGGGCAGATCTCCCACATGCCAGGGGCCTTTGGGTGCTGTTTTGCCAGCCCATTTGGGCA
GAGAGGCTGTGGTTTGGGGGAGAAGAAGTAGGGGTGGCCCGAAAGGGTCTCCGAAATGCTGTCTTTCTTGCTCCC
TGACTGGGGGCAGACATGGTGGGGTCTCCTCAGGACCAGGGTTGGCACCTTCCCCCTCCCCCAGCCACTCCCCAG
CCAGCCTGGCTGGGACTGGGAACAGAACTCGGTGTCCCCACCATCTGCTGTCTTTTCTTTGCCATCTCTGCTCCA
ACCGGGATGGGAGCCGGGCAAACTGGCCGCGGGGGCAGGGGAGGCCATCTGGAGAGCCCAGAGTCCCCCCACTCC
CAGCATCGCACTCTGGCAGCACCGCCTCTTCCCGCCGCCCAGCCCACCCCATGGCCGGCTTTCAGGAGCTCCATA
CACACGCTGCCTTCGGTACCCACCACACAACATCCAAGTGGCCTCCGTCACTACCTGGCTGCGGGGCGGGCACAC
CTCCTCCCACTGCCCACTGGCCGGC

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FIGURE 3149

TCGTGTTCATGGGAGCTCGTTTTCTTTTCCTCTAGGCAGAGAAGAGGCGATGGCGGCGATGGCATCTCTCGGCGC
CCTGGCGCTGCTCCTGCTGTCCAGCCTCTCCCGCTGCTCAGCCGAGGCCTGCCTGGAGCCCCAGATCACCCCTTC
CTACTACACCACTTCTGACGCTGTCATTTCCACTGAGACCGTCTTCATTGTGGAGATCTCCCTGACATGCAAGAA
CAGGGTCCAGAACATGGCTCTCTATGCTGACGTCGGTGGAAAACAATTCCCTGTCACTCGAGGCCAGGATGTGGG
GCGTTATCAGGTGTCCTGGAGCCTGGACCACAAGAGCGCCCACGCAGGCACCTATGAGGTTAGATTCTTCGACGA
GGAGTCCTACAGCCTCCTCAGGAAGGCTCAGAGGAATAACGAGGACATTTCCATCATCCCGCCTCTGTTTACAGT
CAGCGTGGACCATCGGGGCACTTGGAACGGGCCCTGGGTGTCCACTGAGGTGCTGGCTGCGGCGATCGGCCTTGT
GATCTACTACTTGGCCTTCAGTGCGAAGAGCCACATCCAGGCCTGAGGGCGGCACCCCAGCCCTGCCCTTGCTTC
CTTCAATAAACATCACAGGACCTGGGACTGCACAGGA

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FIGURE 3150

GGTCGCGGTCCCCCCCCTCAACATGGCGGCAGCGGTGCTCTAGGCGCCGGAAGGGGGCGTGAATCGGTGCGACCGC
GCGCGTGCGCAGTACCGGGTCCGCGCCTGTCCCCGAAACTTCGCACCCCGTCGAACTCTCGCGAGAGCGGTATCT
GCGTGTCGGGACGTGCGGAGGCTCTCACTTTCCGTCATGGCGCTGAAGGTAGCGACCGTCGCCGGCAGCGCCGCG
AAGGCGGTGCTCGGGCCAGCCCTTCTCTGCCGTCCCTGGGAGGTTCTAGGCGCCCACGAGGTCCCCTCGAGGAAC
ATCTTTTCAGAACAAACAATTCCTCCGTCCGCTAAGTATGGCGGGCGGCACACGGTGACCATGATCCCAGGGGAT
GGCATCGGGCCAGAGCTCATGCTGCATGTCAAGTCCGTCTTCAGGCACGCATGTGTACCAGTGGACTTTGAAGAG
GTGCACGTGAGTTCCAATGCTGATGAAGAGGACATTCGCAATGCCATCATGGCCATCCGCCGGAACCGCGTGGCC
CTGAAGGGCAACATCGAAACCAACCATAACCTGCCACCGTCGCACAAATCTCGAAACAACATCCTTCGCACCAGC
CTGGACCTCTATGCCAACGTCATCCACTGTAAGAGCCTTCCAGGCGTGGTGACCCGGCACAAGGACATAGACATC
CTCATTGTCCGGGAGAACACAGAGGGCGAGTACAGCAGCCTGGAGCATGAGAGTGTGGCGGGAGTGGTGGAGAGC
CTGAAGATCATCACCAAGGCCAAGTCCCTGCGCATTGCCGAGTATGCCTTCAAGCTGGCGCAGGAGAGCGGGCGC
AAGAAAGTGACGGCCGTGCACAAGGCCAACATCATGAAACTGGGCGATGGGCTTTTCCTCCAGTGCTGCAGGGAG
GTGGCAGCCCGCTACCCTCAGATCACCTTCGAGAACATGATTGTGGATAACACCACCATGCAGCTGGTGTCCCGG
CCCCAGCAGTTTGATGTCATGGTGATGCCCAATCTCTATGGCAACATCGTCAACAATGTCTGCGCGGGACTGGTC
GGGGGCCCAGGCCTTGTGGCTGGGGCCAACTATGGCCATGTGTACGCGGTGTTTGAAACAGCTACGAGGAACACC
GGCAAGAGTATCGCCAATAAGAACATCGCCAACCCCACGGCCACCCTGCTGGCCAGCTGCATGATGCTGGACCAC
CTCAAGCTGCACTCCTATGCCACCTCCATCCGTAAGGCTGTCCTGGCATCCATGGACAATGAGAATATGCACACT
CCGGACATCGGGGGCCAGGGCACAACATCTGAAGCCATCCAGGACGTCATCCGCCACATCCGCGTCATCAACGGC
CGGGCCGTGGAGGCCTAGGCTGGCCCTAGGACCTTCTTGGTTTGCTCCTTGGATTCCCCTTCCCACTCCAGCACC
CCAGCCAGCCTGGTACGCAGATCCCAGAATAAAGCACCTTCTCCCTAG

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FIGURE 3151

GGAGCTGCGGGCTGCGTGGCCGGGATGAGCGCCAGCACGGGCGGTGGTGGGGACAGCGGCGGCAGCGGCGGCAGT
AGCAGCAGCTCACAGGCCTCCTGCGGGCCCGAGTCCTCGGGCTCCGAACTAGCCCTGGCCACACCGGTGCCTCAG
ATGCTGCAGGGCCTTCTGGGCTCCGACGACGAGGAACAGGAAGACCCCAAAGACTACTGCAAGGGCGGCTACCAC
CCTGTGAAGATCGGCGACGTGTTCAATGGGCGGTACCACGTGGTGCGCAAACTGGGCTGGGGCCACTTCTCCACC
GTCTGGCTCTGCTGGGACATCCAGCGCAAGCGCTTTGTGGCCCTCAAAGTGGTGAAGAGTGCGGGGCATTACACG
GAGACAGCTGTGGATGAGATCAAGCTCCTGAAATGTGTCCGGGACAGCGACCCCAGTGACCCCAAAAGAGAGACC
ATTGTCCAGCTCATTGATGACTTCAGGATCTCAGGAGTCAATGGAGTCCATGTGTGCATGGTGCTGGAGGTGCTG
GGCCACCAGCTCCTCAAATGGATCATCAAGTCCAACTACCAGGGCCTGCCCGTGCCCTGCGTGAAGAGCATCGTG
AGGCAGGTGCTGCACGGCCTGGACTACCTCCACACCAAGTGCAAGATCATCCACACGGACATCAAGCCCGAGAAC
ATCTTGCTGTGTGTGGGGGACGCTTACATCAGGCGCCTGGCTGCCGAGGCCACGGAGTGGCAACAGGCAGGGGCG
CCGCCCCCCTCCCGCTCCATAGTCAGCACTGCCCCCCAGGAGGTCTTGACCGGTAAGCTGTCCAAAAACAAGAGG
AAGAAGATGAGGCGCAAACGGAAACAGCAGAAGCGGCTGCTGGAGGAGCGGCTGCGGGACCTGCAGAGGCTGGAG
GCCATGGAGGCTGCCACCCAGGCTGAGGACTCTGGCTTGAGACTAGACGGGGGCAGCGGCTCCACATCCTCTTCA
GGCTTCTCCGGCTCCCTCTTCTCTCCTGCCTCCTGCTCCATCCTCTCCGGCTCGTCCAATCAGCGAGAGACCGGG
GGCCTCCTGTCGCCTAGCACACCATTCGGTGCCTCGAACCTCCTGGTGAACCCCCTGGAGCCCCAAAATGCAGAT
AAGATCAAGATCAAGATCGCAGACCTGGGCAACGCCTGCTGGGTGCACAAGCACTTCACGGAAGACATCCAGACT
CGGCAGTACCGGGCCGTCGAGGTGCTGATCGGCGCCGAATACGGCCCCCCGGCAGACATCTGGAGCACAGCCTGC
ATGGCCTTCGAGCTGGCCACTGGTGACTACCTGTTCGAGCCGCATTCTGGAGAAGACTACAGTCGTGATGAGGAC
CACATCGCTCACATAGTGGAGCTTCTGGGGGACATCCCCCCAGCCTTCGCCCTCTCAGGCCGCTATTCCCGGGAG
TTCTTCAACCGGAGAGGAGAGCTGCGGCACATCCACAATCTCAAGCACTGGGGCCTGTACGAGGTACTCATGGAA
AAGTACGAGTGGCCCCTAGAGCAGGCCACACAGTTCAGCGCCTTTCTGCTGCCCATGATGGAGTACATCCCCGAA
AAGCGGGCCAGTGCCGCTGACTGCCTCCAGCACCCCTGGCTCAACCCCTAGGCCCGGCTGTGGCTCCACCTCCAG
CTCTCCGTGCCTTAAGGGAAAAGCGGGACAGCTCCCACCACCCTGCTGGGCGCCAGTTCTCCACAACCACAGGGC
AGAGAGACGCTGGAGCCAGGCCCGGCTCTCAGAGCGTGTTCTGCCTGAGACCCCCGTGAGGGCTCTCGGAGAAAG
TGTGTGTATTCCTTTCTTAATAAAGTGTGGACTGA

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FIGURE 3152A

GCGGACGGACGCGCCTGGTGCCCCGGGGAGGGGCGCCACCGGGGGAGGAGGAGGAGGAGAAGGTGGAGAGGAAGA
GACGCCCCCTCTGCCCGAGACCTCTCAAGGCCCTGACCTCAGGGGCCAGGGCACTGACAGGACAGGAGAGCCAAG
TTCCTCCACTTGGGCTGCCCGAAGAGGCCGCGACCCTGGAGGGCCCTGAGCCCACCGCACCAGGGGCCCCAGCAC
CACCCCGGGGGCCTAAAGCGACAGTCTCAGGGGCCATCGCAAGGTTTCCAGTTGCCTAGACAACAGGCCCAGGGT
CAGAGCAACAATCCTTCCAGCCACCTGCCTCAACTGCTGCCCCAGGCACCAGCCCCAGTCCCTACGCGGCAGCCA
GCCCAGGTGACATGCCGGTGCTCTCCAGGCCCCGGCCCTGGCGGGGGAACACGCTGAAGCGCACGGCCGTGCTCC
TGGCCCTCGCGGCCTATGGAGCCCACAAAGTCTACCCCTTGGTGCGCCAGTGCCTGGCCCCGGCCAGGGGTCTTC
AGGCGCCCGCCGGGGAGCCCACGCAGGAGGCCTCCGGGGTCGCGGCGGCCAAAGCTGGCATGAACCGGGTATTCC
TGCAGCGGCTCCTGTGGCTCCTGCGGCTGCTGTTCCCCCGGGTCCTGTGCCGGGAGACGGGGCTGCTGGCCCTGC
ACTCGGCCGCCTTGGTGAGCCGCACCTTCCTGTCGGTGTATGTGGCCCGCCTGGACGGAAGGCTGGCCCGCTGCA
TCGTCCGCAAGGACCCGCGGGCTTTTGGCTGGCAGCTGCTGCAGTGGCTCCTCATCGCCCTCCCTGCTACCTTCG
TCAACAGTGCCATCCGTTACCTGGAGGGCCAACTGGCCCTGTCGTTCCGCAGCCGTCTGGTGGCCCACGCCTACC
GCCTCTACTTCTCCCAGCAGACCTACTACCGGGTCAGCAACATGGACGGGCGGCTTCGCAACCCTGACCAGTCTC
TGACGGAGGACGTGGTGGCCTTTGCGGCCTCTGTGGCCCACCTCTACTCCAACCTGACCAAGCCACTCCTGGACG
TGGCTGTGACTTCCTACACCCTGCTTCGGGCGGCCCGCTCCCGTGGAGCCGGCACAGCCTGGCCCTCGGCCATCG
CCGGCCTCGTGGTGTTCCTCACGGCCAACGTGCTGCGGGCCTTCTCGCCCAAGTTCGGGGAGCTGGTGGCAGAGG
AGGCGCGGCGGAAGGGGGAGCTGCGCTACATGCACTCGCGTGTGGTGGCCAACTCGGAGGAGATCGCCTTCTATG
GGGGCCATGAGGTGGAGCTGGCCCTGCTACAGCGCTCCTACCAGGACCTGGCCTCGCAGATCAACCTCATCCTTC
TGGAACGCCTGTGGTATGTTATGCTGGAGCAGTTCCTCATGAAGTATGTGTGGAGCGCCTCGGGCCTGCTCATGG
TGGCTGTCCCCATCATCACTGCCACTGGCTACTCAGAGTCAGATGCAGAGGCCGTGAAGAAGGCAGCCTTGGAAA
AGAAGGAGGAGGAGCTGGTGAGCGAGCGCACAGAAGCCTTCACTATTGCCCGCAACCTCCTGACAGCGGCTGCAG
ATGCCATTGAGCGGATCATGTCGTCGTACAAGGAGGTGACGGAGCTGGCTGGCTACACAGCCCGGGTGCACGAGA
TGTTCCAGGTATTTGAAGATGTTCAGCGCTGTCACTTCAAGAGGCCCAGGGAGCTAGAGGACGCTCAGGCGGGGT
CTGGGACCATAGGCCGGTCTGGTGTCCGTGTGGAGGGCCCCCTGAAGATCCGAGGCCAGGTGGTGGATGTGGAAC
AGGGGATCATCTGCGAGAACATCCCCATCGTCACGCCCTCAGGAGAGGTGGTGGTGGCCAGCCTCAACATCAGGG
TGGAGGAAGGCATGCATCTGCTCATCACAGGCCCCAATGGCTGCGGCAAGAGCTCCCTGTTCCGGATCCTGGGTG
GGCTCTGGCCCACGTACGGTGGTGTGCTCTACAAGCCCCCACCCCAGCGCATGTTCTACATCCCGCAGAGGCCCT
ACATGTCTGTGGGCTCCCTGCGTGACCAGGTGATCTACCCGGACTCAGTGGAGGACATGCAAAGGAAGGGCTACT
CGGAGCAGGACCTGGAAGCCATCCTGGACGTCGTGCACCTGCACCACATCCTGCAGCGGGAGGGAGGTTGGGAGG
CTATGTGTGACTGGAAGGACGTCCTGTCGGGTGGCGAGAAGCAGAGAATCGGCATGGCCCGCATGTTCTACCACA
GGCCCAAGTACGCCCTCCTGGATGAATGCACCAGCGCCGTGAGCATCGACGTGGAAGGCAAGATCTTCCAGGCGG
CCAAGGACGCGGGCATTGCCCTGCTCTCCATCACCCACCGGCCCTCCCTGTGGAAATACCACACACACTTGCTAC
AGTTCGATGGGGAGGGCGGCTGGAAGTTCGAGAAGCTGGACTCAGCTGCCCGCCTGAGCCTGACGGAGGAGAAGC
AGCGGCTGGAGCAGCAGCTGGCGGGCATTCCCAAGATGCAGCGGCGCCTCCAGGAGCTCTGCCAGATCCTGGGCG
AGGCCGTGGCCCCAGCGCATGTGCCGGCACCTAGCCCGCAAGGCCCTGGTGGCCTCCAGGGTGCCTCCACCTGAC
ACAACCGTCCCCGGCCCCTGCCCCGCCCCCAAGCTCGGATCACATGAAGGAGACAGCAGCACCCACCCATGCACG
CACCCCGCCCCTGCATGCCTGGCCCCTCCTCCTAGAAAACCCTTCCCGCCCTCGGGAAAGTAGATGTGGAGGGTG
GCGCCCTGCGTAACCCTCGCCCTGTCCCTCCCACTCCCTGGGGGCGCTGTTCCACAGTGACTGGGCCCTGTCCAG
GGCAGTGAGTCCTCTACTTTGCTCCGTGGAGGAAGCTGGGGTACAAGGGGCCCAGTGCTGGCCACACAGCAGCGC
AGCCGAGCCCCAGGAGCCCGTCAGGCCACAGCCCCTGGCACTGCAGGTGGCCTCCCTCCAGAGACTCGAGTCCCC
ATGATTCCCTCCTCGTCAGTCTCTCAAAGACCCCATGGTCCATCCCCTGAGGGTGGTCAGCCAAGGCTCCCGTTC
CGTGGGATGCCATAAAAGCCGCCCAGTGGGACCCACAGTCACACAGAGCGCCTCACCTGCATCCTCTCCCCCACA
AGAGCCCCAAAGATCCCACGGGAGAGGGGAGAGGGACGCACAGCACTGCCTGCCAAGCGAGAATGCAGGCCCCGC
CCCCTCGGCCCCTCACCACCTCTTTCTACAGCCTAATTTATTGGATTCCCTATTCGTAGCCATCTCCGTGGCCAA
TGTGACTACCGTGCCAGCAGCGGGGGCGGCCCAGCCTCTGAGTCCCGTGGGGCCCCGGCTCCCACCGGTGCCAAA
CCCAGCCCCTGCGGCCGTCACCCCGCCAGCCTACACTGCCAGCCGCCACCGGGGCACACGGGCCTCTGCTTGCCA
GCCAGGAGTGCGGACACCATGTTCCCAGCTCAGTGCCAAAGAGGGGTCACCAGGGGGAGCTGTCTGCGGAGCCAG
CGCCTGCCCGAGAGAGACCCCACCGCCACCGTGTGCCTTTCCCGGGCCCTCAGCCCTCGGGCCGGGCACCACCCC

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FIGURE 3152B

CAGTCCCCCCAGTAAA

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FIGURE 3153

TTTCCGGCCGCGGTATGAGGGGCGGGGCCGGGGCTGCTGTGGGAGAGTTCTGTTGCTGCGGCGGGGCCTGCACGT
TGACTGTGGGAAACTCGGAAACAAGCTCACATCTTCCTGTGGGAAACCTTCTAGCAACAGGATGAGTCTGCAGTG
GACTGCAGTTGCCACCTTCCTCTATGCGGAGGTCTTTGTTGTGTTGCTTCTCTGCATTCCCTTCATTTCTCCTAA
AAGATGGCAGAAGATTTTCAAGTCCCGGCTGGTGGAGTTGTTAGTGTCCTATGGCAACACCTTCTTTGTGGTTCT
CATTGTCATCCTTGTGCTGTTGGTCATCGATGCCGTGCGCGAAATTCGGAAGTATGATGATGTGACGGAAAAGGT
GAACCTCCAGAACAATCCCGGGGCCATGGAGCACTTCCACATGAAGCTTTTCCGTGCCCAGAGGAATCTCTACAT
TGCTGGCTTTTCCTTGCTGCTGTCCTTCCTGCTTAGACGCCTGGTGACTCTCATTTCGCAGCAGGCCACGCTGCT
GGCCTCCAATGAAGCCTTTAAAAAGCAGGCGGAGAGTGCTAGTGAGGCGGCCAAGAAGTACATGGAGGAGAATGA
CCAGCTCAAGAAGGGAGCTGCTGTTGACGGAGGCAAGTTGGATGTCGGGAATGCTGAGGTGAAGTTGGAGGAAGA
GAACAGGAGCCTGAAGGCTGACCTGCAGAAGCTAAAGGACGAGCTGGCCAGCACTAAGCAAAAACTAGAGAAAGC
TGAAAACCAGGTTCTGGCCATGCGGAAGCAGTCTGAGGGCCTCACCAAGGAGTACGACCGCTTGCTGGAGGAGCA
CGCAAAGCTGCAGGCTGCAGTAGATGGTCCCATGGACAAGAAGGAAGAGTAAGGGCCTCCTTCCTCCCCTGCCTG
CAGCTGGCTTCCACCTGGCACGTGCCTGCTGCTTCCTGAGAGCCCGGCCTCTCCCTCCAGTACTTCTGTTTGTGC
CCTTCTGCTTCCCCCATTCCCTTCCACAGCTCATAGCTCGTCATCTCGGCCCTTGTCCACACTCTCCAAGCACAT
TACAGGGGACCTGATTGCTACACGTTCAGAATGCGTTTGCTGTCATCCTGCTTGGCCTGGCCAGGCCTGGCACAG
CCTTGGCTTCCACGCCTGAGCGTGGAGAGCACGAGTTAGTTGTAGTCCGGCTTGCGGTGGGGCTGACTTCCTGTT
GGTTTGAGCCCCTTTTTGTTTTGCCCTCTGGGTGTTTTCTTTGGTCCCGCAGGAGGGTGGGTGGAGCAGGTGGAC
TGGAGTTTCTCTTGAGGGCAATAAAAGTTGTCATGGTG

FIGURE 3154A

TAGTCGGAGCGAGGTGGCGAGTCGCTGAGCCCGCCGCGGCCCCGAGAGCGGCTGCAGCCGCCGCCGCCGGGAAGG
AGAGGGCGAGGCGCGCCCGAGCCGCCGCCGCCGCCGCCACCGCCGCCGCCGCCACCACCGCCACCGGAGTCGCGG
GCCAGCCGGGCAGCCTCCGCGGGCCCCGGCCGGGGCGGGGGGCGCGGGCCACAGGCCCCTGCTCCGGCCGCCGCT
TGCAGACCGCGGGCGCCGATGTCGCCCGCGCCCCCGCTAGGCTGAGCCTCGGGTCGGGCGAGGAGCCGCCGCAGCC
GCCGCCGCCCGAGCCGCGGGCAGGAGCCTCGGGAGCCGCCGCCGCCGCCGCCGCCCGGCCGGGCCCCGCCGC
CGCCCGCGCGCCCCCGGGCCCCCGACACACATGAGATTCTTCAGGCTCACTTTCAAGTGCTTCGTGGACTGCTTC
TGACTGCGCCGCCCGCGCCCCGCACCCCGCCGCCCGCCCGCCGCCCCGTCCCCCGGCCCGGCCGCCCCCCGGCCC
CCGGCCGGCCCGCGCCCTCGGGGCCCTCCCCGGTGCCGCCGGTGCCCCCCGCCTGACCGCCGCCCCCCGTGAGGC
GCCGCGACCCCGGCCCGGCCGTGCGGCCCGCCGAGGCCATGGCGAAGAAGAGCGCCGAGAACGGCATCTATAGCG
TGTCCGGCGACGAGAAGAAGGGCCCCCTCATCGCGCCCGGGCCCGACGGGGCCCCGGCCAAGGGCGACGGCCCCG
TGGGCCTGGGGACACCCGGCGGCCGCCTGGCCGTGCCGCCGCGCGAGACCTGGACGCGCCAGATGGACTTCATCA
TGTCGTGCGTGGGCTTCGCCGTGGGCTTGGGCAACGTGTGGCGCTTCCCCTACCTGTGCTACAAGAACGGCGGAG
GTGTGTTCCTTATTCCCTACGTCCTGATCGCCCTGGTTGGAGGAATCCCCATTTTCTTCTTAGAGATCTCGCTGG
GCCAGTTCATGAAGGCCGGCAGCATCAATGTCTGGAACATCTGTCCCCTGTTCAAAGGCCTGGGCTACGCCTCCA
TGGTGATCGTCTTCTACTGCAACACCTACTACATCATGGTGCTGGCCTGGGGCTTCTATTACCTGGTCAAGTCCT
TTACCACCACGCTGCCCTGGGCCACATGTGGCCACACCTGGAACACTCCCGACTGCGTGGAGATCTTCCGCCATG
AAGACTGTGCCAATGCCAGCCTGGCCAACCTCACCTGTGACCAGCTTGCTGACCGCCGGTCCCCTGTCATCGAGT
TCTGGGAGAACAAAGTCTTGAGGCTGTCTGGGGGACTGGAGGTGCCAGGGGCCCTCAACTGGGAGGTGACCCTTT
GTCTGCTGGCCTGCTGGGTGCTGGTCTACTTCTGTGTCTGGAAGGGGGTCAAATCCACGGGAAAGATCGTGTACT
TCACTGCTACATTCCCCTACGTGGTCCTGGTCGTGCTGCTGGTGCGTGGAGTGCTGCTGCCTGGCGCCCTGGATG
GCATCATTTACTATCTCAAGCCTGACTGGTCAAAGCTGGGGTCCCCTCAGGTGTGGATAGATGCGGGGACCCAGA
TTTTCTTTTCTTACGCCATTGGCCTGGGGGCCCTCACAGCCCTGGGCAGCTACAACCGCTTCAACAACAACTGCT
ACAAGGACGCCATCATCCTGGCTCTCATCAACAGTGGGACCAGCTTCTTTGCTGGCTTCGTGGTCTTCTCCATCC
TGGGCTTCATGGCTGCAGAGCAGGGCGTGCACATCTCCAAGGTGGCAGAGTCAGGGCCGGGCCTGGCCTTCATCG
CCTACCCGCGGGCTGTCACGCTGATGCCAGTGGCCCCACTCTGGGCTGCCCTGTTCTTCTTCATGCTGTTGCTGC
TTGGTCTCGACAGCCAGGTTTGTAGGTGTGGAGGGCTTCATCACCGGCCTCCTCGACCTCCTCCCGGCCTCCTAC
TACTTCCGTTTCCAAAGGGAGATCTCTGTGGCCCTCTGTTGTGCCCTCTGCTTTGTCATCGATCTCTCCATGGTG
ACTGATGGCGGGATGTACGTCTTCCAGCTGTTTGACTACTACTCGGCCAGCGGCACCACCCTGCTCTGGCAGGCC
TTTTGGGAGTGCGTGGTGGTGGCCTGGGTGTACGGAGCTGACCGCTTCATGGACGACATTGCCTGTATGATCGGG
TACCGACCTTGCCCCTGGATGAAATGGTGCTGGTCCTTCTTCACCCCGCTGGTCTGCATGGGCATCTTCATCTTC
AACGTTGTGTACTACGAGCCGCTGGTCTACAACAACACCTACGTGTACCCGTGGTGGGGTGAGGCCATGGGCTGG
GCCTTCGCCCTGTCCTCCATGCTGTGCGTGCCGCTGCACCTCCTGGGCTGCCTCCTCAGGGCCAAGGGCACCATG
GCTGAGCGCTGGCAGCACCTGACCCAGCCCATCTGGGGCCTCCACCACTTGGAGTACCGAGCTCAGGACGCAGAT
GTCAGGGGCCTGACCACCCTGACCCCAGTGTCCGAGAGCAGCAAGGTCGTCGTGGTGGAGAGTGTCATGTGACAA
CTCAGCTCACATCACCAGCTCACCTCTGGTAGCCATAGCAGCCCCTGCTTCAGCCCCACCGCACCCCTCCAGGGG
GCCTGCCTTTCCCTGACACTTTTGGGGTCTGCCTGGGGGAGGAGGGGAGAAAGCACCATGAGTGCTCACTAAAAC
AACTTTTTCCATTTTTAATAAAACGCCAAAAATATCACAACCCACCAAAAATAGATGCCTCTCCCCCTCCAGCCC
TAGCCGAGCTGGTCCTAGGCCCCGCCTAGTGCCCCACCCCCACCCACAGTGCTGCACTCCTCCTGCCCCTGCCAC
GCCCACCCCCTGCCCACCTCTCCAGGCTCTGCTCTGCAGCACACCCGTGGGTGACCCCTCACCCCAGAAGCAGCA
GTGGCAGCTTGGGAAATGTGAGGAAGGGAAGGAGGGAGAGACGGGAGGGAGGAGAGAGAGGAGAAGGGAGGCAGG
GGAGGGGCAGCAGAACCAAGGCAAATATTTCAGCTGGGCTATACCCCTCTCCCCATCCCTGTTATAGAAGCTTAG
AGAGCCAGCCAGCAATGGAACCTTCTGGTTCCTGCGCCAATCGCCACCAGTATCAATTGTGTGAGCTTGGGTGCG
AGTGCACGCGTGCGTGAGTACGGAGAGTATATATAGATCTCTATCTCTTAGCAAAGGTGAATGCCAGATGTAAAT
GGCGCCTCTGGGCAAAGGAGGCTTGTATTTTGCACATTTTATAAAAACTTGAGAGAATGAGATTTCTGCTTGTAT
ATTTCTAAAAAGAGGAAGGAGCCCAAACCATCCTCTCCTTACCACTCCCATCCCTGTGAGCCCTACCTTACCCCT
CTGCCCCTAGCCAAGGAGTGTGAATTTATAGATCTAACTTTCATAGGCAAAACAAAAGCTTCGAGCTGTTGCGTG
TGTGAGTCTGTTGTGTGGATGTGCGTGTGTGGTCCCCAGCCCCAGACTGGATTGGAAAAGTGCATGGTGGGGGCC
TCGGGGCTGTCCCCACGCTGTCCCTTTGCCACAAGTCTGTGGGGCAAGAGGCTGCAATATTCCGTCCTGGGTGTC

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FIGURE 3154B

TGGGCTGCTAACCTGGCCTGCTCAGGCTTCCCACCCTGTGCGGGGCACACCCCCAGGAAGGGACCCTGGACACGG
CTCCCACGTCCAGGCTTAAGGTGGATGCACTTCCCGCACCTCCAGTCTTCTGTGTAGCAGCTTTAACCCACGTTT
GTCTGTCACGTCCAGTCCCGAGACGGCTGAGTGACCCCAAGAAAGGCTTCCCCGACACCCAGACAGAGGCTGCAG
GGCTGGGGCTGGGTGAGGGTGGCGGGCCTGCGGGGACATTCTACTGTGCTAAAAAGCCACTGCAGACATAGCAAT
AAAAACATGTCATTTTCC

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FIGURE 3155

GCTTCTGCGCGCCGGGGCCGCCTCTCCTTCCGCCGGTGCCGCGGCGCCTCATGGAAGCCCCGGAGGCGGCGGAGG
GGGGCCTGCAGCGCGGGGCCCGGAGGGCAGCCGGCGCCCGAAGCCAGGGTGCACTTCCGAGTGGCGAGGTTCATC
ATGGAGGCAGGTGTCAAGCTAGGGATGCGGTCCATTCCCATTGCCACTGCTTGCACCATTTACCATAAGTTCTTT
TGCGAGACCAACCTGGACGCCTATGACCCTTACCTGATTGCCATGTCTTCAATTTACTTGGCCGGCAAAGTGGAA
GAGCAGCACCTGCGGACTCGTGACATCATCAATGTGTCCAACAGGTACTTTAACCCAAGCGGTGAGCCCCTGGAA
TTGGACTCCCGCTTCTGGGAACTCCGGGACAGCATCGTGCAGTGTGAGCTTCTCATGCTGAGAGTTCTGCGCTTC
CAGGTCTCCTTCCAGCATCCACACAAGTACCTGCTCCACTACCTGGTTTCCCTCCAGAACTGGCTGAACCGCCAC
AGCTGGCAGCGGACCCCTGTTGCCGTCACCGCCTGGGCCCTGCTGCGGGACAGCTACCATGGGGCGCTGTGCCTC
CGCTTCCAGGCCCAGCACATCGCCGTGGCGGTGCTCTACCTGGCCCTGCAGGTCTACGGAGTTGAGGTGCCCGCC
GAGGTCGAGGCTGAGAAGCCGTGGTGGCAGGTGTTTAATGACGACCTTACCAAGCCAATCATTGATAATATTGTG
TCTGATCTCATTCAGATTTATACCATGGACACAGAGATCCCCTAAGGTCCTGGCCCAGGCCTGCCCAAAGAGAAG
CCACATCTGCGTTTGTCCTTTGAGAGGACTTTGACTACAATACAGGCATGACATCAATGAAAGGAAAGTCATGAA
ATCGATGAGACTGAATCCCTACGGATTTCTTAAAAGCCAGATTTGTAGGGAGAATGAATGTGCAACGTGGCTGAA
ATCTATTTTGTGTAATAAAAGGTGATACAAGTC

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FIGURE 3156A

GTGTCCACGCTTAGCAGCTTTCTCACCGCCGCCAAACCTTGCCTGGGCACTGGGACCGTGGGTGGCCGCCTGTCC
CTAGCTGTGGCTGAGCCAAGATTGCACTTGTGAGAAGGCCTGACAGGCAGCATGGGCGACATGGCCAATAGTTCC
ATCGAGTTCCACCCCAAGCCCCAGCAGCAGCGGGATGTCCCCCAGGCTGGAGGCTTTGGGTGCACGCTGGCGGAG
CTGCGCACCCTCATGGAGCTGCGAGGGGCCGAGGCGCTGCAGAAGATCGAGGAGGCCTACGGGGATGTCAGCGGG
CTCTGCCGGAGGCTGAAGACCTCACCCACAGAGGGCCTGGCGGACAACACCAATGACCTGGAGAAGCGCAGGCAG
ATCTACGGGCAGAACTTCATCCCCCCAAAGCAACCCAAGACCTTCCTGCAGCTGGTGTGGGAGGCCCTGCAGGAC
GTGACCCTCATCATCCTGGAGGTGGCTGCCATCGTCTCTCTGGGCCTCTCGTTCTATGCGCCGCCAGGAGAGGAG
AGTGAAGCCTGTGGGAATGTGTCGGGAGGCGCAGAAGATGAGGGCGAGGCCGAAGCTGGCTGGATCGAGGGGGCT
GCCATCCTGCTGTCCGTCATCTGTGTGGTGCTGGTCACGGCCTTCAATGACTGGAGCAAGGAGAAGCAGTTCCGA
GGCCTGCAGAGCCGAATTGAGCAGGAGCAGAAGTTCACGGTCATCCGGAACGGGCAGCTCCTCCAGGTCCCCGTG
GCTGCGCTGGTGGTGGGGGACATTGCCCAGGTCAAGTACGGCGACCTGCTGCCAGCCGACGGCGTGCTCATCCAG
GCCAATGACCTCAAGATCGACGAGAGCTCCCTGACGGGCGAGTCTGACCACGTGCGCAAGTCAGCTGACAAAGAT
CCCATGCTGCTCTCAGGCACTCATGTCATGGAAGGTTCTGGAAGAATGGTGGTGACCGCCGTTGGCGTGAATTCC
CAGACAGGCATCATCTTCACGCTGCTTGGAGCTGGCGGAGAGGAGGAAGAGAAGAAAGATAAGAAAGGCAAGCAG
CAGGATGGGGCCATGGAGAGTAGCCAGACCAAAGCTAAGAAGCAGGATGGTGCAGTGGCCATGGAGATGCAGCCC
CTGAAGAGCGCGGAGGGTGGGGAGATGGAGGAGCGGGAGAAGAAGAAAGCCAACGCACCCAAAAAGGAGAAGTCT
GTCCTTCAGGGGAAGCTCACAAAGCTAGCCGTGCAGATCGGGAAAGCAGGGCTGGTGATGTCTGCCATCACCGTC
ATCATCCTGGTCCTCTACTTTGTGATTGAGACGTTTGTCGTGGAAGGCCGGACATGGCTGGCAGAGTGCACGCCG
GTCTATGTACAATACTTCGTGAAGTTCTTCATCATTGGTGTCACTGTGCTGGTCGTGGCTGTCCCAGAGGGCCTG
CCTCTTGCTGTCACCATCTCCTTAGCTTACTCTGTCAAGAAAATGATGAAAGACAACAACCTGGTGCGCCACCTG
GATGCCTGCGAGACCATGGGCAACGCCACAGCCATCTGCTCCGACAAGACGGGCACGCTCACCACCAACCGTATG
ACCGTGGTCCAGTCCTACCTAGGGGACACCCACTACAAAGAGATTCCGGCCCCCAGCGCCCTGACCCCTAAGATC
CTCGACCTCCTGGTCCATGCCATCTCCATCAACAGTGCCTATACCACCAAAATACTACCTCCTGAGAAGGAAGGC
GCCCTCCCACGCCAGGTGGGCAATAAGACGGAGTGCGCCCTGCTGGGCTTCGTCTTGGACCTGAAGCGGGACTTC
CAGCCCGTGCGCGAGCAGATCCCGGAAGACAAGCTTTACAAAGTGTACACCTTCAACTCGGTCCGCAAGTCCATG
AGCACAGTCATCCGCATGCCCGACGGTGGCTTCCGCCTCTTCAGCAAGGGGGCCTCAGAGATCCTCTTGAAAAAG
TGCACCAACATCTTGAACAGCAATGGCGAACTCCGGGGCTTTCGGCCTCGGGACCGGGACGACATGGTGAGGAAG
ATCATCGAGCCGATGGCTTGCGATGGCCTCCGCACCATCTGCATCGCCTACCGGGACTTCTCTGCAGGCCAGGAG
CCCGACTGGGACAACGAGAATGAGGTCGTGGGTGACCTCACCTGCATAGCTGTCGTGGGCATTGAGGACCCTGTG
CGGCCCGAGGTCCCTGAAGCTATCCGAAAATGCCAGCGTGCTGGCATCACAGTCCGCATGGTGACTGGGGACAAC
ATCAACACGGCCCGGGCCATCGCAGCCAAATGCGGCATCATCCAGCCCGGGGAGGACTTCCTGTGCCTAGAAGGG
AAGGAGTTCAACCGGCGGATCCGCAATGAGAAAGGCGAGATAGAACAGGAGCGGCTGGACAAGGTGTGGCCCAAG
CTGAGGGTGCTGGCCCGGTCGTCTCCCACCGACAAGCACACACTGGTCAAAGGGATTATCGACAGCACCACTGGT
GAGCAGCGGCAGGTGGTGGCTGTGACAGGGGATGGCACCAACGATGGGCCGGCCCTCAAGAAGGCGGACGTGGGC
TTCGCCATGGGCATCGCAGGGACCGACGTGGCCAAGGAGGCCTCCGACATCATCCTGACCGATGACAACTTCACC
AGCATCGTCAAGGCAGTCATGTGGGGCCGTAACGTCTATGACAGCATCTCCAAGTTCCTGCAGTTTCAACTGACG
GTCAATGTGGTGGCTGTGATCGTGGCCTTCACAGGTGCCTGCATTACTCAGGACTCTCCTCTCAAAGCCGTGCAG
ATGTTGTGGGTGAACTTGATCATGGACACATTTGCCTCTCTGGCCCTGGCGACGGAGCCACCCACAGAGTCGCTG
CTGCTGCGGAAGCCGTACGGCCGCGACAAGCCCCTCATCTCCCGCACCATGATGAAGAACATTCTGGGCCACGCC
GTGTACCAGCTCGCCATCATCTTCACCCTGCTGTTTGTCGGGGAGCTCTTCTTCGACATCGACAGCGGGAGGAAT
GCGCCCCTGCACTCGCCACCCTCAGAGCACTACACCATCATCTTCAACACGTTCGTCATGATGCAGCTCTTTAAC
GAGATCAACGCCCGCAAGATCCACGGCGAGAGGAACGTGTTCGACGGCATCTTCAGCAACCCCATCTTCTGCACC
ATCGTTTTGGGCACTTTCGGGATTCAGATTGTCATCGTCCAGTTTGGCGGGAAGCCCTTCAGCTGCTCCCCACTA
TCCACAGAACAGTGGCTCTGGTGCCTGTTTGTTGGTGTTGGGGAGCTGGTCTGGGGACAGGTCATTGCCACCATC
CCCACCAGCCAGCTCAAGTGCCTGAAGGAAGCCGGGCACGGGCCCGGGAAGGACGAGATGACCGACGAGGAGCTG
GCCGAAGGCGAGGAAGAGATCGACCATGCCGAGCGGGAGCTCCGCAGGGGCCAGATCCTCTGGTTCCGGGGCCTG
AACCGGATTCAGACGCAGATCCGGGTGGTGAAAGCGTTCCGTAGCTCGCTCTATGAAGGCCTGGAGAAACCAGAA
TCCAAGACCTCCATTCACAACTTCATGGCCACGCCCGAGTTTCTGATCAATGACTACACCCACAACATCCCGCTC

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FIGURE 3156B

ATTGACGACACGGACGTGGACGAGAACGAGGAGCGCCTCCGGGCCCCCCCGCCCCCGTCCCCCAACCAGAACAAC
AACGCCATAGACAGCGGCATCTACCTGACCACGCATGTCACCAAGTCAGCTACCTCTTCAGTGTTTTCCTCCAGT
CCCGGGAGCCCGCTCCACAGCGTGGAGACGTCCCTCTAACAAGAACTTGTCTCAGCACATGCGCACACGCACACT
CGGACTCACACGAAGTCACACGCACACATGCACGCACACACACATATGGGGACCTGCACACCTGCAAAACGAGGG
AACAACTAAGGTGGCTGAAGACCTTTCTGGCAGGGCATTTGCAAGGACCCAAATCCATTCAACAAGGGTGCAGCC
TGCCACAGGCTCCTCATCCGGACTGAGGAAGACGAGGACAGGGAGGAGGAAAAGGAGGAAGAGGAGGACAAAAAG
GGGGAGGAGAAGGTTCTTCGTCCAAAGGAG

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FIGURE 3157

TCTCTCCACAAACTGCCCAGGAGTGAGTAGCTGCTTTCGGTCCGCCGGACACACCGGACAGATAGACGTGCGGAC
GGCCCACCACCCCAGCCCGCCAACTAGTCAGCCTGCGCCTGGCGCCTCCCCTCTCCAGGTCCATCCGCCATGTGG
CCCCTGTGGCGCCTCGTGTCTCTGCTGGCCCTGAGCCAGGCCCTGCCCTTTGAGCAGAGAGGCTTCTGGGACTTC
ACCCTGGACGATGGGCCATTCATGATGAACGATGAGGAAGCTTCGGGCGCTGACACCTCGGGCGTCCTGGACCCG
GACTCTGTCACACCCACCTACAGCGCCATGTGTCCTTTCGGCTGCCACTGCCACCTGCGGGTGGTTCAGTGCTCC
GACCTGGGTCTGAAGTCTGTGCCCAAAGAGATCTCCCCTGACACCACGCTGCTGGACCTGCAGAACAACGACATC
TCCGAGCTCCGCAAGGATGACTTCAAGGGTCTCCAGCACCTCTACGCCCTCGTCCTGGTGAACAACAAGATCTCC
AAGATCCATGAGAAGGCCTTCAGCCCACTGCGGAAGCTGCAGAAGCTCTACATCTCCAAGAACCACCTGGTGGAG
ATCCCGCCCAACCTACCCAGCTCCCTGGTGGAGCTCCGCATCCACGACAACCGCATCCGCAAGGTGCCCAAGGGA
GTGTTCAGTGGGCTCCGGAACATGAACTGCATCGAGATGGGCGGGAACCCACTGGAGAACAGTGGCTTTGAACCT
GGAGCCTTCGATGGCCTGAAGCTCAACTACCTGCGCATCTCAGAGGCCAAGCTGACTGGCATCCCCAAAGACCTC
CCTGAGACCCTGAATGAACTCCACCTAGACCACAACAAAATCCAGGCCATCGAACTGGAGGACCTGCTTCGCTAC
TCCAAGCTGTACAGGCTGGGCCTAGGCCACAACCAGATCAGGATGATCGAGAACGGGAGCCTGAGCTTCCTGCCC
ACCCTCCGGGAGCTCCACTTGGACAACAACAAGTTGGCCAGGGTGCCCTCAGGGCTCCCAGACCTCAAGCTCCTC
CAGGTGGTCTATCTGCACTCCAACAACATCACCAAAGTGGGTGTCAACGACTTCTGTCCCATGGGCTTCGGGGTG
AAGCGGGCCTACTACAACGGCATCAGCCTCTTCAACAACCCCGTGCCCTACTGGGAGGTGCAGCCGGCCACTTTC
CGCTGCGTCACTGACCGCCTGGCCATCCAGTTTGGCAACTACAAAAAGTAGAGGCAGCTGCAGCCACCGCGGGGC
CTCAGTGGGGGTCTCTGGGGAACACAGCCAGACATCCTGATGGGGAGGCAGAGCCAGGAAGCTAAGCCAGGGCCC
AGCTGCGTCCAACCCAGCCCCCCACCTCGGGTCCCTGACCCCAGCTCGATGCCCCATCACCGCCTCTCCCTGGCT
CCCAAGGGTGCAGGTGGGCGCAAGGCCCGGCCCCCATCACATGTTCCCTTGGCCTCAGAGCTGCCCCTGCTCTCC
CTCCACAGCCACCCAGAGGCACCCCATGAAGCTTTTTTCTCGTTCACTCCCAAACCCAAGTGTCCAAGTCTCCAG
TCCTAGGAGAACAGTCCCTGGGTCAGCAGCCAGGAGGCGGTCCATAAGAATGGGGACAGTGGGCTCTGCCAGGGC
TGCCGCACCTGTCCAGACACACATGTTCTGTTCCTCCTCCTCATGCATTTCCAGCCTTTCAACCCTCCCCGACTC
TGCGGCTCCCCTCAGCCCCCTTGCAAGTTCATGGCCTGTCCCTCCCAGACCCCTGCTCCACTGGCCCTTCGACCA
GTCCTCCCTTCTGTTCTCTCTTTCCCCGTCCTTCCTCTCTCTCTCTCTCTCTTTCTGTGTGTGTGTGTGTGTG
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTTGTGCTTCCTCAGACCTTTCTCGCTTCTGAGCTTGGTGGC
CTGTTCCCTCCATCTCTCCGAACCTGGCTTCGCCTGTCCCTTTCACTCCACACCCTCTGGCCTTCTGCCTTGAGC
TGGGACTGCTTTCTGTCTGTCCGGCCTGCACCCAGCCCCTGCCCACAAAACCCCAGGGACAGCGGTCTCCCCAGC
CTGCCCTGCTCAGGCCTTGCCCCCAAACCTGTACTGTCCCGGAGGAGGTTGGGAGGTGGAGGCCCAGCATCCCGC
GCAGATGACACCATCAACCGCCAGAGTCCCAGACACCGGTTTTCCTAGAAGCCCCTCACCCCCACTGGCCCACTG
GTGGCTAGGTCTCCCCTTATCCTTCTGGTCCAGCGCAAGGAGGGGCTGCTTCTGAGGTCGGTGGCTGTCTTTCCA
TTAAAGAAACACCGTGCAACGTG

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FIGURE 3158

ATGGGCGGGGCGCGGCTCGGAGCGCGAAACATGGCGGGGCAGGACGCTGGCTGCGGCCGTGGCGGCGACGACTAC
TCAGAGGACGAAGGCGACAGCAGCGTGTCCAGGGCGGCTGTGGAGGTGTTCGGGAAGCTGAAGGACCTAAACTGC
CCCTTCCTCGAGGGTCTGTATATCACAGAGCCAAAGACAATTCAGGAACTGCTGTGCAGCCCCTCAGAGTACCGC
TTGGAGATCCTAGAGTGGATGTGTACCCGGGTCTGGCCCTCACTGCAGGACAGGTTCAGCTCACTGAAAGGGGTC
CCAACAGAGGTGAAGATCCAAGAAATGACGAAGCTGGGCCACGAGCTGATGCTGTGTGCGCCAGATGACCAGGAG
CTCCTCAAGGGCTGTGCCTGCGCCCAGAAGCAGCTACACTTCATGGACCAGTTGCTCGATACCATCCGGAGCCTG
ACCATTGGGTGCTCCAGTTGCTCGAGCCTGATGGAGCACTTCGAGGACACCAGGGAGAAGAACGAGGCCTTGCTG
GGGGAGCTCTTCTCTAGCCCCCACCTGCAGATGCTCCTGAATCCAGAGTGCGACCCGTGGCCCCTGGACATGCAG
CCCCTCCTCAACAAGCAGAGTGATGACTGGCAGTGGGCCAGTGCCTCTGCCAAGTCCGAGGAGGAGGAGAAGCTG
GCGGAGCTTGCCAGGCAGCTGCAGGAGAGTGCTGCCAAGTTGCACGCGCTTAGAACGGAGTACTTTGCACAGCAT
GAGCAAGGGGCTGCTGCGGGCGCAGCCGACATCAGCACCCTAGACCAGAAGCTGCGTCTGGTCACTTCCGACTTC
CACCAGCTAATCTTGGCTTTTCTCCAAGTCTACGACGACGAGCTGGGCGAGTGCTGCCAGCGCCCAGGCCCTGAC
CTCCACCCGTGCGGCCCCATCATCCAGGCCACGCACCAGAATCTGACTTCCTACAGCCAAATCCCCAGAGGCCAA
CCTAAAAAGCCGGCTTTAGTTACGATGACTACAGTTCCCACGTGCGCAACTCTGCCCTTGGCTCAAGGATTCCGT
GATGTTCATTTTGGTTTTCTAAGCGAGAGGCTCCGAGCCTTCCAACCTCTGACTGGCTGGTCCTGTGAGACCCCT
CGATCAGGGATGCTGCTGCAAGTGGTCATGGCAGTTGCTGACACCTCTGCGAAGGCCGTGGAGACCGTGAAGAAG
CAGCAAGGCGAGCAGATCTGCTGGGGTGGCAGCAGCTCCGTCATGAGTCTAGCTACCAAGATGAATGAACTAATG
GAGAAATAGAAAGTCTTCAGTGATGGCCTACGCCAAAGCACAGGATGGGGCGGGCAGGAAGCCCTCTCCCAAGAT
CGAGTTGGCCGAGGATGGATGATTGTGGCAGCAGAAGCCGTTGCAGCCCCACGTTGTGCTCTAGGCAGCTGGGGG
CGGGCTGCGGCCGCTGATTAAAGGCCGCCTAGAGCAGCCTGTGTGGCGACAGGTGCCCAGAAGCCCAGGAAGCCG
GTCAGTGCCCGCCCCAGTTTGAGGACTTGCTATCCCCGTGGGAACATCACCATGTCCGAGGCACCCCGGGCCGAG
ACCTTTGTCTTCCTGGACCTGGAAGCCACTGGGCTCCCCAGTGTGGAGCCCGAGATTGCCGAGCTGTCCCTCTTT
GCTGTCCACCGCTCCTCCCTGGAGAACCCGGAGCACGACGAGTCTGGTGCCCTAGTATTGCCCCGGGTCCTGGAC
AAGCTCACGCTGTGCATGTGCCCGGAGCGCCCCTTCACTGCCAAGGCCAGCGAGATCACCGGCCTGAGCAGTGAG
GGCCTGGCGCGATGCCGGAAGGCTGGCTTTGATGGCGCCGTGGTGCGGACGCTGCAGGCCTTCCTGAGCCGCCAG
GCAGGGCCCATCTGCCTTGTGGCCCACAATGGCTTTGATTATGATTTCCCCCTGCTGTGTGCCGAGCTGCGGCGC
CTGGGTGCCCGCCTGCCCCGGGACACTGTCTGCCTGGACACGCTGCCGGCCCTGCGGGGCCTGGACCGCGCCCAC
AGCCACGGCACCCGGGCCCGGGGCCGCCAGGGTTACAGCCTCGGCAGCCTCTTCCACCGCTACTTCCGGGCAGAG
CCAAGCGCAGCCCACTCAGCCGAGGGCGACGTGCACACCCTGCTCCTGATCTTCCTGCACCGCGCCGCAGAGCTG
CTCGCCTGGGCCGATGAGCAGGCCCGTGGGTGGGCCCACATCGAGCCCATGTACTTGCCGCCTGATGACCCCAGC
CTGGAGGCCTGA

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FIGURE 3159

CTTCTCCGCTCCTTCTAGGATATCCGCCTGGTTTGGCCCGCCTGCCTCCACTCCTGCCTTCACCATGTCCATCAG
GGTGACCCAGAAGTCCTACAAGTTGTCCACCTCTGGTCCCCGGGCCTTCAGCAGCCACTCCTACTCGAGTGGGCC
CAGTGCCTGCATCAGCTCCTTGAGCTTCTCCCAAGTGGGCAGCAGCAGCTTTCGGGGTGGCCTGGGTGGCGGTTA
TGGTGGGGCCAGCGGCATGGGAGGCATCACCGCAGTCATGGTCAACCAGAACCTGCTGAGCCCCCTTGTCCTGGA
GGTGGACCCCAACATCCAGGCCGTGTGCACCCAGGAGAAGGAGCCGATCAAGACCCTCAACAACAAGTTTGCCTC
CTTCATAGACAAGGTACGGTTCCTGGAGCAGCAGAACAAGATGCCGGAGACCAAGTGGAGCCTCCTGCAGCAGCA
GAAGACGGCTCGGAGCAACATGGACAAGTTCGAGAGCTACATCAACAACCTTAGGCAGCAGCTGGAGATTCTGGG
CCAGGAGAAGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGGGGCTGGTGGAGGACTTCAAGAACAAGTATGA
GGATGAGATCAATAAGCGTACAGAGATGGAGAATGAATTTGTGCTCACCAAGAAGGATGTGGATGAAGCTTACAT
GAACAAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTTACTGAAGAGATCAGCTTCCTCAGGCAGCTGTATGAAGA
GGAGATCCGGGAGCTGCAGTCCCAGATCTCAGACACATCTGTGGTGCTGTCCATGGACAACAGCCACTCCCTGGA
CATGGACAGCGTCATTGCTGAGGTCAAGGCACAGTACGAGGACCGCCAGCCGCAGCCAGGCTGAGGCTGAGAGCA
TGTACCAGATCAAGAATGAGGAGCTGCAAGAGCCTGGCTGGGAAGCACGGGGATGACCTGTGGCGCACAAAGACT
GAGATCTCCTAGATAAACCGGAACATCAGCCGGCTCCAGGCTGAGATTGAGGGCCCCAAAGGCCAGAGGGCTTCC
CTGGAGGCCGCCATTGCAGATGCACAGCAGCGCGGAGAGCTGACTATTAAGTATGCCAACGCCAAGTTGTCCGAG
CTGGAGGCCGCCCTGCAGCGGGCCAAGCAGGACATGTTGCGGCAGCTGCGTGAGTACCAGCAGCTGATGAACGTC
AAGCTGGTCCTAGACGTCGAGATCGCCACCTACAGGAAGCTACTGGAGGGCGAGGAGAGCCGGCTGGAGTCTGGG
ATGCAGAACATGAGTATTCACACGAAGACCACCAGCGGCTATGCAGGTGGTCTGAGCTCGGCCTATGGGGGCCTC
ACAAGCCCCAGCCTCAGCTATGGCCTGGGCTCCAGCTTTGGCTCTGGCGCGGGCTCCAGCTCCTTCAGCCGCACC
AGCTCCTCGAGGGCCGTGGTTGTGAAGAAGATCGAGACACGTGATAGGAAGCTGGTGTCCGAGTCCTCCGACTCC
TGCCCAAGTGAACAGCTGAGGCAGCCCCTCCCAGCCTGCCCCTTCTGCGCTGCCCCAGAGCCTGGGAGGGAGGCC
ACTAT

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FIGURE 3160A

AATTGGCTCATTTAAGAATTTCAAAACATTTAATGTAAAAGCTTTTTTTTTTTTAAGGAAGTCCATAAATTTTGG
TTCCCAGGGTTGCACTGGACTTGGAAGGAGTGCTGTTGTGTACATACTATTGTATGGTTTTATTTATTATTTTAC
TGTACAAATCAGCCGAAAGAATTTTTCCAAGTGCCATTTCGGATTTATTAATCCTTTTTTTTTTCCTTTCCTCAA
AGATATTTGCTGTTGTCATATTAAGCATTGGAGACTAGAAAATTACTTTCCCCCTTTGAGCTAGAGGGTCTCTTG
CCAACAGAAGGACAGCTGAGAAAGCTGGATTTAAAGGATGGTTTTATCTGTACTTTGCAGTTAACAGTGATATTT
TGAAGGCACATTTTTCTGTGATTCATTTTTTTTTGGCCATAGTGCTAACCTTGAAGAGATTCGTGGCTGGGTTTT
TGGTTTCTGAGAAGGTCGTAGTTTTTCCTCTTTTCCTTTTTTTTTCTTTTTTCTTTTCTTTTCTTTTTTTTTAAA
GCGGGGGAGGGGAAGAGGGGCTGAGAAAGGAAATCATGTTCACTGGTAGAAGTAGAGTGGAGCATCAGTTACCAG
GGTCCTGAGAGCTGGAGGAGAAAGGATTCTATCTTCAAGTTGGGAGGCCCTCCTCTCACCTTGCTCAAAAATTGC
AAGCGATTCAATCCTGATCAAGACACCAAAGCTACAGGATTCTGGAACCGTGGAGACACCGAGAAACCATGAGTG
TAAGGTTACCCCAGAGTATAGACAGGTTAAGTAGCCTGTCTTCTCTGGGAGATTCTGCACCAGAGCGCAAGTCCC
CTTCCCACCATCGCCAGCCTTCGGATGCCTCTGAGACAACAGGTCTCGTTCAACGCTGTGTCATTATCCAAAAGG
ACCAGCATGGCTTCGGCTTCACAGTCAGTGGGGATCGCATTGTTCTGGTGCAGTCTGTGCGGCCTGGAGGTGCAG
CCATGAAGGCCGGTGTGAAAGAGGGCGACCGGATCATCAAAGTCAACGGCACCATGGTGACCAATAGCTCACACC
TGGAAGTGGTAAAGCTGATCAAATCTGGCGCCTATGTCGCACTCACCCTCCTGGGCTCTTCACCTTCATCCATGG
GCATCTCTGGGCTCCAGCAGGACCCATCCCCAGCAGGAGCTCCCCGAATCACGTCAGTGATCCCCTCACCACCAC
CTCCTCCACCTCTACCACCTCCACAACGCATCACAGGACCCAAACCTCTGCAGGATCCCGAAGTTCAAAAACATG
CCACCCAGATCCTCAGGAATATGCTGAGGCAGGAAGAAAAAGAATTACAGCGTATCTGTGAGGTCTATAGCCGGA
ACCCCGCCAGCCTACTGGAAGAGCAGATCGAAGGTGCCCGGCGGCGAGTCACTCAGTTACAGCTGAAGATCCAGC
AGGAGACTGGTGGCTCAGTGGACATACTTCCACTATATGGTGACACCAGCCAGAGACCATCAGAAGGCCGGCTCT
CTCTGGATTCCCAGGAGGGGGACAGTGGCTTGGACTCTGGGACAGAACGCTTTCCTTCCCTCAGTGAGTCATTGA
TGAATCGGAACTCGGTACTGTCAGACCCTGGGCTAGACAGTCCTCGAACCTCCCCTGTGATCATGGCCAGGGTGG
CCCAGCACCACAGGCGGCAGGGCTCGGATGCAGCAGTCCCCTCAACCGGTGACCAGGGTGTAGATCAAAGCCCAA
AGCCTTTAATTATTGGCCCAGAGGAAGACTATGACCCGGGTTATTTCAACAACGAGAGCGACATCATATTCCAGG
ATCTGGAGAAACTGAAGTCTCGGCCAGCTCACCTGGGGGTTTTTCTACGTTACATCTTCTCTCAGGCGGACCCCA
GTCCACTGCTTTTTTACCTGTGTGCAGAAGTTTATCAGCAGGCAAGCCCCAAGGATTCCCGAAGCTTGGGGAAAG
ACATCTGGAATATTTTCCTGGAGAAAAATGCGCCTCTGAGAGTGAAGATCCCTGAGATGCTACAGGCTGAAATTG
ACTCGCGCCTGCGGAACAGCGAAGATGCCCGTGGTGTTCTCTGTGAAGCTCAAGAGGCAGCCATGCCTGAGATCC
AAGAGCAGATCCACGACTACAGAACGAAGCGCACACTGGGGCTGGGCAGCCTGTATGGTGAAAATGACCTGCTGG
ACCTGGATGGGGACCCTCTCCGAGAGCGCCAAGTGGCTGAGAAGCAGCTGGCTGCCCTTGGAGATATTTTGTCCA
AGTATGAGGAAGACAGGAGCGCCCCCATGGACTTCGCCCTCAATACCTACATGAGCCATGCTGGGATCCGTCTTC
GAGAGGCACGACCTTCCAACACAGCTGAAAAGGCCCAGTCTGCTCCTGACAAGGACAAGTGGCTACCGTTCTTCC
CTAAGACCAAGAAGAGCAGCAATTCCAAGAAAGAAAAGGATGCCTTGGAGGACAAGAAGCGAAACCCTATCCTCA
AATACATTGGGAAGCCCAAAAGCTCTTCTCAAAGCACATTTCATATTCCCTTGTCCCCTGTGGAAGTCAAACCAG
GCAATGTGAGGAACATCATTCAGCACTTTGAGAACAACCAGCAGTATGATGCCCCAGAACCTGGGACACAACGAC
TCTCGACCGGAAGCTTTCCTGAGGACCTGCTGGAGAGTGACAGTTCACGCTCAGAGATTCGCCTGGGCCGCTCTG
AAAGCCTCAAGGGCCGGGAAGAGATGAAACGGTCTCGAAAGGCAGAGAACGTGCCCCGCTCTCGCAGTGATGTTG
ACATGGATGCTGCTGCGGAGGCTACTCGCCTGCACCAGTCAGCCTCGTCCTCTACCTCCAGCCTCTCCACCAGGT
CTCTTGAGAACCCAACCCCTCCATTCACTCCCAAAATGGGCCGCAGGAGCATTGAGTCCCCCAGTTTGGGGTTCT
GCACAGATACCCTCCTTCCCCACCTCCTAGAGGATGATCTGGGCCAGCTGTCTGACCTGGAGCCAGAGCCAGATG
CCCAAAATTGGCAGCATACAGTGGGCAAGGATGTGGTGGCTGGGCTAACCCAGCGGGAGATTGACCGGCAAGAGG
TCATCAATGAGCTGTTTGTGACTGAAGCTTCCCACCTGCGCACACTCCGGGTCCTGGACCTGATCTTCTACCAGC
GAATGAAGAAGGAGAACCTGATGCCCCGGGAGGAGCTGGCCCGGCTCTTCCCGAACCTGCCTGAACTCATAGAGA
TTCACAATTCCTGGTGTGAAGCCATGAAGAAGCTCCGGGAGGAAGGCCCCATCATCAAAGAGATCAGTGACCTCA
TGCTGGCCCGGTTTGATGGCCCTGCCCGAGAGGAACTCCAGCAAGTGGCTGCACAGTTCTGTTCCTATCAGTCAA
TAGCCCTAGAGCTAATCAAGACCAAGCAACGCAAGGAGAGTCGATTCCAGCTCTTCATGCAGGAGGCTGAGAGCC
ACCCTCAGTGTCGGCGGCTGCAGCTGAGAGACCTCATCATCTCTGAGATGCAGCGGCTCACCAAGTACCCGCTGC
TGCTGGAGAGCATCATCAAGCACACAGAGGGTGGCACCTCTGAGCATGAGAAGCTGTGCCGGGCCCGGGACCAGT

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FIGURE 3160B

GCCGGGAGATTCTCAAGTATGTGAATGAAGCGGTAAAACAAACAGAGAACCGCCACCGTTTAGAGGGCTACCAGA
AACGCCTGGATGCCACCGCCCTGGAGAGGGCCAGCAACCCCCTGGCAGCAGAGTTCAAGAGCCTGGATCTTACAA
CCAGAAAAATGATCCATGAGGGACCCCTGACCTGGAGGATCAGCAAGGATAAGACCTTGGACCTCCACGTGCTGC
TGCTGGAGGACCTCCTAGTGCTGCTACAGAAACAGGATGAGAAGCTATTGCTGAAGTGCCACAGCAAGACTGCTG
TGGGCTCCTCAGACAGCAAGCAGACCTTCAGCCCCGTGCTCAAGCTCAATGCTGTGCTCATCCGCTCTGTGGCCA
CAGATAAACGGGCCTTCTTCATCATCTGCACCTCCAAGCTGGGCCCACCCCAGATCTATGAGCTGGTTGCATTGA
CGTCATCAGACAAGAACACATGGATGGAGCTCTTAGAAGAGGCCGTGCGGAATGCCACCAGGCACCCCGGAGCTG
CCCCAATGCCCGTCCATCCTCCACCCCCAGGTCCCCGGGAGCCAGCCCAGCAGGGCCCCACACCCAGCAGGGTAG
AACTGGATGACTCAGACGTGTTCCATGGTGAACCTGAACCTGAGGAGCTGCCTGGAGGCACTGGGTCCCAGCAGA
GGGTCCAAGGGAAGCACCAGGTCCTGCTAGAGGACCCTGAGCAGGAGGGCAGTGCAGAGGAAGAGGAACTGGGTG
TCCTGCCTTGCCCTTCCACATCCCTGGATGGAGAGAACAGGGGCATCAGGACAAGGAACCCCATCCACTTGGCCT
TCCCAGGCCCTCTGTTCATGGAAGGGCTCGCTGACTCCGCTCTGGAAGATGTGGAGAACCTGCGACATCTGATCC
TGTGGAGCCTGCTGCCAGGTCACACCATGGAAACTCAGGCTGCCCAGGAGCCCGAGGACGACCTGACACCCACAC
CTTCTGTCATCAGCGTCACCTCTCACCCCTGGGACCCAGGCTCCCCAGGGCAAGCACCCCCTGGGGGTGAAGGGG
ACAACACCCAGCTTGCAGGGCTGGAGGGGGAACGGCCAGAGCAGGAAGACATGGGTCTCTGTTCTCTGGAACACC
TACCCCCAAGGACCAGAAATTCTGGGATATGGGAGTCTCCAGAACTGGACAGGAATCTGGCTGAAGATGCTTCAA
GCACAGAGGCAGCAGGAGGTTACAAAGTTGTGAGAAAAGCTGAGGTGGCAGGCAGCAAGGTTGTCCCTGCACTAC
CAGAGAGTGGCCAGTCAGAGCCTGGGCCACCTGAAGTGGAAGGCGGAACAAAGGCTACGGGGAACTGCTTTTATG
TCAGCATGCCATCAGGACCCCCGGACTCAAGCACCGACCACTCAGAGGCACCCATGAGCCCCCCTCAGCCTGACA
GCCTCCCTGCAGGGCAGACAGAGCCTCAGCCTCAGCTGCAGGGAGGCAACGATGATCCAAGACGCCCCAGCCGCT
CTCCTCCAAGCCTGGCCCTCAGGGACGTGGGCATGATCTTCCATACCATTGAGCAGCTCACTCTCAAGCTCAACA
GGCTCAAGGATATGGAGCTGGCCCACAGAGAGCTGCTCAAGTCCCTTGGGGGAGAGTCATCTGGTGGCACCACGC
CTGTGGGCAGTTTCCACACAGAAGCAGCTAGATGGACAGATGGCTCCCTCTCACCTCCCGCTAAGGAGCCCCTAG
CTTCTGACTCCAGGAACAGCCATGAACTGGGGCCCTGCCCTGAGGATGGCTCTGACGCCCCCCTGGAAGACAGCA
CAGCAGACGCAGCCGCGTCACCAGGACCATAACCGTACAAACCACCAAATCCTCTGCGTCCCCACTCCTCCTTCA
GGGACTGGCCTGAGACCGGGGCACAGGGTAGGGGGGATCCCAACACTCCTCCCTGTGGAGGAGGCAGTTAGGGAA
ACTAGGATCCAGCCAAGGCCCGGGGGGAGACCCGCATGTTGCTTGGTCTGCTCAAGTCGGAGTCAGGTTTCAGTG
TCTTTTCCCTCCCTTAGCCCAACCCTCCAAGGCCTCATGTCTCCTAAGCATGCTGACTGCATCCGAAAGGCCCCC
ACTCACCATGGTCTGCCCTCACCCCACATATGTGTGTACACGCGCACGCCTGTATGTGCGCTGCCCTCAGACATG
CAAGTGAAAGGAGGAGGCTTCTGTGTAAATGCACTTTCTTCCTCCCCTCTTTCTCCATAAGACCCCAGGCAGAGG
TGGGTGCCTCCCCTCCCCTCTTTGTCACTTTGGTTTCCTATAAATATGTATGTATCGT

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FIGURE 3161

GGAGAGATGATGAGTTGCTGAGTGTGCACACCTTTCCGGAACACATACACACACCCTGCTCTGGGATCCCTTGTG
AGGCTGCCCTCATGGAGTTCCCCCTGGCCCAGATATGTCCCCAAGGGAGTCACGAAGCCCCCATCCCAACCTTCA
GCACCTTCCAGATCACAGACATGACCCGCAGGAGCTGCCAGAACCTGGGCTACACTGCGGCATCTCCCCAGGCCC
CGGAGGCTGCCTCCAACACAGGGAATGCTGAGAGGGCAGAGGAGGTGCCTGGAGAAGGAAGCCTGTTCCTGCAGG
CCGAGACCCGGGCTTGGTTCCAGAAGACCCAGGCCCACTGGCTCCTGCAGCACGGGGCAGCCCCTGCCTGGTTCC
ATGGCTTCATCACCCGGAGGGAGGCAGAGAGGCTGCTGGAGCCCAAGCCTCAGGGGTGCTACTTGGTGCGGTTCA
GCGAGAGCGCGGTGACCTTCGTGCTGACTTACAGGAGCCGGACTTGCTGCCGCCACTTCCTGCTGGCCCAGCTCA
GGGACGGGCGCCACGTGGTGCTGGGCGAGGACAGCGCCCACGCGCGGCTGCAGGACCTGCTGCTGCACTACACCG
CGCACCCGCTCAGCCCCTACGGGGAGACGCTCACCGAGCCCCTCGCCCGACAGACTCCTGAGCCTGCAGGACTTT
CCCTGAGGACCGAAGAATCAAACTTTGGAAGCAAAAGCCAGGACCCAAACCCCCAGTACAGCCCAATCATCAAAC
AGGGGCAAGCCCCAGTCCCGATGCAGAAAGAGGGGGCCGGGGAGAAGGAGCCCTCCCAGCTGCTCAGGCCCAAGC
CTCCCATCCCCGCCAAACCTCAGCTGCCCCCAGAAGTCTACACAATCCCTGTTCCACGACACCGCCCGGCCCCAC
GCCCCAAGCCCTCCAATCCTATCTACAATGAGCCTGATGAACCCATAGCTTTCTATGCCATGGGCCGGGGCAGCC
CTGGGGAAGCCCCCAGCAACATCTATGTGGAAGTGGAAGATGAGGGCCTACCCGCCACCCTTGGGCACCCTGTCC
TACGGAAGAGCTGGTCCAGGCCTGTCCCAGGAGGCCAGAATACAGGTGGCTCCCAGCTGCATTCTGAGAACTCTG
TGATTGGGCAAGGCCCTCCCCTGCCCCACCAGCCCCCACCCGCCTGGAGACACACCCTCCCCCACAATCTTTCTA
GACAGGTGCTTCAGGACAGAGGACAGGCATGGCTTCCCCTTGGGCCTCCTCAGTAGGCGGTCTGGCCTGACCCCC
AACAAAGAAGCCTGGAGGTCAGAGAAGCAAATGCGGAGCCTGCTCCCTCCTAAGAAGATCCCAAGAATCCAATGG
CTCAGTCCTTGGTGATCTAAGACAGCAAAGAAGTGTGCAAGGAGGGCCCTGTTAGCTCCCACTGTCCTGGTTTCT
CCTCCTGGAGTCTAATTTCCTTGGCCCTCTGAGCCTTTTGAGTCTGGGCCCTGGTCCAATGCTGCTGTTGTCTGA
GGAATGGTTTGGTGAGAACAGATGTTAGAACTTGTTTGTTGATTCTTGTCTGGCTAATAAATCATCACCAACTGC
CTTCTCCTACAGGGA

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FIGURE 3162

CTGCGGCAAAGAACCGGGCTGTGTCCAAAGTGTTCTCTGGAAGTTGTAGTTCCTGTATTGGTGAGGCAAGGAGGA
GGCGGAGTGACTCGGCGGCCATTAGCTGTGTGTAGTTGCCCGGGACTAGGAGCTTAAGTGAAGAGGTACGCCTTG
TTCGGTGGAAATCAGCCGTAGCCATGAGTTTCTGCCGGGGCTAGCCCTAGAGTACGGAGCAGGCGGACTTTTCGG
TTCCCCGCCCCGCCAGGTGGCGGGGCCTACTAGGCCTCCGGGCATCCCCGGTCTCAAGTAGGCCTCATCTGCCGG
CAAGGGCGCCCGAAACGCGGGAGGCGCCATGTCGCTGGTTGCTTACGCCAGCAGCGATGAGAGCGAGCCGGATGA
GGCTGAGCCCGAGCCGGAGGAAGAGGAGGCGGTGGCTCCTACATCTGGGCCCGCTTTAGGGGGCTTGTTCGCTTC
TCTCCCTGCGCCCAAGGGTCCGGCCTTGCTGCCTCCGCCCCCTCAGATGCTGGCGCCAGCCTTTCCCCCGCCGCT
GTTGCTTCCCCCACCCACCGGAGACCCCAGGCTTCAGCCTCCTCCCCCCTTGCCCTTCGGCCTGGGAGGCTTCCC
CCCACCTCCAGGCGTGAGCCCGGCTGAAGCGGCGGGAGTTGGGGAGGGACTGGGATTGGGGTTGCCCTCGCCCCG
AGGCCCTGGCCTCAATCTGCCCCCTCCAATTGGCGGTGCCGGTCCCCCGCTGGGGCTTCCCAAGCCAAAGAAGAG
GAAAGAGCCCGTGAAGATCGCGGCGCCGGAGTTGCATAAGGGAGATTCAGATTCTGAGGAAGATGAACCCACAAA
GAAGAAAACTATCCTTCAGGGATCCAGTGAGGGGACTGGTTTGTCTGCCTTGCTTCCCCAACCTAAAAACCTGAC
TGTGAAAGAGACTAACAGGTTGCTCCTGCCCCATGCCTTCTCCCGCAAACCCTCGGATGGCTCCCCTGATACTAA
GCCCTCCAGACTGGCTTCTAAGACCAAGACTTCCTCTCTTGCCCCTGTTGTGGGCACCACAACCACCACTCCGTC
GCCCTCTGCTATCAAGGCTGCTGCCAAGAGTGCTGCCCTGCAGGTGACAAAGCAGATCACGCAGGAAGAAGACGA
CAGTGATGAGGAAGTAGCCCCCGAAAACTTTTTCTCCCTCCCTGAAAAGGCTGAGCCACCTGGAGTTGAGCCATA
CCCTTACCCCATCCCCACTGTCCCTGAAGAGCTGCCTCCAGGCACGGAACCAGAGCCGGCTTTCCAGGACGATGC
AGCCAATGCCCCCCTTGAATTCAAGATGGCAGCAGGTTCAAGTGGGGCCCCTTGGATGCCTAAGCCTGGGGACGA
CTACAGCTACAATCAGTTTTCCACATATGGCGATGCCAATGCCGCTGGTGCTTATTATCAGGATTATTACAGTGG
TGGCTACTATCCTGCACAGGACCCGGCCCTGGTCCCCCCCCCAGGAAATTGCCCCAGATGCCTCCTTCATCGATGA
CGAAGCATTTAAGCGGCTGCAGGGCAAGAGGAACCGAGGGAGAGAAGAAATCAACTTTGTGGAGATCAAAGGTGA
TGACCAGCTCAGTGGGGCCCAGCAATGGATGACTAAGTCATTGACAGAAGAGAAAACCATGAAGTCATTCAGCAA
AAAGAAAGGTGAGCAGCCAACAGGCCAGCAGCGGCGGAAACACCAGATCACATATCTTATTCATCAGGCCAAGGA
GCGGGAGCTGGAACTGAAGAACACCTGGTCAGAGAACAAGCTCAGCCGCCGTCAGACCCAAGCCAAATATGGATT
CTAGGGCTCTGGAACTGATTGCTCCCAGGATCTCCTGCCAGCCCAGCTGGCCTGGCCCCCAGCTTCACCTCTGGG
ACCCCAGCTGCTCTAAGCCCAGGATCTCTTTCCCCAAGGACCCAGCCCTCGCCTCTGCGAGAATGAACATATTTG
ATAGATTTTTCTTAACAAGTTAGAAAATTCAGCTCCTTTCTGTCCTGGAGCTAGCAAAGACTTGTGTGATGCCTC
CGAAGGGGCTCTGAGTTCTGGGGTGGGAGTTTTGCTCTCTGTCAGGTGTGATAAAATGTTGAACCCTCCCCACCA
CCACTTTTTTTTTTTTAAACCAGGGATGTCTGTTGAAATAAAACATTCAGTCTGAC

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FIGURE 3163

GAGGAGGAGTGGGGACCGGGCGGGGGGTGGAGGAAGAGGCCTCGCGCAGAGGAGGGAGCAATTGAATTTCAAACA
CAAACAACTGCACGAGCGCGCACCCACCGCGCCGGAGCCTTGCCCCGATCCGCGCCCGCCCCGTCCGTGCGGCGC
GCGGGCGGAGACGCCGTGGCCGCGCCGGAGCTCGGGCCGGGGGCCACCATCGAGGCGGGGGCCGCGCGAGGGCCG
GAGCGGAGCGGCGCCGCCACCGCCGCACGCGCAAACTTGGGCTCGCGCTTCCCGGCCCGGCGCGGAGCCCGGGGC
GCCCGGAGCCCCGCCATGTCGCGATCCAACCGGCAGAAGGAGTACAAATGCGGGGACCTGGTGTTCGCCAAGATG
AAGGGCTACCCACACTGGCCGGCCCGGATTGACGAGATGCCTGAGGCTGCCGTGAAATCAACAGCCAACAAATAC
CAAGTCTTTTTTTCGGGACCCACGAGACGGCATTCCTGGGCCCCAAAGACCTCTTCCCTTACGAGGAATCCAAG
GAGAAGTTTGGCAAGCCCAACAAGAGGAAAGGGTTCAGCGAGGGGCTGTGGGAGATCGAGAACAACCCTACTGTC
AAGGCTTCCGGCTATCAGTCCTCCCAGAAAAAGAGCTGTGTGGAAGAGCCTGAACCAGAGCCCGAAGCTGCAGAG
GGTGACGGTGATAAGAAGGGGAATGCAGAGGGCAGCAGCGACGAGGAAGGGAAGCTGGTCATTGATGAGCCAGCC
AAGGAGAAGAACGAGAAAGGAGCGTTGAAGAGGAGAGCAGGGGACTTGCTGGAGGACTCTCCTAAACGTCCCAAG
GAGGCAGAAAACCCTGAAGGAGAGGAGAAGGAGGCAGCCACCTTGGAGGTTGAGAGGCCCCTTCCTATGGAGGTG
GAAAAGAATAGCACCCCCTCTGAGCCCGGCTCTGGCCGGGGGCCTCCCCAAGAGGAAGAAGAGGAGGAGGATGAA
GAGGAAGAGGCTACCAAGGAAGATGCTGAGGCCCCAGGCATCAGAGATCATGAGAGCCTGTAGCCACCAATGTTT
CAAGAGGAGCCCCCACCCTGTTCCTGCTGCTGTCTGGGTGCTACTGGGGAAACTGGCCATGGCCTGCAAACTGGG
AACCCCTTTCCCACCCCAACCTGCTCTCCTCTTCTACTCACTTTTCCCACTCCAAGCCCAGCCCATGGAGATTGA
CCTGGATGGGGCAGGCCACCTGGCTCTCACCTCTAGGTCCCCATACTCCTATGATCTGAGTCAGAGCCATGTCTT
CTCCCTGGAATGAGTTGAGGCCACTGTGTTCCTTCCGCTTGGGAGGGGCAATCCTCAAATGCGGGGTGGGGGCAG
CACAGGAGGGCGGCCTCCTTCTGAGCTCCTGTCCCCTGCTACACCTATTATCCCAGCTGCCTAGATTCAGGGAAA
GTGGGACAGCTTGTAGGGGAGGGGCTCCTTTCCATAAATCCTTGATGATTGACAACACCCATTTTTCCTTTTGCC
GACCCCAAGAGTTTTGGGAGTTGTAGTTAATCATCAAGAGAATTTGGGGCTTCCAAGTTGTTCGGGCCAAGGACC
TGAGACCTGAAGGGTTGACTTTACCCATTTGGGTGGGAGTGTTGAGCATCTGTCCCCCTTTAGATCTCTGAAGCC
ACAAATAGGATGCTTGGGAAGACTCCTAGCTGTCCTTTTTCCTCTCCACACAGTGCTCAAGGCCAGCTTATAGTC
ATATATATCACCCAGACATAAAGGAAAAGACACATTTTTTAGGAAATGTTTTTAATAAAAGAAAATTACAAAAAA
AAATTTTAAAGACCCCTAACCCTTTGTGTGCTCTCCATTCTGCTCCTTCCCCATCGTTGCCCCCATTTCTGAGGT
GCACTGGGAGGCTCCCCTTCTATTTGGGGCTTGATGACTTTCTTTTTGTAGCTGGGGCTTTGATGTTCCTTCCAG
TGTCATTTCTCATCCACATACCCTGACCTGGCCCCCTCAGTGTTGTCACCAGATCTGATTTGTAACCCACTGAGA
GGACAGAGAGAAATAAGTGCCCTCTCCCACCCTCTTCCTACTGGTCTCTCTATGCCTCTCTACAGTCTCGTCTCT
TTTACCCTGGCCCCTCTCCCTTGGGCTCTGATGAAAAATTGCTGACTGTAGCTTTGGAAGTTTAGCTCTGAGAAC
CGTAGATGATTTCAGTTCTAGGAAAATAAAACCCGTTGATTACT

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FIGURE 3164

GCGGGGGAGGGGACGCTGAGGGCCCATGTGCTGAAAATCCGAAGTGCCGCGGAAAGTGGAGAGCTGACAAGGAAG
GTTTCGAGCGTTTTGCTGGCAAAGGGATTTCTTACAACCTCCAGGCATGCGTCTTTCTGCCCTGCTGGCCTTGGC
ATCCAAGGTCACTCTGCCCCCCCATTACCGCTATGGGATGAGCCCCCCAGGCTCTGTTGCAGACAAGAGGAAGAA
CCCCCCATGGATCAGGCGGCGCCCAGTGGTTGTGGAACCCATCTCTGATGAAGACTGGTATCTGTTCTGTGGGGA
CACGGTGGAGATCCTAGAAGGCAAGGATGCCGGGAAGCAGGGCAAAGTGGTTCAAGTTATCCGGCAGCGAAACTG
GGTGGTCGTGGGAGGGCTGAACACACATTACCGCTACATTGGCAAGACCATGGATTACCGGGGAACCATGATCCC
TAGTGAAGCCCCCTTGCTCCACCGCCAGGTCAAACTTGTGGATCCTATGGACAGGAAACCCACTGAGATCGAGTG
GAGATTTACTGAAGCAGGAGAGCGGGTACGAGTCTCCACACGATCAGGGAGAATTATCCCTAAACCCGAATTTCC
CAGAGCTGATGGCATCGTCCCTGAAACGTGGATTGATGGCCCCAAAGACACATCAGTGGAAGATGCTTTAGAAAG
AACCTATGTGCCCTGTCTAAAGACACTGCAGGAGGAGGTGATGGAGGCCATGGGGATCAAGGAGACCCGGAAATA
CAAGAAGGTCTATTGGTATTGAGCCTGGGGCAGAGCAGCTCCTCCCCAACTTCTGTCCCAGCCTTGAAGGCTGAG
GCACTTCTTTTTCAGATGCCAATAAAGAGCACTTTATGAGTC

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FIGURE 3165

AAGGCAGGCGCGCGGGTTAGAACGCGCCAGAGGTCGGCGCGCGCACACCCGCACCGCCCCGACCCCAGGTAGTGA
GGCCAGTGATTCCGAGTGTGTGAGGAGAGGAGTGTACGGCAAGGGGCGGGAACTGGAACTTGGCCCGCCTCGTTG
TGAGCTGAGCTCAGCGGCACGCTTTTGTGGCGTCACTGCACTGTTACCCCGCCCTACGTGTCTCTGACGCTGACA
CCTTCTCACTGTGAAACGTCGCGACCTGTGACGTCTGGGGGGCGCCTCAAATCTTCCACTCCAGCATCGGATCCC
GGAAAGGCAGCGTCGGAGACTGGACCCAAAACTCTTCCTGTTCTGCCTGCAGAGTTGAGCCCCGTCCGGGTCCTG
GACCCGCGTAGTACTGACCCTGGATCCCTGTTCACTGCGTTCTCGCTCCCCGCGCTCCCTGCTGGACCCCGGGAT
GCCGGGCATCTCCGCCCGAGGCCTCTCTCATGAGGGGAGGAAGCAGCTAGCTGTTAACCTCACCCGTGTCCTGGC
ACTCTACCGTTCCATCTTGGATGCCTACATCATCGAATTTTTCACAGACAACCTATGGGACACACTCCCTTGCTC
ATGGCAGGAAGCATTGGATGGACTGAAACCACCACAGCTGGCCACAATGCTGCTGGGGATGCCTGGGGAAGGGGA
GGTCGTCAGGTACAGGTCAGTGTGGCCACTCACCCTGCTGGCCCTGAAGTCCACGGCGTGTGCCCTGGCCTTTAC
CCGGATGCCTGGCTTTCAGACCCCCTCAGAATTCCTGGAGAACCCCAGCCAGAGCTCCCGACTAACAGCTCCATT
CCGGAAACATGTCAGGCCCAAGAAGCAGCATGAGATCCGGAGGCTGGGAGAGTTGGTGAAGAAGCTGAGTGATTT
CACAGGCTGCACCCAGGTTGTAGACGTGGGCTCAGGCCAGGGCCATCTCTCCCGCTTCATGGCTCTTGGCCTGGG
GTTGATGGTGAAGAGCATCGAAGGGGATCAGAGACTGGTGGAGAGAGCCCAGCGCCTGGACCAGGAGCTTCTGCA
GGCTCTGGAGAAAGAGGAGAAGAGGAACCCGCAGGTGGTCCAAACCAGCCCTCGTCACTCCCCACACCACGTGGT
TAGGTGGGTAGACCCCACAGCCCTGTGTGAGGAGCTTCTGCTTCCACTGGAGAACCCGTGTCAGGGCAGGGCCCG
CTTGCTGCTCACAGGCCTCCACGCCTGTGGGGATCTGAGTGTTGCCTTGCTGAGACACTTCTCCTGCTGTCCTGA
GGTGGTGGCCCTGGCCTCAGTGGGCTGCTGCTACATGAAGCTGAGTGACCCTGGCGGCTACCCACTGAGTCAGTG
GGTGGCTGGGCTGCCTGGCTATGAACTGCCCTACCGGCTTCGGGAGGGGGCCTGCCATGCCCTGGAGGAATATGC
TGAGCGGCTACAGAAAGCTGGCCCTGGCCTTCGAACTCACTGCTACCGTGCAGCACTGGAGACAGTCATCCGACG
GGCCCGGCCCGAGCTCCGTCGGCCAGGCGTGCAGGGTATCCCCAGGGTCCACGAGCTCAAGATTGAAGAATATGT
GCAGCGGGGGCTACAGCGAGTGGGGCTAGATCCCCAGCTGCCACTGAATCTGGCTGCCCTTCAGGCCCACGTGGC
CCAGGAGAACCGTGTGGTGGCCTTCTTCAGCCTGGCTCTACTGCTTGCCCCACTGGTGGAGACGCTTATTCTACT
GGACCGGCTGCTGTACCTTCAGGAACAGGGTTTCCATGCTGAGCTCCTGCCCATCTTCAGTCCTGAACTCTCTCC
CAGAAACCTGGTTCTGGTGGCCACCAAGATGCCCCTGGGTCAGGCTCTTTCTGTTCTGGAGACTGAAGACAGCTG
ATGCAGCCTGAGGAAACATCTCAGACCCCATCATCTGAAAGTGCCCAGAGAGCACAGTGGCAGAGTACATCTCAT
CCAGAGAAACAGCATCCTGCATCCTCCAGAGTCCTGGTTCCTTCAGTTTCATCCCCTTTCTCTCCTTCCATGGAT
TATGTAATACATTGTAAAGTTTTAATTAATTAAAAATTGGATATCTG

FIGURE 3166

CTGGGAGGTAGGTTTGTGAGCGTGAGAGATCGATCTGTACCGCGGGGATCCGAAGTATGCTTATCCAGGTGGGCT
GCCTCAAGCCTCGATCCCACCCCCGCGCTGGTAGATGGTGTCAAGGTCCTTGCGTGGGAGAAGGACTTGGGTGAG
ATGCATGCGGAGATTGCCCCCAATTCCGGCCTGGAGCCAAGGGAAAGGGATGCCTGGATTTGTGTCTCTATTGGT
GGTCCACGCTGCGGATGCCTGGGTAGCCCAGAGGTTATCTACGCCATACTTCTCACTGTTTTTGAGCATACCTAG
ATGTTCCTTTCCTAGGCGGAGTATAGATCGCACGTGTTCTAGCCTCTTAGACTCAGAGGGTTCGAGCTCTATAAG
CCCCTCCACTCCCTTCATTTTACAAATGAGACTCAAACCTAGAGCGCGGTAATGACCTTACTAAGACCAAATGGC
TGGTGAATTGGGCTTCACTAGAATCCAGGCTTGCTGGCTAACACCAATGCTCCCTCCATCATTTCATGTTATGTT
TTCATTTCCCCTCTGTCTGAGAGATTGCTCTGATGTCTTTCCTTCCATAAGTCCTACGGAGATCGAGCTTACCTC
ATTTTTCTCCCAGGCCTAGGAGCTCAATTACCAGGATCACTTTCTTCCCCAGGGTGTACTACAGACCTCCACATG
TTGGACAGTAGGATTCAGCAGAGAATGAGTCCCACATCCTCTTTTCATCCATAAGCCACTCTTCCCAACTACTCT
TCCGCCTTCCATTGTCCCT**ATG**TCTACTTTACTGCTCAATCTGGATTTTGGGGAACCTCCTCCCAAAAAGGCATT
AGAAGGAAATGCCAAGCACCGAAATTTTGTCAAGAAGCGGAGGCTCTTAGAACGGAGAGGCTTTCTGAGTAAAAA
GAACCAACCCCCTAGCAAGGCGCCTAAGTTGCACTCTGAACCTTCAAAGAAAGGGGAAACTCCTACGGTCGATGG
CACTTGGAAGACCCCTTCCTTCCCAAAAAAGAAGACAGCTGCTTCCAGCAATGGGTCAGGACAGCCCCTGGACAA
GAAAGCTGCAGTGTCTTGGTTGACCCCTGCCCCTTCAAAAAAGGCTGATTCTGTTGCTGCTAAAGTAGATTTGCT
GGGGGAGTTCCAGAGTGCCCTTCCAAAGATCAATAGCCACCCAACCCGCTCTCAGAAGAAGAGCTCCCAGAAGAA
ATCCTCTAAAAAGAACCATCCTCAGAAGAATGCCCCACAGAACTCCACCCAAGCTCATTCAGAGAATAAATGCTC
CGGAGCATCCCAGAAGTTGCCACGGAAGATGGTGGCAATTGACTGTGAGATGGTGGGCACAGGACCAAAGGGGCA
TGTTAGTTCCTTGGCTCGATGTAGCATTGTCAACTACAACGGAGATGTGCTTTATGACGAGTACATTCTTCCCCC
CTGCCACATTGTGGACTACCGAACCAGGTGGAGTGGTATCCGGAAGCAGCACATGGTGAATGCCACACCCTTCAA
GATTGCTCGAGGCCAGATCTTGAAGATACTCACAGGGAAGATAGTGGTGGGGCATGCCATCCACAACGACTTCAA
AGCCCTTCAGTACTTTCACCCCAAGTCCCTCACCCGTGACACCTCCCATATCCCCCCCCTCAACCGGAAGGCTGA
CTGCCCGGAGAATGCCACCATGTCTCTGAAGCATCTCACCAAGAAGCTGCTAAACCGGGATATCCAGGTTGGGAA
GAGCGGACATTCCTCTGTGGAAGATGCCCAGGCCACCATGGAGCTATATAAGTTGGTTGAAGTCGAGTGGGAAGA
GCACCTAGCCCGGAATCCCCCTACAGAC**TAG**TGGCAGTGGGGACGCTGGTGATATGAGGAGGCAGAGGCAGCACC
CAGGAGAAACAGGGCAGTGGACCAATGGACAGCTCCACCAGCTCCACATCTTTGGAAGCTAGATTTGGGGAGAGA
GAAGCTCTACCCCAGACTTAATACCCATTGAAATTTCACCTCAGGTGTTGTGTCCTGTGTCTGGTTAAGTGTCCC
ATGGAAGGGGAAAGCCTTCACGTCAGAACCCAACCCTATACCTTTTACTTCTTAAATGGTGCTAACCACAGGTGT
CCCAGGGTGCTCTGTGCCAGTTAAGATTTTTAACTTTCAAGGGGCAGGGCATACTGGGAAATGTAGTTTCCCAAA
CTGCCTTATCACTTGGGTGGACATATGTCTCCTTTTATGCCTTTTGGTCTTGAGTAATTAACAGCATCCTCTTCC
ACGCTCAGAAGTGTTCTGGTTGGGGCCAGGCATGGTGGCTCACACCTGTAGTCCCAACACTTAGGGAGGCCGAGG
CGGGCGGATCACCTGAGATCAGGAGTTCAAGACCAGCCTGGCCAACATGGCGAATTCCCGTTCTCTACTAAAAAT
ACAAAAAATGTGTGGGGTGTGGTGGCAGGAGCCTGTAATCCTAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCT
TGAGCCCAGGAGGCGGAGATTGCAGTGAGCCGAGATCGTGTCACTGCACTCCAGCCTGGGTGACAAGAGTGAGAC
TCCGTCTCCAAAAAAAAAAAAAAAAGAATTTATTAACCTGGTTGGTTAATAAATTGTGTGGTCCCTGCCGGGCGTG
GTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGACGGGCAGATCACGAGGTCAGGAGATCGAGACCAT
CCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCAGGCGTGGTGGCGGGCACCTGTA
GTTCCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCAGGAGGCGGAGCTTGCAGTGAGCCGAGATT
GTGCCACTGCACTCCAGCCTGGGCCACGGCCACAGAGCGAGACTCTGTCTC

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FIGURE 3167

AGCTTTGGGGTTGTCCCTGGACTTGTCTTGGTTCCAGAACCTGACGACCCGGCGACGGCGACGTCTCTTTTGACT
AAAAGACAGTGTCCAGTGCTCCAGCCTAGGAGTCTACGGGGACCGCCTCCCGCGCCGCCACCATGCCCAACTTCT
CTGGCAACTGGAAAATCATCCGATCGGAAAACTTCGAGGAATTGCTCAAAGTGCTGGGGGTGAATGTGATGCTGA
GGAAGATTGCTGTGGCTGCAGCGTCCAAGCCAGCAGTGGAGATCAAACAGGAGGGAGACACTTTCTACATCAAAA
CCTCCACCACCGTGCGCACCACAGAGATTAACTTCAAGGTTGGGGAGGAGTTTGAGGAGCAGACTGTGGATGGGA
GGCCCTGTAAGAGCCTGGTGAAATGGGAGAGTGAGAATAAAATGGTCTGTGAGCAGAAGCTCCTGAAGGGAGAGG
GCCCCAAGACCTCGTGGACCAGAGAACTGACCAACGATGGGGAACTGATCCTGACCATGACGGCGGATGACGTTG
TGTGCACCAGGGTCTACGTCCGAGAGTGAGTGGCCACAGGTAGAACCGCGGCCGAAGCCCACCACTGGCCATGCT
CACCGCCCTGCTTCACTGCCCCCTCCGTCCCACCCCCTCCTTCTAGGATAGCGCTCCCCTTACCCCAGTCACTTC
TGGGGGTCACTGGGATGCCTCTTGCAGGGTCTTGCTTTCTTTGACCTCTTCTCTCCTCCCCTACACCAACAAAGA
GGAATGGCTGCAAGAGCCCAGATCACCCATTCCGGGTTCACTCCCCGCCTCCCCAAGTCAGCAGTCCTAGCCCCA
AACCAGCCCAGAGCAGGGTCTCTCTAAAGGGGACTTGAGGGCCTGAGCAGGAAAGACTGGCCCTCTAGCTTCTAC
CCTTTGTCCCTGTAGCCTATACAGTTTAGAATATTTATTTGTTAATTTTATTAAAATGCTTTAAAAAAA

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FIGURE 3168

AGTCGCTCAGGCTACTCCCACCCCGCCCCGCCCCGTCATTGTCCCCGTCGGTCTCTTTTCTCTTCCGTCCTAAAA
GCTCTGCGAGCCGCTCCCTTCTCCCGGTGCCCCGCGTCTGTCCATCCTCAGTGGGTCAGACGAGCAGGATGGAGG
GCTGCAGAACTGGCTCAGGAAAGCCCTCCTGGGATGGCTGGAGTGGAAAATGAGGATGAGGCAGAGCTGAATCTG
AGGGAGCAGGATGGCTTCACTGGGAAGGAGGAGGTGGTAGAGCAGGGAGAGCTGAATGCCACAGAGGAGGTCTGG
ATCCCAGGCGAGGGGCACCCAGAGAGCCCTGAGCCCAAAGAGCAGAGAGGCCTGGTTGAGGGAGCCAGTGTGAAG
GGAGGGGCTGAGGGCCTCCAGGACCCTGAAGGGCAATCACAACAGGTGGGGGCCCCAGGCCTCCAGGCTCCCCAG
GGGCTGCCAGAGGCGATAGAGCCCCTGGTGGAAGATGATGTGGCCCCAGGGGGTGACCAAGCCTCCCCAGAGGTC
ATGTTGGGGTCAGAGCCTGCCATGGGTGAGTCTGCTGCGGGAGCTGAGCCAGGCCCGGGGCAGGGGGTGGGAGGG
CTGGGGGACCCAGGCCATCTGACCAGGGAAGAGGTGATGGAACCACCCCTGGAAGAGGAGAGTTTGGAGGCAAAG
AGGGTTCAGGGCTTGGAAGGGCCTAGAAAGGACCTAGAGGAGGCAGGTGGTCTGGGGACAGAGTTCTCCGAGCTG
CCTGGGAAGAGCAGAGACCCTTGGGAGCCTCCCAGGGAGGGTAGGGAGGAGTCAGAGGCTGAGGCCCCCAGGGGA
GCAGAGGAGGCGTTCCCTGCTGAGACCCTGGGCCACACTGGAAGTGATGCCCCTTCACCTTGGCCTCTGGGGTCA
GAGGAAGCTGAGGAGGATGTACCACCAGTGCTGGTCTCCCCCAGCCCAACGTACACCCCGATCCTGGAAGATGCC
CCTGGGCCTCAGCCTCAGGCTGAAGGGAGTCAGGAGGCTAGCTGGGGGGTGCAGGGGAGGGCTGAAGCCCTGGGG
AAAGTAGAGAGCGAGCAGGAGGAGTTGGGTTCTGGGGAGATCCCCGAGGGCCCCCAGGAGGAAGGGGAGGAGAGC
AGAGAAGAGAGCGAGGAGGATCAGGAGGAGGGGAGGGAGCCAGGGGCTGGGCGGTGGGGGCCAGGGTCTTCTGTT
GGCAGCCTCCAGGCCCTGAGTAGCTCCCAGAGAGGGGAATTCCTGGAGTCTGATTCTGTGAGTGTCAGTGTCCCC
TGGGATGACAGCTTGAGGGGTGCAGTGGCTGGTGCCCCCAAGACTGCCCTGGAAACGGAGTCCCAGGACAGTGCT
GAGCCTTCTGGCTCAGAGGAAGAGTCTGACCCTGTTTCCTTGGAGAGGGAGGACAAAGTCCCTGGCCCTCTAGAG
ATCCCCAGTGGGATGGAGGATGCAGGCCCAGGGGCAGACATCATTGGTGTTAATGGCCAGGGTCCCAACTTGGAG
GGGAAGTCACAGCATGTGAATGGGGGAGTGATGAACGGGCTGGAGCAGTCTGAGGAAGTGGGGCAAGGAATGCCG
CTAGTCTCTGAGGGAGACCGAGGGAGCCCCTTTCAGGAGGAGGAGGGGAGTGCTCTGAAGACCTCTTGGGCAGGG
GCTCCTGTTCACCTGGGCCAGGGTCAGTTCCTGAAGTTCACTCAGAGGGAAGGAGATAGAGAGTCCTGGTCCTCA
GGGGAGGACTAGGAAAAGACCATCTGCCCGGCACTGGGGACTTAGGGGTGCGGGGAGGGGAAGGACGCCTCCAAG
CCCGCTCCCTGCTCAGGAGCAGCACTCTTAACTTACGATCTCTTGACATATGGTTTCTGGCTGAGAGGCCTGGCC
CGCTAAGGTGAAAAGGGGTGTGGCAAAGGAGCCTACTCCAAGAATGGAGGCTGTAGGAATATAACCTCCCACCCT
GCAAAGGGAATCTCTTGCCTGCTCCATCTCATAGGCTAAGTCAGCTGAATCCCGATAGTACTAGGTCCCCTTCCC
TCCGCATCCCGTCAGCTGGAAAAGGCCTGTGGCCCAGAGGCTTCTCCAAAGGGAGGGTGACATGCTGGCTTTTGT
GCCCAAGCTCACCAGCCCTGCGCCACCTCACTGCAGTAGTGCACCATCTCACTGCAGTAGCACGCCCTCCTGGGC
CGTCTGGCCTGTGGCTAATGGAGGTGACGGCACTCCCATGTGCTGACTCCCCCCATCCCTGCCACGCTGTGGCCC
TGCCTGGCTAGTCCCTGCCTGAATAAAGTAATGCCTCCGCTTC

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FIGURE 3169

GGCGGCGCACAAGTCAGGTCCGGCACATGTTTCCGCGGAGCGGACCCAGCAATGACGGATGATATCACCTCTTCT
TCTCTGGTGAGAGTCTGAGGATAGAGACTTTTTTCTCACCATGAATGTCACCCCAGAGGTCAAGAGTCGTGGGAT
GAAGTTTGCTGAGGAGCAGCTGCTAAAGCATGGATGGACTCAAGGCAAAGGCCTCGGCCGGAAGGAGAATGGTAT
CACTCAGGCTCTCAGGGTGACACTGAAGCAAGACACTCATGGGGTAGGACATGACCCTGCCAAGGAGTTCACAAA
CCACTGGTGGAATGAGCTCTTCAACAAGACTGCGGCCAACTTGGTAGTGGAAACTGGGCAGGATGGAGTACAGAT
AAGGAGCCTTTCTAAGGAGACCACCCGTTATAATCATCCCAAGCCCAACTTGCTGTATCAGAAGTTTGTGAAGAT
GGCTACATTGACTTCAGGTGGAGAGAAGCCAAACAAAGACTTGGAGAGCTGCAGTGATGACGACAACCAGGGGTC
CAAGTCCCCAAAGATTCTGACTGATGAGATGCTGCTCCAAGCCTGTGAGGGGCGAACAGCACACAAGGCTGCCCG
TCTTGGGATCACAATGAAGGCCAAGCTTGCTCGCCTAGAGGCCCAGGAGCAGGCCTTCCTGGCTCGTCTCAAAGG
CCAGGACCCTGGGGCCCCTCAACTGCAGTCAGAGAGCAAGCCCCCCAAAAAAAAGAAAAAGAAAAGGAGGCAGAA
AGAGGAGGAAGAAGCTACAGCATCTGAAAGGAATGATGCAGATGAGAAGCACCCAGAACATGCTGAGCAGAACAT
CAGAAAAAGCAAGAAGAAGAAAAGGCGACATCAAGAAGGAAAGGTCTCAGATGAAAGAGAGGGTACAACTAAAGG
GAATGAGAAGGAGGACGCTGCAGGAACAAGTGGGCTTGGGGAATTGAATAGCAGAGAGCAAACCAATCAGTCCCT
CAGGAAAGGGAAGAAAAAGAAGAGGTGGCACCATGAAGAGGAGAAGATGGGGGTCTTGGAGGAAGGAGGAAAAGG
CAAGGAGGCTGCAGGCAGTGTCAGGACAGAGGAGGTAGAGAGCAGGGCATATGCTGACCCATGCAGCCGAAGAAA
GAAGAGGCAGCAACAGGAGGAGGAGGACTTGAACCTAGAAGATAGAGGTGAGGAAACTTTTAGGTGGTGGAACCA
GGGAAGCAGAGAGCAGAGCATGCAGTGATGGAAGAAGCAGGAAAAGCAAGAAGAAAAGACAGCAGCATCAAGAGG
AGGAGGACATCTTGGATGTAAGGGATGAGAAGGATGGCGGGGCTAGGGAAGCAGAGAGCAGAGCACACACTGGCT
CAAGCAGCAGAGGTAAGAGGAAGAGGCAGCAGCATCCCAAGAAGGAAAGAGCTGGAGTCAGCACTGTCCAGAAAG
CCAAAAAGAAACAGAAGAAGAGAGACTAAAGGTCTGGTAAAGGTAGGGCTCAATTGATTGATTTTCAGGAGTTGA
AGCCTCAAAGACCAGGGTTGATGCAGGTCTGCAGGTCTTCTGCACCCCCCTCAATGAGGAGTCCCTCCCAGAAAG
GAAACTGATCTCTGGGACGTCAGCTGCTGAGAGGAGCAAGCGGTAGTACCACCCCTTAGTTGAGGGAGTCAGCAC
AGTCCTTTCTGCAGCTTCTAACCCAGGACCATGAACTCAGGTGCCTAGAGAAGCCAGGCAGCTAAAGGACAAGGA
ATGCTGGGGGCTGTGGGAACAGGAATGCAGATACCCTTTGAAGGAGCATTCCTGCTAAAAGAAGCTGAAAATGTA
GACCTATGTGAAGTGCTCTGATTTCTAAATATTGTGAAGGTTAAGAAAAACATAAATTTAGGTCTATGGGCTAGA
TTTAGCCCACAGTTGCCAGTTTCTAGCGCTACCAAATGAATGAATAAACATGAGCTTGCGCTCCTAGCCTAGAGA
TAAATCCTGACTGGCATCTCTGTTCCCAGCCTGGGAAGGTCCTGAATACAAATTAGAAGATATTCCTTGGAGGCC
TTTGAAGAAATTCCTTCGGTTAACCTCTTTGTAGTCTTGCTACACTGATAAGTAGAAGTAGCTCCCTGTCTGTGT
CCCAAATGAATAAGAATTGTGTAAAGGACAGCA

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FIGURE 3170

ATAAGGCCTTCTCAACACCATCACCATCCCTATTCCCTTGTGGAAGCCCCCTAAGAATTTATAGCTCCAGGCAGT
GGTTTGCCAGCCCCCACCATTGCTCCTTGAGGAGCCACAGGGAGGTGTGCCATCCTGCATACTCGAACTTGGATA
GGAGATGGGCTGCTGCTGCTGGGATGTGCAGCAGCTTTGGCCTCTCTCACCCACAGCTGGCTGGTGAGCAGAACA
AGAAGAGGAAATGCTCTGGTTCATCAGGTCTTCACAGTGGACAAGTGCCAGTGACTGACAGTAAAGATGCCCCGC
TCCACCCCGACCATAGTACCTGTTCACAGTACCTTCATTTAATCAGATTAATTGAGAGTCTACTATGGGCCAAGG
AGTTGGGGATTCAGAGTGGAATAAGAATGAGATGGGCCCAGCCCAGATGGAATCTACATAGGCAATTATGATGGA
AGTGTTGCCTGTGATAGAGGAAGGGTACTCAACTCAGACTTCAGAGAATGGCTTCTAAAAGTAACTGATGTATAA
GCTGAGCTCTGGAGGATAAGAGAAACTCAGAAGGTAAAGGGGGAAAGGGAGAAGAATGTCCCAAGCAGAGGGAGC
AACATGTGCAATAACCTGAAGATGGAAGACTGTCGTACCTTCAAAGAAAAGAAACAGATTGGAATCTGTTATGCT
AATGGTTAGGCTAAAGTAGTGGTCCTGGAGAAAAGTGAAGAGATGAGGCTGGAGATGGCAGGAACAGGCATGCAG
AGCCATATAAGCCAGTCCGATAAATCTGGATTGTGTCATCCTAGGTCAAACAAGACCCAGTGACATGATGACATT
TATGTTTTAGAGAGAACACTGGATGCTTTGTGGAGAAGTCCATCCTCCACAAAGGTTGGGGTGGGGAGTGAGACT
ACAGGTGTTCTTAGGAGGCTGCTGGAGAAAGAAATTAGGCAAGAGATGATGATGGCCCGAAGTGGGGTAGTAGAT
GGTAACAGAGATGTAGAGAAATGGGAAAGATTTGCTAGGTAACATGTATAGCCCTTAGCACATAATGACCATTAC
ATGTTAGCTTCCTCCTATTGGTACAGTAGAAAGTGGAGGCCTGAAGTCCTGGGTTCCAGTCCTGTTTGCCATTAC
TAGCCAGCTGTGGGCTCTTCAGCAAACCACTTTTCACCCTTTTAGCCACATCTGCAAAGCAGGGATGGTCCAGAT
AATCTCTCAGGTCTCCTCTGGCTTCTAAGTCCTTTGAATTAGATGTCCCCTGGCCCCCCCAAAATTTGGCAGCTC
CTGACTTAAGAGACTGTACCCTACCTCCCACGCCCTATTGCTGCTCCCTTAACAGATGGCAGGATCCACGGAACC
TGAAGATCTCAATTCCTGCTGAGGGTCTGGGCAGTCTAAGTAAGCAACAGCAAGGCTGGTCACAGGATCCCACTA
TGTTAGGAAAGTTCTGAGAATTGATAAGGCATACAAGGCAACTGTTCAGGCCCCAGGGAAACCAGGGAAGAGAAA
AAGGATGGACTCTGTTACCCACAGCCTCTAATACCTTCACAAACTTCTGATACAGCAAGTTGGGCTTGGGATGAT
TATAACGGGTGGTCTCCTTAGAAAGGCTCCTTATCTGTACTCCATCCTGTAGAGAATTATCAGTACCAGTGAATG
GGTGACATATCATGACTGCCTACGCCACAGGTCCCAGGCCCTCTGTTTCATGTGCCCATCTATCAAGAGCTCATA
CCTGCCCAGTTTCCACTACCAAGTTGGCCGCAGTCTTGTTGAAGAGCTCATTCCACCAGTGGTTTGTGAACTCCT
TGGCAGGGTCATGTCCTACCTGCCAGGGGAATAAATATGAGCTCTGAGTGCCTGCCTCACCTGCCCTCAAGGGTC
CCCTCTCCCACACATGCTAACCTTCCTCAGTCCACCCAGTCTTACCCCATGAGTGTCTTGCTTCAGTGTCACCCT
GAGAGCCTGAGTGATACCATTCTCCTTCCGGCCGAGGCCTTTGCCTGCAGAGGACAGTGAGCGATTTGGCTTATT
CTCCTGCCTGCTGTGAGACCTCACAAGGCACCCCCCACACAGGCCTCTTGCCATTCCACACACCTGACATTGGGG
TATACTCTGTACCTCTCAGAAGACCTCCTAGCGCACTTCTTTCTAGTACCACTCCATATAGTCCCCTGCCTTTGT
GTGAGCCTGAACTATCTCTTCCTTCAAATTCTTTTGGTAGAGAGCCCATATCTCTTTTTCCCTCCCCTAGTCCTC
CCAACCACCACTTCTTCATTATCCACTGTCAAATTTCTTCCTTTCTTCCCTTTTCTGGGAAAGTTAGAAATTTTC
TTCTGCAAATTTCCCTTTAAACTAGCTTTTCCTCCTTTAATTAAATGGACTACATGGGGGGGTAATCCAGGATGA
TGGCTTTCCCCTGGGCAGATGGTAGGCAGGGAGCTGGGGGATGTGGAAGAGGCCCCATGGGGATCACCTTGAGTC
CATCCATGCTTTAGCAGCTGCTCCTCAGCAAACTTCATCCCACGACTCTTGACCTCTGGGGTGACATTCATGGTG
AGAAAAAAGTCTCTATCCTCAGACTCTCACCAGAGAAGAAGAGGTGATATCATCCTTTTAAGAAGAAAGTAGAAA
GTGCCCAAACAGCCATCAGTTCCATCCTGACTGCTTGTTAAGAATTCTCTGCTAGTTGGGTGCAGTGGCACACAC
CTGTAGTCCCAGCTACATGGGAGGCTGAGGCGGGATTGCTTGAGTCCAGCCTGGGCAGTATAGCAAGACCCTCTC
TCATAAAAAGAATAAAGCGGCCAGGCACAGTGGTTCACATTTGTAATCCCAGCACTTTGGAAGGCCAAGGTAGAA
GAATCACTTGAGCCCAGGAGTTCCAGACCAGTGTGGGCAACGTAGTGAAACCCTGCCTCTAGAAAAAATAAAAAA
TTAAAAAG

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FIGURE 3171

GGGCCGGGGGCGCGCGCTCTGCGAGCTGGATGTCCAGGCTGCGGGCGCTGCTGGGCCTCGGGCTGCTGGTTGCGG
GCTCGCGCGTGCCGCGGATCAAAAGCCAGACCATCGCCTGTCGCTCGGGACCCACCTGGTGGGGACCGCAGCGGC
TGAACTCGGGTGGCCGCTGGGACTCAGAGGTCATGGCGAGCACGGTGGTGAAGTACCTGAGCCAGGAGGAGGCCC
AGGCCGTGGACCAGGAGCTATTTAACGAATACCAGTTCAGCGTGGACCAACTTATGGAACTGGCCGGGCTGAGCT
GTGCTACAGCCATCGCCAAGGCATATCCCCCCACGTCCATGTCCAGGAGCCCCCCTACTGTCCTGGTCATCTGTG
GCCCGGGGAATAATGGAGGAGATGGTCTGGTCTGTGCTCGACACCTCAAACTCTTTGGCTACGAGCCAACCATCT
ATTACCCCAAAAGGCCTAACAAGCCCCTCTTCACTGCATTGGTGACCCAGTGTCAGAAAATGGACATCCCTTTCC
TTGGGGAAATGCCCGCAGAGCCCATGACGATTGATGAACTGTATGAGCTGGTGGTGGATGCCATCTTTGGCTTCA
GCTTCAAGGGCGATGTTCGGGAACCGTTCCACAGCATCCTGAGTGTCCTGAAGGGACTCACTGTGCCCATTGCCA
GCATCGACATTCCCTCAGGATGGGACGTGGAGAAGGGAAATGCTGGAGGGATCCAGCCAGACTTGCTCATATCCC
TCACAGCCCCCAAAAAATCTGCAACCCAGTTTACCGGTCGCTACCATTACCTGGGGGGTCGTTTTGTGCCACCTG
CTCTGGAGAAGAAGTACCAGCTGAACCTGCCACCCTACCCTGACACCGAGTGTGTCTATCGTCTGCAGTGAGGGA
AGGTGGGTGGGTATTCTTCCCAATAAAGACTTAGAGCCCCTCTCTTCCAGAACTGTGGATTCCTGGGAGCTCCTC
TGGCAATAAAAGTCAGTGAATGGTGGAAGTCAGAGACCAACCCTGGGGATTGGGTGCCATCTCTCTAGGGGTAAC
ACAAAGGGCAAGAGGTTGCTATGGTATTTGGAAACAATGAAAATGGACTGTTAGATGCC

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FIGURE 3172

CAGGGGCGAGGGCTACCCGCTCTTTGCCGTGACAACACCGTTCCCCCAGCCGGGCTGGAGGCTGTGCAGAAGGTA
TCCTGCAGACCATGAACTGAGCACTGTTCCCAGACCGTTCATGAGCACAGTGTAAGGTGTGCCGAGACCCACCAC
CCAGCGAGCCCCTCCCCTCCGTAGCACTGAGGACCCCCGGAGAAGATGGGGAGGAAAAAGATTCAGATCCAGCGA
ATCACCGACGAGCGGAACCGACAGGTGACTTTCACCAAGCGGAAGTTTGGCCTGATGAAGAAGGCGTATGAGCTG
AGCGTGCTATGTGACTGCGAGATCGCACTCATCATCTTCAACCACTCCAACAAGCTGTTCCAGTACGCCAGCACC
GACATGGACAAGGTGCTGCTCAAGTACACGGAGTACAATGAGCCACACGAGAGCCGCACCAACGCCGACATCATC
GAGACCCTGAGGAAGAAGGGCTTCAACGGCTGCGACAGCCCCGAGCCCGACGGGGAGGACTCGCTGGAACAGAGC
CCCCTGCTGGAGGACAAGTACCGACGCGCCAGCGAGGAGCTCGACGGGCTCTTCCGGCGCTATGGGTCAACTGTC
CCGGCCCCCAACTTTGCCATGCCTGTCACGGTGCCCGTGTCCAATCAGAGCTCACTGCAGTTCAGCAATCCCAGC
GGCTCCCTGGTCACCCCTTCCCTGGTGACATCATCCCTCACGGACCCGCGGCTCCTGTCCCCCCAGCAGCCAGCA
CTACAGAGGAACAGTGTGTCTCCTGGCCTGCCCCAGCGGCCAGCTAGTGCGGGGGCCATGCTGGGGGGTGACCTG
AACAGTGCTAACGGAGCCTGCCCCAGCCCTGTTGGGAATGGCTACGTCAGTGCTCGGGCTTCCCCTGGCCTCCTC
CCTGTGGCCAATGGCAACAGCCTAAACAAGGTCATCCCTGCCAAGTCTCCACCCCCACCTACCCACAGCACCCAG
CTTGGAGCCCCCAGCCGCAAGCCCGACCTGCGAGTCATCACTTCCCAGGCAGGAAAGGGGTTAATGCATCACTTG
ACTGAGGACCATTTAGATCTGAACAATGCCCAGCGCCTTGGGGTCTCCCAGTCTACTCATTCGCTCACCACCCCA
GTGGTTTCTGTGGCAACGCCGAGTTTACTCAGCCAGGGCCTCCCCTTCTCTTCCATGCCCACTGCCTACAACACA
GATTACCAGTTGACCAGTGCAGAGCTCTCCTCCTTACCAGCCTTTAGTTCACCTGGGGGGCTGTCGCTAGGCAAT
GTCACTGCCTGGCAACAGCCACAGCAGCCCCAGCAGCCGCAGCAGCCACAGCCTCCACAGCAGCAGCCACCGCAG
CCACAGCAGCCACAGCCACAGCAGCCTCAGCAGCCGCAACAGCCACCTCAGCAACAGTCCCACCTGGTCCCTGTA
TCTCTCAGCAACCTCATCCCGGGCAGCCCCCTGCCCCACGTGGGTGCTGCCCTCACAGTCACCACCCACCCCCAC
ATCAGCATCAAGTCAGAACCGGTGTCCCCAAGCCGTGAGCGCAGCCCTGCGCCTCCCGCTCCAGCTGTGTTCCCA
GCTGCCCGCCCTGAGCCTGGCGATGGTCTCAGCAGCCCAGCCGGGGGATCCTATGAGACGGGAGACCGGGATGAC
GGACGGGGGGACTTCGGGCCCACACTGGGCCTGCTGCGCCCAGCCCCAGAGCCTGAGGCTGAGGGCTCAGCTGTG
AAGAGGATGCGGCTTGATACCTGGACATTAAAGTGACGATTCCCACTCCCCTCCTCTCAGCCTCCCTGATGAAGA
GTTGACAATCTCACCGCCCGCCCTTCCCTGCCCCGGGCTCCTCCCGCTCGACCCCCACTTCCTTTCTTGTGCTTC
GTGTCCTGTTGACGGTTACATTTGTGTATAATTATTATATTATT

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FIGURE 3173

TTGCGTAGGGGGCGGGACTAAGGCTGTCAATTGGTCTGTTTTTGTGCCGATCAATGAGATGGGTGCGGTGATTGG
CGACTACCTTGAGAGTAGCGGGTTGAGGTGTAAGCCCTGAGGAGGCAGCGTTTTCTGGGCTTCTGTCTGGTTCTC
TCTCTCCAGAAGGTTCTGCCGGTTCCCCCAGCTCTGGGTACCCGGCTCTGCATCGCGTCGCCATGATGGGCCATC
GTCCAGTGCTCGTGCTCAGCCAGAACACAAAGCGTGAATCCGGAAGAAAAGTTCAATCTGGAAACATCAATGCTG
CCAAGACTATTGCAGATATCATCCGAACATGTTTGGGACCCAAGTCCATGATGAAGATGCTTTTGGACCCAATGG
GAGGCATTGTGATGACCAATGATGGCAATGCCATTCTTCGAGAGATTCAAGTCCAGCATCCAGCGGCCAAGTCCA
TGATCGAAATTAGCCGGACCCAGGATGAAGAGGTTGGAGATGGGACCACATCAGTAATTATTCTTGCAGGGGAAA
TGCTGTCTGTAGCTGAGCACTTCCTGGAGCAGCAGATGCACCCAACAGTGGTGATCAGTGCTTACCGCAAGGCAT
TGGATGATATGATCAGCACCCTAAAGAAAATAAGTATCCCAGTCGACATCAGTGACAGTGATATGATGCTGAACA
TCATCAACAGCTCTATTACTACCAAAGCCATCAGTCGGTGGTCATCTTTGGCTTGCAACATTGCCCTGGATGCTG
TCAAGATGGTACAGTTTGAGGAGAATGGTCGGAAAGAGATTGACATAAAAAAATATGCAAGAGTGGAAAAGATAC
CTGGAGGCATCATTGAAGACTCCTGTGTCTTGCGTGGAGTCATGATTAACAAGGATGTGACCCATCCACGTATGC
GGCGCTATATCAAGAACCCTCGCATTGTGCTGCTGGATTCTTCTCTGGAATACAAGAAAGGAGAAAGCCAGACTG
ACATTGAGATTACACGAGAGGAGGACTTCACCCGAATTCTCCAGATGGAGGAAGAGTACATCCAGCAGCTCTGTG
AGGACATTATCCAACTGAAGCCCGATGTGGTCATCACTGAAAAGGGCATCTCAGATTTAGCTCAGCACTACCTTA
TGCGGGCCAATATCACAGCCATCCGCAGAGTCCGGAAGACAGACAATAATCGCATTGCTAGAGCCTGTGGGGCCC
GGATAGTCAGCCGACCAGAGGAACTGAGAGAAGATGATGTTGGAACAGGAGCAGGCCTGTTGGAAATCAAGAAAA
TTGGAGATGAATACTTTACTTTCATCACTGACTGCAAAGACCCCAAGGCCTGCACCATTCTCCTCCGGGGGGCTA
GCAAAGAGATTCTCTCGGAAGTAGAACGCAACCTCCAGGATGCCATGCAAGTGTGTCGCAATGTTCTCCTGGACC
CTCAGCTGGTGCCAGGGGGTGGGGCCTCCGAGATGGCTGTGGCCCATGCCTTGACAGAAAAATCCAAGGCCATGA
CTGGTGTGGAACAATGGCCATACAGGGCTGTTGCCCAGGCCCTAGAGGTCATTCCTCGTACCCTGATCCAGAACT
GTGGGGCCAGCACCATCCGTCTACTTACCTCCCTTCGGGCCAAGCACACCCAGGAGAACTGTGAGACCTGGGGTG
TAAATGGTGAGACGGGTACTTTGGTGGACATGAAGGAACTGGGCATATGGGAGCCATTGGCTGTGAAGCTGCAGA
CTTATAAGACAGCAGTGGAGACGGCAGTTCTGCTACTGCGAATTGATGACATCGTTTCAGGCCACAAAAAGAAAG
GCGATGACCAGAGCCGGCAAGGCGGGGCTCCTGATGCTGGCCAGGAGTGAGTGCTAGGCAAGGCTACTTCAATGC
ACAGAACCAGCAGAGTCTCCCCTTTTCCTGAGCCAGAGTGCCAGGAACACTGTGGACGTCTTTGTTCAGAAGGGA
TCAGGTTGGGGGGCAGCCCCCAGTCCCTTTCTGTCCCAGCTCAGTTTTCCAAAAGACACTGACATGTAATTCTTC
TCTATTGTAAGGTTTCCATTTAGTTTGCTTCCGATGATTAAATCTAAGTCATTTG

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FIGURE 3174

GAATTGCGGCCGTATGCGCGGCTCTGTGGAGTGCACCTGGGGTTGGGGGCACTGTGCCCCCAGCCCCCTGCTCCT
TTGGACTCTACTTCTGTTTGCAGCCCCATTTGGCCTGCTGGGGGAGAAGACCCGCCAGGTGTCTCTGGAGGTCAT
CCCTAACTGGCTGGGCCCCCTGCAGAACCTGCTTCATATACGGGCAGTGGGCACCAATTCCACACTGCACTATGT
GTGGAGCAGCCTGGGGCCTCTGGCAGTGGTAATGGTGGCCACCAACACCCCCCACAGCACCCTGAGCGTCAACTG
GAGCCTCCTGCTATCCCCTGAGCCCGATGGGGGCCTGATGGTGCTCCCTAAGGACAGCATTCAGTTTTCTTCTGC
CCTTGTTTTTACCAGGCTGCTTGAGTTTGACAGCACCAACGTGTCCGATACGGCAGCAAAGCCTTTGGGAAGACC
ATATCCTCCATACTCCTTGGCCGATTTCTCTTGGAACAACATCACTGATTCATTGGATCCTGCCACCCTGAGTGC
CACATTTCAAGGCCACCCCATGAACGACCCTACCAGGACTTTTGCCAATGGCAGCCTGGCCTTCAGGGTCCAGGC
CTTTTCCAGGTCCAGCCGACCAGCCCAACCCCCTCGCCTCCTGCACACAGCAGACACCTGTCAGCTAGAGGTGGC
CCTGATTGGAGCCTCTCCCCGGGGAAACCGTTCCCTGTTTGGGCTGGAGGTAGCCACATTGGGCCAGGGCCCTGA
CTGCCCCTCAATGCAGGAGCAGCACTCCATCGACGATGAATATGCACCGGCCGTCTTCCAGTTGGACCAGCTACT
GTGGGGCTCCCTCCCATCAGGCTTTGCACAGTGGCGACCAGTGGCTTACTCCCAGAAGCCGGGGGGCCGAGAATC
AGCCCTGCCCTGCCAAGCTTCCCCTCTTCATCCTGCCTTAGCATACTCTCTTCCCCAGTCACCCATTGTCCGAGC
CTTCTTTGGGTCCCAGAATAACTTCTGTGCCTTCAATCTGACGTTCGGGGCTTCCACAGGCCCTGGCTATTGGGA
CCAACACTACCTCAGCTGGTCGATGCTCCTGGGTGTGGGCTTCCCTCCAGTGGACGGCTTGTCCCCACTAGTCCT
GGGCATCATGGCAGTGGCCCTGGGTGCCCCAGGGCTCATGCTGCTAGGGGGCGGCTTGGTTCTGCTGCTGCACCA
CAAGAAGTACTCAGAGTACCAGTCCATAAATTAAGGCCCGCTCTCTGGAGGGAAGGACATTACTGAACCTGTCTT
GCTGTGCCTCGAAACTCTGGAGGTTGGAGCATCAAGTTCCAGCCGGCCCCTTCACTCCCCCATCTTGCTTTTCTG
TGGAACCTCAGAGGCCAGCCTCGACTTCCTGGAGACCCCCAGGTGGGGCTTCCTTCATACTTTGTTGGGGGACTT
TGGAGGCGGGCAGGGGACAGGGCTATTGATAAGGTCCCCTTGGTGTTGCCTTCTTGCATCTCCACACATTTCCCT
TGGATGGGACTTGCAGGCCTAAATGAGAGGCATTCTGACTGGTTGGCTGCCCTGGAAGGCAAGAAAATAGATTTA
TTTTTTTTC

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FIGURE 3175A

GTCGCGGGCAGCCGCCTCACAGCGATGGCGGCCGAGCAGGGCCGGTGGCGGCGGCGGCTGCGGCTACGGCCGGAG
ACGGCAGTGTTGGCGGTAGTGGTGGGTGGCAGGGGCCTGTGACCGGGAGCTGCCCCCGGACCCGGGCACCATGAG
CCAAGGCCCCCCCACAGGGGAGAGCAGCGAGCCCGAAGCAAAAGTCCTCCACACTAAGCGGCTTTACCGGGCTGT
GGTGGAGGCTGTGCATCGACTTGACCTCATCCTTTGCAACAAAACTGCTTATCAAGAAGTATTCAAACCAGAAAA
CATTAGCCTGAGGAACAAGCTGCGTGAGCTCTGCGTCAAGCTTATGTTCCTGCACCCAGTGGACTATGGGAGAAA
GGCTGAGGAGCTGCTGTGGAGAAAGGTATACTATGAAGTTATCCAGCTTATCAAGACTAACAAAAAGCACATCCA
CAGCCGGAGCACTTTGGAATGTGCCTACAGGACGCACCTGGTTGCTGGTATTGGCTTCTACCAGCATCTCCTTCT
CTATATCCAGTCCCACTACCAGCTGGAACTGCAGTGCTGCATCGACTGGACCCATGTCACTGACCCCCTCATAGG
ATGCAAGAAGCCAGTGTCTGCCTCAGGGAAGGAGATGGATTGGGCACAGATGGCATGTCACCGATGTCTGGTGTA
TCTGGGGGATTTGTCCCGATATCAGAATGAATTAGCTGGCGTAGATACCGAGCTGCTAGCCGAGAGATTTTACTA
CCAAGCCCTGTCAGTAGCTCCTCAGATTGGAATGCCCTTCAATCAGCTGGGCACCCTGGCAGGCAGCAAGTACTA
TAATGTGGAAGCCATGTATTGCTACCTGCGCTGCATCCAGTCAGAAGTGTCCTTTGAGGGAGCCTATGGGAACCT
CAAGCGGCTGTATGACAAGGCAGCCAAAATGTACCACCAACTGAAGAAGTGTGAGACTCGGAAACTGTCTCCTGG
CAAAAAGCGATGTAAAGACATTAAAAGGTTGCTAGTGAACTTTATGTATCTGCAAAGCCTCCTACAGCCCAAAAG
CAGCTCCGTGGACTCAGAGCTGACCTCACTTTGCCAGTCAGTCCTGGAGGACTTCAACCTCTGCCTCTTCTACCT
GCCCTCCTCACCCAACCTCAGCCTGGCCAGTGAGGATGAGGAGGAGTATGAGAGTGGATATGCTTTCCTCCCGGA
CCTTCTCATCTTTCAAATGGTCATCATCTGCCTTATGTGTGTGCACAGCTTGGAGAGAGCAGGATCCAAGCAGTA
CAGTGCAGCCATTGCCTTCACCCTGGCCCTCTTTTCCCACCTCGTCAATCATGTCAACATACGGCTGCAGGCTGA
GCTGGAAGAGGGCGAGAATCCCGTCCCGGCATTCCAGAGTGATGGCACAGATGAACCAGAGTCCAAGGAACCTGT
GGAGAAAGAGGAGGAGCCAGATCCTGAGCCTCCTCCTGTAACACCCCAAGTGGGTGAGGGCAGAAAGAGCCGTAA
GTTCTCTCGCCTCTCCTGTCTCCGCCGTCGCCGCCACCCACCCAAAGTTGGTGATGACAGTGACCTGAGTGAAGG
CTTTGAATCGGACTCAAGCCATGACTCAGCCCGGGCCAGTGAGGGCTCAGACAGTGGCTCTGACAAGAGTCTTGA
AGGTGGGGGAACGGCCTTTGATGCTGAAACAGACTCGGAAATGAATAGCCAGGAGTCCCGATCAGACTTGGAAGA
TATGGAGGAAGAGGAGGGGACACGGTCACCAACCCTGGAGCCCCCTCGGGGCAGATCAGAGGCTCCCGATTCCCT
CAATGGCCCACTGGGCCCCAGTGAGGCTAGCATTGCCAGCAATCTACAAGCCATGTCCACCCAGATGTTCCAGAC
TAAGCGCTGCTTCCGACTGGCCCCCACCTTTAGCAACCTGCTCCTCCAGCCCACCACCAACCCTCATACCTCGGC
CAGCCACAGGCCTTGCGTCAATGGGGATGTAGACAAGCCTTCAGAGCCAGCCTCTGAGGAGGGCTCTGAGTCGGA
GGGGAGTGAGTCCAGTGGACGCTCCTGTCGGAATGAGCGCAGCATCCAGGAGAAGCTTCAGGTCCTGATGGCCGA
AGGTCTGCTTCCTGCTGTGAAAGTCTTCCTGGACTGGCTTCGGACCAACCCCGACCTCATCATCGTGTGTGCGCA
GAGCTCTCAAAGTCTGTGGAACCGCCTGTCTGTGTTGCTGAATCTGTTGCCTGCTGCTGGTGAACTCCAGGAGTC
TGGCCTGGCCTTGTGTCCTGAGGTCCAAGATCTTCTTGAAGGTTGTGAACTGCCTGACCTCCCCTCTAGCCTTCT
GCTCCCAGAGGACATGGCTCTTCGTAACCTGCCCCCGCTCCGAGCTGCCCACAGACGCTTTAACTTTGACACGGA
TCGGCCCCTGCTCAGCACCTTAGAGGAGTCAGTGGTGCGCATCTGCTGCATCCGCAGCTTTGGTCATTTCATCGC
CCGCCTGCAAGGCAGCATCCTGCAGTTCAACCCAGAGGTTGGCATCTTCGTCAGCATTGCCCAGTCTGAGCAGGA
GAGCCTGCTGCAGCAGGCCCAGGCACAGTTCCGAATGGCACAGGAGGAAGCTCGTCGGAACAGGCTCATGAGAGA
CATGGCTCAGCTACGACTTCAGCTCGAAGTGTCTCAGCTGGAGGGCAGCCTGCAGCAGCCCAAGGCCCAGTCAGC
CATGTCTCCCTACCTCGTCCCTGACACCCAGGCCCTCTGCCACCATCTCCCTGTCATCCGCCAACTGGCCACCAG
TGGCCGCTTCATTGTCATCATCCCAAGGACAGTGATCGATGGCCTGGATTTGCTGAAGAAGGAACACCCAGGGGC
CCGGGATGGGATTCGGTACCTGGAGGCAGAGTTTAAAAAAGGAAACAGGTACATTCGCTGCCAGAAAGAGGTGGG
AAAGAGCTTTGAGCGGCATAAGCTGAAGAGGCAGGATGCAGATGCCTGGACTCTCTATAAGATCCTAGACAGCTG
CAAACAGCTGACTCTGGCCCAGGGGGCAGGTGAGGAGGATCCGAGTGGCATGGTGACCATCATCACAGGCCTTCC
ACTGGACAACCCCAGCGTGCTTTCAGGCCCCATGCAGGCAGCCCTGCAGGCCGCTGCCCACGCCAGTGTGGACAT
CAAGAATGTTCTGGACTTCTACAAGCAGTGGAAGGAAATTGGTTGATACTGACCCCCAGGCCCTGCAGTGGGGCT
GACTCCAGATCTCTCCTGCCCTCCCTGGCAGCCAGGACCAGCACCTGTAGTCACCCCACCACACGCAGACTCATG
CACGCACACAGGAGGGAGGCCTAGCTGCTCAGAGGCTGCAGGGAGGGCCCAGGAGCCGGCTGGGAGGGTGGGGTC
CCTTTGTTGCCAAGACGTTAGGAAAGCGAGGAAAGTGCTTGGATTAGGAGAGTCTTGTGGGCCCCTGGCCAGCCT
TCCTGCCTCAGCTCCCCTGCTGTCTCCAGGGGCAGGTGGTAGGCATGGGTACCTGCATTTCACTGGAATGGGTTC
TTGGATCTCTGAGGGGAAGGAACAGCAAAAGAGGCCCTTCTTCCTCACCCAAGATGCAGGGTGGTTGGGGCCAGG

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FIGURE 3175B

AGTTTGGACCCTCTAGGTCTTGGGGGAAGAGCTGGGTAATACCTGGTGTCTGAGTGATTCTCTGCAGACCCTTCC
CCTCCTCAAGGATCACCCATCCTCCTTTCAGCCCCCTTTATGGGGACCAGGCAGCTCTGGAGCCAGCCACAGGGG
CTGTTAGAGAAGCAAGGCCTGGAGTGGCCTGCACCGAGTAGCAGGGTCAGGGTTCGTGTGCTCCTCCTCCTGCTG
CAGGGGCTGCACATCCCATTGCCCCACTTCTGCTTTGTGTCTCCCTCTGTCTAGCTTCCAGGGCAGGGAGCAGGC
CCCACCTAGGGCTGCAGGCAGTCTGGCCTGTGCCAGCACGGTCTCCTGTGCCCACCAGCCCCACAGGTGCTGTGC
TTTGTGCTCTTGGCTGCTGTGCTGGGACAGAATGGGATGCCAGGAAGAGAAGAAAGGGGGTGCAGTCTGAGGCCA
CCACCCCCCTTCCTATCTAAGGGAGGGCTGAAGACAAGGGGCCGGCATTCAGTGGGCAGCAGAAAGGAGAGGCTC
CTTGAAGCTGCTCAGTCAGAGGCCCCCGTCCCTCCTTTTGCCTTCCGCAGGACTGAAGACCTGAAGGGGCTGGCT
TTTGGAGTGTTGAGGTGAATATCTGGGAGCAGAGATCATGAATAGCTCAGGGCAGTGAATGGCGCACCAAGAGCA
GGGCTGTGTGTGGGAGGCTGCAGCCAGGATTGCCTCAGCTCCTCCCCCTCAGGCTGGGAGGATAGCACAGGCTAG
GGGCTCGGGGTGGAGGGTCTCAGCTCTGCTGCCCCCACCCCAGTACTAGCCTAGCTTCCCAAGCTGTGGCTTAGA
GGATAGTTGGCTTCCTGCCTCTCTCCTCTAAAATAGCAAGTCTGGGAAATCCTGGGGTGAGTGGAGTCACCCCAC
TCCCAGTTGCTGGCAGAGACTGAGACTAAAGCATCACTTAATAAACCCCCCAAGCCC

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FIGURE 3176

ACTCCCCGCCCAGGCCTGGCCCGCCTGCCTGGCCACTCTTCCTCCATCAGCCTGGCTGGCAGCAGCCTTGGACTC
CGCCCGTGGAGCCCTGGGCCTGTTGACCCACCAGCTTAGGAGCACCCACCAAGCTCTGGGTGTTCTGGGAAGATG
GCATCATGTCTGGCTACCGCCGCCCCACCAGCTCGGCTTTGGACTGTGTCCTCAGCTCCTTCCAGATGACCAACG
AGACGGTCAACATCTGGACTCACTTCCTGCCCACCTGGTACTTCCTGTGGCGGCTCCTGGCGCTGGCGGGCGGCC
CCGGCTTCCGTGCGGAGCCGTACCACTGGCCGCTGCTGGTCTTCCTGCTGCCCGCCTGCCTCTACCCCTTCGCGT
CGTGCTGCGCGCACACCTTCAGCTCCATGTCGCCCCGCATGCGCCACATCTGCTACTTCCTCGACTACGGCGCGC
TCAGCCTCTACAGTCTGGGCTGCGCCTTCCCCTATGCCGCCTACTCCATGCCGGCCTCCTGGCTGCACGGCCACC
TGCACCAGTTCTTTGTGCCTGCCGCCGCACTCAACTCCTTCCTGTGCACCGGCCTCTCCTGCTACTCCCGTTTCC
TGGAGCTGGAAAGCCCTGGGCTCAGTAAGGTCCTCCGCACAGGAGCCTTCGCCTATCCATTCCTGTTCGACAACC
TCCCACTCTTTTATCGGCTCGGGCTGTGCTGGGGCAGGGGCCACGGCTGTGGGCAGGAGGCCCTGAGCACCAGCC
ATGGCTACCATCTCTTCTGCGCGCTGCTCACTGGCTTCCTCTTCGCCTCCCACCTGCCTGAAAGGCTGGCACCAG
GACGCTTTGATTACATCGGCCACAGCCACCAGTTATTCCACATCTGTGCAGTGCTGGGCACCCACTTCCAGCTGG
AGGCAGTGCTGGCTGATATGGGATCACGCAGAGCCTGGCTGGCCACACAGGAACCTGCCCTGGGCCTGGCAGGCA
CAGTGGCCACACTGGTCTTGGCTGCAGCTGGGAACCTACTCATTATTGCTGCTTTCACAGCCACCCTGCTTCGGG
CCCCCAGTACATGCCCTCTGCTGCAGGGTGGCCCACTGGAGGGGGGTACCCAGGCCAAACAACAGTGAGGCCCCA
TCCCTGACCCTGTCCTGGAGGGGGCAGAGGCCAGGCCCCAGTGCTGACGAGGAGCCCAGATTTGGGCCTAATCAG
GTGGGGACGCATCTCAGCCTGGAACCAACAGGGGCTGAGGAGAGAGGGCACAGGAGAGAGGGCAGAGAAGAGGAG
GGGTGTCTAGGGGGACTGGCAGAGTGTGAGAGGGACCGTGAGGGGGCTCTTGATGGGAGTGGAAGAAGTGCTGAG
GGTCTGAGAGGGGAGATGCATGCGTGTCCAGGCTGAAGATGCCCCTATATTCTGTCAAAGGTTGGCGGGGGGAGG
TGTTGGGGTCCTTTCATCTGGCTCCGTTTCTGGTGCTTCTGGAAGTCTCTGCTCAGCACAGGGAAGAACTAACAC
GACTAACCTAGGCCTACCCTGAATGCTTCTTGCTAACCAGGCCGAGAGGCCACACACTTGCCCCCCCATCCCCAC
AAACCAGGTAATGCCAGTTTGCCAGCAGCTATTTGCCTATAGAGATGAGTCTGTCCTGGTCATAACTGTGTGCTC
AAGGTGTCCAGGCTTTTGGGGGTGGGCCTATCTGGGTGCATTATGGATGGTTTGGTGGATTGAGGTGTGGGGAGG
AGGGTCCTAGGCTAGAGGGGGTATCCCTAGTTAGACTTTGGGAAGCCACCTTCAACGTTTTCTGGAACAAGGCAG
GTACAAATAAAAAAAATAAAACTTTGGAAAGC

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FIGURE 3177

GCAAGTAGCGCCAATCTAGGCAGCGGCTGTGAGGAAAAAAGGCATGAGGGGTCGTCTTCGGAATCTGTGCCACCC
GGCACTACCATTTCGAGGGTGAAGCTCCTCGACACCATGGTGGACACTTTTCTTCAGAAGCTGGTCGCCGCCGGC
AGCTACCAGAGATTCACTGACTGCTATAAGTGCTTCTACCAGTTGCAGCCTGCGATGACACAGCAAATCTATGAC
AAGTTTATAGCTCAGTTGCAGACATCTATCCGGGAGGAAATCTCTGACATCAAAGAGGAGGGGAACCTAGAAGCT
GTCTTGAATGCCTTGGATAAAATTGTGGAAGAAGGCAAAGTCCGCAAAGAGCCAGCCTGGCGCCCCAGCGGGATC
CCAGAGAAGGATCTGCACAGTGTTATGGCACCCTACTTCCTGCAGCAACGGGACACCCTGCGGCGCCATGTGCAG
AAACAGGAGGCCGAGAACCAGCAGCTGGCAGATGCCGTCCTGGCAGGGCGGAGGCAGGTGGAGGAGCTGCAGCTA
CAGGTCCAGGCCCAGCAGCAGGCCTGGCAGGCTCTACACAGAGAACAGAGGGAGCTGGTTGCTGTGCTGAGGGAG
CCTGAGTGAGGAGACCGCCAGCCCCAGAAGCAGAGGGCAGTCAAGGTCAAGAGCCTGTGGTCCAGCATGCCTGGC
CTGGGCGGGCTACCTCTGAGAACGGCTGAAATGGTGCCCAGTCCATCAGCAGTGATGGAATTTGCTGGAGGACTA
GGCCAGAGCAAGCCTCACTGCCACTGTGCCTTTGGGGCACCCTTGGGGTTGGACATACACCCCCTTTAGATTCCT
CTGTTTCTTCTACCTGGATAATTCTTGGCCATGTTCTCTCTTCTCTAGGTTCAGGTCAGCTCTGCCCCTCCGCCC
CCCTCCTGCTGGTTCCCCAGCCCTTTTCCCTGGCCCTGGCTTGGAGAATCTGTTTTCAATCTCCACTGATTGCCC
CCTTGCTGGCCAGCCCAGGGGCCTTTACCATGTTCTCTCCACATCCGTAAATAAACTTCCTTCACTAC

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FIGURE 3178A

AAACAAGAAGAATGGGATTGATATTTCCGCAGGAAGTTTGGAAGTTATGTAACAGAGCAGGTTGAGATCCTACCT
TTTAGGAGCAGCCTGCCCCTTTTGAAGGGGTAAAGGGAGTGGGTGCAGTGCCCTCTCTTCTGTTGTAGTGGCTTA
TCCCTCTAAGGCATGACCCTTGGATAGGGGTTACCTGCCTCGGAAAGTCCCCACTTCCTTGTGGGAGTTTAAAAT
AGATTGGCATATGTGAGAGATGGAGACAAGGTGGGAAATCGGATCCTGTCTTAGGATTTCTCATCAGGAGATGCT
GATACTTGGTGTTTCAGCTTGATAAATTGAGAAGGTGCCATGAAACCAGGTCCTGGAACAGAATCCCTGGTTGCT
CTGTCTTTTAGCTGCTCTGACCCTCTGCCCTGCAGAGCATGCATTTTGCATGTGCCTGGCAGGAGGCCCTCCTGC
TTGAGCCCTGCTGTATTTGTCTGTGTTGACAACGTGACTGCCAGCCATTAAGCTTGGTCAGTCCACAGACACACT
AGGAAAGCAGAGGCAGCTCTTGGTTTCTCTGGAACAGAGCTGCAAGAAGTCTCTGGGCATCTGCATGGCCAGGAG
CTTATGCTTAACTGTTGAGTGACCTGCAGCCATAAGGGCATTAATTCTGCCTTCCAGAGGTGGGAATGACTTGGC
TTTAAACAGTGATTTGTGTGAGAATTCTTCAAATCCCATAAGGTAGAAGGCATGGTGGAGTAGAGGAGAAATCTT
GGCTCATATCTGCCTCTTCCATTGACCAGCTGTGTGACCTTGGGCCTGTTACTTTTAACCTACCTGACCCTCCAT
TTCCTCATTTATCAGAAGTGTCTAACTGTACACAAGTTAAACTGTAAGGATTACATGAGGTAGTAGTCAATCCTG
GTGTTTCTCTGTATCTTCTCACTTCTCACTGGTGTTGGAAATATGATCTTGCGACCCTAGATGGCAGCCACTCTG
GGGCAGAAGAGACAGTGACCACCTTTTGAAGAGCTCAAAGGAGAATATTGCCCCACAGGGCTTAGTGGGTCCCCC
AGGCTGAGGCTGGGGAGGAGGGCCACCTTTGCCTACAGCAAGTGGCATATCATTGTTCTAGGGGTTCTCTTGACG
GCAGAACTTTGCCTCTAGCTCATTTTCCACAGCCTAGATTTTCCAATCTTGCCAATCCAGTTGACTTCTGTCTTC
TCATTTCCAAGCCATTGTTCTCTCTCTTTCACTATCTACATGGATTATCCTTCATTCAAACTGCTTTGTCCCGGC
TGGGTGCGGTGGCTCATGCCTGTAATCCTAGCACTTTGGGAAGCCGAGGCGGGTGGATCACGAGGTCAGGAGATC
GAGACCATCCTGGCTAACATGGTGAAACCCCGTCTCTACTAAAATTAAAAAAATTAGCCGGGCGTGGTGGCAGGC
GCCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGCATGAACCCGGGAGGTGGAGCTTGCAGTGGGT
GGAGATCGCGCCACTGCACTCCAGCCTGGGCGACAGAGCGAGACTCCGTCTGAAAAAAAAAAACAAAAAAACTGCT
TTGTCCTGTAGGAATCCTGTGCGGGTTATGTGCACCTCCCTCAATCCTTACCTTGAAGCTAAGGTTTCCCCTCAG
CTCTCAAGTACTCAGTTTGCACTGCAGGTAGTCCCTATTTTAACGAAAGTTATACGGTCCAGCTCAGGGAATCCT
GAAAAGCTGCCCTTGCTTCCATGGTAATCAAAAGGCAGTTCTCATGGAATAAAAGCTACCTGAAGCCTGAGTTGG
GACCTTTGGCTGGGGAAGGTGGTTGAGGACGTTCTCTGATTAGATGCTTGGCATGAGGTTTGCTACTGGAACTGC
TAGTGTAGAATGTTTCAGCCCCCTAGAGTTGTCCCTGTGATGTGGCTACCTCCTTTCTCTGGGATTTCTCTTAAA
GTCTGGGGAGCCCCTGCTTCTCATTTCCTGGAATTTATCTTCCCAGTCTCCCTTTCTGGCTGAAAATTTCTAGTA
TCTTACAGAACAGCGGTGGGATACACTGGAGCACATCATATTACCACTAAGTATGTCTAATAAATGATGTCCTCT
GATTTGACATTTCCTAAATGTGAAGCTCCTGATTTTATACAATTTTGAAATTAGTAAGCTTGTTAGTTTTGTTTG
AAATTCTAGGCATTGGATACACTTAACATGAGGGCTACATGTGCATCAACATACTCTGGTTTCCTTCCCTCTGTA
TCTTTTTTTTTTTTGAGATGGAGTCTCACTGTCTCCTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCACTGCAG
CCCCAACCTTCAGGGCTCAGGTGATCCTCCCACCTCAGCCACCCAAGTAGCTGGGACCACAGGTGCATGCCACCA
TGCCTGGCTAACTTATTTTTATATATTGTAGAGACGGAGTCTCCCTATGTTGCCTAGGCTGACCTTGAGCTCTTG
GGCTCAGGTGATCCTCCCACCTTGGCCTCCCAAAGTGTTGGGATTATAGGCGTGAGCCACTGTGTCCAGCCTTTT
CCTCTGTATCTTGTATCCATTCCCCAGAGCGATACTGTGTATCCTTGAACAGACGGTTTCTTGAAGTCAGAGTCT
ATCTCCTCTGTCACTTCTCCCCCTTCATTATCTAAGACTGAGGTTGTGGTTTATATGCTTAGAGTTGAAAGCATG
GGGTCCAACGTGTTCTGTACTCTGTAGTTCCCCAGACTCTTCAGGGAAACTACTTAGCTCTCAGGTGGTTCTTTT
CTGTTTTTCTCAGAGCAAGTTATCTAATAACTGAAGAGGACTCTGCCCTTTGGCCTGTTCCTGACTTTCTAACTC
CTTTTGCTGGAGGAAGGGGAGGTTGAGGGGGGTGCCCTGTGGTGTGAAAGCCCCACTTGCCCTCTCCTCTATACT
TTCTTCCAATGCAGACGGGAGAAAGTATCATAAATGTAGTGACTGTGGGTCAGGGGAGCTCTGAGAGGCCAGCAC
AGGAAACCAGAAACAAAATGAGTCAGTTCGTAGGTGGCGATCAGAGGCACCCTGCTGAGGGTGCAAGGCCACAGG
TGATGCCTCCTCAGTAGGCCCAGGAGCATCAAAACGGGAACAGTCCCTTTCAGCCTTCAGGAGCCTCCCAAATGT
CACTTAGTGATGTCCCATTCACCTGCTTAAAGGCCCTGCATCCTGCCAGGTAGTTGGTTTGTCCATAGCATCCTG
AGCTCTGCTTGGGTGAGCCAGACAAAAAGAATGATTCCTGGCCAGAGTAGTGATACCAGGGCCCAGACAGAGGCA
GAGAGTCCGGATAGAAGATCCTGTAAGCTGGGGTAGGGAGCCGAGGAGGCCATGGAGCCAGGGGAATCATTGAAG
TGAGGGACAATTTCTGGAGGAGGGAAACTGAGTAAGGAAGGCCTGGCCAAGGACCAAGAAGGGGACAGTATCCTG
ATCTATGAAAGAAGACTCAAGTGGGGATTGACAGAGCCAGATTGGGTGGAGTCCAAGCTTTGGGCAGGTGAGTGT
CCAGGAG**ATG**AGGGCTGAGAATGGGCCTTCAGAGCCCAGCCAGAAGGGGAAAGCACAAAGCTCCACCCTCCTTCT

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FIGURE 3178B

TCACATCCCTCCATACTGCTCAAATCCCAGGTCTTCAGGCACCATGGAGGACAAACGCAACATCCAGATCATCGA
GTGGGAACACCTGGACAAGAAGAAGTTCTACGTGTTTGGTGTGGCAATGACAATGATGATCCGTGTCAGTGTCTA
CCCATTCACCCTCATCCGCACCCGGTTGCAAGTTCAGAAGGGGAAGAGCCTCTACCATGGGACCTTCGATGCCTT
CATCAAGATCCTGCGAGCAGATGGTATCACTGGCCTCTACCGAGGGTTCCTGGTCAATACCTTCACCCTCATCTC
TGGCCAGTGTTATGTCACCACTTATGAGCTCACCCGGAAGTTTGTAGCTGACTACAGCCAGAGTAACACAGTCAA
ATCACTGGTGGCTGGTGGCTCAGCCTCCCTTGTGGCCCAGAGCATCACAGTGCCCATTGATGTAGTCTCCCAGCA
CCTGATGATGCAACGCAAGGGTGAGAAAATGGGCCGCTTTCAGGTGCGGGGGAACCCAGAGGGACAAGGGGTAGT
TGCCTTTGGCCAAACCAAGGACATCATCAGGCAGATCCTGCAGGCTGATGGACTTCGCGGCTTCTATCGAGGCTA
TGTGGCTTCACTGCTTACCTATATCCCAAACAGTGCTGTCTGGTGGCCCTTCTATCACTTCTATGCAGAGCAGCT
CTCCTACCTGTGTCCTAAGGAGTGCCCTCACATTGTCTTTCAAGCTGTCTCGGGGCCCCTGGCTGCAGCCACTGC
CTCCATCCTCACCAATCCCATGGATGTCATACGAACCCGTGTGCAGGTTGAGGGCAAGAACTCCATCATCCTGAC
CTTCAGACAGCTGATGGCAGAAGAAGGGCCTTGGGGCCTCATGAAGGGCCTCTCGGCCAGAATCATCTCAGCCAC
ACCTTCCACCATTGTCATTGTGGTGGGCTATGAGAGCCTCAAGAAACTCAGCCTCCGACCTGAGCTGGTGGACTC
GAGACACTGGTAACCAGTGGTGGGGAGAGAAGCCTGCTGTTTTCCACACTACCGTGGGTCAGGGGCAGAGTGGAG
AGGACAGCACCCTCTCCAGGTGCTCCCACCACACACCCAGCCCTGCCCTGGGCCAAGTGGCCTATCTGGGATAGG
GATAGAGACTTTGAACTGCTCTTGCTGAAGAGGCTCCACGCCTGGATCCCTTGCCCCCACTATTTAAAATTCTCT
TCTGAGCTGGGCTCCCTCACTCAGTCCCTGTATTTGATACTGGCCTAAAGACCCCACCCCCCACCCTGCCAGCCC
TTCTTCTGGCTTCCCCTTCCATCTGTGTCCCTGAGACCCTGAGAAGAGCTGTACATAGAGCTTGCTTACTACCAC
TGGTTCTTCCTCTTGGGCTTTCAGCCCAGACTCCAAGCAGCTGCTATCAACCCTCTCTCCCTTCATCTCTTAGCC
TTGCTTATTTTTATTTTGGGACCGAGCTGCCCACTAGATGACTCTGCTTTTCCCTGCATTTGGGGCTAAGGTGCC
AGGTACTTATTTGCACAGGGAGCAGGAGCAGCAAAAAATCTCTGGTTCTCCAGAGCACTCGTCCTCTCTTTGGAG
GGGTTATTAGGTTGGGAGAAATGTTGATACTTTTGTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
GTGTGTGTTTTAACATCTGTGAACCAGGCTATTAGTCCTGCTAAAGCGCCAATCCTGCTGTCAGAGCTCACCCCC
TTCCTAAGACAGGTAGAAAAATGTAATGTAGCTTTTTCCACAAGCCACTTCCCTGTCCCTTCAGTCTCAGGAGCC
CTAGGAGAGTCTAAGCTGGGGCATCCCCTGGCCCAGAGGACTCCCGTGGTGGGCACAGTTCTAAGTGGATCAGGC
TGTCTTGGGTGCACTGGACTTGGAGCACTACCTTGAGAAGTCAGGTTGAGAAAGTAGTTGATCTAGAAGGCAACA
AGTGGGCATGTGTTCCCCAGCACATTACCCAGGCCAGCAGAGCCAAACCTAGGAGAGGGCAGTGGGTAGATTCTC
TGCCCCAGGCAGCCATGACATACACATAAATACCCCAATCACTCAGACTTACGGCAACAAGTGTTGTCTCACTAT
GGTGATCTCTAAGATCCACATCACTGGATGCGTAGTCATCCCAGTCATGGTACCCTGTGGAGGAATGCTGGAAGA
ACATAAAGAGCAGTTCAGAAAGTCACCCAATACCAGGACCACTGCATTTACCAGCCTGATACTGCCAAGATTATC
TGATGCTCTCCTCAGGAGCTAGGAGAGGAGTGCTCCTTCCTCCCTACCGCTACTCTCCCCAAGCCTGTGTTGCAG
GTAGAGAGGTGCAGCAAATAGAGAAGGCATGTCAAACCCTGCATTTCTACCTGAGACGTGTGACCTGGATGATCC
TCCAAACCCTATTGGTCCCACCCCCTGGGAAAGGCCATGGTGCCAGTTTGAAAGGTGCTAGCTACCTGAAGCCTT
GATATTTCTTCATGGCTGCCGCACATTCTTCCACCTTGGCCAGAACAGGTTCTGAAAACCACTTCTCTACCTTCA
CCACCACCACTGCCCATCTTGATCTCTTTGAGGGTTTTCCCATTTCACTTGATCTTATTTTTGTTTATCCCTTCC
TGCACTTTGTCAAGAGAGTCCTCCAGTTTCTATCCAGGAATGTTCACATCCAAAGGGTTGGACCCACGGATCATT
CTGAATCTTCCTGCCCCTCCTCACTGCTTAACCCTGAGAACCACAAATATAATGGAAGCAGTTCCCCCCACCCTC
ACCCCATCTCTTTAAGCTCATCCTAGCAAGACCTCTAGAGACCCTAGAGACTCGACTTTAGTCCTTCCCCGCCAT
GGCACAGTGGGGAAGGTGTCAATGGGGAGTGTCACGGACAGGAGGTAGGATCCTGCCGCTCGCGTCTTAGTGTTT
CTCCCTCAAGACTTTCCTTCTGTTTTGTTGTCTTGTGCAGTATTTTACAGCCCCTCTTGTGTTTTTCTTTATTTC
TCGTACACACACGCAGTTTTAAGGGTGATGTGTGTATAATTAAAAGGACCCTTGGCCCATACTTTCCTAATTCTT
TAGGGACTGGGATTGGGTTTGACTGAAATATGTTTTGGTGGGGATGGGACGGTGGACTTCCATTCTCCCTAAACT
GGAGTTTTGGTCGGTAATCAAAACTAAAAGAAACCTCTGGGAGACTGGAAACCTGATTGGAGCACTGAGGAACAA
GGGAATGAAAAGGCAGACTCTCTGAACGTTTGATGAAATGGACTCTTGTGAAAATTAACAGTGAATATTCACTGT
TGCACTGTACGAAGTCTCTGAAATGTAATTAAAAGTTTTTATTGAGCCCCCG

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FIGURE 3179

GATGAGCAAGTGGTGGGGACGCCCCTGCTGGTGAAATCTGGCGTGGAGTATACACGGCTTGCAGTGGAGACAGCC
CAGGGCCTTGATGGGCACAGCCATCTTGTCATGTACCTGGGAACCACCACAGGGTCGCTCCACAAGGCTGTGGTA
AGTGGGGACAGCAGTGCTCATCTGGTGGAAGAGATTCAGCTGTTCCCTGACCCTGAACCTGTTCGCAACCTGCAG
CTGGCCCCCACCCAGGGTGCAGTGTTTGTAGGCTTCTCAGGAGGTGTCTGGAGGGTGCCCCGAGCCAACTGTAGT
GTCTATGAGAGCTGTGTGGACTGTGTCCTTGCCCGGGACCCCCACTGTGCCTGGGACCCTGAGTCCCGAACCTGT
TGCCTCCTGTCTGCCCCCAACCTGAACTCCTGGAAGCAGGACATGGAGCGGGGGAACCCAGAGTGGGCATGTGCC
AGTGGCCCCATGAGCAGGAGCCTTCGGCCTCAGAGCCGCCCGCAAATCATTAAAGAAGTCCTGGCTGTCCCCAAC
TCCATCCTGGAGCTCCCCTGCCCCCACCTGTCAGCCTTGGCCTCTTATTATTGGAGTCATGGCCCAGCAGCAGTC
CCAGAAGCCTCTTCCACTGTCTACAATGGCTCCCTCTTGCTGATAGTGCAGGATGGAGTTGGGGGTCTCTACCAG
TGCTGGGCAACTGAGAATGGCTTTTCATACCCTGTGATCTCCTACTGGGTGGACAGCCAGGACCAGACCCTGGCC
CTGGATCCTGAACTGGCAGGCATCCCCCGGGAGCATGTGAAGGTCCCGTTGACCAGGGTCAGTGGTGGGGCCGCC
CTGGCTGCCCAGCAGTCCTACTGGCCCCACTTTGTCACTGTCACTGTCCTCTTTGCCTTAGTGCTTTCAGGAGCC
CTCATCATCCTCGTGGCCTCCCCATTGAGAGCACTCCGGGCTCGGGGCAAGGTTCAGGGCTGTGAGACCCTGCGC
CCTGGGGAGAAGGCCCCGTTAAGCAGAGAGCAACACCTCCAGTCTCCCAAGGAATGCAGGACCTCTGCCAGTGAT
GTGGACGCTGACAACAACTGCCTAGGCACTGAGGTAGCTTAAACTCTAGGCACAGGCCGGGGCTGCGGTGCAGGC
ACCTGGCCATGCTGGCTGGGCGGCCCAAGCACAGCCCTGACTAGGATGACAGCAGCACAAAAGACCACCTTTCTC
CCCTGAGAGGAGCTTCTGCTACTCTGCATCACTGATGACACTCAGCAGGGTGATGCACAGCAGTCTGCCTCCCCT
ATGGGACTCCCTTCTACCAAGCACATGAGCTCTCTAACAGGGTGGGGGCTACCCCCAGACCTGCTCCTACACTGA
TATTGAAGAACCTGGAGAGGATCCTTCAGTTCTGGCCATTCCAGGGACCCTCCAGAAACACAGTGTTTCAAGAGA
CCCTAAAAAACCTGCCTGTCCCAGGACCCTATGGTAATGAACACCAAACATCTAAACAATCATATGCTAACATGC
CACTCCTGGAAACTCCACTCTGAAGCTGCCGCTTTGGACACCAACACTCCCTTCTCCCAGGGTCATGCAGGGATC
TGCTCCCTCCTGCTTCCCTTACCAGTCGTGCACCGCTGACTCCCAGGAAGTCTTTCCTGAAGTCTGACCACCTTT
CTTCTTGCTTCAGTTGGGGCAGACTCTGATCCCTTCTGCCCTGGCAGAATGGCAGGGGTAATCTGAGCCTTCTTC
ACTCCTTTACCCTAGCTGACCCCTTCACCTCTCCCCCTCCCTTTTCCTTTGTTTTGGGATTCAGAAAACTGCTTG
TCAGAGACTGTTTATTTTTTATTAAAAATATAAGGCTT

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FIGURE 3180

ACTCAGTGTTCGCGGGAGCGCCGCACCTACACCAGCCAACCCAGATCCCGAGGTCCGACAGCGCCCGGCCCAGAT
CCCCACGCCTGCCAGGAGCAAGCCGAGAGCCAGCCGGCCGGCGCACTCCGACTCCGAGCAGTCTCTGTCCTTCGA
CCCGAGCCCCGCGCCCTTTCCGGGACCCCTGCCCCGCGGGCAGCGCTGCCAACCTGCCGGCCATGGAGACCCCGT
CCCAGCGGCGCGCCACCCGCAGCGGGGCGCAGGCCAGCTCCACTCCGCTGTCGCCCACCCGCATCACCCGGCTGC
AGGAGAAGGAGGACCTGCAGGAGCTCAATGATCGCTTGGCGGTCTACATCGACCGTGTGCGCTCGCTGGAAACGG
AGAACGCAGGGCTGCGCCTTCGCATCACCGAGTCTGAAGAGGTGGTCAGCCGCGAGGTGTCCGGCATCAAGGCCG
CCTACGAGGCCGAGCTCGGGGATGCCCGCAAGACCCTTGACTCAGTAGCCAAGGAGCGCGCCCGCCTGCAGCTGG
AGCTGAGCAAAGTGCGTGAGGAGTTTAAGGAGCTGAAAGCGCGCAATACCAAGAAGGAGGGTGACCTGATAGCTG
CTCAGGCTCGGCTGAAGGACCTGGAGGCTCTGCTGAACTCCAAGGAGGCCGCACTGAGCACTGCTCTCAGTGAGA
AGCGCACGCTGGAGGGCGAGCTGCATGATCTGCGGGGCCAGGTGGCCAAGCTTGAGGCAGCCCTAGGTGAGGCCA
AGAAGCAACTTCAGGATGAGATGCTGCGGCGGGTGGATGCTGAGAACAGGCTGCAGACCATGAAGGAGGAACTGG
ACTTCCAGAAGAACATCTACAGTGAGGAGCTGCGTGAGACCAAGCGCCGTCATGAGACCCGACTGGTGGAGATTG
ACAATGGGAAGCAGCGTGAGTTTGAGAGCCGGCTGGCGGATGCGCTGCAGGAACTGCGGGCCCAGCATGAGGACC
AGGTGGAGCAGTATAAGAAGGAGCTGGAGAAGACTTATTCTGCCAAGCTGGACAATGCCAGGCAGTCTGCTGAGA
GGAACAGCAACCTGGTGGGGGCTGCCCACGAGGAGCTGCAGCAGTCGCGCATCCGCATCGACAGCCTCTCTGCCC
AGCTCAGCCAGCTCCAGAAGCAGCTGGCAGCCAAGGAGGCGAAGCTTCGAGACCTGGAGGACTCACTGGCCCGTG
AGCGGGACACCAGCCGGCGGCTGCTGGCGGAAAAGGAGCGGGAGATGGCCGAGATGCGGGCAAGGATGCAGCAGC
AGCTGGACGAGTACCAGGAGCTTCTGGACATCAAGCTGGCCCTGGACATGGAGATCCACGCCTACCGCAAGCTCT
TGGAGGGCGAGGAGGAGAGGCTACGCCTGTCCCCCAGCCCTACCTCGCAGCGCAGCCGTGGCCGTGCTTCCTCTC
ACTCATCCCAGACACAGGGTGGGGGCAGCGTCACCAAAAAGCGCAAACTGGAGTCCACTGAGAGCCGCAGCAGCT
TCTCACAGCACGCACGCACTAGCGGGCGCGTGGCCGTGGAGGAGGTGGATGAGGAGGGCAAGTTTGTCCGGCTGC
GCAACAAGTCCAATGAGGACCAGTCCATGGGCAATTGGCAGATCAAGCGCCAGAATGGAGATGATCCCTTGCTGA
CTTACCGGTTCCCACCAAAGTTCACCCTGAAGGCTGGGCAGGTGGTGACGATCTGGGCTGCAGGAGCTGGGGCCA
CCCACAGCCCCCCTACCGACCTGGTGTGGAAGGCACAGAACACCTGGGGCTGCGGGAACAGCCTGCGTACGGCTC
TCATCAACTCCACTGGGGAAGAAGTGGCCATGCGCAAGCTGGTGCGCTCAGTGACTGTGGTTGAGGACGACGAGG
ATGAGGATGGAGATGACCTGCTCCATCACCACCACGTGAGTGGTAGCCGCCGCTGAGGCCGAGCCTGCACTGGGG
CCACCCAGCCAGGCCTGGGGGCAGCCTCTCCCCAGCCTCCCCGTGCCAAAAATCTTTTCATTAAAGAATGTTTTG
GAACTTT

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FIGURE 3181

CTCTGCTTCCTTACAGCACCCCCACCTGCCAGAGCTGATCCTCCCTAGGCCCTGCCTAACCTTGAGTTGGCCCCC
AATCCCTCTGGCTGCAGAAGTCCCCTTACCCCCAATGAGAGGAGGGGCAGGACCAGATCTTTTGAGAGCTGAGGG
TTGAGGGCATTGAGCCAACACACAGATTTGTCGCCTCTGTCCCCGAAGACACCTGCACCCTCCATGCGGAGCCAA
GATGGGGAATGGAACTGAGGAAGATTATAACTTTGTCTTCAAGGTGGTGCTGATCGGCGAATCAGGTGTGGGGAA
GACCAATCTACTCTCCCGATTCACGCGCAATGAGTTCAGCCACGACAGCCGCACCACCATCGGGGTTGAGTTCTC
CACCCGCACTGTGATGTTGGGCACCGCTGCTGTCAAGGCTCAGATCTGGGACACAGCTGGCCTGGAGCGGTACCG
AGCCATCACCTCGGCGTACTATCGTGGTGCAGTGGGGGCCCTCCTGGTGTTTGACCTAACCAAGCACCAGACCTA
TGCTGTGGTGGAGCGATGGCTGAAGGAGCTCTATGACCATGCTGAAGCCACGATCGTCGTCATGCTCGTGGGTAA
CAAAAGTGACCTCAGCCAGGCCCGGGAAGTGCCCACTGAGGAGGCCCGAATGTTCGCTGAAAACAATGGACTGCT
CTTCCTGGAGACCTCAGCCCTGGACTCTACCAATGTTGAGCTAGCCTTTGAGACTGTCCTGAAAGAAATCTTTGC
GAAGGTGTCCAAGCAGAGACAGAACAGCATCCGGACCAATGCCATCACTCTGGGCAGTGCCCAGGCTGGACAGGA
GCCTGGCCCTGGGGAGAAGAGGGCCTGTTGCATCAGCCTCTGACCTTGGCCAGCACCACCTGCCCCCACTGGCTT
TTTGGTGCCCCTTGTCCCCACTTCAGCCCCAGGACCTTTCCTTGCCCTTTGGTTCCAGATATCAGACTGTTCCCT
GTTCACAGCACCCTCAGGGTCTTAAGGTCTTCATGCCCTATCACAAATACCTCTTTTATCTGTCCACCCCTCACA
GACTAGGACCCTCAAATAAAGCTGTTTTATATC

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FIGURE 3182

GGAAGCAGCGGGCAGCGGCCCGCGGGAGGCACCTCGGAGATCTGGGTGCAAAAGCCCAGGGTTAGGAACCGTAGG
CATGCTGCGCCCCAAGGCTTTGACCCAGGTGCTAAGCCAAGCCAACACTGGAGGCGTCCAGAGCACCCTGCTGCT
GAATAACGAGGGATCACTGCTGGCCTACTCTGGTTACGGGGACACTGACGCCCGGGTCACCGCTGCCATAGCCAG
TAACATCTGGGCCGCCTACGACCGGAACGGGAACCAAGCGTTTAATGAAGACAATCTCAAATTCATCCTCATGGA
CTGCATGGAGGGCCGTGTAGCCATCACCCGAGTGGCCAACCTTCTGCTGTGTATGTATGCCAAGGAGACCGTGGG
CTTTGGAATGCTCAAGGCCAAGGCCCAGGCTTTGGTGCAGTACCTGGAGGAGCCCCTCACCCAAGTGGCGGCATC
TTAACGGCATTGGTGGAAGCTGGGGTCAGAAAAGAGAAATGACCATTTGGAGGGGCGGGGCCTCCTAGAAGAACC
TTCTTAGACAATGGGGGGAGGATGGGACTTTGTTTTTTCCAAGAATAAACTTCAACTCCTGT

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FIGURE 3183

GGAGGAGCCGGGCGGGCTGGCGGGCGGCCGGGTGGCGGCGGCGGCATGGCGGAGCCGAGCGGGGCCGAGACGAGG
CCCCCCATTCGGGTCACCGTCAAGACCCCCAAGGACAAGGAGGAAATTGTGATCTGCGATCGAGCCTCGGTCAAG
GAGTTCAAAGAGGAAATCTCCCGGAGGTTTAAGGCTCAGCAGGATCAGCTGGTCCTGATCTTCGCAGGCAAGATC
CTCAAGGATGGGGACACACTGAACCAGCACGGAATCAAGGACGGGCTCACTGTCCATCTGGTCATCAAGACCCCT
CAGAAGGCTCAAGATCCAGCTGCTGCCACTGCTTCTTCCCCCTCCACACCTGACCCTGCCTCAGCACCCTCCACC
ACGCCTGCTTCACCCGCCACCCCTGCCCAGCCCTCCACCTCTGGCAGTGCCTCTTCAGATGCTGGCAGTGGAAGC
CGGAGGAGCAGTGGTGGGGGGCCCTCTCCGGGGGCTGGGGAGGGATCCCCCAGTGCTACTGCGTCCATACTCTCT
GGCTTTGGGGGCATCCTGGGGCTGGGCAGCCTAGGCCTGGGCTCTGCCAACTTCATGGAGCTGCAGCAGCAGATG
CAGCGGCAGCTGATGTCCAATCCTGAGATGCTGTCACAGATCATGGAGAACCCCCTGGTCCAGGATATGATGTCT
AACCCTGATCTGATGCGTCACATGATTATGGCCAACCCCCAGATGCAGCAGTTGATGGAGCGGAACCCTGAGATC
AGCCACATGCTCAATAACCCTGAACTCATGAGGCAGACAATGGAGCTTGCTCGGAATCCAGCCATGATGCAAGAG
ATGATGCGGAACCAGGACCGGGCCCTGAGCAACCTTGAGAGCATCCCTGGAGGGTATAATGCCCTCCGCCGCATG
TACACGGACATCCAGGAGCCCATGTTCAGTGCTGCCCGGGAACAGTTTGGCAACAATCCCTTCTCTTCCCTGGCC
GGGAACTCCGACAGCTCATCCTCCCAGCCTCTGCGGACTGAGAATCGAGAGCCCCTCCCTAACCCCTGGAGCCCC
TCGCCCCCCACCTCCCAGGCCCCCGGGTCCGGTGGGGAGGGCACCGGAGGATCGGGGACCAGCCAGGTGCACCCG
ACAGTCTCGAACCCCTTTGGGATCAATGCGGCTAGCCTGGGGTCAGGGATGTTCAATAGCCCAGAAATGCAAGCC
CTCCTCCAGCAGATCTCTGAGAACCCCCAGCTGATGCAGAATGTGATCTCAGCACCCTACATGCGCAGCATGATG
CAGACGCTTGCCCAGAACCCCGACTTTGCTGCTCAGATGATGGTGAATGTGCCGCTCTTCGCGGGGAACCCCCAA
CTGCAGGAGCAGCTCCGCCTGCAGCTCCCAGTCTTCCTGCAGCAGATGCAGAACCCAGAGTCACTCTCCATCCTT
ACCAATCCCCGAGCCATGCAGGCATTGCTGCAGATCCAGCAGGGACTACAGACCTTGCAGACCGAGGCCCCTGGG
CTGGTACCCAGCCTTGGCTCCTTTGGGATATCCCGGACCCCAGCACCCTCAGCAGGCAGCAACGCAGGGTCTACG
CCCGAGGCCCCCACTTCCTCACCAGCCACGCCAGCCACATCTTCTCCAACAGGGGCTTCCAGCGCCCAGCAGCAA
CTCATGCAGCAGATGATCCAGCTTTTGGCTGGAAGTGGAAACTCACAGGTGCAGACGCCAGAAGTGAGATTTCAG
CAGCAGCTGGAGCAGCTCAACTCCATGGGCTTCATCAATCGTGAGGCTAACCTGCAGGCCCTGATTGCCACAGGA
GGGGACATCAACGCAGCTATCGAGAGACTGCTGGGCTCCCAGCTCTCCTAATCCCTCGGCCCATGCCTCCTGCCT
CTCCCCTCCCTCGATGTCAGCATTCGGTTCTTCTGTCAATCCTTACCCTCTGCAGCTTGTCCTCCCTTCCGTCTT
CTCCCTCATCCTTTCCAAACAGCAGGGTGACTTTAGAGGCATGGGCTCCAACCCCTTAGCTCTGTCTGAGAATTA
TGGTTTTACTGCTACGTCTCTAACAGACTCTTCTCTCCTGGTCTCCTTGAGCAGTGCTACTTAAACAGTTTTCAC
AGTTTCATTGATTGACTCTACCTCCTTGCCCCACACCACTTTTGCAATCTTTAAACTTTCAGTGGCTGTGCAGAG
TCGAGGGAGGAACCAGCTCTCTGGTTTACTGGAACATAGTCTTCCATCTATACCACTAGGGTTTTGTCTTATGTT
TACTTTTGGTAACTCTCTTCCTTCTTTTTCTCCCTACCCCCCAACCCCTAGCCCAACCAATGCTAGAATTTCTTG
CTCTGAAGGAGGAGCAGGTGAAACAGGTGGTAATTTTCCTTCTCGGCCCCTATTCTGGTTCATTCAGCACTTTTT
GGTGGGAACTGTTGGAAATTCCAGGGTAAGGAGGAAGATGCCTGTTCTCCCTGTCTGAAGAGGGAGATGAGACAG
CTCTCTGGACAGGAATTAACAAACGCTGGAGCAGCCCAGAGGAAATTCGTGTGAAAGAGGAGGGAATGAGATTAT
TCGGAGGAAGGGAATGGGGGAGACAGCCTGAGTAAAAGGCTTGGAAGTTGGAATTAACAGTGGGGAGCAGAAGCA
CTCATAGCTCTTTTAGGCAGAAGAATCCAGGCCCGAGCTGGCAGAAGAGACTTAGAGATGCTAATGGAATTTAAA
CTGAAAAAAGGAGCCCAATGAAGCTAAGCGCCACGCCCCACAAGGGGTCATATTGGCTTTAGTTCCTCAAGCATA
TGTGCTTATATGCACACACACACACATTTCCATGGACCCAGGTCTTGCTTGTGTCCCCAGGCACCAGTAGTTTGA
GCCCCCCTCAAAAGACATGAAGGGGGTTGGGGTCTGTGTGAGTAGTGGGGAGGTGCATGTGTATCCACATGTGTG
CATACACTCTTAAGTTGGGTGGGAAGTGGATTCCTTGTTGGTTTCTGGTTCAGAGTGCTCTCCCACCACCAGAGA
CAAGTGGGTAAAAAGGTCAGTCCATTGCAGGAATATATATCCGGGAGAGCTAGGTCCCTTGGGGCTCTGGATGCT
GGGTAACCCAGAGGTAATGTGGGTACCCTTTCTGAAGCTGTCAGGGCTGTGACTAGCACCCTTATCACCCCTCAC
TGCCTTGTGGGAATAGTAGAGGGTTTTTTTCCTCCAGAGCCCCTGGCCTTTCAGTTCTTAACTATTTCCCTCCAG
GCCAGAAAGTTTTCTTTGAGGAAGGAGAGGAGAGGGTGGCAATGATGCCTTTGATCTGGAATTGGACATTTCTCT
GTCAGAGCACAGAGGAGGCTCATATCACCTCTTCCCTCTCCTACTTGGCCCAGCTGCTTGGAGGACCGACCCCAT
GGCTGAGAATATGACGGCAAGAGGAACAGAGTTTGCTCCAAGTGGGAAAGGGTCCCAAGCAGTCCAGAGAAGATG
TCTGTGTGGCTTTCCCTCCCTGCCTCCCCCAGCTCCCACACTGGCCTTTGTAAATAAATGGCGTGGTCTTTGTTG
TG

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FIGURE 3184

GCTCTCTTCCTGTCTTTGTGGCTCCGGAAAGGCGTTTGGGATGCCAACGATGAGGCTGCTGTCATTTGTGGTGTT
GGCTCTATTTGCTGTCACTCAAGCAGAGGAAGGAGCCAGGCTTTTGGCTTCCAAATCACTGCTGAACAGATACGC
CGTGGAGGGACGAGACCTGACCTTGCAGTACAACATCTACAATGTTGGCTCAAGTGCTGCATTAGACGTGGAACT
ATCTGATGATTCCTTCCCTCCAGAAGACTTTGGCATTGTGTCTGGAATGCTCAATGTCAAATGGGACCGGATTGC
CCCTGCTAGCAATGTCTCCCACACTGTGGTCCTGCGCCCTCTCAAGGCTGGTTATTTCAACTTCACCTCGGCAAC
AATTACTTACCTGGCCCAGGAGGATGGGCCCGTTGTGATTGGCTCTACCAGTGCACCTGGACAGGGAGGAATCCT
GGCTCAGCGGGAGTTTGACAGGCGATTCTCCCCTCATTTTCTGGACTGGGCAGCCTTTGGGGTCATGACCCTTCC
CTCCATCGGCATCCCCCTGCTATTGTGGTACTCCAGCAAGAGGAAATATGACACTCCCAAAACGAAGAAGAACTG
ATTGGGGCTTCCACAGCCCTCCTCTCCCAAGAAATCCAGGCTCCTCTCCCAAGAAATCCAGGTGCTTTCCAGACT
CCAAAGGGTATCTTAAATGCAATCTCTTCTCTCTTAGCCCTTGGCCACTTTCTCCTGGATCCTGCCCTGCTCTCA
GCCATAGTGAAGGACCAGCCCTAGGAGTCTGCGAGAGCCTCCTTGGTTCCATCGTGAAGCCATAAACAGGAATGC
CTTTGGCAATAGCCTTGAGCCTAGAGGGCCCTCTGATGCCCCACTGAGGTGCTGTTGGTTTATTGCTGGCAACGT
GAATTCTCTCAGGGGTCTAGGAGGGGCATTTTGGAGACTGCCTGACACCACCCCTATCCCCTGCCTCCCCCTCTC
AGAAGAGGGTGGAAGATGAAATGAAAGCTATGGGACTCTTGGAGGATACCCAGTGTCTATTCTGGGTTAGAGAAG
TGCTTACTAAGGGGTTTTCTAATAAAAACAAATGCCACATTG

FIGURE 3185A

GAGACCAACGCGTGCGGGCCGAACCCCTCCCCCCGCCTTCCCCCAACAATACAGGACGCCGGGGTCCGCGCCGCG
TCCTCCCTGGTCCCCCCGTCCGATTATGTCTCGGATCGAATCCCTCACGCGGGCGCGGATCGACCGGAGCAGAGA
GCTGGCGAGCAAGACCCGGGAAAAGGAGAAAATGAAGAAAGCCAAGGATGCCCGCTATACAAATGGGCACCTCTT
CACCACCATTTCAGTTTCAGGCATGACCATGTGCTATGCCTGTAACAAGAGCATCACAGCCAAGGAAGCCCTCAT
CTGCCCAACCTGCAATGTGACTATCCACAACCGCTGTAAAGACACCCTCGCCAACTGTACCAAGGTCAAGCAGAA
GCAACAGAAAGCGGCCCTGCTGAAGAACAACACCGCCTTGCAGTCCGTTTCTCTTCGAAGTAAGACAACCATCCG
GGAGCGGCCAAGCTCGGCCATCTACCCCTCCGACAGCTTCCGGCAGTCCCTCCTGGGCTCCCGCCGTGGCCGCTC
CTCCTTGTCTTTAGCCAAGAGTGTTTCTACCACCAACATTGCTGGACATTTCAATGATGAGTCTCCCCTGGGGCT
GCGCCGGATCCTCTCACAGTCCACAGACTCCCTCAACATGCGGAACCGAACCCTATCCGTGGAATCCCTCATTGA
CGAAGAGGTAATCTACAGTGAGCTGATGAGTGACTTTGAGATGGATGAGAAGGACTTTGCAGCTGACTCTTGGAG
TCTTGCTGTGGACAGCAGCTTCCTGCAGCAGCATAAAAAGGAGGTGATGAAGCAGCAAGATGTCATCTATGAGCT
AATCCAGACAGAGCTGCACCATGTGAGGACACTGAAGATCATGACCCGCCTCTTCCGCACGGGGATGCTGGAAGA
GCTACACTTGGAGCCAGGAGTGGTCCAGGGCCTGTTCCCCTGCGTGGACGAGCTCAGTGACATCCATACACGCTT
CCTCAGCCAGCTATTAGAACGCCGACGCCAGGCCCTGTGCCCTGGCAGCACCCGGAACTTTGTCATCCATCGCTT
GGGTGATCTGCTCATCAGCCAGTTCTCAGGTCCTAGTGCGGAGCAGATGTGTAAGACCTACTCGGAGTTCTGCAG
CCGCCACAGCAAGGCCTTAAAGCTCTATAAGGAGCTGTACGCCCGAGACAAACGCTTCCAGCAATTCATCCGGAA
AGTGACCCGCCCCGCCGTGCTCAAGCGGCACGGGGTACAGGAGTGCATCCTGCTGGTGACTCAGCGCATCACCAA
GTACCCGTTACTCATCAGCCGCATCCTGCAGCATTCCCACGGGATCGAGGAGGAGCGCCAGGACCTGACCACAGC
ACTGGGGCTAGTGAAGGAGCTGCTGTCCAATGTGGACGAGGGTATTTATCAGCTGGAGAAAGGGGCCCGTCTGCA
GGAGATCTACAACCGCATGGACCCTCGGGCCCAAACCCCAGTGCCTGGCAAGGGCCCCTTTGGCCGAGAGGAACT
TCTGAGGCGCAAACTCATCCACGATGGCTGCCTGCTCTGGAAGACAGCGACGGGGCGCTTCAAAGATGTGCTAGT
GCTGCTGATGACAGATGTACTGGTGTTTCTCCAGGAAAAGGACCAGAAGTACATCTTTCCTACCCTGGACAAGCC
TTCAGTGGTATCGCTGCAGAATCTAATCGTACGAGACATTGCCAACCAGGAGAAAGGGATGTTTCTGATCAGCGC
AGCCCCACCTGAGATGTACGAGGTGCACACAGCATCCCGGGATGACCGGAGCACCTGGATCCGGGTCATTCAGCA
GAGCGTGCGCACATGCCCATCCAGGGAGGACTTCCCCCTGATTGAGACAGAGGATGAGGCTTACCTGCGGCGAAT
TAAGATGGAGTTGCAGCAGAAGGACCGGGCACTGGTGGAGCTGCTGCGAGAGAAGGTCGGGCTGTTTGCTGAGAT
GACCCATTTCCAGGCCGAAGAGGATGGTGGCAGTGGGATGGCCCTGCCCACCCTGCCCAGGGGCCTTTTCCGCTC
TGAGTCCCTTGAGTCCCCTCGTGGCGAGCGGCTGCTGCAGGATGCCATCCGTGAGGTGGAGGGTCTGAAAGACCT
GCTGGTGGGGCCAGGAGTGGAACTGCTCTTGACACCCCGAGAGCCAGCCCTGCCCTTGGAACCAGACAGCGGTGG
TAACACGAGTCCTGGGGTCACTGCCAATGGTGAGGCCAGAACCTTCAATGGCTCCATTGAACTCTGCAGAGCTGA
CTCAGACTCTAGCCAGAGGGATCGAAATGGAAATCAGCTGAGATCACCGCAAGAGGAGGCGTTACAGCGATTGGT
CAATCTCTATGGACTTCTACATGGCCTACAGGCAGCTGTGGCCCAGCAGGACACTCTGATGGAAGCCCGGTTCCC
TGAGGGCCCTGAGCGGCGGGAGAAGCTGTGCCGAGCCAACTCTCGGGATGGGGAGGCTGGCAGGGCTGGGGCTGC
CCCTGTGGCCCCTGAAAAGCAGGCCACGGAACTGGCATTACTGCAGCGGCAACATGCGCTGCTGCAGGAGGAGCT
ACGGCGCTGCCGGCGGCTAGGTGAAGAACGGGCAACCGAAGCTGGCAGCCTGGAGGCCCGGCTCCGGGAGAGTGA
GCAGGCCCGGGCACTGCTGGAGCGTGAGGCCGAAGAGGCTCGAAGGCAGCTGGCCGCCCTGGGCCAGACCGAGCC
ACTCCCAGCTGAGGCCCCCTGGGCCCGCAGACCTGTGGATCCTCGGCGGCGCAGCCTCCCCGCAGGCGATGCCCT
GTACTTGAGTTTCAACCCCCCACAGCCCAGCCGAGGCACTGACCGCCTGGATCTACCTGTCACTACTCGCTCTGT
CCATCGAAACTTTGAGGACCGAGAGAGGCAGGAACTGGGGAGCCCCGAAGAGCGGCTGCAAGACAGCAGTGACCC
TGACACTGGCAGCGAGGAGGAAGGTAGCAGCCGTCTGTCTCCGCCCCACAGTCCACGAGACTTTACCAGAATGCA
GGACATCCCGGAGGAGACGGAGAGCCGCGACGGGGAGGCTGTAGCCTCCGAGAGCTAAGGGGGCCCCTCCCCCCT
GCCCCGTGCCCCACTGAAGAACATTACTGAGGGGGCTAACCTTGGGGACTCCAATTTGCCAATGATGAGGGAACA
TTTGAAAGAACTGCAAATTGTCCTTGCCAGCTCTTGGGATCCTTGGATACCTGGGGCCATTTAAGAAGCTAGGGG
AATTAGGCCACAACACCCCCTGGGACATCCGAAAGCTACACCACAGATGCCAGTGGTTCATGCCTTCTTCCCGCA
ACTTTAGGAAAATTTATTTATTTATTGTTTATTAGTTATGGGGGGAGAGGGGAGATTTAAAGGACCAGGGACATG
GGAACCAAGCCATAGGGATCAGAGGGCCTTGTCCTTGAACACTACTGGGGTATATTCAGGCTCATCCACGCAGCT
GCTGGGTTCTTGCCCTAACGGCCCTCCCCTGCAACATCCGTCTTGGAGGAGAGGCTGCAGCCACAGCACCCTACT
GCCCTTTAAATAAAGGAGGGCTGTGGGCAGGGCCATGTCCCTTTCTCCTCTCCCCTCAACCTCTTACTGCTGTTC

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FIGURE 3185B

TCCCTTTCTCCGTCCTTCATGGAAGCCCTGGGAGATAACCTGGCTTCCTGGAGTTGATGGAATAAAGGTTGGGGT
GGCCATAATGGTTTGTTGGGGGTGAGGGAAAAAACCCACAGGGACCAGAATGTTTTGTTGTTCTTTTGTTTTCTT
TTTTGTACCAAAGTCAACTGCACGTGTTTTATATTTTTAAGAGATCGTAGGCAATTAGAGATCGAAGCCTCCTAT
CTCCACATCTCTGAAGAAGTTGAGGGGTGGGGGAGAGAATGACTTCTGCCTTCATCTGCAGTAACGGGGGGACCT
ATACTGACCTCTTCCCCAGCCATTTAGAAACAAGTTCTAGGGTGGGTTGGAAAATCTCCAAGAGCCCTGACCTCA
TCTTCCACCTCAGCAACCATGACCTGAAACCTCAGCGTGAATTTGGGGGATTTTTCAGTGGAACCCTTGCCCCCA
AATGTCGACCAGCCCCCAAATGTCGAAGAATTTTCTTCTTGCCAATTTTGTTGTTTAAAAAAAAAATTCAGGGAA
AATTAAAAACCTGGAACTCCA

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FIGURE 3186A

CGGGTGGTTGAGTAGAAGCGGTCGCCATGTCCGCGGGGAGCGCGACACATCCTGGAGCTGGCGGGCGCCGCAGCA
AATGGGACCAACCAGCTCCAGCCCCACTTCTCTTCCTCCCGCCAGCGGCCCCAGGTGGGGAGGTCACCAGCAGTG
GGGGAAGTCCTGGGGGCACCACAGCTGCTCCTTCAGGAGCCTTGGATGCTGCTGCTGCTGTGGCTGCCAAGATTA
ATGCCATGCTCATGGCAAAAGGGAAGCTGAAACCAACTCAGAATGCTTCTGAGAAGCTTCAGGCTCCTGGCAAAG
GCCTAACTAGCAATAAAAGCAAGGATGACCTGGTGGTAGCTGAAGTAGAAATTAATGATGTGCCTCTCACATGTA
GGAACTTGCTGACTCGAGGACAGACTCAAGACGAGATCAGCCGACTTAGTGGGGCTGCAGTATCAACTCGAGGGA
GGTTCATGACAACTGAGGAAAAAGCCAAAGTGGGACCAGGGGATCGTCCATTATATCTTCATGTTCAGGGCCAGA
CACGGGAATTAGTGGACAGAGCTGTAAACCGGATCAAAGAAATTATCACCAATGGAGTGGTAAAAGCTGCCACAG
GAACAAGTCCAACTTTTAATGGTGCAACAGTAACTGTCTATCACCAGCCAGCACCCATCGCTCAGTTGTCTCCAG
CTGTTAGCCAGAAGCCTCCCTTCCAGTCAGGGATGCATTATGTTCAAGATAAATTATTTGTGGGTCTAGAACATG
CTGTACCCACTTTTAATGTCAAGGAGAAGGTGGAAGGTCCAGGCTGCTCCTATTTGCAGCACATTCAGATTGAAA
CAGGTGCCAAAGTCTTCCTGCGGGGCAAAGGTTCAGGCTGCATTGAGCCAGCATCTGGCCGAGAAGCTTTTGAAC
CTATGTATATTTACATCAGTCACCCCAAACCAGAAGGCCTGGCTGCTGCCAAGAAGCTTTGTGAGAATCTTTTGC
AAACAGTTCATGCTGAATACTCTAGATTTGTGAATCAGATTAATACTGCTGTACCTTTACCAGGCTATACACAAC
CCTCTGCTATAAGTAGTGTCCCTCCTCAACCACCATATTATCCATCCAATGGCTATCAGTCTGGTTACCCTGTTG
TTCCCCCTCCTCAGCAGCCAGTTCAACCTCCCTACGGAGTACCAAGCATAGTGCCACCAGCTGTTTCATTAGCAC
CTGGAGTCTTGCCGGCATTACCTACTGGAGTCCCACCTGTGCCAACACAATACCCGATAACACAAGTGCAGCCTC
CAGCTAGCACTGGACAGAGTCCGATGGGTGGTCCTTTTATTCCTGCTGCTCCTGTCAAAACTGCCTTGCCTGCTG
GCCCCCAGCCCCAGCCCCAGCCCCAGCCCCCACTCCCAAGTCAGCCCCAGGCACAGAAGAGACGATTCACAGAGG
AGCTACCAGATGAACGGGAATCTGGACTGCTTGGATACCAGCATGGACCCATTCATATGACTAATTTAGGTACAG
GCTTCTCCAGTCAGAATGAGATTGAAGGTGCAGGATCGAAGCCAGCAAGTTCCTCAGGCAAAGAGAGAGAGAGGG
ACAGGCAGTTGATGCCTCCACCAGCCTTTCCAGTGACTGGAATAAAAACAGAGTCCGATGAAAGGAATGGGTCTG
GGACCTTAACAGGGAGCCATGGTGAGTGTGATATAGCTGGGGGAACAGGGGAGTGGCTAAGACTGGTCTAAAGCT
ATTAGTTTTCTCAGCCGGGCGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCA
CCTAAGGTCAGGAGTTCAAGACCAGCTTGGCCAACATAGTGAAATCCCATCTCTACTAAAAATACAAAAACTAGC
GGGCATGGTGGTGGGCGCCTGTAATTCCAGCTACTCAGGGGGTTGAGGCAGGAGAATCGCTTCAACCTGGGAGGC
AGAGGTTGCAGTGAGCCAAGATCAGACCACTGCCCTCCAGCCTGGGCAATAGAGCAAGACTCCATCTCATAAATA
AATAAATACATAAATAAAGCTATTAATTTTCTAACCTGATGTTCATTCAGGTGTTTAATCCAACCTCTATAATCT
GTTGGCCAGTGAAAATACTTTTGGGCTGGGCACGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGG
TGGGCGGATAACCTGAGGTCAGGAGTTTGAGACCAGCGTGGCTAACATGGTGAAACCCCGTCTCTACTAAAAATA
GAAAAATTAAGCTGGGCATGGTGGTGCATGCCTGTAATTCCAGCGGCTTGGAAGGCTGAGGCAGGAGAATCACTT
GAACTTGGGAGGTGGAGGTTGCAGTGAGCCAAGATCACACCACTGCATTCCAGCCTGGGCACTAGAGTGAGACTC
TGTCTCAAAAAAAAAGAAAGAGAAAGAGAAAATAGTTTCTAAAAAATTGTATACAGACAACCTTTTATTTCCAAC
AAACGTGTGCCGAGAGAGAGAGAGAGAAAATAGTTTTAAAAAAATTGTATACAGACAACCTTTTGTTTCCAACCA
ACGTGTATCTAGAAAAGAGTTAGTCGACTTATTTTATACATAGCATCAGTGAATAGTAATGAGTGGTAGGTCATT
TCAAAATCCTGTTGCCTATATTATGTGAATACCAGGAGGTCATCTGATACGGACTTAATAAAGGTTGATTTTGCT
TTATATTGGGAGCTGAGCCACACCTCCCCTTATAACTCTATTGGTCAGTAATGGTCAGTTTGTGGCTGTTAGGAA
AATGTTGCCTTTTAGCATTCCAGAACTCTAAATCCTGTAGAGGTACATGGGATATTTTATTCTTTGCCTGTACTC
ATAAAAATGAACAGAAGAAAATACGTTTTTTTCTTTTCTTAACTTCTTTTCTTTTAACTCTTTAAAAGGTGAAAT
ATCAGCCCTCAAGAGACTCACTTGCTAACTTTCCTTTTTTTCTTTTTTTTTCTTTTTTTGTGTTTCTTTTTTCTT
TCTCTGTTTTCTTACATGGTTCTGGTGGATTCACATTTGCTGATGCTGGTGCTGTTTTTCGTGTGATCTTCAACG
TTTTTGGGTGACCATTGACCCTGTGACCTCAAAATGGTGTCCAACTAACCACTTAAAATTAACATCTTTTTTTTA
ATTAACGAATTTATGGTATTTTTTTTTTCCCTTGGCGGGGATGGGGTTGGGGTTGTTTTTTCTCTATTCTAGAT
TATCCAGCCAAGAAGATGAAAACTACAGAGAAGGGATTTGGCTTGGTGGCTTATGCTGCAGATTCATCTGATGAA
GAGGAGGAACATGGAGGTCATAAAAATGCAAGTAGTTTTCCACAGGGCTGGAGTTTGGGATACCAATATCCTTCA
TCACAACCACGAGCTAAACAACAGATGCCATTCTGGATGGCTCCCTAGGAAACAGTGGAACAGAGTTTTGACCCT
CAGTGACTCTTCTTAGCAATAATGCATGCATTTGATTTAACAAGACTCTGGGGCCTGTGCTGGGAACCATCTGGA
CCTTTGCAGAAGTTAGAGATTCAGTGCCCCCCTTTCTTAAAGGGGTTCCTTAACAACCACAAAAATCCTTATTTC

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FIGURE 3186B

TGCAGTGGCATAGAATCTGTTAAAATTTAATTAGAATCACAAATTTATCTCAGAAGCTTTTTAACAGTTGGTGAA
ATGTGCTTGTCCAACAAAGCATCCTAACAGGGTCGTTCCCATACACATTTGACCTGGTCAGCCTTTTCCAGGTGA
ATAGCCCCAGTTCTGACATAAAGAAAGTTTTATTTGTATTTTACTACTGTTTGGTCAATTTTGATATATAACTGG
TTACAAACAGAGCCTTACTATTTATTAGTGGGGAAATGATTTTAAGACCGTCCTTTTCAGTATTTAATTCTGACA
GATCTGCATCCCTGTTTTGTTTTGGATTATTTCTGTTTTGGAAAATGCTGTCTCATTTAAAACTGTTGGATATAG
CTGGATCCTGGATAGGAAAATGAAATTATTTTTTCATTGTGTTTTTTAATTGGGGTGATCCAAAGCTGGCACCTT
CAGGCACATTGGTCTCATAGCCATTACTGTTTTTATTGCCCTTCTAAGATCCTGTCTTCAGCTGGGTCAGAGAAA
ACTTCTTGACTAAAACTGGTCAGAACTCATCACAGAAATGAAATACAGTGGTCTCTCTCTCCCAGAACTGGTTGC
AGCTAAAACAGAGAGATCTGACTGCTGGCTATAGGATTTTGGACTTAATGACTGAAATTGCAAATTGTCCTTTTT
CTTGGCATTACAGATTTTGCCAAAATAACTTTTTGTATCAAATATTGATGTGTGAAAGTGAAGGAGCTAGTCTGC
TGAACCAGGAATAGTTTGAGATATTGAACTGTCATTTTTGCACATTTGAATACTTTGCAGGCTGGCTTTGTATAA
ACTTATCCTCTGGTTTCCTATATGTTGTAAATATTTAGACCATAATTTCATTATAAATAAATCTATAAATATTC

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FIGURE 3187

AGAAATCTTCAGCCAAACAGCTGCAGGAAGTAGAGAAGGTTAAACCCCAGAGTGAGAAAGTTCATCAGACTCTGA
TTCTGGACCCAGCACAGAGGAAGAGACTCCAGCAGCAGATGCAGCAGCACGTTCAGCTCTTGACCCAAATCCACC
TTCTTGCCACCTGCAACCCCAACCTCAATCCGGAGGCCACTACCACCAGGATATTTCTTAAAGAGCTGGGAACCT
TTGCTCAAAGCTCCATCGCCCTTCACCATCAGTACAACCCCAAGTTTCAGACCCTGTTCCAACCCTGTAACTTGA
TGGGAGCTATGCAGCTGATTGAAGACTTCAGCACACATGTCAGCATTGACTGCAGCCCTCATAAAACTGTCAAGA
AGACTGCGAATGAATTTCCCTGTTTGCCAAAGCAAGTGGCTTGGATTCTGGCCACAAGCAAGGTTTTCATGTATC
CAGAGTTACTTCCAGTGTGTTCCCTGAAGGCAAAGAATCCCCAGGATAAGATCGTCTTCACCAAGGCTGAGGACA
ATTTGTTAGCTTTAGGACTGAAGCATTTTGAAGGAACTGAGTTTCCTAATCCTCTAATCAGCAAGTACCTTCTAA
CCTGCAAAACTGCCCACCAACTGACAGTGAGAATCAAGAACCTCAACATGAACAGAGCTCCTGACAACATCATTA
AATTTTATAAGAAGACCAAACAGCTGCCAGTCCTAGGAAAATGCTGTGAAGAGATCCAGCCACATCAGTGGAAGC
CACCTATAGAGAGAGAAGAACACCGGCTCCCATTCTGGTTAAAGGCCAGTCTGCCATCCATCCAGGAAGAACTGC
GGCACATGGCTGATGGTGCTAGAGAGGTAGGAAATATGACTGGAACCACTGAGATCAACTCAGATCGAAGCCTAG
AAAAAGACAATTTGGAGTTGGGGAGTGAATCTCGGTACCCACTGCTATTGCCTAAGGGTGTAGTCCTGAAACTGA
AGCCAGTTGCCACCCGTTTCCCCAGGAAGGCTTGGAGACAGAAGCGTTCATCAGTCCTGAAGCCCCTCCTTATCC
AACCCAGCCCCTCTCTCCAGCCCAGCTTCAACCCTGGGAAAACACCAGCCCGATCAACTCATTCAGAAGCCCCTC
CGAGCAAAATGGTGCTCCGGATTCCTCACCCAATACAGCCAGCCACTGTTTTACAGACAGTTCCAGGTGTCCCTC
CACTGGGGGTCAGTGGAGGTGAGAGTTTTGAGTCTCCTGCAGCACTGCCTGCTGTGCCCCCTGAGGCCAGGACAA
GCTTCCCTCTGTCTGAGTCCCAGACTTTGCTCTCTTCTGCCCCTGTGCCCAAGGTAATGCTGCCCTCCCTTGCCC
CTTCTAAGTTTCGAAAGCCATATGTGAGACGGAGACCCTCAAAGAGAAGAGGAGTCAAGGCCTCTCCCTGTATGA
AACCTGCCCCTGTTATCCACCACCCTGCATCTGTTATCTTCACTGTTCCTGCTACCACTGTGAAGATTGTGAGCC
TTGGCGGTGGCTGTAACATGATCCAGCCTGTCAATGCGGCTGTGGCCCAGAGTCCCCAGACTATTCCCATCACTA
CCCTCTTGGTTAACCCTACTTCCTTCCCCTGTCCATTGAACCAGTCCCTTGTGGCCTCCTCTGTCTCACCCTTAA
TTGTTTCTGGCAATTCTGTGAATCTTCCTATACCATCCACCCCTGAAGATAAGGCCCACGTGAATGTGGACATTG
CTTGTGCTGTGGCTGATGGGGAAAATGCCTTTCAGGGCCTAGAACCCAAATTAGAGCCCCAGGAACTATCTCCTC
TCTCTGCTACTGTTTTCCCGAAAGTGGAACATAGCCCAGGGCCTCCACTAGCAGATGCAGAGTGCCAAGAAGGAT
TGTCAGAGAATAGTGCCTGTCGCTGGACCGTTGTGAAAACAGAGGAGGGGAGGCAAGCTCTGGAGCCGCTCCCTC
AGGGCATCCAGGAGTCTCTAAACAACCCTACCCCTGGGGATTTAGAGGAAATTGTCAAGATGGAACCTGAAGAAG
CTAGAGAGGAAATCAGTGGATCCCCTGAGCGTGATATTTGTGATGACATCAAAGTGGAACATGCTGTGGAATTGG
ACACTGGTGCCCCAAGCGAGGAGTTGAGCAGTGCTGGAGAAGTAACGAAACAGACAGTCTTACAGAAGGAAGAGG
AGAGGAGTCAGCCAACTAAAACCCCTTCATCTTCTCAAGAGCCCCCTGATGAAGGAACCTCAGGGACAGATGTGA
ACAAAGGATCATCAAAGAATGCTTTGTCCTCAATGGATCCTGAAGTGAGGCTTAGTAGCCCCCCAGGGAAGCCAG
AAGATTCATCCAGTGTTGATGGTCAGTCAGTGGGGACTCCAGTTGGGCCAGAAACTGGAGGAGAGAAGAATGGGC
CAGAAGAAGAGGAAGAAGAGGACTTTGATGACCTCACCCAAGATGAGGAAGATGAAATGTCATCAGCTTCTGAGG
AATCTGTGCTTTCTGTCCCAGAACTCCAGGTGAGAGCTGGAGAATATTCTCAAGTATTTCGTGGACTCAGTAATA
TGTATCACTTATTGATATGCCACCTGCTTGCTTGCTGCACTATGGATAGTCCTAAAATCATTTGTATTTGATTTG
TGAATGCATTATGGGACATGATTGTGGAGTTGAGGTGAAATGAGATGGAAAGGATGAAATTTTACTTATTATATT
AAACTCGTTTACACATTAAA

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FIGURE 3188

ATGAAATGACGGATGAAGCAGTTGGAGACTCTGCTGAGAAGCCTCCTACTTTTGCTTCACCTGAGACTGCTCCAG
AAGTGGAGACCAGCAGAACTCCACCAGGAGAGAGCATCAAAGCTGCTGGAAAAGGCCGGAACAATCATCGAGCTC
GCAACAAGCGGGGAAGTCGGGCTCGGGCCAGCAAGGACACCTCCAAGCTGCTGTTGCTGTATGATGAGGACATTC
TCGAGCGAGATCCACTCAGGGAGCAGAAGGACTTGGCCTTTGCCCAAGCTTATCTGACCAGGGTGCGAGAAGCCC
TACAACATATCCCTGGCAAGTATGAAGACTTCCTTCAAGTCATCTATGAATTTGAGTCAAGTACCCAGAGACGGA
CGGCTGTAGATCTCTACAAAAGCCTGCAAATTCTGCTCCAAGACTGGCCTCAGCTGTTGAAAGACTTTGCTGCTT
TCCTGTTACCTGAGCAAGCTCTGGCCTGTGGATTATTTGAGGAGCAGCAGGCTTTTGAGAAGAGCCGCAAGTTCC
TTCGGCAGCTGGAGATTTGCTTTGCAGAGAACCCCTCACACCACCAGAAGATTATCAAGGTCCTCCAAGGCTGTG
CAGACTGCCTTCCCCAGGAGATCACCGAGCTCAAGACACAGATGTGGCAGCTCCTCAAGGGCCACGACCACCTGC
AGGATGAGTTTTCTATCTTCTTTGACCACTTGCGCCCAGCAGCTAGCCGGATGGGTGACTTTGAAGAGATCAATT
GGACTGAGGAAAAGGAGTATGAGTTTGATGGCTTTGAAGAAGTGGCCCTGCCTGATGTGGAAGAAGAGGAGGAGC
CTCCCAAGATACCCACAGCCTCAAAGAACAAGAGGAAAAAAGAGATCGGGGTCCAAAATCATGATAAGGAGACTG
AATGGCCAGATGGGGCCAAGGACTGTGCCTGCTCCTGCCATGAAGGAGGTCCAGATTCCAAGCTGAAGAAGAGCA
AAAGGCGGAGCTGTAGCCACTGTAGCAGCAAGGTCTGTGACAGCAAATCCTACAAGAGCAAGGAGCCCCATGAGT
TGGTGGGCAGCAGCCCCCACCGAGAGGCTAGTCCTATGCCTGGTGCTAAGGAAGCTGGGCAGGGCAAGGATATGA
TGGAAGAGGAAGCCCCAGAGGAGCGGGAGAGCACTGAGGCCACCCAGAGCAGGACTGTCAGGACCACCAGAAAGG
GAGAGATGCCTGTTTCAGGATTGGCAGTGGGGAGCACTTTGCCATCCCCTCGAGAAGTGACTGTTACAGAACGGC
TCCTCCTGGATGGCCCACCACCTCATTCACCAGAGACTCCTCAATTTCCCCCCACAACTGGAGCTGTACTGTACA
CTGTTAAGAGAAACCAGGTTGGGCCTGAGGTTCGCTCCTGCCCCAAGGCATCCCCCAGACTTCAGAAAGAGAGGG
AGGGCCAAAAGGCAGTGAGTGAGTCAGAGGCTTTGATGCTGGTCTGGGATGCATCAGAAACTGAGAAATTGCCTG
GTACCGTGGAACCCCCTGCTTCCTTCCTGAGTCCTGTTTCCTCAAAGACCAGAGATGCAGGGAGAAGACATGTGT
CCGGGAAACCAGACACTCAAGAGAGATGGCTGCCCTCAAGCAGAGCTCGGGTGAAGACAAGAGACAGGACGTGCC
CTGTCCATGAATCTCCATCAGGAATTGACACCTCAGAGACTTCTCCCAAAGCCCCTAGAGGGGGTTTGGCTAAAG
ACAGTGGAACACAGGCCAAGGGTCCAGAGGGGGAGCAGCAGCCAAAGGCCGCAGAAGCTACGGTGTGTGCCAACA
ACAGCAAGGTCAGCTCCACTGGGGAAAAGGTTGTCCTGTGGACAAGGGAAGCTGACCGTGTGATCCTCACCATGT
GCCAGGAGCAAGGGGCACAGCCACAGACCTTCAACATCATCTCCCAGCAGCTGGGAAATAAGACCCCTGCTGAGG
TTTCCCACCGTTTTCGAGAACTCATGCAGCTCTTCCACACTGCCTGTGAAGCCAGCTCTGAGGATGAGGATGATG
CAACCAGTACCAGCAATGCAGACCAGCTGTCTGACCATGGGGACCTTCTGTCTGAAGAGGAGCTGGATGAATGAG
ACTCTGGGAATCATCTACACAGGACCAAACCCAACAGGCGCCCTGGCACCGGGGAGGGGGTAGTTGTACTCTGCT
TGTACAGTCCTTGAGCCCAGTTTACAGATCTGGAGAGCAGGAGGCCAGGACAAGGACAAAGGCTGGAGGATGGAG
TAGGACCCAGGGGCTCTGCCATCCTAGGCATCATTCAAGGTCTTTTATGAAGACTTTACAGATGTCCTCTGTAAA
TAGCATCGAGAGTGGAGTTCAGCTCCTTTCTCTACTTTTTTTTGGTCTGATGGCACATATTTATTGTTCTGTGGT
CTAATCACAGTGTTTCTAAATGTAAAAAGTGCATATGTTGGTGTAGCTAGTCCCGCGACATTGAGCTCCTCTGCA
TGAAGACACTGGGCTCCTGCATCCAGCTGTTTTTATTGCAAACTAGCTCCTTTCTCCCACACTGGGAACTTTAGT
CCACGAGGCTGTCACCACCCTGGTAGCACTGGGCCAGGCTTTGTAGCTCCTGCAGCAGCTCTGCTACGTCATCGT
GCTCCACTCCAGCATCCATGAAGCTGGCCCAGCGCCGCAAGTCGAGTTTGGTGAGGTCTCTGGCCAAGGCTTCCA
GGGTCTGGTGCAGGGACGAAGAGGAACACAGTGCCCCAAACACTGGGATGCTCTCCACTGCTGTGGAGGGAGAGG
AAACAGAGACCTGTAGATGGATGATTATTCTGCCCTGGGACTCGCCAAACTGATAAGGAAGTCCAACCTTAGTAG
ACTTGATTGTAAACTCAACAAATTTGGTGTATTGTCCCCTTAGTACACCAGTACTCCAGAGGAAGAATGCTTTTC
TTGGGAGCCATAGGGTGAATAAAGGAATGTTTAACTGTGG

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FIGURE 3189

CCTTTTTTGCAGTCTCAGGACGGGCGCTTTGGAGCCGGCCCCAGGCAGCGTGTGTCGGTCGCCTAGTCTGGAGAA
CTAGTCCTCGACTCACGGTGAGGGAATGGACCGACACGGGTATTGTACCGCTGAGGGAAAGGAGCGGGACTCCGG
ACCTCCAGGAGTGCAAGGATGATGCTGAAAGGAATAACAAGGCTTATCTCTAGGATCCATAAGTTGGACCCTGGG
CGTTTTTTACACATGGGGACCCAGGCTCGCCAAAGCATTGCTGCTCACCTAGATAACCAGGTTCCAGTTGAGAGT
CCGAGAGCTATTTCCCGCACCAATGAGAATGACCCGGCCAAGCATGGGGATCAGCACGAGGGTCAGCACTACAAC
ATCTCCCCCCAGGATTTGGAGACTGTATTTCCCCATGGCCTTCCTCCTCGCTTTGTGATGCAGGTGAAGACATTC
AGTGAAGCTTGCCTGATGGTAAGGAAACCAGCCCTAGAACTTCTGCATTACCTGAAAAACACCAGTTTTGCTTAT
CCAGCTATACGATATCTTCTGTATGGAGAGAAGGGAACAGGAAAAACCCTAAGTCTTTGCCATGTTATTCATTTC
TGTGCAAAACAGGACTGGCTGATACTACATATTCCAGATGCTCATCTTTGGGTGAAAAATTGTCGGGATCTTCTG
CAGTCCAGCTACAACAAACAGCGCTTTGATCAACCTTTAGAGGCTTCAACCTGGCTGAAGAATTTCAAAACTACA
AATGAGCGCTTCCTGAACCAGATAAAAGTTCAAGAGAAGTATGTCTGGAATAAGAGAGAAAGCACTGAGAAAGGG
AGTCCTCTGGGAGAAGTGGTTGAACAGGGCATAACACGGGTGAGGAACGCCACAGATGCAGTTGGAATTGTGCTG
AAAGAGCTAAAGAGGCAAAGTTCTTTGGGTATGTTTCACCTCCTAGTGGCCGTGGATGGAATCAATGCTCTTTGG
GGAAGAACCACTCTGAAAAGAGAAGATAAAAGCCCGATTGCCCCCGAGGAATTAGCACTTGTTCACAACTTGAGG
AAAATGATGAAAAATGATTGGCATGGAGGCGCCATTGTGTCGGCTTTGAGCCAGACTGGGTCTCTCTTTAAGCCC
CGGAAAGCCTATCTGCCCCAGGAGTTGCTGGGAAAGGAAGGATTTGATGCCCTGGATCCCTTTATTCCCATCCTG
GTTTCCAACTATAACCCAAAGGAATTTGAAAGTTGTATTCAGTATTATTTGGAAAACAATTGGCTTCAACATGAG
AAAGCTCCTACAGAAGAAGGGAAAAAAGAGCTGCTGTTCCTAAGTAACGCGAACCCCTCGCTGCTGGAGCGGCAC
TGTGCCTACCTCTAAGCCAAGATCACAGCATGTGAGGAAGACAGTGGACATCTGCTTTATGCTGGACCCAGTAAG
ATGAGGAAGTCGGGCAGTACACAGGAAGAGGAGCCAGGCCCTTGTACCTATGGGATTGGACAGGACTGCAGTTGG
CTCTGGACCTGCATTAAAATGGGTTTCACTGTGAATGCGTGACAATAAGATATTCCCTTGTTCCTAAAACTTTAT
ATCAGTTTATTGGATGTGGTTTTTCACATTTAAGATAATTATGGCTCTTTTCCTAAAAAATAAAATATCTTTCT

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FIGURE 3190

CAAACAGCAGAAGGAGGTAGAGAAGGTTAAACCCCAGTGTAAGGAAGTTCATCAGACCCTGATTCTGGACCCAGC
ACAAAGGAAGAGACTCCAGCAGCAGATGCAGCAGCATGTTCAGCTCTTGACACAAATCCACCTTCTTGCCACCTG
CAACCCCAATCTCAATCCGGAGGCCAGTAGCACCAGGATATGTCTTAAAGAGCTGGGAACCTTTGCTCAAAGCTC
CATCGCCCTTCACCATCAGTACAACCCCAAGTTTCAGACCCTGTTCCAACCCTGTAACTTGATGGGAGCTATGCA
GCTGATTGAAGACTTCAGCACACATGTCAGCATTGACTGCAGCCCTCATAAAACTGTCAAGAAGACTGCCAATGA
ATTTCCCTGTTTGCCAAAGCAAGTGGCTTGGATCCTGGCCACAAGCAAGGTTTTCATGTATCCAGAGTTACTTCC
AGTGTGTTCCCTGAAGGCAAAGAATCCCCAGGATAAGATCCTCTTCACCAAGGCTGAGGACAATTTGTTAGCTTT
AGGACTGAAGCATTTTGAAGGGACTGAGTTTCTTAACCCTCTAATCAGCAAGTACCTTCTAACCTGCAAGACTGC
CCGCCAACTGACAGTGAGAATCAAGAACCTCAACATGAACAGAGCTCCTGACAACATCATTAAATTTTATAAGAA
GACCAAACAGCTGCCAGTCCTAGGAAAATGCTGTGAAGAGATCCAGCCACATCAGTGGAAGCCACCTATAGAGAG
AGAAGAACACCGGCTCCCATTCTGGTTAAAGGCCAGTCTGCCATCCATCCAGGAAGAACTGCGGCACATGGCTGA
TGGTGCTAGAGAGGTAGGAAATATGACTGGAACCACTGAGATCAACTCAGATCAAGGCCTAGAAAAAGACAACTC
AGAGTTGGGGAGTGAAACTCGGTACCCACTGCTATTGCCTAAGGGTGTAGTCCTGAAACTGAAGCCAGTTGCCGA
CCGTTTCCCCAAGAAGGCTTGGAGACAGAAGCGTTCATCAGTCCTGAAACCCCTCCTTATCCAACCCAGCCCCTC
TCTCCAGCCCAGCTTCAACCCTGGGAAAACACCAGCCCAATCAACTCATTCAGAAGCCCCTCCGAGCAAAATGGT
GCTCCGGATTCCTCACCCAATACAGCCAGCCACTGTTTTACAGACAGTTCCAGGTGTCCCTCCACTGGGGGTCAG
TGGAGGTGAGAGTTTTGAGTCTCCTGCAGCACTGCCTGCTATGCCCCCTGAGGCCAGGACAAGCTTCCCTCTGTC
TGAGTCCCAGACTTTGCTCTCTTCTGCCCCTGTGCCCAAGGTAATGATGCCCTCCCCTGCCTCTTCCATGTTTCG
AAAGCCATATGTGAGACGGAGACCCTCAAAAAGAAGGGGAGCCAGGGCCTTTCGCTGTATCAAACCTGCCCCTGT
TATCCACCCTGCATCTGTTATCTTCACTGTTCCTGCTACCACTGTGAAGATTGTGAGCCTTGGCGGTGGCTGTAA
CATGATCCAGCCTGTCAATGCGGCTGTGGCCCAGAGTCCCCAGACTATTCCCATCGCCACCCTCTTGGTTAACCC
TACTTCCTTCCCCTGTCCATTGAACCAGCCCCTTGTGGCCTCCTCTGTCTCACCCTTAATTGTTTCTGGCAATTC
TGTGAATCTTCCTATACCATCCACCCCTGAAGATAAGGCCCACATGAATGTGGACATTGCTTGTGCTGTGGCTGA
TGGGGAAAATGCCTTTCAGGGCCTAGAACCCAAATTAGAGCCCCAGGAACTATCTCCTCTCTCTGCTACTGTTTT
CCCCAAAGTGGAACATAGCCCAGGGCCTCCACCAGTCGATAAACAGTGCCAAGAAGGATTGTCAGAGAACAGTGC
CTATCGCTGGACCGTTGTGAAAACAGAGGAGGGAAGGCAAGCTCTGGAGCCGCTCCCTCAGGGCATCCAGGAGTC
TCTAAACAACTCTTCCCCTGGGGATTTAGAGGAAGTTGTCAAGATGGAACCTGAAGATGCTACAGAGGAAATCAG
TGGATTTCTTTGAGCTAGGAGAATAAGAGTCTGGAGACTGGGAGCCTTCACTTCGGCCTCCGATTGGTGGCGCAT
AGGGTGTAACCAATAGGAAACCCCTAAAGGGTACTTAAACCCCAGATTTTGCAACTGGGGCTCTTGAGCAGCTTG
CTTTAGCCTGCTCCCACTCTGTGGAATATACTTTTGCTTCAATAAATCTGTGCTTTTATTGC

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FIGURE 3191

AGCGCAGTATGGCGGGCGGGGCCCGGGAGGTGCTCACACTGCAGTTGGGACATTTTGCCGGTTTCGTGGGCGCGC
ACTGGTGGAACCAGCAGGATGCTGCGCTGGGCCGAGCGACCGATTCCAAGGAGCCCCCGGGAGAGCTGTGCCCCG
ACGTCCTGTATCGTACGGGCCGGACGCTGCACGGCCAGGAGACCTACACGCCGCGACTCATCCTCATGGATCTGA
AGGGTAGTTTGAGCTCCCTAAAAGAGGAAGGTGGACTCTACAGGGACAAACAGTTGGATGCTGCAATAGCATGGC
AGGGGAAGCTCACCACACACAAAGAGGAACTCTATCCCAAGAACCCTTATCTCCAAGACTTTCTGAGTGCAGAGG
GAGTGCTGAGTAGTGATGGTGTCTGGAGGGTCAAATCCATTCCCAATGGCAAAGGTTCCTCACCACTCCCCACCG
CTACAACTCCAAAACCACTTATCCCTACAGAGGCCAGCATCAGGGTCTGGTCAGACTTCCTCAGAGTCCATCTCC
ATCCCCGGAGCATCTGTATGATTCAGAAGTACAACCACGATGGGGAAGCAGGTCGGCTGGAGGCTTTTGGCCAAG
GGGAAAGTGTCCTAAAGGAACCCAAGTACCAGGAAGAGCTGGAGGACAGGCTGCATTTCTACGTGGAGGAATGTG
ACTACTTGCAGGGCTTCCAGATCCTGTGTGACCTGCACGATGGCTTCTCTGGGGTAGGCGCGAAGGCGGCAGAGC
TGCTACAAGATGAATATTCAGGGCGGGGAATAATAACCTGGGGCCTGCTACCTGGTCCCTACCATCGTGGGGAGG
CCCAGAGAAACATCTATCGTCTATTAAACACAGCTTTTGGTCTCGTGCACCTGACTGCTCACAGCTCTCTTGTCT
GCCCCTTGTCCTTGGGTGGGAGCCTGGGCCTGCGACCCGAGCCACCTGTCAGCTTCCCTTACCTGCATTATGATG
CCTGAGGCCAAGTGCCCATCTTGGTGTCTTCTTACAGGCCACTCTGCCCTTCCACTGCAGTGCCATCCTGGCTAC
AGCCCTGGACACAGTCACTGTTCCTTATCGCCTGTGTTCCTCTCCAGTTTCCATGGTTCATCTGGCTGACATGCT
GAGCTTCTGTGGGAAAAAGGTGGTGACAGCAGGAGCAATCATCCCTTTCCCCTTGGCTCCAGGCCAGTCCCTTCC
TGATTCCCTGATGCAGTTTGGAGGAGCCACCCCATGGACCCCACTGTCTGCATGTGGGGAGCCTTCTGGAACACG
TTGCTTTGCCCAGTCAGTGGTGCTGAGGGGTATAGACAGAGCATGCCACACAAGCCAGCTCACCCCAGGGACACC
TCCACCCTCTGCCCTTCATGCATGTACCACTGGGGAAGAAATCTTGGCTCAGTATTTACAACAGCAGCAGCCTGG
AGTCATGAGTTCTTCCCATCTGCTGCTGACTCCCTGCAGGGTGGCTCCTCCTTACCCCCACCTCTTCTCAAGCTG
CAGTCCACCGGGTATGGTTCTGGATGGTTCCCCCAAGGGAGCAGCAGTGGAGAGCATCCCAGTGTTTGGGGCACT
GTGTTCCTCTTCGTCCCTGCACCAGACCCTGGAAGCCTTGGCCAGAGACCTCACCAAACTCGACTTGCGGCGCTG
GGCCAGCTTCATGGATGCTGGAGTGGAGCACGATGACGTAGCAGAGCTGCTGCAGGAGCTACAAAGCCTGGCCCA
GTGCTACCAGGGTGGTGACAGCCTCGTGGACTAAAGTTCCCAGTGTGGGAGAAAGGAGCTAGTTTGCAATAAAAA
CAGCTGGATGCAGGAGCCCAGTGTCTTCATGCAGAGGAGCTCAATGTCGCGGGACTAGCTACACCAACATATGCA
CTTTTTACATTTAGAAACACTGTGATTAGACCACAGAACAATAAATATGTGCCATCAGACC

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FIGURE 3192A

CGCCTCCCCTCAGTTTGCCCCCTTTAGCCTTCCACCTTTCCCTTCTCCTCTCTCGCATTTCCGCCAGTCAGCTTA
CCCGCTGGCCGCCTCCTGACAAGCGGGAGGGATCCGCCGTGGACCCAGGGAAGCGGAGGAGCCTGGCGGCCACCC
CCTCTTCCCCACTTCCCTGCACTCTCATCGCTCTCGGCCTCGGCCTCGGCCTCCGACACGAGAAAGATGCTGGTT
TCGAGTTTTGGAGATCCTTGTTTTTTATGGAACACAGTTCTGTAAAATTTTCATAAGATTCCTTGGCAATAACAT
ACGCTTGTGATGGACCCTAGAAATACTGCTATGTTAGGATTGGGTTCTGATTCCGAAGGTTTTTCAAGAAAGAGT
CCTTCTGCCATCAGTACTGGCACATTGGTCAGTAAGAGAGAAGTAGAGCTAGAAAAAAACACAAAGGAGGAAGAG
GACCTTCGCAAACGGAATCGAGAAAGAAACATCGAAGCTGGGAAAGATGATGGTTTGACTGATGCACAGCAACAG
TTTTCAGTGAAAGAAACAAACTTTTCAGAGGGAAATTTAAAATTGAAAATTGGCCTCCAGGCTAAGAGAACTAAA
AAACCTCCAAAGAACTTGGAGAACTATGTATGTCGACCTGCCATAAAAACAACTATTAAGCACCCAAGGAAAGCA
CTTAAAAGTGGAAAGATGACGGATGAAAAGAATGAACACTGTCCTTCAAAACGAGACCCTTCAAAGTTGTACAAG
AAAGCAGATGATGTTGCAGCCATTGAATGCCAGTCTGAAGAAGTCATCCGTCTTCATTCACAGGGAGAAAACAAT
CCTTTGTCTAAGAAGCTGTCTCCAGTACACTCAGAAATGGCAGATTATATTAATGCAACGCCATCTACTCTTCTT
GGTAGCCGGGATCCTGATTTAAAGGACAGAGCATTACTTAATGGAGGAACTAGTGTAACAGAAAAGTTGGCACAG
CTGATTGCTACCTGTCCTCCTTCCAAGTCTTCCAAGACAAAACCGAAGAAGTTAGGAACTGGCACTACAGCAGGA
TTGGTTAGCAAGGATTTGATCAGGAAAGCAGGTGTTGGCTCTGTAGCTGGAATAATACATAAGGACTTAATAAAA
AAGCCAACCATCAGCACAGCAGTTGGATTGGTAACTAAAGATCCTGGGAAAAAGCCAGTGTTTAATGCAGCAGTA
GGATTGGTCAATAAGGACTCTGTGAAAAAACTGGGAACTGGCACTACAGCGGTATTCATTAATAAAAACTTAGGC
AAAAAGCCAGGAACTATCACTACAGTAGGACTGCTAAGCAAAGATTCAGGAAAGAAGCTAGGAATTGGTATTGTT
CCAGGTTTAGTGCATAAAGAGTCTGGCAAGAAGTTAGGACTTGGCACTGTGGTTGGACTGGTTAATAAAGATTTG
GGAAAGAAATTGGGTTCTACTGTTGGCCTAGTGGCCAAGGACTGTGCAAAGAAGATTGTAGCAAGTTCAGCAATG
GGATTGGTTAATAAGGACATTGGAAAGAAACTAATGAGTTGTCCTTTGGCAGGTCTGATCAGTAAAGATGCCATA
AACCTTAAAGCCGAAGCACTGCTCCCCACTCAGGAACCGCTTAAGGCTTCTTGTAGTACAAACATCAATAATCAG
GAAAGTCAGGAACTTTCTGAATCCCTGAAAGATAGTGCCACCAGCAAAACTTTTGAAAAGAATGTTGTACGGCAG
AATAAAGAAAGCATATTGGAAAAGTTCTCAGTACGAAAAGAAATCATTAATTTGGAGAAAGAAATGTTTAATGAA
GGAACATGCATTCAGCAAGACAGTTTCTCATCCAGTGAAAAGGGATCTTATGAAACCTCAAAGCATGAAAAGCAG
CCTCCTGTATATTGCACTTCTCCGGACTTTAAAATGGGAGGTGCTTCTGATGTATCTACCGCTAAATCCCCATTC
AGTGCAGTAGGAGAAAGCAATCTCCCTTCCCCATCACCTACTGTATCTGTTAATCCTTTAACCAGAAGTCCCCCT
GAAACTTCTTCACAGTTGGCTCCTAATCCATTACTTTTAAGTTCTACTACAGAACTAATCGAAGAAATTTCTGAA
TCTGTTGGAAAGAACCAGTTTACTTCTGAAAGTACCCACTTGAACGTTGGTCATAGGTCAGTTGGTCATAGTATA
AGTATTGAATGTAAAGGGATTGATAAAGAGGTAAATGATTCAAAAACTACCCATATAGATATTCCAAGAATAAGC
TCTTCCCTTGGAAAAAAGCCAAGTTTGACTTCTGAATCCAGCATTCATACTATTACTCCTTCAGTTGTTAACTTC
ACTAGTTTATTTAGTAATAAGCCTTTTTTAAAACTGGGTGCAGTATCTGCATCAGACAAACACTGCCAAGTTGCT
GAAAGCCTAAGTACTAGTTTGCAGTCCAAACCATTAAAAAAAAGAAAAGGAAGAAAACCTCGGTGGACTAAAGTG
GTGGCAAGAAGCACATGCCGGTCTCCAAAAGGGCTAGAATTAGAAAGATCAGAGCTTTTTAAAAACGTTTCATGT
AGCTCACTATCAAATAGTAATTCTGAGCCAGCCAAGTTTATGAAAAACATTGGACCCCCTTCATTTGTAGATCAT
GACTTCCTTAAACGCCGATTGCCAAAGTTGAGCAAATCCACAGCTCCATCTCTTGCTCTCTTAGCTGATAGTGAA
AAACCATCTCATAAGTCTTTTGCTACTCACAAACTATCCTCCAGTATGTGTGTCTCTAGTGACCTTTTGTCTGAT
ATTTATAAGCCCAAAAGAGGAAGGCCTAAATCTAAGGAGATGCCTCAACTGGAAGGGCCACCTAAAAGGACTTTA
AAAATCCCTGCTTCTAAAGTGTTTTCTTTACAGTCTAAGGAAGAACAAGAACCCCCAATTTTACAGCCAGAAATT
GAAATCCCTTCCTTCAAACAAGGTCTGTCTGTGTCTCCTTTTCCAAAAAAGAGAGGCAGGCCTAAGAGGCAAATG
AGGTCACCAGTCAAGATGAAGCCACCTGTACTGTCAGTGGCTCCATTTGTTGCCACTGAAAGTCCAAGCAAGCTA
GAATCTGAAAGTGACAACCATAGAAGTAGCAGTGATTTCTTTGAGAGCGAGGATCAACTTCAGGATCCAGATGAC
CTAGATGACAGTCATAGGCCAAGTGTCTGTAGTATGAGTGACCTTGAGATGGAACCAGATAAAAAAATTACCAAG
AGAAACAATGGACAATTAATGAAAACAATTATCCGCAAAATAAATAAAATGAAGACTTTAAAGAGAAAGAAACTG
TTGAATCAGATTCTTTCAAGTTCTGTAGAATCAAGTAATAAAGGGAAAGTGCAATCCAAACTCCATAATACGGTA
TCAAGTCTTGCTGCCACATTTGGCTCTAAATTGGGCCAACAGATAAATGTCAGCAAGAAAGGAACCATTTATATA
GGAAAGAGAAGAGGTCGCAAACCAAAAACTGTCTTAAATGGTATTCTTTCTGGTAGTCCTACTAGCCTTGCTGTT
CTTGAGCAAACAGCTCAACAGGCAGCTGGGTCAGCATTAGGACAGATTCTTCCCCCATTACTGCCTTCATCTGCT

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FIGURE 3192B

AGTAGTTCTGAGATTCTTCCATCACCTATTTGCTCTCAGTCTTCTGGGACTAGTGGAGGTCAGAGCCCTGTAAGT
AGTGATGCAGGTTTTGTTGAACCCAGTTCAGTGCCATATTTGCATTTACACTCCAGACAGGGCAGTATGATTCAG
ACTCTTGCAATGAAGAAGGCCTCAAAGGGGAGGAGGCGGTTATCTCCTCCTACTTTGTTGCCAAATTCTCCTTCG
CACTTGAGTGAACTCACATCTCTAAAAGAAGCTACTCCTTCCCCAATCAGTGAGTCTCATAGTGATGAGACCATT
CCCAGTGATAGTGGAATTGGAACAGATAATAACAGCACATCAGACAGGGCAGAGAAATTTTGTGGGCAAAAAAAG
AGGAGGCATTCTTTTGAGCATGTTTCTCTGATTCCCCCTGAAACCTCTACAGTGCTAAGCAGTCTTAAAGAAAAA
CATAAACACAAATGTAAGCGCAGGAATCATGATTACCTCAGCTATGACAAGATGAAAAGGCAGAAACGAAAACGG
AAAAAGAAATATCCCCAGCTTCGAAATAGACAGGATCCAGACTTTATTGCAGAGCTGGAGGAACTAATAAGTCGC
CTAAGTGAAATTCGGATCACTCATCGAAGTCATCATTTTATCCCCCGAGATCTTCTGCCAACTATCTTTCGAATC
AACTTTAATAGTTTCTATACACATCCTTCTTTCCCCTTAGACCCTTTGCACTACATTCGAAAACCTGACTTAAAA
AAGAAAAGAGGGAGACCCCCTAAGATGAGGGAGGCAATGGCTGAAATGCCTTTTATGCACAGCCTTAGTTTTCCT
CTTTCTAGTACTGGATTCTATCCATCTTATGGTATGCCTTACTCTCCTTCACCCCTTACAGCTGCTCCCATAGGA
TTAGGTTACTATGGAAGGTATCCTCCCACTCTTTATCCACCTCCTCCATCTCCTTCTTTCACCACGCCACTTCCA
CCTCCTTCCTATATGCATGCTGGTCATTTACTTCTCAATCCTGCCAAATACCATAAGAAAAAGCATAAGCTACTT
CGACAGGAGGCCTTTCTTACAACCAGCAGGACTCCCCTCCTTTCCATGAGTACCTACCCCAGTGTTCCTCCTGAG
ATGGCCTATGGTTGGATGGTTGAGCACAAACACAGGCACCGTCACAAACACAGAGAACACCGTTCTTCTGAACAA
CCCCAGGTTTCTATGGACACTGGCTCTTCCCGATCTGTCCTGGAATCTTTGAAGCGCTATAGATTTGGAAAGGAT
GCTGTTGGAGAGCGATATAAGCATAAGGAAAAGCACCGTTGTCACATGTCCTGCCCTCATCTCTCTCCTTCAAAA
AGCTTAATAAACAGAGAGGAACAGTGGGTCCACCGAGAGCCTTCAGAATCTAGTCCATTGGCCTTGGGATTGCAG
ACACCTTTACAGATTGACTGTTCAGAAAGTTCTCCAAGCTTATCCCTTGGAGGATTCACTCCCAACTCTGAGCCA
GCCAGCAGTGATGAACATACAAACCTTTTCACAAGTGCAATAGGCAGCTGCAGAGTTTCAAACCCTAACTCCAGT
GGCCGGAAGAAATTAACTGACAGCCCTGGACTCTTTTCTGCACAGGACACTTCACTAAATCGGCTTCACAGAAAG
GAGTCACTGCCTTCTAACGAAAGGGCAGTACAGACTTTGGCAGGCTCCCAGCCAACCTCTGATAAACCCTCCCAG
CGGCCATCAGAGAGCACAAATTGTAGCCCTACCCGGAAAAGGTCTTCATCTGAGAGTACTTCTTCAACAGTAAAC
GGAGTTCCCTCTCGAAGTCCAAGATTAGTTGCTTCTGGGGATGACTCTGTGGATAGTCTGCTGCAGCGGATGGTA
CAAAATGAGGACCAAGAGCCCATGGAGAAAAGTATTGATGCTGTGATTGCAACTGCCTCTGCACCACCTTCTTCC
AGTCCAGGCCGTAGCCACAGCAAGGACCGAACCCTGGGAAAACCAGACAGCCTTTTAGTGCCTGCAGTCACAAGT
GACTCTTGCAATAATAGCATCTCACTCCTATCTGAAAAGTTGACAAGCAGCTGTTCCCCCCATCATATCAAGAGA
AGTGTAGTGGAAGCTATGCAACGCCAAGCTCGGAAAATGTGCAATTACGACAAAATCTTGGCCACAAAGAAAAAC
CTAGACCATGTCAATAAAATCTTAAAAGCCAAAAAACTTCAAAGGCAGGCCAGGACAGGGAATAACTTTGTGAAA
CGTAGGCCAGGTCGACCTCGGAAATGTCCCCTTCAGGCTGTCGTATCAATGCAAGCATTCCAGGCTGCTCAGTTT
GTCAACCCAGAATTGAACAGAGACGAGGAAGGAGCAGCACTGCACCTCAGTCCTGACACAGTTACAGATGTAATT
GAGGCTGTTGTTCAGAGTGTAAATCTGAACCCAGAACATAAAAAGGGGTTGAAGAGAAAAGGTTGGCTATTGGAA
GAACAGACCAGAAAAAAGCAGAAGCCATTACCAGAGGAAGAAGAGCAAGAGAATAATAAAAGCTTTAATGAAGCA
CCAGTTGAGATTCCCAGTCCTTCTGAAACCCCAGCTAAACCTTCTGAACCTGAAAGTACCTTGCAGCCTGTGCTT
TCTCTCATCCCAAGGGAAAAGAAGCCCCCACGTCCCCCAAAGAAGAAGTATCAGAAAGCAGGGCTGTATTCTGAC
GTTTACAAAACTACAGACCCAAAGAGTCGATTGATCCAATTAAAGAAAGAGAAGCTGGAGTATACTCCAGGAGAG
CATGAATATGGATTATTTCCAGCGCCCATTCATGTTGTGTTTTTTGTTTCAGGAAAGTATCTAAGACAAAAGAGA
ATTGACTTCCAGCTTCCTTATGATATCCTTTGGCAGTGGAAACACAATCAGCTATACAAAAAGCCAGATGTCCCA
CTATATAAGAAAATTCGTTCAAATGTCTACGTTGATGTCAAACCCCTTTCTGGTTACGAAGCTACCACCTGTAAC
TGTAAGAAGCCAGATGATGACACCAGGAAGGGCTGTGTTGATGACTGCCTCAATAGAATGATCTTTGCTGAGTGT
TCCCCCAACACTTGCCCATGTGGCGAGCAATGCTGTAACCAGAGGATACAGAGGCATGAATGGGTGCAATGTCTA
GAACGATTTCGAGCTGAGGAAAAAGGTTGGGGAATCAGAACCAAAGAGCCCCTAAAAGCTGGGCAGTTCATCATT
GAATACCTAGGGGAGGTCGTCAGTGAACAGGAGTTCAGGAACAGGATGATTGAGCAGTATCATAATCACAGTGAC
CACTACTGCCTGAACCTGGATAGTGGGATGGTGATTGACAGTTACCGCATGGGAAATGAGGCCCGATTCATCAAC
CATAGCTGTGACCCAAATTGTGAAATGCAGAAATGGTCTGTTAATGGAGTATACCGGATTGGACTCTATGCTCTT
AAAGACATGCCAGCTGGGACTGAACTCACTTATGATTATAACTTTCATTCCTTCAATGTGGAAAAACAGCAACTT
TGTAAGTGTGGCTTTGAGAAATGTCGAGGAATCATCGGAGGCAAGAGTCAGCGTGTGAATGGACTCACCAGCAGC

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FIGURE 3192C

AAAAACAGCCAGCCCATGGCCACACACAAAAAATCTGGACGGTCAAAAGAGAAGAGAAAGTCTAAGCACAAGCTG
AAGAAAAGGAGAGGCCATCTCTCTGAGGAACCCAGTGAAAATATCAACACCCCAACTAGATTGACCCCCCAATTA
CAGATGAAGCCAATGTCCAATCGTGAAAGGAACTTTGTGTTAAAGCATCATGTATTCTTGGTCCGAAACTGGGAG
AAGATTCGTCAAAAACAGGAGGAAGTAAAGCACACCAGTGATAATATTCACTCAGCATCATTATATACCCGTTGG
AATGGGATCTGCCGAGATGATGGGAATATCAAGTCTGATGTCTTCATGACCCAGTTCTCTGCCCTGCAGACAGCT
CGATCTGTTCGAACAAGACGGTTGGCAGCTGCAGAGGAAAATATTGAAGTGGCTCGGGCAGCCCGCCTAGCCCAG
ATCTTCAAAGAAATTTGTGATGGTATCATCTCTTATAAAGATTCTTCCCGGCAAGCACTGGCAGCTCCACTTTTG
AACCTTCCCCCAAAGAAAAAGAATGCTGATTATTATGAGAAGATCTCTGATCCCCTAGATCTTATCACCATAGAG
AAGCAGATCCTCACTGGTTACTATAAGACAGTGGAAGCTTTTGATGCTGACATGCTCAAAGTCTTTCGGAATGCT
GAGAAGTACTATGGGCGTAAATCCCCAGTTGGGAGAGATGTTTGTCGTCTACGAAAGGCCTATTACAATGCCCGG
CATGAGGCATCAGCCCAGATTGATGAGATTGTGGGAGAGACAGCAAGTGAGGCAGACAGCAGTGAGACCTCAGTC
TCTGAAAAGGAGAATGGGCATGAGAAGGACGACGATGTTATTCGCTGTATCTGTGGCCTCTACAAGGATGAAGGT
CTCATGATCCAGTGTGACAAGTGCATGGTATGGCAGCACTGTGATTGTATGGGAGTGAACTCAGATGTGGAGCAC
TACCTTTGTGAGCAGTGTGACCCAAGGCCTGTGGACAGGGAGGTTCCCATGATCCCTCGGCCCCACTATGCCCAA
CCTGGCTGTGTCTACTTCATCTGTTTGCTCCGAGATGACTTGCTGCTTCGTCAGGGTGACTGTGTGTATCTGATG
AGGGATAGTCGGCGCACCCCTGATGGCCACCCGGTCCGTCAGTCCTATCGACTGTTATCTCACATTAACCGAGAT
AAACTTGACATCTTTCGCATTGAGAAGCTTTGGAAGAATGAAAAAGAGGAACGGTTTGCCTTTGGTCACCATTAT
TTCCGTCCCCACGAAACACACCACTCTCCATCCCGTCGGTTCTATCATAATGAACTATTTCGGGTGCCACTCTAT
GAGATCATTCCCTTGGAGGCTGTAGTGGGGACCTGCTGTGTGTTGGACCTTTATACGTATTGTAAAGGGAGACCC
AAAGGAGTAAAGGAGCAAGATGTGTACATCTGTGATTATCGGCTTGACAAGTCAGCACACCTGTTTTACAAGATC
CACCGGAACCGCTATCCTGTCTGCACCAAACCCTATGCTTTTGATCACTTCCCCAAGAAGCTCACTCCCAAAAAA
GATTTCTCGCCTCATTACGTCCCAGACAACTACAAGAGGAATGGAGGACGATCATCCTGGAAGTCTGAGCGCTCA
AAGCCACCCCTAAAAGACTTGGGCCAGGAGGATGATGCTCTACCCTTGATTGAAGAGGTTCTAGCCAGTCAAGAG
CAAGCAGCCAATGAGATACCCAGCCTGGAGGAGCCAGAACGGGAAGGGGCCACTGCTAACGTCAGTGAGGGTGAA
AAAAAAACAGAGGAAAGTAGTCAAGAACCCCAGTCAACCTGTACCCCTGAGGAACGACGGCATAACCAACGGGAA
CGACTCAACCAGATCTTGCTCAATCTCCTTGAAAAAATCCCTGGAAAAAATGCCATTGATGTGACCTACTTGCTG
GAGGAAGGATCAGGCAGGAAACTGCGAAGGCGTACTTTGTTTATCCCAGAAAACAGCTTTCGAAAGTGACCCTCA
AAGAATGAGAACCTCAAGCATCTGGGATCCAGTGGAGCTAATCAGTCCTGCCTCCTGCTCTCTGGGTATAGACAG
GGGTGGGAAGGGTCCATCTGGGCAAGGGGAATGGGGCCATGTTGTTGACATTAGGTACTTAATAAGCCTTGGAGC
TAGTGGAGAGGGAGAGGAAAGGGTTCTGTCCAAGACAGTTCAGGTTAATTAATTTTCTTCTCCATTGCTTCACCT
TAAGGGTTAATAATGTAGAGAGGAGGGAGGACCACATTGATGACCAGAACCTACTGGTACTTTATAGCATTTGCC
CCACCCCACAGCTTAGGTTTTTCTGTCATCCTCAGATCCCACAGGCATTGCGAAGAAGCTGCTTCCTATACCCAG
GTATAACTCAAAATCCAAAGGGATAGGGCCAGGATCCCTATTCCTACCCCATCTATTCTCTGTTGGCTCCAAGAG
CTACCCCAGAGACCTTAAACAGAAACAGTAGCTGAGGCTTCTTCCTAGATACCTGACTAGGGAAGTTTGTCTCTC
CTTTCTTGCCCAACCAGGTCAAAGTAAAATGTGAGTTGACAGCTCAAAGCACTTGTAACTGCTGCCCCCTCCCTA
CCTCTACTCCCCAAAATGGAATCATGGGATAGGGAAGGCCCCCATGGGGTCAGAAGGGCACGGTAGTTCTTGCAA
TTATTTTTGTTTTACCCTTCATAACC

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FIGURE 3193

CGCCCTACAGGCCCTAGCAGGGCAGGCGGGAGGTGAGCGCGGCCATCCCGCTCCCGGAGTTCCGGGATCCTGGAG
TCCGTAGTTCGTGGTCCTTCGCCGGTGTCCCCGGAGCCCAGCGGCTGTGGATGGCAGAAGCCCAGAGTGGGACTG
GTCAGCTGCAGGAGCAGAAGAAAGGTCTTCTGATAGCCGTCAGCGTCTCCGTTGATAAAATCATCTCGCATTTCG
GGGCCGCCCGGAACTTGGTGCAGAAGGCCCAGTTGGGTGATAGCCGGCTGAGCCCGGATGTGGGGCACCTGGTGC
TGACCACCCTCTGCCCGGCCCTCCACGCCCTGGTGGCGGACGGGCTGAAGCCTTTCCGGAAGGACCTCATCACCG
GGCAGCGCAGGAGCAGCCCCTGGAGCGTGGTGGAGGCGTCGGTGAAGCCAGGCTCCAGCACCCGCTCCCTTGGAA
CCCTGTATAGCCAGGTCAGCCGTCTAGCCCCGCTGAGCAGCAGCCGTAGCCGCTTCCATGCCTTTATCCTGGGCC
TCCTCAACACCAAGCAGTTGGAGCTGTGGTTTTCCAGTCTCCAGGAAGATGCAGGCCTGCTCTCCCTCCTGTACC
TGCCAACAGGATTTTTCTCCCTGGCCCGCGGTGGTTGTCCCTCCCTGTCCACAGAGCTGCTGCTCCTGCTGCAGC
CATTGTCGGTGCTCACTTTCCACCTGGACCTGCTCTTTGAGCACCACCACCACCTGCCCCTGGGCCCACCTCAGG
CCCCTGCCCCTCCAGGCCCACCTCCAGCTCTGCAGCAGACTATGCAAGCCATGCTGCACTTTGGGGGCCGGCTGG
CCCAGAGCCTTCGGGGGACTTCCAAGGAAGCTGCTTCAGACCCCTCTGACTCTCCAAACCTTCCCACACCAGGGA
GCTGGTGGGAGCAGTTGACCCAGGCCTCCCGGGTCTATGCCTCTGGGGGCACTGAGGGCTTTCCTCTTTCCCGAT
GGGCACCGGGGCGTCATGGGACTGCAGCTGAAGAAGGTGCACAGGAGAGACCCCTGCCCACAGATGAGATGGCAC
CAGGCAGGGGCCTCTGGTTGGGAAGACTATTTGGAGTGCCTGGGGGCCCCGCAGAAAATGAGAATGGAGCCCTAA
AGTCCAGGAGACCATCTAGCTGGCTGCCCCCGACAGTGAGTGTGTTGGCTCTTGTGAAGCGGGGGGCACCTCCCG
AGATGCCTTCTCCTCAGGAGCTTGAGGCCTCAGCACCCAGGATGGTGCAAACCCATAGGGCAGTGCGGGCTCTCT
GTGATCACACTGCTGCAAGACCTGACCAGTTGAGCTTCCGGCGTGGGGAAGTGCTGCGTGTCATCACCACAGTGG
ATGAGGACTGGCTCCGCTGTGGGCGGGATGGCATGGAGGGTCTGGTGCCTGTGGGGTATACCTCCCTTGTTCTGTAG
CCCTGGGACCCTTTCCTGCGTATGTGTCTCCTTCCTGTCACCTGGGAATGGAATGGCCAGTGAACACCATCCC
AGAAGCATTTTCCCTCTGCAAAATGACGTTTCTTCCCACGTCTGTTTCTGCTAATATTTAAAATAAACTTTCCTT
CTTCCCTCCTATACCCACCTGTAAGGTGAAATCTGCTCTTCTTCCAAATATATAAAAAAGGAATTGCCCTCCAGG
TAATCCCTTTCCTTTTTCCCGTCTATATAAGGGAATGTCTTCCTTCCTATCTATCTGCAAAATGGAAATCTAGAC
CTCCTTCTTCATCCATAAGTGGACTGTGCCAGTACAATACATGCCTCAGCCCCCAAGCCTAGAAGGACCTCTAGT
CTCCTTCCTGTGTGGAATCTTCCCCACTCCATCCCTCCCAAGTTGCCTGTATTGATAATGTACTCACTCATGCTG
TACTAGGTGCTGAAGCCTGGACACCCTTGGTGGGTGGGCCTGTGGTGATGGTTTGCATCCTTCCTCCTTTGTCCC
AATAAAGTATGGGAGTTG

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FIGURE 3194

AGGTGAGAGAGGATGTGTGCTGGGCCTTGGAGGAAGGGGGCCGAGACCGGGCCTTACTTCTGTAACGATACTGTG
AGGCATCGGAAGGCCAGCCTGTTGTGTCCGTTTTGAAGGATGCCCCTGTCCCGCTGGTTGAGATCTGTGGGGGTC
TTCCTGCTGCCAGCCCCCTACTGGGCACCCCGGGAGAGGTGGCTGGGTTCCCTACGGCGGCCCTCCCTGGTGCAC
GGGTACCCAGTCCTGGCCTGGCACAGTGCCCGCTGCTGGTGCCAAGCGTGGACAGAGGAACCTCGAGCCCTTTGC
TCCTCCCTCAGAATGAACGGAGACCAGAATTCAGATGTTTATGCCCAAGAAAAGCAGGATTTCGTTCAGCACTTC
TCCCAGATCGTTAGGGTGCTGACTGAGGATGAGATGGGGCACCCAGAGATAGGAGATGCTATTGCCCGGCTCAAG
GAGGTCCTGGAGTACAATGCCATTGGAGGCAAGTATAACCGGGGTTTGACGGTGGTAGTAGCATTCCGGGAGCTG
GTGGAGCCAAGGAAACAGGATGCTGATAGTCTCCAGCGGGCCTGGACTGTGGGCTGGTGTGTGGAACTGCTGCAA
GCTTTCTTCCTGGTGGCAGATGACATCATGGATTCATCCCTTACCCGCCGGGGACAGATCTGCTGGTATCAGAAG
CCGGGCGTGGGTTTGGATGCCATCAATGATGCTAACCTCCTGGAAGCATGTATCTACCGCCTGCTGAAGCTCTAT
TGCCGGGAGCAGCCCTATTACCTGAACCTGATCGAGCTCTTCCTGCAGAGTTCCTATCAGACTGAGATTGGGCAG
ACCCTGGACCTCCTCACAGCCCCCCAGGGCAATGTGGATCTTGTCAGATTCACTGAAAAGAGGTACAAATCTATT
GTCAAGTACAAGACAGCTTTCTACTCCTTCTACCTTCCTATAGCTGCAGCCATGTACATGGCAGGAATTGATGGC
GAGAAGGAGCACGCCAATGCCAAGAAGATCCTGCTGGAGATGGGGGAGTTCTTTCAGATTCAGGATGATTACCTT
GACCTCTTTGGGGACCCCAGTGTGACCGGCAAAATTGGCACTGACATCCAGGACAACAAATGCAGCTGGCTGGTG
GTTCAGTGTCTGCAACGGGCCACTCCAGAACAGTACCAGATCCTGAAGGAAAATTACGGGCAGAAGGAGGCTGAG
AAAGTGGCCCGGGTGAAGGCGCTATATGAGGAGCTGGATCTGCCAGCAGTGTTCTTGCAATATGAGGAAGACAGT
TACAGCCACATTATGGCTCTCATTGAACAGTACGCAGCACCCCTGCCCCCAGCCGTCTTTCTGGGGCTTGCGCGC
AAAATCTACAAGCGGAGAAAGTGACCTAGAGATTGCAAGGGCGGGGAGAGGAGGCTCTCAATAAATAATCGTGTA
ACCTT

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FIGURE 3195

TCCCAGGGTCCCGGGTTGGGGGGGTGGAGCAGCATTTCGTCGCCGCGGGGGTGCCGGGACTCCGGCCGCAGTGTC
GCCGCCATCACGGACTTCCTGTGGGACAAGCGCACGGGCCTCGCCGCCAGAACG**ATG**CCGCATCCTCGAAGGTAC
CACTCCTCAGAGCGAGGCAGCCGGGGGAGTTACCGTGAACACTATCGGAGCCGAAAGCATAAGCGACGAAGAAGT
CGCTCCTGGTCAAGTAGTAGTGACCGGACACGACGGCGTCGGCGAGAGGACAGCTACCATGTCCGTTCTCGAAGC
AGTTATGATGATCGTTCGTCCGACCGGAGGGTGTATGACCGGCGATACTGTGGCAGCTACAGACGCAACGATTAT
AGCCGGGATCGGGGAGATGCCTACTATGACACAGACTATCGGCATTCCTATGAATATCAGCGGGAGAACAGCAGT
TACCGCAGCCAGCGCAGCAGCCGGAGGAAGCACAGACGGCGGAGGAGGCGCAGCCGGACATTTAGCCGCTCATCT
TCGCAGCACAGCAGCCGGAGAGCCAAGAGTGTAGAGGACGACGCTGAGGGCCACCTCATCTACCACGTCGGGGAC
TGGCTACAAGAGCGATATGAAATCGTTAGCACCTTAGGAGAGGGGACCTTCGGCCGAGTTGTACAATGTGTTGAC
CATCGCAGGGGTGGGGCTCGAGTTGCCCTGAAGATCATTAAGAATGTGGAGAAGTACAAGGAAGCAGCTCGACTT
GAGATCAACGTGCTAGAGAAAATCAATGAGAAAGACCCTGACAACAAGAACCTCTGTGTCCAGATGTTTGACTGG
TTTGACTACCATGGCCACATGTGTATCTCCTTTGAGCTTCTGGGCCTTAGCACCTTCGATTTCCTCAAAGACAAC
AACTACCTGCCCTACCCCATCCACCAAGTGCGCCACATGGCCTTCCAGCTGTGCCAGGCTGTCAAGTTCCTCCAT
GATAACAAGCTGACACATACAGACCTCAAGCCTGAAAATATTCTGTTTGTGAATTCAGACTATGAGCTCACCTAC
AACCTAGAGAAGAAGCGAGATGAGCGCAGTGTGAAGAGCACAGCTGTGCGGGTGGTAGACTTTGGCAGTGCCACC
TTTGACCATGAGCACCATAGCACCATTGTCTCCACTCGCCATTACCGAGCACCAGAAGTCATCCTTGAGTTGGGC
TGGTCACAGCCTTGTGATGTGTGGAGTATAGGCTGCATCATCTTTGAATACTATGTGGGATTCACCCTCTTCCAG
ACCCATGACAACAGAGAGCATCTAGCCATGATGGAAAGGATCTTGGGTCCTATCCCTTCCCGGATGATCCGAAAG
ACAAGAAAGCAGAAATATTTTTACCGGGGTCGCCTGGATTGGGATGAGAACACATCAGCTGGGCGCTATGTTCGT
GAGAACTGCAAACCGCTGCGGCGGTATCTGACCTCAGAGGCAGAGGAACACCACCAGCTCTTCGATCTGATTGAA
AGCATGCTAGAGTATGAACCAGCTAAGCGGCTGACCTTGGGTGAAGCCCTTCAGCATCCTTTCTTCGCCCGCCTT
CGGGCTGAGCCGCCCAACAAGTTGTGGGACTCCAGTCGGGATATCAGTCGG**TGA**CGATCAGGCCCTGGGCCCCCC
TGCATCTTTTATAGCAGTGGGTGTCCAGTCCAGGACACTGGTGCTTTTTTATACAAGAGAACGAGCCAGAGTTCA
CTCCTTCCTCCTGGCTCTCTATATACCTGTGAATATGTGAAATAGTGTAAATATGAAAGAACTTGTACCTATCAC
TTCAACCCCTGCCTTGTACATAATACTATTCCATCCACACAGTTTCCACCCTCACCTGCCCCCTCATACGGAGTT
GGATGGGGGCCGAGTGAGGTAACCAGGTGGCATCTACCCCATGTTTTATAAGGAATTTTGTACAGTCTTTGTGAA
ATAAAATAACGTGCTTCATTTGA

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FIGURE 3196

GGTAGTTGGTTGTGGGCACTGGGTTAGAGGTATCACGTGGGGGCACTTTCGTCTTAGCTTTTGGACAAGACGCAG
GCGCAACCCACGGCTGCTGCGGGGATCCTTGTGGCCCTTCCGGTCGGTGGAACCAATCCGTGCACAGAGAAGCGG
GGCGAACTGAGGCGAGTGAAGTGGACTCTGAGGGCTACCGCTACCGCCACTGCTGCGGCAGGGGCGTGGAGGGCA
GAGGGCCGCGGAGGCCGCAGTTGCAAACATGGCTCAGAGCAGAGACGGCGGAAACCCGTTCGCCGAGCCCAGCGA
GCTTGACAACCCCTTTCAGGACCCAGCTGTGATCCAGCACCGACCCAGCCGGCAGTATGCCACGCTTGACGTCTA
CAACCCTTTTGAGACCCGGGAGCCACCACCAGCCTATGAGCCTCCAGCCCCTGCCCCATTGCCTCCACCCTCAGC
TCCCTCCTTGCAGCCCTCGAGAAAGCTCAGCCCCACAGAACCTAAGAACTATGGCTCATACAGCACTCAGGCCTC
AGCTGCAGCAGCCACAGCTGAGCTGCTGAAGAAACAGGAGGAGCTCAACCGGAAGGCAGAGGAGTTGGACCGAAG
GGAGCGAGAGCTGCAGCATGCTGCCCTGGGGGGCACAGCTACTCGACAGAACAATTGGCCCCCTCTACCTTCTTT
TTGTCCAGTTCAGCCCTGCTTTTTCCAGGACATCTCCATGGAGATCCCCCAAGAATTTCAGAAGACTGTATCCAC
CATGTACTACCTCTGGATGTGCAGCACGCTGGCTCTTCTCCTGAACTTCCTCGCCTGCCTGGCCAGCTTCTGTGT
GGAAACCAACAATGGCGCAGGCTTTGGGCTTTCTATCCTCTGGGTCCTCCTTTTCACTCCCTGCTCCTTTGTCTG
CTGGTACCGCCCCATGTATAAGGCTTTCCGGAGTGACAGTTCATTCAATTTCTTCGTTTTCTTCTTCATTTTCTT
CGTCCAGGATGTGCTCTTTGTCCTCCAGGCCATTGGTATCCCAGGTTGGGGATTCAGTGGCTGGATCTCTGCTCT
GGTGGTGCCGAAGGGCAACACAGCAGTATCCGTGCTCATGCTGCTGGTCGCCCTGCTCTTCACTGGCATTGCTGT
GCTAGGAATTGTCATGCTGAAACGGATCCACTCCTTATACCGCCGCACAGGTGCCAGCTTTCAGAAGGCCCAGCA
AGAATTTGCTGCTGGTGTCTTCTCCAACCCTGCGGTGCGAACCGCAGCTGCCAATGCAGCCGCTGGGGCTGCTGA
AAATGCCTTCCGGGCCCCGTGACCCCTGACTGGGATGCCCTGGCCCTGCTACTTGAGGGAGCTGACTTAGCTCCC
GTCCCTAAGGTCTCTGGGACTTGGAGAGACATCACTAACTGATGGCTCCTCCGTAGTGCTCCCAATCCTATGGCC
ATGACTGCTGAACCTGACAGGCGTGTGGGGAGTTCACTGTGACCTAGTCCCCCCATCAGGCCACACTGCTGCCAC
CTCTCACACGCCCCAACCCAGCTTCCCTCTGCTGTGCCACGGCTGTTGCTTCGGTTATTTAAATAAAAAGAAAGT
GGAACTGGAACTGAC

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FIGURE 3197

CCTGCGGCAGCCGGAGCTCGGGGAGCGGAGCGTGGTGGGGAGGGGAGCGGGACAGGCGACACAGGAGACAGCGGC
GCCGCGGCCTCTCCCCACCAGGCGGCCCCGGATCCTACTGGACGCCCTGAGGGCACACCGACCGCGCCTCTAGAG
TCACCCCACGCCGACCCCTCCCCTCTTCTCTAGACTTATTTCCATCCTTCCCGCTTTTACCCTCCCCACCCCTCC
CTGGGCTCCAGGCCGCCGCCCCCTCCTCACTCCTGGACCGGCCCTTCTCGGTGCCCCTCTTCCCTAGGGAGATGC
GATGAGCCGGTGCCCCCGCGTCCTCATCGTCGCCCCGGGCACGGTGCCCGTCCAGTGCCCGTGGTGGGGAGGGAG
CACTCCGCGGTCCCTCCGTGACGCCCCTCGCTTGGCCCCCCCCACAGCTGGCGTCCCTCGGCCATGCCCCAGGGG
ACCCAGCCAGGGGGTGGGCTCTAGAGCGAGTGGGGTGGAGAGGAGAAAGGACGGGGCCTTGGGCGCCTCTGAGAT
GCTCCCAAGTGCCAGGGAGGGCCGAGCGAGGCGCAGGCAACCGGGCAGCAGGC**ATG**ATGCCCTCGCCTAGTGACT
CCAGCCGCTCGCTGACCAGCCGGCCCAGCACCAGGGGCCTTACCCACCTCCGCCTCCACCGACCCTGGCTGCAGG
CCCTGCTTACGCTGGGGCTGGTCCAAGTGCTCCTGGGCATCCTGGTGGTCACCTTCAGCATGGTGGCCTCTTCCG
TCACCACCACCGAGAGCATCAAGAGGTCCTGCCCGTCTTGGGCTGGGTTCTCGCTGGCGTTCTCCGGGGTGGTTG
GCATTGTGTCCTGGAAGCGGCCATTCACTCTAGTGATCTCCTTCTTCTCCTTGCTTTCGGTGCTCTGTGTCATGC
TTAGCATGGCTGGCTCTGTTCTCTCCTGTAAGAATGCTCAACTGGCCCGAGACTTCCAACAGTGCTCTCTGGAAG
GAAAGGTCTGTGTGTGCTGTCCCTCTGTTCCCCTCCTCCGGCCCTGTCCAGAGTCGGGGCAGGAACTGAAAGTTG
CCCCTAACTCCACCTGTGATGAAGCCCGAGGGGCCCTCAAGAACCTGCTCTTCAGCGTCTGTGGGCTCACCATTT
GTGCCGCTATAATCTGTACACTCTCTGCTATTGTCTGCTGCATCCAAATCTTCTCCCTGGACCTCGTGCATACGC
AGCTGGCCCCTGAGCGGTCAGTCTCAGGCCCACTGGGACCTCTGGGCTGCACGTCCCCGCCCCCAGCCCCTCTCC
TACACACCATGCTGGACCTGGAGGAATTTGTCCCGCCTGTGCCCCCACCGCCCTACTATCCCCCAGAGTATACCT
GCAGCTCAGAAACAGATGCACAGAGCATCACGTACAATGGCTCCATGGACAGCCCAGTGCCCTTGTACCCTACCG
ATTGCCCCCCTTCTTATGAGGCAGTCATGGGACTACGAGGAGACAGCCAGGCCACTCTCTTTGACCCTCAGCTTC
ACGATGGCTCGTGCATCTGTGAACGAGTGGCCTCCATTGTAGACGTGTCCATGGACAGCGGGTCTCTGGTGCTGT
CAGCCATTGGTGACCTCCCTGGGGGCTCTAGCCCGTCGGAGGACTCGTGCCTGCTGGAGCTGCAGGGCTCCGTGC
GCTCCGTGGACTACGTTCTCTTTCGCTCCATCCAGCGCAGCCGTGCCGGCTACTGCCTCAGCCTGGACTGTGGCC
TGCGGGGCCCCTTCGAGGAAAGCCCCCTGCCACGGCGCCCCCCACGGGCTGCCCGCTCCTATTCCTGCTCTGCCC
CTGAAGCTCCACCCCCACTGGGTGCCCCCACAGCTGCCCGCAGCTGCCACCGGTTGGAGGGCTGGCCGCCCTGGG
TGGGACCCTGCTTCCCCGAGCTGAGGCGGCGGGTCCCCCGGGGAGGGGGCCGCCCAGCCGCAGCCCCGCCCACCC
GAGCCCCGACTCGTCGCTTCAGCGATAGCTCAGGTTCCCTCACCCCACCGGGGCACCGGCCTCCTCATCCGGCAT
CCCCACCACCGCTGCTGCTGCCACGGTCCCACAGCGACCCAGGCATCACGACCTCCAGTGACACTGCTGACTTCA
GGGACCTTTATACCAAAGTGCTTGAGGAAGAAGCTGCTTCTGTTTCCTCTGCAGATACAGGGCTCTGCTCTGAAG
CCTGCCTCTTCCGCCTAGCCCGCTGCCCTTCCCCCAAGTTGCTACGTGCCCGGTCAGCCGAGAAACGGCGCCCTG
TGCCCACCTTCCAAAAAGTTCCCCTGCCCTCGGGCCCTGCACCTGCCCACTCCCTGGGGGACCTAAAGGGCAGCT
GGCCAGGTCGGGGCCTGGTCACTCGTTTCCTCCAGATATCCAGGAAAGCCCCAGACCCCAGTGGGACTGGAGCTC
ATGGACATAAGCAGGTGCCCCGGAGCCTGTGGGGCCGGCCTGGCCGAGAGAGCCTCCACCTTCGCAGCTGCGGAG
ATCTGAGCTCTAGCTCTTCCCTGCGGCGTCTCCTGTCTGGCCGCAGGCTGGAGCGTGGTACCCGCCCCCACAGCC
TCAGCCTCAACGGGGGCAGCCGGGAGACTGGGCTC**TGA**CCTAGGCTTCTTGTCACACTGAACACATCCAGCCACA
GGCACCAGCTGGTTGGGACCAGCAGCCCCCAGCATCCTCTTGCACTGGCTGGCACAAAAAGAAACCTGCTGTATA
CCCCCCAAAGTGTCCCTTTCCCTCCTACCTCTGGGGTCTCTTGCTGCTTGCCTCTGCTGCTCTGGACTGGGAGAG
CTTCTGTCCTGTGCTGCATGGGTATTTAGACTGTGGGGGAGATGCCCCTTCTTATAGCACTGGAGGAGGAAAACA
AATTCTTGTCCCCCTCAGAATGAGAGTGGCTCTTTCTGATTTGCAAGGGCACTATGGTCAGGGCAAAGGCATGGC
CCAGGTGTTTAAGTACAGGGTGACGTGTGCCTATGCAATGGGGTGGTAAGGCAGGCACGAAGAGTCCAAAAAATC
TAGGTGGCCTCTCAGCTCTGCCACCTCTAGCTGCATGACCTTGGGCAAGCTATGTAACCCCAATTGCCTGCTCCA
TTAAAGACTGTGAAGGTAGAATGTTTGTAAAGCTCTTAACAGTATGTAAGCCTTCAATAAATTTCAGTTTTCCCC
TT

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FIGURE 3198

CAGTGCCCCACAGCTCTTCAGGCCCTTCCTGTGCCTGGCTGCCCTCCCACCCTACCCTTTTGTACCTCTGAGAAG
GCTCTGGCCCCACGCACAGCCCCACTGTCACCAGGGCCAGTATCTGTCTCAGGGACCTCCTATCCAGAGCCTGAG
CCAGCCCCAGCCCCAGCCCCAGCTCCAGCTGCTCCATCTGAACCTGTATCTTCTTCCAAGCCACCCATTACCCTC
TTGGAGTCAGACTCACGCATCTCCAAAGAAGAACTTTTGAGAGCCCAGGCGCTGAGAGAGCAGGGTCAGACACTC
CCGAGCCTCTCGGTACAGCTGTAGGGGCGACACAGGTAGGCTTGCAGCTGCGGGAACAGTGCCACCTCCGCACCT
AAGCACTCCCATTCCTGGCCAGCATCCTTGGGGCTCATCTCATACAATAGCCCCCGGTCTCAGAGCTACCTCCTT
CTCCAGCTCTTCCTCGTCCTCAGGCCTGTGCTCCCCAGTCAGCAGCTGTAGCCGTTCCATGTACTGCCGCTGCAT
GCGGCCAGGCAGGAAGAAGTTGAGGGGAAAGGGCATAGCCTCTGCATACCACTTCCGGGTCACTTCTACGTAGTT
CTTGGTGTCTATCCAAAAAGTATGTACCTGGATTGGGTGGGCAGGAAGAAACAGGCAGGTCTGAGCCAGTGCACC
TGTCTGATTCAAGGTGGGCTTCTGACCTCCATGCTCTCCTGAGTCTCTGTGTGGGTCTGTGTGTTCCCGTCCCCT
CCCCGGCTGGCCATGGATGCTGGGAGGTCTGGGCACACTCACCAGCACCGGGATCAACTTCTCCTCCAGGAGAGA
CATGAAGGCCAGGGTGTCTGCCCCTTGCTGAGCTGACAGATCATAATCAGCATTGTACTTCTGTGGAGGAAATAT
CCATGGCGTGGACGCTGGGGAGCTGCAAGGGCACTTCACCAGGGAGGAAGGAGTCCTGTCTGGTACCCCCCTCAC
TGGCCTCTGAGTGCAGTGGAGGTACAGCAAGGAACTTTTCCTGCCAAGGCCCCCTTGCCTGGGCCCAGCCAGTAG
CCTGTTGCTGTTGGCAAAAAGCCTGGGCCTTGGAGCCCGCTGGCCGTCAAGGTCCTGGGCCCATTGAGAAGAAGG
AAGAAAGGTTGGGCCGCAAACTAGGAGCAGCTCCCAGAATTTCCATGGAAAGCTGGAACAATGCCTGCTGACAGC
AACTTTCTAACAGTAACTTTCCCGACCCAGACACCACAAAGCTAGCACAACGGAGCTCAGATGCAGGCTAGGACT
CGGTCCATGCCTCAGGAACCAGGGAAAGCCATCCTCACACTCCCTGGATCCAGGGAACCCACGCCCAGGGCCCCC
CAGCTTGTTCCCTCAGTGCCCAGCTCTTGGCTATTTCTTTCACTTCATTCCATCGCCCAGACACCATTACCACAT
ACACATTCCATCCATACCCCCAGGTCTCAGCCTGCCCTACCTTCCCAGGCTCCAGTCCCTGTTCCTCAGCATCCC
CCACCACATCCTGAGTAAGCTTTGTCCCCAGATAACCTCTTCAGCATGATCCTTAAATCTCCCTAAGCCTCAGTT
TCTCCCCTGTGGAATGGGGGTAAGAATCTCTTTCTCTGAATGCCCCTGTGTTAGGAAATAATTTAGAATACTTCG
GAAACAAAAAGCTCTGTTCACACCTAAGCAATCAGGGCAGTGGCCCTGGCCTTGCCAGGAACTTAGGCTTTTATC
TGGATCCTCTTTCCAGGCCTCTCAATTAATTCCCCAGGTCCTTAACCTTTGGGAAATTAGAAATTAGGAAGAGTG
TCCCACTTCTGACACTGTGTTCCCTCTTGGAACCTGACCGTCAATGCTAGAAGAACCCTTGGAAAACATGCTGGC
CCAGCCCTCTAGTTTTACAAATAAGGGAGTGCACAGCCCTGAGAGGTTACATGGCCTGCCCAAGATCACGCAGTC
AATGGCAGAGTAAAGAGCATAGCCTAGGCCTCCCCACTCCTCTAGTAATGCTCTTTCATCTTCTCCAACCTGGCT
CTAAGCCTTGTCCATCCTGAGCCCCATATCTAGCCCAACCTAGTCCCTGAAAACAAGAAGTGGCCCTTAGAAATC
TCTCTCCAGTCCCACTATCAGAGGCCAACTGCTGTCTTCCAGTCTCCTTCAGCCTGTGCTCCTCTCCCTCCCTGA
CTGACAGGCAGAAGGTACCGTGCCTCTGGATATCCCCACAGTGCCCTGAGCTGCATCTCTTGCCGACTGCTTTAA
TACATCACAGTGACATTGTGTGTGTCTCTGCCACCAGACTATTGCTCCTTGATGCTCTGGGTCACCTGCATCTAG
CATGGCATATATCTAGTGCTCAATAAATGTGTATTGTACGG

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FIGURE 3199

AAGCCCCAGCCCGGCCTCCGCTCCGGCCGCCGCCACCGCCCCTGTTTTGTTTCCATGGCGACAGGCGGCGCAGGG
CCCGCTCCAAACATAACGCGCTGTGGAAAACATGCTGCTCGGGGGACCCCCCCGCAGTCCCCGCTCGGGGACGAG
CCCCAAGGGGCCCTGGAGCAGTACAGGCCACGTGCAGTTTGGCAAGAGCCCCCAGACCTGGCCCAGGCGCACAAG
ACCCCGCTCTCCAGAGCCTGCCGCGCCTTCAAGGGTTCGGGGCTCCACTTGGACGAGGCGCCGTGACTCTCCGAG
GCGCGCCGGGCCGACAGCGCTGTCCCGCTACGTGGGCCACCTCTGGATGGGCCGGCGGCCGCCCTCCCCCGAGGC
CCGCGGCCCAGTCCCCCGCAGTTCAGCTGCCAGTCGGGCCAGAAGAAGCCTCGCCTCCCCGGGGATCTCCCCAGG
CCCCCTGACCGCAACGATCGGAGGGGCGGTGGCGGGGGGCGGGCCCAGGCAGGGGAGGGCAGAAGCACACAAGGA
AGTGTTTCCGGGACAGAGGGTGGGCAAGATGGCGGCGCCCATGGAGCTGTTCTGCTGGTCAGGGGGCTGGGGGCT
GCCGTCAGTGGACCTGGACAGCCTGGCCGTGCTGACCTATGCCAGATTTACTGGTGCTCCACTGAAGGTACACAA
GATCAGCAACCCCTGGCAGAGCCCTTCAGGAACTCTGCCTGCCCTTCGGACCAGTCATGGAGAGGTCATCTCAGT
TCCACACAAGATCATCACCCACCTTCGAAAAGAGGTACATACTTTTTGGATAGACACCAAGAACTACGTGGAAGT
GACCCGGAAGTGGTATGCAGAGGCTATGCCCTTTCCCCTCAACTTCTTCCTGCCTGGCCGCATGCAGCGGCAGTA
CATGGAACGGCTACAGCTGCTGACTGGGGAGCACAGGCCTGAGGACGAGGAAGAGCTGGAGAAGGAGCTGTACCG
AGAGGCTCGGGAGTGTCTGACCCTGCTCTCTCAGCGCCTGGGCTCTCAAAAGTTCTTCTTTGGAGATGCCCCTGC
CTCCTTGGACGCCTTCGTCTTCAGCTACTTGGCCCTGCTGCTGCAGGCAAAGCTGCCCAGTGGGAAGCTGCAGGT
CCACCTGCGTGGGCTGCACAACCTCTGTGCCTATTGTACCCACATTCTCAGTCTCTACTTCCCCTGGGATGGAGC
TGAGGTACCACCGCAACGCCAGACACCAGCAGGCCCAGAGACTGAGTGAGTGAGCCATACCGGCGCCGGAACCAG
ATCCTATCTGTGCTGGCAGTGACTGGCAGCCATGGTGGGCTACGCCTTGCTCAGCGGCATTGTCTCCATCCAGCG
GGCAACGCCTGCTCGTGGCCCCAGGCACCCGGACCCTGGGCATGGCTGAGGAGGATGAAGAGGAATGATTTGTCC
TCACGCTCCCAAGACTGGTTTTTCTACTCTCATGCATTCCAGAGGCCCCCGTGCCTCCTCGTTGTTGGTACAGCC
GGACACGGGGTGTGCCACCCAGAATAAAGCCACTCACACTG

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FIGURE 3200

ATGGAGACGCAGGAACTTCGGGGGGCCCTGGCTCTTCTCCTCCTTTGCTTTTTCACATCTGCCAGTCAGGATCTG
CAGGTAATTGACCTGCTGACTGTGGGCGAGTCTCGGCAGATGGTAGCTGTGGCAGAGAAGATCCGGACAGCCTTG
CTCACTGCTGGGGACATCTACCTCTTATCCACCTTCCGCCTGCCCCCCAAGCAGGGTGGTGTCCTCTTTGGCCTC
TATTCTCGCCAAGACAACACTCGATGGCTGGAGGCCTCTGTTGTAGGCAAGATCAACAAAGTACTGGTGCGATAC
CAGCGGGAGGATGGCAAAGTCCACGCCGTGAACCTACAGCAAGCGGGCCTGGCTGATGGGCGCACACACACAGTT
CTCCTGCGACTCCGAGGTCCCTCCAGACCCAGCCCTGCCCTACATCTCTACGTGGACTGCAAACTGGGTGACCAA
CATGCAGGCCTTCCAGCACTGGCCCCCATTCCTCCAGCGGAGGTCGATGGGCTGGAGATTAGGACTGGACAGAAG
GCGTATTTGAGGATGCAGGGCTTTGTGGAATCTATGAAAATTATTCTGGGTGGGTCCATGGCCCGGGTAGGAGCC
CTGAGTGAGTGTCCATTCCAAGGGGACGAGTCCATCCACAGTGCAGTGACCAATGCACTGCACTCCATTCTAGGG
GAGCAGACCAAGGCGCTGGTCACCCAACTCACCCTCTTCAACCAGATCCTGGTGGAGCTGCGGGATGATATACGA
GACCAGGTGAAGGAAATGTCCCTGATCCGAAACACCATTATGGAGTGTCAGGTGTGCGGCTTCCATGAGCAGCGT
TCCCACTGCAGCCCCAATCCCTGCTTCCGAGGTGTGGACTGCATGGAAGTGTACGAGTACCCAGGCTACCGCTGT
GGGCCCTGCCCCCCTGGCCTGCAGGGCAACGGCACCCACTGCAGTGACATCAATGAGTGTGCTCACGCTGACCCC
TGTTTCCCGGGCTCCAGCTGCATCAACACCATGCCCGGCTTCCACTGTGAGGCCTGTCCTCGAGGGTACAAGGGC
ACACAGGTGTCTGGTGTGGGCATTGACTATGCCCGGGCCAGCAAACAGGTCTGCAATGACATCGATGAATGCAAC
GATGGCAACAATGGTGGCTGTGACCCAAACTCCATCTGCACCAACACTGTGGGCTCTTTCAAGTGTGGTCCCTGC
CGCCTGGGTTTCCTGGGCAACCAGAGCCAGGGCTGCCTCCCAGCCCGGACCTGCCACAGCCCAGCCCACAGCCCC
TGCCACATCCATGCTCACTGTCTCTTTGAACGCAATGGTGCAGTGTCCTGCCAGTGTAACGTGGGCTGGGCTGGG
AATGGGAACGTGTGTGGGACTGACACAGACATCGATGGCTACCCAGACCAAGCACTGCCCTGCATGGACAACAAC
AAACACTGCAAACAGGACAACTGCCTTTTGACACCCAACTCTGGGCAGGAAGATGCTGATAATGATGGTGTGGGG
GACCAGTGTGATGATGATGCTGATGGGGATGGGATCAAGAATGTTGAGGACAACTGCCGGCTGTTCCCCAACAAA
GACCAGCAGAACTCAGATACAGATTCATTTGGTGATGCCTGTGACAATTGCCCCAACGTTCCCAACAATGACCAG
AAGGACACAGATGGCAATGGGGAAGGAGATGCCTGTGACAACGACGTGGATGGGGATGGCATCCCCAATGGATTG
GACAATTGCCCTAAAGTCCCCAACCCACTACAGACAGACAGGGATGAGGACGGGGTGGGAGATGCTTGCGACAGC
TGCCCTGAAATGAGCAATCCTACCCAGACAGATGCAGACAGCGACCTGGTGGGGGATGTCTGTGATACTAATGAA
GACAGCGATGGGGATGGGCATCAGGACACCAAGGACAACTGCCCACAGCTGCCAAATAGCTCCCAGCTGGACTCT
GATAACGATGGACTTGGAGATGAGTGTGATGGGGATGATGACAATGATGGCATCCCAGATTATGTGCCTCCTGGT
CCCGATAACTGCCGCCTGGTACCCAATCCCAATCAGAAGGACTCAGATGGCAATGGCGTTGGTGATGTGTGTGAG
GATGACTTTGACAATGATGCTGTGGTCGACCCCCTGGATGTGTGTCCTGAAAGTGCAGAGGTAACGCTTACGGAT
TTTCGGGCCTATCAGACCGTCGTCCTGGATCCTGAGGGTGATGCTCAGATTGACCCAAACTGGGTTGTGCTCAAC
CAGGGCATGGAAATCGTTCAGACCATGAACAGTGACCCTGGCTTGGCAGTTGGATACACGGCCTTCAATGGTGTG
GACTTTGAAGGCACCTTCCATGTGAACACAGTGACTGATGATGACTACGCAGGCTTTCTCTTCAGTTATCAAGAC
AGTGGCCGCTTCTACGTAGTCATGTGGAAGCAGACCGAGCAGACCTACTGGCAGGCTACACCCTTCCGGGCGGTT
GCCCAGCCCGGGCTGCAGCTCAAGGCAGTGACATCAGTGTCTGGCCCAGGTGAGCACCTCCGAAATGCCCTGTGG
CATACTGGCCACACCCCTGATCAGGTACGACTGCTGTGGACAGACCCACGAAATGTGGGCTGGCGGGACAAGACC
TCCTATCGCTGGCAGCTTCTGCACCGGCCTCAAGTTGGCTACATTCGGGTGAAGCTCTATGAGGGACCCCAGCTT
GTGGCGGATTCTGGGGTGATCATTGACACATCCATGCGAGGGGGGCGTCTTGGTGTATTCTGCTTCTCCCAAGAA
AACATAATTTGGTCCAATCTCCAGTATCGATGCAATGACACAGTGCCTGAGGACTTTGAGCCATTCCGGAGGCAG
CTGCTCCAGGGAAGGGTGTGA

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FIGURE 3201

CGCTCCACCTCTCAAGCAGCCAGCGCCTGCCTGAATCTGTTCTGCCCCCTCCCCACCCATTTCACCACCACCATG

ACACCGGGCACCCAGTCTCCTTTCTTCCTGCTGCTGCTCCTCACAGTGCTTACAGTTGTTACAGGTTCTGGTCAT
GCAAGCTCTACCCCAGGTGGAGAAAAGGAGACTTCGGCTACCCAGAGAAGTTCAGTGCCCAGCTCTACTGAGAAG
AATGCTGTGAGTATGACCAGCAGCGTACTCTCCAGCCACAGCCCCGGTTCAGGCTCCTCCACCACTCAGGGACAG
GATGTCACTCTGGCCCCGGCCACGGAACCAGCTTCAGGTTCAGCTGCCACCTGGGGACAGGATGTCACCTCGGTC
CCAGTCACCAGGCCAGCCCTGGGCTCCACCACCCCCCCAGCCCACGGTGTCACCTCGGCCCCGGACACCAGGCCG
GCCCGGGGCTCCACCGCCCCCCCAGCCCACGGTGTCACCTCGGCCCCGGACACCAGGCCGGCCCCGGGCTCCACC
GCCCCCCCAGCCCATGGTGTCACCTCGGCCCCGGACAACAGGCCCGCCTTGGGCTCCACCGCCCCTCCAGTCCAC
AATGTCACCTCGGCCTCAGGCTCTGCATCAGGCTCAGCTTCTACTCTGGTGCACAACGGCACCTCTGCCAGGGCT
ACCACAACCCCAGCCAGCAAGAGCACTCCATTCTCAATTCCCAGCCACCACTCTGATACTCCTACCACCCTTGCC
AGCCATAGCACCAAGACTGATGCCAGTAGCACTCACCATAGCACGGTACCTCCTCTCACCTCCTCCAATCACAGC
ACTTCTCCCCAGTTGTCTACTGGGGTCTCTTTCTTTTTCCTGTCTTTTCACATTTCAAACCTCCAGTTTAATTCC
TCTCTGGAAGATCCCAGCACCGACTACTACCAAGAGCTGCAGAGAGACATTTCTGAAATGTTTTTGCAGATTTAT
AAACAAGGGGGTTTTCTGGGCCTCTCCAATATTAAGTTCAGGCCAGGATCTGTGGTGGTACAATTGACTCTGGCC
TTCCGAGAAGGTACCATCAATGTCCACGACGTGGAGACACAGTTCAATCAGTATAAAACGGAAGCAGCCTCTCGA
TATAACCTGACGATCTCAGACGTCAGCGTGAGTGATGTGCCATTTCCTTTCTCTGCCCAGTCTGGGGCTGGGGTG
CCAGGCTGGGGCATCGCGCTGCTGGTGCTGGTCTGTGTTCTGGTTGCGCTGGCCATTGTCTATCTCATTGCCTTG
GCTGTCTGTCAGTGCCGCCGAAAGAACTACGGGCAGCTGGACATCTTTCCAGCCCGGGATACCTACCATCCTATG
AGCGAGTACCCCACCTACCACACCCATGGGCGCTATGTGCCCCCTAGCAGTACCGATCGTAGCCCCTATGAGAAG
GTTTCTGCAGGTAATGGTGGCAGCAGCCTCTCTTACACAAACCCAGCAGTGGCAGCCACTTCTGCCAACTTGTAG

GGGCACGTCGCCCGCTGAGCTGAGTGGCCAGCCAGTGCCATTCCACTCCACTCAGGTTCTTCAGGGCCAGAGCCC
CTGCACCCTGTTTGGGCTGGTGAGCTGGGAGTTCAGGTGGGCTGCTCACAGCCTCCTTCAGAGGCCCCACCAATT
TCTCGGACACTTCTCAGTGTGTGGAAGCTCATGTGGGCCCCTGAGGGCTCATGCCTGGGAAGTGTTGTGGTGGGG
GCTCCCAGGAGGACTGGCCCAGAGAGCCCTGAGATAGCGGGGATCCTGAACTGGACTGAATAAAACGTGGTCTCC
CACTG

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FIGURE 3202

GCATGCGCATAGCTAACCGCACCCGGTTCAGCTCGCCTTTCTTGGCCAGAGGCGCCGGTTGGACTCACGGGCGGG
GCATGATGGTGGTGGGTACGGGCACCTCGCTGGCGCTCTCCTCCCTCCTGTCCCTGCTGCTCTTTGCTGGGATGC
AGATGTACAGCCGTCAGCTGGCCTCCACCGAGTGGCTCACCATCCAGGGCGGCCTGCTTGGTTCGGGTCTCTTCG
TGTTCTCGCTCACTGCCTTCAATAATCTGGAGAATCTTGTCTTTGGCAAAGGATTCCAAGCAAAGATCTTCCCTG
AGATTCTCCTGTGCCTCCTGTTGGCTCTCTTTGCATCTGGCCTCATCCACCGAGTCTGTGTCACCACCTGGTATC
TTCATCTTCTCCATGGTTGGTCTGTACTACATCAACAAGATCTCCTCCACCCTGTACCAGGCAGCAGCTCCAGTC
CTCACACCAGCCAAGGTCACAGGCAAGAGCAAGAAGAGAAACTGACCCTGAATGTTCAATAAAGTTGATTCTTTG
T

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FIGURE 3203

GTAGGTCCCGGCAACCGCAGGCTCGCGGCGGGCGCTGGGCGCGGGATCCGACTCCAGTCGTAATGGAGGCGGGCG
GCTTTCTGGACTCGCTCATTTACGGAGTCATGCACATGCGAATGACCCGGAGTGTGGACAACGTCCAGTTCCTGC
CCTTTCTCACCACGGAAGTCAACAACCTGGGCTGGCTGAGTTATGGGGCTTTGAAGGGAGACGGGATCCTCATCG
TCGTCAACACAGTGGGTGCTGCGCTTCAGACCCTGTATATCTTGGCATATCTGCATTACTGCCCTCGGAAGCGTG
TTGTGCTCCTACAGACTGCAACCCTGCTAGGGGTCCTTCTCCTGGGTTATGGCTACTTTTGGCTCCTGGTACCCA
ACCCTGAGGCCCGGCTTCAGCAGTTGGGCCTCTTCTGCAGTGTCTTCACCATCAGCATGTACCTCTCACCACTGG
CTGACTTGGCTAAGGTGATTCAAACTAAATCAACCCAATGTCTCTCCTACCCACTCACCATTGCTACCCTTCTCA
CCTCTGCCTCCTGGTGCCTCTATGGGTTTCGACTCAGAGATCCCTATATCATGGTGTCCAACTTTCCAGGAATCG
TCACCAGCTTTATCCGCTTCTGGCTTTTCTGGAAGTACCCCCAGGAGCAAGACAGGAACTACTGGCTCCTGCAAA
CCTGAGGCTGCTCATCTGACCACTGGGCACCTTAGTGCCAACCTGAACCAAAGAGACCTCCTTGTTTCAGCTGGG
CCTGCTGTCCAGCTTCCCAGGTGCAGTGGGTTGTGGGAACAAGAGATGACTTTGAGGATAAAAGGACCAAAGAAA
AAGCTTTACTTAGATGATTGATTGGGGCCTAGGAGATGAAATCACTTTTTATTTTTTAGAGATTTTTTTTTTTAA
TTTTGGAGGTTGGGGTGCAATCTTTAGAATATGCCTTAAAAGGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAG
CACTTTGGGAGGCCAAGGTGGGCGGATCGCCTGAGGTCAGGAGTTCAAGACCAACCTGACTAACATGGTGAAACC
CCATCTCTACTAAAAATACAAAATTAGCCAGGCATGATGGCACATGCCTGTAATCCCAGATACTTGGGAGGCTGA
GGCAGGAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCTGAGATCGTGCCATTGTGATATGAATATGC
CTTATATGCTGATATGAATATGCCTTAAAATAAAGTGTTCCCCACCCCTG

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FIGURE 3204

CCCAGGTTCCGGAATGAGGACTACACCATACATGTGCAGCTGAATGACTACGTGGACATCATCTGTCCGCACTAT
GAAGATCACTCTGTGGCAGACGCTGCCATGGAGCAGTACATACTGTACCTGGTGGAGCATGAGGAGTACCAGCTG
TGCCAGCCCCAGTCCAAGGACCAAGTCCGCTGGCAGTGCAACCGGCCCAGTGCCAAGCATGGCCCGGAGAAGCTG
TCTGAGAAGTTCCAGCGCTTCACACCTTTCACCCTGGGCAAGGAGTTCAAAGAAGGACACAGCTACTACTACATC
TCCAAACCCATCCACCAGCATGAAGACCGCTGCTTGAGGTTGAAGGTGACTGTCAGTGGCAAAATCACTCACAGT
CCTCAGGCCCATGACAATCCACAGGAGAAGAGACTTGCAGCAGATGACCCAGAGGTGCGGGTTCTACATAGCATC
GGTCACAGTGCTGCCCCACGCCTCTTCCCACTTGCCTGGACTGTGCTGCTCCTTCCACTTCTGCTGCTGCAAACC
CCGTGAAGGTGTATGCCACACCTGGCCTTAAAGAGGGACAGGCTGAAGAGAGGGACAGGCACTCCAAACCTGTCT
TGGGGCCACTTTCAGAGCCCCCAGCCCTGGGAACCACTCCCACCACAGGCATAAGCTATCACCTAGCAGCCTCAA
AACGGGTCAGTATTAAGGTTTTCAACCGGAAGGAGGCCAACCAGCCCGACAGTGCCATCCCCACCTTCACCTCGG
AGGGATGGAGAAAGAAGTGGAGACAGTCCTTTCCCACCATTCCTGCCTTTAAGCCAAAGAAACAAGCTGTGCAGG
CATGGTCCCTTAAGGCACAGTGGGAGCTGAGCTGGAAGGGGCCACGTGGATGGGCAAAGCTTGTCAAAGATGCCC
CCTCCAGGAGAGAGCCAGGATGCCCAGATGAACTGACTGAAGGAAAAGCAAGAAACAGTTTCTTGCTTGGAAGCC
AGGTACAGGAGAGGCAGCATGCTTGGGCTGACCCAGCATCTCCCAGCAAGACCTCATCTGTGGAGCTGCCACAGA
GAAGTTTGTAGCCAGGTACTGCATTCTCTCCCATCCTGGGGCAGCACTCCCCAGAGCTGTGCCAGCAGGGGGGCT
GTGCCAACCTGTTCTTAGAGTGTAGCTGTAAGGGCAGTGCCCATGTGTACATTCTGCCTAGAGTGTAGCCTAAAG
GGCAGGGCCCACGTGTATAGTATCTGTATATAAGTTGCTGTGTGTCTGTCCTGATTTCTACAACTGGAGTTTTTT
TATACAATGTTCTTTGTCTCAAAATAAAGCAATGTGTTTTTTCGG

FIGURE 3205

GGAGCTGGGAAGCGGAGAAGCCGGGAGCGCGGGGCTCAGTCGGGGGGCGGCGGCGGCGGCGGCTCCGGGGATGGC
GGCGGCTCCGCTGCTGCTGCTGCTGCTGCTCGTGCCCGTGCCGCTGCTGCCGCTGCTGGCCCAAGGGCCCGGAGG
GGCGCTGGGAAACCGGCATGCGGTGTACTGGAACAGCTCCAACCAGCACCTGCGGCGAGAGGGCTACACCGTGCA
GGTGAACGTGAACGACTATCTGGATATTTACTGCCCGCACTACAACAGCTCGGGGGTGGGCCCCGGGGCGGGACC
GGGGCCCGGAGGCGGGGCAGAGCAGTACGTGCTGTACATGGTGAGCCGCAACGGCTACCGCACCTGCAACGCCAG
CCAGGGCTTCAAGCGCTGGGAGTGCAACCGGCCGCACGCCCCGCACAGCCCCATCAAGTTCTCGGAGAAGTTCCA
GCGCTACAGCGCCTTCTCTCTGGGCTACGAGTTCCACGCCGGCCACGAGTACTACTACATCTCCACGCCCACTCA
CAACCTGCACTGGAAGTGTCTGAGGATGAAGGTGTTCGTCTGCTGCGCCTCCACATCGCACTCCGGGGAGAAGCC
GGTCCCCACTCTCCCCCAGTTCACCATGGGCCCCAATATGAAGATCAACGTGCTGGAAGACTTTGAGGGAGAGAA
CCCTCAGGTGCCCAAGCTTGAGAAGAGCATCAGCGGGACCAGCCCCAAACGGGAACACCTGCCCCTGGCCGTGGG
CATCGCCTTCTTCCTCATGACGTTCTTGGCCTCCTAGCTCTGCCCCCTCCCCTGGGGGGGGAGAGATGGGGCGGG
GCTTGGAAGGAGCAGGGAGCCTTTGGCCTCTCCAAGGGAAGCCTAGTGGGCCTAGACCCCTCCTCCCATGGCTAG
AAGTGGGGCCTGCACCATACATCTGTGTCCGCCCCCTCTACCCCTTCCCCCCACGTAGGCACTGTAGTGGACCAA
GCACGGGGACAGCCATGGGTCCCGGGCGGCCTTGTGGCTCTGGTAATGTTTGGTACCAAACTTGGGGGCCAAAAA
GGGCAGTGCTCAGGACTCCCTGGCCCCTGGTACCTTTCCCTGACTCCTGGTGCCCTCTCCCTTTGTCCCCCCAGA
GAGACATATGCCCCCAGAGAGAGCAAATCGAAGCGTGGGAGGCACCCCCATTGCTCTCCTCCAGGGGCAGAACAT
GGGGAGGGGACTAGATGGGCAAGGGGCAGCACTGCCTGCTGCTTCCTTCCCCTGTTTACAGCAATAAGCACGTCC
TCCTCCCCCCACTCCCACTTCCAGGATTGTGGTTTGGATTGAAACCAAGTTTACAAGTAGACACCCCTGGGGGGGC
GGGCAGTGGACAAGGATGGCAAGGGGTGGGCATTGGGGTGCCAGGCAGGCATGTACAGACTCTATATCTCTATAT
ATAATGTACAGACAGACAGAGTCCCTTCCCTCTTTAACCCCCTGACCTTTCTTGACTTCCCCTTCAGCTTCAGAC
CCCTTCCCCACCAGGCTAGGCCCCCCACACCTGGGGGACCCCCTGGCCCCTCTTTTGTCTTCTGTGAAGACAGGA
CCTATGCAACGCACAGACACTTTTGGAGACCGTAAAACAACAACGCCCCCTCCCTTCCAGCCCTGAGCCGGGAAC
CATCTCCCAGGACCTTGCCCTGCTCACCCTATGTGGTCCCACCTATCCTCCTGGGCCTTTTTCAAGTGCTTTGGC
TGTGACTTTCATACTCTGCTCTTAGTCT

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FIGURE 3206A

CGCCGGCCGAGGAGGAGGGGTGGGGGTAGCGGCGGCGCCCGCGGCCCGGAGCGGGGGTTGGGGGAGTAGAGAAAG
CGGGGCGCGCGGAGGAACGCTGGGTCCCCGGCGCCGCGGGAGCTGGGAGGACCGAGCCGGCCGAGCGAGCAGCGC
GGCAGCACAGTCCCCGCGTGGCGCAGCGCGGCGGGGACGCGGGGACCGCCCGGATCTCCTTCCACTGCGCCCCGC
GCTCTGCGGTCCTCGGCCGCCTCTTCTTCCTTCACTCACTGCCCGGGCGGGAGCGGCGCCCAAGTCGGGTGCGCC
ATGTCTGGGGCCGGGTAGCCCCGCCGCCCGCCGGCCCGCCAGCTCGCCCTCCGAGCCACCCGCCAGCGGGCCGGC
CGGCCGGGAAGCGCGGGACAGGCAGATGCAGTGAGTGAGGGGGGGGCCATGGCGGAGGAGCGGCCCCCCCGGCTG
GTGGATTACTTCGTGGTAGCTGGGCTTGCAGGGAACGGAGCACCCATCCCTGAGGAAACGTGGGTTCCTGAACCC
AGTGGGCCCCTGCGCCCTCCCCGGCCAGCTGAGCCCATCACAG**ATG**TGGCAGTCATCGCTAGGGCACTGGGCGAG
GAAGTGCCCCAGGGCTACACATGCATCCAGGCTTCTGCTGGGGGCCACCCCTTGGAACTCAGTGCTGGACTTCTG
GGTGGAACTCAACCCGTCATCTGCTACCGCAGGGGCCGTGACAAGCCCCCCCTCGTTGAGCTGGGGGTGTTGTAT
GAGGGGAAGGAACGTCCCAAGCCTGGCTTCCAAGTGCTTGACACGACACCCTACAGCCACTCAGCAAACCTGGCC
CCTCCAGGCCCCGGGCACCCCCGCACCTACCTCACTTACCGGCGGGCAGCAGAGGGGGCAGGGCTGCATGCCCTG
GGCATCACTGACCTCTGCCTGGTGCTGCCCAGTAAGGGCGAGGGCACTCCTCATACTTACTGCCGGCTGCCCCGC
AACCTCAACCCTGGCATGTGGGGCCCAGCAGTGTACCTGTGCTATAAGGTGGGCCTGGCGAAGGCCAACACGCTG
GTGTACGAGGCAGTTCTACGAGGCGTTCCCAAGGGCCAGGCTATCAGAGCGACAGGCACGGGCACTGGGCCTGCT
GAGCGCCGTGGAGCGGGGTCGGGCACTGGGGGGCAGAGCTGTGCGCAGCCGGCGTGCCATCGCTGTGCTGTCCCG
CTGGCCTGCCTTCCCTGCCTTCCGCGCCTTCCTCACCTTCCTTTACCGCTACTCCGTCTCAGGCCCCCACCGCCT
ACCCTTGGAAGCGCACATCTCCCACTTCATTCACAACGTTCCCTTCCCTTCCCCACAGAGACCCCGCATCCTAGT
GCAGATGTCTCCCTATGACAACTTGCTCCTCTGTCAGCCTGTATCCTCACCCCTGCCCCTCAGTGGTGCCAGCTT
CCTGCAGCTGCTGCAGAGCCTGGGCCCTGAGCTGGCTATCACACTGCTGCTGGCTGTGCTCACAGAGCACAAGCT
GCTAGTCCACTCGCTGCGGCCAGACCTGCTCACCAGCGTCTGTGAGGCCCTCGTCTCGATGATCTTCCCACTGCA
CTGGCAGTGCCCCTACATTCCTCTGTGCCCGCTGGTGCTGGCAGATGTGCTGAGTGCCCCAGTGCCCTTCATTGT
GGGTATCCACTCCAGCTACTTTGATCTGCATGACCCGCCTGCTGATGTCATCTGTGTAGACCTTGATACCAACAC
GCTCTTCCAGACTGAGGAAAAGAAGCTCCTCTCCCCTCGGACCCTGCCCCGCAGACCCTACAAGGTTCTGCTGGC
CACACTGACAAACCTGTACCAGCAGCTGGACCAGACATACACTGGACCTGAGGAGGAAGCATCCCTGGAGTTCCT
ACTGACAGACTACGAGGCAGTGTGTGGCCGCAGGGCCCGGCTGGAGCGCGAAGTCCAAGGAGCCTTCCTCCGCTT
CATGGCCTGTCTGCTCAAGGGCTACCGGGTCTTCCTGCGCCCACTCACCCAGGCCCCCTCCGAGGGAGCTCGTGA
TGTTGACAACCTTTTCTTCCTGCAGGGCTTCCTCAAATCCCGGGAACGCTCCAGCCACAAACTTTACTCTCAGCT
GCTGCACACACAGATGTTCTCACAGTTCATTGAGGAGTGCTCTTTTGGCTCTGCTCGCCATGCTGCCCTTGAATT
CTTTGACTCTTGTGTTGAAAAGGTCCACCCAGAGCAGGAGAAGCCTGAGCCGACACCCTTAGTGGAGCTAGAGGA
GCTGTCAGGAAGTGAGCTCACTGTCTTTATCACACCTCCCGAGGAGCCTGCCTTACCAGAGGGCAGTGAATCCAC
TCCCCAGTACTGCTATGATGGATTCCCAGAGCTACGGGCTGAGTTGTTTGAGTCTCTTCAAGAGCAACCTGGGGC
CCTGCCTGTGCCAGGCCCTTCCCGTAGCGCCCCCAGCAGTCCTGCTCCTCGCCGTACCAAACAGGAGATGAAAGT
TGCACAGCGGATGGCACAGAAGTCAGCAGCTGTGCCTGAGCTGTGGGCCCGGTGCCTGCTGGGGCACTGCTATGG
GCTGTGGTTCCTGTGTCTGCCTGCCTATGTGCGGTCGGCACCCTCCCGAGTGCAGGCACTGCACACAGCCTACCA
TGTGCTGCGCCAGATGGAGAGCGGCAAGGTGGTGCTCCCTGATGAGGTGTGTTACCGGGTACTGATGCAGCTCTG
CTCACACTATGGGCAGCCTGTGCTGTCTGTGCGGGTCATGCTGGAGATGCGTCAGGCAGGCATTGTGCCCAACAC
CATCACCTATGGCTACTACAATAAGGCTGTGTTGGAAAGCAAGTGGCCGTCTGGCACACCAGGTGGGCGTCTGCG
CTGGGCCAAGCTCCGGAATGTTGTCCTGGGGGCTGCTCAGTTCCGCCAGCCCTTGAGAGAACGGCAACAGCAGCA
GCAGCAGCAACAGCAGCAGCAGCAGCAGCAGCAGGAGCAGGTGTCAGCACATCAAGAGGCAGGCAGCTCCCA
GGCAGAGCCCTATTTGGAGCGCCCTTCCCCTACTCGCCCTCTTCAGCGCCAGACTACTTGGGCTGGGCGAAGTCT
GAGAGACCCAGCCTCACCCCCTGGACGCCTGGTGAAGAGTGGTAGCCTGGGCAGTGCCCGAGGGGCACAGCCCAC
TGTGGAGGCCGGTGTGGCCCACATGATAGAGGCCTTGGGGGTCCTGGAACCCCGGGGATCACCTGTGCCCTGGCA
CGATGGAAGTCTCTCAGACCTGAGCCTGACAGGGGAGGAGCCGCTCCCTGGAGGCAGCCCAGGGGGCTCAGGCTC
AGCCCTGAGTGCCCAGTCCACTGAGGCCCTGGAAGGGCTAAGTGGGCGGGGACCCAAGGCTGGTGGGCGACAGGA
TGAGGCAGGCACCCCCCGACGAGGGCTGGGTGCCCGCCTCCAACAGCTGCTCACTCCTTCCCGCCACTCCCCTGC
CTCCCGCATTCCCCCACCTGAGCTGCCTCCTGACCTGCCACCCCCAGCCCGCCGCAGCCCCATGGACAGTCTTCT
GCACCCCCGGGAGCGCCCTGGATCCACTGCCTCCGAGAGCTCAGCCTCTCTGGGCAGTGAGTGGGACCTCTCAGA

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FIGURE 3206B

ATCTTCTCTCAGCAACCTGAGTCTTCGCCGTTCCTCAGAGCGCCTCAGTGACACCCCTGGATCCTTCCAGTCACC
TTCCCTGGAAATTCTGCTGTCCAGCTGCTCCCTGTGCCGTGCCTGTGATTCGCTGGTGTATGATGAGGAAATCAT
GGCTGGCTGGGCACCTGATGACTCTAACCTCAACACAACCTGCCCCTTCTGCGCCTGCCCCTTTGTGCCCCTGCT
CAGTGTCCAGACCCTTGATTCCCGGCCCAGTGTCCCCAGCCCCAAATCTGCTGGTGCCAGTGGCAGCAAAGATGC
TCCTGTCCCTGGTGGTCCTGGCCCTGTGCTCAGTGACCGAAGGCTCTGCCTTGCTCTGGATGAGCCCCAGCTCTG
CAACGGGCACATGGGGGGAGCCTCCCGGCGGGTTGAGAGTGGGGCATGGGCATACCTGAGCCCCCTGGTGCTGCG
TAAGGAGCTGGAGTCGCTGGTAGAGAACGAGGGCAGTGAGGTGCTGGCGTTGCCTGAACTGCCCTCTGCCCACCC
CATCATCTTCTGGAACCTTTTGTGGTATTTCCAACGGCTACGCCTGCCCAGTATTCTACCAGGCCTGGTGCTGGC
CTCCTGTGATGGGCCTTCGCACTCCCAGGCCCCATCTCCTTGGCTAACCCCTGATCCAGCCTCTGTTCAGGTACG
GCTGCTGTGGGATGTACTGACCCCTGACCCCAATAGCTGCCCACCTCTCTATGTGCTCTGGAGGGTCCACAGCCA
GATCCCCCAGCGGGTGGTATGGCCAGGCCCTGTACCTGCATCCCTTAGTTTGGCACTGTTGGAGTCAGTGCTGCG
CCATGTTGGACTCAATGAAGTGCACAAGGCTGTGGGGCTCCTGCTGGAAACTCTAGGGCCCCCACCCACTGGCCT
GCACCTGCAGAGGGGAATCTACCGTGAGATATTATTCCTGACAATGGCTGCTCTGGGCAAGGACCACGTGGACAT
AGTGGCCTTCGATAAGAAGTACAAGTCTGCCTTTAACAAGCTGGCCAGCAGCATGGGCAAGGAGGAGCTGAGGCA
CCGGCGGGCGCAGATGCCCACTCCCAAGGCCATTGACTGCCGAAAATGTTTTGGAGCACCTCCAGAATGCTAGAG
ACCTTAAGCTTCCCTCTCCAGCCTAGGGTGGGGAAGTGAGGAAGAAGGGATTCTAGAGTTAAACTGCTTCCCTGT
TGCCTTCATGGAGTTGGGAACAGGCTGGGAAGGATGCCCAGTCAAAGGCTCCAAGCGAGGACAACAGGAAGAGGG
ATCCACTGTTACCAAAAGTCCTGATTCCCCCATCACCAACCTACCCAGTTTGTTCGTGCTGATGTTGGGGGAGAT
CTGGGGGGAGTTGGTACAGCTCTGTTCTTCCCTTGTCCTATACCGGGAACTCCCCTCCAGGGTACCCACAGATCT
GCATTGCCCTGGTCATTTTAGAAGTTTTTGTTTTAAAAAACAACTGGAAAGATGCAGAGCTACTGAGCCTTTGCC
CTGAATGGGAGGTAGGGATGTCATTCTCCACCAATAATGGTCCCTCTTCCCTGACGTTGCTGAAGGAGCCCAAGG
CTCTCCATGCCTTTCTACCTAAGTGTTTGTATTTTATTTTAAATTATTTATTCTGGAGCCACAGCCCCCTTGCTT
ATGAGGTTCTTATGGAGAGTGAGAAAGGGAAGGGAAATAGGGCACCATGGTCCGGTGGTTTGTAGTTCCTTCAAA
GTCAGGCACTGGGAGCTAGAGGAGTCTCAAGCTCCCCTTAGGAAGAACTGGTGCCCCCTCCAGTCCTAATTTTTC
TTGCCTGCCCCGCCTTGGGGAATGCCTCACCCACCCAGGTCCTGACCTGTGCAATAAGGATTGTTCCCTGCGAAG
TTTTGTTGGATGTAAATATAGTAAAAGCTGCTTCTGTCTTTTTC

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FIGURE 3207

GCCGGAAGCGCGCGGAGACCATGTAGTGAGACCCTCGCGAGGTCTGAGAGTCACTGGAGCTACCAGAAGCATCATGGGGCCCTGGGGAGAGCCAGAGCTCCTGGTGTGGCGCCCCGAGGCGGTAGCTTCAGAGCCTCCAGTGCCTGTGGGGCTGGAGGTGAAGTTGGGGGCCCTGGTGCTGCTGCTGGTGCTCACCCTCCTCTGCAGCCTGGTGCCCATCTGTGTGCTGCGCCGGCCAGGAGCTAACCATGAAGGCTCAGCTTCCCGCCAGAAAGCCCTGAGCCTAGTAAGCTGTTTCGCGGGGGGCGTCTTTTTGGCCACTTGTCTCCTGGACCTGCTGCCTGACTACCTGGCTGCCATAGATGAGGCCCTGGCAGCCTTGCACGTGACGCTCCAGTTCCCACTGCAAGAGTTCATCCTGGCCATGGGCTTCTTCCTGGTCCTGGTGATGGAGCAGATCACACTGGCTTACAAGGAGCAGTCAGGGCCGTCACCTCTGGAGGAAACAAGGGCTCTGCTGGGAACAGTGAATGGTGGGCCGCAGCATTGGCATGATGGGCCAGGGGTCCCACAGGCGAGTGGAGCCCCAGCAACCCCCTCAGCCTTGCGTGCCTGTGTACTGGTGTTCTCCCTGGCCCTCCACTCCGTGTTCGAGGGGCTGGCGGTAGGGCTGCAGCGAGACCGGGCTCGGGCCATGGAGCTGTGCCTGGCTTTGCTGCTCCACAAGGGCATCCTGGCTGTCAGCCTGTCCCTGCGGCTGTTGCAGAGCCACCTTAGGGCACAGGTGGTGGCTGGCTGTGGGATCCTCTTCTCATGCATGACACCTCTAGGCATCGGGCTGGGTGCAGCTCTGGCAGAGTCGGCAGGACCTCTGCACCAGCTGGCCCAGTCTGTGCTAGAGGGCATGGCAGCTGGCACCTTTCTCTATATCACCTTTCTGGAAATCCTGCCCCAGGAGCTGGCCAGTTCTGAGCAAAGGATCCTCAAGGTCATTCTGCTCCTAGCAGGCTTTGCCCTGCTCACTGGCCTGCTCTTCATCCAAATCTAGGGGCTTCAAGAGAGGGGCAGGGGAGATTGATGATCAGGTGCCCCTGTTCTCCCTTCCCTCCCCCAGTTGTGGGGAATAGGAAGGAAAGGGGAAGGGAAATACTGAGGACCAAAAAGTTCTCTGGGAGCTAAAGATAGAGCCTTTGGGGCTATCTGACTAATGAGAGGGAAGTGGGCAGACAAGAGGCTGGCCCCAGTCCCAAGGAACAAGAGATGGTCAAGTCGCTAGAGACATATCAGGGGACATTAGGATTGGGGAAGACACTTGACTGCTAGAATCAGAGGTTGGACACTATACATAAGGACAGGCTCACATGGGAGGCTGGAGGTGGGTACCCAGCTGCTGTGGAACGGGTATGGACAGGTCATAAACCTAGAGTCAGTGTCCTGTTGGTCCTAGCCCATTTCAGCACCCTGCCACTTGGAGTGGACCCCTCCTACTCTTCTTAGCGCCTACCCTCATACCTATCTCCCTCCTCCCATCTCCTAGGGGACTGGCGCCAAATGGTCTCTCCCTGCCAATTTTGGTATCTTCTCTGGCCTCTCCAGTCCTGCTTACTCCTCTATTTTTAAAGTGCCAAACAAATCCCCTTCCTCTTTCTCAAAGCACAGTAATGTGGCACTGAGCCCTACCCAGCACCTCAGTGAAGGGGGCCTGCTTGCTCTTTATTTTGGTCCCGGATCCTGGGGTGGGGCAGAAATATTTTCTGGGCTGGGGTAGGAGGAAGGTTGTTGCAGCCATCTACTGCTGCTGTACCCTAGGAATATGGGGACATGGACATGGTGTCCCATGCCCAGATGATAAACACTGAGCTGCCAAAACATTTTTTTAAATACACCCGAGGAGCCCAAGGGGGAAGGGCAATGCCTACCCCCAGCGTTATTTTTGGGGAGGGAGGGCTGTGCATAGGGACATATTCTTTAGAATCTATTTTATTAACTGACCTGTTTTGGGACCTGTTACCCAAATAAAAGATGTTTCTAG

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FIGURE 3208

GCGAGGCGCCACCGACGCGGAAGACTATAAGCCCCAGCGGGCGACGACCGAACGCCCCCGGGAACACCGGGCCCC
GAGCTCGGTCCCGCGCCCGAGGATCCTCCACGGGGCTAGATGGCTGCGTCGGGGGCGGGAGCGGAGGTGAGCGGG
CGCTAGGGCCGCGAGCCCCCGCCGGCCCTTCCTCCAGCGCCCTGCGGACCCCGCAGAAGGCGCTCGCCTCCCTAG
CCCGCAAAAACATATCGATTTTTCTCGCTGTGGCAACGGGGACGTCCTGATAGATCCTCTGCTCCAATAGGCAAC
TCCGGCCTTCCCTGCCCTGACCTGGAACCTCTGGGAGGGCTGCAGAGTAAGTGCCGCCTCTGCGCTCCGACGGAG
GCACGAGGCCTGTGGAGTAGGTCCCTCTGTTCCGACAGGTGCGACACTTGGCGCTCC**ATG**CTTGCGGGTGCCGGG
AGGCCTGGCCTCCCCCAGGGCCGCCACCTCTGCTGGTTGCTCTGTGCTTTCACCTTAAAGCTCTGCCAAGCAGAG
GCTCCCGTGCAGGAAGAGAAGCTGTCAGCAAGCACCTCAAATTTGCCATGCTGGCTGGTGGAAGAGTTTGTGGTA
GCAGAAGAGTGCTCTCCATGCTCTAATTTCCGGGCTAAAACTACCCCTGAGTGTGGTCCCACAGGATATGTAGAG
AAAATCACATGCAGCTCATCTAAGAGAAATGAGTTCAAAAGCTGCCGCTCAGCTTTGATGGAACAACGCTTATTT
TGGAAGTTCGAAGGGGCTGTCGTGTGTGTGGCCCTGATCTTCGCTTGTCTTGTCATCATTCGTCAGCGACAATTG
GACAGAAAGGCTCTGGAAAAGGTCCGGAAGCAAATCGAGTCCATA**TAG**CTACATTCCACCCTTGTATCCTGGGTC
TTAGAGACCCTATCTCAGACAGTGAAAGTGAAATGGACTGATTTGCACTCTTGGTTCTTTGGAGCCTTGTGGTGG
AATCCCCTTTTCCCCATCTTCTTCTTTCAGATCATTAATGAGCAGAATAAAAAGAGTAAAATGGT

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FIGURE 3209

GGGAGGAAAACTTCTTCCTGGCCTGGGCTCCGTGCCGCTCTGTTTGCCAACCGTCCAGTCCCGCCTACCAGTGCC
GGGCGCTCCCCACCCCTCCCCCGGCTCCCCCGGTGTCCGCCATGGCCAAAGCCTACGACCACCTCTTCAAGTTGC
TGCTGATCGGGGACTCGGGGGTGGGCAAGACTTGTCTGATCATTCGCTTTGCAGAGGACAACTTCAACAACACTT
ACATCTCCACCATCGGAATTGATTTCAAGATCCGCACTGTGGATATAGAGGGGAAGAAGATCAAACTACAAGTCT
GGGACACGGCTGGCCAAGAGCGGTTCAAGACAATAACTACTGCCTACTACCGTGGAGCCATGGGCATTATCCTAG
TATACGACATCACGGATGAGAAATCTTTCGAGAATATTCAGAACTGGATGAAAAGCATCAAGGAGAATGCCTCGG
CTGGGGTGGAGCGCCTCTTGCTGGGGAACAAATGTGACATGGAGGCCAAGAGGAAGGTGCAGAAGGAGCAGGCCG
ATAAGTTGGCTCGAGAGCATGGAATCCGATTTTTCGAAACTAGTGCTAAATCCAGTATGAATGTGGATGAGGCTT
TTAGTTCCCTGGCCCGGGACATCTTGCTCAAGTCAGGAGGCCGGAGATCAGGAAACGGCAACAAGCCTCCCAGTA
CTGACCTGAAAACTTGTGACAAGAAGAACACCAACAAGTGCTCCCTGGGCTGAGGACCCTTTCTTGCCTCCCCAC
CCCGGAAGCTGAACCTGAGGGAGACAACGGCAGAGGGAGTGAGCAGGGGAGAAATAGCAGAGGGGCTTGGAGGGT
CACATAGGTAGATGGTAAAGAGAATGAGGAGAAAAAGGAGAAAAGGGAAAAGCAGAAAGGAAAAAAAGGAAGAGA
GAGGAAGGGAGAAGGGAGAGGAATGAATTGAGGAAGTGAAAGAAGGCAAGGAGGTAGGAAGAGAGGGAGGAGGAA
AGGAAGGAGAGATGCCTCAGGCTTCAGACCTTACCTGGGTTTTCAGGGCAAACATAAATGTAAATACACTGATTT
ATTCTGTTACTAGATCAGGTTTTAGGGTCCTGCAAAAGGCTAGCTCGGCACTACACTAGGGAATTTGCTCCTGTT
CTGTCACTTGTCATGGTCTTTCTTGGTATTAAAGGCCACCATTTGCACAAAAAAAAAAAAAAA

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FIGURE 3210

CCTTTCCGGCGGTGACGACCTACGCACACGAGAACATGCCTCTCGCAAAGGATCTCCTTCATCCCTCTCCAGAAG
AGGAGAAGAGGAAACACAAGAAGAAACGCCTGGTGCAGAGCCCCAATTCCTACTTCATGGATGTGAAATGCCCAG
GATGCTATAAAATCACCACGGTCTTTAGCCATGCACAAACGGTAGTTTTGTGTGTTGGCTGCTCCACTGTCCTCT
GCCAGCCTACAGGAGGAAAAGCAAGGCTTACAGAAGGATGTTCCTTCAGGAGGAAGCAGCACTAAAAGCACTCTG
AGTCAAGATGAGTGGGAAACCATCTCAATAAACACATTTTGGAT

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FIGURE 3211

ACTCAGGCAGCAGCCCCTTCTTTCTTGCCCCAGTCTCCAGTTCTCCAGTGTTCACAGGTGAGCCTACCAACAGCC
ACTGCTCATGATGGAGGCCATCAAGAAAAAGATGCAGATGCTGAAGTTAGACAAGGAGAATGCTCTGGATCGGGC
AGAGCAAGCTGAAGCTGAGCAGAAGCAGGCAGAAGAAAGAAGTAAACAGCTGGAGGATGAGCTGGCAGCCATGCA
GAAGAAGCTGAAAGGGACAGAGGATGAGCTGGACAAGTATTCTGAAGCTTTGAAGGATGCCCAGGAGAAGCTGGA
ACTGGCAGAGAAGAAGGCTGCTGATGCTGAGGCTGAGGTGGCCTCCTTGAACCGTAGGATCCAGCTGGTTGAAGA
AGAGCTGGACCGTGCTCAGGAGCGCCTGGCCACTGCCCTGCAAAAGCTGGAAGAAGCTGAAAAAGCTGCTGATGA
GAGTGAGAGAGGTATGAAGGTTATTGAAAACCGGGCCTTAAAAGATGAAGAAAAGATGGAACTCCAGGAAATCCA
ACTCAAAGAAGCTAAGCACATTGCAGAAGAGGCAGATAGGAAGTATGAAGAGGTGGCTCGTAAGTTGGTGATCAT
TGAAGGAGACTTGGAACGCACAGAGGAACGAGCTGAGCTGGCAGAGTCTAAGTGTTCTGAGCTGGAGGAGGAGCT
GAAGAATGTCACCAACAACCTCAAGTCTCTTGAGGCTCAGGCGGAGAAGTACTCTCAAAAAGAAGATAAATATGA
GGAAGAAATCAAGATTCTTACTGATAAACTCAAGGAGGCAGAGACCCGTGCTGAGTTTGCTGAGAGATCGGTAGC
CAAGCTGGAAAAGACAATTGATGACCTGGAAGATGAGCTCTATGCCCAGAAACTGAAGTACAAGGCCATTAGCGA
GGAGCTGGACCACGCCCTCAATGACATGACCTCTATATAATTATCACCGTTTCTGCTCTGTTCTGGATCTGCCCC
CTTTACTCCTCGGGGAACCCAAGGCCCCACTCTCGCTCTGGATTCCATTTGGGTCAGCCTGGCTGGTCCCCAAGG
CATTAGGATGGGGGAGCAAAAAGCAACTTATGTATTTTCTTCCACCCCCACCCCAAATTAAAATGTTAAGCTGCT
GGA

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FIGURE 3212

GTCAGGGGGAAGCTGGAAGGCGTCGTTCTCCTTTCCCAGCTCTCCTGCCTGTCCGCCATGTTTTCAGGCCGGGTC
TGGCTTGGTCTTCCCCCGTAAGGAAATGGCCGGGGAGCTCCAGGGGACCCAGGCGCCGTCGCTTCGGCGGAGCCT
GGGCTGACCAGCCAGGACAGCGGGGTAAACCCGAACAATTCTGCGCGAGGTAGGGAGGCCATGGCGTCCGGCAGT
AACTGGCTCTCCGGGGTGAATGTCGTGCTGGTGATGGCCTACGGGAGCCTGGACTTGAAAGAGGAGATTGATATT
CGACTCTCCAGGGTTCAGGATATCAAGTATGAGCCCCAGCTCCTTGCAGATGATGATGCTAGACTACTACAACTG
GAAACCCAGGGAAATCAAAGTTGCTACAACTATCTGTATAGGATGAAAGCTCTGGATGCCATTCGTACCTCTGAG
ATCCCATTTCATTCTGAAGGCCGGCATCCCCGTTCCTTAATGGGCAAGAATTTCCGCTCCTACCTGCTGGATCTG
CGAAACACTAGTACGCCTTTCAAGGGTGTACGCAAAGCACTCATTGATACCCTTTTGGATGGCTATGAAACAGCC
CGCTATGGGACAGGGGTCTTTGGCCAGAATGAGTACCTACGCTATCAGGAGGCCCTGAGTGAGCTGGCCACTGCG
GTTAAAGCACGAATTGGGAGCTCTCAGCGACATCACCAGTCAGCAGCCAAAGACCTAACTCAGTCCCCTGAGGTC
TCCCCAACAACCATCCAGGTGACATACCTCCCCTCCAGTCAGAAGAGTAAACGTGCCAAGCACTTCCTTGAATTG
AAGAGCTTTAAGGATAACTATAACACATTGGAGAGTACTCTGTGACGGAGCTGAAGGACTCTTGCCGTAGATTAA
GCCAGTCAGTTGCAATGTGCAAGACAGGCTGCTTGCCGGGCCGCCCTCGGAACATCTGGCCCAGCAGGCCCAGAC
TGTATCCATCCAAGTTCCCGTTGTATCCAGAGTTCTTAGAGCTTGTGTCTAAAGGGTAATTCCCCAACCCTTCCT
TATGAGCATTTTTAGAACATTGGCTAAGACTATTTTCCCCCAGTAGCGCTTTTTTCTGGATTTGCATTCAGGTGT
TATTCTTAATGTTTCTGTCAAAGCTTCTTAAAAATCTTCACTTGGTTTCAGCCATAGTTCACCTTCCCTGTTCCA
GGTTTATTTAATTCCAAAGGTGAGAGTTGGAGTGAGATGTCTTCCATATCTATACCTTTGTGCACAGTTGAATGG
GAACTGTTTGGGTTTAGGGCATCTTAGAGTTGATTGATGGAAAAAGCAGACAGGAACTGGTGGGAGGTCAAGTGG
GGAAGTTGGTGAATGTGGAATAACTTACCTTTGTGCTCCACTTAAACCAGATGTGTTGCAGCTTTCCTGACATGC
AAGGATCTACTTTAATTCCACACTCTCATTAATAAATTGAATAAAAGGGAATGTTTTGGCACCTGATATAATCTG
CCAGGCTATGTGACAGTAGGAAGGAATGGTTTCCCCTAACAAGCCCAATGCACTGGTCTGACTTTATAAATTATT
TAATAAAATGAACTATTATCAAATAAAACGTATGAATCAGT

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FIGURE 3213

CCCGACTAAGTGACTTAAACTCCCACCTACTCCTGGAATAAGGAGTCAAAGCCCGGATAGGCGCAGTATTCTACC
TTGTAAATACTGTTATTTGTATATACTGTAAATGATGACATCGGTGGGCACTAACCGAGCCCGGGGAAACTGGGA
ACAACCTCAAAACCAAAACCAGACACAGCACAAGCAGCGGCCACAGGCCACTGCAGAACAAATTAGACTTGCACA
GATGATTTCGGACCATAATGATGCTGACTTTGAGGAGAAGGTGAAACAATTGATTGATATTACAGGCAAGAACCA
GGATGAATGTGTGATTGCTTTGCATGACTGCAATGGAGATGTCAACAGAGCTATCAATGTTCTTCTGGAAGGAAA
CCCAGACACGCATTCCTGGGAGATGGTCGGGAAGAAGAAGGGAGTCTCAGGCCAGAAGGATGGTGGCCAGACGGA
ATCCAATGAGGAAGGCAAAGAAAATCGAGACCGGGACAGAGACTATAGTCGGCGACGTGGTGGGCCACCAAGACG
GGGGAGAGGTGCCAGCCGTGGACGAGAGTTTCGAGGTCAGGAAAATGGATTGGATGGCACCAAGAGTGGAGGGCC
TTCTGGAAGAGGAACAGAAAGAGGCAGAAGGGGCCGTGGCCGAGGCAGAGGTGGCTCTGGTAGGCGAGGAGGAAG
GTTTTCTGCTCAAGGAATGGGAACCTTTAACCCAGCTGATTATGCAGAGCCAGCCAATACTGATGATAACTATGG
CAATAGCAGCGGCAATACGTGGAACAACACTGGCCACTTTGAACCAGATGATGGGACGAGTGCATGGAGGACTGC
AACAGAGGAGTGGGGGACTGAAGATTGGAATGAAGATCTTTCTGAGACCAAGATCTTCACTGCCTCTAATGTGTC
TTCAGTGCCTCTGCCTGCGGAGAATGTGACAATCACTGCTGGTCAGAGAATTGACCTTGCTGTTCTGCTGGGGAA
GACACCATCTACAATGGAGAATGATTCATCTAATCTGGATCCGTCTCAGGCTCCTTCTCTGGCCCAGCCTCTGGT
GTTCAGTAATTCGAAGCAGACTGCCATATCACAGCCTGCTTCAGGGAACACATTTTCTCATCACAGTATGGTGAG
CATGTTAGGGAAAGGATTTGGTGATGTCGGTGAAGCTAAAGGCGGCAGTACTACAGGCTCCCAGTTCTTGGAGCA
ATTCAAGACTGCCCAAGCCCTGGCTCAGTTGGCAGCTCAGCATTCTCAGTCTGGAAGCACCACCACCTCCTCTTG
GGACATGGGCTCGACGACACAATCCCCATCACTGGTGCAGTATGATTTGAAGAACCCAAGTGATTCAGCAGTGCA
CAGCCCCTTTACAAAGCGCCAGGCTTTTACCCCATCTTCAACCATGATGGAGGTGTTCCTTCAGGAGAAGTCACC
TGCAGTGGCTACCTCCACAGCTGCACCTCCACCTCCGTCTTCTCCTCTGCCAAGCAAATCCACATCGGCTCCACA
GATGTCGCCTGGATCTTCAGACAACCAGTCCTCTAGCCCTCAGCCGGCTCAGCAGAAACTGAAACAGCAGAAGAA
AAAAGCCTCCTTGACTTCTAAGATTCCTGCTCTGGCTGTGGAGATGCCTGGCTCAGCAGATATCTCAGGGCTAAA
CCTGCAGTTTGGGGCATTGCAGTTTGGGTCAGAGCCTGTCCTTTCTGATTATGAGTCCACCCCCACCACGAGCGC
CTCTTCAAGCCAGGCTCCAAGTAGCCTGTATACCAGCACGGCCAGTGAATCATCCTCTACAATTTCATCTAACCA
GAGTCAGGAGTCTGGTTATCAGAGCGGCCCAATTCAGTCGACAACCTATACCTCCCAAAATAATGCTCAGGGCCC
TCTTTATGAACAGAGATCCACACAGACTCGGCGGTACCCCAGCTCCATCTCTTCATCACCCCAAAAGGACCTGAC
TCAGGCAAAGAATGGCTTCAGTTCTGTGCAGGCCACGCAGTTACAGACCACACAATCTGTTGAAGGTGCTACAGG
CTCTGCAGTGAAATCTGATTCACCTTCCACTTCTAGCATCCCCCCTCTCAATGAAACGGTATCTGCAGCTTCCTT
ACTGACGACAACCAATCAGCATTCATCCTCCTTGGGTGGCTTGAGCCACAGTGAGGAGATTCCAAATACTACCAC
CACACAACACAGCAGCACGTTATCTACGCAGCAGAATACCCTTTCATCATCAACATCTTCTGGGCGCACTTCGAC
ATCCACTCTTTTGCACACAAGTGTGGAGAGTGAGGCGAATCTCCATTCTTCCTCCAGCACTTTTTCCACCACATC
CAGCACAGTCTCTGCACCTCCCCCAGTGGTCAGTGTCTCCTCCAGTCTCAATAGTGGCAGTAGCCTGGGCCTCAG
CCTAGGCAGCAACTCCACTGTCACAGCCTCGACTCGAAGCTCAGTTGCTACGACTTCAGGAAAAGCTCCTCCCAA
CCTCCCTCCTGGGGTCCCGCCGTTGTTGCCTAATCCGTATATTATGGCTCCAGGGCTGTTACATGCCTACCCGCC
ACAAGTATATGGTTATGATGACTTGCAGATGCTTCAGACAAGATTTCCATTGGATTACTACAGCATCCCATTTCC
CACACCCACTACTCCGCTGACTGGGAGGGATGGTAGCCTGGCCAGCAACCCTTATTCTGGTGACCTCACAAAGTT
CGGCCGTGGGGATGCCTCCTCCCCAGCCCCGGCCACAACCTTGGCCCAACCCCAACAGAACCAGACGCAGACTCA
CCATACCACGCAGCAGACATTCCTGAACCCGGCGCTGCCTCCTGGCTACAGTTACACCAGCCTGCCATACTATAC
AGGGGTCCCGGGCCTCCCCAGCACCTTCCAGTATGGGCCTGCTGTGTTCCCTGTGGCTCCTACCTCTTCCAAGCA
GCATGGTGTGAATGTCAGTGTGAATGCATCGGCCACCCCTTTCCAACAGCCGAGTGGATATGGGTCTCATGGATA
CAACACTGGAAGAAAATATCCACCCCCTTACAAGCATTTCTGGACGGCTGAGAGCTAATTTGGCCCAAGGCTGGG
GGCTGTGTTTTGTGTGTGTGTATAAATTTGCACTGAAGTCTTGTTTCAGAAACCAGACCACTGAGGAGAGCCTGC
TGAGCTGAGGCCATGGCCTGCGTGGCTTGGGGAAATGAGTTGGTGGATACCTTCTGGGCTTTTGAACTTGCCCCT
CCCCCATTTCCCTCTCCCCCATGTGTCTGACCCTGTCTTACCCATTTCAAGTTCAAGCGGTGCAGCACCTTCGAA
GCATCAATGCACACACCTGCTGTTGCTTTTGATTTCTGGAAGGCATGTAGTTTCAACTTGTAACAAAAATATTTG
TAGTCTTCAATAAACTGTGGTATTTCTTTAGCTAAC

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FIGURE 3214

GTCCGGCTTACCGTCGTTTACGACAGTGTCAGGATCGCGGGCTTGCTTTCCGGTAGCGTGGGCTGACGCCTCGCT
CAATTTCTCACAGGGCTGCGCAGGTTTCCCCCGTCTGCGAATGGACCACTGGAGGGGTTCAAAGGTTCGCGTCCC
AGTACGGGA**ATG**AGCCTCTTTGATCTCTTCCGGGGCTTTTTCGGCTTTCCTGGACCTCGGAGCCACAGAGATCCC
TTTTTTGGAGGGATGACTCGAGATGAAGATGATGATGAGGAAGAAGAAGAAGAAGGGGGCTCATGGGGCCGTGGG
AACCCAAGGTTCCATAGTCCTCAGCACCCCCCTGAGGAATTTGGCTTCGGCTTCAGCTTCAGCCCAGGAGGAGGG
ATACGTTTCCACGATAACTTCGGCTTTGATGACCTAGTACGAGATTTCAATAGCATCTTCAGCGATATGGGGGCC
TGGACCTTGCCTTCCCATCCTCCTGAACTTCCAGGTCCTGAGTCAGAGACACCTGGTGAGAGACTACGGGAGGGA
CAGACACTTCGGGACTCAATGCTTAAGTATCCAGATAGTCACCAGCCCAGGATCTTTGGGGGGGGTCTTGGAGAGT
GATGCAAGAAGTGAATCCCCCCAACCAGCACCAGACTGGGGCTCCCAGAGGCCATTTCATAGGTTTGATGATGTA
TGGCCTATGGACCCCCATCCTAGAACCAGAGAGGACAATGATCTTGATTCCCAGGTTTCCCAGGAGGGTCTTGGC
CCGGTTCTACAGCCCCAGCCCAAATCCTATTTCAAGAGCATCTCTGTGACCAAGATCACTAAACCAGATGGGATA
GTGGAGGAGCGCCGGACTGTGGTGGACAGTGAGGGCCGGACAGAGACTACAGTAACCCGACACGAAGCAGATAGC
AGTCCTAGGGGTGATCCAGAATCACCAAGACCTCCAGCCCTGGATGATGCCTTTTCCATCCTGGACTTATTCCTG
GGACGTTGGTTCCGGTCCCGG**TAG**CCTTGTTAACCCTCAGAGGCCTTCAAGTCCTTTCCACCTCTCACCCATTGC
CCACCATTAATAAGCTTAGCTTCTCTTGCCACCTCAGGGGCTTGGATATGTGGAATAGTGAACTGGGGCCATGTC
AGTTTGTCACTCACCCAAACTGACCAATAAAACCTTTATTTATGCT

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FIGURE 3215

CCTACAGAGGGGTCCATACCGTGTTGTTCTGGATTCCCGTTGTAACTTAAAGGGAAATTTTCACAATGTCCAGAG
CCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTTAGGTGGCACTA
ATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCATCTACATCATAAATCTGAAGAGGA
CCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCCATTGTTGCCATTGAAAACCCTGCTGATGTCAGTGTTATATCCT
CCAGGAATACTGGCCAGAGGGCCATGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGCTGGCCACTTCA
CTCCTGGAACCTTCACTAACCGGATCCAGGCAGCCTTCCGGGAGCCACAGCTTCCTGTGGTTACTGACCCCAGGG
CTGACCACCAGCCTCTCACGGAGGTATCTTATGTTAACTTACCTACCATTGCGCTGTGTAACACAGATTCTCCTC
TGCGCTATGTGGACATTGCCATCCCATGCAACAATAAGGGAGCTCACTCAGTGGGTTGGATGTGGTGGATGCTGG
CTCAGGAAGTTCTGCGCATGCGTGGCACCATTTCCCGTGAACACCCATGGGAGGTCATGCCTGATCTCTGCTTCT
ACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGGCTGCTGCTGAAGAGGCAGTGACCAAGGAGGAATTTCAGG
GTGAATGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGACTGGTCTGAAGGTCTGCAGG
TGCCCTCTGTGTCTATTCAGTAGTTCCCTACTGAAGACTGGAGCGCTCAGCCTGCCACGGAAGACTGGTCTGCAG
CTCCCACTGCTCAGGCCACTGAATGGGTAGGAGCAACCACTGAATGGTCTTAAGCTGTTCTTGCATGGGCTCTTA
AGCAACATGGAAAAATGGTTGATGGAAAATAAATAAACATCAGTTTCT

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FIGURE 3216

GGGGGGGGCCTGTCCCGGAGGTGGCGGCGGCGCCATCTTGGCGAAGGGGGGATCAGGAAGTGCGGACCGCGGCGG
CGGCGGCGGCGGCGGCGGCGGCGGCGGAGCCCGGAGCGCAGGCCGGAGGCTCCCGGCCCGCCGGCCCCGGAGCGG
AGCGGAGCGGAGGATGCAGCAGCCGCAGCCGCAGGGGCAGCAGCAGCCGGGGCCGGGGCAGCAGCTGGGGGGCCA
GGGGGCGGCGCCGGGGGCCGGGGGCGGCCCAGGGGGGGGCCCGGGGCCGGGGCCCTGCCTGAGGCGAGAGCTGAA
GCTGCTCGAGTCCATCTTCCACCGCGGCCACGAGCGCTTCCGCATTGCCAGCGCCTGCCTGGACGAGCTGAGCTG
CGAGTTCCTGCTGGCTGGGGCCGGAGGGGCCGGGGCGGGGGCCGCGCCCGGACCGCATCTCCCCCCACGGGGGTC
GGTGCCTGGGGATCCTGTCCGCATCCACTGCAACATCACGGAGTCATACCCTGCTGTGCCCCCCATCTGGTCGGT
GGAGTCTGATGACCCTAACTTGGCTGCTGTCTTGGAGAGGCTGGTGGACATAAAGAAAGGGAATACTCTGCTATT
GCAGCATCTGAAGAGGATCATCTCCGACCTGTGTAAACTCTATAACCTCCCTCAGCATCCAGATGTGGAGATGCT
GGATCAACCCTTGCCAGCAGAGCAGTGCACACAGGAAGACGTGTCTTCAGAAGATGAAGATGAGGAGATGCCTGA
GGACACAGAAGACTTAGATCACTATGAAATGAAAGAGGAAGAGCCAGCTGAGGGCAAGAAATCTGAAGATGATGG
CATTGGAAAAGAAAACTTGGCCATCCTAGAGAAAATTAAAAAGAACCAGAGGCAAGATTACTTAAATGGTGCAGT
GTCTGGCTCGGTGCAGGCCACTGACCGGCTGATGAAGGAGCTCAGGGATATATACCGATCACAGAGTTTCAAAGG
CGGAAACTATGCAGTCGAACTCGTGAATGACAGTCTGTATGATTGGAATGTCAAACTCCTCAAAGTTGACCAGGA
CAGCGCTTTGCACAACGATCTCCAGATCCTCAAAGAGAAAGAAGGAGCCGACTTCATTCTACTTAACTTTTCCTT
TAAAGATAACTTTCCCTTTGACCCACCATTTGTCAGGGTTGTGTCTCCAGTCCTCTCTGGAGGGTATGTTCTGGG
CGGAGGGGCCATCTGC**ATG**GAACTTCTCACCAAACAGGGCTGGAGCAGTGCCTACTCCATAGAGTCAGTGATCAT
GCAGATCAGTGCCACACTGGTGAAGGGGAAAGCACGAGTGCAGTTTGGAGCCAACAAATCTCAATACAGTCTGAC
AAGAGCACAGCAGTCCTACAAGTCCTTGGTGCAGATCCACGAAAAAAAACGGCTGGTACACACCCCCAAAAGAAGA
CGGC**TAA**CCCTGGAGTATCACCCTTCCTCCCTCCCCAGGCACCACTGGACCAATTACCTTTGAATGCTGTATTTG
GATCTCACGCTGCCTCTGTGGTTCCCTCCCTCATTTTTCCTGGACGTGATAGCTCTGCCTATTGCAGGACAATGA
TGGCTATTCTAAACGCTAAGGAAAAAAAAACAAACACAGAACTGTTTCAAGTACTCAAGACTGACTTACAGACCAA
CCAACCACCTTGCTGGAACCCTTGCTAGCAGGCATTCTTATAAAAGAAACTTTCGAGCCTCCTTATATTGCTGGA
AACTCAGCTGTGCTCCAGACTAGAGCCTCCTTACCTATGCTATGGATTTTTAATTTATTTTCTCTTATTTCATGT
ACACTGCTTTTTTTGGTTACAGTGTATGATGGATGTGTATGAAAAAAATGTATCTTTGGGAAAACAATTACAGTT
TGTTAATTTGAAGATGCTGGTCTTGACTCATCTTTATTTTTATTCGCACATCCCACCCCATCCCCTGAACTACTT
GGGAGGTGGGGAGGGGTACGAGTCCACTGTTGCTTTGGTAGAGATGAGAGGCCGCATTTTGCTGCTAAAGCAAGA
GAAACTTGGAGCTGAAGCACACACCTGGTCTGCCCCTAGATTTCTCCTCAAGGCCTCTGGAGCAACCAGCACTTG
CCCCCTTGGAATGCAGAGCCTGGCCTGCCAAACTACAATGTGGTAGGCTGAAACGATGGTGTTAATTCTTAGGAC
TACTTTTCTAGTCACAGATGTTTTCAAATTTCTAAGAAAAAGAAAATGAGGCTCAAGAGGCTGCTTCGTAGAATT
CCTTTTGAATGAATTGAGTGGGGATGGGGACACAGTCTCCAAGTGTGTATGTGGTCTTTTCTGATCTCAGCTGTG
TGGCTGCAACTCTTCGCTGTTCATTGGTTCCTCTCCTGGAAAGTGGCTTCTAACCAGCACTGGATGGTGATCATT
GGTAAGCTTTGCTCACCTCCCTCTCTCTTGCTTCATTTGGCTTTATCAAAAAGAACAGACCTAGCTCTGAATTTG
TTTGGCTTGGGAAATTATGGATTCTTTCAAGCCACTCCCACAAGGTGGGTCCTACTAGAAAGGGTTAGCATTTTA
AGGGGGGTTGTTCTATACACCTGTGTCCTTACCCCAGGCTCAGGAACTGCCAGGGAGGGAAGATGAGGTGGGGAG
TCTGTACTGAGATGGAACTGTCAGTGCTGTGTTGTATGTACTTGCTGTTGTAAAAGTTTGGGCATGACTTTGCAT
CTAGCGGGTGCTGCCTGCATCTCTTTGTCTGTAAGCTTGCTCTGGGACTCAGCCTCTTAGGACCTACGATGCCAG
CAGCTCTCATTAACAGTGAAATGACAGAGGCCAAAGATGGCCAAGTGAAGACCCAAGTCTCAGAAAACCCAGACT
TGGGACAACTGCCTGGGAACTAGGATGCTAGAGCAGTTCTGTAATGCTTTGAGACACAGCAATTTTCACATTGGC
CATTCTTTCCCCTCCCCTACCCCTTTTCTTTTGAGGGACTTTTAATGTTTGCTGCTTTAGGTGGATGGAGAGTCC
ACCAGTCCCACTCAATGCTGCTCTAACTCTACCCACACCCACCTAATTAGGGGTGCTAATAAAACATGCTGAGGT
TGAGATAAAGACGGGACATAAGGGGAAAATTCATTCCATAGAGCTGAAATCTGGTTTTCAAGGCCTCTGTGGCTT
TCTTCTGAACTTACCACCAGCCCTGGCTGGAATGTAGATTGTGTTTTTAGTAATGTGTACTGTGAGCTGTCTTCT
GTATAATGTATTTTGTAATGTATTTTTCTCATCTACCAAAGGATGAAACAAATAAAATTATTTAAATA

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FIGURE 3217A

CGAAATTGAACCGGAGCCATCTTGGGCCCGGCGCGCAGACCCGCGGAGTTTCCCGTGCCGACGCCCCGGGGCCAC
TTCCAGTGCGGAGTAGCGGAGGCGTGGGGGCCTCGAGGGGCTGGCGCGGCCCAGCGGTCGGGCCAGGGTCGTGCC
GCCGGCGGGTCGGGCCGGGCAATGCCTCGCGGGCGCAATGAATCCGCGGCAGGGGTATTCCCTCAGCGGATACTA
CACCCATCCATTTCAAGGCTATGAGCACAGACAGCTCAGGTACCAGCAGCCTGGGCCAGGATCTTCCCCCAGTAG
TTTCCTGCTTAAGCAAATAGAATTTCTCAAGGGGCAGCTCCCAGAAGCACCGGTGATTGGAAAGCAGACACCGTC
ACTGCCACCTTCCCTCCCAGGACTCCGGCCAAGGTTTCCAGTACTACTTGCCTCCAGTACCAGAGGCAGGCAAGT
GGACATCAGGGGTGTCCCCAGGGGCGTGCATCTCAGAAGTCAGGGGCTCCAGAGAGGGTTCCAGCATCCTTCACC
ACGTGGCAGGAGTCTGCCACAGAGAGGTGTTGATTGCCTTTCCTCACATTTCCAGGAACTGAGTATCTACCAAGA
TCAGGAACAAAGGATCTTAAAGTTCCTGGAAGAGCTTGGGGAAGGGAAGGCCACCACAGCACATGATCTGTCTGG
GAAACTTGGGACTCCGAAGAAAGAAATCAATCGAGTTTTATACTCCCTGGCAAAGAAGGGCAAGCTACAGAAAGA
GGCAGGAACACCCCCTTTGTGGAAAATCGCGGTCTCCACTCAGGCTTGGAACCAGCACAGCGGAGTGGTAAGACC
AGACGGTCATAGCCAAGGAGCCCCAAACTCAGACCCGAGTTTGGAACCGGAAGACAGAAACTCCACATCTGTCTC
AGAAGATCTTCTTGAGCCTTTTATTGCAGTCTCAGCTCAGGCTTGGAACCAGCACAGCGGAGTGGTAAGACCAGA
CAGTCATAGCCAAGGATCCCCAAACTCAGACCCAGGTTTGGAACCTGAAGACAGCAACTCCACATCTGCCTTGGA
AGATCCTCTTGAGTTTTTAGACATGGCCGAGATCAAGGAGAAAATCTGCGACTATCTCTTCAATGTGTCTGACTC
CTCTGCCCTGAATTTGGCTAAAAATATTGGCCTTACCAAGGCCCGAGATATAAATGCTGTGCTAATTGACATGGA
AAGGCAGGGGGATGTCTATAGACAAGGGACAACCCCTCCCATATGGCATTTGACAGACAAGAAGCGAGAGAGGAT
GCAAATCAAGAGAAATACGAACAGTGTTCCTGAAACCGCTCCAGCTGCAATCCCTGAGACCAAAAGAAACGCAGA
GTTCCTCACCTGTAATATACCCACATCAAATGCCTCAAATAACATGGTAACCACAGAAAAAGTGGAGAATGGGCA
GGAACCTGTCATAAAGTTAGAAAACAGGCAAGAGGCCAGACCAGAACCAGCAAGACTGAAACCACCTGTTCATTA
CAATGGCCCCTCAAAAGCAGGGTATGTTGACTTTGAAAATGGCCAGTGGGCCACAGATGACATCCCAGATGACTT
GAATAGTATCCGCGCAGCACCAGGTGAGTTTCGAGCCATCATGGAGATGCCCTCCTTCTACAGTCATGGCTTGCC
ACGGTGTTCACCCTACAAGAAACTGACAGAGTGCCAGCTGAAGAACCCCATCAGCGGGCTGTTAGAATATGCCCA
GTTCGCTAGTCAAACCTGTGAGTTCAACATGATAGAGCAGAGTGGACCACCCCATGAACCTCGATTTAAATTCCA
GGTTGTCATCAATGGCCGAGAGTTTCCCCCAGCTGAAGCTGGAAGCAAGAAAGTGGCCAAGCAGGATGCAGCTAT
GAAAGCCATGACAATTCTGCTAGAGGAAGCCAAAGCCAAGGACAGTGGAAAATCAGAAGAATCATCCCACTATTC
CACAGAGAAAGAATCAGAGAAGACTGCAGAGTCCCAGACCCCCACCCCTTCAGCCACATCCTTCTTTTCTGGGAA
GAGCCCCGTCACCACACTGCTTGAGTGTATGCACAAATTGGGGAACTCCTGCGAATTCCGTCTCCTGTCCAAAGA
AGGCCCTGCCCATGAACCCAAGTTCCAATACTGTGTTGCAGTGGGAGCCCAAACTTTCCCCAGTGTGAGTGCTCC
CAGCAAGAAAGTGGCAAAGCAGATGGCCGCAGAGGAAGCCATGAAGGCCCTGCATGGGGAGGCGACCAACTCCAT
GGCTTCTGATAACCAGCCTGAAGGTATGATCTCAGAGTCACTTGATAACTTGGAATCCATGATGCCCAACAAGGT
CAGGAAGATTGGCGAGCTCGTGAGATACCTGAACACCAACCCTGTGGGTGGCCTTTTGGAGTACGCCCGCTCCCA
TGGCTTTGCTGCTGAATTCAAGTTGGTCGACCAGTCCGGACCTCCTCACGAGCCCAAGTTCGTTTACCAAGCAAA
AGTTGGGGGTCGCTGGTTCCCAGCCGTCTGCGCACACAGCAAGAAGCAAGGCAAGCAGGAAGCAGCAGATGCGGC
TCTCCGTGTCTTGATTGGGGAGAACGAGAAGGCAGAACGCATGGGTTTCACAGAGGTAACCCCAGTGACAGGGGC
CAGTCTCAGAAGAACTATGCTCCTCCTCTCAAGGTCCCCAGAAGCACAGCCAAAGACACTCCCTCTCACTGGCAG
CACCTTCCATGACCAGATAGCCATGCTGAGCCACCGGTGCTTCAACACTCTGACTAACAGCTTCCAGCCCTCCTT
GCTCGGCCGCAAGATTCTGGCCGCCATCATTATGAAAAAAGACTCTGAGGACATGGGTGTCGTCGTCAGCTTGGG
AACAGGGAATCGCTGTGTGAAAGGAGATTCTCTCAGCCTAAAAGGAGAAACTGTCAATGACTGCCATGCAGAAAT
AATCTCCCGGAGAGGCTTCATCAGGTTTCTCTACAGTGAGTTAATGAAATACAACTCCCAGACTGCGAAGGATAG
TATATTTGAACCTGCTAAGGGAGGAGAAAAGCTCCAAATAAAAAAGACTGTGTCATTCCATCTGTATATCAGCAC
TGCTCCGTGTGGAGATGGCGCCCTCTTTGACAAGTCCTGCAGCGACCGTGCTATGGAAAGCACAGAATCCCGCCA
CTACCCTGTCTTCGAGAATCCCAAACAAGGAAAGCTCCGCACCAAGGTGGAGAACGGAGAAGGCACAATCCCTGT
GGAATCCAGTGACATTGTGCCTACGTGGGATGGCATTCGGCTCGGGGAGAGACTCCGTACCATGTCCTGTAGTGA
CAAAATCCTACGCTGGAACGTGCTGGGCCTGCAAGGGGCACTGTTGACCCACTTCCTGCAGCCCATTTATCTCAA
ATCTGTCACATTGGGTTACCTTTTCAGCCAAGGGCATCTGACCCGTGCTATTTGCTGTCGTGTGACAAGAGATGG
GAGTGCATTTGAGGATGGACTACGACATCCCTTTATTGTCAACCACCCCAAGGTTGGCAGAGTCAGCATATATGA
TTCCAAAAGGCAATCCGGGAAGACTAAGGAGACAAGCGTCAACTGGTGTCTGGCTGATGGCTATGACCTGGAGAT

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FIGURE 3217B

CCTGGACGGTACCAGAGGCACTGTGGATGGGCCACGGAATGAATTGTCCCGGGTCTCCAAAAAGAACATTTTTCT
TCTATTTAAGAAGCTCTGCTCCTTCCGTTACCGCAGGGATCTACTGAGACTCTCCTATGGTGAGGCCAAGAAAGC
TGCCCGTGACTACGAGACGGCCAAGAACTACTTCAAAAAAGGCCTGAAGGATATGGGCTATGGGAACTGGATTAG
CAAACCCCAGGAGGAAAAGAACTTTTATCTCTGCCCAGTATAGTATGCTCCAGTGACAGATGGATTAGGGTGTGT
CATACTAGGGTGTGAGAGAGGTAGGTCGTAGCATTCCTCATCACATGGTCAGGGGATTTTTTTTCTCCTTTTTT
TTTCTTTTTAAGCCATAATTGGTGATACTGAAAACTTTGGGTTCCCATTTATCCTGCTTTCTTTGGGATTGCTAG
GCAAGGTCTGGCCAGGCCCCCCTTTTTTCCCCCAAGTGAAGAGGCAGAAACCTAAGAAGTTATCTTTTCTTTCTA
CCCAAAGCATACATAGTCACTGAGCACCTGCGGTCCATTTCGTCTTAAAAGTTTTGTTTTGATTTGTTTCCATTT
CCTTTCCCTTTGTGTTTGCTACACTGACCTCTTGCGGTCTTGATTAGGTTTCAGTCAACTCTGGATCATGTCAGG
GACTGATAATTTCATTTGTGGATTACGCAGACCCCTCTACTTCCCCTCTTTCCCTTCTGAGATTCTTTCCTTGTG
ATCTGAATGTCTCCTTTTCCCCCTCAGAGGGCAAAGAGGTGAACATAAAGGATTTGGTGAAACATTTGTAAGGGT
AGGAGTTGAAAACTGCAGTTCCCAGTGCCACGGAAGTGTGATTGGAGCCTGCAGATAATGCCCAGCCATCCTCCC
ATCCTGCACTTTAGCCAGCTGCAGGGCGGGCAAGGCAAGGAAAGCTGCTTCCCTGGAAGTGTATCACTTTCTCCG
GCAGCTGGGAAGTCTAGAACCAGCCAGACTGGGTTAAGGGAGCTGCTCAAGCAATAGCAGAGGTTTCACCCGGCA
GGATGACACAGACCACTTCCCAGGGAGCACGGGCATGCCTTGGAATATTGCCAAGCTTCCAGCTGCCTCTTCTCC
TAAAGCATTCCTAGGAATATTTTCCCCGCCAATGCTGGGCGTACACCCTAGCCAACGGGACAAATCCTAGAGGGT
ATAAAATCATCTCTGCTCAGATAATCATGACTTAGCAAGAATAAGGGCAAAAAATCCTGTTGGCTTAACGTCACT
GTTCCACCCGGTGTAATATCTCTCATGACAGTGACACCAAGGGAAGTTGACTAAGTCACATGTAAATTAGGAGTG
TTTTAAAGAATGCCATAGATGTTGATTCTTAACTGCTACAGATAACCTGTAATTGAGCAGATTTAAAATTCAGGC
ATACTTTTCCATTTATCCAAGTGCTTTCATTTTTCCAGATGGCTTCAGAAGTAGGCTCGTGGGCAGGGCGCAGAC
CTGATCTTTATAGGGTTGACATAGAAAGCAGTAGTTGTGGGTGAAAGGGCAGGTTGTCTTCAAACTCTGTGAGGT
AGAATCCTTTGTCTATACCTCCATGAACATTGACTCGTGTGTTCAGAGCCTTTGGCCTCTCTGTGGAGTCTGGCT
CTCTGGCTCCTGTGCATTCTTTGAATAGTCACTCGTAAAAACTGTCAGTGCTTGAAACTGTTTCCTTTACTCATG
TTGAAGGGACTTTGTTGGCTTTTAGAGTGTTGGTCATGACTCCAAGAGCAGAGCAGGGAAGAGCCCAAGCATAGA
CTTGGTGCCGTGGTGATGGCTGCAGTCCAGTTTTGTGATGCTGCTTTTACGTGTCCCTCGATAACAGTCAGCTAG
ACACACTCAGGAGGACTACTGAGGCTCTGCGACCTTCAGGAGCTGAGCCTGCCTCTCTCCTTTAGATGACAGACC
TTCATCTGGGAACGTGCTGAGCCAGCACCCTCAGATGATTTCCCTCCAAACTGCTGACTAGGTCATCCTCTGTCT
GGTAGAGACATTCACATCTTTGCTTTTATTCTATGCTCTCTGTACTTTTGACCAAAAATTGACCAAAGTAAGAAA
ATGCAAGTTCTAAAAATAGACTAAGGATGCCTTTGCAGAACACCAAAGCATCCCAAGGAACTGGTAGGGAAGTGG
CGCCTGTCTCCTGGAGTGGAAGAGGCCTGCTCCCTGGCTCTGGGTCTGCTGGGGGCACAGTAAATCAGTCTTGGC
ACCCACATCCAGGGCAGAGAGGTCTGTGGTTCTCAGCATCAGAAGGCAGCGCAGCCCCTCTCCTCTTCAGGCTAC
AGGGTTGTCACCTGCTGAGTCCTCAGGTTGTTTGGCCTCTCTGGTCCATCTTGGGCATTAGGTTCTCCAGCAGAG
CTCTGGCCAGCTGCCTCTTCTTTAACTGGGAACACAGGCTCTCACAAGATCAGAACCCCCACTCACCCCCAAGAT
CTTATCTAGCAAGCCTGTAGTATTCAGTTTCTGTTGTAGGAAGAGAGCGAGGCATCCCTGAATTCCACGCATCTG
CTGGAAACGAGCCGTGTCAGATCGCACATCCCTGCGCCCCCATGCCCCTCTGAGTCACACAGGACAGAGGAGGCA
GAGCTTCTGCCCACTGTTATCTTCACTTTCTTTGTCCAGTCTTTTGTTTTTAATAAGCAGTGACCCTCCCTACTC
TTCTTTTTAATGATTTTTGTAGTTGATTTGTCTGAACTGTGGCTACTGTGCATTCCTTGAATAATCACTTGTAAA
AATTGTCAGTGCTTGAAGCTGTTTCCTTTACTCACATTGAAGGGACTTCGTTGGTTTTTTGGAGTCTTGGTTGTG
ACTCCAAGAGCAGAGTGAGGAAGACCCCCAAGCATAGACTCGGGTACTGTGATGATGGCTGCAGTCCAGTTTTAT
GATTCTGCTTTTATGTGTCCCTTGATAACAGTGACTTAACAATATACATTCCTCATAAATAAAAAAAAAACAAGA
ATCTGAATTCTT

FIGURE 3218

GATCACAGACTGCGGAGTGGGTCAGGGGCTGCGAGGGCTGCCCCAAGTCCTACCGGGTTTGCACGGGCGCGCCCG
GCTCCGCCCGCAAGTGCGCCTTCCTGACTTACTGCTGGGTGCGCGGGGCTGGGGGTGCGAGTACCACCCCTGAAG
TCTCTTCCTGGGCGACCTCCGGGGCCTCATTCTAGGCCTCCTTAAAGAGAAGGATCTAAATTAGGAAAAGGAAGT
GCCCTTATCCACGACCAAGCTCTTCCACCTGCGGAGCTCGCTTAGTCTGCACCTCAACCGTGCGGAAAGTGACTG
CCCTGTTTACTGAGGAAAAACTGGGGCTCAGAAAGATACCATGGAGTAGTTTGAAACAGGAACAAAATCTTCTGA
AAGCTCGGAGCAGAAGCCTTTTTGGTCAACATGGAGGAAAAAAGACGGCGAGCCCGAGTTCAGGGAGCCTGGGCT
GCCCCTGTTAAAAGCCAGGCCATTGCTCAGCCAGCTACCACTGCTAAGAGCCATCTCCACCAGAAGCCTGGCCAG
ACCTGGAAGAACAAAGAGCATCATCTCTCTGACAGAGAGTTTGTGTTCAAAGAACCTCAGCAGGTAGTACGTAGA
GCTCCTGAGCCACGAGTGATTGACAGAGAGGGTGTGTATGAAATCAGCCTGTCACCCACAGGTGTATCTAGGGTC
TGTTTGTATCCTGGCTTTGTTGACGTGAAAGAAGCTGACTGGATATTGGAACAGCTTTGTCAAGATGTTCCCTGG
AAACAGAGGACTGGCATCAGAGAGGATATAACTTATCAGCAACCAAGACTTACAGCATGGTATGGAGAACTTCCT
TACACTTATTCAAGAATCACTATGGAACCAAATCCTCACTGGCACCCTGTGCTGCGCACACTAAAGAACCGCATT
GAAGAGAACACTGGCCACACCTTCAACTCCTTACTCTGCAATCTTTATCGCAATGAGAAGGACAGCGTGGACTGG
CACAGTGATGATGAACCCTCACTAGGGAGGTGCCCCATTATTGCTTCACTAAGTTTTGGTGCCACACGCACATTT
GAGATGAGAAAGAAGCCACCACCAGAAGAGAATGGAGACTACACATATGTGGAAAGAGTGAAGATACCCTTGGAT
CATGGGACCTTGTTAATCATGGAAGGAGCGACACAAGCTGACTGGCAGCATCGAGTGCCCAAAGAATACCACTCT
AGAGAACCGAGAGTGAACCTGACCTTTCGGACAGTCTATCCAGACCCTCGAGGGGCACCCTGGTGACGTCAGAGC
TTTGAGAGAGAAGCTTCACTGAAACGGAGCAAACCTTCCACTGAGAAGCCACTTCAAGAGGCTGGTGCTGCTAGA
TCTCATGATGTGGCTGTTGGGAAGATGGTGGGGTTTGTTTGCCAGCTTGGAGTCCTATTAAATGAAAGCCAGCAA
CTCATGTTGGTAATAGGTCTACTGTGGGAACAGTTATCCCTAACCACAGCTCAAAATCGCTATCATCTTTAGGCA
AATTAAAATCTATGTGGCAGTGCTCATGGATGATTTTGTTCTAAGCAGTTTTCCTCCTGCCCTCCCCCGCCCCCC
ACACGCCC

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FIGURE 3219

AAGAAAAATTCAAAGTGGAGACAAGAACCATTGCTGTTGACTTTGCATCAGAAGATATTTATGATAAAATTAAAA
CAGGCTTGGCTGGTCTTGAAATCGGCATCTTAGTGAACAACGTGGGAATGTCGTATGAGTATCCTGAATACTTTT
TGGATGTTCCTGACTTGGACAATGTGATCAAGAAAATGATAAATATTAATATTCTTTCTGTTTGTAAGATGACAC
AATTGGTACTGCCTGGCATGGTGGAAAGATCCAAAGGGGCTATTCTGAACATTTCATCTGGCAGTGGCATGCTCC
CTGTCCCACTCTTGACCATCTATTCTGCAACCAAGACTTTTGTAGATTTCTTCTCTCAGTGCCTCCATGAGGAGT
ATAGGAGCAAGGGCGTCTTTGTGCAGAGTGTCCTGCCATACTTCGTAGCTACAAAACTGGCTAAAATCCGGAAGC
CAACTTTGGATAAGCCCTCTCCGGAGACGTTTGTGAAGTCTGCAATTAAAACAGTCGGCCTGCAATCCCGAACCA
ATGGATACCTGATCCATGCTCTTATGGGCTCGATAATCTCAAACCTGCCTTCTTGGATTTATTTGAAAATAGTCA
TGAATATGAACAAGTCTACACGGGCTCACTATCTGAAGAAAACCAAGAAGAACTAAGCATTGATAACTGCATTGT
AACTTGGCCAGATGCTCCAGCATATGCACGTTCACTGCAAAGCACCCTACTGGTTTTGAAAATCTGACCTTGTCA
TTTCAATAGTTATTAACATGACTAAATATTATCTTAATTAAGAGGAAAATAGAAGTTGCTTTTAGGGGTTTCTGA
CATATATTCTGGATACTATCCGAGGTAATTTTGAAGTTTAATATAAATGCTCATATCAAATGAATATAGAACTAA
TATTGTCGGGAACACCTAATAGAAAGGAATACTATTATAGCAAATCACAGAATGATAGACTCAAGCATAAAACTT
GGCAGTTTTATCTGCTTCAAAATGCCATTGATCATTATTCCTGTATTTTCTCTGAAACTGATTATAAAAACCAAT
GTCCAGCTACTCTTTTGTTTTTGACACTTGAAGAAATGGAGATCGATTTGATTTGTTTATAAGCAGACACACTGC
AATTTACAAAGATCTCTTTACGGTTTTATAAAATTATCTTCCAGTTTGTACATTTATATGGAATTGTTCTTTATC
AAGGGTAGCTAATGACATGAAAATAATTGTGAAATATGGAATTATTTCTGACACATGAAGCCCACTAAACTATGC
TTTCTTATAATGCATATTTCTTCTCAGTTTAAATGTATGTAAATATCGAAGCTATATGGTATGATTTATAAAGAT
AAATGGGCCAAAGTGTACATTGAGACTGGCAGCCATCTATGGTACCACTGAAACCCTGACCCAGAAAAGTGGCTT
GCTTGGACACCCAGCTGCCTTTGTTTCTGCATTAAACCAATATTGATCACACATATGACACAGGCTAGTCCTATA
AAAGTAATGACTTCATAGAAATGGCATTATAATTTTTAAGTTGATACTCTACAGGTAGCTATTGATATAATTAGT
TTTAATAAAACATGCTGCAACCATGGTATACAACAAAAATACATTTCTTTGGTGATTGAAATTAAGGCCGTATTT
ACAATGACTTAATATAAGACTGACTTTTATCCTGCTTCATAACTTGTATGGAGAACTCACCAAGAAAGAATTCAA
TACTGTGAAATATGCAGCAAGAAGATTGGTCTTTACCTAGGCTGTGTTTCCTAAGCTCTGAGTTTTCAGCACCAG
TAGATTTGTATTAAAAGAAAAAAAAATGGGGCCTTAGCTTCTGGCTTTTAATTTTGCCAGCTAAGGACATAAAAC
AAAAATAAACAAACAAAAACAAATAGCCATCTGCTATCAGCATCATTATGTAAAAGAAAATATATTTTAGCCCCT
AAAATTAGGAAGAATGTAATCTCAGAATAAAGGTTGTCATTTAAGTTGAATAAATATATAGCTTTATGAAAAACA
C

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FIGURE 3220

GTGGAGCACCATGGAAGGCGACTGTCTGAGCTGCATGAAGTATCTGATGTTTGTATTCAATTTCTTCATATTTCT
GGGCGTGGCCTGCCTGCTGGCATCGGATCTGGGTCATGGTGGACCCCACCGGCTTCCGGGAGATCGTGGCTGCCA
ATCCTCTGCTCCTCACGGGCGCCTACATCCTCCTGGCCATGGGGGGCCTGCTCTTTCTGCTCGGCTTCCTGGGCT
GCTGCGGGGCCGTCCGTGAGAACAAGTGTCTGCTGCTATTTTTCTTCCTGTTCATCCTGATCATCTTCCTGGCAG
AGCTCTCAGCAGCCATCCTGGCCTTCATCTTCAGGGAAAATCTCACCCGAGAATTCTTCACCAAGGAGCTCACCA
AGCACTACCAGGGCAATAACGACACAGACGTCTTCTCTGCCACCTGGAACTCGGTCATGATCACATTTGGTTGCT
GCGGGGTCAACGGGCCTGAAGACTTTAAGTTTGCATCTGTGTTTCGACTCCTGACCCTGGATAGTGAAGAGGTGC
CGGAGGCCTGCTGCCGGAGGGAACCCCAAAGTCGGGACGGGGTCCTGCTGAGCCGGGAGGAGTGCCTCCTGGGAA
GGAGCCTATTCCTAAACAAGCAGGGCTGTTACACGGTGATCCTCAACACCTTCGAGACCTACGTCTACTTGGCCG
GAGCCCTTGCCATCGGGGTACTGGCCATCGAGGAAGAAAGAGCTCATTCTGTCTCACAAGCCACCGGCATCCTGT
ATCAGTTCCAGCCTCCCCTCAGGCTTTCCAGTCACCAGGGACACTCGGAGCCACAGCCTAGAGCCCCGTGTTCCC
TGGCCTGTGCGTCTGCCCCCTTCTGAGATGCAGCCAGAAGCTCTGTGCCTGCTGCAAAGATTCAGGTGGACCCTC
CTCTAATCTCCTCCTGCTGTGCCCGCCAGTCCTTGCCCTCCCACCAGGTCTCTGAGCTCAGTCTTACCAAATTCG
CCCTTTAACAGCTTGCTCTGGCAACCCCATAAATGACACCTGAGCTCCGTAGAAGCTAAGCTCCTGAGACCCAGG
GGGACCTGCCACTGGTACCGCGGCCCAGCCTGGGGCCTGGGGGCTGCCCCTCTTGAACCACCCACATGCTTAGCC
CCAGCTTTTTGGAAGAGGCAAATGGCTGGTCTGAGGATGACACACAAAAACA

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FIGURE 3221

CACCGCCAGCCAAAGCAGTCCCTTCCATTTCAGGCACCGCCTGGGCCCGGGAGACACCGCAAGGCTATTTAAGAT
GGTGTGGTTTGCCCATCTACGTTGATCGTCCCAAGAAAGGGCAACCGTCTGCAGAACTTGCCAGGAAAGTCATCC
TGGGCGGCGCGGCCACGCCAGAGTCTCCCCGCGCGGCTTCCTCCCCCGGCGCCTTCTTTCCTCGCGCGTGCGCCC
CCTGCAGGCGGCCCCCGGGAGAGCTTCGCGGGGGAGCCGTGAGCCTGGTTTCCCCGCCAACCCCCATTCCCGCCG
CCCCGGCGGCCACCCTGGGGGCGAGGCAGCCCGGCGCGTGGGAGGGGACGGCGCGCCATTGGCTTGTGCGCGGAA
CCGAGAGGAGGGACCAGCGCGGGCCGCCAGACTCGCCCTTCTGCAGAGGCCGGGCTGGAGGAGAAGATGGCGGCC
AAGCAGCCCCCGCCTCTGATGAAGAAGCACAGCCAGACGGACCTCGTGAGCCGCCTGAAGACCCGCAAGATCCTC
GGCGTGGGCGGGGAGGATGACGACGGGGAGGTGCATCGCTCCAAGATCAGCCAGGTCTTAGGCAATGAAATCAAG
TTTACCATTCGGGAGCCTTTGGGGCTCAGGGTCTGGCAGTTCGTCTCTGCTGTGCTCTTCTCCGGCATTGCCATC
ATGGCGCTTGCCTTCCCTGACCAGCTCTATGATGCGGTCTTTGATGGAGCCCAGGTGACCAGCAAGACCCCCATC
CGCCTCTACGGCGGTGCCCTCCTCAGCATCTCCCTGATCATGTGGAACGCTCTCTACACGGCTGAGAAGGTCATC
ATTCGATGGACCCTGCTCACCGAAGCTTGCTATTTCGGGGTCCAGTTCTTGGTGGTCACTGCCACGCTAGCTGAG
ACGGGCCTCATGTCCCTGGGGATCCTGCTGCTCCTGGTCAGCCGCCTCCTTTTTGTCGTCATCAGCATTTACTAC
TATTACCAAGTCGGCCGAAGACCCAAGAAGGCCTAGTTGCCCGCATGCCTGGGCCCTCGCATGCCTGGGCCAGAG
TGGCGCTGGGGCCTCGGCTTCCCTTTGGCTCCTGGAAGGCAGGAGGGTCCCCTGCCCTGCCCCAGTCCTGCCCCA
GGGAGGCAGGGGGTGGGGGGCCTTCCTTTCCTCCTGGGCACCCCGTGTGCTGTGATCTCCTGGGCTTTCAGGCTT
GACATGCTGGTCTGGGGAGAGACAGGGCCTCTGCTGCCCTGTTCTTCACCCTCACAGTGATACCTCCTTTCCTTG
GGTCTCTTGGCCTCCAGACCCCCTCAATAGACACTGACTAAAGTCAAGCTGGAGTCATGAGGGTAGTGGGCTAAG
TCGAGGGTCCAGCCTCTTCTGCCAGGAAGCCCTTCTTGCTTTTGAGAGAGGCTGTGACCACCCCCCATCCTTCTC
CCTACACTCCCAGCCAACCTAGTGCCCAAGCAGCTAAACTTGGCTTCCTTCTAATCCTGGAAAACCCTGTACCCC
TCCTCCTCAATCTGGCCCTCTCCACATGCACACCCTGAGAACACACACAGACACACAACACACACACATACACAC
CCCTGAACACACACACAGACACACATACACCCATGATGTGAGCAAACACACACACGTGCGCCTTCATAGCCCAGC
CAAGGGCATGCAGGCAGGGTGTGCTGCCTGAGATGGCACCTCCCTTTCAGCCATTCTTCAAGAATGGGCCACACA
CAGCTAGAAGTCCTCTCCCAGCTAGAAGTCCTGTCCCCACTCTCCTGGCCTGACAAGATGAGCTCTCCTGGGACC
TTGCTCTAGGGCACTCTGCCTCTACCCTAGGACACTGGAATGCCCTGGGAGCCCCCTCCCTGCAACCAGCCTGAG
TTCAGCCCCACGGACAAAGGGACACACAGCCCCCAATGGAGACCATTGTAAGTGGTGGGGCTGGGAGAGGAGGAA
CAGAAGGAAAGCCATAGCGCTCTCTTGCCCCTTGGCATGTACCCCAAGGCCTGATGGCCACTGGGCTCAGCCTGT
CCCCCACTCCTGCCTGCTTCCCGGTGAGCTGCCCCCGACACGTGCAGCCCGGGCTGCCTCCAGGGTCTGGCTGAG
TGGGATCAGGTGGCCCTCCAACTCAGCACAGGAAATAAGTAGAAACATTTCAGCAGGCCACCTCCCCTCATCTTC
CCCGCCCTGTCCAGCGCCCTGGCAAAGGCTGACAACTGGCTGTCTTGGGGCCGAACAGCCCCTGCCCTGCCTCTG
AGGGCCCACCAGCCTGTGCTGCATACCCACCGCCCAGCTTCTCCCTGAGGGCCCACCAGCCTGTGCTGCATACCC
ACCACCCAGCTTCTCCCTGAGGGCCCACCAGCCTGTGCTGTACACCCCGTTAGTCCCTGATCCCAACCTTCTCCC
TCCTGCCAGCACACCGATGCACACACCGGAAGTGGCGAGCCCAAGCCCTGGGGACAGGTGTAGGGAGAAAAGCAG
CCCCAGGCCTCAGACTCGCTTCCCATCCTGGCATAGAGTGGGGGATGGCTGGAGGGTGTCTATAGGTACAGCCCG
CTCTGGCTGCTGCCAGGTGGGCCCCTGCCAGGGGTCCTCACCCCTGTCCACCCTGTGCCTGGCTGTCCCTGCACC
CAGATACAGCAACATGGCCTGTACCCAGCAGAGTGGTGGCACCACCATGGTTACAGCGGATGCCCCGAGACTCTG
CTTGGTAAACGTGGCAGAGCAGAATGGGAGGCTGGACCCTGAGGAAGGGCCCCTCTCCTGGCATCTGTCTCTTGC
TACCTAAGCCTGTGCCTCTCCCTAAAGAGCTGCCTCCCTGCTGCCGAGCCCTGGTCTGGCCACGAGCCACTACTG
CCTCCCACAGGCACCACTGCCTCCCGCTGCTGCCCACAGGTGGTGCCGCCAATGGGCAGTGCCCTCAGGCCGAAG
CCTCAATCCCCCATCTGAGCCAGGCCTAATCCTCTAATAGTGATGGTTGGTTTGTCCTCCCATAACTGCAGGTGG
ATTCCACCTGGGGAATGAGGCTGCGTGTCGGGCGTCTGCTGGCCCTGAGACATCCAGTCTTCCACACTCAACTGT
GAGATGGGAGGGTGGCGTGGCCTTACCCCATGAGGCTGTCCAGGCTCTGGCACACAGCTGTGCTCACAAAATACT
GGGTGGCTTGGTTAGAGCTAATTGTAGTGGAGCCTGCAGGTGAGGGTGAGGGAGGGGGCTGCAGGTCAGGTAAGA
TCTGGAAGACAGACGTACAGCTTGGAGGGCAGGGGGACTCTAAGGCAAGGAGATTTACAGTTGGGAAGGAGGCAG
TGGCAGAGGGGTGAGGGACAGGGGCCCTTAAGTCCAGCGAGGAAAGCTCGGTGTGGGCCCGCTCTACGCTCCGTT
TGGGGTGACCTGGAACGCCTCTTCTCCCAGCTCCCTCCAGCCATCAGCAGCCTCTTGTCAAGCTTCTGCCTCGCC
CCAGTCTATCCCCAACCCCAAATTAAGACCACCTTTCTTCACGGTCACTATTTATTCTTTGTTCCTTTTTCTTTT
TGTAAGAAACATTCACAAAAACCAGTGCAAAACCATC

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FIGURE 3222A

GGCGGCGGGAGAGCTGCTGGCTCGCCCGGATCCCGGGAGCTGCCTGGAGGCGGGCCCGGCCCGGGGAAGGTGAGC
GGCTGCGGGACCCAGCCCCTCGCCGGGAGCGGGCACCATGGTGCTGTCGGTGCCTGTGATCGCGCTGGGCGCCAC
GCTGGGCACAGCCACCAGCATCCTCGCGTTGTGCGGGGTCACCTGCCTGTGTCGGCACATGCACCCCAAGAAGGG
GCTGCTGCCGCGGGACCAGGACCCCGACCTGGAGAAGGCGAAGCCCAGCTTGCTCGGGTCTGCACAACAGTTCAA
TGTTAAAAAGTCCACGGAACCTGTTCAGCCCCGTGCCCTCCTCAAGTTCCCAGACATCTATGGACCCAGGCCAGC
TGTGACGGCTCCAGAGGTCATCAACTATGCAGACTATTCACTGAGGTCTACGGAGGAGCCCACTGCACCTGCCAG
CCCCCAACCCCCGAATGACAGTCGCCTCAAGAGGCAGGTCACAGAGGAGCTGTTCATCCTCCCTCAGAATGGTGT
GGTGGAGGATGTCTGTGTCATGGAGACCTGGAACCCAGAGAAGGCTGCCAGTTGGAACCAGGCCCCCAAACTCCA
CTACTGCCTGGACTATGACTGTCAGAAGGCAGAATTGTTTGTGACTCGCCTGGAAGCTGTGACCAGCAACCACGA
CGGAGGCTGTGACTGCTACGTCCAAGGGAGTGTGGCCAATAGGACCGGCTCTGTGGAGGCTCAGACAGCCCTAAA
GAAGCGGCAGCTGCACACCACCTGGGAGGAGGGCCTGGTGCTCCCCCTGGCGGAGGAGGAGCTCCCCACAGCCAC
CCTGACGCTGACCTTGAGGACCTGCGACCGCTTCTCCCGTCACAGCGTGGCCGGGGAGCTCCGCCTGGGCCTGGA
CGGGACATCTGTGCCTCTAGGGGCTGCCCAGTGGGGCGAGCTGAAGACTTCAGCGAAGGAGCCATCTGCAGGAGC
TGGAGAGGTCCTACTATCCATCAGCTACCTCCCGGCTGCCAACCGCCTCCTGGTGGTGCTGATTAAAGCCAAGAA
CCTCCACTCTAACCAGTCCAAGGAGCTCCTGGGGAAGGATGTCTCTGTCAAGGTGACCTTGAAGCACCAGGCTCG
GAAGCTGAAGAAGAAGCAGACTAAACGAGCTAAGCACAAGATCAACCCCGTGTGGAACGAGATGATCATGTTTGA
GCTGCCTGACGACCTGCTGCAGGCCTCCAGTGTGGAGCTGGAAGTGCTGGGCCAGGACGATTCAGGGCAGAGCTG
TGCGCTTGGCCACTGCAGCCTGGGCCTGCACACCTCGGGCTCTGAGCGCAGCCACTGGGAGGAGATGCTCAAAAA
CCCTCGCCGGCAGATTGCCATGTGGCACCAGCTGCACCTGTAACCAGCTGCCCAGCTGCCTCCCTTCTTGGACAG
CCCTGACCCGTCCTCTGCAACCTCCTTTCTGTGCCCCTTTCCTCATTCTGACACCCAGAAGACAGTGACAGATGT
GTTTGCAAGGCTGGGATGGCTCTCTCATCATACTCTTGTTTCTTAGAAATAAGCAAGACAGAGCAGGAAATGGAA
TATGCGGGTCACACTGAGGAATGCATTTTGCTCATCTGTGTTATTGAAGGAGGTGCTTATTAAATACAGTTCCTA
TGCCTGTTTTATAGGTGGGGTTAGGCCAGATGCAGAGAAAGCTAAATGTGGGAATCATGGATGCAAAGAAGAATT
TGGCTTTTTGAAAAACAAGCATTTCAAAAATGATGAAGGAAGTGAAAGTATCCTGGATCAACTCCTAGAGTTAGA
GATTGCCCAGGTGGAAAGAAACCTTAGCCAGCGTTCAATCAAGCTCACCATGCAGGGCAGTCACCCGGCAGTTCT
CAAACTTTAGCATGTGAAGAGTCACCAGCAGATTCCTGGGCTCGCCTGGAGACATTCCTAGTCGGTATTCCTGGT
CGAAGCCCAGGAGCCTTCCTTTTTAACAAGCTGATGTAGAGGGTGGAGCACTGTATGTGGAGAAATTCCTTCTAC
AATATTCCACACAGGTTTTTGGCCACAGTCCTTGATGGAGTCCCAAAACCATGGTGCAGCCAGTTCCAATGCTGG
ACACCTCAACCATCAGGGTGAAATCTGGGGCCTCAGCTTTTTAATTTAATTATTTTAATTCTTAATACTTTAATT
TGTGCATTTCATAAGCCCCCTGCTCTTGGACTGAATTTTGTGCTTTTTATTGAAGAATTTTATTGTTTTTATCTT
AAAATCAGTTTCTATTATCCTTGGGGAGACCATCCCTAACAAAGTACAGGTGGGATCTCCTGTGAGTCATTGGCT
GGGTTCTGATTGCTAGATGTCACACCCACCAGCATCACCAAAGTGACTCTGAGATAGACCGGTCCCTTCTCAGCG
TTCCAGTCACTTCAGGAGGAATTTAGTTATTGACTTAGTCTATGACATCTGGCTACATGTAGGTAGAGAAGAAAG
ACAATTTTAAAAAGGAAATCAGGTCTTTTGCAACTGTGCCTCCCTCTGTCTGTTTTCACTTGAATGGGTAAATAA
CCAGCAGCTAGGTTTTGAATTCCTACCTTGTTATTCTAAACAGATGTCCACATTGTTAATTAAATCTAAATTATG
AGCCTTGCTGAGTGGATACGGTACTTACACCTGAACCAGGATTCCTGGGTTCTGTTGTTGACATTGCCCTTCAGC
ACCTGTTTGGCCAGCTGTATAAGATAGGACTAATGACTAGGAAGCCTACCCCAATGAATGATATACTAGATGAAA
TAGTGTTCAAAACCTGTAGGCACTCTCTGGCTAAAAACAAACTCTGAGGCCACCAGCAGATCATCTTTAAGCTAA
GTTACTATTTTTCACCTTTTTTTTTAGACGGAGTTTTGCTCTTTGTTGCCCAGGCTGGAGTGCAGTGGCACGATC
TCGGCTCACTGCAACCTCCGCCTCCCAAGTTCAAGCGATTCTCCTGTCTCAGCCTCCTGGGTAGCTGGGATTACA
GGTGCCCACCAACATGCCTGGCTAATTTTTGTACTTTTAGTAGAGATGGGGTTTCACCATGTTGGCCAGGCTGGT
CTTCAACTCCAGATCTCAGGTGATCTACCCTCCTCGGCCTCCCAAAGTACTGGGATTACAGGCCTGAGCCACCGC
GCCCGGCCTATTTTTCACTTTAATTTGGCAGCTGAGAATGCCCAAAAAGTGCCAGAAGCATCGTGGCATTTCCAG
AACCATGGATTCTGCCTTTGGACCCCTCTCTATTAATATTAAAACTCTGGGCCTTCAGATGTCACCCTAATCCAC
TGCCCTAAGACAGAATTTCTGGACAAGATGGGTAAGGGCTTCATTCCTTCAACAAGTCAAGTCATACTTGGCCTC
TCCCTGAGAATCTGAGCAGGAGCCTTATAACCTGTGGTCATTATTTTTTCTTTCTGTACAGAAATAGAAAAGCAT
TAGAAATAACTTCTAACCATCCTCTGAAAAAACAGAAAAAATATCGAATCCCTCTTTCATGAGAAGTCTTTTGGA
TAATTGGAAACCTTCATCACTGAGGTTGGCCAGCCCCTGCCAAGTGTTGTGTAGGCAAAGCACTTGTTAGTGGCT

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FIGURE 3222B

TCCTATGAAATGTTTTAGAGATCTCTTCACCATACTGGTTTCTTCTCTTTGGTTGGTGTGGGTAAAAGAAAACAA
AACATTTCCTATAAGCTGAAAGCTGACCAGCATTCTCTTCTTGGTAACATCTACTACTCCAACCTAGAAAATTTG
GATTCTAGACCAAAAATCAGGAAACATGGCTCCTTATAAATCTGTGCAGCTGCCTTATAGTACCATCAAAGGAAT
TTCAGGTGGGCTGGGCGGGGCCCCGATCCCAGAATTATCAACTCCACCCATCATCATTTGGTCATGAAGCATCCT
TTCATTCTTCTTCTTCTTTTTTTTGGGGGGGGCGGGGCGGGGGAGGGATCTCAAAGTTTTAGTCTTCCAGAATCC
AAATTAAAGGTTGCCCCTGATGGGGGCCAGGTTCCGCCACAGAACATCTTAGATGTCAGCCTTGACCTCACTTAG
CAGGGATTACAGAAATGAGATACATTTTGAAGGAGAGTTGTCTGTTATGTTCACTGTATTCTAAGTGCCTGGGAT
AAAGCTGTCTCATGGGTGCTCCATATATATTCATATATATTTGTTGAGTGAATTAATGAATTAAGAGTGGCTGGC
AGAGTAGGCAGAAAAAGACACTGCAAATGGCATAAAAATTAAAGTCCTAGCTGAGTTCTCAATGGTAAAGGCATC
AGATGTCTTAGCAGTCAAGCTAGAAATTCATGACAATGAGTATTACTATTTGCCTAATGACAACTCATTGCTCTC
CATGTAAATGTAATCAACAGATGAAGAGAATATAATTGCTCTGCTTTTCCACTAAAACTCCATCTTAGTGAATTT
TAAATTATCCAGAGATGTCAAACTGCCAAATAAAAATATTTCAGTAGTCTTTGCATCAGCTTACCTTGTACCAGA
AACATTTCCAATTTACTATCAAATTATAGTAACTGAGCCTGTGTGAAGTATCTCATCATTTTCGAAAGGAACACC
TTGTGTGATGCCAGTGAGCATTTCTAAAAAGGGTGTGAGGTAGAGGTAAAAATAAGGTGAGAGACCATTTCAGAA
TGCACTGTTGCTCAAAAAGGTGATCTGGTTCTTTCTTCAGAGATTTCTACGGGGATAGAAAATCGGGAGTCTGCC
CTCATTAATCTGTGACTCCACCTCTTGCATCAAATCAATATCTATTTGTTGAGCACTTATTGATTAAGACCTTGC
ATATGTCTGTCCATTTTGATTTGAGATACAACTTTTTGTGTGGGTTGAATGACAAATCACTCCAAACAAAACTGG
GCACAGAGAATCAGCTAGGAGACCAGTTATTCAGGGTCCATTTCTCTTGGATGTAAAGGAGTCCTGGGTAAAATG
TGGCTGTAACCTAAACCAACTAGTCCTTGTGATTTGTTTCTGCCCTCTGTGTTTCCTGTTGTCAAATGCTAAGTG
TGTGTTTTGCAGTCATGAACTAAAGCACAAAAAGATGCATGAGACATTGTAGTCATATGTCTGGTGTGACACTTT
GGAGCAAAAACCTTGCAGTGGTAAATAAAAAATTTCCAACAGGG

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FIGURE 3223

CCCCGCCCGTTTGCCAGCGCTCAGGCAGGAGCTCTGGACTGGGCGCGCCGCCGCCCTGGAGTGAGGGAAGCCCAG
TGGAAGGGGGTCCCGGGAGCCGGCTGCGATGGACGCCGTCTTGGAACCCTTCCCGGCCGACAGGCTGTTCCCCGG
ATCCAGCTTCCTGGACTTGGGGGATCTGAACGAGTCGGACTTCCTCAACAATGCGCACTTTCCTGAGCACCTGGA
CCACTTTACGGAGAACATGGAGGACTTCTCCAATGACCTGTTCAGCAGCTTCTTTGATGACCCTGTGCTGGATGA
GAAGAGCCCTCTATTGGACATGGAACTGGACTCCCCTACGCCAGGCATCCAGGCGGAGCACAGCTACTCCCTGAG
CGGCGACTCAGCGCCCCAGAGCCCCCTTGTGCCCATCAAGATGGAGGACACCACCCAAGATGCAGAGCATGGAGC
ATGGGCGCTGGGACACAAACTGTGCTCCATCATGGTGAAGCAGGAGCAGAGCCCGGAGCTGCCCGTGGACCCTCT
GGCTGCCCCCTCGGGCCATGGCTGCCGCGGCCGCCATGGCCACCAGCCCCGCTGCTGGGCCTCAGCCCCTTGTCC
AGGCTGCCCATCCCCCACCAGGCCCCGGGAGAGATGACTCAGCTGCCAGTGATCAAAGCAGAGCCTCTGGAGGTG
AACCAGTTCCTCAAAGTGACACCGGAGGACCTGGTGCAGATGCCTCCGACGCCCCCCAGCAGCCATGGCAGTGAC
AGCGACGGCTCCCAGAGTCCCCGCTCTCTGCCCCCCTCCAGCCCTGTCAGGCCCATGGCGCGCTCCTCCACGGCC
ATCTCCACCTCCCCACTCCTCACTGCCCCTCACAAATTACAGGGGACATCAGGGCCACTGCTCCTGACAGAGGAG
GAGAAGCGGACCCTGATTGCTGAGGGCTACCCCATCCCCACAAAACTCCCCCTCACCAAAGCCGAGGAGAAGGCC
TTGAAGAGAGTCCGGAGGAAAATCAAGAACAAGATCTCAGCCCAGGAGAGCCGTCGTAAGAAGAAGGAGTATGTG
GAGTGTCTAGAAAAGAAGGTGGAGACATTTACATCTGAGAACAATGAACTGTGGAAGAAGGTGGAGACCCTGGAG
AATGCCAACAGGACCCTGCTCCAGCAGCTGCAGAAACTCCAGACTCTGGTCACCAACAAGATCTCCAGACCTTAC
AAGATGGCCGCCACCCAGACTGGGACCTGCCTCATGTGCCCTCCCGAAGCCTCCTATTCTACGATGACGGGGCAG
GCTTATGGGAAGATGGCCGCAGCACCCTGCTGCCCATGGAGCCCCCAGATGGCTGGGAAATCAACCCCGGGGGGC
CGGCAGAGCAGCGGCCCCGGGACCACCTGCAGCATGATCACCTGGACAGCACCCACGAGACCACCAAGTACC**TGA**

GTGAGGCCTGGCCTAAAGACGGTGGAAACGGCACCAGCCCCGACTTCTCCCACTCCAAGGAGTGGTTCCACGACA
GGGATCTGGGCCCCAACACCACCATCAAACTCTCCTAGGCCATGCCAAGACCCAGGACATAGGACGGACCCCTGG
TACCCAGAAGAGGAGTTCTTGCTCACTAACCCGGATCCGCCTCGTGCCCCTGCCTCCTGGAGCTTCCCATTCCAG
GAGAAAAGGCTCCACTTCCCAGCCCTTCCTTGCCCCTGACATTTGGACTCTTCCCTTGGGCCGACCACTCTGTTC
TCATTCTCCTTCCCACCAACATCCATCCGTCCTTCTCAGACAAACCACTCACTGGGTACCCCACCTCCTCTCTCA
TATGCCCAACACGACCACTGCCTCCCTGCCCCCACACCTGCACCCAAACAGACACATCAACGCACCCCACTCACA
GACACCCCTTACCCCACCCCCACTGTACAGAGACCAAGAACAGAAATTGTTTGTAAATAATGAACCTTATTTTTT
ATTATTGCCAATCCCCTAAGATATTGTATTTTACAAATCTCCCTCTTCCCTTCGCCCCTCCCTTGTTTTATATTT
TATGAAGTTAGTGCGGGCTTTGCTGCTCCCTGGCCCAGGAAAGAGGGACTCCCTGACCCTCACCTGGCACCCCCC
TGCTGCTGCCCAAGCCGCTGGGCCTTTTTAATTGCCAAACTGCTCTCTTCATCAGCTCAGCACATGCTTTAAGAA
AGCAAAACTAAAAAAAAAAAAAAAAAAGAGGCAGCATC

FIGURE 3224A

AGGACTCTCTTAGCCTCCACCCATGTGAACCATAATATCTATATTACGGAGGTGAAGACTGGCAAGTGTGTTCAT
TCCCTGATTGGACACCGCCGTACTCCATGGTGTGTCACTTTTCATCCCACCATCTCAGGCCTTATTGCTTCTGGC
TGCCTAGATGGGGAGGTTAGGATTTGGGATTTACACGGTGGCAGTGAAAGCTGGTTCACAGATAGCAACAATGCC
ATTGCCTCCCTGGCTTTCCACCCTACGGCTCAGCTCCTGCTGATTGCCACTGCCAATGAGATCCACTTCTGGGAC
TGGAGTCGACGGGAACCCTTTGCTGTGGTGAAGACAGCTAGTGAGATGGAACGGGTCCGTCTGGTGAGATTTGAT
CCACTTGGACACTACTTACTCACAGCAATTGTTAACCCCTCTAATCAACAGGGTGATGACGAACCAGAGATCCCC
ATAGATGGAACAGAATTATCCCACTACCGTCAGCGTGCCCTCCTGCAATCACAGCCAGTTCGCCGGACGCCTCTC
CTCCACAATTTCCTGCACATGCTGTCCTCCCGCTCTTCTGGCATCCAGGTGGGAGAGCAAAGCACAGTGCAAGAT
TCTGCTACCCCCTCACCCCCACCGCCTCCCCCTCAGCCCTCCACGGAGCGCCCCAGGACTTCCGCTTACATCAGG
CTCCGACAGCGGGTCAGTTACCCCACAGCTGAGTGCTGCCAGCACCTTGGGATCCTGTGCCTTTGCAGCCGCTGC
TCTGGCACTCGAGTTCCTTCCCTCTTGCCACACCAGGACAGTGTCCCCCCTGCTTCTGCCAGAGCTACTACCCCT
TCCTTTTCTTTTGTACAGACCGAGCCCTTCCATCCCCCGGAGCAGGCCTCGTCAACGCAGCAGGACCAGGGCCTC
CTGAACCGGCCGTCTGCCTTCAGTACAGTCCAGAGCAGCACTGCCGGCAACACGCTCCGCAACCTCAGTCTGGGT
CCTACCCGCCGCTCTTTGGGAGGGCCTCTGTCTAGCCACCCTTCTAGGTATCACCGAGAAATAGCTCCTGGGTTG
ACAGGATCTGAGTGGACCCGGACAGTACTCAGTCTGAACTCCCGCTCTGAGGCGGAATCCATGCCCCCGCCCAGA
ACCAGTGCCTCTTCGGTGAGTTTGCTGTCTGTGCTGAGACAGCAGGAAGGTGGCTCTCAGGCATCTGTGTACACT
TCAGCCACAGAAGGGAGGGGTTTTCCGGCATCAGGGTTGGCAACTGAGTCAGATGGAGGGAATGGCTCCAGCCAA
AACAACTCAGGCAGCATTCGCCATGAGCTTCAGTGTGACCTGAGACGCTTCTTTCTGGAGTATGACCGGCTTCAG
GAGCTGGATCAGAGCCTGAGTGGGGAAGCTCCCCAGACCCAACAGGCCCAGGAAATGCTCAACAATAACATTGAA
TCTGAGAGGCCAGGCCCTTCCCACCAGCCCACCCCACACAGCAGTGAGAACAACTCCAACCTGTCCCGTGGCCAC
CTGAATCGCTGTCGTGCTTGCCACAATCTCCTGACCTTCAACAACGATACCCTGCGCTGGGAAAGAACCACACCT
AACTACTCCTCTGGCGAGGCTAGTTCCTCTTGGCAGGTCCCCAGCTCCTTTGAGAGTGTGCCATCAAGTGGCAGC
CAGTTGCCACCTCTCGAGCGGACTGAGGGCCAAACGCCCAGCTCCAGCAGGCTGGAGTTGAGCAGCTCTGCTAGT
CCGCAGGAGGAGAGGACTGTGGGGGTGGCCTTTAACCAGGAGACAGGCCACTGGGAAAGAATTTACACCCAGTCC
AGCAGATCTGGAACTGTGTCACAGGAGGCCTTACATCAGGATATGCCTGAGGAGAGCTCTGAGGAGGATTCACTC
AGGAGGAGGCTGCTGGAATCTTCCCTCATTTCATTATCCCGTTATGATGGAGCAGGATCCAGAGAGCACCCAATT
TACCCAGACCCAGCGAGGGACAATGGTGACAGATCCAGGCACCGAGCTCCACGCAATGCCCGGATGTCTGCACCT
TCGCTTGGACGCTTTGTCCCAAGGCGTTTCTTGCTGCCTGAGTACTTGCCTTATGCTGGGATTTTTCATGAACGT
GGACAGCCTGGCTTGGCTACTCACTCTTCTGTTAACAGGGTCCTGGCAGGGGCAGTGATCGGTGATGGACAGTCT
GCTGTGGCCAGTAACATTGCCAATACTACCTACCGGCTCCAGTGGTGGGACTTCACTAAGTTTGACCTCCCTGAA
ATCAGTAATGCTTCCGTGAATGTGCTGGTGCAGAACTGCAAGATCTACAATGATGCCAGCTGTGACATTTCTGCA
GATGGCCAGCTCCTGGCAGCTTTCATCCCCAGCAGCCAGAGGGGCTTTCCTGATGAAGGCATCCTGGCAGTGTAC
TCCCTGGCCCCCCATAACCTGGGCGAAATGCTCTACACCAAGCGATTTGGTCCCAATGCCATTTCGGTGAGCCTG
TCCCCAATGGGCAGATATGTAATGGTGGGCTTGGCCTCACGAAGGATCCTGCTGCACCCCTCCACAGAGCACATG
GTGGCCCAGGTCTTCAGGCTGCAACAGGCCCATGGTGGAGAGACCTCCATGAGGAGAGTTTTCAACGTCCTTTAT
CCCATGCCTGCCGACCAGCGGAGACATGTCAGTATCAACTCTGCCCGTTGGCTGCCTGAGCCAGGGCTTGGCTTG
GCCTATGGTACTAACAAAGGAGACCTGGTGATCTGCCGACCAGAGGCCTTAAACTCTGGTGTTGAGTACTACTGG
GACCAGCTGAACGAGACGGTCTTCACTGTCCATTCCAACAGCAGGAGCAGCGAGCGGCCTGGAACCAGCAGAGCC
ACATGGAGGACAGACAGAGACATGGGGCTGATGAATGCCATTGGGCTTCAGCCCCGGAACCCTGCCACCTCAGTG
ACATCTCAGGGCACCCAGACTCTGGCCCTTCAGCTGCAGAATGCCGAAACACAGACTGAGAGGGAGGTGCCGGAG
CCAGGGACAGCCGCCTCAGGTCCTGGTGAAGGTGAGGGTTCAGAGTATGGTGCCAGTGGAGAAGATGCGCTCAGC
AGGATCCAGAGGCTGATGGCGGAGGGCGGCATGACAGCCGTGGTGCAGCGGGAGCAGAGCACCACCATGGCCTCC
ATGGGCGGCTTCGGCAACAACATCATCGTCAGCCACCGCATTCACCGCAGCTCTCAGACGGGCACTGAACCTGGT
GCCGCCCACACCTCCTCACCCCAGCCCTCCACCTCTCGGGGACTGCTCCCAGAGGCCGGGCAACTGGCAGAGCGA
GGCCTAAGCCCCCGGACAGCTTCCTGGGACCAGCCTGGTACCCCTGGGCGGGAGCCAACCCAGCCAACCCTGCCC
TCTTCCTCCCCTGTCCCCATTCCTGTTTCCCTTCCCAGCGCTGAGGGACCAACCCTCCACTGCGAGTTGACCAAT
AACAACCACCTTCTGGATGGTGGCAGCAGCAGGGGGGACGCTGCAGGCCCTAGGGGAGAACCACGGAACAGGTAG

AGACAAACGTTGCACTGGTGCCTCCCCTCGAACCGCCAAGCAGAAACCGGACCTCACAGCTGACTGGGAACTGGA

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FIGURE 3224B

CATGTGGAAGAGCTGCTGGCTGCATCAGGGAACAGGAGGAGGAAGAGGGTCAGGGTGGAGAGGAAGATCAGTCAG
TGGGCACAAGACAGTCAAATGGGCAAGGCCTGCCTCGGGGAACTAGAACCTTCCAGGATCTGGAGCCCGGGAGAG
CCACACTGTGGGCTTAATGTGAATAGAGGAACAAGTGGGTATCTCTGCCAGGCACCCCACTTTCTCCTAGTAACA
TGGGCTCAGGGGACTCAGCCCTGGACAGAGAGCCTCCAGAGAGTGAACAGTCTTCCAGATCTGGGCCAATCATCC
TGGACAGAGGCCCGCGAGGCAGCTTTGCCCTGTCCACCTGTTGGGTGGGCAGAGCCACCAGGAACCCAGACACCA
CCTCCAACTCTGAGCCTTCCAGAGCTTCAGCCTCTCTTCGTCGTCTTACCCCACTGAAACCAACAGGGATCGGGC
CAGGCTCCCAGATTCTTGAGGACAGGGACTTCGGCATTTACTAATGGGGGACTACTGTGGGGTAAGGGGGCGCCT
GCTTGCCTGATACAGGATGGGGTCAAGGGACAGTGGGCAGGTCCTCACTCAGGAGTGGGGGGTGTAGGCTGGCCA
GCCCCCAGGGCTTGTCCACCAGTCTTCTCCCCGCAAGGCCCTCAGAGCAGCGCCTGTGGGTGTCAGTATTACCTG
AGCCTAGGCCAAAGCTAGCCCAAGGCTGGGGAAGGGGAGGAGACTCCAGGTCAGAATGTGAGGTCTCAGTCTGTG
ATTTAAGGTGTTGCATGTGGACTCTTAACTGTACGTGTAGTTTCTAGTGGAGAAATCAAGGCTCTGATCATTTTG
TTTTTAGTATGAAAATGTGATTTCCTTTCTGTTTGTAACTCCTCATAGAAACATTGTGGTGGGAGGAGAGGGGAT
AGTCTACAGCTAATGAGGGAAACACCAAAGATCACATCATTAAAATGATGACATGCCCCTC

FIGURE 3225

TTTTCATTTAAATATTCTTCTTTTGCTTCTCTTAAGCAGAAGCTGGTCTCTGCTTTTCACCACCTGGAATCCCAG
TCCCAACAGCTGCTCTTCTAACCCTTCCGGCCTAATTGTGGAATAATCGTTTAAATCATTAAGAGACAGAATCTG
ATGTTGGTAGCTCTGACAGACCTCTCTAGCTTCTTTCATAAGCCAGGGCTCTTGCCCAGCTCCTGCACACAGCCT
GCCAGTTCTCCATCTTAGCACAGTTCCACTTTTCCATAGTAGCCAGAAACATCTGGCTGAAGACAAACAGTTACA
AAGCAGAAGCCAAGGTGATGGGATCTGTTGTCACATATGGGGCTGGCAGCTCAAGGAATGTGGTTCTCTGCTGAG
GAGATGTGGTAATCCAGTCAGCCCCTGGCTGTCCTGCCAAGGGTCTCAAGGCAGCTAGCCAGCAGCTGCATGCTT
GGTGACTGGAGCTACTACTACTGCCAGGCTGCCTGGTGAACCTTTTTTGATTCTCAGTAGGTACCATCTGCCACC
AAGCACTAAGAAAGGGAGCTGAAGTACCTAGAAAGTTCCCATTTGGGAAGTGTTCCTGTCACCCAAGAGACAGGA
TCAAGGCATCTCAACAAGGTTTAGGTCAACCAAGTGTCCACCCAGTCTGACTTTAAACCCCCATGCTACAGAAAG
GTTTCTGGTTTTCCAGGTCTTGGTTGCCCCTTACGTCCAAAGGCACCAGATCACTCAGCAAATGTCCCTGAATTC
AGTGATTGGTGGAAGGGAAGACACCAGCTTTTTTGGATAGCTGTGCTGTATCACCGTTTAAGGCAAGAAGTGAAT
TTTTGTCTGAGAACAGGGAGCAAGGGTTTAATGGGACAGTACAGCATCTCCCTCTTTGCACAGGTAAGTATAGGT
GGGTGTCTCCATCTCTAATGTCAAGCTCTGACCATAAAGGAATGCTTTAGTGGGTAATGGGCCTGTCCTAGAGCT
TTGCTACCCAGAATTCCCCTTCTGTCTGGTGTTACCTCTTGGAATTCACTGTGGTAATGTTCAGAGAGGCAAATG
TGTTGGGCCAACAGACATTCCCAGGAGAACATCCTCCAGAGCATTGATTTATTTTAAGATGGCACTAAGTGACAT
CTCTCCCCAAGAGATGATCTCTGACACAATCCCATATGAAAACTCTTCTGAAAATGAATTGCTAATTGCTATTAG
CCTTGATGCACTTACTCTAAGCAGTTCTTCAGACTTCTGGATCAGTGCTTCTCAAACTGTGGTTCTTGGACAACT
TACAGTAGAACTACATGGGTCCTTATTAAAATACAGATCCATTTCAGACCTAAAATCAGAATAAGAATGGGAGTC
AGAGGGACCCAGGATTAGTATTTTTAAAACAAGATTTCTTCATTTTAGGTGTCTGCCCTCAGCCTCCTCAGCAAG
GCAGAGTCAGTCTCAGGTCTACTTGCCATTGTGGTTTTGTGCATGGTGCTTTGATTCTTTGCTAATTATGTTGCA
GGCACAGTGGTGTTTGTCTTCTGTTTCCTACCAAACTCAGCTTTTTTGGCTGTCTGCGCCTCACCTCCCATCTTT
TCTAGGCTGTTGCTGCTTTCCAGGTTTCTCCCTTGAATAGCTGTATGTGCTGGAGTCTTTTCTTTATGTTGAATC
ATTTTAATTTTTGTCCTTATTTCTAGGATCTAGGGTCCTTTTGATCTTTCCCTTCTCTGTTTATCGTGCTAGTCC
TCCCAGTTTTAATGATGGGTAAGTCAGGAAAGTAAGACTGGGCACATATTTTCTCTCTCCCTTCCCACTGTCCAT
TTGCGATTCCTCCAGATTGGATATGCTACTCTCTATGACTCAGAATCTTATTTTCTGTCTGATTCCCTTCTGCTT
GAGCCAGAGAGGGCTTTTTGTTAATTTTTGTTTTGTTTTTAGGTTAAGCTTTTAGAGACTGCTGAGCTGAAGTTT
TGCTGAATTCTCAAAACACTAAACTGCCTGTGTTCCCTCTCGGCTTTCATTTTCTAATTGGAACCAGGCACAGTA
TTGTAACAGAGAACTGCAATTAATTTTCTAAAATAGTGGCAACTTGCACAGTATAATAACTTTGGTTGTAACCAA
GTGAAAGCATAATAACAAAAATACAAAATTACTGATGAAACCAGAAAGAGTCATATACCACATTCTTCCTTTAGT
TTGTATCTCAGTAAGTGCTGTGTTACTTAGGAATAGGGGCAGAAGCCTGCAACTGGGCAGGGAGGTTCAGGGACA
TGAGGACGAAGCTAGGGCATTTTGAGCTAGAAAGCAAGAATAAGGATTAGTGCTTTCAACACTGGAATTAACATG
GACCACCCCCCCACCTCCCAATAAGTGGGGATTGTAGGCACATAAGTGGTTTAGTAAGAAGTGGAAAAGGTTTTT
CTGTGGAGTTCGAGTTCCATCGGCTCCCATCCGGGCTATCCTGCCACCTTAGCGGCTGCTCCTCCCCAGGATGCG
GGCAGGGGGCCTCTCTCCCACTCCCCACACACCGATTTCTGAGTAGCGATAGGGGCTGGAGGCTTATTTTATGGG
GTAGGGGGCCGCTGGTAGGCGAAGATTGTCCGAGGGAGAGGGGGAGGATGAAGCCAGTGCGTGGCGGAGACCTGC
CAG**ATG**TTGATGCCTAAGAAGAACCGGATTGCCATTTATGAACTCCTTTTTAAGGAGGGAGTCATGGTGGCCAAG
AAGGATGTCCACATGCCTAAGCACCCGGAGCTGGCAGACAAGAATGTGCCCAACCTTCATGTCATGAAGGCCATG
CAGTCTCTCAAGTCCCGAGGCTACGTGAAGGAACAGTTTGCCTGGAGACATTTCTACTGGTACCTTACCAATGAG
GGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCCAGAGATTGTGCCTGCCATCCTACGCCGTAGCCGTCCA
GAGACTGGCAGGCCTCGGCCTAAAGGTCTGGAGGGTGAGCGACCTGCGAGACTCACAAGAGGGGAAGCTGACAGA
GATACCTACAGACGGAGTGCTGTGCCACCTGGTGCCGACAAGAAAGCCGAGGCTGGGGCTGGGTCAGCAACCGAA
TTCCAGTTTAGAGGCGGATTTGGTCGTGGACGTGGTCAGCCACCTCAG**TAA**AATTGGAGAGGATTCTTTTGCATT
GAATAAACTTATAGCCAAAAAACCTT

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FIGURE 3226

ATGGCCAACTTCACACCTGTCAATGGCAGCTCGGGCAATCAGTCCGTGCGCCTGGTCACGTCATCATCCCACAAT
CGCTATGAGACGGTGGAAATGGTCTTCATTGCCACAGTGACAGGCTCCCTGAGCCTGGTGACTGTCGTGGGCAAC
ATCCTGGTGATGCTGTCCATCAAGGTCAACAGGCAGCTGCAGACAGTCAACAACTACTTCCTCTTCAGCCTGGCG
TGTGCTGATCTCATCATAGGCGCCTTCTCCATGAACCTCTACACCGTGTACATCATCAAGGGCTACTGGCCCCTG
GGCGCCGTGGTCTGCGACCTGTGGCTGGCCCTGGACTACGTGGTGAGCAACGCCTCCGTCATGAACCTTCTCATC
ATCAGCTTTGACCGCTACTTCTGCGTCACCAAGCCTCTCACCTACCCTGCCCGGCGCACCACCAAGATGGCAGGC
CTCATGATTGCTGCTGCCTGGGTACTGTCCTTCGTGCTCTGGGCGCCTGCCATCTTGTTCTGGCAGTTTGTGGTG
GGTAAGCGGACGGTGCCCGACAACCAGTGCTTCATCCAGTTCCTGTCCAACCCAGCAGTGACCTTTGGCACAGCC
ATTGCTGCCTTCTACCTGCCTGTGGTCATCATGACGGTGCTGTACATCCACATCTCCCTGGCCAGTCGCAGCCGA
GTCCACAAGCACCGGCCCGAGGGCCCGAAGGAGAAGAAAGCCAAGACGCTGGCCTTCCTCAAGAGCCCACTAATG
AAGCAGAGCGTCAAGAAGCCCCCGCCCGGGGAGGCCGCCCGGGAGGAGCTGCGCAATGGCAAGCTGGAGGAGGCC
CCCCCGCCAGCGCTGCCACCGCCACCGCGCCCCGTGGCTGATAAGGACACTTCCAATGAGTCCAGCTCAGGCAGT
GCCACCCAGAACACCAAGGAACGCCCAGCCACAGAGCTGTCCACCACAGAGGCCACCACGCCCGCCATGCCCGCC
CCTCCCCTGCAGCCGCGGGCCCTCAACCCAGCCTCCAGATGGTCCAAGATCCAGATTGTGACGAAGCAGACAGGC
AATGAGTGTGTGACAGCCATTGAGATTGTGCCTGCCACGCCGGCTGGCATGCGCCCTGCGGCCAACGTGGCCCGC
AAGTTCGCCAGCATCGCTCGCAACCAGGTGCGCAAGAAGCGGCAGATGGCGGCCCGGGAGCGCAAAGTGACACGA
ACGATCTTTGCCATTCTGCTAGCCTTCATCCTCACCTGGACGCCCTACAACGTCATGGTCCTGGTGAACACCTTC
TGCCAGAGCTGCATCCCTGACACGGTGTGGTCCATTGGCTACTGGCTCTGCTACGTCAACAGCACCATCAACCCT
GCCTGCTATGCTCTGTGCAACGCCACCTTTAAAAAGACCTTCCGGCACCTGCTGCTGTGCCAGTATCGGAACATC
GGCACTGCCAGGTAG

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FIGURE 3227

GCGAAGCAGCGCGGGCAGCGAGATGCAGCACCGAGGCTTCCTCCTCCTCACCCTCCTCGCCCTGCTGGCGCTCAC
CTCCGCGGTCGCCAAAAAGAAAGATAAGGTGAAGAAGGGCGGCCCGGGGAGCGAGTGCGCTGAGTGGGCCTGGGG
GCCCTGCACCCCCAGCAGCAAGGATTGCGGCGTGGGTTTCCGCGAGGGCACCTGCGGGGCCCAGACCCAGCGCAT
CCGGTGCAGGGTGCCCTGCAACTGGAAGAAGGAGTTTGGAGCCGACTGCAAGTACAAGTTTAAAAAATGGGGTGA
AGTGTGATGGGGGCACAGGCACCAAAGTCCGCCAAGGCACCCTGAAGAAGGCGCGCTACAATGCTCAGTGCCAGG
AGACCATCCGGGTCCCCCAGCCCTGCACCCCCAAGACCAAAGCAAAGGCCAAAGCCAAGAAAGGGAAGGGAAAGG
ACTAGACGCCAAGCCTGGATGCCAAGGAGCCCCTGGTGTCACATGGGGCCTGGCCCACGCCCTCCCTCTCCCAGG
CCCGAGATGTGACCCACCAGTGCCTTCTGTCTGCTCGTTAGCTTTAATCAATCATGCCCTGCCTTGTCCCTCTCA
CTCCCCAGCCCCACCCCTAAGTGCCCAAAGTGGGGAGGGACAAGGGATTCTGGGAAGCTTGAGCCTCCCCCAAAG
CAATGTGAGTCCCAGAGCCCGCTTTTGTTCTTCCCCACAATTCCATTACTAAGAAACACATCAAATAAACTGACT
TTTTCCCCCCAATAAAAGCTCTTCTTTTTTAATAT

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FIGURE 3228

GCGGCGCGGAGCGGGCGTGCTGAACCCCGGCCGCCGGCCCGGCATGGGCGTCTCCCGCGGGCCCTCCGCCGGCCG
GGGCTAGGGCCGGATGGAGCCGCGGGACGGTAGCCCCGAGGCCCGGAGCAGCGACTCCGAGTCGGCTTCCGCCTC
GTCCAGCGGCTCCGAGCGCGACGCCGGTCCCGAGCCGGACAAGGCGCCGCGGCGACTCAACAAGCGGCGCTTCCC
GGGGCTGCGGCTCTTCGGGCACAGGAAAGCCATCACCAAGTCGGGCCTCCAGCACCTGGCCCCCCCTCCGCCCAC
CCCTGGGGCCCCGTGCAGCGAGTCAGAGCGGCAGATCCGGAGTACAGTGGACTGGAGCGAGTCAGCGACATATGG
GGAGCACATCTGGTTCGAGACCAACGTGTCCGGGGACTTCTGCTACGTTGGGGAGCAGTACTGTGTAGCCAGGAT
GCTGAAGTCAGTGTCTCGAAGAAAGTGCGCAGCCTGCAAGATTGTGGTGCACACGCCCTGCATCGAGCAGCTGGA
GAAGATAAATTTCCGCTGTAAGCCGTCCTTCCGTGAATCAGGCTCCAGGAATGTCCGCGAGCCAACCTTTGTACG
GCACCACTGGGTACACAGACGACGCCAGGACGGCAAGTGTCGGCACTGTGGGAAGGGATTCCAGCAGAAGTTCAC
CTTCCACAGCAAGGAGATTGTGGCCATCAGCTGCTCGTGGTGCAAGCAGGCATACCACAGCAAGGTGTCCTGCTT
CATGCTGCAGCAGATCGAGGAGCCGTGCTCGCTGGGGGTCCACGCAGCCGTGGTCATCCCGCCCACCTGGATCCT
CCGCGCCCGGAGGCCCCAGAATACTCTGAAAGCAAGCAAGAAGAAGAAGAGGGCATCCTTCAAGAGGAAGTCTAG
CAAGAAAGGGCCTGAGGAGGGCCGCTGGAGACCCTTCATCATCAGGCCCACCCCCTCCCCGCTCATGAAGCCCCT
GCTGGTGTTTGTGAACCCCAAGAGTGGGGGCAACCAGGGTGCAAAGATCATCCAGTCTTTCCTCTGGTATCTCAA
TCCCCGACAAGTCTTCGACCTGAGCCAGGGAGGGCCCAAGGAGGCGCTGGAGATGTACCGCAAAGTGCACAACCT
GCGGATCCTGGCGTGCGGGGGCGACGGCACGGTGGGCTGGATCCTCTCCACCCTGGACCAGCTACGCCTGAAGCC
GCCACCCCCTGTTGCCATCCTGCCCCTGGGTACTGGCAACGACTTGGCCCGAACCCTCAACTGGGGTGGGGGCTA
CACAGATGAGCCTGTGTCCAAGATCCTCTCCCACGTGGAGGAGGGGAACGTGGTACAGCTGGACCGCTGGGACCT
CCACGCTGAGCCCAACCCCGAGGCAGGGCCTGAGGACCGAGATGAAGGCGCCACCGACCGGTTGCCCCTGGATGT
CTTCAACAACTACTTCAGCCTGGGCTTTGACGCCCACGTCACCCTGGAGTTCCACGAGTCTCGAGAGGCCAACCC
AGAGAAATTCAACAGCCGCTTTCGGAATAAGATGTTCTATGCCGGGACAGCTTTCTCTGACTTCCTGATGGGCAG
CTCCAAGGACCTGGCCAAGCACATCCGAGTGGTGTGTGATGGAATGGACTTGACTCCCAAGATCCAGGACCTGAA
ACCCCAGTGTGTTGTTTTCCTGAACATCCCCAGGTACTGTGCGGGCACCATGCCCTGGGGCCACCCTGGGGAGCA
CCACGACTTTGAGCCCCAGCGGCATGACGACGGCTACCTCGAGGTCATTGGCTTCACCATGACGTCGTTGGCCGC
GCTGCAGGTGGGCGGACACGGCGAGCGGCTGACGCAGTGTCGCGAGGTGGTGCTCACCACATCCAAGGCCATCCC
GGTGCAGGTGGATGGCGAGCCCTGCAAGCTTGCAGCCTCACGCATCCGCATCGCCCTGCGCAACCAGGCCACCAT
GGTGCAGAAGGCCAAGCGGCGGAGCGCCGCCCCCCTGCACAGCGACCAGCAGCCGGTGCCAGAGCAGTTGCGCAT
CCAGGTGAGTCGCGTCAGCATGCACGACTATGAGGCCCTGCACTACGACAAGGAGCAGCTCAAGGAGGCCTCTGT
GCCGCTGGGCACTGTGGTGGTCCCAGGAGACAGTGACCTAGAGCTCTGCCGTGCCCACATTGAGAGACTCCAGCA
GGAGCCCGATGGTGCTGGAGCCAAGTCCCCGACATGCCAGAAACTGTCCCCCAAGTGGTGCTTCCTGGACGCCAC
CACTGCCAGCCGCTTCTACAGGATCGACCGAGCCCAGGAGCACCTCAACTATGTGACTGAGATCGCACAGGATGA
GATTTATATCCTGGACCCTGAGCTGCTGGGGGCATCGGCCCGGCCTGACCTCCCAACCCCCACTTCCCCTCTCCC
CACCTCACCCTGCTCACCCACGCCCCGGTCACTGCAAGGGGATGCTGCACCCCCTCAAGGTGAAGAGCTGATTGA
GGCTGCCAAGAGGAACGACTTCTGTAAGCTCCAGGAGCTGCACCGAGCTGGGGGCGACCTCATGCACCGAGACGA
GCAGAGTCGCACGCTCCTGCACCACGCAGTCAGCACTGGCAGCAAGGATGTGGTCCGCTACCTGCTGGACCACGC
CCCCCCAGAGATCCTTGATGCGGTGGAGGAAAACGGGGAGACCTGTTTGCACCAAGCAGCGGCCCTGGGCCAGCG
CACCATCTGCCACTACATCGTGGAGGCCGGGGCCTCGCTCATGAAGACAGACCAGCAGGGCGACACTCCCCGGCA
GCGGGCTGAGAAGGCTCAGGACACCGAGCTGGCCGCCTACCTGGAGAACCGGCAGCACTACCAGATGATCCAGCG
GGAGGACCAGGAGACGGCTGTGTAGCGGGCCGCCCACGGGCAGCAGGAGGGACAATGCGGCCAGGGGACGAGCGC
CTTCCTTGCCCACCTCACTGCCACATTCCAGTGGGACGGCCACGGGGGGACCTAGGCCCCAGGGAAAGAGCCCCA
TGCCGCCCCCTAAGGAGCCGCCCAGACCTAGGGCTGGACTCAGGAGCTGGGGGGGCCTCACCTGTTCCCCTGAGG
ACCCCGCCGGACCCGGAGGCTCACAGGGAACAAGACACGGCTGGGTTGGATATGCCTTTGCCGGGGTTCTGGGGC
AGGGCGCTCCCTGGCCGCAGCAGATGCCCTCCCAGGAGTGGAGGGGCTGGAGAGGGGGAGGCCTTCGGGAAGAGG
CTTCCTGGGCCCCCTGGTCTTCGGCCGGGTCCCCAGCCCCCGCTCCTGCCCCACCCCACCTCCTCCGGGCTTCCT
CCCGGAAACTCAGCGCCTGCTGCACTTGCCTGCCCTGCCTTGCTTGGCACCCGCTCCGGCGACCCTCCCCGCTCC
CCTGTCATTTCATCGCGGACTGTGCGGCCTGGGGGTGGGGGGCGGGACTCTCACGGTGACATGTTTACAGCTGGG
TGTGACTCAGTAAAGTGGATTTTTTTTCTTT

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FIGURE 3229A

GAAGAAGTCCCGGGCGGTACCCGGCCGTAGGCCCATCCTGCAACTCTCTCCGCCGGGTCCTCGGGGCAGCACGCC
GGGCCGGGACCCGGAGCCGGAACCCGACACTGAGCCGGACTCAACCGCGGCGGTCCCCAGCCAGCCCGCCCCGTC
GGCGGCGACGACCACCACCACCGCGGTGACTGCCGCCGCGGCCTCGGACGACTCGCCTTCAGAAGATGAACAGGA
AGCGGTGCAGGAGGTTCCTAGAGTTGTTCAGAATCCTCCAAAACCAGTCATGACCACTAGACCCACAGCTGTTAA
AGCAACAGGCGGTCTATGCTTGCTTGGTGCTTATGCTGACAGTGATGACGATGACAATGATGTTTCCGAAAAACT
AGCACAATCCAAAGAGACAAATGGAAACCAGTCAACTGATATTGATAGTACATTGGCCAACTTCCTAGCGGAGAT
CGATGCCATAACAGCTCCTCAGCCTGCAGCTCCTGTAGGAGCTTCTGCTCCACCTCCAACTCCACCTCGACCAGA
GCCAAAGGAAGCAGCAACATCTACCCTTTCTTCTTCTACTTCAAATGGAACAGACTCCACCCAAACATCTGGTTG
GCAATATGATACTCAGTGTTCACTGGCAGGAGTCGGAATTGAGATGGGCGATTGGCAGGAAGTCTGGGATGAGAA
CACGGGATGTTATTATTATTGGAATACACAAACAAATGAAGTGACTTGGGAGTTACCCCAATATCTTGCCACACA
GGTACAGGGATTACAGCATTACCAGCCCAGTTCTGTGCCAGGTGCTGAAACTAGTTTTGTGGTAAATACAGACAT
ATATTCTAAGGAGAAAACGATTTCTGTTTCCAGTAGTAAAAGTGGACCAGTCATAGCCAAGCGAGAAGTTAAAAA
GGAAGTAAATGAAGGAATTCAGGCTCTCTCAAATAGTGAGGAGGAGAAGAAAGGGGTGGCAGCATCGCTGCTTGC
TCCTTTATTGCCTGAGGGAATAAAAGAAGAAGAAGAGAGATGGAGAAGAAAAGTAATTTGTAAAGAGGAGCCAGT
TTCAGAAGTAAAAGAAACAAGTACAACAGTAGAAGAAGCAACAACAATAGTAAAGCCACAGGAAATTATGTTGGA
CAATATAGAAGACCCTTCTCAGGAGGATCTTTGCAGTGTTGTCCAATCTGGAGAAAGTGAGGAGGAAGAGGAACA
AGATACCCTTGAACTGGAGCTAGTTTTGGAAAGGAAAAAAGCAGAGTTGCGAGCCTTGGAGGAAGGAGATGGTAG
TGTGTCAGGGTCTAGTCCACGTTCTGATATCAGCCAGCCAGCATCTCAAGATGGAATGCGTAGGCTTATGTCTAA
AAGAGGAAAATGGAAGATGTTTGTTCGAGCTACCAGTCCAGAATCTACCAGTAGGAGTTCTAGTAAAACTGGACG
AGATACTCCAGAAAATGGAGAAACTGCAATTGGTGCTGAAAATTCAGAAAAAATAGATGAGAATTCAGATAAAGA
GATGGAAGTAGAAGAATCTCCAGAGAAAATAAAAGTACAGACAACACCAAAAGTAGAAGAAGAACAGGATTTGAA
ATTTCAGATTGGAGAACTGGCAAATACCCTGACAAGTAAATTCGAGTTTCTAGGCATTAATAGACAATCCATCTC
CAACTTTCATGTGCTGCTCTTACAGACTGAGACTCGAATTGCAGACTGGCGGGAAGGGGCTCTTAATGGAAACTA
CCTTAAACGAAAACTTCAGGATGCAGCAGAACAACTAAAACAGTATGAAATAAACGCCACTCCTAAAGGCTGGTC
CTGCCACTGGGACAGGGATCATAGACGGTATTTCTATGTAAACGAACAGTCGGGCGAGTCTCAGTGGGAGTTTCC
AGATGGTGAAGAGGAAGAAGAAGAAAGCCAAGCACAAGAAAATAGAGATGAGACTCTTGCCAAACAGACCTTGAA
AGACAAAACTGGCACTGATTCAAATTCAACAGAATCCTCTGAAACTTCCACAGGTTCTCTTTGTAAAGAATCCTT
TTCTGGTCAAGTTTCTTCTTCATCACTCATGCCACTTACTCCATTCTGGACCCTCCTTCAGTCAAATGTTCCTGT
GCTTCAACCTCCATTACCCTTGGAAATGCCACCACCCCCACCTCCACCTCCAGAATCACCTCCACCCCCTCCTCC
ACCACCTCCTCCTGCGGAAGATGGTGAGATCCAGGAGGTAGAGATGGAGGATGAGGGAAGTGAGGAGCCCCCTGC
CCCAGGAACAGAGGAAGATACCCCTTTGAAACCTTCAGCACAAACCACAGTTGTAACTAGCCAGAGTTCAGTTGA
TTCCACCATCTCTAGTTCTTCTTCCACTAAAGGAATAAAGAGGAAAGCTACAGAAATTAGCACTGCAGTGGTTCA
GAGGTCAGCTACCATTGGCAGTTCTCCAGTTCTCTATAGCCAGTCAGCTATAGCTACAGGTCACCAGGCAGCAGG
GATTGGAAACCAGGCAACAGGAATTGGACATCAGACAATACCAGTTAGCCTTCCAGCAGCAGGAATGGGTCATCA
GGCCAGAGGAATGAGCCTGCAGTCAAATTACCTTGGACTAGCGGCAGCACCTGCAATTATGAGTTATGCAGAATG
TTCTGTCCCAATTGGAGTGACTGCTCCCTCATTGCAGCCAGTTCAGGCCCGAGGTGCTGTGCCTACCGCTACCAT
TATAGAACCACCACCACCACCTCCTCCNTNCCTCCTCCTCCACCACCACCAGCTCCCAAAATGCCACCACCTGAA
AAGACAAAAAAAAGGAAGGAAAGACAAGGCAAAGAAGAGTAAGACCAAAATGCCATCTTTGGTAAAAAAAGTGGCAG
AGTATCCAGCGTGAGTTAGATGAAGAGGACAATTCTAGTTCCAGTGAAGAGGATCGGGAATCAACTGCACAGAAG
CGAATTGAAGAGTGGAAACAGCAGCAGCTGGTTAGTGGCATGGCAGAGAGAAATGCTAATTTTGAAGCCCTTCCT
GAGGATTGGAGAGCAAGGCTGAAGAGAAGGAAAATGGCTCCAAACACATAGTTTTTAAGTTTTTAAAACTTTTTT
GTATTATTGTTTGTTTTGTGTTCAGTTCAAAGTCTTAACCAGTTTTATTGTCAAATAAACTATAAATGTTATGGG
GGAGATCTTATAAATTTCCTGGGCAAGAGTGTATGCATACAAAGTTTTCACTTTTGTGAAATGTAATTTTTCTGT
TTTTGCAAAGGGATGAGGTGATTGGAATTGCTTTGACCATGCTGCCTTTATTCTCAAACTGGCAAACTTAGCATG
TTAGGTGTATTAACCTCATCAGTCTTGAAGAACATGTGGCTCATGAGTATAACACTTCTGTAGAGGACTCCCTGA
CAAAAGTGAAGAATTAACTTCTCCTCCAGAACAAGTGCAATTCAGAAGGCAGCTCTGCATTCTACCTTGCTTGAC
TGGAATTGTCTGAAGCTTTTTCTGGCCTCTTTTCTCTAGTCGGCCACCCCTGAAGTGCTGAGGTCTAAGTGGTTT
ACCTCGTGCTGATAGATGGCCACACTCTTTAGAGTAGTTCTCATAAGTTCTAGAACTGGTAGCTCGGTCGTTTCG

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FIGURE 3229B

CACACTAGGTGGCATACAGGCAGCAGCAGGTGTTCATATCCTTGATTTTGAGAATTTCCCCTCAAGTATGTGGCA
GTAAATACAACAAGACACTCTATGTATTAATGTCTCCATTGTCTTAACCCTGTTCCAAAACAAAATTCACCTCCT
TTCTTTATGTGAATGTATTCTCCATAAAATTCCAGTATTTAAAAAGCAGTTTACTGTTCTGTACTTTCTGTTGTA
TCACAATCAGGTAAAAGTCACTTTAAACTGAGGAAACGGCAAATTGTGTTTTAAAGCTCTTTGTATTTCTCCAGT
TTCTGACCTTGTAAATTTGTATATATGCACTAATAAAGCTTTTTTTAT

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FIGURE 3230

GTGATGGAGGATATTTGTAGTAAACTGCAAGAGATTAGGAACCCAATCCATGCAATTGGACTACTTATACGGGAA
ATGGATTATGAAACAGAAGTGGAAATGGAAAAGGGATTCAATCCAGCTCAGCCTTTGAATATTCGAATGAATCTT
ACCCAGCTCTATGGTAGTAACACAGCAGGGTATATTGTGTGCAGAGGGGTGCATAAAATCGCCAGTACTCGTTTC
CTGATCTGCAGAGATCTTTTGATCTTACAGCAGCTGTTAATGAGGCTTGGAGATGCTGTGATTTGGGGAACTGGT
CAGCTCTTTCAAGCTCAGCAAGACCTACTACATCGAACAGCTCCCCTACTCTTATCTTATTACCTCATTAAATGG
GGAAGTGAGTGCTTGGCAACTGATGTTCCACTTGACACACTGGAGTCTAATCTCCAACACTTATCAGTACTGGAA
TTAACAGACTCTGGTGCTTTAATGGCAAATAGGTTTGTATCTAGTCCTCAGACTATTGTGGAGTTATTCTTCCAA
GAAGTTGCAAGAAAACACATTATATCTCACCTCTTCTCTCAGCCAAAGGCACCTCTGAGCCAAACTGGATTGAAT
TGGCCTGAAATGATTACTGCAATTACCAGTTATTTATTGCAGCTTTTATGGCCTAGCAATCCTGGTTGTCTCTTT
CTAGAATGTTTGATGGGAAATTGCCAATATGTACAATTGCAGGATTATATTCAACTGCTACATCCCTGGTGTCAA
GTCAATGTTGGTTCCTGTCGATTTATGCTGGGAAGGTGTTACCTAGTTACAGGAGAAGGACAGAAGGCTCTGGAA
TGTTTTTGTCAGGCAGCATCTGAAGTAGGCAAAGAGGAATTCTTGGATCGCTTGATTCGCTCAGAGGATGGGGAG
ATCGTGTCTACCCCCAGGCTGCAGTATTATGACAAGGTTTTACGACTACTAGATGTCATTGGTTTGCCTGAACTG
GTTATTCAGTTGGCTACATCAGCCATAACTGAAGCAGGTGATGACTGGAAAAGTCAGGCTACTCTAAGGACATGT
ATTTTCAAACATCATTTGGATTTGGGTCACAATAGCCAAGCATATGAAGCCTTAACCCAAATTCCTGATTCCAGC
AGGCAATTAGATTGTTTACGGCAGTTGGTGGTAGTTCTTTGTGAACGCTCACAGCTACAGGATCTTGTAGAGTTT
CCCTATGTGAATCTGCATAATGAGGTTGTGGGAATAATTGAGTCACGTGCTAGAGCTGTGGACCTTATGACTCAC
AATTACTATGAACTTCTGTATGCCTTTCACATCTATCGCCACAATTACCGCAAGGCTGGCACAGTGATGTTTGAG
TATGGAATGCGGCTTGGCAGAGAAGTTCGAACTCTCCGGGGACTTGAGAAACAAGGCAACTGTTATCTGGCTGCT
CTCAATTGTTTACGACTTATTCGTCCAGAATATGCGTGGATTGTGCAGCCAGTGTCTGGTGCAGTGTATGATCGC
CCTGGAGCATCCCCTAAGAGGAATCATGATGGAGAATGCACAGCTGCCCCCACAAATCGACAAATTGAAATCCTG
GAACTGGAAGATCTGGAGAAAGAGTGTTCCTTGGCTCGCATCCGCCTCACTTTGGCTCAGCATGATCCATCAGCG
GTTGCAGTTGCTGGAAGTTCATCAGCAGAGGAAATGGTCACTCTCTTGGTTCAGGCGGGCCTCTTTGACACTGCC
ATATCACTCTGTCAGACTTTTAAGCTTCCCTTAACGCCAGTCTTTGAAGGGCTTGCCTTCAAATGCATCAAATTG
CAATTTGGAGGAGAGGCAGCACAAGCAGAAGCCTGGGCCTGGCTAGCAGCCAATCAGCTCTCATCTGTCATCACT
ACTAAGGAGTCTAGTGCTACAGATGAAGCATGGCGACTATTATCCACTTACCTGGAGAGGTACAAAGTCCAGAAT
AACTTGTATCACCACTGTGTAATCAACAAGCTCTTGTCTCATGGAGTGCCTCTGCCTAATTGGCTTATAAACAGT
TACAAGAAGGTTGATGCTGCTGAATTGCTTCGTTTATACTTAAACTATGACCTTTTAGAAGAAGCTGTGGATTTG
GTGTCAGAATATGTGGATGCTGTATTGGGAAAAGGACATCAATACTTCGGAATTGAGTTTCCACTGTCCGCAACA
GCCNCNCAATGGTGTGGCTTCCATACTCCTCTATTGATCAGCTTCTCCAAGCTCTGGGAGAGAACAGTGCCAACA
GTCACAACATCGCACTGTCCCAGAAAATACTTGACAAATTGGAGGACTACCAGCAAAAAGTTGATAAGGCAACAC
GGGATTTATTATATCGTCGGACCTTGTGATTTGGATTGTCACCTAGCCTTTGTAACCGCTTGGTGCCTCTTAGGA
CTTAAGACTACCCTACAGGAACCCTGTACTCAAGGCCGATTTTTGTAACTGTAAATGATGTGTACAACATTCAAG
TCTGCATTCTGCACAAGATAGGAGGGCGGAAGAGTCAGAGGACCCTGTGCTTGCTGGTGGTGCTAACACAATTTC
TGGTGTTCAACCTTGGTCTCAAATAGCTGCTTTTGTATATGATTCACGAGCTTTTTTAGAGTTTATATTTTTTTA
AACTACCGAAGACATTCATTATCTGCAAATTAAGACTCACCTTCACTTTCCAAAATAGCTGAGGGTTGTTGGCTT
GTTGTAGCTGACCACCAAAAGCAGTCACTGCAAATCTTTTAATTCTTCCCTATCACCTTTTGTATTTTAATGCAA
TTATTTTGGTCCAGAACTGACCTGTATTTTCTGTATTGTACACAAAAGCTAATAATTTTGTGTACTTTTTATTTA
TTTTGGAGGTTTTATATGATCTTCAATTGAGTATTAAATAATTTGCCTAGATTAAGCCTAAAATGATGACCAGCT
AATTAAAGAAGATATTTTGAATCTGGTTCTGAGCTAAAGTTGAGTAAATTCTTAGCTAAGAAAAAATTGGAAATC
CATCATCTATATTAGCAACAGATTCTCAGAGTAAATTGTTAACTTCTATGATTTATGATAATCAAGCTGGACTTG
ATCATACAAGTTAGTCTCATAATGTATTGGACCAAAATGTAAACTTCATTGGTCAGATTTAGAAGCATTCATGCT
CACAAGTTTTGGGAAAGTGAAAAATAATAAAATCATCTTGGATTTTATTCTGTATATTAAAATTTATCTTTTAAG
GAAACAATCTGTATACTACTTGCTTGTATAGCCTTTTGACCCTTCTTGAGTTTTTCAGAAGCCTTTAATTTTTAT
ACTTTCAATACCATATTTACATTATATACTTTAAT

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FIGURE 3231

GGTCGCTTGGTGGCTCCGTCTGTCTGTCCGTCCGCCCGCGGGTGCCATCATGGCGGACGCGGCCAGTCAGGTGCT
CCTGGGCTCCGGTCTCACCATCCTGTCCCAGCCGCTCATGTACGTGAAAGTGCTCATCCAGGTGGGATATGAGCC
TCTTCCTCCAACAATAGGACGAAATATTTTTGGGCGGCAAGTGTGTCAGCTTCCTGGTCTCTTTAGTTATGCTCA
GCACATTGCCAGTATCGATGGGAGGCGCGGGTTGTTCACAGGCTTAACTCCAAGACTGTGTTCGGGAGTCCTTGG
AACTGTGGTCCATGGTAAAGTTTTACAGCATTACCAGGAGAGTGACAAGGGTGAGGAGTTAGGACCTGGAAATGT
ACAGAAAGAAGTCTCATCTTCCTTTGACCACGTTATCAAGGAGACAACTCGAGAGATGATCGCTCGTTCTGCTGC
TACCCTCATCACACATCCCTTCCATGTGATCACTCTGAGATCTATGGTACAGTTCATTGGCAGAGAATCCAAGTA
CTGTGGACTTTGTGATTCCATAATAACCATCTATCGGGAAGAGGGCATTCTAGGATTTTTCGCGGGTCTTGTTCC
TCGCCTTCTAGGTGACATCCTTTCTTTGTGGCTGTGTAACTCACTGGCCTACCTCGTCAATACCTATGCACTGGA
CAGTGGGGTTTCTACCATGAATGAAATGAAGAGTTATTCTCAAGCTGTCACAGGATTTTTTGCGAGTATGTTGAC
CTATCCCTTTGTGCTTGTCTCCAATCTTATGGCTGTCAACAACTGTGGTCTTGCTGGTGGATGCCCTCCTTACTC
CCCAATATATACGTCTTGGATAGACTGTTGGTGCATGCTACAAAAAGAGGGGAATATGAGCCGAGGAAATAGCTT
ATTTTTCCGGAAGGTCCCCTTTGGGAAGACTTATTGTTGTGACCTGAAAATGTTAATTTGAAGATGTGGGGCAGG
GACAGTGACATTTCTGTAGTCCCAGATGCACAGAATTATGGGAGAGAATGTTGATTTCTATACAGTGTGGCGCGC
TTTTTTAATAATCATTTAATCTTGGGAAAATT

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FIGURE 3232

CATCTGAGTAACATGGCGGCGGCGGCGGTAGCCAGGCTGTGGTGGCGCGGGATCTTGGGGGCCTCGGCGCTGACC
AGGGGGACTGGGCGACCCTCCGTTCTGTTGCTGCCGGTGAGGCGGGAGAGCGCCGGGGCCGACACGCGCCCCACT
GTCAGACCACGGAATGATGTGGCCCACAAGCAGCTCTCAGCTTTTGGAGAGTATGTGGCTGAAATCTTGCCCAAG
TATGTCCAACAAGTTCAGGTGTCCTGCTTCAATGAGTTAGAGGTCTGTATCCATCCTGATGGCGTCATCCCAGTG
CTGACTTTCCTCAGGGATCACACCAATGCACAGTTCAAATCTCTGGTTGACTTGACAGCAGTGGACGTCCCAACT
CGGCAAAACCGTTTTGAGATTGTCTACAACCTGTTGTCTCTGCGCTTCAACTCACGGATCCGTGTGAAGACCTAC
ACAGATGAGCTGACGCCCATTGAGTCTGCTGTCTCTGTGTTCAAGGCAGCCAACTGGTATGAAAGGGAGATCTGG
GACATGTTTGGAGTCTTCTTTGCTAACCACCCTGATCTAAGAAGGATCCTGACAGATTATGGCTTCGAGGGACAT
CCTTTCCGGAAAGACTTTCCTCTATCTGGCTATGTTGAGTTACGTTATGATGATGAAGTGAAGCGGGTGGTGGCA
GAGCCGGTGGAGTTGGCCCAAGAGTTCCGCAAATTTGACCTGAACAGCCCCTGGGAGGCTTTCCCAGTCTATCGC
CAACCCCCCGGAGAGTCTCAAGCTTGAAGCCGGAGACAAGAAGCCTGATGCCAAGTAGCTCCAGGGAACGCATGTG
GATCCTAGACAGCGCCTTATCTATGATTGAGTGTCCGTGTAAATAAATTCCTACTTAGACTT

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FIGURE 3233

AGCGGAGGTTCCGGGCTCCGGGATGAAAGGAGGGAACGCAGCTGGCAGAGAGAGAAGTTGGCTAGCATGGAATCA
CCAGAGGAGCCTGGAGCATCCATGGATGAGAACTACTTTGTGAACTACACTTTCAAAGATCGGTCACATTCAGGC
CGTGTGGCTCAAGGCATCATGAAACTGTGTCTAGAGGAGGAGCTCTTTGCTGATGTCACCATTTCGGTGGAAGGC
CGGGAGTTTCAGCTCCATCGGCTGGTCCTCTCAGCTCAGAGCTGCTTCTTCCGATCCATGTTCACTTCCAACCTG
AAGGAGGCCCACAACCGGGTGATTGTGCTGCAGGATGTCAGCGAGTCTGTTTTCCAGCTCCTGGTTGATTATATC
TACCATGGGACTGTGAAACTTCGAGCTGAGGAGTTGCAGGAAATTTATGAGGTGTCAGACATGTATCAGCTGACA
TCTCTCTTTGAGGAATGCTCTCGGTTTTTGGCCCGCACAGTGCAAGTGGGAAACTGCCTTCAGGTGATGTGGCTG
GCAGATCGGCACAGTGATCCTGAGCTCTATACGGCTGCCAAGCACTGTGCCAAGACCCACCTGGCCCAGCTGCAG
AATACAGAGGAATTTCTCCACTTGCCCCACCGCTTACTCACAGATATCATCTCGGATGGAGTTCCGTGTTCTCAG
AACCCAACAGAGGCAATAGAAGCCTGGATCAACTTTAATAAAGAGGAAAGAGAGGCTTTTGCAGAGTCACTCAGG
ACAAGCTTGAAGGAAATTGGGGAGAATGTGCACATTTACCTGATTGGGAAAGAGTCATCTCGTACCCACTCGTTG
GCTGTGTCCTTGCACTGTGCTGAAGATGACTCCATCAGTGTAAGTGGCCAAAACAGTTTGTGCCACCAGATCACT
GCGGCCTGCAAGCATGGTGGAGACTTGTATGTGGTGGGAGGGTCCATCCCACGGCGCATGTGGAAGTGCAACAAT
GCCACCGTTGACTGGGAGTGGTGTGCTCCTTTGCCTCGGGACCGGCTCCAGCACACCCTGGTGTCTGTGCCCGGG
AAAGATGCCATATATTCACTGGGTGGCAAGACACTGCAAGATACCCTCTCCAACGCAGTCATTTATTATCGCGTA
GGTGATAATGTGTGGACAGAGACAACTCAGCTAGAGGTGGCTGTGTCAGGGGCTGCTGGTGCCAACCTCAACGGG
ATCATCTACTTACTAGGGGGGGAGGAGAATGATCTGGACTTCTTTACCAAACCTTCCCGACTCATCCAGTGCTTT
GACACAGAGACAGACAAATGCCATGTGAAGCCCTATGTGCTGCCCTTTGCAGGCCGCATGCACGCAGCTGTGCAT
AAAGATCTGGTGTTCATCGTGGCTGAAGGGGACTCCCTGGTGTGCTACAATCCCTTGCTAGACAGCTTCACCCGG
CTTTGCCTTCCTGAGGCCTGGAGCTCTGCCCCATCCCTCTGGAAGATTGCCAGCTGTAACGGGAGCATCTATGTC
TTCCGGGACCGATATAAAAAGGGGGATGCCAACACCTACAAGCTTGACCCTGCCACTTCAGCCGTAACTGTCACA
AGAGGTATTAAGGTGCTGCTTACCAATTTGCAGTTTGTGTTGGCCTAAGGCTGTGGGGAGGGGAGGAGAACTGCT
CACTCCTTTTCCCTCCCCATACAAACTCAAAGTCCCCTGGGCCCCAATTCAGAGTTATGTTTTTTTTGGCACATA
CTAGAAAGGCAGTGCCTCAGCCCTTCCCTGAATCCATGGAGGTGTTCTGTTTGGGGCTTTTTAGACTGCTGCTGC
TCAGCTGGTTGCTTGAACTGACAGTAGGCCAGCCTGTTCTCTGCCATTCCCTAGTCATCCTGTGCCTCACCACAG
CTTGCTTAGAGCAAGCCTTTTCTCAGACCTTAGGCACAGCCTCTCCTCTTTACCTGATCAATGTTAAATGTAAGC
ACCCCTGATCCCAGGACATAAGGAAAGATGCCCAATTGTACTTTTGTTCTATAGCCTGTGAAATGGCTAGTTGAT
CATTTTTCCACAAAGAATTAGGTGTTAAGAGTTTTCCTTCAGGCTTTACTTAGGAGAATGGACTAAGCTGAAGGT
GTACTTCACCAGCAAGAGTCAACTCTAGAATTCAGGATGTTCCTTCTATTGTTTTCTTAGCCATCTGTCAGGAAA
TGTAACTTTGGTTTTATTTTTGGCTTATTCCAAGGGGTAAGCCAGAAAATAGAAATGATTATTTCTGATTAATAG
CAGAAACTTTTTCAATCTCAAATATATAAGGTGTCTGCTCTTTTAAAAGCTCTAAGCTAAGTCAAGAGCTAGGAA
CTGTTGATACAAATAAAAGTTTTTGAAGGG

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FIGURE 3234

CCGCCCCGGCACCCGCCTGCTCTTCTCGCGGGTCCGGACCGCGAGCGCGGGGGCCGACGGGTCGCCGCTGCGCCG
GGCCGGGATGGCGGCCACCGCGCTGCTGGAGGCCGGCCTGGCGCGGGTGCTCTTCTACCCGACGCTGCTCTACAC
CCTGTTCCGCGGGAAGGTGCCGGGTCGGGCGCACCGGGACTGGTACCACCGCATCGACCCCACCGTGCTGCTGGG
CGCGCTGCCGTTGCGGAGCTTGACGCGCCAGCTGGTACAGGACGAGAACGTGCGCGGGGTGATCACCATGAACGA
GGAGTACGAGACGAGGTTCCTGTGCAACTCTTCACAGGAGTGGAAGAGACTAGGAGTCGAGCAGCTGCGGCTCAG
CACAGTAGACATGACTGGGATCCCCACCTTGGACAACCTCCAGAAGGGAGTCCAATTTGCTCTCAAGTACCAGTC
GCTGGGCCAGTGTGTTTACGTGCATTGTAAGGCTGGGCGCTCCAGGAGTGCCACTATGGTGGCAGCATACCTGAT
TCAGGTGCACAAATGGAGTCCAGAGGAGGCTGTAAGAGCCATCGCCAAGATCCGGTCATACATCCACATCAGGCC
TGGCCAGCTGGATGTTCTTAAAGAGTTCCACAAGCAGATTACTGCACGGGCAACAAAGGATGGGACTTTTGTCAT
TTCAAAGACATGATGTATGGGGATTAGAAAGAACTCAAGACACTCCTGCTTGATACAGAACAAAAAGAGCTTAAC
AGGACCAACAGGGCTTAAGCCCAGACTTGACGTAACAGAAATGTGCCAATAGGTAATAGGTAATTTTTCTTTCTC
TGACTTGTTTTGTTTTCTTGAAATAACACTGTTGTGTGGCTAGAAAGGAAAAGATTTAGTGTGGCTTGTATTCAT
GGGATACAGGACAGGGATGGGGCTATCATCTTTTCTTGAATAGGGCTAAAGAAGTATTTTAACAAAAATCTATTA
TGTACCTAATATTGTGCCTAATAATATTTAGCACCACAACTCAAAAAACATTTAGCACTTGAAAAAAGGAGACTC
ACCTCTGGCTCTTTGCCACTGTCAGAATCTGAATCTCACTGGCCCTGTGGAGTAGGGATCCTATCTGGAGAAGTG
GGAGCATGGGCTGCAGTCAGGACTGCTGCAGACTGAGCCATGTGATGGTACGTAATGAGTTCCCCTGAGGGAATG
AAACACCCTCACCCCTTCAAAGTCACCCCTTTGGAATTCAACACAGACACACATATCCCTTCAAAAACTTTTATT
TGTATCAACAGTTCCTAGCTCTTGACTTAGCTTAGAGCTTTTAAAAGAGCAGACACCTTATATATTTGAGATTGA
AAAAGTTTCTGCTATTAATCAGAAATAATCATTTCTATTTTCTGGCTTACCCCTTGGAATAAGCCAAAAATAAAA
CCAAAGTTACATTTCCTGACAGATGGCTAAGAAAACAATAGAAGGAACATCCTGAATTCTAGAGTTGACTCTTGC
TGGTGAAGTACACCTTCAGCTTAGTCCATTCTCCTAAGTAAAGCCTGAAGGAAAACTCTTAACACCTAATTCTTT
GTGGAAAAATGATCAACTAGCCATTTCACAGGCTATAGAACAAAAGTACAATTGGGCATCTTTCCTTATGTCCTG
GGATCAGGGGTGCTTACATTTAACATTGATCAGGTAAAGAGGAGAGGCTGTGCCTAAGGTCTGAGAAAAGGCTTG
CTCTAAGCAAGCTGTGGTGAGGCACAGGATGACTAGGGAATGGCAGAGAACAGGCTGGCCTACTGTCAGTTCAAG
CAACCAGCTGAGCAGCAGCAGTCTAAAAAGCCCCAAACAGAACACCTCCATGGATTCAGGGAAGGGCTGAGGCAC
TGCCTTTCTAGTATGTGCCAAAAAAAACATAACTCTGAATTGGGGCCCAGGGGACTTTGAGTTTGTATGGGGAGG
GAAAAGGAGTGAGCAGTTCTCCTCCCCTCCCCACAGCCTTAGGCCAACACAAACTGCAAATTGGTAAGCAGCACC
TTAATACCTCTTGTGACAGTTACGGCTGAAGTGGCAGGGTCAAGCTTGTAGGTGTTGGCATCCCCCTTTTTATAT
CGGTCCCGGAAGACATAGATGCTCCCGTTACAGCTGGCAATCTTCCAGAGGGATGGGGCAGAGCTCCAGGCCTCA
GGAAGGCAAAGCCGGGTGAAGCTGTCTAGCAAGGGATTGTAGCACACCAGGGAGTCCCCTTCAGCCACGATGAAC
ACCAGATCTTTATGCACAGCTGCGTGCATGCGGCCTGCAAAGGGCAGCACATAGGGCTTCACATGGCATTTGTCT
GTCTCTGTGTCAAAGCACTGGATGAGTCGGGAAGGTTTGGTAAAGAAGTCCAGATCATTCTCCTCCCCCCCTAGT
AAGTAGATGATCCCGTTGAGGTTGGCACCAGCAGCCCCTGACACAGCCACCTCTAGCTGAGTTGTCTCTGTCCAC
ACATTATCACCTACGCGATAATAAATGACTGCGTTGGAGAGGGT

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FIGURE 3235

GCTCAAAGAAAATGAACGGCACCCTGGACCACCCAGACCAACCAGATCTTGATGCTATCAAGATGTTTGTGGGCC
AGGTTCCAAGGACCTGGTCTGAAAAGGACTTGCGGGAACTCTTCGAACAGTATGGTGCTGTGTATGAAATCAACG
TCCTAAGGGATAGGAGCCAAAACCCGCCTCAGAGCAAAGGGTGCTGTTTTGTTACATTTTACACCCGTAAAGCTG
CATTAGAAGCTCAGAATGCTCTTCACAACATGAAAGTCCTCCCAGGGATGCATCACCCTATACAGATGAAACCTG
CTGACAGTGAGAAGAACAATGCAGTGGAAGACAGGAAGCTGTTTATTGGTATGATTTCCAAGAAGTGCACTGAAA
ATGACATCCGAGTCATGTTCTCTTCGTTTGGACAGATTGAAGAATGCCGGATATTGCGGGGACCTGATGGCCTGA
GCCGAGGTTGTGCATTTGTGACTTTTACAACAAGAGCCATGGCACAGACGGCTATCAAGGCAATGCACCAAGCAC
AGACCATGGAGGGTTGCTCATCACCCATGGTGGTAAAATTTGCTGATACACAGAAGGACAAAGAACAGAAGAGAA
TGGCCCAGCAGCTCCAGCAGCAGATGCAGCAAATCAGCGCCATCTGTGTGGGGAAACCTTGCTGGTCTAAATACT
CTTGGACCCCAGTATTTAGCACTCCTTCAGCAGACTGCCTCCTCTGGGAACCTCAACACCCTGAGCAGCCTCCAC
CCAATGGGAGGGTTGAATGCAATGCAGTTACAGAATTTGGCTGCACTAGCTGCTGCAGCTAGTGCAGCTCAGAAC
ACACCAAGTGGTACCAATGCTCTCACTACATCCAGCAGTCCCCTCAGCGTGCTCACTAGTTCAGGGTCCTCACCT
AGCTCTAGCAGCAGTAATTCTGTCAACCCCATAGCCTCACTTGGAGCCCTGCAGACATTAGCTGGAGCAACGGCT
GGCCTCAATGTTGGCTCTTTGGCAGGAATGGCTGCTTTAAATGGTGGCCTGGGCAGCAGTGGCCTTTCCAATGGC
ACCGGGAGCACCATGGAGGCCCTCACTCAGGCCTACTCGGGTATCCAGCAATATGCTGCTGCTGCGCTCCCCACT
CTGTACAACCAGAATCTTCTGACACAGCAGAGTATTGGTGCTGCTGGAAGCCAGAAGGAAGGTCCAGAGGGAGCC
AACCTGTTCATCTACCACCTGCCCCAGGAGTTTGGTGATCAGGACCTGCTGCAGATGTTTATGCCCTTTGGGAAT
GTCGTGTCTGCCAAGGTTTTCATAGACAAGCAGACAAACCTGAGCAAGTGTTTTGGTTTTGTAAGTTACGACAAT
CCTGTTTCGGCCCAAGCTGCCATCCAGTCCATGAACGGCTTTCAGATTGGCATGAAGCGGCTTAAAGTGCAGCTC
AAACGTTCGAAGAATGACAGCAAGCCCTACTGAGCGTGCTCCCCTCTGAGACTGGAGTGAGAGGGTCTTCTGATT
CCTGCCGTTTGTTCATCGTTGTGCCTAAAGCATGTCGATGTGGCGTCAAGTACATCGTCCAAATCCCTGTCTCTT
CAGCTTCTCTGATGCTTGAACTCTCACCTTTGACCTTGTGTTGACCTTTGATGCTGATGTGTATTTTTATTATGT
TTGTTTCTTTCTTCGTTTTTTTTCTTTTTTTCTTTCCTTTTTTTTTCCTTTTGTGCTGCCAAATTGGTTTTGCT
AGAACGACTGCTGAAGGGGAAATATTTAAACTTGCATTTGAATATAAAAAAAATCTATTTTTCTAGAACTTCATA
AGATAACCACTTGATTTTGTGATTCCAATTCTTTGTAATTGTCTTCAGAGCAGCCCTACTAGCACATACCGCGTG
GTGTTTGTATTTCTGTGAACACACAGCCAGTCCGTTTCTAGGCTTTGTTTCTCTGTGTGCTTAGTTTTAAAGACA
ACTTTGAAGTAAACAATGAAATAAAAGATGTCACT

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FIGURE 3236

TAAAGTGCAGCTCAAACGTTCGAAGAATGACAGCAAGCCCTACTGAGCGTGCTCCCCTCTGAGACTGGAGTGAGA
GGGTCTTCTGGTAAGTGGGGGAGGAGCACCCTTAATGATTCGAAGCCCTGAGGCTGTGTGTTGACAGCCCTGGAC
CCTGATCCCTGCCACTCTCGCAGGCACAGCTTGCCCTGAAGACTCGGCTACTGCCTTCTGTGGGAGTTTCGCTTC
GTACAGAGGACAAGTTTGTGCTTTGGTTTCCAGTGTTTTACTTTGGAGTTTAGGTGCCATATCCTGAGGTTTTTT
TTGTTTTTGTTTTTGTTTCTCCTTTATTTAAAGTTTGCTGTGTTTGTAACCAGTGTGTGTTGAGAAGGACCAACA
CCAAACCACCCTGGGGAAGGGGGACAGGGAAACATTTAACACAGACGATGATCAGGATTTGCCCCAAACCACCCC
AAGAGAGAGGACTGAGTGGAACAAAAAAGTGACCCCCAGAACCTCTCTTAGTGTGAGGGTGGGTAGAATGAGAAC
TGACACCTGGGAGCTGTGGGGAGCAGAGCGGCTTTGGGGAAGAGTGGAGTGACTAGACACCTAATGCCCTGGCAG
CTGGAGACTCAAACTCCTGTACAGCTACCTTCTGGGAAATAGTTTTTGACACCTATTTTTCAGATTCTTGTCCGG
AATTTCTGCTGCTCTTTTCAAAAAAGGGCATTAACAATTCTCTGGAAATAAAGCACCTGTTAGCCTGACAT**ATG**C
AAAAAGCAGGGCGGCATCACCCATTACGAGCTCCCCCAGCCAGCAGTCAGTATTGGATTGGCCTTGCCTGGCTGG
TGGCAGTTTGGGAGAAACAGCCAAAGAGGTTAGTTTATTTCAACACCAAATTAGACCATGGCCCATTTCCAACGG
GTCTCTTTAAAGGCCTCTATGGAATACATTGCCTGGTTTCCTTCTTTGCAGTTCACCACAGCAAGGAATGTCACC
TCCATCCCAAGCCACCATTTTCTCATGAAGGCAAATCCAAGAAGGGCTTGCAGTTCTTGCTGAAGGGGGTACCAT
TTGTGGGCAGAGTGATCAATACCATC**TAG**TTGGGGGAGGAGGAGCTTATTTCTTGGTGTACTTGAATCAGAAGGT
CCCTGCAAGCCAGTATGCTTCATTTGCCAGTGGCCAGAAATTCTCCCTTGCCTCCTTGATTGAGGTGTCCCAGAT
GTAGTATTCCCACAGGGGTCTGGCAGGCCCCTCCTGTAACCACTCCAGTCACATTTTCTGCTCTTGAGGCAGAGG
TGACATCAGGACGTTTACAGCCTCCACATGAATTGAGTGTTCATTTACCTCAGTATTACCGTGTTCATTTTTGTC
CTCGTGCTACAGTTAGCTCCCTGCCGCCTCTTGCAGGTCTTACTTCAGCTCTTGCCTGTGACCCACACAGCTTCT
GGGCTCTGCCTCTGCTCTAAGAAGTGCTGTGGGGGTAGAGAACCAGGAAGGACATGCTGTTGGGAATGTACACCT
GGGCAGAGGTGGCCCTGTTAAGATGTGACTGTAGCCACAGCCAGGGATGGGATCCCTGGGTCTCTGGAATCTGAA
ACCTCAACAAATACCAGTCTTGACCCCTAGCAGCAGAGATAAGAATAAAGGGGTTGGTTTGCTATTAAGTCAGAT
GGGGGCTCTCTCCTTGTCATGCTGTCCCTGTGGGTAACAGACAGGGATTGACCATCTTACTGTTGTACAGGTAGC
TGGTGGTGTTGGATTATCCCATTGAAGCTGGGACAGCTGTTCCTTTCTCATAGTGATAACTTGGGTCTGTTGTCC
TCTAAGGAACGTGAAACATACACTTCTTAAGCTGAACCACGTAAACTTGAAATTCTGCGCACTGGGAGAAATGTG
TCCTGTGTTTCAAAGGATAAAACTGTTCTAAAGGCTTCCAGGGTCATGATGGGATTTTTTAAATAAATGCAAAAA
AT

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FIGURE 3237A

GCTAGGTTGGGGAGGCGCTGTTCTGAATCCCAACCGGCTGGAACCAAGAATGTCGTTTCTATTTTTATAGAAGTT
TTATACAGCTCCGGGGTGGAGAATATTTATTACCTAAATTATATCTCTGGAAAAGGCCAGGATTTTGTAGAATCC
AGAATGTGATTGTTATACACACAGGGTGCTGTGTATGATTGAAACTACTGACTTTCTGTGGCCCGTTTGCAGCCC
AGCTAACCTGCCCAAGGGGAAGGTGTTAATGCTGTGAATTGGCAGAGGAGAGAGCTGTGCTCCATAGGGTGCTGC
CGGTGCTGTGCTCCCTAGCCTTCTGTTCTGTCTTCCTCCTTAGCCAGAACGCCACTCCCTTCCCACATCCCCTTC
TTCTCTCCGCCTTCCCCCATCTCACCATTATTTGTCCATGGATTTGTCCTGGGCTCTGGGACCTTATGAAACCCC
TTTCCTAATGACATAAGAGGCCAAGGTGCAATCCACCCACCTTTGATACCAGACCCTGAGGGCTTCATACCTGCT
GATGGGTTTTCTTTTCTAAAAGGAATGCTCGCCCCAGCAGGGTCCTGGGCTGCTTGAGCAGCCAGCTGGTGAGAC
CATGCACTTCTCTGTTCTCTCCTCCCCCTGCCCAGTGAGTTAGCACAGCAGTAGCACTGCCCTTGAGCACAGTTC
TTTCCCCAGGCCAAAGATGGTTTTGTGAAGAAGCTGCTCCCCTACAAGTCTCACGTGTGAAAGGGCTCAGCTCAG
AGTGGAGACTCGCTGTCAAGTCTTAAGCAATCCTTTTCTGTTGTGTGAAGGTTTCACTTACAATGTGTTTTCTGC
TGTAGTTTTGTTTCTTACTTGGGTTACATCATGAAATTGATTTGCCTTGAATGCAGCCAGACCACTGTCTCCTGG
GTTCCCCTTGAGTGGCCAGGGCCTGGATGGAAGCTAAGAGCTTGGATTTCTGGGAACAAAGGGCCATCCCCATAA
GATTGAGCAGAAATTCTGGTCCTCTTCCCTGAAAAATTTTCCCCACCCCAGCCAGCATCTTCTGCTTCCCCTTGG
GTTGTGACCAGGGAGTGGGGAGAGAGGCTGAGGCTCTGCTCCCCTGGAGACCTTCTCTTAGGAGTTGGGTGCTTC
ATGGAAAATCCAAGCCTTAGGTTCCCTTCTGTCTCTGGCAATTAGATGTGTTCTTGGTGTCCTCCATGTCCTTTT
TGACTTTTCCCTGTGTCCATTGTTAGCATGTGCAAAAGTTCCCTGTCATTACCCAACCCCTGCCCGCCCACCTCA
TTTCAGGGCTGTACACACAGTGAGTGTTCCTGTTCTCTCTCTCTTTGTTTGGATGTATTGCTCTGTGTAACTCAG
TGGGTCTCCCTCTTTCTGGTTTGTTTTTTTTTCTAGATTCCTGCCGTTTGTTCATCGTTGTGCCTAAAGCATGTC
GATGTGGCGTCAAGTACATCGTCCAAATCCCTGTCTCTTCAGCTTCTCTGATGCTTGAACTCTCACCTTTGACCT
TGTGTTGACCTTTGATGCTGATGTGTATTTTTATTATGTTTGTTTCTTTCTTCGTTTTTTTTTCTTTTTTTCTTT
CCTTTTTTTTTCCTTTTGTGCTGCCAAATTGGTTTTGCTAGAACGACTGCTGAAGGGGAAATATTTAAACTTGCA
TTTGAATATAAAAAAAAATCTATTTTTCTAGAACTTCATAAGATAACCACTTGATTTTGTGATTCCAATTCTTTGT
AATTGTCTTCAGAGCAGCCCTACTAGCACATACCGCGTGGTGTTTGTATTTCTGTGAACACACAGCCAGTCCGTT
TCTAGGCTTTGTTTCTCTGTGTGCTTAGTTTTAAAGACAACTTTGAAGTAAACAATGAAATAAAAGATGTCACTA
AAACCTCTGAGGCTCCTGAGCACATTTTGCTGATACAGTCTGTGGGGCTTGAGGAGACCGCATGTATTGTTCTTT
CTTTTGTTTTTCTTCTGAGTTCTCAACTGCGGAGAGCACCTGAACCCCCTTTCCTTTTTGACCGCAGGCTGCACT
TTGGGCCCCAGCCAGCCCTTTTTCTTTTTCTTTTTCTTTTGTGGTTCTTCCCTGGAGCGACTCTGGGGAGTCCTG
GATATCCCGCCTGCCCCTTCCCCTCAGCCCCATGCTTGTTCCAACAGTCTCCACAGCAAAATGTGATGCTTTGAT
TTTTTTGTTGTTGTTTTTGTTTTTGTATTGTTTTTGTGTTTTTGTTTTGAATTTTTTCCTTTCCTACTAAGATTA
TGCCCAGAAAAAAGTTTTGCATGTTTCCTGCTGTTTCTTCACACCTTCGTATATATCACCTTCACCTCTCTGTTT
TCTATAGTTTGTGCAAAAACTGATCGATTTAAAAGGGTTTCAAAGAAGCTGTTTTAAATTGTTGTAGGGTTGATT
ATTTTTTTCAAGATTGTATTGTTTAATTTTGAAGTGGCAACTTTCTCCTCTATTGCCCTTAGAGCGTTTGCCTGT
GCACTTAGACTGTCACTTCGTGTGGCCTCCAGGTCTTACCGGGGCTTCCGGGAGGCTGGCTGCTTTGCTCAGAGA
GGGTGGGAAGGGGGCCTGGAGAGACACGAGAAGCAGAGGTAGAGCCTAGAAGGTGGCAGCAGGTGGGTAAGAGGC
TTATTTAGCACATTAGGGGCAGTGAGCACCTGGAGGAAGGAGGGCGCTCCCAATCACCCGTAGGAGGCCATCTGC
ACACCAAGCGGCAATTCACCTGCTGGCGCTTTTCCTAGGTGACAAGCACAATACTACAGTCTTCACACTGTTTAC
AGCCCTGGGCACCAGCCACCCGGCACTGGCTCTTCATCACAGCTCTGCTCTTGCTTAGCTAGTGGGGTGGGGGAA
AGGGCAGGGATTTGTTTTTTTAATTGGGTGGAGAGCCAAACAGCTACTGTCCCTGGGTGCCAAGCAAGCCAGTTT
TTTGGTTCCCTGAGGGAAACTGACCCTCCTCTCTTGTGGCACCATCCAGCCTCAGGGTCTTGGAGACTTGAGTAA
GAATGTGAGTGGAGGGGGAGAGGTGAGGAGAGGAGCACAGGGTGGATCTGTGGAGGGAAGAGGTTACAGGGGGAG
GAGCTGATGATAGATCCCACCCAGACTTAAGCTGCTGGTGGGTGGGTGAGCTGGGAAGTAGGACTGTCCAGGGAA
GGGTGGAGAGATGTAGCTAGGGGCTGGGGAGGGGGAGGTGGAAGCGCTATTGAGCATCCTCCACACCAAGGTTG**A**
TGAAGGAAGGGATCCCAGCAGGGTTTCTGCTCTGGGGCTGGCAGGTTGCCTGGTATTATGCCCAAGGCCGCTCTG
CCTGGGGGAAAGGGCAGCCAGGCAGAGGCCCAGTGTCTGGTAGGCTGCTGAATTTCCTGGAAGGGGTGATTGGAT
GGAAAGAGGCCAGAAACCCCAGCCTGAGAGACTGCTGTGCACCCCACAGTCTGACTGCACAGAGCCGCCTCTGTT
GGCAGGAGGCACTGAGGCTCCCCTTCCTGTGTATTGAGAAGCAGTGTTTGCCAATATATTTTGCTTTCAATTCCA
AGAGGAGCTCTGGGAAAACCTGTGGA**TAA**AACCAAATGCCAAATGTTGGACGTTGTTTCCTTTTCCTTTTCTCTC

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FIGURE 3237B

TCTGATTGTTTTAATTGTTCTGTGGTGGTTTTAATGGATTTGAGACCCTGGAGCGGCAGCTGCCTTTCTGATTTC
CAGCTGCTTTTTGTGAATAATTT

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FIGURE 3238

GATTCGCTGCTCCGCAGCACGGCCGGAGCTGGTCGGGTCAAGAGTCGGGATTTGTGGGGAGAGGTTTTCCACTGG
TCAAGAGAAGGCTTTAAGAAAGACGGTATTAATCTCCCGTTGCGGCTCCCGCCTGGTCCCATCTTCTGCCCGCTC
CTCCAGGAAATGAATCTGCTGCCGAATATTGAGAGTCCAGTGACTCGGCAGGAGAAGATGGCGACCGTGTGGGAT
GAGGCCGAGCAAGATGGAATTGGGGAGGAGGTGCTCAAGATGTCCACGGAGGAGATCATCCAGCGCACACGGCTG
CTGGACAGTGAGATCAAGATCATGAAGAGTGAAGTGTTGAGAGTCACCCATGAGCTCCAAGCCATGAAGGACAAG
ATAAAAAGAGAACAGTGAGAAAATCAAAGTGAACAAGACCCTGCCGTACCTTGTCTCCAACGTCATCGAGCTCCTG
GATGTTGATCCTAATGACCAAGAGGAGGATGGTGCCAATATTGACCTGGACTCCCAGAGGAAGGGCAAGTGTGCT
GTGATCAAAACCTCTACACGACAGACGTACTTCCTTCCTGTGATTGGGTTGGTGGATGCTGAAAAGCTAAAGCCA
GGAGACCTGGTGGGTGTGAACAAAGACTCCTATCTGATCCTGGAGACGCTGCCCACAGAGTATGACTCGCGGGTG
AAGGCCATGGAGGTAGACGAGAGGCCCACGGAGCAATACAGTGACATTGGGGGTTTGGACAAGCAGATCCAGGAG
CTGGTGGAGGCCATTGTCTTGCCAATGAACCACAAGGAGAAGTTTGAGAACTTGGGGATCCAACCTCCAAAAGGG
GTGCTGATGTATGGGCCCCCAGGGACGGGGAAGACCCTCCTGGCCCGGGCCTGTGCCGCACAGACTAAGGCCACC
TTCCTAAAGCTGGCTGGCCCCCAGCTGGTGCAGATGTTCATTGGAGATGGTGCCAAGCTAGTCCGGGATGCCTTT
GCCCTGGCCAAGGAGAAAGCGCCCTCTATCATCTTCATTGATGAGTTGGATGCCATCGGCACCAAGCGCTTTGAC
AGTGAGAAGGCTGGGGACCGGGAGGTGCAGAGGACAATGCTGGAGCTTCTGAACCAGCTGGATGGCTTCCAGCCC
AACACCCAAGTTAAGGTAATTGCAGCCACAAACAGGGTGGACATCCTGGACCCCGCCCTCCTCCGCTCGGGCCGC
CTTGACCGCAAGATAGAGTTCCCGATGCCCAATGAGGAGGCCCGGGCCAGAATCATGCAGATCCACTCCCGAAAG
ATGAATGTCAGTCCTGACGTGAACTACGAGGAGCTGGCCCGCTGCACAGATGACTTCAATGGGGCCCAGTGCAAG
GCTGTGTGTGTGGAGGCGGGCATGATCGCACTGCGCAGGGGTGCCACGGAGCTCACCCACGAGGACTACATGGAA
GGCATCCTGGAGGTGCAGGCCAAGAAGAAAGCCAACCTACAATACTACGCCTAGGGCACACAGGCCAGCCCCAGT
CTCACGGCTGAAGTGCGCAATAAAAGATGGTTTAGGGTCCCTGCC

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FIGURE 3239

GGGGCCGCCCGGATCGCCGCCGCCGCCGCCGCACGTACGTGGCATGCCTGGATGTCCCTGCCCTGGCTGTGGCAT
GGCGGGCCCAAGGCTCCTCTTCCTCACTGCCCTTGCCCTGGAGCTCTTGGAAAGGGCTGGGGGTTCCCAGCCGGC
CCTCCGGAGCCGGGGGACTGCGACGGCCTGTCGCCTGGACAACAAGGAAAGCGAGTCCTGGGGGGCTCTGCTGAG
CGGAGAGCGGCTGGACACCTGGATCTGCTCCCTCCTGGGTTCCCTCATGGTGGGGCTCAGTGGGGTCTTCCCGTT
GCTTGTCATTCCCCTAGAGATGGGGACCATGCTGCGCTCAGAAGCTGGGGCCTGGCGCCTGAAGCAGCTGCTCAG
CTTCGCCCTGGGGGGACTCTTGGGCAATGTGTTTCTGCATCTGCTGCCCGAAGCCTGGGCCTACACGTGCAGCGC
CAGCCCTGGTGGTGAGGGGCAGAGCCTGCAGCAGCAGCAACAGCTGGGGCTGTGGGTCATTGCTGGCATCCTGAC
CTTCCTGGCGTTGGAGAAGATGTTCCTGGACAGCAAGGAGGAGGGGACCAGCCAGGCCCCCAACAAAGACCCCAC
TGCTGCTGCCGCCGCGCTCAATGGAGGCCACTGTCTGGCCCAGCCGGCTGCAGAGCCCGGCCTCGGTGCCGTGGT
CCGGAGCATCAAAGTCAGCGGCTACCTCAACCTGCTGGCCAACACCATCGATAACTTCACCCACGGGCTGGCTGT
GGCTGCCAGCTTCCTTGTGAGCAAGAAGATCGGGCTCCTGACAACCATGGCCATGCTCCTGCATGAGATCCCCCA
TGAGGTGGGCGACTTTGCCATCCTGCTCCGGGCCGGCTTTGACCGATGGAGCGCAGCCAAGCTGCAACTCTCAAC
AGCGCTGGGGGGCCTACTGGGCGCTGGCTTCGCCATCTGTACCCAGTCCCCCAAGGGAGTAGTTGGGTGTTCTCC
CGCTGCAGAGGAGACGGCAGCCTGGGTCCTGCCCTTCACCTCTGGCGGCTTTCTCTACATCGCCTTGGTGAACGT
GCTCCCTGACCTCTTGGAAGAAGAGGACCCGTGGCGCTCCCTGCAGCAGCTGCTTCTGCTCTGTGCGGGCATCGT
GGTAATGGTGCTGTTCTCGCTCTTCGTGGATTAACTTTCCCTGATGCCGACGCCCCTGCCCCCTGCAGCAATAAG
ATGCTCGGATTCACTCTGTGACCGCATATGTGAGAGGCAGAGAGGGCGAGTGGCTGCGAGAGAGAATGAGCCTCC
CGCCAGACAGGAGGGAGGTGCGTGTGGATGTATGTGGTGTGCACATGTGGCCAGAGGTGTGTGCGCGAGACCGAC
ACTGTGATCCCTGTGCTGGGTCCGGGGCCCAGTGTAGCGCCTGTCCCCAGCCATGCTGTGGTTACCTCTCCTTGC
CGCCCTGTCACCTTCACCTCCCGGAGTAAGCAGCGAGGAAGAGCAGCACTGGTCCCAAGCAGAGGCCTTGCCCTG
CTGGGACCCCGGGAGTGAGAGCAGCCCAAGGATCCAGGGTGCAGGGAACTCCAGAGCTGCCCACCTCCCACTGCC
CCCTCAGCACACACACAGTCCCCAGGCGGCCTAGGGGCCAAGGCTGGGGCGGCTTTGGTCCCTTTTCCTGGCCCT
TCCTTCCCCACTTCTAAGCCAAAGAAAGGAGAGGCAGGTGCTCCTGTACCCCAGCCCCACTCAGCACTGACAGTC
CCCAGCTCCTAGTAGTGAGCTGGGAGGCGCTTCCTAAGACCCTTTCCTCAGGGCTGCCCTGGGAGCTCATTCCTG
GCCAACACGCCCTGGCAGCACCAGCAGCTCTTGCCACCTCCAGCTGCCAAACAGCAGCCTGCCGGGCAGGGAGCA
GCCCCAGGCCAGAGAGGCCTCCCGGTCCAGCTCAGGGATGCTCCTGCCAGCACAGGGGCCAGGGACTCCTGGAGC
AGGCACATAGTGAGCCCGGGCAGCCCTGCCCAGCTCAGGCCCCTTTCCTTCCCCATTGAGGTTGGGGTAGGTGGG
GGCGGTGAGGGCTCCACGTTGTCAGCGCTCAGGAATGTGCTCCGGCAGAGTGCTGAAGCCATAATCCCCAACCAT
TTCCCTTGGCTGACGCCCAGGTACTCAGCTGGCCCACTCCACAGCCAGGCCTGGCCCTGCCCTTCACCGTGGATG
TTTTCAGAAGTGGCCATCGAGAGGTCTGGATGGTTTTATAGCAACTTTGCTGTGATTCCGTTTGTATCTGTAAAT
ATTTGTTCTATAGATAAGATACAAATAAATATTATCCACAT

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FIGURE 3240A

ACCGCGGCCGCGCGCCCCCCTCTGCCCCCGCTGCCCAGGATTGGTAGGCTCCACCGCTCGGCAGCCGGCTTCCCT
GCTCGGACGCCGAGCACCGCCAAAGCGCACTTCGATTTTCAGAATTCCTCCTGGGAATGCTGACTCCTTGCTTGG
TGCCCTGATGCTTCTCTGAGATAAACTGATGAATTGGAACCATGGTGCAAAAGAAGAAGTTCTGTCCTCGGTTAC
TTGACTATCTAGTGATCGTAGGGGCCAGGCACCCGAGCAGTGATAGCGTGGCCCAGACTCCTGAATTGCTACGGC
GATACCCCTTGGAGGATCACACTGAGTTTCCCCTGCCCCCAGATGTAGTGTTCTTCTGCCAGCCCGAGGGCTGCC
TGAGCGTGCGGCAGCGGCGCATGAGCCTTCGGGATGATACCTCTTTTGTCTTCACCCTCACTGACAAGGACACTG
GAGTCACGCGATATGGCATCTGTGTTAACTTCTACCGCTCCTTCCAAAAGCGAATCTCTAAGGAGAAGGGGGAAG
GTGGGGCAGGGTCCCGTGGGAAGGAAGGAACCCATGCCACCTGTGCCTCAGAAGAGGGTGGCACTGAGAGCTCAG
AGAGTGGCTCATCCCTGCAGCCTCTCAGTGCTGACTCTACCCCTGATGTGAACCAGTCTCCTCGGGGCAAACGCC
GGGCCAAGGCGGGGAGCCGCTCCCGCAACAGTACTCTCACGTCCCTGTGCGTGCTCAGCCACTACCCTTTCTTCT
CCACCTTCCGAGAGTGTTTGTATACTCTCAAGCGCCTGGTGGACTGCTGTAGTGAGCGCCTTCTGGGCAAGAAAC
TGGGCATCCCTCGAGGCGTACAAAGGGACACCATGTGGCGGATCTTTACTGGATCGCTGCTGGTAGAGGAGAAGT
CAAGTGCCCTTCTGCATGACCTTCGAGAGATTGAGGCCTGGATCTATCGATTGCTGCGCTCCCCAGTACCCGTCT
CTGGGCAGAAGCGAGTAGACATCGAGGTCCTACCCCAAGAGCTCCAGCCAGCTCTGACCTTTGCTCTTCCAGACC
CATCTCGATTCACCCTAGTGGATTTCCCACTGCACCTTCCCTTGGAACTTCTAGGTGTGGACGCCTGTCTCCAGG
TGCTAACCTGCATTCTGTTAGAGCACAAGGTGGTGCTACAGTCCCGAGACTACAATGCACTCTCCATGTCTGTGA
TGGCATTCGTGGCAATGATCTACCCACTGGAGTATATGTTTCCTGTCATCCCGCTGCTACCCACCTGCATGGCAT
CAGCAGAGCAGCTGCTGTTGGCTCCAACCCCGTACATCATTGGGGTTCCTGCCAGCTTCTTCCTCTACAAACTGG
ACTTCAAAATGCCTGATGATGTATGGCTAGTGGATCTGGACAGCAATAGGGTGATTGCCCCCACCAATGCAGAAG
TGCTGCCTATCCTGCCAGAACCAGAATCACTAGAGCTGAAAAAGCATTTAAAGCAGGCCTTGGCCAGCATGAGTC
TCAACACCCAGCCCATCCTCAATCTGGAGAAATTTCATGAGGGCCAGGAGATCCCCCTTCTCTTGGGAAGGCCTT
CTAATGACCTGCAGTCCACACCGTCCACTGAATTCAACCCACTCATCTATGGCAATGATGTGGATTCTGTGGATG
TTGCAACCAGGGTTGCCATGGTACGGTTCTTCAATTCCGCCAACGTGCTGCAGGGATTTCAGATGCACACGCGTA
CCCTGCGCCTCTTTCCTCGGCCTGTGGTAGCTTTTCAAGCTGGCTCCTTTCTAGCCTCACGTCCCCGGCAGACTC
CTTTTGCCGAGAAATTGGCCAGGACTCAGGCTGTGGAGTACTTTGGGGAATGGATCCTTAACCCCACCAACTATG
CCTTTCAGCGAATTCACAACAATATGTTTGATCCAGCCCTGATTGGTGACAAGCCAAAGTGGTATGCTCATCAGC
TGCAGCCTATCCACTATCGCGTCTATGACAGCAATTCCCAGCTGGCTGAGGCCCTGAGTGTACCACCAGAGCGGG
ACTCTGACTCCGAACCTACTGATGATAGTGGCAGTGATAGTATGGATTATGACGATTCAAGCTCTTCTTACTCCT
CCCTTGGTGACTTTGTCAGTGAAATGATGAAATGTGACATTAATGGTGATACTCCCAATGTGGACCCTCTGACAC
ATGCAGCACTGGGGGATGCCAGCGAGGTGGAGATTGACGAGCTGCAGAATCAGAAGGAAGCAGAAGAGCCTGGCC
CAGACAGTGAGAACTCTCAGGAAAACCCCCCACTGCGCTCCAGCTCTAGCACCACAGCCAGCAGCAGCCCCAGCA
CTGTCATCCACGGAGCCAACTCTGAACCTGCTGACTCTACGGAGATGGATGATAAGGCAGCAGTAGGCGTCTCCA
AGCCCCTCCCTTCCGTGCCTCCCAGCATTGGCAAATCGAACGTGGACAGACGTCAGGCAGAAATTGGAGAGGGGT
CAGTGCGCCGGCGAATCTATGACAATCCATACTTCGAGCCCCAATATGGCTTTCCCCCTGAGGAAGATGAGGATG
AGCAGGGGGAAAGTTACACTCCCCGATTCAGCCAACATGTCAGTGGCAATCGGGCTCAAAAGCTGCTGCGGCCCA
ACAGCTTGAGACTGGCAAGTGACTCAGATGCAGAGTCAGACTCTCGGGCAAGCTCTCCCAACTCCACCGTCTCCA
ACACCAGCACCGAGGGCTTCGGGGGCATCATGTCTTTTGCCAGCAGCCTCTATCGGAACCACAGTACCAGCTTCA
GTCTTTCAAACCTCACACTGCCCACCAAAGGTGCCCGAGAGAAGGCCACGCCCTTCCCCAGTCTGAAAGTATTTG
GGCTAAATACTCTAATGGAGATTGTTACTGAAGCCGGCCCCGGGAGTGGTGAAGGAAACAGGAGGGCGTTAGTGG
ATCAGAAGTCATCTGTCATTAAACACAGCCCAACAGTGAAAAGAGAACCTCCATCACCCCAGGGTCGATCCAGCA
ATTCTAGTGAGAACCAGCAGTTCCTGAAGGAGGTGGTGCACAGCGTGCTGGACGGCCAGGGAGTTGGCTGGCTCA
ACATGAAAAAGGTGCGCCGGCTGCTGGAGAGCGAGCAGCTGCGAGTCTTTGTCCTGAGCAAGCTGAACCGCATGG
TGCAGTCAGAGGACGATGCCCGGCAGGACATCATCCCGGATGTGGAGATCAGTCGGAAGGTGTACAAGGGAATGT
TAGACCTCCTCAAGTGTACAGTCCTCAGCTTGGAGCAGTCCTATGCCCACGCGGGTCTGGGTGGCATGGCCAGCA
TCTTTGGGCTTTTGGAGATTGCCCAGACCCACTACTATAGTAAAGAACCAGACAAGCGGAAGAGAAGTCCAACAG
AAAGTGTAAATACCCCAGTTGGCAAGGATCCTGGCCTAGCTGGGCGGGGGGACCCAAAGGCTATGGCACAACTGA
GAGTTCCACAACTGGGACCTCGGGCACCAAGTGCCACAGGAAAGGGTCCTAAGGAACTGGACACCAGAAGTTTAA
AGGAAGAAAATTTTATAGCATCTATTGAATTGTGGAACAAGCACCAGGAAGTGAAAAAGCAAAAAGCTTTGGAAA

FIGURE 3240B

AACAGAGGCCTGAAGTAATCAAACCTGTCTTTGACCTTGGTGAGACAGAGGAGAAAAAGTCCCAGATCAGCGCAG
ACAGTGGTGTGAGCCTGACGTCTAGTTCCCAGAGGACTGATCAAGACTCTGTCATCGGCGTGAGTCCAGCTGTTA
TGATCCGCAGCTCAAGTCAGGATTCTGAAGTTAGCACCGTGGTGAGTAATAGCTCTGGAGAGACCCTTGGAGCTG
ACAGTGACTTGAGCAGCAATGCAGGTGATGGACCAGGTGGCGAGGGCAGTGTTCACCTGGCAAGCTCTCGGGGCA
CTTTGTCTGATAGTGAAATTGAGACCAACTCTGCCACAAGCACCATCTTTGGTAAAGCCCACAGCTTGAAGCCAA
GCATAAAGGAGAAGCTGGCAGGCAGCCCCATTCGTACTTCTGAAGATGTGAGCCAGCGAGTCTATCTCTATGAGG
GACTCCTAGGAAGGGACAAAGGATCCATGTGGGACCAGTTAGAGGATGCAGCTATGGAGACCTTTTCTATAAGCA
AAGAGCGTTCTACTTTATGGGACCAAATGCAATTCTGGGAAGATGCCTTCTTAGATGCTGTGATGTTGGAGAGAG
AAGGGATGGGTATGGACCAGGGTCCCCAGGAAATGATCGACAGGTACCTGTCCCTTGGAGAACATGACCGGAAGC
GCCTGGAAGATGATGAAGATCGCTTGTTGGCCACACTTCTGCACAACCTCATCTCCTACATGCTGCTGATGAAGG
TAAATAAGAATGACATCCGCAAGAAGGTGAGGCGCCTAATGGGAAAGTCGCACATTGGGCTTGTGTACAGCCAGC
AAATCAATGAGGTGCTTGATCAGCTGGCGAACCTGAATGGACGCGATCTCTCTATCTGGTCCAGTGGCAGCCGGC
ACATGAAGAAGCAGACATTTGTGGTACATGCAGGGACAGATACAAACGGAGATATCTTTTTCATGGAGGTGTGCG
ATGACTGTGTGGTGTTGCGTAGTAACATCGGAACAGTGTATGAGCGCTGGTGGTACGAGAAGCTCATCAACATGA
CCTACTGTCCCAAGACGAAGGTGTTGTGCTTGTGGCGTAGAAATGGCTCTGAGACCCAGCTCAACAAGTTCTATA
CTAAAAAGTGTCGGGAGCTGTACTACTGTGTGAAGGACAGCATGGAGCGCGCTGCCGCCCGACAGCAAAGCATCA
AACCCGGACCTGAATTGGGTGGCGAGTTCCCTGTGCAGGACCTGAAGACTGGTGAGGGTGGCCTGCTGCAGGTGA
CCCTGGAAGGGATCAACCTCAAATTCATGCACAATCAGGTTTTCATAGAGCTGAATCACATTAAAAAGTGCAATA
CAGTTCGAGGCGTCTTTGTCCTGGAGGAATTTGTTCCTGAAATTAAAGAAGTGGTGAGCCACAAGTACAAGACAC
CAATGGCCCACGAAATCTGCTACTCCGTATTATGTCTCTTCTCGTACGTGGCTGCAGTTCATAGCAGTGAGGAAG
ATCTCAGAACCCCGCCCCGGCCTGTCTCTAGC**TGA**TGGAGAGGGGCTACGCAGCTGCCCCAGCCCAGGGCACGCC
CCTGGCCCCTTGCTGTTCCCAAGTGCACGATGCTGCTGTGACTGAGGAGTGGATGATGCTCGTGTGTCCTCTGCA
AGCCCCCTGCTGTGGCTTGGTTGGTTACCGGTTATGTGTCCCTCTGAGTGTGTCTTGAGCGTGTCCACCTTCTCC
CTCTCCACTCCCAGAAGACCAAACTGCCTTCCCCTCAGGGCTCAAGAATGTGTACAGTCTGTGGGGCCGGTGTGA
ACCCACTATTTTGTGTCCTTGAGACATTTGTGTTGTGGTTCCTTGTCCTTGTCCCTGGCGTTATAACTGTCCACT
GCAAGAGTCTGGCTCTCCCTTCTCTGTGACCCGGCATGACTGGGCGCCTGGAGCAGTTTCACTCTGTGAGGACTG
AGGGAACCCTGGGGCTCACCCTCTCAGAGGAAGGGCACAGAGAGGAAGGGAAGAATTGGGGGGCAGCCGGAGTGA
GTGGCAGCCTCCCTGCTTCCTTCTGCATTCCCAAGCCGGCAGCTACTGCCCAGGGCCCGCAGTGTTGGCTGCTGC
CTGCCACAGCCTCTGTGACTGCAGTGGAGCGGCGAATTCCCTGTGGCCTGCCATGCCTTCGGCATCAGAGGATGG
AGTGGTCGAGGCTAGTGGAGTCCCAGGGACCGCTGGCTGCTCTGCCTGAGCATCAGGGAGGGGGCAGGAAAGACC
AAGCTGGGTTTGCACATCTGTCTGCAGGCTGTCTCTCCAGGCACGGGGTGTCAGGAGGGAGAGACAGCCTGGGTA
TGGGCAAGAAATGACTGTAAATATTTCAGCCCCACATTATTTATAGAAAATGTACAGTTGTGTGAATGTGAAATA
AATGTCCTCAACTCCC

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FIGURE 3241

CAGTGCCTTGGTAATGACCAGGGCTCCAGGAAGAGATGTCCTTGTGGCTGGGGGCCCCTGTGCCTGACATTCCTC
CTGACTCTGCGGTGGAGCTGTGGAAGCCAGGCGCACAGGATGCAAGCAGCCAGGCCCAGGGAGGCAGCAGCTGCA
TCCTCAGAGAGGAAGCCAGGATGCCCCACTCTGCTGGGGGTACTGCAGGGGTGGGGCTGGAGGCTGCAGAGCCCA
CAGCCCTGCTCACCAGGGCAGAGCCCCCTTCAGAACCCACAGAGATCCGTCCACAAAAGCGGAAAAAGGGGCCAG
CCCCCAAAATGCTGGGGAACGAGCTATGCAGCGTGTGTGGGGACAAGGCCTCGGGCTTCCACTACAATGTTCTGA
GCTGCGAGGGCTGCAAGGGATTCTTCCGCCGCAGCGTCATCAAGGGAGCGCACTACATCTGCCACAGTGGCGGCC
ACTGCCCCATGGACACCTACATGCGTCGCAAGTGCCAGGAGTGTCGGCTTCGCAAATGCCGTCAGGCTGGCATGC
GGGAGGAGTGTGTCCTGTCAGAAGAACAGATCCGCCTGAAGAAACTGAAGCGGCAAGAGGAGGAACAGGCTCATG
CCACATCCTTGCCCCCCAGGGCTTCCTCACCCCCCCAAATCCTGCCCCAGCTCAGCCCGGAACAACTGGGCATGA
TCGAGAAGCTCGTCGCTGCCCAGCAACAGTGTAACCGGCGCTCCTTTTCTGACCGGCTTCGAGTCACGCCTTGGC
CCATGGCACCAGATCCCCATAGCCGGGAGGCCCGTCAGCAGCGCTTTGCCCACTTCACTGAGCTGGCCATCGTCT
CTGTGCAGGAGATAGTTGACTTTGCTAAACAGCTACCCGGCTTCCTGCAGCTCAGCCGGGAGGACCAGATTGCCC
TGCTGAAGACCTCTGCGATCGAGGTGATGCTTCTGGAGACATCTCGGAGGTACAACCCTGGGAGTGAGAGTATCA
CCTTCCTCAAGGATTTCAGTTATAACCGGGAAGACTTTGCCAAAGCAGGGCTGCAAGTGGAATTCATCAACCCCA
TCTTCGAGTTCTCCAGGGCCATGAATGAGCTGCAACTCAATGATGCCGAGTTTGCCTTGCTCATTGCTATCAGCA
TCTTCTCTGCAGACCGGCCCAACGTGCAGGACCAGCTCCAGGTAGAGAGGCTGCAGCACACATATGTGGAAGCCC
TGCATGCCTACGTCTCCATCCACCATCCCCATGACCGACTGATGTTCCCACGGATGCTAATGAAACTGGTGAGCC
TCCGGACCCTGAGCAGCGTCCACTCAGAGCAAGTGTTTGCACTGCGTCTGCAGGACAAAAAGCTCCCACCGCTGC
TCTCTGAGATCTGGGATGTGCACGAATGACTGTTCTGTCCCCATATTTTCTGTTTTCTTGGCCGGATGGCTGAGG
CCTGGTGGCTGCCTCCTAGAAGTGGAACAGACTGAGAAGGGCAAACATTCCTGGGAGCTGGGCAAGGAGATCCTC
CCGTGGCATTAAAAGAGAGTCAAAGGGT

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FIGURE 3242

TTGCTGCATAGATTACAACGGTGATGGCGGGCAAGCGGTCCGGCTGGAGCCGGGCGGCTCTCCTCCAGCTCCTTC
TCGGCGTGAACCTGGTGGTGATGCCGCCCACCCGGGCCCGGAGTCTGCGCTTCGTTACCTTGCTGTACCGCCATG
GAGACCGTTCACCAGTGAAGACATATCCCAAGGACCCCTATCAGGAAGAAGAATGGCCCCAGGGGTTTGGTCAGT
TAACCAAGGAGGGGATGCTACAGCACTGGGAACTGGGCCAGGCCCTGCGGCAGCGCTATCACGGCTTCCTAAACA
CCTCTTATCACCGGCAAGAGGTTTATGTGCGAAGCACAGACTTTGACCGGACTCTCATGAGTGCTGAGGCCAACC
TGGCTGGACTCTTCCCTCCCAACGGGATGCAGCGCTTCAACCCGAACATCTCGTGGCAGCCTATTCCTGTGCACA
CTGTGCCCATCACTGAGGACAGGCTGCTGAAGTTCCCGTTGGGCCCATGTCCCCGTTATGAGCAGCTGCAGAACG
AGACCCGGCAGACACCAGAGTATCAGAATGAGAGTTCTCGGAATGCACAATTTCTGGACATGGTGGCCAACGAGA
CAGGGCTTACAGACCTGACACTGGAGACCGTCTGGAATGTCTATGACACACTCTTCTGTGAGCAAACGCACGGGC
TGCGCCTGCCGCCCTGGGCCTCACCCCAAACCATGCAGCGTCTCAGCCGGCTAAAGGACTTCAGCTTCCGCTTCC
TCTTCGGAATCTACCAGCAGGCGGAGAAGGCCCGGCTTCAGGGGGGAGTCCTGCTGGCTCAGATAAGGAAGAACC
TGACCCTAATGGCGACCACCTCCCAGCTCCCCAAGCTGCTGGTTTACTCTGCGCACGACACTACCCTGGTTGCCC
TGCAAATGGCACTGGATGTCTACAATGGTGAACAAGCCCCCTACGCCTCCTGCCACATATTTGAACTGTACCAGG
AAGATTCTGGGAATTTCTCAGTGGAGATGTACTTTCGGAACGAGAGTGACAAGGCCCCCTGGCCGCTCAGCCTGC
CTGGCTGCCCTCACCGCTGCCCACTGCAGGACTTCCTTCGCCTCACAGAGCCCGTCGTGCCCAAGGATTGGCAGC
AGGAGTGCCAGCTGGCAAGCGGTCCTGCAGACACAGAGGTGATTGTGGCCTTGGCTGTATGTGGCTCCATCCTCT
TCCTCCTCATAGTGCTGCTCCTCACCGTCCTCTTCCGGATGCAGGCCCAGCCTCCTGGCTACCGCCACGTCGCAG
ATGGGGAGGACCACGCCTGACAACCACTCAGCCCCCTTCCCTCCACCTCCTAGGGGAGGTGGGCTGGGCCCTCGC
TCCTGACTGTTGCTGCTCCCCAGCCCATGGACAGGAGATCCTGGGTTGGGCCTCCCTCTGATGACCCCAGCCAGA
TGAGCGAGTGGGGCTCAGCGTGGCCCATGGTGCCTGTCACTCAGCATTCCCATGCCTGATGTTTACCAAGTGCTG
TGTTGGACACTGGCTTTCTCCAAACAGGATTTGCCTCCTCCACGCTCCCTACACACCTGAGATGTAAACTGGCAG
TCAGTGTTCACTCAGGACCTAGGATTAGAAAATGGCAGAGTTGGTGCTGGATCCACCTTGCACTTCTATCAAGCC
CTGTTCTTTTTCCTCCAGCCTGAAGTCTTCGGCAAATAGCTCAGAGGGACACGGTCTTGCCTCTCAGTGCTTATT
TTAGTGGGAAAAACAGCTAATACCAGGGGTACAAACATTGGCTCCCAAGGAACTGGATCACCCAACAGCCAGCCA
GCCACATTTCCCTGTGTCTGGCTAGAGCCACCATTAGACTCAGACAGAATGCTTCAGGAATCGTTGTCACCCCTT
CAACTGGAGCAGGACGGAAGGTTGTCTGTACTTGGGAGGGAGTAGGGAGTGGTGGGAAGGGAGTTGCTTGTCACA
CGAATCAGGAAACTGCTCTCCCTCAGCTGGGCTGGGGTCTCCAGGGACCTGAGCTACATGCAGGTTGTGAGCTGG
AAAAGAAAGTTCTAGACTGTGGCCCAGAATAGGGCTGGGGCAGCTCCCAGAGAATGAATAGTGCTGTTTCCTATT
GGACTGATA

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FIGURE 3243

GAGCTCCAAGCTGGTTTGAACAAGCCCTGGGCATGTTTGGCGGGAAGTTGGCTTAGCTCGGCTACCTGTGGCCCC
GCAGTTTTGTAGTCCCCGCCTTGTTTCTCCCCAGAGGCCTCTCAATCCTCCCTCCATGATCTTCGCATAGAGCAC
AGTACCCCTTCACACGGAGGACGCGATGGCTCCCAAGAAACGCCCAGAAACCCAGAAGACCTCCGAGATTGTATT
ACGCCCCAGGAACAAGAGGAGCAGGAGTCCCCTGGAGCTGGAGCCCGAGGCCAAGAAGCTCTGTGCGAAGGGCTC
CGGTCCTAGCAGAAGATGTGACTCAGACTGCCTCTGGGTGGGGCTGGCTGGCCCACAGATCCTGCCACCATGCCG
CAGCATCGTCAGGACCCTCCACCAGCATAAGCTGGGCAGAGCTTCCTGGCCATCTGTCCAGCAGGGGCTCCAGCA
GTCCTTTTTGCACACTCTGGATTCTTACCGGATATTACAAAAGGCTGCCCCCTTTGACAGGAGGGCTACATCCTT
GGCGTGGCACCCAACTCACCCCAGCACTGTGGCTGTGGGTTCCAAAGGGGGAGATATCATGCTCTGGAATTTTGG
CATCAAGGACAAACCCACCTTCATCAAAGGGATTGGAGCTGGAGGGAGCATCACTGGGCTGAAGTTTAACCCTCT
CAATACCAACCAGTTTTACGCCTCCTCAATGGAGGGAACAACTAGGCTGCAAGACTTTAAAGGCAACATTCTACG
AGTTTTTGCCAGCTCAGACACCATCAACATCTGGTTTTGTAGCCTGGATGTGTCTGCTAGTAGCCGAATGGTGGT
CACAGGAGACAACGTGGGGAACGTGATCCTGCTGAACATGGACGGCAAAGAGCTTTGGAATCTCAGAATGCACAA
AAAGAAAGTGACGCATGTGGCCCTGAACCCATGCTGTGATTGGTTCCTGGCCACAGCCTCCGTAGATCAAACAGT
GAAAATTTGGGACCTGCGCCAGGTTAGAGGGAAAGCCAGCTTCCTCTACTCGCTGCCGCACAGGCATCCTGTCAA
CGCAGCTTGTTTCAGTCCCGATGGAGCCCGGCTCCTGACCACGGACCAGAAGAGCGAGATCCGAGTTTACTCTGC
TTCCCAGTGGGACTGCCCCCTGGGCCTGATCCCGCACCCTCACCGTCACTTCCAGCACCTCACACCCATCAAGGC
AGCCTGGCATCCTCGCTACAACCTCATTGTTGTGGGCCGATACCCAGATCCTAATTTCAAAAGTTGTACCCCTTA
TGAATTGAGGACGATCGACGTGTTCGATGGAAACTCAGGGAAGATGATGTGTCAGCTCTATGACCCAGAATCTTC
TGGCATCAGTTCGCTTAATGAATTCAATCCCATGGGGGGACACGCTGGCCTCTGCAATGGGTTACCACATTCTCAT
CTGGAGCCAGGAGGAAGCCAGGACACGGAAGTGAGAGACACTAAAGAAGGTGTGGGCCAGACAAGGCCTTGGAGC
CCACACATGGGATCAAGTCCTGCAAGCAGAGGTGGCGATTTGTTAAAGGGCCAAAAGTATCCAAGGTTAGGGTTG
GAGCAGGGGTGCTGGGACCTGGGGCACTGTGGGACTGGGACACTTTTATGTTAATGCTCTGGACTTGCCTCCAGA
GACTGCTCCAGAGTTGGTGACACAGCTGTCCCAAGGGCCCCTCTGTATCTAGCCTGGAACCAAGGTTATCTTGGA
ACTAAATGACTTTTCTCCTCTCAGTGGGTGGTAGCAGAGGGATCAAGCAGTTATTTGATTTGTGCTCACTTTTGA
TATGGCCAATAAAACCATACCG

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FIGURE 3244

ATGGCTTTTAAGGATACCGGAAAAACACCCGTGGAGCCGGAGGTGTGTGCTGACTTGATCAGAGGCGCAAAGGAA
AAGAATCTCAAAGTGAAAGGACCAGTCCGAATGCTTACCAAGACTTTGAGAATCACTACAAGAAAAACCCCTTGT
GGTGAAGGTTCTAAGACATGGGATCGTTTCCAGATGAGAATCCACCAGCGACTCATTGACTTGCACAGTCCTTCT
GAGATTGTTAAGCAGATTACTTCCATCAGTATTGAGCCAGGAGTTGAGGTGGAAGTCACCATTGCAGGATGCTTA
AGTCAACAATTTTAA

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FIGURE 3245

AGGACTCGGGCCGGAGCGTGGCCGGACCCCCACCCGCCGAGGGGCCCAGGGAGGACGCGGCAGAGTCACGGTGGC
AGCATTGAGAGTTGGACACCCGGGTCCTTGAAGTGATCTCTAGGCCCCAGCCCCAAATCCGCCACCATTCCGTGC
TGCGGGGACACC**ATG**GCTCCAGAAGAGGACGCTGGAGGGGAGGCCTTAGGGGGCAGTTTCTGGGAGGCTGGCAAC
TACAGGCGCACGGTACAGCGGGTGGAGGACGGGCACCGGCTGTGCGGGGACCTGGTCAGCTGCTTCCAGGAGCGC
GCCCGCATCGAGAAGGCTTATGCCCAGCAGTTGGCTGACTGGGCCCGAAAGTGGAGGGGGACCGTGGAGAAGGGC
CCCCAGTATGGCACACTGGAGAAGGCCTGGCATGCCTTTTTCACGGCGGCTGAGCGGCTGAGCGCGCTGCACCTG
GAGGTGCGGGAGAAGCTGCAAGGGCAGGACAGTGAGCGGGTGCGCGCCTGGCAGCGGGGGGCTTTCCACCGGCCT
GTGCTGGGCGGCTTCCGCGAGAGCCGGGCGGCCGAGGACGGCTTCCGCAAGGCCCAGAAGCCCTGGCTGAAGAGG
CTGAAGGAGGTTGAGGCTTCCAAGAAAAGCTACCACGCAGCCCGGAAGGATGAGAAGACCGCCCAGACGAGGGAG
AGCCACGCAAAGGCAGACAGCGCCGTCTCCCAGGAGCAGCTGCGCAAACTGCAGGAACGGGTGGAACGCTGTGCC
AAGGAGGCCGAGAAGACAAAAGCTCAGTATGAGCAGACGCTGGCAGAGCTGCATCGCTACACTCCACGCTACATG
GAGGACATGGAACAGGCCTTTGAGACCTGCCAGGCCGCCGAGCGCCAGCGGCTTCTTTTCTTCAAGGATATGCTG
CTCACCTTACACCAGCACCTGGACCTTTCCAGCAGTGAGAAGTTCCATGAACTCCACCGTGACTTGCACCAGGGC
ATTGAGGCAGCCAGTGACGAAGAGGATCTGCGCTGGTGGCGCAGCACCCACGGGCCAGGCATGGCCATGAACTGG
CCACAGTTCGAGGAGTGGTCCTTGGACACACAGAGGACAATCAGCCGGAAAGAGAAGGGTGGCCGGAGCCCTGAT
GAGGTTACCCTGACCAGCATTGTGCCTACAAGAGATGGCACCGCACCCCCACCCCAGTCCCCGGGGTCCCCAGGC
ACGGGGCAGGATGAGGAGTGGTCAGATGAAGAGAGTCCCCGGAAGGCTGCCACCGGGGTTCGGGTGAGGGCACTC
TATGACTACGCTGGCCAGGAAGCTGATGAGCTGAGCTTCCGAGCAGGGGAGGAGCTGCTGAAGATGAGTGAGGAG
GACGAGCAGGGCTGGTGCCAAGGCCAGTTGCAGAGTGGCCGCATTGGCCTGTACCCTGCCAACTACGTGGAGTGT
GTGGGCGCC**TGA**GTGTCCTGACAGCCCTTCTGCAACGTTTACCCACCCTGGTTCAGAGCCCAGCTTCTCCTGGAG
AGCCGGACCCTCAGGGCCCTGAACCGTCGCTCTCTGGCTGCTCCTCTGTCCCTTGAGGGAGGAAGTCCTGGGACC
CAGGGAGGGGAGGGGCCTTTGTCTAGGGAAGGGACTGGTAGGGAAGGGACGAGTCTAGGCTGAGGGCAAGATGGG
AGGTCAGAGGTGACAGAAGCGTTCAGGGGTGCCTGGGCCTCCCCAGGAGCTGTGGACTCAGTTCCTGACCTCTGC
TTTGGGGTTCCTGGGGTGGGCTTGGGGTGAGTGTAGTTCTGGCCTAGCAGCACCCTCTTGTGGCTTGTTCTAGCG
TGTATTAAAACTTGACACACACCCACACACAAAAAC

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FIGURE 3246

TGGGAAGGAGAGAAA**ATG**GCGGCGGAGCCGAACAAGACCGAAATCCAGACTCTTTTTAAGAGGCTTCGCGCAGTT
CCAACCAACAAGGCCTGTTTCGACTGCGGCGCCAAGAATCCGAGTTGGGCCAGCATCACGTACGGTGTTTTCTTG
TGCATTGACTGTTCCGGGGTGCACCGCTCCCTGGGCGTCCATCTGAGCTTCATCAGGTCCACAGAGTTGGATTCC
AACTGGAACTGGTTCCAGCTGAGGTGTATGCAGGTCGGCGGGAATGCCAATGCGACGGCTTTTTTTCGCCAACAT
GGATGCACAGCCAATGATGCCAACACCAAATATAATAGCCGAGCTGCCCAGATGTACCGGGAGAAGATCCGGCAG
CTGGGGAGTGCGGCCCTGGCTAGGCATGGCACTGATCTTTGGATAGACAACATGAGTAGTGCCGTTCCTAATCAC
TCCCCAGAGAAGAAGGACTCTGATTTCTTCACAGAACACACTCAACCCCCTGCCTGGGATGCGCCAGCCACTGAG
CCTTCAGGGACCCAGCAGCCAGCCCCGTCTACAGAGAGCAGTGGCCTGGCACAGCCGGAGCATGGCCCCAACACA
GACCTGCTTGGCACCTCACCCAAAGCCTCACTGGAACTGAAAAGCTCCATCATTGGCAAGAAGAAGCCAGAGCTT
CAG**TGA**GATTGAGCGGCAGGCTCAGGTGGCAGAGAAGCTCCGTGAGCAGCAGGCAGCCGATGCCAAGAAGCAGGC
GGAGGAGTCCATGGTCGCCTCCATGCGTCTGGCCTACCAGGAGCTCCAGATTGATCGTAAGAAAGAGG

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FIGURE 3247

TTCCGCCGCGTGGGTGCCATGGCAACGGAGAGAGACGGCAACCTGGGTTCCGGAAGCCGGAGAGCTGGAGCTTTG
AAGCCACCCCGGTCAAAGGATGCTGAGTCCGGAGCGCCTAGCCCTACCGGACTACGAGTATCTGGCTCAGCGACA
TGTCCTCACCTACATGGAGGATGCAGTGTGCCAGCTGCTAGAAAACAGGGAAGATATTAGCCAATATGGAATTGC
CAGGTTCTTCACTGAATATTTTAACAGTGTATGCCAGGGAACACACATTCTCTTTCGAGAATTCAGCTTCGTCCA
AGCCACCCCCCACAATAGGGTATCATTTTTACGGGCCTTCTGGAGATGCTTCCGAACTGTGGGCAAAAATGGCGA
TTTGCTGACCATGAAAGAATATCACTGTTTGCTGCAATTACTGTGTCCTGATTTCCCGCTGGAGCTCACTCAGAA
AGCAGCCAGGATTGTGCTCATGGACGATGCCATGGACTGCTTGATGTCTTTTTCAGATTTCCTCTTTGCCTTCCA
GATCCAGTTTTACTACTCAGAATTCCTGGACAGTGTGGCTGCCATCTATGAGGACCTGCTGTCAGGCAAGAACCC
CAACACAGTGATTGTGCCGACGTCGTCCAGTGGGCAGCACCGCCAACGACCTGCCTTGGGCGGGGCCGGCACGCT
GGAGGGCGTGGAGGCGTCGCTGTTCTACCAGTGTCTGGAAAACCTGTGTGATCGGCACAAGTACAGCTGCCCACC
CCCAGCACTTGTCAAAGAGGCCCTCAGCAATGTTCAGAGACTGACCTTCTATGGATTCCTCATGGCTCTCTCAAA
GCACCGTGGAATCAACCAAGCCCTCGGAGCTTTGCCTGACAAGGGGGATCTGATGCACGACCCAGCAATGGATGA
AGAGCTGGAACGGCTGTAAGTGTCAAGTGGGAGGATACTGCCCCCTTGTGGGGGCCAGACGGGTCGGACACGGCT
GTGCCCCATCTGGGGCCAACACCACTTGTCTGTAACATCCCACATCTGCCAGGGAAGGGTCTGGGGGCCAGTGGA
GGCCTGAGGTGTCCCTCCCTCTGAGTCCTTTGGGGGCTGCAGCCCAGGGGTTTACCCTAGTGTTAAGAGTGGGCA
TGGAGGCCCTGCTCTCTGTACAGGAGGCCTCTCGCTGCCCTCCAGGCTTCTTCCCTTCTTCAGGCTGGCCCAGGT
CCCAGGCCTGGTCAACTCGGTCACAGCCAGTCCAGAGGCCAGTTGCCTGCCTTCCCGGACCCCTCCCCGGGTTGG
CTCTCCCTGGAGACCTCTCCATCATTCCCGAAAAGTGGATGGAGAGAGTGATGGCTCCACTGAAGAGACAGACGA
GTCGGAGACTTGAGGAGTCCAAAGGGTCCTGCCCACAGCGCCCTGTACCTGCTCCCACCCAGCCCTTGGTGTGCC
CACCCAGCCTCCTCTCCAGCACCTTGCTGTGCTGCCCTCTGCTGCTGACAAGGTGAATAACAGCCCCAAGACCAG
CCAGAGGGGCTCTGATGATCAGCCCAGCCAGTGGCCCCGGAAGGTGAATGGCCTGCTCTCCCTGGCCCTATCAGC
CTGTGAACTTCACTTAGGCCCCAAGCTGACAGACTGTGCTGAGGCCACCTTGTCACGCCGTAGCCTGTTAGTCCT
CCTAACCTCTTAAGAGCAGTCTCTTCTGAGCCAGCCTCTGCGGGTCCCCCAATAAGGTTCATCTCCTCACAGCAA
CTCCATTAAGGGGGAGAACCCGAATAGCCACGCAGGGCCTTGCACCATCAAGGGTGACACCTGCGACGCAAGTAC
CAGGAGGACATAACCGCTGTGGCCTGTTGGAGAACAGCCAGTAGCCTTGGTAATATGAAGGGTGGGCCAGAAGAT
GATTTCACTTGCAAAAACTGCTTCAAGTCTTGACCCCTTTGTGTCTAATAGCTAAACAAACATGTGAAACGAATA
AAAAGTCCCTCATGTCTGGT

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FIGURE 3248

ATTGCTGGGGCTGCAGCGCTGCCTCCGAGACCGCGAGGTGGGTGGATCGGGTCTTCCTGGAAGGGTGCGATAAGG
CCGGGCGAGGTGCCTGGGATGCTTCTCCCCTTCCGCGAGGAAGAGATCTAATTGGGTAGGGCGGGTGTAGACTAG
CCTGCCGAGCCGCCCGCTGGCACCTGCAGCCTCCTGGGCGCCCGCCGGGCCCCGGCGAGAAAGTTGTTAAAGGGA
GCGAGGTGGTTGTTCCTGGGGTGCTTGGCGCGCCCTCTCACGCCCTGCCCAACAGAAGCCGCAGTCCCGTGGGGT
CTGGAGACGCAGTTTCCTGTTAATGACAATAAATCCCTGCTCCCCCTGCCTCAGACATCTACGCAGCGAAATCGA
GCCTGGCCTTGAGGGTCCACACCGCGAGGGAAGATGCGTGCGCCCATTCCAGAGCCTAAGCCTGGAGACCTGATT
GAGATTTTTCGCCCTTTCTACAGACACTGGGCCATCTATGTTGGCGATGGATATGTGGTTCATCTGGCCCCTCCA
AGTGAGGTCGCAGGAGCTGGTGCAGCCAGTGTCATGTCCGCCCTGACTGACAAGGCCATCGTGAAGAAGGAATTG
CTGTATGATGTGGCCGGGAGTGACAAGTACCAGGTCAACAACAAACATGATGACAAGTACTCGCCGCTGCCCTGC
AGCAAAATCATCCAGCGGGCGGAGGAGCTGGTGGGGCAGGAGGTGCTCTACAAGCTGACCAGTGAGAACTGCGAG
CACTTTGTGAATGAGCTGCGCTATGGAGTCGCCCGCAGTGACCAGGTCAGAGATGTCATCATCGCTGCAAGCGTT
GCAGGAATGGGCTTGGCAGCCATGAGCCTTATTGGAGTCATGTTCTCAAGAAACAAGCGACAAAAGCAATAACTG
AAAAAGACTGTCCTGTCAGCGATGACTTTATACATCAAGGGGGTCTTGTTTTGCTAGAGAGTTTGGGGTTTGGTT
TGTGGATTTCATTGTGATTTATAATAAGGCTTATTTTCACAGAATAAAATAAAGCAAAACGAGGGAGGATTTTAT
TGGGGGAAGTGCAGC

FIGURE 3249

AGTTAAACACCAAAGCTGTCTCTCACACTGGTGGTTCCAGGATAAAGCCTCGGCCTGGGGCCTGGTCTGCACGTT
AGGCGCCGGCCGCAGCTCGCAGGAGGACCCGAGCCAGCCCGCCCCTTCCCGCACAGCCTGCTGGGAGTTGTAGTT
CAGTCGTCGGAGAACCACGCCAAGCCCCGCCCCAGATGAGTGCGCAGTATGAGGACCGCTGGCCGGGACCCAGTG
AGCGCGGGACTACAATTCCCAAAGGACGGTAGCACTCAGCGCCCCGCCAACAGAGATGATGCCATGGAGAGCAGC
AAGCCTGGTCCAGTGCAGGTTGTTTTGGTTCAGAAAGATCAACATTCCTTTGAGCTAGATGAGAAAGCCTTGGCC
AGCATCCTCTTGCAGGACCACATCCGAGATCTTGATGTGGTGGTGGTTTCAGTGGCTGGTGCCTTCCGAAAGGGC
AAGTCCTTCATTCTGGATTTTATGCTACGATACTTATATTCTCAGAAGGAAAGTGGCCATTCAAATTGGTTGGGT
GACCCAGAAGAACCGTTAACAGGATTTTCCTGGAGAGGGGGATCTGATCCAGAAACCACTGGGATTCAAATCTGG
AGTGAAGTTTTCACTGTGGAGAAGCCAGGTGGGAAGAAGGTTGCAGTTGTTCTGATGGATACCCAGGGGGCATTT
GACAGCCAGTCAACTGTGAAAGACTGTGCTACCATCTTTGCTCTAAGCACTATGACTAGTTCTGTTCAGATTTAT
AATTTATCTCAGAACATTCAAGAAGATGATCTTCAACAGCTGCAGCTCTTCACAGAATACGGTCGTCTGGCAATG
GATGAAATTTTCCAAAAGCCTTTCCAGACACTGATGTTTTTGGTTAGAGATTGGAGTTTCCCTTATGAATATAGC
TATGGACTCCAAGGAGGAATGGCATTTTTGGATAAGCGTTTACAGGTGAAGGAACATCAACATGAAGAAATTCAG
AATGTTCGAAATCACATTCACTCATGTTTCTCCGATGTCACCTGCTTTCTCTTACCACATCCAGGACTCCAGGTG
GCCACAAGCCCTGACTTTGATGGGAAATTAAAAGATATTGCTGGTGAATTCAAAGAGCAGTTACAGGCACTGATA
CCGTATGTATTAAACCCATCTAAGTTAATGGAAAAGGAGATCAATGGCTCAAAGGTCACCTGTCGGGGACTACTG
GAGTATTTTAAGGCATATATTAAAATTTATCAAGGAGAAGATCTGCCTCACCCCAAGTCCATGCTTCAGGCCACT
GCTGAAGCCAACAACTTAGCAGCTGCAGCCTCTGCCAAGGACATTTATTATAACAACATGGAAGAGGTTTGTGGG
GGAGAGAAACCTTATTTGTCTCCAGACATTCTAGAGGAGAAGCACTGTGAATTCAAACAACTTGCTCTGGACCAT
TTTAAGAAGACCAAGAAGATGGGTGGGAAGGATTTCAGCTTTCGTTACCAGCAGGAGCTGGAGGAGGAAATCAAG
GAATTATATGAGAACTTCTGCAAGCACAATGGTAGCAAGAACGTCTTCAGCACCTTCCGAACCCCTGCAGTGCTG
TTCACGGGCATTGTAGCTTTGTACATAGCCTCAGGCCTCACTGGCTTCATAGGTCTTGAGGTTGTAGCCCAGTTG
TTCAACTGTATGGTTGGACTACTGTTAATAGCACTCCTCACCTGGGGCTACATCAGGTATTCTGGTCAATATCGT
GAGCTGGGCGGAGCTATTGATTTTGGTGCCGCATATGTGTTGGAGCAGGCTTCTTCTCATATCGGTAATTCCACT
CAGGCCACTGTGAGGGATGCAGTTGTTGGAAGACCATCCATGGATAAAAAAGCTCAATAGCATCTTAACGTGAAG
ATCAAACAAGAACACAACAAGCCCCTACTGATTTCTGGGTTTCTGCCACGGCCACAGGTTCATATCCAGAGGAAT
GGCAGATCTGAGACGATCCAGGAAGAGCTAAAACATGGCCCTGTAATAAATGAGCAGACCTCTCCTGTGGTTTCA
AATTATTAAACACACTTCCATTTCTCTTGGAAGCATTTCTTTTCCTTGCTGTTATAGATGCAAGCCTGTGTCTAT
TTTCATATTACTCTGCTTTGTGCACTTTATGGAGGAGGAAGCTAGAGGAAAAATGGAAATGCAGCTTTTAAGTTC
TTTATGTGCCACTTAGTGCCTTTTAAGATTGATTCCATGGTTTTGCACACACGATGGGGAGGGGATGGAGGATAA
CCTCATGAAAGGTGCCGTTTTCGGGTGAAACTTGACATTTCTTTTATACTTTACTCTTTTGAGAAGGATTCTTTT
TTTTTTTTTTTTTTTTTTTGAGTTGGAGTCTCGCTCTGTCACCAGGCTTGAGTGCAGTGGTGTGATCTTGGCTCA
CTGCAACCTCTGCCTGCCGGGTTCAAGCAGTTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGTGTACG
CCACCATA

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FIGURE 3250

CAGGTGACCAGCGCCATGTCCAGCCAGGTGGTGGGCATTGAGCCTCTCTACATCAAGGCAGAGCCGGCCAGCCCT
GACAGTCCAAAGGGTTCCTCGGAGACAGAGACCGAGCCTCCTGTGGCCCTGGCCCCTGGTCCAGCTCCCACTCGC
TGCCTCCCAGGCCACAAGGAAGAGGAGGATGGGGAGGGGGCTGGGCCTGGCGAGCAGGGCGGTGGGAAGCTGGTG
CTCAGCTCCCTGCCCAAGCGCCTCTGCCTGGTCTGTGGGGACGTGGCCTCCGGCTACCACTATGGTGTGGCATCC
TGTGAGGCCTGCAAAGCCTTCTTCAAGAGGACCATCCAGGGGAGCATCGAGTACAGCTGTCCGGCCTCCAACGAG
TGTGAGATCACCAAGCGGAGACGCAAGGCCTGCCAGGCCTGCCGCTTCACCAAGTGCCTGCGGGTGGGCATGCTC
AAGGAGGGAGTGCGCCTGGACCGCGTCCGGGGTGGGCGGCAGAAGTACAAGCGGCGGCCGGAGGTGGACCCACTG
CCCTTCCCGGGCCCCTTCCCTGCTGGGCCCCTGGCAGTCGCTGGAGGCCCCCGGAAGACAGCAGCCCCAGTGAAT
GCACTGGTGTCTCATCTGCTGGTGGTTGAGCCTGAGAAGCTCTATGCCATGCCTGACCCCGCAGGCCCTGATGGG
CACCTCCCAGCCGTGGCTACCCTCTGTGACCTCTTTGACCGAGAGATTGTGGTCACCATCAGCTGGGCCAAGAGC
ATCCCAGGCTTCTCATCGCTGTCGCTGTCTGACCAGATGTCAGTACTGCAGAGCGTGTGGATGGAGGTGCTGGTG
CTGGGTGTGGCCCAGCGCTCACTGCCACTGCAGGATGAGCTGGCCTTCGCTGAGGACTTAGTCCTGGATGAAGAG
GGGGCACGGGCAGCTGGCCTGGGGGAACTGGGGGCTGCCCTGCTGCAACTAGTGCGGCGGCTGCAGGCCCTGCGG
CTGGAGCGAGAGGAGTATGTTCTACTAAAGGCCTTGGCCCTTGCCAATTCAGACTCTGTGCACATCGAAGATGCC
GAGGCTGTGGAGCAGCTGCGAGAAGCTCTGCACGAGGCCCTGCTGGAGTATGAAGCCGGCCGGGCTGGCCCCGGA
GGGGGTGCTGAGCGGCGGCGGGCGGGCAGGCTGCTGCTCACGCTACCGCTCCTCCGCCAGACAGCGGGCAAAGTG
CTGGCCCATTTCTATGGGGTGAAGCTGGAGGGCAAGGTGCCCATGCACAAGCTGTTCTTGGAGATGCTCGAGGCC
ATGATGGACTGAGTGCAAGGGGTGGGACTGGTGGGGGTTCTGGCAGGACCTGCCTAGCATGGGGTCAGCCCCAAG
GGCTGGGGCGGAGCTGGGGTCTGGGCAGTGCCACAGCCTGCTGGCAGGGCCAGGCAATGCCATCAGCCCCTGGGA
ACAGGCCCCACGCCCTCTCCTCCCCCTCCTAGGGGGTGTCAGAAGCTGGGAACGTGTGTCCAGGCTCTGGGCACA
GTGCTGCCCCTTGCAAGCCATAACGTGCCCCCAGAGTGTAGGGGGCCTTGCGGAAGCCATAGGGGGCTGCACGGG
ATGCGTGGGAGGCAGAAACCTATCTCAGGGAGGGAAGGGGATGGAGGCCAGAGTCTCCCAGTGGGTGATGCTTTT
GCTGCTGCTTAATCCTACCCCCTCTTCAAAGCAGAGTGGGACTTGGAGAGCAAAGGCCCATGCCCCCTTCGCTCC
TCCTCTCATCATTTGCATTGGGCATTAGTGTCCCCCCTTGAAGCAATAACTCCAAGCAGACTCCAGCCCCTGGAC
CCCTGGGGTGGCCAGGGCTTCCCCATCAGCTCCCAACGAGCCTCCTCAGGGGGTAGGAGAGCACTGCCTCTATGC
CCTGCAGAGCAATAACACTATATTTATTTTTGGGTTTGGCCAGGGAGGCGCAGGGACATGGGGCAAGCCAGGGCC
CAGAGCCCTTGACTGTACAGAGACTCTATTTTAATGTATATTTGCTGCAAAGAGAAACCGCTTTTGGTTTTAAAC
CTTTAATGAGAAAAAAATATATAATACCGAGCTC

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FIGURE 3251

TCCGGTTCCGGCCTGGCGAGAGTTTGTGCGGCGACATGAAACTGCTTACCCACAATCTGCTGAGCTCGCATGTGC
GGGGGGTGGGGTCCCGTGGCTTCCCCCTGCGCCTCCAGGCCACCGAGGTCCGTATCTGCCCTGTGGAATTCAACC
CCAACTTCGTGGCGCGTATGATACCTAAAGTGGAGTGGTCGGCGTTCCTGGAGGCGGCCGATAACTTGCGTCTGA
TCCAGGTGCCGAAAGGGCCGGTTGAGGGATATGAGGAGAATGAGGAGTTTCTGAGGACCATGCACCACCTGCTGC
TGGAGGTGGAAGTGATAGAGGGCACCCTGCAGTGCCCGGAATCTGGACGTATGTTCCCCATCAGCCGCGGGATCC
CCAACATGCTGCTGAGTGAAGAGGAAACTGAGAGTTGATTGTGCCAGGCGCCAGTTTTTCTTGTTATGACTGTGT
ATTTTTGTTGATCTATACCCTGTTTCCGAATTCTGCCGTGTGTATCCCCAACCCTTGACCCAATGACACCAAACA
CAGTGTTTTTGAGCTCGGTATTATATATTTTTTTCTCATTAAAGGTTTAAAACC

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FIGURE 3252

CACGGGCGGGGCGGGGCCTGGGTCCACCGGGGTTCTGAGGGGAGACTGAGGTCCTGAGCCGACAGCCTCAGCTCC
CTGCCAGGCCAGACCCGGCAGACAGATGAGGGCCCAGGAGGCCTGGCGGGCCTGGGGGCGCTACGGTGGGAGAGG
AAGCCAGGGGTACCTGCCTCTGCCTTCCAGGGCCACCGTTGGCCCCAGCTGTGCCTTGACTACGTAACATCTTGT
CCTCACAGCCCAGAGC**ATG**TTCCAGATCCCAGAGTTTGAGCCGAGTGAGCAGGAAGACTCCAGCTCTGCAGAGAG
GGGCCTGGGCCCCAGCCCCGCAGGGGACGGGCCCTCAGGCTCCGGCAAGCATCATCGCCAGGCCCCAGGCCTCCT
GTGGGACGCCAGTCACCAGCAGGAGCAGCCAACCAGCAGCAGCCATCATGGAGGCGCTGGGGCTGTGGAGATCCG
GAGTCGCCACAGCTCCTACCCCGCGGGGACGGAGGACGACGAAGGGATGGGGGAGGAGCCCAGCCCCTTTCGGGG
CCGCTCGCGCTCGGCGCCCCCCAACCTCTGGGCAGCACAGCGCTATGGCCGCGAGCTCCGGAGGATGAGTGACGA
GTTTGTGGACTCCTTTAAGAAGGGACTTCCTCGCCCGAAGAGCGCGGGCACAGCAACGCAGATGCGGCAAAGCTC
CAGCTGGACGCGAGTCTTCCAGTCCTGGTGGGATCGGAACTTGGGCAGGGGAAGCTCCGCCCCCTCCCAG**TGA**CC
TTCGCTCCACATCCCGAAACTCCACCCGTTCCCACTGCCCTGGGCAGCCATCTTGAATATGGGCGGAAGTACTTC
CCTCAGGCCTATGCAAAAAGAGGATCCGTGCTGTCTCCTTTGGAGGGAGGGCTGACCCAGATTCCCTTCCGGTGC
GTGTGAAGCCACGGAAGGCTTGGTCCCATCGGAAGTTTTGGGTTTTCCGCCCACAGCCGCCGGAAGTGGCTCCGT
GGCCCCGCCCTCAGGCTCCGGGCTTTCCCCCAGGCGCCTGCGCTAAGTCGCGAGCCAGGTTTAACCGTTGCGTCA
CCGGGACCCGAGCCCCCGCGATGCCCTGGGGGCCGTGCTCACTACCAAATGTTAATAAAGCCCGCGTCTGTGCCG
CC

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FIGURE 3253

AGCGGCCGCTGCCCTGACCCGACGGGTATCAGCCGGCTCTCCCCCTCCACCCAGGACGACATGAACGACCGAGGC
CAGGGAGTCCTCTCCTTGGGCCTCTGCATCCCCCCATCCTTGGCTCTGGGGTAGGCCCAGGGAGGAGACACCCCC
AACCCCTATCCGGTCTGTCCTGGAGAAAAGAGACTGCCCTTCCATGCCCCTGAGTGAGGGGCCTGGGGCCCAGGC
TGCCTGTGTTCCCCAAGGGCAAGGGTCTCTCTGTTGAGGAGGAGGGGCCTGTCAGCCACAACTTCTTTCCTCCTG
AGCGCCCCATCTCCCTCTCTGCACCCTGCAATTCCCACCCCTCCGTATTTATTTCCCTGGTCCCGCCGACAGTCC
CCTCCTTGTCTGTCTCCGGGATTCAGGCCTCCCTCCCTGACATGGAGAGTAACCTGTCTGGCCTGGTGCCTGCTG
CCGGGCTGGTGCCTGCGCTGCCACCTGCTGTGACCCTGGGGCTGACAGCTGCCTACACCACCCTGTATGCCCTGC
TCTTCTTCTCCGTCTATGCCCAGCTCTGGCTGGTGCTTCTGTATGGGCACAAGCGTCTCAGCTATCAGACGGTGT
TCCTGGCCCTCTGTCTGCTCTGGGCCGCCTTGCGTACCACCCTCTTCTCCTTCTACTTCCGAGATACTCCCCGCG
CCAACCGCCTGGGGCCCTTGCCCTTCTGGCTTCTCTACTGCTGCCCCGTCTGCCTGCAGTTCTTCACCTTGACGC
TTATGAACCTCTACTTTGCCCAGGTGGTGTTCAAGGCCAAGGTGAAGCGTCGGCCGGAGATGAGCCGAGGCTTGC
TCGCTGTCCGAGGGGCCTTTGTGGGGGCCTCGCTGCTCTTTCTGCTGGTGAACGTGCTGTGTGCTGTGCTCTCCC
ATCGGCGCCGGGCACAGCCCTGGGCCCTGCTGCTTGTCCGCGTCCTGGTGAGCGACTCCCTGTTCGTCATCTGCG
CGCTGTCTCTTGCTGCCTGCCTCTGCCTCGTCGCCAGGCGGGCGCCCTCCACTAGCATCTACCTGGAGGCCAAGG
TAGGGCTGCAGCACTGATGCCCAGGTGTCTTTTGGGTCTCTCGGCAGCGGTTCTCAGGGTGTAGAG

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FIGURE 3254

GCGCCGTAAATAGAGTCCAAGTGGGCGGAGAGCCGTCCCGCGCCGCCCGCTCATGTCTCTACAGAGCCGACTGTC
CGGCCGCCTGGCACAGCTGCGCGCGGCGGGGCAGCTGCTCGTCCCCCCGCGCCCCCGGCCCGGACACTTGGCGGG
TGCCACGAGGACCCGCAGCAGCACGTGCGGTCCCCCGGCGTTCCTGGGCGTGTTCGGCCGCCGTGCGCGGACCTC
GGCGGGAGTTGGGGCGTGGGGGGCGACGNCGGTGGGGCGGACAGCCGGGGTGCGCACTTGGGCCCCCCTGGCCAT
GGCGGCGAAGGTGGACCTGAGCACCTCCACCGACTGGAAGGAGGCGAAATCCTTTCTGAAGGGCCTGAGTGACAA
GCAGCGGGAGGAACATTACTTCTGCAAGGACTTTGTCAGGCTGAAGAAGATCCCGACATGGAAGGAGATGGCGAA
AGGGGTGGCTGTGAAGGTGGAGGAGCCCAGGTATAAAAAGGACAAGCAGCTCAATGAGAAAATCTCCCTGCTCCG
CAGCGACATCACCAAGCTGGAGGTGGACGCCATCGTCAACGCCGCCAACAGCTCCCTGCTCGGAGGCGGTGGCGT
GGACGGCTGCATTCATCGGGCCGCCGGCCCCCTGCTTACCGACGAGTGCCGGACCCTGCAGAGCTGTAAGACTGG
CAAGGCCAAGATCACCGGCGGCTATCGGCTCCCGGCCAAGTACGTCATCCACACAGTGGGGCCCATCGCCTACGG
GGAGCCCAGCGCCAGCCAGGCTGCCGAGCTCCGCAGCTGCTACCTGAGCAGTCTGGACCTGCTGCTGGAGCACCG
GCTCCGCTCGGTGGCGTTCCCCTGCATCTCCACCGGCGTGTTTGGCTACCCCTGTGAGGCGGCCGCCGAGATCGT
GCTGGCCACGCTGCGAGAGTGGCTGGAGCAGCACAAGGACAAGGTGGACCGGCTGATCATCTGCGTGTTCCTCGA
GAAGGACGAGGACATCTACCGGAGCCGGCTCCCCCACTACTTCCCCGTGGCCTGAGGCTCCCGCAGCCCACCCTG
ACCGGGACTGACCCGCCTTCGGGACCCCGCTCCCAGCTCTGAGAGGTCGCCAAAGCCTGCAGCCTGGCCTGGGCC
TGGCCACCCCTTCTTTCCCTCCGCGCCCCGCCCCCGAGGAGCCTAATAAAGATCTCGTTGTGGC

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FIGURE 3255

GGCGAGGAAGGGGCGGGAGCCGGGGTCCCGGTAGCTTCTAGTAGGTTCCAGAAGGCGGCGCGTGCGGTTGGGAAC
GCGGAGCGGACGGATTCGATTCAACGGGGTTCCGGACCGCGCTGCGCTATGGAGCAGGTCAATGAGCTGAAGGAG
AAAGGCAACAAGGCCCTGAGCGTGGGTAACATCGATGATGCCTTACAGTGCTACTCCGAAGCTATTAAGCTGGAT
CCCCACAACCACGTGCTGTACAGCAACCGTTCTGCTGCCTATGCCAAGAAAGGAGACTACCAGAAGGCTTATGAG
GATGGCTGCAAGACTGTCGACCTAAAGCCTGACTGGGGCAAGGGCTATTCACGAAAAGCAGCAGCTCTAGAGTTC
TTAAACCGCTTTGAAGAAGCCAAGCGAACCTATGAGGAGGGCTTAAAACACGAGGCAAATAACCCTCAACTGAAA
GAGGGTTTACAGAATATGGAGGCCAGGTTGGCAGAGAGAAAATTCATGAACCCTTTCAACATGCCTAATCTGTAT
CAGAAGTTGGAGAGTGATCCCAGGACAAGGACACTACTCAGTGATCCTACCTACCGGGAGCTGATAGAGCAGCTA
CGAAACAAGCCTTCTGACCTGGGCACGAAACTACAAGATCCCCGGATCATGACCACTCTCAGCGTCCTCCTTGGG
GTCGATCTGGGCAGTATGGATGAGGAGGAAGAGATTGCAACACCTCCACCACCACCCCCTCCCAAAAAGGAGACC
AAGCCAGAGCCAATGGAAGAAGATCTTCCAGAGAATAAGAAGCAGGCACTGAAAGAAAAAGAGCTGGGGAACGAT
GCCTACAAGAAGAAAGACTTTGACACAGCCTTGAAGCATTACGACAAAGCCAAGGAGCTGGACCCCACTAACATG
ACTTACATTACCAATCAAGCAGCGGTATACTTTGAAAAGGGCGACTACAATAAGTGCCGGGAGCTTTGTGAGAAG
GCCATTGAAGTGGGGAGAGAAAACCGAGAAGACTATCGACAGATTGCCAAAGCATATGCTCGAATTGGCAACTCC
TACTTCAAAGAAGAAAAGTACAAGGATGCCATCCATTTCTATAACAAGTCTCTGGCAGAGCACCGAACCCCAGAT
GTGCTCAAGAAATGCCAGCAGG

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FIGURE 3256

CCCAACGCACAGTACTGGTCCCAGTTTCACAGCGTGAGGCCACAGGGGCCCCAGTTGAGGCAGCAGCAACACAAA
CAAAACAAACAAGTGCTGGGGTACTGCCTCCTCCTCATGCTGGCGGGCATGGGCCTGCACTACATTGCCTTCAGG
AAGGTGAAGCAGATGCACCTTAACTTCATGGATGAAAAGGATCGGATCATCACAGCCTTCTACAACGAAGCCCGG
GCACGGGCCAGGTCTGTCCCTGCTCTATTCTGCTCCCTGCTCCCTGTCCAGGAACCACACTTCGGGATCCCTATC
CCAACCACCCAGGTGCCCTCTCCTCCAGGGCCAACAGAGGCATCCTTCAGCAGGAGCGACAACGGCTAGGGCAGC
GGCAGCCGCCACCATCCGAGCCAACCCAAGGCCCCGAGATCGTGCCCCGGGGCGCCGGCCCCTGAGGGGCTCACC
TGGATGGGGCCTGCAGTGCGTTCCCGCTTTGCTTCCTTCCTGGACGGCCCGCTCCCCGAAACGCGCGCAATAAAG
TGATTCGCAGA

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FIGURE 3257

GGCGGCTGGTGAGCGCCCGCTGGAGGCTGGAGCTTCCGGGCCCTGGAAAGGGGTCCCCGCGCGCCCCGGGTCGGA
GGCAGACCCCTGGGTTTGGGGGACATGGGCATTTGGGGCGCCTGAACCCAAGACCTCTGGATGAGCTGCCCCGTT
CAGACCATGGATCCTGAGGTGACCTTGCTGCTGCAGTGCCCTGGCGGGGGCCTGCCCCAGGAGCAGATACAGGCC
GAGCTGAGCCCCGCCCATGACCGTCGCCCACTGCCAGGTGGGGACGAGGCCATCACTGCCATCTGGGAGACCCGG
CTAAAGGCCCAACCCTGGCTCTTCGACGCCCCCAAGTTCCGCCTGCACTCAGCCACCCTGGCGCCTATTGGCTCT
CGGGGGCCACAGCTGCTCCTGCGCCTGGGCCTTACTTCCTACCGAGACTTCCTGGGCACCAACTGGTCCAGCTCA
GCTGCCTGGCTGCGACAGCAGGGTGCCACCGACTGGGGTGACACGCAGGCCTATCTGGCGGACCCACTGGGGGTG
GGCGCTGCACTAGCCACAGCCGATGACTTCCTTGTCTTCCTGCGCCGCTCCCGGCAGGTGGCTGAGGCCCCTGGG
CTGGTGGACGTACCTGGTGGGCACCCTGAGCCTCAGGCCCTGTGCCCTGGTGGCAGCCCCCAGCACCAGGACCTC
GCTGGGCAGCTGGTGGTACATGAACTCTTTTCCAGTGTCCTTCAGGAGATCTGTGATGAGGTGAACCTGCCGCTG
CTCACCCTGAGCCAGCCCCTGCTGTTGGGCATCGCCCGAAATGAGACCAGTGCTGGCCGAGCCAGTGCCGAGTTC
TATGTCCAGTGCAGCCTGACTTCTGAGCAGGTGAGGAAGCACTACCTGAGTGGGGGACCCGAGGCCCACGAGTCT
ACAGGAATCTTCTTTGTGGAGACACAGAACGTGCAGAGATTGCTCGAGACGGAGATGTGGGCTGAACTCTGCCCC
TCGGCCAAAGGCGCCATCATCCTCTACAACCGGGTTCAGGGAAGTCCCACTGGAGCGGCCCTAGGGTCCCCAGCC
CTACTCCCGCCGCTCTGAAAATAATAAACGACTTTATTCTTGG

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FIGURE 3258

GGCACGTCGGCCCTGCCTCCCGGACCACCCTGCGGGGCGCACCAGCGATCTGGGGTGCGGGGCTCGGCCTCCCTG
CGCTCCTGGCTGACCGTGTGACCTTGGGACCGAGACGTGCAGCTGTCCAAGGCTCTGTCCTATGCCCTGCGCCAT
GGGGCCTTGAAGCTGGGGCTTCCCATGGGAGCTGATGGCTTCGTGCCCCTGGGCACCCTCCTGCAGTTGCCCCAG
TTCCGCGGCTTCTCTGCTGAAGATGTGCAGCGCGTGGTGGACACCAATAGGAAGCAGCGGTTCGCCCTGCAGCTG
GGGGATCCCAGCACTGGCCTTCTCATCCGGGCCAACCAGGGCCATTCCCTGCAGGTACCTAAGTTGGAGCTGATG
CCCCTGGAGACACCGCAGGCCCTGCCCCCGATGCTAGTCCATGGTACATTCTGGAAGCACTGGCCATCCATCCTA
CTCAAAGGCCTGTCCTGCCAGGGAAGGACGCACATTCACCTGGCCCCAGGACTGCCTGGAGACCCCGGTATCATC
AGTGGCATGCGGTCCCATTGTGAAATAGCTGTGTTCATCGATGGACCCCTGGCTCTGGCAGATGGAATACCCTTC
TTCCGCTCTGCCAATGGGGTGATTCTGACTCCAGGGAATACTGATGGCTTCCTCCTTCCCAAGTACTTCAAGGAG
GCCCTGCAGCTACGCCCTACCCGAAAGCCCCTTTCCTTGGCTGGTGATGAAGAGACAGAGTGTCAGAGTAGCCCC
AAGCACAGCTCCAGAGAAAGGAGGAGGATCCAACAATAAAATATTAATTTATAAAAAAGAAATTTTAAAAAGTAA
CAAGAAAGAACTCGTTTGAAACCATGTTTCATCATCCTGT

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FIGURE 3259

AGACAGACCCCGTGCGGCTGACACAGCTGTATGAGCAGGCCCGGTGGGACCTGCTGCTGGAGGAGATTGACTGCA
CCGAGGAGGAGATGATGGTGTTTGCCGCCCTGCAGTACCACATCAACAAGCTGTCCCAGAGCGGGGAGGTGGGGG
AGCCGGCTGGCACAGACCCAGGGCTGGACGACCTGGATGTGGCCCTGAGCAACCTGGAGGTGAAGCTGGAGGGGT
CGGCGCCCACAGATGTGCTGGACAGCCTCACCACCATCCCAGAGCTCAAGGACCATCTCCGAATCTTTCGGCCCC
GGAAGCTGACCCTGAAGGGCTACCGCCAACACTGGGTGGTGTTCAAGGAGACCACACTGTCCTACTACAAGAGCC
AGGACGAGGCCCCTGGGGACCCCATTCAGCAGCTCAACCTCAAGGGCTGTGAGGTGGTTCCCGATGTTAACGTCT
CCGGCCAGAAGTTCTGCATTAAACTCCTAGTGCCCTCCCCTGAGGGCATGAGTGAGATCTACCTGCGGTGCCAGG
ATGAGCAGCAGTATGCCCGCTGGATGGCTGGCTGCCGCCTGGCCTCCAAAGGCCGCACCATGGCCGACAGCAGCT
ACACCAGCGAGGTGCAGGCCATCCTGGCCTTCCTCAGCCTGCAGCGCACGGGCAGTGGGGGCCCGGGCAACCACC
CCCACGGCCCTGATGCCTCTGCCGAGGGCCTCAACCCCTACGGCCTCGTTGCCCCCCGTTTCCAGCGAAAGTTCA
AGGCCAAGCAGCTCACCCCACGGATCCTGGAAGCCCACCAGAATGTGGCCCAGTTGTCGCTGGCAGAGGCCCAGC
TGCGCTTCATCCAGGCCTGGCAGTCCCTGCCCGACTTCGGCATCTCCTATGTCATGGTCAGGTTCAAGGGCAGCA
GGAAAGACGAGATCCTGGGCATCGCCAACAACCGACTGATCCGCATCGACTTGGCCGTGGGCGACGTGGTCAAGA
CCTGGCGTTTCAGCAACATGCGCCAGTGGAATGTCAACTGGGACATCCGGCAGGTGGCCATCGAGTTTGATGAAC
ACATCAATGTGGCCTTCAGCTGCGTGTCTGCCAGCTGCCGAATTGTACACGAGTATATCGGGGGCTACATTTTCC
TGTCGACGCGGGAGCGGGCCCGTGGGGAGGAGCTGGATGAAGACCTCTTCCTGCAGCTCACCGGGGGCCATGAGG
CCTTCTGAGGGCTGTCTGATTGCCCCTGCCCTGCTCACCACCTGTCACAGCCACTCCCAAGCCCACACCCACAGG
GGCTCACTGCCCCACACCCGCTCCAGGCAGGCACCCAGCTGGGCATTTCACCTGCTGTCACTGACTTTGTGCAGG
CCAAGGACCTGGCAGGGCCAGACGCTGTACCATCACCCAGGCCAAGGATGGGGGTGGGGGTCCCTGAGCTCATGT
GGTGCCCCCTTTCCTTGTCTGAGTGGCTGAGGCTGATACCCCTGACCTATCTGCAGTCCCCCAGCACACAAGGAA
GACCAGATGTAGCTACAGGATGATGAAACATGGTTTCAAACGAGTTCTTTCTTGTTACTTTTTAAAATTTCTTTT
TTATAAATTAATATTTTATTGTTGG

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FIGURE 3260

GGCTACGGCTGACCGTTTTTTGTGGTGTACTCCGTGCCATCATGTCCGTCCTGACGCCGCTGCTGCTGCGGGGCT
TGACAGGCTCGGCCCGGCGGCTCCCAGTGCCGCGCGCCAAGATCCATTCGTTGCCGCCGGAGGGGAAGCTTGGGA
TCATGGAATTGGCCGTTGGGCTTACCTCCTGCTTCGTGACCTTCCTCCTGCCAGCGGGCTGGATCCTGTCACACC
TGGAGACCTACAGGAGGCCAGAGTGAAGGGGTCCGTTCTGTCCCTCACACTGTGACCTGACCAGCCCCACCGGCC
CATCCTGGTCATGTTACTGCATTTGTGGCCGGCCTCCCCTGGATCATGTCATTCAATTCCAGTCACCTCTTCTGC
AATCATGACCTCTTGATGTCTCCATGGTGACCTCCTTGGGGGTCACTGACCCTGCTTGGTGGGGTCCCCCTTGTA
ACAATAAAATCTATTTAAACTTT

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FIGURE 3261

GGTTGAATGTCTCCATTGAATGTAAGCGAGTGTCTGGACTGGAGCCAGCCACCGTGGATTGGGCCTTCGACCTGA
CCAAAACGAATATGCAAACCATGTATGAGCAGAGCGAGTGGGGCTGGAAGGACCGAGAGAAACGGGAGGAAATGA
CAGATGACCGAGCCTGGTACCTCATCGCGTGGGAAAACAGCTCCGTCCCTGTTGCCTTTTCTCACTTCCGGTTTG
ACGTGGAGTGTGGGGATGAAGTCCTGTACTGCTATGAAGTGCAGTTGGAAAGCAAGGTGCGGCGGAAAGGCCTGG
GGAAGTTCCTCATACAGATCCTGCAGCTCATGGCCAACAGCACACAGATGAAGAAGGTTATGTTAACAGTATTTA
AACACAATCATGGTGCCTACCAGTTCTTCAGAGAAGCGTTGCAGATTTGAAATTGATGACTCTTCCCCCAGCATG
TCCGGTTGCTGTGGGGAGGATTGCTCCTATGAGATCCTGAGCCGGAGGACCAAGTTTGGGGACAGCCATCACTCC
CACGCGGGTGGGCACTGTGGTGGCTGCTGCCACTGAACTCTCAGAGCCACTTTCAAGTCACAATGCTCTCTCCTA
AGGCCTTTCCTCTTTCCTGGTCTCACTGTTCACCGGGTGTCCTCAGAGCTGTGGCCTCCCCAGCCCTGCACGTGC
CAGGCTGCGCCCTGAGAGCACAGAACCCTGGGGAGAAGTGGTATCAGCTGCTCCTCCTCTCCTAGGAGACCAGAG
TGCTAGAAGGGAATGAAAGGGAGAGGGAAGAGTAGGTGGGGCCGGGCAGTGAAGCTCATCCTCCACAGTGGCTGC
CTCCTCATTTGGCTCCTGGGGCCTGCAGTGGAGGTTCTCGCACCTCTGCAGCCCCTAGATTCCTGGCAACCTCCC
CTCCCCTGACACATACACACTTGGACAAATGGAATGTTTATGTCCACCTTTATGAAAGTTCTGGAGTCCTGGGTC
TGGGGTTTGCTGGTCCCCAAAGAGGAACACACTGGGTGTAAGATCTGGGTGTAGAGGGCGGCTTCAGAGAGACTC
ACGCTTGCGCAGTTGGAATTGCTGTTAACGGAGACTGGGAAGATCTTTTGTGCCAAGATGCAGGGAAATGAAGAA
AGCTCTTTCCAGCTGTTTTTATGGATTCATGGAGTGGGCTCATGTTGGGACCAGCTGACTCTGGGAGGAAGACTG
CCTCTCCATCGCTGTCAGAGAGCCTGAAAGGACCAACAATGAGGTGTTCTTGGGACCCGCCATGGGGATGATTGC
TTCTCTAGGCTCCTGGATGTTGCTGCATTCTAAGCTTAACCTCCTGGTCTCATGGCAGTGACTTGAGCTTTTGAT
TCATAGAAGAAAGCCAGAGGTTCTGCTTGTTCTTGTCTGCCAGCCCTCGTCGTTCTTTCTCCTCTGCCTCTCACC
TCTACCCCAAATACCTCTGTTCTTAGTCTCAAGGGGAGAATAACATCAGGGAGCCCCTCATCTTCCCCAGAAGGA
CTTCTCGTTCCTCATGTAGTTAACTCCATTGATTTTCCTATCTTGGTGCTGATAGCTCTCTAAGGGTAGGGCACA
CCTCCCCACAGCCACCCTCCCTCTTCAGAGAGCCCCCAGCCAGCAGCAGGCCCCTCTGCCTGCACTCCTCAGGCT
TGCCCCTCGCTGCCTCAGTGAGGCACTAGTGCCACTGCCGTGGCCCAGCCGGGCCATAGCTCAGGCTGCAGCAGA
AATGCCTCTCAGTGGCCAACAGTTGCTTTTCTCTCTGGTGTCACCCTGTGGCAACAGGCTGGAGCAGGGGAAGGA
GAAAGCCTTCCTCTTCTCTCATAGGATAGAAAGGCAGGCTCAGAACTAATGCTCATCCTGATCTCTAGGCCTTGT
TCCTCTTCCAGGGAAGAAAAGCCAAATCCTTATCAAGGAAAAAGCACCTAACAGCTCCCTTTGGATATCCCTGAG
CTCTGCTGTGGGGAGTATCATAAAGGTTCTAGCCTTCGTGAAGTTGTTCTCGTGGAGGTCTGTTGGTCCCTCTGA
CCTCAGCATCTGCTCACATCCCACCCTCTGCCCAACTCTGGCAGTCTCTCCTGGCAGATCTCCCCAGAGTGGTCC
TTGCTTCTCACCTGGATTCCTGCTTGTGCAGGAGCCTGTGTACACAGGGCCTCCCTCACCCAGCCTGGCCCCTCT
GCTGAGCACTTTGCGCTGCTCTTGATGGGCAGCAGTGGGACTGGGAACTCCTTAGAGAGGGCCTTGCAGCTTTAC
ACTGGAATAAGTCTGCCTCTGCCTCTGCCTCACCCTGCTGGCTCCTGGTGGGTTTCATCCCAGGCAGAGTTGACA
TTGCTGGAGGGGTTTGGTGGACTCCTAAGAATCATGAAACCACAGGAGCATGTTTAGGAAGAGATTTGTCTCTGG
TCCCTGTCTCTGAAAGGACACAGATGCTAAATATTTATTGTCTTAGATCATGGATTCCTGATACCTCTCACTCAA
GGGGACCAAAAGGGACCCCCCCGTGTTCATCCCTTGTAAGGTGAGTTCAGTCTACGTTGTCTCTTTCCAGTCACT
GGATACGTGGCACCAACTGGTCAATGGGTGCTTGGTGCCATACCCTGCTCACCCTAGTCTCTGCAGGCCATGTCC
TGAAGGGTTCCTCAGGAGGTCGGGACTAGGGTGGGAGAGGCACTATCTGAGACCTGCAATCACTCTTGTTGGTCT
TGAGCCCATTCATTTCCAAAACATCCATCTTTCTCCACTTTCCCCAGGTCTTGGTTTTGAGAAACAGCAGGCATG
GCTGAGTGCGGTGGCTTACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGCGGGTCACCTGAGGTCAGGA
GTTCAAGACCAGCCTGGTCAACATGGCAAAAGCCCATCTCTACTAAAAAATACAAAAATCACCCAGGCGTGGTTG
TGGCCTGTGATCCCAGCTACTCGGGAGGCTGAGGCAGGAGACTCGCTTGAACCCAGCAGGTGGAGGTTGTGGTGA
GCTGAGATCACGCCATTGCACTCCAGCCTAGGCGACCGAGTGAGACTCCATCTC

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FIGURE 3262

AGGTGTTAACTGTCTGGCCTATGATGAAGCCATCATGGCTCAGCAGGACCGAATTCAGCAAGAGATTGCTGTGCA
GAACCCTCTGGTGTCAGAGCGGCTGGAGCTCTCGGTCCTATACAAGGAGTATGCTGAAGATGACAACATCTATCA
ACAGAAGATCAAGGACCTCCACAAAAAGTACTCGTACATCCGCAAGACCAGGCCTGACGGCAACTGTTTCTATCG
GGCTTTCGGATTCTCCCACTTGGAGGCACTGCTGGATGACAGCAAGGAGTTGCAGCGGTTCAAGGCTGTGTCTGC
CAAGAGCAAGGAAGACCTGGTGTCCCAGGGCTTCACTGAATTCACAATTGAGGATTTCCACAACACGTTCATGGA
CCTGATTGAGCAGGTGGAGAAGCAGACCTCTGTCGCCGACCTGCTGGCCTCCTTCAATGACCAGAGCACCTCCGA
CTACCTTGTGGTCTACCTGCGGCTGCTCACCTCGGGCTACCTGCAGCGCGAGAGCAAGTTCTTCGAGCACTTCAT
CGAGGGTGGACGGACTGTCAAGGAGTTCTGCCAGCAGGAGGTGGAGCCCATGTGCAAGGAGAGCGACCACATCCA
CATCATTGCGCTGGCCCAGGCCCTCAGCGTGTCCATCCAGGTGGAGTACATGGACCGCGGCGAGGGCGGCACCAC
CAATCCGCACATCTTCCCTGAGGGCTCCGAGCCCAAGGTCTACCTTCTCTACCGGCCTGGACACTACGATATCCT
CTACAAATAGGGCTGGCTCCAGCCCGCTGCTGCCCTGCTGCCCCCCTCTGCCAGGCGCTAGACATGTACAGAGGT
TTTTCTGTGGTTGTAAATGGTCCTATTTCACCCCCTTCTTCCTGTCACATGACCCCCCCCCATGTTTTATTAAAG
GGGGTGCTGGTGGTGAGCCGTGTGTGCGTGTCCCTGCTCTGCTGCCCGCCTGGCTGCTCTGTCTGCTGCCCCCTC
CCCCCAGGTGGGTCCCCCTGCTTTTCACCTATCTACTCCTGAGCTTCCCCAACAGGAGCAGGTTTGAGGGGCCAG
GCCTCTTGGAGGCCCCTCCTGCTTCGTTGGGTTCTGCTTCCTTCCCTTCTTAGCTGGCTCAGGGGCTTCTATGGG
ATCCTGGAAGTTCCTTAGGGACTTGCCCAGGGTCCCAGGGCCACCCACACTTCATCTGCTCCCTCATAGGCCCCA
CCTCCACGTCCCGGCTGGGCCCCAGACCCCAGCTTCCTGCCCTCCACCGGGAGTCTGCATGGTTGGGAGTCCTGG
GTGGAGGGGCCTTTGTGAGGCTGGACCCGGCTCAGGGCAGGTGGAGGAGCTGGGCCTCCCACAGGGTGCCCGGGC
AGTGCCATCCTGGTGGGGGAGGGCAGCCTTCAAACGTGTGGGGTCTACAGTCCTCAGGTCTAGGCAGGGCTGCCG
GTTCTCCACCTCCCCATCCGCCCCAGGCCCCCTGCCTGTGCCTGCCTTGCACCCCCTCTGCTTGGGCCACGGTGT
CTCTGCATTGCCTGCCTTTTTGCCTTCACCTCTTTTCTTCCCCGCCCCCTGCACATTCGGGGTCTCAGCCCCCAG
GCTGTGAGCTCCTTGGGGGCAGGCCCTCAATAAATGTGAACTGCTGCTGCCGCC

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FIGURE 3263

CCTTCAGCATAAAAGCTGATCCACAAACAAGAGGAGCACCAGACCTCCTCTTGGCTTCGAGATGGCTTCGCCACA
CCAAGAGCCCAAACCTGGAGACCTGATTGAGATTTTCCGCCTTGGCTATGAGCACTGGGCCCTGTATATAGGAGA
TGGCTACGTGATCCATCTGGCTCCTCCAAGTGAGTACCCCGGGGCTGGCTCCTCCAGTGTCTTCTCAGTCCTGAG
CAACAGTGCAGAGGTGAAACGGGAGCGCCTGGAAGATGTGGTGGGAGGCTGTTGCTATCGGGTCAACAACAGCTT
GGACCATGAGTACCAACCACGGCCCGTGGAGGTGATCATCAGTTCTGCGAAGGAGATGGTTGGTCAGAAGATGAA
GTACAGTATTGTGAGCAGGAACTGTGAGCACTTTGTCACCCAGCTGAGATATGGCAAGTCCCGCTGTAAACAGGT
GGAAAAGGCCAAGGTTGAAGTTGGTGTGGCCACGGCGCTTGGAATCCTGGTTGTTGCTGGATGCTCTTTTGCGAT
TAGGAGATACCAAAAAAAAGCGACAGCCTGAAGCAGCCACAAAATCCTGTGTTAGAAGCAGCTGTGGGGGTCCCA
GTGGAGATGAGCCTCCCCCATGCCTCCAGCAGCCTGACCCTCGTGCCCTGTCTCAGGCGTTCTCTAGATCCTTTC
CTCTGTTTCCCTCTCTCGCTGGCAAAAGTATGATCTAATTGAAACAAGACTGAAGGATCAATAAACAGCCATCTG
CCCCTTC

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FIGURE 3264

AGAGTGGGCGTCTGGCGGGGTCCGCAGTTTCAGCAGAGCCGTGCAGCCATGGCCCCAATCAAGGTGGGAGATGCC
ATCCCAGCAGTGGAGGTGTTTGAAGGGGAGCCAGGGAACAAGGTGAACCTGGCAGAGCTGTTCAAGGGCAAGAAG
GGTGTGCTGTTTGGAGTTCCTGGGGCCTTCACCCCTGGATGTTCCAAGACACACCTGCCAGGGTTTGTGGAGCAG
GCTGAGGCTCTGAAGGCCAAGGGAGTCCAGGTGGTGGCCTGTCTGAGTGTTAATGATGCCTTTGTGACTGGCGAG
TGGGGCCGAGCCCACAAGGCGGAAGGCAAGGTTCGGCTCCTGGCTGATCCCACTGGGGCCTTTGGGAAGGAGACA
GACTTATTACTAGATGATTCGCTGGTGTCCATCTTTGGGAATCGACGTCTCAAGAGGTTCTCCATGGTGGTACAG
GATGGCATAGTGAAGGCCCTGAATGTGGAACCAGATGGCACAGGCCTCACCTGCAGCCTGGCACCCAATATCATC
TCACAGCTCTGAGGCCCTGGGCCAGATTACTTCCTCCACCCCTCCCTATCTCACCTGCCCAGCCCTGTGCTGGGG
CCCTGCAATTGGAATGTTGGCCAGATTTCTGCAATAAACACTTGTGGTTTGCGG

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FIGURE 3265

GGAGCCGCCATGTAACCGGCGCCGCCCGGAGCCCGAGCCGCGCGGGCCCCAGCGACCCGCCCGCCATGGGGGACG
AGGACGACGATGAGAGCTGCGCCGTGGAGCTGCGGATCACAGAAGCCAACCTGACCGGGCACGAGGAGAAGGTGA
GCGTGGAGAACTTCGAGCTGCTCAAGGTGCTGGGCACGGGAGCCTACGGCAAGGTGTTCCTGGTGCGGAAGGCGG
GCGGGCACGACGCGGGGAAGCTGTACGCCATGAAGGTGCTGCGCAAGGCGGCGCTGGTGCAGCGCGCCAAGACGC
AAGAGCACACGCGCACCGAGCGCTCGGTGCTGGAGCTGGTGCGCCAGGCGCCCTTCCTGGTCACGCTGCACTACG
CTTTCCAGACGGATGCCAAGCTGCACCTCATCCTGGACTATGTGAGCGGCGGGGAGATGTTCACCCACCTCTACC
AGCGCCAGTACTTCAAGGAGGCTGAGGTGCGCGTGTATGGGGGTGAGATCGTGCTGGCCCTGGAACACCTGCACA
AGCTCGGCATCATTTACCGAGACCTGAAACTGGAGAATGTGCTGCTGGACTCCGAGGGCCACATTGTCCTCACGG
ACTTCGGGCTGAGCAAGGAGTTCCTGACGGAGGAGAAAGAGCGGACCTTCTCCTTCTGTGGCACCATCGAGTACA
TGGCCCCCGAAATCATCCGTAGCAAGACGGGGCATGGCAAGGCTGTGGACTGGTGGAGCCTGGGCATCTTGCTCT
TCGAGCTGCTGACGGGGGCCTCGCCCTTCACCCTGGAGGGCGAGAGGAACACGCAGGCTGAGGTGTCTCGACGGA
TCCTGAAGTGCTCCCCTCCCTTCCCCCCTCGGATCGGGCCCGTGGCGCAGGACCTGCTGCAGCGGCTGCTTTGTA
AGGATCCTAAGAAGCGATTGGGCGCGGGGCCCCAGGGGGCACAAGAAGTCCGGAACCATCCCTTCTTCCAGGGCC
TCGATTGGGTGGCTCTGGCTGCCAGGAAGATTCCAGCCCCATTCCGGCCCCAAATCCGCTCAGAGCTGGATGTGG
GCAACTTTGCGGAGGAATTCACTCGGCTGGAGCCTGTCTACTCACCCCCTGGCAGCCCCCCACCTGGGGACCCCC
GAATCTTTCAGGGATACTCCTTTGTGGCACCCTCCATTCTCTTTGACCACAACAACGCGGTGATGACCGATGGGC
TGGAAGCGCCTGGTGCTGGAGACCGGCCAGGTCGGGCAGCGGTGGCCAGGAGCGCTATGATGCAGGACTCGCCCT
TCTTCCAGCAGTACGAGCTGGACCTGCGGGAGCCTGCGCTGGGCCAGGGCAGCTTTTCTGTGTGTCGCCGCTGCC
GCCAGCGCCAGAGCGGCCAGGAGTTCGCAGTCAAGATCCTCAGTCGCAGGCTGGAGGCGAACACGCAGCGCGAAG
TGGCTGCCCTGCGCCTGTGCCAGTCACACCCCAACGTGGTGAATCTGCACGAGGTGCATCACGACCAGCTGCACA
CGTACCTGGTCCTGGAGCTGCTGCGGGGCGGGGAGCTGCTGGAGCACATCCGCAAGAAGCGGCACTTCAGCGAGT
CGGAAGCAAGCCAGATCCTGCGCAGCCTCGTGTCGGCCGTGAGCTTCATGCACGAGGAGGCGGGCGTGGTGCACC
GCGACCTCAAGCCGGAGAACATCCTGTACGCCGACGACACGCCCGGGGCCCCGGTGAAAATCATCGACTTCGGGT
TCGCGCGGTTGCGGCCGCAGAGTCCCGGGGTGCCCATGCAGACGCCCTGCTTCACGCTGCAGTACGCTGCCCCCG
AGCTGCTGGCGCAGCAGGGCTACGACGAGTCCTGCGACCTCTGGAGCCTGGGCGTCATTCTGTACATGATGCTGT
CGGGGCAGGTCCCCTTCCAGGGGGCCTCTGGCCAGGGCGGGCAGAGCCAGGCGGCCGAGATCATGTGCAAAATCC
GCGAGGGGCGCTTCTCCCTTGACGGGGAGGCCTGGCAGGGTGTATCCGAGGAAGCCAAGGAGCTGGTCCGAGGGC
TCCTGACCGTGGACCCCGCCAAGCGGCTGAAGCTCGAGGGACTGCGGGGCAGCTCGTGGCTGCAGGACGGCAGCG
CGCGCTCCTCGCCCCCGCTCCGGACGCCCGACGTGCTCGAGTCCTCTGGGCCCGCAGTGCGCTCGGGTCTCAACG
CCACCTTCATGGCATTCAACCGGGGCAAGCGGGAGGGCTTCTTCCTGAAGAGCGTGGAGAATGCACCCCTGGCCA
AGCGGCGGAAGCAGAAGCTGCGGAGCGCCACCGCCTCCCGCCGGGGCTCCCCTGCACCAGCCAACCCGGGCCGAG
CCCCCGTCGCCTCCAAAGGGGCCCCCCGCCGAGCCAACGGCCCCCTGCCCCCCTCCTAATCCCCACCACTGTGAC
CCCCTTCCCTCATAGGGGCTGTGACCTGGGAGCCCGGCTCACTCCCGGAGGCCTCTGCCTGCGGCTGACCTGATC
CCCAAGGGACTGTCCTTTCCTCTCCTACCCCACCCCACTCCCAGACAGAGCAGAAGTATTTTTATAAGCAGAGAA
TTTTTTATGTCTTACCAGATAGAGTTGCAGGGAAGGGGGGGCCTGCTGGGGAGTGGGGTTTGGGGGGCCCTCTCC
CAGGACACTGCCTCTTCTGGGCAGAAGGCCCCTCCAGGGGGACTGCTCCAACAGGAAAGAGCCCCTCCCCCACTT
CTAAGCACTGAGTTAGGAGTGCTAACTCCTAAACTGGGACCCCCTACCCTGTTCTCCCCTGAGGCCCCGTTCCTG
GGAGGGGCACCCCTCAACTGTCACTTTATGGACTGTCTGTGCAATTACGTCCACCAAAGACCCGTGTTGGGGGTA
CTGAAGGAGAGGCCCTGGGGGACCCTCTGAAGCATTTCTGCCTCACTTTATGTCATCTGCTTCTCCCCTGTTGGG
GCTAAGGAAGGAGATAGGTGGCTCCTAAAAGAGGAGGCCATCTTCTCACCCACCCCTTCCTCTTTGGCACAGCTA
CTCCTGGCTGGGGGTGGGGCCTTGGGGGTCTGGGCTGGGCATCCATGGTCACTGCCTCAGCCCAGCCAGGCTGTG
CCTTTGACTTTAAAATAAAAGTCCACCCAGTGCTGTGTGTGGC

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FIGURE 3266

CGATTTCATTCCTCGCTCCCCACAGGTCCCTCTCCCCAAAATATTCCCATCTTGTCCTAGCCCATCCCCCAGACT
ATCTCAAGGACCAGCTGTCCCCACGCCCCCGACCTCCACTAGGCCTGTGCCACCCGCTGCCTGCAGGAAGACGCC
CGGTCCCGGGCCGGGTTAGCCCCATGGGAACGCAGCGCCTGTGTGGCCGCGGGACTCAAGGCTGGCCTGGCTCAA
GTGAACAGCACGTCCAGGAGGCGACCTCGTCCGCGGGTTTGCATTCTGGGGTGGACGAGCTGGGGGTTCGGTCCG
AGCCCGGTGGGAGGCTCCCGGAGCGCAGCCTGGGCCCAGCCCACCCCGCGCCGGCGGCCATGGCAGGCACCCTGG
ACCTGGACAAGGGCTGCACGGTGGAGGAGCTGCTCCGCGGGTGCATCGAAGCCTTCGATGACTCCGGGAAGGTGC
GGGACCCGCAGCTGGTGCGCATGTTCCTCATGATGCACCCCTGGTACATCCCCTCCTCTCAGCTGGCGGCCAAGC
TGCTCCACATCTACCAACAATCCCGGAAGGACAACTCCAATTCCCTGCAGGTGAAAACGTGCCACCTGGTCAGGT
ACTGGATCTCCGCCTTCCCAGCGGAGTTTGACTTGAACCCGGAGTTGGCTGAGCAGATCAAGGAGCTGAAGGCTC
TGCTAGACCAAGAAGGGAACCGACGGCACAGCAGCCTAATCGACATAGACAGCGTCCCTACCTACAAGTGGAAGC
GGCAGGTGACTCAGCGGAACCCTGTGGGACAGAAAAAGCGCAAGATGTCCCTGTTGTTTGACCACCTGGAGCCCA
TGGAGCTGGCGGAGCATCTCACCTACTTGGAGTATCGCTCCTTCTGCAAGATCCTGTTTCAGGACTATCACAGTT
TCGTGACTCATGGCTGCACTGTGGACAACCCCGTCCTGGAGCGGTTCATCTCCCTCTTCAACAGCGTCTCACAGT
GGGTGCAGCTCATGATCCTCAGCAAACCCACAGCCCCGCAGCGGGCCCTGGTCATCACACACTTTGTCCACGTGG
CGGAGAAGCTGCTACAGCTGCAGAACTTCAACACGCTGATGGCAGTGGTCGGGGGCCTGAGCCACAGCTCCATCT
CCCGCCTCAAGGAGACCCACAGCCACGTTAGCCCTGAGACCATCAAGCTCTGGGAGGGTCTCACGGAACTAGTGA
CGGCGACAGGCAACTATGGCAACTACCGGCGTCGGCTGGCAGCCTGTGTGGGCTTCCGCTTCCCGATCCTGGGTG
TGCACCTCAAGGACCTGGTGGCCCTGCAGCTGGCACTGCCTGACTGGCTGGACCCAGCCCGGACCCGGCTCAACG
GGGCCAAGATGAAGCAGCTCTTTAGCATCCTGGAGGAGCTGGCCATGGTGACCAGCCTGCGGCCACCAGTACAGG
CCAACCCCGACCTGCTGAGCCTGCTCACGGTGTCTCTGGATCAGTATCAGACGGAGGATGAGCTGTACCAGCTGT
CCCTGCAGCGGGAGCCGCGCTCCAAGTCCTCGCCAACCAGCCCCACGAGTTGCACCCCACCACCCCGGCCCCCGG
TACTGGAGGAGTGGACCTCGGCTGCCAAACCCAAGCTGGATCAGGCCCTCGTGGTGGAGCACATCGAGAAGATGG
TGGAGTCTGTGTTCCGGAACTTTGACGTCGATGGGGATGGCCACATCTCACAGGAAGAATTCCAGATCATCCGTG
GGAACTTCCCTTACCTCAGCGCCTTTGGGGACCTCGACCAGAACCAGGATGGCTGCATCAGCAGGGAGGAGATGG
TTTCCTATTTCCTGCGCTCCAGCTCTGTGTTGGGGGGGCGCATGGGCTTCGTACACAACTTCCAGGAGAGCAACT
CCTTGCGCCCCGTCGCCTGCCGCCACTGCAAAGCCCTGATCCTGGGCATCTACAAGCAGGGCCTCAAATGCCGAG
CCTGTGGAGTGAACTGCCACAAGCAGTGCAAGGATCGCCTGTCAGTTGAGTGTCGGCGCAGGGCCCAGAGTGTGA
GCCTGGAGGGGTCTGCACCCTCACCCTCACCCATGCACAGCCACCATCACCGCGCCTTCAGCTTCTCTCTGCCCC
GCCCTGGCAGGCGAGGCTCCAGGCCTCCAGAGATCCGTGAGGAGGAGGTACAGACGGTGGAGGATGGGGTGTTTG
ACATCCACTTGTAAATAGATGCTGTGGTTGGATCAAGGACTCATTCCTGCCTTGGAGAAAATACTTCAACCAGAGC
AGGGAGCCTGGGGGTGTCGGGGCAGGAGGCTGGGGATGGGGGTGGGATATGAGGGTGGCATGCAGCTGAGGGCAG
GGCCAGGGCTGGTGTCCCTAAGGTTGTACAGACTCTTGTGAATATTTGTATTTTCCAGATGGAATAAAAAGGCCC
GTGTAATTAACCTTC

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FIGURE 3267

ACTTACTGTCATTAAACCAGTATGATGATGGAGTGGGGAATGCCTCAGTTTCTCCCACCGCCGAGGGCCTATAGG
ACTACAGTTCCCAGGGCCCCGTGCTGCAGGCTAGCGGCCTCCCGCCAATGCTGGCCAGTAACCTGAGCATCCCTC
TCCAAAAGGTCACTTCAGGGCTCCTTGAGGGACAGCAACAGGGGGAGCCTAGAGCTGCTCAGCTTCGGTGGGGGT
GGAGTGAGGGCTGTGGCCCTGCCTCACACAACCTCCCTCACACCACCCCTGCAATGCAGGGTCGTGGGCCCCTTT
CTCAAAGACATCCAGTGGCCTCTGCTAGTTGCACCTCTTCCGTCAGGGGACACTGACTTGGCTCCTGCACCACAG
CCTGCAGGGGGTCCTGGTTCCTTTTGCCACAACACATGGCCTCCCATCCTGGTTCAGCCACTGACAGACAGCTCC
CCAATCCAGCACTCTGCCTGCTCCTTCTTGTATCCAACCCTCCAAAAGGCAGGGACAAGGGACAGAAGACCATGT
GCAAGGCCTGGAGGAAGTGGGTCAGCACAGGCCTGTGAACAAGCCAGGCCAGTCTTGGCGGCCCAAGTGGAGCTC
ACCTCTCCCTCCCCTCTCCTCTCCTCCCCTTGCCCTCAAAATAGCTCCCTGAGCTGCCAGGCCAAGACCCTCCCA
TTGCAGGGGAGGCGGGGCGTGCTGCCCAGAGCCAGGCTTTAAATCCCCTTGAGGCTGGGGAGCTCCACTCCTTGG
CTGGAGGCAGTGCTGAGGCCGCCGTCCCCTCTACCATCAGTCCAGTCCGGCCCGCCCTCCTGCAGCC**ATG**TCCCG
GCCCCTGTCAGACCAAGAGAAAAGAAAGCAAATCAGTGTGCGTGGCCTGGCCGGCGTGGAGAACGTGACTGAGCT
GAAAAAGAACTTCAACCGGCACCTGCATTTCACACTCGTAAAGGACCGCAATGTGGCCACCCCACGAGACTACTA
CTTTGCTCTGGCCCATACCGTGCGCGACCACCTCGTGGGGCGCTGGATCCGCACGCAGCAGCACTACTATGAGAA
GGACCCCAAGAGGATCTACTACCTGTCTTTAGAGTTCTATATGGGACGGACGCTACAGAACACCATGGTGAACCT
GGCCTTAGAGAATGCCTGTGACGAGGCCACCTACCAGCTGGGCCTGGACATGGAGGAGCTGGAGGAAATTGAGGA
GGATGCGGGGCTGGGCAACGGGGGCCTGGGCCGGCTGGCAGCCTGCTTTCTTGACTCCATGGCAACACTGGGCCT
GGCCGCCTATGGCTACGGGATTCGCTATGAGTTTGGGATTTTTAACCAGAAGATCTCCGGGGGCTGGCAGATGGA
GGAGGCCGATGACTGGCTTCGCTACGGCAACCCCTGGGAGAAGGCCCGGCCCGAGTTCACGCTACCTGTGCACTT
CTACGGCCATGTGGAGCACACCAGCCAGGGTGCCAAGTGGGTGGACACACAGGTGGTACTGGCCATGCCCTACGA
TACGCCCGTGCCTGGCTATCGCAACAATGTTGTCAACACCATGCGCCTCTGGTCTGCCAAGGCTCCCAATGACTT
CAACCTCAAGGACTTCAATGTCGGTGGCTACATCCAGGCTGTGTTGGACCGAAACCTGGCGGAGAACATCTCTCG
TGTCCTGTACCCCAATGATAATTTCTTCGAAGGGAAGGAGCTGCGGCTGAAGCAGGAGTATTTCGTGGTGGCTGC
CACCCTCCAGGACATCATCCGTCGCTTCAAGTCTTCCAAGTTCGGCTGCCGTGATCCCGTGCGCACGAACTTCGA
TGCCTTCCCAGATAAGGTGGCCATCCAGCTCAATGACACCCACCCCTCCCTGGCCATCCCCGAGCTGATGAGGAT
CCTGGTGGACCTGGAACGGATGGACTGGGACAAGGCGTGGGATGTGACAGTGAGGACCTGTGCCTACACCAACCA
CACGGTGCTGCCCGAGGCCCTGGAGCGCTGGCCGGTGCACCTCTTGGAGACGCTGCTGCCGCGGCACCTCCAGAT
CATCTACGAGATCAACCAGCGCTTCCTCAACCGGGTGGCGGCCGCATTCCCAGGGGACGTAGACCGGCTGCGGCG
CATGTCGCTGGTGGAGGAGGGCGCAGTGAAGCGCATCAACATGGCACACCTGTGCATCGCGGGGTCGCACGCCGT
CAACGGCGTGGCGCGCATCCACTCCGAGATCCTCAAGAAGACCATCTTCAAAGACTTCTATGAGCTGGAGCCTCA
TAAGTTCCAGAATAAGACCAACGGCATCACCCCTCGGCGCTGGCTGGTTCTGTGTAACCCCGGGCTGGCAGAGGT
CATTGCTGAGCGCATCGGGGAGGACTTCATCTCTGACCTGGACCAGCTGCGCAAACTGCTCTCCTTTGTGGATGA
TGAAGCTTTCATTCGGGATGTGGCCAAAGTGAAGCAGGAAAACAAGTTGAAGTTTGCTGCCTACCTAGAGAGGGA
ATACAAAGTCCACATCAACCCCAACTCACTCTTCGACATCCAGGTGAAGCGGATTCACGAATATAAACGACAGCT
CCTCAACTGCCTCCATGTCATCACCCTGTACAACCGCATCAAGAGGGAGCCCAATAAGTTTTTTGTGCCTCGGAC
TGTGATGATTGGAGGGAAGGCTGCACCTGGGTACCACATGGCCAAGATGATCATCAGACTCGTCACAGCCATCGG
GGATGTGGTCAACCATGACCCGGCAGTGGGTGACCGCCTCCGTGTCATCTTCCTGGAGAACTACCGAGTCTCACT
GGCCGAGAAAGTGATCCCAGCTGCAGACCTCTCTGAGCAGATCTCCACTGCGGGCACTGAAGCCTCAGGCACCGG
CAACATGAAGTTCATGCTCAACGGGGCTCTGACCATTGGCACCATGGACGGGGCCAATGTGGAGATGGCAGAAGA
GGCGGGAGAGGAAAACTTCTTCATCTTTGGCATGCGGGTGGAGGATGTGGATAAGCTTGACCAAAGAGGGTACAA
TGCCCAGGAGTACTACGATCGCATTCCTGAGCTTCGGCAGGTCATTGAGCAGCTGAGCAGTGGCTTCTTCTCCCC
CAAACAGCCCGACCTGTTCAAGGACATTGTCAATATGCTCATGCACCATGACCGGTTTAAAGTCTTCGCAGATTA
TGAAGACTACATTAAATGCCAGGAGAAAGTCAGCGCCTTGTACAAGAACCCAAGAGAGTGGACGCGGATGGTGAT
CCGGAACATAGCCACCTCTGGCAAGTTCTCCAGTGACCGCACCATTGCCCAGTATGCCCGGGAGATCTGGGGTGT
GGAGCCTTCCCGCCAGCGCCTGCCAGCCCCGGATGAGGCCATC**TGA**GCCTCCAGACCAGACCCCAAACCAGCCCT
TGAGTCTGTCACACTCTCTTGGGCCAGCCCCAGCACCTCATGCAGAGGGTGGGGTACTGGAGTTAGATCTCT

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FIGURE 3268

AAATGAAGTGCGCGCTGCGACACCTCCCAGCCCACCGAACTCCGCCGCCATTTCCTCGCTTGGCCTAACGGTTCG
GCCAATCCCAGCGCGCATCAAGAAGGACTGAGGCTCCGCCAATCGGAGGCCGCCGATTTCGACCCTTCGCCTCGG
CCCGGCCCAATCCAGGCCCCGGCCCCGCCGCCCCCGGCCCGCCCCCGCGGTGCCCTCTCTCCTCCCTCTTTGTGC
GTCTCGCGCCGCCGCCGCCCGCCGCGTGAGAGGACGGGCTCCGCGCGCTCCGGCAGCGCATTCGGGTCCCCTCCC
CCCGGGAGGCTTGCGAAGGAGAAGCCGCCGCAGAGGAAAAGCAGGTGCCGGTGCCTGTCCCCGGGGGCGCCATGG
CGACCGGAGCGAACGCCACGCCGTTGGACTTCCCAAGTAAGAAGCGGAAGAGGAGCCGCTGGAACCAAGACACAA
TGGAACAGAAGACAGTGATTCCAGGAATGCCTACAGTTATTCCCCCTGGACTTACTCGAGAACAAGAAAGAGCTT
ATATAGTGCAACTGCAGATAGAAGACCTGACTCGTAAACTGCGCACAGGAGACCTGGGCATCCCCCCTAACCCTG
AGGACAGGTCCCCTTCCCCTGAGCCCATCTACAATAGCGAGGGGAAGCGGCTTAACACCCGAGAGTTCCGCACCC
GCAAAAAGCTGGAAGAGGAGCGGCACAACCTCATCACAGAGATGGTTGCACTCAATCCGGATTTCAAGCCACCTG
CAGATTACAAACCTCCAGCAACACGTGTGAGTGATAAAGTCATGATTCCACAAGATGAGTACCCAGAAATCAACT
TTGTGGGGCTGCTCATCGGGCCCAGAGGGAACACCCTGAAGAACATAGAGAAGGAGTGCAATGCCAAGATTATGA
TCCGGGGGAAAGGGTCTGTGAAAGAAGGGAAGGTTGGGCGCAAAGATGGCCAGATGTTGCCAGGAGAAGATGAGC
CACTTCATGCCCTGGTTACTGCCAATACAATGGAGAACGTCAAAAAGGCAGTGGAACAGATAAGAAACATCCTGA
AGCAGGGTATCGAGACTCCAGAGGACCAGAATGATCTACGGAAGATGCAGCTTCGGGAGTTGGCTCGCTTAAATG
GGACCCTTCGGGAAGACGATAACAGGATCTTAAGACCCTGGCAGAGCTCAGAGACCCGCAGCATTACCAACACCA
CAGTGTGTACCAAGTGTGGAGGGGCTGGCCACATTGCTTCAGACTGTAAATTCCAAAGGCCTGGTGATCCTCAGT
CAGCTCAGGATAAAGCACGGATGGATAAAGAATATTTGTCCCTCATGGCTGAACTGGGTGAAGCACCTGTCCCAG
CATCTGTGGGCTCCACCTCTGGGCCTGCCACCACACCCCTGGCCAGCGCACCTCGTCCTGCTGCTCCCGCCAACA
ACCCACCTCCACCGTCTCTCATGTCTACCACCCAGAGCCGCCCACCCTGGATGAATTCTGGCCCTTCAGAGAGTC
GGCCCTACCACGGCATGCATGGAGGTGGTCCTGGTGGGCCCGGAGGTGGCCCCCACAGCTTCCCACACCCATTAC
CCAGCCTGACAGGTGGGCATGGTGGACATCCCATGCAGCACAACCCCAATGGACCCCCACCCCCTTGGATGCAGC
CACCACCACCACCGATGAACCAGGGCCCCCACCCTCCTGGGCACCATGGCCCTCCTCCAATGGATCAGTACCTGG
GAAGTACGCCTGTGGGCTCTGGGGTCTATCGCCTGCATCAAGGAAAAGGTATGATGCCGCCACCACCTATGGGCA
TGATGCCGCCGCCGCCGCCGCCTCCCAGTGGGCAGCCCCCACCCCCTCCCTCTGGTCCTCTTCCCCCATGGCAAC
AACAGCAGCAGCAGCCTCCGCCACCCCCTCCGCCCAGCAGCAGTATGGCTTCCAGTACCCCCTTGCCATGGCAGC
AAAATACGACGACTACCACCACGAGCGCTGGCACAGGGTCCATCCCGCCATGGCAACAGCAGCAGGCGGCTGCCG
CAGCTTCTCCAGGAGCCCCTCAGATGCAAGGCAACCCCACTATGGTGCCCCTGCCCCCCGGGGTCCAGCCGCCTC
TGCCGCCTGGGGCCCCTCCCCCTCCGCCCCGTAGCATCGAGTGTCTTCTTTGTCTTCTTTCTCTCCTCACCCAAC
TCCCTTTGCCTCTCCCCAAACCGGGCCGCCAGGATCCCTCCCCGCGGCGGCGATGGCCCGAGCCATGAGAGTGAG
GACTTTCCGCGCCCATTGGTGACCCTTCCAGGCAGACAGCCTCAGCAACGCCCCTGGTGGACAGGATGGTTCGGC
AAAGCAGCCTGAGTTATTTTTGTGGACGGAATCGGAACACGCTGGCTCCATATCGTGAAATTTTTATTAATTTTT
TTCTTTTTCCTTTGTTACTTCTTTATCTTTTCCTTTCTTCAGACTCCGTCCAAGGAGATGCTCTCCCCGGTCTTC
TGCTGCAATTTAGATTCCTTTCCCTTCTCTCCAGTTCTCCTTCCCTTACCAAGGAGAGGGGAGCAAATGGTTTTG
GGCAAGGGCTTTGGCCATTCATGTCAAGCTGGTTGTGGGTTTTTCAAGGTGCCATAGCCACCCCCAAATATGTTT
GTTTAAAGCGTGGGGTTTTTTAATCTCTGCCACCCTTGTCAAGGGAGTCTTGTAAAGTTGCCGAGGGTAGGTTCA
TCTCCAGGTTTCGGGATTCCCATCCGTCCTGGCGATCCTGCCAGCAGTGGGTGGGCAGCCTGAGCTCCCTCGGGC
TCGCCTGCCAGCCTGGAGTTCTTCCTGTGCTCCTTGATCACCTGAGCTGCCTCAGATTCCATTTGGTCCTCTCCT
TCCTGGAAGGCTTCCTTTTATGTTTTGTTTTAATCCCAAATGTCTGAATGTTTTGCAGTGTGTAGGGGTTTGAGC
CCCTTGTTCATTCTCCTTCCTTTTTCCTCCCGCTTCCCTCTCCATGAAGTGATTCTGTTGACAATAATGTATACT
GCGCGTTCTCTTCACTGGTTTATCTGCAGAAATTTCTCTGGGCTTTTTTCGGTGTTAGATTCAACACTGCGCTAA
AGCGGGGATGTTCCATTGAATAAAAGAGCAGTGTGGTTTTCTGGG

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FIGURE 3269

GCGCCGGGCCATGGCGCTGCTGCGGGATGTGTCGCTGCAGGACCCGCGGGACCGCTTCGAGCTGCTGCAGCGCGT
GGGGGCCGGGACCTATGGCGACGTCTACAAGGCCCGCGACACGGTCACGTCCGAACTGGCCGCCGTGAAGATAGT
CAAGCTAGACCCAGGGGACGACATCAGCTCCCTCCAGCAGGAAATCACCATCCTGCGTGAGTGCCGCCACCCCAA
TGTGGTGGCCTACATTGGCAGCTACCTCAGGAATGACCGCTTGTGGATCTGCATGGAGTTCTGCGGAGGGGGCTC
CCTGCAGGAGATTTACCATGCCACTGGGCCCCTGGAGGAGCGGCAGATTGCCTACGTCTGCCGAGAGGCACTGAA
GGGGCTCCACCACCTGCATTCTCAGGGGAAGATCCACAGAGACATCAAGGGAGCCAACCTTCTCCTCACTCTCCA
GGGAGATGTCAAACTGGCTGACTTTGGGGTGTCAGGCGAGCTGACAGCGTCTGTGGCCAAGAGGAGGTCTTTCAT
TGGGACTCCCTACTGGATGGCTCCCGAGGTGGCTGCTGTGGAGCGCAAAGGTGGCTACAATGAGCTATGTGACGT
CTGGGCCCTGGGCATCACTGCCATTGAGCTGGGCGAGCTGCAGCCCCCTCTGTTCCACCTGCACCCCATGAGGGC
CCTGATGCTCATGTCGAAGAGCAGCTTCCAGCCGCCCAAACTGAGAGATAAGACTCGCTGGACCCAGAATTTCCA
CCACTTTCTCAAACTGGCCCTGACCAAGAATCCTAAGAAGAGGCCGACAGCAGAGAAGCTCCTGCAGCACCCGTT
CACGACTCAGCAGCTCCCTCGGGCCCTCCTCACACAGCTGCTGGACAAAGCCAGTGACCCTCATCTGGGGACCCC
CTCCCCTGAGGACTGTGAGCTGGAGACCTATGACATGTTTCCAGACACCATTCACTCCCGGGGGCAGCACGGCCC
AGCCGAGAGGACCCCCTCGGAGATCCAGTTTCACCAGGTGAAATTTGGCGCCCCACGCAGGAAGGAAACTGACCC
ACTGAATGAGCCGTGGGAGGAAGAGTGGACACTACTGGGAAAGGAAGAGTTGAGTGGGAGCCTGCTGCAGTCGGT
CCAGGAGGCCCTGGAGGAAAGGAGTCTGACTATTCGGTCAGCCTCAGAATTCCAGGAGCTGGACTCCCCAGACGA
TACCATGGGAACCATCAAGCGGGCCCCGTTCCTAGGGCCACTCCCCACTGACCCTCCAGCAGAGGAGCCTCTGTC
CAGTCCCCCAGGAACCCTGCCCCCACCTCCTTCAGGCCCCAACAGCTCCCCACTGCTGCCCACGGCCTGGGCCAC
CATGAAGCAGCGGGAGGATCCTGAGAGGTCATCCTGCCACGGGCTCCCCCCAACTCCCAAGGTGCATATGGGCGC
CTGCTTCTCCAAGGTCTTCAATGGCTGCCCCCTGCGGATCCACGCTGCTGTCACCTGGATTCACCCTGTTACTCG
GGACCAGTTCCTGGTGGTAGGGGCCGAGGAAGGCATCTACACACTCAACCTGCATGAACTGCATGAGGATACGCT
GGAGAAGCTGATTTCACATCGCTGCTCCTGGCTCTACTGCGTGAACAACGTGCTGCTGTCACTCTCAGGGAAATC
CACGCACATCTGGGCCCATGACCTCCCAGGCCTGTTTGAGCAGCGGAGGCTACAGCAACAGGTTCCCCTCTCCAT
CCCCACCAACCGCCTCACCCAGCGCATCATCCCCAGGCGCTTTGCTCTGTCCACCAAGATTCCTGACACCAAAGG
CTGCTTGCAGTGTCGTGTGGTGCGGAACCCCTACACGGGTGCCACCTTCCTGCTGGCCGCCCTGCCCACCAGCCT
GCTCCTGCTGCAGTGGTATGAGCCGCTGCAGAAGTTTCTGCTGCTGAAGAACTTCTCCAGCCCTCTGCCCAGCCC
AGCTGGGATGCTGGAGCCGCTGGTGCTGGATGGGAAGGAGCTGCCGCAGGTGTGTGTTGGGGCCGAGGGGCCTGA
GGGGCCCGGCTGCCGCGTCCTGTTCCATGTCCTGCCCCTGGAGGCTGGCCTGACGCCCGACATCCTCATCCCACC
TGAGGGGATCCCAGGCTCGGCCCAGCAGGTGATCCAGGTGGACAGGGACACAATCCTAGTCAGCTTTGAACGCTG
TGTGAGGATTGTCAACATGCAGGGCGAGCCCACGGCCACACTGGCACCTGAGCTGACCTTTGATTTCCCCATCGA
GACTGTGGTGTGCCTGCAGGACAGTGTGCTGGCCTTCTGGAGCCATGGGATGCAAGGCCGAAGCCTGGATACCAA
TGAGGTGACCCAGGAGATCACAGATGAAACAAGGATCTTCCGAGTGCTTGGGGCCCACAGAGACATCATCCTGGA
GAGCATTCCCACTGACAACCCAGAGGCGCACAGCAACCTCTACATCCTCACGGGCCACCAGAGCACCTACTAAGA
GCAGCGGGCCTGTCCAGGGGCTCCCCGCCCCACCCCACGCCTTAGCTGCAGGCCCTTTTGGGCAAAGGGGCCCAT
CCTAGACCAGAGGAGCCCAGGCCCTGGCCCTGCTGGGGCTGAAGGTCAGAAGTAATCCTGAGAAATGTTTCAGGC
CTGGGGAGGGAGGGGAGCCCCCGACGCCTCTGCAATAACTGGACCAGGGGGAGCTGCTGTCACTCCCCCATCCCC
GAGGCAGCCCAGTCCCTAGTGCCCAAGGCAGGGACCCTGGGCCTGGGCCATCCATTCCATTTTGTTCCACATTTC
CTTTCTACTCTTTCTGCCAAGAGCCTGCCCCTGCATTTGTCCTGGGAAACACGGTATTTAAGAGAGAACTATATT
GGTATTAAAGCTGGTTTGTTTT

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FIGURE 3270

TATATTTATGTATATGCACATACACACAAAATTAGGCGGGAGTGGTGGCGCACGCCTGTGATCACAGCTACTCGG
GAGGCTGAGGCACGAGAATCGCTTGAGCCCGTGAAGTCGAGGCTGCAGTGAGCCCAGATCGAGCCACTGCATTCC
AGCCTGGGCGAAAGAGAAAGACCGTGTCTCAAAACAAACAAACAAAAGCTACTCTTAGCACGTGTTAGAGTATCT
CGCGGGCGGAAGTGGGAAACGAGTGCTGCACACAGACAACCTGATCTTTTTCCTCATAACTTGCCGACCGACCCG
TGACAGCAAAACCGGCAGAAGCTCGGCGACCTCCCACCCCGAGTCTGCAGGTAGCCGCCGCCCACCGCCCGCCGT
CATGGGGCTGAAGGCCGCCCAGAAGACGCTGTTCCCGCTGCGCTCCATCGACGACGTGGTGCGCCTGTTTGCTGC
CGAGCTGGGCCGAGAGGAGCCGGACCTGGTGCTCCTTTCCTTGGTGCTGGGCTTCGTGGAGCATTTTCTGGCTGT
CAACCGCGTCATCCCTACCAACGTTCCCGAGCTCACCTTCCAGCCCAGCCCCGCCCCCGACCCGCCTGGCGGCCT
CACCTACTTTCCCGTGGCCGACCTGTCTATCATCGCCGCCCTCTATGCCCGCTTCACCGCCCAGATCCGAGGCGC
CGTCGACCTGTCCCTCTATCCTCGAGAAGGGGGTGTCTCCAGCCGTGAGCTGGTGAAGAAGGTCTCCGATGTCAT
ATGGAACAGCCTCAGCCGCTCCTACTTCAAGGATCGGGCCCACATCCAGTCCCTCTTCAGCTTCATCACAGGTTG
GAGCCCAGTAGGCACCAAATTGGACAGCTCCGGTGTGGCCTTTGCTGTGGTTGGGGCCTGCCAGGCCCTGGGTCT
CCAGGATGTCCACCTCGCCCTGTCTGAGGATCATGCCTGGGTAGTGTTTGGGCCCAATGGGGAGCAGACAGCTGA
GGTCACCTGGCACGGCAAGGGCAACGAGGACCGCAGGGGCCAGACAGTCAATGCCGGTGTGGCTGAGCGGAGCTG
GCTGTACCTGAAAGGATCATACATGCGCTGTGACCGCAAGATGGAGGTGGCGTTCATGGTGTGTGCCATCAACCC
TTCCATTGACCTGCACACCGACTCGCTGGAGCTTCTGCAGCTGCAGCAGAAGCTGCTCTGGCTGCTCTATGACCT
GGGACATCTGGAAAGGTACCCCATGGCCTTAGGGAACCTGGCAGATCTAGAGGAGCTGGAGCCCACCCCTGGCCG
GCCAGACCCACTCACCCTCTACCACAAGGGCATTGCCTCAGCCAAGACCTACTATCGGGATGAACACATCTACCC
CTACATGTACCTGGCTGGCTACCACTGTCGCAACCGCAATGTGCGGGAAGCCCTGCAGGCCTGGGCGGACACGGC
CACTGTCATCCAGGACTACAACTACTGCCGGGAAGACGAGGAGATCTACAAGGAGTTCTTTGAAGTAGCCAATGA
TGTCATCCCCAACCTGCTGAAGGAGGCAGCCAGCTTGCTGGAGGCGGGCGAGGAGCGGCCGGGGGAGCAAAGCCA
GGGCACCCAGAGCCAAGGTTCCGCCCTCCAGGACCCTGAGTGCTTCGCCCACCTGCTGCGATTCTACGACGGCAT
CTGCAAATGGGAGGAGGGCAGTCCCACGCCTGTGCTGCACGTGGGCTGGGCCACCTTTCTTGTGCAGTCCCTAGG
CCGTTTTGAGGGACAGGTGCGGCAGAAGGTGCGCATAGTGAGCCGAGAGGCCGAGGCGGCCGAGGCCGAGGAGCC
GTGGGGCGAGGAAGCCCGGGAAGGCCGGCGGCGGGGCCCACGGCGGGAGTCCAAGCCAGAGGAGCCCCCGCCGCC
CAAGAAGCCAGCACTGGACAAGGGCCTGGGCACCGGCCAGGGTGCAGTGTCAGGACCCCCCCGGAAGCCTCCTGG
GACTGTCGCTGGCACAGCCCGAGGCCCTGAAGGTGGCAGCACGGCTCAGGTGCCAGCACCCGCAGCATCACCACC
GCCGGAGGGTCCAGTGCTCACTTTCCAGAGTGAGAAGATGAAGGGCATGAAGGAGCTGCTGGTGGCCACCAAGAT
CAACTCGAGCGCCATCAAGCTGCAACTCACGGCACAGTCGCAAGTGCAGATGAAGAAGCAGAAAGTGTCCACCCC
TAGTGACTACACTCTGTCTTTCCTCAAGCGGCAGCGCAAAGGCCTCTGAACTACTGGGGACTTCGGACCGCTTGT
GGGGACCCAGGCTCCGCCCTTAGTCCCCCAACTCTGAGCCCATGTTCTGCCCCCAGCCCAAAGGGGACAGGCCTC
ACCTCTACCCAAACCCTAGGTTCCCGGTCCCGAGTACAGTCTGTATCAAACCCACGATTTTCTCCAGCTCAGAAC
CCAGGGCTCTGCCCCAGTCGTTAGAATATAGGTCTCTTCTCCCAGAATCCCAGCCGGCCAATGGAAACCTCACGC
TGGGTCCTAATTACCAGTCTTTAAAGGCCCAGCCCCTAGAAACCCAAGCTCCTCCTCGGAACCGCTCACCTAGAG
CCAGACCAACGTTACTCAGGGCTCCTCCCAGCTTGTAGGAGCTGAGGTTTCACCCTTAACCCAAGGAGCACAGGT
CCCACCTCCAGCCCGGGAGCCTAGGACCACTCAGCCCCTAGGAGTATATTTCCGCACTTCAGAATTCCATATCTT
GCGAATCCAAGCTCCCTGCCCCAAATAACTTCAGTCCTGCTCCAGAATTTGGAAATCCTAGTTTCCTCTCCTTCG
TATCCCGAGTCTGGGACACAAAACTCCGCCCCCAGCCTATGAGCATCCTGAGCCCCGCCCTCTTCCTGACGAAAC
TGGCCCCGGATCAGAGCAGGACCTCCCTTCCGACCCTCTGGGAACCTCCCAGAGGTCCAGCCCATCTCGGAGCAT
CCCGGAGGAAATCTGCAGAGGGTTAGGAGTGGGTGACAAGAGCCTGATCTCTTCCTGTTTTGTACATAGATTTAT
TTTTCAGTTCCAAGAAAGATGAATACATTTTGTT

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FIGURE 3271

GGCACCAGTCGGAGGGGCGGGGCTGGGAGGGGCTCCTCCCTACCGCCCCCAATTCCGCCCTGCCCCCGCCGCGGC
GGCGCTAGCCGCCACTGAGGGACCGACCCTATAAAGGCCGCTCCGCGAGGGGTGCGCAGCATTCGGCAGAGGGCG
CTTCGACGGGCTGGGCTGTGCGCCTGCGCAGTGTGGGTCGCTCCCGATTCCCTGCCCCGGCCGGCCCCGCCTCGG
CTCCGCACCCTCGCCCCGCTCTCAGCCGCCGCTCTGCCCCGCAGCAGCCAGCCCCGTGTCCGGCAGTATGTTCAG
CTGGGTCAGCAAGGATGCCCGCCGCAAGAAGGAGCCGGAGCTCTTCCAGACGGTGGCTGAGGGGCTGCGGCAGCT
GTACGCGCAGAAGCTGCTACCCCTGGAGGAGCACTACCGCTTCCACGAGTTCCACTCGCCCGCGCTGGAGGACGC
TGACTTCGACAACAAGCCTATGGTGCTCCTCGTGGGGCAGTACAGCACGGGCAAGACCACCTTCATCCGACACCT
GATCGAGCAGGACTTCCCGGGGATGCGCATCGGGCCCGAGCCCACCACCGACTCCTTCATCGCCGTCATGCACGG
CCCCACTGAGGGCGTGGTGCCGGGCAACGCGCTCGTGGTGGACCCGCGGCGCCCCTTCCGCAAGCTCAACGCGTT
TGGCAACGCTTTCCTCAACAGGTTCATGTGTGCCCAGCTGCCCAACCCCGTCCTGGACAGCATCAGCATCATCGA
CACCCCCGGGATCCTGTCTGGAGAGAAGCAGCGGATCAGCAGAGGCTATGACTTTGCAGCCGTCCTGGAGTGGTT
CGCGGAGCGTGTGGACCGCATCATCCTGCTCTTCGACGCCCACAAGCTGGACATCTCCGATGAGTTCTCGGAAGT
GATCAAGGCTCTGAAGAACCATGAGGACAAGATCCGCGTGGTGCTGAACAAGGCAGACCAGATCGAGACGCAGCA
GCTGATGCGGGTGTACGGGGCCCTCATGTGGTCCCTGGGCAAGATCATCAACACCCCGAGGTGGTCAGGGTCTA
CATCGGCTCCTTCTGGTCCCACCCGCTCCTCATCCCCGACAACCGCAAGCTCTTTGAGGCCGAGGAGCAGGACCT
CTTCAAGGACATCCAGTCACTGCCCCGAAACGCCGCCCTCAGGAAGCTCAATGACCTGATCAAGCGGGCACGGCT
GGCCAAGGTTCACGCCTACATCATCAGCTCCCTCAAGAAAGAGATGCCCAATGTCTTTGGTAAAGAGAGCAAAAA
GAAAGAGCTGGTGAACAACCTCGGAGAGATCTACCAGAAGATTGAGCGCGAGCACCAGATCTCCCCTGGGGACTT
CCCGAGCCTCCGCAAGATGCAGGAACTCCTGCAGACCCAGGACTTCAGCAAGTTCCAGGCGCTGAAGCCCAAGCT
GCTGGACACGGTGGATGACATGCTGGCCAACGACATCGCGCGGCTGATGGTGATGGTGCGGCAGGAGGAGTCCCT
GATGCCTTCCCAGGTGGTCAAGGGCGGCGCCTTTGACGGCACCATGAACGGGCCGTTCGGGCACGGCTACGGCGA
GGGGGCCGGCGAGGGCATCGACGACGTGGAGTGGGTGGTGGGCAAGGACAAGCCCACCTACGACGAGATCTTCTA
CACGCTGTCCCCTGTCAACGGCAAGATCACGGGCGCCAACGCCAAGAAGGAGATGGTGAAGTCCAAGCTCCCCAA
CACCGTGCTAGGGAAGATCTGGAAGCTGGCCGACGTGGACAAGGACGGGCTGCTGGACGACGAGGAGTTCGCGCT
GGCCAACCACCTCATCAAGGTCAAGCTGGAGGGCCACGAGCTGCCTGCCGACCTGCCCCCGCACCTGGTGCCGCC
CTCCTCTGCCTGGGGCCATTGAGCCCAGCCTCCAGGGCCCGGGCGCGTTTGCAGGCCAGTGGCCACTGTCCGGGC
TGTGATGGCACCAAGGCAGGTGGAGCACCAGGTACCACACAGCTGGGCTTCCCACCAGGCTTTCCCGCGGGGGTC
TCAGGGAGCTTCTCCCCAGCGCTGCTCGGAGTCTGCAGGAACTGGCCTTGTTCTCCTTAGCCCGTCACTCCATAC
AGTATTAGGTGAGGATGGATGCGGGCGCTGTCCTTGCCGGGAAGTCACTGTTGAAGTTGCAGTGGCTTGTTCACA
CCTGTGGGAAGAGAAGTGAAGACTTTCTCCTTGCATTAAAAAGTCTGAACTGTG

FIGURE 3272A

ACGGGGATCGCCGGCGGGCGGCAAGCGGAGGCGGCCCAGGCCCGGCGGTCTCCGAGATGTCACGATGGCTGTGGC
CATGGTCAAACTGTGTGAAAGAGCGGGTCTGCCGCTACTTGCTGCACCACTACTTAGGTCACTTCTTCCAAGAGC
ACCTCAGCCTGGACCAGCTCAGCCTCGATCTGTACAAGGGCAGCGTTGCCCTGCGAGACATCCACCTGGAAATCT
GGTCTGTGAACGAGGTGCTGGAGTCAATGGAGTCACCGCTGGAGCTGGTGGAAGGCTTCGTGGGCTCCATCGAGG
TGGCCGTGCCCTGGGCTGCTCTGCTCACCGACCACTGCACAGTGCGCGTGTCCGGCCTCCAGCTCACCTTGCAGC
CCCGCCGGGGTCCAGCGCCAGGGGCTGCCGACTCACAGAGCTGGGCCTCATGCATGACCACAAGCCTGCAGCTGG
CCCAGGAGTGTCTGCGGGATGGGCTACCGGAGCCCTCTGAGCCACCACAGCCCCTGGAGGGGCTGGAGATGTTTG
CCCAGACCATTGAGACTGTGCTTCGGAGGATCAAAGTGACCTTCCTGGACACTGTCGTGAGGGTGGAGCACTCTC
CGGGTGATGGGGAACGTGGTGTGGCCGTCGAGGTCCGTGTGCAGAGACTGGAGTACTGTGATGAGGCAGTGCGGG
ACCCAAGCCAGGCGCCGCCGGTGGACGTGCATCAGCCGCCTGCCTTCCTGCACAAGCTGCTGCAGCTGGCAGGGG
TCCGCCTGCACTACGAGGAGCTCCCGGCACAGGAAGAGCCTCCAGAGCCCCCCTTGCAGATCGGCAGCTGCTCAG
GGTACATGGAGCTGATGGTGAAGTTGAAGCAAAATGAGGCCTTCCCTGGCCCCAAGTTGGAGGTGGCGGGACAGC
TGGGCTCCCTGCACCTGCTCCTGACCCCGAGGCAGCTCCAGCAACTTCAGGAACTGCTCAGCGCCGTGAGCCTTA
CAGACCACGAGGGCCTGGCTGACAAGCTGAACAAGAGCCGCCCGCTAGGTGCCGAAGACCTGTGGCTGATTGAGC
AGGACCTGAACCAGCAGCTGCAGGCAGGGGCAGTGGCTGAGCCCCTCAGCCCAGACCCCCTTACCAACCCCCTTC
TCAACCTGGATAACACTGACCTCTTCTTCTCCATGGCTGGCCTCACAAGCAGTGTGGCCTCAGCCCTCTCTGAGC
TCTCCCTCTCCGATGTAGACCTGGCCTCCTCTGTGCGCAGCGACATGGCCTCCCGCCGGCTCTCTGCCCAGGCCC
ACCCAGCTGGCAAGATGGCCCCCAACCCCCTCCTGGACACCATGCGCCCTGACTCGCTGCTGAAGATGACCTTGG
GGGGTGTGACCCTGACCTTGCTTCAGACGTCTGCCCCATCTTCCGGACCACCTGACCTCGCCACGCACTTTTTCA
CCGAGTTTGATGCCACCAAGGATGGGCCCTTCGGTTCCCGAGACTTCCATCACCTTCGACCACGCTTCCAGAGGG
CCTGTCCCTGTAGCCATGTTCGGCTAACGGGCACAGCCGTGCAGCTGTCCTGGGAGCTGCGGACGGGCAGTCGGG
GCCGGCGGACAACCAGCATGGAAGTGCACTTCGGGCAGCTGGAGGTGCTGGAGTGTCTGTGGCCCCGGGGCACCT
CTGAGCCTGAGTACACGGAGATCCTGACCTTTCCTGGTACGCTGGGCTCCCAGGCCTCAGCTCGGCCCTGCGCCC
ATCTGCGCCACACACAGATCCTGCGCCGTGTGCCTAAGAGCCGACCCCGGCGCTCAGTTGCCTGCCATTGCCACT
CAGAACTGGCCCTGGACCTGGCCAACTTCCAGGCGGACGTGGAGCTGGGGGCCCTGGACCGGCTGGCCGCCCTAC
TGCGCCTGGCCACCGTACCTGCTGAGCCTCCAGCCGGCCTGCTGACAGAGCCCCTGCCGGCGATGGAGCAGCAGA
CGGTATTTCGGCTCTCTGCACCCCGGGCCACGCTGCGGCTGCGCTTCCCCATTGCCGACCTGCGGCCTGAGCCGG
ACCCCTGGGCGGGCCAGGCCGTGCGGGCTGAGCAGCTTCGGCTGGAGCTGAGTGAGCCCCAGTTCCGGTCAGAGC
TTAGCAGTGGGCCTGGTCCCCCAGTCCCCACCCACCTGGAACTCACCTGCTCCGACCTACATGGTATCTATGAAG
ATGGAGGGAAGCCACCTGTCCCTTGCCTGCGTGTCTCCAAAGCCCTGGACCCCAAGAGCACTGGGCGCAAGTACT
TCCTGCCCCAGGTAGTGGTGACTGTGAACCCCCAGTCCAGCAGCACACAGTGGGAGGTGGCCCCGGAGAAGGGAG
AGGAACTGGAGCTGTCAGTGGAGAGTCCCTGTGAGCTGCGGGAACCTGAGCCCTCGCCCTTCTCCTCTAAGAGGA
CCATGTATGAGACAGAGGAGATGGTGATCCCTGGAGACCCTGAGGAGATGAGGACGTTCCAGAGCCGGACCCTGG
CACTGTCCCGCTGCAGCCTGGAAGTGATCCTGCCCAGTGTCCACATCTTTCTGCCCAGCAAGGAGGTCTACGAGA
GCATCTACAACAGGATCAACAACGACCTGCTCATGTGGGAGCCTGCAGATCTGCTTCCCACCCCCGACCCCGCCG
CCCAGCCCTCGGGCTTCCCCGGCCCCTCAGGCTTCTGGCACGACAGCTTTAAGATGTGCAAGTCAGCCTTCAAGC
TGGCCAACTGCTTTGATCTCACCCCAGACTCGGACTCGGATGACGAGGATGCCCACTTCTTCTCAGTGGGGGCAT
CAGGTGGCCCACAGGCCGCTGCCCCTGAGGCCCCAAGTCTTCACTTGCAGAGCACCTTCTCTACACTGGTGACAG
TGCTGAAGGGGCGGATCACAGCCCTCTGTGAGACCAAGGATGAGGGTGGGAAGCGGCTGGAGGCTGTGCACGGGG
AGCTGGTGCTGGACATGGAGCACGGTACCCTCTTCAGCGTCTCCCAGTACTGTGGCCAGCCAGGACTTGGCTACT
TCTGTCTGGAAGCTGAAAAGGCAACACTCTACCACCGAGCGGCCGTGGATGACTACCCGCTGCCCAGTCACCTGG
ACCTTCCCAGTTTCGCTCCCCCGGCTCAGCTGGCCCCAACCATCTACCCATCGGAGGAAGGGGTGACCGAGCGGG
GAGCCTCGGGCCGCAAGGGCCAGGGCCGGGGACCCCACATGTTGTCCACTGCTGTGCGCATCCACCTGGACCCCC
ACAAGAATGTGAAGGAGTTCCTGGTGACACTGCGGTTGCACAAAGCCACCTTGCGCCACTACATGGCCCTGCCCG
AGCAGAGCTGGCATTCCCAGTTGTTGGAGTTCCTAGACGTGCTGGATGACCCTGTGCTGGGCTACCTGCCCCCGA
CGGTCATCACCATCCTGCACACACACCTGTTCTCCTGCTCTGTGGACTATAGGCCACTCTACCTCCCAGTGCGTG
TCCTCATCACCGCGGAGACCTTCACTCTCTCCAGCAACATCATCATGGACACCTCCACCTTCCTGCTCAGGTTCA
TCCTCGATGACTCCGCCTTGTACCTGTCCGACAAGTGTGAGGTGGAGACCCTGGACCTGCGGCGAGATTATGTCT

FIGURE 3272B

GTGTTTTGGATGTTGACCTCTTGGAACTTGTGATTAAAACCTGGAAAGGGAGCACCGAGGGCAAACTGAGCCAGC
CACTATTCGAGCTGCGCTGCTCCAACAATGTGGTACACGTGCACAGCTGTGCCGACTCCTGTGCCCTGCTGGTCA
ACCTGCTCCAGTACGTAATGAGCACAGGCGATCTGCACCCCCCACCCCGGCCCCCCAGCCCCACGGAGATCGCCG
GCCAGAAGCTCTCGGAGAGTCCTGCCTCTCTGCCCTCGTGCCCCCCAGTGGAGACGGCCCTCATCAACCAGCGTG
ACCTGGCCGACGCCCTCCTGGACACCGAGCGCAGCCTACGGGAGCTGGCCCAGCCTTCAGGTGGCCACCTCCCTC
AGGCGTCGCCCATCTCCGTCTACCTATTCCCAGGTGAACGGAGTGGGGCCCCACCCCCTTCACCACCTGTCGGGG
GCCCTGCTGGCAGCTTAGGGTCATGCTCAGAGGAGAAGGAAGATGAAAGGGAAGAGGAGGGCGATGGAGACACCC
TGGACAGTGATGAGTTCTGCATCCTTGATGCTCCCGGCCTGGGCATCCCGCCCCGAGATGGGGAGCCTGTGGTGA
CACAGCTGCATCCCGGCCCCATCGTTGTGAGGGACGGTTACTTCTCACGGCCGATCGGCAGCACGGACTTGCTGC
GGGCACCTGCCCATTTCCCAGTGCCCAGCACTCGGGTGGTGCTACGTGAGGTCTCCCTCGTCTGGCACCTCTATG
GGGGCCGAGACTTTGGCCCCCACCCCGGCCACAGGGCAAGAACTGGCCTCTCAGGTCCCAGGAGCTCCCCTTCCC
GCTGCTCTGGCCCCAACCGGCCCCAGAACTCATGGCGCACGCAGGGGGGCAGCGGGCGGCAGCACCATGTCCTCA
TGGAGATCCAGCTGAGCAAGGTAAGCTTCCAGCACGAGGTGTACCCAGCGGAGCCAGCCACAGGCCCTGCGGCCC
CCAGCCAGGAGCTGGAGGAGCGACCGCTGTCCCGTCAGGTGTTCATCGTGCAGGAGCTGGAGGTCCGAGACCGGC
TCGCCTCCTCCCAGATCAACAAGTTCCTGTACCTACACACGAGTGAGCGGATGCCGCGACGTGCCCACTCTAACA
TGCTCACCATCAAAGCGCTGCATGTGGCCCCCACTACCAACCTGGGTGGGCCTGAGTGCTGTCTCCGCGTCTCGC
TGATGCCCCTGCGGCTCAATGTGGACCAGGATGCCCTCTTCTTCCTCAAGGACTTCTTCACTAGTCTGGTGGCCG
GCATCAACCCCGTGGTCCCAGGGGAGACCTCCGCTGAGGCTCGCCCCGAGACTCGAGCCCAGCCCAGCAGCCCCC
TGGAAGGGCAGGCCGAAGGCGTAGAGACCACTGGTTCGCAGGAGGCCCCAGGAGGTGGACACAGCCCCTCCCCTC
CTGACCAGCAGCCCATCTACTTCAGAGAGTTCCGCTTCACGTCTGAGGTCCCCATCTGGCTGGATTACCATGGCA
AGCACGTCACGATGGACCAGGTGGGCACTTTTGCTGGCCTCCTCATCGGCCTGGCCCAACTCAACTGCTCCGAGC
TGAAGCTAAAGCGGCTCTGTTGCAGGCACGGGCTCCTGGGTGTGGACAAGGTGCTGGGCTATGCCCTCAACGAGT
GGCTGCAGGACATCCGCAAGAACCAGCTGCCCGGCCTGCTGGGAGGCGTGGGCCCCATGCACTCGGTTGTCCAGC
TCTTCCAAGGGTTCCGGGACCTGCTGTGGCTGCCCATTGAGCAGTACAGGAAGGATGGCCGCCTCATGCGGGGGC
TGCAGCGAGGGGCTGCCTCCTTTGGCTCATCCACAGCCTCTGCCGCCCTGGAACTCAGCAACCGGTTGGTACAGG
CTATCCAGGCCACAGCTGAGACCGTGTATGACATCCTGTCCCCGGCAGCCCCCGTCTCCCGCTCCCTGCAGGATA
AGCGCTCTGCGCGGAGGCTGCGCAGGGGCCAGCAGCCTGCCGACCTGCGGGAGGGTGTGGCCAAGGCCTACGACA
CAGTGCGAGAGGGCATCTTGGATACAGCTCAGACCATCTGTGACGTGGCATCGCGGGGCCATGAGCAGAAGGGGC
TGACGGGCGCCGTGGGGGGCGTGATCCGCCAGCTGCCCCCGACTGTGGTGAAGCCGCTCATCCTGGCCACGGAGG
CCACGTCCAGCCTGCTCGGGGGCATGCGCAACCAGATTGTCCCCGACGCCCACAAGGACCACGCCCTCAAGTGGC
GCTCGGACAGTGCCCAAGACTGAGCCTGGGGTGCCCGGCACCCAGAGGGTGCTGCCCACCATGCTCCTGAGCCTC
CCAAGAGCTGCAGCCCACGGGCCCGGCCCGGCCTGGCCCTTCAGGGGATGGCCACTGTGAAGGACGCCTTCCCAG
CCTGCCCGTTGCCAATCTGCTGTGAGAGGGGGGCCTCCCTGCCTTGGGGCCTTAGCCCTGGCTCTGCACTTTTCC
TCCGGGGAGAAAGGACACTGCCCCTCCCCCGACCTGGGCCCACACTGCTGCCTTCTCCCAGGACGGAGGCTTTTG
GACCCTCGGACCCCATCCCACTCAGCCAAGTGTCTTTCTGTGTCTGGGGGGAGGAGGGGATGATATCCGTGTGGT
TCGATGTATTATTTTTAAGCTCCGTGAGTGCGTGGGTCAGTGTCTGCATGAAGTGGAATAAACTGCCCACCGCC

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FIGURE 3273

AAGGAGAGAGGGAGGGCGGAGGGCGGAGGGGCGGCGGGAGGAGGGCGGGGAGGAGCGCTCTTCCTGGTTGGGCCC
TGCCCTGAGCTGCCACCGGGAAGCCAGCCTCAGGGACTGCAGCGACCCCCAAACACCCCTCCCCCAGGATGTCGG
AGGAGATCATCACGCCGGTGTACTGCACTGGGGTGTCAGCCCAAGTGCAGAAGCAGCGGGCCAGGGAGCTGGGCC
TGGGCCGCCATGAGAATGCCATCAAGTACCTGGGCCAGGATTATGAGCAGCTGCGGGTGCGATGCCTGCAGAGTG
GGACCCTCTTCCGTGATGAGGCCTTCCCCCCGGTACCCCAGAGCCTGGGTTACAAGGACCTGGGTCCCAATTCCT
CCAAGACCTATGGCATCAAGTGGAAGCGTCCCACGGAACTGCTGTCAAACCCCCAGTTCATTGTGGATGGAGCTA
CCCGCACAGACATCTGCCAGGGAGCACTGGGGGACTGCTGGCTCTTGGCGGCCATCGCCTCCCTCACTCTCAACG
ACACCCTCCTGCACCGAGTGGTTCCGCACGGCCAGAGCTTCCAGAATGGCTATGCCGGCATCTTCCATTTCCAGC
TGTGGCAATTTGGGGAGTGGGTGGACGTGGTCGTGGATGACCTGCTGCCCATCAAGGACGGGAAGCTAGTGTTCG
TGCACTCTGCCGAAGGCAACGAGTTCTGGAGCGCCCTGCTTGAGAAGGCCTATGCCAAGGTAAATGGCAGCTACG
AGGCCCTGTCAGGGGGCAGCACCTCAGAGGGCTTTGAGGACTTCACAGGCGGGGTTACCGAGTGGTACGAGTTGC
GCAAGGCTCCCAGTGACCTCTACCAGATCATCCTCAAGGCGCTGGAGCGGGGCTCCTGCTGGGCTGCTCCATAGA
CATCTCCAGCGTTCTAGACATGGAGGCCATCACTTTCAAGAAGTTGGTGAAGGGCCATGCCTACTCTGTGACCGG
GGCCAAGCAGGTGAACTACCGAGGCCAGGTGGTGAGCCTGATCCGGATGCGGAACCCCTGGGGCGAGGTGGAGTG
GACGGGAGCCTGGAGCGACAGCTCCTCAGAGTGGAACAACGTGGACCCATATGAACGGGACCAGCTCCGGGTCAA
GATGGAGGACGGGGAGTTCTGGATGTCATTCCGAGACTTCATGCGGGAGTTCACCCGCCTGGAGATCTGCAACCT
CACACCCGACGCCCTCAAGAGCCGGACCATCCGCAAATGGAACACCACACTCTACGAAGGCACCTGGCGGCGGGG
GAGCACCGCGGGGGGCTGCCGAAACTACCCAGCCACCTTCTGGGTGAACCCTCAGTTCAAGATCCGGCTGG**ATG**A
GACGGATGACCCGGACGACTACGGGGACCGCGAGTCAGGCTGCAGCTTCGTGCTCGCCCTTATGCAGAAGCACCG
TCGCCGCGAGGCCGCTTCGGCCGCGACATGGAGACTATTGGCTTCGCGGTCTACGAGGTCCCTCCGGAGCTGGTC
GCGAGCCGGCCGTACACTTGAAGCGTGACTTCTTCCTGGCCAATGCGTCTCGGGCGCGCTCAGAGCAGTTCATCA
ACCTGCGAGAGGTCAGCACCCGCTTCCGCCTGCCACCCGGGGAGTATGTGGTGGTGCCCTCCACCTTCGAGCCCA
ACAAGGAGGGCGACTTCGTGCTGCGCTTCTTCTCAGAGAAGAGTGCTGGGACTGTGGAGCTGGATGACCAGATCC
AGGCCAATCTCCCCGATGAGCAAGTGCTCTCAGAAGAGGAGATTGACGAGAACTTCAAGGCCCTCTTCAGGCAGC
TGGCAGGGGAGGACATGGAGATCAGCGTGAAGGAGTTGCGGACAATCCTCAATAGGATCATCAGCAAACACAAAG
ACCTGCGGACCAAGGGCTTCAGCCTAGAGTCGTGCCGCAGCATGGTGAACCTCATGGATCGTGATGGCAATGGGA
AGCTGGGCCTGGTGGAGTTCAACATCCTGTGGAACCGCATCCGGAATTACCTGTCCATCTTCCGGAAGTTTGACC
TGGACAAGTCGGGCAGCATGAGTGCCTACGAGATGCGGATGGCCATTGAGTCGGCAGGCTTCAAGCTCAACAAGA
AGCTGTACGAGCTCATCATCACCCGCTACTCGGAGCCCGACCTGGCGGTCGACTTTGACAATTTCGTTTGCTGCC
TGGTGCGGCTAGAGACCATGTTCCGATTTTTCAAAACTCTGGACACAGATCTGGATGGAGTTGTGACCTTTGACT
TGTTTAAGTGGTTGCAGCTGACCATGTTTGCA**TGA**GGCAGGGACTCGGTCCCCCTTGCCGTGCTCCCCTCCCTCC
TCGTCTGCCAAGCCTCGCCTCCTACCACACCACACCAGGCCACCCCAGCTGCAAGTGCCTTCCTTGGAGCAGAGA
GGCAGCCTCGTCCTCCTGTCCCCTCTCCTCCCAGCCACCATCGTTCATCTGCTCCGGGCAGAACTGTGTGGCCCC
TGCCTGTGCCAGCCATGGGCTCGGGATGGACTCCCTGGGCCCCACCCATTGCCAAGCCAGGAAGGCAGCTTTCGC
TTGTTCCTGCCTCGGGACAGCCCCGGGTTTCCCCAGCATCCTGATGTGTCCCCTCTCCCCACTTCAGAGGCCACC
CACTCAGCACCACCGGCCTGGCCTTGCCTGCAGACTATAAACTATAACCACTAGCTCGACACAGTCTGCAGTCCA
GGCGTGTGGAGCCGCCTCCCGGCTCGGGGAGGCCCCGGGGCTGGGAACGCCTGTGCCTTCCTGCGCCGAAGCCAA
CGCCCCCTCTGTCCTTCCCTGGCCCTGCTGCCGACCAGGAGCTGCCCAGCCTGTGGGCGGTCGGCCTTCCCTCCT
TCGCTCCTTTTTTATATTAGTGATTTTAAAGGGGACTCTTCAGGGACTTGTGTACTGGTTATGGGGGTGCCAGAG
GCACTAGGCTTGGGGTGGGGAGGTCCCGTGTTCCATATAGAGGAACCCCAAATAATAAAAGGCCCCACATCTGTC
TGTG

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FIGURE 3274

GTTCCGGTTCGCAGGGGGTGGGGAGTGTTGTTAACCGGAGGGGCAGCCGCAGTCGCGCGGATTGAGCGGGCTCGC
GGCGCTGGGTTCCTGGTCTCCGGGCCAGGGCAATGTTCCGCACGGCAGTGATGATGGCGGCCAGCCTGGCGCTGA
CCGGGGCTGTGGTGGCTCACGCCTACTACCTCAAACACCAGTTCTACCCCACTGTGGTGTACCTGACCAAGTCCA
GCCCCAGCATGGCAGTCCTGTACATCCAGGCCTTTGTCCTTGTCTTCCTTCTGGGCAAGGTGATGGGCAAGGTGT
TCTTTGGGCAACTGAGGGCAGCAGAGATGGAGCACCTTCTGGAACGTTCCTGGTACGCCGTCACAGAGACTTGTC
TGGCCTTCACCGTTTTTCGGGATGACTTCAGCCCCCGCTTTGTTGCACTCTTCACTCTTCTTCTCTTCCTCAAAT
GTTTCCACTGGCTGGCTGAGGACCGTGTGGACTTTATGGAACGCAGCCCCAACATCTCCTGGCTCTTTCACTGCC
GCATTGTCTCTCTTATGTTCCTCCTGGGCATCCTGGACTTCCTCTTCGTCAGCCACGCCTATCACAGCATCCTGA
CCCGTGGGGCCTCTGTGCAGCTGGTGTTTGGCTTTGAGTATGCCATCCTGATGACGATGGTGCTCACCATCTTCA
TCAAGTATGTGCTGCACTCCGTGGACCTCCAGAGTGAGAACCCCTGGGACAACAAGGCTGTGTACATGCTCTACA
CAGAGCTGTTTACAGGCTTCATCAAGGTTCTGCTGTACATGGCCTTCATGACCATCATGATCAAGGTGCACACCT
TCCCACTCTTTGCCATCCGGCCCATGTACCTGGCCATGAGACAGTTCAAGAAAGCTGTGACAGATGCCATCATGT
CTCGCCGAGCCATCCGCAACATGAACACCCTGTATCCAGATGCCACCCCAGAGGAGCTCCAGGCAATGGACAATG
TCTGCATCATCTGCCGAGAAGAGATGGTGACTGGTGCCAAGAGACTGCCCTGCAACCACATTTTCCATACCAGCT
GCCTGCGCTCCTGGTTCCAGCGGCAGCAGACCTGCCCCACCTGCCGTATGGATGTCCTTCGTGCATCGCTGCCAG
CGCAGTCACCACCACCCCCGGAGCCTGCGGATCAGGGGCCACCCCCTGCCCCCCACCCCCCACCACTCTTGCCTC
AGCCCCCCAACTTCCCCCAGGGCCTCCTGCCTCCTTTTCCTCCAGGCATGTTCCCACTGTGGCCCCCCATGGGCC
CCTTTCCACCTGTCCCGCCTCCCCCCAGCTCAGGAGAGGCTGTGGCTCCTCCATCCACCAGTGCAGCCCTTTCTC
GGCCCAGTGGAGCAGCTACAACCACAGCTGCTGGCACCAGTGCTACTGCTGCTTCTGCCACAGCATCTGGCCCAG
GCTCTGGCTCTGCCCCAGAGGCTGGCCCTGCCCCTGGTTTCCCCTTCCCTCCTCCCTGGATGGGTATGCCCCTGC
CTCCACCCTTTGCCTTCCCCCCAATGCCTGTGCCCCCTGCGGGCTTTGCTGGGCTGACCCCAGAGGAGCTACGAG
CTCTGGAGGGCCATGAGCGGCAGCACCTGGAGGCCCGGCTGCAGAGCCTGCGTAACATCCACACACTGCTGGACG
CCGCCATGCTGCAGATCAACCAGTACCTCACCGTGCTGGCCTCCTTGGGGCCCCCCCGGCCTGCCACTTCAGTCA
ACTCCACTGAGGAGACTGCCACTACAGTTGTTGCTGCTGCCTCCTCCACCAGCATCCCTAGCTCAGAGGCCACGA
CCCCAACCCCAGGAGCCTCCCCACCAGCCCCTGAAATGGAAAGGCCTCCAGCTCCTGAGTCAGTGGGCACAGAGG
AGATGCCTGAGGATGGAGAGCCCGATGCAGCAGAGCTCCGCCGGCGCCGCCTGCAGAAGCTGGAGTCTCCTGTTG
CCCACTGACACTGCCCCAGCCCAGCCCCAGCCTCTGCTCTTTTGAGCAGCCCTCGCTGGAACATGTCCTGCCACC
AAGTGCCAGCTCCCTCTCTGTCTGCACCAGGGAGTAGTACCCCCAGCTCTGAGAAAGAGGCGGCATCCCCTAGGC
CAAGTGGAAAGAGGCTGGGGTTCCCATTTGACTCCAGTCCCAGGCAGCCATGGGGATCTCGGGTCAGTTCCAGCC
TTCCTCTCCAACTCTTCAGCCCTGTGTTCTGCTGGGGCCATGAAGGCAGAAGGTTTAGCCTCTGAGAAGCCCTCT
TCTTCCCCCACCCCTTTCCAGGAGAAGGGGCTGCCCCTCCAAGCCCTACTTGTATGTGCGGAGTCACACTGCAGT
GCCGAACAGTATTAGCTCCCGTTCCCAAGTGTGGACTCCAGAGGGGCTGGAGGCAAGCTATGAACTTGCTCGCTG
GCCCACCCCTAAGACTGGTACCCATTTCCTTTTCTTACCCTGATCTCCCCAGAAGCCTCTTGTGGTGGTGGCTGT
GCCCCCTATGCCCTGTGGCATTTCTGCGTCTTACTGGCAACCACACAACTCAGGGAAAGGAATGCCTGGGAGTGG
GGGTGCAGGCGGGCAGCNNTGNGGGNCCNNGCNCCGCCCCTCCCCCCAGGCCCCTTTCCTCTGCAGCTTCTCAAG
TGAGACTGACCTGTCTCACCCAGCAGCCACTGCCCAGCCGCACTCCAGGCAAGGGCCAGTGCGCCTGCTCCTGAC
CACTGCAATCCCAGCGCCCAAGGAAGGCCACTTCTCAACTGGCAGAACTTCTGAAGTTTAGAATTGGAATTACTT
CCTTACTAGTGTCTTTTGGCTTAAATTTTGTCTTTTGAAGTTGAATGCTTAATCCCGGGAAAGAGGAACAGGAGT
GCCAGACTCCTGGTCTTTCCAGTTTAGAAAAGGCTCTGTGCCAAGGAGGGACCACAGGAGCTGGGACCTGCCTGC
CCCTGTCTTTTCCCCTTGGTTTTGTGTTACAAGAGTTGTTGGAGACAGTTTCAGATGATTATTTAATTTGTAAAT
ATTGTACAAATTTTAATAGCTTAAATTGTATATACAGCCAAATAAAAACTTGCATTAAC

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FIGURE 3275

GTAGCAGGTAAAGATGGCAGCTACCATGTTCCGGGCTACGCTGCGGGGATGGAGAACCGGTGTCCAGCGGGGCTG
CGGGCTACGGCTGTTGAGCCAGACCCAGGGCCCTCCAGATTACCCCAGGTTTGTGGAGTCTGTGGATGAATATCA
GTTTGTGGAGCGCCTGTTACCGGCTACCAGGATCCCAGATCCCCCAAAGCATGAACATTATCCTACCCCTAGTGG
CTGGCAGCCTCCCAGAGACCCCCCACCCAACCTGCCTTACTTTGTACGACGCTCTCGGATGCACAACATCCCCGT
CTACAAGGACATCACGCATGGCAACCGGCAGATGACTGTGATCCGGAAAGTGGAAGGGGACATCTGGGCCCTGCA
GAAAGACGTGGAAGATTTTCTGAGCCCGCTGCTGGGGAAGACACCTGTCACCCAGGTCAATGAGGTGACAGGTAC
CCTACGGATCAAGGGCTACTTTGACCAGGAGCTTAAAGCCTGGCTCTTGGAGAAAGGCTTCTGAGGCCCAGCCGA
GCAGCCTGCTTGTCAGCATGCCCTGTGGATCAAGTCTAGGGGGCCTCAGGAGGAGGGAGGTGGGTGTTGGAGCCC
CTGAGACAGGGGATACAGAAACTAGGGCTAAAGGACTTTGGGGTCAGGCCTTGCTTGCATAAAGGAGAAAACAAC
TCTATGTACATGCTGGGGGAGAGTGCCTAATGTGGGAGACCAAATAGGGATCACCAGGCTAATGGGGGGCGTCAG
CAGCTTTCTCTCCCTCCTATCTTGGCCTGTTCTTTTTTGTTTTTTGAGACGGAGTCTCACTCTGTTGCCCAGGGT
GGAGTGCAGTGGCATGATCTTGGCTCACTGCAACTTCCACCTCTGGGATCAAGGGATTCTCCTGCCTCAGCCTCT
TGAGTAGCTGGGATTACAGGCGCCCACCACCACAGCCTGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCAC
CATGTTGGCCAGGCTGGTCTCAAACTCCTGACTCGAAGTGATCCGCCCACCTTGGCCTCCCAAAGCGTTGGGATT
ATAGGCATGAGCCATGTGCCTGGTCCACCTTGGCCTGTTTTGTTTTTCTTTCCTTGGGCTCAGCAATTCAAATTC
TAGTTGTTATTTGGTGGAAGCAGTAGCCCAACCCCAGTTTAGGGGAAGGTAGCACAGGGCAGAGCCACTGGGCAC
TTTGTTTCCTTGGCCCTCCGAAGCTCACTGTTGCAAATACCCCCAAGCCTTTGCTCTAGGCCAGATCTTGTTTGG
TGCAGGTGATGGAGAACACAGATGACTCGGGCATGGGTCTTGGAGATCTTCTGTTCAAAGTACAGTGCTGGCACT
GGGGCACAGAGTGCCCACGTTAGCCCCGGGCTCTGATAGAGAGGTAGGAGGCACGTTCTTGGTCACTGTTCCATT
GCAGACCAGACTTGCTGGCCTGACCACAAGGGAGTGGCTGGGAACTCACAGCCAGCATAGGGACATCCCCCTGCA
GCCTTCTGACCTGCAATCAAGGCTGGGGAGGGGTTTGCAGGCAGGAATATGCTGACCTTTCACCCTGCCATCCCA
TCCCAACCCCAGCTCACTAGCCTTCATATATGCCTTATACTTGGAGTCACAGGGGCCAAAGGCCTGAGACCCCAC
CCTGCCCCCAAACTGGCTAAGACAGCTTTCAGTTCCTGACTCCCCAACTTGGTCTCTGCCCTGAAGCAGGGCACT
GAACTCTGGGCTGCTTCTCTGTGTGTAAAATGGGCACATCTTCCTAATCTGTTAATGGTCAGTGGTGTCCCCAAG
GATAGTGCTGGCTTCCATGGAAACCCTCACTCCTGGAGATTCCATTCCATTTTCAAGTGTACAGCCACAGCAAGG
AGCCCGACACTGATTTGATCGATTCTGTGACACAAACCCCACCAATTGTTAATGCAAGTTTTTATTTGGCTGTAT
ATACAATTTAAGCTATTAAAATTTGTACAATATTTACAAATTAAA

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FIGURE 3276

CAGTGACGTGACACGCAGCCCACGGTCTGTACTGACGCGCCCTCGCTTCTTCCTCTTTCTCGACTCCATCTTCGC
GGTAGCTGGGACCGCCGTTCAGTCGCCAATATGCAGCTCTTTGTCCGCGCCCAGGAGCTACACACCTTCGAGGTG
ACCGGCCAGGAAACGGTCGCCCAGATCAAGGCTCATGTAGCCTCACTGGAGGGCATTGCCCCGGAAGATCAAGTC
GTGCTCCTGGCAGGCGCGCCCCTGGAGGATGAGGCCACTCTGGGCCAGTGCGGGGTGGAGGCCCTGACTACCCTG
GAAGTAGCAGGCCGCATGCTTGGAGGTAAAGTCCATGGTTCCCTGGCCCGTGCTGGAAAAGTGAGAGGTCAGACT
CCTAAGGTGGCCAAACAGGAGAAGAAGAAGAAGACAGGTCGGGCTAAGCGGCGGATGCAGTACAACCGGCGC
TTTGTCAACGTTGTGCCCACCTTTGGCAAGAAGAAGGGCCCCAATGCCAACTCTTAAGTCTTTTGTAATTCTGGC
TTTCTCTAATAAAAAAGCCACTTAGTTCAGTC

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FIGURE 3277

GTCCAGGCAGGTGCAGGCGCCGCGGGGCCGGATCCTCCGCGCGGCCGAGTCCATCTCCTGGGAAATGGGGCGGAC
AGTGTTTCCTTGACTGACTATTGTGAGCGCCCTCTCTCTCCGGCGGAGCGGAGACC**ATG**GCCCCCACTCAGGGCC
CCCGGGCCCCGCTGGAATTCGGAGGGCCCCTGGGCGCCGCGGCTCTGCTACTGCTGCTGCCCGCCACCATGTTCC
ACCTGCTCCTGGCGGCCCGTTCGGGCCCCGCGCGCCTGCTGGGTCCACCCGCGTCCCTGCCGGGGCTGGAGGTGC
TGTGGAGCCCACGGGCGCTGCTGCTGTGGCTCGCCTGGCTCGGCCTGCAGGCGGCGCTCTACCTACTGCCGGCGC
GCAAGGTGGCCGAGGGGCAGGAATTGAAGGACAAGAGTCGCCTGCGCTATCCTATTAACGGCTTCCAGGCCCTGG
TGCTGACAGCCCTGTTGGTGGGGCTGGGGATGTCAGCGGGGCTGCCTCTGGGGGCGCTCCCGGAAATGCTCCTGC
CCTTGGCGTTTGTCGCCACCCTCACCGCTTTCATCTTCAGCCTCTTTCTCTACATGAAGGCGCAGGTAGCCCCAG
TTTCGGCCCTGGCACCTGGGGGGAACTCAGGCAATCCGATTTACGACTTTTTTCTGGGACGAGAGCTCAACCCTC
GTATCTGTTTCTTCGACTTCAAATATTTCTGTGAACTGCGACCCGGCCTCATCGGCTGGGTCCTCATCAACCTGG
CCCTGTTGATGAAGGAGGCAGAGCTTCGAGGCAGTCCCTCACTGGCCATGTGGCTGGTCAATGGCTTCCAGTTGC
TCTACGTGGGTGATGCCCTCTGGCACGAGGAGGCCGTCCTCACCACCATGGATATCACACATGACGGGTTTGGCT
TCATGCTGGCGTTTGGGGACATGGCCTGGGTGCCCTTCACCTACAGCCTGCAGGCCCAGTTCCTGCTGCACCACC
CGCAGCCCCTGGGGGTTGCCCATGGCCTCTGTCATCTGCCTCATCAATGCTACTGGTTACTACATCTTCCGTGGGG
CGAATTCCCAGAAAAACACTTTCCGAAAGAATCCTTCTGACCCCAGAGTGGCTGGGCTTGAGACCATCTCTACAG
CCACAGGGCGGAAACTGCTGGTGTCTGGGTGGTGGGGTATGGTCCGCCATCCCAACTATCTTGGAGACCTCATCA
TGGCTCTGGCTTGGTCCTTGCCCTGCGGGGTGTCACACCTGCTGCCCTACTTCTACCTCCTCTACTTCACCGCGC
TGCTGGTGCACCGTGAGGCCCGGGATGAGCGGCAGTGCCTGCAGAAGTACGGCCTGGCCTGGCAGGAGTACTGCC
GGCGTGTGCCTTACCGCATCATGCCCTACATCTAC**TGA**AGCGGCTCCACCACCCCAGGTGGGGGCATGTGCCCAC
TCATCCACCAGCACACCCAGGACCAGGAGCCTCGACACACTTGGGACTCAAGGGCTTGCACCCCACCCAGCCCTG
AGGATGAACAACCTCAGAGAAGAGGTGGTTTAGAGCAAGGAAAAAAATGAAACCAGTGACC

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FIGURE 3278

GGAAGTGCCTCCTCCCCGTCCCCTTCCTTTCCAGCCTCACGCCCGTGGGCTGCAGTTGGAACGATGGCGGCGGCA
GCTGCCGCCGGGCCTAGCCCGGGGTCTGGACCTGGGGACTCCCCAGAAGGGCCCGAGGGGGAGGCTCCGGAGCGT
CGGCGGAAGGCGCACGGGATGCTGAAGCTTTACTACGGCCTCTCGGAAGGGGAGGCGGCGGGACGCCCCGCGGGG
CCCGACCCCCTGGACCCGACTGATCTGAACGGGGCGCACTTCGACCCGGAAGTTTACCTAGACAAGCTGCGTAGA
GAGTGCCCTCTGGCCCAGTTGATGGACAGTGAGACGGACATGGTGCGGCAGATCCGGGCTCTAGACAGCGACATG
CAGACCCTGGTCTATGAGAACTACAACAAGTTCATCTCAGCCACAGACACCATCCGGAAGATGAAGAACGATTTC
CGGAAGATGGAGGATGAGATGGACCGGCTGGCCACCAACATGGCAGTGATCACCGACTTCAGCGCTCGCATCAGC
GCCACGCTGCAGGACCGCCACGAGCGCATCACCAAGCTGGCAGGTGGGCGCTGCCGGGCAGGGCCTGCAGTGGGC
CTTTCCTGGGGCTCTGGGGCTAACGTCACCCTCCGTCCCCCAGGGGTCCACGCGCTGCTGCGGAAGCTGCAGTTC
CTCTTTGAGCTGCCCTCGCGCCTCACCAAGTGCGTGGAACTGGGCGCCTATGGGCAGGCGGTGCGCTACCAGGGC
CGCGCGCAGGCCGTGCTGCAGCAGTACCAACACCTGCCCTCGTTCCGCGCCATCCAGGACGACTGCCAGGTCATC
ACGGCCCGCCTGGCCCAGCAGCTGCGGCAGCGCTTTAGGGAGGGCGGCTCAGGCGCCCCGGAGCAGGCAGAGTGC
GTGGAGCTGCTGCTGGCCCTGGGCGAGCCTGCGGAGGAGCTGTGCGAGGAGTTCCTGGCGCACGCCCGCGGCCGG
CTGGAGAAGGAGCTGAGAAACCTGGAGGCCGAGCTGGGGCCCTCACCTCCGGCTCCCGACGTGTTAGAGTTCACC
GACCATGGAGGCAGTGGCTTCGTGGGCGGCCTCTGCCAGGTGGCGGCGGCCTACCAGGAGCTGTTTGCGGCCCAG
GGCCCAGCAGGTGCCGAGAAGCTGGCGGCCTTCGCCCGGCAGCTGGGCAGCCGCTATTTTGCGCTGGTGGAGCGG
CGGCTGGCGCAGGAGCAGGGTGGTGGTGACAACTCACTGCTGGTGCGGGCGCTGGACCGCTTCCACCGGCGCTTG
CGGGCTCCCGGGGCCCTGCTGGCCGCTGCCGGGCTCGCAGACGCTGCCACGGAGATCGTGGAACGAGTGGCCCGC
GAGCGCCTGGGCCACCACCTGCAGGGTCTCCGGGCGGCCTTCCTGGGCTGCCTGACAGACGTCCGCCAGGCGCTG
GCAGCACCTCGCGTGGCTGGGAAGGAGGGCCCTGGCCTGGCCGAGTTGCTGGCCAATGTGGCCAGCTCCATCCTG
AGCCACATTAAGGCCTCTCTGGCAGCAGTGCACCTTTTCACCGCCAAAGAGGTGTCCTTCTCCAACAAGCCCTAC
TTCCGGGGTGAGTTCTGCAGTCAGGGTGTCCGTGAGGGCCTCATCGTGGGCTTCGTCCACTCTATGTGCCAGACG
GCTCAGAGCTTCTGCGACAGCCCTGGGGAGAAGGGGGGTGCCACACCACCTGCCCTGCTCCTGCTGCTCTCCCGC
CTCTGCCTGGACTACGAGACGGCCACCATCTCCTACATCCTCACTCTCACTGATGAACAGTTTCTGGTGCAGGAT
CAGTTCCCAGTGACGCCCGTGAGCACGCTGTGTGCAGAGGCCAGGGAAACGGCGCGGCGGCTGCTGACCCACTAC
GTGAAGGTGCAGGGCCTGGTCATATCACAGATGCTGCGCAAGAGCGTGGAGACTCGCGACTGGCTCAGCACTCTG
GAGCCCCGGAATGTGCGGGCCGTCATGAAGCGGGTGGTGGAGGATACCACCGCCATCGACGTGCAGGTGGGGCTC
CTGTACGAAGAGGGTGTTCGCAAGGCCCAGAGCAGCGACTCCAGCAAGAGGACTTTCTCCGTGTACAGCAGCTCT
CGGCAGCAGGGCCGCTACGCCCCCAGCTATACCCCCAGTGCCCCGATGGACACCAACCTCTTGAGCAATATCCAG
AAGCTATTCTCTGAACGTATTGATGTGTTCAGCCCTGTGGAGTTCAACAAGGTGTCGGTGCTGACCGGCATCATC
AAGATCAGCCTGAAGACGCTGCTGGAGTGTGTGCGGCTGCGCACCTTTGGGCGCTTCGGGCTGCAGCAGGTGCAA
GTGGACTGCCACTTTCTGCAGCTCTACCTGTGGCGTTTTGTGGCCGACGAAGAACTCGTGCACTTGCTGCTGGAC
GAAGTGGTGGCCTCTGCTGCCCTGCGCTGCCCAGACCCTGTGCCCATGGAGCCCAGTGTGGTTGAGGTCATCTGC
GAGCGCGGCTAGGCGCAGCCGCTGCCATGCACCGGTCTGTCCCTGCACCCCATGGCACCCAGGATCTGGTCTCGG
TGGTCCTTCCCCGCAGGCAGGTGTCAGGACCGGCCTAATAAACATGTGTGGCCTCCTCCTCTCGCTTGCTGGGCG
GGCCTTTCCGGGGGCGGGGTTTTGAAGCTGAGGCTTCTGAGGCGCCCGCGTCGGGTCCGCCCCCGAGCGCCGATT
GGCTGGTGTGCTGGGCCCAGCATGGGCAGGGGGCGGTTCCACTTAAAAACCCTGGGACGA

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FIGURE 3279

GAGGGATAATCGGGGCGGCCGGGGCTGAAGGGAGAGGCGCAGGAGCCCTGGGGAGAGTGGTCCCTGCCCTTCCGC
GCCTCGAGCCATCGCTACCGCCCTTCGGAACCAGTGCAGCGGCCGATCAGTAAACACAGAGACTGGGGATCGATC
ATGGGGCTTTGTAAGTGCCCCAAGAGAAAGGTGACCAACCTGTTCTGCTTCGAACATCGGGTCAACGTCTGCGAG
CACTGCCTGGTAGCCAATCACGCCAAGTGCATCGTCCAGTCCTACCTGCAATGGCTCCAAGATAGCGACTACAAC
CCCAATTGCCGCCTGTGCAACATACCCCTGGCCAGCCGAGAGACGACCCGCCTTGTCTGCTATGATCTCTTTCAC
TGGGCCTGCCTCAATGAACGTGCTGCCCAGCTACCCCGAAACACGGCACCTGCCGGCTATCAGTGCCCCAGCTGC
AATGGCCCCATCTTCCCCCCAACCAACCTGGCTGGCCCCGTGGCCTCCGCACTGAGAGAGAAGCTGGCCACAGTC
AACTGGGCCCGGGCAGGACTGGGCCTCCCTCTGATCGATGAGGTGGTGAGCCCAGAGCCCGAGCCCCTCAACACG
TCTGACTTCTCTGACTGGTCTAGTTTTAATGCCAGCAGTACCCCTGGACCAGAGGAGGTAGACAGCGCCTCTGCT
GCCCCAGCCTTCTACAGCCAGGCCCCCCGGCCCCCAGCTTCCCCAGGCCGGCCCGAGCAGCACACAGTGATCCAC
ATGGGCAATCCTGAGCCCTTGACTCACGCCCCTAGGAAGGTGTATGATACGCGGGATGATGACCGGACACCAGGC
CTCCATGGAGACTGTGACGATGACAAGTACCGACGTCGGCCGGCCTTGGGTTGGCTGGCCCGGCTGCTAAGGAGC
CGGGCTGGGTCTCGGAAGCGGCCGCTGACCCTGCTCCAGCGGGCGGGGCTGCTGCTACTCTTGGGACTGCTGGGC
TTCCTGGCCCTCCTTGCCCTCATGTCTCGCCTAGGCCGGGCCGCAGCTGACAGCGATCCCAACCTGGACCCACTC
ATGAACCCTCACATCCGCGTGGGCCCCTCC**TGA**GCCCCCTTGCTTGTGGCTAGGCCAGCCTAGGATGTGGGTTCT
GTGGAGGAGAGGCGGGGTAATGGGGAGGCTGAGGGCACCTCTTCACTGCCCCTCTCCCTCAAGCCTAAGACACTA
AGACCCCAGACCCAAAGCCAAGTCCACCAGAGTGGCTGCAGGCCAGGCCTGGAGTCCCCGTGGGTCAAGCATTTG
TCTTGACTTGCTTTCCTCCCGGGTCTCCAGCCTCCGACCCCTCGCCCCATGAAGGAGCTGGCAGGTGGAAATAAA
CAACAACTTTATTAAAAC

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FIGURE 3280

GCAGCGAGTGGCCTTCCCGGTTGGCGCGCGCCCGGGGCGGCGGCGCTGGAGGAGCTCGAGACGGAGCCTAAGTTA
TGTCTGGGAGGCGAACGCGGTCCGGAGGAGCCGCTCAGCGCTCCGGGCCAAGGGCCCCATCTCCTACTAAGCCTC
TGCGGAGGTCCCAGCGGAAATCAGGCTCTGAACTCCCGAGCATCCTCCCTGAAATCTGGCCGAAGACACCCAGTG
CGGCTGCAGTCAGAAAGCCCATCGTCTTAAAGAGGATCGTGGCCCATGCTGTAGAGGTCCCAGCTGTCCAATCAC
CTCGCAGGAGCCCTAGGATTTCCTTTTTCTTGGAGAAAGAAAACGAGCCCCCTGGCAGGGAGCTTACTAAGGAGG
ACCTTTTCAAGACACACAGCGTCCCTGCCACCCCCACCAGCACTCCTGTGCCGAACCCTGAGGCCGAGTCCAGCT
CCAAGGAAGGAGAGCTGGACGCCAGAGACTTGGAAATGTCTAAGAAAGTCAGGCGTTCCTACAGCCGGCTGGAGA
CCCTGGGCTCTGCCTCTACCTCCACCCCAGGCCGCCGGTCCTGCTTTGGCTTCGAGGGGCTGCTGGGGGCAGAAG
ACTTGTCCGGAGTCTCGCCAGTGGTGTGCTCCAAACTCACCGAGGTCCCCAGGGTTTGTGCAAAGCCCTGGGCCC
CAGACATGACTCTCCCTGGAATCTCCCCACCACCCGAGAAACAGAAACGTAAGAAGAAGAAAATGCCAGAGATCT
TGAAAACGGAGCTGGATGAGTGGGCTGCGGCCATGAATGCCGAGTTTGAAGCTGCTGAGCAGTTTGATCTCCTGG
TTGAATGAGATGCAGTGGGGGGTGCACCTGGCCAGACTCTCCCTCCTGTCCTGTACATAGCCACCTCCCTGTGGA
GAGGACACTTAGGGTCCCCTCCCCTGGTCTTGTTACCTGTGTGTGTGCTGGTGCTGCGCATGAGGACTGTCTGCC
TTTGAGGGCTTGGGCAGCAGCGGCAGCCATCTTGGTTTTAGGAAATGGGGCCGCCTGCCCAGCCACTCACTGGTG
TCCTGTCTCTTGTCGTCCTGTCCTTCCTATCTCCCCAAAGTACCATAGCCAGTTTCCAGATGGGCCACAGACTGG
GGAGGAGAATCAGTGGCCCAGCCAGAAGTTAAAGGGCTGAGGGTTGAGGTGAGAGGCACCTCTGCTCTTGTTGGG
AGGGGTGGCTGCTTGGAAATAGGCCCAGGGCTCTGCCAGCCTCGGCCTCTCCCTCCTGAGTTGCCTTCTGTTGGT
GGCTTTCTTCTTGAACCCACCTGTGTAAAGAGGTTTTCAGTTCCGTGGGTTTCCCCTTTGATTCTGTAAATAGTC
CCAGAGAGAATTCGTGGGCTGAGGGCAATTCTGTCTTGGAGGAAGAAGCTGGACATTCAGCCTGTGGAGTCTGAG
TTTTGAAGGATGTAGGGAGCCTTAGTTGGGTCTCAGACCATAAGTGTGTACTACACAGAAGCTGTGTTTTCTAGT
TCTGGTCTGCTGTTGAGATGTTTGGTAAATGCCAGGTTGATAGGGCGCTGGCTGCTTGGAGCAAAGGGTGCATTT
CAGGGTGTGGCCACCAGGTGCTGTGAGTTTCTGTGGCTCATGGCCTCTGGGCTGGTCCCTTGCACAGGGCCCACG
CTGGAGTCTTACCACTCTGCTGCAGGGGTGGAAGGTGGCCCCTCTTGTCACCCATACCCATTTCTTACAAAATAA
GTTACACCGAGTCTACTTGGCCCTAGAAGAGAAAGTTGAAGAGTCCCAGACCTACTAGCATTTTGCAACTATGCT
TGTAAAGTCCTCGGAAAGTTTCCTCGCGTACCAGACAGCGGCGGGGGCTGATAGCAATTTTAGTTTTTGGCCTCC
CTATCCTCTCACATGAGAACACTGCCTGGATGCATCTCATGATCTCTGGAGAATTTCCCCATCTTTCTCTTCTTT
CCATCGTGTGGATTCAATAGTGTGGATTTGAAGGCTGCCCTGCCCCCGACTCTCCTGCCGCACCCCTGGCCATTG
TACCTTTTGATGTTTAGAAGTTCGTGGAAGTAGACGCTGAGGTGTGCAGAGGAGCTGGTGGATAACAGAGAATGC
CAGGGAAGATGAGTGCTGGGTCAGGGTACTTGGATGAAACGGTGCAGGCCAGGCGGGCCCTAATAAAACCCTCTG
CCAGGTCTGGGAGTCCCAGGCCATCTGCTCAACGCTCTGTGGTTTGTCAGACCTGCAAGCAAGCCCCCTGCTGGG
GAAGCCTAGGTGTCCTTGAGCTGAACCGCACTGAAGAACTCTTGTCCTCACTGGCTGATGCAGCAGAACTCTTGG
GAAATGTCTTAGTCCTGCAGAATCAGGAGTCACCAGATGATGCAGAGTTGAGATCATCATTGCAAAGTTCTCTGT
TCCTGAGGAACTAAATTTAAGGAAAAAATGGGATTTTGTTTTAGAGTTGGAAAAAAAGCCTGATTAAAGAGTTTC
TGCCTGTT

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FIGURE 3281

GTGCACGATCTGATTTTCTGGAGAGATGTGAAGAAGACTGGGTTTGTCTTTGGCACCACGCTGATCATGCTGCTT
TCCCTGGCAGCTTTCAGTGTCATCAGTGTGGTTTCTTACCTCATCCTGGCTCTTCTCTCTGTCACCATCAGCTTC
AGGATCTACAAGTCCGTCATCCAAGCTGTACAGAAGTCAGAAGAAGGCCATCCATTCAAAGCCTACCTGGACGTA
GACATTACTCTGTCCTCAGAAGCTTTCCATAATTACATGAATGCTGCCATGGTGCACATCAACAGGGCCCTGAAA
CTCATTATTCGTCTCTTTCTGGTAGAAGATCTGGTTGACTCCTTGAAGCTGGCTGTCTTCATGTGGCTGATGACC
TATGTTGGTGCTGTTTTTAACGGAATCACCCTTCTAATTCTTGCTGAACTGCTCATTTTCAGTGTCCCGATTGTC
TATGAGAAGTACAAGACCCAGATTGATCACTATGTTGGCATCGCCCGAGATCAGACCAAGTCAATTGTTGAAAAG
ATCCAAGCAAAACTCCCTGGAATCGCCAAAAAAAAGGCAGAATAAGTACATGGAAACCAGAAATGCAACAGTTAC
TAAAACACCATTTAATAGTTATAACGTCGTTACTTGTACTATGAAGGAAAATACTCAGTGTCAGCTTGAGCCTGC
ATTCCAAGCTTTTTTTTTAATTTGGTGTTTTCTCCCATCCTTTCCCTTTAACCCTCAGTATCAAGCACAAAAATT
GATGGACTGATAAAAGAACTATCTTAGAACTCAGAAGAAGAAAGAATCAAATTCATAGGATAAGTCAATACCTTA
ATGGTGGTAGAGCCTTTACCTGTAGCTTGAAAGGGGAAAGATTGGAGGTAAGAGAGAAAATGAAAGAACACCTCT
GGGTCCTTCTGTCCAGTTTTCAGCACTAGTCTTACTCAGCTATCCATTATAGTTTTGCCCTTAAGAAGTCATGAT
TAACTTATGAAAAAATTATTTGGGGACAGGAGTGTGATACCTTCCTTGGTTTTTTTTTGCAGCCCTCAAATCCTA
TCTTCCTGCCCCACAATGTGAGCAGCTACCCCTGATACTCCTTTTCTTTAATGATTTAACTATCAACTTGATAAA
TAACTTATAGGTGATAGTGATAATTCCTGATTCCAAGAATGCCATCTGATAAAAAAGAATAGAAATGGAAAGTGG
GACTGAGAGGGAGTCAGCAGGCATGCTGCGGTGGCGGTCACTCCCTCTGCCACTATCCCCAGGGAAGGAAAGGCT
CCGCCATTTGGGAAAGTGGTTTCTACGTCACTGGACACCGGTTCTGAGCATTAGTTTGAGAACTCGTTCCCGAAT
GTGCTTTCCTCCCTCTCCCCTGCCCACCTCAAGTTTAATAAATAAGGTTGTACTTTTCTTACTATAAAATAAATG
TCTGTAACTGCTGTGCACTGCTGTAAACTTGTTAGAGAAAAAAATAACCTGCATGTGGGCTCCTCAGTTATTGAG
TTTTTGTGATCCTATCTCAGTCTGGGGGGGAACATTCTCAAGAGGTGAAATACAGAAAGCCTTTTTTTCTTGATC
TTTTCCCGAGATTCAAATCTCCGATTCCCATTTGGGGGCAAGTTTTTTTCTTCACCTTCAATATGAGAATTCAGC
GAACTTGAAAGAAAAATCATCTGTGAGTTCCTTCAGGTTCTCACTCATAGTCATGATCCTTCAGAGGGAATATGC
ACTGGCGAGTTTAAAGTAAGGGCTATGATATTTGATGGTCCCAAAGTACGGCAGCTGCAAAAAGTAGTGGAAGGA
AATTGTCTACGTGTCTTGGAAAAATTAGTTAGGAATTTGGATGGGTAAAAGGTACCCTTGCCTTACTCCATCTTA
TTTTCTTAGCCCCCTTTGAGTGTTTTAACTGGTTTCATGTCCTAGTAGGAAGTGCATTCTCCATCCTCATCCTCT
GCCCTCCCAGGAAGTCAGTGATTGTCTTTTTGGGCTTCCCCTCCAAAGGACCTTCTGCAGTGGAAGTGCCACATC
CAGTTCTTTTCTTTTGTTGCTGCTGTGTTTAGATAATTGAAGAGATCTTTGTGCCACACAGGATTTTTTTTTTTT
TTAAGAAAAACCTATAGATGAAAAATTACTAATGAAACTGTGTGTACGTGTCTGTGCGTGCAACATAAAAATACA
GTAGCACCTAAGGAGCTTGAATCTTGGTTCCTGTAAAATTTCAAATTGATGTGGTATTAATAAAAAAAAAAAAAA

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FIGURE 3282

CGCCAAGCCCCGCCCCAGATGAGTGCGCAGTATGAGGACCGCTGGCCGGGACCCAGTGAGCGCGGGACTACAATT
CCCAAAGGACGGTAGCACTCAGCGCCCCGCCAACAGGTACCCGGCGGCTCGCTTCGCGCACACGCGGCAGGCGGT
GGCGGGATTCTGCCGCGTGCGCTTTCCCGCCCCGCCTCGCCTAGCCTCGTCCTGCGCTCGCCACGCCTCGGGCTG
TCCGTTGGGCCACGCAGACCGCGCTGCGCTCGCTCCGTCGCGGCTCCGCGTGCCCCACCTTCTGGCTAGTTTTTT
CTAGAGCCCAGGCTCCGCCCGTTTCCCGCTTCCAGGGCCCGGTTCGTTCCCGCCCGCACCCGTCCCTCTCCTCTG
CACCCCTGCTGCTTCTGCTTTGAAGGCGGAGGCTCCATGTTGTCCCCTCAGCGAGTGGCAGCAGCTGCCTCAAGA
GGAGCAGTGTAATGTGTGTGCTGTTGAAATGACCGTTTCACTTGCGAAATCGAAGAGCAAAAAGGAAAAGAACAG
TGAAGAATTTTTAAATGAGTCTCAGTTCTCAAATTCAAATACGAAGCAATGGAACGTTTTGTCAGTCTTAGAATA
ACGGACCAAAAATGTACGATTTCACATATTGGCTTACTTTTGGAGATTTAAGAAGCATAACCTACGGAGTACTAA
TCCCTGTCAAGAATTTAGCATTGCAACATAG

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FIGURE 3283

AGTAGAGATGGGGTTTCACCATGTTGGCCAGGCTGGTGTCAAACTCCTGACCTCAGGTGATCCACCCACCTTGGC
CTTCCAGAGTGCTGGGATTACAGGCATGAGCCACCGCACCCAGCGTTGTTTTGTTTTTTAGTCAGCAATGGTTTT
GGATTCCAAAGCTCTCAGGACCAAGGCCCACGCATTTTGTCTAGTTGTCATGTACTCTTCAGTTTCTCAAACTGG
AATTGTCCCCCGCTATGTGTTTTTCATAACATCAGCCTCTTGCAGAGTCCAGGCAGTTTGTCTTGTGTGGGATGA
TCCATCATCTGGAGTTGTCTTTCCTGATGTTGTCCCCTCTGTTTGGTGCTGGGTGAGGCATTAGAGTTGGAAGTC
CACATGCTTGAGTTGCCTGTACTGAGCTTGTCCAAGGGAATGAGCCTAATTTCTTTCTGTTGCTTCATTCTAGGA
CTGTGAGGAATGTATCCAGCTGGAGCCGACCTTCATCAAGGGTTATACACGGAAAGCCGCTGCGCTGGAAGCGAT
GAAGGACTACACCAAAGCCATGGATGTGTACCAGAAGGCGCTAGACCTGGACTCCAGCTGTAAGGAGGCGGCAGA
CGGCTACCAGCGCTGTATGATGGCGCAGTACAACCGGCACGACAGCCCCGAAGATGTGAAGCGACGAGCCATGGC
CGACCCTGAGGTGCAGCAGATCATGAGTGACCCAGCCATGCGCCTTATCCTGGAACAGATGCAGAAGGACCCCCA
GGCACTCAGCGAACACTTAAAGAATCCTGTAATAGCACAGAAGATCCAGAAGCTGATGGATGTGGGTCTGATTGC
AATTCGGTGATGACTTGTTCATCCCCCCTTCCCTTCGCCCTCATGTGGAAAGAGGAGCTGGGACCGCGGCGAGCA
GCACGGAGCGGAAGGGAGAGCAGGGGAGAGAAGGCCTCATCTCTCTATATTTATACATAACCCCGGGGAAGACAC
AGAGACTCGTACCTGCGCTGTTTGTGCCGCCGCTGCCTCTGGGCCCTCCCAGCACACGCATGGTCTCTTCACCGC
TGCCCTCGAGTTCCATGTCTCTTTCCCCTGCCCCTAGTTGCTGTCTCGGCTGCTCTCCCATAGTTGGTTTTTTTT
TTATTTGGGGGCAGTGGGCATGTTATGGGGAGGGGAGGGGGTTCTTCCAGCCTCAGGTCCCAGCTGTCTCACGTT
GTTTATTCTGCGTCCCCTTCTCCAATAAAACAAGCCAGTTGGGCGTGGTTATATGTT

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FIGURE 3284

AAAACACTAAGGGGAGCGCGCGAAGCTGAACTTGGCGCTCGATGGGGGCCGTTAGCCGCCCTAGAGCGCGCGGAG
CCGCAGAGGCGTAGCTGGACTACAACGCAGTGCATCTCGGGAGGCCAACTCGACTGGACTGGGTGAGAGGACAGA
GGTGGCTCGATGGGCGGCCCGAAGGCCGGGGATCATGGCGGGAAGGCGGGCCCAGACAGGTTCAGCCCCGCCCCC
GACCCGCCGCTCCCCACCCCCCGGCCGGCCTCGCGTGCCTTCCCGCAGCACTGCCGTCCCCGGGATGCTGAGCGC
CCACCGTCTCCCCGCAGCCCCCTCATGCCCGGCTGCGAGCTGCCCGTGGGCACCTGCCCGGACATGTGCCCGGCC
GCCGAGCGCGCCCAGCGCGAAAGGGAGCACCGCCTGCACCGCTTGGAGGTGGTGCCGGGTTGCCGCCAGGACCCG
CCCCGCGCGGATCCGCAGCGCGCGGTGAAGGAGTACAGCCGACCCGCCGCCGGCAAGCCCCGGCCCCCGCCCAGC
CAGTTGCGTCCGCCCTCCGTGCTGCTGGCCACCGTGCGCTACCTGGCCGGTGAGGTGGCGGAGAGCGCCGACATC
GCCCGCGCCGAGGTGGCCAGCTTCGTGGCAGACCGCTTGCGAGCTGTGCTCCTGGACCTGGCGCTGCAGGGAGCG
GGCGACGCCGAGGCAGCTGTGGTGCTGGAGGCGGCGCTGGCCACGCTGCTGACCGTAGTGGCGCGGCTCGGGCCC
GACGCGGCGCGGGGACCCGCGGACCCGGTGCTGCTGCAGGCCCAGGTGCAGGAGGGCTTCGGCTCGCTGCGGCGC
TGCTACGCGCGGGGCGCCGGGCCGCACCCCCGCCAACCCGCCTTCCAGGGCCTCTTTCTGCTCTATAACCTGGGT
GAGTCGGGATCCTGGCGGCTGGGCAGAGCGTGGGGACAGGAGCCCACCATGACAGTGGAGGCTCGGTGGAAGCCC
TGCATGAGGTTCTACAGCTGCCTGCTGCCCTGCGCGCCTGCCCGCCCCTCCGCAAGGCCTTGGCGGTAGATGCTG
CCTTCCGAGAGGGCAATGCTGCCCGCCTGTTCCGTCTGCTCCAGACCCTGCCCTACCTGCCAAGTTGCGCTGTGC
AGTGCCATGTGGGCCATGCCCGCCGGGAAGCCCTGGCCCGCTTCGCTCGTGCCTTTAGCACCCCCAAGGGCCAGA
CCTTGCCTCTGGGCTTCATGGTCAACCTCTTGGCCCTGGATGGACTCAGGGAAGCACGGGACCTGTGCCAGGCCC
ACGGGCTGCCCTTGGACGGAGAGGAGAGAGTTGTGTTCCTGAGGGGTCGCTACGTGGAGGAAGGGCTACCGCCTG
CCAGTACGTGCAAGGTGTTAGTGGAGAGCAAACTTCGAGGACGTACCCTGGAGGAGGTGGTCATGGCAGAGGAGG
AAGATGAGGGCACGGACAGACCTGGGTCCCCAGCCTGAGGAGGGAGCGTGAGCCTCCCAGAGCCCCAGGACTGGG
CCAGAGCACTTAGGTTTCTTTTTCCATGGTTTCCAGGTAATAAAAGGAACTTGTTTTGTTGGT

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FIGURE 3285

CTCCGGGGACCATGGGGCTCCTGACCATTCTGAAGAAGATGAAGCAGAAAGAGCGGGAGCTGCGACTGCTCATGC
TTGGCCTGGACAATGCTGGAAAGACAACCATCCTGAAGAAGTTCAATGGGGAGGACATCGACACCATCTCCCCAA
CGCTGGGCTTCAACATCAAGACCCTGGAGCACCGAGGATTCAAGCTGAACATCTGGGATGTGGGTGGCCAGAAGT
CCCTGCGGTCCTACTGGCGGAACTACTTTGAGAGCACCGATGGCCTCATCTGGGTAGTGGACAGCGCAGACCGCC
AGCGCATGCAGGACTGCCAGCGGGAGCTCCAGAGCCTGCTGGTGGAGGAGCGCCTGGCCGGAGCAACCCTCCTCA
TCTTTGCTAATAAGCAGGACCTGCCTGGAGCACTGTCCTCTAACGCCATCCGCGAGGTCCTGGAGCTGGACTCCA
TCCGCAGCCACCACTGGTGCATCCAGGGCTGCAGCGCCGTCACCGGGGAGAACCTGCTGCCGGGCATCGACTGGC
TCCTGGATGACATTTCCAGCCGCATTTTCACAGCTGACTGAACCACTCCAGATGCCCCCCACCTAGCAGTCCAGG
TCCCTCAACCTTCACCAAACACTACCCATGGGGGGTTGGGAGTCAGCCGGCCAAACTAACACTCCCCCTCCTCCA
CCCCAGCCTGCTGCTGCTACTGCTGCCCGCTGCTGCTCTGTGGCCACCCGGCTCCCATGGCGGGAGGGCTGTGCC
CTGGCTGTCTCTCTGGCTCCTGACCTGGCCTTTGGCTACCATACCAAGAAGAGAGGGCTGGGCGGGGAGGAGCTG
CTACTGCTGCTACCGAGGCTGTGGGCCTCATCCTTCACTCAGTTGTGAAATAAACCGCTCCTTGCCCCG

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FIGURE 3286

GGAGACCGGAGGTCTGAGCTGCAGCCACTACACAGGCCTGGAATTCTACCACAGGGAATTTGCAGCACGAGTCTC
TGGAAAAAGACAACCTCGCCCTGCGGAAGGAGATCCAGTCCCTGCAGGCCGAGCTGGCGTGGTGGAGCCGGACCC
TGCACGTGCATGAGCGCCTGTGCCCC**ATG**GATTGTGCCTCCTGCTCAGCTCCAGGGCTCCTGGGCTGCTGGGACC
AGGCTGAGGGGCTCCTGGGCCCTGGCCCACAGGGACAACATGGCTGCCGGGAGCAGCTGGAGCTGTTCCAGACCC
CGGGTTCCTGTTACCCAGCTCAGCCGCTCTCTCCAGGTCCACAGCCTCATGATTCTCCCAGCCTCCTCCAGTGCC
CCCTGCCCTCACTGTCCCTTGGCCCCGCTGTGGTTGCTGAACCTCCTGTCCAGCTGTCCCCCAGCCCTCTCCTGT
TTGCCTCGCACACTGGTTCCAGCCTGCAGGGGTCTTCCTCTAAGCTCAGTGCCCTCCAGCCCAGCCTCACGGCCC
AAACTGCCCCTCCACAGCCCCTCGAGCTGGAGCATCCCACCAGAGGGAAGCTGGGGTCCTCTCCCGACAACCCTT
CCTCTGCCCTGGGGCTTGCACGTCTGCAGAGCAGGGAGCACAAACCTGCTCTCTCAGCAGCCACTTGGCAAGGGC
TGGTTGTGGATCCCAGCCCTCACCCTCTCCTGGCCTTTCCTCTGCTCTCCTCTGCTCAAGTCCACTTC**TAA**CCTG
GTCTTCGGAGCTGGGTTGGCCCCTTCTTTGGGCTCAGGAAGCAGCCTTAGCACACGGGCCTCTCCTCCCTCACTA
CTGGGTGCTGCCCTGCGTGGCTGACCAGCTGGCCCAGGATTTCACAGTCGAAAAGGAAGCCACCACTGATGCCTC
CCACTGTGACAGGCCCTGTCACCACCAATATCTTATTTCAACCTCACAGTTGACCTGAGAAATCGAGATTATCAC
TCCACTTTTTCAGACAAGGAAACTGAGGCTCAGGGAAGCCAAGTGACAAGTCCAAGGTCACGAAGACTTTCTTGG
AGCCCGAAACACCACCCTCTGCTCCTCCTTCTCCTGTCCTGGCCCAGGCATCCTAGGGGCTGAAATCCTGGAAAC
CGTGGGCTGGTGTGAGAAGGTTTGCATGCTCAGAGCAGAGAAGGGCTCTCCCCACTGCTTCGTGATTCCAGGGCC
AGAGCCATGCAGTCCCAGAAACCCCAACCTAGCTGGGGCAGGTCCAGAGTCCAAGCCCTGGTGGGTAGAGGCCAA
GCAGAAGCCCTGAAGTGGACTCTTGCTTCCCCTAGTAGTGTTTTCAGTGCCAAGAAGCTGAAACTGTGAGCTGGA
GTTGGGGAGAGGTCTGGAAGAGGACCATCTGGGATTTCTACAGCCTGGGTACCCATAGCCACACCAAGGCTTCTG
GGAGATTCTGCAGGGTCAGCTTTCCAGGCTGTTCCCAAATAGCTCCCTGCCTCCCCACTGCCCCTAAAGCCACAG
CAGAAGAGCCATTCATCTCATAAACAAAAAGGAAGAGGAAAGAATGAGGAAGGACCCTGTGCAAGGTTATTTGCA
GGCAGGGATGGGCTTGTACCTGACAGCACCCACCCCTGTGTGGCCCCCAGGCCCTCATCACCCTCAGACCCCTCC
TAAGCAGTTCCCTCATTGCTCTTTGGACTAGGCTGACAGCAGGAAGAGCAGGGCCCATGACCGGGTGGAAGTTCA
GTTTTGGTGTCTGCTTCAAGAGGGGGTTTTACACTCTGATTCCAGGACAAGCACTCTGAGGCGGGTGGGGGAGAG
AAACCCTGGCTCTTCACCCAGGTTTCACACACATGTAAATGAAACACTATGTTAGTATCTAACACACTCCTGGAT
ACAGAACACAAGTCTTGGCACATATGTGATGGAAATAAAGTGTTTTGCAATCTTT

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FIGURE 3287

ATGAATGCAGCACTGAGCTCTGTTTGCCCTCTAAGCTTGTCCCCAGAAAAAACAAGATATACCCTAAATATGCAC
GATCTGATTTTCTGGAGAGATGTGAAGAAGACTGGGTTTGTCTTTGGCACCACGCTGATCATGCTGCTTTCCCTG
GCAGCTTTCAGTGTCATCAGTGTGGTTTCTTACCTCATCCTGGCTCTTCTCTCTGTCACCATCAGCTTCAGGATC
TACAAGTCCGTCATCCAAGCTGTACAGAAGTCAGAAGAAGGCCATCCATTCAAAGCCTACCTGGACGTAGACATT
ACTCTGTCCTCAGAAGCTTTCCATAATTACATGAATGCTGCCATGGTGCACATCAACAGGGCCCTGAAACTCATT
ATTCGTCTCTTTCTGGTAGAAGATCTGGTTGACTCCTTGAAGCTGGCTGTCTTCATGTGGCTGATGACCTATGTT
GGTGCTGTTTTTAACGGAATCACCCTTCTAATTCTTGCTGAACTGCTCATTTTCAGTGTCCCGATTGTCTATGAG
AAGTACAAGGAGATGGGCCACTAA

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FIGURE 3288

CCCACCTTGGGACACCTTGACTCCAAGCCCAGCAGTAAGTCCAACATGATTCGGGGCCGCAACTCAGCCACCTCT
GCTGATGAGCAGCCCCACATTGGAAACTACCGGCTCCTCAAGACCATTGGCAAGGGTAATTTTGCCAAGGTGAAG
TTGGCCCGACACATCCTGACTGGGAAAGAGGTAGCTGTGAAGATCATTGACAAGACTCAACTGAACTCCTCCAGC
CTCCAGAAACTATTCCGCGAAGTAAGAATAATGAAGGTTTTGAATCATCCCAACATAGTTAAATTATTTGAAGTG
ATTGAGACTGAGAAAACGCTCTACCTTGTCATGGAGTACGCTAGTGGCGGAGAGGTATTTGATTACCTAGTGGCT
CATGGCAGGATGAAAGAAAAAGAGGCTCGAGCCAAATTCCGCCAGATAGTGTCTGCTGTGCAGTACTGTCACCAG
AAGTTTATTGTCCATAGAGACTTAAAGGCAGAAAACCTGCTCTTGGATGCTGATATGAACATCAAGATTGCAGAC
TTTGGCTTCAGCAATGAATTCACCTTTGGGAACAAGCTGGACACCTTCTGTGGCAGTCCCCCTTATGCTGCCCCA
GAACTCTTCCAGGGCAAAAAATATGATGGACCCGAGGTGGATGTGTGGAGCCTAGGAGTTATCCTCTATACACTG
GTCAGCGGATCCCTGCCTTTTGATGGACAGAACCTCAAGGAGCTGCGGGAACGGGTACTGAGGGGAAAATACCGT
ATTCCATTCTACATGTCCACGGACTGTGAAAACCTGCTTAAGAAATTTCTCATTCTTAATCCCAGCAAGAGAGGC
ACTTTAGAGCAAATCATGAAAGATCGATGGATGAATGTGGGTCACGAAGATGATGAACTAAAGCCTTACGTGGAG
CCACTCCCTGACTACAAGGACCCCCGGCGGACAGAGCTGATGGTGTCCATGGGTTATACACGGGAAGAGATCCAG
GACTCGCTGGTGGGCCAGAGATACAACGAGGTGATGGCCACCTATCTGCTCCTGGGCTACAAGAGCTCCGAGCTG
GAAGGCGACACCATCACCCTGAAACCCCGGCCTTCAGCTGATCTGACCAATAGCAGCGCCCCATCCCCATCCCAC
AAGGTACAGCGCAGCGTGTCGGCCAATCCCAAGCAGCGGCGCTTCAGCGACCAGGCTGGTCCTGCCATTCCCACC
TCTAATTCTTACTCTAAGAAGACTCAGAGTAACAACGCAGAAAATAAGCGGCCTGAGGAGGACCGGGAGTCAGGG
CGGAAAGCCAGCAGCACAGCCAAGGTGCCTGCCAGCCCCCTGCCCGGTCTGGAGAGGAAGAAGACCACCCCAACC
CCCTCCACGAACAGCGTCCTCTCCACCAGCACAAATCGAAGCAGGAATTCCCCACTTTTGGAGCGGGCCAGCCTC
GGCCAGGCCTCCATCCAGAATGGCAAAGACAGCCTAACCATGCCAGGGTCCCGGGCCTCCACGGCTTCTGCTTCT
GCCGCAGTCTCTGCGGCCCGGCCCCGCCAGCACCAGAAATCCATGTCGGCCTCCGTGCACCCCAACAAGGCCTCT
GGGCTGCCCCCCACGGAGAGTAACTGTGAGGTGCCGCGGCCCAGCACAGCCCCCCAGCGTGTCCCTGTTGCCTCC
CCATCCGCCCACAACATCAGCAGCAGTGGTGGAGCCCCAGACCGAACTAACTTCCCCCGGGGTGTGTCCAGCCGA
AGCACCTTCCATGCTGGGCAGCTCCGACAGGTGCGGGACCAGCAGAATTTGCCCTACGGTGTGACCCCAGCCTCT
CCCTCTGGCCACAGCCAGGGCCGGCGGGGGGCCTCTGGGAGCATCTTCAGCAAGTTCACCTCCAAGTTTGTACGC
AGAAATCTGTCTTTCAGGTTTGCCAGAAGGAACCTGAATGAACCTGAAAGCAAAGACCGAGTGGAGACGCTCAGA
CCTCACGTGGTGGGCAGTGGCGGCAACGACAAAGAAAAGGAAGAATTTCGGGAGGCCAAGCCCCGCTCCCTCCGC
TTCACGTGGAGTATGAAGACCACGAGCTCCATGGAGCCCAACGAGATGATGCGGGAGATCCGCAAGGTGCTGGAC
GCGAACAGCTGCCAGAGCGAGCTGCATGAGAAGTACATGCTGCTGTGCATGCACGGCACGCCGGGCCACGAGGAC
TTCGTGCAGTGGGAGATGGAGGTGTGCAAACTGCCGCGGCTCTCTCTCAACGGGGTTCGATTTAAGCGGATATCG
GGCACCTCCATGGCCTTCAAAAACATTGCCTCCAAAATAGCCAACGAGCTGAAGCTTTAACAGGCTGCCAGGAGC
GGGGGCGGCGGGGGGCGGGCCAGCTGGACGGGCTGCCGGCCGCTGCGCCGCCCCACCTGGGCGAGACTGCAGCGA
TGGATTGGTGTGTCTCCCCTGCTGGCACTTCTCCCCTCCCTGGCCCTTCTCAGTTTTCTCTTACATGTTTGTGGG
GGGTGGGAGATTGTTNTCCAGCACCCCACATTCACCCCTGCCCAGAGATTCCCCCTTCTCCTCTCCCCTACTGGA
GGCAAAGGAAGGGGAGGGTGGATGGGGGGGCAGGGCTCCCCCTCGGTACTGCGGTTGCACAGAGTATTTCGCCTA
AACCAAGAAATTTTTTATTACCAAAAAG

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FIGURE 3289

GCTGCTGACTGGCGGGCCGCCAGGCGCGTGCGTAGAGACGCCCACACGCCCGCTGATGCGCACGCGCCCTGGGCC
GCGCGTGCGCGCGTGGGGTTCCGGAATGAGCCGGGGAAAGCAAGGGGAAGGTTTGGGGTTGGCTCCCGGTTTCGC
GCATGCGTGCACTGCACAAACCATTTGGCGGGTTTTTCCGGCCACTCAGTTCTGCCACCGTCACTGAGAAGCTCA
GCGGTAGCTTTTGGGAAGCAGGACGTTCTCACCAGGAGAGCGTCCTCTCGAGATTTCTGCTCCCTCCATTCAGGG
CGTTTGGGAGCCACCCCTTCATTTTTTAAAAAAAGTATTTCTCTGTGACCGACGGCCGGGGCCTTCTGACGGTCT
GAGGTCTTGCTTGGGCCAGTCACCTCCTGTCACGGTCCGCGGAGGGGGGAAGGATAAGAGGGCGAGGAGCTCATC
GCTCGCCACCCCCGTGGGCTTCTTGGGCGCAGGTCGGAGCTGGGTGGGCCGGCTCCCCGGCCCCTGGCTTGGGCG
ACCATGTCCGCATCCGCCCAGCAGCTGGCGGAGGAGCTGCAGATCTTCGGCCTAGACTGCGAGGAGGCTCTAATT
GAGAAATTGGTAGAGCTTTGTGTTCAGTATGGACAGAATGAGGAGGGAATGGTAGGCGAGCTTATAGCCTTCTGC
ACCAGCACACATAAAGTTGGCCTTACCTCAGAGATCCTGAACTCTTTTGAGCATGAGTTTCTGAGCAAAAGATTA
TCGAAAGCCAGGCATAGTACCTGCAAGGACAGTGGCCATGCAGGAGCTAGAGACATTGTTTCCATTCAAGAGCTA
ATTGAAGTGGAAGAAGAAGAGGAAATCCTCTTGAACTCTTACACCACACCTTCAAAGGGTTCTCAGAAGCGAGCT
ATCTCTACCCCAGAAACCCCCCTAACAAAAAGGAGTGTGTCAACTCGTAGCCCCCATCAGCTACTCTCACCGTCA
AGTTTCTCTCCAAGTGCTACTCCCTCCCAGAAATACAACTCACGAAGTAACCGAGGAGAAGTGGTTACCTCCTTC
GGCTTAGCACAGGGAGTATCTTGGTCTGGGAGAGGAGGAGCTGGAAACATCAGCCTGAAGGTCTTGGGATGTCCA
GAGGCACTAACTGGGAGCTACAAATCCATGTTTCAGAAGCTCCCAGACATTCGAGAAGTTCTGACCTGTAAGATA
GAAGAACTTGGCAGCGAACTCAAGGAACATTACAAGATTGAAGCTTTCACTCCTTTGCTAGCCCCAGCACAGGAG
CCTGTCACTCTGCTGGGCCAGATTGGCTGTGATAGCAACGGGAAGCTGAACAACAAGTCAGTGATTCTCGAGGGA
GACCGGGAACATTCCTCGGGTGCTCAAATTCCAGTGGATTTATCTGAGCTTAAGGAATATTCTCTGTTTCCTGGA
CAGGTTGTAATTATGGAAGGAATCAACACCACTGGTAGGAAACTTGTTGCCACCAAACTCTACGAGGGTGTGCCA
CTTCCATTTTATCAGCCCACTGAAGAGGATGCAGACTTTGAGCAAAGCATGGTCCTGGTTGCCTGTGGACCATAC
ACCACATCTGACAGCATCACGTATGACCCCCTGCTTGACCTGATTGCTGTCATCAACCATGACCGGCCAGATGTC
TGCATCCTGTTTGGCCCTTTCCTGGATGCTAAGCATGAACAGGTGGAGAATTGTCTACTGACAAGTCCATTTGAA
GACATTTTCAAGCAGTGTCTACGAACAATTATTGAAGGCACAAGAAGCTCCGGCTCCCACCTTGTCTTTGTCCCG
TCATTGAGAGATGTGCACCATGAGCCTGTGTACCCCCAGCCGCCTTTCAGCTACTCCGATCTGTCTCGAGAGGAC
AAAAAGCAAGTACAGTTTGTGTCCGAGCCCTGCAGCCTCTCCATAAACGGAGTGATCTTCGGCTTGACATCCACA
GATCTGCTTTTCCACCTGGGGGCCGAGGAGATCAGTAGTTCTTCCGGAACTTCAGACAGATTCAGCCGAATACTC
AAGCACATCTTGACCCAGAGGAGCTACTACCCACTCTACCCGCCCCAAGAAGACATGGCCATTGACTATGAGTCG
TTCTATGTTTACGCACAGCTGCCTGTCACCCCAGATGTCCTCATCATCCCGTCAGAGCTGAGGTACTTCGTGAAG
GATGTCCTCGGCTGTGTCTGTGTGAACCCTGGGCGCCTTACCAAAGGGCAGGTGGGAGGCACCTTCGCCCGACTC
TACCTTAGGAGGCCGGCAGCGGACGGGGCAGAGAGGCAGAGCCCATGCATTGCTGTGCAGGTCGTCAGGATCTGA

GGCTTCTGTCCTCTGCTGTTCTCTGCTGTGTGGGCCCTTAAAGTCTTAGCCAAGAGCCAAGACATAGCCCTGTGA
CAAGGTGAACAGTTGGGTGGGAAAGGAGAGAGGAGCCAGCCAGGGAGGGGCAGCTGCAGTGACCAGGCCCAGCAG
GGAGGACTTGTGCAGCCGGGCCTGCCTCTGAGTGGTGCCTCTCCTGGAAGGAAGCTCTTGCTTCTCAGTCCATGC
TCCGTGTCCAGAAGTAAGCCAGCTGTGGATCCCGCCCACTCAGAAAAGGCGAGAAGGCTTTGTGATTTTCTACAT
GAATCAAACACAGAAACAACTTTTGGAGAAATTAAATTCTGAGTGTGACTTCTGAGTTTGACCTTTCTTCTATTT
TCTTTTATTTATTTATTTTGTTTTTAGACGGAGTCTCGATCTGTCGCCCAGGCTGGAGTGCAGTGGTGAGATCTC
GGCTCACTGCAAGCTCTGCCGCCCGGGTTCATGCCATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGA

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FIGURE 3290

AAGATGGCGGCTGTGGTGGAGAATGTAGTGAAGCTCCTTGGGGAGCAGTACTACAAAGATGCCATGGAGCAGTGC
CACAATTACAATGCTCGCCTCTGTGCTGAGCGCAGCGTGCGCCTGCCTTTCTTGGACTCACAGACCGGAGTAGCC
CAGAGCAATTGTTACATCTGGATGGAAAAGCGACACCGGGGTCCAGGATTGGCCTCCGGACAGCTGTACTCCTAC
CCTGCCCGGCGCTGGCGGAAAAAGCGGCGAGCCCATCCCCCTGAGGATCCACGACTTTCCTTCCCATCTATTAAG
CCAGACACAGACCAGACCCTGAAGAAGGAGGGGCTGATCTCTCAGGATGGCAGTAGTTTAGAGGCTCTGTTGCGC
ACTGACCCCCTGGAGAAGCGAGGTGCCCCGGATCCCCGAGTTGATGATGACAGCCTGGGCGAGTTTCCTGTGACC
AACAGTCGAGCGCGAAAGCGGATCCTAGAACCAGATGACTTCCTGGATGACCTCGATGATGAAGACTATGAAGAA
GATACTCCCAAGCGTCGGGGAAAGGGGAAATCCAAGGGTAAGGGTGTGGGCAGTGCCCGTAAGAAGCTGGATGCT
TCCATCCTGGAGGACCGGGATAAGCCCTATGCCTGTGACATTTGTGGAAAACGTTACAAGAACCGACCAGGCCTC
AGTTACCACTATGCCCACTCCCACTTGGCTGAGGAGGAGGGCGAGGACAAGGAAGACTCTCAACCACCCACTCCT
GTTTCCCAGAGGTCTGAGGAGCAGAAATCCAAAAAGGGTCCTGATGGATTGGCCTTGCCCAACAACTACTGTGAC
TTCTGCCTGGGGGACTCAAAGATTAACAAGAAGACGGGACAACCCGAGGAGCTGGTGTCCTGTTCTGACTGTGGC
CGCTCAGGGCATCCATCTTGCCTCCAATTTACCCCCGTGATGATGGCGGCAGTGAAGACATACCGCTGGCAGTGC
ATCGAGTGCAAATGTTGCAATATCTGCGGCACCTCCGAGAATGACGACCAGTTGCTCTTCTGTGATGACTGCGAT
CGTGGCTACCACATGTACTGTCTCACCCCGTCCATGTCTGAGCCCCCTGAAGGAAGTTGGAGCTGCCACCTGTGT
CTGGACCTGTTGAAAGAGAAAGCTTCCATCTACCAGAACCAGAACTCCTCTTGATGTGGCCACCCACCTGCTCCC
CGACATATCTAAGGCTGTTTCTCTCCTCCACTTCATATTTCATACCCATCTTTCCCTTCTTCCTCCTCTCCTTCA
CAAATCCAGAGAACCTTGGGGTGGTTGTGCCAGCCTGCCTTTGGCAGCTGCAAGCTGAGGTGGCAGCTCTGACCA
CCTCTGGCCCCAGGCCCTCAGGGAGAAAGGAGCAACACACTGCCCCTAGGCGTGCGTGTGGCCCAGTTTCTCTCT
GCTCTCCATTAAGTGCATTCACTCTGCTTGCCTTGGGCCCAGCCCCTGGTGATCACAGGGTTCAAACAGTGTCCT
CCTAGAAAGAGTGGGAGAGCAGCTCACTTCTCTGTGTTCTGCCTCCCCTCTGGTCTCCAGAGTTTTCCTGTCCTC
TAGAGGCAAGCCAGGCCAGGGAGCTGGGAGCGAGCAAGCTGAGGCCACGTCCACAAGGAGCTTTTCATGCCCCTG
TGCCGCATAGCCTCACCTCTTTCCTCCAGAGTGGCTCTCTGCGGCCCTGTGTTCCTGCTACAGAGTGTTCTTTTC
TGGAGTCAGGATGTTCTCGGTCACCCTCCTGGTTCTGCCCTGTCCCATTCCACCCCACCCCAGGGGGAACAGTAG
CTTCACCTTGTTATTCCCATTGCTCTCCTGGCTCACTCTTACGGTCGGTCTCCAGTGACTGAAGCATTCCCCACC
CTTGGAATTTCTCATCTTCTGCCTCCCTTCCTACTCCTTTTGGTTTTGTGGGGAGAGGGGAAGGATCAGGGGGCC
AGGCCAGCAGCTCGGGGGCCACAAGGAGATGGATAATGTGCCTGTTTTTTAACACAACAAAAAAGCCTACCTCCA
AAATCCCCTTTTTGTTCTTCCTGGACCTGGGCATTCAGCCTCCTGCTCTTAACTGAATTGGGAGCCTCTGCCACC
TGCCCCGTGTATCCTGGCTCTCAGCTCATGGGGAAGCCACATAGACATCCCTTTCTTCCCTTGCACGCTCGCTAG
CAGCTGGTAAGGTCTTCACACCCTGATTCCTCAAGTTTTCTGCTTAGTGGCACTGACATTAAGTAGTGGGGGGAC
AGTCCATGCCAGGACACCCTGGAGTAGCCTTCCCCCTTGGCCGTGGGCAGGCCCTAACTCACTGTCGCTTTGGAG
TTGAGGTGTCTTTTCTTTTTCTTTCTTTAGTTCCTGTATTCTAAACATTAGTAAAAATAAATGTTTTTACACAGA

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FIGURE 3291A

GGAATTCTCTGGGGCTTTGGGGAATTTAGTGCGTGGGTGAGCCAAGAAAATACTAATTAATAATAGTAAGTTGTT
AGTGTTGGTTAAGTTGTTGCTTGGAAGTGAGAAGTTGCTTAGAAACTTTCCAAAGTGCTTAGAACTTTAAGTGCA
AACAGACAAACTAACAAACAAAAATTGTTTTGCTTTGCTACAAGGTGGGGAAGACTGAAGAAGTGTTAACTGAAA
ACAGGTGACACAGAGTCACCAGTTTTCCGAGAACCAAAGGGAGGGGTGTGTGATGCCATCTCACAGGCAGGGGAA
ATGTCTTTACCAGCTTCCTCCTGGTGGCCAAGACAGCCTGTTTCAGAGGGTTGTTTTGTTTGGGGTGTGGGTGTT
ATCAAGTGAATTAGTCACTTGAAAGATGGGCGTCAGACTTGCATACGCAGCAGATCAGCATCCTTCGCTGCCCCT
TAGCAACTTAGGTGGTTGATTTGAAACTGTGAAGGTGTGATTTTTTCAGGAGCTGGAAGTCTTAGAAAAGCCTTG
TAAATGCCTATATTGTGGGCTTTTAACGTATTTAAGGGACCACTTAAGACGAGATTAGATGGGCTCTTCTGGATT
TGTTCCTCATTTGTCACAGGTGTCTTGTGATTGAAAATCATGAGCGAAGTGAAATTGCATTGAATTTCAAGGGAA
TTTAGTATGTAAATCGTGCCTTAGAAACACATCTGTTGTCTTTTCTGTGTTTGGTCGATATTAATAATGGCAAAA
TTTTTGCCTATCTAGTATCTTCAAATTGTAGTCTTTGTAACAACCAAATAACCTTTTGTGGTCACTGTAAAATTA
ATATTTGGTAGACAGAATCCATGTACCTTTGCTAAGGTTAGAATGAATAATTTATTGTATTTTTAATTTGAATGT
TTGTGCTTTTTAAATGAGCCAAGACTAGAGGGGAAACTATCACCTAAAATCAGTTTGGAAAACAAGACCTAAAAA
GGGAAGGGGATGGGGATTGTGGGGAGAGAGTGGGCGAGGTGCCTTTACTACATGTGTGATCTGAAAACCCTGCTT
GGTTCTGAGCTGCGTCTATTGAATTGGTAAAGTAATACCAATGGCTTTTTATCATTTCCTTCTTCCCTTTAAGTT
TCACTTGAAATTTTAAAAATCATGGTTATTTTTATCGTTGGGATCTTTCTGTCTTCTGGGTTCCATTTTTTAAAT
GTTTAAAAATATGTTGACATGGTAGTTCAGTTCTTAACCAATGACTTGGGGATGATGCAAACAATTACTGTCGTT
GGGATTTAGAGTGTATTAGTCACGCATGTATGGGGAAGTAGTCTCGGGTATGCTGTTGTGAAATTGAAACTGTAA
AAGTAGATGGTTGAAAGTACTGGTATGTTGCTCTGTATGGTAAGAACTAATTCTGTTACGTCATGTACATAATTA
CTAATCACTTTTCTTCCCCTTTACAGCACAAATAAAGTTTGAGTTCTAAACTCATTAGAATTGTTGTATTGCTAT
GTTACATTTCTCGACCCCTATCACATTGCCTTCATAACGACTTTGGATGTATCTTCATATTGTAGATTTAGGTCT
AGATTTGCTAGCTCCAAGTAATTAAGGCCATGTAGGAGAGCATGGTAACCACAGATAGAACTGGTATTATCCCAA
GTGGTCTGCAGACTGCTGAGTGGGGATGGGATCTGCTCTCTGTTGAGAGTTGGTAATCATTGGTTTGAAATGTGA
TGAAACCACTCAAGCCAATGAAGGTGGGTGTGTAGGTGGGGAGTACTTTGCCATAATATTTTAAAACATTACCTG
GTTAGAGTTCTAAGTGGTACTTATTTTTGTTTGGTTAGGGGAAAGCCTGAATAAAAACAGAAATGGACACATAAT
ATGCATATTCCATAGTCTTTGGGAGGCTGGAATGTGCCTGGGATTTGGGTCTAAGTGTATGCGTAATTCTTACCT
CACTAAAGAATTTGCCTTGTTTTTTTCCTTTTGGTGAGTGACTAAAACGTCTGGGCTTCCCTGTGTGCGTGCTAC
AGTAAGCAAGCAGAGGCTGTGCAAAGGTGTGAGCAGGATCACGTGGAATCTGGAGGATACATCTTGGCTTGCAAA
CTGCCTCTGTCTCCTGGGTGGGACTGTTCTGTCCTTGCACTGCTGTTCTGTGTTACCTCTTGGGGTGTAAGGTTT
TGCTTACAGGAGACAAACTTTGGGCGTAGAATGGAAGCCACTGCCAGCCTCTGTGCTGAGAAGGAAGGTGCTTGT
TTCAAAGGGAGCAGCAAGGGAGGCTTGTTCTACTCACCTGGGCCTGTTTGCCTGAGAAGGGGAGATAAGGGCTGA
ACTGGGACTAGCCAGGGGGACCAACACAAATGGTGGGGGATCATGACCTGAAGGATTCTTTCCTTCCCATGAGCT
GCAGGGCTGGTTGCCGTCCTTGCAACTGTGTCTTATTTGCCTGTGCCGTTATATCTTGGTGACCCCTCCACGTGT
ACACTACTGACAAACGGGTGGAGTGCTGGGGAGAAGTCACTGTGCCGCCCACCTAGTAAACCTTCTGTCTGTGCT
CATGGCATCTCCAAGATGGGGCACTGCTGTGTGCAGAATCCAGGGTCCTCTTTCTGCTTGCAACTCCTTTCCCTG
GATGCCCCAGAAACAATCCAGGCCTCCTTTCCTATCTTACCCCTTTGCTTTGCTTTTTACCCCAGCACCTCTATA
ACCGCCTTCTCTTCTTTTCAGAACTCCTTGTTTCTCATCCTGTTTTTTATGATTACAAAACTCTTGCTTCCACCC
TGGAAGATAACTGCTATAGATGCCTGTATGTAAATGGTGCTGTCTCCAGCAACTGGCATGCTGAAGAAGAATTGA
TTCACGGGGTATAAATGTTGGGGATTGGAAGTGGGGATGAAATGGCACTTGTTGATACAGGAGCAGAGAGGTGAG
GCCGACTGCTGAAGACAGCTCGCCACCCTCCTTGCCTCCACTCCAATCCAGGGGCTGGGGCCACATTCTTTGCCT
TCATTTATCCTCAGATCAGGTGAGATCGACAGGAGGTGTTGATGGCAGTGCCAGCAATTATTGCTAATCCGTTTG
CATCCTTATGCATAGATCTGAATTCAGACTTTGTGAATTTCCAGAGGTGTGGGTAATATAATAGAATTCAGTGAG
TGGGCATGGCTGATCTTGTGCAAATTAAAAGTTATGGGGCATAAGAATAGCAAAAGTTGAACTTCTTTTAAAAAG
GAAAGTACCCTGAGAGCCAGTATTGGTTGAGGCTCTTCAGTATGCCCAGGTTGGCAGCACTGAGAACCGCAGGAA
CGGCCTGTTGTTACAAAAAGGAGATTGACTCAGCTGCCCTTGGTGCATCTGACTGACTATGACTGCTGAGAGATT
CCAAGGACCCTTAATGCCAGGGCTAACCTCTCCATGTGCAGTGAGACCTCTGGAGGAAGTGTCATCCTCTGGCTT
TGTGTGGTACTCATTATGGTGCAGTGCGGGCATGAAATGAAGACACCCAAATAGGCTTACAGATACGATATGTTT
TAAATGTTCGTATTTAACAAAAACATACTGACACTGTTTGGAAATGGCAACAGGAAGATAGCAAAATGAATACTA

FIGURE 3291B

ACATTACGAAAAGATGAACAGGTACATGTTCCAAGGCAGGTGGCTGTGAACTTCCTCTGAGTGAAGGCATCCCCT
CCAGCACCTTTCAGCCTGCTAGTTAGGACGACCCGCCGCCACCCTCCAGGACCTCCAGCCCTGCACTGCCTTTCC
TCTCTTTTAAATAATTCTTCATTGAGTTCTAATATGTAAAAAAAAAAAGTTTACTGTAAAGTTTGCAAATAAGGA
AATTTTTTTTAAAAGTCCTCAGTAATCTTACCAGTAACAATTGTTATGGGCACATTTGCTTTTGGAAGATTTCTT
TTGTATGCATGGGATAAGTACATTTTTAAACAAAAATGGGATTATGCCATAAATTCTATTTTGTGACTTTAATAT
ATAGTGAACACCTTTTTTAATGATGACAGGATGTTCCCTTGCATGGCTGTATCAATTTAAACAATCTTGTTTCAA
TGGGCATACAGGGTATTTTCTAGTTTTTTTTTCCTCTTAGAAAATAATACTTGCGATGACTTTCCTTGTAGCTCA
GACTTTTTCACGTCTGTTGTTATCTCTTTGGGAATGCTGAATACATACATTTCGAGAAGGAAATGACTGTTAAAC
TCTTAAGACTTCAGGTTCATATTGCTAAACTGCCCAGCAGGGAGGGATTTTTTCAATTAGTGTTCTCACTGGTGA
GGCAAACCTGATGCCTTCCCCTCTTCCTCAGAACCGGCTTTATCACATTGAAAACCTTTGCTCCTCCGACGGATC
GAGTCTGCTTTCCCTGTGGATGTGAGCATTGCTTTGTCTGCTGGTGACTGAACATCTCTACCATGTGTCAATTGG
CCATTTGTGGTGTGTGTGTGTGTGCGTGTGTGTGTGTGTGTGTGTGTGTATGATTTTCTAATTCCTAGTCATTTT
TCTATTGATTGTTTTGCAAAAGCCATTTACATCTTAAGGATATTGATAATCTTTTGTTATATTTGATGCAAATAT
TTTTTTCCAGTTTATAGGTTGCCTTTTAATTTTGTGTTTCAGGTAGATAAAAGTTAAACGATTTTCTTAGGTTAG
TTTATCACTGTGGTTTCTGAACTTGTTATGTGTAGATCTTTTCCACCCCAAGAGTACATAAATATTAATCCATAC
TTTCTTATGGAACTTGTATGGTTTCGTTTTTTACATTTAAACCTTCTTCCCCGTGGTGTGTGTTGTGGAATCTGT
GTTTGTGTGAGGAGGGGCATGGTGCTCTCAGAACCCACCTCCTGTGGCCAGAGAGCCCTGTCCTGTGAGGGTGGT
TATCACAGTGGCAGGGTTCAATTCAGAAGACCTTGAGGGCAGGCTGATGTTTCCTGAATGGGCCCCTGGTTGTTG
CTTGTCCCTGACTCTCCATTTCCCCATCTGAGTGGATTTGGACCTAATAGGGCACTGGAGCTGGTTCGAATCCTG
ACTGGACTACTTGGCAACTTTATGTCTGGGAGCAAGTTACTTAACCTCCCCAAGCCTGTGTCTGTGAAATGCGGG
TAAATGAATGTAG**ATG**TTTGGCAGCAGCTACTCCTTGTTGAGCTCTCACAGTGAACTCTCCTGCCTCTGCCCTCC
TTCCCCGCCTCCCCTGGTGCCTAGCGTCAGGTCTAGCCACTTCCTCCTGGGCCCCTCTCCCTTTTCTGTGGCTGG
CTGCCTGCCCGCCTGGCGCTGGACCTTTCATGTAACGGGAATCAGCATGTATATTCTGGTCTGGTCTGTTTCTAC
ACTTAATTTTGTTTCCAGTAGTATTTCCCTGTACCGGCAGAGTTCACAAACACATTTGAAGAGGCTTTTTCTCAG
GATTCTTAACCTTCCCAAAGGAAGTCCCATGGATGGGTTTCTAGAAGTCTATAAATGCTCTGAAATTGTATTTTT
CTGTGGAAAGCATAACTTTCATCTGCTTGTTCGTGCTCAAAAAAGATCA**TGA**ATGAATGATTGCATGATTTTATG
CCATTGTGCTTATACTAAAGGATATGTAGCCCATCTCTTGAGCTGTTAAACTGTTTTGACTACTTTAAATCGTGC
AGCTGTGAGCATCTCTGTAAATTTAGTGTACACATGTATCCCCTGGAGTGGCATTGCCTCGGCAGTGAGCACTTA
TGGTTTTATAACTCTCTTCACAGACTCAAATGACTCCAGAAAGCTACACTTCCTGTTGTGAGTATATGATATCCA
TTTCCCTACATAGCCACTAACATCAGGTTTTTACAATTTTATTTATTTCTTGCTACTTTAAGAAATTTTTGTGGT
GAAATACATATAATAGAAGTTGACTATCTGAATCATTTTTAAGTATACATTCAGTAGTGTTAAGTATGTCGCCAT
TGTTGTACAACCAATCTCCAGAACTTTTTCATCTTGCAAAACAAACTCTGTACCCATTAAATAACATTAAACATT
CCATTCCCTCCAGCCTCAGCAACCCCATTCTACTTTCTGTTTCTGTGAGTTTGACTATTCCAAGCACTTCATATC
AGTTAAATCATGAAGTATTTGTCTGTCTGTGACTGGCTTATTTCTCTGAGCACAGTGTCCTCGAGATGCGTCTAT
GTTGTAGCATATGTCAGAATTTCCTTCCTTTTTAAAAGATCCAAATAATATTCTTATTTTATATCTTTTTTTTAT
CCATTCATCCATTAGTGGACACTTGGGTTGCTTTTGGCTATTGTAAATAATGGTGCTATGTACAAATATCTATAT
TATTGTATTTACAAGTATAATGCTGTAATGTACACACATCTTTTTGAGATCCTACCTTCAGTTCTTTTGAGTATA
TAGCCAGAAGTGGTATTACTAAATCTTACGATATTTCTATTTTTAATTTATTGAGGAACCACTGTAGTTTTTCAT
AGCAACTGCACCATTTTACGTTCTCACCAAGAGTGCACAAGGGTTCCGAGGTTCCCACATCCTCCCCAACACTTG
TTATTTTCTGCTTTTTTTAGATTGCAGCCATCATAGTGGGTGTGAGGTGACATTTCATTGTGGTTTTGATTTGCA
TTTCCCTAATGAGGAGTGATGCTGAGCATCTTTTCATATGCTTACTGGTCATTTGTATGTTGTCTTTGGAAAAAT
GTCTATTCAAGTCCTTTGACTATTTTAAAAATTGGGTTATTAGAGTTATCGTTGTTGTTGACTTGTAGGAGTTTC
TTTCTATATTCTGGATATTAATCCCCTATCAGATATATGATTTGCAAATATCTTCTCTTATTCCATAAGGTTACT
TTTTCACTTTGTTGATTGTGTTCTTTGATGTATAGAAGTTTTTAGTTTTGAAATAGTCTAATTTATCTGTTTTTA
CTTTTGTGGTCTGTGCTTTTGGTGTCATATCCAAGAAATCCTTGCCAAATCCAACGTTATAAGGTACTTTTAAGG
TATTTTAGTTGTCTTAGTCTATATTTCTGTACTCACCTTTCTTTATCCACTCATCAGTTGATGGGCATGTAGGTT
GGTTCCATATCTTTGCAATTCTGAATTGTGCTGTGATCAGGTGTCTTTTTAGTATAATGATTTACTCTCCTTTGG
GTAGATACCCAGTAGTGGGATTGCTGGATCGAATGGTTTTTATAATTTTCTATTTTACCACAGTTTCTCTCTGCA

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FIGURE 3291C

TTTTTCCTCTTTGACCACTAACCATGTGAAATTCTCATATTGACCTTTATAATGATCATGAACTCTTAGTATCAT
TGGGAAGGCCACATTTGCCACTTATGATTGTAAACCTTATCCTCCATTTTTCCTGTTATTGTTGGTGCAAAAAGC
ACCTATTATACCAGGACTTTAAAAATCAGTCTGATAAGTCTTTGATAAGTCTAATAATAATAACTGATAAGTCCA
TTGAATTTGCTTCTGATTACTTTTTCTTTAGTAGCTAAACATGTATGTACTCCTATGATTACAATGAACACTCCT
CTCCATTTAAATTAATTATTTACATTGATGAAATAGCAAAATGTTAATGACTAAATACTGTCTTGGTTTTTTCGT
TCCAGGTCAGTCAATATTAACTTCTTATAATTTTCTTTTTTTTCTTTATGTGTGTGTGTGTGTGTATTTTTTTTT
TTTTAATTTCAATGGCTTTTGGGGTACAAATGGCTTTTGGTCATATAGATGAATTCTACAGTAGTGAAGTCTGAG
ATTTTACTGCACCGGTCACCTGAGTAGTGTACATTGTACCCAATATGTGGTTTTTTATACCTTGCCCCCCTCTTA
CCCTCCCCACTTTGAGTCTCTAGTGTCCATTATGTCACTCTGTATACCTTTTTGTACCCATAAGTTAGCTCTCAC
TTATAAGTGAGAACACACAGTATTTGGTTTTCCATTCCTGAGTTGCTTCACTTAGAATAATATCCTCCAGCTCCA
TCCAAAATTGCTGCAAAAAAAAAAAAAAACCACAAACATTATTTTGTTCTTTTTTATTGCTAAGTCATATTCCATG
GTGTAGAGATACCACATTTTATTTATCCACTCACTGGTTGATGGGTTGGTTCCACATCTTTGCAATTGTGACTTG
TACTGCCATCAAGTGTCTTTCTGGTATAATGACTTCTTTTCCTTTGGGTAGATACCCAGGAGTGGGATTGCTAGA
TCAAATGGTTCTTAACATTTTCTCTCTGGATCTATTTCTGGAAATTTTAGGCTCCAGTTTTTGTTGTTGTTGTTA
ATAAAATGCAATGGAATGTAATGATCATCACTTTTCATTATGCTTTAAAATCTGGTAAATGGAGGCTAGAACACT
CCTGTAAGGCAAGAATATTCTCTCTGTTGGAACTCAAATACACAGAACTGGGTAAATCTCAATCTTAATCTTTGA
TTCAGGACACAACATGGCTCTCTTTTACTTGCTTTCTTTAATTGTTTTTTAATAATGTGGTAAGCATTTCTGAAT
CTCCTATCCAATACAAAAACTAGGACAATACAGACAGTAACTCCTATGGTTACAATGAACACTCCTCTCCACTTA
AATTAATTATTTACACTGATGAAATTGAAATAGCAAAATTTTAATGACTAAATACTGTCTTTGATTTTTTGTTCC
AGGTCTGTCAATATTAACTTCTTATAATTTTCTTTTTTTTTCTTTATGTGTGTGTGTGTGTGTATATATATATAT
ATTTAATTTCAATGGCTTTTGGGGTACAAATGGCTTTTGGTCATATATATGAGTTCTACAGTAGTGAAGTCTGAG
ATTTTACTACACCTTCCACTTATGTGGTCCCACACCACCCGCCTCCCCTGCCGCCTCCTGCCACCCCCTAGGCCA
AGGTAATAATCATCCTGAATCCTGGGTTTATCTCTCACTTGCTTTCTTTTCATATAATTTTGCAAAAGAATCTGA
TCTAAATGTGTTTTTCAGAGTATATATTTATATTTTAGCTGTTCTTAGAGAAAATTTATTATTTTGCATGTAATC
TTATGGAACATTCTCATTTAATACCATGGTAAGATTCAGCCCTTGCCCAGGGGATAGTTCATTTAGTTTGTTTAC
TGGATAGAGCTCATCATGTGACTATACCTCAGTTAGTTTATCAGTTCTCCCATCCATGGTGACTAGGTTGCCTCT
CAGCCTCTCAACAACACTGTTTCTCAGTGTCCTTGTAGAAGTGATATGTGGGTGTTTTCTCCTTACACAGAGTTG
AAAGGTGACGACAACAACGTTGGCACTACCAATCCCCCACCCTCCAGAGGGGTAACCAGTGTTACCAGTTTGCTG
TGTTTCCTGCTACACCTCGCCTTATTCACTTCCATTTGTATCTGAAAAACGTGTTGCATGGTTTCTTTTCTATAG
AAGTGGTAAAATGCTATTGTGTCCTGTACATTATTGATTACTTTTTTTCATTTAACAGTAGGGAGATGCCTGGGA
GTACACAGAGAACTGCCCTCATTGTTTTCAACTTCTGCACTGTATGTCTGTGAGTTTAGCCATTCTGCTGTTAAT
GGAAATTTACAGTATTCTAATCTTTTGATATTACAAACAGTTCTGTGCGATCATCGTCATACACAACCCCTTGTG
CACAATGCATGAGTGTTTCTCAGGGTAGGTACCAAGAAGTGAAATTCCTGGGTCATAGGGCGTGAGTCCGACATT
TTTCTCCATTCTGCCCTGTTGCCCTCCAGAGTGGGTGTCCAGCTTTGCATACCTAAGTATGAGAGTATCTGTTGT
TCATATCCTCTACGACGCTCCATATATGAAACTTAAGTTTCTGCTAGTTGCCATCTTTGATCTATCATGTATGCA
GTGACCTACTAAGACTGTAATTGGTACAGTAGATTCTTGTCATCTGTGTGTGAATTTAGCATTCATGGGCTTAAT
GCTGACAAGGCCCCCAGGGTCCAAGACATATAATCATGTATAATTTTGTCAAGGTATAATTTTTTAAATTGCTTT
TGTCATGTGTCTGCTGGTGATGCCCAACCCAGTGCTCTGCACCCAGGTCACACTGTGGCTTTGTCCTCTGCTTAT
GCCTGCATTGCAGCAACTGTCCTGAAGAGACCAAAATTATGCAGATTTAGGTAAGTCCATGGCTAATGTTATTAT
ATTATGTGCTATTGTAATGGATGGGGCTGTGGAGTGTATGAATTTATAAATCACTGGTCTTGTAATTAAAATTCA
AACACTATAGAAAAAGGCCATGTAGAAGATAAAAGTTCCTCTATAATCCCGGACCCCTAAGATAACTACTAATGA
CAACTTCATTTATATTCCTTCAGACATTTTCTGGCTGTGGATGTACTAAAATGTATCCTATTATTCTCTGCCCTA
AAATGGAATCATACAAGGTGTACTGTTATTTTTATGGCTCTATAACATGTCATATTGTACGTGTTGGTATGGTCA
TTTTAACCATTTTTCTAGTGATGGCTTTGAGGTTATTTGCAGTTTCCTAGCCATCTCAAAGTGTGCTGCGGGGAT
CTCTTTTGCATCCCTCTGGGTGCAGAGCTGAGGCACCCAGAGGCAGTGTCCAGAGGAGGCAGCATCTGTAGGTGT
CTTCACCTGCTCTGGCTCTTGGCACATCTGGTTGGTGACACTGTTTTGTGAGATGGGTTGAAAGCACGTGCTGCC
AAAATAGAATAATGTTGGTCCTCTCCTCATGTGCCGTGGAACTGGGGTAAAACTGCGTAGTGGCTGCAGCTGCCT
GTCCATACCGGAATCGAGTATAACACGGTGCCTGGCTTAGCACAAAACAGTAGTGGGTCCTGCAGGCCCCAGAGT

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FIGURE 3291D

CTAATTCCTGGTATTCTTTCCCCTACACAGATTAAATAAACCAAAAACAAACTATTCTAGGAAAGCGTCTGTGAC
ATTTGTAAAAAGTGGTATTTAATGATCTTTTATTCACTTGTCTGTTTAGTTTGTTGAAATCTTAAGTGGCATCCT
GGTCTGGGAAGGAGTGCTGTCTGCGCCTGCCCTCCGCTGGGCACAGCGTGGCTGCTTCAGGGGCTAAGCACACAC
TTTCTGTCTTCTAAAGGGCCGCCACATGCCAGGAGCTCAGGTGTGAGCCCGGCTCTGGCTCTTACCTCATAGGGT
CACTCATAGGGGCACAGGGAGCAGAACATTGTACACAGCGAGGCACCACCCGGCTTGGCATCTGCCTCGGTGGAC
TTACTACCTCTAGAAGGAAATACCTGAGTTCCTCTGGCCTCAGCTCCTAGAGTGACTGGTGTGCTGTCCCTGTTA
CTCTTCTGTCAAGGTGACAACTGTGTGACCCATCATCTGTGTGTCAAAGCAAGGCCCTGCCTGGGCCTCTGCTCC
TGTGCTGACCCCAAAGGCAAATGCTTTGCTAGTTTCCTTCCAGTTAATTTCACCTATGAATAGATGTGTGAAAAC
TGTTCAAAGCCATACCTGCACATGTTTGAACTTCAAACCCTGTGGGTGATTCAGTGGCATCTTTCTCTAACCCCC
AGCCTCCCTTCCCACAGAGGCCACCGTCATGGCCAGTTGCTGCAGTTTCTTTCCAGAGAACCTGTGTATGTGTAA
AGCTGTACAGGCGTGGGTACACCACACAGCCTGTCTTGCACTGTGGACTGTTGAGTTACTAGTACATCTAGGTAA
GCACCGCATATCTGTATTCATGTCTGCCTTGGTCTTTTCAACATCTGTGTGGTAGCCGTGTTTGAATTACCCATT
CCCTTTTTGGGGAACCATTAAGTTGTTTCAGCAATTTTTACTGTAGATAAGGCTATACCGCATATCTGTGTACAT
GGGTTTTTATGTACATGGGCAAGTATATCTGTGAGAGAAAAGTTTCCTCAGGAGGAATTCTGGGCACAGCATGTG
TAAATTTCTAAATATGATGGACACCCCCAGCTTCCACCTCAAGGAGGTTGGTCCCATTGACATTTCCCCACACCT
TCACCCAGGCTGTGCCCTTAAACTTGGTTATTTGTCAATGTGAGAAGTGGAAAATAGTATTTAATTGTAGTTTGG
ATTTGTATTTCTATTGGGTTGTATACTTACTGATTAATAATAAGAGCTCTTTACATATTAAGGAAATTAACCCTT
TTCAAATACATTCCTATTTCTCACTAATCTTTAAGTTTTATTGTAATATTTTGCTCTTTAGTTTATATATATATG
TATATATATATATATGTATATATATATATATATACATATATATATACATATATATATA

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FIGURE 3292

ATGGTCCGCTGCGTCCGACTGGTGGAAGCAGGATCTGTGGTGAGATACCTCAGCACAAGCATATGCAGGCCTGTG
GTAGACGCCGGAAGTAGGGCCCTTTGTCTCCAAGAATGGGCAGACTCTCAACAGGTGAAAGAAAAACAGTACTCC
AGCAGAGATGTCCAGAGAGCAGCCGCTCTCAACATCTACCGTATCCCACCGTCTAGCAGGAAGCCCGCTCTCTGT
CCAACTCCGCGGGACCGACTAGAGTACGACGAGGACCGACTAGAGCACATCGCCTACGTGCGCGCCCGGGAGCTG
CACACTCTTGAAGTGACCGGCCTGGAGACGGTTGCCCAGAGCAAGCCACTACTTGCCTTTCCTCCTGTGGCTTCC
CCAGACAACACTCTTGACTCTCCCTTTCCTTTGAAGGCCCATGTAGCATCCCTGGAGGGCCTCATCCCTGAAGAT
AAGGTTGTGCTTCTGGCAGGTTCTCCCTTACAGAATGAAGCCACCCTGGGTCAGTGTGGGGTGGAAGCCCTGACA
ACCCTGGAAGTGGTTGGCCGCAGGCTAGGAGTGGTAAGAGTGCCAGGAACGGAGCGCGTTTGCTGCACACCATTT
GCCATTGGTGCATCGAGCACACTCCCAGCTCCAGGATTATGGGAAGACCTTTTTGGGGCTGGAACAGCGCGCAGT
GGCCACCGCCGCCGGGTCTCCAGCCCCCAGGAGCGCGGCCTCCTCCCGGACTCTCTCCGATGCGGTCCTGCCCTG
GGGACACGGCAGGAAGAAGGGACCTGGCTGGGGGACGTGGCCCCGGCGCGGGGGCAGGGGAGGCAGCGCGGGACT
CCCAGCGGCCCCTGCGCGGGCCTTCCTGAACAGCAGCAGCAGCTGGGAATGCAAAATGACATCCCTATGTTGTCC
CTGCCCTTTGTCCAGGGTGAGAGGGACCCTTCCTCGGTGGAGTTGACACAGACCTGCCTCTCTCTCATGTCTGTA
CTGGGACCCACAGTGCTACAGCTGGGCTGCCACAGCCAGGCCTTTCGGGAGGATCCACCAATAGGCTTCAGGGCC
CAGGGCCAAGGAGGGCGGCTCACGGCCCTCGCGTATCCCTGCGCGGCGCTCGCGAGCCGCCCCTCCCCCGGCGTT
TGTCCCTGA

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FIGURE 3293

AGCCCCCCCATCCCCGCCCCTCTCCCGCCCCTCCCTTGTCCCCGCCCCTTCCCGCCCCAACTCAGGTTCTGCCCC
ACCCCGCCCCAATTCACGTCCTGCTCCGCCCCGACGTAGGCCCCGCCCTGGCCCCCGGGCCCCGCCCCCGTCTGA
CGCAGGCCCCGCCCCCTCTCCGCCCCGCCCCGGCTCGGGCGGCCGGAGGACCCGGAGCTAAGGCGCCCGAACCCG
CGGCGGCGGTGGGGACGATGTGGTTCTTTGCCCGGGACCCGGTCCGGGACTTTCCGTTCGAGCTCATCCCGGAGC
CCCCAGAGGGCGGCCTGCCCGGGCCCTGGGCCCTGCACCGCGGCCGCAAGAAGGCCACAGGCAGCCCCGTGTCCA
TCTTCGTCTATGATGTGAAGCCTGGCGCGGAAGAGCAGACCCAGGTGGCCAAAGCTGCCTTCAAGCGCTTCAAAA
CTCTACGGCACCCCAACATCCTGGCTTACATCGATGGACTGGAGACAGAAAAATGCCTCCACGTCGTGACAGAGG
CTGTGACCCCGTTGGGAATATACCTCAAGGCGAGAGTGGAGGCTGGTGGCCTGAAGGAGCTGGAGATCTCCTGGG
GGCTACACCAGATCGTGAAAGCCCTCAGCTTCCTGGTCAACGACTGCAGCCTCATCCACAACAATGTCTGCATGG
CCGCCGTGTTCGTGGACCGAGCTGGCGAGTGGAAGCTTGGGGGCCTGGACTACATGTATTCGGCCCAGGGCAACG
GTGGGGGACCTCCCCGCAAGGGGATCCCCGAGCTTGAGCAGTATGACCCCCCGGAGTTGGCTGACAGCAGTGGCA
GAGTGGTCAGAGAGAAGTGGTCAGCAGACATGTGGCGCTTGGGCTGCCTCATTTGGGAAGTCTTCAATGGGCCCC
TACCTCGGGCAGCAGCCCTACGCAACCCTGGGAAGATCCCCAAAACGCTGGTGCCCCATTACTGTGAGCTGGTGG
GAGCAAACCCCAAGGTGCGTCCCAACCCAGCCCGCTTCCTGCAGAACTGCCGGGCACCTGGTGGCTTCATGAGCA
ACCGCTTTGTAGAAACCAACCTCTTCCTGGAGGAGATTCAGATCAAAGAGCCAGCCGAGAAGCAAAAATTCTTCC
AGGAGCTGAGCAAGAGCCTGGACGCATTCCCTGAGGATTTCTGTCGGCACAAGGTGCTGCCCCAGCTGCTGACCG
CCTTCGAGTTCGGCAATGCTGGGGCCGTTGTCCTCACGCCCCTCTTCAAGGTGGGCAAGTTCCTGAGCGCTGAGG
AGTATCAGCAGAAGATCATCCCTGTGGTGGTCAAGATGTTCTCATCCACTGACCGGGCCATGCGCATCCGCCTCC
TGCAGCAGATGGAGCAGTTCATCCAGTACCTTGACGAGCCAACAGTCAACACCCAGATCTTCCCCCACGTCGTAC
ATGGCTTCCTGGACACCAACCCTGCCATCCGGGAGCAGACGGTCAAGTCCATGCTGCTCCTGGCCCCAAAGCTGA
ACGAGGCCAACCTCAATGTGGAGCTGATGAAGCACTTTGCACGGCTACAGGCCAAGGATGAACAGGGCCCCATCC
GCTGCAACACCACAGTCTGCCTGGGCAAAATCGGCTCCTACCTCAGTGCTAGCACCAGACACAGGGTCCTTACCT
CTGCCTTCAGCCGAGCCACTAGGGACCCGTTTGCACCGTCCCGGGTTGCGGGTGTCCTGGGCTTTGCTGCCACCC
ACAACCTCTACTCAATGAACGACTGTGCCCAGAAGATCCTGCCTGTGCTCTGCGGTCTCACTGTAGATCCTGAGA
AATCCGTGCGAGACCAGGCCTTCAAGGCCATTCGGAGCTTCCTGTCCAAATTGGAGTCTGTGTCGGAGGACCCGA
CCCAGCTGGAGGAAGTGGAGAAGGATGTCCATGCAGCCTCCAGCCCTGGCATGGGAGGAGCCGCAGCTAGCTGGG
CAGGCTGGGCCGTGACCGGGGTCTCCTCACTCACCTCCAAGCTGATCCGTTCGCACCCAACCACTGCCCCAACAG
AAACCAACATTCCCCAAAGACCCACGCCTGAAGGCCACTGGGAGACGCAGGAGGAGGACAAGGACACAGCAGAGG
ACAGCAGCACTGCTGACAGATGGGACGACGAAGACTGGGGCAGCCTGGAGCAGGAGGCCGAGTCTGTGCTGGCCC
AGCAGGACGACTGGAGCACCGGGGGCCAAGTGAGCCGTGCTAGTCAGGTCAGCAACTCCGACCACAAATCCTCCA
AATCCCCAGAGTCCGACTGGAGCAGCTGGGAAGCTGAGGGCTCCTGGGAACAGGGCTGGCAGGAGCCAAGCTCCC
AGGAGCCACCTCCTGACGGTACACGGCTGGCCAGCGAGTATAACTGGGGTGGCCCAGAGTCCAGCGACAAGGGCG
ACCCCTTCGCTACCCTGTCTGCACGTCCCAGCACCCAGCCGAGGCCAGACTCTTGGGGTGAGGACAACTGGGAGG
GCCTCGAGACTGACAGTCGACAGGTCAAGGCTGAGCTGGCCCGGAAGAAGCGCGAGGAGCGGCGGCGGGAGATGG
AGGCCAAACGCGCCGAGAGGAAGGTGGCCAAGGGCCCCATGAAGCTGGGAGCCCGGAAGCTGGACTGAACCGTGG
CGGTGGCCCTTCCCGGCTGCGGAGAGCCCGCCCCACAGATGTATTTATTGTACAAACCATGTGAGCCCGGCCGGC
CCAGCCAGGCCATCTCACGTGTACATAATCAGAGCCACAATAAATTCTATTTCAC

FIGURE 3294

CAGAGACTGATGAGTGCCGACTGAACCAGAACATCTGTGGCCACGGAGAGTGCGTGCCGGGCCCCCCTGACTACT
CCTGCCACTGCAACCCCGGCTACCGGTCACATCCCCAGCACCGCTACTGCGTGGATGTGAACGAGTGCGAGGCAG
AGCCCTGTGGCCCGGGGAGGGGCATCTGCATGAACACCGGCGGCTCCTACAATTGCCACTGCAACCGCGGCTACC
GCCTGCACGTGGGCGCCGGGGGGCGCTCGTGCGTGGACCTGAACGAATGCGCCAAGCCCCACCTGTGCGGCGACG
GCGGCTTCTGCATCAACTTTCCCGGTCACTACAAGTGCAACTGCTACCCCGGCTACCGGCTCAAAGCCTCCCGGC
CTCCTGTGTGCGAAGACATCGACGAGTGCCGGGACCCAAGCTCTTGCCCGGATGGCAAATGCGAGAACAAGCCCG
GGAGCTTCAAGTGCATCGCCTGTCAGCCTGGCTACCGCAGCCAGGGGGGCGGGGCCTGTCGCGACGTGAACGAGT
GCGCCGAGGGCAGCCCCTGCTCGCCTGGCTGGTGCGAGAACCTCCCGGGCTCCTTCCGCTGCACCTGTGCCCAGG
GCTACGCGCCCGCGCCCGACGGCCGCAGTTGCTTGGATGTGGACGAGTGTGAGGCTGGGGACGTGTGTGACAATG
GCATCTGCAGCAACACGCCAGGATCTTTCCAGTGTCAGTGCCTCTCTGGCTACCATCTGTCCAGGGACCGGAGCC
ACTGCGAGGACATTGATGAGTGTGACTTCCCTGCAGCCTGCATTGGGGGTGACTGCATCAATACCAATGGCTCCT
ACAGATGTCTTTGCCCCCAGGGGCATCGGCTGGTGGGTGGCAGGAAATGCCAAGACATAGATGAGTGCAGCCAGG
ACCCGAGCCTGTGCCTTCCCCATGGGGCCTGCAAGAACCTTCAGGGCTCCTATGTGTGTGTCTGCGATGAGGGCT
TCACTCCCACCCAGGACCAGCACGGTTGTGAGGAGGTGGAGCAGCCCCACCACAAGAAGGAGTGCTACCTGAACT
TCGATGACACAGTGTTCTGCGACAGCGTATTGGCCACCAACGTGACCCAGCAGGAGTGCTGCTGCTCTCTGGGGG
CCGGCTGGGGCGACCACTGCGAAATCTACCCCTGCCCAGTCTACAGCTCAGCCGAGTTCCACAGCCTCTGCCCAG
ACGGAAAGGGCTACACCCAGGACAACAACATCGTCAACTACGGCATCCCAGCCCACCGTGACATCGACGAGTGCA
TGTTGTTCGGGTCGGAGATTTGCAAGGAGGGCAAGTGCGTGAACACGCAGCCTGGCTACGAGTGCTACTGCAAGC
AGGGCTTCTACTACGACGGGAACCTGCTGGAATGCGTGGACGTGGACGAGTGCCTGGACGAGTCCAACTGCCGGA
ACGGAGTGTGTGAGAACACGCGCGGCGGCTACCGCTGTGCCTGCACGCCCCCTGCCGAGTACAGTCCCGCGCAGC
GCCAGTGCCTGAGCCCGGAAGAGATGGACGTGGACGAGTGCCAGGACCCGGCAGCCTGCCGCCCTGGCCGCTGCG
TCAACCTGCCGGGCTCCTACCGCTGCGAGTGTCGCCCGCCCTGGGTGCCCGGGCCCTCCGGCCGCGATTGCCAGC
TCCCCGAGAGCCCGGCCGAGCGTGCCCCGGAGCGGCGCGACGTGTGCTGGAGCCAGCGCGGAGAGGACGGCATGT
GCGCTGGCCCCCTGGCCGGGCCTGCCCTCACCTTCGACGACTGCTGCTGCCGCCAGGGCCGCGGCTGGGGCGCCC
AATGCCGACCGTGCCCGCCGCGCGGCGCGGGGTCCCATTGCCCGACATCGCAGAGCGAGAGCAATTCCTTCTGGG
ACACAAGCCCCCTGCTGTTGGGGAAGCCCCCAAGAGATGAGGACAGTTCAGAGGAGGATTCAGACGAGTGTCGCT
GCGTGAGTGGCCGCTGCGTGCCGCGGCCGGGCGGCGCCGTGTGCGAGTGTCCCGGCGGCTTCCAGCTCGACGCCT
CCCGCGCCCGCTGCGTGGATATCGACGAGTGCCGAGAGCTGAACCAGCGCGGGCTGCTGTGCAAGAGCGAGCGCT
GCGTGAACACCAGCGGCTCCTTCCGCTGCGTCTGCAAAGCCGGCTTCGCGCGCAGCCGCCCGCACGGGGCCTGCG
TTCCCCAGCGCCGCCGCTGACGCCGCCGACGCCGCCCTCGGCCCAGACCTCGGTGATCACTGAGGGATTTCCGCG
AGCTCGGCCTCACTTCTGCCCCGACTTGTGGCTCGGACCCAGGGACCTTCAGGGCCCGCAGACCCTCCCGGCGCC
TTGAGACCCGAGGCGCCCCTACCGGCCCCCCTCCCCGGTTAGCGGGCGGTTGTAAGGTCTCCGGCGGGCGCTGCC
TGCCTTCCTCCCAGAGGGTGTTTCCTAGAAACTGATAAATCAGATCGTGCCTCTTTACCCTTGGCTTTCG

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FIGURE 3295

CTCCCAAAGCAGAATTGCAGCTGCCGCCGCCGCCACCTCCAGGCCACTATGGCGCCTGGGCTGCCCAGGAGCTTC
AGGCCAAGTTGGCAGAGATCGGAGCTCCGATCCAGGGTAATCGCGAGGAGCTGGTGGAGCGGCTGCAGAGCTACA
CCCGCCAGACTGGCATCGTGCTGAATCGGCCGGTTTTGAGAGGGGAAGATGGGGACAAAGCCGCTCCACCTCCCA
TGTCGGCACAGCTCCCTGGAATTCCCATGCCACCACCACCTTTGGGACTCCCCCCTCTGCAGCCTCCTCCGCCAC
CCCCACCACCTCCACCAGGCCTTGGCCTTGGCTTTCCTATGGCCCACCCACCAAATTTGGGGCCCCCGCCTCCTC
TCCGTGTGGGTGAGCCAGTGGCACTGTCAGAGGAGGAGCGGCTGAAGTTGGCTCAGCAGCAGGCGGCATTGCTGA
TGCAGCAGGAGGAGCGTGCCAAGCAGCAGGGAGATCATTCGCTGAAGGAACATGAGCTCTTGGAGCAGCAGAAGC
GGGCAGCTGTGTTACTGGAGCAGGAACGACAGCAGGAGATTGCCAAGATGGGCACCCCAGTCCCTCGGCCCCCAC
AAGACATGGGCCAGATTGGTGTGCGCACTCCTCTGGGTCCTCGAGTAGCTGCTCCAGTGGGCCCAGTGGGCCCCA
CTCCTACAGTTTTGCCCATGGGAGCCCCTGTTCCCCGGCCTCGTGGTCCCCCACCGCCCCCTGGAGATGAGAACA
GAGAGATGGATGACCCCTCTGTGGGCCCCAAGATCCCCCAGGCTTTGGAGAAGATCCTGCAGCTGAAGGAGAGCC
GCCAGGAAGAGATGAATTCTCAGCAGGAGGAAGAGGAAATGGAAACAGATGCTCGCTCGTCCCTGGGCCAGTCAG
CGTCAGAGACTGAGGAGGACACAGTGTCCGTATCTAAAAAGGAGAAAAACCGGAAGCGTAGGAACCGAAAGAAGA
AGAAAAAGCCCCAGCGGGTGCGAGGGGTGTCCTCTGAGAGCTCTGGGGACCGGGAGAAAGACTCAACCCGGTCCC
GTGGCTCTGATTCCCCAGCAGCTGATGTTGAGATTGAGTATGTGACTGAAGAACCTGAAATTTACGAGCCCAACT
TTATCTTCTTTAAGAGGATCTTTGAGGCTTTTAAGCTCACTGATGATGTGAAGAAGGAGAAAGAGAAGGAGCCAG
AGAAACTTGACAAACTGGAGAACTCTGCAGCCCCCAAGAAGAAGGGATTTGAAGAGGAGCACAAGGACAGTGATG
ATGACAGCAGTGATGACGAGCAGGAAAAGAAGCCAGAAGCCCCCAAGCTGTCCAAGAAGAAGTTGCGCCGAATGA
ACCGCTTCACTGTGGCTGAACTCAAGCAGCTGGTGGCTCGGCCCGATGTCGTGGAGATGCACGATGTGACAGCGC
AGGACCCTAAGCTCTTGGTTCACCTCAAGGCCACTCGGAACTCTGTGCCTGTGCCACGCCACTGGTGTTTTAAGC
GCAAATACCTGCAGGGCAAACGGGGCATTGAGAAGCCCCCCTTCGAGCTGCCAGACTTCATCAAACGCACAGGCA
TCCAGGAGATGCGAGAGGCCCTGCAGGAGAAGGAAGAACAGAAGACCATGAAGTCAAAAATGCGAGAGAAAGTTC
GGCCTAAGATGGGCAAAATTGACATCGACTACCAGAAACTGCATGATGCCTTCTTCAAGTGGCAGACCAAGCCAA
AGCTGACCATCCATGGGGACCTGTACTATGAGGGGAAGGAGTTCGAGACACGACTGAAGGAGAAGAAGCCAGGAG
ATCTGTCTGATGAGCTAAGGATTTCCTTGGGGATGCCAGTAGGACCAAATGCCCACAAGGTCCCTCCCCCATGGC
TGATTGCCATGCAGCGATATGGACCACCCCCATCGTATCCCAACCTGAAAATCCCTGGGCTGAACTCGCCCATCC
CTGAGAGCTGTTCCTTTGGGTACCATGCTGGTGGCTGGGGCAAACCTCCAGTGGATGAGACTGGGAAACCGCTCT
ATGGGGACGTGTTTGGAACCAATGCTGCTGAATTTCAGACCAAGACTGAGGAAGAAGAGATTGATCGGACCCCTT
GGGGGGAACTGGAACCATCTGATGAAGAATCCTCAGAAGAAGAGGAAGAGGAAGAAAGTGATGAAGACAAACCAG
ATGAGACAGGCTTTATTACCCCTGCAGACAGTGGCCTTATCACTCCTGGAGGCTTTTCATCAGTGCCTGCTGGAA
TGGAGACCCCTGAACTCATTGAGCTGAGGAAGAAGAAGATTGAGGAGGCGATGGACGGAAGTGAGACACCTCAGC
TCTTCACTGTGTTGCCAGAGAAGAGAACAGCCACTGTTGGAGGGGCCATGATGGGATCAACCCACATTTATGACA
TGTCCACGGTTATGAGCCGGAAGGGCCCGGCTCCTGAGCTGCAAGGTGTGGAAGTGGCGCTGGCGCCTGAAGAGT
TGGAGCTGGATCCTATGGCCATGACCCAGAAGTATGAGGAGCATGTGCGGGAGCAGCAGGCTCAAGTAGAGAAGG
AGGACTTCAGTGACATGGTGGCTGAGCACGCTGCCAAACAGAAGCAAAAAAAACGGAAAGCTCAGCCCCAGGACA
GCCGTGGGGGCAGCAAGAAATATAAGGAGTTCAAGTTTTAGGTCCCCTCACACTAGCCCTTTTTTTGGCCCTACG
TCTGGATGCCTGGGCTTCACACAAGAACCACCTCTCCCGCAGTTCCCAAGGACTTGTCATTTCATGTTCTTATTT
TAGACCTGTTTTGTAAATAAAGCTGTTTCCCAAGGAAAGAGATG

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FIGURE 3296

GGAGTTTCGCCGCCGCAGTCTTCGCCACCATGCCGCCCTACACCGTGGTCTATTTCCCAGTTCGAGGCCGCTGCG
CGGCCCTGCGCATGCTGCTGGCAGATCAGGGCCAGAGCTGGAAGGAGGAGGTGGTGACCGTGGAGACGTGGCAGG
AGGGCTCACTCAAAGCCTCCTGCCTATACGGGCAGCTCCCCAAGTTCCAGGACGGAGACCTCACCCTGTACCAGT
CCAATACCATCCTGCGTCACCTGGGCCGCACCCTTGGGCTCTATGGGAAGGACCAGCAGGAGGCAGCCCTGGTGG
ACATGGTGAATGACGGCGTGGAGGACCTCCGCTGCAAATACATCTCCCTCATCTACACCAACTATGAGGCGGGCA
AGGATGACTATGTGAAGGCACTGCCCGGGCAACTGAAGCCTTTTGAGACCCTGCTGTCCCAGAACCAGGGAGGCA
AGACCTTCATTGTGGGAGACCAGATCTCCTTCGCTGACTACAACCTGCTGGACTTGCTGCTGATCCATGAGGTCC
TAGCCCCTGGCTGCCTGGATGCGTTCCCCCTGCTCTCAGCATATGTGGGGCGCCTCAGTGCCCGGCCCAAGCTCA
AGGCCTTCCTGGCCTCCCCTGAGTACGTGAACCTCCCCATCAATGGCAACGGGAAACAGTGAGGGTTGGGGGGAC
TCTGAGCGGGAGGCAGAGTTTGCCTTCCTTTCTCCAGGACCAATAAAATTTCTAAGAGAGCT

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FIGURE 3297

GCGTGACGTCTTTCCTGCGCGCCACCTAGCGTCTCTATCGCGCCAGTTCCTCAGCCTCAGTGCTATGAAGGTGAC
AGCGTGAGGTGACCCATCTGGCCCGCCGCGATGCTGGCAACACGGCGGCTGCTCGGCTGGTCGCTTCCCGCGCGG
GTATCTGTGCGTTTCAGCGGCGACACGACAGCACCCAAGAAAACCTCATTTGGCTCGCTGAAGGATGAAGACCGG
ATTTTCACCAACCTGTACGGCCGCCATGACTGGAGGCTGAAAGGTTCCCTGAGTCGAGGTGACTGGTACAAGACA
AAGGAGATCCTGCTGAAGGGGCCCGACTGGATCCTGGGCGAGATCAAGACATCGGGTTTGAGGGGCCGTGGAGGC
GCTGGCTTCCCCACTGGCCTCAAGTGGAGCTTCATGAATAAGCCCTCAGATGGCAGGCCCAAGTATCTGGTGGTG
AACGCAGACGAGGGGGAGCCGGGCACCTGCAAGGACCGGGAGATCTTACGCCATGATCCTCACAAGCTGCTGGAA
GGCTGCCTGGTGGGGGGCCGGGCCATGGGCGCCCGCGCTGCCTATATCTACATCCGAGGGGAATTCTACAATGAG
GCCTCCAATCTGCAGGTGGCCATCCGAGAGGCCTATGAGGCAGGTCTGATTGGCAAGAATGCTTGTGGCTCTGGC
TATGATTTTGACGTGTTTGTGGTGCGCGGGGCTGGGGCCTACATCTGTGGAGAGGAGACAGCGCTCATCGAGTCC
ATTGAGGGCAAGCAGGGCAAGCCCCGCCTGAAGCCCCCCTTCCCCGCAGACGTGGGAGTGTTTGGCTGCCCCACA
ACTGTGGCCAACGTGGAGACAGTGGCAGTGTCCCCCACAATCTGCCGCCGTGGAGGTACCTGGTTTGCTGGCTTT
GGCAGAGAACGCAACTCAGGCACCAAACTATTCAACATCTCTGGCCATGTCAACCACCCTTGCACTGTGGAGGAG
GAGATGTCTGTGCCCTTGAAAGAACTGATTGAGAAGCATGCTGGGGGTGTCACGGGCGGCTGGGACAACCTCCTT
GCTGTGATCCCTGGCGGCTCGTCTACCCCACTGATCCCCAAGTCTGTGTGTGAGACGGTGCTGATGGACTTCGAT
GCGCTGGTGCAGGCACAGACAGGCCTGGGCACAGCTGCGGTGATCGTCATGGACCGCTCGACGGACATCGTGAAA
GCCATCGCCCGCCTCATTGAGTTCTATAAGCACGAGAGCTGTGGCCAGTGTACCCCATGCCGTGAGGGTGTGGAC
TGGATGAACAAGGTGATGGCACGTTTCGTGAGGGGGGATGCCCGGCCGGCCGAGATCGACTCCCTGTGGGAGATC
AGCAAGCAGATAGAAGGCCATACGATTTGTGCTCTGGGTGACGGGGCCGCCTGGCCTGTGCAGGGTCTGATCCGC
CACTTTCGGCCGGAGCTCGAGGAGCGGATGCAGCGGTTTGCCCAGCAGCATCAGGCCCGGCAGGCTGCCTCTTAG

CCCACCACCCTGGCCTGCTGTCCTGCGTCTATCCATGTGGAATGCTGGACAATAAAGCGAGTGCTGCCCACCCTC
C

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FIGURE 3298

GTCAAAGCCCTGCGTCCTTCGGCCCCCAGAGCGGAGAAGCGCGCAAGGCACCGGTGGCAGCGGCGACGGCAGCTG
CGACAGCAACCCCTGCTGGGCCGAAACTGGGCAGAGCGGAGCAGACGTCTGAAGCAGCGCGAGTGAGGCGCGAGG
GTAGCGCCCGCGCCCGGGAAGACCCCTCGGCGCGAACCGGCAGCCCAGCCCCGGGTCCCGGTTCCCAAGGCCCCG
CCTCTAGGGCCTGGGGACTAATCGGATTGAGAGCGCGCCGGCCCGGGCCGCGAACTCGCCAATTGCGGAGGGCGG
TGGCCACCGCCCAATCCGGAGCAGACAGGTGCGAGGTCCGGAAGGCGGAGGCCAATCGGCGGCGGTTGCGACCTG
CTGGGGCAGGTCTCGGCCAATAAGGAGGCTCGAGTGACATCTTCGCGCACCAATCGGGAGTGAGGGAGCATTCGT
GCCCGCTCGCCCTTCCGGCCAGACCTCTATTTACCAGGGGCGTGCAGCCCGCTTGCCAATCAGAGCGCGGCTGAG
CGGCCCCGCAGCCAACCCCCGAGGAGCGGCCGGCTGGCGTCCGCCGCGCCCAGGAGTTGGGGATGTCCTACAAAC
CCATCGCCCCTGCTCCCAGCAGCACCCCTGGCTCCAGCACCCCTGGGCCGGGCACCCCGGTCCCTACAGGTGAGG
ATCCAGCTCCACCCCTGCTCGCCTGCCGGGCGGTCGAGGTCTCGAAGAGAAGACGGCCTGAGTTCTGCAATACTG
GGCCTGCCGCCTACCCTCGCTGAGCCTCAGTTTGCTGGCCTGTGAAGTGGGCGTGGTCACGTAAGGGCTTGTAGG
TGGAGCGCAGTGGGAGGGATTTGTCCCTGAAGTTGATCAGCATGGA**ATG**AAGCATCCTTTGGAGGGAATCGGGCG
AACCCGGTCCTGGGCTTGGAAAAGCTGGGAGGCGGCGTCCCTGCCCCGCGCTGACCTCTTACTCGCGCCTGTTGC
TGCAGGAAGCGTCCCGTCGCCGTCGGGCTCAGTGCCAGGAGCCGGCGCTCCTTTCAGACCGCTGTTTAACGACTT
TGGACCGCCTTCCATGGGCTACGTGCAGGCGATGAAGCCACCCGGCGCCCAGGGCTCCCAGAGCACCTACACGGA
CCTGCTGTCAGTCATAGAGGAGATGGGCAAAGAGATCCGGCCTACCTATGCTGGCAGCAAGAGCGCCATGGAGCG
CCTGAAGAGAGGTATCATCCATGCCCGGGCCCTAGTCAGAGAGTGCCTGGCAGAGACAGAGCGGAACGCCCGCAC
G**TAA**CAGGAAGCGCCTCGGCCTCAGCGTCTGGACCTATCCGGCCACTGCAGAGCACCCGCTTCTCCCTGGCCTTC
ATCCCGAGTTGCACTAACCATCCTGGGCTTCCTGTCCTGTGTCCCTTGGTGGGTCCCCTCCAGGAACCAAGGAGT
GGCCCTCCAGGTGGCAGCACTAAGGACACCCCCCCACAACAAGAGTTAGCAGCGAGGTCCCCATGAGTCCCACCC
ATGACCTGCCGACAGTGTTGCCCACCGGAACTTTTGTGGCCCCTACCGCTCAGCCCTTCCCAGCACTTCTCCCAC
TTTGTCCCGAGCCTCCTTCTCCCCCAGCAGGGGCACAGGCCTGGCACCTCCCTGCCTTGTGTCCTGAGCCATAGT
GACTCTTTTATCTGTGTGTCTTTTGCTAAATATGCCCTTTTTATATTAATAAAAGATGATTTGGAGTTGTGCTCT
C

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FIGURE 3299

CGCGGGCGGCGGTGCTAGGCTCGCCTCTGCCTCCCTCGTGGCGGGCCCGGACATGGGGTCCCGTGGCCTGAGTCC
CTCGGCCGGCGCGCAGGGCTCGGGCCGCGCGCAGCCTCCCCGCACTGACTGTCGCGCCGTGCCCTGCGCCAGGAG
GAGCGGAGGCCGCGCGCCCGCCGAGCGCCTTCAGGATGCTCATCAAGGAATACCACATTCTGCTGCCCATGAGCC
TGGACGAGTACCAGGTGGCCCAGCTCTACATGATCCAGAAAAAGAGCCGGGAGGAGTCTAGTGGTGAGGGCAGCG
GCGTGGAGATCCTGGCCAACCGGCCCTACACGGATGGGCCCGGGGGCAGCGGGCAATACACACACAAGGTGTACC
ACGTGGGCTCCCACATCCCAGGCTGGTTCCGGCACTGCTGCCCAAGGCTGCCCTGCAGGTAGAAGAGGAATCCTG
GAATGCCTACCCCTACACCCGAACCCGGTACACCTGCCCTTTCGTGGAGAAATTCTCCATTGAAATTGAGACCTA
TTACCTGCCTGATGGGGGGCAGCAGCCAAACGTCTTCAACCTGAGCGGGGCCGAGAGGAGACAGCGCATCCTGGA
CACCATCGACATCGTGCGGGATGCAGTGGCCCCAGGCGAGTACAAAGCAGAAGAGGACCCCCGGCTTTATCACTC
GGTCAAGACGGGCCGAGGGCCACTGTCTGATGACTGGGCACGGACGGCGGCACAGACGGGGCCCCTTATGTGTGC
CTATAAGCTGTGCAAGGTTGAGTTCCGCTACTGGGGCATGCAAGCCAAGATCGAGCAGTTCATCCATGATGTAGG
TACTGCGTCGGGTGATGCTGCGGCCCACCGCCAGGCCTGGTGCTGGCAGGATGAGTGGACAGAGCTGAGCATGGC
TGACATCCGGGCACTGGAAGAGGAGACTGCTCGCATGCTGGCCCAGCGCATGGCCAAGTGCAACACAGGCAGTGA
GGGTCCGAGCCCAGCCCCCCGGGAAACCGAGCACCGAGGCCCGGTCTGCGGCAGCAACACTGGCACCCCCGATGG
GCCTGAGCCCCCCCAGGCCCAGATGCCTCCCCCGATGCCAGCTTTGGGAAGCAGTGGTCCTCATCCTCCCGTTCC
TCCTACTCATCCCAACATGGAGGGGCTGTGTCTCCCCAGAGCTTGTCTGAGTGGCGCATGCAGAACATTGCCCGA
GACTCTGAGAACAGCTCCGAGGAAGAGTTCTTTGATGCCCACGAAGGCTTCTCGGACAGTGAGGAGGTCTTCCCC
AAGGAGATGACCAAGTGGAACTCCAATGACTTCATTGATGCCTTTGCCTCCCCAGTGGAGGCAGAGGGAACGCCA
GAGCCTGGAGCCGAGGCAGCTAAAGGCATTGAGGATGGGGCCCAAGCACCCAGGGACTCAGAGGGCCTGGATGGA
GCCGGGGAGCTGGGGGCTGAGGCATGCGCAGTCCACGCCCTCTTCCTTATCCTGCACAGCGGCAACATCCTGGAC
TCAGGCCCTGGAGACGCCAACTCCAAGCAGGCGGATGTGCAGACGCTGAGCTCCGCCTTCGAGGCCGTCACCCGC
ATCCACTTCCCTGAGGCCTTGGGCCACGTGGCGCTGCGACTGGTGCCCTGTCCACCCATCTGCGCCGCCGCCTAT
GCCCTTGTCTCCAACCTGAGCCCTTACAGCCACGATGGGGACAGCCTGTCTCGCTCCCAAGACCACATTCCACTG
GCTGCCCTGCCACTGCTGGCCACCTCATCCTCCCGCTACCAGGGCGCCGTGGCCACCGTCATTGCCCGCACCAAC
CAGGCCTACTCAGCCTTCCTGCGCTCACCTGAGGGTGCCGGCTTCTGTGGGCAGGTCGCACTGATTGGAGATGGT
GTTGGTGGCATCCTGGGCTTTGATGCACTCTGCCACAGTGCTAACGCGGGCACCGGGAGTCGGGGCAGCAGCCGC
CGTGGGAGCATGAACAATGAGCTGCTCTCTCCGGAGTTTGGCCCAGTGCGGGACCCCCTGGCAGATGGTGTGGAA
GGCCTGGGTCGGGGCAGCCCAGAACCCTCGGCCTTGCCTCCCCAGCGCATCCCCAGCGACATGGCCAGTCCTGAG
CCCGAGGGCTCTCAGAACAGCCTTCAGGCAGCCCCCGCAACCACCTCCTCCTGGGAGCCCCGGCGGGCAAGCACG
GCCTTCTGCCCACCCGCTGCCAGTTCCGAGGCACCTGACGGCCCCAGCAGCACTGCCCGCCTTGACTTCAAGGTC
TCTGGCTTCTTCCTCTTCGGCTCCCCACTGGGCCTGGTGCTGGCTCTGCGCAAAACTGTGATGCCCGCCCTGGAG
GCAGCCCAGATGCGCCCAGCCTGTGAACAGATCTACAACCTCTTCCACGCGGCTGACCCCTGCGCCTCACGCCTC
GAGCCCCTGCTGGCCCCGAAGTTCCAGGCCATCGCCCCACTGACCGTGCCCCGCTACCAGAAGTTCCCCCTGGGA
GATGGCTCATCCCTGCTGCTGGCCGACACTCTGCAGACGCACTCCAGCCTCTTTCTGGAGGAGCTGGAGATGCTG
GTGCCCTCAACACCCACCTCTACTAGCGGTGCCTTCTGGAAGGGCAGTGAGTTGGCCACTGACCCCCCGGCCCAG
CCAGCCGCCCCCAGCACCACCAGTGAGGTGGTTAAGATCCTGGAGCGCTGGTGGGGGACCAAGCGGATCGACTAC
TCGCTGTACTGCCCCGAGGCGCTCACCGCCTTTCCCACCGTCACGCTGCCCCACCTCTTCCACGCCAGCTACTGG
GAGTCCGCCGACGTGGTGGCGTTCATCCTGCGCCAGGTGATCGAGAAGGAGCAGGCCACAGCTGGCGGAATGCGA
GGAGCCGTCCATCTACAGCCCGGCCTTCCCCAGGCAGAAGTGGCAGCGAAAACGCACGCAGGTCAAGATCCGGGT
AGAACTGAACATCGTGGCCGGTTATGGGTCTCCCAAAGATGTGGCTGTATACGCGGCGCTGGGGCTGTCCCCGAG
CCAGACCTACATCGTGGGCCGTGCCGTGCGGAAGCTACAGGCGCAGTGCCAGTTCCTGTCAGACGGCTATGTGGC
CCACCTGGGCCAGCTGGAAGCGGGCTCGCACTCGCATGCCTCCTCGGGACCCCCGAGAGCTGCCTTGGGCAAGAG
CAGCTATGGTGTGGCTGCCCCCGTGGACTTCCTGCGCAAACAGAGCCAGCTGCTTCGCTCGAGGGGCCCCAGCCA
GGCGGAGCGTGAGGGCCCGGGAACACCACCCACCACCCTGGCACGGGGCAAAGCACGGAGCATCAGCCTGAAGCT
GGACAGCGAGGAGTGAGGCCCACACCAGCCTGGACCTGGGTTATTTATTGACACACCCAAGGGGCCCGAGGGGCT
GCGTGTGGGAGGCTGGGGACCCAGACTTTTGGCCCCAGCGCTGGCCCCCCCAGCCCCACACCCTATATCTCCGTG
TGCTCCTCGGTGTTACTTCCCTTTCATATGAGGGGACCCAGCGCCGGGGGGAGGGAGGAGGGCGTGGGCATGGGC
GCAGAGGCTTTTCCAGTGTGTATAAATCCATGAAAATAAACGCCACCTGCACCCC

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FIGURE 3300

AGGCCACGTTCCACTACCGGACGCTGCACAGTGACGACGAGGGCACCGTGCTGGACGACAGCCGGGCTCGTGGCA
AGCCCATGGAGCTCATCATTGGCAAGAAGTTCAAGCTGCCTGTGTGGGAGACCATCGTGTGCACCATGCGAGAAG
GGGAGATTGCCCAGTTCCTCTGTGACATCAAGCATGTGGTCCTGTACCCGCTGGTGGCCAAGAGTCTCCGCAACA
TCGCGGTGGGCAAGGACCCCCTGGAGGGCCAGCGGCACTGCTGCGGTGTTGCACAGATGCGTGAACACAGCTCCC
TGGGCCATGCTGACCTGGACGCCCTGCAGCAGAACCCCCAGCCCCTCATCTTCCACATGGAGATGCTGAAGGTGG
AGAGCCCTGGCACGTACCAGCAGGACCCATGGGCCATGACAGACGAAGAGAAGGCAAAGGCAGTGCCACTTATCC
ACCAGGAGGGCAACCGGTTGTACCGCGAGGGGCATGTGAAGGAGGCTGCTGCCAAGTACTACGATGCCATTGCCT
GCCTCAAGAACCTGCAGATGAAGGAACAGCCTGGGTCCCCTGAATGGATCCAGCTGGACAAGCAGATCACGCCGC
TGCTGCTCAACTACTGCCAGTGCAAGCTGGTGGTCGAGGAGTACTACGAGGTGCTGGACCACCTAGCTCTTCCAT
CCTCAACAAGTACGACGACAACGTCAAGGCCTACTTCAAGCGGGGCAAGGCCCACGCGGCCGTGTGGAATGCCCA
GGAGGCCCAGGCTGACTTTGCCAAAGTGCTGGAGCTGGACCCAGCCCTGGCGCCTGTGGTGAGCCGAGAGCTGCT
GGGCCCTGGAGGCACGGATCCGGCAGAAGGACGAAGAGGACAAAGCCCGGTTCCGGGGGATCTTCTCCCATTGAC
AGGAGCACTTGGCCCTGCCTTACCTGCCAAGCCCACTGCTGCAGCTGCCAGCCCCCCTGCCCGTGCTGCGTCATG
CTTCTGTGTATATAAAGGCCTTTATTTATCTCTC

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FIGURE 3301

GACTCCGGGGCGACCGCCGCGAGTCCGCAGTAGTTCGGGCCATGGAGGCGGAGCCGCCGCTCTACCCGATGGCGG
GGGCTGCGGGGCCGCAGGGCGACGAGGACCTGCTCGGGGTCCCGGACGGGCCCGAGGCCCCGCTGGACGAGCTGG
TGGGCGCGTACCCCAACTACAACGAGGAGGAGGAGGAGCGCCGCTACTACCGCCGCAAGCGCCTGGGCGTGCTCA
AGAACGTGCTGGCTGCCAGCGCCGGGGGCATGCTCACCTACGGCGTCTACCTGGGCCTCCTGCAGATGCAGCTGA
TCCTGCACTACGACGAGACCTACCGCGAGGTGAAGTATGGCAACATGGGGCTGCCCGACATCGACAGCAAAATGC
TGATGGGCATCAACGTGACTCCCATCGCCGCCCTGCTCTACACACCTGTGCTCATCAGGTTTTTTGGAACGAAGT
GGATGATGTTCCTCGCTGTGGGCATCTACGCCCTCTTTGTCTCCACCAACTACTGGGAGCGCTACTACACGCTTG
TGCCCTCGGCTGTGGCCCTGGGCATGGCCATCGTGCCTCTTTGGGCTTCCATGGGCAACTACATCACCAGGATGG
CGCAGAAGTACCATGAGTACTCCCACTACAAGGAGCAGGATGGGCAGGGGATGAAGCAGCGGCCTCCGCGGGGCT
CCCACGCGCCCTATCTCCTGGTCTTCCAAGCCATCTTCTACAGCTTCTTCCATCTGAGCTTCGCCTGCGCCCAGC
TGCCCATGATTTATTTCCTGAACCACTACCTGTATGACCTGAACCACACGCTGTACAATGTGCAGAGCTGCGGCA
CCAACAGCCACGGGATCCTCAGCGGCTTCAACAAGACGGTTCTGCGGACGCTCCCGCGGAGCGGAAACCTCATTG
TGGTGGAGAGCGTGCTCATGGCAGTGGCTTCCTGGCCATGCTGCTGGTGCTGGGTTTGTGCGGAGCCGCTTACCG
GCCCACGGAGGAGATCGATCTGCGCAGCGTGGGCTGGGGCAACATCTTCCAGCTGCCCTTCAAGCACGTGCGTGA
CTACCGCCTGCGCCACCTCGTGCCTTTCTTTATCTACAGCGGCTTCGAGGTGCTCTTTGCCTGCACTGGTATCGC
CTTGGGCTATGGCGTGTGCTCGGTGGGGCTGGAGCGGCTGGCTTACCTCCTCGTGGCTTACAGCCTGGGCGCCTC
AGCCGCCTCACTCCTGGGCCTGCTGGGCCTGTGGCTGCCACGCCCGGTGCCCCTGGTGGCCGGAGCAGGGGTGCA
CCTGCTGCTCACCTTCATCCTCTTTTTCTGGGCCCCTGTGCCTCGGGTCCTGCAACACAGCTGGATCCTCTATGT
GGCAGCTGCCCTTTGGGGTGTGGGCAGTGCCCTGAACAAGACTGGACTCAGCACACTCCTGGGAATCTTGTACGA
AGACAAGGAGAGACAGGACTTCATCTTCACCATCTACCACTGGTGGCAGGCTGTGGCCATCTTCACCGTGTACCT
GGGCTCGAGCCTGCACATGAAGGCTAAGCTGGCGGTGCTGCTGGTGACGCTGGTGGCGGCCGCGGTCTCCTACCT
GCGGATGGAGCAGAAGCTGCGCCGGGGCGTGGCCCCGCGCCAGCCCCGCATCCCGCGGCCCCAGCACAAGGTGCG
CGGTTACCGCTACTTGGAGGAGGACAACTCGGACGAGAGCGACGCGGAGGGCGAGCATGGGGACGGCGCGGAGGA
GGAGGCGCCGCCCGCAGGGCCCAGGCCTGGCCCCGAGCCCGCTGGACTCGGCCGCCGGCCCTGCCCGTACGAACA
GGCGCAGGGGGGAGACGGGCCGGAGGAGCAGTGAGGGGCCGCCTGGTCCCCGGACTCAGCCTCCCTCCTCGCCGG
CCTCAGTTTACCACGTCTGAGGTCGGGGGGACCCCCTCCGAGTCCCGCGCTGTCTTCAAAGGCCCCTGTCTCCCC
TCCCCCACGTTGGGGACGCCCCTCCCAGAGCCCAGGTCACCTCCGGGCTTCCGCAGCCCCCTCCAAGGCGGAGTG
GAGCCTTGGGAACCCCTCGGCCAAGCACAGGGGTTCGAAAATACAGCTGAAACCCCGCGGGCCCTTAGCACGCGC
CCCAGCGCCGGAGCACGGTCAGGGTCTTCTTGCGACCCGGCCCGCTCCAGATCCCCACAGCTCTCGGCCGCGGAC
CCGGGCCGCGTGTGAGCGCACTTTGCACCTCCTATCCCCAGGGTCCGCCGAGAGCCACGATTTTTTACAGAAAAT
GAGCAATAAAGAGATTTTGTACTGTC

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FIGURE 3302

ATTTCTTAACAGCAGGGCCACCAGGCAGAGCGGGACAGCCAGGAGGAAGGGCAGCTTGGCAGAGCCTCAGGATGG
ACCCCCTTGGGGACACGCTGCGGCGACTGCGGGAGGCCTTCCACGCGGGGCGCACGCGGCCAGCTGAGTTCCGGG
CTGCGCAGCTCCAAGGCCTGGGCCGCTTCCTGCAAGAAAACAAGCAGCTTCTGCACGACGCACTGGCCCAGGACC
TGCACAAGGCCACGCAGCTGGACTCCGCCTTCATCCGGAAGGAGCCCTTTGGCCTGGTCCTCATCATTGCGCCCT
GGAACTATCCGCTGAACCTGACGCTGGTGCCCCTCGTGGGAGCCCTCGCTGCAGGGAACTGTGTGGTGCTGAAGC
CATCGGAGATTAGCAAGAACGTCGAGAAGATCCTGGCCGAGGTGCTGCCCCAATACGTGGACCAGAGCTGCTTTG
CTGTGGTGCTGGGCGGGCCCCAGGAGACGGGGCAGCTGCTAGAGCACAGGTTCGACTACATCTTCTTCACAGGGA
GCCCTCGTGTGGGCAAGATTGTTATGACTGCTGCCGCCAAGCACCTGACACCTGTCACCCTGGAGCTGGGGGGCA
AGAACCCTTGCTACGTGGACGACAACTGCGACCCCCAGACCGTGGCCAACCGCGTGGCCTGGTTCCGCTACTTCA
ACGCCGGCCAGACCTGCGTGGCCCCCGACTACGTCCTATGCAGCCCTGAGATGCAGGAGAGGCTGCTGCCTGCCC
TGCAGAGCACCATCACCCGTTTCTATGGCGACGACCCCCAGAGCTCCCCAAACCTGGGCCGCATCATCAACCAGA
AACAGTTCCAGCGGCTGCGGGCATTGCTGGGCTGCGGCGTGTGGCCATTGGGGGCCAGAGCGATGAGAGCGATCG
CTACATCGCCCCCACGGTGCTGGTGGATGTGCAGGAGATGGAGCCTGTGATGCAGGAGGAGATCTTCGGGCCCAT
CCTGCCCATCGTGAACGTGCAGAGCTTGGACGAGGCCATCGAGTTCATCAACCGGCGGGAGAAGCCCCTGGCCCT
GTACGCCTTCTCCAACAGCAGCCAGGTGGTCAAGCGGGTGCTGACCCAGACCAGCAGCGGGGGCTTCTGTGGGAA
CGACGGCTTCATGCACATGACCCTGGCCAGCCTGCCTTTTGGAGGAGTGGGTGCCAGTGGGATGGGCCGGTACCA
TGGCAAGTTCTCCTTCGACACCTTCTCCCACCATCGCGCCTGCCTCCTGCGCAGCCCGGGGATGGAGAAGCTCAA
CGCCCTCCGCTACCCGCCGCAATCGCCGCGCCGCCTGAGGATGCTGCTGGTGGCCATGGAGGCCAAGGCTGCAGC
TGCACACTGCTCTGAGCCCTTCCCCAGGCCCAGGCTGTAGACCACCATGACAGCTGTCGCCTGCGGCTGGTGGAG
ACGGGGCCTGGGCTCCCGGGCCCGAGGAGGAAAAGGATTGCCAAGGCTCCAGGGCACCCCTCAAAGCAGCGCCTG
CCTCCTCCCTCCTGGGTCTTCCCTCTCCCTGCCTCAGCCTCCTCCCTCAGCCGCTCCCAACCATGAGAGCCGAGG
TGGGAGGCATGGGAAACAGTGCAGTGACTCACCCCCTGCCCCCGCACCAACCACCCATATTCAGGAGAAGAGGAC
AGACACGGCACCTCTGAGTCACCCCTCTCCTGTGGAGCGGGCGTCCGAGGGGCCCTGGCATCTGACTCAGGCCAC
ACCATGGAATCACTGCATCCAAGGCCATTCCTGCCCTCTCTGAGTCTCAGTTTTTCCATTTGTTCAGTGGAGAGA
ATTAACCATTGATACCTCCTGGCTGGGTGAGGCGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCGAGGCAG
GCGGATCACCTGAAATCAGGAGTTCAAGATCAGCCTGGCTAACATGGCGAAACCCCGTCTCTACTAAAAATACAA
AAATTAGCCTGGCGTGGTGGCGCATGCCTGTAATCCCAGCTACTCAGGAGGCTAAGGCAGGAGAATCGCTTGAAC
CCGGGAGGTGGAGGTTGCCGTGAGCTGAGATTGCGTCACTGAACTCCGGCCTGGGTGACAGAAGGAGGCTCTGCC
TTAAAAAAAAAAAAAAAAAAAACCTCCTGGGACTGTTGCAAGGATGAAATGAAGGATTGAGGGATTGAGGGATTG
CTGAGCTGGAGCTCCAGGTGTCCTATCTTTCTCAGTGGGGTGGCACGGAGCGGGGCCGCCTCCCTCTTCTCTCCA
GGCAGGTGGGGCTGTGGTTATGCGATAGGGTCTCCCTTCCCTCCAGCCCATGCCAGAGGAGCTTGTAACTCTTTA
TCCTCATGGTGCCCACTACGAGTCATACTCTTCCCCATGCTGCTCATCCTCCTGGGCCCCATCCACTCAGCCAAA
GCAGAATGCAGGGTTTCCTGCCTGACAACCCTTCTCACCTCCCAAGTCCCACTTTTGAACAAGCTGATGATTCTG
AAACTGGCCCAATTTCCTAACAAGCCGGATGCTTGAGAAACCTACATTTGGACAATGAGAGGCTGCTCCTGCGGC
CTGCGGGCCACCTCCTCTTCCTTGGCTCCTGCTTTCTTTTTAGACTATATCAACCTACAACTTTAGTCGGGAAGA
GGGACAGGGGTGGACCTGAGTTTCGTCTCCTGTCTCTCTGGCTGATGTCACCTGAATAAAGCCTTCTTCCCTGGC

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FIGURE 3303

CCCGCTGGCCCAATGGCAGCGTCCTACAGTGTAGCCTCCGCCTCCCGATTGACTGGCCTGCTTGGCAAGGCAAGT
AGCGGCGGCGCTTCAAGATGCGCTGCCTGACCACGCCTATGCTGCTGCGGGCCCTGGCCCAGGCTGCACGTGCAG
GACCTCCTGGTGGCCGGAGCCTCCACAGCAGTGCAGTGGCAGCCACCTACAAGTATGTGAACATGCAGGATCCCG
AGATGGACATGAAGTCAGTGACTGACCGGGCAGCCCGCACCCTGCTGTGGACTGAGCTCTTCCGAGGCCTGGGCA
TGACCCTGAGCTACCTGTTCCGGGAACCGGCCACCATCAACTACCCGTTCGAGAAGGGCCCGCTGAGCCCTCGCT
TCCGTGGGGAGCATGCGCTGCGCCGGTACCCATCCGGGGAGGAGCGTTGCATTGCCTGCAAGCTCTGCGAGGCCA
TCTGCCCCGCCCAGGCCATCACCATCGAGGCTGAGCCAAGAGCTGATGGCAGCCGCCGGACCACCCGCTATGACA
TCGACATGACCAAGTGCATCTACTGCGGCTTCTGCCAGGAGGCCTGTCCCGTGGATGCCATCGTCGAGGGCCCCA
ACTTTGAGTTCTCCACGGAGACCCATGAGGAGCTGCTGTACAACAAGGAGAAGTTGCTCAACAACGGGGACAAGT
GGGAGGCCGAGATCGCCGCCAACATCCAGGCTGACTACTTGTATCGGTGACGCCCCACCGGCCCGCAGCCCCTGC
TGCCCAATAAAACCACTCCGACCCCACGG

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FIGURE 3304

GCGGCGCCTAGTCCCGGGCTGGCGGGAGTGCAGTTCTGAGTCCCGCCCGGCGTGCGCGGAGCGGGGCAGCCAGCA
GCGGAGGCGCGGCGCGCAGCACACCCGGGGACCATGGCTCCATGTTCCGGAGCGAGGAGGTGGCCCTGGTCCAG
CTCTTTCTGCCCACAGCGGCTGCCTACACCTGCGTGAGTCGGCTGGGCGAGCTGGGCCTCGTGGAGTTCAGAGAC
CTCAACGCCTCGGTGAGCGCCTTCCAGAGACGCTTTGTGGTTGATGTTCGGCGCTGTGAGGAGCTGGAGAAGACC
TTCACCTTCCTGCAGGAGGAGGTGCGGCGGGCTGGGCTGGTCCTGCCCCCGCCAAAGGGGAGGCTGCCGGCACCC
CCACCCCGGGACCTGCTGCGCATCCAGGAGGAGACGGAGCGCCTGGCCCAGGAGCTGCGGGATGTGCGGGGCAAC
CAGCAGGCCCTGCGGGCCCAGCTGCACCAGCTGCAGCTCCACGCCGCCGTGCTACGCCAGGGCCATGAACCTCAG
CTGGCAGCCGCCCACACAGATGGGGCCTCAGAGAGGACGCCCCTGCTCCAGGCCCCCGGGGGGCCGCACCAGGAC
CTGAGGGTCAACTTTGTGGCAGGTGCCGTGGAGCCCCACAAGGCCCCTGCCCTAGAGCGCCTGCTCTGGAGGGCC
TGCCGCGGCTTCCTCATTGCCAGCTTCAGGGAGCTGGAGCAGCCGCTGGAGCACCCCGTGACGGGCGAGCCAGCC
ACGTGGATGACCTTCCTCATCTCCTACTGGGGTGAGCAGATCGGACAGAAGATCCGCAAGATCACGGACTGCTTC
CACTGCCACGTCTTCCCGTTTCTGCAGCAGGAGGAGGCCCGCCTCGGGGCCCTGCAGCAGCTGCAACAGCAGAGC
CAGGAGCTGCAGGAGGTCCTCGGGGAGACAGAGCGGTTCCTGAGCCAGGTGCTAGGCCGGGTGCTGCAGCTGCTG
CCGCCAGGGCAGGTGCAGGTCCACAAGATGAAGGCCGTGTACCTGGCCCTGAACCAGTGCAGCGTGAGCACCACG
CACAAGTGCCTCATTGCCGAGGCCTGGTGCTCTGTGCGAGACCTGCCCGCCCTGCAGGAGGCCCTGCGGGACAGC
TCGATGGAGGAGGGAGTGAGTGCCGTGGCTCACCGCATCCCCTGCCGGGACATGCCCCCCACACTCATCCGCACC
AACCGCTTCACGGCCAGCTTCCAGGGCATCGTGGATGCCTACGGCGTGGGCCGCTACCAGGAGGTCAACCCCGCT
CCCTACACCATCATCACCTTCCCCTTCCTGTTTGCTGTGATGTTCGGGGATGTGGGCCACGGGCTGCTCATGTTC
CTGTTCGCCCTGGCCATGGTCCTTGCGGAGAACCGACCGGCTGTGAAGGCCGCGCAGAACGAGATCTGGCAGACT
TTCTTCAGGGGCCGCTACCTGCTCCTGCTTATGGGCCTGTTCTCCATCTACACCGGCTTCATCTACAACGAGTGC
TTCAGTCGCGCCACCAGCATCTTCCCCTCGGGCTGGAGTGTGGCCGCCATGGCCAACCAGTCTGGCTGGAGTGAT
GCATTCCTGGCCCAGCACACGATGCTTACCCTGGATCCCAACGTCACCGGTGTCTTCCTGGGACCCTACCCCTTT
GGCATCGATCCTATTTGGAGCCTGGCTGCCAACCACTTGAGCTTCCTCAACTCCTTCAAGATGAAGATGTCCGTC
ATCCTGGGCGTCGTGCACATGGCCTTTGGGGTGGTCCTCGGAGTCTTCAACCACGTGCACTTTGGCCAGAGGCAC
CGGCTGCTGCTGGAGACGCTGCCGGAGCTCACCTTCCTGCTGGGACTCTTCGGTTACCTCGTGTTCCTAGTCATC
TACAAGTGGCTGTGTGTCTGGGCTGCCAGGGCCGCCTCGGCCCCCAGCATCCTCATCCACTTCATCAACATGTTC
CTCTTCTCCCACAGCCCCAGCAACAGGCTGCTCTACCCCCGGCAGGAGGTGGTCCAGGCCACGCTGGTGGTCCTG
GCCTTGGCCATGGTGCCCATCCTGCTGCTTGGCACACCCCTGCACCTGCTGCACCGCCACCGCCGCCGCCTGCGG
AGGAGGCCCGCTGACCGACAGGAGGAAAACAAGGCCGGGTTGCTGGACCTGCCTGACGCATCTGTGAATGGCTGG
AGCTCCGATGAGGAAAAGGCAGGGGGCCTGGATGATGAAGAGGAGGCCGAGCTCGTCCCCTCCGAGGTGCTCATG
CACCAGGCCATCCACACCATCGAGTTCTGCCTGGGCTGCGTCTCCAACACCGCCTCCTACCTGCGCCTGTGGGCC
CTGAGCCTGGCCCACGCCCAGCTGTCCGAGGTTCTGTGGGCCATGGTGATGCGCATAGGCCTGGGCCTGGGCCGG
GAGGTGGGCGTGGCGGCTGTGGTGCTGGTCCCCATCTTTGCCGCCTTTGCCGTGATGACCGTGGCTATCCTGCTG
GTGATGGAGGGACTCTCAGCCTTCCTGCACGCCCTGCGGCTGCACTGGGTGGAATTCCAGAACAAGTTCTACTCA
GGCACGGGCTACAAGCTGAGTCCCTTCACCTTCGCTGCCACAGATGACTAGGGCCCACTGCAGGTCCTGCCAGAC
CTCCTTCCTGACCTCTGAGGCAGGAGAGGAATAAAGACGGTCCGCCCTGGC

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FIGURE 3305

GAGGTCCTGTAATAAAGAGGGATCCGAACAAGCTCAGAAAGAAAATGAATTTCAAGGGGCTGAGGCCATGGTTCT
GGAGAGCGTTATGTTTGCCATTCTCGCAGAGAGGTCACTTGGGCCAAAACTCTATGGCATCTTTCCCCAAGGCCG
ACTGGAGCAGTTCATCCCGAGCCGGCGATTAGATACTGAAGAATTAAGTTTGCCAGATATTTCTGCAGAAATCGC
CGAGAAAATGGCTACATTTCATGGTATGAAAATGCCATTCAATAAGGAACCAAAATGGCTTTTTGGCACAATGGA
AAAGTATCTAAAGGAAGTGCTGAGAATTAAATTTACTGAGGAATCCAGAATTAAAAAGCTCCACAAATTGCTCAG
TTACAATCTGCCCTTGGAACTGGAAAACCTGAGATCATTGCTTGAATCTACTCCATCTCCAGTTGTATTTTGTCA
TAATGACTGTCAAGAAGGTAATATCTTGTTGCTGGAAGGCCGAGAGAATTCTGAAAAACAGAAACTGATGCTCAT
TGATTTCGAATACAGCAGTTACAATTACAGGGGATTCGACATTGGAAATCACTTCTGTGAGTGGATGTATGATTA
TAGCTATGAAAAATACCCTTTTTTCAGAGCAAACATCCGGAAGTATCCCACCAAGAAACAACAGCTCCATTTTAT
TTCCAGTTACTTGCCTGCATTCCAAAATGACTTTGAAAACCTCAGTACTGAAGAAAAATCCATTATAAAAGAAGA
AATGTTGCTTGAAGTTAATAGGTTTGCCCTTGCATCTCATTTCCTCTGGGGACTGTGGTCCATTGTACAAGCCAA
GATTTCATCTATTGAATTTGGGTACATGGACTACGCCCAAGCAAGGTTTGATGCCTATTTCCACCAGAAGAGGAA
GCTTGGGGTGTGACTGTGGGGAGGACTCCATCCACCTCATCACTGGACTGCATGGGGAGGCAGCAGAGCGGGGTC
CCCTCTGTGCTTCGACTACTGCTCCTGTGGCAGGAGGCTTTGGGTGGCTCACTACTGAACACATGTGTATGATAC
TAAAGACGGTATTAAAATGGAGCGACGTTTATTTCATCTCTTGTTTACGATTTCACTAGGACTCAGAAACGAGAT
CGGGAAGCAGAAATATAGTGCAATAGTGCAACATCTCTGAATCCTTTTAATCTAGAGAAGGCATTTCATATTTGG
GGGCTAAGGTTTCCAGTCAGATGAGGCAAACAGCAAGAGTAAGCAGTGTTACTTGCAGGTACTTTGGTTAATGTT
GATTTAAATTTTCATGAATGTGCTGGTGAACACTGTGACCAGGCTTTTGTAGATGGCGATGTGTTATAGACGGTG
CTCACTCCCAAGGGACAGCAAGTGAGCAGAGATGTACTGCAAAGTCGCCAGTCACTGCTGCAAGGTGGCCTCTGC
CTGGGGCCTCCAGAAGCTGCTCCTTTACCCTCTTGGTCCCATGGCTGAAGCTGGAGCAGCGGATTGCTCTGGAGC
AGCCAAGGCCGCCAGCGTGTGGAGCAGAGCTCTCCCCTCCTGCTGGGCGTGTGTGACACTGATGAGTTTCACTGT
ACTGCATGTGACTTCTCCCCTGCCCTTCCTCCTGATGGAGTGTGCAGACAGCCATGCGTGGCCACGGGGGCAGTG
TGAGGACCTCCCTGTCTCCCGGCTCCCCTCCCAGGGGAGCCAGCTGCTTGACCTAGCTCTTTGGGCCTCTCCTGC
CCTCTGCTCTGCCTGGAGTGTCGGATCCTGTGAGTAGGCTGGGCCTCCCCTGGGCAGGGTTCTCCAAGGGCCCGG
TTTCCCGGCCCTTACCTTTCCTGATGCCCCTGACATCATCATTCTTGTGGGAGACAGCAGCCTGTATGTGGTGTG
GGGCGTGGATCGAGTGTAGCTGTGAAATCCATATATATGAAATGTCC

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FIGURE 3306

TGAAGAAGCCTGCAAAGCCTTTACTTTCAAAGATAAAATTGAGAAATCATTGCAAGCGGCTGGAGCAAAAGAATG
CTTCAAGAAAACTCGAAATGGAAACTTAGTACTGAAAGAGCCTAAAGTAGTTCTGTATAAAAATTTGCCCATTA
AAAAAGATAAGGAGCCAGAGGGACCAGCCCAAGCCGCAGTTGCCAGCGGGTGCTTGACTAGACACGCGGCGAGAG
AACACAGACAGAATCCTGTGAGAGGTGCTCATTCGCAGGGGGAGAGCTCGCCCTGCACCTACATAACTCGGCGGT
CAGTGAGGACAAGAACAAATCTGAAGGAGGCCTCTGACATCAAGCTTGAACCAAATACGTTGAATGGCTATAAAA
GCAGTGTGACGGAACCTTGCCCCGACAGTGGTGAACAGCTGCAGCCAGCTCCTGTGCTGCAGGAGGAAGAACTGG
CTCATGAGACTGCACAAAAAGGGGAGGCAAAGTGTCATAAGAGTGACACAGGCATGTCCAAAAAGAAGTCACGAC
AAGGAAAACTTGTGAAACAGTTTGCAAAAATAGAGGAATCTACTCCAGTGCACGATTCTCCTGGAAAAGACGACG
CGGTACCAGATTTGATGGGTCCCCATTCTGACCAGGGTGAGCACAGTGGCACTGTGGGCGTGCCTGTGAGCTACA
CAGACTGTGCTCCTTCACCCGTCGGTTGTTCAGTTGTGACATCAGATAGCTTCAAAACAAAAGACAGCTTTAGAA
CTGCAAAAAGTAAAAAGAAGAGGCGAATCACAAGGTATGATGCACAGTTAATCCTAGAAAATAACTCTGGGATTC
CCAAATTGACTCTTCGTAGGCGTCATGATAGCAGCAGCAAAACAAATGACCAAGAGAATGATGGAATGAACTCTT
CCAAAATAAGCATCAAGTTAAGCAAAGACCATGACAACGATAACAATCTCTATGTAGCAAAGCTTAATAATGGAT
TTAACTCAGGATCAGGCAGTAGTTCTACAAAATTAAAAATCCAGCTAAAACGAGATGAGGAAAATAGGGGGTCTT
ATACAGAGGGGCTTCATGAAAATGGGGTGTGCTGCAGTGATCCTCTTTCTCTCTTGGAGTCTCGAATGGAGGTGG
ATGACTATAGTCAGTATGAGGAAGAAAGTACAGATGATTCCTCCTCTTCTGAGGGCGATGAAGAGGAGGATGACT
ATGATGATGACTTTGAAGACGATTTTATTCCTCTTCCTCCAGCTAAGCGCTTGAGGTTAATAGTTGGAAAAGACT
CTATAGATATTGACATTTCTTCAAGGAGAAGAGAAGATCAGTCTTTAAGGCTTAATGCCTAAGCTCTTGGTCTTA
ACTTGACCTGGGATAACTACTTTAAAGAAATAAAAAATTCCAGTCAATTATTCCTCAACTGAAAGTTTAGTGGCA
GCACTTCTATTGTCCCTTCACTTATCAGCATACTATTGTAGAAAGTGTACAGCATACTGACTCAATTCTTAAGTC
TGATTTGTGCAAATTTTTATCGTACTTTTTAAATAGCCTTCTTACGTGCAATTCTGAGTTAGAGGTAAAGCCCTG
TTGTAAAATAAAGGCTCAAGCAAAATTGTACAGTGATAGCAACTTTCCACACAGGACGTTGAAAACAGTAATGTG
GCTACACAGTTTTTTTAACTGTAAGAGCATCAGCTGGCTCTTTAATATATGACTAAACAATAATTTAAAACAAAT
CATAGTAGCAGCATATTAAGGGTTTCTAGTATGCTAATATCACCAGCAATGATCTTTGGCTTTTTGATTTATTTG
CTAGATGTTTCCCCCTTGGAGTTTTGTCAGTTTCACACTGTTTGCTGGCCCAGGTGTACTGTTTGTGGCCTTTGT
TAATATCGCAAACCATTGGTTGGGAGTCAGATTGGTTTCTT

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FIGURE 3307

CGCGGGGGGCGCGACGGCGGCGGCGGCGGCCGGTTGGGGGCGGGGGGCTCGGACGCTGCGGGGACTCATTTTTCC
CGTCAGCGGAGGGAGCGAGCGGTGCTGCGGCCCGCGCCGCCATCTTGGATTTTACTCTCCATTTTTCTCTGGAAT
TATTTTTGGTGATTAATTTTCTGGGGGGGACTGGGACGCGGGGCCCGGCGGCGCGGCCCCGCATCGCAGCGGCCG
GGCAGCGGGGCCTGGGACGCGCCCCGAGGAGGAGCGGGGCGGCGCAGGCGGAGAGAACATTGAAAGTATTCTCTA
AGCTATTTGAAGAGAGTGACTAAATGCACCTGGGTCAGGCTGTCTGTGGGTATGAAGTGGTTGGGAGAATCCAAG
AACATGGTGGTGAATGGCAGGAGAAATGGAGGCAAGTTGTCTAATGACCATCAGCAGAATCAATCAAAATTACAG
CACACGGGGAAGGACACCCTGAAGGCTGGCAAAAATGCAGTCGAGAGGAGGTCGAACAGATGTAATGGTAACTCG
GGATTTGAAGGACAGAGTCGCTATGTACCATCCTCTGGAATGTCCGCCAAGGAACTCTGTGAAAATGATGACCTA
GCAACCAGTTTGGTTCTTGATCCCTATTTAGGTTTTCAAACACACAAAATGAATACTAGCGCCTTTCCTTCGAGG
AGCTCAAGGCATTTTTCAAAATCTGACAGTTTTTCTCACAACAACCCTGTGAGATTTAGGCCTATTAAAGGAAGG
CAGGAAGAACTAAAGGAAGTAATTGAACGTTTTAAGAAAGATGAACACTTGGAGAAAGCCTTCAAATGTTTGACT
TCAGGCGAATGGGCACGGCACTATTTTCTCAACAAGAATAAAATGCAGGAGAAATTATTCAAAGAACATGTATTT
ATTTATTTGCGAATGTTTGCAACTGACAGTGGATTTGAAATATTGCCATGTAATAGATACTCATCAGAACAAAAT
GGAGCCAAAATAGTTGCAACAAAAGAGTGGAAACGAAATGACAAAATAGAATTACTGGTGGGTTGTATTGCCGAA
CTTTCAGAAATTGAGGAGAACATGCTACTTAGACATGGAGAAAACGACTTCAGTGTCATGTACTCCACAAGGAAA
AACTGTGCTCAACTCTGGCTGGGTCCTGCTGCGTTTATAAACCATGATTGCAGACCTAATTGTAAGTTTGTGTCA
ACTGGTCGAGATACAGCATGTGTGAAGGCTCTAAGAGACATTGAACCTGGAGAAGAAATTTCTTGTTATTATGGA
GATGGGTTCTTTGGAGAAAATAATGAGTTCTGCGAGTGTTACACTTGCGAAAGACGGGGCACTGGTGCTTTTAAA
TCCAGAGTGGGACTGCCTGCGCCTGCTCCTGTTATCAATAGCAAATATGGACTCAGAGAAACAGATAAACGTTTA
AATAGGCTTAAAAAGTTAGGTGACAGCAGCAAAAATTCAGACAGTCAATCTGTCAGCTCTAACACTGATGCAGAT
ACCACTCAGGAAAAAAACAATGCAAGTAAGTAAGGGAGATTTGATAAGCATATCTTTTAAAAGTATTTTCACACA
ATTTGCTTTATAAAGTGTGCTTCAGTAGTTTTAAACTTTTAAATACTCAGAGAGACTGGGACTTGTGAGCTTTGG
CTGCACTTCAAGGCTCTAGACGTGATTTGAGTAGAGGCACAGTCTGTATCCCATCTCTAACTTCAGTACCGTCCT
CTAGACTATTTTTCTTGAATACCTTGGTAACTGGATATGAGTTCTTCATCATATGTTCCAAGGTCATCATATGTT
TTAAACATTTTCAAGGTGTTAGAGACTGTGATGATGTCGCTAAGTCCTGCAAGAAGACAAAAGGACTGAGTAGAA
TTAAATTAGACTCTATACATTCCAGTGCCTAGCCAGTTTGTTAGAAAAGATGATGGACTTGGGGAATTCATAGCT
TCTGGCCTTAAGGCTTCCACCTTTTCATTGCTTGCTGACCTTTTTCAAAACGAACTGACTCAGTTCAGCAGACCA
CCAGTACCAGACTCAGAATTGTGATAGAGGAGCATTTTGAACAGTGCCGTATTGTGACATGCTGTATTGGCTACT
CCAGAAAGTAGGAGTAAAGATGGAAAGGAGAAAGAAGCAACCTCTGAGATTCCAGTGGTGTGTGGGGGCAAGATC
TGATGGAAACTGAAAAAGAGAACGAAGACTAAACAAAGAGAAAGGAAAGAGAAGAAACCCTAAATGGGCAAAGGA
AAGCACATCCTGTTTGCGGAGCTTTGAAATATTGGAACCATTTCTAATTGCTCCTGTTTTTCTGGGTAACACCAG
TTTTCTGTAGTTGCCACTAAAGCAGTAGACTCTTGAGTCTCACTTGTCTCTGAGAGAGACAGAAGTTAGAAAGTT
TTGACTTGGCGATTCCGAAAGTATGCCTTTGTTGGCACTTAAATGTCCAGTGAGACTTCTTGGCACCTTAGAGCC
CTCTGAGATACTGATTATTTTAGGTTCTTCTCCCTACTTTCAGATGTTTTCAGCCCAACACTGGGTGCTCTCTTC
CACTACAGAGAATCCTGAAGAAAAGGGAAGGTGTTTCCCATGATGGTGAATGTCACTGCCATGAATTCCTGAATC
TACCTGCTGCTGGGAGTCAGAGTCCAAGCATAACCCGTGTAGCATAAAAGCAGCGCTGTAGCCCTATTCCAGTCT
TTTTCGTTAATGTCCAGAGTGAACAACAAGAGTTAGTCAATCATTAACTGTTGACTGTTGATTCTCATAATAAAT
GCAGCATAACGACC

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FIGURE 3308

GCCTGGGTTGCGCTGCCGGCCACGTCCCCGCGCCGGGCCTCAGGCTCCTTCCTACTGTCCGAGGGCCACCAGGCC
GCCGGGGGCCTGCTGCGCCCGGATGCGTCTGTTACTAGAGTGGAGAGTCTACCTTCGTCTCACATGTGCCACAAA
GGATGGCATGGCCCGGGAGTGCCCCACCACGTGGCTTTCACCCCCTGCAAAGCCAGACTTCGCCCAGCGACACAG
TGTCAAGCCCACAGCTCTCCAAGGAGGAAGATGGTCCAGGCTGGGAGCATCCCCTTAGCAGCAGCCTCTGATCCC
TTGGCCAAGCAGGAGGGAACCATTAGCAGCCTGAGGAGCTGGCTGGCTGGGAGCCTCGGGGACCGCCCAGCCTTG
CTCCCAGCTCACCCACAAGATGTGGACAGCTCTTGTGCTCATTTGGATTTTCTCCTTGTCCTTATCTGAAAGCCA
TGCGGCATCCAACGATCCACGCAACTTTGTCCCTAACAAAATGTGGAAGGGATTAGTCAAGAGGAATGCATCTGT
GGAAACAGTTGATAATAAAACGTCTGAGGATGTAACCATGGCAGCAGCTTCTCCTGTCACATTGACCAAAGGGAC
TTCGGCAGCCCACCTCAACTCTATGGAAGTCACAACAGAGGACACAAGCAGGACAGATGTGAGTGAACCAGCAAC
TTCAGGAGGTGCAGCTGATGGTGTGACCTCCATTGCTCCCACGGCTGTGGCCTCCAGTACGACTGCGGCCTCCAT
TACGACTGCGGCCTCCAGTATGACTGTGGCCTCCAGTGCTCCCACGACTGCAGCCTCCAGTACAACTGTGGCCTC
CATTGCTCCCACGACTACAGCCTCCAGTATGACTGCGGCCTCCAGCACTCCCATGACACTTGCACTCCCCGCGCC
CACGTCCACTTCCACAGGGCGGACCCCGTCCACTACCGCCACTGGGCATCCATCTCTCAGCACAGCCCTCGCACA
AGTGCCAAAGAGCAGCGCGTTGCCAAGAACAGCAACCCTGGCCACATTGGCCACACGTGCTCAGACTGTAGCGAC
CACAGCAAACACAAGCAGCCCCATGAGCACTCGTCCAAGTCCTTCCAAGCACATGCCCAGTGACACCGCGGCAAG
CCCTGTACCCCCTATGCGTCCCCAAGCACAAGGTCCCATTAGCCAGGTGTCAGTGGACCAGCCTGTGGTTAACAC
AACAAATAAATCCACACCCATGCCCTCAAACACAACCCCAGAGCCCGCCCCCACCCCCACAGTGGTGACCACCAC
CAAGGCACAAGCCAGGGAGCCAACTGCCAGCCCAGTGCCAGTACCTCACACCAGCCCAATCCCTGAGATGGAGGC
CATGTCCCCCACGACACAGCCAAGCCCCATGCCATATACCCAGAGGGCCGCTGGGCCAGGCACATCCCAGGCACC
GGAGCAGGTAGAGACTGAAGCCACACCAGGTACTGATTCCACTGGGCCAACACCCAGGAGCTCAGGGGGCACTAA
GATGCCAGCCACGGACTCGTGCCAGCCCAGCACCCAAGGCCAGTACATGGTGGTCACCACTGAGCCCCTCACCCA
GGCCGTGGTAGACAAAACTCTCCTTCTGGTGGTGCTGTTACTCGGGGTGACCCTTTTCATCACAGTCTTGGTTTT
GTTTGCCCTGCAGGCCTATGAGAGCTACAAGAAGAAGGACTACACCCAGGTGGACTACTTAATCAACGGGATGTA
TGCGGACTCAGAAATGTGAGGGGGGCGGGGGCCTGGCGGGAGGCCTGGCCCCTTCCTCGTCCTTTCCTTTTGCCT
TTGAGACCAAACCAAGTGCTTCCAAATTCTTTTGGTGCAATTGAGGAGATATGCCAGATGCTTAAACACATTTAA
TTGCTGTCAGATTAATTCCATGATCACTAAAGAGTTGCTGCTTTTTTCATATTTATTTTTGTAAATGATTCTGTG
CCCAGGAGCAGCTGGGGGTTCCACCTCAGGGTGGGGCGGGCAGGACCCCGTCTCCCCAGGTGTCGGAGCCTGACC
TGAATTAAAGTACTGACTGCTCGCC

FIGURE 3309A

ATGGAGCCCGAGTGAGCGCGGCGCGGGCCCGTCCGGCCGCCGGACAACATGGAGGCAGCGCCGCCCGGGCCGCCG
TGGCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGGCGCTGTGCGGCTGCCCGGCCCCCGCCGCGGCCTCGCCGCTC
CTGCTATTTGCCAACCGCCGGGACGTACGGCTGGTGGACGCCGGCGGAGTCAAGCTGGAGTCCACCATCGTGGTC
AGCGGCCTGGAGGATGCGGCCGCAGTGGACTTCCAGTTTTCCAAGGGAGCCGTGTACTGGACAGACGTGAGCGAG
GAGGCCATCAAGCAGACCTACCTGAACCAGACGGGGGCCGCCGTGCAGAACGTGGTCATCTCCGGCCTGGTCTCT
CCCGACGGCCTCGCCTGCGACTGGGTGGGCAAGAAGCTGTACTGGACGGACTCAGAGACCAACCGCATCGAGGTG
GCCAACCTCAATGGCACATCCCGGAAGGTGCTCTTCTGGCAGGACCTTGACCAGCCGAGGGCCATCGCCTTGGAC
CCCGCTCACGGGTACATGTACTGGACAGACTGGGGTGAGACGCCCCGGATTGAGCGGGCAGGGATGGATGGCAGC
ACCCGGAAGATCATTGTGGACTCGGACATTTACTGGCCCAATGGACTGACCATCGACCTGGAGGAGCAGAAGCTC
TACTGGGCTGACGCCAAGCTCAGCTTCATCCACCGTGCCAACCTGGACGGCTCGTTCCGGCAGAAGGTGGTGGAG
GGCAGCCTGACGCACCCCTTCGCCCTGACGCTCTCCGGGGACACTCTGTACTGGACAGACTGGCAGACCCGCTCC
ATCCATGCCTGCAACAAGCGCACTGGGGGGAAGAGGAAGGAGATCCTGAGTGCCCTCTACTCACCCATGGACATC
CAGGTGCTGAGCCAGGAGCGGCAGCCTTTCTTCCACACTCGCTGTGAGGAGGACAATGGCGGCTGCTCCCACCTG
TGCCTGCTGTCCCCAAGCGAGCCTTTCTACACATGCGCCTGCCCCACGGGTGTGCAGCTGCAGGACAACGGCAGG
ACGTGTAAGGCAGGAGCCGAGGAGGTGCTGCTGCTGGCCCGGCGGACGGACCTACGGAGGATCTCGCTGGACACG
CCGGACTTCACCGACATCGTGCTGCAGGTGGACGACATCCGGCACGCCATTGCCATCGACTACGACCCGCTAGAG
GGCTATGTCTACTGGACAGATGACGAGGTGCGGGCCATCCGCAGGGCGTACCTGGACGGGTCTGGGGCGCAGACG
CTGGTCAACACCGAGATCAACGACCCCGATGGCATCGCGGTCGACTGGGTGGCCCGAAACCTCTACTGGACCGAC
ACGGGCACGGACCGCATCGAGGTGACGCGCCTCAACGGCACCTCCCGCAAGATCCTGGTGTCGGAGGACCTGGAC
GAGCCCCGAGCCATCGCACTGCACCCCGTGATGGGCCTCATGTACTGGACAGACTGGGGAGAGAACCCTAAAATC
GAGTGTGCCAACTTGGATGGGCAGGAGCGGCGTGTGCTGGTCAATGCCTCCCTCGGGTGGCCCAACGGCCTGGCC
CTGGACCTGCAGGAGGGGAAGCTCTACTGGGGAGACGCCAAGACAGACAAGATCGAGGTGATCAATGTTGATGGG
ACGAAGAGGCGGACCCTCCTGGAGGACAAGCTCCCGCACATTTTCGGGTTCACGCTGCTGGGGGACTTCATCTAC
TGGACTGACTGGCAGCGCCGCAGCATCGAGCGGGTGCACAAGGTCAAGGCCAGCCGGGACGTCATCATTGACCAG
CTGCCCGACCTGATGGGGCTCAAAGCTGTGAATGTGGCCAAGGTCGTCGGAACCAACCCGTGTGCGGACAGGAAC
GGGGGGTGCAGCCACCTGTGCTTCTTCACACCCCACGCAACCCGGTGTGGCTGCCCCATCGGCCTGGAGCTGCTG
AGTGACATGAAGACCTGCATCGTGCCTGAGGCCTTCTTGGTCTTCACCAGCAGAGCCGCCATCCACAGGATCTCC
CTCGAGACCAATAACAACGACGTGGCCATCCCGCTCACGGGCGTCAAGGAGGCCTCAGCCCTGGACTTTGATGTG
TCCAACAACCACATCTACTGGACAGACGTCAGCCTGAAGACCATCAGCCGCGCCTTCATGAACGGGAGCTCGGTG
GAGCACGTGGTGGAGTTTGGCCTTGACTACCCCGAGGGCATGGCCGTTGACTGGATGGGCAAGAACCTCTACTGG
GCCGACACTGGGACCAACAGAATCGAAGTGGCGCGGCTGGACGGGCAGTTCCGGCAAGTCCTCGTGTGGAGGGAC
TTGGACAACCCGAGGTCGCTGGCCCTGGATCCCACCAAGGGCTACATCTACTGGACCGAGTGGGGCGGCAAGCCG
AGGATCGTGCGGGCCTTCATGGACGGGACCAACTGCATGACGCTGGTGGACAAGGTGGGCCGGGCCAACGACCTC
ACCATTGACTACGCTGACCAGCGCCTCTACTGGACCGACCTGGACACCAACATGATCGAGTCGTCCAACATGCTG
GGTCAGGAGCGGGTCGTGATTGCCGACGATCTCCCGCACCCGTTCGGTCTGACGCAGTACAGCGATTATATCTAC
TGGACAGACTGGAATCTGCACAGCATTGAGCGGGCCGACAAGACTAGCGGCCGGAACCGCACCCTCATCCAGGGC
CACCTGGACTTCGTGATGGACATCCTGGTGTTCCACTCCTCCCGCCAGGATGGCCTCAATGACTGTATGCACAAC
AACGGGCAGTGTGGGCAGCTGTGCCTTGCCATCCCCGGCGGCCACCGCTGCGGCTGCGCCTCACACTACACCCTG
GACCCCAGCAGCCGCAACTGCAGCCCGCCCACCACCTTCTTGCTGTTCAGCCAGAAATCTGCCATCAGTCGGATG
ATCCCGGACGACCAGCACAGCCCGGATCTCATCCTGCCCCTGCATGGACTGAGGAACGTCAAAGCCATCGACTAT
GACCCACTGGACAAGTTCATCTACTGGGTGGATGGGCGCCAGAACATCAAGCGAGCCAAGGACGACGGGACCCAG
CCCTTTGTTTTGACCTCTCTGAGCCAAGGCCAAAACCCAGACAGGCAGCCCCACGACCTCAGCATCGACATCTAC
AGCCGGACACTGTTCTGGACGTGCGAGGCCACCAATACCATCAACGTCCACAGGCTGAGCGGGGAAGCCATGGGG
GTGGTGCTGCGTGGGGACCGCGACAAGCCCAGGGCCATCGTCGTCAACGCGGAGCGAGGGTACCTGTACTTCACC
AACATGCAGGACCGGGCAGCCAAGATCGAACGCGCAGCCCTGGACGGCACCGAGCGCGAGGTCCTCTTCACCACC
GGCCTCATCCGCCCTGTGGCCCTGGTGGTAGACAACACACTGGGCAAGCTGTTCTGGGTGGACGCGGACCTGAAG
CGCATTGAGAGCTGTGACCTGTCAGGGGCCAACCGCCTGACCCTGGAGGACGCCAACATCGTGCAGCCTCTGGGC
CTGACCATCCTTGGCAAGCATCTCTACTGGATCGACCGCCAGCAGCAGATGATCGAGCGTGTGGAGAAGACCACC

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FIGURE 3309B

GGGGACAAGCGGACTCGCATCCAGGGCCGTGTCGCCCACCTCACTGGCATCCATGCAGTGGAGGAAGTCAGCCTG
GAGGAGTTCTCAGCCCACCCATGTGCCCGTGACAATGGTGGCTGCTCCCACATCTGTATTGCCAAGGGTGATGGG
ACACCACGGTGCTCATGCCCAGTCCACCTCGTGCTCCTGCAGAACCTGCTGACCTGTGGAGAGCCGCCCACCTGC
TCCCCGGACCAGTTTGCATGTGCCACAGGGGAGATCGACTGTATCCCCGGGGCCTGGCGCTGTGACGGCTTTCCC
GAGTGCGATGACCAGAGCGACGAGGAGGGCTGCCCCGTGTGCTCCGCCGCCCAGTTCCCCTGCGCGCGGGGTCAG
TGTGTGGACCTGCGCCTGCGCTGCGACGGCGAGGCAGACTGTCAGGACCGCTCAGACGAGGCGGACTGTGACGCC
ATCTGCCTGCCCAACCAGTTCCGGTGTGCGAGCGGCCAGTGTGTCCTCATCAAACAGCAGTGCGACTCCTTCCCC
GACTGTATCGACGGCTCCGACGAGCTCATGTGTGAAATCACCAAGCCGCCCTCAGACGACAGCCCGGCCCACAGC
AGTGCCATCGGGCCCGTCATTGGCATCATCCTCTCTCTCTTCGTCATGGGTGGTGTCTATTTTGTGTGCCAGCGC
GTGGTGTGCCAGCGCTATGCGGGGGCCAACGGGCCCTTCCCGCACGAGTATGTCAGCGGGACCCCGCACGTGCCC
CTCAATTTCATAGCCCCGGGCGGTTCCCAGCATGGCCCCTTCACAGGCATCGCATGCGGAAAGTCCATGATGAGC
TCCGTGAGCCTGATGGGGGGCCGGGGCGGGGTGCCCCTCTACGACCGGAACCACGTCACAGGGGCCTCGTCCAGC
AGCTCGTCCAGCACGAAGGCCACGCTGTACCCGCCGATCCTGAACCCGCCGCCCTCCCCGGCCACGGACCCCTCC
CTGTACAACATGGACATGTTCTACTCTTCAAACATTCCGGCCACTGCGAGACCGTACAGGCCCTACATCATTCGA
GGAATGGCGCCCCCGACGACGCCCTGCAGCACCGACGTGTGTGACAGCGACTACAGCGCCAGCCGCTGGAAGGCC
AGCAAGTACTACCTGGATTTGAACTCGGACTCAGACCCCTATCCACCCCCACCCACGCCCCACAGCCAGTACCTG
TCGGCGGAGGACAGCTGCCCGCCCTCGCCCGCCACCGAGAGGAGCTACTTCCATCTCTTCCCGCCCCCTCCGTCC
CCCTGCACGGACTCATCC**TGA**CCTCGGCCGGGCCACTCTGGCTTCTCTGTGCCCCTGTAAATAGTTTTAAATATG
AACAAAGAAAAAAATATATTTTATGATTTAAAAAATAAATATAATTGGGATTTTAAAAACATGAGAAATGTGAAC
TGTGATGGGGTGGGCAGGGCTGGGAGAACTTTGTACAGTGGAGAAATATTTATAAACTTAATTTTGTAAAACAG

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FIGURE 3310A

CAGATAAGAAAACAAGCTCAGAGAGATGTGGTGACTTGCTCAAATAGTGACAGAACTTCCTCGGCCATATGGAGG
GGTCATATAATACCCTTGTGTCTTCAGTTTGAGGAGAGCTTGTTTCATATCCATATCCCACTGTATTCCTGCTAA
TCTGCTAATGCAGTAAATTGGAGGAAAACTGTTACCAGGATAACCTGTAATGGGCAAGGAGCCACAAAGAAGAAA
ACATTTCTTTTAATTTTTAAACTTGGTTTGAAAGACCAGCATGTTTTGGAAATTTGATCTTCACTCATCATCCCA
CATAGACACACTTCTAGAAAGAGAAGATGTAACACTGAAGGAGTTAATGGATGAGGAAGATGTTTTACAGGAATG
TAAAGCTCAGAACCGCAAACTTATAGAGTTTCTGTTAAAAGCAGAATGTCTCGAAGATTTAGTCTCATTCATTAT
AGAAGAACCACCTCAAGACATGGATGAAAAGATCAGATACAAGTATCCAAATATATCTTGTGAGTTGCTCACTTC
TGATGTCTCCCAGATGAATGATAGACTGGGAGAAGATGAATCCTTGCTAATGAAATTATATAGCTTCCTCCTAAA
CGATTCCCCTTTGAATCCACTACTTGCCAGTTTCTTCAGCAAGGTGCTAAGTATTCTTATCAGCAGAAAACCAGA
ACAGATTGTGGATTTCTTAAAGAAGAAGCATGATTTTGTAGACCTTATTATAAAGCACATAGGAACTTCTGCTAT
CATGGATTTGTTGCTCAGGCTCCTGACGTGTATCGAACCTCCACAGCCCAGGCAAGATGTGCTGAATTGGTTAAA
TGAGGAGAAAATTATCCAGAGGCTTGTGGAAATAGTTCATCCATCGCAAGAAGAAGATCGACATTCAAATGCATC
ACAATCACTTTGTGAAATTGTTCGCCTGAGCAGAGACCAGATGTTACAAATTCAGAACAGTACAGAGCCCGACCC
CCTGCTTGCCACTCTAGAAAAGCAAGAAATTATAGAGCAGCTTCTATCAAATATTTTCCACAAGGAGAAAAATGA
GTCAGCCATAGTCAGTGCAATCCAGATATTGCTGACTTTACTTGAGACACGACGACCAACATTTGAAGGCCATAT
AGAGATCTGCCCACCAGGCATGAGCCATTCAGCTTGTTCAGTAAACAAGAGTGTTCTAGAAGCCATCAGAGGAAG
ACTTGGATCTTTTCATGAACTCCTGCTGGAGCCACCCAAGAACATGTTCTTCAAGTATACATGGAATAACTTTTT
GCATACACAAGTGGAAATTTGTATTGCACTGATTCTTGCAAGTCCTTTTGAAAACACAGAAAATGCCACAATTAC
CGATCAAGACTCCACTGGTGATAATTTGTTATTAAAACATCTTTTCCAAAAATGTCAATTAATAGAACGAATACT
TGAAGCCTGGGAAATGAATGAGAAGAAACAGGCTGAGGGAGGAAGACGGCATGGTTACATGGGACACCTAACGAG
GATAGCTAACTGTATCGTGCACAGCACTGACAAGGGCCCCAACAGTGCATTAGTGCAGCAGCTTATCAAAGATCT
TCCCGACGAAGTCAGGGAACGATGGGAGACGTTCTGCACAAGCTCCTTAGGAGAAACTAACAAGAGGAACACGGT
AGATCTAGCCTTTTCTGATTATCAGATGCAACAAATGACGTCCAATTTTATTGACCAGTTTGGCTTCAACGATGA
GAAGTTTGCAGATCAAGATGACATTGGCAATGTTTCTTTTGATCGAGTATCAGACATCAACTTTACTCTCAATAC
AAATGAAAGTGGAAATATTGCCTTGTTTGAAGCATGTTGTAAGGAAAGAATACAACAGTTTGATGATGGTGGCTC
TGATGAGGAAGATATATGGGAGGAAAAGCACATCGCATTCACACCAGAATCCCAAAGACGATCCAGCTCGGGGAG
TACAGACAGTGAGGAAAGTACAGACTCTGAAGAAGAAGATGGAGCAAAGCAAGACTTGTTTGAACCCAGCAGTGC
CAACACGGAGGATAAAATGGAGGTGGACCTGAGTGAACCACCCAACTGGTCAGCTAACTTTGATGTCCCAATGGA
AACAACCCACGGTGCTCCATTGGATTCTGTGGGATCTGATGTCTGGAGCACAGAGGAGCCGATGCCAACTAAAGA
GACGGGCTGGGCTTCTTTTTCAGAGTTCACGTCTTCCCTGAGCACAAAAGATTCTTTAAGGAGTAATTCTCCAGT
GGAAATGGAAACCAGCACTGAACCCATGGACCCTCTGACTCCCAGTGCGGCTGCCCTGGCAGTGCAGCCAGAAGC
GGCAGGCAGTGTGGCCATGGAAGCCAGCTCTGACGGAGAGGAGGATGCAGAAAGTACAGACAAGGTAACTGAGAC
AGTGATGAATGGCGGCATGAAGGAAACGCTCAGCCTCACTGTAGATGCCAAGACAGAGACTGCGGTCTTCAAAAG
TGAGGAAGGGAAACTGTCTACCTCTCAAGATGCTGCTTGTAAAGACGCAGAGGAGTGTCCCGAGACTGCAGAGGC
GAAGTGCGCGGCACCCAGGCCTCCCAGCAGCAGTCCCGAGCAGAGGACTGGCCAACCAAGCGCACCAGGTGACAC
TTCAGTGAATGGCCCTGTATGACGGGTGACGTCTGCTGCTGCTGACTGAGGACTGCAGACCGCCACCACTCAGGG
GCTCTGGAGGGGTCAGCTGGAGCCCACCAAGCTGTCACTGCTGCACTCACTCTGCAAGGGATCAGGACCAGCAAC
CTTTATATTCTAGATTCTAAGACATTGTACAGAGAAATTCAGAAGTGTAAAAATATTGCACATTGACAAATACCA
AGAATTTTTGCGTATGTTTATATTGTATTGTTCTAAATAATGGGTAGCCTGTGAAATAAGATCTTGCCACCCATG
TAATAATAGTAGTAATACTATAGTTAAAATGGCTGTAAGAATAGTTTTATAAAAGTGAATACACAGATCTATTGT
ATTTGAAACATAACTTTGACAATTATTAGTGTGACCAAAGTATTAGGCGGTTTTCATACATTTTTCACCTTGTAC
AAAATTATGAATTCATTTTTCCTCCAGGCCGACAAGGAGTTGTAGAATGAAAATGCCCTCTAAGTGTTATTTTGG
TTGTTCTAACTTACAAAAGTGATTTTGAATAAGAAATATTTGGTGTTCTTTTTATAACCAGTTTTTGATTGGTAA
TTGTTTTCTGTATTGTTTAAAACGGATCAAAAATGTAAGTCTATTGGTAGAGATTAAGTAAAGTATTTATTGCTA
CATCATAGTTGATAAATTGATGTTATCGTAAAGCCATATGTTCTGTTCAAGTCTTGTTTGCTTGAAATGATTATT
CCTACAAGTGAAACACTAGACTATTTGGAGTGTATATGGCTTGTGTTTTGGGATTTTTTTTTTTTTTTTGGCTT
TTGTTTTTGTTTGTTTTTTTGTTTCGTTTGGTAGTTCATCTGCCTTTTAACCCATTCACCAAAATTTACCTTGTT
AACAAGCATCACCAATGAACATTTCAGAGCAATCTGCATATTTAACAGACCTAAAATAAATCCTATTAGGCAAGT

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FIGURE 3310B

CAGTTGAAAATGCTCGTGCTGCTAATGGAATTAGAGTGCGTTCATTTTACAGGCTAGTATTTTAAAAGTAGAAAT
CAAAATCTGGCACCGAAGCATGCTAATTGTTTACTGTACCTTGTGAGGTTTTCACTCATAAATTTAAACCAGTGT
ATTTTTTTAGAACTGGTTTGTGTATATATATAGTGATTATGGATACTAATTCAATGTAATTTATAATTTTCTATG
TCAATACAAAAATACATCACAGCCTTCTCAAACAGCTCAAGCAATATATTGTATATTGCCATATCGTCTGGTGAA
AGGGTTAAATTACTTCACCTCTTGCACTTTTAGATGCAAATCAGTTTTTCATTTCTGTAATAGAAAATTATTCAC
GTATTTTTACATCATTTGTTTTTCCTGACCAGTATTTAAAACCAAAAGGATATTCTGAAAAATGGCCAACAATTT
TTTTAGAAGTAGCATCCCAAGCAGCGTGCCTAAACATTACATTGCATATGGAAATAAAAGAATCAAACGTCTAAT
GCCTTATTATTTCTGATTTCCTTTTTCATTTTAAGTGGTGTGGAGATTCCAGCACTCCCAGGACAGTGGAGTCAG
CAGTAAGCCCTGGGACAGGTGGCAAGGGTGGGTCCCTTGACCTTTGCACGCCTCCTCAGGAACCCCCTTTCCCGG
GTGAGCCCCTCTCTGAAGAGACTGTCCTTGGGCCTCCTCTGGAAGCAGCACCCCCAGAGGACAGGGCTCCTCCTG
CTTGCCTCAGGGCTGCCTGACTTGAATGGCGTTGGACCTCGGGGATTACTGGTAGATAATATGCTCTGGTCTCGC
CTGGTGGTGAGTTTTGCCAGCCATGGCCAGGGTTTGGCTCCACTGGTGGCACACGTGGCCTCCGTGGTATGGACC
TGGTGGCTTCTCCATCCCACTGTGGCCTCTGTGGTATGGACCTGGTGGCTTCTCCATCCTACCCAAGGTAACAGT
GTCTTGCTTCATCCCACTGACTGCTGGGAGAGAGCCTCTGGGACTTTTCTTTGGGGCATCATTTTGTTTTGTCTT
TCGTAGCAGGGAAAGGATATGACAATGGGGAGGACAGTTCTTTTGGAGGTTGGAGGGGCCAAGCCAAGGACAGGA
GCAAGTGTGCCCTCATTTTGTTTCTACTTTTAATTTCTGTGTGTTGGCCATACTGA

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FIGURE 3311

GGTCAAGGCGAAGCTCGCGGGGGGCGACAGCGACGGCGGGGAGCTCCTCGGGGAGTACCCCGGGATCCCAGAGCT
CAGCGCGCTGGAGGACGTCGCGCTCCTGCAGGCCCCGCAGCCGCCCGCCTGCAACGTGCACTTCCTGTCCTCGCT
GCTACCCGCGCACCGCAGCCCGGCGGTGTTGCCCCTGGGCGCCTGGGTCCTGGAAGGAGCCTCCCACCCGGGCGT
CCGCATGATCCCAGTTGAAATCAAGGAAGCAGGTGGTACTACTACAAGTAATAATCCGGAAGAAGCAACTTTGCA
GAATCTTCTTGCTCAGGAATCCTGTTGCAAGTTCCCATCGTCCCAGGAACTAGAGGATGCCTCCTGCTGTTCTCT
TAAGAAAGATTCCAACCCA**ATG**GTGATATGCCAATTGAAAGGGGGCACACAAATGCTATGTATAGACAATTCTAG
AACAAGAGAACTAAAAGCACTCCATTTGGTTCCTCAGTATCAAGATCAAAATAATTATCTACAGTCAGATGTCCC
TAAACCAATGACTGCTTTAGTAGGGAGATTTTTGCCAGCATCAACAAAATTAAATCTCATTACACAACAACTTGA
GGGAGCCTTACCATCGGTAGTCAACGGGTCTGCTTTCCCCTCGGGATCAACTCTTCCAGGACCACCAAAAATAAC
TTTGGCTGGGTACTGTGACTGCTTTGCCAGTGGGGACTTTTGCAACAACTGCAATTGTAATAATTGTTGCAACAA
CTTGCATCATGATATTGAACGGTTTAAAGCCATTAAGGCATGTCTTGGTAGAAATCCAGAAGCTTTCCAGCCAAA
AATTGGGAAGGGCCAATTGGGCAATGTCAAGCCCCAGCACAACAAAGGGTGCAACTGCAGGAGGTCAGGCTGCCT
GAAGAATTACTGCGAGTGCTATGAGGCCCAAATTATGTGTTCTTCTATTTGCAAATGCATTGGTTGCAAAAATTA
TGAAGAAAGCCCAGAACGAAAGACACTAATGAGCATGCCAAACTACATGCAGACTGGAGGTTTGGAAGGCAGCCA
TTACCTGCCACCAACGAAATTTTCAGGACTTCCAAGATTCAGTCACGATAGGCGGCCTTCCTCATGCATCTCCTG
GGAGGTGGTGGAGGCCACATGCGCCTGCCTGCTTGCTCAGGGAGAAGAGGCCGAGAAAGAACACTGCTCCAAGTG
CCTGGCAGAGCAGATGATCCTGGAGGAATTTGGAAGGTGCTTATCACAGATTCTCCACACTGAGTTTAAATCTAA
GGGATTGAAAATGGAG**TAG**AGTATAAAGTGTGAATGCATGTTGATTTTGTCTTAGTCTAGAAATCTCTAGTTTAG
AAAGGATGTTTAGGGGAACATGAGGCTGGCTCTGCAGCAACAACCAGGCTCCCCTGCATCCCTGGGCCCAGGGAG
TTTACTCAGAGCTCTCTGAAGATGTGGCAACCCATGCCCCCTTTTCTGAGGAGGTGCATGGCCTGAGCATTGTTT
GTCTGGCCCAGAGGAGAGAGCTTGGGTTCCCATAGTCCTGGGAGAGTGTCTGCAGGGCGGCGGAGGGCAGAGCAG
GCCCTGCGGAGAGCTCACTCTGGTCGACTCTTCCTCTCAGAGAATGTTGCTCTGGAGGCTGCTCTGCATGAAAAC
CCTAATGGTTTCTTGTTTGTTTTTCAAATTATTTAGAAATAAGTTCTCCGGATGGGCTGTTGTGATACCACTTAA
AATCTCTAGAGAACTACTGAACACCTAAAGATTTTCTGTAGCGTAGATATTTCCCCAGAGGCACGCGAACTGTCA
GTCTTTCCTAAGGCCCCCGGGAGACGCAGGCAATGGGGCCTCGCAGGCCAGGCTTGCACCAGCATGTCTTGAGTT
AGAGGACTTAAAATTATCCAGTTTCTTCTGTGTTTCTACTTGAATTGTGGAAAAGCTCTATTATCCAATTAACTT
CTCCATAATTATTGTTGTAATATTATTATTGTTTGTAAAACATGGTTCACATAACTAGCTTGTGGAAACCAGCAG
GTAAAATGAATTCTTAAGTTGACGCTTTTGGTTCTGTTGTAAAGCAAAGATGAATAAAAATTTCCAATGTC

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FIGURE 3312A

TCAGTGGCGTTTGCCCTGATTCCCGGGGCCTGGCTTTCAGCGTAGCAATTCTGCCGGCGAAGAAGGTGAGCGCAG
TGCTGTGTGGCAGCAGAGGTCCTTAGGACGAGGAACAGCGGGACGAGGAAGGGCAGACTGGTGAAATCGCAAACT
GGGCGTCTGTTCCGGCACCGGACCCCTGTTTGCAAAGGTCCATGGCTAATGAAACACAGAAGGTTGGTGCCATCC
ATTTTCCTTTTCCCTTCACACCCTATTCCATCCAGGAAGACTTCATGGCAGAGCTGTACCGGGTTTTGGAGGCTG
GCAAGATTGGGATATTTGAGAGTCCAACTGGCACTGGGAAGTCCTTAAGTCTTATTTGTGGGGCCCTCTCCTGGC
TCCGTGACTTTGAACAGAAGAAGCGTGAAGAAGAGGCACGACTCCTTGAAACTGGAACTGGCCCCTTACATGATG
AGAAAGATGAATCCCTGTGTCTGTCTTCCTCCTGCGAAGGGGCTGCAGGCACCCCGAGGCCTGCTGGAGAACCGG
CCTGGGTTACTCAGTTTGTGCAGAAGAAAGAAGAGAGGGACCTGGTGGACCGACTGAAGGTGGAGCAGGCCAGGA
GGAAGCAGCGAGAAGAACGCCTGCAGCAGCTGCAGCACAGGGTGCAGCTCAAGTATGCAGCCAAGCGCCTGAGGC
AGGAAGAAGAAGAAACAGAGAATCTCCTCCGCCTCAGCAGGGAGATGCTAGAGACAGGCCCGGAGGCCGAGCGGC
TGGAGCAGCTGGAGTCTGGGGAGGAGGAGCTGGTCCTCGCCGAATACGAGAGTGATGAGGAGAAAAAGGTGGCGA
GCAGAGTGGATGAGGATGAGGATGACCTGGAGGAAGAACACATAACTAAGATTTATCACTGTAGTCGGACACACT
CCCAGCTGGCCCAGTTTGTGCATGAGGTGAAGAAGAGCCCCTTTGGCAAGGATGTTCGGCTGGTCTCCCTCGGCT
CCCGGCAGAACCTTTGTGTAAATGAAGACGTGAGAAGCCTAGGTTCTGTGCAGCTTATCAACGACCGCTGCGTGG
ACATGCAGAGAAGCAGGCACGAGAAGAAGAAAGGAGCTGAGGAGGAGAAGCCAAAGAGGAGGAGGCAGGAGAAGC
AGGCAGCCTGCCCCTTCTACAACCACGAGCAGATGGGCCTTCTCCGGGATGAGGCCCTGGCAGAGGTGAAGGACA
TGGAGCAGCTGCTGGCCCTTGGGAAGGAGGCCCGGGCCTGTCCCTATTACAGGAGCCGCCTTGCCATCCCTGCAG
CCCAGCTGGTGGTGCTGCCCTATCAGATGCTGCTGCATGCGGCCACTCGGCAGGCCGCCGGCATCCGGCTGCAGG
ACCAGGTGGTGATCATCGACGAGGCGCACAACCTGATCGACACCATCACGGGCATGCACAGCGTGGAGGTCAGCG
GCTCCCAGCTCTGCCAGGCCCATTCCCAGCTGCTGCAGTACATGGAGCGATACGGGAAGCGTTTGAAGGCCAAGA
ACCTGATGTACCTGAAGCAGATCCTGTATTTGCTGGAGAAATTCGTGGCTGTGCTAGGGGGGAACATTAAGCAAA
ATCCCAATACACAGAGTCTGTCACAGACAGGGACGGAGCTGAAGACCATCAACGACTTTCTCTTCCAGAGCCAGA
TCGACAACATCAACCTGTTCAAGGTGCAGCGATACTGTGAGAAGAGCATGATCAGCAGAAAGCTCTTTGGCTTCA
CTGAACGGTACGGAGCAGTGTTCTCATCCCGGGAGCAGCCCAAACTGGCTGGGTTTCAGCAATTCCTGCAGAGCC
TGCAGCCCAGGACGACTGAAGCTCTTGCAGCCCCTGCAGACGAGAGTCAGGCCAGCGTCCCGCAACCAGCTTCCC
CACTAATGCACATCGAAGGCTTCCTGGCAGCTCTCACTACGGCCAACCAGGACGGCAGGGTCATCCTGAGCCGCC
AAGGCAGCCTCAGTGAGAGCACCCTGAAGTTTTTGCTCCTGAATCCAGCTGTGCACTTTGCCCAAGTGGTGAAGG
AATGCCGGGCAGTGGTCATTGCGGGGGGGACCATGCAGCCGGTGTCTGACTTCCGGCAGCAGCTGCTGGCCTGTG
CTGGGGTGGAAGCTGAGCGCGTGGTGGAGTTTTCCTGTGGTCACGTGATCCCTCCAGACAACATCTGCCCCTTGT
CATCTGCAGCGGGATCTCCAACCAGCCGCTGGAATTCACCTTCCAGAAAAGAGACCTGCCTCAGATGATATTCCA
GGAACCTAAGAGCGCACACCAGGTGGAGCAGGTGCTGCTGGCGTATTCCAGGTGCATCCAGGCCTGTGGCCAGGA
GAGAGGCCAGGTGACAGAGGCCCTGCTCCTCTCTGTGGTTGGAGGAAAGATGAGTGAAGGGATCAACTTCTCTGA
CAACCTAGGCCGGTGTGTGGTGATGGTGGGCATGCCCTTCCCCAACATCAGGTCTGCAGAGCTGCAGGAGAAGAT
GGCCTACTTGGATCAAACCCTCCCCAGAGCCCCCGGCCAGGCACCCCCAGGGAAGGCTCTGGTGGAGAACCTGTG
CATGAAGGCCGTCAACCAGTCCATAGGCAGGGCCATCAGGCACCAGAAGGATTTTGCCAGCATAGTGCTCCTGGA
CCAGCGATACGCCCGGCCCCCTGTCCTGGCCAAGCTGCCGGCCTGGATCCGAGCCAGTGTGGAGGTCAAAGCTAC
CTTTGGCCCCGCCATTGCTGCTGTGCAGAAGTTTCACCGGGAGAAGTCGGCCTCTTCCTGATGGGCAACCACACC
ACCGCCCGGCGCCGTGCCCTTCCTTTGTCCTGCCCTCTGGAGACAGTGTTTGTCGTGGGCGTGGTCTGCAGGGAT
CCTGTTACAAAGGTGAAACCCAGGAGGAGAGTGTGGAGTCCAGAGCGCTGCCGGGACCCAGGCACAGGCGTTAGC
TCCCGTAGGAGAAAATGCGGGAATCCTGAATGAACAGTGGGTCCTGGCTGTCCTTGGGGCGTTCCAGGGCAGCTC
CCCTCCTGGAATAGAATCTTTCTTTCCATCCTGCATGGCTGAGAGCCAGGCTTCCTGCTTGGAGTCCGCAGGAGG
CTGTGGCAGCAGTGGCATCCACTGTGGCATCTCCGTCCTGCCCACCTTAAGAGGCGAGATGGAGCAGGTCCATCT
GCCTCTGCCCTTTCTAGCCAAGGTTATAGCTGCCCTGGACTGCTCACTCTCTGGTCTCAATTTAAAATGATCCCG
TGGCCACAGGGCTCCTGCCCAGGGGCTTGTCACCTTCCCCTCCTCCTTCCTGAGTCACTCCTTCAGTAGAAGGCC
CTGCTCTCTATCCTGCCCCACAGCCCTGCCTGGATTTGTATCCTTGGCTTCGTGCCAGTTCCTCCAAGTCTATGG
CACCTCCCTCCCTCTCAACCACTTGAGCAAACTCCAAGACACCTTCTACCCCGACACCAGCAATTATGCCAAGGG
CCATTAGGCTCTCAACATGACTATAGAGACCCCGTATCATCATGGAGACCTTTGTTCCTGTGGGAAAATAACCCT
CCCACCTGCAACAGCTGCCCCTGCTGACTGCGCCTGTCTTCTCCCTCTGACCCCAGAGAAAGGGGCCGTGGTCAG

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FIGURE 3312B

CTGGGATCTTCTGCCACCATCAGGGACAAACCGGGGGCAGGAGGAAAGTCACTGATGCCCAGCTGTTTGCATCCT
GCACAGCTACAGGTCCTTAATTAAAAGTGTACTGTTGGTT

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FIGURE 3313A

TACAATACAGTCTGTTCTCCTCCAGCTCCTTCTTTCTGCAACATGGGGAAGAACAAACTCCTTCATCCAAGTCTG
GTTCTTCTCCTCTTGGTCCTCCTGCCCACAGACGCCTCAGTCTCTGGAAAACCGCAGTATATGGTTCTGGTCCCC
TCCCTGCTCCACACTGAGACCACTGAGAAGGGCTGTGTCCTTCTGAGCTACCTGAATGAGACAGTGACTGTAAGT
GCTTCCTTGGAGTCTGTCAGGGGAAACAGGAGCCTCTTCACTGACCTGGAGGCGGAGAATGACGTACTCCACTGT
GTCGCCTTCGCTGTCCCAAAGTCTTCATCCAATGAGGAGGTAATGTTCCTCACTGTCCAAGTGAAAGGACCAACC
CAAGAATTTAAGAAGCGGACCACAGTGATGGTTAAGAACGAGGACAGTCTGGTCTTTGTCCAGACAGACAAATCA
ATCTACAAACCAGGGCAGACAGTGAAATTTCGTGTTGTCTCCATGGATGAAAACTTTCACCCCCTGAATGAGTTG
ATTCCACTAGTATACATTCAGGATCCCAAAGGAAATCGCATCGCACAATGGCAGAGTTTCCAGTTAGAGGGTGGC
CTCAAGCAATTTTCTTTTCCCCTCTCATCAGAGCCCTTCCAGGGCTCCTACAAGGTGGTGGTACAGAAGAAATCA
GGTGGAAGGACAGAGCACCCTTTCACCGTGGAGGAATTTGTTCTTCCCAAGTTTGAAGTACAAGTAACAGTGCCA
AAGATAATCACCATCTTGGAAGAAGAGATGAATGTATCAGTGTGTGGCCTATACACATATGGGAAGCCTGTCCCT
GGACATGTGACTGTGAGCATTTGCAGAAAGTATAGTGACGCTTCCGACTGCCACGGTGAAGATTCACAGGCTTTC
TGTGAGAAATTCAGTGGACAGCTAAACAGCCATGGCTGCTTCTATCAGCAAGTAAAAACCAAGGTCTTCCAGCTG
AAGAGGAAGGAGTATGAAATGAAACTTCACACTGAGGCCCAGATCCAAGAAGAAGGAACAGTGGTGGAATTGACT
GGAAGGCAGTCCAGTGAAATCACAAGAACCATAACCAAACTCTCATTTGTGAAAGTGGACTCACACTTTCGACAG
GGAATTCCCTTCTTTGGGCAGGTGCGCCTAGTAGATGGGAAAGGCGTCCCTATACCAAATAAAGTCATATTCATC
AGAGGAAATGAAGCAAACTATTACTCCAATGCTACCACGGATGAGCATGGCCTTGTACAGTTCTCTATCAACACC
ACCAATGTTATGGGTACCTCTCTTACTGTTAGGGTCAATTACAAGGATCGTAGTCCCTGTTACGGCTACCAGTGG
GTGTCAGAAGAACACGAAGAGGCACATCACACTGCTTATCTTGTGTTCTCCCCAAGCAAGAGCTTTGTCCACCTT
GAGCCCATGTCTCATGAACTACCCTGTGGCCATACTCAGACAGTCCAGGCACATTATATTCTGAATGGAGGCACC
CTGCTGGGGCTGAAGAAGCTCTCCTTCTATTATCTGATAATGGCAAAGGGAGGCATTGTCCGAACTGGGACTCAT
GGACTGCTTGTGAAGCAGGAAGACATGAAGGGCCATTTTTCCATCTCAATCCCTGTGAAGTCAGACATTGCTCCT
GTCGCTCGGTTGCTCATCTATGCTGTTTTACCTACCGGGGACGTGATTGGGGATTCTGCAAAATATGATGTTGAA
AATTGTCTGGCCAACAAGGTGGATTTGAGCTTCAGCCCATCACAAAGTCTCCCAGCCTCACACGCCCACCTGCGA
GTCACAGCGGCTCCTCAGTCCGTCTGCGCCCTCCGTGCTGTGGACCAAAGCGTGCTGCTCATGAAGCCTGATGCT
GAGCTCTCGGCGTCCTCGGTTTACAACCTGCTACCAGAAAAGGACCTCACTGGCTTCCCTGGGCCTTTGAATGAC
CAGGACAATGAAGACTGCATCAATCGTCATAATGTCTATATTAATGGAATCACATATACTCCAGTATCAAGTACA
AATGAAAAGGATATGTACAGCTTCCTAGAGGACATGGGCTTAAAGGCATTCACCAACTCAAAGATTCGTAAACCC
AAAATGTGTCCACAGCTTCAACAGTATGAAATGCATGGACCTGAAGGTCTACGTGTAGGTTTTTATGAGTCAGAT
GTAATGGGAAGAGGCCATGCACGCCTGGTGCATGTTGAAGAGCCTCACACGGAGACCGTACGAAAGTACTTCCCT
GAGACATGGATCTGGGATTTGGTGGTGGTAAACTCAGCAGGTGTGGCTGAGGTAGGAGTAACAGTCCCTGACACC
ATCACCGAGTGGAAGGCAGGGGCCTTCTGCCTGTCTGAAGATGCTGGACTTGGTATCTCTTCCACTGCCTCTCTC
CGAGCCTTCCAGCCCTTCTTTGTGGAGCTCACAATGCCTTACTCTGTGATTCGTGGAGAGGCCTTCACACTCAAG
GCCACGGTCCTAAACTACCTTCCCAAATGCATCCGGGTCAGTGTGCAGCTGGAAGCCTCTCCCGCCTTCCTAGCT
GTCCCAGTGGAGAAGGAACAAGCGCCTCACTGCATCTGTGCAAACGGGCGGCAAACTGTGTCCTGGGCAGTAACC
CCAAAGTCATTAGGAAATGTGAATTTCACTGTGAGCGCAGAGGCACTAGAGTCTCAAGAGCTGTGTGGGACTGAG
GTGCCTTCAGTTCCTGAACACGGAAGGAAAGACACAGTCATCAAGCCTCTGTTGGTTGAACCTGAAGGACTAGAG
AAGGAAACAACATTCAACTCCCTACTTTGTCCATCAGGTGGTGAGGTTTCTGAAGAATTATCCCTGAAACTGCCA
CCAAATGTGGTAGAAGAATCTGCCCGAGCTTCTGTCTCAGTTTTGGGAGACATATTAGGCTCTGCCATGCAAAAC
ACACAAAATCTTCTCCAGATGCCCTATGGCTGTGGAGAGCAGAATATGGTCCTCTTTGCTCCTAACATCTATGTA
CTGGATTATCTAAATGAAACACAGCAGCTTACTCCAGAGATCAAGTCCAAGGCCATTGGCTATCTCAACACTGGT
TACCAGAGACAGTTGAACTACAAACACTATGATGGCTCCTACAGCACCTTTGGGGAGCGATATGGCAGGAACCAG
GGCAACACCTGGCTCACAGCCTTTGTTCTGAAGACTTTTGCCCAAGCTCGAGCCTACATCTTCATCGATGAAGCA
CACATTACCCAAGCCCTCATATGGCTCTCCCAGAGGCAGAAGGACAATGGCTGTTTCAGGAGCTCTGGGTCACTG
CTCAACAATGCCATAAAGGGAGGAGTAGAAGATGAAGTGACCCTCTCCGCCTATATCACCATCGCCCTTCTGGAG
ATTCCTCTCACAGTCACTCACCCTGTTGTCCGCAATGCCCTGTTTTGCCTGGAGTCAGCCTGGAAGACAGCACAA
GAAGGGGACCATGGCAGCCATGTATATACCAAAGCACTGCTGGCCTATGCTTTTGCCCTGGCAGGTAACCAGGAC
AAGAGGAAGGAAGTACTCAAGTCACTTAATGAGGAAGCTGTGAAGAAAGACAACTCTGTCCATTGGGAGCGCCCT

FIGURE 3313B

CAGAAACCCAAGGCACCAGTGGGGCATTTTTACGAACCCCAGGCTCCCTCTGCTGAGGTGGAGATGACATCCTAT
GTGCTCCTCGCTTATCTCACGGCCCAGCCAGCCCCAACCTCGGAGGACCTGACCTCTGCAACCAACATCGTGAAG
TGGATCACGAAGCAGCAGAATGCCCAGGGCGGTTTCTCCTCCACCCAGGACACAGTGGTGGCTCTCCATGCTCTG
TCCAAATATGGAGCAGCCACATTTACCAGGACTGGGAAGGCTGCACAGGTGACTATCCAGTCTTCAGGGACATTT
TCCAGCAAATTCCAAGTGGACAACAACAACCGCCTGTTACTGCAGCAGGTCTCATTGCCAGAGCTGCCTGGGGAA
TACAGCATGAAAGTGACAGGAGAAGGATGTGTCTACCTCCAGACATCCTTGAAATACAATATTCTCCCAGAAAAG
GAAGAGTTCCCCTTTGCTTTAGGAGTGCAGACTCTGCCTCAAACTTGTGATGAACCCAAAGCCCACACCAGCTTC
CAAATCTCCCTAAGTGTCAGTTACACAGGGAGCCGCTCTGCCTCCAACATGGCGATCGTTGATGTGAAGATGGTC
TCTGGCTTCATTCCCCTGAAGCCAACAGTGAAAATGCTTGAAAGATCTAACCATGTGAGCCGGACAGAAGTCAGC
AGCAACCATGTCTTGATTTACCTTGATAAGGTGTCAAATCAGACACTGAGCTTGTTCTTCACGGTTCTGCAAGAT
GTCCCAGTAAGAGATCTGAAACCAGCCATAGTGAAAGTCTATGATTACTACGAGACGGATGAGTTTGCAATTGCT
GAGTACAATGCTCCTTGCAGCAAAGATCTTGGAAATGCT**TGA**AGACCACAAGGCTGAAAAGTGCTTTGCTGGAGT
CCTGTTCTCAGAGCTCCACAGAAGACACGTGTTTTTGTATCTTTAAAGACTTGATGAATAAACACTTTTTCTGGT
C

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FIGURE 3314

CATCAGCCCAGCCTGCAAGGAGGCGCCACCGGACCTGCACACTCAGGAGCAGACTCAGCTAGATTGGAAGAGAGG
ATGGGAAGACAATGGATGACCTACCTGTGGAGAGAAACTACCCATTCCAGAACCTCCTCTCTGCTGAAAGCTGAA
CACTCAATGGGAAGACCTGTTTGCAGAGAGGAGCCAGCCACTCCAGGGTCTCCGTTCTGCTAGAAGCTGAACACT
CGTTGGGACACCCTTGCTGTGGAAAGGACATCCTTACTGTGGAAATGAGCTACTAACTGCAGGAGCTGAGGAGCT
GCACAGCAAGGTTAAAAGAGCTGTAACACAAACAGGGCTGCAACATGCCCCTTGCTCCCCACAGGGAGAGAAGAG
CTCTGGCCCTCGGAGAAGCCCAGACCTGGGAGCTCCTTGAGCCCGGGCTGTGACTCCCTCTTTGGGGCCCTGGTT
GGCGTCACTGCATTCGCCAGTGCCACTGTTGGAAGCTGCTTGTG**ATG**CGCCTGGTCCAGGGGGAAGCTGTTTGTT
GTGTGCCTGGTCCAGCCACCTCATGGAGAGCCTGTGCTGGCACCTGGAGCTGCCCAACCTGGGCAGCAGCTTGTG
TGTGTGACTGCACAGTGGCCACGCTTGCTCACACACCCCTAGCACACCCCTCTGCTCCACCCGTCTCAATCTCCC
TTGGATCCGGGATCCAGGTTGGTAGCAAGTGCGAGTGGGCAGAAGCAGCCCAGTGGGCCCAGAGCAAAACTCAGG
CAAAGGTGCCACTAGACTGGCCAGGAAAGCGACACCCTAAAGATCCCATAATGCTGATATGT**TAA**TTCTATTCTA
TAAGCACCACACAGAAGTGATAGCTTTTATTTCTTATTTTGTCTAGCCTGGAGACAGAGCTAAGGATTCCTTGAA
CTGCAAAGTCTTTTCCAGTTCTTAGTTTATACAATCCATACTCACCTTCTGCCTAACTAAGCATTGTCATTTTTG
TGCCAAATGAAGAGTAGGACTCCTACGATTGTCCTCAGACTCTCTTGGCTCAATCCTCCTGCTTTAACCTTTCCT
ACTTCAAAAACTCCTGAAGTTTTGCTTCCCCTTCTATAGAATGGAAATATATGTCGCAATACTTACTGCAAAGAA
AATTATATATTTTAAAAATAGACTAAAGAGATGTTGTGAGACATCAGACATCAATCAGATGTTGTGAGAACTGAT
TTCTGCATCAGAATATCTCCTTGACTTTACAGCTATCCTTTAATCCTGGCTCAAAGTTCCAGAAGAAAGATGATC
CAATATAATACTCCTATTTGGACTTTGAGTCATACACATTCCTTCTTCTGAGAAAACGTGCTTCTGCATGAATCC
TCCCTTCATTATTTTCAGCTCATCTATTATTGAATCTGAAACCCCAGGTTAACTGACTGATCACTCTCATCAGTG
GCAGATTTTGGTGTAACATAGGACACATCACTCCCAATTCAGGTCAAGTCCCAATTATCTTGCCTCTCAATATGA
CATGTTCAATGTTGTATTTCATTCTACTTCATTTTAATGTAAAAAGTCTTTTCTGGTGAAGTCAGTCTTTTATTT
TCTCATAAAAATTCACCCTTTGGGTTTTTCATAGGGTATTCCCATAACCAAACACACTTTACACTTTCCTAGTAC
ATAACCCAATACTTTCTTCTTTCCCCACAGTCCTTACATGAAGCCTACTCAGACCGACATCACTGTATCATTTTT
TTGTATTCTGAAGTCCTTCAGCACTTGATTCCTTTAAGTTTAATCTTGGTATTCTATTGGGAATCATATGGAAAT
GTACAATGATATTTATTGAATGAACAGGAAACAGGGAAAGACATTGACCAGAAAAAGTGTTTATTCATCAAGTCT
TTAAAGATACAAAAACACGTGTCTTCTGTGGAGCTCTGAGAACAGGACTCCAGCAAAGCACTTTTCAGCCTTGTG
GTCTTCAAGCATTTCCAAGATCTGTGACATTGGAAAGAAAAAAAATTAAGACAGATTTGGGTCTCCATGAGCAGA
GAGTATTCTTTCCCTTAGTTCTGGGTAGCATAGTGCCCAAGGAAACCTAATCAGTACAGTGGGAAACCAAATCTA
TTCCAAATCATTACCCATAAGCAATCCTATGGACTCTCTGAGGTTTGACAGAGTCAGCGGCCCTCTCCAATAAAT
GTGTTTTTCTAT

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FIGURE 3315

TTCCGGTTCCCAGAGTGGGGCACAGCGAGGCGCTAGGGGGAACGCTGGCCTCTGAAACTAGCTCTGGGACCGGGG
TCTGCGGCCGGCCCCTAGCTGGCCCCGTCTCCCATCCCCAGAAGGGTATTCACTGGGGATTCTGAGCTTTGGCTA
CTCCAGTTTCCCACGACACG**ATG**TTCCCTTTCTACAGCTGCTGGAGGACTGGACTGCTACTACTACTCCTGGCTG
TGGCAGTGAGAGAATCCTGGCAGACAGAAGAAAAAACTTGCGACTTGGTAGGAGAAAAGGGTAAAGAGTCAGAGA
AAGAGTTGGCTCTAGTGAAGAGGCTGAAACCACTGTTTAATAAAAGCTTTGAGAGCACTGTGGGCCAGGGTTCAG
ACACATACATCTACATCTTCAGGGTGTGCCGGGAAGCTGGCAACCACACTTCTGGGGCAGGCCTGGTGCAAATCA
ACAAAAGTAATGGGAAGGAGACAGTGGTAGGGAGACTCAACGAGACTCACATCTTCAACGGAAGTAATTGGATCA
TGCTGATCTATAAAGGGGGTGATGAATATGACAACCACTGTGGCAAGGAGCAGCGTCGTGCAGTGGTGATGATCT
CCTGCAATCGACACACCCTAGCGGACAATTTTAACCCTGTGTCTGAGGAGCGTGGCAAAGTCCAAGATTGTTTCT
ACCTCTTTGAGATGGATAGCAGCCTGGCCTGTTCACCAGAGATCTCCCACCTCAGTGTGGGTTCCATCTTACTTG
TCACGTTTGCATCACTGGTTGCTGTTTATGTTGTTGGGGGGTTCCTATACCAGCGACTGGTAGTGGGAGCCAAAG
GAATGGAGCAGTTTCCCCACTTAGCCTTCTGGCAGGATCTTGGCAACCTGGTAGCAGATGGCTGTGACTTTGTCT
GCCGTTCTAAACCTCGAAATGTGCCTGCAGCATATCGTGGTGTGGGGGATGACCAGCTGGGGGAGGAGTCAGAAG
AAAGGGATGACCATTTATTACCAATG**TAG**ATTGCACTTTATATGTCCAGCCTCTTCCTCAGTCCCCCAAACCAAA
GCTACACAGCCAGATTTCTCAAGCAGTCTCAACTCCAGTCCCTCATCTCACCCTTACTATTGCTCTTGCTTTCCA
GTTTGCTTTTGATTTGCATCTTCTCACTAGTAAAACTGCCTTCCCTTTGTTCCTTATTTTCTGTTTTTTCTCTAG
AGAGGTACAGTTGTAAGTCAGAGTTAATATAATAGGGCCTGTGAAAACAGAGGCTTTTGCATTGTCTCTTGACAT
CAGAAGTTACAATAGGCATATGGGCAAAATGGTGTAGCAGGCTCACTGGCCGTTTGTTTTTTAAACACATTTTCA
CAAGTTTTTGAGACACTGGATTTCTTTAATTAAAAAAAAAATGCCAAGAAACATTATTTATACAGGGTTGATTGC
TTTCATGTTGTTATTCTGTACCCTATAGTAGCCTCCATGAGAATCTGGTATTTCTTGCTGCTTGGAACTACTTTG
CAGTGATTACTTGGTTGCAGTCCAAGTACTCTCGTTTAGTCTGAGCCTGGAGATGTTCTAGACTTGCTTCTCCCA
CCTCTGAGATTAGGACAGGAAAAATGTGAAATTTCCCAATTACAGGATTATACGGTACCATCACATCATTTGTGG
AAATTGGGGTGACTGTATAGCTGGGATTGGGCTAAGGACTGTGGTCTTATCTGTCCACATACAGCCAAAATGCCT
ATCCAGAAATCCAGTTCGTTGGAAAGGAAAATTGGTACTCCTGTGCCACAGGGGTTCCAGAAAAGGGAAGTCACT
TTACCTTGCGGTGGTGGGATCCTGATGTCTTTCATCCATTTGTAGTAAAAGCTGGTAAAGCTTTTCTTACTCCTG
GTTCCCTACCAGTATTTCTAAACATGTCGCACTTTCTCCACAGGCATGTGGTTTTGACCTTTTTTTCAATCTTCT
AGAAAGGGAACGGAAGCAGAAGTGGGACATCGAGGGCTCTGCTGTCCTCTGCGCTGGGTGTGGAATGCTGCTGCA
CCTGTCCCTTCTGCTGGCTCAGGGAAGTGTCTTCTTGCCCACATTTCTGTGGGGAAAGGTTTTTAATCCTCTGAT
GCTTCCATCTTCCTGTTTAGGCCATGTGCCCAGAAACCTGGACTGATCTTTCTTTAATAGTGAACCCCTGGGCCA
CTGAAGAGTAACATGGCTCCACTGGACACAAAAGAGGGATGGAATCAACAGGCAGGGGGCCTTTTATAAGCCTTA
GGAAAAGAAAATGAAACTATTTCATCTTTGGACTTTTCAATACTATTGGAGTGATTTTTTTCTTTCTAAACAGGG
AAAATAATGTTACAAAAGCATCTTTTTTGTTATTTGTTTGCATCCCTCCCCCACACCCTGGTGTTTTAAAATGAA
GAAAAAAAACCATCACCTTTTGTACAAAAACTCTTAATGATTAAAAAACAAACA

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FIGURE 3316

GGCTCCCGGAATATGGAGCCCTGGGCGCGGGGGCGGCGTGTCAGGTGGTTGCGGAGCTGAATCATATTCTAAGAA
CTCAGCCACTCAGGTATCCACCATGGTGCTGGGTCCTGAACAGAAGATGTCAGATGACAGTGTTTCTGGAGATCA
TGGGGAGTCTGCCAGTCTTGGTAACATCAACCCTGCCTATAGTAATCCCTCTCTTTCACAGTCCCCTGGGGACTC
AGAGGAGTACTTCGCCACTTACTTTAATGAGAAGATCTCCATTCCTGAGGAGGAGTACTCTTGTTTTAGCTTTCG
TAAACTCTGGGCTTTCACCGGACCAGGTTTTCTTATGAGCATTGCCTACCTGGATCCAGGAAATATTGAATCCGA
TTTGCAGTCTGGAGCAGTGGCTGGATTTAAGTTGCTCTGGATCCTTCTGTTGGCCACCCTTGTGGGGCTGCTGCT
CCAGCGGCTTGCAGCTAGACTGGGAGTGGTTACTGGGCTGCATCTTGCTGAAGTATGTCACCGTCAGTATCCCAA
GGTCCCACGAGTCATCCTGTGGCTGATGGTGGAGTTGGCTATCATCGGCTCAGACATGCAAGAAGTCATTGGCTC
AGCCATTGCTATCAATCTTCTGTCTGTAGGAAGAATTCCTCTGTGGGGTGGCGTTCTCATCACCATTGCAGATAC
TTTTGTATTTCTCTTCTTGGACAAATATGGCTTGCGGAAGCTAGAAGCATTTTTTGGCTTTCTCATCACTATTAT
GGCCCTCACATTTGGATATGAGTATGTTACAGTGAAACCCAGCCAGAGCCAGGTACTCAAGGGCATGTTCGTACC
ATCCTGTTCAGGCTGTCGCACTCCACAGATTGAACAGGCTGTGGGCATCGTGGGAGCTGTCATCATGCCACACAA
CATGTACCTGCATTCTGCCTTAGTCAAGTCTAGACAGGTAAACCGGAACAATAAGCAGGAAGTTCGAGAAGCCAA
TAAGTACTTTTTCATTGAATCCTGCATTGCACTCTTTGTTTCCTTCATCATCAATGTCTTTGTTGTCTCAGTCTT
TGCTGAAGCATTTTTTGGGAAAACCAACGAGCAGGTGGTTGAAGTCTGTACAAATACCAGCAGTCCTCATGCTGG
CCTCTTTCCTAAAGATAACTCGACACTGGCTGTGGACATCTACAAAGGGGGTGTTGTGCTGGGATGTTACTTTGG
GCCTGCTGCACTCTACATTTGGGCAGTGGGGATCCTGGCTGCAGGACAGAGCTCCACCATGACAGGAACCTATTC
TGGCCAGTTTGTCATGGAGGGATTCCTGAACCTAAAGTGGTCACGCTTTGCCCGAGTGGTTCTGACTCGCTCTAT
TGCCATCATCCCCACTCTGCTTGTTGCTGTCTTCCAAGATGTAGAGCATCTAACAGGGATGAATGACTTTCTGAA
TGTTCTACAGAGCTTACAGCTTCCCTTTGCTCTCATACCCATCCTCACATTTACGAGCTTGCGGCCAGTAATGAG
TGACTTTGCCAATGGACTAGGCTGGCGGATTGCAGGAGGAATCTTGGTCCTTATCATCTGTTCCATCAATATGTA
CTTTGTAGTGGTTTATGTCCGGGACCTAGGGCATGTGGCATTATATGTGGTGGCTGCTGTGGTCAGCGTGGCTTA
TCTGGGCTTTGTGTTCTACTTGGGTTGGCAATGTTTGATTGCACTGGGCATGTCCTTCCTGGACTGTGGGCATAC
GTGCCATCTGGGATTGACAGCTCAGCCTGAACTCTATCTTCTGAACACCATGGACGCTGACTCACTTGTGTCTAG
ATGACTGACAGCCTGAGAGACTCTATAAGAACATGTTTTTCTAAGCCCTTTTTGTGCCAGGTGTCCCGTTAACGT
CTCTGTTAGTTCAGAGAGACGGGATTTCACCATGTTGCCCAGGCTGGTGTTGAACTCATGAGCTCAAGTAATCTG
CTGGCCTTGGCCTCCCAAAGTGCTGAGATTATAGGCGTGAGCCACTGCATCCAGCTCACTCCTCATTTCTTTCTA
GCCCCAAAGGTGTTGAGTCAGCAAATCCTGCAGCCTTTGTGTGACTTTGAGCATCACTTTCCCCTTTCAGCATTA
AATATATGACCTCTCTGCCTTATTTTAGAACTTACTACATTTCAATAAAACTTTTTAAAAAATCC

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FIGURE 3317

CAGCCCTCTCATCTCCTGGAACCATGGCCAGCACATCCACCACCATCAGGAGCCACAGCAGCAGCCGCCGGGGTT
TCAGTGCCAACTCAGCCAGGCTCCCTGGGGTCAGCCGCTCTGGCTTCAGCAGCATCTCCGTGTCCCGCTCCAGGG
GCAGTGGTGGCCTGGGTGGTGC**ATG**TGGAGGAGCTGGCTTTGGCAGCCGCAGTCTGTATGGCCTGGGGGGCTCCA
AGAGGATCTCCATTGGAGGGGGCAGCTGTGCCATCAGTGGCGGCTATGGCAGCAGAGCCGGAGGCAGCTATGGCT
TTGGTGGCGCCGGGAGTGGATTTGGTTTCGGTGGTGGAGCCGGCATTGGCTTTGGTCTGGGTGGTGGAGCCGGCC
TTGCTGGTGGCTTTGGGGGCCCTGGCTTCCCTGTGTGCCCCCCTGGAGGCATCCAAGAGGTCACCGTCAACCAGA
GTCTCCTGACTCCCCTCAACCTGCAAAT**TGA**CCCCGCCATCCAGCGGGTGCGGGCCGAGGAGCGTGAGCAGATCA
AGACCCTCAACAACAAGTTTGCCTCCTTCATCGACAAGGTGCGGTTCCTAGAGCAGCAGAACAAGGTTCTGGACA
CCAAGTGGACCCTGCTGCAGGAGCAGGGCACCAAGACTGTGAGGCAGAACCTGGAGCCGTTGTTCGAGCAGTACA
TCAACAACCTCAGGAGGCAGCTGGACAACAT

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FIGURE 3318

CATGGCCAGCACATCCACCACCATCAGGAGCCACAGCAGCAGCCGCCGGGGTTTCAGTGCCAACTCAGCCAGGCT
CCCTGGGGTCAGCCGCTCTGGCTTCAGCAGCGTCTCCGTGTCCCGCTCCAGGGGCAGTGGTGGCCTGGGTGGTGC
ATGTGGAGGAGCTGGCTTTGGCAGCCGCAGTCTGTATGGCCTGGGGGGCTCCAAGAGGATCTCCATTGGAGGGGG
CAGCTGTGCCATCAGTGGCGGCTATGGCAGCAGAGCCGGAGGCAGCTATGGCTTTGGTGGCGCCGGGAGTGGATT
TGGTTTCGGTGGTGGAGCCGGCATTGGCTTTGGTCTGGGTGGTGGAGCCGGCCTTGCTGGTGGCTTTGGGGGCCC
TGGCTTCCCTGTGTGCCCCCCTGGAGGCATCCAAGAGGTCACCGTCAACCAGAGTCTCCTGACTCCCCTCAACCT
GCAAATCGATCCCACCATCCAGCGGGTGCGGGCTGAGGAGCGTGAACAGATCAAGACCCTCAACAACAAGTTTGC
CTCCTTCATCGACAAGGTGCGGTTCCTGGAGCAGCAGAACAAGGTTCTGGAAACAAAGTGGACCCTGCTGCAGGA
GCAGGGCACCAAGACTGTGAGGCAGAACCTGGAGCCGTTGTTCGAGCAGTACATCAACAACCTCAGGAGGCAGCT
GGACAGCATTGTCGGGGAACGGGGCCGCCTGGACTCAGAGCTCAGAGGCATGCAGGACCTGGTGGAGGACTTCAA
GAACAAATATGAGGATGAAATCAACAAGCGCACAGCAGCAGAGAATGAATTTGTGACTCTGAAGAAGGATGTGGA
TGCTGCCTACATGAACAAGGTTGAACTGCAAGCCAAGGCAGACACTCTCACAGACGAGATCAACTTCCTGAGAGC
CTTGTATGATGCAGAGCTGTCCCAGATGCAGACCCACATCTCAGACACATCTGTGGTGCTGTCCATGGACAACAA
CCGCAACCTGGACCTGGACAGCATCATCGCTGAGGTCAAGGCCCAATATGAGGAGATTGCTCAGAGAAGCCGGGC
TGAGGCTGAGTCCTGGTACCAGACCAAGTACGAGGAGCTGCAGGTCACAGCAGGCAGACATGGGGACGACCTGCG
CAACACCAAGCAGGAGATTGCTGAGATCAACCGCATGATCCAGAGGCTGAGATCTGAGATCGACCACGTCAAGAA
GCAGTGCGCCAACCTGCAGGCCGCCATTGCTGATGCTGAGCAGCGTGGGGAGATGGCCCTCAAGGATGCCAAGAA
CAAGCTGGAAGGGCTGGAGGATGCCCTGCAGAAGGCCAAGCAGGACCTGGCCCGGCTGCTGAAGGAGTACCAGGA
GCTGATGAATGTCAAGCTGGCCCTGGACGTGGAGATCGCCACCTACCGCAAGCTGCTGGAGGGTGAGGAGTGCAG
GCTGAATGGCGAAGGCGTTGGACAAGTCAACATCTCTGTGGTGCAGTCCACCGTCTCCAGTGGCTATGGCGGTGC
CAGTGGTGTCGGCAGTGGCTTAGGCCTGGGTGGAGGAAGCAGCTACTCCTATGGCAGTGGTCTTGGCGTTGGAGG
TGGCTTCAGTTCCAGCAGTGGCAGAGCCATTGGGGGTGGCCTCAGCTCTGTTGGAGGCGGCAGTTCCACCATCAA
GTACACCACCACCTCCTCCTCCAGCAGGAAGAGCTATAAGCACTAAAGTGCGTCTGCTAGCTCTCGGTCCCACAG
TCCTCAGGCCCCTCTCTGGCTGCAGAGCCCTCTCCTCAGGTTGCCTTTCCTCTCCTGGCCTCCAGTCTCCCCTGC
TGTCCCAGGTAGAGCTGGGTATGGATGCTTAGTGCCCTCACTTCTTCTCTCTCTCTCTATACCATCTGAGCACCC
ATTGCTCACCATCAGATCAACCTCTGATTTTACATCATGATGTAATCACCACTGGAGCTTCACTGTTACTAAATT
ATTAATTTCTTGCCTCCAGTGTTCTATCTCTGAGGCTGAGCATTATAAGAAAATGACCTCTGCTCCTTTTCATTG
CAGAAAATTGCCAGGGGCTTATTTCAGAACAACTTCCACTTACTTTCCACTGGCTCTCAAACTCTCTAACTTATA
AGTGTTGTGAACCCCCACCCAGGCAGTATCCATGAAAGCACAAGTGACTAGTCCTATGATGTACAAAGCCTGTAT
CTCTGTGATGATTTCTGTGCTCTTCGCTGTTTGCAATTGCTAAATAAA

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FIGURE 3319

TCGACAGCTCTCTCGCCCAGCCCAGTTCTGGAAGGGATAAAAAGGGGGCATCACCGTTCCTGGGTAACAGAGCCA
CCTTCTGCGTCCTGCTGAGCTCTGTTCTCTCCAGCACCTCCCAACCCACTAGTGCCTGGTTCTCTTGCTCCACCA
GGAACAAGCCACC**ATG**TCTCGCCAGTCAAGTGTGTCCTTCCGGAGCGGGGGCAGTCGTAGCTTCAGCACCGCCTC
TGCCATCACCCCGTCTGTCTCCCGCACCAGCTTCACCTCCGTGTCCCGGTCCGGGGGTGGCGGTGGTGGTGGCTT
CGGCAGGGTCAGCCTTGCGGGTGCTTGTGGAGTGGGTGGCTATGGCAGCCGGAGCCTCTACAACCTGGGGGGCTC
CAAGAGGATATCCATCAGCACTAGTGGTGGCAGCTTCAGGAACCGGTTTGGTGCTGGTGCTGGAGGCGGCTATGG
CTTTGGAGGTGGTGCCGGTAGTGGATTTGGTTTCGGCGGTGGAGCTGGTGGTGGCTTTGGGCTCGGTGGCGGAGC
TGGCTTTGGAGGTGGCTTCGGTGGCCCTGGCTTTCCTGTCTGCCCTCCTGGAGGTATCCAAGAGGTCACTGTCAA
CCAGAGTCTCCTGACTCCCCTCAACCTGCAAATCGACCCCAGCATCCAGAGGGTGAGGACCGAGGAGCGCGAGCA
GATCAAGACCCTCAACAATAAGTTTGCCTCCTTCATCGACAAGGTGCGGTTCCTGGAGCAGCAGAACAAGGTTCT
GGACACCAAGTGGACCCTGCTGCAGGAGCAGGGCACCAAGACTGTGAGGCAGAACCTGGAGCCGTTGTTCGAGCA
GTACATCAACAACCTCAGGAGGCAGCTGGACAGCATCGTGGGGGGAACGGGGCCGCCTGGACTCAGAGCTGAGAAA
CATGCAGGACCTGGTGGAAGACTTCAAGAACAAGTATGAGGATGAAATCAACAAGCGTACCACTGCTGAGAATGA
GTTTGTGATGCTGAAGAAGGATGTAGATGCTGCCTACATGAACAAGGTGGAGCTGGAGGCCAAGGTTGATGCACT
GATGGATGAGATTAACTTCATGAAGATGTTCTTTGATGCGGAGCTGTCCCAGATGCAGACGCATGTCTCTGACAC
CTCAGTGGTCCTCTCCATGGACAACAACCGCAACCTGGACCTGGATAGCATCATCGCTGAGGTCAAGGCCCAGTA
TGAGGAGATTGCCAACCGCAGCCGGACAGAAGCCGAGTCCTGGTATCAGACCAAGTATGAGGAGCTGCAGCAGAC
AGCTGGCCGGCATGGCGATGACCTCCGCAACACCAAGCATGAGATCTCTGAGATGAACCGGATGATCCAGAGGCT
GAGAGCCGAGATTGACAATGTCAAGAAACAGTGCGCCAATCTGCAGAACGCCATTGCGGATGCCGAGCAGCGTGG
GGAGCTGGCCCTCAAGGATGCCAGGAACAAGCTGGCCGAGCTGGAGGAGGCCCTGCAGAAGGCCAAGCAGGACAT
GGCCCGGCTGCTGCGTGAGTACCAGGAGCTCATGAACACCAAGCTGGCCCTGGACGTGGAGATCGCCACTTACCG
CAAGCTGCTGGAGGGCGAGGAATGCAGACTCAGTGGAGAAGGAGTTGGACCAGTCAACATCTCTGTTGTCACAAG
CAGTGTTTCCTCTGGATATGGCAGTGGCAGTGGCTATGGCGGTGGCCTCGGTGGAGGTCTTGGCGGCGGCCTCGG
TGGAGGTCTTGCCGGAGGTAGCAGTGGAAGCTACTACTCCAGCAGCAGTGGGGGTGTCGGCCTAGGTGGTGGGCT
CAGTGTGGGGGGCTCTGGCTTCAGTGCAAGCAGTGGCCGAGGGCTGGGGGTGGGCTTTGGCAGTGGCGGGGGTAG
CAGCTCCAGCGTCAAATTTGTCTCCACCACCTCCTCCTCCCGGAAGAGCTTCAAGAGC**TAA**GAACCTGCTGCAAG
TCACTGCCTTCCAAGTGCAGCAACCCAGCCCATGGAGATTGCCTCTTCTAGGCAGTTGCTCAAGCCATGTTTTAT
CCTTTTCTGGAGAGTAGTCTAGACCAAGCCAATTGCAGAACCACATTCTTTGGTTCCCAGGAGAGCCCCATTCCC
AGCCCCTGGTCTCCCGTGCCGCAGTTCTATATTCTGCTTCAAATCAGCCTTCAGGTTTCCCACAGCATGGCCCCT
GCTGACACGAGAACCCAAAGTTTTCCCAAATCTAAATCATCAAAACAGAATCCCCACCCCAATCCCAAATTTTGT
TTTGGTTCTAACTACCTCCAGAATGTGTTCAATAAAATGCTTTTATAATAT

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FIGURE 3320

GAAACATGCAGGACCTGGTGGAAGACTTCAAGAACAAGTATGAGGATGAAATCAACAAGCGTACCACTGCTGAGA
ATGAGTTTGTGATGCTGAAGAAGGATGTAGATGCTGCCTACATGAACAAGGTGGAGCTGGAGGCCAAGGTTGATG
CACTGATGGATGAGATTAACTTCATGAAGATGTTCTTTGATGCGGAGCTGTCCCAGATGCAGACGCATGTCTCTG
ACACCTCAGTGGTCCTCTCCATGGACAACAACCGCAACCTGGACCTGGATAGCATCATCGCTGAGGTCAAGGCCC
AGTATGAGGAGATTGCCAACCGCAGCCGGACAGAAGCCGAGTCCTGGTATCAGACCAAGTCCGCAACACCAAGCA
TGAGATCTCTGAGATGAACCGGATGATCCAGAGGCTGAGAGCCGAGATTGACAATGTCAAGAAACAGTGCGCCAA
TCTGCAGAACGCCATTGCGGATGCCGAGCAGCGTGGGGAGCTGGCCCTCAAGGATGCCAGGAACAAGCTGGCCGA
GCTGGAGGAGGCCCTGCAGAAGGCCAAGCAGGACATGGCCCGGCTGCTGCGTGAGTACCAGGAGCTCATGAACAC
CAAGCTGGCCCTGGACGTGGAGATCGCCACTTACCGCAAGCTGCTGGAGGGCGAGGAATGCAGACTCAGTGGAGA
AGGAG

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FIGURE 3321

GCGAGTGCGCGCTCCTCCTCGCCCGCCGCTAGGTCCATCCCGGCCCAGCCACC**ATG**TCCATCCACTTCAGCTCCC
CGGTATTCACCTCGCGCTCAGCCGCCTTCTCGGGCCGCGGCGCCCAGGTGCGCCTGAGCTCCGCTCGCCCCGGCG
GCCTTGGCAGCAGCAGCCTCTACGGCCTCGGCGCCTCACGGCCGCGCGTGGCCGTGCGCTCTGCCTATGGGGGCC
CGGTGGGCGCCGGCATCCGCGAGGTCACCATTAACCAGAGCCTGCTGGCCCCGCTGCGGCTGGACGCCGACCCCT
CCCTCCAGCGGGTGCGCCAGGAGGAGAGCGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATCGACA
AGGTGCGGTTTCTGGAGCAGCAGAACAAGCTGCTGGAGACCAAGTGGACGCTGCTGCAGGAGCAGAAGTCGGCCA
AGAGCAGCCGCCTCCCAGACATCTTTGAGGCCCAGATTGCTGGCCTTCGGGGTCAGCTTGAGGCACTGCAGGTGG
ATGGGGGCCGCCTGGAGGCGGAGCTGCGGAGCATGCAGGATGTGGTGGAGGACTTCAAGAATAAGTACGAAGATG
AAATTAACCACCGCACAGCTGCTGAGAATGAGTTTGTGGTGCTGAAGAAGGATGTGGATGCTGCCTACATGAGCA
AGGTGGAGCTGGAGGCCAAGGTGGATGCCCTGAATGATGAGATCAACTTCCTCAGGACCCTCAATGAGACGGAGT
TGACAGAGCTGCAGTCCCAGATCTCCGACACATCTGTGGTGCTGTCCATGGACAACAGTCGCTCCCTGGACCTGG
ACGGCATCATCGCTGAGGTCAAGGCGCAGTATGAGGAGATGGCCAAATGCAGCCGGGCTGAGGCTGAAGCCTGGT
ACCAGACCAAGTTTGAGACCCTCCAGGCCCAGGCTGGGAAGCATGGGGACGACCTCCGGAATACCCGGAATGAGA
TTTCAGAGATGAACCGGGCCATCCAGAGGCTGCAGGCTGAGATCGACAACATCAAGAACCAGCGTGCCAAGTTGG
AGGCCGCCATTGCCGAGGCTGAGGAGCGTGGGGAGCTGGCGCTCAAGGATGCTCGTGCCAAGCAGGAGGAGCTGG
AAGCCGCCCTGCAGCGGGGCAAGCAGGATATGGCACGGCAGCTGCGTGAGTACCAGGAACTCATGAGCGTGAAGC
TGGCCCTGGACATCGAGATCGCCACCTACCGCAAGCTGCTGGAGGGCGAGGAGAGCCGGTTGGCTGGAGATGGAG
TGGGAGCCGTGAATATCTCTGTGATGAATTCCACTGGTGGCAGTAGCAGTGGCGGTGGCATTGGGCTGACCCTCG
GGGGAACCATGGGCAGCAATGCCCTGAGCTTCTCCAGCAGTGCGGGTCCTGGGCTCCTGAAGGCTTATTCCATCC
GGACCGCATCCGCCAGTCGCAGGAGTGCCCGCGAC**TGA**

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FIGURE 3322

CTCTCTGTCAAGAGCCATTGCCTGAAACTGGAGGAGAACATCAAGACAGCTGAGGAGCAGGGTGAGCTGGCCTTC
CAGGATGCCAAGACCAAGCTGGCCCAGCTGGAGGCCGCCCTGCAGCAGGCCAAGCAGGACATGGCGCGGCAGCTG
CGCAAGTACCAGGAGCTGATGAACGTCAAGCTGGCCCTGGACATCGAGATCGCCACCTACAGGAAGCTGGTGGAG
GGCGAGGAGGGCAGGATGGACTCGCCCTCAGCCACTGTGGTCAGCGCTGTGCAGTCCAGGTGCAAAACCGCCCCT
TCCCTCCCCTACCCCTTATGTTCCCTGTAGCTGCCTCCAGATCAGGCCTCTCCAAGGCCCCCTCCCGAAAGAAGA
AGGGCAGCAAAGGCCCCGTGATCAAAATCACCGAAATGTCAGAGAAGTACTTCTCGCAGGAGTCGGAGGTCTCAG
AGTAAGGCGGCTGGACCCCAGGAACCCCAGGGCACTCCACTGCAGCAGGAGGGACTTAAGCTAGACTCAAGAAAG
CAGCTTGGAGCCTCTAGGTTGAGAAGAGAGGCAAAACCTGATATTGAACTGAGAGAGGGGTTCAAAACTGACTGT
GTTTTGTGGGCTGCCAGGGTGGGAGAGGAGCATCACCAGCTCCTCAGAGCCACTCCGCTCCATATCAGTATCTCA
CAGTCCCATCCTTCCAACCTTCTGGCCAGAGGTTTTCCTGATGGGTGAGTCGGAATTAGGGGTCAGTTTTGTCTC
CACCTCCTCGCTCCTCTGAGGCTCCTCCTCCAGCATCAGGCTCTGCCAAGGCCCCTCTGACTCTTGCCCAATCCT
TGACCTTGACTCCTATCTCAAGCCTTGCCTTGTCTCTGCCTCGGAACTGGGACTGGGACTGGCTCATCCACCTAT
GTGCGGGAGCCGAGGAGGACGGCGTGGGCCCTGTCCTGTATCTGGAATTCCTGGGAAGGCTGGCTGCTGAAGACC
CTCTTGGCTTTCCCGTGCTCTTTGGGCTCCCCAGAGACCTGACAGTATTAGGGAGTGAAGGGAGGAGGGGCCCTG
GCTATTTGGGACCTAAGCCTAGGCCCCAGAGATCAGCCCGAACACCCGCATCCCTTCCTCCTCCCATGGGTCCCT
CCCAGTAGGCAGTAGTCAGAACTGGATGGGCTGCCCCCAGCCAGCTCCCAGCAGCTTCTCCGGAAGCTGCTCTTG
CCATAATCAACTCCCTGGGAGTGGAAGCCAGATGGCAGCTTGAGATTGGGCAGGAGCATTCGATCTTCCTTTCAC
CTCCCTGCCATGCTGGGGTCCTACCCAGCCTGGATCTGAGCTCTGTGCCCCCAGCCGGGTTGTTCCCAGCCTGAG
CACCGGGCTTTGGTGCACCAGGCCTTGGAGACCCCTGGTCCCACCCCTGCCGTGAAGCCCCAGGCCCACTTCCCA
AGAATCTCACTTCTCAGGGCCTCTGTTCTCCTCTCCACTGGGCCAAATAGCCTGGCCCTCCCCTCCTTGGCATTC
ATGGGGGAGCCCAGGAACCCCCCACACCT**ATG**GGGTTAGAGCTCCTCCTTTCTTCTCACTCCTTCCCCTTCCTCC
CTCCATGCCCACTCCCCCTGCCTCCAGCAGGCCAGGAAGAAGGCACAGTCCAGGCAAGTCTGGGAGCTTCCAAGC
CCTTGAGGTCCAGCTGTGGGGCCCAAATGACAGCCTTACAAGGGTTCTACCAGAGAGGAAAATTCCACATCCCAC
CAGAAGACAGGGGTGTTGGCAGGCATACTCCTATCTCCTCCTCTTGGCTCTCAATGCTGAGGCTTGCAGAGGCAT
CCCAGCGGCACCAGCCTCCCACTGCACAGCTTCCTTCCCTCCTTCACTCTCCTCTCCCCTCCCTGCCCCTTGCCT
CACCTCCTCTTCTAGACTGCATTAGATTCATTCATCTCATTTGCCAGGACATGTTGGCCAGAGGTCTGGGCCCAT
CCCAGGCCTCAAGGCCCTCCAGGCCTGTGGGGAGCACTGGAGGGTTACTGACTCTCTGGCCATGGGAACTCAGAG
ATTCTCATCCCCAAAGTCCCAAAAGAGGGTGC**TGA**TTGGTGCTTTTCCTCAGGCTCTTCATTGGTTTCCAAGGGA
GCAAATCCTCAGTGGGGATACAAGACATATAAAGTATATATTATTTTTTCATAACTTATGTGGCTTTTAACTTAT
TGCTTCCCTTCCTGTTTCTGCATGATCAGTCTGTATGTACTATCTGGAAAGATAACACATACTCCAGCCACCTCA
CCTGATTGGCTATCTTGGGGCCATGTCCCCTTCTTGCTGCCACAGGATGAATAAAGTGTTGAGATTTGTCTATGG
AGAAAGCTGTGTGTCTGTTTTTATCTCCCCTCTCAGGACCAGTCAGCCACTGGTCAATCAGGCTGATCATGGAAC
ATTAGGAATTCTCCAATTAAGGGAGAAAAAGTCCAGGGACTTAGTTATATCTTCAGACCAGTGCAGCTGGTACAC
ACAAAGTTCTCCTGTCTCACCATCTGATATGGTTTGGATGCTCGTCCCCTCCAAATCTCATGTTGAAATGTAATT
CCCAGTGTTGGAAGTGGAGCCTGGTGGGAAGTATTTGGATCATGAGAGAGGATCCTTCATGAATGGCTCAGCACC
ATCTCCTTGGTGATGAGTGAGTTCTCACTCAATTCACATAGATATGGTTGTTTAAAAGAGTCTGAGACCTCTCCC
CTCTTTCTCGCCATGTGATATGCCTGCTCCCCCTTCACCTTCCGCCTTTACTGTAAGCTTCCTGAGGCCCTCACC
AGAAGCTGAGCAAATGTTGGTGCCATGCCAGTACAGCCTGCAGAATTGTGAGCCAAAATAAATGTCTTTTCTTTA
TAAATTA

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FIGURE 3323

TTCCGGTCCCGGCTCAGCCTCCGACCCAGGTGGTCTGGAGCCTGCCGGGAGAGTGGTGGCATCTGAGAGGCTGGT
CGTGGACTGTGGTTGGGGGAGGTGGGAGCTGTTTTAACCGTGTGCCCCCTCTCCTGTGCCGGCGTGGGCATCCCC
CGGGGCAGTGGAACGCGGGCGCTCCTCCAGCTTCCGAGTCCAGCCAGCCTGGGCGCGGGGCGCCGCCCCCGAGAC
ACCCGAGGAGTCCGTTCCTCCCTGGTTACGTGGACTGTGGAGCTGGTCTCTTGTGGCTCAGCGCCGTGCGGAGGT
TGAAGCGTACCTGCGGAGGTCGCACCAGGGCGTGAGGAGGAGGAGGAAGGGCATGAGCCGAGCTTGAGGAATCCG
TGCTCCAAACTCTACACTCAAGGGTGGCCCTTGGGTAGGGTGAAGATCCCCTGTCTTTATCCTAGTTCCACACCT
TGGTGTGGGTTACTGGGTGCAGG**ATG**AACTGTCGCTCGGAGGTGCTGGAGGTGTCGGTGGAGGGGCGGCAGGTGG
AGGAGGCCATGCTGGCTGTGCTGCACACGGTGCTTCTGCACCGCAGCACAGGCAAGTTCCACTACAAGAAGGAGG
GCACCTACTCCATTGGCACCGTGGGCACCCAGGATGTTGACTGTGACTTCATCGACTTCACTTATGTGCGTGTCT
CTTCTGAGGAACTGGATCGTGCCCTGCGCAAGGTTGTTGGGGAGTTCAAGGATGCACTGCGCAACTCTGGTGGCG
ATGGGCTGGGGCAGATGTCCTTGGAGTTCTACCAGAAGAAGAAGTCTCGCTGGCCATTCTCAGACGAGTGCATCC
CATGGGAAGTGTGGACGGTCAAGGTGCATGTGGTAGCCCTGGCCACGGAGCAGGAGCGGCAGATCTGCCGGGAGA
AGGTGGGTGAGAAACTCTGCGAGAAGATCATCAACATCGTGGAGGTGATGAATCGGCATGAGTACTTGCCCAAGA
TGCCCACACAGTCGGAGGTGGATAACGTGTTTGACACAGGCTTGCGGGACGTGCAGCCCTACCTGTACAAGATCT
CCTTCCAGATCACTGATGCCCTGGGCACCTCAGTCACCACCACCATGCGCAGGCTCATCAAAGACACCCTTGCCC
TC**TGA**GCGTCGCTGGATCTCTGGGAGCTCCTTGATGGCTCCCAGACCTTGGCTTTTGGGAATTGCACTTTTGGGC
CTTTGGGCTCTGGAACCTGCTCTGGGTCATTGGTGAGACTTGGAAGGGGCAGCCCCCGCTGGCTTCTTGGTTTTG
TGGTTGCCAGCCTCAGGTCATCCTTTTAATCTTTGCTGACGGTTCAGTCCTGCCTCTACTGTCTCTCCATAGCCC
TGGTGGGGTCCCCCTTCTTTCTCCACTGTACAGAAGAGCCACCACTGGGATGGGGAATAAAGTTGAGAACATG

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FIGURE 3324

GAAACTTGGGGGAGTGCACAGAAGAACTTCGGGAGCGCACGCGGGACCAGGGACCAGGCTGAGACTCGGGGCGCC
AGTCCGGGCAGGGGCAGCGGGAGCCGGCCGGAGATGCCCTGTATCCAAGCCCAATATGGGACACCAGCACCGAGT
CCGGGACCCCGTGACCACCTGGCAAGCGACCCCCTGACCCCTGAGTTCATCAAGCCCACCATGGACCTGGCCAGC
CCCGAGGCAGCCCCCGCTGCCCCCACTGCCCTGCCCAGCTTCAGCACCTTCATGGACGGCTACACAGGAGAGTTT
GACACCTTCCTCTACCAGCTGCCAGGAACAGTCCAGCCATGCTCCTCAGCCTCCTCCTCGGCCTCCTCCACATCC
TCGTCCTCAGCCACCTCCCCTGCCTCTGCCTCCTTCAAGTTCGAGGACTTCCAGGTGTACGGCTGCTACCCCGGC
CCCCTGAGCGGCCCAGTGGATGAGGCCCTGTCCTCCAGTGGCTCTGACTACTATGGCAGCCCCTGCTCGGCCCCG
TCGCCCTCCACGCCCAGCTTCCAGCCGCCCCAGCTCTCTCCCTGGGATGGCTCCTTCGGCCACTTCTCGCCCAGC
CAGACTTACGAAGGCCTGCGGGCATGGACAGAGCAGCTGCCCAAAGCCTCTGGGCCCCCACAGCCTCCAGCCTTC
TTTTCCTTCAGTCCTCCCACCGGCCCCAGCCCCAGCCTGGCCCAGAGCCCCCTGAAGTTGTTCCCCTCACAGGCC
ACCCACCAGCTGGGGGAGGGAGAGAGCTATTCCATGCCTACGGCCTTCCCAGGTTTGGCACCCACTTCTCCACAC
CTTGAGGGCTCGGGGATACTGGATACACCCGTGACCTCAACCAAGGCCCGGAGCGGGGCCCCAGGTGGAAGTGAA
GGCCGCTGTGCTGTGTGTGGGGACAACGCTTCATGCCAGCATTATGGTGTCCGCACATGTGAGGGCTGCAAGGGC
TTCTTCAAGCGCACAGTGCAGAAAAACGCCAAGTACATCTGCCTGGCTAACAAGGACTGCCCTGTGGACAAGAGG
CGGCGAAACCGCTGCCAGTTCTGCCGCTTCCAGAAGTGCCTGGCGGTGGGCATGGTGAAGGAAGTTGTCCGAACA
GACAGCCTGAAGGGGCGGCGGGGCCGGCTACCTTCAAAACCCAAGCAGCCCCCAGATGCCTCCCCTGCCAATCTC
CTCACTTCCCTGGTCCGTGCACACCTGGACTCAGGGCCCAGCACTGCCAAACTGGACTACTCCAAGTTCCAGGAG
CTGGTGCTGCCCCACTTTGGGAAGGAAGATGCTGGGGATGTACAGCAGTTCTACGACCTGCTCTCCGGTTCTCTG
GAGGTCATCCGCAAGTGGGCGGAGAAGATCCCTGGCTTTGCTGAGCTGTCACCGGCTGACCAGGACCTGTTGCTG
GAGTCGGCCTTCCTGGAGCTCTTCATCCTCCGCCTGGCGTACAGGTCTAAGCCAGGCGAGGGCAAGCTCATCTTC
TGCTCAGGCCTGGTGCTACACCGGCTGCAGTGTGCCCGTGGCTTCGGGGACTGGATTGACAGTATCCTGGCCTTC
TCAAGGTCCCTGCACAGCTTGCTTGTCGATGTCCCTGCCTTCGCCTGCCTCTCTGCCCTTGTCCTCATCACCGAC
CGGCATGGGCTGCAGGAGCCGCGGCGGGTGGAGGAGCTGCAGAACCGCATCGCCAGCTGCCTGAAGGAGCACGTG
GCAGCTGTGGCGGGCGAGCCCCAGCCAGCCAGCTGCCTGTCACGTCTGTTGGGCAAACTGCCCGAGCTGCGGACC
CTGTGCACCCAGGGCCTGCAGCGCATCTTCTACCTCAAGCTGGAGGACTTGGTGCCCCCTCCACCCATCATTGAC
AAGATCTTCATGGACACGCTGCCCTTCTGACCCCTGCCTGGGAACACGTGTGCACATGCGCACTCTCATATGCCA
CCCCATGTGCCTTTAGTCCACGGACCCCCAGAGCACCCCCAAGCCTGGGCTTGAGCTGCAGAATGACTCCACCTT
CTCACCTGCTCCAGGAGGTTTGCAGGGAGCTCAAGCCCTTGGGGAGGGGGATGCCTTCATGGGGGTGACCCCACG
ATTTGTCTTATCCCCCCCAGCCTGGCCCCGGCCTTTATGTTTTTTGTAAGATAAACCGTTTTTAACACATAGCGC
CGTGCTGTAAATAAGCCCAGTGCTGCTGTAAATACAGGAAGAAAGAGCTTGAGGTGGGAGCGGGGCTGGGAGGAA
GGGATGGGCCCCGCCTTCCTGGGCAGCCTTTCCAGCCTCCTGCTGGCTCTCTCTTCCTACCCTCCTTCCACATGT
ACATAAACTGTCACTCTAGGAAGAAGACAAATGACAGATTCTGACATTTATATTTGTGTATTTTCCTGGATTTAT
AGTATGTGACTTTTCTGATTAATATATTTAATATATTGAATAAAAAATAGACATGTAGTTG

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FIGURE 3325

ATGAGGCTCCTCCGCAGACGCCACATGCCCCTGCGCCTGGCCATGGTGGGCTGCGCCTTTGTGCTCTTCCTCTTC
CTCCTGCATAGGGATGTGAGCAGCAGAGAGGAGGCCACAGAGAAGCCGTGGCTGAAGTCCCTGGTGAGCCGGAAG
GATCACGTCCTGGACCTCATGCTGGAGGCCATGAACAACCTTAGAGATTCAATGCCCAAGCTCCAAATCAGGGCT
CCAGAAGCCCAGCAGACTCTGTTCTCCATAAACCAGTCCTGCCTCCCTGGGTTCTATACCCCAGCTGAACTGAAG
CCCTTCTGGGAACGGCCACCACAGGACCCCAATGCCCCTGGGGCAGATGGAAAAGCATTTCAGAAGAGCAAGTGG
ACCCCCCTGGAGACCCAGGAAAAGGAAGAAGGCTATAAGAAGCACTGTTTCAATGCCTTTGCCAGCGACCGGATC
TCCCTGCAGAGGTCCCTGGGGCCAGACACCCGACCACCTGAGTGTGTGGACCAGAAGTTCCGGCGCTGCCCCCCA
CTGGCCACCACCAGCGTGATCATTGTGTTCCACAACGAAGCCTGGTCCACACTGCTGCGAACAGTGTACAGCGTC
CTACACACCACCCCTGCCATCTTGCTCAAGGAGATCATACTGGTGGATGATGCCAGCACAGAGGAGCACCTAAAG
GAGAAGCTGGAGCAGTACGTGAAGCAGCTGCAGGTGGTGAGGGTGGTGCGGCAGGAGGAGCGGAAGGGGCTGATC
ACCGCCCGGCTGCTGGGGGCCAGCGTGGCACAGGCGGAGGTGCTCACGTTCCTGGATGCCCACTGTGAGTGCTTC
CACGGCTGGCTGGAGCCCCTCCTGGCTCGAATCGCTGAGGACAAGACAGTGGTGGTGAGCCCAGACATCGTCACC
ATCGACCTTAATACTTTTGAGTTCGCCAAGCCCGTCCAGAGGGGCAGAGTCCATAGCCGAGGCAACTTTGACTGG
AGCCTGACCTTCGGCTGGGAAACACTTCCTCCACATGAGAAGCAGAGGCGCAAGGATGAAACCTACCCCATCAAA
TCCCCGACGTTTGCTGGTGGCCTCTTCTCCATCTCCAAGTCCTACTTTGAGCACATCGGTACCTATGATAATCAG
ATGGAGATCTGGGGAGGGGAGAACGTGGAAATGTCCTTCCGGGTGTGGCAGTGTGGGGGCCAGCTGGAGATCATC
CCCTGCTCTGTCGTAGGCCATGTGTTCCGGACCAAGAGCCCCCACACCTTCCCCAAGGGCACTAGTGTCATTGCT
CGCAATCAAGTGCGCCTGGCAGAGGTCTGGATGGACAGCTACAAGAAGATTTTCTATAGGAGAAATCTGCAGGCA
GCAAAGATGGCCCAAGAGAAATCCTTCGGTGACATTTCGGAACGACTGCAGCTGAGGGAACAACTGCACTGTCAC
AACTTTTCCTGGTACCTGCACAATGTCTACCCAGAGATGTTTGTTCCTGACCTGACGCCCACCTTCTATGGTGCC
ATCAAGAACCTCGGCACCAACCAATGCCTGGATGTGGGTGAGAACAACCGCGGGGGGGAAGCCCCTCATCATGTAC
TCCTGCCACGGCCTTGGCGGCAACCAGTACTTTGAGTACACAACTCAGAGGGACCTTCGCCACAACATCGCAAAG
CAGCTGTGTCTACATGTCAGCAAGGGTGCTCTGGGCCTTGGGAGCTGTCACTTCACTGGCAAGAATAGCCAGGTC
CCCAAGGACGAGGAATGGGAATTGGCCCAGGATCAGCTCATCAGGAACTCAGGATCTGGTACCTGCCTGACATCC
CAGGACAAAAAGCCAGCCATGGCCCCCTGCAATCCCAGTGACCCCCATCAGTTGTGGCTCTTTGTCTAGGACCCA
GATCATCCCCAGAGAGAGCCCCCACAAGCTCCTCAGGAAACAGGATTGCTGATGTCTGGGAACCTGATCACCAGC
TTCTCTGGAGGCCGTAAAGATGGATTTCTAAACCCACTGGGTGGCAAGGCAGGACCTTCCTAATCCTTGCAACAA
CATTGGGCCCATTTTCTTTCCTTCACACCGATGGAAGAGACCATTAGGACATATATTTAGCCTAGCGTTTTCCTG
TTCTAGAAATAGAGGCTCCCAAAGTAGGGAAGGCAGCTGGGGGAGGGTTCAGGGCAGCAATGCTGAGTTCAAGAA
AAGTACTTCAGGCTGGGCACAGTGGCTCATGCCTGAAATCCTAGCACTTTGGGAAGACAATGTGGGAGAATGGCT
TGAGCCCAGGAGTTCAAGACCGGCCTGAGCAACATAGTGAGGATCCCATCTCTACGCCCACCCTCCCCCCGGCAA
AAAAAAAAAGCTGGGTATGGTGGCTTATGCCTGTAGTCGCAGCTACTCAGAAGGCTGAGGTGGGAGGATTGCTTG
TTCCCCGGAGGTTGAAGCTACAGTGAGCCTTGATTGTGTCACTGCACTCCAGCCTGGGCAACAGGTAAGACTCTG
TCTCAAAAAAAAAACAAAAAAGAAGAAGAAAAGTACTTCTACAGCCATGTCCTATTCCTTGATCATCCAAAGCACC
TGCAGAGTCCAGTGAAATGATATATTCTGGCTGGGCACAGTGGCTCACACCTGTAATCCTAGCACTTTGGGAGGC
CAAGGCAGGTGGATCACCTGAGGTCAGAAGTTTGAAACCAGCCTGGACTACATGGTGAAACTCCATCTCTACTAA
AAGTACAAAAATTAGCTGGGCATGATGGCACGCACCTGCAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATC
ACTCGAACCCAGGAGGCAGAGGTTGCAGTGAGCCAAGACAGCACCATTGCACCCCAGCCTGAGCAACAAGAGCGA
AACTCCATCTCAGG

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FIGURE 3326

CGCGGGGCCAGGGCGGCGGCCCCCAGGGAGTTGGCAGGATGGCAGAGGGCAAGGCAGGCGGCGCGGCCGGCCTCT
TCGCCAAGCAGGTGCAGAAGAAGTTTAGCAGGGCCCAGGAGAAGGTGCTGCAGAAATTGGGGAAAGCTGTAGAAA
CCAAAGATGAACGATTTGAACAAAGCGCTAGCAACTTCTACCAACAACAGGCAGAAGGCCACAAGCTGTACAAGG
ACCTGAAGAACTTCCTTAGTGCAGTCAAAGTGATGCATGAAAGTTCAAAAAGAGTGTCAGAAACCCTGCAGGAGA
TCTACAGCAGCGAGTGGGACGGTCATGAGGAGCTGAAGGCCATCGTATGGAATAATGATCTCCTTTGGGAAGACT
ACGAGGAGAAACTGGCTGACCAGGCTGTAAGGACCATGGAAATCTATGTTGCCCAGTTCAGTGAAATTAAGGAGA
GAATTGCCAAGCGGGGTCGGAAACTCGTGGACTATGACAGTGCCCGACACCACCTGGAGGCAGTGCAGAATGCCA
AGAAGAAAGATGAGGCCAAGACTGCCAAGGCAGAGGAAGAGTTCAACAAAGCCCAGACTGTGTTTGAAGATCTGA
ACCAAGAACTACTAGAGGAGCTGCCTATTCTTTATAATAGTCGTATTGGCTGCTATGTGACCATCTTCCAAAACA
TTTCCAACTTGAGGGATGTCTTCTACAGGGAAATGAGCAAGCTGAACCACAATCTCTACGAGGTGATGAGCAAAC
TGGAGAAGCAACATTCCAATAAAGTCTTTGTGGTGAAGGGACTGTCAAGCAGCAGCAGGCGCTCTTTAGTCATTT
CTCCCCCAGTTCGAACAGCTACAGTCTCCAGTCCTCTTACCTCACCTACTAGTCCCTCTACACTTTCCTTGAAGA
GTGAGAGTGAATCTGTCTCAGCAACTGAAGATCTGGCACCTGATGCAGCCCAAGGGGAAGACAATTCTGAGATCA
AGGAGCTCTTAGAAGAGGAGGAAATAGAGAAGGAAGGATCTGAAGCAAGCTCCTCTGAGGAAGATGAGCCTCTAC
CAGCCTGCAATGGCCCCGCCCAGGCCCAGCCCTCTCCTACCACTGAAAGGGCCAAGTCCCAGGAGGAAGTTCTCC
CCAGCTCCACAACTCCATCACCAGGCGGAGCCCTGAGCCCTTCAGGGCAGCCTTCATCATCTGCCACAGAAGTAG
TCCTCCGAACCCGCACCGCAAGTGAAGGATCTGAACAACCAAAGAAGAGAGCCTCTATCCAGAGGACCTCAGCAC
CCCCTAGTAGGCCTCCTCCACCCAGAGCCACTGCAAGCCCCAGGCCCTCCTCAGGGAACATACCTTCCAGCCCTA
CAGCCTCTGGAGGGGGTTCACCCACCAGCCCTAGGGCCTCCTTGGGGACTGGGACTGCAAGTCCTAGGACCTCCC
TAGAGGTCTCTCCTAATCCAGAACCACCAGAGAAGCCAGTAAGAACTCCTGAGGCCAAAGAAAATGAAAACATCC
ACAATCAGAACCCTGAAGAACTTTGTACTTCCCCCACCTTAATGACATCTCAGGTTGCTTCAGAGCCTGGAGAGG
CAAAGAAGATGGAAGACAAGGAAAAGGATAATAAGCTTATCTCAGCTAACTCCTCGGAGGGCCAAGACCAGCTTC
AAGTCTCCATGGTACCAGAAAACAACAACCTCACAGCACCTGAACCTCAAGAAGAGGTATCCACAAGTGAAAATC
CACAACTCTGAAGAGAAACTACCAAGACTCCTCCTGCCCCAAACCTCGCCAGAGAAGCTCTTCAACCAGAGGGTA
TAGGTCAGAGGGATATAAGAGCCAGCATCCATCCCTGGGTTCTCAGTAGGAATGCTGGTGCTGTCTAAAGACCTG
GCATTAATGGAGGCGGAGGAGCAGCCTTACGGGAGGGATGGAGGGAGGCAGGCTGGGGAGAAGAGAACATTAGAC
TCAGGGAATATTTAATTCTGGTTTTAGCATTATTAGAATAAGACTTTATACATTAACTAAAGTGGAGCTTTAATC
ACTATAAAAAGCAAAAGTATCTATAGACACAGACACTTGCCTATACAGAGACATAACCACACACACTCAGAGGAT
AGTGAACAAATCTGTCTTTGACTTACGACCCATTTTGCAAGACTTAAAGCCGGAAGAACACATTTTCAGATTGTT
AAATAAAGTCTGATTCTGACT

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FIGURE 3327

GCCGGAGAGCCGGGTCGCCCACATTCGCCGCAGCCACCTCGGCCGTGGCAGGAACCGAAACCCGGAGCGGCCGAA
GCTCAGCGCTCCGCTGGGGCAGAGGGTCGCGGCGGCTGGGAACGCCGCTCCCCGACGCACCGGCCGCCCCCAGCG
CAGCGCGCTCCGCGGGGTGCTGATCTGCCTCTTCTCCAAGAAACTCAACCACTAGTGACAATGACCAGCCTCCTG
ACTACTCCTTCTCCAAGAGAAGAACTGATGACCACCCCAATTTTACAGCCCACTGAGGCCCTGTCCCCAGAAGAT
GGAGCCAGCACAGCACTCATTGCAGTTGTTATCACCGTTGTCTTCCTCACCCTGCTCTCGGTCGTGATCTTGATC
TTCTTTTACCTGTACAAGAACAAAGGCAGCTACGTCACCTATGAACCTACAGAAGGTGAGCCCAGTGCCATCGTC
CAGATGGAGAGTGACTTGGCCAAGGGCAGCGAGAAAGAGGAATATTTCATCTAATGACTCCCAGGCCCCAAGGAG
CTTATTCCTGGCTCCATCGCTAACACGTTGACTGCTTATTATGGGAAAGTTTTCTCTGAAGCCAGGGAGAAGCAT
TGATTGATGTGGGCAAATCCAAGCTCCAGCCAGGTCGCAGTCCCAAATGCCGACATCACTGACTCCAGGGACCAG
GGACATGGAGAAAGCTGTTTATGATATCTTTAACCAGGCCCTCTTACTAGAGCTGGTGTTTGTGACTGGCCAACA
AGATGTGGCTATGCCAGGGGACATCTGAGTATGTGCCCAGTCATCTTTTTTCACAGGTTGAAGGGAGAGAAAAGA
TTTTGAGTTAAGGTCATTGGCTGCTCTACTCTGTCCCCTACCTGGTCACCTAGTGATAGCCCCAGTGGAGATACT
GTCCATACAAGGTCTTCCCAGAGGCTGGATACCACAGTAAAAGGCCAGGCCAGGAGGGGTAGGAGACTATGGAGA
TCTTACCTCCTGATAAATGTGCTACACCCCCTAATCTGAGCCCTTCCTTTCCGTGTTCCCCAACAACCTCATGCT
TACGTGATTTTTATTCAAATTAAAAATTTTCATTGCTACAG

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FIGURE 3328

GACTTGCTCCGGTTTGCAGAGCTAGGAGGTGGCAGGCTGTGCGCTCAAACTCAGGCTGTCTAACTCCACATTCTG
TGGGGTGAGAGGATGGGTGATGGGGTGTCTTTTCTGGAGGAGGGAGGTGCTGTGAGCCTAGCGAGATGGAGGTAC
AGTGGGTGTGGGCCTGGAGCGCTGGGCCCAGGCAGGGGCTTCTGATTAGGAAGCCCTGGGGCACCAGTTCAGGTT
CTCCCAGAGAGTAGTGTGATGGGATCCAGTAACCTGTGCCCTCCAGATGACTTCTGTAGGTGTGTTTAGTGACAT
GCTCAACGGGTGCGGGAAGGATGGGCTTGTGCCAAGGGCCAAGCCCAGAGATGTTTCAGATTTTTCCCTTTATGC
CCCTGCAACCAAGCCCTGCTGCTCCAGGACATATAAGAGACGAAGGCTGAGGGCTCCAGCACTCACCGGCCTGGG
CCCTGTCACTTCTCTGATAGCTCCCAGCTCGCTCTCTGCAGCCATGATTGCCAGACAGCAGTGTGTCCGAGGCGG
GCCCCGGGGCTTCAGCTGTGGCTCGGCCATTGTAGGCGGTGGCAAGAGAGGTGCCTTCAGCTCAGTCTCCATGTC
TGGAGGTGCTGGCCGATGCTCTTCTGGGGGATTTGGCAGCAGAAGCCTCTACAACCTCAGGGGGAACAAAAGCAT
CTCCATGAGTGTGGCTGGGTCACGACAAGGTGTCTGCTTTGGGGGTGCTGGAGGCTTTGGCACTGGTGGCTTTGG
TGCCGGCGGCTTCGGAGCTGGTTTCGGCACTGGTGGCTTTGGTGGTGGATTTGGGGGCTCCTTCAGTGGTAAGGG
TGGCCCTGGCTTCCCCGTCTGCCCCGCTGGGGGAATTCAGGAGGTCACCATCAACCAGAGCTTGCTCACCCCCCT
CCACGTGGAGATTGACCCTGAGATCCAGAAAGTCCGGACGGAAGAGCGCGAACAGATCAAGCTCCTCAACAACAA
GTTTGCCTCCTTCATCGACAAGGTGCAGTTCTTAGAGCAACAGAATAAGGTCCTGGAGACCAAATGGAACCTGCT
CCAGCAGCAGACGACCACCACCTCCAGCAAAAACCTTGAGCCCCTCTTTGAGACCTACCTCAGTGTCCTGAGGAA
GCAGCTAGATACCTTGGGCAATGACAAAGGGCGCCTGCAGTCTGAGCTGAAGACCATGCAGGACAGCGTGGAGGA
CTTCAAGACTAAGTATGAAGAGGAGATCAACAAACGCACAGCAGCCGAGAATGACTTTGTGGTCCTAAAGAAGGA
CGTGGATGCTGCCTACCTGAACAAGGTGGAGTTGGAGGCCAAGGTGGACAGTCTTAATGACGAGATCAACTTCCT
GAAGGTCCTCTATGGATGCGGAGCTGTCCCAGATGCAGACCCATGTCAGCGACACGTCCGTGGTCCTTTCCATGG
ACAACAACCGCAACCTGGACCTGGACAGCATTATTGCCGAGGTCCGTGCCCAGTACGAGGAGATTGCCCAGAGGA
GCAAGGCTGAGGCTGAAGCCCTGTACCAGACCAAGGTCCAGCAGCTCCAGATCTCGGTTGACCAACATGGTGACA
ACCTGAAGAACACCAAGAGTGAAATTGCAGAGCTCAACAGGATGATCCAGAGGCTGCGGGCAGAGATCGAGAACA
TCAAGAAGCAGTGCCAGACTCTTCAGGTATCCGTGGCTGATGCAGAGCAGCGAGGTGAGAATGCCCTTAAAGATG
CCCACAGCAAGCGCGTAGAGCTGGAGGCTGCCCTGCAGCAGGCCAAGGAGGAGCTGGCACGAATGCTGCGTGAGT
ACCAGGAGCTCATGAGTGTGAAGCTGGCCTTGGACATCGAGATCGCCACCTACCGCAAACTGCTGGAGGGCGAGG
AGTACAGAATGTCTGGAGAATGCCAGAGTGCCGTGAGCATCTCTGTGGTCAGCGGTAGCACCAGCACTGGAGGCA
TCAGCGGAGGATTAGGAAGTGGCTCCGGGTTTGGCCTGAGTAGTGGCTTTGGCTCCGGCTCTGGAAGTGGCTTTG
GGTTTGGTGGCAGTGTCTCTGGCAGTTCCAGCAGCAAGATCATCTCTACCACCACCCTGAACAAGAGACGATAGA
GGAGACGAGGTCCCTGCAGCTCACTGTGTCCAGCTGGGCCCAGCACTGGTGTCTCTGTGCTTCCTTCACTTCACC
TCCATCCTCTGTCTCTGGGGCTCATCTTACTAGTATCCCCTCCACTATCCCATGGGCTCTCTCTGCCCCAGGATG
ATCTTCTGTGCTGGGACAGGGACTCTGCCTCTTGGAGTTTGGTAGCTACTTCTTGATTTGGGCCTGGTGACCCAC
CTGGAATGGGAAGGATGTCAGCTGACCTCTCACCTCCCATGGACAGAGAAGAAAATGACCAGGAGTGTCATCTCC
AGAATTATTGGGGTCACATATGTCCCTTCCCAGTCCAATGCCATCTCCCACTAGATCCTGTATTATCCATCTACA
TCAGAACCAAACTACTTCTCCAACACCCGGCAGCACTTGGCCCTGCAAGCTTAGGATGAGAACCACTTAGTGTCC
CATTCTACTCCTCTCATTCCCTCTTATCCATCTGCAGGTGAATCTTCAATAAAATGCTTTTGTCATTC

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FIGURE 3329

CTCTCATCCTGCCCTCCGGCCCCTCTGCAGCTATGAGGTCCTCCGTCTCTCGGCAAACATACTCCACAAAAGGGG
GCTTCAGCTCCAACTCTGCCAGCGGAGGGAGTGGGTCCCAGGCCCGCACCAGCTTCAGCTCAGTGACGGTGTCTC
GGAGCAGTGGCAGTGGTGGCGGGGCCCACTGTGGCCCCGGCACAGGTGGCTTTGGCAGCCGAAGCCTCTATAACT
TGGGGGGCCACAAGAGTATCTCTGTCAGTGTGGCCGGAGGGGCCTTGTCGGGGCGGGCTCTGGGGGGCTTTGGCT
TTGGCAGCAGGGCATTTATGGGACAGGGGGCTGGCAGGCAGACGTTTGGGCCTGCTTGTCCTCCTGGGGGGATCC
AGGAGGTCACTGTCAACCAGAGCCTGCTGACCCCCCTCCATGTGGAGATTGACCCCGAGATCCAGCGAGTGCGCA
CTCAGGAGCGGGAGCAGATCAAGACCCTCAACAACAAGTTCGCCTCCTTCATCGACAAGGTGCGGTTCCTGGAGC
AACAGAATAAGGTGCTGGAGACCAAGTGGGCACTGCTGCAGGAGCAGGGCCAGAACTTGGGTGTCACCAGGAACA
ACCTGGAGCCCCTCTTTGAGGCCTACCTGGGTAGCATGCGGAGCACGCTGGACAGACTTCAGAGCGAGCGGGGGA
GGCTGGACTCAGAGCTCAGGAACGTGCAGGACCTTGTGGAGGACTTCAAGAACAAGTACGAGGATGAAATCAACA
AGCACACTGCTGCAGAGAACGAGTTTGTGGTGCTCAAGAAGGATGTGGATGCAGCATACATGGGCCGGATGGATC
TGCATGGCAAAGTGGGCACCTTGACCCAGGAGATTGACTTCCTGCAGCAACTCTATGAAATGGAGCTGAGCCAAG
TGCAGACCCACGTGTCTAACACCAATGTGGTGCTGTCCATGGACAACAACCGCAACCTGGACCTGGACAGCATCA
TCGCCGAGGTCAAGGCCCAGTATGAGCTGATTGCCCAGAGGAGCCGGGCTGAGGCCGAGGCCTGGTACCAGACCA
AGTATGAGGAGCTGCAGGTGACTGCTGGGAAGCATGGGGACAACCTGCGGGACACCAAGAACGAGATTGCTGAGC
TCACCCGCACTATCCAGAGGCTGCAGGGGGAGGCTGATGCAGCCAAGAAGCAGTGTCAGCAGCTGCAGACGGCCA
TTGCGGAAGCGGAGCAGCGTGGGGAGCTGGCACTCAAGGATGCTCAGAAGAAGCTTGGGGATCTGGATGTGGCCC
TGCACCAGGCCAAGGAGGACCTGACACGGCTGCTGCGTGACTACCAGGAGCTGATGAATGTCAAGCTGGCCCTGG
ACGTGGAGATTGCCACCTACCGCAAGCTTCTGGAGAGCGAGGAGAGCAGGATGTCTGGAGAATGGTCCCAGTGCA
GTCAGCATTTGGAGTATTACTCCCCACTTCCTGCTCCACCCCTGGCCAGGCCCCAGAACTCTGCTCAGTTTATGC
AACNTGTACNTGTCNTAAAGCATGCTCTCNTCCATTCGAGCCCCTGGAGACAGGTTCAGAGGGTCCTAGTTCTGG
GGTTCTCTATCCATTTCCCATAGCTCTGCTGCTTGATTTTGTTCTGATTCCCCACTGATCTCTGGGTCTCCCCCA
GCCCTCTCTGGCATGGCCGCCCTGACTAATCCAGACCCTTTGCTTTGCAGCTGTGACTGGCAACTCCACCACTGT
GTGCGGAGGTGGCGCAGCCAGCTTTGGAGGTGGCATCTCCCTGGGTGGGAGTGGGGGGGCCACCAAGGGTGGATT
CAGCACAAATGTGGGCTATAGCACCGTCAAGGGAGGGCCAGTCTCTGCGGGCACCTCCATCCTGCGGAAGACCAC
TACGGTCAAGACGTCCAGCCAGAGGTATTAGCTGCTGAGCCCTGCAAGGGCCCCTGCAATCCTGTCCCTGCCCTC
CTCACCCCACCTCTGCTGTCCTTTCCAGTCACTTCTCAGGAGCAGGAACAGCCAGGGGACCTCAGACCCAGGGTA
TTTTCATAC

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FIGURE 3330

GCTCCTTCTAGGATCTCCGCCTGGTTCGGCCCGCCTGCCTCCACTCCTGCCTCTACCATGTCCATCAGGGTGACC
CAGAAGTCCTACAAGGTGTCCACCTCTGGCCCCCGGGCCTTCAGCAGCCGCTCCTACACGAGTGGGCCCGGTTCC
CGCATCAGCTCCTCGAGCTTCTCCCGAGTGGGCAGCAGCAACTTTCGCGGTGGCCTGGGCGGCGGCTATGGTGGG
GCCAGCGGCATGGGAGGCATCACCGCAGTTACGGTCAACCAGAGCCTGCTGAGCCCCCTTGTCCTGGAGGTGGAC
CCCAACATCCAGGCCGTGCGCACCCAGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATA
GACAAGGTACGGTTCCTGGAGCAGCAGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGACG
GCTCGAAGCAACATGGACAACATGTTCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCCAG
GAGAAGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGGGGCTGGTGGAGGACTTCAAGAACAAGTATGAGGAT
GAGATCAATAAGCGTACAGAGATGGAGAACGAATTTGTCCTCATCAAGAAGGATGTGGATGAAGCTTACATGAAC
AAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACCGACGAGATCAACTTCCTCAGGCAGCTATATGAAGAGGAG
ATCCGGGAGCTGCAGTCCCAGATCTCGGACACATCTGTGGTGCTGTCCATGGACAACAGCCGCTCCCTGGACATG
GACAGCATCATTGCTGAGGTCAAGGCACAGTACGAGGATATTGCCAACCGCAGCCGGGCTGAGGCTGAGAGCATG
TACCAGATCAAGTATGAGGAGCTGCAGAGCCTGGCTGGGAAGCACGGGGATGACCTGCGGCGCACAAAGACTGAG
ATCTCTGAGATGAACCGGAACATCAGCCGGCTCCAGGCTGAGATTGAGGGCCTCAAAGGCCAGAGGGCTTCCCTG
GAGGCCGCCATTGCAGATGCCGAGCAGCGTGGAGAGCTGGCCATTAAGGATGCCAACGCCAAGTTGTCCGAGCTG
GAGGCCGCCCTGCAGCGGGCCAAGCAGGACATGGCGCGGCAGCTGCGTGAGTACCAGGAGCTGATGAACGTCAAG
CTGGCCCTGGACATCGAGATCGCCACCTACAGGAAGCTGCTGGAGGGCGAGGAGAGCCGGCTGGAGTCTGGGATG
CAGAACATGAGTATTCATACGAAGACCACCAGCGGCTATGCAGGTGGTCTGAGCTCGGCCTATGGGGGCCTCACA
AGCCCCGGCCTCAGCTACAGCCTGGGCTCCAGCTTTGGCTCTGGCGCGGGCTCCAGCTCCTTCAGCCGCACCAGC
TCCTCCAGGGCCGTGGTTGTGAAGAAGATCGAGACACGTGATGGGAAGCTGGTGTCTGAGTCCTCTGACGTCCTG
CCCAAGTGAACAGCTGCGGCAGCCCCTCCCAGCCTACCCCTCCTGCGCTGCCCCAGAGCCTGGGAAGGAGGCCGC
TATGCAGGGTAGCACTGGGAACAGGAGACCCACCTGAGGCTCAGCCCTAGCCCTCAGCCCACCTGGGGAGTTTAC
TACCTGGGGACCCCCCTTGCCCATGCCTCCAGCTACAAAACAATTCAATTGCTTTTTTTTTTGGTCCAAAATAA
AACCTCAGCTAGCTCTGCCAA

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FIGURE 3331

GTCGTCCGCAAAGCCTGAGTCCTGTCCTTTCTCTCTCCCCGGACAGCATGAGCTTCACCACTCGCTCCACCTTCT
CCACCAACTACCGGTCCCTGGGCTCTGTCCAGGCGCCCAGCTACGGCGCCCGGCCGGTCAGCAGCGCGGCCAGCG
TCTATGCAGGCGCTGGGGGCTCTGGTTCCCGGATCTCCGTGTCCCGCTCCACCAGCTTCAGGGGCGGCATGGGGT
CCGGGGGCCTGGCCACCGGGATAGCCGGGGGTCTGGCAGGAATGGGAGGCATCCAGAACGAGAAGGAGACCATGC
AAAGCCTGAACGACCGCCTGGCCTCTTACCTGGACAGAGTGAGGAGCCTGGAGACCGAGAACCGGAGGCTGGAGA
GCAAAATCCGGGAGCACTTGGAGAAGAAGGGACCCCAGGTCAGAGACTGGAGCCATTACTTCAAGATCATCGAGG
ACCTGAGGGCTCAGATCTTCGCAAATACTGTGGACAATGCCCGCATCGTTCTGCAGATTGACAATGCCCGTCTTG
CTGCTGATGACTTTAGAGTCAAGTATGAGACAGAGCTGGCCATGCGCCAGTCTGTGGAGAACGACATCCATGGGC
TCCGCAAGGTCATTGATGACACCAATATCACACGACTGCAGCTGGAGACAGAGATCGAGGCTCTCAAGGAGGAGC
TGCTCTTCATGAAGAAGAACCACGAAGAGGAAGTAAAAGGCCTACAAGCCCAGATTGCCAGCTCTGGGTTGACCG
TGGAGGTAGATGCCCCCAAATCTCAGGACCTCGCCAAGATCATGGCAGACATCCGGGCCCAATATGACGAGCTGG
CTCGGAAGAACCGAGAGGAGCTAGACAAGTACTGGTCTCAGCAGATTGAGGAGAGCACCACAGTGGTCACCACAC
AGTCTGCTGAGGTTGGAGCTGCTGAGACGACGCTCACAGAGCTGAGACGTACAGTCCAGTCCTTGGAGATCGACC
TGGACTCCATGAGAAATCTGAAGGCCAGCTTGGAGAACAGCCTGAGGGAGGTGGAGGCCCGCTACGCCCTACAGA
TGGAGCAGCTCAACGGGATCCTGCTGCACCTTGAGTCAGAGCTGGCACAGACCCGGGCAGAGGGACAGCGCCAGG
CCCAGGAGTATGAGGCCCTGCTGAACATCAAGGTCAAGCTGGAGGCTGAGATCGCCACCTACCGCCGCCTGCTGG
AAGATGGCGAGGACTTTAATCTTGGTGATGCCTTGGACAGCAGCAACTCCATGCAAACCATCCAAAAGACCACCA
CCCGCCGGATAGTGGATGGCAAAGTGGTGTCTGAGACCAATGACACCAAAGTTCTGAGGCATTAAGCCAGCAGAA
GCAGGGTACCCTTTGGGGAGCAGGAGGCCAATAAAAAGTTCAGAGTTCATTGGATGTC

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FIGURE 3332

AGATAAGAGCTGGACGGAGGCTAAAGCGGCAGCCCCAGCTTCGCGCCCCGCCCAGTCCCTTTCCCCTGCTGGGGA
TCCCCCCTCTTCCCCGCCCACCCCTTACCCGCATGCAGCCCAGCGCCCTATGCTAGCCCTCCCCCTCCCCCCCTG
CTGGAGCGGGGCGCCGCCGGGGGAGGAGGGGGAATCGGCTGCGGGTCCTTGGTGTTTCCAGCACCCAGTTTCCCT
TCAAGCCGGGTCGCG**ATG**TACGACTGTATGGAAACGTTTGCCCCGGGTCCGCGACGGCTGTACGGGGCGGCCGGG
CCCGGGGCCGGCTTGCTGCGCAGAGCCACCGGCGGCTCCTGTTTCGCCGGACTTGAATCTTTTGCCTGGCCGCAA
CCCGCCAGCCTGCAATCGGTGGAGACACAGAGCACCAGCTCAGAGGAGATGGTGCCCAGCTCGCCCTCGCCCCCT
CCGCCTCCTCGGGTCTACAAGCCATGCTTCGTGTGCAATGACAAGTCCTCTGGCTACCACTATGGGGTCAGCTCT
TGTGAAGGCTGCAAGGGCTTCTTTCGCCGAAGCATCCAGAAGAACATGGTGTACACGTGTCACCGCGACAAAAAC
TGTATCATCAACAAGGTGACCAGGAATCGCTGCCAGTACTGCCGGCTACAGAAGTGCTTCGAAGTGGGCATGTCC
AAGGAAGCTGTGCGAAATGACCGGAACAAGAAGAAGAAAGAGGTGAAGGAAGAAGGGTCACCTGACAGCTATGAG
CTGAGCCCTCAGTTAGAAGAGCTCATCACCAAGGTCAGCAAAGCCCATCAGGAGACTTTCCCCTCGCTCTGCCAG
CTGGGCAAGTATACCACGAACTCCAGTGCAGACCACCGCGTGCAGCTGGATCTGGGGCTGTGGGACAAGTTCAGT
GAGCTGGCTACCAAGTGCATCATCAAGATCGTGGAGTTTGCCAAGCGGTTGCCTGGCTTTACAGGGCTCAGCATT
GCTGACCAGATCACTCTGCTCAAAGCTGCCTGCCTAGATATCCTGATGCTGCGTATCTGCACAAGGTACACCCCA
GAGCAGGACACCATGACCTTCTCCGACGGGCTGACCCTGAACCGGACCCAGATGCACAATGCCGGCTTCGGGCCC
CTCACAGACCTTGTCTTTGCCTTTGCTGGGCAGCTCCTGCCCCTGGAGATGGATGACACCGAGACAGGGCTGCTC
AGCGCCATCTGCCTCATCTGCGGAGACCGCATGGACCTGGAGGAGCCCGAAAAAGTGGACAAGCTGCAGGAGCCA
CTGCTGGAAGCCCTGAGGCTGTACGCCCGGCGCCGGCGGCCCAGCCAGCCCTACATGTTCCCAAGGATGCTAATG
AAAATCACCGACCTCCGGGGCATCAGCACTAAGGGAGCTGAAAGGGCCATTACTCTGAAGATGGAGATTCCAGGC
CCGATGCCTCCCTTAATCCGAGAGATGCTGGAGAACCCTGAAATGTTTGAGGATGACTCCTCGCAGCCTGGTCCC
CACCCCAATGCCTCTAGCGAGGATGAGGTTCCTGGGGGCCAGGGCAAAGGGGGCCTGAAGTCCCCAGCC**TGA**CCA
GGGCCCCTGACCTCCCCGCTGTGGGGGTTGGGGCTTCAGGCAGCAGACTGACCATCTCCCAGACCGCCAGTGACT
GGGGGAGGACCTGCTCTGCCCTCTCCCCACCCCTTCCAATGAGCTCCTTGTTTTTGCCAAAGTTTCTAGGGGTGC
CTCTGTGTTCATCCCCTTCCTGATCTAACCGGCTCCCTCGCCAGTCCCGGGGGCCTGCCCTGCTCCCACCAGGAG
AGAGGGCAAAGGGATGAGCCTGGGTTTGGACTCTAAAATCTCAGCACTGCCCCATGGGTCCTAGACTTCCCAGGG
CAAGAGGAAGACCCTGCCATTCCACAGCCCCTTCCTCTGCCAGGTGCTTGGCTCTCTGAGAGCAAACAGGAACAC
TAGAGACCAAAAAGGGGACAAAGGAGAAGGGCTGAGCCCACCTTCTTGCTCCTACCCTTGGTGCCTAATGCTGTG
TGATGCACCTGCAGGGTGTGTGCTAGCCTCTGTGCCCCGTCCTTGTGCCAGGTCAAGGTGGGGGCAGGCTGGGCC
CTGCATTTCTGGGGCAGGAACAGAGGGTGAAAGGGACAGATAGATGCAGGTCCATTCTGCACCTCTTGGCTCGGG
TGCAGAGTTCACCCTGTGCCCTCCGTTATAAGTCCCTCCCCCAGCCCTGTCATGTGCCTTGGGCTCCTCCTGCCC
TCCATCTCAGCCATTGGGGCAGGGACCCTCCTACACTACAGAGGGGCCAGGGGATCCCTCTCTCCCTAGTGCCTT
CCACCCTTTACTCCCCAGAGCAGCTTGGCCCAGGGAGGGGGGATGCTGCTTAGCTGATCCCGCCCTGACCCAGAG
GAAGCCTCTATTTATTTATTAGCTTTTGTTTACACCGTGGAATTGACCCCTTCCTCCAGGGGTCTTGGGTGGGGG
AGCCCAGGGCCCCTGTGACCCCTCCTTTCTTCCTCCAATCCCCAGTTTGTATTTAGCTGCCAAATAAGATTCCCA
TTGGCTCCCTGTGTTCTCTTGGGGGGTCAGGGTGCTGTCCCCTCCCCTCTGTTTACATCTCCCCTCTACCCCGCT
GTATCGCATATTGCTGAGTTTTCTATTTTTGCAAAATAAAGTGATGGAAACTC

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FIGURE 3333

GCTTGGGGACGCACGGAGAGGTGCAGCTGGGCCGTCCAGCATCAAACACTAGCCTCCACACGTGGAAAAGACCCT
GACTCCCACAGTAGACTAGTCTTATGGGAGTCCTGGCTCTTGGGCCAGGCTGCATTAGGAAAATGGAAACCAGAC
TGTCTTCAAATTCTTCTGCCTAGCCTTAGCCATTAGAGAGAGGTCCTGCTAAAGATGGACTGCAAATGCGCTTGA
TGGAAGGAGATGTCAATTCCACTGAAGTCCTCATTTCTGCTGAGCTACCTGTGCACCCTGCCTCCGGCTCTCCTG
AGCAGAGAGATCCTGATGGCTGACTCAGAAGCACTCCCCTCCCTTGCTGGGGACCCAGTGGCTGTGGAAGCCTTG
CTCCGGGCCGTGTTTGGGGTTGTTGTGGATGAGGCCATTCAGAAAGGAACCAGTGTCTCCCAGAAGGTCTGTGAG
TGGAAGGAGCCTGAGGAGCTGAAGCAGCTGCTGGATTTGGAGCTGCGGAGCCAGGGCGAGTCACAGAAGCAGATC
CTGGAGCGGTGTCGGGCTGTGATTCGCTACAGTGTCAAGACTGGTCACCCTCGGTTCTTCAACCAGCTCTTCTCT
GGGTTGGATCCCCATGCTCTGGCCGGGCGCATTATCACTGAGAGCCTCAACACCAGCCAGTACACATATGAAATC
GCCCCCGTGTTTGTGCTCATGGAAGAGGAGGTGCTGAGGAAACTGCGGGCCCTGGTGGGCTGGAGCTCTGGGGAC
GGAATCTTCTGCCCTGGTGGCTCCATCTCCAACATGTATGCTGTAAATCTGGCCCGCTATCAGCGCTACCCGGAT
TGCAAGCAGAGGGGCCTCCGCACACTGCCGCCCCTGGCCCTATTCACATCGAAGGAGTGTCACTACTCCATCCAG
AAGGGAGCTGCGTTTCTGGGACTTGGCACCGACAGTGTCCGAGTGGTCAAGGCTGATGAGAGAGGGAAAATGGTC
CCCGAGGATCTGGAGAGGCAGATTGGTATGGCCGAGGCTGAGGGTGCTGTGCCGTTCCTGGTCAGTGCCACCTCT
GGCACCACTGTGCTAGGGGCCTTTGACCCCCTGGAGGCAATTGCTGATGTGTGCCAGCGTCATGGGCTATGGCTG
CATGTGGATGCTGCCTGGGGTGGGAGCGTCCTGCTGTCACAGACACACAGGCATCTCCTGGATGGGATCCAGAGG
GCTGACTCTGTGGCCTGGAATCCCCACAAGCTCCTCGCAGCAGGCCTGCAATGCTCTGCACTTCTTCTCCAGGAT
ACCTCGAACCTGCTCAAGCGCTGCCATGGGTCCCAGGCCAGCTACCTTTTCCAGCAGGACAAGTTCTACGATGTG
GCTCTGGACACGGGAGACAAGGTGGTGCAGTGTGGCCGCCGTGTGGACTGTCTGAAGCTGTGGCTCATGTGGAAG
GCACAGGGCGATCAAGGGCTGGAGCGGCGCATCGACCAGGCCTTTGTCCTTGCCCGGTACCTGGTGGAGGAAATG
AAGAAGCGGGAAGGGTTTGAGCTAGTCATGGAGCCTGAGTTTGTCAATGTGTGTTTCTGGTTCGTACCCCCCAGC
CTGCGAGGGAAGCAGGAGAGTCCAGATTACCACGAAAGGCTGTCAAAGGTGGCCCCCGTGCTCAAGGAGCGCATG
GTGAAGGAGGGCTCCATGATGATTGGCTACCAGCCCCACGGGACCCGGGGCAACTTCTTCCGTGTGGTTGTGGCC
AACTCTGCACTGACCTGTGCTGATATGGACTTCCTCCTCAACGAGCTGGAGCGGCTAGGCCAGGACCTGTGAGCC
TTCTCTGTCTTGCTGCCGGCCTTGATACCACCCCTCACCCGCAGAGTCACTGCATTCCCTCCCAGCCTTTGAGGC
CGGGTGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGATCACTTGAGGTCAGGAGT
TCGAGACCAGCCTGGCCAATAAGGTGAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCGAGCATGGTGGCCT
GTGCCTGTAAACCCAGCTACTCAGGAGGTTGGGGCAGAATTGCTTGAACCCAGGGGGCAGAGGTTGCAGTGAGCC
GAGATTGCACCCCTGCACTCCAGGCTGGGCAACAGTACGAGACTCTGTTCCAAAAAAAAATAAAAAAGAACAGCCT
TTTTAGGCCACAGTGACCTGCGCAATGTTTATATGCTTTGACCTACTAACTTTCTCCTAACTAAATATTTGATTT
TAGGAGAGTGTTTAAATAAATTACAGTATGTCTATATGATGAAATGTTATTTTGCCATTAAAATTTTGTTTACAA
AGATAATTTTTATTGACATAAAAATAACTTTAATGTAATTTATGTTGAAAAAGCTGAATACAAGTCTTTATATAG
AGTAATATTTGAGCTGTGTTCAAAAATACATAGGAAAAGACTGATAAAATGAAATATGGCAAAATGTTAATAGTT
TTCCCTGGAATAGGATAATAGGCAATTTTAAAACAGACTCCTTTAAAAAAACAAACAAACAAAAAAAACATAGAC
TTCTTTATATCTTTTGAGCTCCCTCCCTTTTATTATGTAATGAATATGTGTTGCTTTTGTAATAGGAAA

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FIGURE 3334

AGTTTCTAAGGATCATGTCTGCGAGCCAGGATTCCTGATCCAGAGACAACGGCCCCAATGGGATGGAGCCCAAAG
GTGTCATTGAGAGTAACTGGAATGAGATTGTTGACAGCTTTGATGACATGAACCTCTCAGAGTCCCTTCTCCGTG
GCATCTACGCCTATGGTTTAGAGAAGCCGTCTGCCATCCAGCAGCGAGCCATTCTACCTTGTATCAAGGGTTATC
ACGTGATTGCTCAAGCCCAATCTGGGGCTGGGAAAATGGCCACATTTGCCATATTGATTCTGCAGCAGATTGAAT
TAGATCTAAAAGCCACCCAGGCCTTGCTCCTAGCACCCACTCAAGAATTGGCTCAGCAGATACAGAAGGTGGTCA
TGGCACTAGGAGACTACATGGGTGCCTCCTGTCATGCCTGTATCAGGGGCACCAACATGCGTGCTGAGGTGCAGA
AACTGCAGACGAAGCTCCTCACATCATTGTGGGTACCCCTGGCCATGTGTTTGATATGCTTAACGGGAGATACCT
GTCTCCCAAATACATCAAGATGTTTGTACTGGACGAAGCTGACGAAATGTTAAGCCGTGGATTCAAGGACCAGAT
CTATGACATATTCCAAAAGCTCAACAGCAACACCCAGGTAGTTTTGCTGTCAGCTGCGATGCCTTCTGATGTGCT
TGAGGTGACCAAGAAGTTCATGAGGGACCTCATTCGGATTCTTGTCACGAAGGAAGTGTTGACCTTGGAGGGTAT
CCGCCAATTCTACATCAATTTGGAACGAGAGGAGTGGAAGCTGGACACACTATGTGACTTGTATGAAACCCTGAC
CATCACCCCAGGCAGTCATCTTCATCAACACCCGGAGGAAGGTGGACTGGCTCACCGAGAAGATGCATGCTCGAG
ATTTCACTGTCTTCACCATTCGTGGAGATATGGACCAAAACGAACAAGACGTGATCTTGAGGGAGTTTCGTTATG
GCTCTAGCAGTTTTGATTACCACTGACCTGCTGGCCAGAGGCATTGATGTGCAACAGGTTTCTTTAGTCACCAAC
TATGACCTTCCCACCAACAGGGAAAACCATATCCATAGAATCGGTCGAGGTGGACGGTTTGGCCGTAAAGGTGTG
GCTATTAACGTGGTGACAGAAGAAGACAAGAGGACTCTTCGAGACATCGAGATCTTCTACAACTCCTCCATTGAG
GAAATGCCCCTCAATGTTGCTGACCTCATCTGAGGGGCTGTCCTGCCACCCAGCCCCAGCCAGGGCTCTATCTCG
GGGGGCTGAGGAGCAGCAGGAGTGGGGAGGGAAGGGAGCCAAGGGATGGACATCTTGTCATTTTTTTCTTTGAAT
AAATGTCACTTTTTGAGGCAAAA

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FIGURE 3335

GGAGGACTGGGTGCGCGTGCAGGGATCGGAAGCCGGTTGGAGTGTGTGAGGTTTTCTCGCTCTAGGGAGATTCTT
CAAGCAATCACTATGTCAACAGACACAGGTGTTTCCCTTCCTTCATATGAGGAAGATCAGGGATCAAAACTTATT
GGAAAAGCTAAAGAGGCACCATTTGTACCCGTTGGAATAGCAGGTTTTGCAGCAATTGTTGCATATGGATTATAC
AAACTGAAGAGCAGGGGAAATACTAAAATGTCCATTCATCTGATCCACATGCGTGTGGCAGCCCAAGGCTTTGTT
GTAGGAGCAATGACTGTTGGTATGGGCTACTTCATGTATCGGGAATTCTGGGCAAAACCTAAGCCTTAGAAGAAG
AGATGCTGTCTTGGTCTTGTTGGACGAGCTTGCTTTAGTTAGACGTCTCATTATTGAAGTTACTATTATTGTTGG
AAATAAACTAATTTGTATGGGTTTAGATGGTAACATGGCATTTTGAATATTGGCTTCCTTTCTTGCAGGCTTGAT
TTGCCTGGTGACCAAATTACTAGTGACTAGTTTACTAACTAGGTCATTAAAGGAAGTCAAGTTAACTTAAACACG
TCAACTAAACGCACTTGATGGTGTTGAAATGTCCACCTTCTTAAATTTTTAAGATGAACTGAGTTCTAAAGAAGA
TAACAGGCCAATCCTGAAGGTACTCCCAGTTTGCTGCAGAATCTCACATATTTTGGATGTTGTATAAGAGTCCTA
TTTGCCCCAGTTAATTCAACTTTTGTCTGCCTGTTCTGTGGACTGGCTGGCTCTGTTAGAACTCTGTCCAAAAAG
TGCATGGAATATAACTTGTAAAGCTTCCCACAATTGACAATATATGTGCATGTGTTTAAGCCAAATCCAGAAAGC
TTAAACAATAGAGCTGCATAATAGTATTTATTAAAGAATCACAACTGTAAACATGAGAATAACTTAAGGATTCTA
GTTTAGTTTTTTGTAATTGCAAATTATATTTTTGCTGCTGATATATTAGAATAATTTTTAAATGTCATCTTGAAA
TAGAAATATGTATTTTAAGCACTCATGCAAAGGTAAATGAACACTTTTTAAATGTGTGTTGCTTATTTTTTCCAT
AAGAATTGTAAACATTGAACTGAACAAATTACCTATAATGGATTTGATTAATGACTAATGAGCAAGCGGGTTTGG
CCAGACAGTATACCCAAACTTTTATATAGTATACAGAAGGCTATCACACTTGTGAAATTCTCTTGTCTAATCCGA
ATTTGCATTCCATGGTGATAACATGGTATATGTATTGTTATTAAAGTAAGTGACCCATGTC

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FIGURE 3336

GCAGCTGCGCTGCGACTGCTCTGGAAGGAGAGGACGGGGCACAAACCCTGACCATGACCCCCCACAGGCTGCTGC
CACCGCTGCTGCTGCTGCTAGCTCTGCTGCTCGCTGCCAGCCCAGGAGGCGCCTTGGCGCGGTGCCCAGGCTGCG
GGCAAGGGGTGCAGGCGGGTTGTCCAGGGGGCTGCGTGGAGGAGGAGGATGGGGGGTCGCCAGCCGAGGGCTGCG
CGGAAGCTGAGGGCTGTCTCAGGAGGGAGGGGCAGGAGTGCGGGGTCTACACCCCTAACTGCGCCCCAGGACTGC
AGTGCCATCCGCCCAAGGACGACGAGGCGCCTTTGCGGGCGCTGCTGCTCGGCCGAGGCCGCTGCCTTCCGGCCC
GCGCGCCTGCTGTTGCAGAGGAGAATCCTAAGGAGAGTAAACCCCAAGCAGGCACTGCCCGCCCACAGGATGTGA
ACCGCAGAGACCAACAGAGGAATCCAGGCACCTCTACCACGCCCTCCCAGCCCAATTCTGCGGGTGTCCAAGACA
CTGAGATGGGCCCATGCCGTAGACATCTGGACTCAGTGCTGCAGCAACTCCAGACTGAGGTCTACCGAGGGGCTC
AAACACTCTACGTGCCCAATTGTGACCATCGAGGCTTCTACCGGAAGCGGCAGTGCCGCTCCTCCCAGGGGCAGC
GCCGAGGTCCCTGCTGGTGTGTGGATCGGATGGGCAAGTCCCTGCCAGGGTCTCCAGATGGCAATGGAAGCTCCT
CCTGCCCCACTGGGAGTAGCGGCTAAAGCTGGGGGATAGAGGGGCTGCAGGGCCACTGGAAGGAACATGGAGCTG
TCATCACTCAACAAAAAACCGAGGCCCTCAATCCACCTTCAGGCCCCGCCCCATGGGCCCCTCACCGCTGGTTGG
AAAGAGTGTTGGTGTTGGCTGGGGTGTCAATAAAGCTGTGCTTGGGGTC

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FIGURE 3337A

GCTGGCCGTCTGCGCACCCTCTCTCCCCTCGGCTCTTTCCTAGGAAAGCTGAGCCTCATAGCTTCCGGGAGAAGG
TTTTCCGGAAGAAACCTCCAGTCTGTGCAGTATGTAAGGTGACCATCGATGGGACAGGCGTTTCGTGCAGAGTCT
GCAAGGTGGCGACGCACAGAAAATGTGAAGCAAAGGTGACTTCAGCCTGTCAGGCCTTGCCTCCCGTGGAGTTGC
GGCGAAACACGGCCCCAGTCAGGCGCATAGAGCACCTGGGATCCACCAAATCTCTGAACCACTCAAAGCAGCGCA
GCACTCTGCCCAGGAGCTTCAGCCTGGACCCGCTCATGGAGCGGCGCTGGGACTTAGACCTCACCTACGTGACGG
AGCGCATCTTGGCCGCCGCCTTCCCCGCGCGGCCCGATGAACAGCGGCACCGGGGCCACCTGCGCGAGCTGGCCC
ATGTGCTGCAATCCAAGCACCGGGACAAGTACCTGCTCTTCAACCTTTCAGAGAAAAGGCATGACCTGACCCGCT
TAAACCCCAAGGTTCAAGACTTCGGCTGGCCTGAGCTGCATGCTCCACCCCTGGACAAGCTGTGCTCCATCTGCA
AAGCCATGGAGACATGGCTCAGTGCTGACCCACAGCACGTGGTCGTACTATACTGCAAGGGAAACAAGGGCAAGC
TTGGGGTCATCGTTTCTGCCTACATGCACTACAGCAAGATCTCTGCAGGGGCGGACCAGGCACTGGCCACTCTTA
CCATGCGGAAATTCTGCGAGGACAAGGTGGCCACAGAACTGCAGCCCTCCCAGCGTCGATATATCAGCTACTTCA
GTGGGCTGCTATCTGGCTCCATCAGAATGAACAGCAGCCCTCTCTTCCTGCACTATGTGCTCATCCCCATGCTGC
CAGCCTTTGAACCTGGCACAGGCTTCCAGCCCTTCCTTAAAATCTACCAGTCCATGCAGCTTGTCTACACATCTG
GAGTCTATCACATTGCAGGCCCTGGTCCCCAGCAGCTTTGCATCAGCCTGGAGCCAGCCCTCCTCCTCAAAGGCG
ATGTCATGGTAACATGTTATCACAAGGGTGGCCGGGGCACAGACCGGACCCTCGTGTTCCGAGTCCAGTTCCACA
CCTGCACCATCCACGGACCACAGCTCACTTTCCCCAAGGACCAGCTTGACGAGGCCTGGACTGATGAGAGGTTCC
CCTTCCAAGCCTCCGTGGAGTTTGTCTTCTCCTCCAGCCCCGAGAAGATCAAAGGCAGCACTCCACGGAACGACC
CCTCGGTCTCTGTCGACTACAACACCACTGAGCCAGCCGTGCGCTGGGACTCCTATGAGAACTTCAACCAGCACC
ACGAGGACAGTGTGGATGGCTCCTTGACCCACACCCGGGGTCCCCTGGATGGCAGTCCTTATGCCCAGGTGCAGC
GGCCTCCCCGGCAGACCCCCCCGGCACCCTCTCCAGAGCCTCCACCACCCCCCATGCTCTCTGTCAGCAGCGACT
CAGGCCATTCCTCCACGCTGACCACAGAGCCGGCTGCTGAGTCCCCTGGCCGGCCGCCCCCTACAGCTGCTGAAC
GGCAGGAGCTGGATCGCCTCCTAGGAGGCTGCGGAGTGGCCAGTGGGGGCCGGGGAGCTGGGCGCGAGACGGCCA
TCCTAGATGACGAAGAGCAGCCCACTGTGGGCGGAGGCCCCCACCTCGGAGTGTATCCAGGCCATAGGCCTGGCC
TCAGCCGCCACTGCTCCTGCCGCCAGGGCTACCGGGAGCCCTGCGGGGTTCCCAATGGGGGCTACTACCGGCCAG
AGGGAACCCTGGAGAGGAGGCGACTGGCCTACGGGGGCTATGAGGGATCCCCCCAGGGCTACGCCGAGGCCTCGA
TGGAGAAGAGGCGCCTCTGCCGATCGCTGTCAGAGGGGCTATACCCCTACCCACCTGAGATGGGGAAACCAGCCA
CTGGGGACTTTGGCTACCGCGCCCCAGGCTACCGGGAGGTGGTCATCCTGGAGGACCCTGGGCTGCCTGCCCTAT
ACCCATGCCCAGCCTGCGAGGAGAAGCTGGCGCTGCCTACAGCAGCCTTGTATGGACTGCGGCTGGAGAGGGAGG
CTGGAGAAGGGTGGGCAAGTGAGGCTGGCAAGCCTCTCCTGCACCCAGTGCGGCCTGGGCACCCGCTGCCTCTGC
TCTTGCCTGCCTGTGGGCATCACCATGCCCCGATGCCTGACTACAGCTGCCTGAAGCCACCCAAGGCAGGCGAGG
AAGGGCACGAGGGCTGCTCCTACACCATGTGCCCCGAAGGCAGGTATGGGCATCCAGGGTACCCTGCCCTGGTGA
CATACAGCTATGGAGGAGCAGTTCCCAGTTACTGCCCAGCATATGGCCGTGTGCCTCATAGCTGTGGCTCTCCAG
GAGAGGGCAGAGGGTATCCCAGCCCTGGTGCCCACTCCCCACGGGCTGGCTCCATTTCCCCGGGCAGCCCGCCCT
ATCCACAATCTAGGAAGCTGAGCTACGAGATCCCTACGGAGGAGGGAGGGGACAGGTACCCATTGCCTGGGCACC
TGGCCTCAGCAGGACCTTTGGCATCTGCAGAGTCGCTGGAGCCGGTGTCCTGGAGGGAGGGCCCCAGTGGGCACA
GCACACTGCCTCGGTCTCCCCGAGATGCCCCATGCAGTGCTTCGTCAGAGTTGTCTGGTCCCTCCACGCCCCTGC
ACACCAGCAGTCCAGTCCAGGGCAAGGAAAGCACCCGGCGACAGGACACCAGGTCCCCCACCTCAGCGCCCACTC
AGAGACTGAGTCCTGGCGAGGCCTTGCCCCCTGTTTCCCAGGCAGGCACCGGAAAGGCCCCTGAGCTGCCGTCGG
GAAGTGGGCCTGAGCCTCTGGCCCCTAGCCCAGTCTCTCCGACCTTCCCTCCCAGCTCGCCCAGTGACTGGCCTC
AGGAAAGGAGTCCAGGGGGCCACTCAGATGGCGCCAGTCCTCGGAGCCCTGTGCCCACCACACTTCCTGGCCTCC
GCCACGCCCCCTGGCAAGGCCCTCGAGGCCCCCCCGACAGCCCAGATGGGTCTCCCCTCACTCCTGTGCCTTCCC
AGATGCCCTGGCTTGTGGCCAGCCCAGAGCCGCCTCAGAGCTCACCTACACCTGCTTTCCCCCTGGCTGCCTCCT
ATGACACCAATGGCCTTAGCCAGCCCCCACTTCCTGAGAAACGCCACCTGCCCGGGCCGGGGCAACAGCCAGGAC
CCTGGGGCCCAGAGCAGGCATCATCGCCAGCCAGAGGCATCAGTCACCATGTCACCTTCGCACCTCTGCTCTCAG
ATAATGTCCCCCAAACCCCAGAGCCTCCTACACAAGAGAGCCAAAGCAATGTCAAGTTTGTCCAGGATACATCCA
AGTTCTGGTACAAGCCACACCTGTCCCGTGACCAAGCCATTGCCCTGCTGAAGGACAAGGACCCTGGGGCCTTCC
TGATCAGGGACAGTCATTCATTCCAAGGAGCTTATGGGCTGGCCCTCAAGGTGGCCACACCGCCACCCAGTGCCC
AGCCCTGGAAAGGGGACCCCGTGGAACAGCTGGTCCGCCATTTCCTCATCGAGACTGGGCCCAAAGGGGTGAAGA

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FIGURE 3337B

TCAAGGGCTGCCCCAGTGAGCCCTACTTTGGCAGCCTGTCCGCCTTGGTCTCCCAGCACTCCATCTCCCCCATCT
CCCTGCCCTGCTGCCTGCGCATTCCCAGCAAAGATCCTCTGGAAGAGACCCCAGAGGCTCCAGTGCCCACCAACA
TGAGCACAGCGGCAGACCTCCTGCGTCAGGGTGCTGCCTGCAGCGTGCTCTACTTGACCTCAGTGGAGACAGAGT
CACTGACGGGCCCCCAAGCTGTGGCCCGGGCCAGCTCTGCAGCTCTGAGCTGTAGCCCCCGCCCGACACCAGCTG
TTGTCCACTTCAAGGTGTCAGCCCAGGGCATTACACTGACGGACAACCAAAGGAAGCTCTTCTTTCGCCGCCATT
ATCCAGTGAACAGCATCACCTTCTCCAGCACTGACCCTCAAGACCGGAGATGGACCAACCCAGACGGGACCACCT
CCAAGATCTTTGGTTTCGTGGCCAAGAAGCCGGGAAGCCCCTGGGAGAATGTGTGTCACCTCTTTGCAGAGCTTG
ACCCAGATCAGCCTGCTGGCGCCATTGTCACCTTCATCACCAAAGTTCTACTGGGCCAGAGAAAA**TGA**AGGAAGG
CCACAAGCTCAGAGCCCACATCAACACTGCCCCCCTCCCAGCACCCCACAGCCCTCACATCCCCTGGCCTGGACC
CAGGAGACCCAGGAGAAAGCACCCTCCCTTAGGAATGAGGAGTGGGCATCAGGCCTGGGACACTGCTCTCCTTCC
CCGCCCCCAGCCTGCTAAGTTAAGTGGACAGGCCCACAAGATGACCTTGCATGTGAGCAGATGGCAGAGATGGGT
GTGTGAGGGGTGAGGAGGCATCAGCAGTTGAGCCCCGAAGGAGATCAGGCAGCCCCACCTGCAGGAGAACGTCAG
CCCTCCAGGGGATCAGCCCCTGCCAGTTCCACCCAGCTGCAGGTGCCAGCACGGCAGGGATGGGAGAGGGGTGGG
GAGCGAGTCACTGCCTCCTCTGAGCAGAGATTCAGAGTAGGATCACATGAATAGGGGAAAAAAGAGAGTCTATTT
TTGTCTAATAATAAAGAATTTCTATAAACTTT

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FIGURE 3338

TCTAATCTTGGACAATATGGTATCCAATACTGAATGAAAACTTCAGAGATGGTAGGAGGAGGAGGAGCAGGTGGT
CAATGACTACAGTAAAAACCACTGGGAGTGCAGAGTATTTGTCAAAGAACTTCAGCATTACAATGAACTTTAAAG
ATCAGATTTATTTGGAGAAAACAAAAAACCCACAACCCAAAGGATGGGATTTTACATCAAGACATCTCCCAGGTA
ATAAGTCTACAGATTACAAATCATTTTCATAGAAGATATTTTTGTACAAATTTTACATGTATTCAGGAGCGGGAC
ATTAATCAATCCCTGTTTCTATTTTAATAGGGGGGACAAGGTAGGGGAGAGGGAAAAACAGTTTTGGATATAACT
ATTTGGAAGGAGAGTAGACATGAAGAGGGCAAACCCTAGCTTTTCATTATCTACAATCAATAGTTTGTTTTTCTT
TTTTAAAAAAGAAAGAAAAACCCTTTCAATCTTCAATACTCTTTAAAAGCCCACTTCTTAGCTACTGGCCAATCC
ACACCAATTATTTAAATTCACTTGGTACACACCTTTGTCCACTGGGTAAATTATATTCATTATGCCCACTGCTGC
AGCACGCATAAACCAACACCCCTGCATGGCTGAACAGGGCCTAATCTAGGACTGATGGGAGAAGGGCTTGCAAAC
CAAGATCAAGGTGTTTCTCCGCTAATACTGTCTACCAAGCTGATCCCTACAAAAATGCATATAAAAGCAGGCAAG
TTTAGCTACTGTGTTGCAAGAGAAACCAGGACCTTGTTAAATAGTTCTCTCCATTACCATTTATTCTCTCAAGGG
AAGCTTAAAAAAACAACAACAAAACAACACATTGGTCTGGCCACCTCATGAATCCAACAAGCATTAGTGTGGCAT
TTCAGTGGAGAAGGAAACTTGGGGGGAAAAATCCCATCAAGGTTGTAAGAAAGGCTCCCAATTTAACTGTCCCTG
TCCCTATTTATCCATCATCCAAGACCATCCATTATTCTAGAGCACTCTGATCAATAAAAGGGGTCCAAGCATCAG
GAGCAGGCAAGGAGAACCAAAAGACATCAAGAAACCGATTTGCTTGAGAAAAGCAGCGATTCTTCCTTTCAGAGT
TCTCCATGGCTGAGAAAATGCCCAAGACATCATGTATGTGACTTAGATACTGCTTTTTGGGAGGTTAAGAGTAGC
ATGAAGAACTTAAGATGATGATAAGAGTCTAAATTTTTAGTTTCAAGGTTTCAATAGA**ATG**TGGATATATTCAAA
ACTTTCAAAAAGGACAGTGTTTAGAAAGGGTAAAACTAGGACACAGAAAACACTGGGAATTACCACGACCCCCAA
GTGCTTCCGGCTCCAGGAAATAACCATTCATGTGTTTGCTGGAGGTCACACAATTTTCCCCTATTACCTGGTGCA
AAATGACTCATCACTTCCCAAAAGCTTCTTTTCAAACCACGATTTTCCCATTTATTTTGGTCCAATGCAGTCCCA
TTCTTTATGGCCTATAGTCTCACTCCCAACTACCCCCCTGGGGGGTT

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FIGURE 3339

TGCAGCGTCAGCTGGATGAGCCAAAACTAGAACGACGGCCTCGGGAGAGACACCCAAGCTGGCGAAGTGAAGAAA
CTCAGGAACGGGAACGGTCGAGGACAGGAAGTGAGTCATCACAAACTGGGACCTCCACCACATCTAGCAGAAATG
CACGAAGGAGAGAGAGTGAGAAGTCTCTAGAAAATGAAACACTCAATAAGGAGGAAGATTGCCACTCTCCAACTT
CTAAACCTCCCAAACCTGATCAGCCCCTAAAGGTAATGCCAGCCCCTCCACCAAAGGAGAATGCTTGGGTGAAGC
GAAGTTCTAACCCTCCTGCTCGATCTCAGAGCTCAGACACAGAGCAGCAGTCCCCTACAAGTGGTGGGGGAAAAG
TAGCTCCAGCTCAACCATCTGAGGAAGGACCAGGAAGGAAAGATGAAAATAAAGTAGATGGGATGAATGCCCCAA
AAGGCCAAACTGGGAACTCTAGCCGTGGTCCAGGCGACGGAGGGAACAGAGACCACTGGAAGGAGTCAGATAGGA
AAGATGGCAAAAAGGATCAAGACTCCAGATCTGCACCTGAGCCAAAGAAACCTGAGGAAAATCCAGCTTCCAAGT
TCAGTTCTGCAAGCAAGTATGCTGCTCTCTCTGTTGATGGTGAAGATGAAAATGAGGGAGAAGATTATGCCGAAT
AGACCTCTACATCCTGTGCTTTTCTCCTAGTTTCTCTCCACCCTGGAACATTCGAGAGCAAATCAAAACCTCTAT
CCAGACAAGACAAAAT

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FIGURE 3340

AATCTAGCCCGGGAACCGAGTTGCGGGAGTGCGGTCTGTGCCGTTCCGGCCAGGAGTTTGCCGACTGCAGACGTC
CTGCGAACCGGCAAGATGTGCTCTCTGGGGTTGTTCCCTCCTCCACCGCCTCGGGGTCAAGTCACCCTATATGAG
CACAATAACGAGCTGGTGACGGGCAGTAGCTATGAGAGCCCGCCCCCCGACTTCCGGGGCCAGTGGATCAATCTT
CCTGTCCTACAACTGACAAAGGATCCCCTAAAGACCCCTGGAAGGCTGGACCATGGCACAAGAACTGCCTTCATC
CATCACCGGGAGCAAGTGTGGAAGAGATGCATCAACATTTGGCGTGATGTGGGCCTTTTTGGGGTGCTAAATGAA
ATTGCAAACTCAGAAGAAGAGGTGTTTGAGTGGGTGAAGACGGCATCCGGCTGGGCCCTGGCACTCTGTCGATGG
GCCTCTTCCCTCCATGGGTCCCTGTTCCCCCATCTGTCTCTCAGGAGCGAAGATCTGATCGCTGAATTTGCCCAA
GTCACAAATTGGTCCAGCTGCTGCTTGCGTGTCTTTGCATGGCACCCCCACACCAACAAGTTTGCAGTGGCCCTG
CTAGATGACTCAGTCCGTGTGTATAATGCCAGCAGCACCATAGTCCCCTCCCTGAAGCACCGGCTGCAGCGAAAT
GTGGCGTCTCTGGCCTGGAAGCCCCTTAGTGCCTCTGTCTTGGCTGTGGCCTGCCAGAGCTGCATTCTTATCTGG
ACCCTGGACCCTACCTCCTTGTCTACCCGACCCTCTTCTGGCTGTGCCCAAGTGCTGTCTCACCCTGGGCATACA
CCTGTTACCAGCTTGGCCTGGGCCCCCAGTGGGGGGCGGCTGCTCTCAGCTTCACCCGTGGATGCTGCTATCCGG
GTATGGGATGTCTCAACAGAGACCTGTGTCCCCCTTCCCTGGTTCCGAGGAGGTGGGGTGACCAACCTGCTCTGG
TCCCCAGACGGCAGCAAAATCCTGGCTACCACTCCTTCAGCTGTCTTTCGAGTCTGGGAGGCCCAGATGTGGACT
TGTGAGAGGTGGCCTACTCTATCAGGGCGCTGTCAGACTGGCTGCTGGAGCCCAGATGGCAGCCGACTGCTGTTC
ACTGTATTGGGAGAGCCACTGATTTACTCCCTGTCTTTTCCAGAACGTTGTGGTGAGGGAAAGGGGTGCGTTGGA
GGTGCAAAGTCAGCAACGATTGTGGCAGATCTGTCTGAGACAACAATACAGACACCAGATGGTGAGGAGAGGCTT
GGGGGAGAGGCTCACTCCATGGTCTGGGACCCCAGTGGGGAACGTCTGGCTGTGCTTATGAAAGGAAAGCCAAGG
GTACAGGATGGTAAACCAGTCATCCTCCTTTTTCGCACTCGAAACAGCCCTGTGTTTGAGCTCCTTCCCTGTGGC
ATTATCCAGGGGGAGCCAGGAGCCCAGCCCCAGCTCATCACTTTCCATCCTTCCTTCAACAAAGGGGCCCTGCTC
AGTGTGGGCTGGTCCACAGGCCGAATTGCCCACATCCCGCTGTACTTTGTCAATGCCCAGTTTCCACGTTTTAGC
CCAGTGCTTGGGCGGGCCCAGGAACCCCCTGCTGGGGGTGGAGGCTCTATTCATGACCTGCCCCTCTTTACTGAG
ACATCCCCAACCTCTGCCCCTTGGGACCCTCTCCCAGGGCCACCACCTGTTCTGCCCCACTCCCCACATTCCCAC
CTCTAAGAATAAATAAGTTTTCCTTTTGTTTTCCACTCA

FIGURE 3341

CTCCCTGCAGGGAGCTGCTTATGGGACACCAATTCCTGCGCGGCCTCTTAACGCTGCTGCTGCCGCCGCCACCCC
TGTATACCCGGCACCGCATGCTCGGTCCAGAGTCCGTCCCGCCCCCAAAACGATCCCGCAGCAAACTCATGGCAC
CGCCCCGAATCGGGACGCACAATGGCACCTTCCACTGCGACGAGGCACTGGCATGCGCACTGCTTCGCCTCCTGC
CGGAGTACCGGGATGCAGAGATTGTGCGGACCCGGGATCCCGAAAAACTCGCTTCCTGTGACATCGTGGTGGACG
TGGGGGGCGAGTACGACCCTCGGAGACACCGATATGACCATCACCAGAGGTCTTTCACAGAGACCATGAGCTCCC
TGTCCCCTGGGAAGCCGTGGCAGACCAAGCTGAGCAGTGCGGGACTCATCTATCTGCACTTCGGGCACAAGCTGC
TGGCCCAGTTGCTGGGCACTAGTGAAGAGGACAGCATGGTGGGCACCCTCTATGACAAGATGTATGAGAACTTTG
TGGAGGAGGTGGATGCTGTGGACAATGGGATCTCCCAGTGGGCAGAGGGGGAGCCTCGATATGCACTGACCACTA
CCCTGAGTGCACGAGTTGCTCGACTTAATCCTACCTGGAACCACCCCGACCAAGACACTGAGGCAGGGTTCAAGC
GTGCAATGGATCTGGTTCAAGAGGAGTTTCTGCAGAGATTAGATTTCTACCAACACAGCTGGCTGCCAGCCCGGG
CCTTGGTGGAAGAGGCCCTTGCCCAGCGATTCCAGGTGGACCCAAGTGGAGAGATTGTGGAACTGGCGAAAGGTG
CATGTCCCTGGAAGGAGCATCTCTACCACCTGGAATCTGGGCTGTCCCCTCCAGTGGCCATCTTCTTTGTTATCT
ACACTGACCAGGCTGGACAGTGGCGAATACAGTGTGTGCCCAAGGAGCCCCACTCATTCCAAAGCCGGCTGCCCC
TGCCAGAGCCATGGCGGGGTCTTCGGGACGAGGCCCTGGACCAGGTCAGTGGGATCCCTGGCTGCATCTTCGTCC
ATGCAAGCGGCTTCACTGGCGGTCACCACACCCGAGAGGGTGCCTTGAGCATGGCCCGTGCCACCTTGGCCCAGC
GCTCATACCTCCCACAAATCTCCTAGTCTAATAAAACCTTCCATCTC

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FIGURE 3342

AGTCGGCCTTCCCAACATGGCGCAGTCTATTAACATCACGGAGCTGAATCTGCCGCAGCTAGAAATGCTCAAGAA
CCAGCTGGACCAGGAAGTGGAGTTCTTGTCCACGTCCATTGCTCAGCTCAAAGTGGTACAGACCAAGTATGTGGA
AGCCAAGGACTGTCTGAACGTGCTGAACAAGAGCAACGAGGGGAAAGAATTACTCGTCCCACTGACGAGTTCTAT
GTATGTCCCTGGGAAGCTGCATGATGTGGAACACGTGCTCATCGATGTGGGAACTGGGTACTATGTAGAGAAGAC
AGCTGAGGATGCCAAGGACTTCTTCAAGAGGAAGATAGATTTTCTAACCAAGCAGATGGAGAAAATCCAACCAGC
TCTTCAGGAGAAGCACGCCATGAAACAGGCCGTCATGGAAATGATGAGTCAGAAGATTCAGCAGCTCACAGCCCT
GGGGGCAGCTCAGGCTACTGCTAAGGCCTGAGAGTTTTTGCAGAAATGGGGCAGAGGGACACCCTTTGGGCGTGG
CTTCCTGGTGATGGGAAGGGTCTTGTGTTTTAATGCCAATAAATGTGCCAGCTGGGCA

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FIGURE 3343A

ACGGACGCCCTCTTCCCCGCCCTCCTTGCGCGCAGCCTTCTGGGATGTATAGTCCTAGATCCGAGCACGCAGCGG
CAAAAGGGCGCAGAAGAACCACAAACCCCAGAAGCCCTCGCGCCCACTCTTCTCCCTCCCCTCCAGAAGTCGGAG
TGCTGTTTTTGTTGTTGGTGAAAGGTGAGGGGAACAGCTGATCCGTCTGTTGGGAGGACAGATATCTCAAGGCCA
GGATGGAAGAATCACCACTAAGCCGGGCACCATCCCGTGGTGGAGTCAACTTTCTCAATGTAGCCCGGACCTACA
TCCCCAACACCAAGGTGGAATGTCACTACACCCTTCCCCCAGGCACCATGCCCAGTGCCAGTGACTGGATTGGCA
TCTTCAAGGTGGAGGCTGCCTGTGTTCGGGATTACCACACATTTGTGTGGTCTTCCGTGCCTGAAAGTACAACTG
ATGGTTCCCCCATTCACACCAGTGTCCAGTTCCAAGCCAGCTACCTGCCCAAACCAGGAGCTCAGCTCTACCAGT
TCCGATATGTGAACCGCCAGGGCCAGGTGTGTGGGCAGAGCCCCCCTTTCCAGTTCCGAGAGCCAAGGCCCATGG
ATGAACTGGTGACCCTGGAGGAGGCTGATGGGGGCTCTGACATCCTGCTGGTTGTCCCCAAGGCAACTGTGTTAC
AGAACCAGCTCGATGAGAGCCAGCAAGAACGGAATGACCTGATGCAGCTGAAGCTACAGCTGGAGGGACAGGTGA
CAGAGCTGAGGAGCCGAGTGCAGGAGCTCGAGAGGGCTCTGGCAACTGCCAGGCAGGAGCACACGGAGCTGATGG
AACAGTACAAGGGGATTTCCCGGTCCCATGGGGAGATCACAGAAGAGAGGGACATCCTGAGCCGGCAACAGGGAG
ACCATGTGGCACGCATCCTGGAGCTAGAGGATGACATCCAGACCATCAGTGAGAAAGTGCTGACGAAGGAAGTGG
AGCTGGACAGGCTTAGAGACACAGTGAAGGCCCTGACTCGGGAACAAGAGAAGCTCCTTGGGCAACTGAAAGAAG
TACAAGCAGACAAGGAGCAAAGTGAGGCTGAGCTCCAAGTGGCACAACAGGAGAACCATCACTTAAATTTGGACC
TGAAGGAGGCGAAGAGCTGGCAAGAGGAGCAGAGTGCTCAGGCTCAGCGACTGAAAGACAAGGTGGCCCAGATGA
AGGACACCCTAGGCCAGGCCCAGCAGCGGGTGGCCGAGCTGGAGCCCTTGAAGGAGCAGCTTCGAGGGGCCCAGG
AGCTTGCAGCCTCAAGCCAGCAGAAAGCCACCCTTCTTGGGGAGGAGTTGGCCAGTGCAGCAGCAGCCAGGGACC
GCACCATAGCCGAACTACACCGCAGCCGCCTGGAAGTGGCTGAAGTTAACGGCAGGCTGGCTGAGCTCGGTTTGC
ACTTGAAGGAAGAAAAATGCCAATGGAGCAAGGAGCGGGCAGGGCTGCTGCAGAGTGTGGAGGCAGAGAAGGACA
AGATCCTGAAGCTGAGTGCAGAGATACTTCGATTGGAGAAGGCAGTTCAGGAGGAGAGGACCCAAAACCAAGTGT
TCAAGACTGAGCTGGCCCGGGAGAAGGATTCTAGCCTGGTACAGTTGTCAGAAAGTAAGCGGGAGCTGACAGAGC
TGCGGTCAGCCCTGCGTGTGCTCCAGAAGGAAAAGGAGCAGTTACAGGAGGAGAAACAGGAATTGCTAGAGTACA
TGAGAAAGCTAGAGGCCCGCCTGGAGAAGGTGGCAGATGAGAAGTGGAATGAGGATGCCACCACAGAGGATGAGG
AGGCCGCTGTGGGGCTGAGCTGCCCGGCAGCTCTGACAGACTCAGAGGACGAGTCCCCAGAAGACATGAGGCTCC
CACCCTATGGCCTTTGTGAGCGTGGAGACCCAGGCTCCTCTCCTGCTGGGCCTCGAGAGGCTTCTCCCCTTGTTG
TCATCAGCCAGCCGGCTCCCATTTCTCCTCACCTCTCTGGGCCAGCTGAGGACAGTAGCTCTGACTCGGAGGCTG
AAGATGAGAAGTCAGTCCTGATGGCAGCTGTGCAGAGTGGGGGTGAGGAGGCCAACTTACTGCTTCCTGAACTGG
GCAGTGCCTTCTATGACATGGCCAGGTGAGTTCAACCAGCAAGGCCAGGAGGGAGGTGGGAGGAGGTCAGAGGGA
AAGGGCATCTGTGTGGACAGTCACCAGGCCCTGCTCCCAACCCCTGCCCTTCTTGGCCTCAGCCAAGAAAAGGAG
ATACAGGTATGGTTAACAAGGAAAATGACTCACTGCTCCAAATCCCAGATGCCTTCAGGTAATCCCTACCCCTAT
CTTATCAATGCACTCAGAGGTCCTGCCTTTAACTGGCTTCTATGTTGTTCTAGCACCATCTTCTGCAGAGCCCAA
ATTGCCCTGCTTCCCCTCTCTCCTGCCTCTACCCCTTCCCCAACCACCAGGTAGGTACCTAGGGTCCTCCGGGGA
GGAAGGGAGGTGACCATGGCCCCCAGGGATAGGAGCAGAGAGAAGACTGGGATCCAGCATCCATCTGGCTACAAC
TGAAATGCTTTCCCTCTTCCCTGACTTCCCTGGGTAACCCTTAGGGAAGGGAACCTATAGAGGTGGGGGTTTCAG
GTATCAGATTGTCCCCTTCTGCCTTCCCTTTTATTCCCAGGTTCAAGGGGGCAGGCACAGGGAAGAGAGATTTGA
TCATCTAGTCCCGGTTTTGCCTGGATGTGAGATGGGCTCAGGGCAGGGAGGGGGTGATGCTGTCATCCTTCTCGG
CTGGAGCAGGAAGATGAAGGACGATGTCAGACTCATTTTCAGCCTCATTAGGCAGCAGACGGAGATGGAGGGAGG
AGAGCAGGAGGCTGGGGGATGGGCTCTGCACTGCAGAGACCAGCAGGGACTAAAGAAGAGAGGACATGGGGAACT
GGAAAAATAAGCCTTCCAGGATTGTGGGGAGAAAGACGCTGTGGGAGAGGCCAGGATGCTGCATTAGGCACAGGA
TAACCTGGGAACCCAGGCACATGGGTCCTGCTCTCCGAAGTCTGCAAGTCAAGAAGGGAACAGAGCACGCCGACC
CTCTCCCTTTCCCCTCTGTCTCTCTTAGTGGCTTTACAGTGGGTACCCTGTCAGAAACCAGCACTGGGGGCCCTG
CCACCCCCACATGGAAGGAGTGTCCTATCTGTAAGGAGCGCTTTCCTGCTGAGAGTGACAAGGATGCCCTGGAGG
ACCACATGGATGGACACTTCTTTTTCAGCACCCAGGACCCCTTCACCTTTGAGTGATCTTACTCCCTCGTACATG
CACAAATACACACTCATGCACACACACACTCACACACATGCATACACTTAGGTTTCATGCCCATTTTCTATCACA
CTGGGCTCCATGATATTCTGTTCCCTAAGAACTGCTTCTGTGTGCCCTGTTTTCATCCCAAGATTTCTCACTTCA
TCCTCTCCTACCTGGCTCTTTTGTCCCAGGGAGGGGTCCTGTTCGGAAGCAGTGGCTGAATTTATCCCCTGAAAG
TGGTTTTGGAGGAACCGGGATGGAGGAGGCCTTCCCCTGTGGGAATAGAATCGTCCACTCCTAGCCCTGGTTGCT

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FIGURE 3343B

TCTGATACACAGCCACTGCACACACACACTCACACTCACACTCCCTTGTCTGATGCCCCAAAGCCAATTCCTGGG
GCACCCTACCCTCTCTTATTTGGAGTTTCCGTTGGTTTACCTGAGTTTTCTCTGGGGTCTGCACAGAGGCAGCAG
CATGGACATCATGGCCTCTCAGGTCCCTTTTGGTTCTCAGTTTCATTGGTTCCTCTTTCTGTTCCCCCATTGACT
TCTGTGCCCCACCCTAGCCTTTTCCATAACCTTAGGTATTCAGTTTGGAGGGGTTTTTTGTATTTTTGAGGATTC
CTGTATTCTGTATCCTCTCCTCGCATCTCCTCACATGGAAAGAAATAATGTATTTGTGCCTTCTGTGAGGAATGG
GGGGAACAAGTGGTCCCAGGTATCCCCATTTCCAAGGCCCCCCTCCCTCTCCAGGTCCCCCCACAGCAATAAAAG
CTTCCCCCTGATATCCATCCCTTTGTAGTTTGAACAAATATATTTATATGATATGT

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FIGURE 3344

ATGACATGCCCTCGCAATGTAACTCCGAACTCGTACGCGGAGCCCTTGGCTGCGCCCGGCGGAGGAGAGCGCTAT
AGCCGGAGCGCAGGCATGTATATGCAGTCTGGGAGTGACTTCAATTGCGGGGTGATGAGGGGCTGCGGGCTCGCG
CCCTCGCTCTCCAAGAGGGACGAGGGCAGCAGCCCCAGCCTCGCCCTCAACACCTATCCGTCCTACCTCTCGCAG
CTGGACTCCTGGGGCGACCCCAAAGCCGCCTATCGCCTGGAACAACCTGTTGGCAGGCCGCTGTCCTCCTGCTCC
TACCCACCTAGTGTCAAGGAGGAGAATGTCTGCTGCATGTACAGCGCAGAGAAGCGGGCGAAAAGTGGCCCCGAG
GCAGCTCTCTACTCCCACCCCTTGCCGGAGTCCTGCCTTGGGGAGCACGAGGTACCCGTGCCCAGCTACTACCGC
GCCAGCCCGAGCTACTCCGCGCTGGACAAGACGCCCCACTGTTCTGGGGCCAACGACTTCGAAGCCCCTTTCGAG
CAGCGGGCCAGTCTCAACCCGCGCGCCGAACATCTGGAATCGCCTCAGCTGGGGGGCAAAGTGAGTTTCCCTGAG
ACCCCCAAGTCCGACAGCCAGACCCCCAGCCCCAATGAAATCAAGACGGAGCAGAGCCTGGCGGGCCCTAAAGGG
AGCCCCTCGGAGAGCGAAAAGGAGAGGGCCAAAGCTGCCGACTCCAGCCCAGACACCTCGGATAACGAAGCGAAA
GAGGAGATAAAGGCAGAAAACACCACAGGAAATTGGCTGACAGCAAAGAGCGGAAGGAAGAAGAGGTGCCCCTAT
ACTAAACACCAGACGCTGGAATTGGAGAAAGAATTTCTGTTCAATATGTATTTGACGCGAGAGCGCCGCCTGGAG
ATTAGCAAGACCATTAACCTTACAGACAGACAAGTCAAAATCTGGTTTCAAAATCGCAGAATGAAACTCAAGAAA
ATGAACCGAGAGAATCGGATCCGGGAACTGACCTCCAATTTTAATTTCACCTGAGAGCGCGGCCTCTCCTCCTCC
CTTCCCGCTCCTTCCTCTCCCCGCCCCTCCTCCCTTTGTGCCTGGTGATATATTTTTTTTCCTCCCTGAGTATA
AATGCAATGCGACTGCAAAAAAGGCAAAGACCTCAGACTCTCCTTCCAAGGGACCTGTGGTTCGTGCTGCGAAGA
TGCTTCCACTTAAAGCATGAGAAATGGGGTGCCGGGATGTGGGGTGTGGTGTGTGCCCTCATAGATGGGGGTGGG
AGTGTGGCTGGTGTGTGTGTCAAGCCCTCACTCACCCACGCACTCACACACAGCATTCTGTTCTCCATGCAAAGT
TAAGATCGAATCCATCCGCTTGTAGGGGAAAAAAAGGAAAAAAATTAACCAGAGAGGGTCTGTAATCTCGCAGAG
CACAGGCAGAATCGTTCCTTCCTTGCTGCATTTCCTCCTTAGACTAATAGACGTTTTGGAAAGTTCGGCTAGTGT
TCGTGTGTTTGTCGTAGCACCCAGAGCCTCCACCAAACCCTCTCCATGTCTTTACCTCCCAGTCGCTCTAAGAAT
CTGCTTGAAGTCTCGTATTTGTACTGCTTTCTGCTTTTCTCCCACCCCTCCTAGCACCCCCACATCCCCCATCTA
GTAACATCTCAGAAATTTCATCCAGAGGAACAAAAAAATTAAAAATAGAACATAGCAAAGCAAAGACAGAATGCC
CCCCCCCCCAAATATTGTCCTGTCCCTGTCTGGGAGTTGTGTTATTTAAAGATATTCTGTATGTTGTATCTTTTG
CATGTAGCTTCCTTAATGGAGAAAAAAAAACCTAATAAATTTCCAGAATCAT

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FIGURE 3345

TTTTGTCTGTCCTGGATTGGAGCCGTCCCTATAACCATCTAGTTCCGAGTACAAACTGGAGACAGAAATAAATAT
TAAAGAAATCATAGACCGACCAGGTAAAGGCAAAGGGATGAATTCCTACTTCACTAACCCTTCCTTATCCTGCCA
CCTCGCCGGGGGCCAGGACGTCCTCCCCAACGTCGCCCTCAATTCCACCGCCTATGATCCAGTGAGGCATTTCTC
GACCTATGGAGCGGCCGTTGCCCAGAACCGGATCTACTCGACTCCCTTTTATTCGCCACAGGAGAATGTCGTGTT
CAGTTCCAGCCGGGGGCCGTATGACTATGGATCTAATTCCTTTTACCAGGAGAAAGACATGCTCTCAAACTGCAG
ACAAAACACCTTAGGACATAACACACAGACCTCAATCGCTCAGGATTTTAGTTCTGAGCAGGGCAGGACTGCGCC
CCAGGACCAGAAAGCCAGTATCCAGATTTACCCCTGGATGCAGCGAATGAATTCGCACAGTGGGGTCGGCTACGG
AGCGGACCGGAGGCGCGGCCGCCAGATCTACTCGCGGTACCAGACCCTGGAACTGGAGAAGGAATTTCACTTCAA
TCGCTACCTAACGCGGCGCCGGCGCATCGAGATCGCCAACGCGCTTTGCCTGACCGAGCGACAGATCAAAATCTG
GTTCCAGAACCGCCGGATGAAGTGGAAAAAAGAATCTAATCTCACATCCACTCTCTCGGGGGGCGGCGGAGGGGC
CACCGCCGACAGCCTGGGCGGAAAAGAGGAAAAGCGGGAAGAGACAGAAGAGGAGAAGCAGAAAGAGTGACCAGG
ACTGTCCCTGCCACCCCTCTCTCCCTTTCTCCCTCGCTCCCCACCAACTCTCCCCTAATCACACACTCTGTATTT
ATCACTGGCACAATTGATGTGTTTTGATTCCCTAAAACAAAATTAGGGAGTCAAACGTGGACCTGAAAGTCAGCT
CTGGACCCCCTCCCTCACCGCACAACTCTCTTTCACCACGCGCCTCCTCCTCCTCGCTCCCTTGCTAGCTCGTTC
TCGGCTTGTCTACAGGCCCTTTTCCCCGTCCAGGCCTTGGGGGCTCGGACCCTGAACTCAGACTCTACAGATTGC
CCTCCAAGTGAGGACTTGGCTCCCCCACTCCTTCGACGCCCCCACCCCCGCCCCCCGTGCAGAGAGCCGGCTCCT
GGGCCTGCTGGGGCCTCTGCTCCAGGGCCTCAGGGCCCGGCCTGGCAGCCGGGGAGGGCCGGAGGCCCAAGGAGG
GCGCGCCTTGGCCCCACACCAACCCCCAGGGCCTCCCCGCAGTCCCTGCCTAGCCCCTCTGCCCCAGCAAATGCC
CAGCCCAGGCAAATTGTATTTAAAGAATCCTGGGGGTCATTATGGCATTTTACAAACTGTGACCGTTTCTGTGTG
AAGATTTTTAGCTGTATTTGTGGTCTCTGTATTTATATTTATGTTTAGCACCGTCAGTGTTCCTATCCAATTTCA
AAAAAGGAAAAAAAAGAGGGAAAATTACAAAAAGAGAGAAAAAAAGTGAATGACGTTTGTTTAGCCAGTAGGAGA
AAATAAATAAATAAATAAA

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FIGURE 3346

GGAGAAAGGGGGGGCTGTGGCGTGGGGGCTGAGGAGGGGCTAAGGCGGGAGGGGCGCCTCATCCCTTCACCCTCC
CTTTTCGCCATGTGGGGGCCCTGAGCGCCGCCCCAGAAGAGGTCGAGGGAATGTTGTGGGCTGGGGCACACCAGC
ACGGCAGAAACTGGAGAAAGCGAGAGACGTCGCCAGGGACCCAGGGACCTCTCCCTCCAGTTCCCCGGGCCCGCC
CGGCCCTGATGGCCACTCACGCTATAGCGCCCACTCTGTCCTGGGCCATCCCGCGCCAGCAGTGTAGCCCCCAGC
CCGGGCGCCTGAATGCTCTCCCTCCGGATCGCTGCTCGGGTCCCCACTTTGGCGACCGTGCCCCCGAGTCCTGCT
TCCCCGGGGCCTGCTCTGTATCAGGCGCCTGCGCCTTCAAGGGTACCCGGCCCGCCTGCCCTCCCCAAGAGCCGA
GTTTGCGCTCCTCCCGGAATCGTTTGAGAGAAGGACAAACTTTTGGCAGGATGGAAATCTAGATGAGCCTGTCCG
GAGCAGAACACCCCTGATTAGCCAGGCCCACCGCCATCCACATCTGCTCGGCAAAGAAGGAAGGCAGCTTGTTCC
AGACCTTGGTGAGCAGCTGCAGACTGCCTGCCTAGAACAGCCTCCTTACTCCAGCCTGGCAGGGAAGGAAGGAAC
CTGACTTGCTTCGCAGGATCTGGAAGCTCAGCCGGCAGAGCTGAGAGCCGCAGTTGCATCCTGGAGCCTGATGCT
AGAAGCAGCTTCCGTCTTTGGGTTCTTGCTGCCTCGGCCTCTGCTCTGTTCAGTTTGCTGTTGTGTTTTTCTCCC
CCATGTGGGGGTGGTGGGGTACAGGGAAATAAAATGCTTTCTCCCAGGCCCCTAATCCTTCCCCATGCCTGCATC
AGGCTCAAAGCTGCTGACAGTCATGAACTGCACCTTCCAGCCCTGCCCATAAGCTACTCAAAGCAAATTCAAATT
CTCTTCTGGCCAGGAGGAAGGGCAGATGCTCCCTCCTTCCTCAAGCCTCCCTGGCTCATTGATCCATTTTGAGGG
CATTTGGGGGTCAAAGTTGAGACCAGATTGCTTCAGTTTGTATAAAATTAGCATTTCTTATCACACCAAGGCCAC
ACCTGTTCTCTGGCCTCACAAACCAGTGAGGATGTAAAGGTTTGTTGAGGTGGAGGAACAGAAGTGAAATGAGCA
ATCTGCTCCATTTAGAAGTCAGTCGCTTCGGCTGTTCATTCCACTAATATTTATCTAGTACCTATTCTGTGCCAA
GCATTGTCTCTACCTCAGTTTGCCACAAATATGAAAAAAAAAAAAATTCTTGGAACTGTGAGGCTTCAATGTGTTG
TGGACCAATATACAAATAAACCAATGGAAAAG

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FIGURE 3347

AACGGGATGGGGAGCTGGACCAGCAGATTATGAGCTTACAGAAAGCCTGGCCTACATTTTACTCTTTTTGGATTT
CTTCCTCATCAAGAGACTGCTGCAGTGCCTGTCATGTGACAGCGGCATGGACATATGCCCCAGGCTTTCCTGCTG
GGGTCCATCCATGAGCCTGCAGGTGCCCTCATGGAGCCCCAGCCCTGCCCTGGAAGCTTGGCTGAGAGCTTCCTG
GAGGAGGAGCTTCGGCTCAATGCTGAGCTGAGCCAGCTGCAGTTTTCGGAGCCTGTGGGCATCATCTACAATCCC
GTGGAGTATGCATGGGAGCCACATCGCAACTACGTGACTCGCTACTGCCAGGGCCCCAAGGAAGTACTCTTCCTG
GGCATGAACCCTGGACCTTTTGGCATGGCCCAGACTGGGGTGCCCTTTGGGGAAGTAAGCATGGTCCGGGACTGG
TTGGGCATTGTGGGGCCTGTGCTGACCCCTCCCCAAGAGCATCCTAAACGACCAGTGCTGGGACTGGAGTGCCCA
CAGTCAGAAGTGAGTGGTGCCCGATTCTGGGGCTTTTTCCGGAACCTCTGTGGACAGCCTGAGGTCTTCTTCCAT
CACTGTTTTGTCCACAATCTATGCCCTCTGCTTTTCCTGGCTCCCAGCGGGCGCAACCTTACTCCTGCTGAGCTG
CCTGCCAAGCAGCGAGAACAGCTTCTTGGGATCTGTGATGCAGCCCTCTGCCGGCAGGTGCAGCTGCTGGGGGTG
CGGCTGGTGGTGGGAGTTGGGCGACTGGCAGAGCAGCGGGCACGACGGGCTCTGGCAGGCCTGATGCCAGAGGTC
CAGGTGGAAGGGCTCCTGCATCCCTCTCCCCGTAACCCACAGGCCAACAAGGGCTGGGAGGCAGTGGCCAAGGAA
AGATTGAATGAGCTGGGGCTGCTGCCACTGCTGTTGAAATGAGTGCCCTTGGGGCCTTGCATGGGACACATTCAA
GACCTCGAAGTCATTCTTGGCCAAGCAGATGACAACACATCTCCTGGACTGGAGCAAAAGGTCCTTCTGTGCACC
CTGGTCGCTGGGAAACGTATTCTTTGATCTGTTGAACTGTCTTCCAACCTGCCATGGCAGTTTTGACACTACTCC
TGTTTGCCCTCCTGATTCCTGCTTTCTTTACCTTTTAACATTGCCCCTTTCAGGGGACCCCACTTTGTAGGGAAT
CTGCAGAAGGTGTGCTTTTGCACTTGCAGACTGCTCTACCTCAGTGTTTCCTTGGGAGACTTTATTCAGCTGAGA
GTGCCCTAGACAGTAACTTCTAAGGTCACGTTTACTATTTCAGAGGAAATATCTTGCCAGGATACCTACCCATCC
TTATAGAACAGTTACCTTTAGCTGACCCCTTTCCTCACAGGGACCAAGACAAAGCATGGGACATGAAATTAAGAG
TGAACTTCTTATGGGAGGCTGCAGCTGGATCAGAGGAAAAATCCAGTGTGACAGAGTGCAAGTCAGAAGACCTGG
CTTTTCATCCCAGCTTTGAAACTTGGAACTTTTTGATTGACAAATTAATAAACCTCTCTATGCCTCAGGC

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FIGURE 3348

TGACCCTAACAGTCGATTCAAGGCCAAGTGGTCAGTTTGTCAGCCTTTTTTAAGGGATTTCTTTTTATTTTTAGG
AATTCCAAACAGAGTTAACCTAAACTGTCATTGCCAAAAGATCAGTCTTAAACTTTCTTAGCACCTGTACCTGTT
TAATGTGATCAGCTATCAGTGAGGAAAAAAAAAAAAATCTATTTAGGTCTTGGAATGGTTCCTGTACCTAGAGTA
TCCATATTGAACCTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGATGGAAACTTGCTCTTTTGCCCAGGCTGGAG
TGCAGTGGCGTGATCTTGGCTCACTGCAACCTCCGCCTCCCGGGTTCAAGCAGTTCTCTGCCTCAGCCTCCTGAG
CAGCTGGGATTATAGGCGCCTGCCACCATGCCCGGCTAATTTTTGTATTTTTAGTAGAGACAGGGTTCACCATCT
TGGCCGTGCTGGTCTTGAACTCCTGACCTTGTGATCCGCCTGCCTCGGCCACTCAAAGTGCTGGGATTGCAGGCG
TGAGCCAGCACCCGGCCACAGTATCTTTATTACAGCTCACTGCAGCCTCAATCTCCTGGGCTCAAATGATCCTCC
TGCCTCAGCCTCCCAAGCAGCTGGGACTACAGGCGCACACCACGGTGTCTGGCTAATTTTATTATTTAAAAAATG
TTTTGTAGAGACAGTCTCCCTGTGTTGCCCAGGCTGGTCTCCAACTCGTGAGCTCAAGTGATCCACGTGCCTCAG
CCTCCCAAAGTGCTGGGATTACAAGCATAAGCCACCGCACCCGGCCCCTAGTGAACATTTTACTGTATGTGTTGA
TAAATCATCTTTTGAGTTTCTGTTGTATGTGGGGACTTCCTACACTGGCTGCTGTGAAGAGGTATGGAAGAAAGG
AGAGGCTTTCTGCCTAGAAATTCTTTGAGAACACCTGAAAAGACAGTTTAATCATGTCACAACACTCTTAAGGCT
CAAGTCAGTGTTCTGGTTTCCGGTAGCTTTAGGATTGGATTCTAAACGAGGGCTGGTGGTGAGTTTGGTGTTTGT
CTCGTGTCACCCTCACCCCTCACCTCCTCAGTTTAGGATAAGAGACATAATGATTTCTACCAGAATCCAAAGTAA
ATCCAAAGGGGGAGAAAAGACATAACTGTTTTTTCTTCTACCTTTTTTTTGTTAAAGAGTTACATCTCTCACAGG
AGGAAAGAATTCAAGAGTCTATATGATTAGTTACAGAGAATATTTTCATCCCCTCTCCCTGAATAGAAAAGCAGG
GGTCACCATTTGTATCCTTACCCTTGAGGTGTTTTTGAAGATGCTGTAACTCTTGAAGTTGAGCTGAGGCAGAAA
GGTTGGAAAAATGCAGCCCTCTGGGTATTGTGGGGAGGGATGTGATGTAGTAAGAGGGTGTTTTGTGGTGCTAGG
ATTCCCACGCCACCAACTTGCAGCTTTATAAGAGCGCTACCAAGAACCACCACTGGGGAAAAGGTTCTTATTCAT
TGTTTCTGTTGGAATGTGATCTTGCTTTCTGGATTTTAGGAATTCAGGTTACTCAGTATAAAACTCTGAGAAATC
AGTGTGACTTAGTCCTTCACCTCCTAAGATAAAGTGAATATTTCTTTACAAAATAATTCATGTCCTTAATGTTAA
AGATGTAATTTTATTTTCAAAACATCTATAACATGACTTTCAGAAGCAGTTCATTTTTCCAAGATTCCTCACATT
ATACTAGATAAATAATAGGCCCTCAGTTAATACCCTTCAGTTATTGAATTAATCTAGTTTGTGGAATGAGGTGTA
TCCTGCCAACTTCCCTCTGCTCCCAAGTACACTCTGAGAGGTAAAATGCTCTGGGAAATGGAACAAGAATCGAGT
GGATGCTGACTCTGTGTGCCCACCTCCTCAACTGATTGATA**ATG**GTTGACCTTGGGCAAGTCACTTCTTTCAATG
CCTCAGTTCCCCATCTGTCAAATGGGGTTAATAATACTGACCTACCTCACAGGGGTGTTGTTGTGAGGCATTGTA
AATCAAAGTTAATAGAATACTTCAGGGTCCTCTGTGGAGGATGTCTTGAGCCAGAGTTTAAGCCTGACACACAGG
CTTTGGTCCTCACTGAGCTGTCTCCAAGACTGGAACTACTTAGTGACTCGGCAAATTTTCTGCCCCCCACCCCTC
ATCAAAGCTGC**TAG**TTCAGATGTTGACAGTGTTTTCATGAATGTTGGAATCTTACTAGTCCAGACTTACTTAGGA
TGTTGTTGGGGAAGGCACTTGGGATTTTCTGTGTCTTGCATTCACAGAGGGAGGCCATTTCAGATTCAAGAGCAT
TGGATTAGGGAATCGTGAGGCAGGGATGCTACTGCGTATTTCTCTCTGCAGGTTGGGGATTAAAGTTCCTTTCCC
CATGGGTTTGAAGCAGACTCAGACTGTCTCAGGATCAAAGCAACCCTCAATGGTTTTGATTTATGTCATTGCTTA
CCACTCCCCAACCAATCCCAGGACAGCTGGGTCACTGTACCCCTTTGTGGTATCTGTACCTGGGCCTCTCCTTCC
TCATAGGGACCAGCTGATTGAATAAATGTGACCACCTTATTTCCACCCCCCACCCCCAAAAGCTACATTGGAATT
ATTTTTCCTAGAAATGTGTATAACACTCAGAATTGGGCATTGATCCTTAAAGCTTCATCCCATTCACCGTATTCA
ACATCTGTCATCTCTTAGTGTCTGCAGTCTGAACCTAACCTTGACCTTTTTTCCCTCTGGTTTGAGAAAACTTTG
GACACTATTTCTACTTGGCCAGGTGTGGGCTCAAGAGCCTTACTCTTTCCATCTCAGTTTAGGGGCGCAGCCAGC
TCCTCTTCCCAATAGGGCTCTTTCTGCTTTCCCTCTCCTTGGCCCTAGATTTGTAATCCATGAAAAAGCACAAGG
TCCTGGCTCCTTGCGGTCACATTCTGGTTCTCTGTGTTTTGTGGACTCTGCTCTCACTGTTCACCCAGCACTAGC
AGTACCAGATGGTTCTGTGGAGTCCTGGGGAATGGAGAGAGCACAGTCTGACTCCCTGCCAAGTAGCCAGGAGTT
GACTTGCCCATGGTCCGCTGGCTTTCCCACCACTTCCTACAGGATGGGATCTAAGAGACTCAAGAGCTGGGTTTC
TTTCAGCACTCTGTACTGTCCCAAATAGCAAACAAATCACTTTGTAGCCAGATTTCTGAATGGAAATGAGAAATT
GAATTCTCCATGGACTTTTAGGTTTATGGGGGAGTTTTAGCTGTGTTTCTTGGTTTTATTTCAGCCAAACATGTC
TGCTTTTGATTTTTTTTTTAAAGTATAAGTGGTCTATATATATGTTCACCTTTTAAATGTAAATGTTTAAAAAGT
AAGCATTTATGTGTTTCCATAACTGACATCTGATGCAGACCTCATTCTCTCCCCCTCTTCTACCCTCCTCTTTTC
CCCCTTTTCATACTCTTGTATTGGTTCTAATAAATGGTTGCTTTTC

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FIGURE 3349

GGAGCACCCATTTTAAACCTGGAGAGAACCATGATGTTTTCTTCTTCAAATAACAATCTAGTTTTTTTTCCCCCA
GTACTAAAATTGTATTGTCTTTCAGACAATATAATTTTTATTTAAAATTGGAACATACTATCTTCATGCTTTCTA
AGCTAAATCTTCATTTAGATTTCACTCCTCAGTAGATCCCAGAGAAGAAGCTATATAGGATCCAGATTCAAATTT
AACAGTGTCTTCTACTTTTTTAGTTATGTTTTCTATCAACTCCTGCTGCCTTTTCAAATACGGATATTTTTCAGG
AGACTCTTCTACTTGTCCACTGACTGTATTTTTTCCTTTTTGATCCGTAGCCCTGGTTAAATGGCTGACATCCTT
CCGTGGATGATTCTTGGAGGTAGTCTCAGAATTCCAAAGTGATTGTCTGTCTTCTTCTTGTCTTGATCCTA**ATG**C
AGACATTCACCTCTATTATTTATTTATTTTTTTTAGACAGAGTCTCGCTCTGTCACCAGGCTGGAGTGCAGTGGC
ACAATCTTGGCTTACTGTACCCTCCACCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCTCGAGTAGCTGGG
ACTACAGGTGTGTGCCACCATGCCCAGCTAATTTTTGTATTTTTGGTAGAGATGGGGTTTTACCATGTTTGCCAG
GATGGTCTCGATTTCCTGACCTTGTGATCTGCCCACCTTGGCCTCCCAAAGTGCTGGAATTACAGGCA**TGA**GCCA
CCGTGCCTGGCCACCTCTATTAAATTTTTGTGGACAAAAATAAAATTGTCATTATTTGTTTGCTCTCATGGAGCA
CTTTCAGTAATACAATTTTTTTTAAATTCCAGTTGCCCTCTTTGTTGCTCTGTCCTCTGTAATACCTGACTTTGC
TAAAGACTTGAGGGGTGGTTTCAGAGGAGGGTCAGGTGATGGGAAGGCAGGATGAGAAAAGCCCTGGACTTGCAT
GTTTGAGAAGGCTTCCAACCACATCTTCACTCAGACTCTTGGAATTCCTGTCCCCAAAACAAGCTTCTGTTTTTT
GCTCACAATGCTATATTTCTAAATTTTTCCTGAATTACTGAGAAGCAGTCATTAGCTTTGTTAAGTTTGGTTTGG
GGACATTGTTGGTATCAAAAATCGAAGTCTTATTCATTTGATGTAGGCCATGAATCATCAATAACTGGTTGCTGG
AAAGCTTGACTACCATCCACTGGGGTGCTATTTTGAGAAGGATTTTTGGGTATCTTTATAGTCTGCAATTAGTTG
ATGATTGCTTTCTAGTTTATCAACTGCATTTATATTTGCTTTTCTGTTCATGGAAAATCCTTTATTTGCTGGGGT
TTTTTGTTTGTTTGTTTGTTTTTCCCACTTACAGCAAGTAAAAGTGGTCTGAGGTTATCCTTGTTTTTCTTCGCG
GTTTGCCATGTGTGAAAGTAGATTTCCTGCTATTGATATATTCTCATTATAGACAGAATAGTGGAGAACAGTGTT
GCCATGGACAAAATCCAGTTTTGGTCCACTCTGGGGAGCATTTGGACCTGTGGTGCTTCTAACAATTAAAAGTCT
AGATGGTCCTTGACTGTCCCCCAGCCATACTGCATACTACTTTGTGCATTCTACTTTGTGTCATTAATGAAAGAT
TGGTTCTGTCCCTGTAACTTAGGCATTTATTATTCTTAACTCTTCATTCCTGTTCTGTAGCCACCCAGCAGTCCA
TTTTCCCTATGTTCAGGCCAAACCACAGGGCATTGGGGAAGGTTTTTGGGATTTTCTTATTGAGATTTTGTTGAA
TCTGTAGTTTACCCCAGCTTTCCTAAGGTACAGTGAGGGGTTGGAGGGATCTGTGTTTGGCCCGGGGAGCAATTG
TCTCTACCTTAAGGTTCAGTTTTGAGGGCATAAAATACTACTTTGCAATGTCATGAGAACACCGTTAGATCTGAA
ATGTGGAAATGGTTTCTCACAATTTAAAGGAAAAACCCACTTTGCACCCATGATCCCATCATTTTGGTTGAGATT
TTAGAAT

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FIGURE 3350

GGAAGAGCCGAGACTGCGAAGGAGAACGCAGCAAGCCCAGGCGGCGGTGGAAAGGCTGGAGGACACACCTAAACA
TGTGGAATCCCAATGCCGGGCAGCCAGGGCCAAATCCATATCCCCCCAATATTGGGTGCCCTGGAGGTTCCAATC
CTGCCCACCCACCACCTATTAATCCACCCTTTCCCCCAGGCCCCTGTCCTCCTCCCCCAGGAGCTCCCCATGGCA
ATCCAGCTTTCCCCCCAGGTGGGCCCCCTCATCCTGTGCCACAGCCAGGGTATCCAGGATGCCAACCGTTGGGTC
CCTACCCTCCTCCATACCCACCGCCTGCCCCTGGAATCCCTCCTGTGAATCCCTTGGCTCCTGGCATGGTTGGAC
CAGCAGTGATAGTAGACAAGAAGATGCAGAAGAAAATGAAGAAAGCTCATAAAAAAGATGCACAAGCACCAAAAGC
ACCACAAGTACCACAAGCATGGCAAGCATTCCTCCTCTTCCTCCTCCTCTTCCAGCAGTGATTCTGACTGAATAC
AGGCCCTGGACCCTTCCCTCAAGTCTCACCAGTTCTGCTCTCCCATCAAGCTTCAGATGCCATGTTGTACTGGGG
GAATGTAGCCCTTGTGCTCCCCACCCCCTACCTCCACCTGAGCCTCACCCTGCTGTTGAGCCCTGAGTGGCTAGG
GGAAATGGGAAGAGGATTGCCATGGCCTGGCCATCTTGTTGCTGCTTGGTTAGATCATATAGCTAATGAATTAGG
CAGGGGAGCTATTTTTTGAAGATGATGAACTAAATGTTGAAGACAAGTTTGAGATCTGTAAAATGTGATTTTTTA
CTTCCACTTATAATACTTGTGATTGGGGAGGTTTGTGGAAATTCAATTATGATGAAAAACCTATCTTTTTTGTAA
TGTTGGCATACTTGGGGAATTTAGTGGCAAATACATTCCCCAGCAGGCCTTTTGTTGGTTGCACTAACTGCAAGG
TTGCTGGGAAGTAGAGTCCATTTGGTTGATGAGCTTTGACTGCGGTTTTGGAACCTTACCTCTCCTCCTTAGCCC
AATATGCTGTCTCGGGTCCTATTCAAATAAAGTTATTTCTCCTGG

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FIGURE 3351

TTTAACTGTGCTATGGAGTAGAAGCAGGAGGTTTTCAACCTAGTCACAGAGCAGCACCTACCCCCTCCTCCTTTC
CACACCTGCAAACTCTTTTACTTGGGCTGAATATTTAGTGTAATTACATCTCAGCTTTGAGGGCTCCTGTGGCAA
ATTCCCGGATTAAAAGGTTCCCTGGTTGTGAAAATACATGAGATAAATCATGAAGGCCACTATCATCCTCCTTCT
GCTTGCACAAGTTTCCTGGGCTGGACCGTTTCAACAGAGAGGCTTATTTGACTTTATGCTAGAAGATGAGGCTTC
TGGGATAGGCCCAGAAGTTCCTGATGACCGCGACTTCGAGCCCTCCCTAGGCCCAGTGTGCCCCTTCCGCTGTCA
ATGCCATCTTCGAGTGGTCCAGTGTTCTGATTTGGGTCTGGACAAAGTGCCAAAGGATCTTCCCCCTGACACAAC
TCTGCTAGACCTGCAAAACAACAAAATAACCGAAATCAAAGATGGAGACTTTAAGAACCTGAAGAACCTTCACGC
ATTGATTCTTGTCAACAATAAAATTAGCAAAGTTAGTCCTGGAGCATTTACACCTTTGGTGAAGTTGGAACGACT
TTATCTGTCCAAGAATCAGCTGAAGGAATTGCCAGAAAAAATGCCCAAAACTCTTCAGGAGCTGCGTGCCCATGA
GAATGAGATCACCAAAGTGCGAAAAGTTACTTTCAATGGACTGAACCAGATGATTGTCATAGAACTGGGCACCAA
TCCGCTGAAGAGCTCAGGAATTGAAAATGGGGCTTTCCAGGGAATGAAGAAGCTCTCCTACATCCGCATTGCTGA
TACCAATATCACCAGCATTCCTCAAGGTCTTCCTCCTTCCCTTACGGAATTACATCTTGATGGCAACAAAATCAG
CAGAGTTGATGCAGCTAGCCTGAAAGGACTGAATAATTTGGCTAAGTTGGGATTGAGTTTCAACAGCATCTCTGC
TGTTGACAATGGCTCTCTGGCCAACACGCCTCATCTGAGGGAGCTTCACTTGGACAACAACAAGCTTACCAGAGT
ACCTGGTGGGCTGGCAGAGCATAAGTACATCCAGGTTGTCTACCTTCATAACAACAATATCTCTGTAGTTGGATC
AAGTGACTTCTGCCCACCTGGACACAACACCAAAAAGGCTTCTTATTCGGGTGTGAGTCTTTTCAGCAACCCGGT
CCAGTACTGGGAGATACAGCCATCCACCTTCAGATGTGTCTACGTGCGCTCTGCCATTCAACTCGGAAACTATAA
GTAATTCTCAAGAAAGCCCTCATTTTTATAACCTGGCAAAATCTTGTTAATGTCATTGCTAAAAAATAAATAAAA
GCTAGATACTGGAAACCTAACTGCAATGTGGATGTTTTACCCACATGACTTATTATGCATAAAGCCAAATTTCCA
GTTTAAGTAATTGCCTACAATAAAAAGAAATTTTGCCTGCCATTTTCAGAATCATCTTTTGAAGCTTTCTGTTGA
TGTTAACTGAGCTACTAGAGATATTCTTATTTCACTAAATGTAAAATTTGGAGTAAATATATATGTCAATATTTA
GTAAAGCTTTTCTTTTTTAATTTCCAGGAAAAAATAAAAAGAGTATGAGTCTTCTGTAATTCATTGAGCAGTTAG
CTCATTTGAGATAAAGTCAAATGCCAAACACTAGCTCTGTATTAATCCCCATCATTACTGGTAAAGCCTCATTTG
AATGTGTGAATTCAATACAGGCTATG

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FIGURE 3352

GTGGATTCTTGTCCATAGTGCATCTGCTTTAAGAATTAACGAAAGCAGTGTCAAGACAGTAAGGATTCAAACCAT
TTGCCAAAAATGAGTCTAAGTGCATTTACTCTCTTCCTGGCATTGATTGGTGGTACCAGTGGCCAGTACTATGAT
TATGATTTTCCCCTATCAATTTATGGGCAATCATCACCAAACTGTGCACCAGAATGTAACTGCCCTGAAAGCTAC
CCAAGTGCCATGTACTGTGATGAGCTGAAATTGAAAAGTGTACCAATGGTGCCTCCTGGAATCAAGTATCTTTAC
CTTAGGAATAACCAGATTGACCATATTGATGAAAAGGCCTTTGAGAATGTAACTGATCTGCAGTGGCTCATTCTA
GATCACAACCTTCTAGAAAACTCCAAGATAAAAGGGAGAGTTTTCTCTAAATTGAAACAACTGAAGAAGCTGCAT
ATAAACCACAACAACCTGACAGAGTCTGTGGGCCCACTTCCCAAATCTCTGGAGGATCTGCAGCTTACTCATAAC
AAGATCACAAAGCTGGGCTCTTTTGAAGGATTGGTAAACCTGACCTTCATCCATCTCCAGCACAATCGGCTGAAA
GAGGATGCTGTTTCAGCTGCTTTTAAAGGTCTTAAATCACTCGAATACCTTGACTTGAGCTTCAATCAGATAGCC
AGACTGCCTTCTGGTCTCCCTGTCTCTCTTCTAACTCTCTACTTAGACAACAATAAGATCAGCAACATCCCTGAT
GAGTATTTCAAGCGTTTTAATGCATTGCAGTATCTGCGTTTATCTCACAACGAACTGGCTGATAGTGGAATACCT
GGAAATTCTTTCAATGTGTCATCCCTGGTTGAGCTGGATCTGTCCTATAACAAGCTTAAAAACATACCAACTGTC
AATGAAAACCTTGAAAACTATTACCTGGAGGTCAATCAACTTGAGAAGTTTGACATAAAGAGCTTCTGCAAGATC
CTGGGGCCATTATCCTACTCCAAGATCAAGCATTTGCGTTTGGATGGCAATCGCATCTCAGAAACCAGTCTTCCA
CCGGATATGTATGAATGTCTACGTGTTGCTAACGAAGTCACTCTTAATTAATATCTGTATCCTGGAACAATATTT
TATGGTTATGTTTTTCTGTGTGTCAGTTTTCATAGTATCCATATTTTATTACTGTTTATTACTTCCATGAATTTT
AAAATCTGAGGGAAATGTTTTGTAAACATTTATTTTTTTTAAAGAAAAGATGAAAGGCAGGCCTATTTCATCACA
AGAACACACACATATACACGAATAGACATCAAACTCAATGCTTTATTTGTAAATTTAGTGTTTTTTTATTTCTAC
TGTCAAATGATGTGCAAAACCTTTTACTGGTTGCATGGAAATCAGCCAAGTTTTATAATCCTTAAATCTTAATGT
TCCTCAAAGCTTGGATTAAATACATATGGATGTTACTCTCTTGCACCAAATTATCTTGATACATTCAAATTTGTC
TGGTTAAAAAATAGGTGGTAGATATTGAGGCCAAGAATATTGCAAAATACATGAAGCTTCATGCACTTAAAGAAG
TATTTTTAGAATAAGAATTTGCATACTTACCTAGTGAAACTTTTCTAGAATTATTTTTCACTCTAAGTCATGTAT
GTTTCTCTTTGATTATTTGCATGTTATGTTTAATAAGCTACTAGCAAAATAAAACATAGCAAATGGC

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FIGURE 3353

GCAGAACAAAGAATACTCCACTTTTGATAGATGGGGTTACCAGGATTCAGGCTACATGGCCTGAGGCAAGGTCAC
AACATGAGTGACAGAATGTGTCCTGGAAGCCAGGCATCCTCTGGGGGTGTATTTGGGGCGCTCAACAAGGCTTGAT
CGAGCTTTGGGGGTAGATCTAGCTATTCCATGGGGATTCTTTTCAGAATTGCTGTTTTCGGTAACTAATTCCATG
ACCAGGTCCATGGCATTGGATGACATTGCGCTACACTGTTGCTCACCCGGGTCACCCGTCCTCACAGGTTGGATG
GCAAGCATGTTGTGTTCGGTCACGTCAAAGAGGGCATGGACGTCGTGAAGAAAAATAGAATCTTTCGGCTCTAAG
AGTGGGAGGACATCCAAGAAGATTGTCATCACAGACTGTGGCCAGTTGAGCTAATCTGTGGCCCAGGGTGCTGGC
ATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTGGCCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATAC
GTGTGCCCACTCCACTGTCACAGTGTGCCTGAGGAAGGCTGCTAGGGATGTTAGACCTCGGCCAGGACCCACCAC
ATTGCTTCCTAATACCCACCCTTCCTCACGACCTCATTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCCT
TGTCAAGCATTGCCTGTGATTGCCCAGCCCAGATTCATCTGTGCCTTGGACATGGTGATGGTGATGGGTTGCCAT
CCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAGTCAGTTTTGCAAAAGGACTCTAATACCTGTTTAATATTG
TCTTCCTAATTGGGATAATTTAATTAACAAGATTGACTAGAAGTGAAACTGCAACACTAACTTCCCCGTGCTGTG
GTGTGACCTGAGTTGGTGACACAGGCCACAGACCCCAGAGCTTGGCTTTTGAAACACAACTCAGGGCTTTTGTGA
AGGTTCCCCCGCTGAGATCTTTCCTCCTGGTTACTGTGAAGCCTGTTGGTTTGCTGCTGTCGTTTTTGAGGAGGG
CCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAACCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTG
TTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCCGGAGGGAAGCATTTCCTGGTAGGCTTTGATTTTTCTGTG
TGTTAAAGAAATTCAATCTACTCATGATGTGTTATGCATAAAACATTTCTGGAACATGGATTTGTGTTCACCTTA
AATGTGAAAATAAATCCTATTTTCTATGG

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FIGURE 3354A

GGACGCACAGGCATTCCCCGCGCCCCTCCAGCCCTCGCCGCCCTCGCCACCGCTCCCGGCCGCCGCGCTCCGGTA
CACACAGGATCCCTGCTGGGCACCAACAGCTCCACCATGGGGCTGGCCTGGGGACTAGGCGTCCTGTTCCTGATG
CATGTGTGTGGCACCAACCGCATTCCAGAGTCTGGCGGAGACAACAGCGTGTTTGACATCTTTGAACTCACCGGG
GCCGCCCGCAAGGGGTCTGGGCGCCGACTGGTGAAGGGCCCCGACCCTTCCAGCCCAGCTTTCCGCATCGAGGAT
GCCAACCTGATCCCCCCTGTGCCTGATGACAAGTTCCAAGACCTGGTGGATGCTGTGCGGGCAGAAAAGGGTTTC
CTCCTTCTGGCATCCCTGAGGCAGATGAAGAAGACCCGGGGCACGCTGCTGGCCCTGGAGCGGAAAGACCACTCT
GGCCAGGTCTTCAGCGTGGTGTCCAATGGCAAGGCGGGCACCCTGGACCTCAGCCTGACCGTCCAAGGAAAGCAG
CACGTGGTGTCTGTGGAAGAAGCTCTCCTGGCAACCGGCCAGTGGAAGAGCATCACCCTGTTTGTGCAGGAAGAC
AGGGCCCAGCTGTACATCGACTGTGAAAAGATGGAGAATGCTGAGTTGGACGTCCCCATCCAAAGCGTCTTCACC
AGAGACCTGGCCAGCATCGCCAGACTCCGCATCGCAAAGGGGGGCGTCAATGACAATTTCCAGGGGGTGCTGCAG
AATGTGAGGTTTGTCTTTGGAACCACACCAGAAGACATCCTCAGGAACAAAGGCTGCTCCAGCTCTACCAGTGTC
CTCCTCACCCTTGACAACAACGTGGTGAATGGTTCCAGCCCTGCCATCCGCACTAACTACATTGGCCACAAGACA
AAGGACTTGCAAGCCATCTGCGGCATCTCCTGTGATGAGCTGTCCAGCATGGTCCTGGAACTCAGGGGCCTGCGC
ACCATTGTGACCACGCTGCAGGACAGCATCCGCAAAGTGACTGAAGAGAACAAAGAGTTGGCCAATGAGCTGAGG
CGGCCTCCCCTATGCTATCACAACGGAGTTCAGTACAGAAATAACGAGGAATGGACTGTTGATAGCTGCACTGAG
TGTCACTGTCAGAACTCAGTTACCATCTGCAAAAAGGTGTCCTGCCCCATCATGCCCTGCTCCAATGCCACAGTT
CCTGATGGAGAATGCTGTCCTCGCTGTTGGCCCAGCGACTCTGCGGACGATGGCTGGTCTCCATGGTCCGAGTGG
ACCTCCTGTTCTACGAGCTGTGGCAATGGAATTCAGCAGCGCGGCCGCTCCTGCGATAGCCTCAACAACCGATGT
GAGGGCTCCTCGGTCCAGACACGGACCTGCCACATTCAGGAGTGTGACAAGAGATTTAAACAGGATGGTGGCTGG
AGCCACTGGTCCCCGTGGTCATCTTGTTCTGTGACATGTGGTGATGGTGTGATCACAAGGATCCGGCTCTGCAAC
TCTCCCAGCCCCCAGATGAACGGGAAACCCTGTGAAGGCGAAGCGCGGGAGACCAAAGCCTGCAAGAAAGACGCC
TGCCCCATCAATGGAGGCTGGGGTCCTTGGTCACCATGGGACATCTGTTCTGTCACCTGTGGAGGAGGGGTACAG
AAACGTAGTCGTCTCTGCAACAACCCCACACCCCAGTTTGGAGGCAAGGACTGCGTTGGTGATGTAACAGAAAAC
CAGATCTGCAACAAGCAGGACTGTCCAATTGATGGATGCCTGTCCAATCCCTGCTTTGCCGGCGTGAAGTGTACT
AGCTACCCTGATGGCAGCTGGAAATGTGGTGCTTGTCCCCCTGGTTACAGTGGAAATGGCATCCAGTGCACAGAT
GTTGATGAGTGCAAAGAAGTGCCTGATGCCTGCTTCAACCACAATGGAGAGCACCGGTGTGAGAACACGGACCCC
GGCTACAACTGCCTGCCCTGCCCCCCACGCTTCACCGGCTCACAGCCCTTCGGCCAGGGTGTCGAACATGCCACG
GCCAACAAACAGGTGTGCAAGCCCCGTAACCCCTGCACGGATGGGACCCACGACTGCAACAAGAACGCCAAGTGC
AACTACCTGGGCCACTATAGCGACCCCATGTACCGCTGCGAGTGCAAGCCTGGCTACGCTGGCAATGGCATCATC
TGCGGGGAGGACACAGACCTGGATGGCTGGCCCAATGAGAACCTGGTGTGCGTGGCCAATGCGACTTACCACTGC
AAAAAGGATAATTGCCCCAACCTTCCCAACTCAGGGCAGGAAGACTATGACAAGGATGGAATTGGTGATGCCTGT
GATGATGACGATGACAATGATAAAATTCCAGATGACAGGGACAACTGTCCATTCCATTACAACCCAGCTCAGTAT
GACTATGACAGAGATGATGTGGGAGACCGCTGTGACAACTGTCCCTACAACCACAACCCAGATCAGGCAGACACA
GACAACAATGGGGAAGGAGACGCCTGTGCTGCAGACATTGATGGAGACGGTATCCTCAATGAACGGGACAACTGC
CAGTACGTCTACAATGTGGACCAGAGAGACACTGATATGGATGGGGTTGGAGATCAGTGTGACAATTGCCCCTTG
GAACACAATCCGGATCAGCTGGACTCTGACTCAGACCGCATTGGAGATACCTGTGACAACAATCAGGATATTGAT
GAAGATGGCCACCAGAACAATCTGGACAACTGTCCCTATGTGCCCAATGCCAACCAGGCTGACCATGACAAAGAT
GGCAAGGGAGATGCCTGTGACCACGATGATGACAACGATGGCATTCCTGATGACAAGGACAACTGCAGACTCGTG
CCCAATCCCGACCAGAAGGACTCTGACGGCGATGGTCGAGGTGATGCCTGCAAAGATGATTTTGACCATGACAGT
GTGCCAGACATCGATGACATCTGTCCTGAGAATGTTGACATCAGTGAGACCGATTTCCGCCGATTCCAGATGATT
CCTCTGGACCCCAAAGGGACATCCCAAAATGACCCTAACTGGGTTGTACGCCATCAGGGTAAAGAACTCGTCCAG
ACTGTCAACTGTGATCCTGGACTCGCTGTAGGTTATGATGAGTTTAATGCTGTGGACTTCAGTGGCACCTTCTTC
ATCAACACCGAAAGGGACGATGACTATGCTGGATTTGTCTTTGGCTACCAGTCCAGCAGCCGCTTTTATGTTGTG
ATGTGGAAGCAAGTCACCCAGTCCTACTGGGACACCAACCCCACGAGGGCTCAGGGATACTCGGGCCTTTCTGTG
AAAGTTGTAAACTCCACCACAGGGCCTGGCGAGCACCTGCGGAACGCCCTGTGGCACACAGGAAACACCCCTGGC
CAGGTGCGCACCCTGTGGCATGACCCTCGTCACATAGGCTGGAAAGATTTCACCGCCTACAGATGGCGTCTCAGC
CACAGGCCAAAGACGGGTTTCATTAGAGTGGTGATGTATGAAGGGAAGAAAATCATGGCTGACTCAGGACCCATC
TATGATAAAACCTATGCTGGTGGTAGACTAGGGTTGTTTGTCTTCTCTCAAGAAATGGTGTTCTTCTCTGACCTG

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FIGURE 3354B

AAATACGAATGTAGAGATCCCTAATCATCAAATTGTTGATTGAAAGACTGATCATAAACCAATGCTGGTATTGCA
CCTTCTGGAACTATGGGCTTGAGAAAACCCCCAGGATCACTTCTCCTTGGCTTCCTTCTTTTCTGTGCTTGCATC
AGTGTGGACTCCTAGAACGTGCGACCTGCCTCAAGAAAATGCAGTTTTCAAAAACAGACTCAGCATTCAGCCTCC
AATGAATAAGACATCTTCCAAGCATATAAACAATTGCTTTGGTTTCCTTTTGAAAAAGCATCTACTTGCTTCAGT
TGGGAAGGTGCCCATTCCACTCTGCCTTTGTCACAGAGCAGGGTGCTATTGTGAGGCCATCTCTGAGCAGTGGAC
TCAAAAGCATTTTCAGGCATGTCAGAGAAGGGAGGACTCACTAGAATTAGCAAACAAAACCACCCTGACATCCTC
CTTCAGGAACACGGGGAGCAGAGGCCAAAGCACTAAGGGGAGGGCGCATACCCGAGACGATTGTATGAAGAAAAT
ATGGAGGAACTGTTACATGTTCGGTACTAAGTCATTTTCAGGGGATTGAAAGACTATTGCTGGATTTCATGATGC
TGACTGGCGTTAGCTGATTAACCCATGTAAATAGGCACTTAAATAGAAGCAGGAAAGGGAGACAAAGACTGGCTT
CTGGACTTCCTCCCTGATCCCCACCCTTACTCATCACCTGCAGTGGCCAGAATTAGGGAATCAGAATCAAACCAG
TGTAAGGCAGTGCTGGCTGCCATTGCCTGGTCACATTGAAATTGGTGGCTTCATTCTAGATGTAGCTTGTGCAGA
TGTAGCAGGAAAATAGGAAAACCTACCATCTCAGTGAGCACCAGCTGCCTCCCAAAGGAGGGGCAGCCGTGCTTA
TATTTTTATGGTTACAATGGCACAAAATTATTATCAACCTAACTAAAACATTCCTTTTCTCTTTTTTCCTGAATT
ATCATGGAGTTTTCTAATTCTCTCTTTTGGAATGTAGATTTTTTTTAAATGCTTTACGATGTAAAATATTTATTT
TTTACTTATTCTGGAAGATCTGGCTGAAGGATTATTCATGGAACAGGAAGAAGCGTAAAGACTATCCATGTCATC
TTTGTTGAGAGTCTTCGTGACTGTAAGATTGTAAATACAGATTATTTATTAACTCTGTTCTGCCTGGAAATTTAG
GCTTCATACGGAAAGTGTTTGAGAGCAAGTAGTTGACATTTATCAGCAAATCTCTTGCAAGAACAGCACAAGGAA
AATCAGTCTAATAAGCTGCTCTGCCCCTTGTGCTCAGAGTGGATGTTATGGGATTCTTTTTTTCTCTGTTTTATC
TTTTCAAGTGGAATTAGTTGGTTATCCATTTGCAAATGTTTTAAATTGCAAAGAAAGCCATGAGGTCTTCAATAC
TGTTTTACCCCATCCCTTGTGCATATTTCCAGGGAGAAGGAAAGCATATACACTTTTTTCTTTCATTTTTCCAAA
AGAGAAAAAAATGACAAAAGGTGAAACTTACATACAAATATTACCTCATTTGTTGTGTGACTGAGTAAAGAATTT
TTGGATCAAGCGGAAAGAGTTTAAGTGTCTAACAAACTTAAAGCTACTGTAGTACCTAAAAAGTCAGTGTTGTAC
ATAGCATAAAAACTCTGCAGAGAAGTATTCCCAATAAGGAAATAGCATTGAAATGTTAAATACAATTTCTGAAAG
TTATGTTTTTTTTCTATCATCTGGTATACCATTGCTTTATTTTTATAAATTATTTTCTCATTGCCATTGGAATAG
ATATCTCAGATTGTGTAGATATGCTATTTAAATAATTTATCAGGAAATACTGCCTGTAGAGTTAGTATTTCTATT
TTTATATAATGTTTGCACACTGAATTGAAGAATTGTTGGTTTTTTCTTTTTTTTGTTTTGTTTTTTTTTTTTTT
TTTTTTGCTTTTGACCTCCCATTTTTACTATTTGCCAATACCTTTTTCTAGGAATGTGCTTTTTTTTGTACACAT
TTTTATCCATTTTACATTCTAAAGCAGTGTAAGTTGTATATTACTGTTTCTTATGTACAAGGAACAACAATAAAT
CATATGGAAATTTATATTT

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FIGURE 3355

TGGGGGCGTCCTCCTTCGTCCCCGCCCGGCTGTCAAGCTGTGTTCTAGCGGCCGAGGGACCGAGGGGGGCTAAGA
AAGGGGGCGCCCAGCCATGCAGAGGCAAAAAGGCGCTGCGGAACGGGGTCCCCGTCGCCAGTGCTGAGGCAGGAG
GTCGGAGCCACAAGTGAGGGGCTGGGAAGCAGGACCCAGCACGGGCGTCTTGGCAGGCGGCCGGGCGCAGGGCCA
GGCTGCTGGGGACGCTCAGGGCTTTCCACCCAAGCCATGGGCGCTGTCGGGCACTCGGGGGTCCCCTCGTGGCTC
CGGCCACTCGGCGTGGGCATTACGTTGGCTTCACATCGCCATCCAGCCTCGAAGCCAACAGGACTGAAAAATAGC
TTCGGCCAAACGTTCTCCTCCCGCTAAGGAGAGGGGTCGAGTGCGTCAGCCCGAGGGGACTGGAGAGGGATGCCC
TAGCCCTCGAGGGGCGGAGGACCCGCGGTTGAAGGAGGCAGCGGGAGCGGAGAGCGCCCTCCTTGACCATCGAAT
GCCTCCTTCTGTGTTTCCATTCCTGTCGAGTGGGCTGGGCCACGCTGACCACCCTGGAGGAGGGACGGACGACGC
TCGGCGGGCTCTGACCGTGCCGCCTTCTTGTGGCTGCTGACTGGGATCCAGGAGGGAGTGGGCATGGGGCGCAGC
CGCGCCTCCCTCCCTCCCCGCCTCCCGGGCGCCGGGGTTGGCGATGTGGAGACGTGAGGGGACCCGTCGGCTGCT
CCGGCTTCTCCAGGACTCCGCCAGGCGCCCGCGCGTCCCTCCTCACCCGGAGGAGGAGAGGCTCCGCGCGGGGCT
CCGAGGCGGGCGGCGCGCGGAGCCGGAGTCCCAGCCTCGCC**ATG**GGACATAACGGGAGCTGGATCTCTCCAAATG
CCAGCGAGCCGCACAACGCGTCCGGCGCCGAGGCTGCGGGTGTGAACCGCAGCGCGCTCGGGGAGTTCGGCGAGG
CGCAGCTGTACCGCCAGTTCACCACCACCGTGCAGGTCGTCATCTTCATAGGCTCGCTGCTCGGAAACTTCATGG
TGTTATGGTCAACTTGCCGCACAACCGTGTTCAAATCTGTCACCAACAGGTTCATTAAAAACCTGGCCTGCTCGG
GGATTTGTGCCAGCCTGGTCTGTGTGCCCTTCGACATCATCCTCAGCACCAGTCCTCACTGTTGCTGGTGGATCT
ACACCATGCTCTTCTGCAAGGTCGTCAAATTTTTGCACAAAGTATTCTGCTCTGTGACCATCCTCAGCTTCCCTG
CTATTGCTTTGGACAGGTACTACTCAGTCCTCTATCCACTGGAGAGGAAAATATCTGATGCCAAGTCCCGTGAAC
TGGTGATGTACATCTGGGCCCATGCAGTGGTGGCCAGTGTCCCTGTGTTTGCAGTAACCAATGTGGCTGACATCT
ATGCCACGTCCACCTGCACGGAAGTCTGGAGCAACTCCTTGGGCCACCTGGTGTACGTTCTGGTGTATAACATCA
CCACGGTCATTGTGCCTGTGGTGGTGGTGTTCCTCTTCTTGATACTGATCCGACGGGCCCTGAGTGCCAGCCAGA
AGAAGAAGGTCATCATAGCAGCGCTCCGGACCCCACAGAACACCATCTCTATTCCCTATGCCTCCCAGCGGGAGG
CCGAGCTGCACGCCACCCTGCTCTCCATGGTGATGGTCTTCATCTTGTGTAGCGTGCCCTATGCCACCCTGGTCG
TCTACCAGACTGTGCTCAATGTCCCTGACACTTCCGTCTTCTTGCTGCTCACTGCTGTTTGGCTGCCCAAAGTCT
CCCTGCTGGCAAACCCTGTTCTCTTTCTTACTGTGAACAAATCTGTCCGCAAGTGCTTGATAGGGACCCTGGTGC
AACTACACCACCGGTACAGTCGCCGTAATGTGGTCAGTACAGGGAGTGGCATGGCTGAGGCCAGCCTGGAACCCA
GCATACGCTCGGGTAGCCAGCTCCTGGAGATGTTCCACATTGGGCAGCAGCAGATCTTTAAGCCCACAGAGGATG
AGGAAGAGAGTGAGGCCAAGTACATTGGCTCAGCTGACTTCCAGGCCAAGGAGATATTTAGCACCTGCCTGGAGG
GAGAGCAGGGGCCACAGTTTGCGCCCTCTGCCCCACCCCTGAGCACAGTGGACTCTGTATCCCAGGTGGCACCGG
CAGCCCCTGTGGAACCTGAAACATTCCCTGATAAGTATTCCCTGCAGTTTGGCTTTGGGCCTTTTGAGTTGCCTC
CTCAGTGGCTCTCAGAGACCCGAAACAGCAAGAAGCGGCTGCTTCCCCCCTTGGGCAACACCCCAGAAGAGCTGA
TCCAGACAAAGGTGCCCAAGGTAGGCAGGGTGGAGCGGAAGATGAGCAGAAACAATAAAGTGAGCATTTTTCCAA
AGGTGGATTCC**TAG**CAAGGATTGTAAATTCTTGGAAGCAACGGGGAGCTTCCATATTCCCACCAGAGTGTGGGAA
TGCTGTGGCCATGTGATTGTATGATCTCCTTGCAACTCAGTGTGAGTTGATTCCTCCAATATGGGCCAGATGCTT
TTGAATGATAGGGAAATCTACATAAAATCCAGTGTCCTCTTTATTGAGGGAGTATATGTATCCATCTCAGTGATC
CATGTCCTTAGTGAAGTCCACATTATTCTCTGTGGGGACAAGAGCTGGGCAGTTTTGAATGGGTCTTGAGGTGGG
TACCCCATGTGCACTTTCTGAGGATGCCTCACTTCCCTGGGCTCTGCAGAGAACACACAGAGAGAAGACTTTCAG
AGCTCACAGGAGCAGGGAGCAGGAGCACTCTAAGGGAATTC

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FIGURE 3356A

GGTCAAAGAGCCCCCTGAAATCAATTTAGTTTTGTACCCTCAAGGCCTAACTGGTGAAGAAGTATATGTAAAAGT
GGATTTGAGGGTTAAATGCCCACCTACCTATCCAGATGTAGTTCCTGAAATAGAGTTAAAAAATGCCAAAGGTCT
ATCAAATGAAAGTGTCAATTTGTTAAAATCTCGCCTAGAAGAACTGGCCAAGAAACACTGTGGGGAGGTGATGAT
CTTTGAACTGGCTTACCACGTGCAGTCATTTCTCAGCGAGCATAACAAGCCCCCTCCCAAGTCTTTTCATGAAGA
AATGCTGGAAAGGCGGGCTCAGGAGGAGCAGCAGAGGCTGTTGGAGGCCAAGCGGAAAGAAGAGCAGGAGCAACG
TGAAATCCTGCATGAGATTCAGAGAAGGAAAGAAGAGATAAAAGAAGAGAAAAAAAGGAAAGAAATGGCTAAGCA
GGAACGTTTGGAAATTGCTAGTTTGTCAAACCAAGATCATACCTCTAAGAAGGACCCAGGAGGACACAGAACGGC
TGCCATTCTACATGGAGGCTCTCCTGACTTTGTAGGAAATGGTAAACATCGGGCAAACTCCTCAGGAAGGTCTAG
GCGAGAACGTCAGTATTCTGTATGTAATAGTGAAGATTCTCCTGGCTCTTGTGAAATTCTGTATTTCAATATGGG
GAGTCCTGATCAGCTCATGGTGCACAAAGGGAAATGTATTGGCAGTGATGAACAACTTGGAAAATTAGTCTACAA
TGCTTTGGAAACAGCCACTGGTGGCTTTGTCTTGTTGTATGAGTGGGTCCTTCAGTGGCAGAAAAAAATGGGTCC
ATTCCTTACCAGTCAAGAAAAAGAGAAGATTGATAAGTGCAAAAAGCAGATTCAAGGAACAGAAACAGAATTCAA
CTCACTGGTAAAATTGAGCCATCCAAATGTAGTACGCTACCTTGCAATGAATCTCAAAGAGCAAGACGACTCCAT
CGTGGTGGACATTTTAGTGGAGCACATTAGTGGGGTCTCTCTTGCTGCACACCTGAGCCACTCAGGCCCCATCCC
TGTGCATCAGCTTCGCAGGTACACAGCTCAGCTCCTGTCAGGCCTTGATTATCTGCACAGCAATTCTGTGGTGCA
TAAGGTCCTGAGTGCATCTAATGTCTTGGTGGATGCAGAAGGCACCGTCAAGATTACGGACTATAGCATTTCTAA
GCGCCTCGCAGACATTTGCAAGGAGGATGTGTTTGAGCAAACCCGAGTTCGTTTTAGTGACAATGCTCTGCCTTA
TAAAACGGGGAAGAAAGGAGATGTTTGGCGTCTTGGCCTTCTGCTGCTGTCCCTCAGCCAAGGACAGGAATGTGG
AGAGTACCCTGTGACCATCCCTAGTGACTTACCAGCTGACTTTCAAGATTTTCTAAAGAAATGTGTGTGCTTGGA
TGACAAGGAAAGATGGAGTCCCCAGCAGTTGTTGAAACACAGCTTTATAAATCCCCAGCCAAAAATGCCTCTAGT
GGAACAAAGTCCTGAAGATTCTGAAGGACAAGATTATGTTGAGACTGTTATTCCTAGCAACCGGCTACCCAGTGC
TGCCTTCTTTAGTGAGACACAGAGACAGTTTTCCCGATACTTCATTGAGTTTGAAGAATTACAACTTCTTGGTAA
AGGAGCTTTTGGAGCTGTCATCAAGGTGCAGAACAAGTTGGACGGCTGCTGCTACGCAGTGAAGCGCATCCCCAT
CAACCCGGCCAGCCGGCAGTTCCGCAGGATCAAGGGCGAAGTGACACTGCTGTCACGGCTGCACCATGAGAACAT
TGTGCGCTACTACAACGCCTGGATCGAGCGGCACGAGCGGCCGGCGGGACCGGGGACGCCGCCCCCGGACTCCGG
GCCCCTGGCCAAGGATGACCGAGCTGCACGCGGGCAGCCGGCGAGCGACACAGACGGCCTGGACAGCGTAGAGGC
CGCCGCGCCGCCACCCATCCTCAGCAGCTCGGTGGAGTGGAGCACTTCGGGCGAGCGCTCGGCCAGTGCCCGTTT
CCCCGCCACCGGCCCGGGCTCCAGCGATGACGAGGACGACGACGAGGACGAGCACGGTGGCGTCTTCTCCCAGTC
CTTCCTGCCTGCTTCAGATTCTGAAAGTGATATTATCTTTGACAATGAAGATGAGAACAGTAAAAGTCAGAATCA
GGATGAAGATTGCAATGAAAAGAATGGCTGCCATGAAAGTGAGCCATCAGTGACGACTGAGGCTGTGCACTACCT
ATACATCCAGATGGAGTACTGTGAGAAGAGCACTTTACGAGACACCATTGACCAGGGACTGTATCGAGACACCGT
CAGACTCTGGAGGCTTTTTCGAGAGATTCTGGATGGATTAGCTTATATCCATGAGAAAGGAATGATTCACCGGGA
TTTGAAGCCTGTCAACATTTTTTTGGATTCTGATGACCATGTGAAAATAGGTGATTTTGGTTTGGCGACAGACCA
TCTAGCCTTTTCTGCTGACAGCAAACAAGACGATCAGACAGGAGACTTGATTAAGTCAGACCCTTCAGGTCACTT
AACTGGGATGGTTGGCACTGCTCTCTATGTAAGCCCAGAGGTCCAAGGAAGCACCAAATCTGCATACAACCAGAA
AGTGGATCTCTTCAGCCTGGGAATTATCTTCTTTGAGATGTCCTATCACCCCATGGTCACGGCTTCAGAAAGGAT
CTTTGTTCTCAACCAACTCAGAGATCCCACTTCGCCTAAGTTTCCAGAAGACTTTGACGATGGAGAGCATGCAAA
GCAGAAATCAGTCATCTCCTGGCTGTTGAACCACGATCCAGCAAAACGGCCCACAGCCACAGAACTGCTCAAGAG
TGAGCTGCTGCCCCCACCCCAGATGGAGGAGTCAGAGCTGCATGAAGTGCTGCACCACACGCTGACCAACGTGGA
TGGGAAGGCCTACCGCACCATGATGGCCCAGATCTTCTCGCAGCGCATCTCCCCTGCCATCGATTACACCTATGA
CAGCGACATACTGAAGGGCAACTTCTCAATCCGTACAGCCAAGATGCAGCAGCATGTGTGTGAAACCATCATCCG
CATCTTTAAAAGACATGGAGCTGTTCAGTTGTGTACTCCACTACTGCTTCCCCGAAACAGACAAATATATGAGCA
CAACGAAGCTGCCCTATTCATGGACCACAGCGGGATGCTGGTGATGCTTCCTTTTGACCTGCGGATCCCTTTTGC
AAGATATGTGGCAAGAAATAATATATTGAATTTAAAACGATACTGCATAGAACGTGTGTTCAGGCCGCGCAAGTT
AGATCGATTTCATCCCAAAGAACTTCTGGAGTGTGCATTTGATATTGTCACTTCTACCACCAACAGCTTTCTGCC
CACTGCTGAAATTATCTACACTATCTATGAAATCATCCAAGAGTTTCCAGCACTTCAGGAAAGAAATTACAGTAT
TTATTTGAACCATACCATGTTATTGAAAGCAATACTCTTACACTGTGGGATCCCAGAAGATAAACTCAGTCAAGT
CTACATTATTCTGTATGATGCTGTGACAGAGAAGCTGACGAGGAGAGAAGTGGAAGCTAAATTTTGTAATCTGTC

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FIGURE 3356B

TTTGTCTTCTAATAGTCTGTGTCGACTCTACAAGTTTATTGAACAGAAGGGAGATTTGCAAGATCTTATGCCAAC
AATAAATTCATTAATAAAACAGAAAACAGGTATTGCACAGTTGGTGAAGTATGGCTTAAAAGACCTAGAGGAGGT
TGTTGGACTGTTGAAGAAACTCGGCATCAAGTTACAGGTCTTGATCAATTTGGGCTTGGTTTACAAGGTGCAGCA
GCACAATGGAATCATCTTCCAGTTTGTGGCTTTCATCAAACGAAGGCAAAGGGCTGTACCTGAAATCCTCGCAGC
TGGAGGCAGATATGACCTGCTGATTCCCCAGTTTAGAGGGCCACAAGCTCTGGGGCCAGTTCCCACTGCCATTGG
GGTCAGCATAGCTATAGACAAGATATCTGCTGCTGTCCTCAACATGGAGGAATCTGTTACAATAAGCTCTTGTGA
CCTCCTGGTTGTAAGTGTTGGCCAGATGTCTATGTCCAGGGCCATCAACCTAACCCAGAAACTCTGGACAGCAGG
CATCACAGCAGAAATCATGTACGACTGGTCACAGTCCCAAGAGGAATTACAAGAGTACTGCAGACATCATGAAAT
CACCTATGTGGCCCTTGTCTCGGATAAAGAAGGAAGCCATGTCAAGGTTAAGTCTTTCGAGAAGGAAAGGCAGAC
AGAGAAGCGTGTGCTGGAGACTGAACTTGTGGACCATGTACTGCAGAAACTGAGGACTAAAGTCACTGATGAAAG
GAATGGCAGAGAAGCTTCCGATAATCTTGCAGTGCAAAATCTGAAGGGGTCATTTTCTAATGCTTCAGGTTTGTT
TGAAATCCATGGAGCAACAGTGGTTCCCATTGTGAGTGTGCTAGCCCCGGAGAAGCTGTCAGCCAGCACTAGGAG
GCGCTATGAAACTCAGGTACAAACTCGACTTCAGACCTCCCTTGCCAACTTACATCAGAAAAGCAGTGAAATTGA
AATTCTGGCTGTGGATCTACCCAAAGAAACAATATTACAGTTTTTATCATTAGAGTGGGATGCTGATGAACAGGC
ATTTAACACAACTGTGAAGCAGCTGCTGTCACGCCTGCCAAAGCAAAGATACCTCAAATTAGTCTGTGATGAAAT
TTATAACATCAAAGTAGAAAAAAAAGGTGTCTGTGCTATTTCTGTACAGCTATAGAGATGACTACTACAGAATCTT
ATTT**TAA**CCCTAAAGAACTGTCGTTAACCTCATTCAAACAGACAGAGGCTTATACTGGAATAATGGAATGTTGTA
CATTCATCATAATTTAAAATTAAATTCTAAGAAGAGGCTGGGTGCAGTGGCTCACACCTTTAATCCCAGCACTTT
GGGAAGCCAAGGCAGGAAGACTGCTTGAAACCAGGAGTTTGAGACCAGCCTGAGCAACAAAGCAAGACCCCATCT
CTATAAAAACTAAAAAAATTAGTTGGGCATGGTGGCACATGCCTGTAGTCCCAGCTACTCCAGAGGCTGAGATGG
ATCATCTGAGCCTCAGGAGGTTGAGGCTGCAGTGAGCTGTGACTGCGCCACTGCACTCCAGTCTGGGACAACAGA
GCAAGACCCTGTCTTAAAAAAAAAAAGAAAAAAAAAATTTTTTTCTAAGAAGCTGTCCTACAAAGTTGAGCTTTG
TTAGTTTTTCATGTGTAATATATTATAAATTTATCTTTTGGGATATAATAAATGCTTTCATAT

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FIGURE 3357

TCGAGCCAGCGTCGCCGCGATGGTGTTGTTGGAGAGCGAGCAGTTCCTGACGGAGCTGACCAGACTTTTCCAGAA
GTGCCGGACGTCGGGCAGCGTCTATATCACCTTGAAGAAGTATGACGGTCGAACCAAACCCATTCCAAAGAAGGG
TACTGTGGAGGGCTTTGAGCCCGCAGACAACAAGTGTCTGTTAAGAGCTACCGATGGGAAGAAGAAGATCAGCAC
TGTGGTGAGCTCCAAGGAAGTGAATAAGTTTCAGATGGCTTATTCAAACCTCCTTAGAGCTAACATGGATGGGCT
GAAGAAGAGAGACAAAAAGAACAAAACTAAGAAGACCAAAGCAGCAGCAGCAGCAGCAGCAGCACCTGCCGC
AGCAGCAACAGCACCAACAACAGCAGCAACAACAGCAGCAACAGCAGCACAGTAAAGGGCATACATTTCCTGCTT
TCACCAATTAACCACTGAATTGCTATTTTTTCCTTTTGGCCAGATAGCTAGGTTTCTGGTTCCCCCACAGTAGGT
GTTTTCACATAAGATTAGGGTCCTTTTGGAAAGAATAGTTGCAGTGTTTATAGGATAGTTGTGGTAAGAATCTAG
TTTATTTTGCATTTGGCTAATTGGTCTGTGCTGCATGGTTATATACTCCTGGATTATAGATTAAAAGTCTCTGTA
GACATCTCTGTGAAGAGCAAGCTATCATTAAACATGTCTGTTTATC

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FIGURE 3358

GGAAACATTCCTATGTATGTGAGACACACCTATGCCAGGGCAAAGACTCCAAGCTCAAGTTTTTCTCTTGCCTTC
TAGTCACAAGAACATGGCTTTGGAGTGTGACACTGGCCTAGGAATCCATGACTCCCAAAGGACGGGGCTAGGGGT
AGAGGAGGTTCAGGCAAAGCCCTTAGATTTTGGAGACATCAGGCAGATGTCTCCAAAA**ATG**ATTGTGATCAAGAA
TCTGAATTATAAGATTCACAGTCTGCTCCCCAACCCAGTGCTGCCAACTGTACAGCTGCGCCTCCACGAAGGGGC
ATATGCCAGGCTCGTC**TGA**CCCTGGAATGAGGATGTAGGAAGCAGGCAGAGCTCGGGTTCAGCCCTCACAATGGG
ACTGAAGCAGGAGAGAAGGCTGGGCAGAAGGGCTGTGGGGAAGTAGGGCTTGTCTCCATGGATGACGTCCAGAAG
GATGTCAGGAGGAGGAATATCACAGGAGTTATAGACATTGGAGGGAACAGAGACTGGCACAGGACCTCTTCATTG
CAGGAAGATGGTAGTGTAGGCAGGTAACATTGAGCTCTTTTCAAAAAAGGAGAGCTCTTCTTCAAGATAAGGAAG
TGGTAGTTATGGTGGTAACCCCCGGCTATCAGTCCGGATGGTTGCCACCCCTCCTGCTGTAGGATGGAAGCAGCC
ATGGAGTGGGAGGGAGGCGCAATAAGACACCCCTCCACAGAGCTTGGCATCATGGGAAGCTGGTTCTACCTCTTC
CTGGCTCCTTTGTTTAAAGGCCTGGCTGGGAGCCTTCCTTTTGGGTGTCTTTCTCTTCTCCAACCAACAGAAAAG
ACTGCTCTTCAAAGGTGGAGGGTCTTCATGAAACACAGCTGCCAGGAGCCCAGGCACAGGGCTGGGGGCCTGGAA
AAAGGAGGGCACACAGGAGGAGGGAGGAGCTGGTAGGGAGATGCTGGCTTTACCTAAGGTCTCGAAACAAGGAGG
GCAGAATAGGCAGAGGCCTCTCCGTCCCAGGCCCATTTTTGACAGATGGCGGGACGGAAATGCAATAGACCAGCC
TGCAAGAAAGACATGTGTTTTGATGACAGGCAGTGTGGCCGGGTGGAACAAGCACAGGCCTTGGAATCCAATGGA
CTGAATCAGAACCCTAGGCCTGCCATCTGTCAGCCGGGTGACCTGGGTCAATTTTAGCCTCTAAAAGCCTCAGTC
TCCTTATCTGCAAAATGAGGCTTGTGATACCTGTTTTGAAGGGTTGCTGAGAAAATTAAAGATAAGGGTATCCAA
AATAGTCTACGGCCATACCACCCTGAACGTGCCTAATCTCGTAAGCTAAGCAGGGTCAGGCCTGGTTAGTACCTG
GATGGGGAGAGTATGGAAAACATACCTGCCCGCAGTTGGAGTTGGACTCTGTCTTAACAGTAGCGTGGCACACAG
AAGGCACTCAGTAAATACTTGTTGAATAAATGAAGTAGCGATTTGGTGTG

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FIGURE 3359A

GTTAGTGGTCTGGAGAGCACTACAAGCCCTCACAGGCCCCAGGAAGCTGCTTTTCCTTTCCCCAGACCTTGAGCT
GAACAGCTCGAGCTCCCACAACACTCTGAGGCCTGCACCCAGAGGCAGTGCCCAGGAGAGCGCTGTCCGGCCTCG
GAGAATGGTGGAGCCCCTGGAGGACAGAAGGCAAGAGAACTTCTTCTGTGGCCCCCCTGAGAAGAGCTATGCAAA
GCTGGTGTTCATGTCCACCTCCTCGGGCAGCCTATGGAACCTGCATGCCATCCATTCCATGTGTCGCATGGAACA
GGACCAGATCCGCTCCCATACCAGCTTCGGGGCTCTGTGCCAGCGGACAGCAGCCAACCAGTGCTGCCCCAGCTG
GTCCCTGGGCAACTATCTGGCTGTGCTCTCCAACCGCTCCTCCTGCCTGGACACTACCCAAGCTGACGCAGCCCG
CACACTGGCCCTGCTTCGGACCTGTGCCCTCTACTACCACAGTGGCGCCTTGGTGCCCTCTTGTCTGGGACCTGG
GCAGAACAAGTCCCCACGCTGTGCCCAGGTTCCCACCAAGTGCTCCCAGAGTAGTGCCATCTACCAACTCCTGCA
CTTTCTGCTTGACAGGGACTTTCTGAGTCCCCAGACCACTGACTACCAGGTGCCTTCCCTCAAGTACAGCCTGCT
CTTCCTGCCCACCCCAAAGGGTGCTTCCCTCATGGACATCTACCTGGACCGGCTGGCCACCCCCTGGGGGCTTGC
TGACAACTACACCTCTGTCACTGGCATGGACCTGGGCCTCAAGCAGGAGCTGCTGAGGCACTTCCTGGTCCAGGA
CACGGTGTACCCCTTGCTGGCTCTGGTTGCCATCTTCTTCGGCATGGCCCTGTACCTGCGCTCACTCTTCCTCAC
GCTCATGGTGCTGCTGGGGGTGCTGGGCTCACTGCTGGTGGCCTTCTTCCTTTACCAGGTGGCCTTCCGCATGGC
CTACTTCCCCTTCGTCAATCTGGCAGCCCTCCTCCTGCTGAGCAGCGTCTGCGCCAACCACACGCTCATCTTCTT
CGACCTGTGGCGCCTTAGCAAGAGCCAGCTGCCGTCGGGGGGGCTGGCGCAGCGCGTGGGCCGCACCATGCACCA
CTTCGGCTACCTGCTGCTGGTCTCCGGCCTCACCACGAGCGCGGCCTTCTATGCCAGCTACCTGAGCCGCCTGCC
GGCCGTTCGCTGCCTCGCCCTCTTCATGGGCACGGCTGTGCTGGTGCACCTGGCGCTCACGCTGGTCTGGCTGCC
CGCCTCCGCCGTGCTCCACGAGCGCTACCTGGCGCGCGGCTGTGCGCGCCGGGCGCGGGGCCGGTGGGAGGGCAG
CGCGCCCCGGCGGCTACTGCTGGCGCTGCACCGGCGGCTCCGCGGCCTGCGGAGGGCGGCGGCTGGCACCTCGCG
TCTGCTCTTCCAGCGCCTGCTGCCCTGCGGCGTCATCAAGTTCCGCTACATCTGGATCTGCTGGTTCGCAGCACT
GGCGGCAGGGGGCGCCTACATCGCCGGAGTCAGCCCCCGCCTGCGGCTGCCCACGCTGCCGCCGCCCGGCGGCCA
GGTCTTCCGGCCCAGCCACCCCTTCGAGCGCTTCGACGCGGAGTATCGCCAGCTGTTCCTGTTCGAGCAGCTGCC
GCAGGGCGAGGGCGGCCACATGCCCGTGGTTTTGGTGTGGGGCGTCCTGCCTGTGGACACTGGCGACCCTCTGGA
CCCTCGTAGCAACAGCAGCCTGGTGAGGGACCCTGCCTTCTCGGCCAGCGGCCCTGAGGCCCAGCGCTGGCTGCT
GGCACTCTGTCACCGGGCCCGGAATCAGAGCTTCTTCGACACCCTGCAGGAAGGCTGGCCCACGCTGTGTTTCGT
GGAGACCCTCCAGCGCTGGATGGAGAGCCCCAGCTGCGCCCGCCTGGGGCCTGACCTCTGCTGCGGCCACTCGGA
CTTCCCCTGGGCCCCCCAGTTTTTCCTGCACTGCCTGAAAATGATGGCTCTGGAGCAAGGCCCCGATGGCACCCA
GGACCTGGGACTCCGCTTTGATGCCCATGGCAGCCTGGCCGCCCTGGTCCTACAATTCCAGACCAACTTCCGGAA
CAGTCCGGACTACAACCAGACCCAGCTCTTCTACAATGAGGTCAGCCACTGGCTGGCAGCGGAGCTGGGCATGGC
ACCTCCAGGCCTCCGCCGTGGTTGGTTCACTAGCCGTCTAGAGCTGTATAGCCTGCAGCACAGCCTGAGCACTGA
GCCTGCTGTGGTGCTGGGCCTGGCTTTGGCGCTGGCCTTTGCCACACTGCTCCTGGGCACCTGGAATGTTCCCCT
CAGCCTATTCTCCGTGGCAGCTGTGGCAGGCACCGTGCTGCTCACTGTAGGACTCCTGGTTCTCCTCGAGTGGCA
GCTCAACACTGCCGAGGCCCTGTTTCTCTCTGCCTCAGTGGGCCTCTCAGTAGACTTCACTGTCAACTACTGCAT
CTCCTATCACCTGTGCCCACACCCTGACCGCCTGAGCCGTGTGGCCTTCTCTCTGCGCCAGACCAGCTGCGCCAC
AGCCGTGGGGGCTGCAGCCCTGTTTGCGGCAGGCGTGCTCATGCTGCCTGCCACAGTGCTGCTCTATCGCAAGCT
GGGCATCATCCTCATGATGGTCAAATGCGTCAGTTGTGGCTTTGCCAGCTTCTTCTTCCAATCTCTCTGCTGTTT
CTTCGGGCCAGAGAAGAACTGTGGGCAGATCCTCTGGCCCTGTGCCCACCTGCCATGGGATGCTGGTACTGGGGA
CCCTGGTGGGGAGAAGGCAGGCCGCCCACGACCAGGGTCAGTGGGAGGGATGCCCGGGTCCTGCTCAGAGCAATA
TGAGCTACAGCCCCTGGCACGGCGTCGGAGCCCCAGCTTTGACACCAGCACAGCCACCAGCAAGCTGTCCCACCG
GCCCTCAGTACTCTCTGAGGATCTGCAGCTCCATGATGGTCCGTGCTGTTCCCGGCCCCCACCAGCCCCTGCCTC
CCCAAGGGAGCTGCTGCTGGACCACCAGGCAGTCTTCAGCCAGTGCCCTGCCCTGCAGACCTCCTCCCCCTATAA
GCAGGCTGGCCCCAGCCCCAAAACCCGGGCCAGGCAGGACTCCCAAGGGGAGGAGGCTGAGCCCCTGCCAGCCTC
ACCAGAAGCCCCAGCCCACTCTCCTAAGGCCAAGGCTGCAGATCCTCCTGATGGCTTCTGTTCCTCAGCCAGCAC
CCTGGAGGGGCTCAGCGTCTCTGATGAGACCTGCCTAAGCACCTCTGAGCCCAGTGCCCGTGTACCAGATTCCGT
GGGTGTGTCCCCAGATGACCTGGATGACACTGGGCAGCCAGTCCTTGAGCGAGGCCAGCTCAATGGGAAGCGGGA
CACCCTGTGGCTGGCGCTGAGGGAGACAGTGTATGACCCATCATTGCCCGCTTCCCATCACAGCAGCTTGTCCTG
GAAGGGCCGAGGGGGGCCAGGGGATGGCAGCCCTGTGGTGCTGCCCAATAGCCAGCCAGACCTGCCAGATGTTTG
GCTGCGCAGGCCCAGCACTCACACGTCAGGCTATAGCAGCTGAGGGGGGACCCGGGGAGGCTGGACAGGGCGCGGA

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FIGURE 3359B

ACCCTGTCATGGATGACAAGGCAAGGGCAGCAATAGGCTGGAGCCCGAAGGTATTTCTCCAGATCCACAGGGAGA
GGTCTCACCCTCCAGCTGTGGATGTTAAACCCTGCCAGATGTCCCAGCCTTGATCTGTCTGCTCCTACTCCTCAC
ATCTGGAGGATTCCAGCAGGAGGGGTTTTGGAGGGGACCTGCTTGCGACCTGCTGAGGGCTTGTCTGCTCCCACA
GCACCATCTAAGACCCCTCCTCTAGAAGTGGGGAAGGCCAGATGTGTAGCTTCGGGTATCAGAGGAGGCTGACCT
GGCCCCCATCCCAAGTTACAAGAACTTCAGTGAGACTAAGGGACCCCCATCCTAGGGATCTTGTCAGGGTTCCTT
ACTGACCAGAGGAGCCCGCAGCAATCTCCACAGCCTCCTGGGTCTCACCCCTTTCATGGGCTCTTCATCAGGACA
CTTCCCTCTCTTTTGGGAGCTTCTCTGGGCAGAATTGGGCTGGGACCTCTCTCCCCAACTGCCCTGCTCTCCTCA
TACTCACCGGTTTGACCAGAAATTCTCCAAATCCAGCCATAGATGGCTGCTGGGTGTGCAGCAGGAGAAGGAGGA
TGGTCAGCCTTGGAGCATCTCTCAATTACGGGACAGTCCCTCTTTGGAAGCAGGCTCCTGTGCTTTCCTGTGTTA
ATAAACAGTAATAATCCTTTCCATCTCTGC

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FIGURE 3360

ACAAATTGCATCACCCTCCTCCTCTGCCCAGACCTGGGGGCTCCAACACCTTTCGCTAGGTCTGGCTCTGGCCTC
TGAGCGAACCTTCCGTACAGT**ATG**GCGGCTCCCGAAGCCCCGCCCCTGGACAGAGTTTTCCGTACAACATGGCTG
TCTACAGAGTGCGATTCCCACCCACTTCCGCCTAGCTACCGGAAGTTTCTATTTGAAACCCAGGCGGCCGACTTA
GCCGGTGGCACGACAGTTGCTGCAGGGAATCTTTTAAACGAGAGCGAGAAGGACTGCGGGCAGGACCGGCGGGCT
CCTGGGGTTCAGCCGTGCCGCCTCGTTACGATGACCAGTGTGGTTAAGACAGTGTATAGCCTGCAGCCCCCCTCT
GCGCTGAGCGGCGGCCAGCCGGCAGACACACAAACTCGGGCCACTTCTAAGAGTCTCTTACCTGTTAGGTCCAAA
GAAGTCGATGTTTCCAAACAGCTTCATTCAGGAGGTCCAGAGAATGATGTTACAAAAATCACCAAACTGAGACGA
GAGAATGGGCAAATGAAAGCTACTGACACTGCCACCAGAAGGAATGTCAGAAAAGGCTACAAACCACTGAGTAAG
CAAAAATCAGAGGAAGAGCTCAAGGACAAGAACCAGCTGTTAGAAGCCGTCAACAAGCAGTTGCACCAGAAGTTG
ACTGAAACTCAGGGAGAGCTGAAGGACCTGACCCAGAAGGTAGAGCTGCTGGAGAAGTTTCGGGACAACTGTTTG
GCAATTTTGGAGAGCAAGGGCCTTGATCCAGCTTTAGGCAGTGAGACCCTGGCATCACGACAAGAATCCACTACT
GATCACATGGACTCTATGTTGCTGTTAGAAACTTTGCAAGAGGAGCTGAAGCTTTTTAACGAAACAGCCAAAAAG
CAGATGGAGGAGTTACAGGCCTTAAAGGTAAAGCTGGAGATGAAAGAGGAAAGAGTCCGATTCCTAGAACAGCAA
ACCTTATGTAACAATCAAGTAAATGATTTAACAACAGCCCTTAAGGAAATGGAGCAGCTATTAGAAATG**TAA**GAA
GAAGCAAGTGGCCAGATGGCTCCCTCTTGGGCATAAAATCTCAGAGGAAGCTACTTAGGACATCATCTTGGCCAT
GATCTTCTGGGACTCACCATCTCCAGAATGAAAACAATTTCTACAGTAGACTTAAGGACAGTTTATGCTGAAATG
GCAATTCCTCATTTAAGCAAGTTTTCCCAACCTTCAGGTTGGTCAGCCCTCCTGAGCCTCACAGGTGGATAATTG
AGGCCTACAAGAGAGGGGAGCCTAGGAGCTTGGATTGACCTTCTAGTCAACCACCTGACTTCAGCACACCATTAC
AATCGGGAGACTAAACCAACAACCAGAGGATCTAAAATGTCACATTCAGATTTTCAGGAAGAAAATCTTCATTAC
AGTGGAGCACAAATGTTCCATACAAGACATCATTGAGGAGCCATGCTGTCCCCTTCTAACCTGAAACACATTCTT
TCCCATCCTGGTTGGGCTTCTGTACCTCCTTATTAATTTATGAACCTGAAGTTGCTTGAAGTGTTTTGGGCTTAA
TAAATGGGGTGAAAGTATAGGTAGCAGTAACACCTACATGAAACAATACACCTTGGATCTTTTAATCTAAATTAC
TTTTCTTTTTTAAGTCTACTTTTAAAATAAATACTTCTGTAAATATTCTGACTGTAACATTGAGGAATGAAAATA
GCCTTTTAACCTA

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FIGURE 3361

TTTCCGCAGTTAGGGGCTGCTATTTCAACGCAGGGAGATAAAAAGAAAAAAACACTTGCTCTTCTACCCCGCTAA
AAACACTCATCCTAGGGAGCACGCCAGCATTTGCAGCGTTCGGGGCAGGGCCACTCGGCCTGCGGCCGTTGCACT
GGCTGGAAGCTGGCAGGCGATCACGGTTGATTGGCTCGGGTGCGGTCCAAGGGCAGCAACGCCTTCGGCGGGCCG
CCTAGGGTGATTGGCTGCTGCAGCCCACCCCCTAGCCGGTTTGGTGGGCGGCGAAGCCTGGATTGGTGGAGCTAA
GAGCTGGCTCAGTTTCAGCGCTGGCTCTTCGTGCATGGCAGAGATGGCGACTGCGACTCGGCTGCTGGGGTGGCG
TGTGGCGAGCTGGAGGCTGCGGCCGCCGCTTGCCGGCTTCGTTTCCCAGCGGGCCCACTCGCTTTTGCCCGTGGA
CGATGCAATCAATGGGCTAAGCGAGGAGCAGAGGCAGCTTCGTCAGACCATGGCTAAGTTCCTTCAGGAGCACCT
GGCCCCCAAGGCCCAGGAGATCGATCGCAGCAATGAGTTCAAGAACCTGCGAGAATTTTGGAAGCAGCTGGGGAA
CCTGGGCGTATTGGGCATCACAGCCCCTGTTCAGTATGGCGGCTCCGGCCTGGGCTACCTGGAGCATGTGCTGGT
GATGGAGGAGATATCCCGAGCTTCCGGAGCAGTGGGGCTCAGTTACGGTGCCCACTCCAACCTCTGCATCAACCA
GCTTGTACGCAATGGGAATGAGGCCCAGAAAGAGAAGTATCTCCCGAAGCTGATCAGTGGTGAGTACATCGGAGC
CCTGGCCATGAGTGAGCCCAATGCAGGCTCTGATGTTGTCTCTATGAAGCTCAAAGCGGAAAAGAAAGGAAATCA
CTACATCCTGAATGGCAACAAGTTCTGGATCACTAATGGCCCTGATGCTGACGTCCTGATTGTCTATGCCAAGAC
AGATCTGGCTGCTGTGCCAGCTTCTCGGGGCATCACAGCCTTCATTGTGGAGAAGGGTATGCCTGGCTTTAGCAC
CTCTAAGAAGCTGGACAAGCTGGGGATGAGGGGCTCTAACACCTGTGAGCTAATCTTTGAAGACTGCAAGATTCC
TGCTGCCAACATCCTGGGCCATGAGAATAAGGGTGTCTACGTGCTGATGAGTGGGCTGGACCTGGAGCGGCTGGT
GCTGGCCGGGGGGCCTCTTGGGCTCATGCAAGCGGTCCTGGACCACACCATTCCCTACCTGCACGTGAGGGAAGC
CTTTGGCCAGAAGATCGGCCACTTCCAGTTGATGCAGGGGAAGATGGCTGACATGTACACCCGCCTCATGGCGTG
TCGGCAGTATGTCTACAATGTCGCCAAGGCCTGCGATGAGGGCCATTGCACTGCTAAGGACTGTGCAGGTGTGAT
TCTTTACTCAGCTGAGTGTGCCACACAGGTAGCCCTGGACGGCATTCAGTGTTTTGGTGGCAATGGCTACATCAA
TGACTTTCCCATGGGCCGCTTTCTTCGAGATGCCAAGCTGTATGAGATAGGGGCTGGGACCAGCGAGGTGAGGCG
GCTGGTCATCGGCAGAGCCTTCAATGCAGACTTTCACTAGTCCTGAGACCCTTCGCCCCCTTTTCCTGCACCTAG
TGGCCTTTCTTGGGAAGTAGAGATGTGGCGGCTTTCCCACCCTGCCCACAGCAGGCCCTCCTGCCCAGCTGCTCT
TGTCAGCCCTCTGGCCTCTGGATGAGGTTGAGTTCTCCACAACAGCTCCCAAGCATCATGGGCCTCGCAGCCGGG
CCTGTGCCACGGCTAGTGTTGTGTGATTTAAAATGGACTCAGCAGGAAGCATATTGTCTGGGGATTGTTGGGACA
GGTTTTGGTGACTCTGTGCCCTTGCTCTCTAACTTCTGAGCCCACCTCCCAGGGTAGGCACCTGGGGGCATGCAG
GTGCCCACCTCCCAGGGTAGGCACCTGGGGGCATGCAGGTACCCACCTCTTTCTCTTGGGTGAGGCTCTGGCAAG
GAGATCTCTCTGCTCAAGCACAGCAGAATCATGGCCCCTCTCCATGAATTGGAACTTGGTACAGGTTAAGTATCC
CTAATCCTGAAATCTGAAACACTTGTGGTTCCAAGCATTTTGGATAAGGCAAATTCAACTTTCAGTCTCTTTTCT
GGGGGAAAAAAATAATAAACCTAGCCTAGCCAGGCGTGGTG

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FIGURE 3362A

TTTCTCGAGAACCTACTGTGTGCATATCCCGGGCTTAGTGAAGTCCTAGGCGGGCTCTGGCACCACCAGGTGCCC
AAGACACAGCTCCTTCCCGCACCTAACAGGGACTTCCCATCTCTCTCTGTGCCCTTAGCCTGCTGTGCCCACCCA
CCCCACTGACCCCGCGAGCGTGCTCGGGCTTGGGAGGGCACGTCTGTGGGGGTGAGAGACGGAGCCACAGCATTT
GGTGACTAGGGGGAAGCCAGGTTGGAAGTACTCCATGACACACACTCGGAGAAAGTCCCTTCCCATGCTGAGTTC
GGGCCTCACTGGCCGCCGAGAGCCCCTGCAGATGGAAGACAGCAACATGGAGCAGGGGGTTGAGGGTGTGGAGCC
AGGCATGCCCGAGAGCCCAGGTCACCTCACAGGGCGCCGCAAGAATTACCCACTTCGTAAGCGCCCATTGGTTCC
TGAGAAGCCCAAGGCCTGCAAAGTGCTGCTGACTCGCCTGGAGAATGTGGCCGGTCCCCGGAGTGCAGATGAGGC
TGATGAGCTACCGCCTGACCTGCCCAAGCCCCCCAGCCCGGCCCCATCCAGTGAAGACCCTGGCCTTGCCCAGCC
CCGCAAGCGGCGCCTGGCCTCCCTCAATGCTGAAGCTCTCAATAACCTGCTGCTGGAGCGAGAGGACACCAGCAG
CCTGGCAGGCACCCGCCGCAGTCGAGCAGGGGATCCCCACCGCAGCCGTGACCGTGATCGTGCTACTGGGGGCTG
GTCCTCCTCCAAGAAGCGGCCCCGGCTGGGGGACCTTGGAGGAGGAAGTCGGGACCTGTCTCCAGAGCCAGCACC
CGATGAAGGTCCCCGCCGAGATGGAGACCCAGCTCCCAAGAGACTGGCTAGCCTGAACGCAGCTGCTTTCCTAAA
ACTGAGCCAGGAGCGGGAGCTACCCCTGCGGCTGCCTCGTGCCCATGCAGAAGTAGATGGGCGCTCCACTGAGCC
CCCAGCACCCAAGGCCCCGAGGCCAAAGTGGCCCAAGGTCAATGGCAAGAACTATCCCAAGGCTTGGCAGGGGGC
CAGCTCTGGGGAGGCTGCAGGCCCACCTGGCTGGCAAGGCTGCCCTGATGAACCATGGCCATCTGCAACTCCTTG
TGGGCCATCCGTCCAGCCATCTCATCAGCCCCTGAGCAAGGCTCTGGAGAGCCCTTTGGGGCTGCGCCCTCACCT
GCCCCTGCTGATGGGTGGACAGGCGGCTCTGAAGCCGGAGCCTGGGCGCCCAGGCGAGGAGTCACCTGCCCCTAA
GCAGGAACTGCATCAGCCCTCTTTCCCCACACCTCAGCTGTCGCCGCTGCCGATGCCTGGCAACCCCGCCGACTA
CAATGGCCTGTGTGTTGGGCCTGAGCTCACTGCACTAGGCAGCTTCTACCTGTACTGTGGCCAAGAGGGGCTGCA
GTGTGGGGGCTACTCGCCCTGCCCCATGCTTCCTGAGGGCAAGCTGTCCCCAGTGGCTGCACCTCACGAGGAGGG
GCTCCTCTTAGCTCCGAGCTCAGTGCCCTCAGGCACCCCTTTCCAGCACCCTCCCTGGGGCTCCTCTCGCTACTG
CTCTAGCGAGGACACTGGAGTGAATGGCTACAGCATCTGCGGAGTGTTGCCCCTGTCTGTTACCCACGCTGGCAC
TACCTGTGGCGGCTGCCCATACAAAATGCCTTTTGCAGCAGGCTGCAGATCCCTGGGCCAGTTGGAATTTCCTCT
CCCGGAAGCTGGCCACCCAGCCTCACCCGCCCACCCACTCCTGGGGTGCCCTGTACCCAGTGTGCCACCTGCAGC
AGAGCCCGTCCCCCATCTTCAGACACCCACCTCGGAGCCCCAGACAGTAGCCCGTGCGTGCCCTCAGAGCGCCAA
ACCTCCCAGCGGTTCTAAGTCAGGTCTGCGCACAGGCTCCAGCTGCAGGCACACTGCAAGGAGCAAGGCTGCCCG
CAGGCCTAGCCACCCCAAGCAGCCACGTGTCCAGCGCCCACGCCCTCGCCGCCGCCGTCGCCGCCGCACTAATGG
CTGGGTACCTGTTGGGGCTGCGTGTGAGAAGGCTGTGTATGTCTTGGATGAGCCGGAGCCAGCCATCCGAAAGAG
CTACCAGGCGGTAGAGCGGCATGGGGAGACAATCCGAGTCCGGGACACCGTCCTTCTCAAATCAGGCCCACGAAA
GACCTCCACACCTTATGTGGCCAAGATCTCTGCCCTCTGGGAGAACCCCGAGTCAGGAGAGCTGATGATGAGCCT
CCTGTGGTATTACAGACCTGAGCACTTACAGGGAGGCCGCAGTCCCAGCATGCACGAGCCCTTGCAGAATGAAGT
GTTTGCATCGCGACATCAGGACCAGAACAGTGTGGCCTGCATTGAGGAGAAGTGCTATGTGCTGACTTTTGCCGA
GTACTGCAGGTTCTGTGCCATGGCCAAGCGCCGAGGTGAAGGCCTCCCCAGCCGAAAGACAGCACTGGTTCCCCC
CTCTGCAGACTATTCCACCCCACCCCACCGCACAGTGCCAGAGGACACGGACCCTGAGCTGGTGTTCCTTTGCCG
CCATGTCTATGACTTCCGCCACGGGCGCATCCTTAAGAACCCCCAGTAGCCTCCTCATGCCCATGCTGGGGCTAC
CCATGGGCAAGTGGGGCTCGGGGTAGGGGGCACTGCTTGAAGCACAGCACTTGGTTAGGGGGCCACAGAGGCCTA
AGTTTGCTGGCCTGTGGTTTTCTTGGGGGGGAGGGCAGGGGCCCCTGTGGGTTCTGGGCTCCAGGGGAGGGAGCT
GGGGAGGCCAGGGTATAAGAAAAGCATCAGAACTCTCAGCTTGGCCCAAGGTACCTTCTGTGGTTCCCCTGGGTG
GAGATTTCCGAAAAGTAGTCTTCTCTGAGGCTGGGCCAAGCCTGAGGGAAATGGGGCCCTAGGAGGGTGGGGGCG
GGAAGGAGGGGCAAGGTCTTTCAGGAACCAGACCCAACAGGCCCTTCTGTAGCCTCCCCCTTGCCCTCAAAGGGG
GAGTGGGGGCCAGCTTTACCTCACCCACTGTGACCCGCCGCTTCCCCTTCAGCCTGGGACCAGGCTTTCCTAGAT
CCCAGCACAGCTCTGAGCTTGTTCCTTTGAGGCATAGAGAGCCAGAGTCTGGCTTCCAGAGCATTGACTTCCTCT
TCCTAGACTTGAGGCCTTTTCTCTGGCTTTCCTCCTTTGCCCTGCAGTAGCAACTGGTGCTGGGACAAGTTGACC
CACCTCTCACAGTCATGGGTGTGGCCCACTTGTGGGAGTCTCCTGTCCACCTCCCAGAGACGGCCACCCAGCGGG
TCTGGCTTCCCAGAAAGTTAACTGATGATTGTGGGGTTTGTCATATCTGGGAGGGAAGATGGGTGCTGGGAGAGG
GTTGGGGGCAGGGGGCAAGGAAAATTGCTACCTGATTTGTTGAAGATTTTTCCTCTTGCCTTACACATGGAGGTT
CCAGGAAACCTCTTGCAGAACTTCACACGTGATTCTTCAAGCCACACCCACCTGAAATCAAACCAAAGGAGTGCT
GTGGCTCCCCTTGCCCTGCCACCCTTTCCCTAGTCTTTTGTAGATTGCACTAATTTACATCCTAGCAAGAATCAA

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FIGURE 3362B

CACTGTATCAGTCCACGGACCTGCTGAGCTGCAGCCACTTGCTCTAGGAGCTAAGGACTTGCATTTTCAGTTTGT
TCCTGTTGCCCAGAGGCCCTGTTCTCACCTCATGCTGCTCCCCAGAGTAGACTAACAGGCTCAGTCCCCTGTTGT
CCTTGTGGAGACTAGGCCTTGGCCCTGGCCCTGAGACTCTGTGAGGGGGCTGGAGCAGCCTGGTTATTTCCTATC
TGTACCAAAGAGGAGTATGGTGGGAGAGGGAGTGGAGTGCAGTGTGGCTTGGGCCTGGTGCTGGGAACCTGCTAG
CTGAGCACTTCCACAAGGGCATACCCCTGGGGGCAGGGGCTGGGGCTGAGAACTGCAGCCCTGGGTCTTCCCTTA
GGGAGGAAGGGCAGATGAACCCAGCAGGCTTAGGAGGTGGCACTGGGTGAGGACAGCTGGGCAGGGGCTGCAGAG
GGAGGTGGAAATGAACCCTGAGGGCTCCCCCAACTTGCCATGCCCTGTCCCTTAGTAGATGAGTTGCTCCTGATT
GGTCATTGGGTTTGGGTGAGGCCTGGAGGCTTCAGAGGTGAATTTATGCTTGGGAAGCCTGATCCCAAACCTGAA
GGGAAGGGACTTGGATCTCCTTATATTGAATAAGCTGTTTGGAGGAAGGTGTCTGTCTGGGAGGATGGGGCAGTA
AATGAGGTTGGCAGAGTGGCAGTGGGGGCTCTGCAGAGCCAGCCTTGGAGCCTGCTCATTCTGGGCCCTTGCTGC
CAAGGAGCCCAGCCTCACCTAGCAGGAAAGGAGATGAAGGCCCTCCTCCCAGGAGGTAGGGTCTTGGCTGCCCCG
AACTTAAATGCTTTTGAAATCTCTTAGATGTGGAAATATTTTTTCGAACCTGAAAATGCAGCTGGTAGAATTTCA
ATGGAAGCATAATCCATGTAAAATATATTTTAGTTGATATTTTGTAAAATGCACTTTTTGTGTGTGTTGATCCTG
GTTTCCCAGATCTGTATTTCAGTGTTTACAAGGGAGGAAGGACCTTTCCTCACCTCCCTTTTGACAGAGATTAGA
AGTACTTCTTTAAGAAAAAAATAAATTTGAGAAATTGTATTGATTTAG

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FIGURE 3363

TCCGGCCCGGGTCCCTCGCCGCGCCCGCCGCCCGCCGCCCGCTTCGGCGCCGCAGCCCGGGAGCCGGCCACCCCT
ACACGCGCCAGGGCTGTCCCCTGCCCTCCCCTCCCCAACTACCCCCGGTCCCAGACCCTCCTCCCGCCCCCAGCC
CGAGCCCGCCTTCCAGGCCGCCCTCGGATCGGCCGGGCCCGCGCAGGCCCCCACCCCTTGAGCACCATGTTCCCC
CGCCCGCTGACCCCGCTGGCGGCCCCAAATGGCGCCGAGCCCCTGGGCCGGGCGCTGAGGCGGGCCCCTCTGGGC
AGGGCCCGGGCGGGGCTGGGTGGGCCGCCCCTGCTGCTGCCGTCCATGCTGATGTTTGCGGTGATCGTGGCCTCC
AGCGGGCTGCTGCTCATGATCGAGCGGGGCATCCTGGCCGAGATGAAGCCCCTGCCCCTGCACCCGCCCGGCCGC
GAGGGCACAGCCTGGCGCGGGAAAGCCCCCAAGCCTGGGGGCCTGTCCCTCAGGGCTGGGGACGCGGACTTGCAA
GTGCGGCAGGACGTCCGGAACAGGACCCTGCGGGCGGTGTGCGGACAGCCAGGCATGCCCCGGGACCCCTGGGAC
TTGCCGGTGGGGCAGCGGCGCACCCTGCTGCGCCACATCCTCGTAAGTGACCGTTACCGCTTCCTCTACTGCTAC
GTCCCCAAGGTGGCCTGCTCTAACTGGAAGCGGGTGATGAAGGTGCTGGCAGGCGTCCTGGACAGCGTGGACGTC
CGCCTCAAGATGGACCACCGCAGTGACCTGGTGTTCCTGGCCGACCTGCGGCCTGAGGAGATTCGCTACCGCCTG
CAGCACTACTTTAAGTTCCTGTTTGTGCGGGAGCCCTTGGAACGCCTCCTCTCTGCCTACCGCAACAAGTTTGGC
GAGATCCGAGAGTACCAGCAACGCTATGGGGCTGAGATAGTGAGGCGGTACAGGGCTGGAGCGGGGCCCAGCCCT
GCAGGCGACGATGTCACATTCCCCGAGTTCCTGAGATACCTGGTGGATGAGGACCCTGAGCGCATGAATGAGCAT
TGGATGCCCGTGTACCACCTGTGCCAGCCTTGTGCCGTGCACTATGACTTTGTGGGCTCCTATGAGAGGCTGGAG
GCTGATGCAAATCAGGTGCTGGAGTGGGTACGGGCACCACCTCACGTCCGATTTCCAGCTCGCCAGGCCTGGTAC
CGGCCAGCCAGCCCCGAAAGCCTGCATTACCACTTGTGCAGTGCCCCCCGGGCCCTGCTGCAGGATGTGCTGCCT
AAGTATATCCTGGACTTCTCCCTCTTTGCCTACCCACTGCCTAATGTCACCAAGGAGGCGTGTCAGCAGTGACCA
TGGGTGTGGGGCCAGCAGCTGGTGGGGACTGGTTTCAACGCCAGCTTTCTGTGCTTCTGCCTGTCATTCGGAGAA
ACTCTGGCTCTGGGGCTTGGGGCTTCTCAGGATCCTGGATGGCAGAGACTGCCCTCAGAAGTTCCTTGTCCAGGG
TGGGCACCCACAGTGACTCAGAGGACAGGGCTAGGCAGGAGACCTGCTGCTCCTCATTGGGGGGATCTCTTGGGG
GGCAGACACCAGTTTGCCAATGAAGCAACACATCTGATCTAAAGACTGGCTCCAGACCCCGGGCTGCCAGGATTA
TGCAGTCCACTTGGTCTACCTTAATTTAACCTGTGGCCAAACTCAGAGATGGTACCAGCCAGGGGCAAGCATGAC
CAGAGCCAGGGACCCTGTGGCTCTGATCCCCCATTTATCCACCCCATGTGCCTCAGGACTAGAGTGAGCAATCAT
ACCTTATAAATGACTTTTGTGCCTTTCTGCTCCAGTCTCAAAATTTCCTACACCTGCCAGTTCTTTACATTTTTC
CAAGGAAAGGAAAACGGAAGCAGGGTTCTTGCCTGGTAGCTCCAGGACCCAGCTCTGCAGGCACCCAAAGACCCT
CTGTGCCCAGCCTCTTCCTTGAGTTCTCGGAACCTCCTCCCTAATTCTCCCTTCCTTCCCCACAAGGCCTTTGAG
GTTGTGACTGTGGCTGGTATATCTGGCTGCCATTTTTCTGATGCATTTATTTAAAATTTGTACTTTTTGATAGAA
CCCTTGTAAGGGCTTTGTTTTCCTAATAGCTGACTTTTTAATAAAGCAGTTTTATATAT

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FIGURE 3364

GGGGACTCCGCCCCTCCCGATTTCCTCCGGGCTACAGGCGACAGAGCTGAGCCAAGCGTTTACTGGGCAGCTGTT
ACGCTCAGATTCCAAATGAAAATGTTTGAGAGCGCTGACTCTACAGCCACAAGATCTGGCCAGGATCTCTGGGCT
GAAATTTGTTCCTGTCTGCCAAATCCTGAACAAGAAGATGGTGCCAACAATGCATTCTCAGACTCCTTTGTGGAT
TCTTGCCCTGAAGGTGAAGGCCAGAGGGAGGTGGCTGACTTTGCTGTCCAGCCAGCTGTAAAGCCTTGGGCTCCC
TTGCAGGATTCAGAAGTGTATTTAGCATCTCTAGAGAAGAAGCTAAGAAGAATCAAAGGTTTAAATCAGGAAGTG
ACTTCCAAGGACATGCTTCGAACTCTGGCCCAAGCCAAGAAGGAATGCTGGGATCGGTTCCTCCAGGAGAAGTTA
GCTTCAGAGTTCTTTGTGGATGGACTTGATTCTGATGAGAGCACCTTGGAACATTTCAAGAGGTGGCTCCAGCCA
GATAAAGTAGCCGTCAGCACAGAGGAGGTCCAGTATCTGATTCCTCCAGAGTCACAGGTTGAGAAGCCAGTGGCC
GAGGACGAGCCAGCAGCCGGGGACAAGCCAGCAGCAGCAGAACAGTAAATTACACACACACACACACACACACAC
ACACACACACACACACACACACACACACACACACACACACACGCCGAGCAGCTGTCTCGGGTCCAGAGCGAGCAGCGTG
GAGCTCAGTGACAGCAGCAGGGAGAAATCCACTGAAGGAAAAAACCCAAATTTCCACTCCACAAAGAAAACAGCT
GCAAGCCCCCAGGGACTTACCTGGGGCTGGCATGTGTGACTGTCTCGGATGAAGTGACTGACCCAGTGCACACTG
GATCAAAATGCTGCTTTCCTCTGTGTCTCACAGCTTGGCTGAGCTCTGTCTCTGCAGGTTAGAAGTCTGCTAAAG
ATCAAATGTGAAAGTACTTGGAGAAACTGAGGCCTCTTATGTGTAATGTGTAAGTTAAGTGAGCCATATATTTTC
TTGCCTCTTCCGGACATTCATGCTTGTGTCCCAAGCATTCCCTTGGTGAATTGTCACGTGAGTGGGGCCAGTAAG
AGTGAAGTCTGCTCCTTGAATCCAAGCCCCATCTGGGGCTTCTCTAACAAATCTGTAGTAAGTATACGGACTCCA
GGGAGAGAGGCTGGGCTTCTTTCTCTCATTTGTTCCTTGTGGAACAAATGGGCAAAAGAAGTGTGAAAATGTGGG
TGTTTATGTCTGTGTATATGTATTTTTTACTTCATGCATGGCTTCTCCTCCAACTTCCTCCTGCACTTAAAAAGG
GCCAGGTTCCAAATTAGACTTGTAAATATGGTGTTAGTGTTTGACACTACTCCTGGATAGTTCCAAACATCTTCC
TTGTGGCAGGTTTCCTGGCTGAGCCCGAGCTTCCCTCCCTGTTTATTGTGTTCATGATCAGTATGTGTTTCCATA
TAAAACTTTTCTCAACGGAA

FIGURE 3365

ATGTGGCTGGACCGCCGCGGATGGCTCAGGGTTCTTGGACATTGGCGCTACGACCTTAGGCGCCCTAGCTTTACC
AGGACTTGGAGTGGCGATAAGGGCCCAATGGCAGAAACAGTGTCTACCCAGGTTGGGACAGAGGGCGGGCTGAGG
GCTTCGCATCAGCAAAACGGTGACGCTGGTGGCGACGCGAAGGTTGAGCTGTCCCCCGGGCCCCCGAAGCCGGCT
GGCCGGGAAGTGGAGCCGGCCCCAGTAGGCGGGGAGCATCCCTCGGCTGCAGCCCCAGGCCCGGGCAAGCATAAG
AAGCGGCGGGGCGCAACCAGGGAGCGTGTCGTGCCGCCCCCGAAGAAGCGGCGGACCGGGGTGAGCTTCGGAGAT
GAGCACTTTGCAGAAACCAGTTATTACTTCGAGGGCGGCCTGCGTAAGGTGCGGCCCTATTACTTTGACTTCCGG
ACCTACTGCAAAGGTCGCTGGGTGGGCCACAGCTTGCTGCACGTCTTCAGTACCGAGTTCCGAGCTCAGCCCCTG
GCCTACTATGAGGCCGCGGTCCGGGCGGGCCGCCTGCAACTCAACGAGAAGCCGGTGCAGGACCTCAACATCGTG
CTCAAGGACAATGATTTCTTGCGGAACACAGTGCACAGGCATGAGCCACCAGTCACAGCAGAGCCCATTCGCCTG
CTAGCTGAGAACGAAGATGTGGTGGTTGTAGACAAGCCTTCCTCCATTCCCGTTCACCCCTGTGGCCGCTTCCGA
CACAACACAGTTATCTTCATCCTAGGCAAGGAGCACCAACTCAAGGAGCTACACCCCTTGCATCGGCTTGACCGC
CTTACCTCAGGGGTGCTTATGTTTGCCAAGACAGCTGCAGTCTCTGAGAGAATTCACGAGCAGGTTCGGGACCGG
CAGCTGGAGAAGGAGTACGTGTGCCGGGTGGAAGGGGAGTTCCCCACTGAGGAAGTGACCTGTAAAGAACCCATC
TTAGTGGTGTCTTACAAAGTAGGGGTGTGCCGTGTAGATCCCCGGGGCAAGCCCTGTGAGACAGTGTTCCAGAGG
CTAAGCTACAATGGCCAGTCCAGTGTGGTACGGTGCCGGCCACTCACAGGCCGCACACACCAGATTCGAGTCCAC
CTTCAGTTCTTGGGCCATCCCATTCTCAACGACCCCATCTACAACTCAGTTGCCTGGGGTCCTTCTCGAGGCCGG
GGCGGCTACATTCCCAAGACAAACGAGGAGTTGCTACGGGACCTGGTAGCAGAGCACCAGGCCAAACAGAGCCTG
GATGTGCTAGATCTCTGTGAGGGTGACCTGTCCCCAGGACTCACAGACTCTACGGCCCCCTCCTCAGAGTTGGGC
AAGGACGACCTGGAAGAGTTGGCTGCAGCTGCCCAGAAGATGGAGGAAGTAGCTGAGGCAGCCCCTCAGGAGTTG
GACACAATAGCCTTGGCATCAGAGAAGGCAGTTGAAACAGATGTCATGAATCAAGAGACAGACCCACTCTGTGCA
GAGTGCCGGCTGGTGCGACAGGATCCCTTGCCCCAAGACCTTGTGATGTTCCTACATGCCCTACGCTATAAAGGG
CCAGGCTTTGAGTACTTTTCACCAATGCCTGCCTGGGCACAGGATGACTGGCAAAAGGACTGA

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FIGURE 3366

TAAGGAGAGTGCGGCGCTTCCCGAGGCGTGCAGCTGGGAACTGCAACTCATCTGGGTTGTGCGCAGAAGGCTGGG
GCAAGCGAGTAGAGAAGTGGAGCGTAAGCCAGGGGCGTTGGGGGCCGTGCGGGTCGGGCGCGTGCCACGCCCGCG
GGGTGAAGTCGGAGCGCGGGGCCTGCTGGAGAGAGGAGCGCTGCGGACCGAGTAATGGCAATGCAGATGCAGCTT
GAAGCAAATGCAGATACTTCAGTGGAAGAAGAAAGCTTTGGCCCACAACCCATTTCACGGTTAGAGCAGTGTGGC
ATAAATGCCAACGATGTGAAGAAATTGGAAGAAGCTGGATTCCATACTGTGGAGGCTGTTGCCTATGCGCCAAAG
AAGGAGCTAATAAATATTAAGGGAATTAGTGAAGCCAAAGCTGATAAAATTCTGGCTGAGGCAGCTAAATTAGTT
CCAATGGGTTTCACCACTGCAACTGAATTCCACCAAAGGCGGTCAGAGATCATACAGATTACTACTGGCTCCAAA
GAGCTTGACAAACTACTTCAAGGTGGAATTGAGACTGGATCTATCACAGAAATGTTTGGAGAATTCCGAACTGGG
AAGACCCAGATCTGTCATACGCTAGCTGTCACCTGCCAGCTTCCCATTGACCGGGGTGGAGGTGAAGGAAAGGCC
ATGTACATTGACACTGAGGGTACCTTTAGGCCAGAACGGCTGCTGGCAGTGGCTGAGAGGTATGGTCTCTCTGGC
AGTGATGTCCTGGATAATGTAGCATATGCTCGAGCGTTCAACACAGACCACCAGACCCAGCTCCTTTATCAAGCA
TCAGCCATGATGGTAGAATCTAGGTATGCACTGCTTATTGTAGACAGTGCCACCGCCCTTTACAGAACAGACTAC
TCGGGTCGAGGTGAGCTTTCAGCCAGGCAGATGCACTTGGCCAGGTTTCTGCGGATGCTTCTGCGACTCGCTGAT
GAGTTTGGTGTAGCAGTGGTAATCACTAATCAGGTGGTAGCTCAAGTGGATGGAGCAGCGATGTTTGCTGCTGAT
CCCAAAAAACCTATTGGAGGAAATATCATCGCCCATGCATCAACAACCAGATTGTATCTGAGGAAAGGAAGAGGG
GAAACCAGAATCTGCAAAATCTACGACTCTCCCTGTCTTCCTGAAGCTGAAGCTATGTTCGCCATTAATGCAGAT
GGAGTGGGAGATGCCAAAGACTGAATCATTGGGTTTTTCCTCTGTTAAAAACCTTAAGTGCTGCAGCCTAATGAG
AGTGCACTGCTCCCTGGGGTTCTCTACAGGCCTCTTCCTGTTGTGACTGCCAGGATAAAGCTTCCGGGAAAACAG
CTATTATATCAGCTTTTCTGATGGTATAAACAGGAGACAGGTCAGTAGTCACAAACTGATCTAAAATGTTTATTC
CTTCTGTAGTGTATTAATCTCTGTGTGTTTTCTTTGGTTTTGGAGGAGGGGTATGAAGTATCTTTGACATGGTGC
CTTAGGAATGACTTGGGTTTAACAAGCTGTCTACTGGACAATCTTATGTTTCCAAGAGAACTAAAGCTGGAGAGA
CCTGACCCTTCTCTCACTTCTAAATTAATGGTAAAATAAAATGCCTCAGCTATGTAGCAAAGG

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FIGURE 3367

GACGTCACGGTCACTGACAGCGTGAGCCCGCGGCGGCTGCTGCCATGGTGGCTGGCGGCCGGGTAAGGGTCTGAG
TGGATCTCCTGCCAGGCCAGAGCGCCTTCGGGGGCCGCGGCGGAAGGCCAGGAGTTTGCAGCCAGGGCGCCGGGT
TTGTGGTCTGCAGTGTCGTGAGGCTGAGGTGCAGC**ATG**TCTAGACTGGGAGCCCTGGGTGGTGCCCGTGCCGGGC
TGGGACTGTTGCTGGGTACCGCCGCCGGCCTTGGATTCCTGTGCCTCCTTTACAGCCAGCGATGGAAACGGACCC
AGCGTCATGGCCGCAGCCAGAGCCTGCCCAACTCCCTGGACTATACGCAGACTTCAGATCCCGGACGCCACGTGA
TGCTCCTGCGGGCTGTCCCAGGTGGGGCTGGAGATGCCTCAGTGCTGCCCAGCCTTCCACGGGAAGGACAGGAGA
AGGTGCTGGACCGCCTGGACTTTGTGCTGACCAGCCTTGTGGCGCTGCGGCGGGAGGTGGAGGAGCTGAGAAGCA
GCCTGCGAGGGCTTGCGGGGGAGATTGTTGGGGAGGTCCGATGCCACATGGAAGAGAACCAGAGAGTGGCTCGGC
GGCGAAGGTTTCCGTTTGTCCGGGAGAGGAGTGACTCCACTGGCTCCAGCTCTGTCTACTTCACGGCCTCCTCGG
GAGCCACGTTCACAGATGCTGAGAGTGAAGGGGGTTACACAACAGCCAATGCGGAGTCTGACAATGAGCGGGACT
CTGACAAAGAAAGTGAGGACGGGGAAGATGAAGTGAGCTGTGAGACTGTGAAGATGGGGAGAAAGGATTCTCTTG
ACTTGGAGGAAGAGGCAGCTTCAGGTGCCTCCAGTGCCCTGGAGGCTGGAGGTTCCTCAGGCTTGGAGGATGTGC
TGCCCCTCCTGCAGCAGGCCGACGAGCTGCACAGGGGTGATGAGCAAGGCAAGCGGGAGGGCTTCCAGCTGCTGC
TCAACAACAAGCTGGTGTATGGAAGCCGGCAGGACTTTCTCTGGCGCCTGGCCCGAGCCTACAGTGACATGTGTG
AGCTCACTGAGGAGGTGAGCGAGAAGAAGTCATATGCCCTAGATGGAAAAGAAGAAGCAGAGGCTGCTCTGGAGA
AGGGGGATGAGAGTGCTGACTGTCACCTGTGGTATGCGGTGCTTTGTGGTCAGCTGGCTGAGCATGAGAGCATCC
AGAGGCGCATCCAGAGTGGCTTTAGCTTCAAGGAGCATGTGGACAAAGCCATTGCTCTCCAGCCAGAAAACCCCA
TGGCTCACTTTCTTCTTGGCAGGTGGTGCTATCAGGTCTCTCACCTGAGCTGGCTAGAAAAAAAAAACTGCTACAG
CCTTGCTTGAAAGCCCTCTCAGTGCCACTGTGGAAGATGCCCTCCAGAGCTTCCTAAAGGCTGAAGAACTACAGC
CAGGATTTTCCAAAGCAGGAAGGGTATATATTTCCAAGTGCTACAGAGAACTAGGGAAAAACTCTGAAGCTAGAT
GGTGGATGAAGTTGGCCCTGGAGCTGCCAGATGTCACGAAGGAGGATTTGGCTATCCAGAAGGACCTGGAAGAAC
TGGAAGTCATTTTACGAGAC**TAA**CCACGTTTCACTGGCCTTCATGACTTGATGCCACTATTTAAGGTGGGGGGGC
GGGGAGGCTTTTTTCCTTAGACCTTGCTGAGATCAGGAAACCACACAAATCTGTCTCCTGGGTCTGACTGCTACC
CACTACCACTCCCCATTAGTTAATTTATTCTAACCTCTAACCTAATCTAGAATTGGGGCAGTACTCATGGCTTCC
GTTTCTGTTGTTCTCTCCCTTGAGTAATCTCTTAAAAAAATCAAGATTCACACCTGCCCCAGGATTACACATGGG
TAGAGCCTGCAAGACCTGAGACCTTCCAATTGCTGGTGAGGTGGATGAACTTCAAAGCTATAGGAACAAAGCACA
TAACTTGTCACTTTAATCTTTTTCACTGACTAATAGGACTCAGTACATATAGTCTTAAGATCATACCTTACCTAC
CAAGGTAAAAAGAGGGATCAGAGTGGCCCACAGACATTGCTTTCTTATCACCTATCATGTGAATTCTACCTGTAT
TCCTGGGCTGGACCACTTGATAACTTCCAGTGTCCTGGCAGCTTTTGGAATGACAGCAGTGGTATGGGGTTTATG
ATGCTATAAAACAATGTCTGAAAAGTTGCCTAGAATATATTTTGTTACAAACTTGAAATAAACCAAATTTGATGT
T

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FIGURE 3368

TCCCAGCTGCGCGTCGCAGTCCCGACGCGAGAAGGGCTGGAGTCGGCGTCCAGCCTAGAGCCCCCGGTGGGAGCC
AGGCCGGGACGCGTGCACC**ATG**CCCTACCTGCTCATCAGCACCCAGATCCGCATGGAGGTGGGCCCCACTATGGT
GGGCGATGAACAGTCGGATCCAGAGCTGATGCAGCATCTGGGGGCTTCAAAGAGAAGAGCCTTGGGAAACAACTT
TTATGAATACTACGTCGATGACCCTCCCCGCATAGTCCTGGACAAGCTGGAACGCAGGGGCTTCCGTGTGCTGAG
CATGACGGGGGTGGGCCAGACGCTGGTGTGGTGTCTGCACAAGGAG**TGA**CCTTCTCATGCTGATTTGCAGACGGG
GCACCCCTGTGGAGGGGCTGCTGTGGGCCCTGACCTCCAAGCTCCTGCCTCACCGTCTGCCTTGCTCCTCTCTTC
CCAAATCATCACCGCCATGGGCCCAGCCCCAAAGGGCAGTGAATGGCCTTCTCTGAAACCCTGCGTCAAGCAGTG
GGAGAGGGCAGTGCCCGGTGCCCTGGTGCTCCCAGCTGCCCTCCTGCTTCGGGCCTGGGCCGAGGGCCTTGTGTA
GGCCATGTTCCTCGGGCAGCTGCCCCGGGCCGGAGCTGGGCACTCCAGCGGCCCTGGCGCGTGGCTCCTGCATAG
CTAGCCCAAGCCAATAAAGGGCTGTGATGAGTGGCTGC

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FIGURE 3369

ATCCGTCAGGCCGGAACC**ATG**GCAGTGACCAAGGAGCTCTTACAGATGGACCTGTACGCGCTGCTAGGCATTGAG
GAGAAGGCAGCGGACAAAGAGGTAAAGAAGGCGTATAGGCAGAAGGCCCTCTCCTGCCACCCAGACAAAAATCCA
GATAATCCCAGAGCAGCTGAACTCTTCCACCAGCTTTCTCAGGCCTTGGAGGTGCTGACCGATGCTGCAGCCAGG
GCTGCATATGACAAGGTCAGGAAAGCCAAGAAGCAAGCAGCAGAGAGGACCCAGAAACTTGATGAGAAAAGGAAG
AAAGTGAAGCTTGACCTGGAGGCCCGGGAGCGGCAGGCCCAGGCCCAGGAGAGTGAGGAGGAAGAGGAGAGCCGG
AGCACCAGGACACTAGAGCAAGAGATCGAACGCCTGAGAGAAGAGGGTTCCCGGCAGCTGGAGGAACAGCAGAGG
CTCATCCGGGAGCAGATACGCCAGGAGCGTGACCAGAGGTTGAGAGGAAAGGCAGAAAATACTGAAGGCCAAGGA
ACCCCCAAACTAAAGCTAAAATGGAAGTGCAAGAAGGAGGATGAGTCAAAAGGTGGCTACTCCAAAGACGTCCTC
CTACGGCTTTTGCAGAAGTATGGTGAGGTTCTCAACCTGGTGCTTTCCAGTAAGAAGCCAGGCACTGCTGTGGTG
GAGTTTGCAACCGTCAAGGCAGCGGAGCTGGCTGTCCAGAATGAAGTTGGCCTGGTGGATAACCCTCTGAAGATT
TCCTGGTTGGAGGGACAGCCCCAGGATGCCGTGGGCCGCAGCCACTCAGGACTGTCAAAGGGCTCAGTGCTGTCA
GAGAGGGACTACGAGAGCCTCGTCATGATGCGCATGCGCCAGGCGGCCGAGCGGCAACAGCTGATCGCACGGATG
CAGCAGGAAGACCAGGAGGGGCCGCCTACG**TAG**CCCCAGCTCCAGCCATCCACCCCTCAGCCCTTTTCTTCAACG
TCACCAATAAATTTTTTTTTTTTT

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FIGURE 3370

AGGAGAGCGTCCGGATTCCCTGCTCTAGGTCGCGGCGGGACAGTGCCAGTGGGCGTGTGGGGCGGGGCAGGGCAG
GGAAGGGAAGGGCGGAGCTGGGGTGAGGGTCCAAGGGGCCCAGGACTTGGCCGGCGTGATCTCAGCTCTGCAGAC
CCTGCGGTGCTGGGAGCCACC**ATG**GAGAGTAGGTGCTACGGCTGCGCTGTCAAGTTCACCCTCTTCAAGAAGGAG
TACGGCTGTAAGAATTGTGGCAGGGCCTTCTGTTCAGGCTGCCTAAGCTTCAGTGCAGCAGTGCCTCGGACTGGG
AACACCCAACAGAAAGTCTGCAAGCAATGCCATGAGGTCCTGACCAGAGGGTCTTCTGCCAATGCCTCCAAGTGG
TCACCACCTCAGAACTATAAGAAGCGTGTGGCAGCCTTGGAAGCCAAGCAAAAGCCCAGCACTTCCCAGAGCCAG
GGACTGACACGACAAGACCAGATGATTGCTGAGCGCCTAGCACGACTCCGCCAGGAGAACAAGCCCAAGTTAGTC
CCCTCACAGGCAGAGATAGAGGCACGGCTGGCTGCCCTAAAGGATGAACGTCAGGGTTCCATCCCTTCCACCCAG
GAAATGGAGGCACGACTTGCAGCGTTGCAGGGCAGAGTTCTACCTTCTCAAACCCCCCAGCCGGCACATCACACA
CCGGACACCAGGACCCAAGCCCAGCAGACACAGGATCTGCTAACGCAGCTGGCAGCTGAGGTGGCTATCGATGAA
AGCTGGAAAGGAGGAGGCCCAGCTGCCTCTCTCCAGAATGATCTCAACCAGGGTGGCCCAGGGAGCACTAATTCC
AAGAGGCAGGCCAACTGGTCCTTGGAGGAGGAGAAGAGCAGACTGCTGGCTGAGGCAGCACTTGAGTTGCGGGAG
GAGAACACGAGGCAGGAACGGATTCTGGCCCTGGCCAAGCGACTAGCCATGCTGCGGGGACAGGACCCCGAGAGA
GTGACCCTCCAGGACTATCGCCTCCCAGACAGTGATGACGACGAGGATGAGGAGACAGCCATCCAAAGAGTCCTG
CAGCAGCTCACTGAAGAAGCTTCCCTGGATGAGGCAAGTGGCTTTAACATCCCTGCAGAGCAGGCTTCTCGACCC
TGGACGCAACCCCGCGGGGCAGAGCCTGAGGCCCAGGATGTGGACCCCAGGCCTGAGGCTGAGGAAGAGGAGCTC
CCCTGGTGCTGCATCTGCAATGAGGATGCCACCCTACGCTGCGCTGGCTGCGATGGGGACCTCTTCTGTGCCCGC
TGCTTCCGAGAGGGCCATGATGCCTTTGAGCTTAAAGAGCACCAGACATCTGCCTACTCTCCTCCACGTGCAGGC
CAAGAGCAC**TGA**AGACACCCTGGTCCTCCCGGAAGGGCAGTCCCACAGGCAGCGGCACCCATTTCTGGGCCCAGC
CACAGGACGTCCGATGGGAGAGCTTGTCTGGCTCTACTGATGATGGATAGGCCCCTTCCTGAGCCTTGGTGTCCC
TGGAATGAGGAAAGATTCTCCATTCGAGAGAATGACTGGGAGGGAAGAAGTCGGGGCCCTCCTATTAGAAGCCCA
GACTGGAAGTGAGAGGCATGATGGGGAGAGACCAGACTGAATCTACGGGTGAGCCCTGTAACCTGGCTCTAGGGC
ACAGGCCCCTCCCCTGGCACTTAGTGGGTCTAATAAAGTATGTTGATTCATTGG

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FIGURE 3371

CGGCCGAGCCCCAGCTCTCCGAGCACCGGGTCGGAAGCCGCGACCCGAGCCGCGCAGGAAGCTGGGACCGGAACC
TCGGCGGACCCGGCCCCACCCAACTCACCTGCGCAGGTCACCAGCACCCTCGGAACCCAGAGGCCCGCGCTCTGA
AGGTGACCCCCCTGGGGAGGAAGGCGATGGCCCCTGCGAGGACGATGGCCCGCGCCCGCCTCGCCCCGGCCGGCA
TCCCTGCCGTCGCCTTGTGGCTTCTGTGCACGCTCGGCCTCCAGGGCACCCAGGCCGGGCCACCGCCCGCGCCCC
CTGGGCTGCCCGCGGGAGCCGACTGCCTGAACAGCTTTACCGCCGGGGTGCCTGGCTTCGTGCTGGACACCAACG
CCTCGGTCAGCAACGGAGCTACCTTCCTGGAGTCCCCCACCGTGCGCCGGGGCTGGGACTGCGTGCGCGCCTGCT
GCACCACCCAGAACTGCAACTTGGCGCTAGTGGAGCTGCAGCCCGACCGCGGGGAGGACGCCATCGCCGCCTGCT
TCCTCATCAACTGCCTCTACGAGCAGAACTTCGTGTGCAAGTTCGCGCCCAGGGAGGGCTTCATCAACTACCTCA
CGAGGGAAGTGTACCGCTCCTACCGCCAGCTGCGGACCCAGGGCTTTGGAGGGTCTGGGATCCCCAAGGCCTGGG
CAGGCATAGACTTGAAGGTACAACCCCAGGAACCCCTGGTGCTGAAGGATGTGGAAAACACAGATTGGCGCCTAC
TGCGGGGTGACACGGATGTCAGGGTAGAGAGGAAAGACCCAAACCAGGTGGAACTGTGGGGACTCAAGGAAGGCA
CCTACCTGTTCCAGCTGACAGTGACTAGCTCAGACCACCCAGAGGACACGGCCAACGTCACAGTCACTGTGCTGT
CCACCAAGCAGACAGAAGACTACTGCCTCGCATCCAACAAGGTGGGTCGCTGCCGGGGCTCTTTCCCACGCTGGT
ACTATGACCCCACGGAGCAGATCTGCAAGAGTTTCGTTTATGGAGGCTGCTTGGGCAACAAGAACAACTACCTTC
GGGAAGAAGAGTGCATTCTAGCCTGTCGGGGTGTGCAAGGCCCCTCCATGGAAAGGCGCCATCCAGTGTGCTCTG
GCACCTGTCAGCCCACCCAGTTCCGCTGCAGCAATGGCTGCTGCATCGACAGTTTCCTGGAGTGTGACGACACCC
CCAACTGCCCCGACGCCTCCGACGAGGCTGCCTGTGAAAAATACACGAGTGGCTTTGACGAGCTCCAGCGCATCC
ATTTCCCCAGTGACAAAGGGCACTGCGTGGACCTGCCAGACACAGGACTCTGCAAGGAGAGCATCCCGCGCTGGT
ACTACAACCCCTTCAGCGAACACTGCGCCCGCTTTACCTATGGTGGTTGTTACGGCAACAAGAACAACTTTGAGG
AAGAGCAGCAGTGCCTCGAGTCTTGTCGCGGCATCTCCAAGAAGGATGTGTTTGGCCTGAGGCGGGAAATCCCCA
TTCCCAGCACAGGCTCTGTGGAGATGGCTGTCGCAGTGTTCCTGGTCATCTGCATTGTGGTGGTGGTAGCCATCT
TGGGTTACTGCTTCTTCAAGAACCAGAGAAAGGACTTCCACGGACACCACCACCACCCACCACCCACCCCTGCCA
GCTCCACTGTCTCCACTACCGAGGACACGGAGCACCTGGTCTATAACCACACCACGCGGCCCCTCTGAGCCTGGG
TCTCACCGGCTCTCACCTGGCCCTGCTTCCTGCTTGCCAAGGCAGAGGCCTGGGCTGGGAAAAACTTTGGAACCA
GACTCTTGCCTGTTTCCCAGGCCCACTGTGCCTCAGAGACCAGGGCTCCAGCCCCTCTTGGAGAAGTCTCAGCTA
AGCTCACGTCCTGAGAAAGCTCAAAGGTTTGGAAGGAGCAGAAAACCCTTGGGCCAGAAGTACCAGACTAGATGG
ACCTGCCTGCATAGGAGTTTGGAGGAAGTTGGAGTTTTGTTTCCTCTGTTCAAAGCTGCCTGTCCCTACCCCATG
GTGCTAGGAAGAGGAGTGGGGTGGTGTCAGACCCTGGAGGCCCCAACCCTGTCCTCCCGAGCTCCTCTTCCATGC
TGTGCGCCCAGGGCTGGGAGGAAGGACTTCCCTGTGTAGTTTGTGCTGTAAAGAGTTGCTTTTTGTTTATTTAAT
GCTGTGGCATGGGTGAAGAGGAGGGGAAGAGGCCTGTTTGGCCTCTCTATCCTCTCTTCCTCTTCCCCCAAGATT
GAGCTCTCTGCCCTTGATCAGCCCCACCCTGGCCTAGACCAGCAGACAGAGCCAGGAGAAGCTCAGCTGCATTCC
GCAGCCCCCACCCCCAAGGTTCTCCAACATCACAGCCCAGCCCGCCCACTGGGTAATAAAAGTGGTTTGTGGA

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FIGURE 3372

AGCCTGGACCCATTCAGTCAGAGGCAGCCAGCGGGACCTGCTTCACCGAGCGCAGCGAAGCCGAGACCCGGGCTG
GCCCCTCTGCTGCCCCCGGAGCGGGCC**ATG**CCGCCGCGGGAGCTGAGCGAGGCCGAGCCGCCCCCGCTCCGGGCC
CCGACCCCTCCCCCGCGGCGGCGTAGCGCGCCCCCAGAGCTGGGCATCAAGTGCGTGCTGGTGGGCGACGGCGCC
GTGGGCAAGAGCAGCCTCATCGTCAGCTACACCTGCAATGGGTACCCCGCGCGCTACCGGCCCACTGCGCTGGAC
ACCTTCTCTGTGCAAGTCCTGGTGGATGGAGCTCCGGTGCGCATTGAGCTCTGGGACACAGCGGGACAGGAGGAT
TTTGACCGACTTCGTTCCCTTTGCTACCCGGATACCGATGTCTTCCTGGCGTGCTTCAGCGTGGTGCAGCCCAGC
TCCTTTCAAAACATCACAGAGAAATGGCTGCCCGAGATCCGCACGCACAACCCCCAGGCGCCTGTGCTGCTGGTG
GGCACCCAGGCCGACCTGAGGGACGATGTCAACGTACTAATTCAGCTGGACCAGGGGGGCCGGGAGGGCCCCGTG
CCCCAACCCCAGGCTCAGGGTCTGGCCGAGAAGATCCGAGCCTGCTGCTACCTTGAGTGCTCAGCCTTGACGCAG
AAGAACTTGAAGGAAGTATTTGACTCGGCTATTCTCAGTGCCATTGAGCACAAAGCCCGGCTGGAGAAGAAACTG
AATGCCAAAGGTGTGCGCACCCTCTCCCGCTGCCGCTGGAAGAAGTTCTTCTGCTTCGTT**TGA**GCAGCTATGGCT
GCATAGCAAGTAGTAGGCAGGAGGCCAAAGACTTCTGAGACCTGGGGCACCCGGGCCTTTGCGGCAGCTACTGGC
AGGGCCTGGCCACCTCATAGGACTCAGTTCCCTTCTGAACACTCGGGGGACATGGGCCTCTAACTGCCCACTCTG
ATATGCCTGGGTGAGCCTAGGAGGGAAGGCTCTGATTTGGATTTCTCCAGTCAAAGCTCACAGAAAAAAACCTGG
CACTTTGATTTTCATGGGATGGTCCTAACAGGGTCAGTCACCTCCGAGCAGTTTGGGAACCCAGTTTCTTGTCCT
GGGCCCTCAGGTCAGCCTGGCTGAATTAGGACCCTTCCTTGG

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FIGURE 3373

GCTGAGCTGCCGGGGCGAGGTTGGGATCACCTGGCACCGGCTGAAGGGAGCCTGTGATTTTTTTGTAGCGGGGGC
GGGGAGTAAGGTGCAAGACTGCGCCAGATTCAAGGACGAGGGCTGCCCGATTATCTCGCTGCATAAGGCAAGAGC
AAGAGGATCCTCAGGATTTTAAAGAGGAGGCGACGGCTGCAGGTTCCCAGGATCTGTCAGAGGCTGGGGAGTTAC
AGCTTCCATTCTGGGGCGACGGGGACCCCGGGGGGGTAGCCCTTTTGTAATCCCCAGGCCCCGGACAAAGAGCCC
AGAGGCCGGGCACCATGGCGTCCATCCTGGATGAGTACGAGAACTCGCTGTCCCGCTCGGCCGTCTTGCAGCCCG
GCTGCCCTAGCGTGGGCATCCCCCACTCGGGGTATGTGAATGCCCAGCTGGAGAAGGAAGTGCCCATCTTCACAA
AGCAGCGCATTGACTTCACCCCTTCCGAGCGCATTACCAGTCTTGTCGTCTCCAGCAATCAGCTGTGCATGAGCC
TGGGCAAGGATACACTGCTCCGCATTGACTTGGGCAAGGCAAATGAGCCCAACCACGTGGAGCTGGGACGTAAGG
ATGACGCAAAAGTTCACAAGATGTTCCTTGACCATACTGGCTCTCACCTGCTGATTGCCCTGAGCAGCACGGAGG
TCCTCTACGTGAACCGAAATGGACAGAAGGTACGGCCACTAGCACGCTGGAAGGGGCAGCTGGTGGAGAGTGTGG
GTTGGAACAAGGCACTGGGCACGGAGAGCAGCACAGGCCCCATCCTGGTCGGGACTGCCCAAGGCCACATCTTTG
AAGCAGAGCTCTCAGCCAGCGAAGGTGGGCTTTTCGGCCCTGCTCCGGATCTCTACTTCCGCCCATTGTACGTGC
TAAATGAAGAAGGGGGTCCAGCACCTGTGTGCTCCCTTGAGGCCGAGCGGGGCCCTGATGGGCGTAGCTTTGTTA
TTGCCACCACTCGGCAGCGCCTCTTCCAGTTCATAGGCCGAGCAGCAGAGGGGGCTGAGGCCCAGGGTTTCTCAG
GGCTCTTTGCAGCTTACACGGACCACCCACCCCCATTCCGTGAGTTTCCCAGCAACCTGGGCTACAGTGAGTTGG
CCTTCTACACCCCCAAGCTGCGCTCCGCACCCCGGGCCTTCGCCTGGATGATGGGGGATGGTGTGTTGTATGGGG
CATTGGACTGTGGGCGCCCTGACTCTCTGCTGAGCGAGGAGCGAGTCTGGGAGTACCCAGAGGGGGTAGGGCCTG
GGGCCAGCCCACCCCTAGCCATCGTCTTGACCCAGTTCCACTTCCTGCTGCTACTGGCAGACCGGGTGGAGGCAG
TGTGCACACTGACCGGGCAGGTGGTGCTGCGGGATCACTTCCTGGAGAAATTTGGGCCGCTGAAGCACATGGTGA
AGGACTCCTCCACAGGCCAGCTGTGGGCCTACACTGAGCGGGCTGTCTTCCGCTACCACGTGCAACGGGAGGCCC
GAGATGTCTGGCGCACCTATCTGGACATGAACCGCTTCGATCTGGCCAAAGAGTATTGTCGAGAGCGGCCCGACT
GCCTGGACACGGTCCTGGCCCGGGAGGCCGATTTCTGCTTTCGCCAGCGTCGCTACCTGGAGAGCGCACGCTGCT
ATGCCCTGACCCAGAGCTACTTTGAGGAGATTGCCCTCAAGTTCCTGGAGGCCCGACAGGAGGAGGCTCTGGCTG
AGTTCCTGCAGCGAAAACTGGCCAGTTTGAAGCCAGCCGAACGTACCCAGGCCACACTGCTGACCACCTGGCTGA
CAGAGCTCTACCTGAGCCGGCTTGGGGCTCTGCAGGGCGACCCAGAGGCCCTGACTCTCTACCGAGAAGTCAGAA
ATCTGACCCAATTCCACCCCCTGCCTCTAGCACCTCTTCTGTCCCTGTCATTCCCCACACACGTCCTGTTCACCT
CGAGAGAGAGAGAGAGAGAGCACCTTTCTTCCGTCTGTTCACTCTGCGGCCTCTGGAATCCCAGCTCTTCTCTCT
CAGAAGAAGCCTTCTCTTCCTCCTGCCTGTAGGTGTCCCAGAAGTGAGAAGGCAGCCTTCGAAGTCCTGGGCATT
GGGTGAGAAAGTGATGCTAGTTGGGGCATGCTTTTGTGCACACTCTCTGGGGCTCCAGTGTGAAGGGTGCCCTGG
GGCTGAGGGCCTTGTGGAGGATGGTCGGTGGTGGTGATGGAGGTGGAGAGCATTAAACTGTCTGCACTGC

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FIGURE 3374

CAGGCCAGGTGTGTGCGTCCGTCGGTCTTTCCGTGCCCACGCCGGAGACCAGCCCCGGAGGCCGCCTGGGCCTAT
CCCTGTGCCAGGCACCATGAAGCAGGAGTCTGCAGCCCCGAACACCCCGCCCACCTCGCAGTCCCCTACGCCGTC
CGCTCAGTTCCCCCGAAACGACGGCGACCCTCAAGCGCTGTGGATTTTCGGGTACGGCTCCCTGGTGTGGAGGCC
CGACTTCGCCTACAGCGACAGCCGTGTGGGCTTCGTGCGCGGCTACAGCCGCCGTTTCTGGCAGGGAGACACCTT
CCATCGGGGCAGCGACAAGATGCCTGGCCGTGTGGTGACGCTCCTTGAAGATCATGAGGGCTGCACTTGGGGCGT
GGCATACCAAGTGCAAGGGGAGCAGGTAAGCAAGGCCCTGAAGTACCTGAATGTGCGAGAGGCAGTGCTTGGTGG
CTACGATACCAAGGAGGTCACCTTCTATCCCCAAGATGCTCCTGACCAACCACTGAAGGCATTGGCCTATGTGGC
CACCCCACAGAACCCTGGTTACCTGGGCCCTGCGCCTGAAGAGGCCATTGCCACGCAGATCCTGGCCTGCCGGGG
CTTCTCCGGCCACAACCTTGAATACTTGCTGCGTCTGGCAGACTTCATGCAGCTCTGTGGGCCTCAGGCGCAGGA
CGAGCACCTGGCAGCCATCGTGGACGCTGTGGGCACCATGTTGCCCTGCTTCTGCCCCACCGAGCAGGCTCTGGC
GCTGGTGTGAGGGGCTGAGCCCCTGCGGGGAGTGCTCATGTGGACATCAGGGCCAGACACCCACTCCAGTGCACA
AGACAGACTTGCGACCGCTTGAGCCCACTGAGCAGATATGGTGGGTGGCTGGAGGCTTCTCTTTCTCAGTCCCTG
CCTGTCTGCCAGCCTGCAGCTCTCCTGCTTGACACTGACTTACTACTTGAAACTTTATTTATTGCACCATGTTGG
TGTGGTGGGCAGGTGGAGGGCCTGCCCTGGACACAGGGGCCCTGCTGAGCAGTGGCCCCATCCTGGAACTTGACC
AGATTCCCCCCAGTGCTGCTGCTAACCCCACACCACCCAGGCCTCCACCTCCCCAGGGAGTCTCCAAGAGCCTCG
ATCCTCTGCTCACTCAGCCCAGCCATCCATAGCCCTGGGAATTCCACCTGCCAAGGATCCCAGCAGGCTGGATGA
GGGATAGTAGGGCATGAGGAGAAGGAGCCCTGTAAGGACTGAGGCCCCGGCCAGCCCTTCTCCTCCACCAGTTCC
CCAGAGCAGAGCTGGAGCTGATGCCTGGACACAGCTGCTGAGCCTGGCCTGGGCCTCTTACCCACTTGGTTGTTT
TCTTGTCCCTCTGTCTGTCTGTCTATCTACTTGTCTGTCTGGGCCACTCCTGCCTGTGTGTTGGTCTATTCCTGG
GAAGCTCATCACTACAGGCCCTGGCAACCTTCCCAGTCTGTCCCATACTGTTACCCATAAAACTATCTCTTT

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FIGURE 3375A

CCGCGGAGGGAGCGAGCTAGGAGCGTCCACGCCCAACGCAGTCACCGTCCCACGGCCTCAGAGAGCGAACCGCGG
CTCCACCGTCGGCGGGGCGACCCCCCCCTCCGGACCCCGCCCGCACCCCGCCCCCCCTCCGCCGCCGTCGCGGCG
GCGGGGCCAGGCGGCCCGAGCCGTGCAGTCGGAGGTCCTTGTGCATGAAGACAGATTTGTTCTATGGCCTCGGAG
TTGGGTGCCAGGGATGATGGAGGCTGCACTGAGCTGGCAAAGCCCCTCTATCTTCAGTACTTGGAGAGGGCCCTC
CGGTTGGACCATTTTCTGCGACAAACGTCAGCTATCTTCAATAGGAATATTTCTAGTGATGACAGTGAAGATGGA
CTGGATGACAGTAATCCATTATTGCCCCAGTCTGGGGATCCCTTAATACAAGTTAAGGAAGAACCTCCAAATTCA
TTGCTTGGTGAAACTTCTGGAGCAGGCAGTTCTGGAATGTTAAACACATATTCTCTGAATGGAGTTCTACAGTCA
GAATCAAAATGTGATAAGGGGAATTTATATAATTTCTCTAAGCTGAAGAAAAGCAGAAAGTGGCTAAAGAGCATT
CTGCTAAGTGATGAATCCAGCGAGGCTGATTCTCAGAGTGAAGACGATGATGAAGAAGAACTCAATCTCAGCAGA
GAAGAACTTCACAACATGCTTCGACTACACAAATATAAGAAACTTCACCAAAATAAGTATAGTAAAGACAAGGAG
TTGCAGCAATATCAGTACTACAGTGCAGGCCTGCTCTCCACATATGACCCTTTCTATGAGCAACAACGGCACCTA
CTTGGACCCAAGAAAAAGAAATTTAAGGAGGAAAAGAAACTTAAAGCTAAGTTGAAAAAAGTGAAGAAAAAAAGA
CGAAGAGATGAAGAACTTTCCTCTGAAGAATCCCCTCGTCGCCATCACCACCAGACCAAAGTCTTTGCCAAGTTT
TCTCACGATGCACCTCCCCCTGGCACTAAGAAAAAGCACTTATCCATTGAGCAGCTGAATGCTCGTCGCAGGAAA
GTATGGCTCAGCATTGTGAAAAAGGAACTACCAAAGGCAAATAAGCAGAAAGCTTCAGCTCGTAACCTGTTTCTC
ACCAATAGCCGAAAGCTTGCTCACCAGTGCATGAAGGAGGTGCGTCGAGCTGCCTTGCAGGCCCAGAAGAACTGT
AAGGAAACCTTGCCTCGTGCCCGCCGCCTCACCAAGGAGATGCTTCTGTACTGGAAGAAATATGAGAAAGTAGAG
AAGGAGCACCGCAAGAGAGCAGAGAAGGAAGCTTTGGAGCAGCGGAAGTTGGATGAGGAAATGCGGGAGGCCAAG
AGGCAACAGCGAAAACTCAACTTCTTAATTACCCAGACAGAGTTGTATGCCCATTTCATGAGTCGCAAACGAGAT
ATGGGTCATGATGGTATCCAGGAAGAAATCCTAAGGAAACTGGAAGACAGTTCTACCCAGAGACAAATCGATATA
GGTGGAGGAGTGGTAGTTAACATCACACAGGAGGATTATGATAGTAACCATTTTAAAGCCCAGGCCCTGAAGAAT
GCTGAAAATGCTTACCATATTCACCAAGCTCGGACAAGGTCATTTGATGAAGATGCAAAAGAAAGTCGAGCAGCT
GCCCTACGGGCAGCAAACAAGTCTGGCACTGGGTTTGGGGAGAGTTATAGCCTGGCTAACCCATCTATCCGGGCT
GGTGAGGATATTCCACAGCCCACAATTTTTAATGGCAAATTGAAAGGTTATCAACTGAAAGGCATGAATTGGTTG
GCCAATCTATATGAACAGGGTATTAATGGCATTCTTGCTGATGAAATGGGCCTTGGTAAAACAGTACAGAGCATT
GCCCTTCTGGCCCATCTGGCTGAGAGAGAGAACATTTGGGGACCTTTCTTAATAATTTCACCTGCGTCTACACTT
AACAATTGGCACCAGGAGTTTACTAGATTTGTTCCTAAATTTAAGGTGCTACCATATTGGGGAAATCCTCATGAT
AGAAAAGTCATCAGAAGGTTCTGGAGTCAGAAGACCCTCTACACTCAGGATGCCCCCTTCCATGTGGTTATTACC
AGCTATCAGCTGGTGGTGCAGGATGTAAAGTATTTCCAGCGGGTCAAGTGGCAATACATGGTACTGGATGAGGCT
CAGGCGCTCAAGAGTAGTTCCAGTGTTCGTTGGAAGATCCTCTTACAGTTCCAGTGTCGGAATCGGCTTTTGCTA
ACCGGGACCCCAATTCAGAACACCATGGCAGAGCTTTGGGCTCTGCTGCATTTCATTATGCCAACATTATTTGAT
TCACATGAGGAATTTAATGAATGGTTTTCCAAGGACATTGAGAGCCATGCCGAAAACAAATCTGCTATTGATGAG
AATCAACTTTCTCGCTTACACATGATTTTGAAGCCATTTATGCTGAGGAGAATCAAGAAAGATGTGGAAAATGAA
TTATCTGACAAGATTGAGATTCTAATGTATTGCCAACTGACCAGCCGACAGAAGCTGCTATATCAGGCACTAAAG
AACAAAATTTCCATTGAGGATTTATTGCAGTCTTCTATGGGCTCTACCCAACAAGCACAGAACACCACCAGCAGC
CTCATGAATCTGGTCATGCAGTTTAGGAAGGTGTGTAATCACCCGGAGTTATTTGAACGGCAAGAAACTTGGTCT
CCATTTCATATTTCCCTAAAGCCATACCACATTTCAAAGTTTATCTACCGTCATGGACAGATCAGGGTCTTCAAT
CATTCACGAGACAGGTGGTTAAGGGTTCTTTCTCCATTTGCACCAGACTATATCCAACGGTCTCTCTTTCACAGA
AAAGGTATTAATGAAGAAAGCTGTTTCTCTTTCCTTCGCTTTATTGATATATCTCCAGCAGAAATGGCAAACCTT
ATGCTTCAGGGACTTTTGGCCAGATGGTTAGCTCTTTTCCTGTCTCTGAAAGCCTCCTACAGGCTCCATCAGCTA
CGCTCCTGGGGAGCGCCAGAAGGGGAGAGCCACCAGAGATACCTGAGGAACAAGGATTTCCTTCTTGGGGTTAAT
TTTCCACTCTCCTTTCCAAACCTTTGCAGCTGCCCTTTGTTAAAGTCTCTTGTTTTCAGCAGCCACTGTAAAGCA
GTGAGTGGCTACTCAGACCAGGTTGTCCATCAGCGGAGATCAGCTACCTCCTCGCTGCGTCGCTGCCTGCTCACT
GAGCTGCCATCTTTTTTGTGTGTGGCCAGTCCACGAGTTACCGCAGTGCCATTGGATTCTTACTGCAATGACCGA
AGTGCAGAATATGAAAGGCGAGTTCTGAAGGAAGGAGGGAGTCTGGCAGCCAAGCAGTGTTTGTTGAATGGGGCC
CCTGAACTGGCTGCAGACTGGCTAAATAGACGATCACAGTTCTTCCCAGAGCCAGCTGGAGGTCTGTGGAGCATC
AGACCTCAGAATGGCTGGTCTTTCATCAGGATTCCAGGCAAGGAGAGCCTCATCACTGACAGTGGAAAGCTGTAT
GCCCTTGATGTCCTGCTGACTCGGCTCAAGTCTCAAGGGCATAGGGTCCTTATCTACTCCCAGATGACCAGGATG

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FIGURE 3375B

ATAGACCTACTGGAGGAATACATGGTTTACAGGAAGCATACCTACATGAGGCTTGATGGCTCATCCAAGATCTCG
GAGAGGCGAGACATGGTTGCTGATTTTCAGAACAGGTAATGACATCTTTGTGTTCCTGTTAAGCACACGAGCTGG
AGGACTGGGTATCAATCTCACTGCTGCAGACACAGTGATTTTCTATGATAGCGACTGGAACCCCACTGTGGACCA
GCAGGCCATGGACAGGGCCCACCGCTTAGGGCAGACAAAGCAGGTTACTGTGTACCGGCTCATCTGTAAAGGCAC
CATTGAAGAACGCATTCTGCAAAGAGCCAAGGAGAAGAGTGAGATTCAGCGGATGGTGATTTCAGGTGGGAACTT
CAAACCAGATACCTTGAAACCCAAAGAGGTGGTTAGTCTTCTTCTAGACGACGAAGAGTTGGAGAAGAAACTGAG
GCTGCGGCAGGAAGAGAAACGGCAACAGGAGGAAACCAACCGAGTGAAAGAGCGCAAGCGGAAGCGGGAAAAGTA
TGCAGAGAAGAAGAAAAAAGAAGATGAATTGGATGGGAAAAGGAGAAAAGAGGGTGTGAACCTGGTGATCCCATT
TGTTCCCTCGGCTGATAACTCCAACCTCTCTGCTGACGGAGATGACTCCTTCATTAGCGTGGACTCAGCCATGCC
AAGCCCTTTCAGTGAGATCTCCATCAGCAGTGAGCTGCACACTGGCTCCATTCCCCTGGACGAGAGCAGCAGTGA
CATGCTGGTCATTGTGGATGACCCAGCCTCCTCAGCCCCTCAGTCTCGAGCTACCAACTCTCCCGCATCCATAAC
AGGCTCCGTCTCAGATACCGTGAATGGAATTTCCATTCAGGAAATGCCAGCTGCAGGACGTGGTCACTCAGCCCG
AAGCCGAGGCCGCCCCAAAGGTTCAGGAAGCACAGCCAAAGGAGCAGGGAAGGGCCGGAGCCGAAAGTCCACGGC
AGGCAGTGCTGCTGCAATGGCAGGAGCCAAAGCCGGGGCTGCAGCGGCCTCTGCAGCTGCCTATGCCGCATACGG
GTACAACGTGTCTAAAGGAATCTCCGCCAGCAGTCCTCTGCAGACATCCCTTGTTCGGCCTGCTGGCCTTGCTGA
CTTTGGACCTTCAAGCGCCTCTTCTCCTTTGAGTTCCCCTTTGAGCAAGGGAAATAATGTTCCTGGGAATCCCAA
GAACCTCCACATGACCAGCAGCCTAGCCCCAGACTCTCTGGTCCGGAAACAGGGCAAAGGCACCAACCCCTCTGG
AGGACGGTAACCATCTGGGCCCTCCGACTTCCTTCAACCAAACCAGGGCTAGAGTCCTGACCTGCCAGTGGTCTT
TGGATGGCTTGCCCCGTGCAGCATCTTGCATCCTGAGTCAGAAGTGGAAATGTCCAGCAGGGGAAGGACAGGCAG
GTGGATGGTGTGAGCACTTTTATCATCTGTGTCTCATCAGGAGCATCTGGGGTGCCTGTAGGAGGAAGGCCACAG
GGCATGGATCAGCCCCACTGCATCTCAAGTGAACTGTATAGCCAAGTCTTAAACCTCTCACGGGGCAAGCCTGAC
ACAGACCCCCTTTAGATGCTCAGGCATACTGTTTCCATCCCGATTCCACTCTTCGGCTCTGACACGTCCCTTGCA
AAGTCTCCGCAGGTGCTGTGAAGAGCCTTCCATGGTAGAGATTTCTCTTAAGAGTGTGATTTCTCATAGGGCTAG
TAAGGGAGATTGTATACCTGTTGTCCACAGTCTTCAGGCAGCTCCCCAGGTCTCTGAACCCCAGAGTGTCATCAT
TGGAGAGAGCAGTGACTGCGAGAGATGGTGGAGGCCGCTAAGCATGGTAGAGGCTAGAGGAAGTCTATCCACAGG
CAGTTGTGTTCCCAGCAATTCCTCCCATCCTGCATGGTTCACACCAAGAGAACCTTCAGATCCTACCAGCAACCG
TAGCACCTTCCACCCAGGGGACTCCCAGAAGCCAGTAGAGAGACCAGGAGCCACCTCAATCAGCAGGACAGCCTC
ACTGCCCCTCTTGCAGAGTCCCCTTTGCCCATCCTGAATGCACAGTCTCCCTGCTCATGCCCTTCAGTCCCCTGC
TTGGCTGTATGCACTGTCTATATTGCACTGAGAGAGGAAGGGACAGCAGGAGTGAGGTGAAGAGGGCGGAGAGAG
GGGGCAGGCTCGGCACCGGCCCTCCCAGCCCGGCCAGCCTGAGCTTGCTGCCCTCCAGTAGAGACAGAGGGGCAG
TGTTTGCATGGGAGGTGTTTCTGCCTGTCCCTGCCTGATGTCCCTGGTGGAGCAGGTACCTCCGGGCGGGCAAGC
CTCTGATTTGCACACCTGAAAATCGCGGAATTGAGTTTCGATAGATTGATTTTTAAAACTTTTTTGGAGTAGGGG
GTATAGGGGAATCATTTAATTTAAATCATTAAGATTCCCCTGCTCAAACCCAGATTCCTGTGTACAGATGCTATT
TAGAGGGAATCAGAAAAATGCCAAGCCTTTTCTCTTTGAATGTGCTATTTTTATAACTGAACTTGTACATATGTA
TAAAGAGAGACACATCTTCCTTTTACTAACTGGATAAAAAAATCTTAAATAAAATGGAGTGAGATAATTTTATGT

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FIGURE 3376

CTTCTTCATCCTTTTTATATGTTCTTTGCTTCCTACTTCCCTGTCTTCCAACATACTGTTCACTTACTCTGGCAG
TCTTTCTGCTTTTCATTAAGCCTCAAAATCTCCTCTGTTCTACTTGGCACCACAAGCTATGTCCTATATATGTAT
TTCTGACTTGGCAGGATAGTTCAGGGGTCTGGCAGTTTTTATTTACCTTCATTATTAAATGGGCCTCTGGGATGT
TGCCTCTTCAGGAGCTTTTTGGTAATCAATACTTCTCTCAGAAGTATGAGACCATCCTCTGCACTCTGCTCTGTC
ATCAAAGGCTGCTGGGTGGAGATACCCTTTTTGAAAGGTGGCCTTGGTGAGAGGTATGGAGCCAAGTCTTCTAGG
TTGCTTGCCCACATCACTCTATCTCTGGCCTCTGATTCTCAACTTTGTACCTGTGTGGCTCCTCTTGTTAGTGCA
ATGTTGACTGTTGAAAAAGCAGCAGTATGCTTACAGGTTTGCTTAGTTTGGGGACACCGTTACCACCAGAATGGC
TGCTCTGACAATATGCCTAGGGACTTTCTCATGGCTTTTATTTAATAAGGAGGCTGGGCACCCTATAAAGCCTCA
TGCATTCACACCTTTGCAGCATGGTTTATGCCTCACCTCCCAAGTAGCTGGGATTACAGGTGTGCACCACCATGC
CCGGCTAATTTTTTGTATTTTTAGTGGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTCGAACTCCTGACCT
CAATTCTCCCACCTCAGCCTCCCAAGTAGCTGGGATTACAGACGTGTGCCACCATACCTGGGTAATTTTTGCATT
TTTAGTGGAGAGGGAGTTTCACCATGTTGGCCAGGTTGGTCTTGAACTCCTGACCTCAGGTGATCCTCCTGCCTC
GGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGTGCTCAGCCGCAAAATTCTTTATGAATTTTACACTT
GGCAAATGTTAATGACGGAAGCCATAGTCTGCTCCTAATACATGTCCAAAGCATTGACTGTTGTGTCATTAGCTG
CCTGGTTACATTAGCTCCCTGGCTTCTTGTTTAGACCACTGCTAATCCCTTAAAAACAAGAGGTCTGGCACTAGT
AGCACAACCTAAGGTGGCATTACAGATCTTTGAGCGAGCCACAGCAACTTTTCTGCCAAGTCAGCTTAGTTTAGA
CTTCAGTGAATCAGGCTATTGCTATCCTAATGTATGTCTCTATGAGTGTATTTAGCCACACATCTGCCCTTGGTT
GACTTTCTGACTCATTGCTTGCTTGCTTGTTTCCTTGCTTTGGAAAACTATTGAAGATTGCTAAAAAATACCACT
GCAAAGTGATGGAAAAGGGTGGAGAACAGGGGAGTAGCCAGGCTGGATGGCTCAAATATAAATGAATGAGGAATT
CTTTATGAAGTATCAGTCAGATTTTATGATTAAGTGATGTAATATAGGAATTATGTAAAAGGGAAGAATGTCTGA
TACTGATCTATTAGAGAGGTACTTTAGAGGCTTCTTGATTGGCATAAAGTTCCTAAGGTTATAGATTTTCCCCCC
TTTTGGCTGTATAGCAAAGTGTTTTAATCCACGGTTGTGCCTTATTGTTCCATTAAAATTGTATCTTCGATCCAT
CAATAAATACTTGTGGTTGAAAC

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FIGURE 3377

GAGCTGTGCTTGGGGCGGGGCCTGGCGTGTATTCGAAAGGAAGGCGCCGGCTGCGGGAAGATGGCGGCTCAGCCG
CTGCGGCATCGCTCACGTTGTGCAACGCCGCCCCGGGGGGACTTTTGTGGTGGCACTGAGAGGGCGATTGACCAA
GCTTCTTTTACGACCTCCATGGAGTGGGATACGCAGGTGGTGAAGGGGTCCTCGCCGCTCGGCCCCGCAGGGCTG
GGGGCTGAGGAGCCAGCCGCCGGCCCGCAGCTGCCGTCTTGGCTGCAGCCTGAGAGGTGCGCTGTGTTCCAGTGC
GCACAGTGTCACGCAGTGCTCGCCGACTCGGTGCACCTCGCCTGGGACCTGTCGCGGTCCCTCGGGGCCGTGGTC
TTCTCCAGAGTTACAAATAACGTCGTTTTGGAAGCGCCCTTCCTAGTTGGCATTGAAGGTTCACTCAAAGGCAGT
ACTTACAACCTTTTATTCTGTGGTTCTTGTGGGATTCCCGTTGGTTTCCATCTGTATTCTACCCATGCTGCCCTG
GCTGCCTTGAGAGGTCACTTCTGCCTTTCCAGTGACAAAATGGTGTGCTATCTCTTAAAAACAAAAGCCATAGTA
AATGCATCAGAGATGGATATTCAAAATGTTCCTCTATCAGAAAAGATTGCAGAGCTGAAAGAGAAGATAGTGCTA
ACGCACAATCGCTTAAAATCACTAATGAAGATTCTGAGTGAAGTGACTCCTGACCAGTCCAAGCCAGAAAACTGA

TCCTGTACCAAAGCTTGAGTGTCAGGTTCAGGCTTTATTGCTGTCTTCAACAACAGGTGCTGCTTAGTCATTTCT
TGAAAAAGATTGGCTTCAAGAATGGAGGGGAAATGCAGTTTCTATTTACCTTTAGGCTGATTTTCCAAATTATTT
GTGAAGCTGTTTTTAGAAGATGAGAGACTAAGGATTCTTCTCTTTTATAGCTATTTGCCTTAAGAACTTACTTTA
GATTCTTATTGAATTCATAATACTTATCTCTGAAAATGTCTTTGACTGTAAATTTAGGAATTAAGATGCAGAGTC
CCATGTGTCCTCTGATCTAAAGTTGCATGGTTGGTCTGAAAATAGAGTTGGGCTTAATGTTGACTTCTATTACTC
CTGCATGGAGCAGTTGTTATGAATACTAATACATCACTTTTTAACTTCTGTAAAATACAGATCATAATATTCTAT
AGGTAATGTTTAATAAATTGCCTGAATAATA

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FIGURE 3378

GGGATTTGAACCGCGCTGACGAAGTTTGGTGATCCATCTTCCGAGTATCGCCGGGATTTCGAATCGCGATGATCA
TCCCCTCTCTAGAGGAGCTGGACTCCCTCAAGTACAGTGACCTGCAGAACTTAGCCAAGAGTCTGGGTCTCCGGG
CCAACCTGAGGGCAACCAAGTTGTTAAAAGCCTTGAAAGGCTACATTAAACATGAGGCAAGAAAAGGAAATGAGA
ATCAGGATGAAAGTCAAACTTCTGCATCCTCTTGTGATGAGACTGAGATACAGATCAGCAACCAGGAAGAAGCTG
AGAGACAGCCACTTGGCCATGTCACCAAAACAAGGAGAAGGTGCAAGACTGTCCGTGTGGACCCTGACTCACAGC
AGAATCATTCAGAGATAAAAATAAGTAATCCCACTGAATTCCAGAATCATGAAAAGCAGGAAAGCCAGGATCTCA
GAGCTACTGCAAAAGTTCCTTCTCCACCAGACGAGCACCAAGAAGCTGAGAATGCTGTTTCCTCAGGTAACAGAG
ATTCAAAGGTACCTTCAGAAGGAAAGAAATCTCTCTACACAGATGAGTCATCCAAACCTGGAAAAAATAAAAGAA
CTGCAATCACTACTCCAAACTTTAAGAAGCTTCATGAAGCTCATTTTAAGGAAATGGAGTCCATTGATCAATATA
TTGAGAGAAAAAAGAAACATTTTGAAGAACACAATTCCATGAATGAACTGAAGCAGCAGCCCATCAATAAGGGAG
GGGTCAGGACTCCAGTACCTCCAAGAGGAAGACTCTCTGTGGCTTCTACTCCCATCAGCCAACGACGCTCGCAAG
GCCGGTCTTGTGGCCCTGCAAGTCAGAGTACCTTGGGTCTGAAGGGGTCACTCAAGCGCTCTGCTATCTCTGCAG
CTAAAACGGGTGTCAGGTTTTCAGCTGCTACTAAAGATAATGAGCATAAGCGTTCACTGACCAAGACTCCAGCCA
GAAAGTCTGCACATGTGACCGTGTCTGGGGGCACCCCAAAAGGCGAGGCTGTGCTTGGGACACACAAATTAAAGA
CCATCACGGGGAATTCTGCTGCTGTTATTACCCCATTCAAGTTGACAACTGAGGCAACGCAGACTCCAGTCTCCA
ATAAGAAACCAGTGTTTGATCTTAAAGCAAGTTTGTCTCGTCCCCTCAACTATGAACCACACAAAGGAAAGCTAA
AACCATGGGGGCAATCTAAAGAAAATAATTATCTAAATCAACATGTCAACAGAATTAACTTCTACAAGAAAACTT
ACAAACAACCCCATCTCCAGACAAAGGAAGAGCAACGGAAGAAACGCGAGCAAGAACGAAAGGAGAAGAAAGCAA
AGGTTTTGGGAATGCGAAGGGGCCTCATTTTGGCTGAAGATTAATAATTTTTTAACATCTTGTAAATATTCCTGT
ATTCTCAACTTTTTTCCTTTTGTAAATTTTTTTTTTTTGCTGTCATCCCCACTTTAGTCACGAGATCTTTTTCTG
CTAACTGTTCATAGTCTGTGTAGTGTCCATGGGTTCTTCATGTGCTATGATCTCTGAAAAGACGTTATCACCTTA
AAGCTCAAATTCTTTGGGATGGTTTTTACTTAAGTCCATTAACAATTCAGGTTTCTAACGAGACCCATCCTAAAA
TTCTGTTTCTAGATTTTTAATGTCAAGTTCCCAAGTTCCCCCTGCTGGTTCTAATATTAACAGAACTGCAGTCTT
CTGCTAGCCAATAGCATTTACCTGATGGCAGCTAGTTATGCAAGCTTCAGGAGAATTTGAACAATAACAAGAATA
GGGTAAGCTGGGATAGAAAGGCCACCTCTTCACTCTCTATAGAATATAGTAACCTTTATGAAACGGGGCCATATA
GTTTGGTTATGACATCAATATTTTACCTAGGTGAAATTGTTTAGGCTTATGTACCTTCGTTCAAATATCCTCATG
TAATTGCCATCTGTCACTCACTATATTCACAAAAATAAAACTCTACAACTCATTCTAACATTGCTTACTTAAAAG
CTACATAGCCCTATCGAAATGCGAGGATTAATGCTTTAATGCTTTTAGAGACAGGGTCTCACTGTGTTGCCCAGG
CTGGTCTCAAACTCCACCAAATGTACTTCTTATTCATTTTATGGAAAAGACTAGGCTTTGCTTAGTATCATGTCC
ATGTTTCCTTCACCTCAGTGGAGCTTCTGAGTTTTATACTGCTCAAGATCGTCATAAATAAAATTTTTTCTCATT
GTC

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FIGURE 3379

GGTGTGTCCCGGGTGTGGGGAGGCGACAGAGCCCTGGCACTTGAGGGTTGAGGGGGCCTCCCCAGCGCGGCGAAC
CGTCTAGCCTCCGGAGGCCAGGCCGTGAGTGCGGGAGGTATACGCCAAGGCGGAAGAATTTTGCCACTCACTACC
TGTGTGACCTCGGGTAAATTAGCCTTGGAACGTCAGTTTCTTCGTCTCTATAATTGAAATAATAATAGTACCTCT
CTCAGGATTGTTGTGAGCCGTCAGTGAAACACTTAGAGCAGTTTCTGGCACATGGTAGAATTGGGCTATTTGCTG
AAGCTTCTTGGTGGCCCTTGCTAGCCCAGGAAGAAACTTACATTTTGATTTTTTTGTACC**ATG**GCTTTGGTTCAC
AAATTGCTGCGTGGTACTTATTTTCTCAGAAAATTCTCTAAGCCAACTTCTGCCTTGTATCCATTTTTGGGTATT
CGCTTTGCAGAGTATTCCAGTAGTCTTCAGAAACCAGTGGCTTCTCCTGGCAAAGCCTCCTCACAGAGGAAGACT
GAAGGGGATTTGCAAGGAGATCACCAGAAAGAAGTTGCTTTGGATATAACTTCTTCTGAGGAGAAGCCTGATGTT
AGTTTCGATAAAGCAATTAGAGATGAAGCAATATACCATTTTAGGCTTTTGAAGGATGAAATTGTGGATCATTGG
AGAGGACCGGAAGGCCACCCTCTGCATGAGGTCTTGCTGGAACAAGCCAAGGTTGTCTGGCAATTCCGGGGGAAA
GAAGATTTGGATAAGTGGACAGTGACTTCTGATAAGACGATTGGAGGCAGAAGTGAAGTGTTTTTGAAAATGGGC
AAGAATAACCAAAGTGCACTGCTATATGGAACTCTGAGCTCTGAGGCGCCTCAGGACGGGGAGTCTACCCGAAGT
GGGTACTGTGCAATGATATCCAGGATTCCAAGGGGTGCTTTTGAGAGGAAGATGTCTTACGATTGGTCCCAGTTC
AATACTCTGTATCTCCGTGTACGTGGGGATGGTCGGCCTTGGATGGTGAATATCAAGGAGGACACAGATTTCTTC
CAGAGGACGAATCAGATGTATAGTTACTTCATGTTCACCCGCGGGGGACCCTACTGGCAGGAGGTCAAGATTCCT
TTTTCCAAATTTTTCTTCTCTAATCGAGGAAGAATCCGGGATGTTCAGCATGAGCTTCCGCTTGATAAGATCTCT
TCTATAGGATTCACCTTGGCTGATAAAGTGGATGGTCCATTCTTCCTGGAGATAGATTTTATTGGCGTGTTTACT
GATCCAGCTCATACAGAAGAATTTGCCTATGAAAATTCTCCAGAGCTTAACCCAAGGCTTTTTAAA**TAA**AGATCA
TATGGTAGTTTTGTTTTACTAATCTAAGGGTACTAGCATCTACAATGATATAGACAAAATAAAATATTTCTTTAA
TGGCATCCAA

FIGURE 3380A

AGCGGAGCGCGCATGCGCGGTCGCCTTTGTGTGGGTCGAGCAGCGGCGGCGGCGGCGGCAGTGGCGGTCCCACTG
GCAGGCGGGCAAGAGGGGAGTCCGGGCGGCGGCCGGCGTGGGAGCCGGGGGACCACCATGGTAAAGAAGCGGAAA
GGCCGCGTCGTGATCGACTCGGACACAGAGGACAGCGGCAGCGACGAGAACCTGGATCAGGAGCTCTTGTCCCTG
GCAAAGCGAAAGCGCAGTGACTCTGAGGAGAAGGAGCCGCCTGTGAGTCAGCCTGCAGCCTCGTCAGACTCGGAG
ACGTCTGACAGTGACGATGAGTGGACATTTGGGAGCAATAAAAATAAGAAGAAAGGAAAAGCCAGAAAAATAGAG
AAGAAAGGAACCATGAAGAAACAGGCCAACAAAACTGCCTCCTCAGGCAGTTCAGACAAAGACAGTTCAGCTGAG
AGCTCAGCCCCTGAGGAAGGTGAAGTGTCAGACTCTGACAGCAACAGCTCCTCTTCCAGTTCAGATTCAGACTCT
TCCTCAGAAGATGAAGAGTTCCATGATGGCTATGGAGAAGACCTCATGGGAGATGAGGAAGACAGGGCCCGTCTG
GAACAGATGACAGAGAAAGAGAGAGAGCAAGAACTGTTCAATCGCATAGAGAAGAGGGAGGTGTTGAAAAGAAGA
TTTGAAATCAAGAAAAAACTAAAAACAGCCAAAAAGAAAGAAAAGAAAGAAAAGAAGAAAAAGCAAGAAGAGGAG
CAAGAAAAGAAAAAACTGACACAGATTCAAGAATCTCAGGTAACATCCCACAACAAGGAACGGCGTTCCAAGCGG
GATGAGAAACTAGACAAGAAATCTCAAGCCATGGAGGAGCTAAAAGCAGAGCGAGAAAAACGAAAGAACAGAACA
GCTGAGCTCCTTGCCAAAAAACAGCCATTAAAAACCAGTGAGGTCTACTCTGATGATGAAGAGGAGGAAGAGGAT
GACAAATCCAGTGAAAAGTCAGACCGCTCATCACGAACATCATCGTCTGATGAAGAAGAGGAGAAAGAAGAGATC
CCTCCCAAATCCCAACCAGTTTCCTTACCTGAAGAATTGAATCGGGTTCGATTATCACGGCATAAGCTAGAACGC
TGGTGTCACATGCCCTTCTTTGCTAAAACTGTCACAGGATGTTTTGTGCGGATTGGCATCGGAAACCACAACAGC
AAACCAGTTTACCGGGTCGCTGAGATTACGGGTGTTGTGGAAACTGCCAAAGTTTACCAACTAGGTGGCACCAGA
ACAAACAAAGGGCTGCAACTACGGCATGGCAATGACCAACGCGTGTTCCGTTTAGAGTTTGTCTCAAACCAAGAA
TTCACCGAAAGTGAGTTTATGAAGTGGAAAGAAGCGATGTTCTCTGCTGGCATGCAGTTGCCCACTCTAGATGAA
ATCAATAAAAAGGAATTATCTATTAAAGAAGCTCTTAATTATAAATTCAATGATCAGGACATTGAAGAGATTGTA
AAAGAGAAAGAAAGGTTCAGAAAAGCTCCACCCAACTACGCTATGAAGAAGACTCAGCTACTGAAGGAAAAGGCC
ATGGCTGAGGACCTGGGGGATCAGGACAAGGCCAAACAAATCCAAGATCAACTGAATGAGCTGGAGGAACGGGCA
GAGGCCCTGGACCGCCAGCGGACCAAGAACATATCCGCTATCAGTTACATCAACCAGCGGAACCGGGAGTGGAAC
ATTGTAGAGTCTGAGAAGGCCCTTGTGGCTGAAAGTCACAACATGAAAAACCAACAGATGGATCCCTTTACTCGG
CGGCAGTGCAAGCCTACCATCGTTTCTAATTCCAGAGACCCAGCTGTTCAAGCTGCCATCTTGGCCCAGCTGAAT
GCAAAATACGGTTCTGGAGTGTTACCAGATGCTCCAAAGGAAATGAGCAAGGGTCAAGGCAAAGATAAAGATTTG
AATTCTAAGTCAGCCAGTGACCTCTCAGAAGATCTGTTCAAAGTACACGATTTTGATGTGAAGATTGACTTACAA
GTTCCCAGCTCAGAGTCAAAGGCTTTAGCCATCACCTCCAAGGCTCCGCCAGCCAAGGATGGGGCTCCAAGGAGA
TCTCTGAACTTGGAAGACTACAAAAAACGACGAGGGCTTATTTGAGCACACCCAGCCTGCTGCTTCTGACCCTGC
ATGCCCCATCGCAGCGTCCCACCTTTCCTCCTTTCCTTTGATTTAGCCTCTTTGGGCTGGAGCAGCTGTTGAACT
GGGAAGAGACTCTAAACTGCCAGTCATCTGTAATATAAACCATTTGCTGTATAGACCTCCTTTGTCTGCACACCA
TCTCCCACCAGCCTCCCCTCCCCCAGGGCCCCACCCAGTGTGGGCCTGGGCTCTCTTGGGCTTTATCCATGTCTT
TAGATTTGTGTTTGCCTTTTGTTTTTTTAACCGCGCAGTTCATTGGCCACTCTGCACGCATTCAGTATTACCATG
GAGCTGGGAATCTTGCTGGAGCCCCTGGGGCAATAGCAGCAGCACCAGGCGGTCTCCTCTACAGACTGCCTTGGC
CCACCCATTGAACATTCGGCACGTGACCTTGTGGGGGGAGCGGGGATTGGGCACCTGCGATCCTCTTTCCTCTCT
TCATCTTTCTCTTCTGCCCTTCTTTTTGGAAGAAGGGGTTTCAAAACCAGTTTAGTTTCCAAAAAGTGTACATTT
GTGGGGGGGGGGGGTCTAATTTGAGAGCGAGAGTGTGTATGTGTGTGTGTGTAAGTGTGTGGATTTTTTTATCATT
TTTTTAAAATGCAGTACTCTTTGTATCAGTCTGTCATGGGTCTATAGCTGTTTCAGATTTTTTTCAGCTGTACTT
GAGCATCTGAAACTGCAAGAAAGAAACTCATTAAATGTGATTCTTCTTACTAAACAGGCCTGACTGCTGTAGCTG
TGTAACTTCCCCATTCCCACCTACTCTTCCCATCCTTTCCCAACTTTGGAGAAAACTCCCCAGTTTAGCCCCCTG
ACCTGCAGGCTGTGTCCTGGCAGGTGTGGGAGGGAAGCCCATGGCCAGGTACCAGGGAGGGCAGTGAATGTCTTG
CTCTTCCCATGGGTACAGCCCACAGCTTCTTGGCTGAACGTAGAACTTCTTTTTCTCACCCAGTATACCAGCCTC
TTCCTGGTGATTCTGTTTTGCTGCTTTGGCAAGAACTACATTTTGTTTTTAAGAGAAATTTCTGAATATGAATGT
GGAGAGCAAACACAAAAAGATTTAGGTTACGCCGGGTGCAGTAGCTCACGCCTGTAATCCCAGCACTTTGGGAGG
CCTAGGCGGGTGGATCACCTGAGGTCAGGAGTTCAAGACCAATCTGACTAACACGGTGAAACCCCATCTCTACTA
AAACTACAAAACTTAGCCGGGCATGGTGGTGCGTGCCTGTAATCCCAGCTACTCGGGGGGCTGAGACAGGAGAAT
CCCTTGAACCTGGGAGGCGGAGGTTGTGGTGAGCCAAGATCGTGCCACTGCACTCCAGTCTGGGTGACAGAGTGA
GACTCCGCCTCAAAAAGATTTAGGTTGCAAATGTTTCAAGCATGTGCAGTTTTGTGTGTGTGTATACATATATAT

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FIGURE 3380B

GGTCAGCATATATATTGTGCAGCTAGGGCGAAGCCAGCAGAGGTGTGTGTATGTCTTTATGAAATGTTTGAAAAG
AGATAAACTGACTGCTTGATAATCACTCTCAGGTGTAAAGCTCCAAGTGTAAATAAAAGTGGCATTTAACAAATC
TTTCAGAACAAAGTACAGCTGACTATATATACCAAGAGCTAAGCTAAAGGAACAGCTGAGAGCTCCGATCTCCAC
GAGAGACTAATCTAAAAGCTCTGCTTTGTACTTCCTCACCCTGCTTTCGTACAAGGAAGGGGGACGATGGGAAAT
CATGGACTTGTAAGTTGTATTTAAACATAAAAATGAACTTGGTAACTTCTGGGTTTAGTAGAGCCTCAGTGTCGC
TTTAACTTAGTTTACTTTTTTTTTATTTTTAAAGCAGCAATGGATGGTTTTAAAGGAGTATTATGATTGTAAAAT
TGCTAAATATGACTGTAACACAGCTTTGTGGTAGCTGTGACACAGTTCACTTGGGCAAAGGAGTGGTGATGGACT
CGTTAAAATCATATATACTTGAATAGTCCATTGACCGAAACTCTTTATAGACTATTGTGTAAATGTGGAATCACA
GACTGTTAACATTGCCTGGACTTCAGCAGAGTCCTGGAGCTGCTGGGACCTCTCCTATCATGATGAACTTGGACT
TTTTTTTTTGATTTCTGGTTTTAAAAAACATAAAATTATAGAATCCAGATAATTCGCTGGAGTCATTCTGATCCA
CCATGTAGATCTGTATTTAGTATCATTTGGATTTGGAGAAGTGTTGATTACATTATGGCTGTGTAATAAAATTTT
TATTAAAACTGC

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FIGURE 3381A

GCGATCTCTGCGGGGCAAGATGGCGGCGCCCAGACAGGCCTGGAGCACGGATGAATAAGAGGGAACCCCCACACG
GAGAGACTGCTGGAGAGAGTCGTACTGGGGAGGCAGCTGGAGCAGCAAGATGCTGTCGAGACCGAAGCCAGGGGA
GTCCGAGGTGGACCTGCTGCACTTCCAGAGTCAGTTTCTCGCAGCTGGTGCAGCCCCAGCAGTGCAGTTGGTGAA
GAAAGGAAATAGGGGCGGTGGTGATGCCAACTCAGACCGGCCTCCGCTCCAGGACCATCGGGATGTGGTGATGTT
GGACAATCTCCCAGATTTGCCCCCAGCTTTGGTCCCTTCTCCTCCAAAGAGAGCCAGGCCCAGCCCTGGCCACTG
CCTGCCTGAGGATGAGGACCCAGAAGAGAGGCTGAGGAGGCATGATCAGCACATCACTGCTGTCTTGACTAAGAT
TATTGAACGAGATACAAGTTCAGTGGCCGTGAATCTGCCTGTGCCCAGTGGTGTTGCTTTCCCTGCTGTGTTCCT
TCGCTCGCGGGACACACAGGGGAAATCAGCAACATCTGGTAAGAGAAGCATCTTTGCCCAGGAAATTGCGGCAAG
GAGGATAGCTGAAGCCAAGGGCCCATCAGTTGGGGAAGTTGTGCCCAACGTGGGCCCACCAGAGGGTGCCGTGAC
CTGTGAGACACCCACTCCTAGGAACCAGGGCTGCCAGCTTCCTGGGAGCAGCCACAGCTTTCAGGGACCCAATCT
GGTCACAGGGAAGGGGCTCAGGGATCAAGAAGCTGAGCAGGAAGCCCAGACTATCCATGAAGAGAACATAGCAAG
ACTGCAGGCCATGGCTCCTGAGGAGATCCTGCAGGAACAGCAGCGGTTGCTGGCCCAGCTTGACCCCAGCTTGGT
TGCTTTCTTGAGATCTCACAGCCACACGCAAGAGCAAACAGGAGAGACAGCCTCTGAGGAGCAGAGGCCAGGAGG
ACCCTCTGCTAATGTCACCAAGGAGGAACCCCTCATGTCAGCTTTTGCCAGTGAGCCCAGGAAGAGAGACAAGCT
GGAGCCAGAAGCCCCAGCTCTGGCATTGCCCGTGACCCCTCAGAAAGAATGGCTGCACATGGACACTGTCGAGCT
GGAGAAGCTCCACTGGACCCAGGACTTGCCCCCTGTCCGGCGGCAGCAGACACAGGAGAGGATGCAGGCTCGATT
CAGTCTTCAGGGAGAACTACTGGCCCCTGACGTGGACCTGCCCACCCACCTGGGTCTGCACCACCATGGAGAGGA
GGCAGAGAGAGCGGGGTATTCCCTACAGGAGCTGTTCCACCTGACCCGCAGCCAGGTTTCCCAGCAGAGAGCACT
GGCACTGCATGTGTTAGCCCAGGTCATCAGCAGGGCCCAGGCTGGTGAGTTTGGGGACCGGCTAGCAGGCAGTGT
CTTAAGCCTCCTTTTGGATGCTGGTTTCCTCTTCCTACTGCGCTTCTCCTTGGATGACAGAGTGGATGGGGTCAT
TGCAACCGCCATCCGTGCTCTTCGGGCTCTGCTGGTGGCTCCTGGAGATGAGGAGCTCCTCGACAGCACCTTCTC
TTGGTACCATGGAGCTTTGACGTTCCCTCTGATGCCCAGCCAGGAGGACAAGGAGGATGAGGACGAGGATGAAGA
ATGCCCAGCAGGAAAAGCAAAAAGGAAAAGCCCTGAAGAAGAAAGCCGGCCTCCACCTGACCTGGCCCGACATGA
TGTCATCAAGGGGCTCCTGGCTACCAGCCTGCTGCCTCGGCTGCGCTACGTGCTGGAGGTGACATACCCAGGACC
TGCGGTGGTCCTTGACATCCTGGCTGTGCTCATCCGCCTGGCCCGGCATTCCCTGGAATCAGCCACAAGGGTCCT
GGAGTGCCCTCGGCTGATAGAGACTATAGTTCGAGAGTTCTTGCCCACCAGTTGGTCTCCTGTGGGGGCAGGGCC
TACCCCTAGTCTATACAAAGTACCCTGTGCTACTGCCATGAAACTACTTCGTGTCCTGGCCTCAGCTGGGAGGAA
TATTGCTGCCCGGCTGTTGAGCAGCTTTGATCTCCGGAGCCGCCTGTGCCGCATCATAGCTGAGGCTCCCCAAGA
ACTGGCCTTGCCCCCAGAGGAAGCTGAGATGCTGAGCACCGAGGCCCTCCGTCTGTGGGCTGTGGCTGCCTCCTA
TGGCCAGGGCGGTTACCTTTACAGGGAGCTCTACCCAGTGCTGATGCGGGCCTTGCAGGTGGTGCCGCGGGAGCT
CAGCACCCACCCACCTCAACCCCTGTCCATGCAGCGGATAGCCTCACTGCTCACTCTCCTCACCCAGCTAACCCT
GGCAGCCGGCAGTACCCCTGCTGAAACCATCAGTGATTCTGCTGAGGCCAGCCTCTCGGCCACCCCTTCCTTAGT
CACTTGGACACAGGTGTCTGGGCTCCAGCCTCTTGTTGAGCCGTGTCTAAGGCAGACCTTGAAGTTGCTGTCCAG
ACCTGAGATGTGGAGAGCCGTGGGCCCAGTGCCCGTTGCCTGCCTGTTGTTCCTGGGAGCCTACTACCAGGCCTG
GAGCCAGCAACCAAGCTCATGCCCGGAGGATTGGCTCCAGGACATGCAGCGCCTGTCAGAGGAGCTGCTGCTGCC
ACTGCTGAGTCAGCCCACACTGGGCAGCCTGTGGGATTCCCTTAGGCACTGCTCCCTTCTCTGCAACCCGCTGTC
CTGTGTGCCAGCCCTTGAAGCTCCCCCCAGCCTCGTGTCACTGGGCTGCTCGGGAGGCTGCCCCCGTCTCAGTCT
GGCTGGCTCAGCCTCACCCTTCCCATTCCTCACTGCCCTCCTCTCTCTTCTTAATACCCTGGCCCAGATCCACAA
GGGGCTGTGTGGCCAGCTGGCTGCCATATTGGCTGCCCCGGGACTCCAGAATTACTTCCTCCAGTGTGTGGCTCC
TGGGGCTGCCCCACACCTCACACCTTTCTCTGCATGGGCCCTGCGCCATGAGTACCACCTGCAGTACCTGGCACT
CGCTCTGGCCCAGAAAGCGGCAGCGCTGCAGCCACTGCCAGCCACCCATGCTGCCCTCTATCATGGTATGGCCTT
GGCCCTGCTGAGCCGGCTGCTGCCCGGAAGTGAGTACCTCACCCATGAGCTGCTGCTGAGCTGTGTATTCCGGCT
GGAGTTCCTCCCGGAAAGAACATCAGGGGGTCCAGAGGCAGCCGACTTCTCTGACCAGCTGTCGTTAGGAAGCAG
CAGGGTCCCTCGGTGTGGGCAAGGGACTCTGCTGGCTCAGGCCTGCCAGGACCTCCCCAGCATCCGCAACTGCTA
CCTGACTCATTGCTCGCCAGCCCGAGCCAGTCTGCTGGCCTCCCAGGCTCTGCACCGAGGGGAGCTACAGCGAGT
CCCAACCCTGCTACTGCCCATGCCTACGGAGCCGCTGCTGCCCACCGACTGGCCCTTCCTGCCACTGATTCGCCT
CTACCACCGGGCTTCAGACACCCCCTCGGGACTCTCTCCCACAGACACCATGGGCACAGCCATGCGGGTCCTGCA
GTGGGTGCTAGTTTTGGAGAGCTGGCGCCCCCAGGCTCTCTGGGCTGTGCCCCCTGCTGCCCGCCTGGCACGGCT

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FIGURE 3381B

CATGTGTGTGTTCCTGGTGGACAGTGAGCTGTTCCGGGAGTCCCCAGTACAGCATCTGGTGGCAGCCCTCCTCGC
CCAGCTCTGTCAGCCTCAAGTCTTGCCAAACCTCAACCTGGACTGCCGACTCCCTGGCCTGACGTCTTTCCCTGA
CCTCTATGCCAACTTCCTGGATCATTTTGAGGCTGTCTCTTTTGGGGACCACCTCTTTGGGGCCCTGGTCCTCCT
GCCCCTGCAGCGTCGGTTCAGTGTCACCTTGCGCCTTGCCCTCTTTGGGGAACACGTGGGAGCCTTGCGAGCTCT
GAGCCTGCCTCTGACCCAGGTACTTTCTCAGCCCAGCAGGACCTGCAAGGGTACCCTGCACTGGGCCTCGGGGGC
AGTCCTGAGCCTTGAGGAGCTTTGGAAGACCTCAGCTTCCTCATCTTACCTCTTGGGGGCTTTGAGGGGATTAAG
AGAATCAATGAAAAGGGCTTAACATGGGCTGGGTGTGGTGGCTCACGCCTGTAATTCCATCACTCTGGGAAGCTG
AGGTGGGTGGATCACTTAAGGTCAGGAGTTTGAGACCAGCCTGGGCAACATAGTGAAACCCCATTTCTACTAAAA
ATACAAAACTTAGCTGGGCGTGGTTGCGGGTGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGC
TTGAACCCGGGAAGCGGAGGCTACAGTGAGCCGAGATCGCGCCACTGCACCCCAGCCCAGTGACAGAGCAAGACC
CTGTCTCAAAAAAGAAAAAAGGAAAGGGTTTAACCTGGTGTCTGGCATATAGTGGGTATTCATTACTATTAATAA
GGCATAGCTCCTTGCTTATCAGTGCTACAATCTAGATAAGAAGAGATTTACTGAAAACCTACATAGTTGTGAATT
ATTCAGATGCTAGGTGGTATCAGGATTCAGAGAAGGGAAAGATCAAATTGGGCTTTGTGGAAGAAGTGGGGATTG
ACCCAGGCACTGTAGGTTGGGTAGAATTTGAATTGGTGAGGAGGTAGAAAGGCAGGAGATTCCTAACAGAATAAC
ATAAGCAAAAGGAGCATGACAAAGGGCAGAAGGAGGGAGGAGAGATTTCTGTTGGGAACTTAAGGCTGGTCTTGA
ATTCCTAATTTCGTGTGATCCGCCTGCCTCAGCCTCCCAAGTGCTGAGATTACAGGCGTGGCCCACTACACATGG
CCAATTTCATGCTTTTTAATGGCTGCTTCTCAGTTCCCAGTTTTCCCCAACATCTGCTCTGTAGTCTTTAACCCT
GATCCTTGTGCTAGAAGGACAGATGTTTGTCTAGGACCTGATCTCTGCCCTCATGATTTGGTTTCATGTGATCGT
TATCCACACACCTTATGTATGTATATACATTCCTACCCTCCCCCTCAGCACGTCATTTCCCCTGTCACAGTTGCC
TGTGTCCCTGGAGTGTTACACAGTGCCTCCTGAAGACAACCTGGCCCTCCTTCAGCTCTACTTCCGGACCCTGGT
TACTGGTGCGCTCCGCCCACGTTGGTGCCCCGTGCTCTATGCTGTGGCTGTGGCTCATGTCAATAGCTTCATCTT
CTCTCAGGACCCACAGAGCTCAGTAAGTTACATCTCCATCTTCAGAGGAAGGAAGGGAGCTAGCAATTGAGCTGC
CTCTGGGCCAGCTGGGGAAGAGGTAAGTGTCAAGCAAGGCCAGTGGTGGGTACCAGCCCTCGGCTCAGTGCCACC
TCTCCCTGTTCTGCTTCTAGGATGAGGTCAAAGCTGCCCGCAGGAGTATGCTGCAGAAAACATGGCTGCTGGCAG
ATGAGGGTCTCCGGCAGCACCTCCTGCACTATAAGCTTCCCAATTCCACGCTCCCAGAGGGCTTTGAGCTCTATT
CTCAGTTGCCCCCTCTGCGTCAGCACTACCTCCAGAGACTGACTTCAACAGTGCTCCAAAATGGGGTATCAGAGA
CCTAGGATAGTTGATATAGATGGAAAGATGGGTACGTTGTCCTGTATCCAGCCTTTCAACAGATGTCTGGCCAGA
CGAAGAACATTGTGTCCTAATGGTAGGCAGGAGACCAAGGAGCAGAAGGCTTGCCTTCCTGGGAGCAGGTTGTTT
GAGCTGTTTTAGAGCAGTGAGCCCTACCATTACATCCTGATATCTGGGGCTTCTGAAGGTCTGTACTGGGAGTGA
AGAGTGGCTTAGCTATTTACCCGCTCTTTGGGGACAGGGCAAACTAAATGCATCCCTTCTTACCTAACTCCCAAC
CCCTGCCCTGGGCTGAGGCATATGAATGCTATAGTTGTGCATTAAAATAAATGTTTTTTATCTCCTGG

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FIGURE 3382A

CCCCGCCCTCCTCCCTCCTCGCTCGCGGGCCGGGCCCGGCATGGTGCGGCGTCGCCGCCGATGGCGCTGAGGCGG
AGCATGGGGCGGCCGGGGCTCCCGCCGCTGCCGCTGCCGCCGCCACCGCGGCTCGGGCTGCTGCTGGCGGCTCTG
GCTTCTCTGCTGCTCCCGGAGTCCGCCGCCGCAGGTCTGAAGCTCATGGGAGCCCCGGTGAAGCTGACAGTGTCT
CAGGGGCAGCCGGTGAAGCTCAACTGCAGTGTGGAGGGGATGGAGGAGCCTGACATCCAGTGGGTGAAGGATGGG
GCTGTGGTCCAGAACTTGGACCAGTTGTACATCCCAGTCAGCGAGCAGCACTGGATCGGCTTCCTCAGCCTGAAG
TCAGTGGAGCGCTCTGACGCCGGCCGGTACTGGTGCCAGGTGGAGGATGGGGGTGAAACCGAGATCTCCCAGCCA
GTGTGGCTCACGGTAGAAGGTGTGCCATTTTTCACAGTGGAGCCAAAAGATCTGGCAGTGCCACCCAATGCCCCT
TTCCAACTGTCTTGTGAGGCTGTGGGTCCCCCTGAACCTGTTACCATTGTCTGGTGGAGAGGAACTACGAAGATC
GGGGGACCCGCTCCCTCTCCATCTGTTTTAAATGTAACAGGGGTGACCCAGAGCACCATGTTTTCCTGTGAAGCT
CACAACCTAAAAGGCCTGGCCTCTTCTCGCACAGCCACTGTTCACCTTCAAGCACTGCCTGCAGCCCCCTTCAAC
ATCACCGTGACAAAGCTTTCCAGCAGCAACGCTAGTGTGGCCTGGATGCCAGGTGCTGATGGCCGAGCTCTGCTA
CAGTCCTGTACAGTTCAGGTGACACAGGCCCCAGGAGGCTGGGAAGTCCTGGCTGTTGTGGTCCCTGTGCCCCCC
TTTACCTGCCTGCTCCGGGACCTGGTGCCTGCCACCAACTACAGCCTCAGGGTGCGCTGTGCCAATGCCTTGGGG
CCCTCTCCCTATGCTGACTGGGTGCCCTTTCAGACCAAGGGTCTAGCCCCAGCCAGCGCTCCCCAAAACCTCCAT
GCCATCCGCACAGATTCAGGCCTCATCTTGGAGTGGGAAGAAGTGATCCCCGAGGCCCCTTTGGAAGGCCCCCTG
GGACCCTACAAACTGTCCTGGGTTCAAGACAATGGAACCCAGGATGAGCTGACAGTGGAGGGGACCAGGGCCAAT
TTGACAGGCTGGGATCCCCAAAAGGACCTGATCGTACGTGTGTGCGTCTCCAATGCAGTTGGCTGTGGACCCTGG
AGTCAGCCACTGGTGGTCTCTTCTCATGACCGTGCAGGCCAGCAGGGCCCTCCTCACAGCCGCACATCCTGGGTA
CCTGTGGTCCTTGGTGTGCTAACGGCCCTGGTGACGGCTGCTGCCCTGGCCCTCATCCTGCTTCGAAAGAGACGG
AAAGAGACGCGGTTTGGGCAAGCCTTTGACAGTGTCATGGCCCGGGGAGAGCCAGCCGTTCACTTCCGGGCAGCC
CGGTCCTTCAATCGAGAAAGGCCCGAGCGCATCGAGGCCACATTGGACAGCTTGGGCATCAGCGATGAACTAAAG
GAAAAACTGGAGGATGTGCTCATCCCAGAGCAGCAGTTCACCCTGGGCCGGATGTTGGGCAAAGGAGAGTTTGGT
TCAGTGCGGGAGGCCCAGCTGAAGCAAGAGGATGGCTCCTTTGTGAAAGTGGCTGTGAAGATGCTGAAAGCTGAC
ATCATTGCCTCAAGCGACATTGAAGAGTTCCTCAGGGAAGCAGCTTGCATGAAGGAGTTTGACCATCCACACGTG
GCCAAACTTGTTGGGGTAAGCCTCCGGAGCAGGGCTAAAGGCCGTCTCCCCATCCCCATGGTCATCTTGCCCTTC
ATGAAGCATGGGGACCTGCATGCCTTCCTGCTCGCCTCCCGGATTGGGGAGAACCCCTTTAACCTACCCCTCCAG
ACCCTGATCCGGTTCATGGTGGACATTGCCTGCGGCATGGAGTACCTGAGCTCTCGGAACTTCATCCACCGAGAC
CTGGCTGCTCGGAATTGCATGCTGGCAGAGGACATGACAGTGTGTGTGGCTGACTTCGGACTCTCCCGGAAGATC
TACAGTGGGGACTACTATCGTCAAGGCTGTGCCTCCAAACTGCCTGTCAAGTGGCTGGCCCTGGAGAGCCTGGCC
GACAACCTGTATACTGTGCAGAGTGACGTGTGGGCGTTCGGGGTGACCATGTGGGAGATCATGACACGTGGGCAG
ACGCCATATGCTGGCATCGAAAACGCTGAGATTTACAACTACCTCATTGGCGGGAACCGCCTGAAACAGCCTCCG
GAGTGTATGGAGGACGTGTATGATCTCATGTACCAGTGCTGGAGTGCTGACCCCAAGCAGCGCCCGAGCTTTACT
TGTCTGCGAATGGAACTGGAGAACATCTTGGGCCAGCTGTCTGTGCTATCTGCCAGCCAGGACCCCTTATACATC
AACATCGAGAGAGCTGAGGAGCCCACTGCGGGAGGCAGCCTGGAGCTACCTGGCAGGGATCAGCCCTACAGTGGG
GCTGGGGATGGCAGTGGCATGGGGGCAGTGGGTGGCACTCCCAGTGACTGTCGGTACATACTCACCCCCGGAGGG
CTGGCTGAGCAGCCAGGGCAGGCAGAGCACCAGCCAGAGAGTCCCCTCAATGAGACACAGAGGCTTTTGCTGCTG
CAGCAAGGGCTACTGCCACACAGTAGCTGTTAGCCCACAGGCAGAGGGCATCGGGGCCATTTGGCCGGCTCTGGT
GGCCACTGAGCTGGCTGACTAAGCCCCGTCTGACCCCAGCCCAGACAGCAAGGTGTGGAGGCTCCTGTGGTAGTC
CTCCCAAGCTGTGCTGGGAAGCCCGGACTGACCAAATCACCCAATCCCAGTTCTTCCTGCAACCACTCTGTGGCC
AGCCTGGCATCAGTTTAGGCCTTGGCTTGATGGAAGTGGGCCAGTCCTGGTTGTCTGAACCCAGGCAGCTGGCAG
GAGTGGGGTGGTTATGTTTCCATGGTTACCATGGGTGTGGATGGCAGTGTGGGGAGGGCAGGTCCAGCTCTGTGG
GCCCTACCCTCCTGCTGAGCTGCCCCTGCTGCTTAAGTGCATGCATTGAGCTGCCTCCAGCCTGGTGGCCCAGCT
ATTACCACACTTGGGGTTTAAATATCCAGGTGTGCCCCTCCAAGTCACAAAGAGATGTCCTTGTAATATTCCCTT
TTAGGTGAGGGTTGGTAAGGGGTTGGTATCTCAGGTCTGAATCTTCACCATCTTTCTGATTCCGCACCCTGCCTA
CGCCAGGAGAAGTTGAGGGGAGCATGCTTCCCTGCAGCTGACCGGGTCACACAAAGGCATGCTGGAGTACCCAGC
CTATCAGGTGCCCCTCTTCCAAAGGCAGCGTGCCGAGCCAGCAAGAGGAAGGGGTGCTGTGAGGCTTGCCCAGGA
GCAAGTGAGGCCGGAGAGGAGTTCAGGAACCCTTCTCCATACCCACAATCTGAGCACGCTACCAAATCTCAAAAT
ATCCTAAGACTAACAAAGGCAGCTGTGTCTGAGCCCAACCCTTCTAAACGGTGACCTTTAGTGCCAACTTCCCCT

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FIGURE 3382B

CTAACTGGACAGCCTCTTCTGTCCCAAGTCTCCAGAGAGAAATCAGGCCTGATGAGGGGGAATTCCTGGAACCTG
GACCCCAGCCTTGGTGGGGGAGCCTCTGGAATGCATGGGGCGGGTCCTAGCTGTTAGGGACATTTCCAAGCTGTT
AGTTGCTGTTTAAAATAGAAATAAAATTGAAGACTAAAGACCTA

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FIGURE 3383

ATGAATAAAACTGACAAAAATCCTTGCTTTCAGAAATTTGTCATTGCCATCTCAACCAAAACTGGCATTAGCAAT
GTAAAAATCCCAAAACATCTTATTGATGCTCACTTCGAGAAGCAGTTGCAGAAGCCCAGACACCAGGAAGGTGAG
ATCTCTGACACAGAAAAAGAGAACTACAAGACTACAGAGCAGTGCAAGATTGATCAGAAAGCTGTGGACTCACAA
ATTGTACGAAAAATCAAAGCTATTCCTCAGCTCCAGGGCTACCTGCGATCTGTGTTTGCCCTGACGAATGGAATT
TATCCTCACAAATTGGTGTTTTAA

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FIGURE 3384A

ATCTCCAAGGTAGCATCCAATGCCAAGGTGGCTGCATCCAGGAAACCACGTACCCTGTTGCCTTCAACATCCAAT
TCCAAAATGGCATCCTCCTCTGGCACTGCAACAAATCGCCCTGGGAAGAATCTGAAGGCGTTTGTCCCAGCAAAA
CGGCCAATTGCGGCTCGACCCTCTCCTGGTGGTGTGTTCACACAGTTTGTGATGAGTAAAGTTGGAGCCTTGCAG
CAGAAGATACCTGGAGTTAGCACACCCCAAACCCTGGCAGGGACACAGAAGTTCAGTATCAGACCTTCTCCAGTA
ATGGTCGTCACACCTGTGGTTTCTTCTGAGCCAGTTCAGGTGTGCAGCCCTGTGACTGCTGCTGTCACTACTACC
ACCCCTCAAGTGTTTTTAGAAAATACTACTGCTGTGACACCTATGACTGCTATTTCTGACGTGGAAACTAAAGAA
ACTACTTATTCTTCTGGTGCCACCACTACAGGGGTTGTTGAGGTCTCTGAAACTAATACCAGCACCTCTGTAACA
TCTACCCAGTCTACAGCCACTGTGAACCTTACCAAAACCACTGGGATAACTACCCCTGTGGCTTCAGTTGCTTTT
CCTAAGTCTTTGGTAGCATCTCCTTCAACCATAACTCTTCCTGTTGCTTCCACTGCTTCCACCTCCTTAGTCGTG
GTGACTGCAGCTGCATCTTCCTCCATGGTGACCACACCAACTTCATCTCTGGGCTCTGTTCCTATTATACTCTCA
GGAATTAATGGGAGTCCACCAGTGAGCCAGAGACCAGAAAATGCTGCTCAAATTCCAGTGGCTACTCCACAGGTC
TCTCCTAACACAGTGAAACGTGCTGGACCTCGATTGTTGTTGATTCCAGTGCAGCAGGGTTCTCCTACTCTTAGA
CCTGTCTCAAACACACAACTTCAGGGACATCGGATGGTCTTGCAGCCTGTTAGGAGTCCAAGTGGAATGAACTTA
TTCAGGCACCCTAATGGGCAGATTGTCCAGCTTCTACCTTTGCATCAGCTTCGAGGCTCTAATACCCAGCCCAAC
TTACAGCCTGTCATGTTTCGGAACCCAGGGTCTGTGATGGGAATCCGGTTACCTGCTCCTTCCAAACCCTCTGAG
ACTCCGCCATCTTCCACTTCGTCCTCTGCTTTCTCTGTCATGAATCCTGTAATTCAAGCTGTTGGGTCTTCTTCA
GCAGTGAATGTTATCACTCAGGCACCATCATTGCTTTCCTCTGGAGCTAGTTTTGTGTCTCAGGCTGGTACATTG
ACCCTGAGGATTTCTCCTCCTGAACCACAAAGCTTTGCAAGTAAAACAGGCTCTGAAACCAAAATAACTTATAGC
TCAGGAGGACAGCCTGTTGGTACAGCCAGTCTTATTCCTCTCCAGTCTGGTAGTTTTGCCTTGTTACAGCTCCCA
GGACAAAAGCCTGTTCCTAGCTCCATTCTTCAGCATGTTGCTTCCCTTCAGATGAAGAGAGAATCTCAGAATCCA
GACCAGAAAGATGAAACAAACTCAATAAAAAGAGAGCAAGAAACGAAGAAGGTTCTACAGTCAGAAGGAGAGGCT
GTAGACCCTGAGGCTAATGTAATAAAACAAAACTCAGGAGCTGCTACCTCAGAAGAAACTCTGAATGATTCCTTG
GAAGATAGGGGTGATCATTTGGATGAAGAATGCCTTCCAGAAGAAGGTTGTGCAACTGTCAAACCATCTGAGCAT
TCCTGTATCACTGGGTCACATACAGATCAAGATTATAAAGATGTTAATGAAGAATATGGGGCTAGGAATCGTAAG
AGTTCCAAAGAAAAAGTGGCTGTTCTGGAAGTTAGGACCATTTCTGAAAAAGCCAGTAATAAGACAGTCCAAAAT
TTAAGTAAAGTACAGCATCAAAAACTTGGTGATGTGAAGGTGGAACAGCAGAAAGGATTTGACAATCCAGAAGAA
AACTCAAGTGAATTTCCAGTCACCTTTAAGGAAGAAAGTAAATTTGAATTGTCAGGAAGCAAAGTTATGGAGCAG
CAATCTAATCTACAGCCAGAGGCCAAAGAGAAGGAATGTGGAGACTCTCTGGAGAAAGACAGGGAAAGATGGAGA
AAACATCTGAAGGGCCCCTTAACCAGGAAATGTGTTGGAGCTTCACAGGAATGTAAGAAAGAGGCAGACGAGCAG
TTAATTAAAGAAACAAAGACATGTCAGGAAAATTCAGATGTGTTTCAGCAAGAACAAGGCATCTCTGACTTACTT
GGAAAAAGTGGAATTACTGAAGATGCCAGAGTTTTGAAAACTGAATGTGATTCTTGGAGTAGGATTTCTAATCCT
TCAGCCTTCTCCATTGTTCCTAGGAGAGCTGCAAAAAGCAGCAGAGGGAATGGACATTTTCAGGGTCACTTACTG
CTACCTGGAGAACAGATACAACCAAAGCAAGAGAAGAAGGGTGGGAGAAGCAGTGCTGACTTCACTGTTTTGGAT
TTGGAAGAAGATGATGAAGATGATAATGAGAAAACTGATGATTCTATTGATGAAATTGTGGATGTTGTTTCTGAC
TACCAGAGTGAGGAGGTTGATGATGTAGAAAAGAATAACTGTGTAGAATACATTGAGGATGATGAGGAGCACGTG
GACATTGAGACTGTAGAAGAGCTCTCAGAGGAAATTAATGTTGCTCACCTGAAGACCACAGCGGCCCACACACAG
TCATTCAAACAGCCGTCCTGTACTCACATCTCTGCAGATGAAAAAGCAGCTGAAAGGAGTCGAAAGGCTCCACCA
ATTCCTCTAAAACTGAAGCCTGATTACTGGAGTGACAAACTACAGAAAGAAGCAGAAGCGTTTGCTTATTATCGC
CGGACACACACTGCCAATGAGCGGCGGCGGCGTGGTGAAATGAGGGATCTCTTTGAGAAATTAAAGATCACATTG
GGATTACTTCATTCTTCCAAGGTTTCCAAAAGTCTCATTCTTACTCGAGCCTTCAGTGAAATTCAGGGACTAACA
GATCAGGCAGACAAATTGATAGGACAGAAAAATCTCCTGACTCGAAAACGGAATATTCTGATACGGAAAGTATCG
TCTCTTTCAGGTAAGACAGAAGAAGTGGTCCTGAAGAAGCTAGAGTATATTTATGCAAAACAGCAAGCACTAGAG
GCACAAAAAAGAAAAAAGAAGATGGGATCAGATGAGTTTGACATATCTCCCAGAATTAGCAAACAGCAGGAAGGA
TCTTCTGCATCATCTGTAGATCTTGGACAGATGTTTATAAATAACAGGAGGGGGAAACCTTTGATTCTTTCCAGA
AAAAAAGACCAGGCCACAGAAAATACCTCACCCTTGAACACTCCACACACCTCTGCCAACCTTGTGATGACTCCG
CAAGGGCAATTGCTCACCCTAAAAGGTCCCCTATTCTCAGGACCAGTGGTAGCTGTTTCTCCTGATCTCTTAGAA
TCTGATCTTAAGCCTCAAGTTGCCGGTAGTGCTGTGGCTCTACCAGAAAATGACGACTTATTTATGATGCCACGA
ATTGTTAATGTGACATCATTGGCCACAGAGGGAGGTTTGGTAGATATGGGTGGCAGCAAATATCCTCATGAAGTT

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FIGURE 3384B

CCTGATAGCAAGCCATCTGACCATCTGAAAGACACCGTCAGGAATGAAGATAATTCCTTAGAGGATAAGGGTAGA
ATCTCTTCCAGAGGAAACAGAGATGGCAGAGTGACGTTGGGTCCAACGCAGGTTTTTCTGGCAAACAAAGATTCT
GGTTATCCACAAATAGTTGACGTTTCCAATATGCAGAAAGCACAAGAGTTCTTACCTAAAAAAGATTTCTGGTGAT
ATGAGAGGGATTCAGTATAAATGGAAAGAGAGTGAATCAAGAGGGGAGAGAGTGAAGTCAAAGGATTCTTCATTT
CATAAATTAAAGATGAAAGATCTCAAGGACTCAAGCATAGAGATGGAACTGAGGAAAGTAACATCAGCTATAGAG
GAAGCAGCTCTTGATTCCAGTGAACTGCTGACTAACATGGAAGATGAGGATGATACTGATGAGACACTGACTTCA
CTGCTCAATGAAATTGCCTTTCTTAATCAACAACTAAATGATGACTCTGTTGGCCTGGCTGAACTACCCAGCTCT
ATGGATACAGAGTTCCCAGGGGATGCTCGGCGGGCTTTTATTAGTAAGGTTCCTCCTGGAAGCAGAGCAACTTTC
CAGGTTGAGCACTTGGGAACTGGTTTGAAAGAGTTGCCTGATGTTCAAGGGGAGAGTGACTCTATCAGTCCCCTC
CTCTTGCACTTGGAAGACGATGACTTTTCTGAGAATGAAAAACAACTTGCAGAACCAGCCTCTGAGCCAGATGTC
CTTAAGATTGTTATTGACTCTGAAATAAAGGATTCCCTCCTTTCCAACAAGAAAGCTATTGATGGAGGGAAGAAT
ACTTCTGGCCTCCCTGCAGAGCCCGAAAGTGTGTCCTCACCCCCCACCCTACACATGAAGACTGGCTTGGAGAAC
AGCAACAGCACAGACACTTTGTGGAGGCCTATGCCAAAGTTGGCCCCTCTAGGTTTAAAAGTAGCTAATCCTTCC
AGTGATGCAGATGGTCAGAGTCTCAAGGTGATGCCTTGTTTGGCACCTATAGCTGCCAAAGTTGGGTCAGTTGGA
CACAAAATGAACTTAACAGGGAATGACCAGGAAGGCCGGGAAAGCAAGGTGATGCCTACATTGGCACCTGTTGTG
GCTAAATTGGGCAACTCGGGGGCCTCACCAAGTTCTGCAGGGAAA**TGA**ACTTACTTGTCCTTAAGCAGAAGCCAG
GCTGTGAGGGGAAATAGATCTCACCTCCTTTCTCTGCAGGCATCTGTTTGTTTGTGTCTTAGAACTTGGATCCTT
GACTTCAATGATGCAGTGGATAATGATGGGAGAAAGGGGGTAGGGTGCTGACCCTGGTATAAGAAGTACTCTGAA
ATTCTGATCATGTTAAAATGTGTTACCTCACTTGTGGTGCTGGGTCCCCTCATCCTCTCTAAGAAGATGTGATCC
ATTACTGAACATGAGGTGCCCCTCTTACCCAAGGAATTTATAACATGACTCTGGCTCCACAGTGGTTTCTAGTTC
TTCCCCCACAAGCGAAAGAGCTGTTTGCAACTTTGGAGTTGCTGTAGACTGAACTGTAGCTTGTAGCTGTTGAAT
TAAGTCCAAAATCTAAGGAATGCGATGGACTTGTGCAAAGGGATCCAGAAGAGACACTTTTTAGTTGATGTTTCA
AGAATAGGGAGAGAGAGGATGGGTACCATGGAATACCAAAGTGAAGGACTTTGTGTCATTCAGTAAAATTTTCTT
TTTTCATATCCTAAGTAGCTCCCATTCCCTCACCTTTTCAATCAGAATTAACAAATTCAAGCCTTCAGTAAAGTA
GGGATGCTTTTAACTTTTATTATTAATTATTTTGAGATCTTAAAAAAAATAGTAGTTCTCCCTTATTATTTTTGTG
GGCATTGAAAAGCTCATTTCACAGTACCAGAGATTTTTACTGGGAGTATATATTTTGGAGGTAGGCATAGAGGGA
GCCCTACCCCTTCCACAAATTACGTTACTCAAGAGACAGCTAAAATAAAATGCATTATCTCCCCAGACCAGAGAC
AGTGGCCAAAATAAAAAATCATGGGGCTGGAAATTTCCCAAATCAAACCAGCCTCCTGGTGCTTGAAGGTTTCAT
TCACTATTACCTGCACAGGATGTAAAGAAAAGTCACAGTAGGCACTCTTTACCAGGGAAATAAGGCAGTATTTGA
ATCACAAGATATATTTTTTATCTGCAACCATGGATCCAATGATCTGTAGAGCTTTTTCACTCATTAACTGTCAGG
ATATGAAGGACTGACAGTCTGTAAAGATATTTATATTTTTGTATAGTTGTTTTCATAGATTTCTCAAAGGCTGAA
GTTTTCAACCTAGAAGATGAGATTTGTATTGAGTATAGAAATGATGTTTCCTATCTAGTTTGTAAATAATCATGG
TGCACTTGAGGGGTCTCTTGGAAACTCCTAGGGGGTCAAGAATCACTATTCTGAAACTGTATAGACTGGGATTTA
GCTGCTGCATTTTGCCTTTCTTAAATAATTATATTTTGGAATGTAACCCCTGTTCTGTCTTCATTGACAGGATTT
GCTTGTGTTGTTAAAACACTAACACAAGAGCTTCCAGTGCCTGGGCCGTGCCTAGGTGATGCTATTTCTTCTATA
TCTCCTGTCTTCTTTATCCCAAATCCCACTCAGCATATCTTCAGACCTAGGTTGTAAGACCAACTTTGGATTGGA
TCTAGCCAGTGAATTATTATTTCCATGGTTGGTTCCCTTTCTGTTAACTCTGGTAATCAACAGATTGAAAACGGT
GGAAGAACTTCTGAAAATTGCAGTGGGAGCAAATTCTTGTTGGTTTTGTGCTGCTTGCCTTTCTAGATCTGCTCA
TCAGCACTTAACCTTCCCTCCTCTAAAGGTTACTAAAGAAGCCTGAAGTAGGTAAAGAGTGCTCCTCAGCTTCTT
ATCCTTCCACTCTTTACCCAGCAGATTTCATTCAATGCCTTAGCCAAGGAGTCCAGCACCTGTCTCCCCTGCTAA
TAATTGTCCTTAGAGATGCTAGTACTTTAATCCAGGTATAGCAGTTTCCCGTTATTTTCTTGCTTGTCGTTCCCC
TACATTTCCTCCTGATTTCCCAAGACTCTCTTTGTGGCTTTTGAGGGTCAGCCAAGGAGCAGGCAAGTGAGTGAA
CAATCCTCAGGAAAAGAAGGACCATTTTAGCTTAACACTTCCTTTTTTTTTTTTTTTTTTTAAGAAGAATATAG
GTAAACAGGTAATGATTCTTGATTGGAGATACCATTTGACTCTTGATGAGAGTTGTACGAAGATGGAAATGAGGG
ATGATTCCAGGCGTTTTAGGGGGAAGGCTGCAGATACCATTCTAACCCCCAAGATACTGTGTTCTCAAGACCTCT
TAGAACTAGGTGTTGTCAGGGATAATTTGAGGAGGGCTTAGTCTTCAGAACAATCCTGCAGTCTTGACAGAAATC
TAAAATCTCCAAAAACTCCTACCCTTTAACCTTACCCTAGGGGGAACTGATCTATGAATATTACATGTGTGATTA
TGAAAGGTGAAGTTGAGTGAGAGGAGTTGAGGAACGTGGAAGACAGTGAGCTCTCACCCTAACACTATAAGAAGC

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FIGURE 3384C

ATGATCTCAATAGACCAATAATTCACCTTTTTATACATCTGTAAATAAATGGAATGTTTTTAAGAATATAATTAT
GTCAGATTTAGCATTTTCTTTTATATATTAAATATATATATCTTTCCTTTTCTGCTTTCGAAAAGTGACTATTTT
TTTAGAAATCTAAGAACAGAAGTTTGGTGATTGAAAGGTAGAATATATAAACCTGAAATAAAGCAGTTAAAACAA
TTAAAGCAG

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FIGURE 3385

GACGCAGCCATGGCGGAGGCGGCTTTGGAAGCCGTGCGGAGCGAGTTACGAGAATTCCCGGCCGCTGCAAGGGAG
CTCTGCGTGCCTCTTGCTGTGCCCTACCTGGACAAACCCCCAACTCCGCTCCACTTCTACCGGGACTGGGTCTGC
CCCAACAGGCCGTGCATTATCCGCAACGCTCTGCAGCACTGGCCGGCCCTCCAGAAGTGGTCCCTCCCCTATTTC
AGAGCCACAGTGGGCTCCACAGAGGTGAGTGTGGCCGTGACCCCAGATGGTTACGCGGATGCCGTGAGAGGGGAT
CGCTTCATGATGCCAGCTGAGCGCCGCCTGCCCCTGAGCTTCGTGCTGGATGTGCTGGAGGGCCGGGCCCAGCAC
CCTGGAGTCCTCTATGTGCAGAAGCAGTGCTCCAACCTGCCCAGCGAGCTGCCCCAGCTGCTGCCTGATCTGGAA
TCCCATGTGCCCTGGGCCTCCGAAGCCCTGGGAAAGATGCCCGATGCTGTGAACTTCTGGCTGGGGGAGGCGGCT
GCAGTGACTTCTTTGCACAAGGACCACTATGAGAACCTCTACTGCGTGGTCTCAGGAGAGAAGCATTTCCTGTTC
CATCCGCCCAGCGACCGGCCCTTCATCCCCTATGAGCTGTACACGCCGGCAACCTACCAGCTAACTGAAGAGGGC
ACCTTTAAGGTGGTGGATGAAGAGGCCATGGAGAAGGCAGAGGTGTCCAGGACCTGCCTGCTCACGGTTCGTGTC
CTGCAGGCCCATCGCCTACCCTCTAAGGACCTAGTGACCCCCTCTGACTGCTACGTGACTCTCTGGCTGCCCACG
GCCTGCAGCCACAGGCTCCAGACACGCACGGTCAAGAACAGCAGTAGCCCTGTCTGGAACCAGAGCTTTCACTTC
AGGATCCACAGGCAGCTCAAGAATGTCATGGAACTGAAAGTCTTTGACCAGGACCTGGTGACCGGAGATGACCCT
GTGTTGTCAGTACTGTTTGATGCGGGGACTCTGCGGGCTGGGGAGTTCCGGCGCGAGAGCTTCTCACTGAGCCCT
CAGGGTGAGGGGCGCCTGGAAGTTGAATTTCGCCTGCAGAGTCTGGCTGACCGTGGCGAGTGGCTCGTCAGCAAT
GGCGTTCTGGTGGCCCGGGAGCTCTCCTGCTTGCACGTTCAACTGGAGGAGACAGGAGACCAGAAGTCCTCAGAG
CACAGAGTTCAGCTTGTGGTTCCTGGGTCCTGTGAGGGTCCGCAGGAGGCCTCTGTGGGCACTGGCACCTTCCGC
TTCCACTGCCCAGCCTGCTGGGAGCAGGAGCTGAGTATTCGCCTGCAGGATGCCCCCGAGGAGCAACTAAAGGCG
CCACTGAGTGCCCTGCCCTCTGGTCAAGTGGTGAGGCTTGTCTTCCCCACGTCCCAGGAGCCCCTGATGAGAGTG
GAGCTGAAAAAAGAAGCAGGACTGAGGGAGCTGGCCGTGCGACTGGGCTTCGGGCCCTGTGCAGAGGAGCAGGCC
TTCCTGAGCAGGAGGAAGCAGGTGGTGGCCGCGGCCTTGAGGCAGGCCCTGCAGCTGGACGGAGACCTGCAGGAG
GATGAGATCCCAGTGGTAGCTATTATGGCCACTGGTGGTGGGATCCGGGCAATGACTTCCCTGTATGGGCAGCTG
GCTGGCCTGAAGGAGCTGGGCCTCTTGGATTGCGTCTCCTACATCACCGGGGCCTCGGGCTCCACCTGGGCCTTG
GCCAACCTTTATGAGGACCCAGAGTGGTCTCAGAAGGACCTGGCAGGGCCCACTGAGTTGCTGAAGACCCAGGTG
ACCAAGAACAAGCTGGGTGTGCTGGCCCCCAGCCAGCTGCAGCGGTACCGGCAGGAGCTGGCCGAGCGTGCCCGC
TTGGGCTACCCAAGCTGCTTCACCAACCTGTGGGCCCTCATCAACGAGGCGCTGCTGCATGATGAGCCCCATGAT
CACAAGCTCTCAGATCAACGGGAGGCCCTGAGTCATGGCCAGAACCCTCTGCCCATCTACTGTGCCCTCAACACC
AAAGGGCAGAGCCTGACCACTTTTGAATTTGGGGAGTGGTGCGAGTTCTCTCCCTACGAGGTCGGCTTCCCCAAG
TACGGGGCCTTCATCCCCTCTGAGCTCTTTGGCTCCGAGTTCTTTATGGGGCAGCTGATGAAGAGGCTTCCTGAG
TCCCGCATCTGCTTCTTAGAAGGTATCTGGAGCAACCTGTATGCAGCCAACCTCCAGGACAGCTTATACTGGGCC
TCAGAGCCCAGCCAGTTCTGGGACCGCTGGGTCAGGAACCAGGCCAACCTGGACAAGGAGCAGGTCCCCCTTCTG
AAGATAGAAGAACCACCCTCAACAGCCGGCAGGATAGCTGAGTTTTTCACCGATCTTCTGACGTGGCGTCCACTG
GCCCAGGCCACACATAATTTCCTGCGTGGCCTCCATTTCCACAAAGACTACTTTCAGCATCCTCACTTCTCCACA
TGGAAAGCTACCACTCTGGATGGGCTCCCCAACCAGCTGACACCCTCGGAGCCCCACCTGTGCCTGCTGGATGTT
GGCTACCTCATCAATACCAGCTGCCTGCCCCTCCTGCAGCCCACTCGGGACGTGGACCTCATCCTGTCATTGGAC
TACAACCTCCACGGAGCCTTCCAGCAGTTGCAGCTCCTGGGCCGGTTCTGCCAGGAGCAGGGGATCCCGTTCCCA
CCCATCTCGCCCAGCCCCGAAGAGCAGCTCCAGCCTCGGGAGTGCCACACCTTCTCCGACCCCACCTGCCCCGGA
GCCCCTGCGGTGCTGCACTTTCCTCTGGTCAGCGACTCCTTCCGGGAGTACTCGGCCCCTGGGGTCCGGCGGACA
CCCGAGGAGGCGGCAGCTGGGGAGGTGAACCTGTCTTCATCGGACTCTCCCTACCACTACACGAAGGTGACCTAC
AGCCAGGAGGACGTGGACAAGCTGCTGCACCTGACACATTACAATGTCTGCAACAACCAGGAGCAGCTGCTGGAG
GCTCTGCGCCAGGCAGTGCAGCGGAGGCGGCAGCGCAGGCCCCACTGATGGCCGGGGCCCCTGCCACCCCTAACT
CTCATTCATTCCCTGGCTGCTGAGTTGCAGGTGGGAACTGTCATCACGCAGTGCTTCAGAGCCTCGGGCTCAGGT
GGCACGGTCCCAGGGTCCAGGCTGAGGGCTGGGAGCTCCCTTGCGCCTCAGCAGTTTGCAGTGGGGTAAGGAGGC
CAAGCCCATTTGTGTAATCACCCAAAACCCCCCGGCCTGTGCCTGTTTTCCCTTCTGCGCTACCTTGAGTAGTTG
GAGCACTTGATACATCACAGACTCATAC

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FIGURE 3386

GGGAGAGTCGAACCCGGAGCAGGGTCCCATCCGAGCGTGGACTGGCGGCAGGATGTTCAGCTGGATGGGGCGGCA
GGCGGGCGGGCGCGAACGCGCTGGCGGCGCGGACGCGGTGCAGACGGTGACGGGCGGGCTGCGCTCGCTCTACCT
GCGCAAGGTGCTGCCGCTGGAGGAGGCGTACCGCTTCCACGAGTTCCACTCGCCTGCGCTGGAGGACGCCGACTT
CGAGAACAAGCCCATGATCCTGCTGGTGGGCCAGTACAGCACCGGCAAGACCACCTTCATCAGATACCTACTGGA
GCAGGATTTCCCAGGCATGAGGATTGGTCCGGAGCCCACCACAGACTCCTTCATCGCCGTGATGTATGGAGAGAC
TGAGGGCAGCACCCCAGGGAATGCTTTAGTCGTGGACCCCAAAAAGCCGTTTAGAAAGCTCAGTCGCTTTGGAAA
CGCTTTCCTGAATCGATTCATGTGCTCACAGCTCCCCAATCAGGTCCTGAAGAGCATCAGCGTCATCGACAGCCC
CGGCATCCTTTCTGGGGAGAAGCAGCGCATCAGCCGAGGCTATGACTTCTGCCAGGTCCTGCAGTGGTTTGCCGA
GAGGGTGGACAGGATCATCCTGCTCTTTGACGCTCACAAGCTGGACATCTCAGATGAATTCTCAGAGGCCATCAA
GGCCTTCCGGGGCCAGGACGACAAGATCCGTGTCGTGCTGAACAAGGCCGACCAAGTGGACACGCAGCAGCTGAT
GCGGGTCTACGGGGCCCTCATGTGGTCCCTAGGCAAGGTCATCAACACGCCCGAGGTACTGCGCGTCTACATTGG
CTCCTTCTGGGCGCAGCCCCTGCAGAACACGGACAACCGCCGGCTCTTCGAGGCTGAGGCCCAGGACCTCTTTAG
AGACATCCAGAGCCTCCCCCAGAAGGCAGCGGTGCGCAAGCTCAACGACCTCATCAAGCGAGCGAGGCTGGCCAA
GGTGCATGCCTACATCATCAGCTACCTGAAGAAGGAGATGCCAAGTGTATTTGGAAAGGAAAACAAGAAGAGAGA
GCTTATCAGCAGGCTACCGGAAATCTACATTCAGCTACAGCGAGAATACCAGATTTCTGCAGGGGACTTCCCTGA
GGTCAAGGCTATGCAGGAACAGCTTGAGAACTATGACTTCACCAAATTCCACTCGCTGAAGCCCAAGCTGATCGA
GGCAGTGGACAACATGCTGAGCAACAAGATCTCGCCCCTCATGAACCTCATCAGCCAGGAGGAGACGAGCACGCC
CACGCAGCTGGTGCAGGGCGGCGCCTTCGATGGCACCACCGAGGGCCCCTTCAACCAGGGCTACGGGGAGGGTGC
CAAGGAGGGCGCCGACGAGGAGGAGTGGGTCGTGGCCAAAGACAAGCCCGTCTACGACGAGCTCTTCTACACTCT
GTCGCCCATCAATGGCAAGATATCAGGTGTCAACGCCAAGAAGGAGATGGTGACCTCCAAGCTGCCCAACAGCGT
CCTGGGCAAGATCTGGAAGCTGGCCGACTGCGACTGCGACGGCATGCTTGATGAGGAGGAGTTCGCGCTGGCCAA
GCACCTCATCAAGATCAAGCTCGACGGCTACGAGCTGCCCAGCAGCCTGCCCCCCCCACCTCGTGCCCCCCTCGCA
CAGGAAGTCCCTGCCCAAGGCCGACTGAGGGGTGGGCTGCAGAACGGGGTGGGAACTGGGGGACCTGGGCCTCAG
GCCTGCTCCACCACTGACTCACCGAATGACCTTGGGCAAGGCACTGCCCTCTCTGTGCCTTGGTTTCCCCATCTG
TAGAATGGGGAGGGTGGACACTGGAAACTAGATGACTTCTTTCACCTCCAAAATTCCCTTAGTTTCTATGAAAAT
ATTGGGGGTAGGGGGGTGGATTAGGAGATTGAAGGGTTGAGAAGAAAGAGAAATTGTCCAAAGAGTCCTCAGAAC
CTGCCTGGAGAAATGCGCATGGGGGTGGGCCTGGTAAGTCCCAGGAACCACAGGAAGTGAGCTAAGGCTCACCCA
GAGCAGCTGGGTCTCCAGGCTGCCTGGGCTTTTTGTCCTCATGAACAACTCTGGAGCAGCTGTCTGTCCCTCAGA
GGGCACCTGGAGGCAGCAAAGATTATCTTATTTATTTTATTTTGTTTTCTGCTATATTTAGAGTGGCAAAAAAAT
AGAGCAGAGGGTTTCTGCTGTCTCCAGACTGTCTACCAAAGAGAAGGCGACAGATGCCTCCTGGGTTTGGAAGGG
GGATGCACTGTGGATCTGCCATCCATTCTGCAGTCTCCAGCAGAGCAGGCAGTCAGGCCCCAGCGTGCCTCCATC
CCAGTGCCCCGATGACCATCTGGTCAGCCCTCCCAACCTCCCTTCCAGGGGGCTTACCAGCAAAGCCATATTCGG
CTAGGAATTTGGAATTCACAACCTTTATTAACCCCTGGCAAAACTTCCCGTTTGCATGTCAAATCACATTGAAGC
CTGAAAATTAGCTTTTCTTACTGGTTTTTCCAATAAGTAATAGCAAAGCCCACTTATCATACTTAAACTACAGTA
AAGAAAAGAGGTGGTTCTCTGCAGTGATCGTTTAGTGTGGCCCTCAAACATTAAATATCCCGAGGTCTCCTTGGT
GGGTGGCAGGATTTAAATTCAATCAAATCCTGTCCTAGTGTGTGCAGTGTCTTCGGCCCTGTGGACACAGGTGAA
TGAGGGACCAGCCCTGCCCTGGGCTGTTGAGAAGAGATCAGTCCACCCAGAGTTAGACATTGTTTTTGTAGAAAA
CAGGCATTTATTATGTCTAGGGTTTTGTGTTTTTTTTTTTTCCTTACAGGATAAAAGCCTTTATACAGAAACAAA
ATGGAACCTTTCATATAAAACCTTTTCTTT

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FIGURE 3387A

GGGGTTGACGATGGCTGTGTTGTTGAAGGGCCTGTAGCCGGGGGGTTCCTGGCCGGATCCCGGTCTACCCTTAGC
CCAGACTCGTTCCGGACCCCAGCCCGGCCCGGAACACTCTGGGCGAGACGGCGGTGGCAACTCTCCCCTTGCCGC
CATGCACGACGCTTTCGAGCCAGTGCCGATCCTAGAAAAGCTGCCTCTGCAAATCGACTGTCTGGCTGCCTGGGA
GGAATGGCTTCTTGTGGGAACCAAACAAGGACATCTTCTTCTCTATAGGATTCGGAAGGACGTTGTGCCAGCAGA
TGTAGCATCACCTGAAAGCGGCAGTTGCAACAGATTTGAAGTGACACTAGAGAAATCCAATAAGAACTTCTCCAA
AAAGATTCAGCAGATCCATGTGGTTTCCCAGTTTAAGATTCTGGTCAGCTTGTTAGAAAATAACATTTATGTCCA
TGACCTATTGACATTTCAACAAATCACTACGGTTTCAAAGGCAAAGGGAGCATCACTGTTTACTTGTGACCTCCA
GCACACAGAGACCGGTGAGGAGGTGTTACGGATGTGTGTGGCAGTAAAAAAGAAGCTGCAGCTCTATTTCTGGAA
GGACAGGGAATTTCATGAATTGCAGGGGGACTTTAGTGTGCCAGATGTGCCCAAGTCCATGGCGTGGTGTGAAAA
TTCTATCTGTGTGGGTTTCAAGAGAGACTACTACCTAATAAGGGTGGATGGAAAGGGGTCCATCAAAGAGCTCTT
TCCAACAGGAAAACAGCTGGAGCCCTTAGTTGCACCTCTGGCAGATGGAAAAGTGGCTGTGGGCCAGGATGATCT
CACCGTGGTACTCAATGAGGAAGGGATCTGCACACAGAAATGTGCCCTGAACTGGACGGACATACCAGTGGCCAT
GGAGCACCAGCCTCCCTACATCATTGCAGTGTTGCCTCGATATGTTGAGATCCGAACATTTGAACCGAGGCTTCT
GGTCCAAAGCATTGAATTGCAAAGGCCCCGTTTCATTACCTCAGGAGGATCAAACATTATCTATGTGGCCAGCAA
TCATTTTGTTTGGAGACTCATCCCTGTCCCCATGGCAACCCAAATCCAACAACTTCTCCAGGACAAGCAGTTTGA
ATTGGCTCTGCAGCTCGCAGAAATGAAAGATGATTCTGACAGTGAAAAGCAGCAACAAATTCATCACATCAAGAA
CTTGTATGCCTTCAACCTCTTCTGCCAGAAGCGTTTTGATGAGTCCATGCAGGTCTTTGCTAAACTTGGCACAGA
TCCCACCCATGTGATGGGCCTGTACCCTGACCTGCTGCCCACAGACTACAGAAAGCAGTTGCAGTATCCCAACCC
ATTGCCTGTGCTCTCCGGGGCTGAATTGGAGAAGGCTCACTTAGCTCTGATTGACTACCTGACACAGAAACGAAG
TCAATTGGTAAAGAAGCTGAATGACTCTGATCACCAGTCAAGCACCTCACCGCTCATGGAAGGCACTCCCACCAT
CAAATCCAAGAAGAAGCTGCTACAAATCATCGACACCACCCTGCTCAAGTGCTATCTCCATACAAATGTGGCCCT
GGTGGCCCCCTTGCTACGCCTGGAGAACAATCACTGCCACATCGAGGAGAGCGAGCACGTGCTAAAGAAGGCTCA
CAAGTACAGTGAGCTTATCATCCTGTATGAGAAGAAGGGGCTCCACGAGAAAGCTCTGCAGGTGCTCGTGGACCA
GTCCAAGAAAGCCAACTCCCCTCTGAAAGGCCACGAGAGGACAGTGCAGTATCTGCAGCATCTGGGCACAGAAAA
CCTGCATTTGATTTTCTCCTACTCAGTGTGGGTGCTGAGAGACTTCCCAGAAGATGGCCTGAAGATATTTACTGA
AGATCTCCCGGAAGTGGAGTCTCTGCCACGTGATCGAGTCCTCGGCTTCTTAATAGAGAATTTTAAGGGTCTGGC
TATTCCTTATCTGGAACACATCATCCATGTTTGGGAGGAGACAGGCTCTCGGTTCCACAACTGCCTGATCCAGCT
ATACTGTGAGAAGGTGCAAGGTCTGATGAAGGAGTATCTCCTGTCCTTCCCTGCAGGCAAAACCCCAGTCCCAGC
TGGAGAGGAAGAGGGTGAGCTGGGAGAATACCGGCAAAAGCTCCTCATGTTCTTGGAGATTTCCAGCTACTATGA
TCCAGGCCGGCTCATCTGTGATTTTCCCTTTGATGGCCTCTTAGAAGAACGAGCTCTCCTGTTGGGGCGCATGGG
GAAACATGAACAAGCTCTTTTCATTTATGTCCACATCTTGAAGGATACAAGGATGGCTGAGGAGTACTGCCACAA
ACACTATGACCGAAACAAAGATGGCAACAAAGATGTGTATCTGTCCCTGCTTCGGATGTACCTGTCGCCCCCCAG
CATTCACTGCCTGGGGCCAATCAAGCTGGAACTACTGGAGCCAAAAGCCAACCTCCAGGCCGCTCTGCAGGTCCT
CGAGCTACACCACAGCAAACTGGACACCACCAAGGCCCTCAACCTTCTGCCAGCAAACACTCAGATCAATGACAT
ACGCATCTTCCTGGAAAAGGTCTTGGAAGAAAATGCACAAAAGAAACGGTTCAATCAAGTGCTCAAGAACCTTCT
CCATGCAGAATTCCTGAGGGTCCAGGAAGAGCGGATTTTACACCAGCAGGTGAAGTGCATCATCACAGAGGAGAA
GGTGTGCATGGTGTGTAAGAAGAAGATTGGGAACAGTGCATTTGCAAGATACCCCAATGGAGTGGTCGTCCATTA
CTTCTGTTCCAAAGAGGTAAACCCAGCTGACACTTGAGCCCAGCATCCTGGGGATCCAGCGGATGGACAGCTTGG
CTCTCCCAGAGAGGTGAAGGAGCACCTGGCCTTAGGAATCCTGGCTGCCACCACCACAAGGCTCCCCATTTGGAC
ATTACTGGCTATCTTGTGCCCTGGAACAACTCTGAATTAATTAGACTCATGGTCTGGCATTGCCAGCTTTTTAAT
GGGAAAAGAGATTAGTTATACCTTATACCATTATGTTGTGGGCAATTCCAGAGAATTCAGTACCTGCTTGGTCAG
GAGGATGTGCACCATCTTGCCTTTGCACACCAGTCACCTGAACAAGGAAACTTGTCACAAGTGTTTGTAACCATG
GGGTTGTTCATCAAGGGCTTTTCTATTAAGTACATGACTTCACAAGGACCGCTCAGCATGGCTCACTGGAGAGTT
CCATGAGAGAACAGCACTCAAGCTTCTGGCCGCATGGACCCGATGGCTCGCATTCTGTGTAGTGTTTTACGTCTC
CATGGTAACTGTGCCCTGCACCCCTCGGTAGCCGCCCTGTTAGTTTTCAGTCTCCTTTTCTTTCTCACCATTTAT
CACTTCCCTCACTGCCCTACCCAGGCTTTCTCTCCCACTTCCCTGACTCTGGGAATAACTAATATTTAAGCAAGG
TAAGATGAGAAGCAAGGGGTCTCAGTTCTAGGAATACAGTGCTAGTTGATTGTCAGGTATGTTGTAAATAGACCC
TCTTTGGCCATACACTCCATGCCTAGATGCCTCGGAGAGCATCATTCTCTGCCTAGGCAAGGCCCTGCATCCCTT

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FIGURE 3387B

GCCTCAGGCCGGGCTGAGTGTGACTGCAGCTCCTGAGGATGGGCCTGCCCTGTCTGGGGTATGCGTGATCCCTAG
ATACATGTTCCCACAGAGGTGCCTGCTCCGTCTTCGCTCACCAGACACTCAGGCAGGCTGGCTTAGTCTTTGTGC
GTGGCGATTTTGTGCTCTGGGCCCTTTCTCTTTTTCCAGCCAGTTTCCATTCACTTGCCTTACAGCCTGCCCTGG
CCGTCACTCCCCAGCTTTGTTCAGCAATGGTGTGGTTGGAGAGTTGTGCTGGGATAGCGCAGGAAGGTGGGTCCC
GGCAACACGCAGGGGATGAGTGGACCTGGAACTGACAATGGCGTGCTGCCAAGTGTTCCTGAGAGGTGTTTAGGC
ACAGCAGAGGGGACGCGGGGGGCAAGAACAGCAGGACGCTGGTTTAAAAATAACTCACCGCCAAACCTGTGGAGC
AGTGTGGGGCATCCTGCCAGAGGTGCACAGGCTGGAGTTTCAGGCACTGCAGGCTGATGACACACAGGGAGAGTG
GCCCTGCCTCCTGTCCTCCCCGGGGTTTTTGCAGACTCGAAGTCTCACTGCACCAGTGTCTTTGATGGTGGTGAG
GGTGGGTGATGGTGCCCAGCACCAACAGTTTTAGTGGCCTGTCCTTGACCTGCCGTGGTCCTTTGTAAACTATGG
CTCCATGCTGTGTGACAGATCAACGTGCTGATGGTAAGTAGACTAGGCTTCCCCAGGCATGCCGTCCGTGGGGGC
CTGAAGAGACAGTGAGTGCCATTGGCCCCATTCGCAGATGTGGGAGACTCTGCTCAGGCCTGTGAGGCTGGGCAG
CCCTTCACCAGAGTTCGGAGGAGCAGTGTGTGGCGCCACGTCCCGACTGGCCATACCCACACAGAAGCAGTGCTG
CCCGGGGCCTCATCTGGGCCAGCTTGGACTCTGCTTCCTCCAGGAGCAGCAGGGAAGCTCTGGGCCACCTCCCTG
GATAGCAGGAACTTGACCTGCCATGTGTGCCCTGCCTTCCTGGCCAGCTGTGCTTGTTATCTTCCATTCTCACAA
ACTGTCTTTGAAGCAATAGAATAAAGAATGTGTGTTTTCTTTCCTGGTATACATACATGATCCCATGCTCCCAAG
CTCCATTCTTCCTTCCCTCAACTCTCTGCCCTCCACAGAGCTATGGAGAAGGCTGGAGATGAAAGCTTTGTAGTG
AGGACTGATAAAGATCTCATCACTGCTCCTTATAATAAACCTAATAAAGCAAGAAA

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FIGURE 3388

GACTGTCTGAGAGAGGGGCCGCTACGCCGCACAGCAAACAAGCTCCGCGACGTTTCCAGGACCCGGATAATCCCG
CCCTTAGAGCAGAGCCGGAAGAAGGCGGGACGAACCGGAAGAGGGTGAAATGCTTTCGGTAGGCACTCCACGGCT
GTGAAGATGGCGGCGGCTGCGTGGCTTCAGGTGTTGCCTGTCATTCTTCTGCTTCTGGGAGCTCACCCGTCACCA
CTGTCGTTTTTCAGTGCGGGACCGGCAACCGTAGCTGCTGCCGACCGGTCCAAATGGCACATTCCGATACCGTCG
GGGAAAAATTATTTTAGTTTTGGAAAGATCCTCTTCAGAAATACCACTATCTTCCTGAAGTTTGATGGAGAACCT
TGTGACCTGTCTTTGAATATAACCTGGTATCTGAAAAGCGCTGATTGTTACAATGAAATCTATAACTTCAAGGCA
GAAGAAGTAGAGTTGTATTTGGAAAAACTTAAGGAAAAAAGAGGCTTGTCTGGGAAATATCAAACATCATCAAAA
TTGTTCCAGAACTGCAGTGAACTCTTTAAAACACAGACCTTTTCTGGAGATTTTATGCATCGACTGCCTCTTTTA
GGAGAAAAACAGGAGGCTAAGGAGAATGGAACAAACCTTACCTTTATTGGAGACAAAACCGCAATGCATGAACCA
TTGCAAACTTGGCAAGATGCACCATACATTTTTATTGTACATATTGGCATTTCATCCTCAAAGGAATCATCAAAA
GAAAATTCACTGAGTAATCTTTTTACCATGACTGTTGAAGTGAAGGGTCCCTATGAATACCTCACACTTGAAGAC
TATCCCTTGATGATTTTTTTCATGGTGATGTGTATTGTATATGTCCTGTTTGGTGTTCTGTGGCTGGCATGGTCT
GCCTGCTACTGGAGAGATCTCCTGAGAATTCAGTTTTGGATTGGTGCTGTCATCTTCCTGGGAATGCTTGAGAAA
GCTGTCTTCTATGCGGAATTTCAGAATATCCGATACAAAGGAGAATCTGTCCAGGGTGCTTTGATCCTTGCAGAG
CTGCTTTCAGCAGTGAAACGCTCACTGGCTCGAACCCTGGTCATCATAGTCAGTCTGGGATATGGCATCGTCAAG
CCACGCCTTGGAGTCACTCTTCATAAGGTTGTAGTAGCAGGAGCCCTCTATCTTTTGTTCTCTGGCATGGAAGGG
GTCCTCAGAGTTACTGGGGCCCAGACTGATCTTGCTTCCTTGGCCTTTATCCCCTTGGCTTTCCTAGACACTGCC
TTGTGCTGGTGGATATTTATTAGCCTGACTCAAACAATGAAGCTATTAAAACTTCGGAGGAACATTGTAAAACTC
TCTTTGTATCGGCATTTCACCAACACGCTTATTTTGGCAGTGGCAGCATCCATTGTGTTTATCATCTGGACAACC
ATGAAGTTCAGAATAGTGACATGTCAGTCGGACTGGCGGGAGCTGTGGGTAGACGATGCCATCTGGCGCTTGCTG
TTCTCCATGATCCTCTTTGTCATCATGGTTCTCTGGCGACCATCTGCAAACAACCAGAGGTTTGCCTTTTCACCA
TTGTCTGAGGAAGAGGAGGAGGATGAACAAAAGGAGCCTATGCTGAAAGAAAGCTTTGAAGGAATGAAAATGAGA
AGTACCAAACAAGAACCCAATGGAAATAGTAAAGTTAACAAAGCACAGGAAGATGATTTGAAGTGGGTAGAAGAG
AATGTTCCTTCTTCTGTGACAGATGTAGCACTTCCAGCCCTTCTGGATTCAGATGAGGAACGAATGATCACACAC
TTTGAAAGGTCCAAAATGGAGTAAGGAATGGGAAGATTTGCAGTTAAAGATGGCTACCATCAGGGAAGAGATCAG
CATCTGTGTCAGTCTTCTGTACGGCTCCATGGGATTAAAGGAAGCAATGACATCCTGATCTGTTCCTTGATCTTT
GGGCATTGGAGTTGGCGAGAGGTGTCAGAACAAAGAGAACATCTTACTGAAAACAAGTTCATAAGATGAGAAAAA
TCTACGAGCTTCTTATTTACAACACTGCTGCCCCCTTTCCTCCCAGACTCTGACATGGATGTTCATGCAACTTAA
GTGTGTTGTTCCTGAACTTTCTGTAATGTTTCATTTTTTAAATCTGACAAACTAAAAAGTTTAACGTCTTCTAAA
AGATTGTCATCAACACCATAATATGTAATCTCCAGGAGCAACTGCCTGTAATTTTTATTTATTTAGGGAGTTACA
TAGGTGATGGGGGAAATTGTTAACTACCTTTCATTTTCCTGGGAAGTCAAGGTTACATCTTGCAGAGGTTGTTTT
GAGAAAAAAGGGCCCTTCTGAGTTAAGGAGCCATAGTTCTATCAATGATCAAAAGAAAAAAAAAAAAAGAGAAAC
TGTTACAGTATGATTCAGATCATTTAAAAAAGCAAAATCAAGTGCAATTTTGTTTACAAATGGTGTATATTAAAG
ATTTTTCTATTTCAGATGTACTTTAAAGAGAAATATTAGCTTAACTCTTTTGACATCTGCTATTGTGACACATCC
CATTGCTGGCAATGTGGTGCACACTCCGAAACTTTTAACTACTGTTTTGTAAGCCTCCAAGGGTGGCATTGCAGG
GTCCTTAGGCAATGTTTTGTTTGCCTTTATGCAGAGAGGTGCTCCAAGTGCTGTGATTGAGCACCGTGCTAGAGG
AACTGTAATGCTTCAGAAGTTGTAGCTTATACAAAGGAAACAGGTCCTGCTGGCTTAATTTAAACAGTTATTGCA
TGAAGTAGCGTGGAGGCCCTGGACTGCTGCTCGTTCTTTAGGATGGACTGTTCTGGTATCTGGTATTGGTTTAGA
GACTGTTAATAAGGGACATCACAAGGTGATGGGATTCATTTGAAGCACTCTATTTCTGTTTTAATGGTTTTATCC
AATTTTGCCTTCCCAAGATTTTTGTTCTACATAAAAAGTTCATGCCACTTTTTAATAT

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FIGURE 3389A

AGACGTTAGTGAAGTGAATACTCACCGACGGTATCGGAATGTGCCATTTGGACCGGTCGGCAGCAGCTACGGTTG
CCGGTCCCGCACTGAAAAACGACAGTGGTGACGGGTGAGCTCCCAGAAGCAGAAGAATGACAGGCAACACCTGAA
GCCACGCAGCCGCCGCCATCTTCACAGCCGTGGAGTGCCTACCGAAAGCATTTCACCCTCTTCCGGTTCGTCCCG
CCTTCTTCCGGCTCTGCTCTAAGGGCGGGATTATCCGGGTCCTGGAAACGTCGCGGAGCTTGTTTGCTGTGCGGC
GTAGCGGCCCCTCTCTCAGACAGTCGTCTGTGCGCCGTGAGACTTTGGACCTACTGCGCAGGCGTCATCCTGTTG
GAACCTGGTCAGCTGGGTTAGAGAGATCGCTACATGCCAGCCTGGCCTGAGTCTTTTCTGTCTCCCAGCCGTTAA
AGGTTTTAGGACCAGGCAGGCACCCCGTGCAGGATTTGGCTCTCTACTTCCGCTCGCCCCAGCCCTTCATCCCTT
CTAAGTCAATGTCAGACTTTGGGGCCAGAAAGTCTGGAAAAGCCCTAAGCCTGGCTGCCCAAGTGGCGTCTAGTA
GTGAGTTCTCCGGTTTGGGTGGTATTTAAGCAAAGGCTGGAATTCGGCGGTGGTGGAGTACACGCGATTCCTAGA
CTGGGTAGTGTAACAACCTTCAAAGGCCCCTTCTAGCCCTGAAGAGTACGATGCTGCAGTACAATCTGGCTGGAG
ACCTAGCCTCCAGCAAAGACCCGGCCGGCACTTCCCACCCTTAACCGAAAACGGAGACAGAGAGGGACTCATTGC
GTACACGCCCTCACCGCCGCCCAGTTTCGGTTCCTAACAAAAGCACGTTCCTCATCAGCCACCCATAATCAAGAC
AAATTTGCCAAATAAATCATTGTAGAAACGCTAGTTTGGGCCTGAAAAATTCCAGGAGCAAGAGTCAAGATTTGT
CACTCCATGAGAATCTGGAGGGGACTCCCTTCCCAGAAACTTGACGATGAAGTACTGGTTGTAATTTTAGAAAGA
CACCCAATCGGCTTTTTTAAAAGATCGCCCAGGGCCCTTGTCCTGAGAGCTGGGAGCTGGTCGGAGTGACAGAGA
AGCC**ATG**GAAGCAGCAGTGAAAGAGGAAATAAGTCTTGAAGATGAAGCTGTAGATAAAAACATTTTCAGAGACTG
TAACAAGATCGCATTTTACAGGCGTCAGAAACAGTGGCTTTCCAAGAAGTCCACCTATCAGGCATTATTGGATTC
AGTCACAACAGATGAAGACAGCACCAGGTTCCAAATCATCAATGAAGCAAGTAAGGTTCCTCTCCTGGCTGAAAT
TTATGGTATAGAAGGAAACATTTTCAGGCTTAAAATTAATGAAGAGACTCCTCTAAAACCCAGATTTGAAGTTCC
GGATGTCCTCACAAGCAAGCCAAGCACTGTAAGGCTGATTTCATGCTCTGGGGACACAGGCAGTCTGATATTGGC
AGATGGAAAAGGAGACCTGAAGTGCCATATCACAGCAAACCCATTCAAGGTAGACTTGGTGTCTGAAGAAGAGGT
TGTGATTAGCATAAATTCCCTGGGCCAATTATACTTTGAGCATCTACAGATTCTTCACAAACAAAGAGCTGCTAA
AGAAAATGAGGAGGAGACATCAGTGGACACCTCTCAGGAAAATCAAGAAGATCTGGGCCTGTGGGAAGAGAAATT
TGGAAAATTTGTGGATATCAAAGCTAATGGCCCTTCTTCTATTGGTTTGGATTTCTCCTTGCATGGATTTGAGCA
TCTTTATGGGATCCCACAACATGCAGAATCACACCAACTTAAAAATACTGGTGATGGAGATGCTTACCGTCTTTA
TAACCTGGATGTCTATGGATACCAAATATATGATAAAATGGGCATTTATGGTTCAGTACCTTATCTCCTGGCCCA
CAAACTGGGCAGAACTATAGGTATTTTCTGGCTGAATGCCTCGGAAACACTGGTGGAGATCAATACAGAGCCTGC
AGTAGAGTACACACTGACCCAGATGGGCCCAGTTGCTGCTAAACAAAAGGTCAGATCTCGCACTCATGTGCACTG
GATGTCAGAGAGTGGCATCATTGATGTTTTTCTGCTGACAGGACCTACACCTTCTGATGTCTTCAAACAGTACTC
ACACCTTACAGGCACACAAGCCATGCCCCCTCTTTTCTCTTTGGGATACCACCAGTGCCGCTGGAACTATGAAGA
TGAGCAGGATGTAAAAGCAGTGGATGCAGGGTTTGATGAGCATGACATTCCTTATGATGCCATGTGGCTGGACAT
AGAGCACACTGAGGGCAAGAGGTACTTCACCTGGGACAAAAACAGATTCCCAAACCCCAAGAGGATGCAAGAGCT
GCTCAGGAGCAAAAAGCGTAAGCTTGTGGTCATCAGTGATCCCCACATCAAGATTGATCCTGACTACTCAGTATA
TGTGAAGGCCAAAGATCAGGGCTTCTTTGTGAAGAATCAGGAAGGGGAAGACTTTGAAGGGGTGTGTTGGCCAGG
TCTCTCCTCTTACCTGGATTTCACCAATCCCAAGGTCAGAGAGTGGTATTCAAGTCTTTTTGCTTTCCCTGTTTA
TCAGGGATCTACGGACATCCTCTTCCTTTGGAATGACATGAATGAGCCTTCTGTCTTTAGAGGGCCAGAGCAAAC
CATGCAGAAGAATGCCATTCATCATGGCAATTGGGAGCACAGAGAGCTCCACAACATCTACGGTTTTTATCATCA
AATGGCTACTGCAGAAGGACTGATAAAACGATCTAAAGGGAAGGAGAGACCCTTTGTTCTTACACGTTCTTTCTT
TGCTGGATCACAAAAGTATGGTGCCGTGTGGACAGGCGACAACACAGCAGAATGGAGCAACTTGAAAATTTCTAT
CCCAATGTTACTCACTCTCAGCATTACTGGGATCTCTTTTTGCGGAGCTGACATAGGCGGGTTCATTGGGAATCC
AGAGACAGAGCTGCTAGTGCGTTGGTACCAGGCTGGAGCCTACCAGCCCTTCTTCCGTGGCCATGCCACCATGAA
CACCAAGCGACGAGAGCCCTGGCTCTTTGGGGAGGAACACACCCGACTCATCCGAGAAGCCATCAGAGAGCGCTA
TGGCCTCCTGCCATATTGGTATTCTCTGTTCTACCATGCACACGTGGCTTCCCAACCTGTCATGAGGCCTCTGTG
GGTAGAGTTCCCTGATGAACTAAAGACTTTTGATATGGAAGATGAATACATGCTGGGGAGTGCATTATTGGTTCA
TCCAGTCACAGAACCAAAAGCCACCACAGTTGATGTGTTTCTTCCAGGATCAAATGAGGTCTGGTATGACTATAA
GACATTTGCTCATTGGGAAGGAGGGTGTACTGTAAAGATCCCAGTAGCCTTGGACACTATTCCAGTGTTTCAGCG
AGGTGGAAGTGTGATACCAATAAAGACAACTGTAGGAAAATCCACAGGCTGGATGACTGAATCCTCCTATGGACT
CCGGGTTGCTCTAAGCACTAAGGGTTCTTCAGTGGGTGAGTTATATCTTGATGATGGCCATTCATTCCAATACCT

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FIGURE 3389B

CCACCAGAAGCAATTTTTGCACAGGAAGTTTTCATTCTGTTCCAGTGTTCTGATCAATAGTTTTGCTGACCAGAG
GGGTCATTATCCCAGCAAGTGTGTGGTGGAGAAGATCTTGGTCTTAGGCTTCAGGAAGGAGCCATCTTCTGTGAC
TACCCACTCATCTGATGGTAAAGATCAGCCTGTGGCTTTTACGTATTGTGCCAAAACATCCATCCTGAGCCTGGA
GAAGCTCTCACTCAACATTGCCACTGACTGGGAGGTCCGCATCATA**TGA**CAAAGAACTGCCCCTGGTGATGTGAG
CAGGGACCTGCCTGCCCCTTTCAACCTTTCCCCTCACCTTTTTTGAGATTTTTGCTGCAATCTGTTTGCCTTCCC
TGAATCAAAATAATCTTTCATTCGTCACCATTATACTAATGAACAATAGATTTCATGTTTCAAAATTTCAGATTT
TACATGTTAAGATGTACTAACAATATTCCTTGTATCAAACATCTCCTTTTCTCCCTGATACATAGCCCTGAGACA
TTTATAGCGTTCAGGAGTCTTCTATTGCTTCCATTCCTTCAGCAGGGCTGCGTGGGTCTGTTTTAACGTGGGCCA
AGCCTACCTGGGCAGCCCATTTGCCAGGGCTTGCCTCAGGCCATGCAGCATTGGCGCTCTGGCTGCAGCAGCTGA
GTTGCTCAAGGCCAGTGTCCAAGTGGACAGCAGCCTCTGGTACTCCCCCCAGTTATCTTCCACCCACATGGACTG
GGCAGAGCAGCCCTCTTCTGTGTGCACTGCATACGCTGCAGCCGTGGGAGTTATTCTCCCCTAGAGATCGACTTG
GCAGCACGAAGGATTCTTTTCTCTTTCATGCTTCTCAGGCTCAATAGTTTCTAATTAATCTTAAAATCCATGTCT
TTTACATTGTTTTTTTAATTAAGTGCTGTTTACTAACCAAATAATATTTATAACATGAGTAAGCTATAATTAATA
ACAATGAAATAAATACCCATGTACCCACCACTGGACTTCAGAAGTAGAACTCATGACTGGGACTAGGATGAGGCA
AGGGAGACCCTGGCCTTGGGCACAAAATGTAAGGGATGCCAAAAAAATACAGTAATCAAAGTAAGTAATATTTCA
ATCCAATATTTTTAAAAATCAGAATTAATGCAAAAAAAACCATGATGAACAAAATATTAAAATTTAAAATAAAGA
CAGGATTAGTATTACTGAGTTTTCCTTTTGTCCCAGGCTCTAATATGGCTTGGCATGGGGCAGAACATTACAACA
TACCAGTCGTGTCATGGTGCCCAAGGCTCCACAGACCTCAGTGGCTCCCTGCTGCCTGCCACAGCATCTGTTTTA
GCAGCCTCGACTCCTCAGCACTCCTCAGCACACACCTCTTCTTATCAGGCTTCCTCCACTTAGCAACTTGCTAAC
GGCCACCTCTGTGCCTTCTGATCCCTGGGCGCCAATATCCTCCTGCCCTTACCATCCTTCCAGGCCCAACTTAAA
TCCCACTTTCCCATGAAGCCTAACTGCGTGAACACCCCTACCCCCATACCCATTAGCAGTGATTTTGCCCTTCCC
CGTAATGCTGTCCCACTTATAACTGTGCTCTACTTAGCATTCTCAGGGATCATACCTTAATGTTTTCAGTATGTC
TGCGTTCTCCTACTAGATTGTATGTCCCTCAAGAGCATGTTCTGTTTCTCTTCTGTCTGACAGAGCACTATTATA
CCTGACTTTCAGTAACTGTTAGCTGTGATTAGTTAGCTGGTGGATTTAATTGATTAAAAAATTACGATTGAATGT

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FIGURE 3390A

GAGTGCAGCTGGCACCATGGGTGTGCTCCAGAGCAACTTCTGCTTGCTCTGAGCCCCCTGCCCTGCCTCCCCTTT
CACCATGTTTCCTCTGACAAGATTTTAAGTACAGCAATTCAAGAAGATTTCTCCTCCTAAACGACATTTATCTGA
AGTCTATTGCCTCTTGATTGCTGGAAAAGAATCTTAAAATCATTTCAAAAGTAACTTATAAACAAACTTATTAAA
AGTGATGAAAGGAGCATTGAAATTAATTAGCACTAATTTTTCACTGTGCCAAAGTGTGCAGTGTCCTTCAGAGGA
AACAATAACAGATCTGGTGAGTGTGCC**ATG**CCAGTGGGGAGAATTGAATGTCCCTCATCTCCCTCTTTCCCTAGG
GACATTAGTCATGAGTGCCGAGTGTGCGGGGTCACAGAAGTGGGTCTTTCTGCATATGCAAAGCACATTTCTGGC
CAGTTGCACAAAGATAACGTTGATGCCCAGGAAAGAGAAGATGATGGAAAAGGAGAGGAAGAGGAAGAAGATTAT
TTTGACAAGGAACTCATTCAGTTAATAAAACAAAGGAAAGAACAAAGTCGACAAGATGAACCTTCCAATAGCAAC
CAAGAAATAAACTCTGATGACAGACGACCCCAATGGAGACGAGAAGACCGAATTCCTTACCAAGACAGAGAGAGT
TACAGTCAGCCTGCATGGCATCATCGTGGACCTCCACAGCGGGATTGGAAATGGGAAAAAGATGGCTTTAATAAT
ACTAGGAAAAACAGCTTTCCACATTCTTTGAGGAATGGTGGTGGACCAAGAGGACGTTCCGGGTGGCATAAGGGT
GTTGCAGGAGGCTCCTCGACTTGGTTTCACAACCATAGTAATTCTGGAGGTGGTTGGCTTTCAAATAGTGGAGCA
GTAGATTGGAATCATAATGGTACAGGAAGGAATTCCAGTTGGCTTTCTGAAGGAACAGGTGGCTTTTCCAGTTGG
CATATGAACAACAGTAACGGAAACTGGAAATCCAGTGTACGTAGTACAAATAATTGGAATTACAGTGGCCCTGGA
GACAAATTTCAACCAGGCAGAAACAGAAATTCTAACTGTCAAATGGAAGACATGACTATGCTATGGAACAAGAAA
TCTAATAAGTCAAACAAATACAGTCACGACAGATATAATTGGCAGCGGCAAGAAAATGACAAACTTGGTACAGTT
GCCACATATAGAGGTCCTTCTGAAGGATTTACAAGTGATAAATTTCCTTCAGAAGGCTTACTCGACTTCAATTTT
GAGCAGCTGGAAAGCCAAACCACTAAACAAGCAGACACTGCTACTTCCAAAGTTAGTGGAAAGAATGGCAGTGCG
GCAAGGGAAAAGCCTCGTCGCTGGACGCCTTACCCTTCTCAGAAGACTCTGGATTTACAGTCGGGATTGAAAGAC
ATCACTGGTAACAAGTCAGAAATGATAGAGAAACCTCTCTTTGATTTTAGCTTGATAACTACAGGAATACAGGAG
CCCCAAACTGATGAAACACGTAATTCCCCAACACAGAAAACACAAAAAGAAATACATACTGGATCTCTTAATCAC
AAGGCCTCTTCTGATTCCGCTGCTTCCTTCGAGGTGGTGAGACAGTGCCCCACTGCAGAAAAACCTGAACAAGAG
CATACACCAAATAAAATGCCATCATTGAAATCCCCACTCCTTCCATGTCCAGCCACTAAATCATTGTCTCAAAAG
CAAGATCCAAAGAATATCTCAAAAAACACCAAAACAAATTTTTTTTCCCCTGGAGAACACTCAAATCCCTCGAAC
AAGCCCACTGTGGAAGATAACCATGGTCCTTACATATCCAAACTGCGTAGTTCATGTCCTCATGTTTTAAAAGGG
AATAAAAGTACATTTGGCTCTCAAAAGCAATCTGGTGATAATTTAAATGATACTTTACGAAAGGCCAAAGAGGTG
CTACAGTGTCATGAGTCATTGCAAAATCCACTTCTTAGCACTTCTAAAAGTACCAGGAACTATGCAAAAGCAAGT
AGAAATGTAGAAGAATCTGAAAAAGGGTCTTTGAAAATTGAGTTTCAAGTGCACGCACTAGAAGATGAAAGTGAT
GGAGAGACATCTGACACGGAAAAGCATGGAACAAAAATTGGAACCCTAGGTTCTGCAACTACAGAATTGTTATCT
GGCAGCACTCGAACTGCTGATGAGAAAGAGGAGGATGACCGCATCCTGAAGACTTCTAGAGAGCTATCCACTTCC
CCATGTAATCCCATAGTTCGCCAGAAAGAATCTGAATTACAAATGACATCTGCAGCCAGTCCACACCCTGGCTTA
TTGCTAGACTTGAAAACCTCTCTAGAAGATGCACAGGTTGATGACTCTATTAAATCTCATGTATCTTATGAAACA
GAAGGCTTTGAGAGTGCTAGCTTGGATGCAGAGCTTCAAAAAAGTGACATCAGTCAGCCCTCGGGCCCTCTCCTG
CCTGAACTAAGTAAGCTTGGCTTTCCTGCCTCACTTCAGAGGGATCTAACCCGGCACATTAGTTTGAAGAGCAAA
ACTGGAGTACACCTTCCTGAGCCAAACCTCAATAGTGCCCGCCGCATTCGCAATATTAGCGGTCACCGAAAGAGT
GAGACAGAGAAGGAGTCTGGGCTCAAGCCAACCCTACGGCAGATTCTAAATGCATCTCGGAGAAATGTCAACTGG
GAACAGGTCATTCAGCAAGTAACCAAGAAAAAGCAAGAGCTGGGCAAAGGCTTACCCAGGTTTGGCATAGAAATG
GTACCCCTTGTTCAAAATGAACAAGAAGCCTTAGATTTGGATGGGGAACCTGATCTGTCCAGTCTAGAAGGATTC
CAGTGGGAAGGTGTTTCCATTTCCTCGTCCCCTGGCTTGGCAAGAAAGCGAAGCCTTTCTGAGAGCAGCGTGATC
ATGGACAGAGCTCCTTCTGTGTATAGCTTCTTCAGTGAGGAAGGTACAGGCAAAGAAAATGAGCCCCAGCAGATG
GTTTCACCTAGTAACTCATTGAGGGCTGGACAGAGCCAGAAAGCAACCATGCACCTCAAACAAGAAGTGACACCT
CGGGCTGCCTCCCTCCGAACAGGTGAAAGGGCTGAAAATGTTGCTACCCAAAGGCGACATAGTGCACAATTATCC
TCTGACCATATAATACCTTTGATGCATTTGGCAAAAGACTTGAACAGCCAGGAGAGGTCTATACCACCGTCAGAG
AATCAGAATTCCCAGGAGAGTAATGGAGAGGGAAACTGTCTGTCATCAAGCGCATCCTCAGCCCTTGCGATCTCC
AGTTTAGCGGATGCAGCCACAGATAGTAGCTGTACCTCTGGTGCTGAACAAAATGATGGCCAAAGTATTAGAAAG
AAACGAAGAGCCACTGGAGATGGATCTTCTCCTGAACTCCCAAGTCTTGAGAGAAAAAATAAAAGAAGGAAAATT
AAAGGAAAAAAAGAACGTTCTCAGGTTGACCAGCTGCTGAATATTTCTTTAAGGGAGGAAGAACTTAGTAAGTCA
TTGCAGTGCATGGATAACAATCTTCTGCAAGCCCGTGCAGCCCTTCAGACAGCTTATGTGGAAGTTCAGAGGCTA

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FIGURE 3390B

CTTATGCTCAAGCAGCAGATAACTATGGAGATGAGTGCACTGAGGACCCATAGAATACAGATTCTACAGGGATTA
CAAGAAACATATGAACCTTCTGAGCACCCAGACCAGGTTCCCTGTAGCCTCACACGAGAACGAAGGAACAGTAGA
TCTCAAACATCCATTGATGCCGCACTGCTGCCCACTCCCTTTTTCCCACTTTTTCTGGAGCCTCCATCTTCCCAT
GTGTCTCCATCACCCACCGGAGCCTCTCTTCAAATAACCACGTCTCCTACTTTCCAAACCCATGGCAGTGTCCCT
GCTCCAGACTCATCAGTTCAGATTAAACAAGAGCCCATGTCTCCTGAACAAGATGAGAATGTGAATGCTGTGCCA
CCAAGCTCTGCCTGCAATGTGTCCAAGGAATTACTGGAAGCTAATAGAGAGATCAGTGACAGTTGTCCAGTTTAT
CCAGTCATCACTGCTAGATTGTCCTTACCAGAGTCAACAGAAAGTTTCCATGAGCCTAGCCAAGAACTGAAGTTT
TCTGTGGAGCAAAGAAATACCAGAAACAGAGAAAACTCTCCCTCTTCCCAATCAGCTGGTCTTTCTAGCATAAAT
AAAGAAGGGGAAGAGCCAACCAAAGGCAATAGTGGGTCTGAAGCCTGTACCAGTTCTTTTCTAAGATTGTCTTTT
GCTTCAGAAACCCCTTTGGAGAAGGAACCCCACTCTCCAGCTGACCAGCCTGAACAACAGGCAGAATCCACTTTG
ACATCAGCTGAGACTAGGGGAAGCAAGAAAAAGAAGAAACTCCGGAAGAAGAAAAGTCTACGGGCTGCCCATGTT
CCTGAGAATAGTGACACTGAACAGGATGTTTTGACTGTTAAACCTGTAAGGAAAGTAAAAGCTGGAAAGTTAATT
AAAGGGGGGAAAGTAACAACCTCCACTTGGGAAGACAGCAGGACTGGTCGGGAGCAGGAGAGTGTCAGAGATGAG
CCAGATAGTGACTCGTCTCTGGAAGTCCTAGAAATTCCTAATCCTCAGTTAGAAGTAGTAGCCATTGATTCTTCA
GAATCAGGAGAAGAGAAACCAGACAGCCCATCTAAAAAGGATATTTGGAACTCTACAGAGCAAAACCCACTAGAA
ACGTCTCGTTCTGGGTGTGATGAAGTTAGCTCTACCAGTGAAATTGGCACTCGCTATAAAGATGGCATCCCTGTA
AGTGTGGCAGAAACTCAGACTGTGATCTCCTCCATAAAAGGATCAAAGAATTCTTCAGAAATATCTTCAGAGCCA
GGAGATGATGATGAACCCACAGAAGGAAGCTTTGAGGGACACCAAGCTGCCGTAAATGCAATTCAGATATTTGGG
AACTTGCTATATACCTGTTCAGCAGATAAAACTGTTCGGGTTTATAATCTGGTGAGTCGGAAATGTATTGGTGTC
TTTGAGGGTCATACCTCCAAAGTTAACTGCCTCCTGGTTACTCAGACCTCCGGGAAGAATGCTGCCCTTTACACC
GGGTCCAGTGACCATACCATCCGCTGCTATAATGTTAAGAGCCGAGAGTGTGTGGAGCAGTTACAGCTGGAAGAC
CGGGTCCTCTGCCTCCACAGTAGATGGCGAATCCTCTATGCGGGACTGGCAAATGGCACTGTGGTCACCTTCAAC
ATAAAGAACAACAAACGACTTGAGATCTTTGAATGCCATGGCCCTCGGGCAGTCAGCTGTCTTGCTACAGCTCAG
GAAGGTGCCCGAAAACTGCTGGTCGTGGGGTCTTATGACTGCACAATTAGTGTACGCGATGCCCGGAATGGACTG
CTCCTCAGAACTCTGGAGGGCCATAGCAAAACCATTCTTTGCATGAAGGTGGTGAATGATCTCGTGTTCAGTGGC
TCCAGTGATCAGTCAGTCCATGCTCACAACATTCACACTGGTGAGCTCGTGCGGATCTATAAAGGTCACAATCAT
GCAGTGACTGTGGTGAATATCCTAGGAAAAGTGATGGTGACTGCTTGCCTGGATAAATTTGTTCGTGTCTATGAA
TTACAGTCTCATGATCGATTACAAGTTTATGGAGGACACAAAGACATGATTATGTGTATGACCATCCATAAAAGC
ATGATTTACACTGGCTGTTATGATGGCAGTATTCAGGCCGTGAGGCTTAATCTGATGCAGAATTACCGCTGTTGG
TGGCATGGTTGCTCTCTGATATTTGGCGTTGTAGATCATTTAAAACAACACTTGCTGACCGACCACACTAATCCC
AACTTCCAGACTCTGAAATGTCGCTGGAAGAACTGCGATGCTTTTTTCACTGCTAGGAAAGGATCCAAACAGGAT
GCTGCAGGACATATTGAACGACATGCTGAAGATGACAGCAAAATTGATTCATGAAGTTTTTTGCCTCCCACGTTG
GGAAGTCATTAGTTGAACTATTTTCACATTGGCCCCCCACACAGGCCACTCTCTTCCCTTTCTTGGTGAAGTAAG
GAAGGAGAAAGTGGTTACTAGCCAGGCATACCCCTAGCATAAGTCTGGGCAGCTCTATGGGATGATAAATTACAC
TTTTAAGTTCTTGCTGGAGGTTTTAAATAGATTTAGACAAATGTTAAGGAACCATACTTCTCTGGGACAGCATGG
CATATAGTGATATATGCTATTTGCGTTCTCCAGATGTTTATTGAAGATACAGATCCTAATTGGTTACCCAGTTTG
ACCCTAATCATATGTATATTTTATTGATTTCAGTTTGCAATTTTTAATTTATGTTCTTATGATGGTTTAAACCTA
TAGTCAGGCTTTTAAGTACAAGTTTGTTTAAGTGCCAGACTTTGAGGATCAGTTTTAATTTCTCCATTTGTAATA
GCTGGGTATTTAAACTGGAAGCAAATAGTTTTCTTTCTTAACAATTATGTGCAGTGTGTGTCACTGTTTTCTTGC
TTTATAGATAGAGCTGGCTTTAAGTGCTAAAGGACACAGTAGATTTTTGACAAACAGTGGCTGCTCTGCTGACTA
TCTTTTAGGAATTCAGGAAGCAAATCACATAGTGACAAGTCCTTACAGACACCACTTCTAGTAAATCTCTGTAAA
TGTGGATAGAAAGCTCAGTGTGAGGCAGTGCGTAGACCTAACGTCTACCTTTACATCTGCTGTTGAACCTGGGCA
CTACCTGTTACAGATCCTGTCAGGCTGTTGAACTGGAGGTGTACCTTTATCTTCCTTTCTAGTGTCTGACCCTGC
AAGCCTAATGTTGGTTTGAACCCTTTTGGTTTGTTCAGTTGCCAGCCTCCATCTCTCCCACTGTATGGCCGTGCC
TAGACCGATGGCAGCCATCGAATATTCCTCTGGGCTCACGGGGTGTTTTCCACCCCCCTGCAGCAACTAAGATGG
TGGGGGAGAGGGGGTTAGAATAAAGCATCTGAATACAGTTTTCAGGACCTCAAGCAGACTTCCTAGAGACTTGTT
TCTGAGACAGTTCTTTGCCTTCACTTCCCTGCTAGCTGGGAAAGAAGAGTGGAGCAGAGACTCTGCCTGGCCACT
GAGAACAGCCAAATTCACAAACCCTCAGTGGGGCTTTGTTTTTGGATTTTCTCCGGACTCATCAGTAAACCTGTA

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FIGURE 3390C

GAAGTGTCGCTTTCCAGCCTTTTGTTTCTGGATCCTCAAAACTCAGAACGTGGCCGGGCGTGGTGGCTCACGCCT
GTAATCCCAGCACTTTGGGAGGCTGAGGCAGGCAGATCACCTGAGGCTAGGAGTTGCAGACCAGCCTGGCCAACA
TGGCAAAACCCCGTCTCTACTAAAAATACAAAAAGCCGGGCGTGGTGGGCGCCTGTAATCCCAGCTGCTCAGGAG
GCTGAGGCAGGAGAATCGCTTGAACCCGGGAGGCAGAGATTGCAGTAAGCTGAGATCGTGCCACTGCACTCCAGC
CTGGTGACAGAGTGAGACTCCGTCTCAAAAAAAAAAAAAAAAAACTCAGCTTCTTCAGAGAGATAAAATTGGGGGA
GGAGCCCAGGGCCACATACCAAGCTTTGGGACATGGTGCCTCATGCTCTCTGGGATTGCAGACCATCCAGGTCTG
TCTTCGCCCCTGTTAGTGCACATATATCCACTCACATGTCTTCCCTCAGGCTATCGGGCAGGGGGACTTCACCAG
GGGGTTTATGGATAGGCTTCAAGAGGGTCTGTGAGCCCCCAGAAATTGTGTGTGAGACTGAGTATGTGTTCTTTT
TTCCAGGAAAGGCTCCAGTGGTTCTTACTTGATCCAAAAAATGTCAAGAATTAATCTAGGAGGCCGGGCCTGGTG
GCTCACACCTGTAATCCCAGCTCTTTGGGAGGCCGAGGCGGGTGGATCACTCAAGGTCAGGCATTTGAGACCAGC
CTGGCCAACATAGTGAAACCCCGTCTCTATTAAAAATACAAAAATTAGCTGGGTGTGGTGGTATGTGCCTGTAGT
CTCAGCTACTCAGGAGGCTGAGACAGGAGAATCACTTGAACCCTGGAGGTAGAAGTTGCAGTGAGCCAAGATCAT
ACTACTGCACTCCAGCCTGGGCGACAAGAGTGAAACTCCACCTCAAAAAAAAAAAAAAAAAGAGTTAATCTAGGAG
ATAATGAATGGCCTAGTACTAGATAATATATGGCCCCACAAGCTCTTGACTTCTGTCCTTGGGGAAAGCCATTTT
GTTAACCACACTAGTGAGATTTACATGATGCTTAATGGAGAACAGAGAAGATCTTGTTGCAAAAGGTGTATTAAA
TATTTGTGCTGTTTCTGTATGAGATTGAGAAGCTTTTCCCACCTCTCACCCCTATTTCCTATAAGGATATCCAGA
GAAGCCAAACTGTTCTGTGGGTTTGGGAATGGTCATTTCCCGGGAAAATGCATCTGGATCGATGACTAAACCTGG
CCCTTTTCTCTGGGCTGTAGTGAAGCCGCATTTTCACGCTGGCTGGCAGTGTGCTGAGAGCCTCGAATGCTCTGC
GGCGTAGTGCCCTTCTGCCCTGCCTGACGATGTATCGAAAAGATGAGAGTGAAGGAGACTTTGTGCAGCAGGAAA
CGGGTAGGTGAGGTGTTGGGCAGTTGTGGGAACTTCTGAGAGTATTACAGAGTGGTAGAATCGGTAAGAACTCTG
ATTTGGACTTCGCTTTGGTGGAACTGTGTGCCTATACCTGCCTGTGTGTGTGCAAGTGTGCAGGTTCCTTTGTAT
GTATGTGTACGTGTGGGAACCTGTGTTTGTCATATTTTTCTTCATTTCACAAAGGCTTTTTTTGAAGCAGTGGCA
GTATGCCTTTGTTTCAAGAACACATGAAATTCTTTTAACACCAGATTAGTGTGTTACCCCAAATGAACGGTTCTA
GCCCTCTATTAAGAAATAAAGGGACCATAAGCATTTTGGCTGCTTATGGCTGTGTGTTACTACTTACAAGAGTCT
TGAAAATTATACAGAACTTTGCCTTCTTTTTTTAATGTCTTCCACAATGTTGTGACTGATTATAACCCTGTTTCC
CCTCAGAGAAGAGCTATGGCTCAGGGATCTGTGTTGACTCTGGCATTTAGTGGCTTTGTGAAGGAAAGAAACCAT
TAAATGACCTGACAAAAACTGACTCATGTCTTTAAAGTAGTTGAAGCCACTTTTAGAATGTTACTCTCGGTTGCT
TTTGTCTAATTCTAATGGCTTAAAGCCAAGAAAACCATAGTATAAATCTTTTTGTGTACCTATGCTAGTGTTTAA
ATGGCAGTTCGTTGTGATAAAGTATCAGTCACTTCAAGTTTTCTGTGAAAGTTTTTAATTAGGTTAAAAATAATT
TTGGCATACGTCTCTACTCAGTTTATAAAGCAGTTCCACACCATGCAAACAAAACTCTAACAGCAAAGGTTATCT
TGACCTGATGTTACTTGAATCTGAGAGAAAGTCATTACTTACTACTGCACTCCTGCTTTTGTGGGAAAAATTTTC
TTCTTCCCCAGAAGAGTTAACAGTTGAGTGTTCAGCTCCTGACTTACCTTTAATTTAGAGGCAATATTATTACTG
TTTAAGTGATTATTTGCTTAACACAGGTTTTATTTTGTCTTTTTGCTGGTAGATTATACAAGGGACAACTTTAGT
GATGAGGCATGTGGATGATTTGGTGGGAGTAGGTATATACTTAGTGGAATGGTTTATTTTATGGAAGAGAATTCA
TTGGAGGTGAGATTGAAGTATATTGTGAAGTGGGATTTGAACAGCACATATGCTCTGGTTTGCTCAAATAACTGC
AGTTTATGCTTACATCTAAATTTTGTTTCTGTTACCTAAACGGGAGCTTCTAGAATTACGAAGGCCATACCTGCC
ACATTTATAAAATAATGGTTTTATCCCTGCCCCCAAATCATCAGGTTCCTCGGGTTTAAGAGAAGTGGTCTAATA
GACAGGAATAGAAGTTGTGGTGGAGGTGATTTGGGATAGACTAGGTTTCCTTATGCAAGTGGATATGAGCTCCTC
ATAGAAACCAGACCTACTGTATTAGACAGTAACCTCTAACCTCACCTCCAAGCCCAAGTATATGGCCCTGCTGGG
TTACCTGGTGACTACATTTCCCAGATTCACTCTAAATTCAAGGTAGTGACCCAAATAAATTGGGAAAGGAGGGGG
TCAAGGAGGAAAAGCTGTTGAAAATCTTTCTCCTATTTAAGAGAAATATATGCCCTAGAGCTGCTCCAGCACCCT
TGGTTTCTGATTTTTTTAATATTGAATATGGATTAGAAGAATGAAATCAGATGACACCTGACTGCAAAAATGTTT
ATAAGCAAATAGCCTTCTTACATTTTGGTATAAAGCTGTGAACTTCGTAACTTTGTAAAGCAAGATATAAAGCAA
ATACAAGAGGAAAATAAAGTACTTTTACTAATTG

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FIGURE 3391

CGCGACTAGGGTGCAGCGCCAGGTCCGGTGTTGGGGTGTCCGAGTTGCCGCCGGAGAGGAGTGGCCTCGCCCGCT
TGAGTTTTGATTCATCATGGATAATCTGTCATCAGAAGAAATTCAACAGAGAGCTCACCAGATTACTGATGAGTC
TCTGGAAAGTACGAGGAGAATCCTGGGTTTAGCCATTGAGTCTCAGGATGCAGGAATCAAGACCATCACTATGCT
GGATGAACAAAAGGAACAACTAAACCGCATAGAAGAAGGCTTGGACCAAATAAATAAGGACATGAGAGAGACAGA
GAAGACTTTAACAGAACTCAACAAATGCTGTGGCCTTTGTGTCTGCCCATGTAATAGAACAAAGAACTTTGAGTC
TGGCAAGGCTTATAAGACAACATGGGGAGATGGTGGAGAAAACTCACCTTGCAATGTAGTATCTAAACAGCCAGG
CCCGGTGACAAATGGTCAGCTTCAGCAACCAACAACGGGAGCAGCCAGTGGTGGATACATTAAACGCATAACTAA
TGATGCCAGAGAAGATGAAATGGAAGAGAACCTGACTCAAGTGGGCAGTATCCTGGGAAATCTAAAAGACATGGC
CCTGAACATAGGCAATGAGATTGATGCTCAAAATCCACAAATAAAACGAATCACAGACAAGGCTGACACCAACAG
AGATCGTATTGATATTGCCAATGCCAGAGCAAAGAAACTCATTGACAGCTAAAGCTACTGCTGTTCTTCTTTATC
ATTTATTCACTTCCGTAGCTCCTCCTTGAAAGTTATTACCTTTTCAGAGTTTAAGTTTTCGGTTCCACGCTCTTC
TAATTGGGAGATAATATGGAAGAAGGGCCAGAGCAGTTACAGCCCTCCTTCTTTTTTGTTTTCTGTTGAGGGCCG
ACTGCTGCTCTGCCTTCCTTCTAGTATTTTCTTTCTCAATTCATACGCTTAGATTGGTTTTCATATGTCATGTTT
AGTGTTTTCATCCTCCTCATATACTTCAGCAGGTTCTTTTGCTTTCAAGATTTGGAAGCATTGCCAAAGACAGCC
ATGAAGAAGGAAGCTGTAGAGGTGTTTTTTGTTGTTGTTTATTTTTGCTTTTGTGGTTGAGGGAAGGACAAGAGA
TAAGAGGTTGTTACCTCAGTAAAAACCTTCAGGCCACAAAGCAAAAAGTTGCATAGCCACAACGAAGATCTAGTT
GGATATAGTTTTTGATTTAAGTTGCAGTTATAGCCAATTTAGGCTAATGCTTGGTTTTGGAGCTTTTATACACAA
CGTTTTTGTTAGGCATCACAGTTTTGCAACCTCTGCTCCAAAGAGAAAAATAGAATGAGTTTTCTTTCTTTTTTT
TTTTTTTGGAGTCAGAGTCTCGCTCTCTTGTCCAGGCTGGAGTGCAATAGCGCGATCTGGGCTCACTGCAACCTC
CGCCTCCCTGGTTCAAGCAATTCTCCTGCCTTGCCTCCTGAGTAGCTGGGATTACAGGCGTGTGTCACCACGCTC
GGCTAATTTTTGTATTTTTAGTAGAGACAGGGTTTCACCATGTCAAGCTGGTCTTGGACTCCTGACGTCGTGATC
CACCCGCCTTGGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCCACTGTGCCTGGCTGAGTTTTCTTAAAGTGA
GCTTAATTTCTGAACTCTTAGTGATTCATATATGTACATAAATCTGTGATCCCATTTCTTATTGCACCATTCAGG
AACACTTTATATAAATGAGTGGCTTTTTATTTCATATTATTAGTAGTATCATGGTTCCATTACAGGCCTATTAAC
ATCATACATTGTCATTAGTCTTTGAAGAAAAAATATGTAAATATATATGTGTAACATGAGAATTTCTCTCTAAAG
CAGGGCTTAAAATTTTTTGGAAAAGTTTGACAAAGCATACCACATGAATTCAGATTTACCTCAATGCTAAGAATT
ATGTTTAGTTAGGAAAAAGGAAAGTCATTTTGACCTCAGGTAGAAAAATAGATTGCTTTGAGTTTTATGTAGCTT
TAGACTTTAAAAAGTTAGAATTTATTCTGTAACTAAAAATTATTTGAAAAAATTATGCCTCTGGTTTAATTATTG
GTGATTACACACTCTTTCTCTTACCCTTGTGTATTGAACTATGTCCATAATCAAGTTGATGTGGATCCTGAAAAG
TGTTATGAACATCTGATTGGTATTTGTCACATTTATTTTAAAATTAGCATCTGAACACTTCAAAGCTGTCAGTGT
GTATTGGTTTCACCAATAACCACTGCTTGATCCTTACAATTAAATTTTTTAACTAAC

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FIGURE 3392

GAAGGACGGAGCCGAGCCGCGGCTGCCTCCCTCGCTCACTCCCTCGCGCACTCGCCCGCCCCCTCCCTCCCTCCC
CTCCCTTCCCCGGCCCCGGCTCTGGCCCCGGCCCATTCGCTGTTGGGTCTTCTGCTAGGGAGGATGTCGGGTTCG
TCGCTGCCCAGCGCCCTGGCCCTCTCGCTGTTGCTGGTCTCTGGCTCCCTCCTCCCAGGGCCAGGCGCCGCTCAG
AACGCTGGGTTTGTCAAGTCGCCCATGTCAGAAACTAAGCTCACGGGGGACGCCTTTGAGCTGTACTGTGACGTG
GTCGGGAGCCCCACGCCAGAGATCCAGTGGTGGTACGCAGAAGTCAACCGGGCAGAGTCTTTCAGACAGCTGTGG
GACGGTGCTCGGAAGCGCCGTGTCACCGTAAACACCGCCTACGGGTCAAACGGCGTGAGTGTGCTGAGAATAACC
CGGCTCACCTTGGAGGACTCTGGGACTTACGAGTGCAGGGCCAGCAACGACCCCAAGAGGAATGACTTGAGGCAA
AACCCCTCCATAACATGGATTCGAGCCCAGGCCACCATAAGCGTCCTTCAGAAGCCAAGGATTGTCACCAGTGAA
GAGGTCATTATTCGAGACAGCCCTGTTCTCCCTGTCACCCTGCAGTGTAACCTCACCTCCAGCTCTCACACCCTT
ACATACAGCTACTGGACAAAGAATGGGGTGGAACTGAGTGCCACTCGTAAGAATGCCAGCAACATGGAGTACAGG
ATCAATAAGCCGAGAGCTGAGGATTCAGGCGAATACCACTGCGTATATCACTTTGTCAGCGCTCCTAAAGCAAAC
GCCACCATTGAAGTGAAAGCCGCTCCTGACATCACTGGCCATAAACGGAGTGAGAACAAGAATGAAGGGCAGGAT
GCCACTATGTATTGCAAGTCAGTTGGCTACCCCCACCCAGACTGGATATGGCGCAAGAAGGAGAACGGGATGCCC
ATGGACATTGTCAATACCTCTGGCCGCTTCTTCATCATCAACAAGGAAAATTACACTGAGTTGAACATTGTGAAC
CTGCAGATCACGGAAGACCCTGGCGAGTATGAATGTAATGCCACCAACGCCATTGGCTCCGCCTCTGTTGTCACT
GTCCTCAGGGTGCGGAGCCACCTGGCCCCACTCTGGCCTTTCTTGGGAATTCTGGCTGAAATTATCATCCTTGTG
GTGATCATTGTTGTGTATGAGAAGAGGAAGAGGCCAGATGAGGTTCCTGACGATGATGAACCAGCTGGACCAATG
AAAACCAACTCTACCAACAATCACAAAGATAAAAACTTGCGCCAGAGAAACACAAATTAAGTACTGCTTACAATA
TCTTTAGGTTCCTGAAACTGGTGGCAACATGACCTGCTAAAATTTTCTGCTTGGACCTCTTTGGTTCTCTCCCCT
TTCAAGTGAGCAACACCACAATGACTGTCTAAAGCATGCCTTATTTAGCCTCTCCTGTAAGGGTGATCTAGCCAG
GTACATTTTAAACAATGCTTCAGTGTAGAAGGTGTAAACTATTTTGGGCTTGATGTGCTGTGAATGTTGCTTTTT
TTTTTCCTTTGTTAAAATATTTAAATAGAAGTGAAAAGGTCCTCTGAGGATCAGATCATGCATGCGCCATTTTTT
ACTTAATGCAGCTGTTAAATTGGCAAAGCTCTAAAATGCACTGCTGCCATCTAGTGATACACTTTTGTAAAGTAC
AGCAAAACCTACAGATATATACAGTATATAAATATATATATATATATATTTATATTTTTGGGGGTGGGAGAAATC
CAAAATAAAGTAAATGCTTGTTTCATTTTTAAGCTGCTGATATTCATTCCTTATTGTATGTTGTCAGATGAGGAA
ATTGTGCAGTTCTGGTACATAAAGATGAGTAATATAAACTGAAATCTATAATTTTAAGGGCTTAACCTGTGACTT
TAATAAGCTGGAACAGTCCACTGAATGGGTATAATGAATTGCAGTATATACGTATGATTGCTTTTTAAGTGATTA
TCTTTTCTTCTGTTAAGTCATGTAAATTCATAAATCCTTTTGCACTGATGTGTTGAACCTTATTCTTGTACATTC
ATTCAATCAAGGCAAACTTTTATAATTTTTCTTTTGTTTCCAATGACCTTGAAATGTTATAGCATGGTAATATTC
TATGCAACTATAGTTATACTTTTTGGTTTGACACTGTATTTTTTCACATTGATTTACTGGTTGATGATAGATTTT
ATAACCTAACGGTTCTCATGCGGTGCGTAATTGTAGATGCATGTACTTGTGTGTTTTGTGTAATTATTGAAGTGC
AATGATGTATAAAAAAGTGGATTCACCTGTTTTTAAAAATAAAACATTGATA

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FIGURE 3393A

CTCTCCAGAGGCGGGCCCTGAGCCGGCACCTCCCCTTTCGGACAGCTCAAGGGACTCAGCCAACTGGCTCACGCC
TCCCCTTCAGCTTCTCTTCACGCACTCCAAGATCTAAACCGAGAATCGAAACTAAGCTGGGGTCCATGGAGCCTG
CACCCGCCCGATCTCCGAGGCCCCAGCAGGACCCCGCCCGGCCCCAGGAGCCCACCATGCCTCCCCCCGAGACCC
CCTCTGAAGGCCGCCAGCCCAGCCCCAGCCCCAGCCCTACAGAGCGAGCCCCCGCTTCGGAGGAGGAGTTCCAGT
TTCTGCGCTGCCAGCAATGCCAGGCGGAAGCCAAGTGCCCGAAGCTGCTGCCTTGTCTGCACACGCTGTGCTCAG
GATGCCTGGAGGCGTCGGGCATGCAGTGCCCCATCTGCCAGGCGCCCTGGCCCCTAGGTGCAGACACACCCGCCC
TGGATAACGTCTTTTTCGAGAGTCTGCAGCGGCGCCTGTCGGTGTACCGGCAGATTGTGGATGCGCAGGCTGTGT
GCACCCGCTGCAAAGAGTCGGCCGACTTCTGGTGCTTTGAGTGCGAGCAGCTCCTCTGCGCCAAGTGCTTCGAGG
CACACCAGTGGTTCCTCAAGCACGAGGCCCGGCCCCTAGCAGAGCTGCGCAACCAGTCGGTGCGTGAGTTCCTGG
ACGGCACCCGCAAGACCAACAACATCTTCTGCTCCAACCCCAACCACCGCACCCCTACGCTGACCAGCATCTACT
GCCGAGGATGTTCCAAGCCGCTGTGCTGCTCGTGCGCGCTCCTTGACAGCAGCCACAGTGAGCTCAAGTGCGACA
TCAGCGCAGAGATCCAGCAGCGACAGGAGGAGCTGGACGCCATGACGCAGGCGCTGCAGGAGCAGGATAGTGCCT
TTGGCGCGGTTCACGCGCAGATGCACGCGGCCGTCGGCCAGCTGGGCCGCGCGCGTGCCGAGACCGAGGAGCTGA
TCCGCGAGCGCGTGCGCCAGGTGGTAGCTCACGTGCGGGCTCAGGAGCGCGAGCTGCTGGAGGCTGTGGACGCGC
GGTACCAGCGCGACTACGAGGAGATGGCCAGTCGGCTGGGCCGCCTGGATGCTGTGCTGCAGCGCATCCGCACGG
GCAGCGCGCTGGTGCAGAGGATGAAGTGCTACGCCTCGGACCAGGAGGTGCTGGACATGCACGGTTTCCTGCGCC
AGGCGCTCTGCCGCCTGCGCCAGGAGGAGCCCCAGAGCCTGCAAGCTGCCGTGCGCACCGATGGCTTCGACGAGT
TCAAGGTGCGCCTGCAGGACCTCAGCTCTTGCATCACCCAGGGGAAAGATGCAGCTGTATCCAAGAAAGCCAGCC
CAGAGGCTGCCAGCACTCCCAGGGACCCTATTGACGTTGACCTGCCCGAGGAGGCAGAGAGAGTGAAGGCCCAGG
TTCAGGCCCTGGGGCTGGCTGAAGCCCAGCCTATGGCTGTGGTACAGTCAGTGCCCGGGGCACACCCCGTGCCAG
TGTACGCCTTCTCCATCAAAGGCCCTTCCTATGGAGAGGATGTCTCCAATACAACGACAGCCCAGAAGAGGAAGT
GCAGCCAGACCCAGTGCCCCAGGAAGGTCATCAAGATGGAGTCTGAGGAGGGGAAGGAGGCAAGGTTGGCTCGGA
GCTCCCCGGAGCAGCCCAGGCCCAGCACCTCCAAGGCAGTCTCACCACCCCACCTGGATGGACCGCCTAGCCCCA
GGAGCCCCGTCATAGGAAGTGAGGTCTTCCTGCCCAACAGCAACCACGTGGCCAGTGGCGCCGGGGAGGCAGAGG
AACGCGTTGTGGTGATCAGCAGCTCGGAAGACTCAGATGCCGAAAACTCGTCCTCCCGAGAGCTGGATGACAGCA
GCAGTGAGTCCAGTGACCTCCAGCTGGAAGGCCCCAGCACCCTCAGGGTCCTGGACGAGAACCTTGCTGACCCCC
AAGCAGAAGACAGACCTCTGGTTTTCTTTGACCTCAAGATTGACAATGAAACCCAGAAGATTAGCCAGCTGGCTG
CGGTGAACCGGGAAAGCAAGTTCCGCGTGGTCATCCAGCCTGAAGCCTTCTTCAGCATCTACTCCAAGGCCGTGT
CCCTGGAGGTGGGGCTGCAGCACTTCCTCAGCTTTCTGAGCTCCATGCGCCGCCCTATCTTGGCCTGCTACAAGC
TGTGGGGGCCTGGCCTCCCAAACTTCTTCCGGGCCCTGGAGGACATTAACAGGCTGTGGGAATTCCAGGAGGCCA
TCTCGGGCTTCCTGGCTGCCCTGCCTCTCATCCGGGAGCGTGTGCCCGGGGCCAGCAGCTTCAAACTCAAGAACC
TGGCCCAGACCTACCTGGCGAGAAACATGAGCGAGCGCAGCGCCATGGCTGCCGTGCTGGCCATGCGTGACCTGT
GCCGCCTCCTCGAGGTCTCCCCGGGCCCCCAGCTGGCCCAGCATGTCTACCCCTTCAGTAGCCTGCAGTGCTTTG
CCTCCCTGCAGCCCCTGGTGCAGGCAGCTGTGCTGCCCCGGGCTGAGGCCCGCCTCCTGGCCCTACACAACGTGA
GCTTCATGGAGCTGCTGAGTGCACACCGCCGTGACCGGCAGGGGGGCCTGAAGAAGTACAGCCGCTATCTAAGCC
TGCAGACCACCACGTTGCCCCCTGCCCAGCCTGCTTTCAACCTGCAGGCTCTGGGCACCTACTTTGAAGGCCTGT
TGGAGGGTCCGGCGCTGGCACGGGCAGAAGGAGTCTCCACCCCACTTGCTGGCCGTGGCTTGGCAGAGAGGGCCT
CCCAGCAGAGCTGAGAGGAGGGGGTGACCAGCTTGGAGTCTCTGGTGGGCAGAGAGGGATGGGGTCCCTGAGCCA
GGCCCCACCCATCACAGCATTCCCAGGTCCTGGTACCCAGCCCTCAGTTGTCATTTGGTTCAGAATCAGTTCCCT
TTCTCTGGGACCAAATTTCCCTTCTCTAAACATCCTACAGAGAAGGTTCCAAAGCTGAGCACCCATCACCCTAGG
TGTGCACCAGACTCCTATTAGCCCCTCCTTCCAGGAGCTAGAACCAGGGAGGTCCTGAGTGAGGAAGGCATGACC
TCTGGGCTCTCTAGGTGGCCCTGGTCTTGCCCCATCCATCCCACCTGCCACTACCTTGGGTGTCCTTACAGCTCT
GCCCTGACCCCAGCCCCTGCCCCTGGACACCTGCTGACAGCTCCCACACAGAACAGTCTGAGGTGATGCTGGCTA
CAGCCCTGGCAGCCCATGGCAACTCAAAGTGCCTTCCAAACCAAACTGCCCCTCATGAGGTTAGGGTCCCCCACC
CTCCACCTGCCCAGAGGCCAACTCTGTTCCCTTCTCCTTTCATCCCAGAGGGGCCTCATCAGCAAAGACAGAAAC
TGATGTTCCATGCATGTCCCTGCTTCCAAAGCCTGACCTTCCAAAGCTTGCTTCCTTCCTCCTGGCTGCACAGAC
ACCTCTGCTTGGCCACAGCTTTGCTCTTTGGTCCTCAGGCCACCAGACCCCTCACAGCATGGCCCTTGGCTCTTC
CTGCACTGCCCTCACCCTCAGCCGTCCCAAGGAGTGCCCAGCACTACTCAGCATGTAGTCCAGGACCTGCGGCAT

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FIGURE 3393B

CAGCATCCCCTGGGAGCTTCTTAGAAATGCAGACCTGTGGGCTCTACCACAGGCCTCTGGAATCAGAATCTTCAG
GGTGGGGCCCAGCAGTCTGTGTTTTAACAGGTTCTCCCGGTGATGCTGGTGCATGCTCAAGTTTGAGAACCGCTG
CTCTCATAGACTGCTCCTCCAAGGGGAAGCAGTGTGGAACAGCAGAGAAAGTCCCGTCCCTATCTCTGACTGTGC
AGTGAGTGTGGCCTAGGAACAGGTCCCTTCCTAAGCTCTAGTGTCCCCATCTGTAAAATGGGCTGATTGGCCTCC
ACGGTCAGAGCGGCCATCTGGCTGTGCCATCCTGCATTTTTAGGAATGGAAAGCAGGCCTCTGAGGCAGTGGACA
GGAAGACTTCTCATCCTTGAATTCTAGCTCCCATTCCAAACTGTTAGTCCCCAACCTTGTGGTCACATCAGAGGT
CAACAGCAGAACAGAGGCAGGTCAGGGTTGTCCGCTCTGATTAGCAGAACGACAGCCCCTTCCTCCTCCTCCCTC
CTTCCCATCCCTACTCATTAGCTCCCTGCTCCTGGGATGCTTCCCAAGCAGCCCAGGCCTCTAGCCTCCATGGCT
GATGACCTCAGCTTTCACACTGGTGAAGTCTGTGTACCCATACTGCAGCCCCATCCCATGGGGCCCCTGAAGACC
CACTGAGGAATTCCGTAGGGTCTTGTTCCCACGACCGGAGTGCTGGCTCTCACAGTGAATTTTGATGCATTTAAA
ATAAGATTCTGATGCCAGACTGTTAAAACAGGCGCTGGTTCTGAAGCACCGATGGAAACAGATTGATGCAGATGG
AAGGAGGAAGGGAGACTGGGCCCACTGATTTCCAGCCCCACCATGTGTGCTGTTTTCAGATGTGATTGAGGGGTG
TTCTGCCCTGCCTCCACTGTCACAGCCTTTAATAAAGATGTGAATCTTG

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FIGURE 3394

GCGCCGCCGCGGGTGGCCGCGCGGGTGAAGCCGGAAGCAGCAGCCAGGAGGGCGGGGCCGCGTAGGGCCCACTGG
CCAGGGAGGGCGCCGCGCGGAGGCGCGGGGCGTGTCTCCTGTCAAAAGCCATGCTCGGCAGGTCTGGGTACCGGG
CGCTGCCCCTGGGTGATTTTGACCGCTTCCAGCAGTCGAGCTTCGGCTTTCTGGGCTCGCAGAAGGGCTGCTTGT
CCCCGGAGCGGGGCGGCGTGGGGACAGGGGCCGATGTACCCCAGAGCTGGCCCTCCTGCCTCTGTCATGGCCTCA
TCAGTTTCCTGGGGTTCTTGCTGCTGTTGGTCACCTTCCCCATTTCTGGCTGGTTTGCCCTGAAGATTGTGCCCA
CCTACGAGCGGATGATTGTGTTCCGCCTGGGCCGGATCCGCACCCCCCAGGGACCTGGCATGGTTCTGCTCTTGC
CCTTCATTGACTCCTTTCAGAGGGTGGATCTGAGGACACGAGCCTTCAACGTCCCTCCCTGCAAGCTGGCCTCTA
AGGACGGGGCTGTGCTGTCCGTGGGAGCCGATGTCCAGTTTCGCATCTGGGACCCGGTGCTGTCGGTGATGACTG
TGAAAGACCTGAACACAGCCACACGCATGACAGCCCAGAACGCCATGACCAAGGCCCTGCTCAAGAGGCCGCTGC
GGGAGATCCAGATGGAGAAGCTCAAGATCAGCGACCAGCTTCTGCTGGAGATCAACGATGTGACCAGGGCCTGGG
GGCTGGAGGTAGACCGCGTGGAGCTGGCAGTGGAGGCCGTGCTCCAGCCGCCCCAGGACAGCCCAGCTGGGCCCA
ACCTGGACAGCACCCTCCAGCAGCTGGCCCTGCACTTCCTGGGAGGAAGCATGAACTCAATGGCAGGAGGTGCCC
CGTCCCCGGGGCCAGCAGACACCGTGGAGATGGTGAGTGAAGTTGAGCCACCTGCCCCTCAAGTTGGTGCCAGGT
CCAGTCCGAAGCAGCCTCTGGCGGAGGGGCTACTGACTGCTCTACAGCCCTTCCTGTCTGAGGCCCTGGTCAGCC
AAGTCGGGGCCTGCTACCAGTTCAATGTCGTCCTGCCCAGCGGCACCCAAAGCGCCTACTTCCTGGACCTCACTA
CAGGACGAGGAAGAGTGGGACACGGGGTGCCTGATGGCATCCCTGATGTGGTGGTGGAGATGGCCGAGGCAGACC
TGCGGGCCCTGCTATGCAGAGAGCTGCGGCCCCTGGGGGCCTACATGAGTGGACGGCTGAAGGTGAAGGGCGACC
TGGCTATGGCCATGAAGCTGGAGGCTGTCCTCAGGGCCTTGAAGTAGCAGCCTTGGCTGACTTTCCAGAGCCCAG
TCCCAAGCCTGGCACCAAGCCTGAGGGGCCTCTTGGAGGAGGAGGTGTTCATCTGCACCACAGAGAGTTGAGGCC
CTAACAAATTTCAGGCCCAGCCAAGAGCCCATGAATGGAGGCTGCAGGAGGCTGAGTCCGGCTGCCATGCACGTC
TCCCCTACAGTGGTTCTCTGGACAAGGCTTTGTCCATCCCGGTCCCCAGCTGAGTGCCCAGCGCTGAGCTGGGTG
CACGGTGTGATTCCAGGAGGAGAGCCAGGCCTGCCCTGCCCTGCTGGCTTCCTGACTGGAGAGACAGGACCCACA
GAAACAGCCTGACAGCAGCTGGTTTGGTCCTTGTGTGAGGGACCAAGCATGTGGCCCAGGCTCTAAGCTCTGCGG
GGATTGGAGAGGGATGGGGAGGGAAGGGAAGGCAGCTCCAAGAAGAGGTCCCTGTGGCGAAGTTACCTGGGGATC
CTGGCTGGCCCACCTTCCTGGCTGCAGTCCAGGCCCGTGCTGGCGGGATTGGGCATGGGAAGGAGCAGGGCCTGC
TGCTTCCCTGGCGCTGCTCCCAAAGATTTCTGACTCATCTGCCAGCTCTGTCCTGCATGCCTGGCGAGCTGGGGC
CCAGGGCAGCATGAAGGAGAGCCCTGCGTTCTGTGCTTCTTACCAGAGGTTTGCAAGCCTCAGACAAATAAATGT
GGTGTTTACAATGT

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FIGURE 3395

GCCAGCCGAGCGGCCAGCCAGTGCGGGGCTGGCCATGTAAGGCCCACAGGCGGTCCTGCCCGCCCGGTGCCCTGC
GGAGAGCCTCGTGCAGCCCTGGGCACCGCCCCTGCCCTGCCCTGACCCCTTGGCCTTGAAATGCTGTCATCGGAG
GAGCCGTCCCGCTCGGGACAAGGCCAGCATGGACAAAGCTAGAGCTGGGGCAAGCAAGGAGCCTTCCTGTCCTCG
AGGCCGTGGGAAGAGAAGCACGCCCAGGGGGCCACTCCTGAGAGCCTCTCTGTCCACCAGGCCTCTGCAGAGGGG
TCACCATGGCTCTGGCCCGAGGCAGCCGGCAGCTGGGGGCCCTGGTGTGGGGCGCCTGCCTGTGCGTGCTGGTGC
ACGGGCAGCAGGCGCAGCCCGGGCAGGGCTCGGACCCCGCCCGCTGGCGGCAGCTGATCCAGTGGGAGAACAACG
GGCAGGTGTACAGCTTGCTCAACTCGGGCTCAGAGTACGTGCCGGCCGGACCTCAGCGCTCCGAGAGTAGCTCCC
GGGTGCTGCTGGCCGGCGCGCCCCAGGCCCAGCAGCGGCGCAGCCACGGGAGCCCCCGGCGTCGGCAGGCGCCGT
CCCTGCCCCTGCCGGGGCGCGTGGGCTCGGACACCGTGCGCGGCCAGGCGCGGCACCCATTCGGCTTTGGCCAGG
TGCCCGACAACTGGCGCGAGGTGGCCGTCGGGGACAGCACGGGCATGGCCCGGGCCCGCACCTCCGTCTCCCAGC
AACGGCACGGGGGCTCCGCCTCCTCGGTCTCGGCTTCGGCCTTCGCCAGCACCTACCGCCAGCAGCCCTCCTACC
CGCAGCAGTTCCCCTACCCGCAGGCGCCCTTCGTCAGCCAGTACGAGAACTACGACCCCGCGTCGCGGACCTACG
ACCAGGGTTTCGTGTACTACCGGCCCGCGGGCGGCGGCGTGGGCGCGGGGGCGGCGGCCGTGGCCTCGGCGGGGG
TCATCTACCCCTACCAGCCCCGGGCGCGCTACGAGGAGTACGGCGGCGGCGAAGAGCTGCCCGAGCCCCCGAGAG
GCCCTACGTGCCGCCGCCGCCGCCGCCCCCCGACGGCCTGGACCGCCGCTACTCGCACAGTCTGTACAGCGAGGG
CACCCCCGGCTTCGAGCAGGCCTACCCTGACCCCGGTCCCGAGGCGGCGCAGGCCCATGGCGGAGACCCACGCCT
GGGCTGGTACCCGCCCTACGCCAACCCGCCGCCCGAGGCGTACGGGCCGCCGCGCGCGCTGGAGCCGCCCTACCT
GCCGGTGCGCAGCTCCGACACGCCCCCGCCGGGTGGGGAGCGGAACGGCGCGCAGCAGGGCCGCCTCAGCGTGGG
CAGCGTGTACCGGCCCAACCAGAACGGCCGCGGTCTCCCTGACTTGGTCCCAGACCCCAACTATGTGCAAGCATC
CACTTATGTGCAGAGAGCCCACCTGTACTCCCTGCGCTGTGCTGCGGAGGAGAAGTGTCTGGCCAGCACAGCCTA
TGCCCCTGAGGCCACCGACTACGATGTGCGGGTGCTACTGCGCTTCCCCCAGCGCGTGAAGAACCAGGGCACAGC
AGACTTCCTCCCCAACCGGCCACGGCACACCTGGGAGTGGCACAGCTGCCACCAGCATTACCACAGCATGGACGA
GTTCAGCCACTACGACCTACTGGATGCAGCCACAGGCAAGAAGGTGGCCGAGGGCCACAAGGCCAGTTTCTGCCT
GGAGGACAGCACCTGTGACTTCGGCAACCTCAAGCGCTATGCATGCACCTCTCATACCCAGGGCCTGAGCCCAGG
CTGCTATGACACCTACAATGCGGACATCGACTGCCAGTGGATCGACATAACCGACGTGCAGCCTGGGAACTACAT
CCTCAAGGTGCACGTGAACCCAAAGTATATTGTTTTGGAGTCTGACTTCACCAACAACGTGGTGAGATGCAACAT
TCACTACACAGGTCGCTACGTTTCTGCAACAAACTGCAAAATTGTCCAATCCTGATCTCCGGGAGGGACAGATGG
CCAATCTCTCCCCTTCCAAAGCAGGCCCTGCTCCCCGGGCAGCCTCCCGCCGAGGGGCCCAGCCCCCAACCCACA
GGCACGGAGGGGCATCCCTCCCTGCCGGCCTCAGGGAGCGAACGTGGATGAAAACCACAGGGATTCCGGACGCCA
GACCCCATTTTATACTTCACTTTTCTCTACAGTGTTGTTTTGTTGTTGTTGGTTTTTATTTTTTATACTTTGGCC
ATACCACAGAGCTAGATTGCCCAGGTCTGGGCTGAATAAAACAAGGTTTTTCT

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FIGURE 3396

CAGGCCGAGGCAGGGAGAACTCTCCACTCGGAGGAGGAGCTGGGGTCCTCTTCCATCCCGTCTTCATCCTGCCTG
GCTGCGTGACCTCGGGAGGCACCATGCAGGAGCTGCATCTGCTCTGGTGGGCGCTTCTCCTGGGCCTGGCTCAGG
CCTGCCCTGAGCCCTGCGACTGTGGGGAAAAGTATGGCTTCCAGATCGCCGACTGTGCCTACCGCGACCTAGAAT
CCGTGCCGCCTGGCTTCCCGGCCAATGTGACTACACTGAGCCTGTCAGCCAACCGGCTGCCAGGCTTGCCGGAGG
GTGCCTTCAGGGAGGTGCCCCTGCTGCAGTCGCTGTGGCTGGCACACAATGAGATCCGCACGGTGGCCGCCGGAG
CCCTGGCCTCTCTGAGCCATCTCAAGAGCCTGGACCTCAGCCACAATCTCATCTCTGACTTTGCCTGGAGCGACC
TGCACAACCTCAGTGCCCTCCAATTGCTCAAGATGGACAGCAACGAGCTGACCTTCATCCCCCGCGACGCCTTCC
GCAGCCTCCGTGCTCTGCGCTCGCTGCAACTCAACCACAACCGCTTGCACACATTGGCCGAGGGCACCTTCACCC
CGCTCACCGCGCTGTCCCACCTGCAGATCAACGAGAACCCCTTCGACTGCACCTGCGGCATCGTGTGGCTCAAGA
CATGGGCCCTGACCACGGCCGTGTCCATCCCGGAGCAGGACAACATCGCCTGCACCTCACCCCATGTGCTCAAGG
GTACGCCGCTGAGCCGCCTGCCGCCACTGCCATGCTCGGCGCCCTCAGTGCAGCTCAGCTACCAACCCAGCCAGG
ATGGTGCCGAGCTGCGGCCTGGTTTTGTGCTGGCACTGCACTGTGATGTGGACGGGCAGCCGGCCCCTCAGCTTC
ACTGGCACATCCAGATACCCAGTGGCATTGTGGAGATCACCAGCCCCAACGTGGGCACTGATGGGCGTGCCCTGC
CTGGCACCCCTGTGGCCAGCTCCCAGCCGCGCTTCCAGGCCTTTGCCAATGGCAGCCTGCTTATCCCCGACTTTG
GCAAGCTGGAGGAAGGCACCTACAGCTGCCTGGCCACCAATGAGCTGGGCAGTGCTGAGAGCTCAGTGGACGTGG
CACTGGCCACGCCCGGTGAGGGTGGTGAGGACACACTGGGGCGCAGGTTCCATGGCAAAGCGGTTGAGGGAAAGG
GCTGCTATACGGTTGACAACGAGGTGCAGCCATCAGGGCCGGAGGACAATGTGGTCATCATCTACCTCAGCCGTG
CTGGGAACCCTGAGGCTGCAGTCGCAGAAGGGGTCCCTGGGCAGCTGCCCCCAGGCCTGCTCCTGCTGGGCCAAA
GCCTCCTCCTCTTCTTCTTCCTCACCTCCTTCTAGCCCCACCCAGGGCTTCCCTAACTCCTCCCCTTGCCCCTAC
CAATGCCCCTTTAAGTGCTGCAGGGGTCTGGGGTTGGCAACTCCTGAGGCCTGCATGGGTGACTTCACATTTTCC
TACCTCTCCTTCTAATCTCTTCTAGAGCACCTGCTATCCCCAACTTCTAGACCTGCTCCAAACTAGTGACTAGGA
TAGAATTTGATCCCCTAACTCACTGTCTGCGGTGCTCATTGCTGCTAACAGCATTGCCTGTGCTCTCCTCTCAGG
GGCAGCATGCTAACGGGGCGACGTCCTAATCCAACTGGGAGAAGCCTCAGTGGTGGAATTCCAGGCACTGTGACT
GTCAAGCTGGCAAGGGCCAGGATTGGGGGAATGGAGCTGGGGCTTAGCTGGGAGGTGGTCTGAAGCAGACAGGGA
ATGGGAGAGGAGGATGGGAAGTAGACAGTGGCTGGTATGGCTCTGAGGCTCCCTGGGGCCTGCTCAAGCTCCTCC
TGCTCCTTGCTGTTTTCTGATGATTTGGGGGCTTGGGAGTCCCTTTGTCCTCATCTGAGACTGAAATGTGGGGAT
CCAGGATGGCCTTCCTTCCTCTTACCCTTCCTCCCTCAGCCTGCAACCTCTATCCTGGAACCTGTCCTCCCTTTC
TCCCCAACTATGCATCTGTTGTCTGCTCCTCTGCAAAGGCCAGCCAGCTTGGGAGCAGCAGAGAAATAAACAGCA
TTTCTGATGCC

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FIGURE 3397

GGGCGCTGGGGCCCTGGGCAGCGCGGGCTCGATGTGTGTCAGCCAAGTAGCTGGTCCCACTGGAGCGGTGAGGTC
GCCACCGGATAGTGTTCCTGCCCCATTACTAGCGATCTGTGACCTTGGGCCAGTGATTTTACTGAGTCTTGCTTC
CCTCATCTTTAAAATGTGGCTAATGCCTGCCTTAGGGAACCGTTGTGAGGATTAAGTGAGACATGGTATATAAAA
CGACCTCCTTCTGGCATAAACTTGAGGTGGAAGATACCTTGAGGATGCTTGAAGGTCTGCTAGGCAGCTTCACAG
CCTTTTCTTTCCTCTTCTCTATCAGAGGTCTCTTTGGAAGCAATAATGATGACTATAACAAGAACTTATCTTGCT
TTGCAAGATTCTTCCGCCGTCAGAGTTTCTGATTTATTTTCTGGGGTTCCATGTATGCCAGGGAGAAAGAGAGAG
CGCGAAAGAGAGAGG**ATG**TCTCTCTCAGACTGGCACCTGGCGGTGAAGCTGGCTGACCAGCCACTTACTCCAAAG
TCTATTCTTCGGTTGCCAGAGACAGAACTGGGAGAATACTCGCTAGGGGGCTATAGTATTTCATTTCTGAAGCAG
CTTATTGCTGGCAAACTCCAGGAGTCTGTTCCAGACCCTGAGCTGATTGATCTGATCTACTGTGGTCGGAAGCTA
AAAGATGACCAGACACTTGACTTCTATGGCATTCAACCTGGGTCCACTGTCCATGTTCTGCGAAAGTCCTGGCCT
GAACCTGATCAGAAACCGGAACCTGTGGACAAAGTGGCTGCCATGAGAGAGTTCCGGGTGTTGCACACTGCCCTG
CACAGCAGCTCCTCTTACAGGGAGGCGGTCTTTAAGATGCTCAGCAATAAGGAGTCTCTGGATCAGATCATTGTG
GCCACCCCAGGCCTCAGCAGTGACCCTATTGCTCTTGGGGTTCTCCAGGACAAGGACCTCTTCTCTGTCTTCGCT
GATCCCAATATGCTTGATACGTTGGTGCCTGCTCACCCAGCCCTCGTCAATGCCATTGTCCTGGTTCTGCACTCC
GTAGCAGGCAGTGCCCCAATGCCTGGGACTGACTCCTCTTCCCGGAGCATGCCCTCCAGCTCATACCGGGATATG
CCAGGTGGCTTCCTGTTTGAAGGGCTCTCAGATGATGAGGATGACTTTCACCCAAACACCAGGTCCACACCCTCT
AGCAGTACTCCCAGCTCCCGCCCAGCCTCCCTGGGGTACAGTGGAGCTGCTGGGCCCCGGCCCATCACCCAGAGT
GAGCTGGCCACCGCCTTGGCCCTGGCCAGCACTCCGGAGAGCAGCTCTCACACACCGACTCCTGGCACCCAGGGT
CATTCCTCAGGGACCTCACCAATGTCCTCTGGTGTCCAGTCAGGGACGCCCATCACCAATGATCTCTTCAGCCAA
GCCCTACAGCATGCCCTTCAGGCCTCTGGGCAGCCCAGCCTTCAGAGCCAGTGGCAGCCCCAGCTGCAGCAGCTA
CGTGACATGGGCATCCAGGACGATGAGCTGAGCCTGCGGGCCCTGCAGGCCACCGGTGGGGACATCCAAGCAGCC
CTGGAGCTCATCTTTGCTGGAGGAGCCCCA**TGA**ACTCCCTGCTTCCCCTGAACCCCCAGCAAGTTGCAGAGGCTA
CTGCCCTTGGGAGGCACTCATGAAGGTGCCTCCATCTCTCCCTTCCCCAATATACCTGATGGTCAACTCTC

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FIGURE 3398

GGCGGGACGCGCACGCTCACAGTGAGGTCTCAAAAGATCCCCACCTCAGTTTTCTCATCTGGAAAGTGGGGCCTC
GTAATCCTGTCCGACCCGGCGCGGGACAGTAGGTGTCAGGGATTTTGGTGACCCCACGCTCGAGGCCTCTGCAAA
AGGGGGCTGTCCAGTGGCCCAGAGACGCAGCCGGCGGGGCTTTTGTCTAGCGGGGGAGTCTTAACTGAGAGGCCA
CGCAGGCCGGCAGGAAGCCGCTCCACAGGAGGGGGCTCAAGGAGAGGGGATCTCCTCCCTCCAGACTCCGGCCCC
GCCAGAGTAGCTCTAGGGTATCTTCCCAGAAACTGCCCCGCACGCACTGGCGAGCTGGGAGCGCCACCACGGCTT
TCAAAAAACCCGCACACACCAAGATAATAATGTGTCGTTCGCTCGTTTCGCGCAAGCGGAGTCGCGTCCGCCTTC
CCGAGCTCCGGCACACAGACCTCAGGCCGCTCTCGCGCTCTCCGGGGCCCCGAGAACAATGCCCGTCCTCTCCGC
GCGCAGGAGGGAGTTGGCGGACCACGCGGGGTCGGGGCGACGGAGCGGGCCCAGCCCCACGGCCAGGTCGGGGCC
CCACCTCTCGGCTCTGAGAGCCCAGCCGGCCCGGGCCGCGCACCTGTCAGGTCGGGGGACCTACGTGCGCCGCGA
CACGGCGGGAGGCGGGCCGGGCCAGGCTCGTCCCCTCGGCCCTCCCGGAACTAGTCTCCTAGGCCGCGGCGCCCG
CCGGAGCGGAGAGGGCTGGTGCCCCGGAGCCTTCGAGTCGGGGGCTAGAGCGGCCAGGCCTCCGAGCCGGGTCGA
GCCGAGGCTGGCGACGGCTGCGTCACGCGAGGGGGCGGGGCTGCCACGGGCGGAGGTCGCAGCCGGAAGCGGAAG
AGGCGCTCGGAGCGGGGAGTGGGGCCTAGCTGCAGCCGGAGCCTGGGAGACGCCATGACCGCCTGCCCTACCAGA
GGAGGTACCGGGAGCGCCGTGACAGCGATACATACCGGTGTGAAGAGCGGAGCCCATCCTTTGGAGAGGACTACT
ATGGACCTTCACGTTCTCGTCATCGTCGGCGATCGCGGGAGAGGGGGCCATACCGGACCCGCAAGCATGCCCACC
ACTGCCACAAACGCCGCACCAGGTCTTGTAGCAGCGCCTCCTCGAGAAGCCAACAGAGCAGTAAGCGCAGCAGCC
GGAGTGTGGAAGATGACAAGGAGGGTCACCTGGTGTGCCGGATCGGCGATTGGCTCCAAGAGCGATATGAGATTG
TGGGGAACCTGGGTGAAGGCACCTTTGGCAAGGTGGTGGAGTGCTTGGACCATGCCAG

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FIGURE 3399

ATGATCCGCTGCGGCCTGGCCTGCGAGCGCTGCCGCTGGATCCTGACCCTGCTCCTACTCAGCGCCATCGCCTTC
GACATCATCGCGCTGGCCGGCCGCGGCTGGCTGCAGTCGAGCGACCGCGTCCAGACGTCCTCGCTGTGGTGGAGA
TGTTTCCTTCCACAGGGGCGGCGGCGGCGGCAGCGGGTCCTAAGAGGACGGCTGCCACAGCCTCATGGAGTACGC
GTGGGGTCGAGCAGCGCTGCCATGCTTTTCTGGGGCGTCAGCATCCTGGTGATCTGTTTCATCCTCTCCTTCTTC
GTCCTGTGTGTACCCCAGATACTTGTCTTCCTAAGAGTGATTGGAGGTCTCCTTGCCTTGGCTGCTGTGTTCCAG
ATCATCTCCCTGGTAATTTACCCCGTGAAGTACACTCAACCTTCAACCTTCATGCCAAGCCCCGCTGTCACTTCC
ATCTATAACTGGGCCTGCGGCTTTGGGTGGGCAGCCATGATTATCCTCATTGGCTGTGCTTTCTTCTGCTGCTGC
CTCCCCAGCTGCGAAGATGACCTCCTGGGCAATACCAAGCCCAGGTACTTCTACACATCCGCCTAA

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FIGURE 3400

ACTTCCGCTGCTGTTTCGTAGCCGACTGCTGAAGGCTGGTTTGCGTCGACATGGCGGTTACCCTGAGTCTCTTGC
TGGGCGGGCGCGTTTGCGCCGCCGTCACTCGCTGTGGGTTCGCGACCCGGGGGGTGGCGGGCCCAGGCCCTATTG
GCCGGGAGCCGGACCCCGATTCCGACTGGGAGCCGGAGGAACGGGAGCTGCAGGAGGTGGAGAGGTACCGGCTTC
TCCCCGGGCCCTCAGCTTGAAGCAGGGCCTCGTGCCCCGGCGCTCCAGGCCGCGCCCCCTTGGCGCCGGGTGTCC
TGCCGCTGCTTGCGCAGCGGCCCTTGTTTCTTCTTACCCGTTGTTAGGGGCGCAGCGTCAGGTGTTCAGCTCCCC
TGGGACCACTGGTCCCTTCATTAGTGACGTATTTCATCATCAGTTTAGAGAGTTCGGCATGCTTACAGGCAGTTA
TTGTTCTAGGTGTTAGCTTTCTGGGTGTACGGAGCAGCTCTAAGCCGGCAACATGGCCCGGTTGCCCTTGCGATC
AAAGAGAAGAGGGCTGGGCGCTCCATGATTTAGCCTGAGGCTCTTCAAACATCCATTCTGCTTCCACGCATGGCT
TCTGCCATTGGTTCTCTTCCCCCAGCACCCTGAAACGACAGAAACAAGCAATCCGATTCCAGAAAATTCGGAGGC
AA**ATG**GAGGCGCCTGGTGCCCCGCCCAGGACCCTGACGTGGGAAGCCATGGAGCAGATACGGTATTTACATGAGG
AATTTCCAGAGTCCTGGTCAGTTCCCAGGTTGGCTGAAGGCTTTGATGTCAGCACTGATGTGATCCGAAGAGTTT
TAAAAAGCAAGTTTTTACCCACATTGGAGCAGAAGCTGAAGCAGGATCAAAAAGTCCTTAAGAAAGCTGGGCTTG
CCCACTCGCTGCAGCACCTCCGGGGCTCTGGAAATACCTCAAAGCTGCTCCCTGCAGGCCACTCTGTATCAGGCT
CTTTGCTTATGCCAGGGCATGAAGCCTCATCTAAAGACCCAAATCACAGCACAGCTTTGAAAGTGATAGAGTCAG
ACACTCACAGGACAAATACACCAAGGAGAAGGAAGGGAAGAAATAAAGAAATCCAGGACCTGGAGGAGAGCTTTG
TGCCTGTTGCTGCACCCCTAGGTCATCCAAGAGAGCTGCAGAAGTACTCCAGTGATTCTGAGAGCCCCAGAGGAA
CTGGCAGTGGTGCGTTGCCAAGTGGTCAGAAGCTGGAGGAGTTGAAGGCAGAGGAGCCAGATAACTTCAGCAGCA
AAGTAGTGCAGAGGGGCCGAGAGTTCTTTGACAGCAACGGGAACTTCCTGTACAGAATT**TGA**GTCGGGGCTTGGC
TTATGGAGATGCCTCGTGAAACACAGCTGGGCAAGTATTAATGTATATGGAACAGCCTGGATTTCTGCATATGGA
TAAGCCACCTTGGAATAGGAAGAGGTGTTGAGCCTGGACTGTGGGAGGAAAGAGCTGCGTGGATAGATTCAAACT
TCCTGTGGTAGTGCTCCCAGTCTGACCTCTGTAGACCTTCAGTACTCACTCTTCTTGCTTAGGCTCTCTGTGTGT
TGAAAGCCATCCCGTGTTGCATGTGTTGTTACAATTTTCTGTGATACTTGCAATTTATGTTTGAGAAGAAGTGAA
AAGTTTGCCTTCTGACCTCATTTCCTTCTTGATCAGTGAACACTAACATTTTGGGGACAACTTAGTCAATTGGTT
TTCCTTACAACAAAATAAAGTAAAATGTAGCAGTC

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FIGURE 3401

GCGGCCCAAGGGCGGAAGTGAGAAAGTTGTCTGCGTCTCGAGGCGAGTTGGCGGAGCTGTGCGCGCGGCGGGGCG
ATGGGGGGCTCGGGCAGTCGCCTGTCCAAGGAGCTGCTGGCCGAGTACCAGGACTTGACGTTCCTGACGAAGCAG
GAGATCCTCCTAGCCCACAGGCGGTTTTGTGAGCTGCTTCCCCAGGAGCAGCGGAGCGTGGAGTCGTCACTTCGG
GCACAAGTGCCCTTCGAGCAGATTCTCAGCCTTCCAGAGCTCAAGGCCAACCCCTTCAAGGAGCGAATCTGCAGG
GTCTTCTCCACATCCCCAGCCAAAGACAGCCTTAGCTTTGAGGACTTCCTGGATCTCCTCAGTGTGTTCAGTGAC
ACAGCCACGCCAGACATCAAGTCCCATTATGCCTTCCGCATCTTTGACTTTGATGATGACGGAACCTTGAACAGA
GAAGACCTGAGCCGGCTGGTGAACTGCCTCACGGGAGAGGGCGAGGACACACGGCTTAGTGCGTCTGAGATGAAG
CAGCTCATCGACAACATCCTGGAGGAGTCTGACATTGACAGGGATGGAACCATCAACCTCTCTGAGTTCCAGCAC
GTCATCTCCCGTTCTCCAGACTTTGCCAGCTCCTTTAAGATTGTCCTGTGACAGCAGCCCCAGCGTGTGTCCTGG
CACCCTGTCCAAGAACCTTTCTACTGCTGAGCTGTGGCCAAGGTCAAGCCTGTGTTGCCAGTGCGGGCCAAGCTG
GCCCAGCCTGGAGCTGGCGCTGTGCAGCCTCACCCCGGGCAGGGGCGGCCCTCGTTGTCAGGGCCTCTCCTCACT
GCTGTTGTCATTGCTCCGTTTGTGTTTGTACTAATCAGTAATAAAGGTTTAGAAGTTTGACCCTATGTGTGACAT
GAGATACACTGGTATGAGGAAGGACTGGACTTCTCTTCTAAGAGCCTTCAATCATCCTAGGAATAAGCAGCATAT
CGAGCAGAGGCCAGCGGGAAGTCAAGCCGCACCCACGCTGGCTGTCCCCGTGGGAGGGTGTGAGGATGAAGGGGC
AGCAGGAGGTGTGGGACTCGCCTGTATCCTGATTGGGGTGGTGGTTAGATGAGTCTCTGCATGCATCAAAATGTA
AAGAACCGTACATCAGTAAAGTCTATTTTACTGCA

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FIGURE 3402A

GCTCTGCCCAAGCCGAGGCTGCGGGGCCGGCGCCGGCGGGAGGACTGCGGTGCCCCGCGGAGGGGCTGAGTTTGC
CAGGGCCCACTTGACCCTGTTTCCCACCTCCCGCCCCCCAGGTCCGGAGGCGGGGGCCCCCGGGGCGACTCGGGG
GCGGACCGCGGGGCGGAGCTGCCGCCCGTGAGTCCGGCCGAGCCACCTGAGCCCGAGCCGCGGGACACCGTCGCT
CCTGCTCTCCGA**ATG**CTGCGCACCGCGATGGGCCTGAGGAGCTGGCTCGCCGCCCCATGGGGCGCGCTGCCGCCT
CGGCCACCGCTGCTGCTGCTCCTGCTGCTGCTGCTCCTGCTGCAGCCGCCGCCTCCGACCTGGGCGCTCAGCCCC
CGGATCAGCCTGCCTCTGGGCTCTGAAGAGCGGCCATTCCTCAGATTCGAAGCTGAACACATCTCCAACTACACA
GCCCTTCTGCTGAGCAGGGATGGCAGGACCCTGTACGTGGGTGCTCGAGAGGCCCTCTTTGCACTCAGTAGCAAC
CTCAGCTTCCTGCCAGGCGGGGAGTACCAGGAGCTGCTTTGGGGTGCAGACGCAGAGAAGAAACAGCAGTGCAGC
TTCAAGGGCAAGGACCCACAGCGCGACTGTCAAAACTACATCAAGATCCTCCTGCCGCTCAGCGGCAGTCACCTG
TTCACCTGTGGCACAGCAGCCTTCAGCCCCATGTGTACCTACATCAACATGGAGAACTTCACCCTGGCAAGGGAC
GAGAAGGGGAATGTCCTCCTGGAAGATGGCAAGGGCCGTTGTCCCTTCGACCCGAATTTCAAGTCCACTGCCCTG
GTGGTTGATGGCGAGCTCTACACTGGAACAGTCAGCAGCTTCCAAGGGAATGACCCGGCCATCTCGCGGAGCCAA
AGCCTTCGCCCCACCAAGACCGAGAGCTCCCTCAACTGGCTGCAAGACCCAGCTTTTGTGGCCTCAGCCTACATT
CCTGAGAGCCTGGGCAGCTTGCAAGGCGATGATGACAAGATCTACTTTTTCTTCAGCGAGACTGGCCAGGAATTT
GAGTTCTTTGAGAACACCATTGTGTCCCGCATTGCCCGCATCTGCAAGGGCGATGAGGGTGGAGAGCGGGTGCTA
CAGCAGCGCTGGACCTCCTTCCTCAAGGCCCAGCTGCTGTGCTCACGGCCCGACGATGGCTTCCCCTTCAACGTG
CTGCAGGATGTCTTCACGCTGAGCCCCAGCCCCCAGGACTGGCGTGACACCCTTTTCTATGGGGTCTTCACTTCC
CAGTGGCACAGGGGAACTACAGAAGGCTCTGCCGTCTGTGTCTTCACAATGAAGGATGTGCAGAGAGTCTTCAGC
GGCCTCTACAAGGAGGTGAACCGTGAGACACAGCAGATGGTACACCGTGACCCACCCGTGCCCACACCCCGGCCT
GGAGCGTGCATCACCAACAGTGCCCGGGAAAGGAAGATCAACTCATCCCTGCAGCTCCCAGACCGCGTGCTGAAC
TTCCTCAAGGACCACTTCCTGATGGACGGGCAGGTCCGAAGCCGCATGCTGCTGCTGCAGCCCCAGGCTCGCTAC
CAGCGCGTGGCTGTACACCGCGTCCCTGGCCTGCACCACACCTACGATGTCCTCTTCCTGGGCACTGGTGACGGC
CGGCTCCACAAGGCAGTGAGCGTGGGCCCCCGGGTGCACATCATTGAGGAGCTGCAGATCTTCTCATCGGGACAG
CCCGTGCAGAATCTGCTCCTGGACACCCACAGGGGGCTGCTGTATGCGGCCTCACACTCGGGCGTAGTCCAGGTG
CCCATGGCCAACTGCAGCCTGTACAGGAGCTGTGGGGACTGCCTCCTCGCCCGGGACCCCTACTGTGCTTGGAGC
GGCTCCAGCTGCAAGCACGTCAGCCTCTACCAGCCTCAGCTGGCCACCAGGCCGTGGATCCAGGACATCGAGGGA
GCCAGCGCCAAGGACCTTTGCAGCGCGTCTTCGGTTGTGTCCCCGTCTTTTGTACCAACAGGGGAGAAGCCATGT
GAGCAAGTCCAGTTCCAGCCCAACACAGTGAACACTTTGGCCTGCCCGCTCCTCTCCAACCTGGCGACCCGACTC
TGGCTACGCAACGGGGCCCCCGTCAATGCCTCGGCCTCCTGCCACGTGCTACCCACTGGGGACCTGCTGCTGGTG
GGCACCCAACAGCTGGGGGAGTTCCAGTGCTGGTCACTAGAGGAGGGCTTCCAGCAGCTGGTAGCCAGCTACTGC
CCAGAGGTGGTGGAGGACGGGGTGGCAGACCAAACAGATGAGGGTGGCAGTGTACCCGTCATTATCAGCACATCG
CGTGTGAGTGCACCAGCTGGTGGCAAGGCCAGCTGGGGTGCAGACAGGTCCTACTGGAAGGAGTTCCTGGTGATG
TGCACGCTCTTTGTGCTGGCCGTGCTGCTCCCAGTTTTATTCTTGCTCTACCGGCACCGGAACAGCATGAAAGTC
TTCCTGAAGCAGGGGGAATGTGCCAGCGTGCACCCCAAGACCTGCCCTGTGGTGCTGCCCCCTGAGACCCGCCCA
CTCAACGGCCTAGGGCCCCCTAGCACCCCGCTCGATCACCGAGGGTACCAGTCCCTGTCAGACAGCCCCCCGGGG
TCCCGAGTCTTCACTGAGTCAGAGAAGAGGCCACTCAGCATCCAAGACAGCTTCGTGGAGGTATCCCCAGTGTGC
CCCCGGCCCCGGGTCCGCCTTGGCTCGGAGATCCGTGACTCTGTGGTG**TGA**GAGCTGACTTCCAGAGGACGCTGC
CCTGGCTTCAGGGGCTGTGAATGCTCGGAGAGGGTCAACTGGACCTCCCCTCCGCTCTGCTCTTCGTGGAACACG
ACCGTGGTGCCCGGCCCTTGGGAGCCTTGGGGCCAGCTGGCCTGCTGCTCTCCAGTCAAGTAGCGAAGCTCCTAC
CACCCAGACACCCAAACAGCCGTGGCCCCAGAGGTCCTGGCCAAATATGGGGGCCTGCCTAGGTTGGTGGAACAG
TGCTCCTTATGTAAACTGAGCCCTTTGTTTAAAAAACAATTCCAAATGTGAAACTAGAATGAGAGGGAAGAGATA
GCATGGCATGCAGCACACACGGCTGCTCCAGTTCATGGCCTCCCAGGGGTGCTGGGGATGCATCCAAAGTGGTTG
TCTGAGACAGAGTTGGAAACCCTCACCAACTGGCCTCTTCACCTTCCACATTATCCCGCTGCCACCGGCTGCCCT
GTCTCACTGCAGATTCAGGACCAGCTTGGGCTGCGTGCGTTCTGCCTTGCCAGTCAGCCGAGGATGTAGTTGTTG
CTGCCGTCGTCCCACCACCTCAGGGACCAGAGGGCTAGGTTGGCACTGCGGCCCTCACCAGGTCCTGGGCTCGGA
CCCAACTCCTGGACCTTTCCAGCCTGTATCAGGCTGTGGCCACACGAGAGGACAGCGCGAGCTCAGGAGAGATTT
CGTGACAATGTACGCCTTTCCCTCAGAATTCAGGGAAGAGACTGTCGCCTGCCTTCCTCCGTTGTTGCGTGAGAA
CCCGTGTGCCCCTTCCCACCATATCCACCCTCGCTCCATCTTTGAACTCAAACACGAGGAACTAACTGCACCCTG

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FIGURE 3402B

GTCCTCTCCCCAGTCCCCAGTTCACCCTCCATCCCTCACCTTCCTCCACTCTAAGGGATATCAACACTGCCCAGC
ACAGGGGCCCTGAATTTATGTGGTTTTTATACATTTTTTAATAAGATGCACTTTATGTCATTTTTTAATAAAGTC
TGAAGAATTACTGTTT

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FIGURE 3403

CGCCGACGCAGACCCCGCTCTGCACGGCAGCTCGCCCGCACCCCTC**ATG**GCCACAGTTCAGCAGCTGGAAGGAAG
ATGGCGCCTGGTGGACAGCAGAGGCTTTGATGAATATGTGAAGGAGCTAGGAGTGGGAATAGCTTTGCGAAAAAT
GGACACAATAGCCAAGCCAGATTGTATCATCACTTGTGATGGCAAAAACCTCACCATAAAAACCGAGAGCACTTT
GAAAACAACACAGTTTTCTTGTACCCTGGGAGAGAATTTTGAAGAAACCACAGCTGATGGCAGAAAAACTCAGAC
TGTGTGCAACTTTACAGATGGTGCATTGGTTCAACATCAGGAGTGGGATGGGAAGGAAAACACAATAAGAAGAAA
ATTGAAAGATGGGAAATTAGTGGTGGACTGTGTCATGAACAGTGTCACCTGTACTCGGATCTATGAAAAAGTAGA
A**TAA**AAATTCCATCATCACTTTGGACAGGAGTTAACTAAGAGAATGACCAAGCTCAGTTCAATGAGCAAATCTCC
ATACCGTTTCTTTTTTTTTTTTTCATTACTGTGTTCAATTATCTTTATCCCAAACATTTTACATACAGCTATTT
CAAAGTGTGTTGGATTAATTAGGATCATCCCTTTGGTTAATAAATAAATGTGTTTGTGCT

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FIGURE 3404A

GGTGATTGTGTTGTTACAGTGCTGCTTGCTGAAGAGGACAAAGCTGAAGATGATGTAGTGTTTTACTTGGTATTT
TTGGGTTCCACCCTCCGTCACTGTACAAGTACTCGGAAGGTCAGTTCTGATACATTGGAGACCATTGCTCCTGGT
CATGATTGTTGTGAAACAGTGAAGGTGCAGCTCTGTGCTTCCAAAGAGGGCCTTCCCGTGTTTGTGGTGGCTGAA
GAAGACTTTCATTTCGTCCAGGATGAAGCGTATGATGCAGCTCAATTCCTAGCAACCAGTGCTGGAAATCAGCAG
GCTTTGAACTTTACCCGTTTTCTTGACCAGTCAGGACCCCCATCTGGGGATGTGAATTCCCTTGATAAGAAGTTG
GTGCTGGCATTCAGGCACCTGAAGCTGCCCACGGAGTGGAATGTATTGGGGACAGATCAGAGTTTGCATGATGCT
GGCCCGCGAGAGACATTGATGCATTTTGCTGTGCGGCTGGGACTGCTGAGGTTGACGTGGTTCCTGTTGCAGAAG
CCAGGTGGCCGCGGAGCTCTCAGTATCCACAACCAGGAAGGGCGACGCCTGTGAGCTTGGCCTTGGAGCGAGGCT
ATCACAAGCTGCACCAGCTTCTAACCGAGGAGAATGCTGGAGAACCAGACTCCTGGAGCAGTTTATCCTATGAAA
TACCGTATGGAGACTGTTCTGTGAGGCATCATCGAGAGTTGGACATCTATACATTAACCTCTGAGTCTGATTCAC
ATCATGAACACCCATTTCCTGGAGACGGTTGCACTGGACCAATTTTTAAACTT**ATG**AACATCCAACAGCAACTAA
TGAAAACAAACCTCAAGCAGATGGACAGTCTTATGCCCTTAATGATGACAGCACAGGATCCTTCCAGTGCCCCAG
AGACAGATGGCCAGTTTCTTCCCTGTGCACCGGAGCCCACGGACCCTCAGCGACTTTCTTCTTCTGAAGAGACTG
AGAGCACTCAGTGCTGCCCAGGGAGCCCTGTTGCACAGACTGAAAGTCCCTGTGATTTGTCAAGCATAGTTGAGG
AGGAGAATACAGACCGTTCCTGTAGGAAGAAAAATAAAGGCGTGGAAAGAAAAGGGGAAGAGGTGGAGCCAGCAC
CTATTGTGGACTCTGGAACTGTATCTGATCAAGACAGCTGCCTTCAGAGCTTGCCTGATTGTGGAGTAAAGGGCA
CGGAAGGCCTTTCGTCCTGTGGAAACAGAAATGAAGAAACTGGAACAAAATCTTCTGGAATGCCCACAGACCAGG
AGTCCCTGAGCAGTGGAGATGCTGTGCTTCAGAGAGACTTGGTCATGGAGCCAGGCACAGCCCAGTATTCCTCTG
GAGGTGAACTGGGAGGCATTTCAACAACAAATGTCAGTACCCCAGACACTGCAGGGGAAATGGAACATGGGCTCA
TGAACCCAGATGCCACTGTTTGGAAGAATGTGCTTCAGGGAGGGGAAAGTACAAAGGAAAGATTTGAGAACTCTA
ATATTGGCACAGCTGGAGCCTCTGACGTGCACGTCACAAGTAAGCCTGTGGATAAAATCAGTGTTCCAAACTGTG
CCCCTGCTGCCAGTTCCCTGGATGGTAACAAACCTGCTGAGTCTTCACTTGCATTTAGTAATGAAGAAACCTCCA
CTGAAAAAACAGCAGAAACGGAAACTTCACGAAGTCGTGAGGAGAGTGCTGATGCTCCAGTAGATCAGAATTCTG
TGGTGATTCCAGCTGCTGCAAAAGACAAGATTTCAGATGGATTAGAACCTTATACTCTCTTAGCAGCAGGCATAG
GTGAGGCAATGTCACCCTCAGATTTAGCCCTTCTTGGGCTGGAAGAAGATGTAATGCCACACCAGAACTCAGAAA
CAAATTCATCTCATGCTCAAAGCCAAAAGGGCAAATCCTCACCCATTTGTTCTACAACTGGAGACGATAAACTTT
GTGCAGACTCTGCATGTCAACAGAACACAGTGACTTCTAGTGGCGATTTGGTTGCAAAACTGTGTGATAACATAG
TTAGCGAGTCCGAAAGCACCACAGCAAGGCAACCCAGCTCACAAGATCCACCCGATGCCTCCCACTGTGAAGACC
CACAGGCTCATACAGTCACCTCTGACCCTGTAAGGGATACCCAGGAACGTGCGGATTTTTGTCCTTTCAAAGTGG
TGGATAACAAAGGCCAACGAAAAGATGTGAAACTAGATAAACCTTTAACAAATATGCTTGAGGTGGTTTCACATC
CACATCCAGTTGTCCCTAAAATGGAGAAAGAACTGGTGCCAGACCAGGCAGTAATATCAGACAGTACTTTCTCTC
TGGCAAACAGTCCAGGCAGTGAATCAGTAACCAAGGATGACGCACTTTCTTTTGTCCCCTCCCAGAAAGAAAAGG
GAACAGCAACTCCTGAACTACATACAGCTACAGATTATAGAGATGGCCCAGATGGAAATTCGAATGAGCCTGATA
CGCGGCCACTAGAAGACAGGGCAGTAGGCCTGTCCACATCCTCCACTGCTGCAGAGCTTCAGCACGGGATGGGGA
ATACCAGTCTCACAGGACTTGGTGGAGAGCATGAGGGTCCCGCCCCTCCAGCAATCCCAGAAGCTCTGAATATCA
AGGGGAACACTGACTCTTCCCTGCAAAGTGTGGGTAAGGCCACTTTGGCTTTAGATTCAGTTTTGACTGAAGAAG
GAAAACTTCTGGTGGTTTCAGAAAGCTCTGCAGCTCAGGAACAAGATAAGGATAAAGCGGTGACCTGTTCCTCTA
TTAAGGAAAATGCTCTCTCTTCAGGAACTTTGCAGGAAGAGCAGAGAACACCACCTCCTGGACAAGATACTCAAC
AATTTCATGAAAAATCAATCTCAGCTGACTGTGCCAAGGACAAAGCACTTCAGCTAAGTAATTCACCGGGTGCAT
CCTCTGCCTTTCTTAAGGCAGAAACTGAACATAACAAGGAAGTGGCCCCACAAGTCTCACTGCTGACTCAAGGTG
GGGCTGCCCAGAGCCTGGTGCCACCAGGAGCAAGTCTGGCCACAGAGTCAAGGCAGGAAGCCTTGGGGGCAGAGC
ACAACAGCTCCGCTCTGTTGCCATGTCTGTTGCCAGATGGGTCTGATGGGTCCGATGCTCTTAACTGCAGTCAGC
CTTCTCCTCTGGATGTTGGAGTGAAGAACACTCAATCCCAGGGAAAAACTAGTGCCTGTGAGGTGAGTGGAGATG
TGACGGTGGATGTTACAGGGGTTAATGCTCTACAAGGTATGGCTGAGCCCAGAAGAGAGAATATATCACACAACA
CCCAAGACATCCTGATTCCAAACGTCTTGTTGAGCCAAGAGAAGAATGCCGTTCTAGGTTTGCCAGTGGCTCTAC
AGGACAAAGCTGTGACTGACCCACAGGGAGTTGGAACCCCAGAGATGATACCTCTTGATTGGGAGAAAGGGAAGC
TGGAGGGAGCAGACCACAGCTGTACCATGGGTGACGCTGAGGAAGCCCAAATAGACGATGAAGCACATCCTGTCC
TACTGCAGCCTGTTGCCAAGGAGCTCCCCACAGACATGGAGCTCTCAGCCCATGATGATGGGGCCCCAGCTGGTG

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FIGURE 3404B

TGAGGGAAGTCATGCGAGCCCCGCCTTCAGGCAGGGAAAGGAGCACTCCCTCTCTACCTTGCATGGTCTCTGCCC
AGGACGCACCTCTGCCTAAGGGGGCAGACTTGATAGAGGAGGCTGCCAGCCGTATAGTGGATGCTGTCATCGAAC
AAGTCAAGGCCGCTGGAGCACTGCTTACTGAGGGGGAGGCCTGTCACATGTCACTGTCCAGCCCTGAGTTGGGTC
CTCTCACTAAAGGACTAGAGAGTGCTTTTACAGAAAAAGTGAGTACTTTCCCACCTGGGGAGAGCCTACCAATGG
GCAGTACTCCTGAGGAAGCCACGGGGAGCCTTGCAGGATGTTTTGCTGGAAGGGAGGAGCCAGAGAAGATCATTT
TACCTGTCCAGGGGCCTGAGCCAGCAGCAGAAATGCCAGACGTGAAAGCTGAAGATGAAGTGGATTTTAGAGCAA
GTTCAATTTCTGAAGAAGTGGCTGTAGGGAGCATAGCTGCTACACTGAAGATGAAGCAAGGCCCAATGACCCAGG
CGATAAACCGAGAAAACTGGTGTACAATAGAGCCATGCCCTGATGCAGCATCTCTTCTGGCTTCCAAGCAGAGCC
CAGAATGTGAGAACTTCCTGGATGTTGGACTGGGCAGAGAGTGTACCTCAAAACAAGGTGTACTTAAAAGAGAAT
CTGGGAGTGATTCTGACCTCTTTCACTCACCCAGTGATGACATGGACAGCATCATCTTCCCAAAGCCAGAGGAAG
AGCATTTGGCCTGTGATATCACCGGATCCAGTTCATCCACCGATGACACGGCTTCACTGGACCGACATTCTTCTC
ATGGCAGTGATGTGTCTCTCTCCCAGATTTTAAAGCCAAACAGGTCAAGAGATCGGCAAAGCCTTGATGGATTCT
ACAGCCATGGGATGGGAGCTGAGGGTCGAGAAAGTGAGAGTGAGCCTGCTGACCCAGGCGACGTGGAGGAGGAGG
AGATGGACAGTATCACTGAAGTGCCTGCAAACTGCTCTGTCCTAAGGAGCTCCATGCGCTCTCTTTCTCCCTTCC
GGAGGCACAGCTGGGGGCCTGGGAAAAATGCAGCCAGCGATGCAGAAATGAACCACCGGAGTATGAGCTGGTGCC
CCTCTGGTGTGCAGTACTCTGCTGGCCTGAGTGCTGACTTTAATTACAGAAGTTTCAGTCTAGAAGGCTTGACAG
GAGGAGCTGGTGTCGGAAACAAGCCATCCTCATCTCTAGAAGTAAGCTCTGCAAATGCCGAAGAGCTCAGACACC
CATTCAGTGGTGAGGAACGGGTTGACTCTTTGGTGTCACTTTCAGAAGAGGATCTGGAGTCAGACCAGAGAGAAC
ATAGGATGTTTGATCAGCAGATATGTCACAGATCTAAGCAGCAGGGATTTAATTACTGTACATCAGCCATTTCCT
CTCCATTGACAAAATCCATCTCATTAATGACAATCAGCCATCCTGGATTGGACAATTCACGGCCCTTCCACAGTA
CCTTCCACAATACCAGTGCTAATCTGACTGAGAGTATAACAGAAGAGAACTATAATTTCCTGCCACATAGCCCCT
CCAAGAAAGATTCTGAATGGAAGAGTGGAACAAAAGTCAGTCGTACATTCAGCTACATCAAGAATAAAATGTCTA
GCAGCAAGAAGAGCGAAAAGGAAAAAGAAAAAGATAAGATTAAGGAGAAGGAGAAAGATTCTAAAGACAAGGAGA
AAGATAAGAAGACTGTCAACGGGCACACTTTCAGTTCCATTCCTGTTGTGGGTCCCATCAGCTGTAGCCAGTGTA
TGAAGCCCTTCACCAACAAAGATGCCTATACTTGTGCAAATTGCAGTGCTTTTGTCCACAAAGGCTGCCGAGAAA
GTCTAGCCTCCTGTGCAAAGGTCAAAATGAAGCAGCCCAAAGGGAGCCTTCAGGCACATGACACATCATCACTGC
CCACGGTCATTATGAGAAACAAGCCCTCACAGCCCAAGGAGCGTCCTCGGTCCGCAGTCCTCCTGGTGGATGAAA
CCGCTACCACCCCAATATTTGCCAATAGACGATCCCAGCAGAGTGTCTCGCTCTCCAAAAGTGTCTCCATACAGA
ACATTACTGGAGTTGGCAATGATGAGAACATGTCAAACACCTGGAAATTCCTGTCTCATTCAACAGACTCACTAA
ATAAAATCAGCAAGGTCAATGAGTCAACAGAATCACTTACTGATGAGGGAGTAGGTACAGACATGAATGAAGGAC
AACTACTGGGAGACTTTGAGATTGAGTCCAAACAGCTGGAAGCAGAGTCTTGGAGTCGGATAATAGACAGCAAGT
TTCTAAAACAGCAAAAGAAAGATGTGGTCAAACGGCAAGAAGTAATATATGAGTTGATGCAGACAGAGTTTCATC
ATGTCCGCACTCTCAAGATCATGAGTGGTGTGTACAGCCAGGGGATGATGGCGGATCTGCTTTTTGAGCAGCAGA
TGGTAGAAAAGCTGTTCCCCTGTTTGGATGAGCTGATCAGTATCCATAGCCAATTCTTCCAGAGGATTCTGGAGC
GGAAGAAGGAGTCTCTGGTGGATAAAAGTGAAAAGAACTTTCTCATCAAGAGGATAGGGGATGTGCTTGTAAATC
AGTTTTCAGGTGAGAATGCAGAACGTTTAAAGAAGACATATGGCAAGTTTTGTGGGCAACATAACCAGTCTGTAA
ACTACTTCAAAGACCTTTATGCCAAGGATAAGCGTTTTCAAGCCTTTGTAAAGAAGAAGATGAGCAGTTCAGTTG
TTAGAAGGCTTGGAATTCCAGAGTGCATATTGCTTGTAACTCAGCGGATTACCAAGTACCCAGTTTTATTCCAAA
GAATATTGCAGTGTACCAAAGACAATGAAGTGGAGCAGGAAGATCTAGCACAGTCCTTGAGCCTGGTGAAGGATG
TGATTGGAGCTGTAGACAGCAAAGTGGCAAGTTATGAAAAGAAAGTGCGTCTCAATGAGATTTATACAAAGACAG
ATAGCAAGTCAATCATGAGGATGAAGAGTGGTCAGATGTTTGCCAAGGAAGATTTGAAACGGAAGAAGCTTGTAC
GTGATGGGAGTGTGTTTCTGAAGAATGCAGCAGGAAGGTTGAAAGAGGTTCAAGCAGTTCTTCTCACTGACATTT
TAGTTTTCCTTCAAGAAAAAGACCAGAAGTACATCTTTGCATCATTGGACCAGAAGTCAACAGTGATCTCTTTAA
AGAAGCTGATTGTGAGAGAAGTGGCACATGAGGAGAAAGGTTTATTCCTGATCAGCATGGGGATGACAGATCCAG
AGATGGTAGAAGTCCATGCCAGCTCCAAAGAGGAACGAAACAGCTGGATTCAGATCATTCAGGACACAATCAACA
CCCTGAACAGAGATGAAGATGAAGGAATTCCTAGTGAGAATGAGGAAGAAAAGAAAATGTTGGACACCAGAGCCC
GAGAATTAAAAGAACAACTTCACCAGAAGGACCAAAAAATCCTACTCTTGTTGGAAGAGAAGGAGATGATTTTCC
GGGACATGGCTGAGTGCAGCACCCCTCTCCCAGAGGATTGCTCCCCAACACATAGCCCTAGAGTTCTCTTCCGCT

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FIGURE 3404C

CCAACACAGAAGAGGCTCTCAAAGGAGGACCTTTAATGAAAAGTGCAATAAATGAGGTGGAGATCCTTCAGGGTT
TGGTGAGTGGAAATCTGGGAGGCACACTTGGGCCGACTGTCAGCAGCCCCATTGAGCAAGATGTGGTCGGTCCCG
TTTCCCTGCCCCGGAGAGCAGAGACCTTTGGAGGATTTGACAGCCATCAGATGAATGCTTCAAAAGGAGGCGAGA
AGGAAGAGGGAGATGATGGCCAAGATCTTAGGAGAACGGAATCAGATAGTGGCCTAAAAAAGGGTGGAAATGCTA
ACCTGGTATTTATGCTTAAAAGAAACAGTGAGCAGGTTGTCCAGAGCGTTGTTCATCTCTACGAGCTCCTCAGCG
CTCTGCAGGGTGTGGTGCTGCAGCAGGACAGCTACATTGAGGACCAGAAACTGGTGCTGAGCGAGAGGGCGCTCA
CTCGCAGCTTGTCCCGCCCGAGCTCCCTCATTGAGCAGGAGAAGCAGCGCAGCCTGGAGAAGCAGCGCCAGGACC
TGGCCAACCTGCAGAAGCAGCAGGCCCAGTACCTCGAGGAGAAGCGCAGGCGCGAGCGTGAGTGGGAAGCTCGTG
AGAGGGAGCTGCGGGAGCGGGAGGCCCTCCTGGCCCAGCGCGAGGAGGAGGTGCAGCAGGGGCAGCAGGACCTGG
AAAAGGAGCGGGAGGAGCTCCAGCAGAAGAAGGGCACATACCAGTATGACCTGGAGCGACTGCGTGCTGCCCAGA
AACAGCTTGAGAGGGAACAGGAGCAGCTGCGCCGGGAGGCAGAGCGGCTCAGCCAGCGGCAGACAGAACGGGACC
TGTGTCAGGTTTCCCATCCACATACCAAGCTGATGAGGATCCCATCGTTCTTCCCCAGTCCTGAGGAGCCCCCCT
CGCCATCTGCACCTTCCATAGCCAAATCAGGGTCATTGGACTCAGAACTTTCAGTGTCCCCAAAAAGGAACAGCA
TCTCTCGGACACACAAAGATAAGGGGCCTTTTCACATACTGAGTTCAACCAGCCAGACAAACAAAGGACCAGAAG
GGCAGAGCCAGGCCCCTGCGTCCACCTCTGCCTCTACCCGCCTGTTTGGGTTAACAAAGCCAAAGGAAAAGAAGG
AGAAAAAAAAGAAGAACAAAACCAGCCGCTCTCAGCCCGGTGATGGTCCCGCGTCAGAAGTATCAGCAGAGGGTG
AAGAGATCTTCTGC**TGA**CCCTCTTCCTCTCTGCTGAGGCAGCTGCCTCCTGATCCTGGCCAGCCCACCTCTCCTG
CTGTCCCCGCGTGCACAAGTCTCTTACACTGGACGCCCACTGCTCCTCAGCGTCCAGTCCTCCTGGGCGGCCCCA
GGTCCTGGACAATAAGCAACAGATGATATTGAGTGTCGGGTGGGGAAGGAGGCCCAGACTCTGCTTCGGCCATGA
TTTGTGACTGCCCAGGACTCTCAGGTTGGGCTGGCCCTACTCAGGATTACACTGAAAGTAATGGCCTCGTAAGTA
CAGGTGATGGTTTTGGACACGTCAGGAATTCCTAAAGGCTGAAAGAGTGTATCCAAGTAAGGTCTGAACCTCCGA
ATGCCTTTTATTTGGGGGAACACAAAACCAAACAGCAGATGTTTTGGACTTGATCTGTGTACGTACATGGGGACC
TGTCTGCATATACACACGGGGAATGCCAGAAGAAGGCCCAGTCTGCACCAGGCGTCTGGTCAACTTAGCACAAGG
GCAGTGCCTGGACGGACCCGGAGCCCCCGCATATCAGCAGTTCACCCAGTACTCCTCAGAGACTGGTTTCCCTCT
AAACCCATCCCGGGCACATACCACCCGTGTTTTGCATGTATTTCTCATTTCATTTTAGGGATGACAAACATTTGT
GAAACCAGTGAGAGAAGGCTTGATGTGTATAAAAGACGTGATGTGCACCACCTCGATCTCGGTGTTTCAGGCACT
AAAGCAACAAAACAACCCATAGTATCTCATTCTGTCATCAGATCCAGAAGAAATATCCTGGTTTTCCAGCATGTT
TACCCACATGTTTTGGCCATGGATAAAGTGAAGAGGCCTACTCACCATTATCCCTGCAGCGTGACACCTTTTGAT
TGTCACTGACCACTCAGAAGGGGCCACGGCCTCCTGGCTGTGTTCCTGAGCCCCCGTCGTGCCTCTCCCAGACAG
CAGCTGTCTGGCCCTTGCTGGGTGAGGGCACACCACTGCCAGGGGTCAGCCTCGCACCCAGGCCAGGCAGAAGCT
GTGCTCTGAAGCTAGGACAGCTGGCTGAGAAGTGGGTTCAGGCGAAGGGTGAAGCCATGTGTAGCAGTTCCTGCC
AGTGCAGATCTGGAGAGGAGCTGGCCCGGAAGGCGTGGTTGTGAAAGCGCCCTTCTTATGTTAGGAGGCCTTGGC
AAAATTGGATTTCTTCAAAAATACATGTAAAGGTCTGTTGTTGAATTGTACTCTGCCCCTGGAAGCAGATACAGA
TGGCTGCCTGCTGCTCGGCTTTGCTTTTGCTTTTCCCACCGTGTTTTCATCTTTGTTCACTTGAGGCTTTCCCCA
GCTGGTGTGTGCAGGACAGTTCATGGTAATGTTGCCCTCTGAGGCCCCGTACACCAGAAGGGAGGCCCTGGAAAA
TTTTGTGCTTCCAACGTGGCCTTCAATTCTTGCTTTTTTGCCCCTCGGAAGCATGGGGCTTTTGAGCACACTTAA
AAAAAGAAAA

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FIGURE 3405

GGGCGGGAAGGCCGGAGAAACTAGTTTGTTGGCGGCGCCTAGGCTGTATCGCAGCGAGAGCGTTTTTGCCTGTGG
AGAGCCGGCCGACGGGAGCCGCGGCGGAGCCTGTTGAGCTCGCGCGGGCTGCCGGGAGTGGTCTCTGAGGCGGCG
GCGGCGGCGGGGATCGTCTCCGGCACTGACGCACC**ATG**TCGGTCAGTGTCCATGAGACCCGCAAGTCGCGGAGCA
GCACGGGGTCCATGAACGTCACCCTCTTCCACAAGGCCTCCCACCCGGACTGTGTGCTGGCCCACCTCAACACGC
TTCGCAAGCACTGCATGTTCACCGACGTCACACTCTGGGCGGGCGACCGTGCCTTCCCCTGTCACCGTGCCGTGC
TGGCCGCCTCTAGCCGCTATTTTGAGGCCATGTTCAGCCATGGCCTTCGGGAGAGCCGGGATGACACTGTCAACT
TCCAGGACAACCTGCACCCGGAGGTGCTGGAGCTGCTGCTGGACTTTGCCTACTCCTCACGCATCGCCATCAACG
AGGAGAACGCTGAGTCACTGCTGGAGGCAGGCGACATGCTGCAGTTCCACGATGTGCGGGATGCTGCCGCCGAGT
TCCTGGAGAAGAACCTTTTCCCCTCCAACTGCCTGGGCATGATGCTGCTCTCGGACGCCCACCAGTGCCGCCGGC
TGTATGAGTTCTCCTGGCGCATGTGCCTGGTGCACTTTGAGACGGTGAGGCAGAGCGAGGACTTCAACAGCCTGT
CCAAGGACACACTGCTGGACCTCATCTCGAGTGATGAGCTGGAGACCGAGGACGAGCGGGTGGTCTTCGAGGCCA
TCCTCCAGTGGGTGAAGCACGACCTGGAGCCACGGAAGGTCCACTTGCCCGAGCTCCTCCGCAGCGTGCGTCTGG
CCTTGCTGCCGTCCGACTGCCTGCAGGAGGCCGTCTCCAGCGAGGCCCTCCTCATGGCAGACGAGCGCACCAAGC
TTATCATGGATGAGGCCCTGCGCTGCAAGACCAGGATCCTGCAGAATGATGGCGTGGTCACCAGCCCCTGTGCCC
GGCCACGCAAGGCGGGCCACACGCTACTCATCCTGGGGGGCCAGACCTTCATGTGTGACAAGATCTACCAGGTGG
ACCACAAGGCCAAGGAGATCATCCCCAAGGCCGACCTGCCCAGCCCCCGGAAGGAGTTCAGCGCCTCAGCGATCG
GCTGCAAGGTCTATGTGACGGGGGGCAGGGGCTCCGAGAACGGGGTCTCCAAGGATGTCTGGGTGTACGACACCG
TACATGAGGAATGGTCCAAGGCGGCGCCCATGCTGATTGCCCGCTTTGGCCATGGCTCAGCTGAGCTGGAGAACT
GCCTCTATGTGGTGGGGGGACACACATCCCTGGCAGGGGTCTTCCCGGCCTCGCCTTCTGTCTCCCTGAAACAAG
TGGAGAAATACGACCCTGGGGCCAACAAGTGGATGATGGTGGCCCCCTTGCGGGATGGCGTCAGCAATGCCGCAG
TGGTGAGTGCCAAGCTGAAGCTCTTTGTTTTCGGAGGAACCAGCATCCACCGGGACATGGTGTCCAAGGTCCAGT
GCTATGACCCCTCGGAGAACAGGTGGACGATCAAGGCCGAGTGCCCCCAGCCTTGGCGGTACACAGCCGCTGCCG
TCCTGGGCAGCCAGATCTTCATCATGGGAGGTGACACGGAATTCACAGCCGCCTCGGCCTACCGCTTTGACTGTG
AGACCAACCAGTGGACGCGGATTGGGGACATGACTGCCAAGCGCATGTCCTGCCATGCCCTGGCTTCCGGCAACA
AGCTCTATGTGGTCGGGGGCTACTTTGGGACCCAGAGGTGTAAGACTCTGGACTGCTATGACCCCACTTCAGATA
CATGGAACTGCATCACCACAGTGCCCTACTCACTTATCCCCACGGCCTTTGTCAGCACCTGGAAGCACCTGCCCG
CG**TGA**GGAGCACCTGCTGAGCCCAGCCAGACCGCGGCCTTCAGTGTCACAGCGTGGCCTTGCTTGTCTGCCACAG
CGGGAGCTAAGCCGGCCCTGGGCCAGCACTCCGAGAGGTGGAAGGGGCCCTGCCAGCTCTGGGGAGCAGCAGCCT
TGGGCTGTTCTGAGCTTTAGGCAAGAGAAGAGAAGCATCTCTTGCATCCGTGCCCCTGGGGGCCTCTTCAGCTTT
GCAGTGGTTTGTGGGAAGACATACCTCCCAGAGGGGCATGGACTGCCACCAGGACTGACCCTGGCGTCGGGGAGA
AGGACACTTGCAGAGCCTTGAGATCACCTGTTTGGCAGGTCCTGGACTGGGGCCGGGCAGGCAGGGGCAGGGAGG
CGCCCCGGGTGGGCTTTGGGGCTGCGGCACTGCCACACATCCTTTCCCTCCTGGCCTGCCCTGCTGGGGCTCTAC
TGCCATCTATAGATGGTGTCCTGGGCCTGGGAAACTAGGTTCCCAGGGGTTGAGACCAGAAAGGTGACCAAGACA
GATTTTTTAAGGTGCAGAAACTGCAGGGGGGCCTCAGTGACATCCATGAGGCCTTATTAGCAAAGGACACCCAGA
CCTCCAAGGTTTGTGGGCCCCTTCCACAAAGCTGTAAGTCCCAGCCCACCTACTCAGGGCCTTGCTCAGTGCTGT
GGCCCGGTGGGGACACAGTTGCTCGTGGCCACTCAGTGGAGCTGGGCCTGCAGCAGACTCAAGGCTCCGAGTGCC
CTGGGGGTCACCCCTCCCCTCCCCTCCTCAGAGCCCACCCTGAGAGGCAGCAGTGACCCCCATGGCACACACCTG
CCAACAGCACTGGGGGCTTCTCCCCAGGAGACCACGCTGCCCTCCAAGACCAGGAGCAGCTGTGAGCTGGAGACA
GCAGAGGGACCCCAGGGTGTCCCCTGCAGATCCCACCAGGGCCGCATCCATCTCAGTGTGGAGGACAGTGACGGG
ACCCTCACCATCCTCTTGCGTTTTGGCCCCCATTTGCTCCCTGAGCTCCAAGATAAGAATGGCCCCGAGAGAACT
GCTGAACATTTGTTCATTGCTGTCACCTCCTGAGTCACTGGGGTCCCTCACCAGCACCTCCCTGACACCTGGGCT
ATGGAGAGGTTGGCGCCTGTCAGTGACCATCCTAATGCCTCTCGCTCACTCCCAAGCCACCATTTGAGAGGGAGG
GGTGTTGGTGCCCTGACAGGGACTGGGCAGGGTGTCCAAACTTGGGGCTTCCCAGGCACCTGCAGTGTGAACACT
GCTTGGCTGGCTCAAGATTAGGGCCGCGGAGGGGGCTGTGCACATACCAGTTACTTAAGCAGCCACGAGTGTCCC
CCATGCCTTGGTGCGGGTCCTGGAGGCCTCTTGGGGGTGGGACCTTTGGGCAGGGTTTGCCCACTGACACGCCCG
CCATGGGGCACTGGCTGCATGGGGCTCCTTGGACCCTGTAGACCCAGCAGGAGCCTGGCCGCGGGGACTGCAGGG
AGGGTGCCTGGACCCGTGGGGTTGCTTCATTGAGATAAAGCACACTTATCACATAGCACAAAGGACGTGCCATGG
TGCTTTCCCCAAAAGTTGTGTTGCTTTTATCAGTTTTCTAACTTAATAAAAAGAGTTGAG

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FIGURE 3406

GAAAAACAAAAAGAATCTTTGTTTTACCCCGAAAGAGAGGCAGAGGCAGAAAGTCTTCTTCTGCTTTTTGCATCT
CTAAGAGGCTGAAAAAGAGA**ATG**GAAGTGCTGGGGCATTTTGGCCAGGGCAGTAATGGATATTTGGAGTTGGCAC
TTCCCTCAGCTAGAGGAGTCTCAGTGTGTCTGAGAAAATGGCAGTCAGCCATCCAGGATTTTAGGAGCAACGCCA
CTGCTCTGTGCCACATCAGAAATCAGGCATGGCCCCAACCTGAAGGAACTTGTAGCTTAATGGGGAAGCACACCA
AGAATAAAAGAGCCTCCAGAACATGTGGTGCCTGTGGTCCTGAGACAGCAGGAAATGGCTCTCAGGCCAGAGTTG
CTGGAAGAACCCATGTGGCAGGATCGGTGGGAGGCAGTTACAGAGGGAAACGCCCATCCCAGCAACTAGGGGAGG
CCGCCACTCCTCTCGTGGATGGA**TGA**TATTCTTGCTTGGGGATGTTGAGACAGCTGCACTCTGCATAGTTCCTGA
TTTGCCTCTCTACTGCTGATGAAAAACCTCTCTTTCTCTATAGCTGCTGCTTATATTGGAAGGCTTTTGGTTATT
CAGCACACTCACTCCTGAGCTTATTTCAGTGATATTCCTTGGTTATTTCGAAACATGGATGCTTGTGGCAGATGG
AGAGCCTGGGTGTACACAGATCTGCCTGTGTTTTGAAATGCATACCATGTTGCCGTTTGTTTGATTGATTGATCT
TGGACCACGAAAGAAAATTATACTGACAGCTTCCAGGGTAGGGGGCAGTTGTAGCTTTCTGCAGATGTTGCCAAA
TATATTGGGGGTGGGGAGCAGCAAATGCCATGTGTTGCTTTTTATGACATAAGGAGGGATTCCACCCCCATCCCA
ATAAAATCGGTGCTTTGACAAAGGAGGGTTCCCAGGCAGCTAAGAGAACCCAGAGTAGATGATCCTCTTTATCTC
TGGTTTAACCTGTGACTAGGATTCTTGGTGTAAGCTCGGCTTTTCCACTTATCCTCTAACCGGAACAGGCTTCTA
TAATCTCTTTGCCTTAAAATAATTATCTGCATCCCTGTGTAGAGCAATCTTAAGCAGCTCTCCTTGTTTCTTCAG
GGAATGGGAATTCTTTTCTAAGTCGCCCCATCAAAGGTACTATTGGTTTTTTACAACGCCGGCGTTTGTGTATGT
AGTAAAAGTATTAACAGCATTAAAGGCGATATTTTTAACATGTTTATAGATACTACTTGGGGGAGGGCAGCTAAT
GAAACCTTCAAGCTCTATGCAGTCCACAGACGTGAGCTCTGTAGAGTTCGCAGAGGTGGGTAAGTACCCAGCCAG
CACACCCAGTTGAATTCAGCCAGGATTTATTGAGTTGGCATCACGGACGCTGACAGCCTCCAAGTGAAAACCCTT
CTCTTGAATATGTACAGGTTTCCCATCCACATACCAAGCTGATGAGGATCCCATCGTTCTTCCCCAGTCCTGAGG
AGCCCCCCTCGCCATCTGCACCTTCCATAGCCAAATCAGGGTCATTGGACTCAGAACTTTCAGTGTCCCCAAAAA
GGAACAGCATCTCTCGGACACACAAAGATAAGGGGCCTTTTCACATACTGAGTTCAACCAGCCAGACAAACAAAG
GACCAGAAGGGCAGAGCCAGGCCCCTGCGTCCACCTCTGCCTCTACCCGCCTGTTTGGGTTAACAAAGCCAAAGG
AAAAGAAGG

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FIGURE 3407A

CTTCCAGTCTCTGCTGATGTGATTTCAGATGGGCGCGGCTCCAGACCATCCCCTGCAATGGCCAGTTACGCAGCC
TCTCCGAGCCACTGCCTCTCTGTGGAAGGAGGGCCTGAGGCTGACGGGGAGCAGCCGCCTCGCTTGGCCACTCTG
GGACCTGGGGTGATGGAGGGTGCAGCGGAGACTGACCAGGAGGCTCTGTGTGCAGGGGAGACTGGGGCCCAGAAG
CCACCTGGAGATCGGATGCTGTGTCCAGGGAGGATGGATGGTGCAGCTCTGGGGGAACAGCCAACTGGGCAGAAG
GGAGCCTCGGCAAGGGGGTTCTGGGGACCAAGAGAGACCAAGGCGTTGGGTGTGTGCAAAGAGTCTGGGAGCGAG
CCTGCGGAGGACAGCAGCAGGGCCCACAGCCGATCAGAGGAAGGTGTCTGGGAGGAGAACACGCCCCCCTTGGGC
CCCCTGGGTTTTCCCGAGACTTCCAGCTCTCCGGCGGACAGCACCACCAGCAGCTGCCTCCAGGGCCTCCCGGAC
AACCCAGACACCCAGGGTGGAGTCCAGGGGCCTGAAGGCCCCACTCCTGATGCCTCTGGCTCCAGTGCCAAGGAT
CCTCCAAGCTTGTTTGATGATGAGGTCTCTTTCTCCCAGCTCTTCCCTCCAGGCGGTCGCTTGACTAGAAAGAGG
AACCCGCATGTCTACGGGAAGCGCTGTGAGAAGCCGGTGCTCCCGCTGCCAACCCAGCCCAGCTTTGAGGAGGGC
GGTGACCCCACGCTGGGCCCAGCCCGCCTGCCCACGGACCTCAGCGACTCCAGCTCCCTCTGCCTCTGCCATGAG
GACCCGTGGGAGGACGAGGATCCCGCAGGTCTGCCCGAGTCCTTCCTCCTGGATGGGTTCCTCAATAGCAGGGTG
CCTGGCATTGACCCCTGGGCCCCCGGCCTCAGCCTGTGGGCCCTGGAGCCCAGCAGGGAAGCTGGTGCAGAGAAG
CTGCCCTCCCACTGCCCCGAGGACGATCGGCCGGAGGCCATTCCTGAGCTGCACATGGTCCCAGCGGCTTGGCGA
GGCCTGGAGATGCCGGCCCCTGCCGATGACTCCTCCTCTTCTCTCGGAGATGTGAGCCCCGAGCCCCCCAGCCTG
GAGAGAGAACGCTGTGACGGTGGGCTTCCCGGGAACACCCACCTGCTGCCGCTCCGTGCCACGGACTTTGAGGTG
CTCAGCACCAAGTTTGAGATGCAAGACCTGTGCTTTCTGGGACCCTTTGAAGACCCCGTGGGTCTCCCCGGCCCC
AGCTTCTTAGACTTCGAGGGCACGGCGAGCTCACAGGGGCCACAGAGCCGAAGGACAGAGGAGGCTGCAGGGGCA
GGGAGGGCCCAAGGCAGAGGCCGGCCGGCCAAGGGCAGGCGGGCCTCCTACAAGTGCAAAGTGTGCTTCCAGCGC
TTCCGCAGCCTGGGCGAGCTGGACCTGCACAAGCTGGCCCACACGCCCGCGCCGCCGCCCACCTGCTACATGTGC
GTGGAGCGCAGGTTTGGCTCGCGGGAGCTGCTGCGGGGGCACCTGCAGGAGAGGCACGCGCAGAGCAAGGCCGGG
CCCTGGGCGTGCGGCATGTGCCTGAAGGAGGTGGCCGACGTCTGGATGTACAACGAGCACCTGCGTGAGCACGCG
GTCCGCTTCGCCCGCAGGGGGCAGGCGCGGAGGTCCTTGGGGGACCTGCCCGGAGGCCTGGAGGGCAGCAGCGCT
GTCGCCCACCTTCTGAACAGCATCACGGAACCCGCGCCCAAACACCACAGGGGCAAGCGCTCCGCCGGCAAGGCC
GCCGGGAGCCCGGGAGACCCGTGGGGGCAAGAGGGAGAAGCCAAGAAAGACAGCCCGGGCGAGAGGGCGAAACCC
CGGGCACGCAGCACCCCCAGCAACCCAGACGGGGCCGCGACCCCAGACAGCGCCTCTGCCACCGCCCTGGCTGAC
GCCGGCAGCCCGGGCCCCCCCAGGACGACCCCCAGCCCGTCCCCCGACCCCTGGGCCGGCGGGGAGCCCCTCCTG
CAAGCCACCCCGGTGCACGAGGCCTGCAAGGACCCCTCCCGCGACTGCCACCACTGCGGGAAGCGCTTCCCCAAG
CCCTTCAAGCTGCAGCGCCACCTGGCGGTGCACAGCCCGCAGCGCGTCTACCTGTGCCCCCGGTGCCCCCGGGTC
TACCCCGAGCACGGGGAGCTGCTGGCACACCTGGGCGGGGCGCACGGGCTGCTGGAGCGGCCGGAGCTGCAGCAC
ACGCCGCTGTATGCCTGCGAGCTCTGCGCCACGGTTATGCGCATCATCAAGAAGTCCTTCGCCTGCAGCTCCTGC
AACTACACCTTCGCCAAGAAGGAGCAGTTCGACCGCCACATGAACAAGCACCTCAGGGGGGGGCGGCAGCCCTTC
GCGTTCCGCGGCGTGCGGAGGCCGGGAGCGCCGGGACAGAAGGCCCGGGCCCTCGAGGGCACACTGCCCAGCAAA
CGGCGCAGGGTGGCCATGCCCGGCAGTGCCCCTGGGCCCGGCGAGGACAGGCCTCCTCCCCGGGGAAGCAGCCCC
ATCCTGAGTGAGGGCTCTCTCCCGGCCCTGCTCCACCTGTGTTCGGAGGTGGCTCCCAGCACCACCAAGGGATGG
CCCGAGACCCTAGAGAGGCCTGTAGACCCCGTGACCCACCCGATCAGAGGTTGTGAGCTGCCATCCAACCACCAG
GAGTGTCCCCCGCCGTCTCTGTCTCCCTTCCCAGCTGCCTTGGCTGATGGCAGAGGAGACTGCGCGCTGGACGGA
GCCCTGGAGAGGCCAGAGAACGAGGCTTCCCCAGGCAGCCCCGGGCCTCTTCTCCAGCAAGCTCTCCCTCTGGGG
GCATCTCTGCCGCGGCCGGGAGCCAGAGGCCAAGATGCGGAGGGAAAGAGGGCTCCTCTCGTGTTCTCAGGGAAA
CGCAGGGCCCCGGGTGCCCGTGGCAGGTGTGCCCCTGACCATTTCCAGGAAGACCACCTACTTCAGAAAGAGAAG
GAGGTGTCCTCAAGCCACATGGTGTCTGAGGGGGGGCCCCGAGGCACCTTCCACAAGGGCAGCGCCACCAAGCCT
GCGGGCTGCCAGAGCTCATCAAAGGACAGGTCGGCAGCATCCACCCCCAGCAAAGCACTCAAGTTCCCAGTGCAC
CCAAGGAAGGCGGTGGGGAGCCTGGCACCCGGGGAGCTGGCCCGTGGCACAGAGAATGGGATGAAGCCCGCCACC
CCCAAAGCCAAACCCGGCCCCAGCTCCCAGGGCAGTGGAAGCCCTCGCCCCGGCACCAAGACAGGAGGTGGCAGC
CAGCCCCAGCCAGCCAGCGGGCAGCTCCAGAGCGAGACAGCCACCACCCCAGCCAAGCCCAGCTTCCCCAGCCGG
AGCCCTGCACCAGAGAGGCTCCCCGCTCGAGCCCAAGCCAAGAGCTGCACCAAGGGGCCAAGGGAAGCTGGTGAG
CAGGGGCCCCACGGGAGCCTAGGTCCCAAGGAGAAGGGAGAGAGCAGTACGAAGAGGAAAAAGGGCCAGGTCCCA
GGGCCAGCCAGGAGTGAAAGTGTGGGGAGCTTCGGGAGAGCCCCCTCAGCCCCTGACAAGCCCCCCCGGACCCCT

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FIGURE 3407B

CGGAAGCAGGCAACTCCCAGCCGCGTGCTCCCGACCAAGCCCAAGCCCAACAGCCAGAACAAACCCAGGCCGCCA
CCATCAGAGCAGCGGAAGGCAGAGCCGGGCCACACACAGAGGAAGGACAGACTGGGCAAGGCCTTCCCCCAGGGG
AGACCCCTGCTCAGGCCCCCCAAGAGGGGCACAGCTGTCCACGGTGCTGAACCTGCCGAGCCACACACCCACCGG
ACGGCCGAGGCCCAGAGTGACCTCCTCAGCCAGCTCTTCGGGCAGAGACTAACTGGCTTCAAAATCCCTTTAAAG
AAAGATGCTTCCGAG**TAA**TTTCTAGGAGCAAGAGCCTGGGACCGGAGCTGGGCGTTCCTGTCTCGGCCTGCCTCC
TTGGCCAGCTCCGGCTCCCTGAGATGGTCCACTCTGTGGCCACTTGACTTCTTGTGCAACTGCTCAGGCCTTGAT
GTCAGAGCTGAGGTGGTGATGCTTTGAACAGGGCCCAGGTGGGCAGCATTCCCTTTCTTGCTGGAAGGCTGGGGG
TGAAAGACGGGGCCACTGCAGCCCTTTTGAGACCACACAGCTGTTTTCTTGGTACCAAGTACTTGAAGAGACAGC
AGCCCATCCCCTCAGCCCACACCCCTGCGCCCTGTGGGCACCGACACCACAGAAGCCAATGTTTGGAGATTTGCA
CAACCTCCCGTTCCCCCACATGGAGAAGGGAAGTAAGTTGAGGCAGCCGTGGGATGGTGGTAGGTTCCCTCTTAG
TCTTGCTGCTGTTGCTGGAATTCCAAAGTGACCTTAGAAACCACGTGGGGGAAGGCAGTGCTCACTACTTAGAAG
GGTTGCTTCTGAGCCGCCTGGTCCCCCAAGAGCACAACAGGCCTCCTCCCTCTGACCACAGGGTCATGCCTCCTC
CCTCTGACCACAGGGTCATGCCAGCCTCCATTTGCTCTGCGGGAGAAAAGCCCATCTCTAGCACACCTTGACCCC
AGGAACCGGGTTCCCGTATGGAACTGGGAAGAAACCGCCCCTGTGCCAGCTCCCGCGGGCCCTCCTCGTTCCCTC
CCAGCCTCCATGGCCGCCCTCTAGAGCCTCCCTGCTGTACGGAGCTCTGGGCTCCGCCTATTTGCAATGTTACTC
TGAAGTTTCTGGTGCTATTTTTGTGTTGTAATGTGAATACAGGCTTCCTTGATTTTTTTTTTTAATGGGGGTATT
GGGTGGGACAGACGGGGTCAGGGAGGCCCCACCATGGCTTGTCGAGGGCACGGGCACCTGCATGGCGGCGCTCTC
CCTGCCTCCCCTGCCGGGCTGCAAGCCTGAGGTCTGTGCTGCCAGACGGGGATGCTCAGGGCTGGGGCTGCAGAG
CCGCTGCCCTGGCCAGGGCACCCTCATGCACCGACCCAACCCAGGCCTGGGACGCACGTGTCCTCTCACAGCGTC
GTGCCTGTGAAGGTGGGTCAAAGGGTGAGAGGGCTTCCTTCTCACCCTTCTCTCCATAAGTATCTTGAAGATCCA
TGGTTTGTTTTGCTCTATTGTTTAGTTTTTACTTGGGTGCAATGTGTACGTCAAAAGTTTTTATTTTGATATTTG
AAAGAGACCAAATCAGGCCCAGACCGCCTCTCTGGAAGGTGTTGTAGGCCATTCAAAACGCCTCCGGAGTGTCGC
AAACCAAGTGCGGAGGGGCCCTGAGGTTGTACTGTAAACATCATAGTGACTTGTCTTTTCAAATATATTCCCACT
ATTTTCGC

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FIGURE 3408A

ATGGATGCGGGGGCCATCCCGCAGGTGCTGGTGATGATGGAGATAGCAGACATGGGTGCGGGGGCCCTCCCGCAG
GTGCTGGTGATGATGGAGATAGCGGGTGTGGGTGCATGGGCTCTCCCGCAGGTACTGGTGATGATGGAGATAGTG
GGCCTGGGTGCGGGGGCCCTCCCGCAGGTGCTGGTGATGATGGAGATAGCAGACATGGGTGCTGGTGATGATGGA
GATAGCAGACATGGGTGCGGGGCCCTCCCGCAGGTGCTGGTGATGATGGAGATAGCAGACATGGATGCGGGGGCC
ATCCCGCAGGTGCTGGTGATGATAGAGATAGCAGACATGGGTGCGTGGGCCCTCCCGCAGGTGCTGGTGATGATA
GAGATAGCAGACATGGGTGCGTGGGCCATCCCGCAGGTGCTGGTGATGATGGAGATAGCGGCGGCCGTGGACGCA
GCTGATAAGATCGGTCCCCGGAGATGGGACAAAGGGGCCGCCATCGGCTCGAGGGCTGGTCATATCCTGCCCGAA
AGGGCCGAGCAGGGCCTGAGATGCGGCAAGATGCTATCTCGGGTTTATTGCGTCTCAGAAGGATGTTCTAAGGGC
AGCAGAGGCCACGTGGATGCCCGTTTGTGGGTCTCTGCACACACGGTGGCCGGACGGCAGATCCGGGGCTGCCCT
CAGAGCGCTCGCCACCCCCACCCGCCTTTAGCTGTCGTTCCTCCAACCCCACCAGCCATGAAGGCCCCTCAGGGC
TGGAAGGCTGTGTGCGGTCTCTTCGGCAGGCGGTGGTGCCCTCCTCCTCCAAACACAGGCACTCAGGTCCACGGT
GTCCCAGTGCCTTGGGGACACAGCCGTTCAACAGCCGGCCCTGAGGGGCTGACAGTCCAGCAGGAAGACAGAGTT
AATGAAATCAAGACCTCTGCCCCCTGGTGCCCTCAGGAGGTGGCCCATCCCGACGCTCACTCTGAACCTCTCCCA
GATGTGGCCTTCGGTGCCTGCCGTGGGCCCTGGTTGGTGAATCCTGGGAACCAGGGCTCTGCCTCCCGAGGGTCT
GACTTTGGAGCCGGTGACCTTGGGCAGGTCACCTCACCCCCTGTTAAATGGGCTCCAGGTCCTCAGGGGCCCCGC
GGGGTTTGCCTGCGTGGGAACCAAGCACAGGTGATCAGCAAGCGAATCCGCACGCGGCGCGTCATCGTGGACAGA
GGGGCCGGCTTGCCCCGCCCCACGCAGCTGACCCCTGGCCACCCCGCCCCACACCCCTCCGATCCCTGGACTCCT
TGGAGGCCCCTCGCCCAGCCCCCGGCCATCCCTGAGTGGTGGGTTCTGCCCCTGGGCGAGTGGAACGGCCACCTT
TATCAGAGCCAGCCCTCTCTGGCAGTGTGTGATACCCATACCCAGAAGGGGCGGCCGCCACGGGAAATGCCAGCC
ACGCTCTTATCTGGGAGGCTTGGCCGGCTGGCCCTGGAGCTCCGATTAGGGAGCAGGACCGTTTGCCTGTGGGTG
CCTCGTGGGCCGGCCCTTGCTCTGGAGAACGACCATCGCAGGGCTCACAGCTCGCTCAAACCCAGCCACAGGCAT
CCTCCTGGCTGCGTCCCTACACCCCACAGTGCCCTAGAGATCTTGCTGCAGGGCTGCCCAGGCCCCTGGGACCCA
GCACCTGCCCGGCCCCTGCCATTCACCCCAGGCCCCCAGGACTGCCACCCTCCACTGCCCCTTGGGCCAACCCTA
GCGGGAGACGAGCTGGAGCCGGTGGTGCAGGATGGGCAGAGGCGCATACGGGCCCGACTCAGCCTCGCCACGGGC
CTGTCCTGGGGCCCGTTCCATGGGAGTGTCCAGACCAGAGCCTCATCCCCCAGGCAGGCGGAGCCGGTGCCTACC
TGCTATTTCTGGGCGGCTCCACACTCCAGGACTCACGGGAGATGCAGTTCTGTTCACTGTGTTCCCCACACCTGG
CAACAGCTGGTGCACAAGGCCTGCCTGCCGGATAAGGGACAGCCAGGGCAGACTGGCAGGGAGGCCCTCACCCCT
TCCCAGCCTGTGGTCGCAGAAGTAGGAGCGGCAGGCCCCTCTGAGAGTGTTTGGCAGTGGGGGCCGTGGCAGGCC
TGCCCCAGCAGAAGCCCCCATCGGAGCCGGCAGAGCCCCACAGCTGGCGTGCAGTTCCTGAGCCCTGCTCTGCGG
CCCTGGGAATCACGGGGGTGTCCTTTAAAAGGGGGGCACCCACCCGATGCCAGCCTGCACAAAGCACCTTTCTCG
GGGCAGCCACTCACCACAGTGGACACTCAGCATGTGCTGCCCCGGACATGCCCTGTGGACGGCACCCCATGCCCA
CTTTGTCCTGCCAGGGTCCCACGCGTGCTGGCAAAGTCCAGGAAAGCTCATGGGCTGGCACCTAGTGGGGAGAGC
CCAGCCCTGACCCTGCTGCTGGTGGACGAGGCCTGCTGGCTGAGGACGCTGCCCCAGGCCCTGACTGAGGCCGAG
GCCAACACAGAGATCCACAGGAAGGGTCAGTATGACGCGGCACCTCCGTCCCAAGCCTTCCGGAAGGGTCACCAA
GCCGGTGCCTGCGGGGGGACTCCTGAGCGTGCTCCTCACGGCCGAGCCCCACAGCACCCCCGGCCACCCTGTGAA
GAAGGAGCCAGCAGAGCCCACGCCGGGATGGCCTCCATCCTTGCCACCGCAGTGATCAACAGACAGCGCGTGGCC
ATCGTGGACAGGCACGAGTCACGCAGGGAACACGCAGCAAGTCTGGCTCCGGCCAGCGGCTGGGGCTTCCCAGGG
GAACAGGGACGGCACCGGATGGCGTTTGGAGGGGGACGGCTGGCCTTCAGCCTGACCCCGCCTGCTTCCCACCCC
ACAGAAGACGTCTTCCCCTGCAAGGACTGTGGCATCTGGTACCGCAGCGAGCGCAACCTGCAGGCGCACCTGCTC
TACTACTGCGCCAGCCGCCAGGGCACCGGCTCCCCGGCCGCAGCCGCCACAGACGAGAAGCCCAAAGAGACCTAC
CCCAACGAGCGCGTCTGCCCCTTCCCCCAGTGCCGCAAGAGCTGCCCCAGCGCCAGCTCCCTGGAGATCCACATG
CGCAGCCACAGCGGAGAGCGGCCCTTCGTGTGCCTGATCTGCCTGTCGGCCTTCACCACCAAGGCCAACTGCGAG
CGGCACCTCAAGGTGCACACGGACACGCTGAGCGGTGTCTGCCACAGCTGTGGCTTCATCTCCACCACAAGGGAC
ATCCTCTACAGCCACTTGGTCACCAACCACATGGTCTGCCAGCCTGGCTCCAAGGGTGAGATCTACTCGCCAGGG
GCCGGACACCCAGCAACCAAGCTGCCCCCAGACAGTCTGGGCAGCTTCCAGCAGCAGCACACGGCCCTGCAAGGC
CCCCTGGCCTCCGCGGACCTGGGCCTGGCGCCCACCCCATCGCCAGGACTGGACAGAAAGGCCCTGGCCGAGGCC
ACCAACGGAGAGGCCAGAGCGGAGCCTCTGGCCCAGAATGGAGGCAGCAGCGAGCCCCCGGCGGCCCCCAGGAGC
ATCAAGGTGGAGGCGGTGGAGGAGCCGGAGGCGGCCCCCATCCTGGGCCCCGGAGAGCCTGGGCCCCAGGCCCCC

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FIGURE 3408B

CCCGCCCCGGCCAGGGTCAAGGCCGAGCTGTCCAGCCCCACGCCGGGCTCCAGCCCGGTGCCCGGCGAGCTGGGC
CTGGCCGGGGCCCTGTTCCTTCCGCAGTACGTGTTCGGGCCCGACGCGGCGCCCCCCGCCTCGGAGATCCTGGCC
AAGATGTCCGAGCTGGGCGCTACGTGCTTCGAGTGCGAGATCACCTTCAGCAACGTCAACAACTACTACGTGCAC
AAGCGCCTCTACTGTTCAGGCCGCCCCCCGGCACCGGCGCTGGCCGACTACCACGAGTGCACGGCCTGCCGCGTG
AGCTTCCACAGCCTCGAGGCCTACCTGGCGCACAAGAAGTACTCGTGCCCCGCTGCGCCACCGCCCGGCGCGCTC
GGCCTGCCCGCCGCCGCCTGCCCCTACTGCCCCCCGAACGGCCCGGTGCGCGGGGACCTGCTGGAGCATTTCCGC
CTGGCGCACGGCCTGCTGCTCGGCGCGCCCCTGGCCGGCCCGGGGGGCGTCCAGACTCCCAGCAAGGGCACGCCG
GCGCCGCTGCCCAACGGCAACCACCGGTACTGCCGTCTTTGCAACATCAAGTTCAGCAGCCTGTCCACCTTCATC
GCCCACAAGAAGTATTACTGCTCCTCGCACGCCGCCGAGCACGTGAAAGCCAGGGCTGAGGACAACCGTGTGGTG
GAGTCACCTGTGGTGGCTGAGTCGGTGCAAGGGGCTGGGTACCGCTGCCATCGCCCGTCCCAGGTCATTGGCGTG
TGGCCAGAGCCCGTCCCCATCGCACCCAGGACTCGCCTCGGGCACGCGTCTTCTGCACAGACCCTGGGGCCCCCA
CACCTGGCAGACGCCATCAGTCACCCCTACTCCCTCAAGCCATCACCCCAGTCTCCCCCCACCAGACCACCGCCT
GGGCCTCCACCCTGTGCCTCCCCTGTAGCCGCTGACTCGGTGGTGGCCCAGGCCTTCTCCCGCCTCTCCCCAGGA
AGCTGCCTGCCCTGCTCACAGACACCCCCTCGGCCCCCCAGCTGGTTCTCTGCTGAGCCAGGCATCCTCAGTGGC
CCCCTGCCCCTCAAGCTGGAGAGCATCAGCCTTGCCTATTCACCCTTCATTGTCAAAGCAATGCTTGATTTGTCC
AAATCCCACCGCTTCCCAAACCCATCCACCATCGCCGACTCCCAGACCTGGGACTTCACCCTTGAGTCTCTC**TGA**

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FIGURE 3409

GGAAAAGCGGAAAAGGGATTCGTCCACACAACCACCCAAATCTGCAAAACCTCCAGCAGGGGGGAAGTCCTCCCA
GCAGCCCTCGACACCCCAGCAGGCACCCCCCGGGCAGCCCCAGCAGGGCACATTTGTGGCCCACAAGGAGATCAA
GTTGACACTGTTGAATAAGGCGGCTGATAAAGGAAGCAGGAAGCGCTATGAACCATCAGACAAGGACAGGCAGAG
CCCTCCTCCAGCCAAGCGGCCCAACACATCCCCAGACCGAGGTTCTCGGGACCGGAAGTCAGGTGGGAGACTGGG
CTCCCCGAAGCCAGAGCGGCAGAGAGGCCAGAACTCCAAAGCCCCTGCAGCCCCGGCTGACAGGAAGCGCCAGCT
GTCACCCCAGTCCAAGAGCTCCAGCAAGGTCACGAGCGTGCCCGGCAAAGCCTCGGATCCCGGCGCCGCCAGCAC
CAAATCAGGGAAGGCCAGCACGCTGTCTCGGCGGGAGGAGCTGCTGAAACAGCTGAAGGCCGTGGAGGATGCTAT
TGCACGCAAGCGGGCCAAGATCCCCGGGAAAGCATAGGCCGTGCCCCGACCGGACTGGACGCATTTTTATACATA
GGAAGTCCCGCAGGACAGACAGACACAGACAGCGCTAGTGACCAGCACGGTTCTCATGTAAATTACAAGCCCCAG
CCGCCAGCCCCGCCTTCTCTTCCTCCTCCTCCGTCTTCTTCCCTGGCCCTGGTCAGGCCTGTGGAGCCCCAGCTC
TGGGTCCCTAGCCCGGGTCCAGGCAGCCAGGCTCCCTCCTGAGCTGAGAA

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FIGURE 3410

GCAGTGTCCCAGCCGGGTTCGTGTCGCCATGGGGCAGATCGAGTGGGCCATGTGGGCCAACGAACAGGCGCTGGC
GTCCGGCCTGATCCTCATCACCGGGGGCATCGTGGCCACAGCTGGGCGCTTCACCCAGTGGTACTTTGGTGCCTA
CTCCATTGTGGCGGGCGTGTTTGTGTGCCTGCTGGAGTACCCCCGGGGGAAGAGGAAGAAGGGCTCCACCATGGA
GCGCTGGGGACAGAAGTACATGACCGCCGTGGTGAAGCTGTTCGGGCCCTTTACCAGGAATTACTATGTTCGGGC
CGTCCTGCATCTCCTGCTCTCGGTGCCCGCCGGCTTCCTGCTGGCCACCATCCTTGGGACCGCCTGCCTGGCCAT
TGCGAGCGGCATCTACCTACTGGCGGCTGTGCGTGGCGAGCAGTGGACGCCCATCGAGCCCAAGCCCCGGGAGCG
GCCGCAGATCGGAGGCACCATCAAGCAGCCGCCCAGCAACCCCCCGCCGCGGCCCCCGGCCGAGGCCCGCAAGAA
GCCCAGCGAGGAGGAGGCTGCGGTGGCGGCGGGGGGACCCCCGGGAGGTCCCCAGGTCAACCCCATCCCGGTGAC
CGACGAGGTCGTGTGACCTCGCCCCGGACCTGCCCTCCCGCCAGGTGCACCCACCTGCAATAAATGCAGCGAAGC
CGGG

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FIGURE 3411

CAGTGTCCCAGCCGGGTTCGTGTCGCCATGGGGCAGATCGAGTGGGCCATGTGGGCCAACGAACAGGCGCTGGCG
TCCGGCCTGAGTGAGTGCACGTCAGGGACGGTGGAGGCTGCAGCCTGGAGGGGTGTCCCAAGACCCCAGCCGGGA
CCTCGGGCTACTTACAGGGTGGGGAAGTGGGGCGCCAGGCGGGCCAGGCCGGGCCGGGGTCAGGCCAGGAGGGTG
CGGGGAACGGGGGCGGGACCCTCAGGCCGCGGGCTGGAAGGAGGAGTTCTGAGACCCCCAGTAATTCCCTTGCAG
ACCCTGCGGAGCGCGGCGCCCCTCCCCCATTCCCTTCTCTCGGTCCCCCGACTCCGCGAAGGAGGAAGTTGCAGC
GCAGGGGAAGAGGCGGTTCAGCCCCGGTGGTTTCCGGGGTCACCGCCCCGAAGCCCCCGAGTGGGGGCTCCGGCC
TGGGCATCGGGAGAAGCTCCCCTGCCCCTCGGTAGCCAGCTGGCCTGGAGGTCGCTCTCCCTGGGCTTGGGGTGG
GGAATGGGCTCATGCCCTGGGGCTCAGCCCTTCTCATCTGGAGTCTGCGCTGGAGGCGGTCTGAGATTTCACAAG
GCGCCGAAACCACCCAGTGACGGCCCTGCCCAGCCCAGCTGCACAGGCACTTTGCTCTTGGGGTGGGATGGCACA
GCCCCCAGTCACCCTCCTGTGCATTTGCTCAGAGGTTCTGGTGAGGGCAGCGGACTCCATTTGGAAATGGACCCT
CTCGGGACCAGGGCCAGGGAGTGTCTGGCCCAGCACGGGTGAGGCTGGGCTCAGGCGAGGTCTGAGGGCAGAGGC
ACCACTGCAGCAGCTCCAGGAAGGACCTGCACCGGGGGAGGAGTGCCTGGGAAGGGCCTGGGGGCTGAGGGTGAG
GAGGAGGGGCCCGCTGCCACCACTCCCCTGGGGCTCTGAGCGCCCTCCCTGTTGTCTGGAGGGTGCGTGGCAGCT
GGAGTGGGAGCAGAGACCTCAGGGTGGGAGGGCTGGAGGACGGGGCCCTGCAGCCTGTCCTGTGCCCAGGAAAGT
GACCGCCTGCTTCGAGTCAGCGGCCAAGAAGTCGGTGGGTCAGTTCAGACAGCTCTCCCCAGAGCTGCCCCGTGA
GACTCACCCTGCCTGCCCCGCACTCCCTACAGGAAGTAGACGGACTGAGGGCACCCAGCTGGGAGCCAGGAGACC
TGGGCTCTAGTCTGGCCTCCTGCTGAAACCCTCCAGGGGCTCCTGGCCCGAAGAGTTAGAGCCAGACTGGACGCC
CTGCACTGCCCGCCCTGGCCTCCCGGCTCTCCGGCCCCCTCCTCCAGCTGCCGTGCTTCCTTTCTGTTCCTAGAT
CTCCTGAGCGTGCCCCAGGGCCTCGGCACAAGCTGCTGCTTCTGCAGAGCCTCATGGCTGTCTCATTTATTTCTC
AATTCAAATGCCACCTGCCTGGGGAGGTCCTTCCAGACCGTGCAGCCCCAGGAGGCAGCTGGCCCGGAGACAGCA
GGGCCTTGACAAAGAGTCCCCCCTGTACACAGCAGGTGCTCTGTAAATGTGGCTGGGTGCCAGAATACGTCCTCA
GACCTCCCTGGTGGCACCAGCGGCAGCTTTGCACCCTCTTTCGGATGGCAGGCTCGGGACCAGGACGGTCCCCAA
AGATGCATGGACAATTGGCTGAGTAGACTCAAGGACACTGCCCTCCCCTCCTCCGACGCAGACAGACAAACCCAG
AGAGTTAATGTGTAGCTGGGCTCAAACCAAGGATAGGAAATCTTCCAACAAGACCATGTGGAGACAAAAACAGAA
TGGCTGGCAGGGCAAGGTGGCTACACCTGTAATCCTAGCACTTTGGGAGGCCAAGGCGGGCGGATCACGAGGTCA
GGAGATCGAGACCATCCTGGCTAACACAGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGTATGG
TGGCAGGCGCGCATAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTCAACCTGGGAGGTGGAGGTTG
TAGTGAGCTGAGATCACGCCACGGAACTCCAGCCTGGGTGACAGGGCAAGACTCTGTCTCC

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FIGURE 3412

TGGGACCATGGCCTCGGAGAAGCCGCTGGCGGCAGTCACTTGTACAGCGCCGGTCAACATCGCGGTCATCAAGTA
CTGGGGCAAGCGCGATGAAGAGCTGGTTCTGCCCATCAACTCCTCCCTGAGCGTCACTCTGCACCAGGACCAGTT
AAAAACCACCACAACAGCCGTCATCAGCAAGGACTTCACCGAGGACCGGATTTGGCTGAATGGCCGGGAGGAGGA
TGTGGGGCAGCCGCGGCTGCAGGCCTGCCTGCGGGAGATCCGCTGCCTGGCCCGGAAGCGGAGGAACTCACGGGA
TGGGGACCCGCTGCCCTCCAGCCTCAGCTGCAAGGTGCACGTGGCATCGGTGAACAACTTCCCCACGGCTGCGGG
CCTGGCCTCCTCAGCGGCGGGCTATGCCTGCCTAGCCTACACCCTGGCCCGTGTCTACGGCGTGGAGAGTGACCT
CTCAGAAGTGGCTCGCCGGGGCTCAGGCAGCGCCTGCCGGAGCCTGTATGGGGGCTTTGTGGAGTGGCAGATGGG
AGAGCAGGCCGACGGGAAGGACAGCATCGCTCGGCAAGTGGCCCCCGAGTCACACTGGCCTGAACTCCGCGTGCT
CATCCTTGTGGTGAGCGCTGAGAAGAAGCTGACAGGCAGTACCGTGGGCATGCGGGCCAGTGTGGAGACCAGCCC
CCTGCTTCGGTTCCGGGCCGAGTCCGTGGTGCCCGCGCGCATGGCGGAGATGGCCCGCTGCATCCGGGAGCGAGA
CTTCCCCAGCTTCGCCCAGCTGACCATGAAGGACAGCAACCAGTTCCACGCCACCTGCCTCGACACCTTCCCGCC
CATCTCTTACCTCAATGCCATCTCCTGGCGCATCATCCACCTGGTGCACCGCTTCAACGCCCACCACGGGGACAC
CAAGGTGGCGTACACCTTTGACGCGGGCCCCAATGCCGTGATCTTCACCCTGGACGACACTGTGGCTGAGTTTGT
GGCTGCTGTGTGGCACGGCTTTCCCCCAGGCTCGAATGGAGACACGTTTCTGAAGGGGCTGCAGGTGAGGCCGGC
CCCTCTCTCAGCTGAGCTTCAGGCTGCGCTGGCCATGGAGCCGACCCCCGGTGGGGTCAAATACATCATTGTCAC
TCAGGTGGGGCCAGGGCCTCAAATCCTGGATGACCCCTGCGCCCACCTCCTGGGTCCTGACGGCCTGCCGAAGCC
AGCTGCCTGACTGCCTCAGCAGGGACCGCATGCCGCTTGGAGAAGGGGTGGCCTCGCCGGAGCTAGGGAGCGGAT
GTGGTGGGCTGGCCGGACTCCTGGGACATGTGGGTGGTGGCTTGACCCCGGGCCCATGGGCAGCTTGCTGTGGGG
CAGTGCAGGGAGTCCTGCGGCCGCCCAGGTGTCAGGAGAGGTCCCCGCCGAGTGCTTCAGCTGCCCTAAGCTGCA
CCAGCGCTTTGCCAAGATGGGATGGGGAGGGGGTATGAGAACTGGCAGAGCCTCGGTGCAGCAGGGCTGAAGGGC
TTTCTCACCCCAGCTCTGGCTATGCCCAGTTCTCTGAGAAAGGAGCTCAGTGGGGAGGTGGTCCCTCCAGCGGAC
CAGGGAAGGGGTCACCGTGCTGGGAGCAGCCTCCTTGGGCCTCAGGAAACCACCAAGTGCCTCGGATGGTGGCTG
CCCACGGCGCTTCTGCTGAGACCCTGCCCCCGGCCCAGGTGTCTCGGAGGGTGGCTGCCCACGGCCTGGGTGTGG
CTGGAATGGTGGCAGGAGTGGGCACCAGTGCGGCCCCGGTGGCCATGGGGAATAAACCAGCATTGCTGCC

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FIGURE 3413

GGCTGTGACTAGCGGGCCGGCCCGGGCCAGGACAGCGGGCGGCGGGCGGCGCGGGCCTGGCCCCGGGATGGCTAT
GTTCCGCAGCCTGGTGGCCTCGGCTCAGCAGCGGCAGCCGCCGGCCGGGCCGGCGGGCGGCGACAGCGGCCTGGA
GGCGCAGTACACCTGCCCCATCTGCCTGGAGGTCTATCACCGGCCCGTGGCCATCGGCAGCTGCGGCCACACGTT
CTGCGGGGAGTGTCTCCAGCCCTGCCTGCAGGTGCCATCCCCGCTGTGCCCACTGTGCCGCATGCCCTTCGACCC
CAAGAAGGTGGACAAGGCCACCCACGTGGAGAAGCAGCTCTCATCCTACAAAGCGCCCTGTCGAGGCTGCAACAA
AAAGGTGACCCTGGCAAAGATGAGAGTGCACATTTCGTCCTGCCTGAAGGTCCAGGAGCAGATGGCCAACTGCCC
CAAGTTCGTCCCCGTGGTGCCCACATCACAGCCTATCCCCAGCAACATCCCCAACAGGTCCACCTTCGCCTGCCC
GTACTGTGGTGCCCGCAACCTGGACCAGCAGGAGCTGGTGAAGCACTGTGTGGAAAGCCACCGCAGCGACCCCAA
CCGCGTGGTGTGCCCCATCTGCTCGGCAATGCCCTGGGGGGACCCCAGCTACAAGAGCGCCAACTTCCTGCAGCA
CCTGCTTCACCGACACAAGTTCTCCTACGACACCTTTGTGGACTACAGTATTGACGAGGAGGCCGCCTTCCAGGC
TGCTCTGGCCCTGTCTCTCTCTGAGAACTGAAGGGAAGCGCAGCCACCCGCCTGCGTCTGGGGTCAGGGATGTCC
CCGCTCCTGTGTCGCACCTGGCACCTGCTCGGGAGTGCACCTCACCGGACTGAGCTCACAGGAGGAGCCTGCACC
CGCGCAGAAGGGGAGCCGGGGCCGAGCCTCCGGGCCTGAATACGGGCCAGCCGCCGAGGCCGCCAGAGCAGGGCC
GCCTGGTCCCACCGGCGTCGCTGGGTTCTTCGGTGCTTCTGGCCGAGCAGGCGGCCTACTTGGGCAGGGCTGGAC
GCTGAGACCTGGAGCTGCCACCGTCTCTTCAAGCCATGATACCCCCTCGTGGGAAGAAGGGACCGACGCGCGAGT
CGCGGCTGCGCAGTCGAGCCCGGGAGGAACCCAGGCTGCTGCCCTGGCCAGCCCGACCCTGCCCCGGCCCCACTT
CCACCTTGCGCATTTGGTACTGGCTTTTGTGATACTTAGGAACCCTGGCATCTTTTCTATATTATCCAGTGTGAT
AATCTTTTCACGTTTTATAGAGCAAAGACAGAGCAGTTACTCTTCATATTGCAATATCTGTGTTTGACTAGGAAT
AATAGTATTTTTATGGAACATTTACAAAATTATATTTTTTAAGAAAACAATCAAAACAAGCATTGGGGGATTGGG
GCAAGGATGGAAGGAGCAGTGGGGCAGCTGCCAGAGCTCAGGCGAGCCATGGGGTCTGCTGTGGGGTCTGCCCTG
GCCACCCACTGTGTGTCTGGGTCCTTGAGGTTTGTACGTTTCTCTTTGATGACCAGGAAGAAATCCCAGCACCCC
AGCCACAGGCTGTGGCTGCTCCCAGCAGAGGCGGGGCCGGCAGAGAAGGGGCCTCCTCCACCCAGAGTCCTGGCC
TTGGCCCGCTGTCACCTTCAAAGCTGACTGTGCCCCGCTGCGGGAGGGGACGGCACCCCAGTGGTGGCAGAGCTT
GGGGGCCTGGGCAGGGGCCCGCTTGGCGGGCCGGGCAACACGTCAACATTCTTTTCTGTTCTTGGCATTAATTAT
TGCTGTCTTTTTTTTAAAAAAAAAAGTTTAAATAAAATGTCTCAGAGC

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FIGURE 3414

CTCCGACGTCATCGGGGCGCGCCCTCGCGCTGTCGCCGCCACAGTCTGCGACGGGACCCGGCGTGCCC**ATG**TGTC
AGGTGGGCGAGGACTACGGGGAGCCGGCGCCTGAGGAGCCGCCCCCGGCGCCGCGGCCCAGGGACTGTTTCAAGG
CCTTCTACGTCCACAAGTTCAGAGCCATGCTGGGCAAGAACCGGCTCATCTTTCCAGGCGAGAAGGTGCTCTTGG
CGTGGTCTGGGGGGCCTTCGTCCAGCTCCATGGTCTGGCAGGTTCTTGAGGGCCTGAGCCAAGATTCTGCCAAAA
GACTGCGCTTTGTGGCAGGAGTCATCTTTGTTGACGAGGGAGCAGCCTGTGGCCAGAGCCTAGAGGAGAGATCAA
AGACCCTGGCCGAAGTGAAGCCCATTCTGCAAGCAACTGGGTTCCCATGGCATGTGGTGGCCTTAGAGGAGGTGT
TCAGCCTGCCACCGTCGGTGCTTTGGTGCTCTGCCCAGGAGCTAGTGGGATCCGAGGGGGCCTACAAGGCGGCCG
TGGACAGCTTCCTCCAGCAGCAGCATGTGCTGGGGGCCGGGGGTGGTCCTGGCCCGACTCAAGGGGAGGAACAGC
CACCCCAGCCCCCGCTGGACCCCCAGAACCTGGCAAGACCGCCTGCCCCTGCCCAGACTGAGGCTCTTTCCCAAC
TGTTCTGCTCAGTGAGGACACTGACTGCCAAGGAGGAGCTTCTGCAGACCCTGCGGACCCACCTGATCCTCCACA
TGGCCCGAGCCCACGGCTACTCCAAGGTCATGACTGGGGACAGCTGCACACGCTTGGCTATCAAGCTCATGACCA
ACCTGGCGCTGGGTCGAGGGGCCTTCCTGGCCTGGGATACGGGCTTCTCGGATGAGCGGCACGGGGACGTGGTGG
TGGTGCGGCCCATGCGGGACCACACCCTGAAGGAGGTCGCTTTCTACAACCGCCTGTTCTCTGTTCCTTCTGTCT
TCACACCAGCCGTCGACACCAAGGCCCCTGAAAAGGCCAGCATCCACCGGCTGATGGAGGCCTTCATCCTCAGGC
TGCAGACCCAGTTCCCCTCCACTGTCAGCACTGTGTACAGGACAAGTGAGAAGCTGGTGAAGGGCCCCCGGGATG
GCCCTGCTGCTGGCGACTCCGGCCCCCGCTGCCTCCTCTGCATGTGTGCCCTGGACGTCGACGCCGCTGACAGTG
CCACGGCTTTTGGGGCTCAGACCTCCTCGCGTCTCTCCCAGATGCAGTCACCCATCCCCCTGACTGAGACCCGGA
CACCCCCGGGGCCCTGCTGTTCTCCAGGGGTGGGCTGGGCCCAGCGCTGCGGCCAGGGGGCCTGTAGGAGGGAGG
ACCCCCAAGCCTGCATTGAGGAGCAGCTGTGCTACAGCTGCCGCGTGAACATGAAGGACTTGCCCTCACTGGACC
CCCTGCCGCCGTACATCCTGGCTGAGGCCCAGCTCCGCACACAGAGGGCCTGGGGCTTGCAGGAGATCCGGGACT
GTCTGATTGAGGACAGTGACGACGAGGCGGGCCAGAGC**TGA**GCGTGAGGACGTGCTTGCCGGGACAGCAGGCAGT
GGCCACCTGGTACACCACACTGGAGCCGGAAGGCAAGGACGGGGGACTGGCCTCTGATTGTCCATTTGTATAAAT
AAAACATTTTTTAATT

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FIGURE 3415A

CCATGGACCTGCGCCCTGAGCTGCCCACCACCCTGGGCCCCGTCAGCCTGCGCCAGCTGGGGCTGGAGCACACCC
GCTACCCCTGTCTGGACCTTGGTGCCATGTTGCTCTACACCCTGACCTTCTGGCTCCTGCTGCGCCAGTTTGTGA
AAGAGAAGCTGCTGAAGTGGGCAGAGTCTCCAGCTGCGCTGACGGAGGTCACCGTGGCAGACACAGAGCCCACGC
GGACGCAGACGCTGTTGCAGAGCCTGGGGGAGCTGGTGAAGGGCATGTACGCCAAGTACTGGATCTATGTGTGTG
CTGGCATGTTCATCGTGGTCAGCTTCGCCGGCCGCCTCGTGGTCTACAAGATTGTCTACATGTTCCTCTTCCTGC
TCTGCCTCACCCTCTTCCAGGTCTACTACAGCCTGTGGCGGAAGCTGCTCAAGGCCTTCTGGTGGCTCGTGGTGG
CCTACACCATGCTGGTCCTCATCGCCGTCTACACCTTCCAGTTCCAGGACTTCCCTGCCTACTGGCGCAACCTCA
CTGGCTTCACCGACGAGCAGCTGGGGGACCTGGGCCTGGAGCAGTTCAGCGTGTCCGAGCTCTTCTCCAGCATCC
TGGTGCCCGGCTTCTTCCTCCTGGCCTGCATCCTGCAGCTGCACTACTTCCACAGGCCCTTCATGCAGCTCACCG
ACATGGAGCACGTGTCCCTGCCTGGCACGCGCCTCCCGCGCTGGGCTCACAGGCAGGATGCAGTGAGTGGGACCC
CACTGCTGCGGGAGGAGCAGCAGGAGCATCAGCAGCAGCAGCAGGAGGAGGAGGAGGAGGAGGAGGACTCCAGGG
ACGAGGGGCTGGGCGTGGCCACTCCCCACCAGGCCACGCAGGTGCCTGAAGGGGCAGCCAAGTGGGGCCTGGTGG
CTGAGCGGCTGCTGGAGCTGGCAGCCGGCTTCTCGGACGTCCTCTCACGCGTGCAGGTGTTCCTGCGGCGGCTGC
TGGAGCTTCACGTTTTCAAGCTGGTGGCCCTGTACACCGTCTGGGTGGCCCTGAAGGAGGTGTCGGTGATGAACC
TGCTGCTGGTGGTGCTGTGGGCCTTCGCCCTGCCCTACCCACGCTTCCGGCCCATGGCCTCCTGCCTGTCCACCG
TGTGGACCTGCGTCATCATCGTGTGTAAGATGCTGTACCAGCTCAAGGTTGTCAACCCCCAGGAGTATTCCAGCA
ACTGCACCGAGCCCTTCCCCAACAGCACCAACTTGCTGCCCACGGAGATCAGCCAGTCCCTGCTGTACCGGGGGC
CCGTGGACCCTGCCAACTGGTTTGGGGTGCGGAAAGGGTTCCCCAACCTGGGCTACATCCAGAACCACCTGCAAG
TGCTGCTGCTGCTGGTATTCGAGGCCATCGTGTACCGGCGCCAGGAGCACTACCGCCGGCAGCACCAGCTGGCCC
CGCTGCCTGCCCAGGCCGTGTTTGCCAGCGGCACCCGCCAGCAGCTGGACCAGGATCTGCTCGGCTGCCTCAAGT
ACTTCATCAACTTCTTCTTCTACAAATTCGGGCTGGAGATCTGCTTCCTGATGGCCGTGAACGTGATCGGGCAGC
GCATGAACTTTCTGGTGACCCTGCACGGTTGCTGGCTGGTGGCCATCCTCACCCGCAGGCACCGCCAGGCCATTG
CCCGCCTCTGGCCCAACTACTGCCTCTTCCTGGCGCTGTTCCTGCTGTACCAGTACCTGCTGTGCCTGGGGATGC
CCCCGGCCCTGTGCATTGATTATCCCTGGCGCTGGAGCCGGGCCGTCCCCATGAACTCCGCACTCATCAAGTGGC
TGTACCTGCCTGATTTCTTCCGGGCCCCCAACTCCACCAACCTCATCAGCGACTTTCTCCTGCTGCTGTGCGCCT
CCCAGCAGTGGCAGGTGTTCTCAGCTGAGCGCACAGAGGAGTGGCAGCGCATGGCTGGCGTCAACACCGACCGCC
TGGAGCCGCTGCGGGGGGAGCCCAACCCCGTGCCCAACTTTATCCACTGCAGGTCCTACCTTGACATGCTGAAGG
TGGCCGTCTTCCGATACCTGTTCTGGCTGGTGCTGGTGGTGGTGTTTGTCACGGGGGCCACCCGCATCAGCATCT
TCGGGCTGGGCTACCTGCTGGCCTGCTTCTACCTGCTGCTCTTCGGCACGGCCCTGCTGCAGAGGGACACACGGG
CCCGCCTCGTGCTGTGGGACTGCCTCATTCTGTACAACGTCACCGTCATCATCTCCAAGAACATGCTGTCGCTCC
TGGCCTGCGTCTTCGTGGAGCAGATGCAGACCGGCTTCTGCTGGGTCATCCAGCTCTTCAGCCTTGTATGCACCG
TCAAGGGCTACTATGACCCCAAGGAGATGATGGACAGAGACCAGGACTGCCTGCTGCCTGTGGAGGAGGCTGGCA
TCATCTGGGACAGCGTCTGCTTCTTCTTCCTGCTGCTGCAGCGCCGCGTCTTCCTTAGCCATTACTACCTGCACG
TCAGGGCCGACCTCCAGGCCACCGCCCTGCTAGCCTCCAGGGGCTTCGCCCTCTACAACGCTGCCAACCTCAAGA
GCATTGACTTCCACCGCAGGATAGAGGAGAAGTCCCTGGCCCAGCTGAAAAGACAGATGGAGCGTATCCGTGCCA
AGCAGGAGAAGCACAGGCAGGGCCGGGTGGACCGCAGTCGCCCCCAGGACACCCTGGGCCCCAAGGACCCCGGCC
TGGAGCCAGGGCCCGACAGTCCAGGGGGCTCCTCCCCGCCACGGAGGCAGTGGTGGCGGCCCTGGCTGGACCACG
CCACAGTCATCCACTCCGGGGACTACTTCCTGTTTGAGTCCGACAGTGAGGAAGAGGAGGAGGCTGTTCCTGAAG
ACCCGAGGCCGTCGGCACAGAGTGCCTTCCAGCTGGCGTACCAGGCATGGGTGACCAACGCCCAGGCGGTGCTGA
GGCGGCGGCAGCAGGAGCAGGAGCAGGCAAGGCAGGAACAGGCAGGACAGCTACCCACAGGAGGTGGTCCCAGCC
AGGAGGTGGAGCCAGCAGAGGGCCCCGAGGAGGCAGCGGCAGGCCGGAGCCATGTGGTGCAGAGGGTGCTGAGCA
CGGCGCAGTTCCTGTGGATGCTGGGGCAGGCGCTAGTGGATGAGCTGACACGCTGGCTGCAGGAGTTCACCCGGC
ACCACGGCACCATGAGCGACGTGCTGCGGGCAGAGCGCTACCTCCTCACACAGGAGCTCCTGCAGGGCGGCGAAG
TGCACAGGGGCGTGCTGGATCAGCTGTACACAAGCCAGGCCGAGGCCACGCTGCCAGGCCCCACCGAGGCCCCCA
ATGCCCCAAGCACCGTGTCCAGTGGGCTGGGCGCGGAGGAGCCACTCAGCAGCATGACAGACGACATGGGCAGCC
CCCTGAGCACCGGCTACCACACGCGCAGTGGCAGTGAGGAGGCAGTCACCGACCCCGGGGAGCGTGAGGCTGGTG
CCTCTCTGTACCAGGGACTGATGCGGACGGCCAGCGAGCTGCTCCTGGACAGGCGCCTGCGCATCCCAGAGCTGG
AGGAGGCAGAGCTGTTTGCGGAGGGGCAGGGCCGGGCGCTGCGGCTGCTGCGGGCCGTGTACCAGTGTGTGGCCG

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FIGURE 3415B

CCCACTCGGAGCTGCTCTGCTACTTCATCATCATCCTCAACCACATGGTCACGGCCTCCGCCGGCTCGCTGGTGC
TGCCCGTGCTCGTCTTCCTGTGGGCCATGCTGTCGATCCCGAGGCCCAGCAAGCGCTTCTGGATGACGGCCATCG
TCTTCACCGAGATCGCGGTGGTCGTCAAGTACCTGTTCCAGTTTGGGTTCTTCCCCTGGAACAGCCACGTGGTGC
TGCGGCGCTACGAGAACAAGCCCTACTTCCCGCCCCGCATCCTGGGCCTGGAGAAGACTGACGGCTACATCAAGT
ACGACCTGGTGCAGCTCATGGCCCTTTTCTTCCACCGCTCCCAGCTGCTGTGCTATGGCCTCTGGGACCATGAGG
AGGACTCACCATCCAAGGAGCATGACAAGAGCGGCGAGGAGGAGCAGGGAGCCGAGGAGGGGCCAGGGGTGCCTG
CGGCCACCACCGAAGACCACATTCAGGTGGAAGCCAGGGTCGGACCCACGGACGGGACCCCAGAACCCCAAGTGG
AGCTCAGGCCCCGTGATACGAGGCGCATCAGTCTACGTTTTAGAAGAAGGAAGAAGGAGGGCCCAGCACGGAAAG
GAGCGGCAGCCATCGAAGCTGAGGACAGGGAGGAAGAAGAGGGGGAGGAAGAGAAAGAGGCCCCCACGGGGAGAG
AGAAGAGGCCAAGCCGCTCTGGAGGAAGAGTAAGGGCGGCCGGGCGGCGGCTGCAGGGCTTCTGCCTGTCCCTGG
CCCAGGGCACATATCGGCCGCTACGGCGCTTCTTCCACGACATCCTGCACACCAAGTACCGCGCAGCCACCGACG
TCTATGCCCTCATGTTCCTGGCTGATGTTGTCGACTTCATCATCATCATTTTTGGCTTCTGGGCCTTTGGGAAGC
ACTCGGCGGCCACAGACATCACGTCCTCCCTATCAGACGACCAGGTACCCGAGGCTTTCCTGGTCATGCTGCTGA
TCCAGTTCAGTACCATGGTGGTTGACCGCGCCCTCTACCTGCGCAAGACCGTGCTGGGCAAGCTGGCCTTCCAGG
TGGCGCTGGTGCTGGCCATCCACCTATGGATGTTCTTCATCCTGCCCGCCGTCACTGAGAGGATGTTCAACCAGA
ATGTGGTGGCCCAGCTCTGGTACTTCGTGAAGTGCATCTACTTCGCCCTGTCCGCCTACCAGATCCGCTGCGGCT
ACCCCACCCGCATCCTCGGCAACTTCCTCACCAAGAAGTACAATCATCTCAACCTCTTCCTCTTCCAGGGGTTCC
GGCTGGTGCCGTTCCTGGTGGAGCTGCGGGCAGTGATGGACTGGGTGTGGACGGACACCACGCTGTCCCTGTCCA
GCTGGATGTGTGTGGAGGACATCTATGCCAACATCTTCATCATCAAATGCAGCCGAGAGACAGAGAAGAAATACC
CGCAGCCCAAAGGGCAGAAGAAGAAGAAGATCGTCAAGTACGGCATGGGTGGCCTCATCATCCTCTTCCTCATCG
CCATCATCTGGTTCCCGCTGCTCTTCATGTCGCTGGTGCGCTCCGTGGTTGGGGTTGTCAACCAGCCCATCGATG
TCACCGTCACCCTCAAGCTGGGCGGCTATGAGCCGCTGTTCACCATGAGCGCCCAGCAGCCGTCCATCATCCCCT
TCACGGCCCAGGCCTATGAGGAGCTGTCCCGGCAGTTTGACCCCCAGCCGCTGGCCATGCAGTTCATCAGCCAGT
ACAGCCCTGAGGACATCGTCACGGCGCAGATTGAGGGCAGCTCCGGGGCGCTGTGGCGCATCAGTCCCCCCAGCC
GTGCCCAGATGAAGCGGGAGCTCTACAACGGCACGGCCGACATCACCCTGCGCTTCACCTGGAACTTCCAGAGGG
ACCTGGCGAAGGGAGGCACTGTGGAGTATGCCAACGAGAAGCACATGCTGGCCCTGGCCCCCAACAGCACTGCAC
GGCGGCAGCTGGCCAGCCTGCTCGAGGGCACCTCGGACCAGTCTGTGGTCATCCCTAATCTCTTCCCCAAGTACA
TCCGTGCCCCCAACGGGCCCGAAGCCAACCCTGTGAAGCAGCTGCAGCCCAATGAGGAGGCCGACTACCTCGGCG
TGCGTATCCAGCTGCGGAGGGAGCAGGGTGCGGGGGCCACTGGCTTCCTCGAATGGTGGGTCATCGAGCTGCAGG
AGTGCCGGACCGACTGCAACCTGCTGCCCATGGTCATTTTCAGTGACAAGGTCAGCCCACCGAGCCTCGGCTTCC
TGGCTGGCTACGGCATCATGGGGCTGTACGTGTCCATCGTGCTGGTCATCGGCAAGTTCGTGCGCGGATTCTTCA
GCGAGATCTCGCACTCCATTATGTTCGAGGAGCTGCCGTGCGTGGACCGCATCCTCAAGCTCTGCCAGGACATCT
TCCTGGTGCGGGAGACTCGGGAGCTGGAGCTGGAGGAGGAGTTGTACGCCAAGCTCATCTTCCTCTACCGCTCAC
CAGAGACCATGATCAAGTGGACTCGTGAGAAGGAGTAGGAGCTGCTGCTGGCGCCCGAGAGGGAAGGAGCCGGCC
TGCTGGGCAGCGTGGCCACAAGGGGCGGCACTCCTCAGGCCGGGGGAGCCACTGCCCCGTCCAAGGCCGCCAGCT
GTGATGCATCCTCCCGGCCTGCCTGAGCCCTGATGCTGCTGTCAGAGAAGGACACTGCGTCCCCACGGCCTGCGT
GGCGCTGCCGTCCCCCACGTGTACTGTAGAGTTTTTTTTTTAATTAAAAAATGTTTTATTTATACAAATGG

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FIGURE 3416

CGCGCACTCCGCCGCCATGGAGCAGCGCCGCGTCACCGACTTCTTCGCGCGCCGCCGCCCCGGGCCCCCCCGCAT
CGCGGCGCCCAAGCTGGCCTGCCGCACCCCCAGCCCCGCCAGGCCCGCACTCCGCGCCCCGGCCTCCGCTACCAG
TGGCAGCCGCAAGCGCGCCCGCCCGCCCGCCGCCCCCGGACGCGACCAGGCCAGGACACCGGCCCGCAGGAGACT
GCGGCTGTCGGTGGACGAGGTTTCCAGCCCCAGTACCCCCGAGGCCCCAGACATCCCAGCCTGCCCTTCTCCGGG
CCAGAAGATAAAGAAATCCACCCCGGCAGCAGGTCAGCCGCCCCACCTGACATCCGCGCAGGACCAGGACACCAT
CTCTGAGCTTGCGTCATGCCTGCAACGGGCCCGGGAGCTGGGGGCAAGAGTCCGGGCGCTGAAGGCCAGTGCCCA
GGATGCTGGGGAGTCCTGCACCCCAGAGGCCGAGGGCCGCCCTGAGGAGCCATGTGGCGAGAAGGCGCCCGCCTA
CCAGCGCTTCCATGCCCTGGCCCAGCCCGGCCTGCCGGGACTCGTGCTGCCCTACAAGTACCAGGTGCTGGCGGA
GATGTTCCGCAGCATGGACACCATCGTGGGCATGCTCCACAACCGCTCCGAGACGCCCACCTTTGCCAAGGTCCA
GCGGGGCGTCCAGGACATGATGCGTAGGCGTTTTGAGGAGTGCAATGTTGGCCAGATCAAAACCGTGTACCCGGC
CTCCTACCGCTTCCGCCAGGAGCGCAGTGTCCCCACCTTCAAGGATGGCACCAGGAGGTCAGATTACCAGCTCAC
CATCGAGCCACTGCTGGAGCAGGAGGCTGACGGAGCAGCCCCCCAGCTCACGGCCTCGCGCCTCCTGCAGCGACG
GCAGATCTTCAGCCAGAAGCTGGTGGAGCATGTCAAGGAGCACCACAAGGCCTTCCTGGCCTCCCTGAGCCCCGC
CATGGTGGTGCCGGAGGACCAGCTGACCCGCTGGCACCCGCGCTTCAACGTGGATGAAGTACCCGACATCGAGCC
GGCCGCGCTGCCCCAGCCACCCGCCACGGAGAAGCTCACCACTGCTCAGGAGGTGCTGGCCCGGGCCCGCAACCT
GATTTCACCCAGGATGGAGAAGGCCTTGAGTCAATTGGCCCTGCGCTCTGCTGCGCCCAGCAGCCCCGGGTCTCC
CAGGCCAGCACTGCCGGCTACCCCACCAGCCACCCCGCCTGCAGCCTCTCCCAGTGCTCTGAAGGGGGTGTCCCA
GGATCTGCTGGAGCGGATCCGAGCCAAGGAGGCACAGAAGCAGCTGGCACAGATGACGCGGTGCCCGGAGCAGGA
GCAGCGGCTGCAGCGCTTAGAACGGCTGCCTGAGCTGGCCCGCGTGCTGCGGAGCGTCTTTGTGTCCGAACGCAA
GCCTGCGCTCAGCATGGAGGTGGCCTGTGCCAGGATGGTGGGCAGCTGTTGTACTATCATGAGCCCTGGGGAAAT
GGAGAAGCACCTGCTGCTCCTCTCCGAGCTGCTGCCGGACTGGCTCAGCCTCCACCGCATCCGCACCGACACCTA
CGTCAAGCTGGACAAGGCCGCGGACCTCGCCCACATCACTGCACGCCTGGCCCACCAGACACGTGCTGAGGAGGG
GCTGTGAGCCTGGGGGCCACTGTGGACAGACGTGGGCTTCAGAAGCTCGCTGGCCTGGGCCCACCAGCATTTTCT
TTTATGAACATGATACACTTTGGCCTTCCTTTCCCCAGCGCCCCTGAGGGCCAGAGGCAGATGTGGGCTGCAGGC
TGCACAGCCCGAGGGTCTCTGGCTGCGGGCGGTGGGCCCCTTCATGGGGCTCACCTGGTGGATTCACATTAAACC
GGTTTCTGTGGGC

FIGURE 3417

ACCCCTCGTGGCGGTCCCGCCCGTCCCCGCGCAGGCGCGCTCGGGCTGCCGCTGGCTCTTCGCACGCGGCCATGG
CCGACTCCGAGCTGCAGCTGGTTGAGCAGCGGATCCGCAGCTTCCCCGACTTCCCCACCCCAGGCGTGGTATTCA
GGGACATCTCGCCCGTCCTGAAGGACCCCGCCTCCTTCCGCGCCGCCATCGGCCTCCTGGCGCGACACCTGAAGG
CGACCCACGGGGGCCGCATCGACTACATCGCAGGCCTAGACTCCCGAGGCTTCCTCTTTGGCCCCTCCCTGGCCC
AGGAGCTTGGACTGGGCTGCGTGCTCATCCGAAAGCGGGGGAAGCTGCCAGGCCCCACTCTGTGGGCCTCCTATT
CCCTGGAGTACGGGAAGGCTGAGCTGGAGATTCAGAAAGACGCCCTGGAGCCAGGACAGAGGGTGGTCGTCGTGG
ATGATCTGCTGGCCACTGGTGGAACCATGAACGCTGCCTGTGAGCTGCTGGGCCGCCTGCAGGCTGAGGTCCTGG
AGTGCGTGAGCCTGGTGGAGCTGACCTCGCTTAAGGGCAGGGAGAAGCTGGCACCTGTACCCTTCTTCTCTCTCC
TGCAGTATGAGTGACCACAGGGCCTCCCAGCCCAACATCTCCAGCTGGATCCCAGGGAAATATCAGCCTTGGGCA
ACTGCAGTGACCAGGGGCACCGGCTGCCCACAGGGAACACATTCCTTTGCTGGGGTTCAGCGCCTCTCCTGGGGC
TGGAAGTGCCAAAGCCTGGGGCAAAGCTGTGTTTCAGCCACACTGAACCCAATTACACACAGCGGGAGAACGCAG
TAAACAGCTTTCCCAC

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FIGURE 3418

CGGACGCTCGCTAGGTCGGCTCGCTGGCCGGGGCTCCGCGGCTCCCGTGGTTGCCATGGCGGCGGTTGTCGCGGC
GACGAGGTGGTGGCAGCTGTTGCTGGTGCTCAGCGCCGCGGGGATGGGGGCCTCGGGCGCCCCGCAGCCCCCCAA
CATCCTGCTCCTGCTCATGGACGACATGGGATGGGGTGACCTCGGGGTGTATGGAGAGCCCTCCAGAGAGACCCC
GAATTTGGACCGGATGGCTGCAGAAGGGCTGCTTTTCCCAAACTTCTATTCTGCCAACCCTCTGTGCTCGCCATC
GAGGGCGGCACTGCTCACAGGACGGCTACCCATCCGCAATGGCTTCTACACCACCAACGCCCATGCCAGAAACGC
CTACACACCGCAGGAGATTGTGGGCGGCATCCCAGACTCGGAGCAGCTCCTGCCGGAGCTTCTGAAGAAGGCCGG
CTACGTCAGCAAGATTGTCGGCAAGTGGCATCTGGGTCACAGGCCCCAGTTCCACCCCCTGAAGCACGGATTTGA
TGAGTGGTTTGGATCCCCCAACTGCCACTTTGGACCTTATGACAACAAGGCCAGGCCCAACATCCCTGTGTACAG
GGACTGGGAGATGGTTGGCAGATATTATGAAGAATTTCCTATTAATCTGAAGACGGGGGAAGCCAACCTCACCCA
GATCTACCTGCAGGAAGCCCTGGACTTCATTAAGAGACAGGCACGGCACCACCCCTTTTTCCTCTACTGGGCTGT
CGACGCCACGCACGCACCCGTCTATGCCTCCAAACCCTTCTTGGGCACCAGTCAGCGAGGGCGGTATGGAGACGC
CGTCCGGGAGATTGATGACAGCATTGGGAAGATACTGGAGCTCCTCCAAGACCTGCACGTCGCGGACAACACCTT
CGTCTTCTTCACGTCGGACAACGGCGCTGCCCTCATTTCCGCCCCCGAACAAGGTGGCAGCAACGGCCCCTTTCT
GTGTGGGAAGCAGACCACGTTTGAAGGAGGGATGAGGGAGCCTGCCCTCGCATGGTGGCCAGGGCACGTCACTGC
AGGCCAGGTGAGCCACCAGCTGGGCAGCATCATGGACCTCTTCACCACCAGCCTGGCCCTTGCGGGCCTGACGCC
GCCCAGCGACAGGGCCATTGATGGCCTCAACCTCCTCCCCACCCTCCTGCAGGGCCGGCTGATGGACAGGCCTAT
CTTCTATTACCGTGGCGACACGCTGATGGCGGCCACCCTCGGGCAGCACAAGGCTCACTTCTGGACCTGGACCAA
CTCCTGGGAGAACTTCAGACAGGGCATTGATTTCTGCCCTGGGCAGAACGTTTCAGGGGTCACAACTCACAATCT
GGAAGACCACACGAAGCTGCCCCTGATCTTCCACCTGGGACGGGACCCAGGGGAGAGGTTCCCCCTCAGCTTTGC
CAGCGCCGAGTACCAGGAGGCCCTCAGCAGGATCACCTCGGTCGTCCAGCAGCACCAGGAGGCCTTGGTCCCCGC
GCAGCCCCAGCTCAACGTGTGCAACTGGGCGGTCATGAACTGGGCACCTCCGGGCTGTGAAAAGTTAGGGAAGTG
TCTGACACCTCCAGAATCCATTCCCAAGAAGTGCCTCTGGTCCCACTAGCACCTGCGCAGACTCAGGCCAGGCCT
AGAATCTCCGGTTGGCCCTGCAAGTGCCTGGAGGAAGGATGGCTCTGGCCTCGGTCCTCCCCCAACCCTGCCCAA
GCCAGACAGACAGCACCTGCAGACGCAGGGGGACTGCACAATTCCACCTGCCCAGGACCTGACCCTGGCGTGTGC
TTGGCCCTCCTCCTCGCCCACGGCGCCTCAGATTTCAGGACCCTCCTCCTCGCCCACGGCGCCTCAGACCTCAGG
ACCCTGCCGTCTCACGCCTTTGTGAACCCCAAATATCTGAGACCAGTCTCAGTTTATTTTGCCAAGGTTAAGGAT
GCACCTGTGACAGCCTCAGGAGGTCCTGACAACAGGTGCCTGAGGTGGCTGGGGATACAGTTTGCCTTTATACAT
CTTAGGGAGACACAAGATCAGTATGTGTATGGCGTACATTGGTTCAGTCAGCCTTCCACTGAATACACGATTGAG
TCTGGCCCAGTGAATCCGCATTTTTATGTAAACAGTAAGGGAACGGGGCAATCATATAAGCGTTTGTCTCAGGGG
AGCCCCAGAGGGATGACTTCCAGTTCCGTCTGTCCTTTGTCCACAAGGAATTTCCCTGGACGCTAATTATGAGGG
AGGCGTGTAGCTTCTTATCATTGTAACTATGTTATTTAGAAATAAAACGGGAGGCAGGTTTGCCTAATTCCCAGC
TTG

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FIGURE 3419

GTGACCAGCGGCGGGTCACGTGACGCGGTGCCTGGCGCCGAGCCTCCCAAGATGGCGGTGTGCATCGCGGTGATT
GCCAAGGAGAATTACCCCCTCTACATTCGCAGCACCCCTACGGAGAACGAGCTGAAGTTCCACTACATGGTGCAC
ACATCTCTGGACGTGGTGGATGAGAAGATCTCCGCAATGGGGAAGGCCCTGGTCGACCAGAGGGAGCTGTACCTG
GGCCTGCTCTACCCCACGGAGGACTACAAGGTATACGGCTACGTCACCAACTCCAAGGTGAAGTTTGTCATGGTG
GTAGATTCCTCCAACACAGCCCTTCGAGACAACGAAATTCGCAGCATGTTCCGGAAGCTACACAACTCCTACACA
GACGTGATGTGCAACCCCTTCTACAACCCGGGGGACCGCATCCAGTCCAGCAGGGCCTTTGATAACATGGTGACG
TCGATGATGATACAGGTGTGCTGAGTGAGCTGTGCTGCCAGCCATCGCAGAGGAGCCCGCGCACGACTGTGGTGG
GGCCGTCGGTCTGTTCTGGTTGCCTCTTCCTGAATGGGACGCCTGGGGCTTTCAGGGCAGGCAGCTGTGCATGTT
CTCTCAACTAAAGGTCTTGTGAGAGGA

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FIGURE 3420A

CTCCAGGTTGGCCCCTGAGGGTGGCCTCCTCATGCCGGCTTCAAGACTGAGGGACAGGGCAGCCAGTTCAGCCTC
GGGATCCACCTGTGGCTCCATGTCCCAGACGCACCCTGTGCTGGAGAGCGGCCTCCTGGCATCTGCCGGCTGCTC
CGCACCCCGGGGTCCCAGGAAGGGCGGCCCAGCCCCAGTGGACAGGAAAGCTAAGGCCTCAGCGATGCCGGACTC
CCCAGCGGAGGTGAAGACGCAGCCCCGGTCCACACCCCCCAGCATGCCGCCCCCACCGCCTGCCGCATCCCAGGG
GGCCACACGCCCCCCCTCCTTCACGCCACACACACATCGAGAGGACGGGCCTGCGACGCTGCCCCACGGCCGTTT
TCATGGCTGCTTAAAATGGTCTATGGTCTGTCTCTTGATGAACGGCAGCAGCCACTCACCAACAGCCATCAATGG
TGCACCGTGCACACCCAACGGCTTCAGCAATGGCCCGGCCACCTCGTCCACAGCCTCCTTGTCCACACAGCACCT
GCCCCCAGCCTGCGGGGCCCGGCAGCTCAGCAAGCTCAAGCGCTTCCTCACCACACTGCAGCAGTTTGGCAGCGA
CATCTCCCCAGAGATTGGGGAGCGCGTGCGCACACTGGTGCTGGGCCTGGTGAACTCGACATTGACGATCGAGGA
GTTTCATTCCAAGCTTCAGGAGGCCACCAACTTCCCTCTGCGGCCGTTTGTCATTCCCTTCCTGAAGGCAAACCT
GCCCTTGCTGCAGCGGGAGCTCCTGCACTGTGCACGCCTGGCCAAGCAGACGCCCGCCCAGTACTTGGCCCAGCA
TGAGCAGCTCCTGCTGGACGCCAGCGCCTCCTCCCCCATCGACTCCTCAGAGCTGCTACTGGAAGTCAACGAGAA
CGGCAAGAGGAGGACGCCCGACAGGACCAAAGAGAACGGGTCAGACCGCGACCCGCTGCACCCCGAGCACCTCAG
CAAACGGCCATGCACCCTGAACCCTGCCCAGCGCTACAGCCCCAGCAACGGGCCACCGCAGCCCACACCGCCGCC
GCACTACCGCCTGGAGGACATAGCCATGGCCCACCACTTCCGAGATGCCTACCGCCACCCAGACCCCCGGGAGCT
ACGAGAGCGCCATCGGCCGCTTGTGGTGCCTGGGTCCCGGCAGGAAGAAGTGATCGACCACAAGCTCACAGAGCG
TGAGTGGGCAGAAGAGTGGAAGCACCTCAACAACCTCCTGAACTGCATCATGGACATGGTGGAGAAGACGCGGCG
CTCGCTCACGGTGCTGCGCAGGTGCCAGGAGGCCGACCGCGAGGAGCTCAACCACTGGGCGCGGCGCTACAGCGA
CGCCGAGGACACAAAGAAGGGCCCCGCTCCCGCCGCGGCCCGGCCCCGCAGCAGCTCCGCCGGTCCCGAAGGGCC
TCAGCTAGACGTGCCTCGCGAGTTCCTGCCGAGGACCCTCACCGGCTACGTGCCTGAGGACATCTGGAGGAAGGC
TGAAGAGGCCGTGAATGAGGTGAAGCGGCAGGCCATGTCGGAGCTGCAGAAAGCCGTGTCGGACGCGGAGCGCAA
AGCGCACGAGCTCATCACCACGGAGCGTGCCAAGATGGAGCGGGCCCTGGCCGAGGCGAAGCGGCAGGCCTCCGA
GGACGCCCTGACGGTCATCAACCAGCAGGAGGACTCCAGCGAGAGCTGCTGGAACTGCGGGCGGAAAGCCAGTGA
GACGTGCAGCGGCTGCAACGCGGCACGCTACTGCGGGTCCTTCTGCCAGCATCGGGACTGGGAGAAGCATCACCA
CGTGTGTGGCCAGAGCCTGCAGGGCCCCACAGCCGTGGTGGCCGACCCGGTGCCTGGACCGCCCGAAGCCGCCCA
CAGCCTGGGCCCCTCCCTGCCTGTGGGTGCTGCCAGCCCCAGCGAAGCCGGCTCTGCGGGGCCTTCTCGCCCCGG
CTCCCCCAGCCCACCTGGCCCACTGGACACCGTGCCCCGCTGACCCCACTGGCCCCTGGCCTGCCGGACACAGCA
CCGTGCCAACCCCACCCAGCTCCAGGCCCACCGGATGCTGTGCCTGGCCTCCGATGCCTGGCCTGCCAGACACTG
CGCCCCGCCTGACCTGGGGGAGCCGACCAATTAGTCACTGCTGCTACTGCCCCTCTCCGAAAGAAGACACAGAAC
CAACAAAACCGCATTCAGTGCACCTGCCTCAGCTACCTAATGATTCCGCGCGGAGACCTCCTGACAACGTCTCTT
CAAGCATCCTCAGAAGCCTCGACTGAGCTTTAGACAGCAGAGCAGATGCCGCAGGCGCGGCGGCTCTGCCCACCT
CTCTTTTCCTCTCTGTCTGTCTCTCCCCCTCTGTCTTCTCTATCCTCTCTCTCTCTATGACTATCACACACTTTC
TCTTCAATGAAAAAATCGAATTGGTGGCTTATATTTTCAGCAAAGAATTTTGGGGGGTTTTGTGTGTTGGCAAAA
GAGCTACTCAGAAATGGACAAAGAAAACGGGGGGGTTCTCCCCCTCCTGATTAAAAAGGGAGAAAGAAAACTGCG
ATTTTATAGCTGGAGATCTGAACCCAGCTGTGCCCCTCCCCCAGGGGCGTGAGGCTGATCAGCGAAGACGGGAGG
AAAGATTTCGATTTCTGACTCAAGATGCATTTTTGGTTTCAGATTTTTTTTTCCTGTAATGTTAAACTCTTTGGC
TTTAAGTAAAAATCCAAAAAGTTTTTTTAAAAAAGCAAAGGAAGCATACTTGTGAACTACCTTGCTAGCTAGCCA
GCCAAGGATACCGGACACACCTCTGCTCCAAAGGAAATCCAAAAAAGCAAACACAAGAAATCAAAATCCAAAATT
TGTTTGTCACTGCCAAAGTATTTTTTTCACTGTTTCACTTGCTCTTGGGTTTGTTTGGATGTGGGTCTTTTTCTC
TTCTGTTCTGATTTTGTTTGTGGGTGTCGGGATATTTGGGTGCAGAGGGTTTGTGCCCAGTTAGAAGCGACTTTT
GTTCTCTTCTGCGTAGGCGTTGGTGCGTCCGCCGCGTGTGCGTGGTCCGTGTGCCGTTGCTCCGGCCTGCGTCTC
CATATGTGTAGGAAAGGACACGCCGTCTGTCCTCACGCCCCCTGTGACTTTTCATATTTCCGTTTTCCACTTGTG
GAAAAAAAGTGCTAAAGTTTTCTTCCCAGAGAGAGCATAATTCCGAAACAAAACTGTGACAATCTTTTGGGTTGA
TTCTCGACTGCTTTTCGAGCATGCGGAGCCAGCAGGCCTCCCTGAAACACTGCTTCTCGGCCAGCCCGTCCTCCT
CTACCTCTCTCCTCTCCGCGCCCTCCGACCTCTCTCGGCCCCCTCACCCCAGCTCCGACCTCTCTCAGCCCCATC
GCCCCAACTCCAACCTCTCGGCCCCATCGCCCCACCGCAGCTACTCCCCTTTCTTCCAAACTTTTGCAGAAAAAA
CAAAAAAACTACAAACAAAAGCAGCCCTCTGCCTCCTCCCCAGGGAAGACCCTGACCGTGTACATAGCCCTGGTG
CTCCTGCCCAGCCACCCCTCAGATGCGTTCGCCTCTGGCCCTGGGGTGTGTCTCGGTGACGTTTTCTATCAGACG

FIGURE 3420B

TGCTCCCTCCCATCCTCCAGCCCTGCCCACCCTCCCTCCACTCCTCTCAACTGCCTCAGCGATTTCAAGAAGGAA
ATAAAGGGATAAAGAAATTCATGCTTGCACCGAGTACAAGGACAGACAGCAGGCACGGCCCGCAGCCTGGCATCT
GTGCGTGTGGCGTGGCCCGTGGCTTGGCATCTGTGTGCGTGGTGTGGCCCGTGGCCTGGCATCTGTGTGCGTGGC
GTGGCCCGTGGCCTGGCATCTGTGTGTGTGGCGTGGCCCGTGGCCTGGCATCTGTGCGCGTGGCGTGGCCCGTGG
CCTGGCATCTGTGTGCGTGGCTATCAGGAGTTCTAGGAACTCAGTGCAATACGGGAGTGACCCAGCTACTGAACC
AGCCACGAACAGCCCGCCAGAGGCCTGAAGCTGAGCGTGTACGTTAATGTGAATGTATATAGTCTTTGCAGAGGT
CCAAATGATATTCATGATGGTAATAAACGAGATGTTTGCCAAATAAAAAA

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FIGURE 3421

GGAGTCTCGCGAGGATCTTGTGACTTATCGCGGCATCGCCCAGCGGTTGCCGGGAAACGGCGTGGCTTCCGGGGG
CGGGCGCCCTGGTCCCGGAGTCGCCGCTGGGCCTGTCCGCTGGCGTCATGGCACCGAAAAAGAAAGGGAAGAAAG
GCAAAGCCAAAGGCACCCCGATTGTCGATGGGCTCGCTCCAGAGGACATGAGCAAGGAGCAGGTGGAGGAGCATG
TCAGCCGCATCCGGGAGGAGCTGGACCGCGAGCGGGAGGAACGAAACTACTTCCAGCTGGAGCGGGACAAGATCC
ACACCTTCTGGGAGATCACACGGAGGCAGCTGGAGGAGAAGAAGGCTGAGCTGCGGAACAAAGACCGGGAGATGG
AAGAAGCCGAGGAGAGGCACCAGGTGGAGATCAAGGTGTACAAGCAGAAAGTGAAGCACCTGCTATATGAGCACC
AGAACAACCTGACAGAGATGAAGGCTGAGGGCACTGTAGTCATGAAGCTGGCACAGAAAGAGCACCGCATACAGG
AGAGTGTGCTGCGCAAGGACATGCGGGCACTGAAGGTGGAGCTCAAGGAGCAGGAGCTGGCCAGTGAGGTGGTGG
TGAAGAACCTGCGGCTGAAACACACCGAGGAGATCACCAGGATGCGGAATGATTTTGAGAGGCAAGTTCGAGAAA
TTGAGGCCAAGTATGATAAGAAGATGAAGATGCTGAGGGACGAACTCGACTTGCGGAGAAAGACTGAGCTCCACG
AAGTGGAGGAGAGGAAGAATGGCCAGATCCACACGCTGATGCAGCGCCACGAGGAGGCCTTCACCGACATTAAGA
ACTACTACAACGACATCACCCTCAACAACCTGGCCCTCATCAACTCCCTCAAGGAGCAGATGGAGGACATGCGGA
AGAAGGAGGACCACCTGGAGAGGGAGATGGCAGAGGTGTCTGGGCAGAACAAGCGCCTGGCAGACCCTCTCCAGA
AGGCTCGGGAGGAGATGAGCGAGATGCAGAAACAGCTCGCAAACTACGAGAGGGACAAGCAGATCCTGCTTTGCA
CAAAAGCCCGTTTGAAAGTCAGGGAGAAAGAGCTGAAAGACCTGCAGTGGGAGCATGAAGTGTTAGAGCAGCGAT
TCACCAAGGTGCAGCAGGAGCGGGACGAGCTCTATCGGAAGTTCACCGCAGCCATCCAGGAGGTGCAGCAGAAGA
CAGGGTTCAAGAACCTCGTGCTAGAACGCAAGCTGCAGGCTCTGAGCGCCGCTGTGGAGAAGAAGGAGGTGCAGT
TCAACGAGGTCCTGGCTGCCTCTAACCTGGACCCTGCAGCCCTGACGCTGGTGTCCCGCAAGCTGGAGGATGTTC
TTGAGTCGAAGAACAGCACCATCAAGGACCTGCAGTATGAGCTGGCCCAGGTCTGTAAGGCCCATAACGACCTGC
TGCGCACGTATGAGGCAAAGCTGCTGGCCTTCGGGATCCCTCTGGACAACGTGGGCTTCAAGCCCTTGGAAACAG
CTGTGATCGGACAGACACTGGGCCAGGGCCCCGCGGGACTGGTGGGCACCCCGACGTAGCTGCCCCCCTGGGGGG
CCACAGCCCAGAGAACCAGCCTAGGAACACTCGGGATGACACCCCTTATCACACCAAGGACAGCAAGTTTTTTAG
ATTTTATCATCAGCAAATGAAAGCTTTTCACATGTTCTTGCCATCCTCTTTCCTGGCTCTGTGGAGGAGAACCAC
CTGCAGGACCCTCACCCATGGTGTCCCTGTCGCTCCCTTCCCTGGGTGCCGCACGTCCAGCCTGTGTCCAGGCCT
ACTCCCTGGTCTCACCTCCGACCACAGTCGGCGGCACCTTCTCAGAGTGCCCCGCACTCACCTGGGGGTTGGGGC
AGTGCCGCGCTGTGCTGCCTGTCTTCGCGCCACTGTTGTCCCACCGAATGGACAGCTTTGCAGGTGCTGGCACTA
ACTTCATTGACACCTGAGTCACAGCTGCCCAGTGGGATTCTCCAGGGGGCCGGGACTTCCCTAGGAAGTGGTGAG
CCAATGCTCCCTGATGAGCACAAAGCCCGCTCTGTTGAGGGCTGGGTGGGTGCAGCCAGCGTGCGGGAACGGGCA
GGCAGCCTCCCGCTGCCAGTCTTCGCTCTAACTCCCTCGGTAGGTGATGTAGGACCAGGGGCACGTGGAACTTCT
GGGCCTTGCTGGTGATGGTTAAAACAACCTGAGATGGAGAGGCCAGGAGAGAGTATAAGGGGATAGCAGCAAACC
ACCTATCTGGCCCCAACACACCTGAGAGAATTCAGCAGCCCAGACTGAGGGTCTGGGATGGGGTGAACCTTCCGC
ACCAGAGGGACACTCCACAGAAGCCACAGCCCAGTAAGTCAGGCGCTTCTGCGGCGGCTCCAGTGTGGGGTGAGG
CAGTGAGGTTAGGCCCAGAGAGCTGGAGTTGGCTCAGATGAAAACCTCTGTCAACAAAGAGGGGATGAATCACCC
TTGGCCCAGCCTCCCCACAAAGCCTGACCCTGGGCAGGTGAGTGACGGGTGTGTCCTCGTAGAGTCTATTGCTGC
CTGGACACCTTTCTTTTGGGAGCTCAAAGCAAGTGAGCTCACCTACCTGCCACCGCCCAGGACCAGTCTGCCCAC
TGCCTAAATGATGCCCGGCCAGCAGGACCTGGCCTGCAGATCCCAGTGAGTCATGAGCCTCAGCCCCCTCCAGCC
CACTGGGGCTCTCACCTCCACATGTGGGTAGAAGCTTTCCTGCCCCCTCTTCCTCCAGTAGCCCTCAGTGTCGAA
GGTGAGCTTGTAGGTGCCTGCCTTCATCTGGTCCAGGACAGTGACCATCTGGGTCTGTGTAGCTGGGGAGAGGAT
GAGGCTGCAGAGATGGGGACCAGAAGCCCCCCACCCCAGCTTTCCTGGGTCTGCATCCCAGTGGGCCTCAGACAC
TGCCCTGCCACCTGTCAGACTTGGGTGAGCAGACACAGTGAGGCTGTTAGGTCCTGCAGTTCCAGAGCAGTCTAG
GGACACCACTGCCCTGTCTTTAGGAAATCACAACACAGAGAAGCAAAAAGGGAAAAAGTCTCCCACAATTTATCC
CATGAGCAAGAACCACTTTATAGCTGGCATATATTTTTCCAGATTTTCTCTATGCATAAGTATATTTGTTTAAAA
ACTTATAAAGTGGATTATACTATTTGTATTGTTTT

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FIGURE 3422

GTGAGCCGAGATTGCACCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCCATCTAAAAAAAATAAATAAACA
TGGGAGAAACCTGGAAGAATATTTGCTCAACTGTGAGGCATGGTTGGTGGCTAAGGGATCACAGAATGGCAGGCC
TGCCTATTCCTCCTGAGATCGTTAAGGAGGCTGAGGTGCCGCAGGCTGCGCTGGGCGTCCCAGCCCAGGGGACAG
GGGACAATGGCCACACGCCTGTGGAGGAGGAGGTCGGGGGCATCCCAGTACCAGCACCGGGGCTCCTGCAGGTCA
CGGAGAGGAGGCAGCCTCTGAGCAGCGTCTCCTCTCTGGAGGTCCACTTCGACCTCCTGGACCTCACTGAGCTCA
CCGACATGTCGGACCAGGAGCTGGCCGAGGTCTTTGCTGACTCGGACGACGAGAACCTCAACACCGAGTCCCCAG
CAGGTCTGCACCCGCTGCCCCGGGCCGGCTACCTGCGCTCCCCTTCCTGGACGAGGACAAGGGCTGAGCAGAGCC
ACGAGAAGCAGCCCCTAGGCGACCCCGAGCGGCAGGCCACAGTCCTGGACACGTTTCTCACTGTGGAGAGGCCCC
AGGAGGACTAGACCATCTCCACCTGCCCCAGCTCCTGCAGGGATGGGGTCCGAACACGATGGCAGATCTGGGCAG
TGCTGACCCAGCAGACACACTTCACCCGCCCACGAGGCTCCAGCCGTCACCTCCTGACACACACCCTGGGGGCAG
CTCTCTGCCAGCCCCGAGACCGGCCTTGTCTGCTGGGCACGGGTCTTCGCCTCACTTGGAGACCAGCCGGCTTTC
CTGGGGGACACACGGGGCCCCCGGATGCCTCTGGGAGCCCCAGCACAAGCACAGCCCAGTGGCCTTACGTCCAGC
TCGTTCCTGGGCCCCGAGTCAGGAAGACAGCGTCACGGAGTCACTGCCAGGAACGTGCTGAGGAATGGAGTGGCC
CACGGCGGCCTTGGGGTGAAGGGGACCCAGGCCTGTGACAGCCACTCCAGGAACTCCTGGGGGTGCTCCAACCTC
CGCGTTTTCCTGTGCTGCCAAGCTCAGAAGCCAGAGGCGGGTTTGGTAGTGGCTAATGGGACAATGTGCTGTCCA
GCAAAGCACACATGGAGAAGCGGCCCCAAAATTCCCACCTTGATTTCCATCCTGCCCCTTCTTCTACTCCACGGA
GGCGCTGTCTCACTAGGGTCCCCTCCCCAAGGCTCAGCTCTAAGACCTGCACCTGCTTCTCTTGGCCCCTGCGTG
ACAGACAAGTCCATTCCCTCCTTAGCTCAGAACACCAAATATCACCAGACTGCCTAAGAGACTTGATGACACCTC
CCGGAATGCTCTCGGGGTGGGGTTCACCTCTCCTTGTCCTGCACCCACTGCTAGGCCACATTCTCGTTTCTGCTC
ACATCCCATTGCCCGGCTACAAGGCCTGCCCACGGCCCTTAAACTTGCTGGGCAGGTTTGGAGCCCATGGGACCC
CGTGGGTCTCTGTCCAGGAGCAGCAGAGGAGGCTGACAGGCCCTGCTCCCTCTGCTCTGGGGGTGTCTGGGAGCC
CCAGCTCACACCCTCCCAATGCTTATATGCTGAAGCTCACAGAATGGGCTTCTTGCCTGACAGCAAGTCAAAGAA
TGAGTTTAATATCAAAGTGTAAGCTTACTTTCCATCCCCAAGCCAGCCTGCCCCCTGCCCCATTTCCCATGAGCA
CACTTCTGGGGAAGGAAAACAGGCTCCTGGCCTTCACTCTCAGCAGAGCTTTGGAGATGCCCCAGGCATGCCCTG
AGCTCCTTCTGTGTACCTGCTCCCACTTCTGAGCCACCCGCTGCCCCTCCGCACTGCTGGCAAACCCAGTTCCTG
CCTCAGCCAGGTCTCCTTCCCTGGTTTCCAGTCACACAGAGCCCAGCAGCTTTCTCTTTCAGTCCCATAAGGGCA
GCCTTGTGTCCCTGGCCACACTTCCACCCGCCAGGGTCTTCCTCCCCATCTTTCCATCCTTCCTGCTGAGCTTCC
ACAGAGCTCGTTTGCAAACAGGGGGATTAAAGCATCACTGCGCATTCG

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FIGURE 3423

AGATGCGAGGCGGCGGTCAGCAGGTGCCGAACCCACGGCCAGGCTTCCGTGGCCAGCAGCCCTAGAGGAATGGCC
ATCCTGTCCCTGCGAGCCCCTGGGCCCTGGCAGGCGATGCAGGTGGGATGCTATGGAATATGATGAGAAGCTGGC
CCGTTTCCGGCAGGCCCACCTCAACCCCTTCAACAAGCAGTCTGGGCCGAGACAGCATGAGCAGGGCCCTGGGGA
GGAGGTCCCGGACGTCACTCCTGAAGAGGCCCTGCCTGAGCTGCCCCCTGGGGAGCCGGAATTCCGCTGCCCTGA
ACGCGTGATGGATCTCGGCCTGTCTGAGGACCACTTCTCCCGCCCTGTGGGTCTGTTCCTGGCCTCTGACGTCCA
GCAGCTGCGGCAGGCGATCGAGGAGTGCAAGCAGGTGATTCTGGAGCTGCCCGAGCAGTCGGAGAAGCAGAAGGA
TGCCGTGGTGCGACTCATCCACCTCCGGCTGAAGCTCCAGGAGCTGAAGGACCCCAATGAGGATGAGCCAAACAT
CCGAGTGCTCCTTGAGCACCGCTTTTACAAGGAGAAGAGCAAGAGCGTCAAGCAGACCTGTGACAAGTGTAACAC
CATCATCTGGGGGCTCATTCAGACCTGGTACACCTGCACAGGTGGGCCGAGACCCAGACGAGGAGTGAGGAATGA
GAGAGACCAAAGTTCCTGCCTCCGCTGGGCTCACATTCAGATGTGAGCTATCCAGTGTGGTGGCCACTAGCCAAA
CATGGCCAGTCAAAGTTAAATTAACTAAATATGCATTTCCTCGTTGTACTGTCTACATTGGACAGGGCTGTTCTG
GATGAGAAATTAAACTAGTGAATTAC

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FIGURE 3424

AGCCCGGGGCAGCCAGCAGTACCGGGCCCTGACCGTGCCCGAGCTCACCCAGCAGATGTTCGATGCCAAGAACAT
GATGGCGCCGC**ATG**TCCATGAAGGAGGTGGACGAGCAGATGCTGGCCATCCAGAGCAAGAACAGCAGCTACTTCG
TGGAGTGGATCCCCAACAACGTGAAGGTGGCCGTGTGTGACATCCCGCCCCGCGGCCTCAAGATGTCCTCCACCT
TCATCGGGAACAGCACGGCCATCCAGGAGCTGTTCAAGCGCATCTCCGAGCAGTTCACGGCCATGTTCCGGCGCA
AGGCCTTCCTGCACTGGTACACGGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCCGAGAGCAACATGAACG
ACCTGGTGTCCGAGTACCAGCAGTACCAGGACGCCACGGCCGAGGAAGAGGGCGAGATGTACGAAGACGACGAGG
AGGAGTCGGAGGCCCAGGGCCCCAAG**TGA**AGCTGCTCGCAGCTGGAGTGAGAGGCAGGTGGCGGCCGGGGCCGAA
GCCAGCAGTGTCTAAACCCCCGGAGCCATCTTGCTGCCGACACCCTGCTTTCCCCTCGCCCTAGGGCTCCCTTGC
CGCCCTCCTGCAGTATTTATGGCC

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FIGURE 3425

GGAGAGGGTGTGAGGGCAGATCTGGGGGTGCCCAGATGGAAGGAGGCAGGCATGGGGGACACCCAAGGCCCCCTG
GCAGCACCATGAACTAAGCAGGACACCTGGAGGGGAAGAACTGTGGGGACCTGGAGGCCTCCAACGACTCCTTCC
TGCTTCCTGGACAGGACT**ATG**GCTGTGCAGGGATCCCAGAGAAGACTTCTGGGCTCCCTCAACTCCACCCCCACA
GCCATCCCCCAGCTGGGGCTGGCTGCCAACCAGACAGGAGCCCGGTGCCTGGAGGTGTCCATCTCTGACGGGCTC
TTCCTCAGCCTGGGGCTGGTGAGCTTGGTGGAGAACGCGCTGGTGGTGGCCACCATCGCCAAGAACCGGAACCTG
CACTCACCCATGTACTGCTTCATCTGCTGCCTGGCCTTGTCGGACCTGCTGGTGAGCGGGAGCAACGTGCTGGAG
ACGGCCGTCATCCTCCTGCTGGAGGCCGGTGCACTGGTGGCCCGGGCTGCGGTGCTGCAGCAGCTGGACAATGTC
ATTGACGTGATCACCTGCAGCTCCATGCTGTCCAGCCTCTGCTTCCTGGGCGCCATCGCCGTGGACCGCTACATC
TCCATCTTCTACGCACTGCGCTACCACAGCATCGTGACCCTGCCGCGGGCGCGGCGAGCCGTTGCGGCCATCTGG
GTGGCCAGTGTCGTCTTCAGCACGCTCTTCATCGCCTACTACGACCACGTGGCCGTCCTGCTGTGCCTCGTGGTC
TTCTTCCTGGCTATGCTGGTGCTCATGGCCGTGCTGTACGTCCACATGCTGGCCCGGGCCTGCCAGCACGCCCAG
GGCATCGCCCGGCTCCACAAGAGGCAGCGCCCGGTCCACCAGGGCTTTGGCCTTAAAGGCGCTGTCACCCTCACC
ATCCTGCTGGGCATTTTCTTCCTCTGCTGGGGCCCCTTCTTCCTGCATCTCACACTCATCGTCCTCTGCCCCGAG
CACCCCACGTGCGGCTGCATCTTCAAGAACTTCAACCTCTTTCTCGCCCTCATCATCTGCAATGCCATCATCGAC
CCCCTCATCTACGCCTTCCACAGCCAGGAGCTCCGCAGGACGCTCAAGGAGGTGCTGACATGCTCCTGG**TGA**GCG
CGGTGCACGCGGCTTTAAGTGTGCTGGGCAGAGGGAGGTGGTGATATTGTGTGGTCTGGTTCCTGTGTGACCCTG
GGCAGTTCCTTACCTCCCTGGTCCCCGTTTGTCAAAGAGGATGGACTAAATGATCTCTGAAAGTGTTGAAG

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FIGURE 3426

GCCGAGTTTTCTGCGCTTCCTTCTCCCTCTCTCCAGACGTCGTGGTCGTTCGGTCCTATGTCGCGCCGGGCCCTC
CGGAGGCTGAGGGGGGAACAGCGCGGCCAGGAGCCCCTCGGGCCCGGCGCCTTGCATTTCGATCTCCGTGATGAC
GATGACGCGGAAGAAGAAGGGCCCAAGCGGGAGCTTGGTGTCCGGCGTCCCGGGGGCGCAGGGAAGGAGGGCGTC
CGAGTCAACAACCGCTTCGAGCTGATAAACATTGACGATCTTGAGGATGACCCTGTGGTGAACGGGGAGAGGTCT
GGCTGTGCGCTCACAGACGCTGTGGCACCAGGGAACAAAGGAAGGGGTCAGCGTGGAAACACAGAGAGCAAGACG
GATGGAGATGACACCGAGACAGTGCCCTCAGAGCAGTCTCATGCAAGTGGCAAACTCCGGAAGAAGAAAAAAAAA
CAGAAAAACAAGAAAAGCAGCACGGGAGAAGCATCGGAAAACGGACTAGAAGATATCGATCGCATCCTAGAGAGG
ATTGAGGACAGCACTGGGTTGAACCGTCCCGGCCCAGCTCCCCTGAGCTCCAGGAAGCACGTTCTCTACGTGGAG
CACAGACACTTGAATCCAGACACAGAACTGAAAAGGTATTTTGGTGCCCGGGCAATCCTGGGGGAGCAAAGGCCA
CGGCAGAGACAACGTGTGTACCCCAAGTGCACATGGCTGACCACCCCTAAAAGCACCTGGCCCCGCTACAGCAAA
CCAGGTCTGTCCATGCGGCTGCTGGAATCAAAAAAAGGCCTCTCCTTCTTTGCGTTTGAGCACAGTGAGGAGTAC
CAGCAGGCTCAGCACAAGTTCCTGGTGGCCGTGGAGTCTATGGAGCCGAACAACATCGTGGTTCTGCTCCAGACG
AGCCCTTACCACGTTGACTCACTCCTGCAGCTCAGCGATGCCTGCCGCTTTCAAGAGGATCAGGAGATGGCTCGA
GACCTCGTAGAGAGAGCGCTGTACAGCATGGAATGTGCGTTCCACCCCCTGTTCAGTCTCACCAGTGGGGCCTGC
CGGCTGGATTACCGCAGACCCGAGAACAGGAGCTTCTACCTGGCCCTCTACAAGCAGATGAGCTTCCTGGAGAAG
CGAGGCTGCCCGCGCACGGCGCTGGAGTACTGCAAGCTCATCCTGAGTCTCGAGCCGGATGAGGACCCCCTCTGC
ATGCTGCTGCTCATCGACCACCTGGCCTTGCGGGCCCGGAACTACGAGTACCTGATCCGCCTCTTCCAGGAGTGG
GAGGCTCATCGGAACCTGTCCCAGCTCCCTAATTTTGCCTTCTCTGTTCCACTGGCGTATTTCCTGCTGAGCCAG
CAGACAGACCTCCCTGAGTGTGAGCAGAGCTCTGCCAGGCAGAAGGCCTCTCTCCTGATACAGCAGGCGCTCACC
ATGTTCCCTGGAGTCCTCCTGCCCCTGCTCGAGTCTTGCAGTGTGCGGCCCGACGCCAGCGTTTCCAGTCACCGC
TTCTTTGGACCCAATGCTGAAATAAGCCAGCCCCCTGCCCTGAGCCAGCTGGTGAACCTGTACCTTGGGAGGTCA
CACTTTCTCTGGAAAGAGCCCGCCACCATGAGCTGGCTGGAGGAGAACGTCCACGAGGTTCTGCAAGCAGTGGAC
GCCGGGGACCCAGCCGTGGAAGCCTGTGAGAACCGGCGGAAGGTGCTCTACCAGCGTGCACCCAGGAATATCCAC
CGCCATGTGATCCTCTCTGAGATCAAGGAAGCCGTCGCTGCCCTGCCCCCGGACGTGACCACGCAGTCTGTGATG
GGGTTTGATCCTCTGCCTCCTTCGGACACAATCTACTCCTACGTCAGGCCAGAGAGGCTAAGTCCTATCAGCCAT
GGAAACACCATTGCTCTCTTCTTCCGGTCACTGTTGCCAAACTATACCATGGAGGGGGAGAGGCCCGAGGAAGGA
GTGGCTGGGGGTCTGAACCGCAACCAGGGCCTGAACAGGCTGATGCTGGCTGTGCGCGACATGATGGCCAACTTC
CACCTCAACGACCTGGAGGCGCCGCACGAGGACGACGCTGAGGGGGAGGGGGAGTGGGACTGAGCGTCCGCAGAG
GTGACCGAAAAGCCGTATGATGATGTTCCCGATTTCTCTGTTGGTCGGAGTCGGCCAGTTGCCTGAAGTAGGGAA
GCTGAGTGTGTCGCTCCCTGGTCCACTGTTTCTCCTATAAATGTAAATGGGTC

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FIGURE 3427

CTTGCTTTGTCACCCAGGCTGGAGTGCAGAGGCCCGATCTCGGTTCACTGCAACCTCCACCTCCCAGGTTCAAGC
GATTCTCCTGCCTCAGCCTCCCAAGTAAATGGGATTTCAGGCGTGCACCACCACGCCCAGCTAATTTTTGTATTT
TTAGTAGAGACGGGGTTTCATCATGTTGGTCAGGCTGGTCTTGAACTCCTGACCTCGTGATCCGCCCGCCTCGGC
CTCCCAAAGTGCTGGGATTACAGGTGTGGGCCACCGCGCCCGGCCGGGAACATCCTTTTCATCCGGTCCATGTCT
TGCTTGTGCCTTGGTCTCTTGTGGACCGACAGCTGCTGTCTCCCTGGCCGGGTGCTGGGCCCTCTGCACCCACCA
GCCGCGTTCTCCCCGCCCCACCCCCCTGCAGTACCGCCCAGTGACCGCGCCCCTGTCCCGCAGACCGTGCAGTCC
CTCGGCTTCGCCATCTACCGCGCGCTGGACTGGGGGCTGGACGAGAGCGAGGAGCGCGAACTCAGCCCTCAGCTG
GAGCGGCTCATCGACCTCATGGCCAACAACGACAGCGAGGACAGCGGCTGCGGTGCCGCCGATGAGGGCTACGGG
GGTCCCGAGGAGGAGGAGGAGGCCGAGGGCGTCCCCCGCAGCGTGCGCACCTTTGCCCAGGCCATGCGGCTGTGC
GCGGCGCGGCTGACCGACCCCCGGGGCGCACAGGCGCATTACCAGGCCGTGTGCCGCGCGCTCTTCGTGGAGACG
CTGGAGCTGCGGGCCTTCCTGGCCAGGGTCCGGGAGGCCAAGGAGATGCTGCAGAAGCTTCGGGAGGACGAGCCG
CATCTGGAGACGCCTCGGGCAGAGCTGGACAGCCTGGGTCACACAGACTGGGCCCGACTGTGGGTTCAGCTCATG
CGGGAGCTCCGCCGCGGAGTGAAGCTGAAGAAGGTGCAAGAGCAGGAGTTCAACCCCCTCCCCACCGAGTTCCAG
CTCACGCCCTTCGAGATGCTGATGCAGGACATCCGGGCCCGGAACTACAAGCTGCGCAAGGTCATGGTGGATGGG
GACATCCCGCCCCGGGTGAAGAAGGACGCTCACGAGCTCATCCTGGACTTTATCCGCTCACGGCCTCCACTGAAG
CAGGTCTCTGAGAGGCGGCTGCGCCCGTTGCCACCAAAGCAAAGGTCCCTGCATGAGAAGATCCTGGAGGAGATC
AAGCAGGAGCGGAGGCTGCGCCCGGTGCGGGGCGAGGGCTGGGCTGCCCGCGGGTTTGGCTCTCTGCCCTGCATC
CTCAACGCCTGCTCCGGAGATGCCAAGTCCACCTCCTGCATCAACCTGTCAGTCACAGATGCTGGGGGCAGCGCC
CAGCGCCCGCGGCCCCGCGTGCTGCTCAAGGCGCCTACCTTGGCTGAAATGGAAGAGATGAATACATCTGAGGAA
GAAGAGTCTCCGTGTGGGGAGGTGACGCTGAAACGGGACCGCTCCTTCTCAGAGCATGACCTGGCCCAGCTCCGA
AGTGAGGTGGCCTCTGGCCTGCAGTCGGCCACCCACCCCCCAGGAGGGACGGAGCCACCACGGCCCCGAGCTGGC
AGTGCGCATGTGTGGAGGCCCGGCTCCCGAGACCAGGGTACCTGTCCCGCGAGTGTCTCTGACCCCAGCCACCCC
CTACTCAGCAACCGGGGCTCCTCGGGGGACAGACCCGAGGCCTCCATGACCCCCGATGCCAAACACCTGTGGCTG
GAGTTCAGCCACCCCGTGGAGAGCCTGGCGCTGACTGTGGAAGAGGTGATGGACGTGCGCCGTGTGCTGGTGAAG
GCCGAGATGGAAAAGTTTTTGCAGAACAAGGAGCTCTTCAGCAGTCTGAAGAAGGGGAAGATTTGCTGCTGCTGC
CGGGCCAAGTTCCCGCTGTTCTCGTGGCCGCCCAGCTGTCTCTTCTGCAAGAGAGCCGTCTGCACTTCCTGTAGC
ATAAAGATGAAGATGCCTTCTAAGAAATTTGGACACATCCCTGTCTACACACTGGGCTTTGAGAGTCCTCAGAGG
GTATCAGCTGCCAAAACCGCGCCAATCCAGAGAAGAGACATCTTTCAGTCTCTGCAAGGGCCACAGTGGCAGAGC
GTGGAGGAGGCGTTCCCCCACATCTACTCCCACGGCTGTGTCCTGAAGGATGTCTGCAGTGAGTGCACCAGCTTT
GTGGCAGACGTGGTGCGTTCCAGCCGCAAGAGCGTGGACGTCCTCAACACTACGCCACGACGCAGTCGCCAGACC
CAATCCCTCTACATCCCTAACACCAGGACTCTTGACTTCAAGTGACAGCCCCAGGTGGCCAGGCCTCCAGGAGGC
ACCAGGCAGGCCCTGTATCAGGCTAGGACGCTCTGAGCTGTGCATGTACATATATACATATATAGATACATTTAT
AATATATACACACAGTCTATATATTTATATACACTGTTTCCTGGCCCCAGAGCTCATTTGGGTTCAGGCGCACTT
CAAAACCCTCCCTGGGGGAGGCTGTTTCTTCTCAGGATTCCTTGCCAGGGAGGAAGGGGAGGGAACAGGGTGGGT
TTTCTCACTGAAGAGAGAAAGCAGAAGGTTCTAGATCCTGGCACAGACTGCATCCCATGTTCCCATGCTCTTCTC
CGTCCCCAGGAATGCGAACGGCAGTTTCCCTTCCCCAGTGGACGTCTAGGTGGGGACAGGGTATCTTGGCTCCCA
GCTGGACCAGAGTGCCCTGCTTGCCTCTGCTCTCCCTTTGTGGGGACTCAGGCAGCAGAGGCATCTGGGAAGTCT
CTGAGTAGGCAGGGTCCTCCTGGGAGGCACCCCCACCTGTTTGAAAGGTCTGGCCAGGCGTGGTGGTTCAGGCCT
GTAATTCCAGCACTTTGGGAGGCCGAGGAGGGAGGATCA

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FIGURE 3428A

AGCCGCCGCCGGGGCTGTAGGCGCCAAGGCCATGTCCGACTCGTGGGTCCCGAACTCCGCCTCGGGCCAGGACCC
AGGGGGCCGCCGGAGGGCCTGGGCCGAGCTGCTGGCGGGAAGGGTCAAGAGGGAAAAATATAATCCTGAAAGGGC
ACAGAAATTAAAGGAATCAGCTGTGCGCCTCCTGCGAAGCCATCAGGACCTGAATGCCCTTTTGCTTGAGGTAGA
AGGTCCACTGTGTAAAAAATTGTCTCTCAGCAAAGTGATTGACTGTGACAGTTCTGAGGCCTATGCTAATCATTC
TAGTTCATTTATAGGCTCTGCTTTGCAGGATCAAGCCTCAAGGCTGGGGGTTCCCGTGGGTATTCTCTCAGCCGG
GATGGTTGCCTCTAGCGTGGGACAGATCTGCACGGCTCCAGCGGAGACCAGTCACCCTGTGCTGCTGACTGTGGA
GCAGAGAAAGAAGCTGTCTTCCCTGTTAGAGTTTGCTCAGTATTTATTGGCACACAGTATGTTCTCCCGTCTTTC
CTTCTGTCAAGAATTATGGAAAATACAGAGTTCTTTGTTGCTTGAAGCGGTGTGGCATCTTCACGTACAAGGCAT
TGTGAGCCTGCAAGAGCTGCTGGAAAGCCATCCCGACATGCATGCTGTGGGATCGTGGCTCTTCAGGAATCTGTG
CTGCCTTTGTGAACAGATGGAAGCATCCTGCCAGCATGCTGACGTCGCCAGGGCCATGCTTTCTGATTTTGTTCA
AATGTTTGTTTTGAGGGGATTTCAGAAAAACTCAGATCTGAGAAGAACTGTGGAGCCTGAAAAAATGCCGCAGGT
CACGGTTGATGTACTGCAGAGAATGCTGATTTTTGCACTTGACGCTTTGGCTGCTGGAGTACAGGAGGAGTCCTC
CACTCACAAGATCGTGAGGTGCTGGTTCGGAGTGTTCAGTGGACACACGCTTGGCAGTGTAATTTCCACAGATCC
TCTGAAGAGGTTCTTCAGTCATACCCTGACTCAGATACTCACTCACAGCCCTGTGCTGAAAGCATCTGATGCTGT
TCAGATGCAGAGAGAGTGGAGCTTTGCGCGGACACACCCTCTGCTCACCTCACTGTACCGCAGGCTCTTTGTGAT
GCTGAGTGCAGAGGAGTTGGTTGGCCATTTGCAAGAAGTTCTGGAAACGCAGGAGGTTCACTGGCAGAGAGTGCT
CTCCTTTGTGTCTGCCCTGGTTGTCTGCTTTCCAGAAGCGCAGCAGCTGCTTGAAGACTGGGTGGCGCGTTTGAT
GGCCCAGGCATTCGAGAGCTGCCAGCTGGACAGCATGGTCACTGCGTTCCTGGTTGTGCGCCAGGCAGCACTGGA
GGGCCCCTCTGCGTTCCTGTCATATGCAGACTGGTTCAAGGCCTCCTTTGGGAGCACACGAGGCTACCATGGCTG
CAGCAAGAAGGCCCTGGTCTTCCTGTTTACGTTCTTGTCAGAACTCGTGCCTTTTGAGTCTCCCCGGTACCTGCA
GGTGCACATTCTCCACCCACCCCTGGTTCCCGGCAAGTACCGCTCCCTCCTCACAGACTACATCTCATTGGCCAA
GACACGGCTGGCCGACCTCAAGGTTTCTATAGAAAACATGGGACTCTACGAGGATTTGTCATCAGCTGGGGACAT
TACTGAGCCCCACAGCCAAGCTCTTCAGGATGTTGAAAAGGCCATCATGGTGTTTGAGCATACGGGGAACATCCC
AGTCACCGTCATGGAGGCCAGCATATTCAGGAGGCCTTACTACGTGTCCCACTTCCTCCCCGCCCTGCTCACACC
TCGAGTGCTCCCCAAAGTCCCTGACTCCCGTGTGGCGTTTATAGAGTCTCTGAAGAGAGCAGATAAAATCCCCCC
ATCTCTGTACTCCACCTACTGCCAGGCCTGCTCTGCTGCTGAAGAGAAGCCAGAAGATGCAGCCCTGGGAGTGAG
GGCAGAACCCAACTCTGCTGAGGAGCCCCTGGGACAGCTCACAGCTGCACTGGGAGAGCTGAGAGCCTCCATGAC
AGACCCCAGCCAGCGTGATGTTATATCGGCACAGGTGGCAGTGATTTCTGAAAGACTGAGGGCTGTCCTGGGCCA
CAATGAGGATGACAGCAGCGTTGAGATATCAAAGATTCAGCTCAGCATCAACACGCCGAGACTGGAGCCACGGGA
ACACATGGCTGTGGACCTCCTGCTGACGTCTTTCTGTCAGAACCTGATGGCTGCCTCCAGTGTCGCTCCCCCGGA
GAGGCAGGGTCCCTGGGCTGCCCTCTTCGTGAGGACCATGTGTGGACGTGTGCTCCCTGCAGTGCTCACCCGGCT
CTGCCAGCTGCTCCGTCACCAGGGCCCGAGCCTGAGTGCCCCACATGTGCTGGGGTTGGCTGCCCTGGCCGTGCA
CCTGGGTGAGTCCAGGTCTGCGCTCCCAGAGGTGGATGTGGGTCCTCCTGCACCTGGTGCTGGCCTTCCTGTCCC
TGCGCTCTTTGACAGCCTCCTGACCTGTAGGACGAGGGATTCCTTGTTCTTCTGCCTGAAATTTTGTACAGCAGC
AATTTCTTACTCTCTCTGCAAGTTTTCTTCCCAGTCACGAGATACTTTGTGCAGCTGCTTATCTCCAGGCCTTAT
TAAAAAGTTTCAGTTCCTCATGTTCAGATTGTTCTCAGAGGCCCGACAGCCTCTTTCTGAGGAGGACGTAGCCAG
CCTTTCCTGGAGACCCTTGCACCTTCCTTCTGCAGACTGGCAGAGAGCTGCCCTCTCTCTCTGGACACACAGAAC
CTTCCGAGAGGTGTTGAAAGAGGAAGATGTTCACTTAACTTACCAAGACTGGTTACACCTGGAGCTGGAAATTCA
ACCTGAAGCTGATGCTCTTTCAGATACTGAACGGCAGGACTTCCACCAGTGGGCGATCCATGAGCACTTTCTCCC
TGAGTCCTCGGCTTCAGGGGGCTGTGACGGAGACCTGCAGGCTGCGTGTACCATTCTTGTCAACGCACTGATGGA
TTTCCACCAAAGCTCAAGGAGTTATGACCACTCAGAAAATTCTGATTTGGTCTTTGGTGGCCGCACAGGAAATGA
GGATATTATTTCCAGATTGCAGGAGATGGTAGCTGACCTGGAGCTGCAGCAAGACCTCATAGTGCCTCTCGGCCA
CACCCCTTCCCAGGAGCACTTCCTCTTTGAGATTTTCCGCAGACGGCTCCAGGCTCTGACAAGCGGGTGGAGCGT
GGCTGCCAGCCTTCAGAGACAGAGGGAGCTGCTAATGTACAAACGGATCCTCCTCCGCCTGCCTTCGTCTGTCCT
CTGCGGCAGCAGCTTCCAGGCAGAACAGCCCATCACTGCCAGATGCGAGCAGTTCTTCCACTTGGTCAACTCTGA
GATGAGAAACTTCTGCTCCCACGGAGGTGCCCTGACACAGGACATCACTGCCCACTTCTTCAGGGGCCTCCTGAA
CGCCTGTCTGCGGAGCAGAGACCCCTCCCTGATGGTCGACTTCATACTGGCCAAGTGCCAGACGAAATGCCCCTT
AATTTTGACCTCTGCTCTGGTGTGGTGGCCGAGCCTGGAGCCTGTGCTGCTCTGCCGGTGGAGGAGACACTGCCA

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FIGURE 3428B

GAGCCCGCTGCCCCGGGAACTGCAGAAGCTACAAGAAGGCCGGCAGTTTGCCAGCGATTTCCTCTCCCCTGAGGC
TGCCTCCCCAGCACCCAACCCGGACTGGCTCTCAGCTGCTGCACTGCACTTTGCGATTCAACAAGTCAGGGAAGA
AAACATCAGGAAGCAGCTAAAGAAGCTGGACTGCGAGAGAGAGGAGCTATTGGTTTTCCTTTTCTTCTTCTCCTT
GATGGGCCTGCTGTCGTCACATCTGACCTCAAATAGCACCACAGACCTGCCAAAGGCTTTCCACGTTTGTGCAGC
AATCCTCGAGTGTTTAGAGAAGAGGAAGATATCCTGGCTGGCACTCTTTCAGTTGACAGAGAGTGACCTCAGGCT
GGGGCGGCTCCTCCTCCGTGTGGCCCCGGATCAGCACACCAGGCTGCTGCCTTTCGCTTTTTACAGTCTTCTCTC
CTACTTCCATGAAGACGCGGCCATCAGGGAAGAGGCCTTCCTGCATGTTGCTGTGGACATGTACTTGAAGCTGGT
CCAGCTCTTCGTGGCTGGGGATACAAGCACAGTTTCACCTCCAGCTGGCAGGAGCCTGGAGCTCAAGGGTCAGGG
CAACCCCGTGGAACTGATAACAAAAGCTCGTCTTTTTCTGCTGCAGTTAATACCTCGGTGCCCGAAAAAGAGCTT
CTCACACGTGGCAGAGCTGCTGGCTGATCGTGGGGACTGCGACCCAGAGGTGAGCGCCGCCCTCCAGAGCAGACA
GCAGGCTGCCCCTGACGCTGACCTGTCCCAGGAGCCTCATCTCTTCTGACGGGACCTGCCACTGCACACCAGCCC
AGCTCCCGTGTAAATAATTTATTACAAGCATAACATGGAGCTCTTGTTGCACTAAAAAGTGGATTACAAATCTCC
TCGACTGCTTTAGTGGGGAAAGGAATCAATTATTTATGAACTGTCCGGCCCCGAGTCACTCAGCGTTTGCGGGAA
AATAAACCACTGGTCCCAGAGCAGAGGAAGGCTACTTGAGCCGGACACCAAGCCCGCCTCCAGCACCAAGGGCGG
GCAGCACCCTCCGACCCTCCCATGCGGGTGCACACGAAGGGTGAGGCTGACACAGCCACTGCGGAGTCCAGGCTG
CTAGAGGTGCTCATCCTCACTGCCGTCCTCAGGTGGGTTCGGGCTTCACCGCCTGGCCCTCTGTGGTCACAGAGG
GGCTCGGTGGCCCAGGTGGTGGTTCCGCCTCCAGGGGCAGGGCCTTGTCCTGGGTCTGTGTCAGCGGGTGCACCA
TGGACATGTGTACATTGAGGTTGTGGGCCTTCTCAAACCGCCGGCCACACTGGTCACAGGCAAAGTCCAGCTCAG
TCTCAGCCTTGTGTTTGGTCATGTGGTACTTGAGGGATGCCCGCTGCCTGCACTGGAACCCACAGACCTCACACC
TGGGGGACAGAGGCAGATAAGAAGGTGCGAGGGCCACAGCCCTGGGAGGGGGTCCTGACTCACACTTACTGCAAA
GGCTTGGCTCCCGAATGTCGCATTTGGTGGACGAGAAGGTGCTTCCGCTGCTTGAAGGTTTGTCCACATTCGTCA
CAGATATAGTTCCGCACCTCTGAGAGGGGAGAGTCCAGTGAGTCCAGGCCCCTGATGCTCCAACCTCCCGGGGGG
ACGACGATGACAATGTGAAACCATCACAGCTGGGAAGACATTTCTGCACATGGTTCACCATGCAGTGGGCCCAAG
CAAGGGGCCTATGAGGGCCTCGTTTATTAAGATCTTTAAACTGCTTTATACACTGTCACGTGGCTTCATCAGCTG
TGTGCATTTCAGGATGGTTTTTAAAGAAACCTCAGAAAGCTATTTCCTT

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FIGURE 3429A

CCCACGGGTGTTAGTGGCGGGGGCGGCAGAGTCCGGGTGGGTTGTCGCGACGGAGCCGGGCCTCTTCGCCGTCTT
GAGACGGGGCTGGCGAGAAGGGCCCCTCACGGAGTTGCCATGGGCGTCTAACCGCGGCAGCCAGGCCCCTCTCTA
CGTGAGACCCCGGCCCCCCTCCCCTTTCTGCAGCCCGCCCGCCACCTGCGCGCCGCGTGGCCTCCGCCGGCGCCT
GCCCGCCCCGCGCCTCCGTCTCCCACGGAGCAGGCCGGGCTCTCGCCATGGTCACTGTCGCCTCTGCCACGGGA
AGTTTTCCTCGAGAAGCCTGCGCAGCATCTCCGAGAGGGCGCCTGGAGCGAGCATGGAGAGGCCATCCGCAGAGG
AGCGCGTGCTCGTACGGGACTTCCAGCGCCTGCTTGGTGTGGCTGTCCGCCAGGACCCCACCTTGTCTCCGTTTG
TCTGCAAGAGCTGCCACGCCCAGTTCTACCAGTGCCACAGCCTTCTCAAGTCCTTCCTGCAGAGGGTCAACGCCT
CCCCGGCTGGTCGCCGGAAGCCTTGTGCAAAGGTCGGTGCCCAGCCCCCAACAGGGGCAGAGGAGGGAGCGTGTC
TGGTGGATCTGATCACATCCAGCCCCCAGTGCCTGCACGGCTTGGTGGGGTGGGTGCATGGACATGCGGCCAGCT
GCGGGGCCCTGCCCCACCTTCAGAGGACACTGTCCTCCGAGTACTGCGGCGTCATCCAGGTCGTGTGGGGCTGCG
ACCAGGGCCACGACTACACCATGGATACCAGCTCCAGCTGCAAGGCCTTCTTGCTGGACAGTGCGCTGGCAGTCA
AGTGGCCATGGGACAAAGAGACGGCGCCACGGCTGCCCCAGCACCGAGGGTGGAACCCTGGGGATGCCCCTCAGA
CCTCCCAGGGTAGAGGGACAGGGACCCCAGTTGGGGCTGAGACCAAGACCCTGCCCAGCACGGATGTGGCCCAGC
CTCCTTCGGACAGCGACGCGGTGGGGCCCAGGTCGGGCTTCCCACCTCAGCCAAGCCTGCCCCTTTGCAGGGCCC
CAGGGCAGTTGGGTGAGAAGCAGCTTCCATCTTCAACCTCGGATGATCGGGTAAAAGACGAGTTCAGTGACCTTT
CTGAGGGAGACGTCTTGAGTGAAGATGAAAATGACAAGAAGCAAAATGCCCAGTCTTCGGACGAGTCCTTTGAGC
CTTACCCAGAAAGGAAAGTCTCTGGTAAGAAGAGTGAAAGCAAAGAAGCCAAGAAGTCTGAAGAACCAAGAATTC
GGAAGAAGCCGGGACCCAAGCCCGGATGGAAGAAGAAGCTTCGTTGTGAGAGGGAGGAGCTTCCCACCATCTACA
AGTGTCCTTACCAGGGCTGCACGGCCGTGTACCGAGGCGCTGACGGCATGAAGAAGCACATCAAGGAGCACCACG
AGGAGGTCCGGGAGCGGCCCTGCCCCCACCCTGGCTGCAACAAGGTTTTCATGATCGACCGCTACCTGCAGCGCC
ACGTGAAGCTCATCCACACAGCTGTGATGGTTTCACATTGTCATCGTCGTCCCCCCGGGAGGTTGGAGCATCAGG
GGCCTGGACTCACTGGACTCTCCCCTCTCAGAGGTGCGGAACTATATCTGTGACGAATGTGGACAAACCTTCAAG
CAGCGGAAGCACCTTCTCGTCCACCAAATGCGACATTCGGGAGCCAAGCCTTTGCAGTGTGAGGTCTGTGGGTTC
CAGTGCAGGCAGCGGGCATCCCTCAAGTACCACATGACCAAACACAAGGCTGAGACTGAGCTGGACTTTGCCTGT
GACCAGTGTGGCCGGCGGTTTGAGAAGGCCCACAACCTCAATGTACACATGTCCATGGTGCACCCGCTGACACAG
ACCCAGGACAAGGCCCTGCCCCTGGAGGCGGAACCACCACCTGGGCCACCGAGCCCCTCTGTGACCACAGAGGGC
CAGGCGGTGAAGCCCGAACCCACCTGAGGACGGCAGTGAGGATGAGCACCTCTAGCAGCCTGGACTCCGCAGTGG
CTGTGTCAGCCTCACCCTTCGTGTGCACCCGCATGGGAGGGTCGGAGGGTGCTGCCCGCCCTTGGTGCTGGAGGC
GGGCTTGGTGTCCGGCTCAAGTAGCCTTCCTCTGCTCTGGGACCAGTGGTTTATTTTCCCGCAAACGCTGAGTGA
CTCGGGGCCGGACAGTTCATAAATAATTGATTCCTTTCCCCACTAAAGCAGTCGAGGAGATTTGTAATCCACTTT
TTAGTGCAACAAGAGCTCCATGTTATGCTTGTAATAAATTATTTACACGGGAGCTGGGCTGGTGTGCAGTGGCAG
GTCCCGTCAGAAGAGATGAGGCTCCTGGGACAGGTCAGCGTCAGGGGCAGCCTGCTGTCTGCTCTGGAGGGCGGC
GCTCACCTCTGGGTCGCAGTCCCCACGATCAGCCAGCAGCTGTGAGAGAGGAGCAGGTCCTCAGCCCATGCCGCC
CACTAGGCCTCAGACCACAGGGGAGGGGCTCTGGCAGAAATAGTCGAGTTGTATTGCCAGCCAGGCAGGCACATG
GCCCAGGCAGCTGTCAATTCTCATGTCCCCCACATGGCCCAAGGTGGGCATCTTGACGTTACCTCTGCCACGTGT
GAGAAGCTCTTTTTCGGGCACCGAGGTATTAACTGCAGCAGAAAAAGACGAGCTTTTGTTATCAGTTCCACGGGG
TTGCCCTAGAGAGAAAACAGGCAAACTCACAGGTTAGAAGACATACAGAAACAGGGCTGGTGTGTCCCCCATAGT
CTGCATGCTGTGCCGGAACATTCTTTGGCAGAAGGAGCCTCCGGCTGGGGGGAGCTCCCCTGGAGGTGGGACTGG
CCCTTGCACCTGCCTGACCCTTGAGCTCCAGGCTCCTGCCAGCTGGAGGTGAAACTGTGCTTGTATCCCCAGCCA
CGAAGAGCTGGACCAGCTTCAAGTACATGTCCACAGCAACATGCAGGAAGGCCTCTTCCCTGATGGCCGCGTCTT
CATGGAAGTAGGAGAGAAGACTAGAGGTAAAGACATAGTGACAAATGGCTACAGACTGCTGGAAAGGTAGCAGGT
GATGCCAAGGGATACTGCTCATCTGTGGAGCAGAGGCACAGACAACCCTTCCCATCTGGCGGGACCCAGAGGTGC
TGAGATGGGGGTCTGGGAAACACTGCCCAGCCCTGACCAGCCCTGTGGGTGGAGGTACCTGTAAAAAGCGAAAGG
CAGCAGCCTGGTGTGCTGATCCGGGGCCACACGGAGGAGGAGCCGCCCCAGCCTGAGGTCTGCAACACCAAGAAG
TGGCTCAGGCAACTCTGGACATCTCTGCCTATTATCAGTGCTGGGGACACCCCTGGGGGTCGGGACGTGTACCCT
GGGAGGCCTGGCTGTGGGGATAGTGTGGGGCGAACAGCCTGAGCTGAGGATACCCAGGTACCTGTCAGCAGCTGG
GAGAGGATGGGGGGGTCGACCTCTTGCAGGAGGGTGGGTGTGGTGCAGAGAGAGGCAGTCCCCATGATAGGCCCA
TTGGTCCTGGGGGTTGACCAGTGAGCCAGTAAATTATCTTATTGCTTTAAACAAGTTTGTGCTTAATCTGTCCCAA

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FIGURE 3429B

CTAAAATGGAGCTTATAAACTTACTTAGCAAGG

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FIGURE 3430

GCGGCCGCGTCCCTTCCTGCGGTCCGCTGCTCGGGCGGCTCCAGCACCAGCGCCGGCTGCGTTCCGGGCCTCCGG
TCGCCCGTCCAGCCCCTCGGCTACCGCCGCCGCCTCCCCCGCTCGGCGCCATGGCCGCTGCGGCCGGGGACGGCA
CGGTGAAGCCGCTGCAGAGCGCCATGAAGCTTGCCAACGGGGCCATCGAGCTGGACACCGGCAACCGGCCCCGGG
AGGCATACACGGAATACCTGAGGAGCATCCACTATATCTCCCAGGTGTTACTAGAAGAAGTGGAAACCACTAAAG
AAGCTGGGGAAACTGTGCCCCCCGACACCTCCAAGATGCTGAAGCTAGCACAGCAGTGTCTGGAGAGGGCCCAGT
CGACGGCCGCCAAGCTTGGGAAAACACGCCTGAAGCCAACCATGCCTGCAGCTGCTCCCATTCCCCAGCCTGCCG
GCCGACACCGCCGTGTATACTCCGATGAAGGAGGAAAGCTCTCTCCTTTTCTGCCACCCGAGATCTTCCAGAAGC
TTCAGGGGGCAGAGTCACAAAGCTGTAAGAAAGAGCTGACGCCACTGGAGGAGGCCTCCCTGCAGAATCAGAAGC
TGAAGGCTGCGTATGAGGCCCGAATGGCGCGGCTAGACCCCAGCCAGGCCATGCAGAAGACATCCCTGACCCTCT
CTCTACAGCGGCAGATGATGGAGAACCTAGTGATTGCCAAAGCCCGGGAGGAGACACTCCAGAGAAAGATGGAGG
AGCGCCGGCTGCGGCTCCAGGAGGCCGCCAACAGGAGGTTTTGCAGCCAAGTCGCCCTGACCCCGGAGGAACGGG
AGCAGCGGGCCCTTTACGCCGCCATCCTGGAGTACGAACAGGACCATGACTGGCCGAAGCACTGGAAGGCCAAGC
TCAAGAGGAATCCGGGGGACCTGTCACTCGTGACCAGCCTGGTCTCACACCTGCTCAGCCTCCCCGACCACCCGA
TCGCGCAGCTCCTGAGGCGGCTGCAGTGCTCCGTGTACAGCGCCCTGTATCCCGCCGTGAGCAGAGCAGCCGCGC
CAGCCCCAGGCTGCTGCCCCCCGACCCCCAACCCCGGAAGCCGACGGCTGCGGCCCTCGCAGAGCCTCCATTGCA
TGCTGTCCCCGCCCGAGCCCAGCGCAGCCCCGCGGCCCCAGGACAGTCCCCCCACGCCCCCACTCCAACCCGGCC
CCGTGGGGTCTCCCTCACCCCTGGGGGACACCGCATCTGGATTGCCAGACAAGGACAGCTCGTTCGAGGACCTGG
AGCAGTTCCTGGGGACGTCTGAGCGGCAGGGCCGGGGCCGTGGGGTACAGCCGGAGCCCCAGCTGCAGCAGCTGA
AGACCGCGGTGGAGGAGATCCACAATGCCGTAGACAGGCTGCTCTCGCTGACCCTTCTGGCCTTCGAAGGCCTAA
ACACAGCTGCCTCCAAGGACCGCTGCCTGGCCTGCATTGAGGAACCCTTTTTCTCCCCGCTGTGGCCTCTGCTGC
TGGCCCTGTACAGGAGCGTGCACCGAGCCCGGGAGGCTGCCCTGAGCAGGAGCATGGAGCTCTACAGGAATGCAC
CCCCCACCGCCATTGGCATCCCCACCAAGCTCCTCCCCCAGAACCCTGAGGCCAAGGGGGCCACTGGCCTACCCC
TACTGCGCGGCGGCCCAGGAGCTCGGACTGCTGGTCCTGGAGAGCTGCCCCCAGAAGAAGCTGGAGTGCATAGTG
CGGACCCTGCGGATCATCTGTGTCTGTGCGGAAGACTACTGCCCCACCCCAGAGGCCACACCCCAGGCCGGGCCC
CCGCCCATCGCTGCAGCTGCCATTGGTGCCGATGACCTGCTGCCCATCCTGTCCTTCGTGGTGCTGAGGAGCGGC
CTCCCTCAGCTGGTGTCGGAGTGCGCGGCCCTGGAGGAGTTCATCCACGAGGGGTACCTGATCGGAGAGGAGGGC
TACTGCCTCACATCACTGCAGAGTGCCCTGAGCTACGTGGAGCTGCTGCCCCGGGGAGGCCTGGCCAAGTAGTAC
AGCTAGAGCCCAGGGTCCCTGCAGGGCCTGGCCTCGCCTCCCAGGGCTGTCTCTCCTACACCTGGAGCCATGGGA
TCTACTGAGGACCATCCTGGAGCCTCACGCTGCTCTGCACATGGTGGGGGCTTGTCCACTGTGGTGTGCTCTCCA
GCTCTTCACCTTCCTCACCTCACATCTGACCCTGGAGCTTGGGGTTGGCACCTCTGCCCCGACAGAATGGGGCTG
AATCAGCTCCAGGAGGAACCAGGCCCTGCTCTCCTGTGTAGGCCTCAGAGAGGCCAAGAAGGGAAGCTTTGGGCT
TCGGTGGGTGCAGGCTCAGCGATGAACATCTGGCTGGGGCAGCTCCTGGGGAGCATCAGGGAAGAGGGGGCCATG
AGCCGGCCAGCAGTGGAGACGGCAGTCCAGTTTCTCTCCCCTCTGACCCCTAGAAGGGGAGTTGTAGCCCCATGA
ACTAGTTTCTTGTCTGGGTCAGGAACAAGGGCCGGCTGGGGCCTGGGGTGCAGCTGGTGTCAGGGTATGCTGTTT
GCTGATGGGCAGGGACACCCCTGCAGGGTCTCGGGCTCTGAGCCCAGGACATTCCCTGCCCCTTACTCACCTTGG
CTGTGGGCTGTGAACATTCCGGGACCCTGGGCATCTTATCTAGGTCCGTGCAGCCCAAGGGTCAGCCCTCTTGAC
TGTCACATGCTGCCCCCACCCAGCCTAAAATAAAGAGCTCACTGCTGTG

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FIGURE 3431

AGCGACTCACAAAAGGTCCTCGCGCCAGCGGCGTGCGTCACCATGGCGACCGCGCGCCGCGCAGCCGCGCCCCGC
CCCTCTGGCGGGACCGGCCACCATCCTCTCGCGAGAGCATCCCGTGCGACCGGAAGTGGGGCGGCGACCCCGGAA
GTCCCCGCCGGGTGCAGCTTGGTCGGTTCGATCGCCGCCGGGACCTGACACCGCCCGGAGTTGGCGTCCCTTCTC
CCTCTCCGAGTGCTGCTCCTGTCATTGTGGCC**ATG**GACGTTCACGGCGAAGCAGCTGGAGAAGCTGGCCAAGAAG
GCGGAGAAGGACTCCAAGGCGGAGCAGGCCAAAGTGAAGAAGGCCCTTCTGCAGAAAAATGTAGAGTGTGCCCGT
GTGTATGCCGAGAACGCCATCCGCAAGAAGAACGAAGGTGTGAACTGGCTTCGGATGGCGTCCCGCGTAGACGCA
GTGGCCTCCAAGGTGCAGACAGCTGTGACTATGAAGGGGGTGACCAAGAATATGGCCCAGGTGACCAAAGCCCTG
GACAAGGCCCTGAGCACCATGGACCTGCAGAAGGTCTCCTCAGTGATGGACAGGTTCGAGCAGCAGGTGCAGAAC
CTGGACGTCCATACATCGGTGATGGAGGACTCCATGAGCTCGGCCACCACCCTGACCACGCCGCAGGAGCAGGTG
GACAGCCTCATCATGCAGATCGCCGAGGAGAATGGCCTGGAGGTGCTGGACCAGCTCAGCCAGCTGCCCGAGGGC
GCCTCTGCCGTGGGCGAGAGCTCTGTGCGCAGCCAGGAGGACCAGCTGTCACGGAGGTTGGCCGCCTTGAGGAAC
TAGCCGTGCCCCGCCGGTGTGCACCGCCTCTGCCCCGTGATGTGCTGGAAGGCTCCTGTCCTCTCCCCACCGCGT
CTTGCCTTTGTGCTGACCCCGCGGGGCTGCGGCCGGCAGCCACTCTGCGTCTCTCACCTGCCAGGCCTGCGTGGC
CT**TAG**GGTTGTTCCTGTTCTTTTAGGTTGGGCGGTGGGTCTGTGTCCTGGTGTTGAGTTTCTGCAAATTTCTGGG
GGTGATTTCTGTGACTCTGGGCCCACAGCGGGGAGGCCAAGAGGGGCCCTGTGGACTTTCACCCAGCACTGTGGG
GGCCTTCAGACTCTGGGGCAGCAGACATGCTGCTTCCCATCAGCCAGAGGGGGTCAGGGCTGCCCTGTTGCCAAA
CAACTCCCTGAGGCCTCTCCGCACCACCTCAGCGGGCAGGAGGTCCCACCATGTGGACAGACATAGCCCAAGGAG
GCACCACAGGTCTATGTGTGCTGGGGGATGTCAGGTGCCACCCAACGCTGTCCTGGTGGTATTTACAATGACATC
CTCCTCCTCCATCACTCCAGGGGTGGTGTCTCGGCCGCCCCTACCAGCTGGCTGAGCCCCCTGGCCTCCTGCGCT
CCCTCACTTCCCTCAGTTCCCAAAGCTGCCCAGTCCATGGGGACAGAACCGTCACTCAGATCCACATTCAAGTGT
GCCCACCCTGCAGTCTTCATCCTCACTCAGCTGCTGCCTCTGGAGGTGCCTTTGGCCACATGTGCTGTGCTGTTT
GTCTCCTCGACAGGGAGCCTGTCCACCAGCAGGCTGCGGTCCCAGCGGGTGCGTCTGCAGCTCCTCCCCTTGGGC
AGCCTGGTTCTCCCGGAGGACCTTTCCTTGGGGCCCTGCTTCATGACGATGCTGCCTGTGTCACCCTCTACCATC
TGTAAACAACTGGGTGCCTTCCCCGACCACACCCCAATGCCTTCCCAGCTTGGAAGCCAAGGCAGCTGATGAAGG
GAGCTCAGGAGAGCCGTCTTCAGCTGGGCTGGGGTTGGGGCTGCTGTGAGGAAAACCTGCCATTGTGGCCCTGGA
GAGTCACCAGCAGCTCTTGGGAAGGACTTGCTGGGAGGCTGAGAGAGGCTTTGGGCACAGCCTGCTGTCTTTTCC
ATTTCCTAAAGTTTACTTCATTGTCTTGAGGCTTCCAGGTTTTGTTTTTGTTTTTGCCAAAGTAGAAAAGGCAGG
TGGTGGGCGGCTGGCAGGGAGTGCGGGTCCCCGCCCCTCTTCAGTCCTGCCCTCCCCTCCTCAGTCCTGCCCACC
CCGTGCAGCCCATGCTGAGGCTGCAGTGGTGTCGTGGGTGTTACGTGCAGGAACGTGGAGACCCTGACGTGGGCT
CACTGCGTTTGGTTTTCTTTTCAGAACTTGGGAGCCCCCAGGGAGGGGCTAGTGTTGGTAGGTCCTAGACGTGGA
TCCCTCCAGCCTCCCCAAAATCAACCCTGGTGTTGAGAGAACGTCCTTCTGTCCATCGTGGGTAACAGCCTTGGG
GAGGGTGCAGAGCTCTGCAGAGCCATGGGCCAGGTGGGGCTGCCTCAGTCCTGTCCCCTTGGGCACTGAGGAGAG
GGGCCCATTCACCTTTCTCCTAGAATGCTGTTGTAAATAAACAAATGGATCCCTGG

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FIGURE 3432

CTGGGTCCTGGCCTTTGGGCATCATCCAGCGCCATCGGCCTGGCGCTTCAGCCAACGCGGGAGTGGATGGGCCCC
TTCTTCTTCGCAGACAGCGTTCGGCCGCTGCCCGGGCTCTAGGCGCGGCCGGACGGCCCAGTCTGGAGGGTTCGG
GGCGGAGGCCCGGGGGGGTGCGCGCGCCCGGGGTCCGGCCTCTCACTCGCTCCCCTCTCGTCCGCAGCCGCAGGG
CCGTAGGCAGCC**ATG**GCGCCCAGCCGGAATGGCATGGTCTTGAAGCCCCACTTCCACAAGGACTGGCAGCGGCGC
GTGGCCACGTGGTTCAACCAGCCGGCCCGTAAGATCCGCAGACGTAAGGCCCGGCAAGCCAAGGCGCGCCGCATC
GCCCCGCGCCCCGCGTCGGGTCCCATCCGGCCCATCGTGCGCTGCCCCACGGTTCGGTACCACACGAAGGTGCGC
GCCGGCCGCGGCTTCAGCCTGGAGGAGCTCAGGGTGGCCGGCATTCACAAGAAGGTGGCCCGGACCATCGGCATT
TCTGTGGATCCGAGGAGGCGGAACAAGTCCACGGAGTCCCTGCAGGCCAACGTGCAGCGGCTGAAGGAGTACCGC
TCCAAACTCATCCTCTTCCCCAGGAAGCCCTCGGCCCCCAAGAAGGGAGACAGTTCTGCTGAAGAACTGAAACTG
GCCACCCAGCTGACCGGACCGGTCATGCCCGTCCGGAACGTCTATAAGAAGGAGAAAGCTCGAGTCATCACTGAG
GAAGAGAAGAATTTCAAAGCCTTCGCTAGTCTCCGTATGGCCCGTGCCAACGCCCGGCTCTTCGGCATACGGGCA
AAAAGAGCCAAGGAAGCCGCAGAACAGGATGTTGAAAAGAAAAAA**TAA**AGCCCTCCTGGGGACTTGGAATCAGTC
GGCAGTCATGCTGGGTCTCCACGTGGTGTGTTTCGTGGGAACAACTGGGCCTGGGATGGGGCTTCACTGCTGTGA
CTTCCTCCTGCCAGGGGATTTGGGGCTTTCTTGAAAGACAGTCCAAGCCCTGGATAATGCTTTACTTTCTGTGTT
GAAGCACTGTTGGTTGTTTGGTTAGTGACTGATGTAAAACGGTTTTCTTGTGGGGAGGTTACAGAGGCTGACTTC
AGAGTGGACTTGTGTTTTTTCTTTTTAAAGAGGCAAGGTTGGGCTGGTGCTCACAGCTGTAATCCCAGCACTTTG
AGGTTGGCTGGGAGTTCAAGACCAGCCTGGCCAACATGTCAGAACTACTAAAAATAAAGAAATCAGCCATG

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FIGURE 3433

TTTCAGGCCAACATGGCCGTGCTGCTGCTGCTGCTCCGTGCCCTCCGCCGGGGTCCAGGCCCGGGTCCTCGGCCG
CTGTGGGGCCCAGGCCCGGCCTGGAGTCCAGGGTTCCCCGCCAGGCCCGGGAGGGGGCGGCCGTACATGGCCAGC
AGGCCTCCGGGGGACCTCGCCGAGGCTGGAGGCCGAGCTCTGCAGAGCTTACAATTGAGACTGCTAACCCCTACC
TTTGAAGGGATCAACGGATTGTTGTTGAAACAACATTTAGTTCAGAATCCAGTCAGACTCTGGCAACTTTTAGGT
GGTACTTTCTATTTTAACACCTCAAGGTTGAAGCAGAAGAATAAGGAGAAGGATAAGTCGAAGGGGAAGGCGCCT
GAAGAGGACGAAGAGGAGAGGAGACGCCGTGAGCGGGACGACCAGATGTACCGAGAGCGGCTGCGCACCTTGCTG
GTCATCGCGGTTGTCATGAGCCTCCTGAATGCTCTCAGCACCAGCGGAGGCAGCATTTCCTGGAACGACTTTGTC
CACGAGATGCTGGCCAAGGGCGAGGTGCAGCGCGTCCAGGTGGTGCCTGAGAGCGACGTGGTGGAAGTCTACCTG
CACCCTGGAGCCGTGGTGTTTGGGCGGCCTCGGCTAGCCTTGATGTACCGAATGCAGGTTGCAAATATTGACAAG
TTTGAAGAGAAGCTTCGAGCAGCTGAAGATGAGCTGAATATCGAGGCCAAGGACAGGATCCCAGTTTCCTACAAG
CGAACAGGATTCTTTGGAAATGCCCTGTACTCTGTGGGGATGACGGCAGTGGGCCTGGCCATCCTGTGGTATGTT
TTCCGTCTGGCCGGGATGACTGGAAGGGAAGGTGGATTCAGTGCTTTTAATCAGCTTAAAATGGCTCGTTTCACC
ATTGTGGATGGGAAGATGGGGAAAGGAGTCAGCTTCAAAGACGTGGCAGGAATGCACGAAGCCAAACTGGAAGTC
CGCGAGTTTGTGGATTATCTGAAGAGCCCAGAACGCTTCCTCCAGCTTGGCGCCAAGGTCCCAAAGGGCGCACTG
CTGCTCGGCCCCCCCGGCTGTGGGAAGACGCTGCTGGCCAAGGCGGTGGCCACGGAGGCTCAGGTGCCCTTCCTG
GCGATGGCCGGCCCAGAGTTCGTGGAGGTCATTGGAGGCCTCGGCGCTGCCCGTGTGCGGAGCCTCTTTAAGGAA
GCCCGAGCCCGGGCCCCCTGCATCGTCTACATCGATGAGATCGACGCGGTGGGCAAGAAGCGCTCCACCACCATG
TCCGGCTTCTCCAACACGGAGGAGGAGCAGACGCTCAACCAGCTTCTGGTAGAAATGGATGGAATGGGTACCACA
GACCATGTCATCGTCCTGGCGTCCACGAACCGAGCTGACATTTTGGACGGTGCTCTGATGAGGCCAGGCCGACTG
GACCGGCACGTCTTCATTGATCTCCCCACGCTGCAGGAGAGGCGGGAGATTTTTGAGCAGCACCTGAAGAGCCTG
AAGCTGACCCAGTCCAGCACCTTTTACTCCCAGCGTCTGGCAGAGCTGACACCAGGATTCAGTGGGGCTGACATC
GCCAACATCTGCAATGAGGCTGCGCTGCACGCGGCGCGGGAGGGACACACTTCCGTGCACACTCTCAACTTCGAG
TACGCCGTGGAGCGCGTCCTCGCAGGGACTGCCAAAAAGAGCAAGATCCTGTCCAAGGAAGAACAGAAAGTGGTT
GCGTTTCATGAGTCGGGCCACGCCTTGGTGGGCTGGATGCTGGAGCACACGGAGGCCGTGATGAAGGTCTCCATA
ACCCCTCGGACAAACGCCGCCCTGGGCTTTGCTCAGATGCTCCCCAGAGACCAGCACCTCTTCACCAAGGAGCAG
CTGTTTGAGCGGATGTGCATGGCCCTGGGAGGACGGGCCTCGGAAGCACTGTCCTTCAACGAGGTCACTTCTGGG
GCACAGGACGACCTGAGGAAGGTCACCCGCATCGCCTACTCCATGGTGAAGCAGTTTGGGATGGCACCTGGCATC
GGGCCCATCTCCTTCCCTGAGGCGCAGGAGGGCCTCATGGGCATCGGGCGGCGCCCCTTCAGCCAAGGCCTGCAG
CAGATGATGGACCATGAAGCAAGACTGCTGGTGGCCAAGGCCTACAGACACACCGAGAAGGTGCTGCAGGACAAC
CTGGACAAGTTGCAGGCGCTGGCAAACGCCCTTCTGGAAAAGGAAGTGATAAACTATGAGGACATTGAGGCTCTC
ATTGGCCCGCCGCCCCATGGGCCGAAGAAAATGATCGCACCGCAGAGGTGGATCGACGCCCAGAGGGAGAAACAG
GACTTGGGCGAGGAGGAGACCGAAGAGACCCAGCAGCCTCCACTTGGAGGCGAAGAGCCGACTTGGCCCAAGTAG

TTGGGAGGTGTTGGCTGCACGTGCGGGTGGTCCGGGAAGTGAGGGCTCACTCAGCCACCCTGAGTTGCTTTTCAG
CTGAGGTTTGCACTTCCTCTCGCGGCCCTCAGTAGTCCCTGCACAGTGACTTCTGAGATCTGTTGATTGATGACC
CTTTTCATGATTTTAAGTTTCTCTGCAGAAACTACTGACGGAGTCCTGTGTTTGTGAGTCGTTTCCCCTATGGGG
AAGGTTATCAGTGCTTCCCGAGTGAGCATGGAACACTTCGAGTTCCCAGGGTTATAGACAGTCGTTCCCAGTGTG
GCTGAGGCCACCCAGAGGCAGCAGAGCATTCAGACTCCAAACAGACCCCTGTTCATGCCGACGCTTGCACGACCG
CCCCAGTTCCTGTGGCTCCCTCGGAATGCTAAGGGGATCGGACATGAAAGGACCCTGTGAGCCGATTGTCCTATC
TCCAGCGGCCCTGTCATCCAGCTCACTCATCAATGGGGCCAGTCAGGCCCAGGCACTGGGCTCCGGAGGACTCAC
CACTGCCCCCTGCTGCCATGTGGACTGGTGCAAGTTGAGGACTTCTTGCTGGTCTAGTCACGCATGCAGTGTTGG
GGATGCCTTGGTTTTTACTGCTCTGAGAATTGTTGAGATACTTTACTAATAAACTGTGTAGTTGG

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FIGURE 3434

GGGGAGGCGCCGCCGCCGAGCCCGCGGCCAGACGCCCCATCAGTAGCGTCCGCACCGGGAGCCGCGGCTCTCGCC
CGAGCCGTGGGCGCGCCCGAGGGGCGGGCTCGCCTCCCGCCGTCCCTCGCAGCTCTGCCGGGCCCGAGCCCGCGC
CGCCGGCCGCCGGCCGCCTTGCCGCTCGGCCGCGCGGCCCGGGAAACGCGGCCGCGGGCTGCATGGGCAGCGCCC
GCGCCCCGCCGCTGAGCCGTCGCGGAACCTGGCAGCCCTCGGAGCACGAATATATACAGCCCTGCTCTGGGACAC
ACCTCCATTGGATTTAAAAGACAGTCCTCGTCAGCACTGACTTTCAGCTATGGAATCGCAGACGGTTGATGATGA
AGCGCCGGCCGTGTAAATGAAGATCGGGTGAGGAGCAGGACG**ATG**CCCAAGGGTGGGTGCCCTAAAGCACCACAG
CAGGAAGAGCTTCCCCTCAGCAGCGACATGGTGGAGAAGCAGACTGGGAAAAAGGATAAAGATAAAGTTTCTCTA
ACCAAGACCCCAAAACTGGAGCGTGGCGATGGCGGGAAGGAGGTGAGGGAGCGAGCCAGCAAGCGGAAGCTGCCC
TTCACCGCGGGCGCCAATGGGGAGCAGAAGGACTCGGACACAGGACCGCCGGGGTCCTGCTTGTCCTGGGGCAGC
CACGAGGGAGCCCTCGTCAGGAGCGCCATGGGCCGAAGCTGCCTGCCCTCTGCACGTGGATGTTTCTTTGGAACA
AGGGGAAAAATTATGATTTTCTTATTTTGCTTTGACCTG**TGA**ATGACACCCTGGTCTCTGGTGCCTGGGGTGTGC
TCTCTGCAGTGCTGCCAGGCACATGCTGGTTCCTTCAGCGTTAGGTGCTTGGCACCTTCAGTCTTTTCCTGACGT
CATGTTTGTTCCTGGTGCCTCAGATAGGAGACGGCTGTTCTGACGGCTCCTGCTTCCCCATTCCTGGAGGGAAGA
CAGACTTAGCCACTGGTATCTGTGGGACTTCTTGGAACTCTGAATGCCAGACCTTGCCCAGTGCTAGAGGCGACA
AGTGTGTGAAGTTGAAGAGGCTTCTCCCACCCGCTCAGCTGCAGTGGACCCGAGCGGGCAGAGAGAGCAGAGTGC
AGCAGGGGCCAGGCTGTGCTCGCAGGCGGGGCAGGTGCCTGGAGAGCATGGCGCCCCTGGGAGCCTCTGGCCAGG
AAGGGCATGTGCACTGCAGTGTGCCGTGGACCAGTGGCCTCAGCTCAGTGTGTTGACGAGGGTCCCAAGGCACTC
ACGTGTGTGGGGATGTTAGCAACACACGGCGGGAAGCCCTGATGCAGTTTCTCACCAAGCGTGTAGCAGACCCCA
CGCACCCCACACAGGTCAGGCACCCCACACAGGGCACAGACCCCACACACCCCACACAGGGCAGGCACCCCACAC
AGGGCACAGACCCCACGCACCCCACACAGGGCAGG

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FIGURE 3435

TAGTTTTATCTCTATACCCAAAATGGAGGTTAAAAGTTACACTAAAAATAACACGATTGCACCAAAGAAAGCGTC
CCATCGTATCCTGTCAGACACGTCGGACGAGGAGGACGCGAGTGTCACCGTGGGGACAGGAGAGAAGCTGAGACT
CTCGGCACATACGATATTGCCTGGTAGTAAGACACGAGAGCCTTCTAATGCCAAGCAGCAGAAGGAAAAAAATAA
AGTGAAAAAGAAGCGAAAGAAAGAAACAAAAGGCAGAGAGGTTCGCTTCGGAAAGCGGAGCGACAAGTTCTGCTC
CTCGGAGTCGGAGAGCGAGTCCTCAGAGAGTGGGGAGGATGACAGGGACTCTCTGGGGAGCTCTGGCTGCCTCAA
GGGGTCCCCGCTGGTGCTGAAGGACCCCTCCCTGTTCAGCTCCCTCTCTGCCTCCTCCACCTCGTCTCACGGGAG
CTCTGCCGCCCAGAAGCAGAACCCCAGCCACACAGACCAGCACACCAAGCACTGGCGGACAGACAATTGGAAAAC
CATTTCTTCCCCGGCTTGGTCAGAGGTCAGTTCTTTATCAGACTCCACAAGGACGAGACTGACAAGCGAGTCTGA
CTACTCCTCTGAGGGCTCCAGTGTGGAATCGCTGAAGCCAGTGAGGAAGAGGCAGGAGCACAGGAAGCGAGCCTC
CCTGTCGGAGAAGAAGAGCCCCTTCCTGTCCAGCGCGGAGGGCGCTGTCCCCAAACTGGACAAGGAGGGGAAAGT
TGTCAAAAAACATAAAACAAAACACAAACACAAAAACAAGGAGAAGGGACAGTGTTCCATCAGCCAAGAGCTGAA
GTTGAAAAGTTTTACTTACGAATATGAGGACTCCAAGCAGAAGTCAGATAAGGCTATACTGTTAGAGAATGATCT
TTCCACTGAAAACAAGCTAAAAGTGTTAAAGCACGATCGCGACCACTTTAAAAAAGAAGAGAAACTTAGCAAAAT
GAAATTAGAAGAAAAAGAATGGCTCTTTAAAGATGAAAAATCACTGAAGAGAATCAAAGACACAAACAAAGACAT
CAGCAGGTCTTTCCGAGAAGAGAAAGACCGTTCGAATAAAGCAGAAAAGGAGAGATCGCTGAAGGAAAAGTCTCC
GAAAGAAGAAAAACTGAGACTGTACAAAGAGGAGAGAAAGAAGAAATCAAAAGACCGGCCCTCAAAATTAGAGAA
GAAGAATGATTTAAAAGAGGACAAAATTTCAAAAGAGAAGGAGAAGATTTTTAAAGAAGATAAAGAAAAACTCAA
AAAAGAAAAGGTTTATAGGGAAGATTCTGCTTTTGACGAATATTGTAACAAAAATCAGTTTCTGGAGAATGAAGA
CACCAAATTTAGCCTTTCTGACGATCAGCGAGATCGGTGGTTTTCTGACTTGTCCGATTCATCCTTTGATTTCAA
AGGGGAGGACAGCTGGGACTCGCCAGTGACAGACTACAGGGACATGAAGAGCGACTCTGTGGCCAAGCTCATCTT
GGAGACGGTGAAGGAGGACAGCAAGGAGAGGAGGCGGGACAGCCGGGCCCGGGAGAAGCGAGACTACAGAGAGCC
CTTCTTCCGAAAGAAGGACAGGGACTATTTGGATAAAAACTCTGAGAAGAGGAAAGAGCAGACTGAAAAGCATAA
AAGTGTCCCTGGCTACCTTTCGGAAAAGGACAAGAAGAGGAGAGAGTCCGCAGAGGCCGGGCGGGACAGAAAGGA
CGCCCTGGAGAGCTGCAAGGAGCGCAGGGACGGCAGGGCCAAGCCCGAGGAGGCGCACCGGGAGGAGCTGAAGGA
GTGTGGCTGCGAGAGTGGCTTCAAGGACAAGTCCGACGGCGACTTTGGGAAGGGCCTGGAGCCGTGGGAACGGCA
CCACCCAGCACGAGAGAAGGAGAAGAAGGATGGCCCCGATAAGGAAAGGAAGGAGAAGACAAAACCAGAAAGATA
CAAAGAGAAATCCAGTGACAAGGACAAAAGTGAGAAATCAATCCTGGAAAAATGTCAGAAGGACAAAGAATTTGA
TAAATGTTTTAAAGAGAAAAAAGATACCAAGGAAAAACATAAAGACACACATGGCAAAGACAAAGAAAGGAAAGC
GTCTCTCGACCAAGGGAAAGAGAAGAAGGAGAAGGCTTTCCCTGGGATCATCTCAGAAGACTTCTCTGAAAAAAA
AGATGACAAGAAAGGCAAAGAGAAAAGCTGGTACATCGCAGACATCTTCACAGATGAGAGTGAGGACGACAGAGA
CAGCTGCATGGGGAGCGGGTTCAAGATGGGAGAGGCCAGCGACTTGCCGAGGACGGACGGCCTCCAGGAGAAGGA
GGAAGGACGGGAGGCCTATGCCTCCGACAGACACAGGAAGTCTTCTGACAAGCAGCACCCTGAGAGGCAGAAGGA
CAAGGAGCCCAGAGACAGGAGAAAGGACCGAGGGGCTGCCGACGCGGGGAGAGACAAAAAAGAGAAAGTCTTTGA
AAAGCACAAGGAGAAGAAGGATAAAGAGTCCACAGAAAAGTACAAGGACAGGAAGGACAGAGCCTCAGTGGACTC
CACGCAAGATAAGAAAAATAAACAGAAGCTCCCCGAGAAGGCTGAAAAGAAGCACGCTGCCGAAGACAAGGCTAA
AAGCAAACACAAAGAGAAGTCGGACAAAGAACATTCCAAGGAGAGGAAGTCCTCGAGAAGTGCCGACGCGGAAAA
AAGCCTGCTTGAAAAGTTGGAAGAAGAGGCTCTCCATGAGTACAGAGAAGACTCCAACGATAAAATCAGCGAGGT
CTCCTCTGACAGCTTCACGGACCGAGGGCAGGAGCCGGGGCTGACTGCCTTCCTGGAGGTCTCTTTCACGGAGCC
ACCTGGAGACGACAAGCCGAGGGAGAGCGCCTGCCTCCCTGAGAAGCTGAAAGAGAAGGAGAGGCACAGACACTC
CTCATCTTCATCCAAGAAGAGCCACGACCGAGAGCGAGCCAAGAAAGAGAAGGCCGAGAAGAAAGAGAAGGGCGA
AGATTACAAGGAGGGCGGTAGCAGGAAGGACTCCGGCCAGTACGAAAAGGACTTCCTGGAGGCGGATGCTTACGG
AGTTTCTTACAACATGAAAGCTGACATAGAAGATGAGCTAGATAAAACCATTGAATTGTTTTCTACCGAAAAGAA
AGATAAAAATGATTCCGAGAGAGAACCTTCCAAG

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FIGURE 3436

CTGTCTTACAGCTGATCCGGTTCTTGCGGCGGTGCGTGCTGGCGCCGGAGAGTTCCGCGCGTGTCCTCGGGCTGT
CCGCGGGGAAGCTGGTCCGGGAGTGGGCGCCCGCCCGCCTGCCTCGCGCCTTGCGCCCCCGGCACCGCTTCCAGA
AGGGAAAGTCGCCGCCGCTCGCGGTAGACCCGGGCAGCGCTTCCATTCCGCGGAGCTGGAAATAGGGATCCAGCC
ATCCGTGGGTCAGGAGGAATGGAGACTGTACCTTCCACATAGATTCACAAGCTGCCCTGCAGTGGCCTTGGCTTC
AGGAAAGGAGCATTCAGACGCTTCCGTCAGCCTCCCAGGATGGCAGCCCCTGACCTGGCCCACGGAGGTCATGTT
TCTAGGGACTCAGTCTGCCTTCATGAAGAACAGACACAGGCAGCAGGGATGGTGGCTGGCTGGCTGATAAATTGT
TACCAGGACGCGGTGACCTTTGACGACGTGGCTGTGGACTTCACCCAGGAGGAATGGACTTTACTGGACCCATCT
CAGAGAGACCTCTACAGAGATGTGATGCTGGAAAACTACGAGAACCTGGCCTCAGTAGAATGGCGACTTAAAACC
AAAGGGCCAGCACTTCGGCAGGATAGATCTTGGTTCAGAGCATCAAATGAGACACAGACGGCAAGAAGCCACAAT
GGAGGGCAGCTCTGTGACCGCACGCAGTGTGGAGAAGCTTTCAGTGAACACTCAGGCCTCAGCACACACGTGAGA
ACTCAAAATACAGGAGACAGTTGTGTGTCTAATCATTATGAAAGGGACTTTTTTATTCCATGCCAGAAAACCTTG
TTCAAAATTGGAGAGCAGTTTTCCGTGTTGGGTCAGTGTGGAAAAGCCTTCAGCTCTACTCCAAATGTTGTTTCC
CAGCAAGCATGCACTCGGGACAGATCTCTTGACTACAGCAGCTGTGGGGAAGTGTTCCTTAATCAGTCATACCTT
CAGGCACGTGCGGGAAGTCACAACGGAGAAGAAACATGGAAATGGAAGCCGTGTGGGAAAGCTCTAACTCACTCC
ATGGGCTGCGCCACACCTGTTGAAATGCATGCCGTCAGGAATCCCCACGTATGTAGGGAATGTGGGAAGGCCTTT
AGGTACACTGCCTACCTTACTGGTCGCGTGCAAGTCCACCCTGGGGAAAAGCCCTGTGAATTGGAAGAATGTGGA
AAAGCCTCCCCTGTTTCTTCCAGCCTAACTCAACATGTAAGAATTCATGCTGCAGAGAAACCCTGTGAATGTAAA
GAATGCGGAAAAGCCTTCACTGGACTCTCAGGTCTTTCTAAACACGTCCAAACAGACCCTGGACAGAAGCCCTAT
GAATGTAAGGACTGTGGGAAAGCCTGCGGTGGGTTTTATCTACTGAATGAGCATGGAAAAACTCACACGAGGGAG
AAGCCCTTTGCATGTGTGGTTTGCGGAAAATATTTTAGAAATTCCTCATGCCTTAATAATCATGTTCGAATTCAC
ACTGGAATAAAACCCTATACATGCAGCTACTGTGGGAAGGCCTTCACTGTGCGCTGTGGCCTTACTAGACACGTA
CGAACACACACGGGCGAGAAGCCATACACGTGTAAGGACTGCGGGAAAGCCTTCTGTACATCCTCGGGCCTTACT
GAGCATGTAAGGACTCACACTGGAGAGAAACCATATGAATGTAAAGATTGTGGGAAATCCTTCACTGTTTCTTCA
AGCCTGACTGAGCACGCGAGAATCCATACCGGAGAGAAACCCTACGAATGTAAGCAGTGTGGCAAAGCCTTCACA
GGGCGCTCAGGCCTCACTAAACACATGCGGACACACACCGGGGAGAAGCCCTATGAATGTAAGGACTGTGGGAAA
GCCTACAATAGGGTTTATCTACTGAATGAGCATGTGAAAACTCACACAGAGGAGAAGCCCTTTATATGTACGGTA
TGCAGGAAATCCTTCAGAAATTCCTCGTGCCTGAATAAGCACATTCAGATTCACACTGGAATAAAACCTTATGAA
TGTAAGGACTGTGGGAAAACATTCACTGTTTCTTCGAGCCTAACCGAGCACATACGAACTCACACTGGAGAGAAA
CCTTATGAATGTAAAGTATGCGGAAAGGCCTTCACCACATCCTCACACCTTATCGTGCACATAAGAACCCACACC
GGTGAGAAACCCTACATATGTAAGGAGTGTGGGAAAGCCTTTGCTTCCTCCTCACACCTTATCGAACACAGAAGG
ACTCACACAGGAGAGAAACCTTACATATGTAACGAGTGTGGGAAAGCCTTCCGTGCCTCCTCTCACCTGCATAAA
CATGGAAGAATTCACACTGGGCAGAAACCCTATAAATGTAAGGAATGTGGGAAAGCATACAATAGGTTTTATCTA
CTAAAAGAACATTTAAAAACTTACACTGAAGAGCAGGTTTTTGTATGTAAGGACTGTGGAAAATCTTTTAAGAAT
TCCTCATGCCTTAACCATCACACTCAAATTCACACTGATGAGAAACCTTTCTAATGTAAAGAATGTGGGGAAGCT
GTCAGCTACACTCATTCACGTTGAAGACATGAAAGACCTCTCGTTCTCCAGATGTCCATGACTTGAGGAATGTGG
CTAGGCAATCAGCATCTCATCACAACCCGGCAGGCAGGAACTCACCCTGGAGCCCTATGCAGCAGACACAGAGAA
AGCCCTCAGTGTTCTCTAAGGTCTTGCTGAATATGGATGGTATCCAGTAGAGAGAACTCTATTGATGTGTGATAT
GCAGCAGCATTGTTGCTGTTCTGCTCAGTACTTTGATGATCCCTTGTGATCTCACAATGAAGAAAAACCTTAGGA
GGGTGAGAATTGTTGGGAAGTCATTTTTTACATTACATCTTTCCTCACCCTTTAGTAAACGTGGTGATTGAC

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FIGURE 3437

AGGTGACCCCAGGGTTTGAAGAAAAGGAGGGGGAGCTGCTGGTGAGGGGACCCTCCGTGTTTCGAGAATACTGGA
ATAAACCAGAAGAAACTAAGAGTGCATTCACCCTGGATGGCTGGTTTAAGACAGGGGACACCGTGGTGTTTAAGG
ATGGCCAGTACTGGATCCGAGGCCGGACCTCAGTGGACATCATCAAGACTGGAGGCTACAAGGTCAGCGCCCTGG
AGGTGGAGTGGCACCTGCTGGCCCACCCCAGCATCACAGATGTGGCTGTGATTGGAGTTCCGGATATGACATGGG
GCCAGCGGGTCACTGCTGTGGTGACCCTCCGAGAAGGACACTCACTGTCCCACAGGGAGCTCAAAGAGTGGGCCA
GAAATGTCCTGGCCCCGTACGCGGTGCCCTCGGAGCTGGTGCTGGTGGAGGAGATCCCGCGGAACCAGATGGGCA
AGATTGACAAGAAGGCGCTCATCAGGCACTTCCACCCCTCATGACCCGGCAGACTGGGACTGCGGGTCTGGTGGG
GAGCAGCAGACGTCCCCTTCACACCGAGAACCACGGGGGCCCGTCCAAGACCTGGCCTCCCTTAAACCTGAACCC
CCCAAATCAGGTCACGTAGAATCAAGAACTGTTTGGGATGAAATCACCATGTGGGGTCCCCAGCCTCGGGCCAGT
TGTTGCAGCTCAAGGAGACCGTCCCTGGTGTCACCTCTGCCTGGTCACCGCCGACCTCATCTGTGCAGCGCGGTG
CAGCCAGCCCCTGGCCCCACGTGCTGAGGCACCTCCCGCCCCACAGTGCCCTGCAGTTGCCAGGCTCTCCAGGGC
AGGTCCCAGAGGTTTCCCACAAAAAACAAAGACTCCACTGGAGGAAAC

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FIGURE 3438

TGCCAGCGGGGAGGCTGCAGCCGCGGGTTGTTACAGCTGCTGGAGCAGCAGCGGCCCCCGCTCCCGGGAACCGTT
CCCGGGCCGTTGATCTTCGGCCCCACACGAACAGCAGAGAGGGGCAGCAGGATGAATGTGGGCACAGCGCACAGC
GAGGTGAACCCCAACACGCGGGTGATGAACAGCCGTGGCATCTGGCTCTCCTACGTGCTGGCCATCGGTCTCCTC
CACATCGTGCTGCTGAGCATCCCGTTTGTGAGTGTCCCTGTCGTCTGGACCCTCACCAACCTCATTCACAACATG
GGCATGTATATCTTCCTGCACACGGTGAAGGGGACACCCTTTGAGACCCCGGACCAGGGCAAGGCGAGGCTGCTA
ACCCACTGGGAGCAGATGGATTATGGGGTCCAGTTCACGGCCTCTCGGAAGTTCTTGACCATCACACCCATCGTG
CTGTACTTCCTCACCAGCTTCTACACTAAGTACGACCAGATCCATTTTGTGCTCAACACCGTGTCCCTGATGAGC
GTGCTTATCCCCAAGCTGCCCCAGCTCCACGGAGTCCGGATTTTTGGAATCAATAAGTACTGAGAGTGCAGCCCC
TTCCCCTGCCCAGGGTGGCAGGGGAGGGGTAGGGTAAAAGGCATGTGCTGCAACACTGAAGACAGAAAGAAGAAG
CCTCTGGACACTGCCAGAGATGGGGGTTGAGCCTCTGGCCTAATTTCCCCCCTCGCTTCCCCCAGTAGCCAACTT
GGAGTAGCTTGTAGTGGGGTTGGGGTAGGCCCCCTGGGCTCTGACCTTTTCTGAATTTTTTGATCTTTTCCTTTT
GCTTTTTGAATAGAGACTCCATGGAGTTGGTCATGGAATGGGCTGGGCTCCTGGGCTGAACATGGACCACGCAGT
TGCGACAGGAGGCCAGGGGAAAAACCCCTGCTCACTTGTTTGCCCTCAGGCAGCCAAAGCACTTTAACCCCTGCA
TAGGGAGCAGAGGGCGGTACGGCTTCTGGATTGTTTCACTGTGATTCCTAGGTTTTTTCGATGCCACGCAGTGTG
TGCTTTTGTGTATGGAAGCAAGTGTGGGATGGGTCTTTGCCTTTCTGGGTAGGGAGCTGTCTAATCCAAGTCCCA
GGCTTTTGGCAGCTTCTCTGCAACCCACCGTGGGTCCTGGTTGGGAGTGGGGAGGGTCAGGTTGGGGAAAGATGG
GGTAGAGTGTAGATGGCTTGGTTCNCAGAGGTGAGGGGGCCAGGGCTGCTGCCATCCTGGCCTGGTGGAGGTTGG
GGAGCTGTAGGAGAGCTAGTGAGTCGAGACTTAGAAGAATGGGGCCACATAGCAGCAGAGGACTGGTGTAAGGGA

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FIGURE 3439

GGTTTGCAGCTGCTCCGTCATCGTGCGGCCCGACGCTATCTCGCGCTCGTGTGCAGGCCCGGCTCGGCTCCTGGT
CCCCGGTGCGAGGGTTAACGCGAGGCCCCGGCCTCGGTCCCCGGACTAGGCCGTGACCCCGGGTGCCATGAAGCA
GGAGGGCTCGGCGCGGCGCCGCGGCGCGGACAAGGCGAAACCGCCGCCCGGCGGAGGAGAACAAGAACCCCCACC
GCCGCCGGCCCCCCAGGATGTGGAGATGAAAGAGGAGGCAGCGACGGGTGGCGGGTCGACGGGGGAGGCAGACGG
CAAGACGGCGGCGGCAGCGGCTGAGCACTCCCAGCGAGAGCTGGACACAGTCACCTTGGAGGACATCAAGGAGCA
CGTGAAACAGCTAGAGAAAGCGGTTTCAGGCAAGGAGCCGAGATTCGTGCTGCGGGCCCTGCGGATGCTGCCTTC
CACATCACGCCGCCTCAACCACTATGTTCTGTATAAGGCTGTGCAGGGCTTCTTCACTTCAAATAATGCCACTCG
AGACTTTTTGCTCCCCTTCCTGGAAGAGCCCATGGACACAGAGGCTGATTTACAGTTCCGTCCCCGCACGGGAAA
AGCTGCGTCGACACCCCTCCTGCCTGAAGTGGAAGCCTATCTCCAACTCCTCGTGGTCATCTTCATGATGAACAG
CAAGCGCTACAAAGAGGCACAGAAGATCTCTGATGATCTGATGCAGAAGATCAGTACTCAGAACCGCCGGGCCCT
AGACCTTGTAGCCGCAAAGTGTTACTATTATCACGCCCGGGTCTATGAGTTCCTGGACAAGCTGGATGTGGTGCG
CAGCTTCTTGCATGCTCGGCTCCGGACAGCTACGCTTCGGCATGACGCAGACGGGCAGGCCACCCTGTTGAACCT
CCTGCTGCGGAATTACCTACACTACAGCTTGTACGACCAGGCTGAGAAGCTGGTGTCCAAGTCTGTGTTCCCAGA
GCAGGCCAACAACAATGAGTGGGCCAGGTACCTCTACTACACAGGGCGAATCAAAGCCATCCAGCTGGAGTACTC
AGAGGCCCGGAGAACGATGACCAACGCCCTTCGCAAGGCCCCTCAGCACACAGCTGTCGGCTTCAAACAGACGGT
GCACAAGCTTCTCATCGTGGTGGAGCTGTTGCTGGGGGAGATCCCTGACCGGCTGCAGTTCCGCCAGCCCTCCCT
CAAGCGCTCACTCATGCCCTATTTCCTTCTGACTCAAGCTGTCAGGACAGGAAACCTAGCCAAGTTCAACCAGGT
CCTGGATCAGTTTGGGGAGAAGTTTCAAGCAGATGGGACCTACACCCTAATTATCCGGCTGCGGCACAACGTGAT
TAAGACAGGTGTACGCATGATCAGCCTCTCCTATTCCCGAATCTCCTTGGCTGACATCGCCCAGAAGCTGCAGTT
GGATAGCCCCGAAGATGCAGAGTTCATTGTTGCCAAGGCCATCCGGGATGGTGTCATTGAGGCCAGCATCAACCA
CGAGAAGGGCTATGTCCAATCCAAGGAGATGATTGACATCTATTCCACCCGAGAGCCCCAGCTAGCCTTCCACCA
GCGCATCTCCTTCTGCCTAGATATCCACAACATGTCTGTCAAGGCCATGAGGTTTCCTCCCAAATCGTACAACAA
GGACTTGGAGTCTGCAGAGGAACGGCGTGAGCGAGAACAGCAGGACTTGGAGTTTGCCAAGGAGATGGCAGAAGA
TGATGATGACAGCTTCCCTTGAGCTGGGGGGCTGGGGAGGGGTAGGGGGAATGGGGACAGGCTCTTTCCCCCTTG
GGGGTCCCCTGCCCAGGGCACTGTCCCCATTTTCCCACACACAGCTCATATGCTGCATTCGTGCAGGGGGTGGGG
GTGCTGGGAGCCAGCCACCCTGACCTCCCCCAGGGCTCCTCCCCAGCCGGTGACTTACTGTACAGCAGGCAGGAG
GGTGGGCAGGCAACCTCCCNCCNNGGCAGGGTCCTGGCCAGCAGTGTGGGAGCAGGAGGGGAAGGATAGTTCTGT
GTACTCCTTTAGGGAGTGGGGGACTAGAACTGGGATGTCTTGGCTTGTATGTTTTTTGAAGCTTCGATTATGATT
TTTAAACAATAAAAAGTTCTCC

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FIGURE 3440

CCAAACCGGCCTCCGTCCGGGCCCTGCTGTTTGACATCTCCTTCCTCATGCTGTGCCATGTGGCCCAGACCTATG
GTTCAGAGGTGATTCTGTCCGAGTCGCGCACAGGAGCTGAGGTGCCCTTCTTCGAGACCTGGATGCAGACCTGCA
TGCCTGAGGAGGGCAAGATCCTGAACCCTGACCACCCCTGCTTCCGCCCCGACTCCACCAAAGTGGAGTCCCTGG
TGGCCCTGCTCAACAACTCCTCGGAGATGAAGCTAGTGCAGATGAAGTGGCATGAGGCCTGTCTCAGCATCTCAG
CCGCCATCTTGGAAATCCTCAATGCCTGGGAGAATGGGGTCCTGGCCTTCGAGTCCATCCAGAAAATCACTGATA
ACATCAAAGGGNAAGGTATGCAGTCTGGCGGTGTGTGCTGTGGCTTNGGCTTGTGGCCCACGTCCGGATGCTGGG
GCTGGATGAGCGTGAGAAGTCGCTGCAGATGATCCGCCAGCTGGCAGGGCCNACTGTTTAGTGAGAACACCCTGC
AGTTCTACAATGAGAGGGTGGTGATC**ATG**AACTCGATCCTGGAGCGCATGTGTGCCGACGTGCTGCAGCAGACAG
CCACGCAGATCAAGTTTCCCTCCACCGGGGTGGACACAATGCCCTACTGGAACCTGCTGCCCCCCAAGCGGCCCA
TCAAAGAGGTGCTGACGGACATTTTTGCCAAGGTGCTGGAGAAGGGCTGGGTGGACAGCCGCTCCATCCACATCT
TTGACACCCTGCTGCACATGGGCGGCGTCTACTGGTTCTGCAACAACCTGATTAAGGAGCTGCTGAAGGAGACGC
GGAAGGAGCACACGCTGCGGGCAGTGGAGCTGCTCTACTCCATCTTCTGCCTGGACATGCAGCAAGTGACCCTGG
TCCTGCTGGGCCACATCCTACCTGGCCTGCTCACTGACTCCTCCAAGTGGCACAGCCTCATGGACCCCCCGGGCA
CTGCTCTTGCCAAGCTGGCCGTGTGGTGTGCCCTCAGTTCCTACTCCTCCCACAAGGGACAGGCGTCCACCCGCC
AGAAGAAGAGACACCGCGAAGACATTGAGGATTATATCAGCCTCTTCCCCCTGGACGATGTGCAGCCTTCGAAGT
TGATGCGACTGCTGAGCTCTAATGAGGACGATGCCAACATCCTTTCGAGCCCCACAGACCGATCCATGAGCAGCT
CCCTCTCAGCCTCTCAGCTCCACACGGTCAACATGCGGGACCCTCTGAACCGAGTCCTGGCCAACCTGTTCCTGC
TCATCTCCTCCATCCTGGGGTCTCGCACCGCTGGCCCCCACACCCAGTTCGTGCAGTGGTTCATGGAGGAGTGTG
TGGACTGCCTGGAGCAGGGTGGCCGTGGCAGCGTCCTGCAGTTCATGCCCTTCACCACCGTGTCGGAACTGGTGA
AGGTGTCAGCCATGTCCAGCCCCAAGGTGGTTCTGGCCATCACGGACCTCAGCCTGCCCCTGGGCCGCCAGGTGG
CTGCTAAAGCCATTGCTGCACTC**TGA**GGGGCTTGGCATGGCCGCAGTGGGGGCTGGGGACTGGCGCAGCCCCAGG
CGCCTCCAAGGGAAGCAGTGAGGAAAGATGAGGCATCGTGCCTCACATCCGCTCCACATGGTGCAAGAGCCTCTA
GCGGCTTCCAGTTCCCCGCTCCTGACTCCTGACCTCCAGGATGTCTCCCGGTTTCTTCTTTCAAAATTTCCTCTC
CATCTGCTGGCACCTGAGGAGAGTGAGCAGCCTGGACCACAAGCCCAGTGGTCACCCCTGTGTGCGCCCGCCCCA
GCCCAGGAGTAGTCTTACCTCTGAGGAACTTTCTAGATGCAAAGTGTGTATGTGTGTGTGTGTGTGTGTGTGT
GTGTTTGTGTGTATTTTGTAATATGTGAGGGAAATCTACCTTCGTTCATGTATAAATAAAGCTCCTCGTGGCTCC
CTT

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FIGURE 3441A

CACACACACACACACACACACACACACCCCAACACACACACACACCCCAACACACACACACACACACACAC
ACACACACACACACACACACACACACACACACACAGCGGGATGGCCGAGCGCCGCACGCGTAGCACGCCGGGACTAG
CTATCCAGCCTCCCAGCAGCCTCTGCGACGGGCGCGGTGCGTAAGTACCTCGCCGGTGGTGGCCGTTCTCCGTAA
GATGGCGGACCGGCGGCGGCAGCGCGCTTCGCAAGACACCGAGGACGAGGAATCTGGTGCTTCGGGCTCCGACAG
CGGCGGCTCCCCGTTGCGGGGAGGCGGGAGCTGCAGCGGTAGCGCCGGAGGCGGCGGCAGCGGCTCTCTGCCTTC
ACAGCGCGGAGGCCGAACCGGGGCCCTTCATCTGCGGCGGGTGGAGAGCGGGGGCGCCAAGAGTGCTGAGGAGTC
GGAGTGTGTGAGTGAAGATGGCATTGAAGGTGATGCTGTTCTCTCGGATTATGAAAGTGCAGAAGACTCGGAAGG
TGAAGAAGGTGAATACAGTGAAGAGGAAAACTCCAAAGTGGAGCTGAAATCAGAAGCTAATGATGCTGTTAATTC
TTCAACAAAAGAAGAGAAGGGAGAAGAAAAGCCTGACACCAAAAGCACTGTGACTGGAGAGAGGCAAAGTGGGGA
CGGACAGGAGAGCACAGAGCCTGTGGAGAACAAAGTGGGTAAAAAGGGCCCTAAGCATTTGGATGATGATGAAGA
TCGGAAGAATCCAGCATACATACCTCGGAAAGGGCTCTTCTTTGAGCATGATCTTCGAGGGCAAACTCAGGAGGA
GGAAGTCAGACCCAAGGGGCGTCAGCGAAAGCTATGGAAGGATGAGGGTCGCTGGGAGCATGACAAGTTCCGGGA
AGATGAGCAGGCCCCAAAGTCCCGACAGGAGCTCATTGCTCTTTATGGTTATGACATTCGCTCAGCTCATAATCC
TGATGACATCAAACCTCGAAGAATCCGGAAACCCCGATATGGGAGTCCTCCACAAAGAGATCCAAACTGGAACGG
TGAGCGGCTAAACAAGTCTCATCGCCACCAGGGTCTTGGGGGCACCCTACCACCAAGGACATTTATTAACAGGAA
TGCTGCAGGTACCGGCCGTATGTCTGCACCCAGGAATTATTCTCGATCTGGGGGCTTCAAGGAAGGTCGTGCTGG
TTTTAGGCCTGTGGAAGCTGGTGGGCAGCATGGTGGCCGGTCTGGTGAGACTGTTAAGCATGAGATTAGTTACCG
GTCACGGCGCCTAGAGCAGACTTCTGTGAGGGATCCATCTCCAGAAGCAGATGCTCCAGTGCTTGGCAGTCCTGA
GAAGGAAGAGGCAGCCTCAGAGCCACCAGCTGCTGCTCCTGATGCTGCACCACCACCCCCTGATAGGCCCATTGA
GAAGAAATCCTATTCCCGGGCAAGAAGAACTCGAACCAAAGTTGGAGATGCAGTCAAGCTTGCAGAGGAGGTGCC
CCCTCCTCCTGAAGGACTGATTCCAGCACCTCCAGTCCCAGAAACCACCCCAACTCCACCTACTAAGACTGGGAC
CTGGGAAGCTCCGGTGGATTCTAGTACAAGTGGACTTGAGCAAGATGTGGCACAACTAAATATAGCAGAACAGAA
TTGGAGTCCGGGGCAGCCTTCTTTCCTGCAACCACGGGAACTTCGAGGTATGCCCAACCATATACACATGGGAGC
AGGACCTCCACCTCAGTTTAACCGGATGGAAGAAATGGGTGTCCAGGGTGGTCGAGCCAAACGCTATTCATCCCA
GCGGCAAAGACCTGTGCCAGAGCCCCCCGCCCCTCCAGTGCATATCAGTATCATGGAGGGACATTACTATGATCC
ACTGCAGTTCCAGGGACCAATCTATACCCATGGTGACAGCCCTGCCCCGCTGCCTCCACAGGGCATGCTTGTGCA
GCCAGGAATGAACCTTCCCCACCCAGGTTTACATCCCCACCAGACACCAGCTCCTCTGCCCAATCCAGGCCTCTA
TCCCCCACCAGTGTCCATGTCTCCAGGACAGCCACCACCTCAGCAGTTGCTTGCTCCTACTTACTTTTCTGCTCC
AGGCGTCATGAACTTTGGTAATCCCAGTTACCCTTATGCTCCAGGGGCACTGCCTCCCCCACCACCGCCTCATCT
GTATCCTAATACACAGGCCCCATCACAGGTATATGGAGGAGTGACCTACTATAACCCCGCCCAGCAGCAGGTGCA
GCCAAAGCCCTCCCCACCCCGGAGGAGTCCCCAGCCAGTCACCATCAAGCCCCCTCCACCTGAGGTTGTAAGCAG
GGGTTCCAGTTAATACAAGTTTCTGAATATTTTAAATCTTAACATCATATAAAAAGCAGCAGAGGTGAGAACTCA
GAAGAGAAATACAGCTGGCTATCTACTACCAGAAGGGCTTCAAAGATATAGGGTGTGGCTCCTACCAGCAAACAG
CTGAAAGAGGAGGACCCCTGCCTTCCTCTGAGGACAGGCTCTAGAGAGAGGGAGAAACAAGTGGACCTCGTCCCA
TCTTCACTCTTCACTTGAGTTGGCTGTGTTCGGGGGAGCAGAGAGAGCCAGACAGCCCCAAGCTTCTGAGTCTAG
ATACAGAAGCCCATGTCTTCTGCTGTTCTTCACTTCTGGGAAATTGAAGTGTCTTCTGTTCCCAAGGAAGCTCCT
TCCTGTTTGTTTTGTTTTCTAAGATGTTCATTTTTAAAGCCTGGCTTCTTATCCTTAATATTATTTTAATTTTTT
CTCTTTGTTTCTGTTTCTTGCTCTCTCTCCCTGCCTTTAAATGAAACAAGTCTAGTCTTCTGGTTTTCTAGCCCC
TCTGGATTCCCTTTTGACTCTTCCGTGCATCCCAGATAATGGAGAATGTATCAGCCAGCCTTCCCCACCAAGTCT
AAAAAGACCTGGCCTTTCACTTTTAGTTGGCATTTGTTATCCTCTTGTATACTTGTATTCCCTTAACTCTAACCC
TGTGGAAGCATGGCTGTCTGCACAGAGGGTCCCATTGTGCAGAAAAGCTCAGAGTAGGTGGGTAGGAGCCCTTCT
CTTTGACTTAGGTTTTTAGGAGTCTGAGCATCCATCAATACCTGTACTATGATGGGCTTCTGTTCTCTGCTGAGG
GCCAATACCCTACTGTGGGGAGAGATGGCACACCAGATGCTTTTGTGAGAAAGGGATGGTGGAGTGAGAGCCTTT
GCCTTTAGGGGTGTGTATTCACATAGTCCTCAGGGCTCAGTCTTTTGAGGTAAGTGGAATTAGAGGGCCTTGCTT
CTCTTCTTTCCATTCTTCTTGCTACACCCCTTTTCCAGTTGCTGTGGACCAATGCATCTCTTTAAAGGCAAATAT
TATCCAGCAAGCAGTCTACCCTGTCCTTTGCAATTGCTCTTCTCCACGTCTTTCCTGCTACAAGTGTTTTAGATG
TTACTACCTTATTTTCCCCGAATTCTATTTTTGTCCTTGCAGACAGAATATAAAAACTCCTGGGCTTAAGGCCTA
AGGAAGCCAGTCACCTTCTGGGCAAGGGCTCCTATCTTTCCTCCCTATCCATGGCACTAAACCACTTCTCTGCTG

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FIGURE 3441B

CCTCTGTGGAAGAGATTCCTATTACTGCAGTACATACGTCTGCCAGGGGTAACCTGGCCACTGTCCCTGTCCTTC
TACAGAACCTGAGGGCAAAGATGGTGGCTGTGTCTCTCCCCGGTAATGTCACTGTTTTTATTCCTTCCATCTAGC
AGCTGGCCTAATCACTCTGAGTCACAGGTGTGGGATGGAGAGTGGGGAGAGGCACTTAATCTGTAACCCCCAAGG
AGGAAATAACTAAGAGATTCTTCTAGGGGTAGCTGGTGGTTGTGCCTTTTGTAGGCTGTTCCCTTTGCCTTAAAC
CTGAAGATGTCTCCTCAAGCCTGTGGGCAGCATGCCCAGATTCCCAGACCTTAAGACACTGTGAGAGTTGTCTCT
GTTGGTCCACTGTGTTTAGTTGCAAGGATTTTTCCATGTGTGGTGGTGTTTTTTGTTACTGTTTTAAAGGGTGCC
CATTTGTGATCAGCATTGTGACTTGGAGATAATAAAATTTAGACTATAAACTTG

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FIGURE 3442

ATGAGATCCGCGGTGTTCAAGGCGGCCGCGGCCCCTGCCGGCGGCAATCCTGAGCAGCGACTGGACTACGAGCGG
GCTGCGGCGCTGGGCGGGCCCGAGGACGAGCCTGGGGCGGCCGAAGCCCACTTCCTCCCCCGGCACCGTAAGCTC
AAGGAGCCGGGGCCCCCGCTGGCCTCCTCCCAGGGCGGGAGCCCCGCGCCTTCCCCGGCCGGCTGCGGCGGCAAG
GGCCGGGGCTTGTTACTCCCGGCCGGGGCGGCCCCCGGGCAGCAGGAAGAGAGCTGGGGCGGTTCGGTGCCCTTG
CCCTGTCCGCCCCCGGCCACCAAGCAAGCCGGCATTGGGGGGGAGCCTGCCGCAGCCGGAGCCGGCTGCAGCCCC
CGGCCCAAGTATCAGGCGGTGCTGCCCATTCAGACGGGCTCTCTCGTGGCGGCGGCCAAAGAGCCTACGCCCTGG
GCTGGGGACAAGGGTGGGGCGGCCTCCCCCGCTGCCACCGCCTCGGACCCGGCGGGACCCCCACCACTACCTCTG
CCCGGGCCGCCACCCCTCGCGCCCACCGCCACCGCCGGGACCCTGGCGGCCAGCGAGGGCAGATGGAAGAGTATG
AGGAAGAGCCCTCTCGGGGGTGGTGGCGGCTCGGGAGCCTCCAGTCAGGCCGCCTGCCTCAAACAGATCCTTCTG
CTGCAATTGGACCTCATCGAACAGCAGCAGCAGCAGCTGCAGGCCAAGGAAAAGGAGATCGAGGAGCTGAAGTCA
GAGAGAGACACGCTCCTTGCTCGGATTGAACGTATGGAAAGGCGGATGCAGCTGGTAAAGAAGGATAACGAGAAA
GAAAGGCACAAGCTGTTTCAGGGCTATGAAACTGAAGAGAGAGAGGAAACAGAGCTATCTGAGAAAATTAAACTG
GAGTGCCAGCCGGAGCTTTCCGAGACATCCCAGACTCTGCCTCCCAAGCCCTTCTCATGTGGGCGGAGTGGAAAG
GGACATAAAAGGAAATCCCCATTTGGAAGTACAGAAAGAAAGACTCCTGTTAAAAAGCTGGCTCCTGAATTTTCA
AAAGTCAAAACAAAAACTCCTAAGCACTCTCCTATTAAAGAGGAACCCTGTGGTTCCTTATCTGAAACTGTTTGT
AAACGTGAATTGAGGAGCCAAGAAACCCCAGAAAAGCCCCGGTCTTCAGTGGACACCCCACCAAGACTCTCCACT
CCCCAAAAGGGACCCAGCACCCATCCCAAGGAGAAAGCCTTCTCAAGTGAGATAGAAGATTTGCCGTACCTTTCC
ACCACAGAAATGTATTTGTGTCGTTGGCACCAGCCTCCCCCATCACCGTTACCATTACGGGAATCCTCTCCAAAG
AAGGAGGAGACTGTAGCAAGTAAGGCATAGAACACTTGCTCTTATACCCTAGTGGTGGCGGTCAAGCTAACAA
GTGTGAAAATGCCTTTGGCATTTTTAAAAAAGTGCAATCAATAAAGCAGAGTTCTGTCAAGAATGAGTAAGTTAA
CAGCCAGAGACAGACACTGTGCAGGCATTGCAAATAGATGGAATTACAGCAAAATGTGCTCAATGTATTTGCCTG
CTTACAACACTGGGAGATGTGTTTGCCAGTAAGTTGCTCATCACAAGAGCACCAGACTTGGGGGTGTAATCTCCG
GCAACTTGCATGCCCTCTGAAAGAAGGGTTTTCTGTGCTGTGAAATGCATAGAACTATACTTTGCCATGCACGAC
TGTTCCTGCAATTGATATTGTGTGAAATCT

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FIGURE 3443

CCAGGGACAGCGCCGCCTCAGATATCCTGCTGGATGACATTGTCCTTACCCATTCTCTCTTCCTCCCGACGGAGA
AATTTCTGCAGGAGCTACACCAGTACTTTGTTCGGGCAGGAGGCATGGAGGGCCCTGAAGGGCTGGGCCGGAAGC
AAGCCTGTCTAGCCATGCTTCTCCATTTCTTGGACACCTACCAGGGGCTGCTTCAAGAGGAAGAGGGGGCCGGCC
ACATCATCAAGGATCTATACCTGCTAATTATGAAGGACGAGTCCCTTTACCAGGGCCTCCGAGAGGACACTCTGA
GGCTGCACCAGCTGGTGGAGACGGTGGAACTAAAGATTCCAGAGGAGAACCAGCCACCCAGCAAGCAGGTGAAGC
CACTCTTCCGCCACTTCCGCCGGATAGACTCCTGTCTGCAGACCCGGGTGGCCTTCCGGGGCTCTGATGAGATCT
TCTGCCGTGTATACATGCCTGACCACTCTTATGTGACCATACGCAGCCGCCTTTCAGCATCTGTGCAGGACATTC
TGGGCTCTGTGACGGAGAAACTTCAATATTCAGAGGAGCCCGCGGGGCGTGAGGATTCCCTCATCCTGGTAGCTG
TGTCCTCCTCTGGAGAGAAGGTCCTTCTCCAGCCCACTGAGGACTGTGTTTTCACCGCACTGGGCATCAACAGCC
ACCTGTTTGCCTGTACTCGGGACAGCTATGAGGCTCTGGTGCCCCTCCCCGAGGAGATCCAGGTCTCCCCTGGAG
ACACAGAGATCCACCGAGTGGAGCCTGAGGACGTTGCCAACCACCTAACTGCCTTCCACTGGGAGCTGTTCCGAT
GTGTGCATGAGCTGGAGTTCGTGGACTACGTGTTCCACGGGGAGCGCGGCCGCCGGGAGACGGCCAACTTGGAGC
TGCTGCTGCAGCGCTGCAGCGAGGTCACGCACTGGGTGGCCACCGAAGTGCTGCTCTGCGAGGCCCCGGGCAAGC
GCGCGCAGCTGCTCAAGAAGTTCATCAAGATCGCGGCCCTCTGCAAGCAGAACCAGGACCTGCTGTCTTTCTACG
CCGTGGTCATGGGGCTGGACAACGCCGCTGTCAGCCGCCTTCGACTCACCTGGGAGAAGCTGCCAGGGAAATTCA
AGAACTTGTTTCGCAAATTTGAGAACCTGACGGACCCCTGCAGGAACCACAAAAGCTACCGAGAAGTGATCTCCA
AAATGAAGCCCCCTGTGATTCCCTTCGTGCCTCTGATCCTCAAAGACCTGACTTTCCTGCACGAAGGGAGTAAGA
CCCTTGTAGATGGTTTGGTGAACATCGAGAAGCTGCATTCAGTGGCCGAAAAAGTGAGGACAATCCGCAAATACC
GGAGCCGGCCCCTTTGCCTGGACATGGAGGCATCCCCCAATCACCTGCAGACCAAGGCCTATGTGCGCCAGTTTC
AGGTCATCGACAACCAGAACCTCCTCTTCGAGCTCTCCTACAAGCTGGAGGCAAACAGTCAGTGAGAGTGGAGGC
TCCAGTCAGACCCGCCAGATCCTTGGGCACCTGGCACTCAAGCACTTTGCACGATGTCTCAACCAACATCTGACA
TCTTTCCCGTGGAGCAACTTCCTGCTCCACGGGAAAGAGGTCGATGGATTTACCCCTGGACCCATAAGTCTGTTC
ATCCTGCTGAAGTCCCCTCCCCATTGCTCCTTCAAGCCAAAACTACACTTTGCTGGTTCCTGTCCCCTCTGAGAA
AGGGGATAGAAAGCTCCTTCCTCTATGTCCTCCCATCGAGATCTGTTCTGGGGATGGAGCTTCCAACTTCCTCTT
GCAGCAGGAAAGAATGCTGCTCACCCTTCTGTCTTGCAGAGTGGGATTGTGGGAGGGATTGGCAGCCTTCTTCTC
CACCACCTGTCCAGCTTCTTCCTGGTCAGGGCTGGGACCCCCAGGAATATTATGTTGCCGTGTGTGTGTGTGTGT
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTTCTTTTAGGGAGCAAGAGTGCATCTGGTAAT
TGAGGGTGGATGTTGTGTGTGCTGGGGAGGGGTCCTTCTGTTTGGTGCTACCCTTGTCTACTCTGCCCCTGGATG
GTGCGGGGTGCTTTCTCCACCCCCACACTCCCTGCTCAGCTCCTCGTGCTGCCCTGCATGCCCAGGCTTGTGAGC
CAAGCTGCTTTTTGGGGCAGGGAGTAGCAGCAGGTGGGAGGGGTTACCCATCAGCCCTTGCAAGTCCCCCACTCA
GGCCTCTGGAAGGTCCAGGGATGGGCTCTGATGAGAGGGTAAAAGATGCTCAGGGAAACACAGGCCTCAGCTGCC
TAGAGGACCCTCCCCCTGCCTTGCAGTGGGCTCGGGTAGAGCAGTATCAGGAGCTAGGGTTGTCTGCTGCCCACA
CTCCTGCTTTTTGGGATATCTAACTGCTAAGGAGGGAGTTGACATCCCCCTTCTGGCTCATGTGTCTGACACCAA
CAACATGGTCTCTGTCCCTCTCTCTTTGACTCTCCCTTTGTCCTCCCCATAGAGCTGGGGTGGGGTGGATCCCTA
TACCTGGGGCAGGCAGCCCCAAAGTGGGGGAGGGGGATGGCAGAGACTGTAAAGGCGCCACTGGACTCTGGCAAG
GCCTTTATTACCTTTACTCCCCTCCCTCTCCCATCACCAGCCTCAAGGCCTGAGGGGTGCAGGGGCTCCTGGCAG
CTACTGGGTGAGGTTTCCTGGCACAGACTCACCCTTCTTTCTGGCACCACCTCTTTCCCTTTTGAAGAGACAGCA
ACAGCCGTAGCAAAAGCAGCTGCTGCTCCTGCTATGAGGGTGTATATATTTTTTACCCAAAGCTCTGGAATTGTA
CATTTATTTTTTAAAACTCAAAGAGGGAAAGAGCCTTGTATCATATGTGAACATTGTATCATAGGTAATGTTGTA
CAGACCCTTTTATACAGTGATCTGTCTTGTTCCTGCAGCAAAAATCCTCTATGGACATAGGAGGTGCTGTGTCCC
ATGCCCTCTTGCCCTGACAGTGTCCCATGGGCCCCCTTCTGCTCCCTGCCCCCTCCCTGCTACTGCTGATGCACT
CTCCTCTCCCTGCAGCCCCTGGCTTCCCAGCCTTCCTCCTGACCCCTTCCAACAGCCTTGGAACTCCAGCTGCCA
CCACCCTCTGGGTCGGACACTGGGACCCACTGGCCCAGTCTTGGCTGCTGCTTACCCCTAGCCTTGATGCCTGCC
CAGGGACCCCCAGCCCCCTCCCGTTGCCCTGCAGCTTTAACAGAGTGAACCATGTGTATTGTACAGGCGCGGTTG
TCATTGCAGAAACCGCTGGGTGGAGAAGAAGCCGATAAAGTCTATGAATC

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FIGURE 3444

CGAGGCGCTCCCTGGGATCACATGGTACCTGCTCCAGTGCCGCGTGCGGCCCGGGAACCCTGGGCTGCTGGCGCC
TGCGCAGAGCCCTCTGTCCCAGGGAAAGGCTCGGGCAAAAGGCGGCTGAGATTGGCAGAGTGAAATATTACTGCC
GAGGGAACGTAGCAGGGCACACGTCTCGCCTCTTTGCGACTCGGTGCCCCGTTTCTCCCCATCACCTACTTACTT
CCTGGTTGCAACCTCTCTTCCTCTGGGACTTTTGCACCGGGAGCTCCAGATTCGCCACCCCGCAGCGCTGCGGAG
CCGGCAGGCAGAGGCACCCCGTACACTGCAGAGACCCGACCCTCCTTGCTACCTTCTAGCCAGAACTACTGCAGG
CTGATTCCCCCTACACACTCTCTCTGCTCTTCCCATGCAAAGCAGAACTCCGTTGCCTCAACGTCCAACCCTTCT
GCAGGGCTGCAGTCCGGCCACCCCAAGACCTTGCTGCAGGGTGCTTCGGATCCTGATCGTGAGTCGCGGGGTCCA
CTCCCCGCCCTTAGCCAGTGCCCAGGGGGCAACAGCGGCGATCGCAACCTCTAGTTTGAGTCAAGGTCCAGTTTG
AATGACCGCTCTCAGCTGGTGAAGACATGACGACCCTGGACTCCAACAACAACACAGGTGGCGTCATCACCTACA
TTGGCTCCAGTGGCTCCTCCCCAAGCCGCACCAGCCCTGAATCCCTCTATAGTGACAACTCCAATGGCAGCTTCC
AGTCCCTGACCCAAGGCTGTCCCACCTACTTCCCACCATCCCCCACTGGCTCCCTCACCCAAGACCCGGCTCGCT
CCTTTGGGAGCATTCCACCCAGCCTGAGTGATGACGGCTCCCCTTCTTCCTCATCTTCCTCGTCGTCATCCTCCT
CCTCCTTCTATAATGGGAGCCCCCCTGGGAGTCTACAAGTGGCCATGGAGGACAGCAGCCGAGTGTCCCCCAGCA
AGAGCACCAGCAACATCACCAAGCTGAATGGCATGGTGTTACTGTGTAAAGTGTGTGGGGACGTTGCCTCGGGCT
TCCACTACGGTGTGCACGCCTGCGAGGGCTGCAAGGGCTTTTTCCGTCGGAGCATCCAGCAGAACATCCAGTACA
AAAGGTGTCTGAAGAATGAGAATTGCTCCATCGTCCGCATCAATCGCAACCGCTGCCAGCAATGTCGCTTCAAGA
AGTGTCTCTCTGTGGGCATGTCTCGAGACGCTGTGCGTTTTGGGCGCATCCCCAAACGAGAGAAGCAGCGGATGC
TTGCTGAGATGCAGAGTGCCATGAACCTGGCCAACAACCAGTTGAGCAGCCAGTGCCCGCTGGAGACTTCACCCA
CCCAGCACCCCACCCCAGGCCCCATGGGCCCCTCGCCACCCCCTGCTCCGGTCCCCTCACCCCTGGTGGGCTTCT
CCCAGTTTCCACAACAGCTGACGCCTCCCAGATCCCCAAGCCCTGAGCCCACAGTGGAGGATGTGATATCCCAGG
TGGCCCGGGCCCATCGAGAGATCTTCACCTACGCCCATGACAAGCTGGGCAGCTCACCTGGCAACTTCAATGCCA
ACCATGCATCAGGTAGCCCTCCAGCCACCACCCCACATCGCTGGGAAAATCAGGGCTGCCCACCTGCCCCCAATG
ACAACAACACCTTGGCTGCCCAGCGTCATAACGAGGCCCTAAATGGTCTGCGCCAGGCTCCCTCCTCCTACCCTC
CCACCTGGCCTCCTGGCCCTGCACACCACAGCTGCCACCAGTCCAACAGCAACGGGCACCGTCTATGCCCCACCC
ACGTGTATGCAGCCCCAGAAGGCAAGGCACCTGCCAACAGTCCCCGGCAGGGCAACTCAAAGAATGTTCTGCTGG
CATGTCCTATGAACATGTACCCGCATGGACGCAGTGGGCGAACGGTGCAGGAGATCTGGGAGGATTTCTCCATGA
GCTTCACGCCCGCTGTGCGGGAGGTGGTAGAGTTTGCCAAACACATCCCGGGCTTCCGTGACCTTTCTCAGCATG
ACCAAGTCACCCTGCTTAAGGCTGGCACCTTTGAGGTGCTGATGGTGCGCTTTGCTTCGTTGTTCAACGTGAAGG
ACCAGACAGTGATGTTCCTAAGCCGCACCACCTACAGCCTGCAGGAGCTTGGTGCCATGGGCATGGGAGACCTGC
TCAGTGCCATGTTCGACTTCAGCGAGAAGCTCAACTCCCTGGCGCTTACCGAGGAGGAGCTGGGCCTCTTCACCG
CGGTGGTGCTTGTCTCTGCAGACCGCTCGGGCATGGAGAATTCCGCTTCGGTGGAGCAGCTCCAGGAGACGCTGC
TGCGGGCTCTTCGGGCTCTGGTGCTGAAGAACCGGCCCTTGGAGACTTCCCGCTTCACCAAGCTGCTGCTCAAGC
TGCCGGACCTGCGGACCCTGAACAACATGCATTCCGAGAAGCTGCTGTCCTTCCGGGTGGACGCCCAGTGACCCG
CCCGGCCGGCCTTCTGCCGCTGCCCCCTTGTACAGAATCGAACTCTGCACTTCTCTCTCCTTTACGAGACGAAAA
GGAAAAGCAAACCAGAATCTTATTTATATTGTTATAAAATATTCCAAGATGAGCCTCTGGCCCCCTGAGCCTTCT
TGTAAATACCTGCCTCCCTCCCCCATCACCGAACTTCCCCTGCTCCTTTTTTTAAACCACTCTGTCTCCCCCACA
ACCCTCCCCTGGCCCTCTGATTTGTTCTGTTCCTGTCTCAAATCCAATAGTTCACAGCTGAGCTGG

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FIGURE 3445

AGGGCTTCTTTCGCCGCACAATCCAGAAGAACCTNCCATCCCACCTATTCCTGCAAATATGACAGCTGCTGTGTC
ATTGACAAGATCACCCGCAATCAGTGCCAGCTGTGCCGCTTCAAGAAGTGCATCGCCGTGGGCATGGCCATGGAC
TTGGTTCTAGATGACTCGAAGCGGGTGGCCAAGCGTAAGCTGATTGAGCAGAACCGGGAGCGGCGGCGGAAGGAG
GAGATGATCCGATCACTGCAGCAGCGACCAGAGCCCACTCCTGAAGAGTGGGATCTGATCCACATTGCCACAGAG
GCCCATCGCAGCACCAATGCCCAGGGCAGCCATTGGAAACAGAGGCGGAAATTCCTGCCCGATGACATTGGCCAG
TCACCCATTGTCTCCATGCCGGACGGAGACAAGGTGGACCTGGAAGCCTTCAGCGAGTTTACCAAGATCATCACC
CCGGCCATCACCCGTGTGGTGGACTTTGCCAAAAAACTGCCCATGTTCTCCGAGCTGCCTTGCGAAGACCAGATC
ATCCTCCTGAAGGGGTGCTGCATGGAGATCATGTCCCTGCGGGCGGCTGTCCGCTACGACCCTGAGAGCGACACC
CTGACGCTGAGTGGGGAGATGGCTGTCAAGCGGGAGCAGCTCAAGAATGGCGGCCTGGGCGTAGTCTCCGACGCC
ATCTTTGAACTGGGCAAGTCACTCTCTGCCTTTAACCTGGATGACACGGAAGTGGCTCTGCTGCAGGCTGTGCTG
CTAATGTCAACAGACCGCTCGGGCCTGCTGTGTGTGGACAAGATCGAGAAGAGTCAGGAGGCGTACCTGCTGGCG
TTCGAGCACTACGTCAACCACCGCAAACACAACATTCCGCACTTCTGGCCCAAGCTGCTGATGAAGGAGAGAGAA
GTGCAGAGTTCGATTCTGTACAAGGGGGCAGCGGCAGAAGGCCGGCCGGGCGGGTCACTGGGCGTCCACCCGGAA
GGACAGCAGCTTCTCGGAATGCATGTTGTTCAGGGTCCGCAGGTCCGGCAGCTTGAGCAGCAGCTTGGTGAAGCG
GGAAGTCTCCAAGGGCCGGTTCTTCAGCACCAGAGCCCGAAGAGCCCGCAGCAGCGTCTCCTGGAGCTGCTCCAC
CGAAGCGGAATTCTCCATGCCCGAGCGGTCTGTGGGGAAGACGACAGCAGTGAGGCGGACTCCCCGAGCTCCTCT
GAGGAGGAACCGGAGGTCTGCGAGGACCTGGCAGGCAATGCAGCCTCTCCCTGAAGCCCCCCAGAAGGCCGATGG
GGAAGGAGAAGGAGTGCCATACCTTCTCCCAGGCCTCTGCCCCAAGAGCAGGAGGTGCCTGAAAGCTGGGAGCGT
GGGCTCAGCAGGGCTGGTCACCTCCCATCCCGTAAGACCACCTTCCCTTCCTCAGCAGGCCAAACATGGCCAGAC
TCCCTTGCTTTTTGCTGTGTAGTTCCCTCTGCCTGGGATGCCCTTCCCCCTTTCTCTGCCTGGCAACATCTTACT
TGTCCTTTGAGGCCCCAACTCAAGTGTCACCTCCTTCCCCAGCTCCCCCAGGCAGAAATAG

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FIGURE 3446

CTCCTCTCCAGCCCTTCTCCTGTGTGCCTGCCTCCTGCCGCCGCCACCATGACCACCTCCATCCGCCAGTTCACC
TCCTCCAGCTCCATCAAGGGCTCCTCCGGCCTGGGGGGCGGCTCGTCCCGCACCTCCTGCCGGCTGTCTGGCGGC
CTGGGTGCCGGCTCCTGCAGGCTGGGATCTGCTGGCGGCCTGGGCAGCACCCTCGGGGGTAGCAGCTACTCCAGC
TGCTACAGCTTTGGCTCTGGTGGTGGCTATGGCAGCAGCTTTGGGGGTGTTGATGGGCTGCTGGCTGGAGGTGAG
AAGGCCACCATGCAGAACCTCAATGACCGCCTGGCCTCCTACCTGGACAAGGTGCGTGCCCTGGAGGAGGCCAAC
ACTGAGCTGGAGGTGAAGATCCGTGACTGGTACCAGAGGCAGGCCCCGGGGCCCGCCCGTGACTACAGCCAGTAC
TACAGGACAATTGAGGAGCTGCAGAACAAGATCCTCACAGCCACCGTGGACAATGCCAACATCCTGCTACAGATT
GACAATGCCCGTCTGGCTGCTGATGACTTCCGCACCAAGTTTGAGACAGAGCAGGCCCTGCGCCTGAGTGTGGAG
GCCGACATCAATGGCCTGCGCAGGGTGCTGGATGAGCTGACCCTGGCCAGAGCCGACCTGGAGATGCAGATTGAG
AACCTCAAGGAGGAGCTGGCCTACCTGAAGAAGAACCACGAGGAGGAGATGAACGCCCTGCGAGGCCAGGTGGGT
GGTGAGATCAATGTGGAGATGGACGCTGCCCCAGGCGTGGACCTGAGCCGCATCCTCAACGAGATGCGTGACCAG
TATGAGAAGATGGCAGAGAAGAACCGCAAGGATGCCGAGGATTGGTTCTTCAGCAAGACAGAGGAACTGAACCGC
GAGGTGGCCACCAACAGTGAGCTGGTGCAGAGTGGCAAGAGTGAGATCTCGGAGCTCCGGCGCACCATGCAGGCC
TTGGAGATAGAGCTGCAGTCCCAGCTCAGCATGAAAGCATCCCTGGAGGGCAACCTGGCGGAGACAGAGAACCGC
TACTGCGTGCAGCTGTCCCAGATCCAGGGGCTGATTGGCAGCGTGGAGGAGCAGCTGGCCCAGCTTCGCTGCGAG
ATGGAGCAGCAGAACCAGGAATACAAAATCCTGCTGGATGTGAAGACGCGGCTGGAGCAGGAGATTGCCACCTAC
CGCCGCCTGCTGGAGGGAGAGGATGCCCACCTGACTCAGTACAAGAAAGAACCGGTGACCACCCGTCAGGTGCGT
ACCATTGTGGAAGAGGTCCAGGATGGCAAGGTCATCTCCTCCCGCGAGCAGGTCCACCAGACCACCCGCTGAGGA
CTCAGCTACCCCGGCCGGCCACCCAGGAGGCAGGGAGGCAGCCGCCCCATCTGCCCCACAGTCTCCGGCCTCTCC
AGCCTCAGCCCCCTGCTTCAGTCCCTTCCCCATGCTTCCTTGCCTGATGACAATAAAGCTTGTTGACTCAGCT

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FIGURE 3447

ATGACCACCTGCAGCCGCCAGTTCACCTCCTCCAGCTCCATGAAGGGCTCCTGCGGCATCGGAGGCGGCATCGGG
GGCGGCTCCAGCCGCATCTCCTCCGTCCTGGCCGGAGGGTCCTGCCGTGCCCCCAGCACCTACGGGGGCGGCCTG
TCTGTCTCCTCTCGCTTCTCCTCTGGGGGAGCCTGCGGGCTGGGGGGCGGCTATGGCGGTGGCTTCAGCAGCAGC
AGCAGCTTTGGTAGTGGCTTCGGGGGAGGATATGGTGGTGGCCTTGGTGCTGGCTTCGGTGGTGGCTTGGGTGCT
GGCTTTGGTGGTGGTTTTGCTGGTGGTGATGGGCTTCTGGTGGGCAGTGAGAAGGTGACCATGCAGAACCTCAAT
GACCGCCTGGCCTCCTACCTGGACAAGGTGCGTGCTCTGGAGGAGGCCAACGCCGACCTGGAAGTGAAGATCCGT
GACTGGTACCAGAGGCAGCGGCCCAGTGAGATCAAAGACTACAGTCCCTACTTCAAGACCATCGAGGACCTGAGG
AACAAGATCATTGCGGCCACCATTGAGAATGCGCAGCCCATTTTGCAGATTGACAATGCCAGGCTGGCAGCCGAT
GACTTCAGGACCAAGTATGAGCACGAACTGGCCCTGCGGCAGACTGTGGAGGCCGACGTCAATGGCCTGCGCCGG
GTGTTGGATGAGCTGACCCTGGCCAGGACTGACCTGGAGATGCAGATCGAAGGCCTGAAGGAGGAGCTGGCCTAC
CTGAGGAAGAACCACGAGGAGGAGATGCTTGCTCTGAGAGGTCAGACCGGCGGAGATGTGAACGTGGAGATGGAT
GCTGCACCTGGCGTGGACCTGAGCCGCATCCTGAATGAGATGCGTGACCAGTACGAGCAGATGGCAGAGAAAAAC
CGCAGAGACGCTGAGACCTGGTTCCTGAGCAAGACCGAGGAGCTGAACAAAGAAGTGGCCTCCAACAGCGAACTG
GTACAGAGCAGCCGCAGTGAGGTGACGGAGCTCCGGAGGGTGCTCCAGGGCCTGGAGATTGAGCTGCAGTCCCAG
CTCAGCATGAAAGCATCCCTGGAGAACAGCCTGGAGGAGACCAAAGGCCGCTACTGCATGCAGCTGTCCCAGATC
CAGGGACTGATTGGCAGTGTGGAGGAGCAGCTGGCCCAGCTACGCTGTGAGATGGAGCAGCAGAGCCAGGAGTAC
CAGATCTTGCTGGATGTGAAGACGCGGCTGGAGCAGGAGATTGCCACCTACCGCCGCCTGCTGGAGGGCGAGGAT
GCCCACCTTTCCTCCCAGCAAGCATCTGGCCAATCCTATTCTTCCCGCGAGGTCTTCACCTCCTCCTCGTCCTCT
TCGAGCCGTCAGACCCGGCCCATCCTCAAGGAGCAGAGCTCATCCAGCTTCAGCCAGGGCCAGAGCTCCTAG

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FIGURE 3448

GGGTTGCTCCGTCCGTGCTCCGCCTCGCCATGACTTCCTACAGCTATCGCCAGTCGTCGGCCACGTCGTCCTTCG
GAGGCCTGGGCGGCGGCTCCGTGCGTTTTGGGCCGGGGGTCGCCTTTCGCGCGCCCAGCATTCACGGGGGCTCCG
GCGGCCGCGGCGTATCCGTGTCCTCCGCCCGCTTTGTGTCCTCGTCCTCCTCGGGGGCCTACGGCGGCGGCTACG
GCGGCGTCCTGACCGCGTCCGACGGGCTGCTGGCGGGCAACGAGAAGCTAACCATGCAGAACCTCAACGACCGCC
TGGCCTCCTACCTGGACAAGGTGCGCGCCCTGGAGGCGGCCAACGGCGAGCTAGAGGTGAAGATCCGCGACTGGT
ACCAGAAGCAGGGGCCTGGGCCCTCCCGCGACTACAGCCACTACTACACGACCATCCAGGACCTGCGGGACAAGA
TTCTTGGTGCCACCATTGAGAACTCCAGGATTGTCCTGCAGATCGACAATGCCCGTCTGGCTGCAGATGACTTCC
GAACCAAGTTTGAGACGGAACAGGCTCTGCGCATGAGCGTGGAGGCCGACATCAACGGCCTGCGCAGGGTGCTGG
ATGAGCTGACCCTGGCCAGGACCGACCTGGAGATGCAGATCGAAGGCCTGAAGGAAGAGCTGGCCTACCTGAAGA
AGAACCATGAGGAGGAAATCAGTACGCTGAGGGGCCAAGTGGGAGGCCAGGTCAGTGTGGAGGTGGATTCCGCTC
CGGGCACCGATCTCGCCAAGATCCTGAGTGACATGCGAAGCCAATATGAGGTCATGGCCGAGCAGAACCGGAAGG
ATGCTGAAGCCTGGTTCACCAGCCGGACTGAAGAATTGAACCGGGAGGTCGCTGGCCACACGGAGCAGCTCCAGA
TGAGCAGGTCCGAGGTTACTGACCTGCGGCGCACCCTTCAGGGTCTTGAGATTGAGCTGCAGTCACAGCTGAGCA
TGAAAGCTGCCTTGGAAGACACACTGGCAGAAACGGAGGCGCGCTTTGGAGCCCAGCTGGCGCATATCCAGGCGC
TGATCAGCGGTATTGAAGCCCAGCTGGGCGATGTGCGAGCTGATAGTGAGCGGCAGAATCAGGAGTACCAGCGGC
TCATGGACATCAAGTCGCGGCTGGAGCAGGAGATTGCCACCTACCGCAGCCTGCTCGAGGGACAGGAAGATCACT
ACAACAATTTGTCTGCCTCCAAGGTCCTCTGAGGCAGCAGGCTCTGGGGCTTCTGCTGTCCTTTGGAGGGTGTCT
TCTGGGTAGAGGGATGGGAAGGAAGGGACCCTTACCCCCGGCTCTTCTCCTGACCTGCCAATAAAAATTTATGGT
CCAAGGG

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FIGURE 3449

GGTACCTCCTGCCAGCATCTCTTGGGTTTGCTGAGAACTCACGGGCTCCAGCTACCTGGCCATGACCACCACATT
TCTGCAAACTTCTTCCTCCACCTTTGGGGGTGGCTCAACCCGAGGGGGTTCCCTCCTGGCTGGGGGAGGTGGCTT
TGGTGGGGGGAGTCTCTCTGGGGGAGGTGGAAGCCGAAGTATCTCAGCTTCTTCTGCTAGGTTTGTCTCTTCAGG
GTCAGGAGGAGGATATGGGGGTGGCATGAGGGTCTGTGGCTTTGGTGGAGGGGCTGGTAGTGTTTTCGGTGGAGG
CTTTGGAGGGGGCGTTGGTGGGGGTTTTGGTGGTGGCTTTGGTGGTGGCGATGGTGGTCTCCTCTCTGGCAATGA
GAAAATTACCATGCAGAACCTCAATGACCGCCTGGCCTCCTACCTGGACAAGGTACGTGCCCTGGAGGAGGCCAA
TGCTGACCTGGAGGTGAAGATCCATGACTGGTACCAGAAGCAGACCCCAACCAGCCCAGAATGCGACTACAGCCA
ATACTTCAAGACCATTGAAGAGCTCCGGGACAAGATCATGGCCACCACCATCGACAACTCCCGGGTCATCCTGGA
GATCGACAATGCCAGGCTGGCTGCGGACGACTTCAGGCTCAAGTATGAGAATGAGCTGGCCCTGCGCCAGGGCGT
TGAGGCTGACATCAACGGCTTGCGCCGAGTCCTGGATGAGCTGACCCTGGCCAGGACTGACCTGGAGATGCAGAT
CGAGGGCCTGAATGAGGAGCTAGCCTACCTGAAGAAGAACCACGAAGAGGAGATGAAGGAGTTCAGCAGCCAGCT
GGCCGGCCAGGTCAATGTGGAGATGGACGCAGCACCGGGTGTGGACCTGACCCGTGTGCTGGCAGAGATGAGGGA
GCAGTACGAGGCCATGGCGGAGAAGAACCGCCGGGATGTCGAGGCCTGGTTCTTCAGCAAGACTGAGGAGCTGAA
CAAAGAGGTGGCCTCCAACACAGAAATGATCCAGACCAGCAAGACGGAGATCACAGACCTGAGACGCACGATGCA
GGAGCTGGAGATCGAGCTGCAGTCCCAGCTCAGCATGAAAGCTGGGCTGGAGAACTCACTGGCCGAGACAGAGTG
CCGCTATGCCACGCAGCTGCAGCAGATCCAGGGGCTCATTGGTGGCCTGGAGGCCCAGCTGAGTGAGCTCCGATG
CGAGATGGAGGCTCAGAACCAGGAGTACAAGATGCTGCTTGACATAAAGACACGGCTGGAGCAGGAGATCGCTAC
TTACCGCAGCCTGCTCGAGGGCCAGGATGCCAAGATGGCTGGCATTGCCATCAGGGAAGCCTCTTCAGGAGGTGG
TGGTAGCAGCAGCAATTTCCACATCAATGTAGAAGAGTCAGTGGATGGACAGGTGGTTTCTTCCCACAAGAGAGA
AATCTAAGTGTCTATTGCAGGAGAAACGTCCCTTGCCACTCCCCACTCTCATCAGGCCAAGTGGAGGACTGGCCA
GAGGGCCTGCACATGCAAACTCCAGTCCCTGCCTTCAGAGAGCTGAAAAGGGTCCCTCGGTCTTTTATTTCAGGG
CTTTGCATGCGCTCTATTCCCCCTCTGCCTCTCCCCACCTTCTTTGGAGCAAGGAGATGCAGCTGTATTGTGTAA
CAAGCTCATTTGTACAGTGTCTGTTCATGTAATAAAGAATTACTTTTCCTTTTGCAAAT

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FIGURE 3450

GGCCAAGCAAGCTTCTATCTGCACCTGCTCTCAATCCTGCTCTCACCATGAGCCTCCGCCTGCAGAGCTCCTCTG
CCAGCTATGGAGGTGGTTTCGGGGGTGGCTCTTGCCAGCTGGGAGGAGGCCGTGGTGTCTCTACCTGTTCAACTC
GGTTTGTGTCCGGGGGATCAGCTGGGGGCTATGGAGGCGGCGTGAGCTGTGGTTTTGGTGGAGGGGCTGGTAGTG
GCTTTGGAGGTGGCTATGGAGGTGGCCTTGGAGGTGGCTATGGAGGTGGCCTTGGAGGTGGCTTTGGTGGGGGTT
TTGCTGGTGGCTTTGTTGACTTTGGTGCTTGTGATGGCGGCCTCCTCACTGGCAATGAGAAGATCACCATGCAGA
ACCTCAACGACCGCCTGGCTTCCTACCTGGAGAAGGTGCGCGCCCTGGAGGAGGCCAACGCTGACCTGGAGGTGA
AGATCCGTGACTGGCACCTGAAGCAGAGCCCAGCTAGCCCTGAGCGGGACTACAGCCCCTACTACAAGACCATTG
AAGAGCTCCGGGACAAGATCCTGACCGCCACCATTGAAAACAACCGGGTCATCCTGGAGATTGACAATGCCAGGC
TGGCTGCGGACGACTTCAGGCTCAAGTATGAGAATGAGCTGGCCCTGCGCCAGAGCGTGGAGGCCGACATCAACG
GCCTGCGCCGGGTGCTGGATGAGCTCACTCTGTCTAAGACTGACCTGGAGATGCAGATCGAGAGCCTGAATGAAG
AGCTAGCCTACATGAAGAAGAACCATGAAGAGGAGATGAAGGAATTTAGCAACCAGGTGGTCGGCCAGGTCAACG
TGGAGATGGATGCCACCCCAGGCATTGACCTGACCCGCGTGCTGGCAGAGATGAGGGAGCAGTACGAGGCCATGG
CAGAGAGGAACCGCCGGGATGCTGAGGAATGGTTCCACACCAAGAGTGCAGAGCTGAACAAGGAGGTGTCTACCA
ACACTGCCATGATTCAGACCAGCAAGACAGAGATCACGGAGCTCAGGCGCACGCTCCAAGGCCTGGAGATTGAGC
TGCAGTCCCAGCTGAGCATGAAAGCGGGGCTGGAGAACACGGTGGCAGAGACGGAGTGCCGCTATGCCCTGCAGC
TGCAGCAGATCCAGGGACTCATCAGCAGCATCGAGGCCCAGCTGAGCGAGCTCCGCAGTGAGATGGAGTGCCAGA
ACCAAGAGTACAAGATGCTGCTGGACATCAAGACACGTCTGGAGCAGGAGATCGCCACCTACCGCAGCCTGCTCG
AGGGCCAGGACGCCAAGAAGCGTCAGCCCCCGTAGCACCTCTGTTACCACGACTTCTAGTGCCTCTGTTACCACC
ACCTCTAATGCCTCTGGTCGCCGCACTTCTGATGTCCGTAGGCCTTAAATCTGCCTGGCGTCCCCTCCCTCTGTC
TTCAGCACCCAGAGGAGGAGAGAGCCGGCAGTTCCCTGCAGGAGAGAGGAGGGGCTGCTGGACCCAAGGCTCAGT
CCCTCTGCTCTCAGGACCCCCTGTCCTGACTCTCTCCTGATGGTGGGCCCTCTGTGCTCTTCTCTTCCGGTCGGA
TCTCTCTCCTCTCTGACCTGGATACGCTTTGGTTTCTCAACTTCTCTACCCCAAAGAAAAGATTATTCAATAAAG
TTTCCTGCCTTTCTGCAAACATA

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FIGURE 3451

ACCCGAGCACCTTCTCTTCACTCAGCCAACTGCTCGCTCGCTCACCTCCCTCCTCTGCACCATGACCACCTGCAG
CCGCCAGTTCACCTCCTCCAGCTCCATGAAGGGCTCCTGCGGCATCGGGGGCGGCATCGGGGGCGGCTCCAGCCG
CATCTCCTCCGTCCTGGCCGGAGGGTCCTGCCGCGCCCCCAGCACCTACGGGGGCGGCCTGTCTGTCTCATCCTC
CCGCTTCTCCTCTGGGGGAGCCTGCGGGCTGGGGGGCGGCTATGGCGGTGGCTTCAGCAGCAGCAGCAGCAGCTT
TGGTAGTGGCTTTGGGGGAGGATATGGTGGTGGCCTTGGTGCTGGCTTGGGTGGTGGCTTTGGTGGTGGCTTTGC
TGGTGGTGATGGGCTTCTGGTGGGCAGTGAGAAGGTGACCATGCAGAACCTCAATGACCGCCTGGCCTCCTACCT
GGACAAGGTGCGTGCTCTGGAGGAGGCCAACGCCGACCTGGAAGTGAAGATCCGTGACTGGTACCAGAGGCAGCG
GCCTGCTGAGATCAAAGACTACAGTCCCTACTTCAAGACCATTGAGGACCTGAGGAACAAGATTCTCACAGCCAC
AGTGGACAATGCCAATGTCCTTCTGCAGATTGACAATGCCCGTCTGGCCGCGGATGACTTCCGCACCAAGTATGA
GACAGAGTTGAACCTGCGCATGAGTGTGGAAGCCGACATCAATGGCCTGCGCAGGGTGCTGGACGAACTGACCCT
GGCCAGAGCTGACCTGGAGATGCAGATTGAGAGCCTGAAGGAGGAGCTGGCCTACCTGAAGAAGAACCACGAGGA
GGAGATGAATGCCCTGAGAGGCCAGGTGGGTGGAGATGTCAATGTGGAGATGGACGCTGCACCTGGCGTGGACCT
GAGCCGCATTCTGAACGAGATGCGTGACCAGTATGAGAAGATGGCAGAGAAGAACCGCAAGGATGCCGAGGAATG
GTTCTTCACCAAGACAGAGGAGCTGAACCGCGAGGTGGCCACCAACAGCGAGCTGGTGCAGAGCGGCAAGAGCGA
GATCTCGGAGCTCCGGCGCACCATGCAGAACCTGGAGATTGAGCTGCAGTCCCAGCTCAGCATGAAAGCATCCCT
GGAGAACAGCCTGGAGGAGACCAAAGGTCGCTACTGCATGCAGCTGGCCCAGATCCAGGAGATGATTGGCAGCGT
GGAGGAGCAGCTGGCCCAGCTCCGCTGCGAGATGGAGCAGCAGAACCAGGAGTACAAGATCCTGCTGGACGTGAA
GACGCGGCTGGAGCAGGAGATCGCCACCTACCGCCGCCTGCTGGAGGGCGAGGACGCCCACCTCTCCTCCTCCCA
GTTCTCCTCTGGATCGCAGTCATCCAGAGATGTGACCTCCTCCAGCCGCCAAATCCGCACCAAGGTCATGGATGT
GCACGATGGCAAGGTGGTGTCCACCCACGAGCAGGTCCTTCGCACCAAGAACTGAGGCTGCCCAGCCCCGCTCAG
GCCTAGGAGGCCCCCCGTGTGGACACAGATCCCACTGGAAGATCCCCTCTCCTGCCCAAGCACTTCACAGCTGGA
CCCTGCTTCACCCTCACCCCCTCCTGGCAATCAATACAGCTTCATTATCTGAGTTGCAT

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FIGURE 3452

ACCCGAGCACCTTCTCTTCACTCAGCCAACTGCTCGCTCGCTCACCTCCCTCCTCTGCACC**ATG**ACCACCTGCAG
CCGCCAGTTCACCTCCTCCAGCTCCATGAAGGGCTCCTGCGGCATCGGGGGCGGCATCGGGGGCGGCTCCAGCCG
CATCTCCTCCGTCCTGGCCGGAGGGTCCTGCCGCGCCCCCAGCACCTACGGGGGCGGCCTGTCTGTCTCATCCTC
CCGCTTCTCCTCTGGGGGAGCCTGCGGGCTGGGGGGCGGCTATGGCGGTGGCTTCAGCAGCAGCAGCAGCAGCTT
TGGTAGTGGCTTTGGGGGAGGATATGGTGGTGGCCTTGGTGCTGGCTTGGGTGGTGGCTTTGGTGGTGGCTTTGC
TGGTGGTGATGGGCTTCTGGTGGGCAGTGAGAAGGTGACCATGCAGAACCTCAATGACCGCCTGGCCTCCTACCT
GGACAAGGTGCGTGCTCTGGAGGAGGCCAACGCCGACCTGGAAGTGAAGATCCGTGACTGGTACCAGAGGCAGCG
GCCTGCTGAGATCAAAGACTACAGTCCCTACTTCAAGACCATTGAGGACCTGAGGAACAAGATTCTCACAGCCAC
AGTGGACAATGCCAATGTCCTTCTGCAGATTGACAATGCCCGTCTGGCCGCGGATGACTTCCGCACCAAGTATGA
GACAGAGTTGAACCTGCGCATGAGTGTGGAAGCCGACATCAATGGCCTGCGCAGGGTGCTGGACGAACTGACCCT
GGCCAGAGCTGACCTGGAGATGCAGATTGAGAGCCTGAAGGAGGAGCTGGCCTACCTGAAGAAGAACCACGAGGA
GGAGATGAATGCCCTGAGAGGCCAGGTGGGTGGAGATGTCAATGTGGAGATGGACGCTGCACCTGGCGTGGACCT
GAGCCGCATTCTGAACGAGATGCGTGACCAGTATGAGAAGATGGCAGAGAAGAACCGCAAGGATGCCGAGGAATG
GTTCTTCACCAAGACAGAGGAGCTGAACCGCGAGGTGGCCACCAACAGCGAGCTGGTGCAGAGCGGCAAGAGCGA
GATCTCGGAGCTCCGGCGCACCATGCAGAACCTGGAGATTGAGCTGCAGTCCCAGCTCAGCATGAAAGCATCCCT
GGAGAACAGCCTGGAGGAGACCAAAGGTCGCTACTGCATGCAGCTGGCCCAGATCCAGGAGATGATTGGCAGCGT
GGAGGAGCAGCTGGCCCAGCTCCGCTGCGAGATGGAGCAGCAGAACCAGGAGTACAAGATCCTGCTGGACGTGAA
GACGCGGCTGGAGCAGGAGATCGCCACCTACCGCCGCCTGCTGGAGGGCGAGGACGCCCACCTCTCCTCCTCCCA
GTTCTCCTCTGGATCGCAGTCATCCAGAGATGTGACCTCCTCCAGCCGCCAAATCCGCACCAAGGTCATGGATGT
GCACGATGGCAAGGTGGTGTCCACCCACGAGCAGGTCCTTCGCACCAAGAAC**TGA**GGCTGCCCAGCCCCGCTCAG
GCCTAGGAGGCCCCCCGTGTGGACACAGATCCCACTGGAAGATCCCCTCTCCTGCCCAAGCACTTCACAGCTGGA
CCCTGCTTCACCCTCACCCCCTCCTGGCAATCAATACAGCTTCATTATCTGAGTTGCAT

FIGURE 3453

AGTTCTGCGGTGCCAGGGAGTGGAGCAGAGCTCAGCCCCGTCCCAAACACAGATGGGACCATGAACTCCGGACAC
AGCTTCAGCCAGACCCCCTCGGCCTCCTTCCATGGCGCCGGAGGTGGCTGGGGCCGGCCCAGGAGCTTCCCCAGG
GCTCCCACCGTCCATGGCGGTGCGGGGGGAGCCCGCATCTCCCTGTCCTTCACCACGCGGAGCTGCCCACCCCCT
GGAGGGTCTTGGGGTTCTGGAAGAAGCAGCCCCCTACTAGGCGGAAATGGGAAGGCCACCATGCAGAATCTCAAC
GACCGCCTGGCCTCCTACCTGGAGAAGGTTCGCGCCCTGGAGGAGGCCAACATGAAGCTGGAAAGCCGCATCCTG
AAATGGCACCAGCAGAGAGATCCTGGCAGTAAGAAAGATTATTCCCAGTATGAGGAAAACATCACACACCTGCAG
GAGCAGATAGTGGATGGTAAGATGACCAATGCTCAGATTATTCTTCTCATTGACAATGCCAGGATGGCAGTGGAT
GACTTCAACCTCAAGTATGAAAATGAACACTCCTTTAAGAAAGACTTGGAAATTGAAGTCGAGGGCCTCCGAAGG
ACCTTAGACAACCTGACCATTGTCACAACAGACCTAGAACAGGAGGTGGAAGGAATGAGGAAAGAGCTCATTCTC
ATGAAGAAGCACCATGAGCAGGAAATGGAGAAGCATCATGTGCCAAGTGACTTCAATGTCAATGTGAAGGTGGAT
ACAGGTCCCAGGGAAGATCTGATTAAGGTCCTGGAGGATATGAGACAAGAATATGAGCTTATAATAAAGAAGAAG
CATCGAGACTTGGACACTTGGTATAAAGAACAGTCTGCAGCCATGTCCCAGGAGGCAGCCAGTCCAGCCACTGTG
CAGAGCAGACAAGGTGACATCCACGAACTGAAGCGCACATTCCAGGCCCTGGAGATTGACCTGCAGACACAGTAC
AGCACGAAATCTGCTTTGGAAAACATGTTATCCGAGACCCAGTCTCGGTACTCCTGCAAGCTCCAGGACATGCAA
GAGATCATCTCCCACTATGAGGAGGAACTGACGCAGCTACGCCATGAACTGGAGCGGCAGAACAATGAATACCAA
GTGCTGCTGGGCATCAAAACCCACCTGGAGAAGGAAATCACCACGTACCGACGGCTCCTGGAGGGAGAGAGTGAA
GGGACACGGGAAGAATCAAAGTCGAGCATGAAAGTGTCTGCAACTCCAAAGATCAAGGCCATAACCCAGGAGACC
ATCAACGGAAGATTAGTTCTTTGTCAAGTGAATGAAATCCAAAAGCACGCATGAGACCAATGAAAGTTTCCGCCT
GTTGTAAAATCTATTTTCCCCCAAGGAAAGTCCTTGCACAGACACCAGTGAGTGAGTTCTAAAAGATACCCTTGG
AATTATCAGACTCAGAAACTTTTATTTTTTTTTTCTGTAACAGTCTCACCAGACTTCTCATAATGCTCTTAATAT
ATTGCACTTTTCTAATCAAAGTGCGAGTTTATGAGGGTAAAGCTCTACTTTCCTACTGCAGCCTTCAGATTCTCA
TCATTTTGCATCTATTTTGTAGCCAATAAAACTCCGCACTAGC

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FIGURE 3454

CGGAACTAAACGGGGTGAGGTCACATTCGGTTATCTCTAACGTTGGAAAACGATGGAGCTAACACCCATTATGGA
GATTAACCACTTTTCATCAGGTTTTTAACTTAAGTCGTGAGGAATACAACGGTGAACACAAGATTCATTTTATTT
TCATCACCATGGGACGTATCCTGTTGTTGAGTACTCTGGGTCAGACCTCTGAAGACTTCTCAGATGGATCCTAGT
CTCTGGGCTTGCCCTGAAATTACTCGCTGCTCAGGGAGAGAGTTGAAATGGTTGGCATCCTCCCACTCTGTTGCT
CCGGCTGTGTCCCCTCGCTCTGTTGTTCCAGCTATGTCCCCTCTGTTGCTCCAACTGCAGCTCATTCTGTTAGAG
TTCCTCATTCAGCTGGTCACTGTGGCCAGAGGGTGTTGGCCTGCTCCCTTCCTCAAGTATTCTTAAAGCCATGGA
TTTTTGTGGAGCATTTTTCTTCCTGGCTCTCCCTTGAGTTATTTTCCTTTCTTCGCTATCTTGGGACTCTTCTTT
GTGCTTGCGGACATCGGTTGAGAGAAGGACTTCTTCTTCCTTGTCTCCTTGGTGTTGGCTCGTGGTTGCTCTTCA
ACAACTGGACTGGAGGCTCTTGGTTTTCTCTTCATCTTCAACAAGTCAGTCTCTCTCAAGGGTCTCACGTTGCAG
CATTCTTACCAGAGGCCATTGGGCCTGGAGTTCCAGTTCCAGTGTCTGGAGAGTCCACCTCAGCTCAGCAATCTC
ATGCCGGTTGGCAATTGTCAGCAGAAGCCGATGCCTGCCCATCAGTTCTTTACTCTGAGGTGTTAGAGTGGAATA
AAAATATAAATACTTATACTAGTTTTCATGACTTCTGCTTAATATTGGGTATTTTTTTGTTTTGTTTTGTTTTGG
CGGTGATAGGCTTACCTTACATTAAACCAGGCCTTAGCCTTTCTGTGGCTTTGTTATGGCAAAGCCTCATATTAC
TCTCTAGTCTGGTTCAGCAGGACAGTCAGGTCCACACCTGGGGCTGTTTGTTTTCTACGTTTACCTCAACATAAG
GTACCTTATCATTGTCAGCCTTCATCTCCTGATCCAAAATAAAATAAAATGCCACAGGTTACTTGATTTTGCATC
TGGAATATGATTATTTAAAGAAATTAAAAATTTAAAACTGAAAATGTAGAGTTTAGAAATCTTTTTTAAGGTTTC
AAAAAAATTTCTAGGAGACAACAAAATAGTGTTACTAGATTTAGCAAATAAAATACAGAATGCCAATTAAATTTG
AATTTCAAATGAACATTGAATACTTTTTTTGGTATAACTATATTCCATGCAATATTTGGGACATATCTGTTATAT
TATTCATTGTTTACCTGAAATTATAATTTAAACTGAGAGTTCTGTATTTTATCTGGCAACCTTATTATGAAAATA
TTTAGGATCAATATAAAGGAATAATATTTTTAATTTTTACAAACTATTTTAATATAAGTAATTTATTTGATTTTC
ATTGTCATCCTGAGAGTTAAGTT

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FIGURE 3455

AACAGCATCACCATGTCTGTTCGATACAGCTCAAGCAAGCACTACTCTTCCTCCCGCAGTGGAGGAGGAGGAGGA
GGAGGAGGATGTGGAGGAGGAGGAGGAGTGTCATCCCTAAGAATTTCTAGCAGCAAAGGCTCCCTTGGTGGAGGA
TTTAGCTCAGGGGGGTTCAGTGGTGGCTCTTTTAGCCGTGGGAGCTCTGGTGGGGGCTGCTTTGGGGGCTCATCA
GGTGGCTATGGAGGATTAGGAGGTTTTGGTGGAGGTAGCTTTCGTGGAAGCTATGGAAGTAGCAGCTTTGGTGGG
AGTTATGGAGGCATCTTTGGAGGGGGCAGTTTCGGAGGTGGCAGCTTTGGTGGGGGCAGCTTTGGTGGAGGCGGC
TTTGGTGGAGGCGGCTTTGGAGGAGGCTTTGGTGGTGGATTTGGAGGAGATGGTGGCCTTCTCTCTGGAAATGAA
AAAGTAACCATGCAGAATCTGAATGACCGCCTGGCTTCCTACTTGGACAAAGTTCGGGCTCTGGAAGAATCAAAC
TATGAGCTGGAAGGCAAAATCAAGGAGTGGTATGAAAAGCATGGCAACTCACATCAGGGGGAGCCTCGTGACTAC
AGCAAATACTACAAAACCATCGATGACCTTAAAAATCAGATTCTCAACCTAACAACTGATAATGCCAACATCCTG
CTTCAGATCGACAATGCCAGGCTGGCAGCTGATGACTTCAGGCTGAAGTATGAGAATGAGGTAGCTCTGCGCCAG
AGCGTGGAGGCTGACATCAACGGCCTGCGTAGGGTGCTGGATGAGCTGACCCTGACCAAGGCTGACCTGGAGATG
CAAATTGAGAGCCTGACTGAAGAGCTGGCCTATCTGAAGAAGAACCACGAGGAGGAAATGAAAGACCTTCGAAAT
GTGTCCACTGGTGATGTGAATGTGGAAATGAATGCTGCCCCGGGTGTTGATCTGACTCAACTTCTGAATAACATG
AGAAGCCAATATGAACAACTTGCTGAACAAAACCGCAAAGATGCTGAAGCCTGGTTCAATGAAAAGAGCAAGGAA
CTGACTACAGAAATTGATAATAACATTGAACAGATATCCAGCTATAAATCTGAGATTACTGAATTGAGACGTAAT
GTACAAGCTCTGGAGATAGAACTACAGTCCCAACTGGCCTTGAAACAATCCCTGGAAGCCTCCTTGGCAGAAACA
GAAGGTCGCTACTGTGTGCAGCTCTCACAGATTCAGGCCCAGATATCCGCTCTGGAAGAACAGTTGCAACAGATT
CGAGCTGAAACCGAGTGCCAGAATACTGAATACCAACAACTCCTGGATATTAAGATCCGACTGGAGAATGAAATT
CAAACCTACCGCAGCCTGCTAGAAGGAGAGGGAAGTTCCGGAGGCGGCGGACGCGGCGGCGGAAGTTTCGGCGGC
GGCTACGGCGGCGGAAGCTCCGGCGGCGGAAGCTCCGGCGGCGGCCACGGCGGCGGCCACGGCGGCAGTTCCGGC
GGCGGCTACGGAGGCGGAAGCTCCGGCGGCGGAAGCTCCGGCGGCGGCTACGGGGGCGGAAGCTCCAGCGGCGGC
CACGGCGGCAGTTCCAGCGGCGGCTACGGTGGTGGCAGTTCCGGCGGCGGCGGCGGCGGCTACGGGGGCGGCAGC
TCCGGCGGCGGCAGCAGCTCCGGCGGCGGATACGGCGGCGGCAGCTCCAGCGGAGGCCACAAGTCCTCCTCTTCC
GGGTCCGTGGGCGAGTCTTCATCTAAGGGACCAAGATACTAACAAAACCAGAGTAATCAAGACAATTATTGAAGA
GGTGGCGCCCGACGGTAGAGTTCTTTCATCTATGGTTGAATCAGAAACCAAGAAACACTACTATTAAACTGCATC
AAGAGGAAAGAGTCTCCCTTCACACAGACCATTATTTACAGATGCATGGAAAACAAAGTCTCCAAGAAAACACTT
CTGTCTTGATGGTCTATGGAAATAGACCTTGAAAATAAGGTGTCTACAAGGTGTTTTGTGGTTTCTGTATTTCTT
CTTTTCACTTTACCAGAAAGTGTTCTTTAATGGAAAGAAAAACAACTTTCTGTTCTCATTTACTAATGAATTTCA
ATAAACTTTCTTACTGATGCAAACTATCCCAATTTGTCAGAATTTATCTTTACTTAAGTACATAATACTCT

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FIGURE 3456

CCGGACGCGAGGGGCGGGGCGAGCGCGGGACAAAGGGAAGCGAAGCCGGAGCTGCGGGCGCTTTTTCTGCCCGCG
GTGTCTCAGATTCATTCTTAAGGAACTGAGAACTTAATCTTCCAAAATGTCAAAAAGACCATCTTATGCCCCACC
TCCCACCCCAGCTCCTGCAACACAAATGCCCAGCACACCAGGGTTTGTGGGATACAATCCATACAGTCATCTCGC
CTACAACAACTACAGGCTGGGAGGGAACCCGGGCACCAACAGCCGGGTCACGGCATCCTCTGGTATCACGATTCC
AAAACCCCCAAAGCCACCAGATAAGCCGCTGATGCCCTACATGAGGTACAGCAGAAAGGTCTGGGACCAAGTAAA
GGCTTCCAACCCTGACCTAAAGTTGTGGGAGATTGGCAAGATTATTGGTGGCATGTGGCGAGATCTCACTGATGA
AGAAAAACAAGAATATTTAAACGAATACGAAGCAGAAAAGATAGAGTACAATGAATCTATGAAGGCCTATCATAA
TTCCCCCGCGTACCTTGCTTACATAAATGCAAAAAGTCGTGCAGAAGCTGCTTTAGAGGAAGAAAGTCGACAGAG
ACAATCTCGCATGGAGAAAGGAGAACCGTACATGAGCATTCAGCCTGCTGAAGATCCAGATGATTATGATGATGG
CTTTTCAATGAAGCATACAGCCACCGCCCGTTTCCAGAGAAACCACCGCCTCATCAGTGAAATTCTTAGTGAGAG
TGTGGTGCCAGACGTTCGGTCAGTTGTCACAACAGCTAGAATGCAGGTCCTCAAACGGCAGGTCCAGTCCTTAAT
GGTTCATCAGCGAAAACTAGAAGCTGAACTTCTTCAAATAGAGGAACGACACCAGGAGAAGAAGAGGAAATTCCT
GGAAAGCACAGATTCATTTAACAATGAACTTAAAAGGTTGTGCGGTCTGAAAGTAGAAGTGGATATGGAGAAAAT
TGCAGCTGAGATTGCACAGGCAGAGGAACAGGCCCGCAAAAGGCAGGAGGAAAGGGAGAAGGAGGCCGCAGAGCA
AGCTGAGCGCAGTCAGAGCAGCATCGTTCCTGAGGAAGAACAAGCAGCTAACAAAGGCGAGGAGAAGAAAGACGA
CGAGAACATTCCGATGGAGACAGAGGAGACACACCTTGAAGAAACAACAGAGAGCCAACAGAATGGTGAAGAAGG
CACGTCTACTCCTGAGGACAAGGAGAGTGGGCAGGAGGGGGTCGACAGTATGGCAGAGGAAGGAACCAGTGATAG
TAACACTGGCTCGGAGAGCAACAGTGCAACAGTGGAGGAGCCACCAACAGATCCCATACCAGAAGATGAGAAAAA
AGAATAAGTGTTGCCTTGTTTTGTGTGTTCTAAATACTTTTTTTAATGAAAAAATGTTTTTTGGTTTTAATGGTG
TTACGTGGTTTGTGTATTAATTTTTTTTCTTGTCCATATCACACCACCAAAGGCTTTTGGACCATTTAGCATCAT
GAGCCTAATGGCTCAGTCAGTCACCTTTCTTAAGTGTTGTGAAGATGGCTCTTTTCTTTGGATCTTGTTTCTAGC
CCTCAACTGCTGAAAGCCTCAGAATTTAGATTAATTGAGAAAACACCCACCTCTTTTAGAGAATTATCCTTTGAT
GCTGCAGAATCTACTCTTACAATGCCTTCCTACAGCTCACTGGGGTGCTTACCAAAGCCATAGCTTTAAACCTTC
CCAGTCCCCATCAGTAGCTTCCTGAAAGTCTCCTCTCTTGTTTACTTCTGCAAAGGGTAGCTTCTTAAAAACGTG
ATCATGTATGAGTATGTATTTGTTCACTTACCCTTTTTTACTTTTAATCAATGTCAGATACCAAGAGTTGTGTTA
AGCTGAGTGTAGTGTGTAACTAACTACACTTGGATCTTACTGATCCAGAAATAGTCCCCATAGTTAGAGTAGTTA
CTTATGAAGTGGTTATTAAAGTGAACACAGCACATATACATTATCTATACTGCTTTTTGTTATGATTAATACTGG
GTATGTTCTGGTAAATCCATCCTTATTGTATAGAAAAAAAATTACTTTTTTACCAGGTTTTCCAAAGACAGAATA
GATCACAAAGCTCAAGGAATTTAATATTCTTGTAATGGACTAGATAATTCAAACTGATTAGCCCATTCCAGAAGA
AAAACAGCTGGGAATTAAGTTAATCCACTTGAAATTGTTTTACAATAATCAGAACATCCAAACCTCAAGGCTCAG
GATCCCATAGACCAGAGCCCACCTTTTTGATAAACTTAGTAAAGTCTTGGAGACTAGAAGCAAGATAGTTTGTGA
CACATAAGCTTCCCAAAAACTAGAATAGATTTTTACTGAATAGTGGTATATCTGATGGTATATGTTTCTTAAAGG
TCCAAATGTAAT

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FIGURE 3457

AGACAGGGGTAGTGCGAGGCCGGGCACAGCCTTCCTGTGTGGTTTTACCGCCCAGAGAGCGTCATGGACCTGGGG
AAACCAATGAAAAGCGTGCTGGTGGTGGCTCTCCTTGTCATTTTCCAGGTATGCCTGTGTCAAGATGAGGTCACG
GACGATTACATCGGAGACAACACCACAGTGGACTACACTTTGTTCGAGTCTTTGTGCTCCAAGAAGGACGTGCGG
AACTTTAAAGCCTGGTTCCTCCCTATCATGTACTCCATCATTTGTTTCGTGGGCCTACTGGGCAATGGGCTGGTC
GTGTTGACCTATATCTATTTCAAGAGGCTCAAGACCATGACCGATACCTACCTGCTCAACCTGGCGGTGGCAGAC
ATCCTCTTCCTCCTGACCCTTCCCTTCTGGGCCTACAGCGCGGCCAAGTCCTGGGTCTTCGGTGTCCACTTTTGC
AAGCTCATCTTTGCCATCTACAAGATGAGCTTCTTCAGTGGCATGCTCCTACTTCTTTGCATCAGCATTGACCGC
TACGTGGCCATCGTCCAGGCTGTCTCAGCTCACCGCCACCGTGCCCGCGTCCTTCTCATCAGCAAGCTGTCCTGT
GTGGGCATCTGGATACTAGCCACAGTGCTCTCCATCCCAGAGCTCCTGTACAGTGACCTCCAGAGGAGCAGCAGT
GAGCAAGCGATGCGATGCTCTCTCATCACAGAGCATGTGGAGGCCTTTATCACCATCCAGGTGGCCCAGATGGTG
ATCGGCTTTCTGGTCCCCCTGCTGGCCATGAGCTTCTGTTACCTTGTCATCATCCGCACCCTGCTCCAGGCACGC
AACTTTGAGCGCAACAAGGCCATCAAGGTGATCATCGCTGTGGTCGTGGTCTTCATAGTCTTCCAGCTGCCCTAC
AATGGGGTGGTCCTGGCCCAGACGGTGGCCAACTTCAACATCACCAGTAGCACCTGTGAGCTCAGTAAGCAACTC
AACATCGCCTACGACGTCACCTACAGCCTGGCCTGCGTCCGCTGCTGCGTCAACCCTTTCTTGTACGCCTTCATC
GGCGTCAAGTTCCGCAACGATCTCTTCAAGCTCTTCAAGGACCTGGGCTGCCTCAGCCAGGAGCAGCTCCGGCAG
TGGTCTTCCTGTCGGCACATCCGGCGCTCCTCCATGAGTGTGGAGGCCGAGACCACCACCACCTTCTCCCCATAG

GCGACTCTTCTGCCTGGACTAGAGGGACCTCTCCCAGGGTCCCTGGGGTGGGGATAGGGAGCAGATGCAATGACT
CAGGACATCCCCCCGCCAAAAGCTGCTCAGGGAAAAGCAGCTCTCCCCTCAGAGTGCAAGCCCCTGCTCCAGAAG
ATAGCTTCACCCCAATCCCAGCTACCTCAACCAATGCCAAAAAAAGACAGGGCTGATAAGCTAACACCAGACAGA
CAACACTGGGAAACAGAGGCTATTGTCCCCTAAACCAAAAACTGAAAGTGAAAGTCCAGAAACTGTTCCCACCTG
CTGGAGTGAAGGGGCCAAGGAGGGTGAGTGCAAGGGGCGTGGGAGTGGCCTGAAGAGTCCTCTGAATGAACCTTC
TGGCCTCCCACAGACTCAAATGCTCAGACCAGCTCTTCCGAAAACCAGGCCTTATCTCCAAGACCAGAGATAGTG
GGGAGACTTCTTGGCTTGGTGAGGAAAAGCGGACATCAGCTGGTCAAACAAACTCTCTGAACCCCTCCCTCCATC
GTTTTCTTCACTGTCCTCCAAGCCAGCGGGAATGGCAGCTGCCACGCCGCCCTAAAAGCACACTCATCCCCTCAC
TTGCCGCGTCGCCCTCCCAGGCTCTCAACAGGGGAGAGTGTGGTGTTTCCTGCAGGCCAGGCCAGCTGCCTCCGC
GTGATCAAAGCCACACTCTGGGCTCCAGAGTGGGGATGACATGCACTCAGCTCTTGGCTCCACTGGGATGGGAGG
AGAGGACAAGGGAAATGTCAGGGGCGGGGAGGGTGACAGTGGCCGCCCAAGGCCCACGAGCTTGTTCTTTGTTCT
TTGTCACAGGGACTGAAAACCTCTCCTCATGTTCTGCTTTCGATTCGTTAAGAGAGCAACATTTTACCCACACAC
AGATAAAGTTTTCCCTTGAGGAAACAACAGCTTTAAAAG

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FIGURE 3458

CCCCCAGCACTGCTCCAGCCCCTCTGTCACCCCGCCCTTCGGCTCCCTTCGCAGTGGTGGCCTCCTCCTTTCCAG
AGACGTCCCCCGAGAGACACGAAGCAGCAGTGAGAGCCTCATCTTCTCTGGGAACCAGGGCAGGGGGCACCAGCG
CCCTCTGCCCCCCTCAGAGGGTCTCTCCCCTCGACCCCCAAATTCCCCCAGCATCTCAATCCCTTGCATGGGGAG
CAAGGCCTCGAGCCCCCATGGTTTGGGCTCCCCGCTGGTGGCTTCTCCAAGACTGGAGAAGCGGCTGGGAGGCCT
GGCCCCACAGCGGGGCAGCAGGATCTCTGTGCTGTCAGCCAGCCCAGTGTCTGATGTCAGCTATATGTTTGGAAG
CAGCCAGTCCCTCCTGCACTCCAGCAACTCCAGCCATCAGTCATCTTCCAGATCCTTGGAAAGTCCAGCCAACTC
TTCCTCCAGCCTCCACAGCCTTGGCTCAGTGTCCCTGTGTACAAGACCCAGTGACTTCCAGGCTCCCAGAAACCC
CACCCTAACCATGGGCCAACCCAGAACACCCCACTCTCCACCACTGGCCAAAGAACATGCCAGCAGCTGCCCCCC
ATCCATCACCAACTCCATGGTGGACATACCCATTGTGCTGATCAACGGCTGCCCAGAACCAGGGTCTTCTCCACC
CCAGCGGACCCCAGGACACCAGAACTCCGTTCAACCTGGAGCTGCTTCTCCCAGCAACCCCTGTCCAGCCACCAG
GAGCAACAGCCAGACCCTGTCAGATGCCCCCTTTACCACATGCCCAGAGGGTCCCGCCAGGGACATGCAGCCCAC
CATGAAGTTCGTGATGGACACATCTAAATACTGGTTTAAGCCAAACATCACCCGAGAGCAAGCAATCGAGCTGCT
GAGGAAGGAGGAGCCAGGGGCTTTTGTCATAAGGGACAGCTCTTCATACCGAGGCTCCTTCGGCCTGGCCCTGAA
GGTGCAGGAGGTTCCCGCGTCTGCTCAGAGTCGACCAGGTGAGGACAGCAATGACCTCATCCGACACTTCCTCAT
CGAGTCGTCTGCCAAAGGAGTGCATCTCAAAGGAGCAGATGAGGAGCCCTACTTTGGGAGCCTCTCTGCCTTCGT
GTGCCAGCATTCCATCATGGCCCTGGCCCTGCCCTGCAAACTCACCATCCCACAGAGAGAACTGGGAGGTGCAGA
TGGGGCCTCGGACTCTACAGACAGCCCAGCCTCCTGCCAGAAGAAATCTGCGGGCTGCCACACCCTGTACCTGAG
CTCAGTGAGCGTGGAGACCCTGACTGGAGCCCTGGCCGTGCAGAAAGCCATCTCCACCACCTTTGAGAGGGACAT
CCTCCCCACGCCCACCGTGGTCCACTTCAAAGTCACAGAGCAGGGCATCACTCTGACTGATGTCCAGAGGAAGGT
GTTTTTCCGGCGCCATTACCCACTCACCACCCTCCGCTTCTGTGGTATGGACCCTGAGCAACGGAAGTGGCAGAA
GTACTGCAAACCCTCCTGGATCTTTGGGTTTGTGGCCAAGAGCCAGACAGAGCCTCAGGAGAACGTATGCCACCT
CTTTGCGGAGTATGACATGGTCCAGCCAGCCTCGCAGGTCATCGGCCTGGTGACTGCTCTGCTGCAGGACGCAGA
AAGGATGTAGGGGAGAGACTGCCTGTGCACCTAACCAACACCTCCAGGGGCTCGCTAAGGAGCCCCCCTCCACCC
CCTGAATGGGTGTGGCTTGTGGCCATATTGACAGACCAATCTATGGGACTAGGGGGATTGGCATCAAGTTGACAC
CCTTGAACCTGCTATGGCCTTCAGCAGTCACCATCATCCAGACCCCCCGGGCCTCAGTTTCCTCAATCATAGAAG
AAGACCAATAGACAAGATCAGCTGTTCTTAGATGCTGGTGGGCATTTGAACATGCTCCTCCATGATTCTGAAGCA
TGCACACCTCTGAAGACCCCTGCATGAAAATAACCTCCAAGGACCCTCTGACCCCATCGACCTGGGCCCTGCCCA
CACAACAGTCTGAGCAAGAGACCTGCAGCCCCTGTTTCGTGGCAGACAGCAGGTGCCTGGCGGTGACCCACGGGG
CTCCTGGCTTGCAGCTGGTGATGGTCAAGAACTGACTACAAAACAGGAATGGATAGACTCTATTTCCTTCCATAT
CTGTTCCTCTGTTCCTTTTCCCACTTTCTGGGTGGCTTTTTGGGTCCACCCAGCCAGGATGCTGCAGGCCAAGCT
GGGTGTGGTATTTAGGGCAGCTCAGCAGGGGGAACTTGTCCCCATGGTCAGAGGAGACCCAGCTGTCCTGCACCC
CCTTGCAGATGAGTATCACCCCATCTTTTCTTTCCACTTGGTTTTTATTTTTATTTTTTTTTGAGACAGAGTCTC
ACTGTCACCCAGGCTGAACTGCAGTGGTGTGATCTAGGCTCACTGCAACCTCCACCTCCCAGGTTCAAGCAATTA
TCCTGCCTCAGGCTCCCAAGTAGCTGGGATTACAGGCATGTGCAACTCACCCAGCTAATTTTGTATTTTTAGTAG
AGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGACCGCAGGTAATCCACCTGCTTCGGCCTCCC
AAAGTGCTGGGATTACAGGCGCAAGCCACCCAGCCCAGCTTCTTTCCATTCCTTGATAGGCGAGTATTCCAAAGC
TGGTATCGTAGCTGCCCTAATGTTGCATATTAGGCGGCGGGGGCAGAGATAAGGGCCATCTCTCTGTGATTCTGC
CTCAGCTCCTGTCTTGCTGAGCCCTCCCCCAACCCACGCTCCAACACACACACACACACACACACACACACACAC
ACACACACACACACACACACACACACACGCCCCTCTACTGCTATGTGGCTTCAACCAGCCTCACAGCCACACGGG
GGAAGCAGAGAGTCAAGAATGCAAAGAGNGCCGCTTCCCTAAGAGGCTTGGAGGAGCTGGGCTCTATCCCACACC
CACCCCCACCCCACCCCCACCCAGCCTCCAGAAGCTGGAACCATTTCTCCCGCAGGCCTGAGTTCCTAAGGAAAC
CACCCTACCGGGGTGGAAGGGAGGGTCAGGGAAGAAACCCACTCTTGCTCTACGAGGAGCAAGTGCCTGCCCCCT
CCCAGCAGCCAGCCCTGCCAAAGTTGCATTATCTTTGGCCAAGGCTGGGCCTGACGGTTATGATTTCAGCCCTGG
GCCTGCAGGAGAGGCTGAGACCAGCCCACCCAGCCAGTGGTCGAGCACTGCCCCGCCGCCAAAGTCTGCAGAATG
TGAGATGAGGTTCTCAAGGTCACAGGCCCCAGTCCCAGCCTGGGGGCTGGCAGAGGCCCCCATATACTCTGCTAC
AGCTCCTATCATGAAAAATAAAATGTTTGTCTTTGC

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FIGURE 3459

AGCCCCCTGCCCCTCGCCGCCCGCCGCCTGCCTGGGCCGGGCCGAGGATGCGGCGCAGCGCCTCGGCGGCCAGGC
TTGCTCCCCTCCGGCACGCCTGCTAACTTCCCCCGCTACGTCCCCGTTCGCCCGCCGGGCCGCCCCGTCTCCCCG
CGCCCTCCGGGTCGGGTCCTCCAGGAGCGCCAGGCGCTGCCGCCGTGTGCCCTCCGCCGCTCGCCCGCGCGCCCG
CGCTCCCCGCCTGCGCCCAGCGCCCCGCGCCCGCGCCCAGTCCTCGGGCGGTCATGCTGCCCCTCTGCCTCGTGG
CCGCCCTGCTGCTGGCCGCCGGGCCCGGGCCGAGCCTGGGCGACGAAGCCATCCACTGCCCGCCCTGCTCCGAGG
AGAAGCTGGCGCGCTGCCGCCCCCCCGTGGGCTGCGAGGAGCTGGTGCGAGAGCCGGGCTGCGGCTGTTGCGCCA
CTTGCGCCCTGGGCTTGGGGATGCCCTGCGGGGTGTACACCCCCCGTTGCGGCTCGGGCCTGCGCTGCTACCCGC
CCCGAGGGGTGGAGAAGCCCCTGCACACACTGATGCACGGGCAAGGCGTGTGCATGGAGCTGGCGGAGATCGAGG
CCATCCAGGAAAGCCTGCAGCCCTCTGACAAGGACGAGGGTGACCACCCCAACAACAGCTTCAGCCCCTGTAGCG
CCCATGACCGCAGGTGCCTGCAGAAGCACTTCGCCAAAATTCGAGACCGGAGCACCAGTGGGGGCAAGATGAAGG
TCAATGGGGCGCCCCGGGAGGATGCCCGGCCTGTGCCCCAGGGCTCCTGCCAGAGCGAGCTGCACCGGGCGCTGG
AGCGGCTGGCCGCTTCACAGAGCCGCACCCACGAGGACCTCTACATCATCCCCATCCCCAACTGCGACCGCAACG
GCAACTTCCACCCCAAGCAGTGTCACCCAGCTCTGGATGGGCAGCGTGGCAAGTGCTGGTGTGTGGACCGGAAGA
CGGGGGTGAAGCTTCCGGGGGGCCTGGAGCCAAAGGGGGAGCTGGACTGCCACCAGCTGGCTGACAGCTTTCGAG
AGTGAGGCCTGCCAGCAGGCCAGGGACTCAGCGTCCCCTGCTACTCCTGTGCTCTGGAGGCTGCAGAGCTGACCC
AGAGTGGAGTCTGAGTCTGAGTCCTGTCTCTGCCTGCGGCCCAGAAGTTTCCCTCAAATGCGCGTGTGCACGTGT
GCGTGTGCGTGCGTGTGTGTGTTTGTGAGCATGGGTGTGCCCTTGGGGTAAGCCAGAGCCTGGGGTGTTCTCT
TTGGTGTTACACAGCCCAAGAGGACTGAGACTGGCACTTAGCCCAAGAGGTCTGAGCCCTGGTGTGTTTCCAGAT
CGATCCTGGATTCACTCACTCACTCATTCCTTCACTCATCCAGCCACCTAAAAACATTTACTGACCATGTACTAC
GTGCCAGCTCTAGTTTTCAGCCTTGGGAGGTTTTATTCTGACTTCCTCTGATTTTGGCATGTGGAGACACTCCTA
TAAGGAGAGTTCAAGCCTGTGGGAGTAGAAAAATCTCATTCCCAGAGTCAGAGGAGAAGAGACATGTACCTTGAC
CATCGTCCTTCCTCTCAAGCTAGCCAGAGGGTGGGAGCCTAAGGAAGCGTGGGGTAGCAGATGGAGTAATGGTCA
CGAGGTCCAGACCCACTCCCAAAGCTCAGACTTGCCAGGCTCCCTTTCTCTTCTTCCCCAGGTCCTTCCTTTAGG
TCTGGTTGTTGCACCATCTGCTTGGTTGGCTGGCAGCTGAGAGCCCTGCTGTGGGAGAGCGAAGGGGGTCAAAGG
AAGACTTGAAGCACAGAGGGCTAGGGAGGTGGGGTACATTTCTCTGAGCAGTCAGGGTGGGAAGAAAGAATGCAA
GAGTGGACTGAATGTGCCTAATGGAGAAGACCCACGTGCTAGGGGATGAGGGGCTTCCTGGGTCCTGTTCCCTAC
CCCATTTGTGGTCACAGCCATGAAGTCACCGGGATGAACCTATCCTTCCAGTGGCTCGCTCCCTGTAGCTCTGCC
TCCCTCTCCATATCTCCTTCCCCTACACCTCCCTCCCCACACCTCCCTACTCCCCTGGGCATCTTCTGGCTTGAC
TGGATGGAAGGAGACTTAGGAACCTACCAGTTGGCCATGATGTCTTTTCTT

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FIGURE 3460A

CCCTTCACGACCGTCACCATGGAAGTGTCACCATTGCAGCCTGTAAATGAAAATATGCAAGTCAACAAAATAAAG
AAAAATGAAGATGCTAAGAAAAGACTGTCTGTTGAAAGAATCTATCAAAAGAAAACACAATTGGAACATATTTTG
CTCCGCCCAGACACCTACATTGGTTCTGTGGAATTAGTGACCCAGCAAATGTGGGTTTACGATGAAGATGTTGGC
ATTAACTATAGGGAAGTCACTTTTGTTCCTGGTTTGTACAAAATCTTTGATGAGATTCTAGTTAATGCTGCGGAC
AACAAACAAAGGGACCCAAAAATGTCTTGTATTAGAGTCACAATTGATCCGGAAAACAATTTAATTAGTATATGG
AATAATGGAAAAGGTATTCCTGTTGTTGAACACAAAGTTGAAAAGATGTATGTCCCAGCTCTCATATTTGGACAG
CTCCTAACTTCTAGTAACTATGATGATGATGAAAAGAAAGTGACAGGTGGTCGAAATGGCTATGGAGCCAAATTG
TGTAACATATTCAGTACCAAATTTACTGTGGAAACAGCCAGTAGAGAATACAAGAAAATGTTCAAACAGACATGG
ATGGATAATATGGGAAGAGCTGGTGAGATGGAACTCAAGCCCTTCAATGGAGAAGATTATACATGTATCACCTTT
CAGCCTGATTTGTCTAAGTTTAAAATGCAAAGCCTGGACAAAGATATTGTTGCACTAATGGTCAGAAGAGCATAT
GATATTGCTGGATCCACCAAAGATGTCAAAGTCTTTCTTAATGGAAATAAACTGCCAGTAAAAGGATTTCGTAGT
TATGTGGACATGTATTTGAAGGACAAGTTGGATGAAACTGGTAACTCCTTGAAAGTAATACATGAACAAGTAAAC
CACAGGTGGGAAGTGTGTTTAACTATGAGTGAAAAAGGCTTTCAGCAAATTAGCTTTGTCAACAGCATTGCTACA
TCCAAGGGTGGCAGACATGTTGATTATGTAGCTGATCAGATTGTGACTAAACTTGTTGATGTTGTGAAGAAGAAG
AACAAGGGTGGTGTTGCAGTAAAAGCACATCAGGTGAAAAATCACATGTGGATTTTTGTAAATGCCTTAATTGAA
AACCCAACCTTTGACTCTCAGACAAAAGAAAACATGACTTTACAACCCAAGAGCTTTGGATCAACATGCCAATTG
AGTGAAAAATTTATCAAAGCTGCCATTGGCTGTGGTATTGTAGAAAGCATACTAAACTGGGTGAAGTTTAAGGCC
CAAGTCCAGTTAAACAAGAAGTGTTCAGCTGTAAAACATAATAGAATCAAGGGAATTCCCAAACTCGATGATGCC
AATGATGCAGGGGGCCGAAACTCCACTGAGTGTACGCTTATCCTGACTGAGGGAGATTCAGCCAAAACTTTGGCT
GTTTCAGGCCTTGGTGTGGTTGGGAGAGACAAATATGGGGTTTTCCCTCTTAGAGGAAAAATACTCAATGTTCGA
GAAGCTTCTCATAAGCAGATCATGGAAAATGCTGAGATTAACAATATCATCAAGATTGTGGGTCTTCAGTACAAG
AAAAACTATGAAGATGAAGATTCATTGAAGACGCTTCGTTATGGGAAGATAATGATTATGACAGATCAGGACCAA
GATGGTTCCCACATCAAAGGCTTGCTGATTAATTTTATCCATCACAACTGGCCCTCTCTTCTGCGACATCGTTTT
CTGGAGGAATTTATCACTCCCATTGTAAAGGTATCTAAAAACAAGCAAGAAATGGCATTTTACAGCCTTCCTGAA
TTTGAAGAGTGGAAGAGTTCTACTCCAAATCATAAAAAATGGAAAGTCAAATATTACAAAGGTTTGGGCACCAGC
ACATCAAAGGAAGCTAAAGAATACTTTGCAGATATGAAAAGACATCGTATCCAGTTCAAATATTCTGGTCCTGAA
GATGATGCTGCTATCAGCCTGGCCTTTAGCAAAAAACAGATAGATGATCGAAAGGAATGGTTAACTAATTTCATG
GAGGATAGAAGACAACGAAAGTTACTTGGGCTTCCTGAGGATTACTTGTATGGACAAACTACCACATATCTGACA
TATAATGACTTCATCAACAAGGAACTTATCTTGTTCTCAAATTCTGATAACGAGAGATCTATCCCTTCTATGGTG
GATGGTTTGAAACCAGGTCAGAGAAAGGTTTTGTTTACTTGCTTCAAACGGAATGACAAGCGAGAAGTAAAGGTT
GCCCAATTAGCTGGATCAGTGGCTGAAATGTCTTCTTATCATCATGGTGAGATGTCACTAATGATGACCATTATC
AATTTGGCTCAGAATTTTGTGGGTAGCAATAATCTAAACCTCTTGCAGCCCATTGGTCAGTTTGGTACCAGGCTA
CATGGTGGCAAGGATTCTGCTAGTCCACGATACATCTTTACAATGCTCAGCTCTTTGGCTCGATTGTTATTTCCA
CCAAAAGATGATCACACGTTGAAGTTTTTATATGATGACAACCAGCGTGTTGAGCCTGAATGGTACATTCCTATT
ATTCCCATGGTGCTGATAAATGGTGCTGAAGGAATCGGTACTGGGTGGTCCTGCAAAATCCCCAACTTTGATGTG
CGTGAAATTGTAAATAACATCAGGCGTTTGATGGATGGAGAAGAACCTTTGCCAATGCTTCCAAGTTACAAGAAC
TTCAAGGGTACTATTGAAGAACTGGCTCCAAATCAATATGTGATTAGTGGTGAAGTAGCTATTCTTAATTCTACA
ACCATTGAAATCTCAGAGCTTCCCGTCAGAACATGGACCCAGACATACAAAGAACAAGTTCTAGAACCCATGTTG
AATGGCACCGAGAAGACACCTCCTCTCATAACAGACTATAGGGAATACCATACAGATACCACTGTGAAATTTGTT
GTGAAGATGACTGAAGAAAAACTGGCAGAGGCAGAGAGAGTTGGACTACACAAAGTCTTCAAACTCCAAACTAGT
CTCACATGCAACTCTATGGTGCTTTTTGACCACGTAGGCTGTTTAAAGAAATATGACACGGTGTTGGATATTCTA
AGAGACTTTTTTGAACTCAGACTTAAATATTATGGATTAAGAAAAGAATGGCTCCTAGGAATGCTTGGTGCTGAA
TCTGCTAAACTGAATAATCAGGCTCGCTTTATCTTAGAGAAAATAGATGGCAAAATAATCATTGAAAATAAGCCT
AAGAAAGAATTAATTAAAGTTCTGATTCAGAGGGGATATGATTCGGATCCTGTGAAGGCCTGGAAAGAAGCCCAG
CAAAAGGTTCCAGATGAAGAAGAAAATGAAGAGAGTGACAACGAAAAGGAAACTGAAAAGAGTGACTCCGTAACA
GATTCTGGACCAACCTTCAACTATCTTCTTGATATGCCCCTTTGGTATTTAACCAAGGAAAAGAAAGATGAACTC
TGCAGGCTAAGAAATGAAAAAGAACAAGAGCTGGACACATTAAAAAGAAAGAGTCCATCAGATTTGTGGAAAGAA
GACTTGGCTACATTTATTGAAGAATTGGAGGCTGTTGAAGCCAAGGAAAAACAAGATGAACAAGTCGGACTTCCT

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FIGURE 3460B

GGGAAAGGGGGGAAGGCCAAGGGGAAAAAAACACAAATGGCTGAAGTTTTGCCTTCTCCGCGTGGTCAAAGAGTC
ATTCCACGAATAACCATAGAAATGAAAGCAGAGGCAGAAAAGAAAAATAAAAAGAAAATTAAGAATGAAAATACT
GAAGGAAGCCCTCAAGAAGATGGTGTGGAACTAGAAGGCCTAAAACAAAGATTAGAAAAGAAACAGAAAAGAGAA
CCAGGTACAAAGACAAAGAAACAAACTACATTGGCATTTAAGCCAATCAAAAAAGGAAAGAAGAGAAATCCCTGG
TCTGATTCAGAATCAGATAGGAGCAGTGACGAAAGTAATTTTGATGTCCCTCCACGAGAAACAGAGCCACGGAGA
GCAGCAACAAAAACAAAATTCACAATGGATTTGGATTCAGATGAAGATTTCTCAGATTTTGATGAAAAAACTGAT
GATGAAGATTTTGTCCCATCAGATGCTAGTCCACCTAAGACCAAAACTTCCCCAAAACTTAGTAACAAAGAACTG
AAACCACAGAAAAGTGTCGTGTCAGACCTTGAAGCTGATGATGTTAAGGGCAGTGTACCACTGTCTTCAAGCCCT
CCTGCTACACATTTCCCAGATGAAACTGAAATTACAAACCCAGTTCCTAAAAAGAATGTGACAGTGAAGAAGACA
GCAGCAAAAAGTCAGTCTTCCACCTCCACTACCGGTGCCAAAAAAAGGGCTGCCCCAAAAGGAACTAAAAGGGAT
CCAGCTTTGAATTCTGGTGTCTCTCAAAAGCCTGATCCTGCCAAAACCAAGAATCGCCGCAAAAGGAAGCCATCC
ACTTCTGATGATTCTGACTCTAATTTTGAGAAAATTGTTTCGAAAGCAGTCACAAGCAAGAAATCCAAGGGGGAG
AGTGATGACTTCCATATGGACTTTGACTCAGCTGTGGCTCCTCGGGCAAAATCTGTACGGGCAAAGAAACCTATA
AAGTACCTGGAAGAGTCAGATGAAGATGATCTGTTT**TAA**AATGTGAGGCGATTATTTTAAGTAATTATCTTACCA
AGCCCAAGACTGGTTTTAAAGTTACCTGAAGCTCTTAACTTCCTCCCCTCTGAATTTAGTTTGGGGAAGGTGTTT
TTAGTACAAGACATCAAAGTGAAGTAAAGCCCAAGTGTTCTTTAGCTTT

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FIGURE 3461

CCATCTGGGCCCAGGCCCCATGCCCCGAGGAGGGGTGGTCTGAAGCCCACCAGAGCCCCCTGCCAGACTGTCTGC
CTCCCTTCTGACTGTGGCCGCTTGGCATGGCCAGCAACAGCAGCTCCTGCCCGACACCTGGGGGCGGGCACCTCA
ATGGGTACCCGGTGCCTCCCTACGCCTTCTTCTTCCCCCCTATGCTGGGTGGACTCTCCCCGCCAGGCGCTCTGA
CCACTCTCCAGCACCAGCTTCCAGTTAGTGGATATAGCACACCATCCCCAGCCACCATTGAGACCCAGAGCAGCA
GTTCTGAAGAGATAGTGCCCAGCCCTCCCTCGCCACCCCCTCTACCCCGCATCTACAAGCCTTGCTTTGTCTGTC
AGGACAAGTCCTCAGGCTACCACTATGGGGTCAGCGCCTGTGAGGGCTGCAAGGGCTTCTTCCGCCGCAGCATCC
AGAAGAACATGGTGTACACGTGTCACCGGGACAAGAACTGCATCATCAACAAGGTGACCCGGAACCGCTGCCAGT
ACTGCCGACTGCAGAAGTGCTTTGAAGTGGGCATGTCCAAGGAGTCTGTGAGAAACGACCGAAACAAGAAGAAGA
AGGAGGTGCCCAAGCCCGAGTGCTCTGAGAGCTACACGCTGACGCCGGAGGTGGGGGAGCTCATTGAGAAGGTGC
GCAAAGCGCACCAGGAAACCTTCCCTGCCCTCTGCCAGCTGGGCAAATACACTACGAACAACAGCTCAGAACAAC
GTGTCTCTCTGGACATTGACCTCTGGGACAAGTTCAGTGAACTCTCCACCAAGTGCATCATTAAGACTGTGGAGT
TCGCCAAGCAGCTGCCCGGCTTCACCACCCTCACCATCGCCGACCAGATCACCCTCCTCAAGGCTGCCTGCCTGG
ACATCCTGATCCTGCGGATCTGCACGCGGTACACGCCCGAGCAGGACACCATGACCTTCTCGGACGGGCTGACCC
TGAACCGGACCCAGATGCACAACGCTGGCTTCGGCCCCCTCACCGACCTGGTCTTTGCCTTCGCCAACCAGCTGC
TGCCCCTGGAGATGGATGATGCGGAGACGGGGCTGCTCAGCGCCATCTGCCTCATCTGCGGAGACCGCCAGGACC
TGGAGCAGCCGGACCGGGTGGACATGCTGCAGGAGCCGCTGCTGGAGGCGCTAAAGGTCTACGTGCGGAAGCGGA
GGCCCAGCCGCCCCCACATGTTCCCCAAGATGCTAATGAAGATTACTGACCTGCGAAGCATCAGCGCCAAGGGGG
CTGAGCGGGTGATCACGCTGAAGATGGAGATCCCGGGCTCCATGCCGCCTCTCATCCAGGAAATGTTGGAGAACT
CAGAGGGCCTGGACACTCTGAGCGGACAGCCGGGGGGTGGGGGGCGGGACGGGGGTGGCCTGGCCCCCCCGCCAG
GCAGCTGTAGCCCCAGCCTCAGCCCCAGCTCCAACAGAAGCAGCCCGGCCACCCACTCCCCGTGACCGCCCACGC
CACATGGACACAGCCCTCGCCCTCCGCCCCGGCTTTTCTCTGCCTTTCTACCGACCATGTGACCCCGCACCAGCC
CTGCCCCCACCTGCCCTCCCGGGCAGTACTGGGGACCTTCCCTGGGGGACGGGGAGGGAGGAGGCAGCGACTCCT
TGGACAGAGGCCTGGGCCCTCAGTGGACTGCCTGCTCCCACAGCCTGGGCTGACGTCAGAGGCCGAGGCCAGGAA
CTGAGTGAGGCCCCTGGTCCTGGGTCTCAGGATGGGTCCTGGGGGCCTCGTGTTCATCAAGACACCCCTCTGCCC
AGCTCACCACATCTTCATCACCAGCAAACGCCAGGACTTGGCTCCCCCATCCTCAGAACTCACAAGCCATTGCTC
CCCAGCTGGGGAACCTCAACCTCCCCCCTGCCTCGGTTGGTGACAGAGGGGGTGGGACAGGGGCGGGGGGTTCCC
CCTGTACATACCCTGCCATACCAACCCCAGGTATTAATTCTCGCTGGTTTTGTTTTTATTTTAATTTTTTTGTTT
TGATTTTTTTAATAAGAATTTTCATTTTAAGCACATTTATACTGAAGGAATTTGTGCTGTGTATTGGGGGGAGCT
GGATCCAGAGCTGGAGGGGGTGGGTCCGGGGGAGGGAGTGGCTCGGAAGGGGCCCCCACTCTCCTTTCATGTCCC
TGTGCCCCCCAGTTCTCCTCCTCAGCCTTTTCCTCCTCAGTTTTCTCTTTAAAACTGTGAAGTACTAACTTTCCA
AGGCCTGCCTTCCCCTCCCTCCCACTGGAGAAGCCGCCAGCCCCTTTCTCCCTCTGCCTGACCACTGGGTGTGGA
CGGTGTGGGGCAGCCCTGAAAGGACAGGCTCCTGGCCTTGGCACTTGCCTGCACCCACCATGAGGCATGGAGCAG
GGCAGAGCAAGGGCCCCGGGACAGAGTTTTCCCAGACCTGGCTCCTCGGCAGAGCTGCCTCCCGTCAGGGCCCAC
ATCATCTAGGCTCCCCAGCCCCCACTGTGAAGGGGCTGGCCAGGGGCCCGAGCTGCCCCCACCCCCGGCCTCAGC
CACCAGCACCCCCATAGGGCCCCCAGACACCACACACATGCGCGTGCGCACACACACAAACACACACACACTGGA
CAGTAGATGGGCCGACACACACTTGGCCCGAGTTCCTCCATTTCCCTGGCCTGCCCCCCACCCCCAACCTGTCCC
ACCCCCGTGCCCCCTCCTTACCCCGCAGGACGGGCCTACAGGGGGGTCTCCCCTCACCCCTGCACCCCCAGCTGG
GGGAGCTGGCTCTGCCCCGACCTCCTTCACCAGGGGTTGGGGCCCCTTCCCCTGGAGCCCGTGGGTGCACCTGTT
ACTGTTGGGCTTTCCACTGAGATCTACTGGATAAAGAATAAAGTTCTATTTATTCT

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FIGURE 3462

GAGCGCGGCTGGAGTTTGCTGCTGCCGCTGTGCAGTTTGTTCAGGGGCTTGTGGTGGTGAGTCCGAGAGGCTGCG
TGTGAGAGACGTGAGAAGGATCCTGCACTGAGGAGGTGGAAAGAAGAGGATTGCTCGAGGAGGCCTGGGGTCTGT
GAGGCAGCGGAGCTGGGTGAAGGCTGCGGGTTCCGGCGAGGCCTGAGCTGTGCTGTCGTC**ATG**CCTCAAACCCGA
TCCCAGGCACAGGCTACAATCAGTTTTCCAAAAAGGAAGCTGTCTCGGGCATTGAACAAAGCTAAAAACTCCAGT
GATGCCAAACTAGAACCAACAAATGTCCAAACCGTAACCTGTTCTCCTCGTGTAAAAGCCCTGCCTCTCAGCCCC
AGGAAACGTCTGGGCGATGACAACCTATGCAACACTCCCCATTTACCTCCTTGTTCTCCACCAAAGCAAGGCAAG
AAAGAGAATGGTCCCCCTCACTCACATACACTTAAGGGACGAAGATTGGTATTTGACAATCAGCTGACAATTAAG
TCTCCTAGCAAAAGAGAACTAGCCAAAGTTCACCAAAACAAAATACTTTCTTCAGTTAGAAAAAGTCAAGAGATC
ACAACAAATTCTGAGCAGAGATGTCCACTGAAGAAAGAATCTGCATGTGTGAGACTATTCAAGCAAGAAGGCACT
TGCTACCAGCAAGCAAAGCTGGTCCTGAACACAGCTGTCCCAGATCGGCTGCCTGCCAGGGAAAGGGAGATGGAT
GTCATCAGGAATTTCTTGAGGGAACACATCTGTGGGAAAAAAGCTGGAAGCCTTTACCTTTCTGGTGCTCCTGGA
ACTGGAAAAACTGCCTGCTTAAGCCGGATTCTGCAAGACCTCAAGAAGGAACTGAAAGGCTTTAAAACTATCATG
CTGAATTGCATGTCCTTGAGGACTGCCCAGGCTGTATTCCCAGCTATTGCTCAGGAGATTTGTCAGGAAGAGGTA
TCCAGGCCAGCTGGGAAGGACATGATGAGGAAATTGGAAAAACATATGACTGCAGAGAAGGGCCCCATGATTGTG
TTGGTATTGGACGAGATGGATCAACTGGACAGCAAAGGCCAGGATGTATTGTACACGCTATTTGAATGGCCATGG
CTAAGCAATTCTCACTTGGTGCTGATTGGTATTGCTAATACCCTGGATCTCACAGATAGAATTCTACCTAGGCTT
CAAGCTAGAGAAAAATGTAAGCCACAGCTGTTGAACTTCCCACCTTATACCAGAAATCAGATAGTCACTATTTTG
CAAGATCGACTTAATCAGGTATCTAGAGATCAGGTTCTGGACAATGCTGCAGTTCAATTCTGTGCCCGCAAAGTC
TCTGCTGTTTCAGGAGATGTTCGCAAAGCACTGGATGTTTGCAGGAGAGCTATTGAAATTGTAGAGTCAGATGTC
AAAAGCCAGACTATTCTCAAACCACTGTCTGAATGTAAATCACCTTCTGAGCCTCTGATTCCCAAGAGGGTTGGT
CTTATTCACATATCCCAAGTCATCTCAGAAGTTGATGGTAACAGGATGACCTTGAGCCAAGAAGGAGCACAAGAT
TCCTTCCCTCTTCAGCAGAAGATCTTGGTTTGCTCTTTGATGCTCTTGATCAGGCAGTTGAAAATCAAAGAGGTC
ACTCTGGGGAAGTTATATGAAGCCTACAGTAAAGTCTGTCGCAAACAGCAGGTGGCGGCTGTGGACCAGTCAGAG
TGTTTGTCACTTTCAGGGCTCTTGGAAGCCAGGGGCATTTTAGGATTAAAGAGAAACAAGGAAACCCGTTTGACA
AAGGTGTTTTTCAAGATTGAAGAGAAAGAAATAGAACATGCTCTGAAAGATAAAGCTTTAATTGGAAATATCTTA
GCTACTGGATTGCCT**TAA**ATTCTTCTCTTACACCCCACCCGAAAGTATTCAGCTGGCATTTAGAGAGCTACAGTC
TTCATTTTAGTGCTTTACACATTCGGGCCTGAAAACAAATATGACCTTTTTTACTTGAAGCCAATGAATTTTAAT
CTATAGATTCTTTAATATTAGCACAGAATAATATCTTTGGGTCTTACTATTTTTACCCATAAAAGTGACCAGGTA
GACCCTTTTTAATTACATTCACTACTTCTACCACTTGTGTATCTCTAGCCAATGTGCTTGCAAGTGTACAGATCT
GTGTAGAGGAATGTGTGTATATTTACCTCTTCGTTTGCTCAAACATGAGTGGGTATTTTTTTGTTTGTTTTTTTT
GTTGTTGTTGTTTTTGAGGCGCGTCTCACCCTGTTGCCCAGGCTGGAGTGCAATGGCGCGTTCTCTGCTCACTAC
AGCACCCGCTTCCCAGGTTGAAGTGATTCTCTTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGTGCCCACCAC
CGCGCCCAGCTAATTTTTTAATTTTTAGTAGAGACAGGGTTTTACCATGTTGGCCAGGCTGGTCTTGAACTCCTG
ACCCTCAAGTGATCTGCCCACCTTGGCCTCCCTAAGTGCTGGGATTATAGGCGTGAGCCACCATGCTCAGCCATT
AAGGTATTTTGTTAAGAACTTTAAGTTTAGGGTAAGAAGAATGAAAATGATCCAGAAAAATGCAAGCAAGTCCAC
ATGGAGATTTGGAGGACACTGGTTAAAG

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FIGURE 3463

GGTATATGAATGACCTAAAGGTACAAATAAAGACGGAGAGAGAACAGTGCCAACTGGGAGCAGGGCAAGAATGCC
AATTCCTCCTCCCCCGCCACCCCCACCTGGTCCTCCTCCACCTCCCACATTTCATCAGGCAAACACAGAGCAGCC
CAAGCTGAGTAGAGATGAGCAGCGGGGTCGAGGCGCCCTCTTACAGGACATTTGCAAAGGGACCAAGCTGAAGAA
GGTGACCAACATTAATGATCGGAGTGCTCCCATCCTCGAGACTCCTCCACCCCCACCACCTGTGATCCGAAATGG
TGCCAGGGATGCTCCCCCTCCCCCCACCACCATACCGAATGCATGGGTCAGAACCCCCGAGCCGAGGAAAGCCCCC
ACCTCCACCCTCAAGGACGCCAGCTGGGCCACCCCCTCCTCCTCCACCGCCCCTGAGGAATGGCCACAGAGATTC
TATCACCACTGTCCGGTCTTTCTTGGATGATTTTGAGTCAAAGTATTCCTTCCATCCAGTAGAAGACTTTCCTGC
TCCAGAAGAATATAAACACTTTCAGAGGATATATCCCAGCAAAACAAACCGAGCTGCCCGTGGAGCCCCACCTCT
GCCACCCATTCTCAGGTGAAGCCTGGCTTGGTCCCGTTCCTCAGGAAAAGGATGGACCTTCTCTTCTTCTCAGAT
GGTCCCTTCCATTCCCCTGAAACCTGCATGAGAGCTCCTAACATGTTTCTCCAATGCAATCAAGCCCTAGACTCC
AAATGTCCTCCCAGCTCACCTCCATCTATGCATCTCATCTCTGGATTTGGTGATCAGACTCTATATTGACAGTAG
GATCTCAAACCCTGCATCCATCCTTCCTCCAGCAAGCCCTGCTAGCCACATGAGGAACAAGTTTCCGTGTCTTCT
GCCTTCCTCTTGGGGAAAGGTGCCTTGTTGTGATGAATTAACTCACTGTTAGGGCAGGGTGGAGAATGGTACTCC
TTCCTTCTCCTGTCCACTGTGGGGGAAGCTTGGCAGGTATATTATATTTCATCATTTAGGAGGCTGGCATGACCA
GGACTTATGGGTGGGAGGGGAGCATTTTTAGTGAAGCAAGAAAGGAGTTTGCCAAGAAGTGATCTGTTTTAAAGG
TCATATTTGGAGAAAGGGCAAGGAATTGGGTCTGCTTTATTTTTGGGGGTATTTTGTTTTTGTTCTCACCTGCTG
CCCCCCCACCCCACCACCCCAGGGATAAATTGGATATAAACACTAAATACTAATCAGTTGAACTTAACATTTAAT
AAAAAGAAAGGGTGAAATAAACTGAAGACCATTTTAGAACTAGTCAGTTCTCTGCAGCAAAGGGAACAGGAGCCA
TTTGAACCCTCTGGGACCCCTCACCCCACTGCTTCAGGGTGCTAGGCTGAGGGATGTTTTTCCTCCCCCTTACCG
CCCATGCCCTTGAAAGAAAAGTCACTTTTTGTGGAGGGCATCATTCATTCCTGATTCACAAACCCCAAAAACCTC
TGGTGGGAGATAGGAAGATAGGGCGTGGGCCTGGGCCTTAACCTCAATCTTGTGTCTGCCTCAGTCTTTTCTGAC
TGGCCCTGAAGTTGTCAGTGGCTCTTTCTGTCCTTCAGCCCCTGGAAGGTGCTCCAGGATAACAAAGAAGGGCAG
GTTGAAGCCCCTCATGGAAGGAGCTGGCTTTGTGGGGCTGCAAAGGACTTTTAAGTCCTGCCTGTACTGAAGTTC
ACAGCCCACCTGACTGAGCAGACTCTTCCTGTTCCTTTCTCTACCACCCTTGCCTTCCCAGGACTGCACGGTTTA
ACACAGCAGAGTACAGAAGGGTGAAGAAGTGAGCAGAGGCTTATGAAGATATTCAGATACTCTTCTATGCCAGGA
AGCACAAAGACTTTGTTGAGATTTGCCTCAGTTCAGTAGATCTTCCTTGGCAGCCAGCCATAGGTTGTTTCTTTG
TCTTCCGGGTCCTAAAGAGCACAGAGAAAATGGAGGTCCCCAGTCTAGGTAGGAAGCTGATTGGATGAGGACTTC
TTTTTTTCCGACAGCAGGATGGGGCTCTTGGGCTCCACACACCAGATGCTTTGGTTTTCTACAACTGTTGCTATG
TGTAGAGGGTGCTCAGAGCGTGGCATGAGAGCAAGGAGACCATGGCTACTCTTTGAAATGGATGGGGAAAATTAG
CTTAAAAATTTAATCACGAGATTGCGCCACTGCACTCCAGCCTGGGCGACAGAGCCAGACTCCGTCTC

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FIGURE 3464

GCGCGGCGGGCATGGCTCGGGTGGCGTGGGGGCTGCTGTGGTTGCTGCTGGGCAGCGCCGGGGCGCAGTACGAGA
AGTACAGCTTCCGGGGCTTCCCGCCCGAGGACCTGATGCCGCTGGCCGCGGCGTACGGGCACGCTCTGGAGCAGT
ACGAGGGAGAGAGCTGGCGCGAGAGCGCGCGCTACCTGGAGGCGGCGCTGCGGCTGCACCGGCTCCTGCGCGACA
GCGAGGCCTTCTGCCACGCCAACTGCAGCGGCCCCGCGCCCGCGGCCAAGCCCGATCCCGACGGCGGCCGCGCAG
ACGAGTGGGCCTGCGAGCTGCGGCTCTTCGGCCGCGTCCTGGAGCGAGCCGCCTGCCTGCGGCGCTGCAAGCGGA
CGCTGCCCGCCTTCCAGGTGCCCTACCCGCCGCGGCAGCTGCTGCGTGACTTCCAGAGCCGCCTGCCCTACCAGT
ACCTGCACTACGCGCTGTTCAAGGCTAACCGGCTGGAGAAGGCGGTGGCGGCGGCCTACACCTTCCTCCAGAGGA
ACCCGAAGCACGAGCTGACCGCCAAGTATCTCAACTACTATCAGGGGATGCTGGACGTCGCCGACGAGTCCCTCA
CGGACCTAGAGGCCCAGCCCTACGAGGCCGTGTTCCTCCGGGCTGTGAAGCTCTACAACAGCGGGGATTTCCGCA
GCAGCACGGAGGACATGGAGCGGGCCTTGTCAGAGTACCTGGCAGTCTTTGCCCGGTGCCTGGCCGGCTGTGAAG
GGGCCCATGAGCAGGTGGACTTCAAGGACTTCTACCCGGCCATAGCAGATCTCTTTGCAGAGTCCCTGCAGTGCA
AGGTGGACTGTGAGGCCAATTTGACCCCCAATGTGGGTGGCTACTTCGTGGACAAGTTCGTGGCCACCATGTACC
ACTACCTGCAGTTTGCCTACTATAAGTTGAATGATGTGCGCCAGGCTGCCCGCAGCGCCGCCAGCTACATGCTCT
TCGACCCCAAGGACAGCGTCATGCAGCAGAACCTGGTGTATTACCGGTTCCACCGGGCTCGCTGGGGCCTGGAAG
AGGAGGACTTCCAGCCCCGGGAGGAGGCCATGCTCTACCACAACCAGACCGCCGAGCTGCGGGAGCTGCTGGAGT
TCACCCACATGTACCTGCAGTCAGATGATGAGATGGAGCTGGAGGAGACAGAACCGCCCCTGGAGCCTGAGGATG
CCCTATCTGACGCCGAGTTTGAGGGGGAGGGTGACTACGAGGAGGGCATGTATGCTGACTGGTGGCAGGAGCCGG
ATGCCAAGGGTGACGAGGCCGAGGCTGAGCCAGAGCCTGAACTCGCATGAGAAGGGGACACCCCACACCGCTCAA
GCTTGGGAAGCCTGGTGCCGATGGCCCCACCCTCACCAGCCTGGGCAGCAGCAAGAACTATTTATTAAAAACTTA
AGATGGGCCAGGTGCGGTGGCTCACACCTGTAATCCCAGCATTTTGGGAGGCCAAGGTGGGTGGATCACTTGAGG
CCAGGAGTTCAAGACCAGCCTGGCCAACATGATGAGACCTCCGTCTCTACTAAAATACATAAATTAGCCGGGTGT
GGTGGCAGGCGCCTGAAATCCCAGCTACTCAAGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCAAAGGT
TGCAGTGAACTGAGATTGCGCCACCGCACTCCAGCCTGGGCGACAGAGCGAGACTCCATCTTTAAAAAAAAACAA
GACGGGCCGGCACGGTGGCTCACGCCTGTAATCCCAGCACTGAGAGGCCGATCACTTGAGGTCAGGAGTTCAAGA
CCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAAATACAAAAATTAGCCAGGCATGGTGGCACACACC
TGTAATCGTAGCTGAGGCAGGAGAATCGCCTGAACCCAGGAGGCGGAGCTTGCAGTGAGCCGAGATCGTGCCACT
GCACTCCAGCCTGGGCGACAGAGTGAGACTCCATCTCAAAAAAAAAAAAAAAAAACTTAAGATGGACACAGCTGAC
TGGACCCCCATCCTGCCTCACCCATGGGTGCTGCACCCCAGACCCATCCTGCCACTTCTATGTCTCTGGACCACA
GGATGGTGGTGGCATTGCAGGTTGGCAAGTGGGCTGATGGGGTCCGCCCTCCTCACTGCTGAGCTCCTCACCTGG
ACAGTCTCCTGGACAAGGAGTTTCCAGCTGCTGGCTGGAGTCTCAGGCCAAATTGCAGAGGGTCCTCCAGGGTCC
TGAAGAGCACTGGACTAAGAGTCTAGTGGTTCCAGGGCCCTGACCAGTAGGTGCTCAATAAATGTTTGTTGTTGA
ATG

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FIGURE 3465

AGCTATGATCGCAACACCTTGGTGGCCATCGTGGTGGGTGTGGGGCGCCTCATCACTGGCATGGACCGAGGCCTC
ATGGGCATGTGTGTCAACGAGCGGCGACGCCTCATTGTGCCTCCCCACCTGGGCTATGGGAGCATCGGCCTGGCG
GGGCTCATTCCACCGGATGCCACCCTCTACTTCGATGTGGTTCTGCTGGATGTGTGGAACAAGGAAGACACCGTG
CAGGTGAGCACATTGCTGCGCCCGCCCCACTGCCCCCGCATGGTCCAGGACGGCGACTTTGTCCGCTACCACTAC
AATGGCACCCTGCTGGACGGCACCTCCTTCGACACCAGCTACAGTAAGGGCGGCACTTATGACACCTACGTCGGC
TCTGGTTGGCTGATCAAGGGCATGGACCAGGGGCTGCTGGGCATGTGTCCTGGAGAGAGAAGGAAGATTATCATC
CCTCCATTCCTGGCCTATGGCGAGAAAGGCTATGGGACAGTGATCCCCCCACAGGCCTCGCTGGTCTTTCACGTC
CTCCTGATTGACGTGCACAACCCGAAGGACGCTGTCCAGCTAGAGACGCTGGAGCTCCCCCCCGGCTGTGTCCGC
AGAGCCGGGGCCGGGGACTTCATGCGCTACCACTACAATGGCTCCTTGATGGACGGCACCCTCTTCGATTCCAGC
TACTCCCGCAACCACACCTACAATACCTATATCGGGCAGGGTTACATCATCCCCGGGATGGACCAGGGGCTGCAG
GGTGCCTGCATGGGGGAACGCCGGAGAATTACCATCCCCCCGCACCTCGCCTATGGGGAGAATGGAACTGGAGAC
AAGATCCCTGGCTCTGCCGTGCTAATCTTCAACGTCCATGTCATTGACTTCCACAACCCTGCGGATGTGGTGGAA
ATCAGGACACTGTCCCGGCCATCTGAGACCTGCAATGAGACCACCAAGCTTGGGGACTTTGTTCGATACCATTAC
AACTGTTCTTTGCTGGACGGCACCCAGCTGTTCACCTCGCATGACTACGGGGCCCCCCAGGAGGCGACTCTCGGG
GCCAACAAGGTGATCGAAGGCCTGGACACGGGCCTGCAGGGCATGTGTGTGGGAGAGAGGCGGCAGCTCATCGTG
CCCCCGCACCTGGCCCACGGGGAGAGTGGAGCCCGGGGAGTCCCAGGCAGTGCTGTGCTGCTGTTTGAGGTGGAG
CTGGTGTCCCGGGAGGATGGGCTGCCCACAGGCTACCTGTTTGTGTGGCACAAGGACCCTCCTGCCAACCTGTTT
GAAGACATGGACCTCAACAAGGATGGCGAGGTCCCTCCGGAGGAGTTCTCCACCTTCATCAAGGCTCAAGTGAGT
GAGGGCAAAGGACGCCTCATGCCTGGGCAGGACCCTGAGAAAACCATAGGAGACATGTTCCAGAACCAGGACCGC
AACCAGGACGGCAAGATCACAGTCGACGAGCTCAAGCTGAAGTCAGATGAGGACGAGGAGCGGGTCCACGAGGAG
CTCTGAGGGGCAGGGAGCCTGGCCAGGCCTGAGACACAGAGGCCCACTGCGAGGGGGACAGTGGCGGTGGGACTG
ACCTGCTGACAGTCACCCTCCCTCTGCTGGGATGAGGTCCAGGAGCCAACTAAAACAATGGCAGAGGAGACATCT
CTGGTGTTCCCACCACCCTAGATGAAAATCCACAGCACAGACCTCTACCGTGTTTCTCTTCCATCCCTAAACCAC
TTCCTTAAAATGTTTGGATTTGCAAAGCCAATTTGGGGCCTGTGGAGCCTGGGGTTGGATAGGGCCATGGCTGGT
CCCCCACCATACCTCCCCTCCACATCACTGACACAGCTGAGCTTGTTATCCATCTCCCCAAACTTTCTCTTTCTT
TGTACTTCTTGTCATCCCCACTCCCAGCCCCTTTTCCTCTATGTGACAGCTCCCTAGGACCCCTCTGCCTTCCTC
CCCAATCCTGACTGGCTCCTAGGGAAGGGGAAGGCTCCTGGAGGGCAGCCCTACCTCTCCCATGCCCTTTGCCCT
CCTCCCTCGCCTCCAGTGGAGGCTGAGCTGACCCTGGGCTGCTGGAGGCCAGACTGGGCTGTAGTTAGCTTTTCA
TCCCTAAAGAAGGCTCCTTTCCCTAAGGAACCATAGAAGAGAGGAAGAAAACAAAGGGCATGTGTGAGGGAAGCT
GCTTGGGTGGGTGTTAGGGCTATGAAATCTTGGATTTGGGGCTGAGGGGTGGGAGGGAGGGCAGAGCTCTGCACA
CTCAAAGGCTAAACTGGTGTCAGTCCTTTTTTCCTTTGTTCCAAATAAAAGATTAAACC

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FIGURE 3466

GGGATGGCAGAGGAGGTGAGGAGGGAGGAAGCGTCCGGAGTGGGGCGGGCCCGGACTCCGACCCCCGGGGCGCTT
CGAGCCCCCCAGCTGGTCACCGAGGCACCGCCGCTTCACCCAGGCCAGTAGCCGCCCCCTCGCGCACCCCGGCCC
CGCCTCACACGCGCGCCCGAGCGAGCCCCGGGCTCCCCTCGGGCCCAGCGTGGCGCAGGGGTCAGTGGTTCTCTC
GGGTCTCGGGACAGGTGAGCACCCTGATGAAGGCCACGGTCCTGATGCGGCAGCCTGGGCGGGTGCAGGAGATCG
TGGGCGCCCTCCGCAAGGGCGGCGGAGACCGGTTACAGGTGATTTCTGATTTTGACATGACCTTGAGCAGGTTTG
CATATAATGGAAAGCGATGCCCTTCTTCTTACAATATTCTGGATAATAGCAAGATCATCAGTGAGGAGTGTCGGA
AAGAGCTCACAGCGCTCCTTCACCACTATTACCCAATTGAGATCGACCCACACCGGACCGTCAAGGAGAAGCTAC
CTCATATGGTGGAATGGTGGACCAAAGCACACAATCTCCTATGTCAGCAGAAGATTCAGAAGTTTCAGATAGCCC
AGGTGGTTAGAGAGTCCAATGCAATGCTCAGGGAGGGATATAAGACCTTCTTCAACACACTCTACCATAACAACA
TTCCCCTTTTCATCTTTTCTGCGGGCATTGGTGATATCCTGGAAGAAATTATCCGACAGATGAAAGTGTTCCACC
CCAACATCCACATCGTGTCTAACTACATGGATTTTAATGAAGATGGTTTTCTCCAGGGATTTAAGGGCCAGCTCA
TACACACATACAACAAGAACAGCTCTGCGTGTGAGAACTCTGGTTACTTCCAGCAACTTGAGGGCAAAACCAATG
TCATCCTGCTGGGAGACTCTATCGGGGACCTCACCATGGCCGATGGGGTTCCTGGTGTGCAGAACATTCTCAAAA
TTGGCTTCCTGAATGACAAGGTGGAGGAGCGGCGGGAGCGCTACATGGACTCCTATGACATCGTGCTGGAGAAGG
ACGAGACTCTGGATGTGGTCAACGGGCTACTGCAGCACATCCTGTGCCAGGGGGTCCAGCTGGAGATGCAAGGCC
CCTGAAGGCGCAGGCTCCAGCCCGGCCTGCAGGCCGTGGTGAGGAGGGGCGCCTCCCCAGAGTCTGCTCCCCCGT
GAACACAGAGCAGAGGCCAGGGTGGCCAGCAGTGGCTGGGTCCTTCCGCGCCCCTCCGTCCTCCTTTCCCTGAGC
ACCTTCATCACCAGAGGCTTGAAGGAACCCCGCCATGTGGCAGGGCACAGGCACTGTTCCTGGTGAACCTTGGAC
CACAGCATGTCAGTGCTCTAGGGATTGTCTACTCCAGGGATTTTCTTCAAAATTTTTAAACATGGGAAGTTCAAA
CAAATATAATGTGTGAAACAG

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FIGURE 3467A

CCGGATTTTGCGGGGTTCGTCGGGCCTGTGGAAGAAGCGCCGCGCACGGACTTCGGCAGAGGTAGAGCAGGTCTC
TCTGCAGCCATGTCGGCCAAGGCAATTTCAGAGCAGACGGGCAAAGAACTCCTTTACAAGTTCATCTGTACCACC
TCAGCCATCCAGAATCGGTTCAAGTATGCTCGGGTCACTCCTGACACAGACTGGGCCCGCTTGCTGCAGGACCAC
CCCTGGCTGCTCAGCCAGAACTTGGTAGTCAAGCCAGACCAGCTGATCAAACGTCGTGGAAAACTTGGTCTCGTT
GGGGTCAACCTCACTCTGGATGGGGTCAAGTCCTGGCTGAAGCCACGGCTGGGACAGGAAGCCACAGTTGGCAAG
GCCACAGGCTTCCTCAAGAACTTTCTGATCGAGCCCTTCGTCCCCCACAGTCAGGCTGAGGAGTTCTATGTCTGC
ATCTATGCCACCCGAGAAGGGGACTACGTCCTGTTCCACCACGAGGGGGGTGTGGACGTGGGTGATGTGGACGCC
AAGGCCCAGAAGCTGCTTGTTGGCGTGGATGAGAAACTGAATCCTGAGGACATCAAAAAACACCTGTTGGTCCAC
GCCCCTGAAGACAAGAAAGAAATTCTGGCCAGTTTTATCTCCGGCCTCTTCAATTTCTACGAGGACTTGTACTTC
ACCTACCTCGAGATCAATCCCCTTGTAGTGACCAAAGATGGAGTCTATGTCCTTGACTTGGCGGCCAAGGTGGAC
GCCACTGCCGACTACATCTGCAAAGTGAAGTGGGGTGACATCGAGTTCCCTCCCCCCTTCGGGCGGGAGGCATAT
CCAGAGGAAGCCTACATTGCAGACCTCGATGCCAAAAGTGGGGCAAGCCTGAAGCTGACCTTGCTGAACCCCAAA
GGGAGGATCTGGACCATGGTGGCCGGGGGTGGCGCCTCTGTCGTGTACAGCGATACCATCTGTGATCTAGGGGGT
GTCAACGAGCTGGCAAACTATGGGGAGTACTCAGGCGCCCCCAGCGAGCAGCAGACCTATGACTATGCCAAGACT
ATCCTCTCCCTCATGACCCGAGAGAAGCACCCAGATGGCAAGATCCTCATCATTGGAGGCAGCATCGCAAACTTC
ACCAACGTGGCTGCCACGTTCAAGGGCATCGTGAGAGCAATTCGAGATTACCAGGGCCCCCTGAAGGAGCACGAA
GTCACAATCTTTGTCCGAAGAGGTGGCCCCAACTATCAGGAGGGCTTACGGGTGATGGGAGAAGTCGGGAAGACC
ACTGGGATCCCCATCCATGTCTTTGGCACAGAGACTCACATGACGGCCATTGTGGGCATGGCCCTGGGCCACCGG
CCCATCCCCAACCAGCCACCCACAGCGGCCCACACTGCAAACTTCCTCCTCAACGCCAGCGGGAGCACATCGACG
CCAGCCCCCAGCAGGACAGCATCTTTTTCTGAGTCCAGGGCCGATGAGGTGGCGCCTGCAAAGAAGGCCAAGCCT
GCCATGCCACAAGATTCAGTCCCAAGTCCAAGATCCCTGCAAGGAAAGAGCACCACCCTCTTCAGCCGCCACACC
AAGGCCATTGTGTGGGGCATGCAGACCCGGGCCGTGCAAGGCATGCTGGACTTTGACTATGTCTGCTCCCGAGAC
GAGCCCTCAGTGGCTGCCATGGTCTACCCTTTCACTGGGGACCACAAGCAGAAGTTTTACTGGGGGCACAAAGAG
ATCCTGATCCCTGTCTTCAAGAACATGGCTGATGCCATGAGGAAGCATCCGGAGGTAGATGTGCTCATCAACTTT
GCCTCTCTCCGCTCTGCCTATGACAGCACCATGGAGACCATGAACTATGCCCAGATCCGGACCATCGCCATCATA
GCTGAAGGCATCCCTGAGGCCCTCACGAGAAAGCTGATCAAGAAGGCGGACCAGAAGGGAGTGACCATCATCGGA
CCTGCCACTGTTGGAGGCATCAAGCCTGGGTGCTTTAAGATTGGCAACACAGGTGGGATGCTGGACAACATCCTG
GCCTCCAAACTGTACCGCCCAGGCAGCGTGGCCTATGTCTCACGTTCCGGAGGCATGTCCAACGAGCTCAACAAT
ATCATCTCTCGGACCACGGATGGCGTCTATGAGGGCGTGGCCATTGGTGGGGACAGGTACCCGGGCTCCACATTC
ATGGATCATGTGTTACGCTATCAGGACACTCCAGGAGTCAAAATGATTGTGGTTCTTGGAGAGATTGGGGGCACT
GAGGAATATAAGATTTGCCGGGGCATCAAGGAGGGCCGCCTCACTAAGCCCATCGTCTGCTGGTGCATCGGGACG
TGTGCCACCATGTTCTCCTCTGAGGTCCAGTTTGGCCATGCTGGAGCTTGTGCCAACCAGGCTTCTGAAACTGCA
GTAGCCAAGAACCAGGCTTTGAAGGAAGCAGGAGTGTTTGTGCCCCGGAGCTTTGATGAGCTTGGAGAGATCATC
CAGTCTGTATACGAAGATCTCGTGGCCAATGGAGTCATTGTACCTGCCCAGGAGGTGCCGCCCCCAACCGTGCCC
ATGGACTACTCCTGGGCCAGGGAGCTTGGTTTGATCCGCAAACCTGCCTCGTTCATGACCAGCATCTGCGATGAG
CGAGGACAGGAGCTCATCTACGCGGGCATGCCCATCACTGAGGTCTTCAAGGAAGAGATGGGCATTGGCGGGGTC
CTCGGCCTCCTCTGGTTCCAGAAAAGGTTGCCTAAGTACTCTTGCCAGTTCATTGAGATGTGTCTGATGGTGACA
GCTGATCACGGGCCAGCCGTCTCTGGAGCCCACAACACCATCATTTGTGCGCGAGCTGGGAAAGACCTGGTCTCC
AGCCTCACCTCGGGGCTGCTCACCATCGGGGATCGGTTTGGGGGTGCCTTGGATGCAGCAGCCAAGATGTTCAGT
AAAGCCTTTGACAGTGGCATTATCCCCATGGAGTTTGTGAACAAGATGAAGAAGGAAGGGAAGCTGATCATGGGC
ATTGGTCACCGAGTGAAGTCGATAAACAACCCAGACATGCGAGTGCAGATCCTCAAAGATTACGTCAGGCAGCAC
TTCCCTGCCACTCCTCTGCTCGATTATGCACTGGAAGTAGAGAAGATTACCACCTCGAAGAAGCCAAATCTTATC
CTGAATGTAGATGGTCTCATCGGAGTCGCATTTGTAGACATGCTTAGAAACTGTGGGTCCTTTACTCGGGAGGAA
GCTGATGAATATATTGACATTGGAGCCCTCAATGGCATCTTTGTGCTGGGAAGGAGTATGGGGTTCATTGGACAC
TATCTTGATCAGAAGAGGCTGAAGCAGGGGCTGTATCGTCATCCGTGGGATGATATTTCATATGTTCTTCCGGAA
CACATGAGCATGTAACAGAGCCAGGAACCCTACTGCAGTAAACTGAAGACAAGATCTCTTCCCCCAAGAAAAAGT
GTACAGACAGCTGGCAGTGGAGCCTGCTTTATTTAGCAGGGGCCTGGAATGTAAACAGCCACTGGGGTACAGGCA
CCGAAGACCAACATCCACAGGCTAACACCCCTTCAGTCCACACAAAGAAGCTTCATATTTTTTTTATAAGCATAG

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FIGURE 3467B

AAATAAAAACCAAGCCAATATTTGTGACTTTGCTCTGCTACCTGCTGTATTTATTATATGGAAGCATCTAAGTAC
TGTCAGGATGGGGTCTTCCTCATTGTAGGGCGTTAGGATGTTGCTTTCTTTTTCCATTAGTTAAACATTTTTTC
TCCTTTGGAGGAAGGGAATGAAACATTTATGGCCTCAAGATACTATACATTTAAAGCACCCCAATGTCTCTCTTT
TTTTTTTTTTACTTCCCTTTCTTCTTCCTTATATAACATGAAGAACATTGTATTAATCTGATTTTTAAAGATCTT
TTTGTATGTTACGTGTTAAGGGCTTGTTTGGTATCCCACTGAAATGTTCTGTGTTGCAGACCAGAGTCTGTTTAT
GTCAGGGGGATGGGGCCATTGCATCCTTAGCCATTGTCACAAAATATGTGGAGTAGTAACTTAATATGTAAAGTT
GTAACATACATACATTTAAAATGGAAATGCAGAAAGCTGTGAAATGTCTTGTGTCTTATGTTCTCTGTATTTATG
CAGCTGATTTGTCTGTCTGTAACTGAAGTGTGGGTCCAAGGACTCCTAACTACTTTGCATCTGTAATCCACAAAG
ATTCTGGGCAGCTGCCACCTCAGTCTCTTCTCTGTATTATCATAGTCTGGTTTAAATAAACTATATAGTAACA

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FIGURE 3468

GTTACACACAGGCAGTGGTATCTGTGAGCAGCTCTGTGGACTCAAAGGTTTTCTCCCTGAGAGGCATGACCCAGG
CCAGCTGATTCATCAGAATCAGGATGGACGTGGTAGAGGTCGCGGGCAGTTGGTGGGCACAAGAGCGAGAGGACA
TCATTATGAAATACGAAAAGGGACACCGAGCTGGGCTGCCAGAGGACAAGGGGCCTAAGCCTTTTCGAAGCTACA
ACAACAACGTCGATCATTTGGGGATTGTACAAGTGAGACGGAGCTGCCTCCTCTGACTGCGCGGGAGGCGAAGCA
AATTCGGCGGGAGATCAGCCGAAAGAGCAAGTGGGTGGATATGCTGGGAGACTGGGAGAAATACAAAAGCAGCAG
AAAGCTCATAGATCGAGCGTACAAGGGAATGCCCATGAACATCCGGGGCCCGATGTGGTCAGTCCTCCTGAACAC
TGAGGAAATGAAGTTGAAAAACCCCGGAAGATACCAGATCATGAAGGAGAAGGGCAAGAGGTCATCTGAGCACAT
CCAGCGCATCGACCGGGACGTAAGCGGGACATTAAGGAAGCATATATTCTTCAGGGATCGATACGGAACCAAGCA
GCGGGAACTACTCCACATCCTCCTGGCATATGAGGAGTATAACCCGGAGGTGGGCTACTGCAGGGACCTGAGCCA
CATCGCCGCCTTGTTCCTCCTCTATCTTCCTGAGGAGGATGCATTCTGGGCACTGGTGCAGCTGCTGGCCAGTGA
GAGGCACTCCCTGCAGGGATTTCACAGCCCAAATGGCGGGACCGTCCAGGGGCTCCAAGACCAACAGGAGCATGT
GGTAGCCACGTCACAACCCAAGACCATGGGGCATCAGGACAAGAAAGATCTATGTGGGCAGTGTTCCCCGTTAGG
CTGCCTCATCCGGATATTGATTGACGGGATCTCTCTCGGGCTCACCCTGCGCCTGTGGGACGTGTATCTGGTAGA
AGGCGAACAGGCGTTGATGCCGATAACAAGAATCGCCTTTAAGGTTCAGCAGAAGCGCCTCACGAAGACGTCCAG
GTGTGGCCCGTGGGCACGTTTTTGCAACCGGTTCGTTGATACCTGGGCCAGGGATGAGGACACTGTGCTCAAGCA
TCTTAGGGCCTCTATGAAGAAACTAACAAGAAAGCAGGGGGACCTGCCACCCCCAGCCAAACCCGAGCAAGGGTC
GTCGGCATCCAGGCCTGTGCCGGCTTCACGTGGCGGGAAGACCCTCTGCAAGGGGGACAGGCAGGCCCCTCCAGG
CCCACCAGCCCGGTTCCCGCGGCCCATTTGGTCAGCTTCCCCGCCACGGGCACCTCGTTCTTCCACACCCTGTCC
TGGTGGGGCTGTCCGGGAAGACACCTACCCTGTGGGCACTCAGGGTGTGCCCAGCCCGGCCCTGGCTCAGGGAGG
ACCTCAGGGTTCCTGGAGATTCCTGCAGTGGAACTCCATGCCCCGCCTCCCAACGGACCTGGACGTAGAGGGCCC
TTGGTTCCGCCATTATGATTTCAGACAGAGCTGCTGGGTCCGTGCCATATCCCAGGAGGACCAGCTGGCCCCCTG
CTGGCAGGCTGAACACCCTGCGGAGCGGGTGAGATCGGCTTTCGCTGCACCCAGCACTGATTCCGACCAGGGCAC
CCCCTTCAGAGCTAGGGACGAACAGCCGTGTGCTCCCACCTCAGGGCCTTGCCTCTGCGGCCTCCACTTGGAAAG
TTCTCAGTTCCCTCCAGGCTTCTAGAAGCATCTGGGCCAGGGCTCATGGCTGGATAATTTCCCTAGGCTTAACAA
CCCAAGCAAGCTTCGCATCCTCGTTTTATTTTTGGTTAAACTTATGAAAATGTATTAAGAAAGAGTGCAGCTCGA
GAGAGATTCAGAGATGGAACACACCAGACCCCAGATCACAAAGCCAACCATGCCCAGCCCCTCCCAGCACCCCCA
GCCCCACGACCATCGTTCTGAATTCTGACGACACCGTGAGCCTGCCTTTGTACTTCAAACTCATGGAAGGATAAC
CACCTTCATGTTTTGAAATAAATGTTTCCTGTTGAAATG

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FIGURE 3469

CCGGCGTCCCAAGTGAGTGGAGGGGGGATCCCGACTCCAGTCCGGGGCCTTGGCCAGCGGAGCCGCGCTATTCGG
AAGCGGGAATCCCACTCAGAGCCCGGGCCTGTAGGGGCGGGGCGTCCCGGGCACCCGGGATTGGGGCGTCTCCCG
TCGTGCACCGGGGCACCGGCGACTCACCCGGAAGGAGAAGCCGTGATCTGGCTATATGGTGGGGCGCGGGCGGTG
TCGCTGTGGGGAGCTGGTGCTGTTCTCAGATGTTTCCTTCCAATGGGCTTTTGGTGTAGGATGTCGGAGAACCAA
GAACAGGAGGAGGTGATTACAGTGCGTGTTCAGGACCCCCGAGTGCAGAATGAGGGCTCCTGGAACTCTTATGTG
GATTATAAGATATTCCTCCATACCAACAGCAAAGCCTTTACTGCCAAGACTTCCTGTGTGCGGCGCCGCTACCGT
GAGTTCGTGTGGCTGAGAAAGCAGCTACAGAGAAATGCTGGTTTGGTGCCTGTTCCTGAACTTCCTGGGAAGTCA
ACCTTCTTCGGCACCTCAGATGAGTTCATTGAGAAGCGACGACAAGGTCTGCAGCACTTCCTTGAAAAGGTCCTG
CAGAGTGTGGTTCTCCTGTCAGACAGCCAGTTGCACCTATTCCTGCAAAGCCAGCTCTCGGTGCCTGAGATAGAA
GCCTGTGTCCAGGGCCGAAGTACCATGACTGTGTCTGATGCCATTCTTCGATATGCTATGTCAAACTGTGGCTGG
GCCCAGGAAGAGAGGCAGAGCTCTTCTCACCTGGCTAAAGGAGACCAGCCTAAGAGTTGCTGCTTTCTTCCAAGA
TCGGGTAGGAGGAGCTCTCCCTCACCGCCTCCCAGTGAAGAAAAGGACCATTTAGAAGTGTGGGCTCCAGTTGTT
GACTCTGAGGTTCCTTCCTTGGAAAGTCCCACTCTCCCACCCCTCTCCTCACCATTATGCTGTGATTTTGGAAGA
CCCAAAGAGGGAACCTCCACTCTTCAGTCTGTGAGGAGGGCTGTGGGAGGAGATCATGCTGTGCCTTTGGACCCT
GGTCAGTTAGAAACAGTTTTGGAAAAGTGAGCTCTGGGTTCTGCTCTGAGATGGTCAGAGAAGATGCGGGCCAGG
AGACTTACTCAGGTGGGACTGGGCACAGGGCAGGTATGTGGGAGGCTGGGCTGCTTAGTGTCTTCTAGTCACCTC
TGCTTGGGCTGATTGACAGAGGTCAGTCATTACAGCCCCTTATGCCTCTTCCATGGGAACAAATACTGTGCAGAT
GTTTGTAAGTTAAACATAAGACACAGGGGCTGTTGCTTTTGAACAGAACCCTATATTACTCTCCTGGGATCTGAG
TTTCTGCAGGTCATTTGTATGTAGGACCAGGAGTATCTCCTCAGGTGACCAGTTTTGGGGACCCGTATGTGGCAA
ATTCTAAGCTGCCATATTGAACATCATCCCACTGGGAGTGGTTATGTTGTATCCCCATCTTGGCTGGCTTCAGTT
TTTGCTGTAGCCCTAGAGCACTTTGTTTGTGGGAGGCTGGCCTCTTGCCTACCTCCTTGCATGGACAGGGGGATG
AATATTTACTTTCCCACCTCCTTGCTTTTTCTTTCACTGATACCACTGAATGGAACTGGTGCTGTGACTCCTGCT
GCTGGGGATTTATGTCCCGAGACCTTAGCCTGGCTGAGTGGAGCCTGAGACCTGCACAACAGCTCATGGTCATGC
ATGAGAGAGAAGTGGCTGGCCACAGCCAGAGGGAACAGTAACAGCCCAGGGGCCTTTATTTTGGGAAAGGCTGTC
CCGGGCTGTTACTGTCTCTTCTGGTTATAAAGCAGACATGTGGCCATCTTTTCCGCAGGGTTAGAGTGGGCTCCT
TTCTTTTTGGAATCCTTTTCTTCTCCTTTGGTAGCAGCTCCCTGCCTCCAGGGCTTCCGCCACCAGCGTCTCTGC
TGTGTTGCGCAGTGCAGTGGGGTGCAAGGGCTTTGTTTCTGCCTGCCTGAAAGAGAGGGCTCTGGGGATGGAGAT
GAGAAACAACACGCTCTCCTTCAGACAATGAGGCATTCTGTCCTCCTGCTGCCATTCTTCATCTCCACTGAGAGC
CAGAGCTGGTAGGAGCCGAGTGCCACAGGCATTCTGCATTGCTCTACTCTTAGGTTTGTGTGTGTGATCCTTCCC
CTCCCTGTCGCCCACTCCTCCCTCCTCTGGCTATCCTACCCTGTCTGTGGGCTCTTTTACTACCAGCCTATGCTG
TGGGACTGTCATGGCATTTAGTTCAGAGTGGAGGGGCTTTGGCCTGAAATAAAATGCAAGTATTT

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FIGURE 3470

GGCTGAGGGGAGGGCCGTTGGCCGGGGCCTGCGGTACGCCGCTTCAGTGAGGGACGCCACTGCGGCCACCCGGCT
TGCTGCCTTCCTGGGCGCCACTCCCCCAGGCGACCCGACGCGACGCGCCAGCAGCGCAGCACCGATTCCTCTCGG
GCTCTTGGGCGCTGCTCTGAGCAGCGTCACCCTTTACACCAGAAAGCTGGCGGGCACT**ATG**GGGAAAAAACAAAA
CAAGAAGAAAGTGGAGGAGGTGCTAGAAGAGGAGGAAGAGGAATATGTGGTGGAAAAAGTTCTCGACCGTCGAGT
GGTAAAGGGCAAAGTGGAGTACCTCCTAAAGTGGAAGGGATTCTCAGATGAGGACAACACATGGGAGCCAGAAGA
GAACCTGGATTGCCCCGACCTCATTGCTGAGTTTCTGCAGTCACAGAAAACAGCACATGAGACAGATAAATCAGA
GGGAGGCAAGCGCAAAGCTGATTCTGATTCTGAAGATAAGGGAGAGGAGAGCAAACCAAAGAAGAAGAAAGAAGA
GTCAGAAAAGCCACGAGGCTTTGCTCGAGGTTTGGAGCCGGAGCGGATTATTGGAGCTACAGACTCCAGTGGAGA
GCTCATGTTCCTGATGAAATGGAAAAACTCTGATGAGGCTGACCTGGTCCCTGCCAAGGAAGCCAATGTCAAGTG
CCCACAGGTTGTCATATCCTTCTATGAGGAAAGGCTGACGTGGCATTCCTACCCCTCGGAGGATGATGACAAAAA
AGATGACAAGAAC**TAA**CGCTCCTGAGTACCAGCCCCTGTCACATCTGACTGTGGGTTTCAAGTGGGAAGGGAAGG
AGTTCTACTTGTCTTGACACCATAGAGGTGGCTTGAGAAGATGTCCTTTGAAGAGCCAGTATAGTTTCTGTGCCC
TGCAGCAGCCCAAGTGCTTTAAAGCCGTTTCAAGCTGTATAGTTTGCACACCCATCCCAGTGGAGGGGAAAGGGG
ATAAGTGTTTCAAGGCAACCTTTTCTGCACTTTGCTGCGAAAAGCAAAGGGCCTTCTATGAAGGACAAAACTTGC
AGAATTGGGTGTGTGGGAGAGCAAAAAAATACTGTAGATCTTCAAAGAGCATCTCCACAACCCACAGCCTTCTTC
CCAATAGTGTTAACTCTGCATTTTTACAGCGTAGCATGTGTGTAGTTTTTGGCTATTACTGGTGTATTATTTGGG
GGAGGGAGGGATGGGGAGGGGAGAAAGGGAGATGGGTAGCATCATTTTGATTAACATTTGGGGCCTGATAGGGGA
AATGGTGAAGCAATGGAAAAGAACAGACAACTAATGATTTGCTTCTATGTCCAGAATATTTTACCTTTAAAAAAA
TGTCATTGGCACCATAAATAAGGACTGTGAGAGACTGTTTAAAAGCTGTGAAAGTCTGAAACCTATAAGCCAAGG
TGTTCCCTGCCTAAACTTATTGCTGTTCCCACAAAGGACTAAGCCTGTTCATAAGTTACCAAAGTTGCCATTTTG
GAGATGGAAATTGACGAGGAGGGAAGGTCTTTTATTGGAGAGTATACAGTACAAGCAGATCATTCTGCCTTAGAG
GTGCTAATTCCCGAAATTAGAAGACCCTTTCTTTTCCAGTAACGAAGTTATAAATATCAGCTTGTTCATCCAAGC
CACTGGCTGAGGTGTTAGGAAGAGGAAGAGGGTGGTAGAGGAGGTAAGACAGTAGGGAAAGACAAGGGCCCATGC
TCTTAGTGGGGAAAACTCTTGGAGCCGTTTACTTTGAGCTTTGAACACTGAAACCATTGTTGGCAGGGTTCAGTC
ACTGACAGCACAAGTTTCACTGAATTGATCCAAGAGTTTAGTGATTTCAAAAGCCTTGGTCTCAGGAGAAGATTA
AACTTTCATATTGGGCAGTGGTTCACTTTAAAACACACACATACACACACAAAACAATTTTTTAAGAAATCCTAA
TAAGTAACATACCCAAAATGCTCTGTCTTGAGTCATGAGAACCATCAGTTCTTGATATTGTCTAGACTTGCATCT
AGAGCTACGTTGTAAAATTCTTTTAGGCATGTGTTAGATTTCTGTGTAAACTTTGTTTAAATGTAAACTTCATAC
TACATTGTCAGTTTTTGTCTTAATAAAACTATAGATTTAT

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FIGURE 3471A

GGCCGGCGGTGGCGGCGGCGAGGCCGGGACTCGGGCTTAGGGCCTGCTGTGGAGGCAGCGGCGGACGCCGAGCTA
AGCAGTTTCTCTGGAAACCCCCCTGGTAAGTGTGGAGGAGGCGGGACACTCTGACCCAAGACGAAAGGCCTGTAG
CTCCAGCCAAAGAAAATAAACCTTAGGAGGGAGAAGGAAAAAAAAAATCCATCAGCTGTTCCTGAGAACAGCCTG
CATTGGAATCTACAGAGAGGACAACTAATGTGAGTGAGGAAGTGACTGTATGTGGACTGTGGAGAAAGTAAGTCA
CGTGGGCCCTTGAGGACCTGGACTGGGTTAGGAACAGTTGTACTTTCAGAGGTGAGGTGTCGAGAAGGGAAAGTG
AATGTGGTCTGGAGTGTGTCCTTGGCCTTGGCTCCACAGGGTGTGCTTTCCTCTGGGGCCGTCAGGGAGCTCATC
CCTTGTGTTCTGCCAGGGTGGGGTACGGGGTTTGACACTGAGGAGGGTAACCTGCTGGCTGGAGCGGCAGAGCAG
TGGCCTTGATTTGTCTTTTGGAAGATTTTAAAAACCAAAAAGCATAAACATTCTGGTCCTTCAGCAATGCTTTCT
CTGAAGAAATACTTAACGGAAGGACTTCTCCAGTTCACCATTCTGCTGAGTTTGATTGGGGTACGGGTGGACGTG
GATACTTACCTGACCTCACAGCTTCCCCCACTCCGGGAGATCATCCTGGGGCCCAGTTCTGCCTATACTCAGACC
CAGTTCCACAACCTGAGGAATACCTTGGATGGCTATGGTATCCACCCCAAGAGCATAGACCTGGACAATTACTTC
ACTGCCCGGCGGCTCCTCAGTCAGGTGAGGGCCCTGGACAGGTTCCAGGTGCCAACCACTGAGGTAAATGCCTGG
CTGGTTCACCGAGACCCAGAGGGGTCTGTCTCTGGCAGTCAGCCCAACTCAGGCCTCGCCCTCGAGAGTTCCAGT
GGCCTCCAAGATGTGACAGGCCCAGACAACGGGGTGCGAGAAAGCGAAACGGAGCAGGGATTCGGTGAAGATTTG
GAGGATTTGGGGGCTGTAGCCCCCCCAGTCAGTGGAGACTTAACCAAAGAGGACATAGATCTGATTGACATCCTT
TGGCGACAGGATATTGATCTGGGGGCTGGGCGTGAGGTTTTTGACTATAGTCACCGCCAGAAGGAGCAGGATGTG
GAGAAGGAGCTGCGAGATGGAGGCGAGCAGGACACCTGGGCAGGCGAGGGCGCGGAAGCTCTGGCACGGAACCTG
CTAGTGGATGGAGAGACTGGGGAGAGCTTCCCTGCACAGGTGCCTAGTGGGGAGGACCAGACGGCCCTGTCCCTG
GAAGAGTGCCTTAGGCTGCTGGAAGCCACCTGCCCCTTTGGGGAGAATGCTGAGTTTCCAGCAGACATTTCCAGC
ATAACAGAAGCAGTGCCTAGTGAGAGTGAGCCCCCTGCTCTTCAAAACAACCTCTTGTCTCCTCTTCTGACCGGG
ACAGAGTCACCATTTGATTTGGAACAGCAGTGGCAAGATCTCATGTCCATCATGGAAATGCAGGCCATGGAAGTG
AACACATCAGCAAGTGAAATCCTGTACAGTGCCCCTCCTGGAGACCCACTGAGCACCAACTACAGCCTTGCCCCC
AACACTCCCATCAATCAGAATGTCAGCCTGCATCAGGCGTCCCTGGGGGGCTGCAGCCAGGACTTCTTACTCTTC
AGCCCCGAGGTGGAAAGCCTGCCTGTGGCCAGTAGCTCCACGCTGCTCCCGTTGGCCCCCAGCAATTCTACCAGC
CTCAACTCCACCTTCGGCTCCACCAACCTGACAGGGCTCTTCTTTCCACCCCAGCTCAATGGCACAGCCAATGAC
ACAGCAGGCCCAGAGCTGCCTGACCCTTTGGGGGGTCTGTTAGATGAAGCTATGTTGGATGAGATCAGCCTTATG
GACCTGGCCATTGAAGAAGGCTTTAACCCTGTGCAGGCCTCCCAGCTGGAGGAGGAATTTGACTCTGACTCAGGC
CTTTCCTTAGACTCGAGCCATAGCCCTTCTTCCCTAAGCAGCTCTGAAGGCAGTTCTTCCTCTTCTTCCTCCTCC
TCTTCCTCTTCTTCCTCTGCTTCTTCCTCTGCCTCTTCCTCCTTTTCTGAGGAAGGTGCGGTTGGCTACAGCTCT
GACTCTGAGACCCTGGATCTGGAAGAGGCCGAGGGTGCTGTGGGCTACCAGCCTGAGTATTCCAAGTTCTGCCGC
ATGAGCTACCAGGATCCAGCTCAGCTCTCATGCCTGCCCTACCTGGAGCACGTGGGCCACAACCACACATACAAC
ATGGCACCCAGTGCCCTGGACTCAGCCGACCTGCCACCACCCAGTGCCCTCAAGAAAGGCAGCAAGGAGAAGCAG
GCTGACTTCCTGGACAAGCAGATGAGCCGGGATGAGCACCGAGCCCGAGCCATGAAGATCCCTTTCACCAATGAC
AAAATCATCAACCTGCCTGTGGAGGAGTTCAATGAACTGCTGTCCAAATACCAGTTGAGTGAAGCCCAGCTGAGC
CTCATCCGAGACATCCGGCGCCGGGGCAAGAACAAGATGGCGGCGCAGAACTGCCGCAAGCGCAAGCTGGACACC
ATCCTGAATCTGGAGCGTGATGTGGAGGACCTGCAGCGTGACAAAGCCCGGCTGCTGCGGGAGAAAGTGGAGTTC
CTGCGCTCCCTGCGACAGATGAAGCAGAAGGTCCAGAGCCTGTACCAGGAGGTGTTTGGGCGGCTGCGAGATGAG
AACGGACGACCCTACTCGCCCAGTCAGTATGCGCTCCAGTACGCCGGGGACGGCAGTGTCCTCCTCATCCCCCGC
ACGATGGCCGACCAGCAGGCCCGGCGGCAGGAGAGGAAGCCAAAGGACCGGAGAAAGTGAGCCTGGGGAAGAAGG
GGGTTTGAAGCCCACCAAGACCGAAACTGGAGAAGGGCTGGACCTGGACCTGGACCTGGACCTACAGCGGGGACT
TAAATGCCTTCTTATCCAATATATCTTCTCAGATGGGATGACTGCGGGTCAGTGTACAGGAAGAGGCAGGCACTG
GCTGGCTCAGCTCCACTCGGGTGGAGTGGAAGTGGCCAGACCATTTAGACGGACAGGGTCCTCACCCTACCCCTT
TCCTGTGAGGCAGGGGTGGTGGTGGAGTTGCTGGAGGTAGAGGAGCTATGTGGAGCAAAGGCCGACAGAGGGGAA
GGAATGGACCTGTGAGAGGAAGGGAAGGTGGCAGAAAGTCTCATTTCAGGAAGGAGGGATAGAAGGAAGGAAGGA
AGGAACCCCCCCCCCCCCCGAAAAAAAAATCAAAGCGGGAAGAAAATCAGAGGGAAGGTTAAGGTTGGCTCTGGCC
AGGATTCCAGGCAGCAGGTTGGAGTGACTGGTGGGCCTAGATCACTGGTGTGATAAACCCCAATTTTCACCCCGG
GGGGGGTGGGGTACACAGACACAGGGTGGGGGTGGGGAGGGACGGTGTTAACTCTTTCTGCTCCTTGCATTTTGA
CATCCCTGAAGGGGAGCTCTTGGATATCATTGGCCATGTTTCAATCGAATGGAGCCACTGGGCCCCAACACTGGC

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FIGURE 3471B

TTTGAGATTTAGAGTCAAAGGGTAGAGTGAACAGGAAAGGGTCACGTGGTCCCATGTTGCAACAGCCCCAACATC
ACGCATGTCATTCACTGCCTTGCCACTCCATCTCCCTCCGTGCTCCAGCCACCCCTGAGCTGAGGCTCCCATTGT
CTCCATCAGAGCCTGCATGTGTATGCCGTCCTCCCCTGGTCCGGTGTTTGTGTTCCCCACCCCTCACAGACTGCC
TGAGCTCTTCTGTAAGCTGGGGTAGGGTGATGGCAGTGCTCCGGGAACTGGGCCTGCAGCCTTCCTCTTCTGGGA
CTGCTGTGAGGCAGAGGAATGATGGAGAATCTAGTGTAGCAGCCTCCAGGCAGGATTCAGCACAACACTGGGGAG
TCACCCTTCCCTCGGGCCTCTGCCTACCAACAACTGGGCTTATCACTGGGAAAACACAAAAAATTACACAACCCA
GCAACAACAAAAGAACTAGTCCTCTTAGAATTTCTTGCGCTTTGATTTTTTTAGGGCTTGTGCCCTGTTTCACTT
ATAGGGTCTAGAATGCTTGTGTTGAGTAAAAAGGAGATGCCCAATATTCAAAGCTGCTAAATGTTCTCTTTGCCA
TAAAGACTCCGTGTAACTGTGTGAACACTTGGGATTTTTCTCCTCTGTCCCGAGGTCGTCGTCTGCTTTCTTTTT
TGGGTTTCTTTCTAGAAGATTGAGAAGTGCATATGACAGGCTGAGAGCACCTCCCCAAACACACAAGCTCTCAGC
CACAGGCAGCTTCTCCACAGCCCCAGCTTCGCACAGGCTCCTGGAGGGCTGCCTGGGGGAGGCAGACATGGGAGT
GCCAAGGTGGCCAGATGGTTCCAGGACTACAATGTCTTTATTTTTAACTGTTTGCCACTGCTGCCCTCACCCCTG
CCCGGCTCTGGAGTACCGTCTGCCCCAGACAAGTGGGAGTGAAATGGGGGTGGGGGGAAGCACTGATTCCCAGTT
AGGGGGTGCCTAACTGAGCAGTAGGGATAGAAGGTGTGAACCTGGGAGTGCTTTTATAAATTATTTTCCTTGTAG
ATTTTATTTTTAATTTATCTCTGTGACCTGCCAGGGAGAGGGGAGAGAGAGAGATGCTGTTGAGCACATGACA
AAATAAAATAAAATGGATGATTC

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FIGURE 3472

GGCGGCGAGCGGAATGCAGCGGCCCGAGGCTGGCCACGTCCGCACCCGGGGGAGGGGGCCGCGGCGGCAGGCCGG
GGGCCGGCGCCGCCTGCTCGAGCCGGGGAGCCCTCGGGGCTGCGGTTGCAGGAACCTTCCCTCTACACCATCAAG
GCTGTTTTCATCCTAGATAATGACGGGCGCCGGCTGCTGGCCAAGTATTATGATGACACATTCCCCTCCATGAAG
GAGCAGATGGTTTTCGAGAAAAATGTCTTCAACAAGACCAGCCGGACTGAGAGTGAGATTGCATTTTTTGGGGGT
ATGACCATCGTCTACAAGAACAGCATTGACCTCTTCCTATACGTGGTGGGCTCATCCTACGAGAATGAGCTGATG
CTCATGTCTGTTCTCACCTGCCTGTTTGAGTCTCTGAACCACATGTTAAGGAAGAACGTGGAGAAGCGCTGGTTG
CTGGAGAACATGGACGGAGCCTTCTTGGTGCTGGACGAGATTGTGGATGGCGGTGTGATTCTGGAGAGTGACCCC
CAGCAAGTGATCCAGAAGGTGAATTTTAGGGCAGATGATGGCGGCTTGACTGAACAGAGTGTGGCCCAGGTTCTT
CAGTCTGCCAAGGAACAAATTAAATGGTCGTTATTGAAATGAAGGCTGTGGATTCAAGGCTCCCTGCCCCCCAGA
TCATTTCCCCAATCCTGGCAAAAGCCCAAAGATCCCAGGGTCAGGAGAGACCCCTCTGTATCCCCAGGTCCCTCC
CAGAACTGACTCCTAAGGTCTCCAGCCAGGGCTTCTGAGATGCAAAGGTTTGGCCTCAGGAGAGTCACCTTTTCT
CACGGCCCTGGCCTTAACTCATATCTTAGGCATTCCTGGCCCCAGGGCCCTAATAAACCTGCTTTTGTCTTCTGC

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FIGURE 3473

CTGAAGCGGAAGTGGAGGAAAGATGGAGGACCATCAGCACGTGCCCATCGACATCCAGACCAGCAAGCTGCTCGA
TTGGCTGGTGGACAGAAGGCACTGCAGCCTGAAATGGCAGAGTCTGGTGCTGACGATCCGCGAGAAGATCAATGC
TGCCATCCAGGACATGCCAGAGAGCGAAGAGATCGCCCAGCTGCTGTCTGGGTCCTACATTCACTACTTTCACTG
CCTAAGAATCCTGGACCTTCTCAAAGGCACAGAGGCCTCCACGAAGAATATTTTTGGCCGATACTCTTCACAGCG
GATGAAGGATTGGCAGGAGATTATAGCTCTGTATGAGAAGGACAACACCTACTTAGGTAAAGTGGCCCGGCCTGG
GAGCCCTGGTATCCATGGGGAAGCCCACTCTCAGAGTTCTGAGATACCAGGCTTATAGGAGGCACAGTCTGTGAG
TGGGAAGAGACTGGAGTGTAGATGTTGCCCATTTGTAGGTGGTAAAATCAATTGTTTTTGATGGAATTGATTTTC
CCTGAGTGGAGTGCTGGGGGAAGGAGGAGGTCCAGGCCGGTAGTGGCCATTCGCCGTGCCTCAGCGAGCAGGTGT
GTGTGGGTCCTCCACCACTCACCTCTTGGTTAGCGGGAGTGTGCTGCCCCCACCCCCACCCCCGCACCCCCATTC
TACACAAGGCAGAAGAGGCACGGGTTTTCCTGGGAGCGAATATCAAGTGCCTGAGAGCAACTACAGGACTAACTG
TGTTTGGGTTGGGTGTAGTATAAATAATAATAATGGCTAATATTTCCTGAGCATCTACTAAATGCAAGGAATTGT
GCTTGGTGTGTCATGTGGATTCTCTCTTGCATCTTCATGATAAATGTTATTGTCGCTGTTTTACCGATGAGGGTT
GGATTAGAGGGGTTAAACAACTTGTCTTAGGCTCCACAGCTGGGAACAAGTGGGGCTGGGAAGCTGACTTCGTGC
TCTTCACCACCACAAAGG**ATG**TGTGTGCATCCTGGGGCATGCCTGCCTCATGTGGGGGTGTCCTGGGCTGAATTT
CCTGGGCACTTCTCAGTGGAACTCTCTAGCCTCCTGGTTCGGAATGTCAACTATGAGATCCCCTCACTGAAGAAG
CAGATTGCCAAGTGCCAGCAGCTGCAGCAAGAATACAGCCGCAAGGAGGAGGAGTGCCAGGCAGGGGCTGCCGAG
ATGCGGGAGCAGTTCTACCACTCCTGCAAGCAGTATGGCATCACGGGCGAAAATGTCCGAGGAGAACTGCTGGCC
CTGGTGAAGGACCTGCCGAGTCAGCTGGCTGAGATTGGGGCAGCGGCTCAGCAGTCCCTGGGGGAAGCCATTGAC
GTGTACCAGGCGTCTGTGGGGTTTGTGTGTGAGAGCCCCACAGAGCAGGTGTTGCCAATGCTGCGGTTCGTGCAG
AAGCGGGGAAACTCAACGGTGTACGAGTGGAGGACAGGGACAGAGCCCTCTGTGGTGGAACGACCCCACCTCGAG
GAGCTTCCTGAGCAGGTGGCAGAAGATGCGATTGACTGGGGCGACTTTGGGGTAGAGGCAGTGTCTGAGGGGACT
GACTCTGGCATCTCTGCCGAGGCTGCTGGAATCGACTGGGGCATCTTCCCGGAATCAGATTCAAAGGATCCTGGA
GGTGATGGGATAGACTGGGGAGACGATGCTGTTGCTTTGCAGATCACAGTGCTGGAAGCAGGAACCCAGGCTCCA
GAAGGTGTTGCCAGGGGCCCAGATGCCCTGACACTGCTTGAATACACTGAGACCCGGAATCAGTTCCTTGATGAG
CTCATGGAGCTTGAGATCTTCTTAGCCCAGAGAGCAGTGGAGTTGAGTGAGGAGGCAGATGTCCTGTCTGTGAGC
CAGTTCCAGCTGGCTCCAGCCATCCTGCAGGGCCAGACCAAAGAGAAGATGGTTACCATGGTGTCAGTGCTGGAG
GATCTGATTGGCAAGCTTACCAGTCTTCAGCTGCAACACCTGTTTATGATCCTGGCCTCACCAAGGTATGTGGAC
CGAGTGACTGAATTCCTCCAGCAAAAGCTGAAGCAGTCCCAGCTGCTGGCTTTGAAGAAAGAGCTGATGGTGCAG
AAGCAGCAGGAGGCACTTGAGGAGCAGGCGGCTCTGGAGCCTAAGCTGGACCTGCTACTGGAGAAGACCAAGGAG
CTGCAGAAGCTGATTGAAGCTGACATCTCCAAGAGGTACAGCGGGCGCCCTGTGAACCTGATGGGAACCTCTCTG
TGACACCCTCCGTGTTCTTGCCTGCCCATCTTCTCCGCTTTTGGGATGAAGATGATAGCCAGGGCTGTTGTTTTG
GGGCCCTTCAAGGCAAAAGACCAGGCTGACTGGAAGATGGAAAGCCACAGGAAGGAAGCGGCACCTGATGGTGAT
CTTGGCACTCTCCATGTTCTCTACAAGAAGCTGTGGTGATTGGCCCTGTGGTCTACCAGGCGAAAACCACAGATT
CTCCTTCTAGTTAGTATAGCGGACTTAATAAAAGAGGAAAAAAC

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FIGURE 3474

CCGAGTCTCACCCTCCCAGGCAGCTCCTACACTCAACTGCTTCTCTAGGAAAGGTCTCACCTCCAGCCTGGAGCA
GTCGGGATTACAGAAAGCCCCATCCTTGGCTTAGGGAGCGCCATGACGACTGAAATTGGTTGGTGGAAGCTGACT
TTCCTCCGGAAAAAGAAATCCACTCCCAAAGTGCTGTATGAGATCCCTGACACCTATGCCCAAACAGAGGGAGAT
GCAGAACCCCCGAGGCCTGACGCTGGAGGCCCCAACAGCGACTTTAACACCCGCCTGGAGAAGATTGTGGACAAG
AGCACAAAGGGCAAGCACGTCAAGGTCTCCAACTCAGGACGCTTCAAGGAGAAGAAGAAAGTGAGAGCCACGCTG
GCAGAGAACCCTAACCTCTTTGATGATCACGAGGAAGGACGGTCATCAAAGTGAAGGGCTGAGGAGGGTGCTAGC
ACCTCTTGGCTCCCTGCCATCAGCCAGATCTGAGACAGGACCTTGCCACGCTGGCCTCTTTGGCCATAGCTGAAG
CTGTGGGGCCAGTTGATACCTGCTGGCAGGAAATGGCTGTTTTTTAGGTTTGTATTTATGTGCCGCCACTTTTGT
AAGGCCTGGGAGATCCCAGGGTCCTCCACCCTCCCCCTGACCACATACAAAGGCACTCTAGTTCAAGAGTGAAAA
GTCTCACCCAGGAGGAACAGCCCTCCTTGAAGCAATGGCAGGGCCAGCAGGGAGGTGGGCATGGCAGGGAATGGA
GAGAGTGAGCCAGACAGACTTCACCTCCTTACTGGACACAGGGTCAAGGGCGAGTTTCAATTGCTGCTCCCTTTA
CTTTCTCTACCTGTGACTACTCCCTGGACCAATCCTGAGGAGGGCACATTTTCCAGAAGCCACGTGATAGGGGCT
GGTTTCTGTGGAGCCAGAGGCAGAGACACTGAACTTGAGCTCACCTCCTAACACCGGCAGTAAACTTCCTGGAAC
TTTGCCCTCAGGTGCGGAGGGGACAGAGGACCCTGGCACTCTGTTAGGGTGCTGTAGAAGACTAGATTGATGGTA
GTTTGGCCTGTTAGTTCCTGTTTTGGCCATGACTTTTGCAGATGGCAAGTCACACACCCTCAAAGGGAAGCTACA
CGGGCCAAATCGGGGGAGTGGGTGGGGAATTTTCTCCTCTCCCTTTCCTACTATAATAGTATTTAAGACATATCA
GCTCCAGAGATGAGTCCTGGAGCCTTGAATTTTGTTTAACAAAATAATTGTAGGTTTCTCTCTGTAATAACAACG
CTGGAAAGGCAGAGAACCTCTTTTATGCTCATGTCTTGCATTTATTGAGATGACTGTTTCTCATGCCTTTATGTT
CCTTCATGTAAGTAAAGTGGACCTTTGTGCTC

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FIGURE 3475

GAAGAGGGTCGGGTATCTGGGCATGCGCAGGGCCGCAGGACTCTTGGTGGGGTAGCGAGGGGGACGGTCCCACGA
CTGCTCCGAAGGGCCGGGACTCCCAGTGGGGGCGGGACCCCCGGAGTGCCCGCCTGCGGACTCCCAAGCCTGGAG
CCTGGGGAGAGGGTGGGCACCTCCGTTCCCGCACACCCGTCCATGGTGTGTGCGCCGAGCGTCCAGGAGCCACGG
CGGTGTCTTCCTTGCGCGTCTTTTACACGTGTGGGGGTAGGCTGCTCCTCGGGGCTGAGCCGTGGCCAGGGTTAT
GGAGAGGCCCGCCTCTCCCCAGATGGCGTCGTCGAGCCCTGACTCCCCATGTTCCTGCGACTGCTTTGTCTCCGT
GCCCCCGGCCTCAGCCATCCCGGCTGTGATCTTTGCCAAGAACTCGGACCGACCCCGGGACGAGGTGCAGGAGGT
GGTGTTTGTCCCCGCAGGCACTCACACTCCTGGGAGCCGGCTCCAGTGCACCTACATTGAAGTGGAACAGGTGTC
GAAGACGCACGCTGTGATTCTGAGCCGTCCTTCTTGGCTATGGGGGGCTGAGATGGGCGCCAACGAGCATGGTGT
CTGCATTGGCAACGAGGCTGTGTGGACGAAGGAGCCAGTTGGGGAGGGGGAAGCCCTGCTGGGCATGGACCTACT
CAGGCTGGCTTTGGAACGGAGCAGCTCTGCCCAGGAGGCCTTGCATGTGATCACAGGGTTACTGGAGCACTATGG
GCAGGGGGGCAACTGCCTGGAGGATGCTGCGCCATTCTCCTACCATAGCACCTTCCTGCTGGCTGACCGCACTGA
GGCGTGGGTGCTGGAGACAGCTGGGAGGCTCTGGGCTGCACAGAGGATCCAGGAGGGGGCCCGCAACATCTCCAA
CCAGCTGAGCATTGGCACGGACATCTCGGCCCAACACCCGGAGCTGCGGACTCATGCCCAGGCCAAGGGCTGGTG
GGATGGGCAGGGTGCCTTTGACTTTGCTCAGATCTTCTCCCTGACCCAGCAGCCTGTGCGCATGGAGGCTGCCAA
GGCCCGCTTCCAGGCAGGGCGGGAGCTGCTGCGGCAACGGCAAGGGGGCATCACGGCAGAGGTGATGATGGGCAT
CCTCAGAGACAAGGAGAGTGGTATCTGTATGGACTCGGGAGGCTTTCGCACCACGGCCAGCATGGTGTCTGTCCT
GCCCCAGGATCCCACGCAGCCCTGCGTGCACTTTCTTACCGCCACGCCAGACCCATCCAGGTCTGTGTTCAAACC
TTTCATCTTCGGGATGGGGGTGGCCCAGGCCCCCCAGGTGCTGTCCCCCACTTTTGGAGCACAAGACCCTGTTCG
GACCCTGCCCCGATTCCAGACTCAGGTAGATCGTCGGCATACCCTCTACCGTGGACACCAGGCAGCCCTGGGGCT
GATGGAGAGAGATCAGGATCGGGGGCAGCAGCTCCAGCAGAAACAGCAGGATCTGGAGCAGGAAGGCCTCGAGGC
CACACAGGGGCTGCTGGCCGGCGAGTGGGCCCCACCCCTCTGGGAGCTGGGCAGCCTCTTCCAGGCCTTCGTGAA
GAGGGAGAGCCAGGCTTATGCGTAAGCTTCATAGCTTCTGCTGGCCTGGGGTGGACCCAGGACCCCTGGGGCCTG
GGTGCCCTGAGTGGTGGTAAAGTGGAGCAATCCCTTCACGCTCCTTGGCCATGTTCTGAGCGGCCAGCTTGGCCT
TTGCCTTAATAAATGTGCTTTATTTTC

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FIGURE 3476

GGCTTCCGTCCATTCTTCCGGTGGAGATGGCTGCGGCCGTGGCGGGGATGCTGCGAGGGGGTCTCCTGCCCCAGG
CGGGCCGGCTGCCTACCCTCCAGACTGTCCGCTATGGCTCCAAGGCTGTTACCCGCCACCGTCGTGTGATGCACT
TTCAGCGGCAGAAGCTGATGGCTGTGACTGAATATATCCCCCCGAAACCAGCCATCCACCCATCATGCCTGCCAT
CTCCTCCCAGCCCCCCACAGGAGGAGATAGGCCTCATCAGGCTTCTCCGCCGGGAGATAGCAGCAGTTTTCCAGG
ACAACCGAATGATAGCCGTCTGCCAGAATGTGGCTCTGAGTGCAGAGGACAAGCTTCTTATGCGACACCAGCTGC
GGAAACACAAGATCCTGATGAAGGTCTTCCCCAACCAGGTCCTGAAGCCCTTCCTGGAGGATTCCAAGTACCAAA
ATCTGCTGCCCCTTTTTGTGGGGCACAACATGCTGCTGGTCAGTGAAGAGCCCAAGGTCAAGGAGATGGTACGGA
TCTTAAGGACTGTGCCATTCCTGCCGCTGCTAGGTGGCTGCATTGATGACACCATCCTCAGCAGGCAGGGCTTTA
TCAACTACTCCAAGCTCCCCAGCCTGCCCCTGGTGCAGGGGGAGCTTGTAGGAGGCCTCACCTGCCTCACAGCCC
AGACCCACTCCCTGCTCCAGCACCAGCCCCTCCAGCTGACCACCCTGTTGGACCAGTACATCAGAGAGCAACGCG
AGAAGGATTCTGTCATGTCGGCCAATGGGAAGCCAGATCCTGACACTGTTCCGGACTCGTAGCCAGCCTGTTTAG
CCAGCCCTGCGCATAAATACACTCTGCGTTATTGGCTGTGCTCTCCTCAATGGGACATGTGGAAGAACTTGGGGT
CGGGGAGTGTGTTTGTCACTTGGTTTTCACTAGTAATGATATTGTCAGGTATAGGGCCACTTGGAGATGCAGAGG
ATTCCATTTCAGATGTCAGTCACCGGCTTCGTCCTTAGTTTTCCCAACTTGGGACGTGATAGGAGCAAAGTCTCT
CCATTCTCCAGGTCCAAGGCAGAGATCCTGAAAAGATAGGGCTATTGTCCCCTGCCTCCTTGGTCACTGCCTCTT
GCTGCACGGGCTCCTGAGCCCACCCCCTTGGGGCACAACCTGCCACTGCCACAGTAGCTCAACCAAGCAGTTGTG
CTGAGAATGGCACCTGGTGAGAGCCTGCTGTGTGCCAGGCTTTGTGCTGAGTGCTGTACATGTATTAGTTCCTTT
ACTGCTGACCACATTGTACCCATTTCACAGAGAAGGAGCAGAGAAATTAAGTGGCTTGCTCAAGGTCATGCAGTT
AGTAAGTGGCAGAACAGGGACTTGAACCAAGCCCTCTGCTCTGAAGACCGCGTCCTGAATTTCTTCACTAGAGCT
TCCTCATCAGGTTACCCAGAAGTGGGTCCCATCCACCATCCAGGTGTGCTTGGATGTTAGTTCTCCACCCTCGAG
GTGTACGCTGTGAAAAGTTTGGGAGCACTGCTTTATAATAAAATGAAATATATTCTACTTCCTTT

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FIGURE 3477A

GAGAGAAGTACACACGCACCCCCTCACTGCCTACTCCTGCTTTCGGGAGCCTGAGTCATTCCTGCCCCCTCGTAG
GGTTCCCCATTTCCCGGTGCGCGGGCACCCTGAGACAGCCTTGGGAATTCGTTCGCGTCCCCTTCCACCTGGGTC
CCCTTCCCCAGTTTGCGCCCCGTAACACTCAGCCAAGGACTTCCTGTGGGTCCCAGGTCAGGGGCCAAGGGGTCC
TGGACCGCTGCCACAGCCCCGGTGCGCCCGGGGGAGGCGCTTCCTTTTCCTGAACTCTGGGATCCTGCGGGAGGA
AGTGGGGAAGTTGGGCGGGGGTGCAGCCGAGGGCGTGCCGACTGTGGAGGGGCCGACCCTCGCGCAGCTCTGGGC
CTTCCTTGGGGAGGAGCTGGGGTGCCAGAGGCCCAGGCTGAGGAGCTTGGCGGCGAGGTATTTGGGGAAGTAAGG
CCTGGGGTGGAGAAGCGCGGAGGAATGGGCCGGGCCCGGCTGGGAAGGCAGCCCTCTCCCATCCACAGGTCTCCC
TGGGTTCTGGCAGGAGCCTGCCCCTGCTGCCGGCCTGGCTTACTTGTCCCTACTTGTCAACACCCTGGCAGCGGG
GTCTTCACCTGGTTCCAGCCCCTTTTCCCCAAGGCGGCAGAGAGGATGGGGCTGAGGAGTCTGGGAAGGGGCCAT
GGGAGTCCCTGCTGAGCTCGGGGCAGGAAGTTTCTGGGTTGCATCTTAGCCGGCCCCAGGGAGTGCAGAGCCAGG
GAGAGGGGTACCAGGGACAAACCCTAGACAGACGGCCCTGTCCACGGTTGCTCCTGCTCTCCTAGGAGGCCCCGT
GTGGGCCGCGGCCCGGCCCTCACC**ATG**GAGTCCATGTTCGAGGACGACATCAGCATCCTGACGCAGGAGGCCCTG
GGGCCTAGTGAGGTGTGGCTGGACAGTCCCGGAGACCCCTCGCTTGGGGGCGACATGTGCTCCGCCTCCCACTTT
GCCCTCATCACTGCTTACGGAGACATCAAGGAACGGCTGGGGGGCCTGGAGAGGGAGAACGCCACCCTCCGACGC
CGCCTCAAAGTCTACGAGATCAAGTACCCACTGATCAGTGACTTTGGAGAGGAGCATGGCTTTTCTCTGTATGAA
ATCAAGGATGGCTCCCTGCTGGAGGTGGAGAAGGTCAGCCTGCAGCAACGGCTCAACCAGTTCCAGCATGAGTTA
CAGAAGAACAAGGAGCAGGAAGAACAGCTTGGAGAGATGATCCAGGCCTACGAGAAACTCTGCGTGGAGAAGAGT
GACTTGGAGACAGAGCTGAGGGAGATGAGGGCCCTGGTGGAGACGCACCTGCGTCAGATCTGTGGTTTGGAGCAG
CAGCTGCGGCAACAGCAAGGCCTCCAGGATGCAGCCTTCTCCAACCTGAGCCCACCGCCAGCCCCCGCCCCTCCC
TGCACTGATTTAGACCTGCACTACCTGGCACTGAGAGGGGGATCTGGCTTGAGTCATGCAGGCTGGCCGGGCTCC
ACACCCAGTGTGAGTGACCTGGAGCGGCGGCGGCTAGAAGAGGCTTTGGAGGCCGCGCAGGGAGAGGCCCGGGGG
GCTCAGCTCCGGGAGGAGCAGCTCCAGGCCGAGTGCGAGCGGCTGCAGGGGGAGCTGAAGCAGCTGCAGGAGACC
CGGGCCCAGGATCTGGCCTCCAACCAGTCGGAGCGAGACATGGCGTGGGTGAAAAGAGTTGGGGATGATCAGGTG
AATTTGGCGCTGGCCTACACCGAGCTGACGGAGGAGCTGGGCCGGCTTCGGGAGTTGAGTTCCCTACAGGGGAGA
ATCTTGAGGACTCTGTTGCAGGAACAGGCCCGGAGTGGCGGCCAGAGGCACTCGCCGCTGTCACAACGCCACTCC
CCGGCCCCCCAGTGCCCCTCCCCCTCCCCGCCTGCCCGAGCGGCTCCCCCGTGCCCCCCGTGCCAGTCCCCCGTC
CCCCAGCGCCGCTCTCCCGTGCCCCCGTGCCCCTCGCCGCAGCAGCGCCGCTCTCCGGCCTCACCCTCCTGCCCG
TCGCCCGTCCCGCAGCGCCGCTCGCCGGTGCCGCCGTCGTGCCAGTCCCCCAGCCCGCAGCGCCGTTCCCCGGTG
CCCCCCAGCTGCCCGGCCCCGCAGCCCCGGCCACCGCCGCCGCCCCCGCCGGGCGAGAGGACGCTGGCCGAGCGC
GCCTACGCCAAGCCGCCCAGCCACCACGTGAAGGCCGGCTTCCAGGGCCGCCGCAGCTACTCTGAGCTGGCGGAG
GGCGCGGCCTACGCGGGCGCCTCCCCGCCCTGGCTGCAGGCCGAAGCGGCCACTCTCCCCAAGCCCCGGGCCTAC
GGCAGCGAGCTCTACGGCCCTGGCAGGCCCCTCAGCCCGCGGCGCGCCTTCGAGGGCATCCGGCTGCGCTTCGAG
AAGCAGCCGTCGGAGGAGGACGAGTGGGCTGTGCCCACCAGCCCGCCCAGCCCGGAGGTGGGCACCATCCGCTGC
GCCTCCTTCTGCGCGGGCTTCCCCATCCCCGAGTCGCCCGCCGCCACCGCCTACGCCCACGCCGAGCACGCGCAG
TCCTGGCCGTCCATCAACTTGCTGATGGAGACGGTGGGCTCCGACATCCGCAGCTGCCCCCTCTGCCAGCTGGGT
TTCCCTGTCGGGTACCCGGATGATGCCCTCATCAAACACATTGACTCCCACCTGGAGAACAGCAAGATC**TAG**GGC
ACCAGCCCCACCCACTGGCTGTTTCTCCGTCCTCTCCTATCACCCCCAAACACTCACTTTGAATGCTGCATGAAT
CTCGTGGGGGGTCCCTGCCCTTGCGACCCCCAGATACCTCCACTTGCTACCGAGTCAACGTGTGTGCCATCTTCC
CTGGTCCAGGCACCACTCAGCTCTGGCTCTTCCTGGGAGGTCAGCCGAGGCTCCCCCCATGCTCCTGGTTTCTGC
TTAGGAGGTGGGGACTTGGGCTGGGATGGGGACGGCATACCCCTCCCAGGCCTCTCCCTCTGCCTTTCTGTTCTT
AATCAGGGTTGGATCCAAGAAGGTGTCCAGTGCTTGGGCCTGGGGTGGGGGGAAGGTGTTAGAGGACTCCAGGAG
CTCCTGCACCCCTCCCCAAATGTCCATCTTTCTCAGACGGGGCTCTGTCTGGGGAGCACCCACAGGCTGCCTTTG
GGGTCCCAGAGCCTGCTCTGTGCACTGACCCCAGTTCCTCCATCCTGTGGCCAGCCTAGGGCTCATGGCATGGGC
CCCCACTGGGGGAGGGAGGCATCTTGTTTCTTGTGGTTCCCTGCAGGCCAGTCCTGTCCTCCTTTCCCTGTTCTG
CCCACTCTGGGGAATAGGGAGGGGAGGAGAGGAGAGGAGAGGGAGGATCCTGGAGGACTGGGAAGATCTAGCCTA
AAGAGGCTTCTCTGAGGGCCAGGGCCCTACAGCATGCCCCTACGGCCAGGGGACTGTCTGCCAGCCTCCCAGGCC
CATGCCCTCCTGGTGCCCCTGGCACTGAGGCACAGATCGTCAAGGCAGGTACCCCCTCAACCCTTCTTCCACTGG
AGCCCCTGACACCACAGGTGCCCTGGAGCCCTTGTGTGACTCAGCCTCTGTTAGCTGGGTGGGTGTCATCAGCCC

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FIGURE 3477B

CTGCCTCCCAGGCCAGAACCTGAGAACGGGCCCAGGGTGCTGTGGAGATCAACTTCAAAAGAGCTAACCCCTTCC
CACACTCCACCCACCCACCTACATTTCCTCTGTGAAATCTACCTCAGAGTTGTACCCTCAGAAGGACGGGTAAGC
AGGAGGCCAGGGGGTCCCCAGGGCTGAGGTGGGGAGCCTTCTACGGCGAAAGCCTGCCACCCCACAATGAATCCA
CCCTGCTCCACTGCGCGCCTCTCCCAGGTCTCAGCTCTGGGTGGGGAGCAGTGGCCGCTACCGACAGCGCATGTC
CCGCTCTTATCCAACTCTTCCAGGCCCCACCTCCCTGCACCCCTCCCCTCTATAGAGCAGGGGAGTGAAGGGGTA
TGTCAGGCGGGGAAGGGGCCAAGGACACGTCATTGTACCCTGAGCGTCCCCAGGGAGTGGAAATGGGGAAGGGGG
CCTGGAGAGGGGAGGCAGGGGCCCCTGTGCTCTCTGAACAAGTTGAAAGTCCAAATAAAACTTACCTGTTC

FIGURE 3478A

CTCCCTCGCTCCCTCCCTGCGCGCCGCCTCTCACTCACAGCCTCCCTTCCTTCTTTCTCCCTCCGCCTCCCGAGC
ACCAGCGCGCTCTGAGCTGCCCCCAGGGTCCCTCCCCCGCCGCCAGCAGCCCATTTGGAGGGAGGAAGTAAGGGA
AGAGGAGAGGAAGGGGAGCCGGACCGACTACCCAGACAGAGCCGGTGAATGGGTTTGTGGTGACCCCCGCCCCCC
ACCCCACCCTCCCTTCCCACCCGACCCCCAACCCCCATCCCCAGTTCGAGCCGCCGCCCGAAAGGCCGGGCCGTC
GTCTTAGGAGGAGTCGCCGCCGCCGCCACCTCCGCC**ATG**GAGCTGATCACCATTCTCGAGAAGACCGTGTCTCCC
GATCGGCTGGAGCTGGAAGCGGCGCAGAAGTTCCTGGAGCGTGCGGCCGTGGAGAACCTGCCCACTTTCCTTGTG
GAACTGTCCAGAGTGCTGGCAAATCCAGGAAACAGTCAGGTTGCCAGAGTTGCAGCTGGTCTACAAATCAAGAAC
TCTTTGACATCTAAAGATCCAGATATCAAGGCACAATATCAGCAGAGGTGGCTTGCTATTGATGCTAATGCTCGA
CGAGAAGTCAAGAACTATGTTTTGCAGACATTGGGTACAGAAACTTACCGGCCTAGTTCTGCCTCACAGTGTGTG
GCTGGTATTGCTTGTGCAGAGATCCCAGTAAACCAGTGGCCAGAACTCATTCCTCAGCTGGTGGCCAATGTCACA
AACCCCAACAGCACAGAGCACATGAAGGAGTCGACATTGGAAGCCATCGGTTATATTTGCCAAGATATAGACCCA
GAGCAGCTACAAGATAAATCCAATGAGATTCTGACTGCCATAATCCAGGGGATGAGGAAAGAAGAGCCTAGTAAT
AATGTGAAGCTAGCTGCTACGAATGCACTCCTGAACTCATTGGAGTTCACCAAAGCAAACTTTGATAAAGAGTCT
GAAAGGCACTTTATTATGCAGGTGGTCTGTGAAGCCACACAGTGTCCAGATACGAGGGTACGAGTGGCTGCTTTA
CAGAATCTGGTGAAGATAATGTCCTTATATTATCAGTACATGGAGACATATATGGGTCCTGCTCTTTTTGCAATC
ACAATCGAAGCAATGAAAAGTGACATTGATGAGGTGGCTTTACAAGGGATAGAATTCTGGTCCAATGTCTGTGAT
GAGGAAATGGATTTGGCCATTGAAGCTTCAGAGGCAGCAGAACAAGGACGGCCCCCTGAGCACACCAGCAAGTTT
TATGCGAAGGGAGCACTACAGTATCTGGTTCCAATCCTCACACAGACACTAACTAAACAGGACGAAAATGATGAT
GACGATGACTGGAACCCCTGCAAAGCAGCAGGGGTGTGCCTCATGCTTCTGGCCACCTGCTGTGAAGATGACATT
GTCCCACATGTCCTCCCCTTCATTAAAGAACACATCAAGAACCCAGATTGGCGGTACCGGGATGCAGCAGTGATG
GCTTTTGGTTGTATCTTGGAAGGACCAGAGCCCAGTCAGCTCAAACCACTAGTTATACAGGCTATGCCCACCCTA
ATAGAATTAATGAAAGACCCCAGTGTAGTTGTTCGAGATACAGCTGCATGGACTGTAGGCAGAATTTGTGAGCTG
CTTCCTGAAGCTGCCATCAATGATGTCTACTTGGCTCCCCTGCTACAGTGTCTGATTGAGGGTCTCAGTGCTGAA
CCCAGAGTGGCTTCAAATGTGTGCTGGGCTTTCTCCAGTCTGGCTGAAGCTGCTTATGAAGCTGCAGACGTTGCT
GATGATCAGGAAGAACCAGCTACTTACTGCTTATCTTCTTCATTTGAACTCATAGTTCAGAAGCTCCTAGAGACT
ACAGACAGACCTGATGGACACCAGAACAACCTGAGGAGTTCTGCATATGAATCTCTGATGGAAATTGTGAAAAAC
AGTGCCAAGGATTGTTATCCTGCTGTCCAGAAAACGACTTTGGTCATCATGGAACGACTGCAACAGGTTCTTCAG
ATGGAGTCACATATCCAGAGCACATCCGATAGAATCCAGTTCAATGACCTTCAGTCTTTACTCTGTGCAACTCTT
CAGAATGTTCTTCGGAAAGTGCAACATCAAGATGCTTTGCAGATCTCTGATGTGGTTATGGCCTCCCTGTTAAGG
ATGTTCCAAAGCACAGCTGGGTCTGGGGGAGTACAAGAGGATGCCCTGATGGCAGTTAGCACACTGGTGGAAGTG
TTGGGTGGTGAATTCCTCAAGTACATGGAGGCCTTTAAACCCTTCCTGGGCATTGGATTAAAAAATTATGCTGAA
TACCAGGTTTGTTTGGCAGCTGTGGGCTTAGTGGGAGACTTGTGCCGTGCCCTGCAATCCAACATCATACCTTTC
TGTGACGAGGTGATGCAGCTGCTTCTGGAAAATTTGGGGAATGAGAACGTCCACAGGTCTGTGAAGCCGCAGATT
CTGTCAGTGTTTGGTGATATTGCCCTTGCTATTGGAGGAGAGTTTAAAAAATACTTAGAGGTTGTATTGAATACT
CTTCAGCAGGCCTCCCAAGCCCAGGTGGACAAGTCAGACTATGACATGGTGGATTATCTGAATGAGCTAAGGGAA
AGCTGCTTGGAAGCCTATACTGGAATCGTCCAGGGATTAAAGGGGGATCAGGAGAACGTACACCCGGATGTGATG
CTGGTACAACCCAGAGTAGAATTTATTCTGTCTTTCATTGACCACATTGCTGGAGATGAGGATCACACAGATGGA
GTAGTAGCTTGTGCTGCTGGACTAATAGGGGACTTATGTACAGCATTTGGGAAGGATGTACTGAAATTAGTAGAA
GCTAGGCCAATGATCCATGAATTGTTAACTGAAGGGCGGAGATCGAAGACTAACAAAGCAAAAACCCTTGCTACA
TGGGCAACAAAAGAACTGAGGAAACTGAAGAACCAAGCT**TGA**TCTGTTACCATTGGGATGATAACCTGAGGACCC
CCACTGGAAATCTCCCATCTTTTGAAAAACCTGGAAGTGAGGAGTGTGCACGGATGCTGAATGTTTGGGAATGAG
AGGATGAGTGAGTGAGGCTTGAAAACACACCACATTGAAAATCCTGCCACAGCAGCAGCCGCAGCCGCCAACAGC
AGCGCTGTTAGTGAGCTAAGTAAGCACTGACTTCGTAGAAAACCATAACATCGGCCATCTTGGAAAAGAGAAAAA
CAATGGAGTTACTTATTTAAAAAAAAAGAAAGAAAGTTATCTCTTCCCAGGAGAGGCTAGAAGTAGCTTTTCTGT
CTTTTGGCCAGTGCCGAGTGGAATGCCTGGTTTGGGGGAGGAGGAGGGACTGGGTTCAGCTGTGGTGCTTTGTTG
TAAAAGGCAGCCTGGCCTTTGCTACTGAGGAGAAAGATGGAGCCTGGGTCTCAAGCCCACCTTCGCTGTACCTTT
GCCACATGGTACTGTATGCTTGCCAGCTAGAAGGAGGGTCAGGGATTTTTTACAGTCTGAGAATGAGTGTGTGTG
AGTGAGGCGGTATCCACATTTTCAACTTCAAGTCATTGCAGTTTCTTTTTCCCAGAAAACAAGGGGTTAGATGTT

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FIGURE 3478B

GCATTTCATAAAACTAACCGAAGTTTTGTTTACTGATGCAGCACAAGAGATGTAAAAAAAAAAAAAAAAAAAAA
AAAAAAACACACACACAGAGGAAAGACGCTCTTTAGGTTTTGTTTTGTTTTTTTTTTTTGGTTTTGTTTTTTGTT
TTTTTTACTCTAGGGAAAACACTGACGAATGGTCAGAGCTCCTATCCTGATCTTTTCATCAAGGCGCCTTTCCTA
ATAATATGGTTCAACTGTGAATGTAGAAGTGGGGGGGAGGGGGGAGAAAAAGAAAACTCTGGCGTTAGAGGATAT
AGAAAAATATAAGTACAATTGTTACAAATAACGCAGACTTCAAAAACAAAAAAATCACAACCCAAACAAACCAAA
ATTTAAATGATCAGAATTGGCAGCACAAAGAAAACGCCCTCTCCTGACTTGTATTGTGGCAGTCTGAACGCCCCC
AGAAAATTGTGCCAAAGAGTTTAGAAAAATAAATATACAATAAAAGTAAACACATACACACAAAACAGCAAACTT
CAGGTAACTATTTTGGATTGCAAACAGGATAAATTAAATGTTCAAACAATCTGATAAAATAACCATTTGG

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FIGURE 3479

GGGGGGGTCCCTTCCGATCCTCCCTCCTGACGCCCCCCCCAGCAGCCCCCTCCCCCACCATTGAAAGCCATGAAT
TTTGAATTTGAGAGGGAGATTGGGTTTATAAACAGCCAGCCGTCGCTCGCCGAGTGTCTGACTTCCTTCCCCGCT
GTCTTGGAGACATTTCAAACTTCATCAATCAAGGAGTCGACATTAATTCCTCCTCCTCCTCCTTTCGAGCAAACC
TTCCCCAGCCTCCAGCCCGGCGCCTCCACCCTTCAGAGACCCAGGAGCCAAAAGCGAGCCGAAGATGGGCCTGCT
CTGCCGCCGCCACCGCCGCCGCCACTCCCCGCTGCCCCCCCGGCCCCCGAGTTCCCTTGGATGAAAGAGAAGAAA
TCCGCCAAGAAACCCAGCCAATCCGCCACGTCTCCTTCTCCGGCCGCCTCCGCCGTTCCGGCCTCCGGGGTCGGA
TCGCCTGCAGATGGCCTGGGACTGCCGGAGGCTGGTGGCGGCGGGGCGCGCAGGCTGCGCACGGCTTACACCAAC
ACGCAGCTGCTGGAACTGGAGAAGGAATTCCACTTTAATAAGTACCTGTGCCGGCCACGCCGCGTCGAGATCGCG
GCCTTGCTGGACCTCACCGAAAGGCAGGTCAAAGTCTGGTTTCAGAACCGGCGCATGAAGCACAAGCGGCAGACG
CAGCACCGAGAGCCGCCGGATGGGGAGCCTGCCTGCCCGGGAGCCCTGGAGGACATCTGCGACCCTGCCGAGGAA
CCCGCGGCCAGCCCGGGCGGCCCCTCCGCCTCGCGGGCGGCGTGGGAAGCCTGCTGTCACCCGCCGGAGGTGGTG
CCGGGGGCCTTAAGCGCGGACCCCCGGCCTTTAGCCGTTCGCTTAGAGGGCGCAGGCGCGTCGAGTCCCGGCTGC
GCGCTGCGCGGGGCCGGCGGGCTGGAGCCCGGGCCATTGCCAGAAGACGTCTTCTCGGGGCGCCAGGATTCACCT
TTCCTTCCCGACCTCAACTTCTTCGCGGCCGACTCCTGTCTCCAGCTATCCGGAGGCCTCTCCCCTAGCCTACAG
GGTTCTCTCGACAGCCCGGTCCCTTTTTCCGAGGAAGAGCTGGATTTTTTCACCAGTACGCTCTGTGCCATCGAC
CTGCAGTTTCCCTAACCTGTTTCCTCCTCCCGGTCCTTTCGACCCCCGCGCTCCTTGGCCGTCTACTGGAAAAAT
CGAGCCTCTCCCACCCTCAGTCGCATAGACTTATGTGTTTTGCTAAAATTCAGGTATTACTGAATTAGCGTTTAA
TCCACTTCCTTTCTTCTTCTTCTAAAATATTGGGCACTCGGTTATCTTTTAAAATTCACACAGAAAAATTCCGTT
TGGTAGACTCCTTCCAATGAAATCTCAGGAATAATTAAACTCTAGGGGGACTTTCTTAAAAATAACTAGAGGGAC
CTATTTTCCTCTTTTTTATGTTTTAGACTGTAGATTATTTATTAAAATTCTTTAATAATAGGAAAAGGGGAAAGT
ATTTATTGTAC

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FIGURE 3480

CATTGAATCGGCCCTAACGATTCTCGGATCGTCATTATTTGTAACCATAGAGCATGAATTACCTCTTGAGGTCAT
CAGCGAGAATTTACGACTGGTCAACAAAAGCACGTGATTCCCTAACGCCCCCCCACCCCCCTTCCAACCCCCCCC
CCCATATTTGGCCGCATACATAGCAAAACGAAGTACAGTGCATCGCTATAATTCATTAATACATCATAAATCGTG
AAGCACAGGGTTATAACGACCACGATCCACAAATCAAGCCCTCCAAAATCACCCAA**ATG**AGCTCGTACTTTGTAA
ACTCCTTCTCGGGGCGTTATCCAAATGGCCCGGACTATCAGTTGCTAAATTATGGCAGTGGCAGCTCTCTGAGCG
GCTCTTACAGGGATCCCGCTGCCATGCACACCGGCTCTTACGGCTACAATTACAATGGGATGGACCTCAGCGTCA
ACCGCTCCTCGGCCTCCTCCAGCCACTTTGGGGCGGTGGGCGAGAGCTCGCGCGCCTTCCCCGCGCCCGCCCAGG
AGCCCCGCTTCAGGCAAGCGGCTTCGAGCTGCTCCCTGTCCTCGCCCGAGTCCCTGCCCTGCACCAACGGCGACA
GCCACGGCGCCAAGCCCTCTGCTTCGTCCCCCTCCGACCAGGCGACCTCAGCCAGCTCCAGCGCCAATTTCACCG
AAATAGACGAGGCCAGCGCGTCCTCGGAGCCTGAGGAAGCGGCAAGCCAGCTAAGCAGCCCCAGCCTAGCTCGGG
CGCAGCCAGAGCCCATGGCCACCTCCACAGCCGCGCCCGAGGGGCAGACTCCGCAGATATTCCCCTGGATGAGGA
AGCTTCACATCAGCCATGATATGACCGGGCCGGACGGGAAAAGGGCCCGGACCGCGTATACCCGCTACCAGACCC
TGGAGCTGGAAAAGGAGTTCCACTTCAACCGCTACCTGACCCGGCGACGGCGCATCGAGATCGCCCACGCACTCT
GCCTGTCCGAGCGCCAGATCAAGATCTGGTTCCAGAACCGGCGCATGAAGTGGAAGAAGGACAACAAATTGAAAA
GTATGAGCCTGGCTACAGCTGGCAGCGCCTTCCAGCCC**TGA**GCCCGCCCAGAGGAGCCCAGCGGCCCAAGAGCCC
GTGCCACCCCCAGCCCTGGCCCCTCCAATCCTCCCCGCTCTGCCGCCGCCCGCTGGGGACCGGTTCCCACAAGCC
TGCCTCGCCTTGTGTTACGATATTTCGTTTGATCTTAGGTCTTCCTGTGGCTCCCTCTCTCCTGGACTGGTTATC
TTGTTATTATTGTTAATAATAATAATTATTATTATTTTCCTTCCATGCTCCCAACTCCCTTCTGCTTGTCCCAAA
TCCGCCAGTGTTTCTGAATGTTTGTGTCTGTGGTTGCAGTCTTTCCCCCAGGAAAAAAAAAAAAAAGAAATTCGCA
TGTTTAATGTGAACTCTCCCCTCCCCATCTGTGTTCTAACTTATTTATAAAAAGATGATCGCTGTATTTTGAGTT
TCAGCTGGAAACTTCTGTAAGGGGCAGCAGTTGAGGTGGGGTAGTGCCGCAGTGGGGTCAAGCTGAGCTGGCTTC
GGAGATGGAGTCCCTTTTCATTCTCCTCCTCCTCCCTCCTCACTCCCTAGGCCCAAGTCTCCTAGGGGCTTGGTC
CTAGGGTGGGAAGGGGCTAGGGAGGACCAAAGGGATGGTATTGAGAAGAGAGAAAGAAGATAGTGAGATTTAAGT
TCCTGCTGCCTGGGTAGGCCCCACAAGGCCTGGTCTGGGAGTATACGGAAACAAAAATGATCCTCAGTGCAAAAT
GTCTTGTGTATTTCTCTGTGAATCCATGGGTCTGGCTAGAGGGCCCAAAGCTTGTAAATATGGGGATAGTCTGGG
TCAGACCCATCTCTCCCTTACCCATCTTGCTTCCAAGACCATTTGTAGTGAGCGAGTGGATGCTGTGCTACGTGT
GAAATCTGTCTTTGCGGGGCCTGTCTCAGTGATTCGCTTTTGGTATTTGTTTGTAGCTTTCCTGGAAGTCAAATA
AATGTTTCCCCCACTCC

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FIGURE 3481

CACCACACCTAGGTCGGAGCACTGTCGTCCTTCAGGGCTCCAGCCTCTTGATATTTTTGTACTTCAGTATCAGCT
CGATAGAGCAAAAGAGAGAGAGGACGAGAGAGGGGGGTGAGGAGAAAAGAGAGAGAGCGCGAGAGGGAGAGGGAG
AGAAGGAGGGGTGGGAATTACACAAAGAGAGAACCAAAAATAATTTTGATTCCTAAGTTAATTTGCTCACTGATC
TGGGATTTTAGTCACCATGGAGGGTAAATGGACAATCTGCCCAGGACTGCAGCCCGATACTATTTTTCAAAGCCA
GAACTTACTCCATTTTCTATGCAAATGTCAGAAAAATGAAACACCCTCTCTCCCAAGTCAGAGAAGGGGAAGCAA
CGGCTCTCACGTTGGGACAATATTATCTGGAAGCTGAAGAAGAAACTGAATACTCCTTCCTTCCTCCCCACCCAT
TCCTTTAAATCCGGAGGGGGAAAAAATCCCAAGGTCTGCAAAGCTAAAACCCAATCTCGGATATACTACTAATAG
GCGCGGCGCTCGGACTATAAAACACAACAAATCATAAACCCGGCGGAGCAGCAGCGGCCGCGCGCGCCTCCCCTC
CCAATGAGTTCCTATTTCGTGAACTCCACCTTCCCCGTCACTCTGGCCAGCGGGCAGGAGTCCTTCCTGGGCCAG
CTACCGCTCTATTCGTCGGGCTATGCGGACCCGCTGAGACATTACCCCGCGCCCTACGGGCCAGGGCCGGGCCAG
GACAAGGGCTTTGCCACTTCCTCCTATTACCCGCCGGCGGGCGGTGGCTACGGCCGAGCGGCGCCCTGCGACTAC
GGGCCGGCGCCGGCCTTCTACCGCGAGAAAGAGTCGGCCTGCGCACTCTCCGGCGCCGACGAGCAGCCCCCGTTC
CACCCCGAGCCGCGGAAGTCGGACTGCGCGCAGGACAAGAGCGTGTTCGGCGAGACAGAAGAGCAGAAGTGCTCC
ACTCCGGTCTACCCGTGGATGCAGCGGATGAATTCGTGCAACAGTGAGTGAGACTTCCCGTCGCCGTCGCCCCGG
CTCCCCTGGGCGCCCACCCCGGGACACAGAACTAGTGAGCGCCCCCTGCCCCAATCTCCCACAGGGTGCTGGGTG
GGCATCTCAGTTAGGAGATAGAAGAAGATTGGGCGCCGGCCGGGGGTCTCTCGCTGTGTCCCCTATTAGGCAGGA
GTTACAAAGTTTGCAAAGTCCCAGCCGCACTGGGAGCCATGGGGAGCAAGTGTGCTCTCCTGGGGCGCCTGGCCA
GAGCCGGGGTTCCAGGACAGGGAAGGGAGCAGGAGCCTGCAGTCACTGGCTTGGCTTTACTTTGAGCCCCCAACC
CCCCTCTCCCAGCCCTGGTAGGGTTCCCCAACCAAAGACGGCTCCATTAAAAACGGAGTGCGTCATGCAAGGGGG
TAGGGGGTGACGCTGAAGAGGAAGAGTTGAGTCTGTCTGGGACTGTGTTTCCCTGTGGGTGGGGAGCTGGGGCAA
GATGAGGCACCAGGAAAGGGGTGGTAGTCAGAGGAGGGAGGAGGAATAAGGGGAAGGAAGAGAGAGGGAGCAGGC
GGAGCGAGAGAGGGAGAAACAGGCGCGGGGTCTCAGGTTGGATTATTTGTTGGCCTTAAGTCCCAACTGATGTCC
ATTAGCCGGACTCGAAAGTGAGGAGCCGTTAATGTGGACTATGGATCGATCTACGTCATTACGGATTAACGGCCT
GGATTTATCATTGGGTTGGGGGGATGACGGGGGGTGGGAACAAGATGGATGGAAAGGGAGGGAAAGACAAGATGC
AACTAGGAAGAGACACACCTGACCAGCCCCTCCCCCCAGGCTCAGGTGGGAGTTCAAACTGCTCCTCCCCTCCCC
CATCTAGAGTCTAGACAGACGGCACAGGCCTAGGAGACTAGGAGGGAATCTGGAGGGGGCGCTGGAGGAGTGCGA
AACGGGGGAAGGGAGCCGGCAGAATAGAGGGCATCCCGGTACTGGCTGGAGTCTGTGTTCGAGGGTCGACTAGGG
GAGGGGGTCCTGGGCCCGGTGACCGCAGGCCTCAGCATCTCCACTCTGCGTAACAGGTTCCTCCTTTGGGCCCAG
CGGCCGGCGAGGCCGCCAGACATACACACGTTACCAGACGCTGGAGCTGGAGAAGGAGTTTCACTACAATCGCTA
CCTGACGCGGCGGCGGCGCATCGAGATCGCGCACGCCCTGTGCCTGACGGAGAGGCAGATCAAGATATGGTTCCA
GAACCGACGCATGAAGTGGAAAAAGGAGAGCAAACTGCTCAGCGCGTCTCAGCTCAGTGCCGAGGAGGAGGAAGA
AAAACAGGCCGAGTGAAGGTGCTGGAAAGGGAGGGAGGACGCGAGGGGAAAGGCCTGTGGGGAGCCACGGGCGTC
AGAGAGACCCGGGAAGGAAGGCTCTCGGGTGGGGGAGCCAGGAGACCTGCTCTCCGGCGCAGACAGGCGGGGCCC
AGCGCTCTCCTGGACGCCCCCGCCCGCACAGCTCCCGGCGGGTGCTCTGAGGCCTCACTACTCGAGCCCACCCAG
CATCCCGCGCGCCCTTCCTTCCCGAGGAACTCGCCTCAGCCTGATCAGGCTTCCTGGTGAGAACTGAGGAGCGGA
CTCACTTGATGTTTCCTGGAAGCAGAGCAAAATGCTCTTGTCCCTGTCGCGTCTCATTTTGTCCATGTCCCCCGT
GCACGGTTCAATGGTAGATTCGCTGTCCCCTCAGCGGGGGCCTTGAAGACTCCCTGATCCCAGACCTGTCGTCTC
TCCCACCCCCTCCCCAAAGCCACTGGAAGGAGCACATACTACCTAGAAGTAAGAAGAGGAGCCTCAGAAGAAAAC
AAAGTTCTATTTTATTAATTTTCTATGTGTTGTGTTTGTAGTCTTGTCTTAGCTCTGGACGTGAAATACTTCGAT
GATGATGATGATGATGATGATGATAATAATAATAATAATAACAACAACAACAACAATAATAAAGATGTGAAAACT
CGA

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FIGURE 3482

CTTTTTGGTGTAAATCTGGACTCTAATTCTGTAATATATCAAGGAATCTCGTAAAACCGACACTAAAACGTCCCT
GCCTACAAATCATCCGGCCAAATT**ATG**AGTTCATTGTATTATGCGAATGCTTTATTTTCTAAATATCCAGCCTCA
AGTTCGGTTTTCGCTACCGGAGCCTTCCCAGAACAAACTTCTTGTGCGTTTGCTTCCAACCCCCAGCGCCCGGGC
TATGGAGCGGGTTCGGGCGCTTCCTTCGCCGCCTCGATGCAGGGCTTGTACCCCGGCGGGGGGGGCATGGCGGGC
CAGAGCGCGGCCGGCGTCTACGCGGCCGGCTATGGGCTCGAGCCGAGTTCCTTCAACATGCACTGCGCGCCCTTT
GAGCAGAACCTCTCCGGGGTGTGTCCCGGCGACTCCGCCAAGGCGGCGGGCGCCAAGGAGCAGAGGGACTCGGAC
TTGGCGGCCGAGAGTAACTTCCGGATCTACCCCTGGATGCGAAGCTCAGGAACTGACCGCAAACGAGGCCGCCAG
ACCTACACCCGCTACCAGACCCTGGAGCTGGAGAAAGAATTTCACTACAATCGCTACCTGACGCGGCGGCGGCGC
ATCGAGATCGCGCACACGCTCTGCCTCACGGAAAGACAGATCAAGATTTGGTTTCAGAACCGGCGCATGAAGTGG
AAAAAGGAGAACAAGACCGCGGGCCCGGGGACCACCGGCCAAGACAGGGCTGAAGCAGAGGAGGAAGAGGAAGAG
TGAGGGATGGAGAAAGGGCAGAGGAAGAGACATGAGAAAGGGAGAGGAAGAGAAGCCCAGCTCTGGGAACTGAAT
CAGGAAACTCAAATCGAATAGGGAAGTAAAAAAACAAAACAAAAAACAAAAAAAACAAAAAAAAAACCCTATTTA
AATGAAAGGAGTTTAAAAACATTTTTTAAGGAGGGAGAAAGGAGAAATTTTGGTTTTTCAACACTGAAAAAATAC
TACCTATAGGAAAGTCTGTCAGGTTTGGTTTTTTTGTACAATATGAAAAGGATATTATCTACCTGTTCTGTAGCT
TTCTGGAATTTACCTCCCCTTTTCTATGTTGCTATTGTAAGGTCTTTGTAAAATCTTGCAGTTTTGTAAGCCCTC
TTTAATGCTGTCTTTGTGGACTGTGGGTCTGGACTAACCCTGTGGTTGCCTGCCCTCCTGAGCCTCCGCCTTCCC
AGCAGCGGCACCAAGGGGCCTTAGGGAGCCCCAAAACCTACCACTCGCGTGTTCCCCAAGCGCCTGGCTGCTGCT
TCTTGCTTCCCGTCCCCCAGCCCCATGCTCCCTTTTACATTCTGTGTGTATCTAAAGGATGGAAAAATAAAACGC
AATTAAAAAT

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FIGURE 3483

CCGGTCCGGGTGCCACCTCTCCCTGCTTGGGCGCCGCCGCGCGAGCGCTTCCCTTCCCCCTGCAAGCGCCCGGAT
AATGTCTGAGAATGTCCATTTCTGGGACGCTTAGCAGCTATTATGTCGACTCGATCATAAGTCACGAGAGTGAGG
ACGCGCCTCCAGCCAAGTTTCCTTCTGGCCAGTACGCGAGCTCGCGGCAGCCGGGCCACGCGGAGCACCTGGAGT
TCCCCTCGTGCAGCTTCCAGCCCAAAGCGCCGGTGTTCGGCGCCTCCTGGGCGCCGCTGAGCCCGCACGCGTCCG
GGAGCCTGCCGTCCGTCTACCACCCTTACATCCAGCCCCAGGGCGTCCCGCCGGCCGAGAGCAGGTACCTCCGCA
CCTGGCTGGAGCCGGCGCCGCGCGGCGAAGCGGCCCCGGGGCAGGGCCAGGCGGCGGTGAAGGCGGAGCCGCTGC
TGGGCGCGCCTGGGGAGCTGCTCAAACAGGGCACGCCCGAGTACAGTTTGGAAACTTCGGCGGGCAGGGAGGCCG
TGCTGTCTAATCAAAGACCCGGCTACGGGGACAATAAAATTTGCGAAGGAAGCGAGGACAAAGAGAGGCCGGATC
AAACCAACCCCTCCGCCAACTGGCTGCACGCTCGCTCTTCCCGGAAAAAGCGCTGTCCCTACACCAAATACCAGA
CGCTGGAGCTAGAGAAGGAGTTTCTGTTCAATATGTACCTCACCAGGGACCGTAGGCACGAAGTGGCCAGACTCC
TCAATCTGAGTGAGAGACAAGTCAAAATCTGGTTTCAGAACCGGCGGATGAAAATGAAGAAAATGAATAAGGAGC
AGGGCAAAGAGTAAAGATTAAAGATTACCCCCAGTCCTCCCTAGCTCTTCCCCATCTCACTCTTAGTTATGTGAC
GACTGCAAAGCCAGTGCTGTCTGGGATGTATTCAAGTGAATGGGGAAGGGAGTCTCTCTTCCAAGTCCTTTATCT
GCACCTAGAACCTCCCTCCTTTCCTTTGCCCTTACCTGTCTCTCTCTTCTCTCTAGGTGTCAGCCCTCAGACTGT
CAGGCAAGCCCGGGTTCTACCCCTAATGCAAATACCCACCAGGGAGATGTCTAGAGGCAGACTCCTGAGTGAGGA
GTTGCAGCCCAAAGGCTGCAGCATTGCCATACCATTCCCATGGAGTTGCCAACTATTCTCAGGCCAAGGGCCATG
GGGAAGATGGAGCAAACCTAGCCCCCAAGCCGGTGGGCTAGAAAGTACAAGAAAAGGCAGCACGTGGTTTTATGA
AGGTATCTTAGGTGGAGCTACTCCCCACCTCCCACCAACATATACATTTTGTTGCAGGAAATGTTTAATTCCGCA
TGATGTTTCCCTCTCCTTCCAACAAAAGAAGGTCAAACTGTGGGTCGTAGAGCCTTGACAATGTTGTCCTCCTGT
TCATCTGTGCACCACTTGACAGACTGTAGCTTCTCTTGCTCTCGACCGGCCCTGCATTCTTCCGCACCCTCCCTA
GCTCTGAAATCAACTCTCTTCGGTCGTATCCACCTTGCACCCGCAAGTCAAGCCGCCCCTTGTAGAAAAATCCCT
CCACCTTCCGTTCCCCGCTAGGTCAACCCCACTGTAGACAGGAAAGCCAGGCCAGGAGAGTCCGAATGAGAATTT
ATTGTGAATCGATTCCCAAGCTCCCTTCCGGGACAAGTGGTCTGGGACAGGGAGGAGCAACGGCCCCAGCGCGCA
ACGCTCTGCGCGTTCCTCCGAATCCCGTCGGCTTCTCGACCCACGCAGAGAAGCCCCGGGCTTGGCGGCTCTAGC
CCCAGCGCCAAAGGAGACCCGCCCCAGGGCCGGGCTTGGCCTCCTGCTTCATGGGCCTGGATGCAGATCTGCGTG
GCTGGTGCGTGCGCGCGCTTCTGGGAAACAGTCCCGCGTGCAAAGGAAAGGGGCAAAATGGCACCTAAGCATCAG
ATGGAAGCTTACTCTCTGCTTCCGTTCCTCCCCCTGCTCCCCTACTTCTCAGTCCCCTTCAATTTGTAGACTCTT
GCTCCTGCTTCTCCTGATCCTGCAAGGGGACATTCCAGTAGAAGTTTTTTGCTTTGTCGGTGGCTGTCGTGAAAT
TGTGCTTGTGTTTCGTGATTTCTTTGGGGGTGATTGTCTCGCTTGTTTTCAGTTGTCGATTATATGGGAGGGTTC
TGGGTGGGAGTGGGGAGGGCGAGGGGCCTAGAGCTCTAATTGTTTGTTTTGGAAGAAAAAAAGAAAAAGAACAAA
AAATATATATCACTCTAGAAAAT

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FIGURE 3484

ATGGGTAAGATCCGGAAGGCCCAAGGAGAAGGGCTGCCCCGCCCACTGCCCCTGCTGGTCCAGCCCAACCTCCCC
TTTGGGTACCCAGTCCACGGAGTGGAGGTGATGCCCCTGCACACGGTTCCCATCCCAGGCCTCCAGTTTGAAGGA
CCCGATGCCCCCGTCTATGAGGTCACCCTGACAGCTTCTCTGGGGACACTGAACACCCTTGCTGATGTCCCAGAC
AGTGTGGTGCAGGGCAGAGGCCAGAAGCAGCTGATCATTTCTACCAGTGACCGGAAGCTGTTGAAGTTCATTCTT
CAGCACGTGACATACACCAGCACGGGGTACCAGCACCAGAAGTACTATCCCCACATTGCCATTGACCCCATAGAG
CCACTCGAGGAGAGAACAAATCATGCTGTGCGCTTTGCACCTGTGAGTCTGGAGTCCAGGTCCTCAGTGGCCAAG
TTTCCAGTGACCATCCGCCATCCTGTCATACCCAAGCTATACGACCCTGGACCAGTGTTCTTTCAGTGTAGTCTT
AATCAGACTATTCAACTCCTCATCACCCCAGACACTGGTAGTATCTGGCACCAGGTGGGGTGGAAGACAACCCGT
GAGTATTACACCTTCATGTGGGTTACTTTGCCCATTGACCTAAACAACAAATCAGCTAAACAGCAGGAAGTCCAA
TTCAAAGCTTACTACCTGCCCAAGGATGATGAGTATTACCAGTTCTGCTATGTGGATGAGGATGGTGTGGTCCGG
GGAGCAAGTATTCCTTTCCAATTCCGTCCAGAAAATGAGGAAGACATCCTGGTTGTTACCACTCAGGGAGAGGTG
GAAGAGATTGAGCAGCACAACAAGGAGCTTTGCAAAGAAAACCAGGAGCTGAAGGACAGCTGTATCAGCCTCCAG
AAGCAGAACTCAGACATGCAGGCTGAGCTCCAAAAGAAGCAGTATCTTTGA

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FIGURE 3485

GGGTGCTTAGCCCCGCCCCCGTCCCACTCTGCCCTGTTGCTGTCGCGCCGCTGCTGGTTGCTGTCCCTGGACCCC
TACCATGGAGGAGACCATCAAAGATCCCCCCACATCAGCTGTCTTGCTGGATCACTGTCATTTCTCTCAGGTCAT
CTTTAACAGTGTGGAGAAGTTCTACATCCCTGGAGGGGACGTCACATGTCATTATACCTTCACCCAGCATTTCAT
CCCTCGTCGAAAGGATTGGATTGGCATCTTTAGAGTGGGGTGGAAGACAACCCGTGAGTATTACACCTTCATGTG
GGTTACTTTGCCCATTGACCTAAACAACAAATCAGCTAAACAGCAGGAAGTCCAATTCAAAGCTTACTACCTGCC
CAAGGATGATGAGTATTACCAGTTCTGCTATGTGGATGAGGATGGTGTGGTCCGGGGAGCAAGTATTCCTTTCCA
ATTCCGTCCAGAAAATGAGGAAGACATCCTGGTTGTTACCACTCAGGGAGAGGTGGAAGAGATTGAGCAGCACAA
CAAGGAGCTTTGCAAAGAAAACCAGGAGCTGAAGGACAGCTGTATCAGCCTCCAGAAGCAGAACTCAGACATGCA
GGCTGAGCTCCAAAAGAAGCAGGAGGAGCTAGAAACCCTACAGAGCATCAATAAGAAGTTGGAACTGAAAGTGAA
AGAACAGAAGGACTATTGGGAGACAGAGCTGCTTCAACTGAAAGAACAAAACCAGAAGATGTCCTCAGAAAATGA
GAAGATGGGAATCAGAGTGGATCAGCTTCAGGCCCAGCTGTCAACTCAAGAGAAAGAAATGGAGAAGCTTGTTCA
GGGAGATCAAGATAAGACAGAGCAGTTAGAGCAGCTGAAAAAGGAAAATGACCACCTCTTTCTCAGTTTAACTGA
ACAGAGGAAGGACCAGAAGAAGCTCGAGCAGACAGTGGAGCAAATGAAGCAGAATGAAACTACTGCAATGAAGAA
ACAACAGGAATTAATGGATGAAAACTTTGACCTGTCAAAAAGACTGAGTGAGAACGAAATTATATGTAATGCTCT
GCAGAGACAGAAAGAGAGATTGGAAGGAGAAAATGATCTTTTGAAGAGGGAGAACAGCAGATTGCTCAGTTACAT
GGGTCTGGATTTTAATTCTTTGCCGTATCAAGTACCTACTTCAGATGAAGGAGGCGCAAGACAAAATCCAGGACT
TGCCTATGGAAACCCATATTCTGGTATCCAAGAAAGTTCTTCCCCCAGCCCGCTCTCCATCAAGAAATGCCCTAT
CTGCAAAGCAGATGATATTTGTGATCACACCTTGGAGCAACAGCAGATGCAGCCCCTTTGTTTCAATTGTCCAAT
TTGTGACAAGATCTTCCCAGCTACAGAGAAGCAGATCTTTGAAGACCACGTGTTCTGCCACTCTCTCTGAGTATC
CCAACCTCTTGGATGTATACAGAGATTTTATAGAATAGAACCTATAGCTTCTACCATGAGTTATATGAGTCAAGA
TCCTGCCTAACCTGAAATTATTAGGGATTTACTCAGCCCTGCTGCCGCTAACAGTGGAGTTATGTCACTGATCTG
AAGGTCACTGTTAAGGGCTTCTGCTGCCATCCTTGTGGGTTGCTACCTTTAAGTCGCATAACTCTAGCTGTATCA
TCCTCTCACCTGTCATTCTTCTGAGGGTCTCAGTACAAGGGCCCTGGGATGGAGCCAACCTGGGTATTCACAACA
GGCCTGACTTGATACTAAGTGATTAGTTTTCCAAGTTGTCCCACTGCCATTCAAAGTCAGCCCTTGAGTGTATTT
GTTCTCAGTCCTAACCCTGGGGCCAGAGATTGGTCCGAGGTTGAGAATTCCTTCCTCCTCATCCTTGGTGTTGCT
TTCTCCAAATGATTGTTTTAGACTAGCCAAAAATGCCGTGGCAAAGAGCTCAGAAATCCAATTTGGATACCAAAG
GTTTCTCATGTTAATTTCTCAGCCCCCAAAGAAGCATCTTACTCCTGAACCTTAGACAGGAAGTATTGTTTCAGT
CACAGAAAGCTTTTCTGGGTACCTCTGGTTAGCACTTTCTACTCTCTGATATTTCCTATGTACATAGCTTTTATT
GTTGTAAATCCTTTCTTAATGGTTAAATAGGATTGTTAGCAACTATGGGTTTGCAGTTTTCTGAGTAGGTGAGTT
TTGAATATGGGTAAATCAGAATAATGAGACAACTTGTTAATCTCTTTAATACTAAAAATAAATTACTCTTCTATT
TCAGGGACTTAGGTAATTTAAAATAAACCTTCAATTTATGGTCTTCTGTTTTGAAGCTCATGGGAAAATTGTGAT
CAAAAGGGCTATGGGAAGGGCAGACCCCGCCAATGATTTCTCTTCACCTGTCTTAAGATTAAATAAAAAAGAGTG
TCCTGGCAGTTATCTTGAGGTGGGGAAGGAGGTGATGAAACATTAGTTTGTGAAATCCAAGGCCCTGGCTTGCTT
TCTTTCTTTTTTTTTTTTTTTTTTTTGAAACAGTCTCTCTCTGTCACCCAGGCTGGCGTGCAATGGCGCAGTTGA
CTCACTACAGCCTCTGCCTCCCAGGTTCAAGCGATTCTCATGCCTTAGCCTCCCAAGTAGCTGGGATTACAGGTG
TGTGCCGCAATGCCCAGCTAATTTTTGTGTTTTTAGTAGAGACAGGGTTTCACTATGTTGGCCAGGCTGGTCTCG
AACTCCTGGCCTCACGTGATCTGTCCACTTCAGCCGTCCAAAGTGCTGGGATTACAAGCGTGAGCCACTGTGCTG
GGCCCGAGGCCCTGACTTCTTGCTGTAACTTTCCATGCATTTTTTTTAAAAGGAGCAGTGTGGATTTTCGCACCC
TTTGTGAACTAAGTTCAATGCGCTCTATCCAAATTTGCCTAATTGAACTATAAGAAAGTAATAATTCCATTTTCT
ATCCCCTCAGGGACTGAACAAATGGAAATAACTCCCAGGCAGTATCAGGTGGTCACTACAGAGACTTCCACAAAA
ACTTTTGAATGATGTGAAACACGATGTCATGAATAAGGGTTGAGCCAACTATAGCTCTGTGTTCCTACTGGGCTT
TCCCTAATGTGGTTGGGAGTTATGCCCTAGACTAACTGTATTGTCCTAGTCACAGCTCCTTGCTTTGATTTCATC
CTTGATAAAATGAAGATGAAACTT

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FIGURE 3486

ACCGCCACCATGAACAAGCTTTACATCGGCAACCTCAACGAGAGCGTGACCCCCGCGGACTTGGAGAAAGTGTTT
GCGGAGCACAAGATCTCCTACAGCGGCCAGTTCTTGGTCAAANTCCTACGCCTTCGTGGACTGCCCGGACGAGCA
CTGGGCG**ATG**AAGGCCATCGAAACTTTCTCCGGGAAAGTAGAATTACAAGGAAAACGCTTAGAGATTGAACATTC
GGTGCCCAAAAAACAAAGGAGCCGGAAAATTCAAATCCGAAATATTCCACCCCAGCTCCGATGGGAAGTACTGGA
CAGCCTGCTGGCTCAGTATGGTACAGTAGAGAACTGTGAGCAAGTGAACACCGAGAGTGAGACGGCAGTGGTGAA
TGTCACCTATTCCAACCGGGAGCAGACCAGGCAAGCCATCATGAAGCTGAATGGCCACCAGTTGGAGAACCATGC
CCTGAAGGTCTCCTACATCCCCGATGAGCAGATAGCACAGGGACCTGAGAATGGGCGCCGAGGGGGCTTTGGCTC
TCGGGGTCAGCCCCGCCAGGGCTCACCTGTGGCAGCGGGGGCCCCAGCCAAGCAGCAGCAAGTGGACATCCCCCT
TCGGCTCCTGGTGCCCACCCAGTATGTGGGTGCCATTATTGGCAAGGAGGGGGCCACCATCCGCAACATCACAAA
ACAGACCCAGTCCAAGATAGACGTGCATAGGAAGGAGAACGCAGGTGCAGCTGAAAAAGCCATCAGTGTGCACTC
CACCCCTGAGGGCTGCTCCTCCGCTTGTAAGATGATCTTGGAGATTATGCATAAAGAGGCTAAGGACACCAAAAC
GGCTGACGAGGTTCCCCTGAAGATCCTGGCCCATAATAACTTTGTAGGGCGTCTCATTGGCAAGGAAGGACGGAA
CCTGAAGAAGGTAGAGCAAGATACCGAGACAAAAATCACCATCTCCTCGTTGCAAGACCTTACCCTTTACAACCC
TGAGAGGACCATCACTGTGAAGGGGGCCATCGAGAATTGTTGCAGGGCCGAGCAGGAAATAATGAAGAAAGTTCG
GGAGGCCTATGAGAATGATGTGGCTGCCATGAGCCTGCAGTCTCACCTGATCCCTGGCCTGAACCTGGCTGCTGT
AGGTCTTTTCCCAGCTTCATCCAGCGCAGTCCCGCCGCCTCCCAGCAGCGTTACTGGGGCTGCTCCCTATAGCTC
CTTTATGCAGGCTCCCGAGCAGGAGATGGTGCAGGTGTTTATCCCCGCCCAGGCAGTGGGCGCCATCATCGGCAA
GAAGGGGCAGCACATCAAACAGCTCTCCCGGTTTGCCAGCGCCTCCATCAAGATTGCACCACCCGAAACACCTGA
CTCCAAAGTTCGTATGGTTATCATCACTGGACCGCCAGAGGCCCAATTCAAGGCTCAGGGAAGAATCTATGGCAA
ACTCAAGGAGGAGAACTTCTTTGGTCCCAAGGAGGAAGTGAAGCTGGAGACCCACATACGTGTGCCAGCATCAGC
AGCTGGCCGGGTCATTGGCAAAGGTGGAAAAACGGTGAACGAGTTGCAGAATTTGACGGCAGCTGAGGTGGTAGT
ACCAAGAGACCAGACCCCTGATGAGAACGACCAGGTCATCGTGAAAATCATCGGACATTTCTATGCCAGTCAGAT
GGCTCAACGGAAGATCCGAGACATCCTGGCCCAGGTTAAGCAGCAGCATCAGAAGGGACAGAGTAACCAGGCCCA
GGCACGGAGGAAG**TGA**CCAGCCCCTCCCTGTCCCTTCGAGTCCAGGACAACAACGGGCAGAAATCGAGAGTGTGC
TCTCCCCGGCAGGCCTGAGAATGAGTGGGAATCCGGGACACCTGGGCCGGGCTGTAGATCAGGTTTGCCCACTTG
ATTGAGAAAGATGTTCCAGTGAGGAACCCTGATCTCTCAGCCCCAAACACCCACCCAATTGGCCCAACACTGTCT
GCCCCTCGGGGTGTCAGAAATTCTAGCGCAAGGCACTTTTAAACGTGGATTGTTTAAAGAAGCTCTCCAGGCCCC
ACCAAGAGGGTGGATCACACCTCAGTGGGAAGAAAAATAAAATTTCCTTCAGGTTTTAAAAACATGCAGAGAGGT
GTTTTAATCAGCCTTAAAGGATGGTTCA

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FIGURE 3487

GGGGAAGCTGAGCGCTGAGACCAAGGGCTAAAGCTGGGAGGTGAGTCTGTCACCTTGAGCCGGGCGAGCGCTGTG
GGCCAAGCAGGGGTTGCAGGGTAGTAGGAGTGCAGACTGAAAAA**ATG**CAGACCGCCGGGGCATTATTCATTTCTC
CAGCTCTGATCCGCTGTTGTACCAGGGGTCTAATCAGGCCTGTGTCTGCCTCCTTCTTGAATAGCCCAGTGAATT
CATCTAAACAGCCTTCCTACAGCAACTTCCCACTCCAGGTGGCCAGACGGGAGTTCCAGACCAGTGTTGTCTCCC
GGGACATTGACACAGCAGCCAAGTTTATTGGTGCTGGGGCAGCCACAGTTGGTGTGGCTGGTTCAGGGGCTGGCA
TTGGAACCGTGTTTGGCAGCTTGATCATTGGCTATGCCAGGAACCCGTCTCTCAAGCAGCAGCTCTTCTCCTATG
CCATTCTTGGCTTTGCCCTGTCTGAGGCCATGGGGCTTTTCTGTTTGATGGTCGCCTTCCTCATCCTCTTCGCCA
TG**TGA**GGCTCCATGGGGGGTCACCGGCCTGTTGCTACTGCAACTCCACACCATTCTTGGTGCTGGGGTGTGTTAA
GCTTTACCATTAAACACAACGTTTCTCTAAA

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FIGURE 3489

GGGACGTGGAGACCCGGGGTCCCGGCAGCCGGGCGGCCCGCGGGCCCAGGGTGGGGATGCACCGCCGCGGGGTGG
GAGCTGGCGCCATCGCCAAGAAGAAACTTGCAGAGGCCAAGTATAAGGAGCGAGGGACGGTCTTGGCTGAGGACC
AGCTAGCCCAGATGTCAAAGCAGTTGGACATGTTCAAGACCAACCTGGAGGAATTTGCCAGCAAACACAAGCAGG
AGATCCGGAAGAATCCTGAGTTCCGTGTGCAGTTCCAGGACATGTGTGCAACCATTGGCGTGGATCCGCTGGCCT
CTGGAAAAGGATTTTGGTCTGAGATGCTGGGCGTGGGGGACTTCTATTACGAACTAGGTGTCCAAATTATCGAAG
TGTGCCTGGCGCTGAAGCATCGGAATGGAGGTCTGATAACTTTGGAGGAACTACATCAACAGGTGTTGAAGGGAA
GGGGCAAGTTCGCCCAGGATGTCAGTCAAGATGACCTGATCAGAGCCATCAAGAAACTAAAGGCACTTGGCACTG
GCTTCGGCATCATCCCTGTGGGCGGCACTTACCTCATTCAGTCTGTTCCAGCTGAGCTCAATATGGATCACACCG
TGGTGCTGCAGCTGGCAGAGAAGAATGGCTACGTGACTGTCAGTGAGATCAAAGCCAGTCTTAAATGGGAGACCG
AGCGAGCGCGGCAAGTGCTGGAACACCTGCTGAAGGAAGGGTTGGCGTGGCTGGACTTACAGGCCCCAGGGGAGG
CCCACTACTGGCTGCCAGCTCTCTTCACTGACCTCTACTCCCAGGAGATTACAGCTGAGGAGGCCAGAGAAGCCC
TCCCCTGACTGCATGTGGAAGGGCACACAGCAGCAGGCAGGGAGGAGGCGGAGGTGGCAAATAAACCTGGGCAAT
TTTGTTTATACAAAAAATAGAAAAAAA

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FIGURE 3490A

AGCAGACGGGAGTTTCTCCTCGGGGTCGGAGCAGGAGGCACGCGGAGTGTGAGGCCACGCATGAGCGGACGCTAA
CCCCCTCCCCAGCCACAAAGAGTCTACATGTCTAGGGTCTAGACATGTTCAGCTTTGTGGACCTCCGGCTCCTGC
TCCTCTTAGCGGCCACCGCCCTCCTGACGCACGGCCAAGAGGAAGGCCAAGTCGAGGGCCAAGACGAAGACATCC
CACCAATCACCTGCGTACAGAACGGCCTCAGGTACCATGACCGAGACGTGTGGAAACCCGAGCCCTGCCGGATCT
GCGTCTGCGACAACGGCAAGGTGTTGTGCGATGACGTGATCTGTGACGAGACCAAGAACTGCCCCGGCGCCGAAG
TCCCCGAGGGCGAGTGCTGTCCCGTCTGCCCCGACGGCTCAGAGTCACCCACCGACCAAGAAACCACCGGCGTCG
AGGGACCCAAGGGAGACACTGGCCCCCGAGGCCCAAGGGGACCCGCAGGCCCCCCTGGCCGAGATGGCATCCCTG
GACAGCCTGGACTTCCCGGACCCCCCGGACCCCCCGGACCTCCCGGACCCCCTGGCCTCGGAGGAAACTTTGCTC
CCCAGCTGTCTTATGGCTATGATGAGAAATCAACCGGAGGAATTTCCGTGCCTGGCCCCATGGGTCCCTCTGGTC
CTCGTGGTCTCCCTGGCCCCCCTGGTGCACCTGGTCCCCAAGGCTTCCAAGGTCCCCCTGGTGAGCCTGGCGAGC
CTGGAGCTTCAGGTCCCATGGGTCCCCGAGGTCCCCCAGGTCCCCCTGGAAAGAATGGAGATGATGGGGAAGCTG
GAAAACCTGGTCGTCCTGGTGAGCGTGGGCCTCCTGGGCCTCAGGGTGCTCGAGGATTGCCCGGAACAGCTGGCC
TCCCTGGAATGAAGGGACACAGAGGTTTCAGTGGTTTGGATGGTGCCAAGGGAGATGCTGGTCCTGCTGGTCCTA
AGGGTGAGCCTGGCAGCCCTGGTGAAAATGGAGCTCCTGGTCAGATGGGCCCCCGTGGCCTGCCTGGTGAGAGAG
GTCGCCCTGGAGCCCCTGGCCCTGCTGGTGCTCGTGGAAATGATGGTGCTACTGGTGCTGCCGGGCCCCCTGGTC
CCACCGGCCCCGCTGGTCCTCCTGGCTTCCCTGGTGCTGTTGGTGCTAAGGGTGAAGCTGGTCCCCAAGGGCCCC
GAGGCTCTGAAGGTCCCCAGGGTGTGCGTGGTGAGCCTGGCCCCCCTGGCCCTGCTGGTGCTGCTGGCCCTGCTG
GAAACCCTGGTGCTGATGGACAGCCTGGTGCTAAAGGTGCCAATGGTGCTCCTGGTATTGCTGGTGCTCCTGGCT
TCCCTGGTGCCCGAGGCCCCTCTGGACCCCAGGGCCCCGGCGGCCCTCCTGGTCCCAAGGGTAACAGCGGTGAAC
CTGGTGCTCCTGGCAGCAAAGGAGACACTGGTGCTAAGGGAGAGCCTGGCCCTGTTGGTGTTCAAGGACCCCCTG
GCCCTGCTGGAGAGGAAGGAAAGCGAGGAGCTCGAGGTGAACCCGGACCCACTGGCCTGCCCGGACCCCCTGGCG
AGCGTGGTGGACCTGGTAGCCGTGGTTTCCCTGGCGCAGATGGTGTTGCTGGTCCCAAGGGTCCCGCTGGTGAAC
GTGGTTCTCCTGGCCCTGCTGGCCCCAAAGGATCTCCTGGTGAAGCTGGTCGTCCCGGTGAAGCTGGTCTGCCTG
GTGCCAAGGGTCTGACTGGAAGCCCTGGCAGCCCTGGTCCTGATGGCAAAACTGGCCCCCCTGGTCCCGCCGGTC
AAGATGGTCGCCCCGGACCCCCAGGCCCACCTGGTGCCCGTGGTCAGGCTGGTGTGATGGGATTCCCTGGACCTA
AAGGTGCTGCTGGAGAGCCCGGCAAGGCTGGAGAGCGAGGTGTTCCCGGACCCCCTGGCGCTGTCGGTCCTGCTG
GCAAAGATGGAGAGGCTGGAGCTCAGGGACCCCCTGGCCCTGCTGGTCCCGCTGGCGAGAGAGGTGAACAAGGCC
CTGCTGGCTCCCCCGGATTCCAGGGTCTCCCTGGTCCTGCTGGTCCTCCAGGTGAAGCAGGCAAACCTGGTGAAC
AGGGTGTTCCTGGAGACCTTGGCGCCCCTGGCCCCTCTGGAGCAAGAGGCGAGAGAGGTTTCCCTGGCGAGCGTG
GTGTGCAAGGTCCCCCTGGTCCTGCTGGTCCCCGAGGGGCCAACGGTGCTCCCGGCAACGATGGTGCTAAGGGTG
ATGCTGGTGCCCCTGGAGCTCCCGGTAGCCAGGGCGCCCCTGGCCTTCAGGGAATGCCTGGTGAACGTGGTGCAG
CTGGTCTTCCAGGGCCTAAGGGTGACAGAGGTGATGCTGGTCCCAAAGGTGCTGATGGCTCTCCTGGCAAAGATG
GCGTCCGTGGTCTGACTGGCCCCATTGGTCCTCCTGGCCCTGCTGGTGCCCCTGGTGACAAGGGTGAAAGTGGTC
CCAGCGGCCCTGCTGGTCCCACTGGAGCTCGTGGTGCCCCCGGAGACCGTGGTGAGCCTGGTCCCCCCGGCCCTG
CTGGCTTTGCTGGCCCCCCTGGTGCTGACGGCCAACCTGGTGCTAAAGGCGAACCTGGTGATGCTGGTGCTAAAG
GCGATGCTGGTCCCCCTGGCCCTGCCGGACCCGCTGGACCCCCTGGCCCCATTGGTAATGTTGGTGCTCCTGGAG
CCAAAGGTGCTCGCGGCAGCGCTGGTCCCCCTGGTGCTACTGGTTTCCCTGGTGCTGCTGGCCGAGTCGGTCCTC
CTGGCCCCTCTGGAAATGCTGGACCCCCTGGCCCTCCTGGTCCTGCTGGCAAAGAAGGCGGCAAAGGTCCCCGTG
GTGAGACTGGCCCTGCTGGACGTCCTGGTGAAGTTGGTCCCCCTGGTCCCCCTGGCCCTGCTGGCGAGAAAGGAT
CCCCTGGTGCTGATGGTCCTGCTGGTGCTCCTGGTACTCCCGGGCCTCAAGGTATTGCTGGACAGCGTGGTGTGG
TCGGCCTGCCTGGTCAGAGAGGAGAGAGAGGCTTCCCTGGTCTTCCTGGCCCCTCTGGTGAACCTGGCAAACAAG
GTCCCTCTGGAGCAAGTGGTGAACGTGGTCCCCCTGGTCCCATGGGCCCCCCTGGATTGGCTGGACCCCCTGGTG
AATCTGGACGTGAGGGGGCTCCTGGTGCCGAAGGTTCCCCTGGACGAGACGGTTCTCCTGGCGCCAAGGGTGACC
GTGGTGAGACCGGCCCCGCTGGACCCCCTGGTGCTCCTGGTGCTCCTGGTGCCCCTGGCCCCGTTGGCCCTGCTG
GCAAGAGTGGTGATCGTGGTGAGACTGGTCCTGCTGGTCCCACCGGTCCTGTCGGCCCTGTTGGCGCCCGTGGCC
CCGCCGGACCCCAAGGCCCCCGTGGTGACAAGGGTGAGACAGGCGAACAGGGCGACAGAGGCATAAAGGGTCACC
GTGGCTTCTCTGGCCTCCAGGGTCCCCCTGGCCCTCCTGGCTCTCCTGGTGAACAAGGTCCCTCTGGAGCCTCTG
GTCCTGCTGGTCCCCGAGGTCCCCCTGGCTCTGCTGGTGCTCCTGGCAAAGATGGACTCAACGGTCTCCCTGGCC

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FIGURE 3490B

CCATTGGGCCCCCTGGTCCTCGCGGTCGCACTGGTGATGCTGGTCCTGTTGGTCCCCCCGGCCCTCCTGGACCTC
CTGGTCCCCCTGGTCCTCCCAGCGCTGGTTTCGACTTCAGCTTCCTGCCCCAGCCACCTCAAGAGAAGGCTCACG
ATGGTGGCCGCTACTACCGGGCTGATGATGCCAATGTGGTTCGTGACCGTGACCTCGAGGTGGACACCACCCTCA
AGAGCCTGAGCCAGCAGATCGAGAACATCCGGAGCCCAGAGGGCAGCCGCAAGAACCCCGCCCGCACCTGCCGTG
ACCTCAAGATGTGCCACTCTGACTGGAAGAGTGGAGAGTACTGGATTGACCCCAACCAAGGCTGCAACCTGGATG
CCATCAAAGTCTTCTGCAACATGGAGACTGGTGAGACCTGCGTGTACCCCACTCAGCCCAGTGTGGCCCAGAAGA
ACTGGTACATCAGCAAGAACCCCAAGGACAAGAGGCATGTCTGGTTCGGCGAGAGCATGACCGATGGATTCCAGT
TCGAGTATGGCGGCCAGGGCTCCGACCCTGCCGATGTGGCCATCCAGCTGACCTTCCTGCGCCTGATGTCCACCG
AGGCCTCCCAGAACATCACCTACCACTGCAAGAACAGCGTGGCCTACATGGACCAGCAGACTGGCAACCTCAAGA
AGGCCCTGCTCCTCCAGGGCTCCAACGAGATCGAGATCCGCGCCGAGGGCAACAGCCGCTTCACCTACAGCGTCA
CTGTCGATGGCTGCACGAGTCACACCGGAGCCTGGGGCAAGACAGTGATTGAATACAAAACCACCAAGACCTCCC
GCCTGCCCATCATCGATGTGGCCCCCTTGGACGTTGGTGCCCCAGACCAGGAATTCGGCTTCGACGTTGGCCCTG
TCTGCTTCCTGTAAACTCCCTCCATCCCAACCTGGCTCCCTCCCACCCAACCAACTTTCCCCCCAACCCGGAAAC
AGACAAGCAACCCAAACTGAACCCCCTCAAAAGCCAAAAAATGGGAGACAATTTCACATGGACTTTGGAAAATAT
TTTTTTCCTTTGCATTCATCTCTCAAACTTAGTTTTTATCTTTGACCAACCGAACATGACCAAAAACCAAAAGTG
CATTCAACCTTACCAAAAAAAAAAAAAAAAAAAGAATAAATAAATAACTTTTTAAAAAAGGAAGCTTGGTCCACT
TGCTTGAAGACCCATGCGGGGGTAAGTCCCTTTCTGCCCGTTGGGCTTATGAAACCCCAATGCTGCCCTTTCTGC
TCCTTTCTCCACACCCCCCTTGGGGCCTCCCCTCCACTCCTTCCCAAATCTGTCTCCCCAGAAGACACAGGAAAC
AATGTATTGTCTGCCCAGCAATCAAAGGCAATGCTCAAACACCCAAGTGGCCCCCACCCTCAGCCCGCTCCTGCC
CGCCCAGCACCCCCAGGCCCTGGGGGACCTGGGGTTCTCAGACTGCCAAAGAAGCCTTGCCATCTGGCGCTCCCA
TGGCTCTTGCAACATCTCCCCTTCGTTTTTGAGGGGGTCATGCCGGGGGAGCCACCAGCCCCTCACTGGGTTCGG
AGGAGAGTCAGGAAGGGCCACGACAAAGCAGAAACATCGGATTTGGGGAACGCGTGTCAATCCCTTGTGCCGCAG
GGCTGGGCGGGAGAGACTGTTCTGTTCCTTGTGTAACTGTGTTGCTGAAAGACTACCTCGTTCTTGTCTTGATGT
GTCACCGGGGCAACTGCCTGGGGGCGGGGATGGGGGCAGGGTGGAAGCGGCTCCCCATTTTATACCAAAGGTGCT
ACATCTATGTGATGGGTGGGGTGGGGAGGGAATCACTGGTGCTATAGAAATTGAGATGCCCCCCCAGGCCAGCAA
ATGTTCCTTTTTGTTCAAAGTCTATTTTTATTCCTTGATATTTTTCTTTTTTTTTTTTTTTTTTGTGGATGGGG
ACTTGTGAATTTTTCTAAAGGTGCTATTTAACATGGGAGGAGAGCGTGTGCGGCTCCAGCCCAGCCCGCTGCTCA
CTTTCCACCCTCTCTCCACCTGCCTCTGGCTTCTCAGGCCTCTGCTCTCCGACCTCTCTCCTCTGAAACCCTCCT
CCACAGCTGCAGCCCATCCTCCCGGCTCCCTCCTAGTCTGTCCTGCGTCCTCTGTCCCCGGGTTTCAGAGACAAC
TTCCCAAAGCACAAAGCAGTTTTTCCCCCTAGGGGTGGGAGGAAGCAAAAGACTCTGTACCTATTTTGTATGTGT
ATAATAATTTGAGATGTTTTTAATTATTTTGATTGCTGGAATAAAGCATGTGGAAATGACCCAAACATAA

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FIGURE 3491A

CGGAAGCGCGGCGCTGCGGGCCGGGCCGCGGGGCACAGCCGGGGGCCGGCGGCGGCGCGCGGACTCCGCATCCCG
CACCCCGATGGTAGCCGAGGAGCTGGTGTAATTACTTCAAGCCTCCAGGATGGCAATCCAGTTCCGTTCGCTCTT
CCCCTTGGCATTGCCTGGGATGCTGGCGCTCCTCGGCTGGTGGTGGTTTTTCTCTCGTAAAAAAGGCCATGTCAG
CAGCCATGATGAGCAGCAGGTGGAGGCTGGTGCTGTGCAGCTGAGGGCTGACCCTGCCATCAAGGAACCTCTCCC
CGTGGAAGACGTCTGTCCCAAAGTAGTGTCCACACCCCCCAGTGTCACAGAGCCTCCAGAAAAGGAACTGTCCAC
CGTGAGCAAGCTGCCTGCAGAGCCCCCAGCATTGCTCCAGACACACCCACCTTGCCGAAGATCAGAGTCCTCGGG
CATTCTTCCTAACACCACAGACATGAGATTGCGACCAGGAACACGCAGAGATGACAGTACAAAGCTGGAGCTAGC
CCTGACAGGTGGTGAAGCCAAATCGATTCCTCTAGAGTGCCCCCTTTCATCCCCAAAGGGTGTACTATTCTCCAG
CAAATCAGCTGAGGTGTGTAAGCAAGATTCCCCCTTCAGCAGGGTGCCAAGGAAGGTCCAGCCAGGCTACCCCGT
AGTCCCCGCAGAGAAGCGTAGCTCTGGGGAGAGGGCAAGAGAGACAGGTGGGGCCGAAGGGACTGGTGATGCCGT
GTTGGGGGAAAAGGTGCTTGAAGAAGCTCTGTTGTCTCGGGAGCATGTCTTGGAATTGGAGAACAGCAAGGGCCC
CAGCCTGGCCTCTTTAGAGGGGGAAGAAGATAAGGGGAAGAGCAGCTCATCCCAGGTGGTGGGGCCAGTGCAGGA
GGAAGAGTATGTAGCAGAGAAGTTGCCAAGTAGGTTCATCGAGTCGGCTCACACAGAGCTGGCAAAGGACGATGC
GGCGCCAGCACCCCCAGTCGCAGACGCCAAAGCCCAGGATAGAGGTGTCGAGGGAGAACTGGGCAATGAGGAGAG
CTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGGGCTTGGATAGAAATGAGGAGAGCTTGGATAGAAA
TGAGGAGGGCTTGGATAGAAATGAGGAGATTAAGCGGGCTGCCTTCCAGATAATCTCCCAAGTGATCTCAGAAGC
AACCGAACAGGTGCTGGCCACCACGGTTGGCAAGGTTGCAGGTCGTGTGTGTCAGGCCAGTCAGCTCCAAGGGCA
GAAGGAAGAGAGCTGTGTCCCAGTTCACCAGAAAACTGTCTTGGGCCCAGACACTGCGGAGCCTGCCACAGCAGA
GGCAGCTGTTGCCCCGCCGGATGCTGGCCTCCCCTTGCCAGGCCTACCAGCAGAGGGCTCACCACCACCAAAGAC
CTACGTGAGCTGCCTGAAGAGCCTTCTGTCCAGCCCCACCAAGGACAGTAAGCCAAATATCTCTGCACACCACAT
CTCCCTGGCCTCCTGCCTGGCACTGACCACCCCCAGTGAAGAGTTGCCGGACCGGGCAGGCATCCTGGTGGAAGA
TGCCACCTGTGTCACCTGCATGTCAGACAGCAGCCAAAGTGTCCCTTTGGTGGCTTCTCCAGGACACTGCTCAGA
TTCTTTCAGCACTTCAGGGCTTGAAGACTCTTGCACAGAGACCAGCTCGAGCCCCAGGGACAAGGCCATCACCCC
GCCACTGCCAGAAAGTACTGTGCCCTTCAGCAATGGGGTGCTGAAGGGGGAGTTGTCAGACTTGGGGGCTGAGGA
TGGATGGACCATGGATGCGGAAGCAGATCATTCAGGAGGTTCTGACAGGAACAGCATGGATTCCGTGGATAGCTG
TTGCAGTCTCAAGAAGACTGAGAGCTTCCAAAATGCCCAGGCAGGCTCCAACCCTAAGAAGGTCGACCTCATCAT
CTGGGAGATCGAGGTGCCAAAGCACTTAGTCGGTCGGCTAATTGGCAAGCAGGGGCGCTATGTGAGTTTTCTGAA
GCAAACATCTGGTGCCAAGATCTACATTTCAACCCTGCCTTACACCCAGAGCGTCCAGATCTGCCACATAGAAGG
CTCTCAACATCATGTAGACAAAGCGCTGAACTTGATTGGGAAGAAGTTCAAAGAGCTGAACCTCACCAATATCTA
CGCTCCCCCATTGCCTTCACTGGCACTGCCTTCTCTGCCGATGACATCCTGGCTCATGCTGCCTGATGGCATCAC
CGTGGAGGTCATTGTGGTCAACCAGGTCAATGCCGGGCACCTGTTCGTGCAGCAGCACACACACCCTACCTTCCA
CGCGCTGCGCAGCCTCGACCAGCAGATGTACCTCTGTTACTCTCAGCCTGGAATCCCCACCTTGCCCACCCCAGT
GGAAATAACGGTCATCTGTGCCGCCCCTGGTGCGGACGGGGCCTGGTGGCGAGCCCAAGTGGTTGCCTCCTACGA
GGAGACCAACGAAGTGGAGATTCGATACGTGGACTACGGCGGATATAAGAGGGTGAAAGTAGACGTGCTCCGGCA
AATCAGGTCTGACTTTGTCACCCTGCCGTTTCAGGGAGCAGAAGTCCTTCTGGACAGTGTGATGCCCCTGTCAGA
CGATGACCAGTTTTCACCGGAAGCAGATGCCGCCATGAGCGAGATGACGGGGAATACAGCACTGCTTGCTCAGGT
GACAAGTTACAGTCCAACTGGTCTTCCTCTGATTCAGCTGTGGAGTGTGGTTGGAGATGAAGTGGTGTTGATAAA
CCGGTCCCTGGTGGAGCGAGGCCTTGCCCAGTGGGTAGACAGCTACTACACAAGCCTTTGACCCCCATGCTGCTT
CCTGAGAGTCTTTTTTTGCACTGTTGAAATTGGGCTTGGCACTCAAGTCAAAGATGAACATCGGAATAACAAACA
TTGTCCTCTCCAGAAAGTCCTTTCTTTCTCCATACTGTAGTCCTATTGAGAAGACATTTCGTCTCTGAGAAAAAA
GGATGGAACTATGGGTTCTCTTCGCAAAGCCAAAGGATAGTGTTTAACAAGCCAGCTGGCTTATGCTGGTTCTCA
GCTGTTTAAAAAAAAAAAAAAAAAGGAATAGAAACAGTTTCAACCAGATTGTCCTATTCCCCCTGTTCCATTCCC
CTCTTCTTCCTTCTATCTCCTTCCCCGGCAAAAACCAAACAAACTGGCAGACAGGCCAGGGATGTATGTTGCTTG
CTTGAGAGGGTTTCTTTTACTTCAAAATCTTTCTTCAGGGAGCAAGACATGAACTGACTAATTGGTATCCACTAC
TTGTACAGCTTACATAAATGAGTTGATGATATTTAACCAGTTTTTATAAACTTCATTTAGGTCTCTAAACACAGA
CTTTTTAAATTGCAACTGTAAATATGAAATGGTCATCACATCTGACCTTGGTCAGTGGGGAGGGGAACTGGTATC
CTGCCAAGCCTGGTTGTAATTTGTAACCATTTTCTATTTGTGCAAACTCTGTAAATATGTGTTTAAACAAATGTA
ATATTTTGTACAAGATACACTGGAGAACAAAGGGAACTCAAGATTCTTCCAGCCACATGTCACCTGTAGGTAGAA

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FIGURE 3491B

GTAAACTCTGCAGTGCAGCTTCTGCTCTTGGCCCCTCTGGCCAGGGCCCCTGTGGCTTCCTGCACACTGGACAGG
TGACTGTATGGTAGAGACTGTGATCTGGGAACTTTTTGCTGTACAAATCTGTTTAAAAAAAAAAAAAAAGTAACTC
ATTGAATTAA

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FIGURE 3492A

CAAGTGCCGTCGCCGCGCCCCTTCCCCCTCCCGCCTCCCCGGCCCCCTCCCCGGAACCGGCGGTCGAGCTACGGT
CGCGGAGCAGTGGAACCGNAGACTGCCCCGCGGAGCCGCCGGTATGAGCGCCCCTCGCCACCCCGTGTCCCAGGC
CCGGCCTTTCTGACAAGAGCTAGACTTCGGGCTCCTTGAGGATATTCAGTTTTGTATGTTTGAATATCCTCTCAC
CATGTTCAGCATAAAGTACCATTCTTAATGATTATCCTCAACAAGACAGGTGTGAGAGGGTTGCTGTTGTATTGC
AATC**ATG**GTGCAGAAATACCAGTCCCCAGTGAGGGTGTACAAATACCCCTTTGAATTAATTATGGCTGCCTATGA
AAGGAGGTTCCCTACATGTCCTTTGATTCCGATGTTCGTGGGCAGTGACACTGTGAATGAATTCAAGAGCGAAGA
TGGGGCTATTCATGTCATTGAAAGGCGCTGCAAGCTGGATGTAGATGCACCCAGACTGCTGAAGAAGATTGCAGG
AGTTGATTATGTTTATTTTGTCCAGAAAAACTCACTGAATTCTCGGGAACGTACTTTGCACATTGAGGCTTATAA
TGAAACGTTTTCCAATCGGGTCATCATTAATGAGCATTGCTGCTACACCGTTCACCCTGAAAATGAAGATTGGAC
CTGTTTTGAACAGTCTGCAAGTTTAGATATTAAATCTTTCTTTGGTTTTGAAAGTACAGTGGAAAAAATTGCAAT
GAAACAATATACCAGCAACATTAAAAAAGGAAAGGAAATCATCGAATACTACCTTCGCCAATTAGAAGAAGAAGG
CATAACCTTTGTGCCCCGTTGGAGTCCGCCTTCCATCACGACCTCTTCAGAGACATCTTCATCATCCTCCAAGAA
ACAAGCAGCGTCCATGGCCGTCGTCATCCCAGAAGCTGCCCTCAAGGAGGGGCTGAGTGGTGATGCCCTCAGCAG
CCCCAGCGCACCTGAGCCCGTGGTGGGCACCCCTGACGACAAACTAGATGCCGACTACATCAAGAGATACCTGGG
CGATTTGACTCCGCTGCAGGAGAGCTGCCTCATTAGACTTCGCCAGTGGCTCCAGGAGACCCACAAGGGCAAAAT
TCCAAAAGATGAGCATATTCTTCGGTTCCTCCGTGCACGGGATTTTAATATTGACAAAGCCAGAGAGATCATGTG
TCAGTCTTTGACGTGGAGAAAGCAGCATCAGGTAGACTACATTCTTGAAACCTGGACCCCTCCTCAGGTCCTTCA
GGATTACTACGCGGGAGGCTGGCATCATCACGACAAAGATGGGCGGCCCCTCTACGTGCTCAGGCTGGGGCAGAT
GGACACCAAAGGCTTGGTGAGAGCGCTCGGGGAGGAAGCCCTGCTGAGATACGTTCTCTCCATAAATGAAGAAGG
GCTAAGGCGATGCGAAGAGAATACAAAAGTCTTTGGTCGGCCTATCAGCTCATGGACCTGCCTGGTGGACTTGGA
AGGGCTGAACATGCGCCACTTGTGGAGACCTGGTGTGAAAGCGCTGCTGCGGATCATCGAGGTGGTGGAGGCCAA
CTACCCTGAGACACTGGGCCGCCTTCTCATCCTGCGGGCGCCCAGGGTATTTCCTGTGCTCTGGACGCTGGTTAG
TCCGTTCATTGATGACAACACCAGAAGGAAGTTCCTCATTTATGCAGGAAATGACTACCAGGGTCCTGGAGGCCT
GCTGGATTACATCGACAAAGAGATTATTCCAGATTTCCTGAGTGGGGAGTGCATGTGCGAAGTGCCAGAGGGTGG
ACTGGTCCCCAAATCTCTGTACCGGACTGCAGAGGAGCTGGAGAACGAAGACCTGAAGCTCTGGACTGAGACCAT
CTACCAGTCTGCAAGCGTCTTCAAAGGAGCCCCACATGAGATTCTCATTCAGATTGTGGATGCCTCGTCAGTCAT
CACTTGGGATTTCGACGTGTGCAAAGGGGACATTGTGTTTAACATCTATCACTCCAAGAGGTCGCCACAACCACC
CAAAAAGGACTCCCTGGGAGCCCACAGCATCACCTCTCCGGGTGGGAACAATGTGCAGCTCATAGACAAAGTCTG
GCAGCTGGGCCGCGACTACAGCATGGTGGAGTCGCCTCTGATCTGCAAAGAAGGAGAAAGCGTGCAGGGTTCCCA
TGTGACCAGGTGGCCGGGCTTCTACATCCTGCAGTGGAAATTCCACAGCATGCCTGCGTGCGCCGCCAGCAGCCT
TCCCCGGGTGGACGACGTGCTTGCGTCCCTGCAGGTCTCTTCGCACAAGTGTAAAGTGATGTACTACACCGAGGT
GATCGGCTCGGAGGATTTCAGAGGTTCCATGACGAGCCTGGAGTCCAGCCACAGCGGCTTCTCCCAGCTGAGTGC
CGCCACCACCTCCTCCAGCCAGTCCCACTCCAGCTCCATGATCTCCAGG**TAG**TGCCGCGCTGCCTGCACCTAGTG
TGCAGAGGGGACGGCCGCCCCTCCTCGGACAGCCAGCTGCACCCGCCCACCCAGCGGCGACATTGTACAGACTCC
TCTCACCTCTAGATAGCAAATAGCTCTCAGATGGTAAACGTAGTCGTTTGATCCCAAAACTACCTTGGCAGGTAG
TTTTAACTCTGATCCTAACTTAACTCAATAGCCATAGATTTTGTATACGTTGTGCACAAAATCCAACCAGAGCGC
AAGGGCTCTCTTGAAAGAAAAGTAGTTTCTGTACCAATTAAAGGATTGACGTGGTCTCAGATATTGATGCAAAAA
ATTTTTCCAACGAACTCCGCATTGTCCATTAGTGAATGAATTCCTGTGACATCCTCCAGAGATGGCCCCTCCTCA
CCTGGGACGGAAGCTGCCAGCTCGCTTCCCCCAAGCTGCCTCATGGCCCGCACGCCGCCTCACGGCCCCCATGCT
TCCCGCCAGTCAAGATGGTCTGTGGACTTAGGGCCAGCCCTTGAGGTCCTTATCCTCTGAGGATTCAGAGGTTGC
CTGCGGAGTACCTTGTCCCAGGGCCAGACACACCCACACCACCCACTGTCCTGCAGTGGGGCCGGGGGCTCAGGA
GGGGCTCTCAGGGACTCCTGGTGACTCCAGGAAAATGCTGCCATCGTTAAACATTACTTTCTCTTTCCTCCTTTT
CAAATCTTTTTGATACTTTTTAGAGCAGGATTTTTCTGTATGTGAACTTGGGTGGGGGGGTTCTTCCCGTTTCCT
TCCGTGCGTCGCCCCTCTCACCTGCAGTCAGCTCCCAGCCCAGTGTAGGCCATCTCCTCTGTGCCCTCTGGTGGC
TCATTGTCCTCAGAGCCCAGACAGTTCCAGCCACTAGGAGGCCGTCTTGGAACCAGCAAGTCGCATTTGCCACTT
GACACTGTCCATGGGGTTTTATTAGTAGCTAAGCAGCAGCTCTCGCATCCACTTCAGGGTGGCGTGTGGCATGTA
GGAGTCCTGCTTCTTTGTACATGGGAATTGTGGACTCATGCGTGTGTGTGTGTGCATGTGCTGTGTGTGTGCATG
TGTGCATGACGGTGGGGGTGCTGGGGGGACGGGGTGAGTGGAAACTTAGTTTGAGTAATGAAGGAATCTTCACAG

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FIGURE 3492B

AAGCAAATCAGAATATGGGATTTGTTTGCCTTTTACATTTTGTTTAATTCCTGATTTTAAAGCCTGCTCTATCTG
GTACAGGCCCTTATTTTTTCAGCTTTTTATGGGAAAAGCAGGTTATTTGAGAATCTGTCCAGAAGTTGCATAGGG
GATGGCCTCCACGATAAGGACATGCAACACGTGTTTCTGTGTGCAGCAGAGGCCGTGTTTTTCATGCCAAACCCC
ACGCGGCTGTCAACTGTGTGCGTGGTAGGCATGGAGATCCTGGTTGTGCCGTCTCAGCTCCGCTCTGAAGGCACT
GTGTGGGTGCTGCGTGACTGGAGAGCTGTGTGGAGGCCATGTGTGCCCCGTGCAGGGATCAGGAGGGCGGGGGAG
GGACCGAGCAGCCCTCTTGCCCGGTCGGGTCAGCCCTAGTGGCTGCCTGCACACTGTAGACGTCCCAGGGCCTGT
GCTGTGATCACCTGCCTTTGGACCACATTTGTGTTTGCTCTTAGAGATCGAGCTCCTCAGTGGTACCTGAAGCCT
TTGCTTCCGGAAAGCGCGGTAGGGTTCGTAGGTAGGGCTAGTAGGTAGGGTTAGTAGGTAGGGCTAGTAGGTAGG
GCTAGTAGGTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGGCTGGTAGGTAGGGTTAGTAGGTAGGGCTAGTAGGT
AGGGTTAGTAGGTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGGCTAGTAGGTAGGGTTAGTA
GGTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGGTTAGGTAGGGCTAGTAGGTAGGGTTAGTAGGTAGGGCTAGTA
GGTAGGGTTCGTAGGTAGGGTTAGTAGGTAGGGCTAGTAGGTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGGCTA
GTAGGTAGGGTTAGTAGGTAGGGCTAGTAGGTAGGGCTAGTAGGTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGG
TTCGTAGGTAGGGTTCGTAGGTAGGGTTAGTAGGTAGGGTTCGTAGGTAGGGCTAGTAGGTAGGGCTAGTAGGTA
GGGCTAGTAGGTAGGGTTAGTAGGTAGGGCTAGTAGGTAGGGCTAGTAGGTAGGGCTAGTAGGTAGGGCTAGTAG
GTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGGTTCGTAGGTAGGGTTAGTAGCGCGTCTGTGCTGCTTCCACCTG
GTGCTTCCTGTTCCCAAATCACAAGGGCCTGAAGGTGGTCCCTGCTTTCTCTTTCTCTTTCTCTGTGTCTCAGAT
GGCGATTTTGCTGACAGCTGCCAAGAAAATGCTTCACTCAACAGTCCTCATGTGCCCAGAGATGTTTATAGAACT
GTTTGAATTGCAGCCATCCCCTGCCCCCTCCCAGGCTGAAGATCTGTTCTTTTTAAGTTGATTCGGGAGTGGCAT
TCTTTTATACCCAAAGACTGTAGTGCATCTTGAAGAGCTCAAAGCACATGACCGCACAAATGCTTACAGGGTTTC
CTCCCGAGTAATCCAATCTCACTCCCCTTGTAAGGGAATTCTGGGGCAGCTATGGTTTGAGTATGCAGTTTGCAT
CGTGTTTCTACCTTTAGTACCTTGCCACTCTTTTAAAACGCTGCTGTCATTTCCCATTTCTTAGTACTAATGATT
CTTTGATTCTCCCTCTATTATGTCTTAATTCACTTTCCTTCCTAAATTTGTTATTTGCATATCAAATTCTGTAAA
TGTTTTGTAAACATATTACCTCACTTGGTAATACAATACTGATAGTCTTTAAAAGATTTTTTTATTGTTATCAAT
AATAAATGTGAACTATTTAAAG

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FIGURE 3493

AGGTCACCATGGCTGTTATTGGCTCCCTTGCTGTCCCCAGCTGTTCCCCAGGTCACCTCCCCACCTTGCTGCCTG
TGTCCAGAAGGCGTGCACCGGTTCCAGTGGATCAGAAACCTGGTTCCAGAATTTGGAGTCTCCAGTTCTCACGTT
AGGGTGCTTTCTTCCCCGGCAGAGTTTTTCGAGCTC**ATG**AAGGGGCAGATAAGAGTAGCCAAGAGGCGGGTCGTG
ATGGCATCCCTCTACCTGGGGACAGGTCCTTTGGAACAGGAGCTGGTGGACTGCCTGGAAAGTACTCTAGAAAAG
TCACTCCAAGCAAAGTTTCCTTCAAATCTCAAGGTCTCCATTCTCTTAGACTTCACGCGGGGCTCACGAGGCCGG
AAGAACTCCCGCACAATGCTGCTCCCACTCCTGCGGAGGTTCCCAGAGCAGGTCCGAGTCTCCCTCTTTCACACG
CCGCACCTCCGTGGGCTGCTTCGGCTCCTCATCCCTGAGCGCTTCAACGAGACCATCGGCCTCCAGCACATTAAG
GTGTACCTCTTCGACAACAGCGTCATCTTGAGCGGTGCAAACCTGAGTGACTCCTACTTCACCAACCGCCAGGAC
CGCTACGTGTTCCTGCAGGACTGTGCGGAGATTGCCGACTTCTTCACGGAGCTGGTGGACGCGGTGGGGGATGTG
TCCCTGCAGCTGCAGGGGGACGACACGGTGCAGGTGGTGGATGGGATGGTGCATCCTTACAAAGGGGACCGGGCC
GAGTACTGCAAGGCAGCCAATAAGAGGGTCATGGATGTGATCAACTCAGCCAGGACCCGCCAGCAGATGCTGCAT
GCCCAGACCTTCCACAGCAACTCTCTTTTGACCCAGGAAGATGCAGCAGCTGCTGGGGATCGCAGACCAGCCCCT
GACACCTGGATTTATCCGCTGATTCAGATGAAGCCCTTCGAGATTCAAATCGATGAGATTGTCACTGAGACCCTG
TTGACTGAGGCGGAGCGCGGGGCAAAGGTCTACCTCACCACTGGCTATTTCAACCTGACCCAGGCCTACATGGAC
CTGGTCTTGGGCACTCGGGCTGAGTACCAGATCCTGCTGGCCTCACCAGAGGTGAATGGCTTCTTTGGGGCCAAG
GGGGTGGCCGGCGCCATCCCAGCGGCCTATGTGCACATCGAGCGACAGTTCTTCAGTGAGGTGTGCAGCCTGGGA
CAGCAGGAGCGGGTCCAGCTTCAGGAGTACTGGCGGAGGGGCTGGACGTTCCACGCCAAAGGCCTCTGGCTGTAC
CTGGCAGGGAGCAGCCTGCCCTGTCTCACGCTGATTGGCTCTCCTAATTTTGGGTACAGGTCAGTTCACCGGGAC
CTGGAGGCCCAGATTGCGATCGTGACGGAGAACCAGGCCCTGCAGCAGCAGCTTCACCAGGAGCAAGAGCAGCTC
TACCTGAGGTCAGGTGTGGTGTCCTCTGCCACCTTCGAGCAGCCGAGTCGCCAGGTGAAGCTGTGGGTGAAGATG
GTGACTCCACTGATCAAGAACTTCTTC**TGA**GGACAGACAGGAATGGCCTTGATGAAGATGACAGGCATGGCCGGG
GTCAGCTCTTTCAGCCGCGCTTCAGCGATGACTCCAGTCTGGGTGTCCCAGCGAGCCCCTGCAGGGACAGTATGG
CTGAGGGTCAGGTGTGCTGCCAGTAAGTGAGGGAGGGGCTGGCAGGAAGGGTGGGGTCCTCACACTCCCCGCCCT
CTGCAGAGCTGGGCTCTACCCCAAAAGGCTTCAGGCCAGCTGCCACGGCTGGAAGCAGAGGCCTTCGTAGGTGAT
GGCCTGCATGTTGTAACTACCCCGTCCCGCTGGGCTCAAGGAACAGCTCAGCTAAAGCCCTCGGGTTCCATCCGT
TTAAATCTGTGGCATTTTCAGAGCCTCATCTGTCAGCCTTAATGTCAGTGGCAGGAAGTCATAACTCCAGCTAAA
AATTACAGAGTAAAGTTCCCTGATTCTTAATGTGTAATGTCTGCCCTATGTGTACATACACAATATAATTATACA
TCTGTGCATAT

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FIGURE 3494A

AAGGCGGCCAAGATCATGATGGGCAAGGTGGACACCTTCCTAGACTCCCTGAAGAAGTTCGACAAGGAGCACATC
CCTGAGGCCTGCCTGAAGGCCTTCAAGCCCTACCAAGGCAACCCGACGTTCGACCCCGAGTTCATCCGCTCCAAG
TCCACGGCCGCCGCCGGCCTGTGCTCCTGGTGCATCAACATCGTCCGCTTCTACGAGGTCTACTGCGACGTGGCG
CCCAAGAGGCAGGCACTGGAGGAGGCTAATGCAGAGCTGGCAGAGGCACAAGAGAAGCTGTCCCGGATCAAAAAC
AAGATTGCCGAACTTAACGCCAACCTGAGCAACCTAACCTCAGCGTTTGAAAAAGCAACAGCTGAGAAAATCAAG
TGTCAGCAAGAGGCCGATGCCACGAACAGGGTGATCTTACTGGCGAACAGGCTGGTCGGGGGATTAGCATCGGAA
AACATCCGCTGGGCTGAGTCTGTGGAGAACTTCAGGAGCCAGGGGGTCACGCTGTGTGGGGACGTCCTGCTCATC
TCTGCCTTCGTGTCCTACGTGGGCTACTTCACCAAGAAATACCGGAATGAGCTGATGGAGAAATTCTGGATCCCT
TACATACATAACTTAAAGGTCCCCATCCCGATCACGAATGGCCTGGATCCCTTGAGCCTGCTGACAGATGACGCG
GACGTGGCCACCTGGAACAACCAGGGCCTCCCCAGCGACCGCATGTCCACCGAGAATGCCACCATCCTGGGCAAC
ACCGAGCGGTGGCCGCTGATCGTGGACGCCCAGCTCCAAGGAATCAAGTGGATCAAAAACAAATACAGGAGTGAA
CTGAAAGCCATCCGCCTGGGACAGAAGAGCTACCTGGATGTCATCGAGCAGGCCATCTCGGAAGGGGACACCTTG
CTCATTGAGAACATCGGCGAAACCGTGGACCCCGTGCTGGACCCTCTACTGGGCAGGAACACGATTAAAAAGGGA
AAGTACATTAAGATCGGTGACAAGGAGGTGGAGTACCACCCCAAGTTCCGCCTGATCCTACACACCAAGTACTTC
AACCCACACTACAAGCCAGAGATGCAGGCTCAGTGCACCCTCATCAACTTCCTGGTCACCAGGGATGGACTCGAG
GACCAACTCTTGGCCGCTGTGGTGGCCAAAGAGCGCCCAGATCTGGAACAGCTGAAGGCAAACCTCACCAAGTCT
CAAAACGAATTTAAGATTGTTCTGAAAGAGCTGGAAGATTCGCTCCTGGCCCGTCTGTCGGCTGCGTCGGGGAAC
TTTCTGGGAGACACGGCCTTGGTGGAGAATCTGGAGACCACCAAGCACACAGCCAGCGAGATCGAGGAGAAGGTG
GTGGAGGCAAAAATCACAGAAGTTAAAATCAACGAAGCGAGAGAGAACTACCGCCCGGCTGCGGAGAGGGCATCT
CTGCTCTACTTCATACTGAACGATCTCAACAAAATCAACCCCGTCTACCAGTTCTCCCTCAAGGCCTTCAACGTG
GTGTTTGAGAAAGCCATCCAGAGGACCACCCCTGCCAACGAGGTGAAGCAGCGGGTGATCAACCTGACGGACGAG
ATCACCTACTCCGTCTACATGTACACGGCCCGGGGACTCTTCGAGAGGGACAAACTCATTTTCCTGGCACAAGTT
ACGTTTCAGGTCCTGTCCATGAAGAAGGAGCTGAACCCAGTGGAGCTGGATTTCCTCCTGCGGTTCCCTTTTAAG
GCCGGAGTGGTCTCACCAGTGGACTTCCTCCAGCATCAAGGCTGGGGCGGGATCAAGGCCCTCTCGGAGATGGAT
GAGTTCAAAAATCTGGACAGTGACATCGAAGGATCTGCCAAGCGCTGGAAAAAGCTGGTGGAGTCGGAAGCCCCC
GAGAAGGAGATCTTCCCCAAGGAGTGGAAGAACAAGACGGCCCTGCAGAAGCTGTGCATGGTGCGCTGCCTGCGG
CCAGATCGCATGACCTACGCTATCAAGAACTTCGTGGAGGAAAAGATGGGCAGCAAGTTCGTGGAAGGCCGGAGT
GTTGAGTTTTCTAAGTCCTACGAGGAGAGCAGCCCCTCCACGTCAATCTTCTTCATCCTCTCCCCGGGGGTTGAC
CCCTTGAAAGACGTGGAAGCCCTGGGAAAAAAACTAGGGTTTACCATAGACAATGGAAAACTCCATAATGTGTCC
CTGGGGCAGGGACAAGAGGTGGTGGCTGAGAACGCCCTGGACGTGGCTGCAGAGAAAGGACACTGGGTCATTCTG
CAGAATATCCACCTGGTGGCCCGGTGGCTGGGAACACTGGACAAGAAGCTGGAGCACTACAGCACGGGCAGCCAT
GAGGACTACCGGGTGTTCATCAGCGCGGAGCCTGCCCCCAGCCCCGAGACCCACATCATCCCCCAGGGCATTCTG
GAGAACGCCATCAAGATCACCAACGAGCCCCCCCACGGGCATGCACGCCAACTTGCACAAGGCCCTGGACCTGTTC
ACCCAGGACACCCTGGAGATGTGCACCAAGGAGATGGAGTTCAAGTGCATGCTCTTCGCCCTGTGCTACTTCCAC
GCTGTGGTGGCAGAGAGGCGCAAGTTCGGCGCCCAGGGCTGGAACCGGTCGTACCCCTTCAACAACGGGGACCTC
ACCATCTCCATCAACGTGCTCTACAACTACCTGGAGGCCAACCCCAAGGTGCCCTGGGACGATCTCCGCTACCTT
TTTGGTGAAATCATGTATGGCGGCCACATCACAGATGACTGGGACCGTCGGCTGTGCAGGACCTACCTGGCTGAA
TACATCCGGACGGAGATGCTGGAGGGAGACGTCCTGCTGGCCCCCGGCTTTCAGATCCCCCCCAACCTGGACTAC
AAGGGTTACCACGAATACATCGATGAGAACCTGCCCCCTGAGAGTCCCTATCTGTATGGCCTGCACCCCAACGCA
GAGATTGGCTTTCTGACGGTCACCTCAGAGAAGCTGTTCCGCACTGTCCTGGAAATGCAGCCAAAAGAGACGGAC
TCGGGGGCAGGCACGGGAGTGTCCCGCGAGGAGAAGGTGAAGGCCGTGCTGGACGACATCCTGGAGAAGATTCCG
GAGACTTTCAACATGGCTGAGATCATGGCAAAGGCAGCGGAAAAGACCCCCTACGTGGTAGTCGCCTTTCAAGAA
TGTGAAAGAATGAACATCCTGACCAACGAAATGCGCCGTTCGCTCAAGGAGCTGAACCTGGGGCTGAAGGGAGAA
CTGACCATCACGACCGACGTGGAAGATCTGTCCACGGCTCTCTTCTATGACACCGTGCCTGATACGTGGGTGGCC
CGGGCCTACCCCTCCATGATGGGCCTGGCGGCCTGGTACGCAGACCTGCTGCTCCGCATCAGGGAACTCGAGGCC
TGGACGACAGACTTTGCCCTGCCCACCACCGTGTGGCTGGCCGGCTTCTTCAACCCCCAGTCGTTCCTCACGGCC
ATCATGCAGTCCATGGCCAGGAAGAACGAGTGGCCCCTGGACAAGATGTGTCTGTCTGTCGAGGTGACCAAGAAA
AACCGAGAGGACATGACCGCTCCTCCGCGAGAGGGCTCCTACGTGTACGGACTCTTCATGGAAGGGGCTCGCTGG

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FIGURE 3494B

GACACCCAGACTGGAGTCATCGCTGAAGCGCGGCTGAAAGAGCTGACCCCGGCCATGCCTGTCATCTTCATCAAG
GCCATTCCTGTGGACCGCATGGAGACCAAGAACATCTATGAGTGTCCCGTGTACAAAACACGCATCCGCGGCCCC
ACCTATGTCTGGACCTTTAACTTGAAGACCAAAGAGAAGGCAGCGAAGTGGATCCTGGCAGCCGTGGCGCTGCTC
CTACAGGTTTAGCTCGCTCCTGCCTCACAGCCCACACTCCCTGGGGCTGGACCACAACTCAGCCCTTCACCTGTG
CACCTGTGACTTATTCTTTACAGGAACTGGTGGTGGTTTTTCGTTCTCTTAAATAATCAGGTGCTTTGTAACCAA
GCACATCGGAACCAGAGGGTGGAGGTTGGTGTGGAAGAGGTGGGGCAGATTAAAGCCAGTGGAGCCAC

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FIGURE 3495

AGTCGAACCACAACATTCGCCGGGCGGGCGGCGGCGGAGCGGGCGGCGGAGCGGCGGCAGCAGCGGTGAGCGCGA
GCCCCGGAGCCCCGGGCGGCCGGCCTCCCGCGCCCGCGCAGCCCCGCGTCTGCGTCCGGCCGGAGACGCCGGGCC
CCGCGCCGCGCCGCGCCATGTCGGTGAACATGGACGAGCTGCGGCACCAGGTCATGATCAACCAGTTCGTGCTGG
CCGCGGGCTGCGCGGCCGACCAGGCGAAGCAGTTGCTGCAGGCGGCCCACTGGCAGTTCGAGACCGCGCTGAGCA
CGTTCTTCCAAGAAACCAACATTCCCAACAGCCACCACCACCACCAGATGATGTGCACTCCCAGCAACACCCCTG
CCACGCCGCCCAACTTCCCCGATGCGCTGGCCATGTTCTCCAAGCTCCGCGCCTCCGAGGGCCTGCAGAGCAGCA
ACAGCCCCATGACAGCCGCAGCCTGCTCCCCACCTGCAAACTTCAGCCCCTTCTGGGCCTCGTCCCCGCCCAGCC
ACCAGGCGCCCTGGATCCCGCCCTCCTCCCCCACCACCTTCCACCACCTCCACCGCCCACAGCCCACGTGGCCCC
CAGGAGCACAGCAGGGGGGCGCCCAGCAGAAAGCCATGGCGGCCATGGACGGCCAGAGATGAGACTGGACGCCGC
CGGGCGCTGGGCTGGAGCTGGGGGCAGCCCAGGGTTGTGGGGACACAGGAGGGCCAGGGAGGGGGGAGCCGGGGA
GGGCAGGGGGTTTCCCGAAGATCGCACTGGAAGATTTTATAAAAGAATTTTTGTGGGTCGGGGGGACAGTAAACT
TCCTGGGCCACGTGGGTCCTTCAGGAGTTTTTCAGGCAAGTTTTTCCTCTGTTTTTAATATATAACTATAATATA
TATGAATAGATAAATATAACTAATGTGCGTGAGAATGGGCCTGGCACACCTGGGGTGCTCGGGGGTAGGGCTGCC
ATGCTGCAGAGCTGATGGAGTGATGTTGTGGGCACAAGGCATCTGTCAGCTGCCTCCTTTAACAGCCATGCCTTC
TGGAATCTGGAAGAGGACACCACTCCTGCAGTCACTGGGCAGCCACATAGCAGCTGCAGGTCCCAGGAGGGCCTG
AGGTCAAAGCTGTGGAAGGCCCTCTTGGTATCAGGGCTCTCTCCCCATGGCCTCTTCCCCACCTCTGATTGCTGG
TTGTGGCCCCATAGCTCATCACCCCTGTCTCCTGCTGAATGTGCAGGGCTGATGTGGCACTGAGGAGCTGACTTT
GGTCAAAGGCCAGGCTCTGCCCAGCAGGGGACTTGACTGCCCTGGGCGCCCTGCCCCTCCCGCTGCGTGTCCAGG
TCCAAAGTGGAGAGCCTGCCTTTGGGTTTAGTTCCCGAATCAGAATCCCATCTCACCAGGGCGAAATTTTAATTT
AAAAACTTAAAAAGAGACTTTTCT

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FIGURE 3496

CAGATGTAGTTTTTTCCGCACGTGCACGCCTTCCCTCCTCCCCGCCCTCAGGGTCCACGGCCACCATGGCATATT
AGGGGCAGCAGTGCCTGCGGCAGCATTGGCCTTTGCAGCGGCGGCAGCAGCACCAGGCTCTGCAGCGGCACCCCC
CAGCGGCTTAAGCCATGGCGCTTCCCACGGCATTCAGCAGCAGCATTGCTGTAACCGACAAAGACACCTTCGAAT
TAAGCACATTACTCGATTCCAGCAAAGCACCGCAACATGACCGAAATGAGCTTCCTGAGCAACGAGGTGTTGGTG
GGGGACTTGATGTCCCCCTTCGACCAGTCGGGTTTGGGGGCTGAAGAAAGCATAGGTCTCTTAGATGACTACGTG
GAGGTGGCCAAGCACTTCAAACCTCATGGGTTCTCCAGCGACAAGGCTAAGGCGGGCTCCTCCGAATGGCTGACT
GTGGATGGGTTGGTCAGTCCCTCCAACAACAGCAAGGAGGATGCCTTCTCTGGGACACATTGGATGTTGGAGAAA
ATGGATTTGAAGGAGTTCGACTTTGGTGCCCTGTTGGGTATAGATGACCTGGAAACCATGCCAGATGACCTTTTG
ACCACGTTGGATGACACTTGTAATCTCTTTGCCCCCCTAGTCCAGGAGACTAATAAGGTGCCCCCCCCAGATGGTG
AACCCAATTGGCCATCTCCCAGAAAGTTTAACAAAACCCGACCAGGTTGCCCCCTTCACCTTCTTGCAACTTCTT
CCCCTTTCCCCAGGGGTCCAGTCCTCCACTCCAGATCATTCCTTTAGTTTAGAGCTGGGCAGTGAAGTGGATATC
ACTGAAGAAGATAGGAAGCCGGACTCCACTGCTTACGTTGCCATGATCCCTCAGTGCATAAAGGAGGAAGACACC
CCTTCAGATAATGATAGTGGCATCTGTATGAGCCCAGAGTCCTATCTGGGGTCTCCTCAGCATAGCCCCTCTACC
AGGGGCTCTCCAAATAGGAGCCTCCCATCTCCAGGTGTTCTCTGTGGGTCTGCCCACCCCAAACCTTACGATCCT
CCTGGAGAGAAGATGGTAGCAGCAAAAGTAAAGGGTGAGAAACTGGATAAGAAGCTGAAAAAAATGGAGCAAAAC
AAGACAGCAGCCACTAGGTACCGCCAGAAGAAGAGGGCGGAGCAGGAGGCTCTCACTGGCGAGTGCAAAGAGCTG
GAAAAGAAGAACGAGGCTCTAAAAGAGAGGGCAGATTCCCTGGCCAAGGAGATCCAGTACCTGAAAGATTTGATA
GAAGAGGTCCGCAAGGCAAGGGGGAAGAAAAGGGTCCCCTAGTTGAGGGTAGGTCAGGAGTGTCAACGTGCTTGT
ACATAGAGTGTCTGCTGTAGCTGTGTGTTCCAATAAATTATTTTGTAGGG

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FIGURE 3497

CGAGGATCCGCTCGGGAGCCTCCCCTGGCCAGGAGCAGGGGATTAGTCTGCCCCGCGACCGGCCCCAGCCACGAC
GCGGACATCGCCCCCTCTGTCTGGGCCGCTGTCACTCACGCGCCAAAGGGCCACGGAGAAAGAAGGGGCGGGCCG
GGGCGGGCCGGGCGAGCGGAGGCGGGGACTTGCGCCGTCCTGAGGCTGCCTCCTAGGGTCCGGCCGGCGCTGGAG
CTGCGGATTTAGATTGTCACTGCCACCTCGGTCGGTGCTTACTTCGCTGCCAGCTGGTCGTCGCCATGAACCCGG
ACCTGCGCAGGGAGCGGGATTCCGCCAGCTTCAACCCGGAGCTGCTTACACACATCCTGGACGGCAGCCCCGAGA
AAACCCGGCGCCGCCGAGAGATCGAGAACATGATCCTGAACGACCCAGACTTCCAGCATGAGGACTTGAACTTCC
TCACTCGCAGCCAGCGTTATGAGGTGGCTGTCAGGAAAAGTGCCATCATGGTGAAGAAGATGAGGGAGTTTGGCA
TCGCTGACCCTGATGAAATTATGTGGTTTAAAAATTTTGTGCACCGAGGGCGGCCTGAGCCTCTGGATCTTCACT
TGGGCATGTTCCTGCCCACCTTGCTTCACCAGGCAACTGCGGAGCAGCAGGAGCGCTTCTTCATGCCCGCCTGGA
ACTTGGAGATCATTGGCACTTATGCCCAGACAGAGATGGGTCATGGAACTCACCTTCGAGGCTTGGAAACCACAG
CCACGTATGACCCTGAAACCCAGGAGTTCATTCTCAACAGTCCTACTGTGACCTCCATTAAATGGTGGCCTGGTG
GGCGTAAGTGAATTTTTCAGCATTTATTGGATGTTTTGAAGTTGGAAAGACTTCAAATCATGCAATAGTTCTTGC
CCAGCTCATCACTAAGGGGAAATGCTATGGATTACATGCCTTTATCGTACCTATTCGTGAAATCGGGACCCATAA
GCCTTTGCCAGGAATTACCGTTGGTGACATCGGCCCCAAATTTGGTTATGATGAGATAGACAATGGCTACCTCAA
AATGGACAACCATCGTATTCCCAGAGAAAACATGCTGATGAAGTATGCCCAGGT

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FIGURE 3498

GCGATGATTCCCCCACAGGAGGCATCCGCTCGACGGCGGGAGATTGAGGACAAGCTGAAGCAGGAGGAGGAGACT
CTGTCCTTCATCCGAGACAGCCTGGAGAAGAGCGACCAGCTCACTAAGAACATGGTGTCTATCTTATCATCCTTT
GAGAGCCGCCTTATGAAGCTGGAGAACTCCATCATCCCTGTGCACAAGCAGACGGAGAATCTGCAGCGGCTGCAG
GAGAATGTTGAGAAGACGCTGTCCTGCCTGGACCATGTCATCAGCTACTACCATGTGGCCAGTGACACTGAGAAG
ATCATCAGAGAGGGCCCCACAGGTAGGCTGGAAGAGTACCTGGGAAGCATGGCCAAGATTCAGAAGGCAGTGGAG
TATTTCCAGGACAACAGCCCAGACAGCCCGGAACTCAACAAAGTGAAACTGCTCTTTGAGCGCGGGAAGGAGGCC
CTGGAGTCCGAATTTCGCAGCCTGATGACGCGGCACAGTAAGGTCGTCTCGCCCGTGCTCATCTTGGATCTGATC
AGTGGTGACGATGATCTGGAGGCCCAGGAGGACGTGACCCTGGAGCACCTGCCCGAGAGCGTGCTCCAGGATGTC
ATTCGCATCTCCCGCTGGCTGGTGGAATATGGCCGCAACCAAGATTTCATGAACGTCTACTACCAGATACGCTCC
AGCCAGCTGGACCGCTCCATCAAAGGACTGAAGGAGCATTTCCATAAGAGCAGTTCTTCCTCTGGGGTTCCCTAC
TCCCCTGCTATCCCCAACAAGAGGAAAGACACACCTACCAAGAAGCCAGTCAAGCGGCCAGGGACGATCCGTAAG
GCTCAGAACCTTCTGAAACAGTATTCCCAGCATGGTCTAGATGGGAAAAAGGGGGGCTCTAACCTCATTCCTCTG
GAAGGGCTTCTTCCCTGTACCCCAAGGGGCGGCCTGCCTGGCCCCTGGATAAACGCTGCTTGTGTTTGTGCGGCC
GACATCTCGCCAGGTCACGAGCATGATTTCCGAGTTAAGCACCTGTCCGAGGCCTTGAACGACAAGCACGGGCCG
CTGGCCGGGAGAGATGACATGCTGGACGTGGAGACCGATGCCTACATCCACTGCGTCAGTGCCTTCGTCAAGCTG
GCGCAGAGCGAGTACCAGCTGCTGGCCGACATCATCCCCGAGCACCACCAGAAGAAGACCTTCGACTCCCTGATA
CAGGATGCCCTGGATGGGCTGATGCTTGAAGGGGAGAACATCGTGTCTGCTGCCCGGAAGGCCATTGTGCGACAC
GACTTCTCCACGGTGCTCACCGTCTTCCCCATCCTGCGACACCTCAAGCAGACCAAGCCTGAGTTTGACCAGGTG
CTCCAGGGCACGGCTGCCAGCACAAAGAACAAGCTGCCTGGCCTCATCACATCCATGGAGACCATCGGTGCCAAA
GCGCTGGAGGACTTCGCAGACAACATCAAGAATGACCCGGACAAGGAGTACAACATGCCGAAGGACGGCACCGTA
CACGAGCTCACCAGCAATGCCATCCTCTTCCTGCAGCAGCTTTTGGACTTCCAGGAGACGGCAGGCGCCATGCTG
GCCTCCCAAGAGACCAGCTCTTCGGCCACCAGCTACAGCTCTGAGTTCAGCAAGCGGCTGCTAAGCACCTATATC
TGTAAAGTGCTGGGCAACCTGCAGTTGAACTTGCTGAGCAAGTCCAAGGTGTACGAGGACCCAGCTCTGAGCGCC
ATCTTCCTGCACAACAACTACAATTACATCCTCAAGTCCCTGGAGAAGTCTGAACTGATCCAGCTGGTGGCAGTG
ACACAGAAGACTGCTGAGCGCTCCTACCGGGAGCACATTGAGCAGCAGATCCAGACCTACCAGCGCAGCTGGTTA
AAGGTGACTGATTACATCGCAGAGAAGAATCTACCTGTGTTCCAGCCGGGAGTCAAGCTCCGGGACAAGGAGCGG
CAGATTATCAAGGAGCGTTTTAAGGGCTTCAATGATGGCCTCGAAGAACTGTGCAAAATCCAGAAGGCCTGGGCT
ATTCCAGACACAGAGCAGAGGGACAGGATTCGCCAGGCCCAGAAGACCATTGTCAAGGAGACCTACGGGGCCTTT
CTACAGAAGTTTGGCAGCGTGCCCTTCACCAAGAACCCGGAGAAGTACATCAAGTACGGGGTGGAGCAGGTGGGC
GACATGATCGATCGCCTTTTCGACACCTCTGCCTGAGCCTGCTGCTAGCCCTGCCTGGTTCCACCAGACTGGCGT
GTCATTGGACAGATAAACCAGTGTTAGCTTGCCTCTGGGCTGGGTGAGCTTGAAGTCCTCTGGGACAGAGACCTG
TCTCCACGCCTCCGGGAGCTGTGTCCCTGAGCCCCCTAGTCCTGGCTCCTGCTTTTTCCCCACAGCCCGTGTTCC
CAGCCGAACCAGCACTCTCCCGGAAGCCTGGGGTCCCTCCACACCTTGGCTTTTATGACCCTGATGGCTTCTGAA
ACAGGAAAAGAGAGAAGGAAGACAGAGGCCTGTGCCCACTGCTGCTCCATGTGTACCAAGAGCAGCAGGGCAGAA
GGGCCCTCCCTCCAGCCTAGGTCAGAGGTGGGGACAGAGAACTCCCCTACAGCCCAGAGATGTGGCAGGGCTCAG
AGAAGCAGCCAGAGCTCCTGGAGGAAAGGCAGTCGGGACTGACCCCCTCTCTTAAAACACATTCCCGCCCGCCCA
CAGGCCTGAGGTCTGGGACCTTTCCCTCCCAGGAGTCCCCTAGGTGGCTGGGGGAGGCAGGCTCACTGGCCATTT
TCCCTAGAGTCCAGCACACTGCAGGAGGCGTTCGGAGGAGGAGTTCCGCCCCACCCTCTACAGCCTTCCTCAGGC
CCCTGTCTCTGGCCCCCAGCCTCAGTGCCTCTTGGCCCAGGGCCAGGCAGTCGTGGTTGCAGAAGGAGCAATTAG
GCTGCCTGCCTGTGGGCTGGGAGACAGGGACAATGGGGAAAAGTTAAGGAGCAAAATGGGGGTTGGAAGCAAAAA
ATAGGGCCCCACCTATTTAGGACGAGATTGAAGACTGACCCTTGAGGCACACTTGCACTGGAGATGGGTTTATTT
CACGCTCTGTGCTTGTGTGCTAGCGGAGGGAGAGCTCAGGGTGGCTTAATCCAGAGGCCCTGTCATGGCCCGCCC
CCAGCCATGGGAAAGCAAACTTCATCCTAAGGTGTGCAGCCCAGGCCCTGCCCCTTTACAGTCTAGGCCGCCTGC
CATGGGGTGCAGCCTCTCCAGGGGCTGCGTCAGACTTGCACGCTGCCCACATCCAGATTCCTGCAAAGACGAATT
GGGTGCACAGCACCCCAACCACATACACGAGGAAGAAGATGCGGTCAGCAGTCTCAGGCCAGCTTCTCTGTGACC
CCTTTACTCCTCTGGAGGGCTCTGTGGGGAGAGATACAGGGAAAGGAGCTGTTCTTCAAGGTCCCCTCAACATGA
GCGGAAGAGCGAA

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FIGURE 3499

CTTTGGCGCGTGAGTGACAGCGGCCCAGACAGAGGGGGCGATGTCCGCGTCGTGGCTGGGGCCGGTCGCGGGGCA
GACTAATCCCCTGCTCCTGGCCAGGGGAGGCTCCCGAGCGGATCCTCGGGAAAGGGGCTCCGAAGGTCAAGAAAC
TGCCCTGCTGGGCGTCCGGGGAGTGGGAAAATAAAGCACTTTTTGTATCCCGCCCCTCCCCCGTCACGTGACCAC
GCGAGGCGGAAAGAAGAAATCCGAGGACCGGCGACGCCTAGAACAGGAGCCC**ATG**ATGCTGCCCAAACCTGGGAC
CTATTACCTCCCCTGGGAGGTTAGTGCAGGCCAAGTTCCTGATGGGAGCACGCTGAGAACATTTGGCAGGTTGTG
CCTCTATGACATGATTCAGTCCAGAGTAACACTGATGGCTCAGCACGGATCCGATCAGCACCAGGTTCTTGTCTG
TACCAAGTTGGTGGAGCCCTTCCACGCCCAGGTGGGCTCCCTGTACATCGTCCTCGGGGAGCTCCAGCATCAGCA
GGACAGAGGCTCCGTGGTGAAGGCGCGCGTGCTGACCTGTGTGGAGGGGATGAACCTGCCCTTGTTGGAACAAGC
CATCCGGGAGCAGAGACTGTACAAGCAGGAGCGGGGCGGCAGCCAG**TAG**GAAACAGCAGCCTAGCAACACCCTCA
CCTGCTTCAGAGCCCGAACCCTCTGGAGCTGCAGGAGCCCGGGAGAGCACAGACGCCTCCCCAGCGACGGCCTTG
TCTGGAGCTCGAAAGCCGAGGGGCGGGTGATGAATCCAGCCCCTTCCCCTACTTTGGGATTGGCTCAGCAATGAG
AACCCAGAAAGCATGCCATAAATCCGACAGCCCCACCCCAGGAGACTGCAGGTGGCCGAGCTTGGGCGCCGGGGC
CGTGCTTGGTGTGGGGCCATGGAGGGTTCCAGAAGGTCCTGGTGAATAAAGGCCCAGGGGGCGTGCTCTTG

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FIGURE 3500A

GCTGACCAGCCAGTGAGGACGCCCGCTGCCTCCCACCTGCCCTCCTGCCGTCTTTCGCCAGCCAAGCCCAGCCTG
AGCCAGCACTTGCCTTTACGACCATGTTCAAGGGGCTGAGCAAAGGCTCCCAGGGGAAGGGGTCCCCCAAGGGCT
CCCCCGCCAAGGGGTCCCCCAAAGGCTCCCCCAGCAGGCACAGCCGGGCTGCCACCCAGGAGCTGGCCCTTCTCA
TCTCCCGCATGCAAGCCAACGCCGACCAGGTGGAGCGGGACATCCTGGAGACGCAGAAGAGGCTGCAGCAGGACC
GGCTGAACAGTGAGCAGAGCCAGGCCCTGCAGCACCAGCAGGAGACGGGCCGCAGCCTGAAGGAGGCTGAGGTGC
TGCTCAAGGACCTCTTCCTGGACGTGGACAAGGCCCGGCGGCTCAAGCACCCGCAGGCTGAGGAGATTGAGAAGG
ACATCAAGCAGCTGCACGAGCGGGTGACCCAGGAGTGTGCGGAGTACCGTGCCCTGTACGAGAAGATGGTGCTGC
CCCCCGACGTGGGACCCAGGGTCGACTGGGCACGCGTGCTGGAGCAGAAACAGAAGCAGGTCTGCGCAGGCCAGT
ACGGGCCGGGCATGGCGGAGCTGGAGCAACAGATCGCCGAGCACAACATCCTGCAGAAGGAGATCGACGCCTATG
GGCAGCAGCTGCGGAGCCTCGTGGGGCCGGATGCAGCCACCATCCGGAGCCAATACCGAGACCTACTGAAGGCGG
CGTCGTGGCGCGGGCAGAGCCTGGGCAGCCTGTACACGCACCTCCAGGGCTGCACGCGGCAGCTGAGCGCCCTGG
CTGAGCAGCAGCGCCGCATCCTGCAGCAGGACTGGAGCGACCTCATGGCCGACCCTGCGGGCGTGCGGCGGGAGT
ACGAGCACTTCAAGCAGCACGAGCTGCTGAGCCAGGAGCAGAGCGTGAACCAGCTGGAGGACGACGGCGAGCGCA
TGGTGGAGCTGCGGCACCCCGCGGTGGGGCCCATCCAGGCCCACCAGGAGGCCCTGAAGATGGAGTGGCAGAACT
TCCTGAACCTGTGTATCTGCCAGGAGACCCAGCTGCAGCACGTGGAGGACTACCGCCGGTTCCAGGAAGAGGCCG
ACTCAGTCAGCCAGACCCTGGCGAAGCTCAACTCCAACTTGGATGCCAAGTACAGCCCTGCACCTGGGGGCCCCC
CTGGCGCCCCCACAGAGCTGCTGCAACAGCTGGAGGCAGAGGAAAAACGGCTGGCCGTCACCGAGAGGGCCACTG
GGGACCTGCAGCGGCGAAGCCGGGATGTGGCCCCTCTGCCACAGCGAAGAAACCCCCCTCAGCAGCCCCTGCACG
TGGACAGCATCTGCGACTGGGACTCAGNGNNAGTGCAGCTGCTGCAGGGTGAGCGGTATAAGCTGGTAGATAACA
CTGACCCGCACGCCTGGGTCGTGCAGGGCCCTGGCGGGGAGACCAAGCGTGCTCCCGCCGCCTGCTTCTGCATCC
CAGCACCAGACCCTGATGCTGTGGCCAGGGCCTCCCGGCTGGCCTCAGAGCTGCAGGCCCTGAAGCAGAAATTGG
CCACAGTCCAGAGCCGCCTGAAGGCCAGTGCTGTGGAGTCTCTTCGGCCCAGCCAGCAGGCTCCATCTGGCTCAG
ACCTGGCCAACCCACAGGCCCAGAAGCTCCTGACACAGATGACCCGGCTGGATGGAGACCTGGGACAGATAGAGA
GGCAGGTGCTGGCCTGGGCGCGGGCCCCGCTGAGCCGCCCCACACCCTTGGAGGACTTGGAGGGCCGCATCCACA
GCCATGAGGGCACAGCCCAGCGCCTGCAGAGCCTGGGAACGGAGAAGGAGACAGCCCAGAAGGAGTGCGAGGCGT
TTCTGTCCACGCGGCCCGTGGGCCCCGCTGCCCTGCAGCTGCCCGTAGCCCTCAACAGCGTGAAGAACAAGTTCA
GTGACGTGCAGGTTCTGTGCAGCCTCTACGGGGAGAAAGCCAAGGCTGCCCTGGATCTGGAGCGGCAGATCCAGG
ATGCGGACAGGGTCATCCGAGGCTTCGAGGCCACCCTGGTGCAGGAGGCCCCCATCCCTGCTGAACCGGGGGCTC
TGCAGGAGAGGGTCAGCGAGCTGCAGCGCCAGCGGAGGGAGCTGCTGGAACAGCAGACCTGCGTGCTGCGGCTAC
ACCGCGCGCTGAAGGCCTCGGAGCACGCATGCGCTGCCCTGCAGAACAACTTCCAGGAGTTCTGCCAAGACCTGC
CTCGCCAGCAGCGCCAGGTGCGAGCCCTCACCGACCGCTACCACGCCGTAGGGGACCAGCTGGACCTGCAGGGAG
AAGGTGGTGCAGGATGCCGCCCTCACCTACCAGCAGTTCAAGAACTGCAAGGATAACCTGAGCTCCTGGCTGGAG
CACCTGCCCCGCAGCCAGGTGCGGCCCAGCGACGGCCCCAGCCAGATCGCCTACAAGCTGCAGGCGCAGAAGAGG
CTGACGCAGGAGATCCAGAGCCGAGAGCGGGACAGGGCCACAGCATCCCACCTCTCCCAGGCCCTGCAGGCAGCG
CTCCAGGACTATGAGCTCCAGGCAGACACCTACCGCTGCTCTTTGGAGCCCACCCTGGCAGTGTCAGCCCCCAAG
AGACCCCGAGTGGCTCCCCTGCAAGAGAGCATCCAAGCCCAGGAGAAGAACCTTGCAAAGGCCTATACTGAGGTT
GCAGCAGCACAGCAGCAGCTGCTCCAGCAGCTGGAGTTTGCTAGAAAA**ATG**CTGGAGAAGAAGGAGCTCAGTGAG
GACATCCGAAGGACCCATGATGCAAAGCAGGGCTCCGAGAGCCCTGCCCAAGCAGGGAGAGAGTCAGAGGCCCTG
AAGGCCCAGCTGGAAGAGGAGAGGAAGCGGGTGGCCCGGGTGCAGCATGAGCTGGAGGCGCAGAGGAGCCAACTG
CTGCAGCTGAGGACCCAGCGGCCCTTGGAGAGGCTGGAGGAGAAGGAAGTGGTAGAGTTCTACCGGGACCCCCAG
CTGGAGGGCAGCCTGTCCAGGGTGAAGGCCCAGGTGGAGGAGGAGGGCAAGCGGCGGGCTGGCCTGCAGGCAGAC
CTGGAAGTGGCAGCCCAGAAGGTCGTGCAGCTGGAAAGCAAGAGGAAGACCATGCAGCCTCATCTGCTGACCAAG
GAGGTCACCCAGGTGGAGAGGGACCCCGGCCTGGACAGCCAGGCGGCCCAGCTCAGGATCCAGATCCAGCAGCTC
CGCGGGGAGGATGCCGTCATCTCGGCCCGGCTGGAAGGGCTGAAGAAGGAGCTACTGGCCCTTGAGAAGAGGGAG
GTGGACGTGAAGGAGAAGGTCGTGGTGAAAGAGGTAGTCAAGGTGGAGAAGAATCTGGAAATGGTCAAGGCAGCC
CAGGCTCTGAGGCTGCAGATGGAGGAGGATGCTGCGCGGAGGAAGCAGGCGGAGGAGGCTGTGGCCAAGCTACAG
GCTCGCATCGAAGACCTGGAGCGGGCTATCAGCTCGGTGGAGCCCAAGGTCATCGTGAAGGAGGTGAAGAAGGTG
GAGCAGGACCCAGGGCTCCTCCAGGAGTCCTCCAGGCTGAGGAGCCTCCTCGAGGAGGAGAGGACCAAGAACGCG

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FIGURE 3500B

ACGCTGGCCAGGGAGCTGAGCGACCTGCACAGCAAGTACAGCGTGGTGGAGAAGCAGAGGCCCAAAGTGCAGCTC
CAGGAGCGCGTCCACGAGATCTTCCAGGTGGATCCGGAGACAGAGCAGGAGATCACTCGGCTCAAGGCCAAGCTG
CAGGAGATGGCGGGCAAGAGGAGCGGTGTGGAGAAGGAGGTGGAGAAGCTGCTGCCCGACCTGGAGGTCCTGCGG
GCCCAGAAGCCCACGGTGGAGTACAAGGAGGTGACCCAGGAGGTGGTGAGGCATGAGAGGAGCCCCGAGGTGCTG
CGTGAGATCGACCGCCTGAAGGCTCAGCTCAACGAGCTCGTCAACAGCCACGGGCGCTCCCAGGAGCAGCTCATC
CGCCTGCAGGGTGAGCGCGACGAGTGGAGGCGCGAGCGGGCCAAGGTGGAGACCAAGACGGTGAGCAAGGAGGTG
GTGCGCCACGAGAAGGACCCGGTGCTGGAGAAAGAAGCAGAGCGGCTCCGCCAGGAGGTGCGGGAGGCGGCCCAG
AAGAGGCGGGCCGCGGAGGACGCGGTGTACGAGCTGCAGAGCAAGCGCCTGCTGCTGGAGAGGAGGAAGCCCGAG
GAGAAGGTGGTGGTGCAGGAGGTGGTGGTCACCCAGAAGGACCCGAAGCTGCGCGAGGAGCACAGCCGGCTGAGC
GGGAGCCTGGATGAGGAGGTGGGCCGGCGGCGCCAGCTAGAGCTTGAGGTGCAGCAGCTGCGGGCCGGCGTGGAG
GAGCAGGAGGGCCTGCTCAGCTTCCAGGAGGACCGCAGCAAGAAGCTGGCCGTGGAGAGGGAGCTGCGGCAGCTG
ACCTTGAGGATCCAGGAGCTCGAGAAGCGGCCTCCCACGGTGCAGGAGAAGATCATCATGGAGGAAGTGGTCAAG
CTGGAGAAGGACCCGGACCTGGAGAAGTCCACGGAAGCCCTGCGGTGGGACCTGGACCAGGAGAAGACCCAGGTA
ACCGAGCTGAATCGGGAGTGCAAGAACCTGCAGGTCCAGATTGACGTCCTCCAGAAAGCCAAATCGCAGGAGAAG
ACCATCTACAAGGAAGTGATCCGGGTGCAGAAGGACCGCGTCCTGGAAGATGAGCGGGCCCGCGTGTGGGAGATG
CTCAACAGGGAGCGCACGGCCCGGCAGGCCCGGGAGGAGGAGGCACGGCGCCTGCGGGAGCGCATTGACCGGGCC
GAGACGCTGGGGAGAACCTGGTCCCGGGAGGAGTCCGAGCTGCAGAGGGCCCGGGACCAGGCCGACCAGGAGTGT
GGGCGGCTGCAGCAGGAGCTGCGGGCTCTGGAGAGGCAGAAGCAGCAGCAGACACTGCAGCTGCAGGAGGAGTCG
AAGCTGCTCAGCCAGAAGACGGAGAGCGAGCGACAGAAGGCGGCCCAGCGGGGCCAGGAGCTCTCGCGGCTGGAG
GCGGCCATCCTCCGCGAGAAGGACCAGATCTACGAGAAGGAGCGGACGCTCCGGGACCTCCACGCCAAGGTGAGC
CGGGAGGAGCTCAGCCAGGAGACCCAGACGCGAGAGACCAACCTTTCCACCAAGATCTCCATCCTGGAACCCGAG
ACGGGGAAGGACATGTCCCCATACGAGGCCTACAAGAGGGGCATCATCGACAGGGGCCAGTACTTGCAGCTGCAG
GAGCTCGAGTGTGACTGGGAGGAGGTCACCACCTCGGGGCCCTGTGGGGAGGAGTCTGTGCTCCTGGACCGCAAG
AGCGGGAAGCAGTACTCCATCGAGGCCGCCCTCCGCTGCCGGCGCATCTCTAAGGAGGAGTACCATCTGTACAAG
GACGGCCACCTGCCCATCTCCGAGTTTGCGCTGCTTGTAGCTGGGGAGACCAAGCCAAGCTCCTCACTCTCCATC
GGCTCTATCATCTCCAAGTCCCCGCTCGCCTCCCCGGCCCCCCAGAGCACCAGTTTCTTCTCTCCCAGCTTCTCT
CTCGGGCTCGGTGATGACAGCTTCCCTATCGCCGGGATCTATGACACAACCACAGACAACAAGTGCAGCATCAAG
ACGGCCGTGGCCAAGAACATGCTGGACCCCATCACTGGGCAGAAGCTACTGGAGGCCCAGGCGGCCACAGGGGGC
ATCGTGGACCTGCTCAGCCGTGAGCGCTACTCTGTGCACAAGGCGATGGAGAGGGGCCTGATCGAGAACACCTCC
ACACAGAGGCTGCTTAACGCCCAGAAGGCCTTCACCGGCATCGAGGACCCCGTCACCAAGAAGAGGCTCTCGGTG
GGCGAGGCCGTCCAGAAGGGCTGGATGCCCCGGGAGAGCGTGCTCCCACACCTGCAGGTGCAGCACCTGACCGGG
GGGCTCATCGACCCCAAGAGGACAGGCCGCATCCCCATCCAGCAGGCCCTCCTCTCCGGGATGATCAGTGAAGAG
CTGGCCCAGCTCCTGCAGGACGAGTCCAGCTACGAGAAGGATTTGACAGACCCCATCTCCAAGGAACGGCTGAGC
TACAAGGAGGCCATGGGCCGCTGCCGCAAAGACCCCCTGAGCGGCCTGCTGCTCCTGCCAGCGGCACTGGAGGGG
TACCGCTGCTACCGCTCCGCCTCCCCCACCGTCCCGCGCTCCCTTCGC**TGA**CACGGGCCAAGGAGCCAGTGGGGA
AGTGCGTGTGTTGGGCCAGGTAGGATACGTACACCTCTTGCCTCAGAGCAGCCTCATCCCAGGCAGTGGGTCTTC
CCTCTGTCCAACCACTGTTTTATTATTTTACTAACATGGTGATGGGCTCCCTCCCCTAACCTTGGTGCCTGATCC
ATCCCCAGACCAGGACAGCAGCCACTCAGTTCTTCCTCCACCTCCACCCAGTGATCCCAATAAACGAATTCTGTC
TCCCCGTG

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FIGURE 3501

ATGGCTGCTGAGAAGCAGGTCCCAGGCGGCGGCGGCGGCGGCGGCAGTGGCGGCGGCGGTGGCAGTGGCGGCGGC
GGTAGCGGCGGTGGACGTGGTGCCGGAGGGGAAGAAAATAAAGAAAACGAACGCCCTTCGGCCGGATCGAAGGCA
AACAAAGAATTTGGGGATAGCCTGAGTTTGGAGATTCTTCAGATTATTAAGGAATCCCAGCAGCAGCATGGTTTA
CGGCATGGAGATTTTCAGAGGTACAGGGGCTACTGTTCCCGTAGACAAAGACGTCTTCGAAAAACACTCAACTTC
AAGATGGGTAACAGACACAAATTCACAGGGAAGAAAGTGACTGAAGAGCTTCTGACCGATAATAGATACTTGCTT
CTGGTTCTGATGGATGCTGAAAGAGCCTGGAGCTACGCCATGCAGCTGAAACAGGAAGCCAACACTGAACCCCGA
AAACGGTTTCACTTGTTATCTCGCCTACGCAAAGCCGTGAAGCATGCAGAGGAATTGGAACGCTTGTGTGAGAGC
AATCGCGTGGATGCCAAGACCAAATTAGAGGCTCAGGCTTACACAGCTTACCTCTCAGGAATGCTACGTTTTGAA
CATCAAGAATGGAAAGCTGCCATTGAGGCTTTTAACAAATGCAAAACTATCTATGAGAAGCTAGCCAGTGCTTTC
ACAGAGGAGCAGGCTGTGCTGTATAACCAACGTGTGGAAGAGATTTCACCCAACATCCGCTATTGTGCATATAAT
ATTGGGGACCAGTCAGCCATCAATGAACTCATGCAGATGAGATTGAGGTCTGGGGGCACTGAGGGTCTCTTGGCT
GAAAAATTGGAGGCTTTGATCACTCAGACTCGAGCCAAACAGGCAGCTACCATGAGTGAAGTGGAGTGGAGAGGG
AGAACGGTTCCAGTGAAGATTGACAAAGTGCGCATTTTCTTATTAGGACTGGCTGATAACGAAGCAGCTATTGTC
CAGGCTGAAAGCGAAGAAACTAAGGAGCGCCTGTTTGAATCAATGCTCAGCGAGTGTCGGGACGCCATCCAGGTG
GTTCGGGAGGAGCTCAAGCCAGATCAGAAACAGAGAGATTATATCCTTGAAGGAGAGCCAGGGAAGGTGTCTAAT
CTTCAATACTTGCATAGCTACCTGACTTACATCAAGCTATCAACGGCAATCAAGCGTAATGAGAACATGGCCAAA
GGTCTGCAGAGGGCTCTGCTGCAGCAGCAGCCAGAGGATGACAGCAAGCGCTCACCCCGGCCCCAGGACCTGATC
CGACTCTATGACATCATCTTACAGAATCTGGTGGAATTGCTCCAGCTTCCTGGTTTAGAGGAAGACAAAGCCTTC
CAGAAAGAGATAGGCCTCAAGACTCTGGTGTTCAAAGCTTACAGGTGTTTTTTCATTGCTCAGTCCTATGTGCTG
GTGAAGAAGTGGAGCGAAGCCCTTGTCCTGTATGACAGAGTCCTGAAATATGCAAATGAAGTAAATTCTGATGCT
GGCGCCTTCAAGAACAGCCTAAAGGACCTGCCTGATGTGCAAGAGCTCATCACTCAAGTGCGGTCAGAGAAGTGC
TCCCTGCAGGCCGCAGCCATCCTTGATGCAAACGACGCTCATCAAACAGAGACCTCCTCCTCCCAAGTCAAGGAC
AATAAGCCTCTGGTTGAACGGTTTGAGACATTCTGCCTGGACCCTTCCCTTGTCACCAAGCAAGCCAACCTTGTG
CACTTCCCACCAGGCTTCCAGCCCATTCCCTGCAAGCCTTTGTTCTTTGACCTGGCCCTCAACCATGTGGCTTTC
CCACCCCTTGAGGACAAGTTGGAACAGAAGACCAAGAGTGGCCTCACTGGATACATCAAGGGCATCTTTGGATTC
AGGAGCTAA

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FIGURE 3502

GGGACGTCAGCGGACGGGGCGCTCGCGGGCCGGGGCTGT**ATG**GGGCTCCCGCGCGGGTCGTTCTTCTGGCTGCTG
CTCCTGCTCACGGCTGCCTGCTCGGGGCTCCTCTTTGCCCTGTACTTCTCGGCGGTGCAGCGGTACCCGGGGCCA
GCGGCCGGAGCCAGGGACACCACATCATTTGAAGCATTCTTTCAATCCAAGGCATCGAATTCTTGGACAGGAAAG
GGCCAGGCCTGCCGACACCTGCTTCACCTGGCCATTCAGCGGCACCCCCACTTCCGTGGCCTGTTCAATCTCTCC
ATTCCAGTGCTGCTGTGGGGGGACCTCTTCACCCCAGCGCTCTGGGACCGCCTGAGCCAACACAAAGCCCCGTAT
GGCTGGCGGGGGCTCTCTCACCAAGTCATCGCCTCCACCCTGAGCCTTCTGAACGGCTCAGAGAGTGCCAAGCTG
TTTGCCCCGCCCAGGGACACCCCTCCAAAGTGTATCCGGTGTGCCGTGGTGGGCAACGGAGGCATTCTGAATGGG
TCCCGCCAGGGTCCCAACATCGATGCCCATGACTATGTATTCAGACTCAATGGAGCTGTGATCAAAGGCTTCGAG
CGCGATGTGGGCACCAAGACTTCCTTCTATGGTTTCACTGTGAACACGATGAAGAACTCCCTCGTCTCCTACTGG
AATCTGGGCTTCACCTCCGTGCCACAAGGACAGGACCTGCAGTATATCTTCATCCCCTCAGACATCCGCGACTAT
GTGATGCTGAGATCGGCCATTCTGGGCGTGCCTGTCCCTGAGGGCCTAGATAAAGGGGACAGGCCGCACGCCTAT
TTTGGACCAGAAGCCTCTGCCAGTAAATTCAAGCTGCTACATCCGGACTTCATCAGCTACCTGACAGAAAGGTTC
TTGAAATCAAAGTTGATTAACACACATTTTGGAGACCTATATATGCCTAGTACCGGGGCTCTCATGCTGCTGACA
GCTTTGCATACCTGTGACCAGGTCAGTGCCTATGGATTCATCACAAGCAACTACTGGAAATTTTCCGACCACTAT
TTCGAACGAAAAATGAAGCCATTGATATTTTATGCAAACCACGATCTGTCCCTGGAAGCTGCCCTGTGGAGGGAC
CTGCACAAGGCCGGCATCCTTCAGCTGTACCAGCGC**TGA**CCCCAATGCACTGAGCCCTTTGCTTCTTCAAGAGTT
GCGGCCCTGATCCTCTCAAGTGGCCAAAAGCTTTTTTAACTTTTCAATCTTCACCTTCCCTTGCCAACAGAGGGC
ACTGGGGTGAATTCAAGATTTTCATCGAGGTCTGTTCAATATAGGACACCCCAGCTTGTCCTTGGCTCATCCAAG
AACTCTTCTGTATCTAAAACAATACATCTCAATCTTGGCCAAGGGAAAATGGACTGCTTTGCTGGATTGGCACTG
AGCAACTTTAGGAAATGTCGGTGGAGTGTTCAGCAAGATCAGACAGCAGTCCAGGTCAAAGGCAAACACACACGC
TCCAGCCCAAATCCTCCTGGTGGCACATCCTACCCCAGATGCTAAAGTGATTCAAGGACTCCAGGACACCTCTTA
AGAGCCTTTCTAAGAACATGATAGGCTTACTTCTGCTCCATAATAAAGTGGGAGAAAAAAGCCAGAATATAACTT
AAGACTAGATAACTGCGTACATGATGGACCATTTTTTTTTTTTGGCTGGGTAGAGAAATCATATAAAACGCAGG
CTGTTTAGCATGGAGATGACTCTCAGAACACTGGGAGGGTCTGGCACTTGATGGGGGTTAGTTGCTTGGCAGCCT
GCCTGCCACTGAGGGAAGTCCCATTAGAGATGTATCACCACCTTGTCACCAACAGGATGATGTCACCAGGTAATA
AACCTTCATCCTCA

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FIGURE 3503

AGACAAAGGGTGTGCACTTCCTGGCCAGGAAACCTGAGCGGTGAGACTCCCAGCTGCCTACATCAAGGCCCCAGG
ACATGCAGAACCTTCCTCTAGAACCCGACCCACCACCATGAGGTCCTGCCTGTGGAGATGCAGGCACCTGAGCCA
AGGCGTCCAGTGGTCCTTGCTTCTGGCTGTCCTGGTCTTCTTTCTCTTCGCCTTGCCCTCTTTTATTAAGGAGCC
TCAAACAAAGCCTTCCAGGCATCAACGCACAGAGAACATTAAAGAAAGGTCTCTACAGTCCCTGGCAAAGCCTAA
GTCCCAGGCACCCACAAGGGCAAGGAGGACAACCATCTATGCAGAGCCAGTGCCAGAGAACAATGCCCTCAACAC
ACAAACCCAGCCCAAGGCCCACACCACCGGAGACAGAGGAAAGGAGGCCAACCAGGCACCGCCGGAGGAGCAGGA
CAAGGTGCCCCACACAGCACAGAGGGCAGCATGGAAGAGCCCAGAAAAAGAGAAAACCATGGTGAACACACTGTC
ACCCAGAGGGCAAGATGCAGGGATGGCCTCTGGCAGGACAGAGGCACAATCATGGAAGAGCCAGGACACAAAGAC
GACCCAAGGAAATGGGGGCCAGACCAGGAAGCTGACGGCCTCCAGGACGGTGTCAGAGAAGCACCAGGGCAAAGC
GGCAACCACAGCCAAGACGCTCATTCCCAAAAGTCAGCACAGAATGCTGGCTCCCACAGGAGCAGTGTCAACAAG
GACGAGACAGAAAGGAGTGACCACAGCAGTCATCCCACCTAAGGAGAAGAAACCTCAGGCCACCCCACCCCCTGC
CCCTTTCCAGAGCCCCACGACGCAGAGAAACCAAAGACTGAAGGCCGCCAACTTCAAATCTGAGCCTCGGTGGGA
TTTTGAGGAAAAATACAGCTTCGAAATAGGAGGCCTTCAGACGACTTGCCCTGACTCTGTGAAGATCAAAGCCTC
CAAGTCGCTGTGGCTCCAGAAACTCTTTCTGCCCAACCTCACTCTCTTCCTGGACTCCAGACACTTCAACCAGAG
TGAGTGGGACCGCCTGGAACACTTTGCACCACCCTTTGGCTTCATGGAGCTCAACTACTCCTTGGTGCAGAAGGT
CGTGACACGCTTCCCTCCAGTGCCCCAGCAGCAGCTGCTCCTGGCCAGCCTCCCCGCTGGGAGCCTCCGGTGCAT
CACCTGTGCCGTGGTGGGCAACGGGGGCATCCTGAACAACTCCCACATGGGCCAGGAGATAGACAGTCACGACTA
CGTGTTCCGATTGAGCGGAGCTCTCATTAAAGGCTACGAACAGGATGTGGGGACTCGGACATCCTTCTACGGCTT
TACCGCCTTCTCCCTGACCCAGTCACTCCTTATATTGGGCAATCGGGGTTTCAAGAACGTGCCTCTTGGGAAGGA
CGTCCGCTACTTGCACTTCCTGGAAGGCACCCGGGACTATGAGTGGCTGGAAGCACTGCTTATGAATCAGACGGT
GATGTCAAAAAACCTTTTCTGGTTCAGGCACAGACCCCAGGAAGCTTTTCGGGAAGCCCTGCACATGGACAGGTA
CCTGTTGCTGCACCCAGACTTTCTCCGATACATGAAGAACAGGTTTCTGAGGTCTAAGACCCTGGATGGTGCCCA
CTGGAGGATATACCGCCCCACCACTGGGGCCCTCCTGCTGCTCACTGCCCTTCAGCTCTGTGACCAGGTGAGTGC
TTATGGCTTCATCACTGAGGGCCATGAGCGCTTTTCTGATCACTACTATGATACATCATGGAAGCGGCTGATCTT
TTACATAAACCATGACTTCAAGCTGGAGAGAGAAGTCTGGAAGCGGCTACACGATGAAGGGATAATCCGGCTGTA
CCAGCGTCCTGGTCCCGGAACTGCCAAAGCCAAGAACTGACCGGGGCCAGGGCTGCCATGGTCTCCTTGCCTGCT
CCAAGGCACAGGATACAGTGGGAATCTTGAGACTCTTTGGCCATTTCCCATGGCTCAGACTAAGCTCCAAGCCCT
TCAGGAGTTCCAAGGGAACACTTGAACCATGGACAAGACTCTCTCAAGATGGCAAATGGCTAATTGAGGTTCTGA
AGTTCTTCAGTACATTGCTGTAGGTCCTGAGGCCAGGGATTTTTAATTAAATGGGGTGATGGGTGGCCAATACCA
CAATTCCTGCTGAAAAACACTCTTCCAGTCCAAAAGCTTCTTGATACAGAAAAAAGAGCCTGGATTTACAGAAAC
ATATAGATCTGGTTTGAATTCCAGATCGAGTTTACAGTTGTGAAATCTTGAAGGTATTACTTAACTTCACTACAG
ATTGTCTAGAAGACCTTTCTAGGAGTTATCTGATTCTAGAAGGGTCTATACTTGTCCTTGTCTTTAAGCTATTTG
ACAACTCTACGTGTTGTAGAAAACTGATAATAATACAAATGATTGTTGTCCATGGAAAGGCAAATAAATTTTCTA
CAGTG

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FIGURE 3504

ATGGAGGCGCCGGCCGAGCTACTGGCCGCGCTGCCTGCGCTGGCCACCGCGCTGGCCCTTCTGCTCGCCTGGCTA
CTGCCTGGAGAGCCCGCGGGGCTGGGGGAGCTCGGGGAGCCTGCGGGACCGGGGGAGCCCGAAGGGCCAGGGGAT
CCCGCGGCGGCGCCAGCGGAGGCGGAGGAGCAGGCGGTGGAGGCGAGGCAGGTACGCACCGGGGCCCTCGCGGCC
CCCTCCCCACCCCCGGGGCTCCGGCTGCCGCTGCCGTTCCCCGCCGAGCCAGGGAGCGGGGCCGCGGCCTCCAGC
CCAGGCTGCCCCCAGGAAGCGCAGAACCCGCGGCCCGCAGGAAATGCAGGTAAGCTGGGCCTGGATGGAGTGAAG
ATGCAGGATAAAGCCCTCCTGGAGCACCATGTGGTCCTTTTTGATGGCAGTGTGGTCCTTTTTGATGGCAGTGTG
GTCCTTTTTGATGGCAGTGTGGTCCTTTGTGATGGCAGTGTGGGCCTCTGTGACGGCAGCGTGGGCCTCTGTGAC
GGCAGCGTGGGCCTCTGTGATGGCAGAGTGGGCCTCTGTGATGGCAGCGTGGTCCTTTGTGATGGCAGCGTGGGC
CTCTGTGACGGCAGCGTGGGCCTCTGTGACGGCAGCGTGGGCCTCTGTGATGGCAGAGCTCTTCCAGCAACCAGC
ATGACCTTCCTAGCGCAGAGAGCACACCCCCCGGCCCCTGCTCACAGCCCTCCGCGTGCAATTCCAAACTTCCCA
CAGCCCCAGGAAATGATCCTGGTCGCACCCACCATGGCACAGCTGCCTGATGGTGGGGAGGACTCAGACCATGAG
ACCCTGGAGAGATTGCCTTTGGCTGGCCGCACCTTCACGGATTCATTCAACGCTGAGCTGAAGGCCAGGGCAGGC
GCTGCCACAGGGCGTGGGCAGGCTGGACCTTCGAGGGCCTCCTCTGTCTCCCCTACCTTCTGCCCCCCCACCACT
TCCCATCACCCAGTCTGTGCCAAGGGCACTGACCCTGTCCTTGTCTTGCAGGAAGAGGAGCAGGACTTGGATGGT
GAGAAGGGGCCATCATCGGAAGGGCCTGAGGAGGAGGACGGAGAAGGCTTCTCCTTCAAATACAGCCCCGGGAAG
CTGAGGGGAAACCAGTACAAGAAGATGATGACCAAAGAGGAGCTGGAGGAGGAGCAGAGAGTTCAGAAGGAACAG
CTGGCTGCCATCTTCAAGCTCATGAAAGACAACAAGGAGACGTTTGGCGAGATGTCCGACGGCGACGTGCAGGAG
CAGCTCCGGCTCTACGACATGTAG

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FIGURE 3505A

GCGGCCGCTTGCCCAACCCGAGGCTCGGGAGGTGGCTGGGGAGTGAATTTTCTGGAAGGCGACTTTAAAGGCGCC
GGGACTGAGCGAAGGGCGTTTGGGTACTGCCGTCGCCGCCGCCCAGGCCGGGGAGGGGTGCGTTAGTGTCAGGAA
GCGGGCTGCGCCGAGGTCGTAGCGGAACCAGCTGGCGACCCCGCAGAATGAACCACAAGAGCAAGAAGCGCATCC
GCGAGGCCAAGCGGAGTGCGCGGCCGGAGCTCAAGGACTCGCTGGATTGGACCCGGCACAACTACTACGAGAGCT
TCTCGCTGAGCCCGGCGGCCGTGGCGGATAACGTGGAAAGGGCAGATGCTTTACAGCTGTCTGTGGAAGAATTTG
TGGAGCGGTATGAAAGACCTTACAAGCCCGTGGTTTTGTTGAATGCGCAAGAGGGCTGGTCTGCGCAGGAGAAAT
GGACTCTGGAGCGCCTAAAAAGGAAATATCGGAACCAGAAGTTCAAGTGTGGTGAGGATAACGATGGCTACTCAG
TGAAGATGAAGATGAAATACTACATCGAGTACATGGAGAGCACTCGAGATGATAGTCCCCTTTACATCTTTGACA
GCAGCTATGGTGAACACCCTAAAAGAAGGAAACTTTTGGAAGACTACAAGGTGCCAAAGTTTTTCACTGATGACC
TTTTCCAGTATGCTGGGGAGAAGCGCAGGCCCCCTTACAGGTGGTTTGTGATGGGGCCACCACGCTCCGGAACTG
GGATTCACATCGACCCTCTGGGAACCAGTGCCTGGAATGCCTTAGTTCAGGGCCACAAGCGCTGGTGCCTGTTTC
CTACCAGCACTCCCAGGGAACTCATCAAAGTGACCCGAGACGAAGGAGGGAACCAGCAAGACGAAGCTATTACCT
GGTTTAATGTTATTTATCCCCGGACACAGCTTCCAACCTGGCCACCTGAATTCAAACCCCTGGAAATCTTACAAA
AACCAGGAGAGACTGTCTTTGTACCAGGAGGCTGGTGGCATGTTGTCCTCAATCTCGACACTACTATCGCCATCA
CCCAAAATTTTGCCAGCAGCACCAACTTCCCTGTGGTATGGCACAAGACGGTAAGAGGGAGACCAAAGTTATCAA
GGAAATGGTATAGGATTTTGAAGCAAGAGCACCCCGAGTTGGCAGTCCTCGCAGACTCGGTTGACCTTCAGGAGT
CCACAGGGATAGCTTCCGACAGCTCCAGCGACTCTTCCAGCTCCTCCAGCTCCAGTTCGTCAGACTCCGACTCAG
AGTGCGAGTCTGGATCCGAGGGCGATGGGACAGTGCACCGCAGGAAGAAGAGGAGGACGTGCAGCATGGTGGGAA
ACGGGGACACCACCTCCCAGGACGACTGTGTCAGCAAAGAGCGCAGCTCCTCCAGGATTAGGGACACTTGTGGAG
GCCGGGCTCACCCCTGAGCAGATAAAGAGACTCTCCCTGAGGTGCTTTCAGCGTAAGCTTTTGGCAGCCACCCAA
CTCAGTTCTCGCATCTTCTGCTCCTACCTTCTCCTCTGTCTTCTTTGAATTTGGATATTCCTTCCCTGGTCCAAG
CTCCTATCTTCGGTCAAATGCTGTTTTTACTGCTTCCTAAGGATAGATTATCAAGAAATTTAACAGCTCGGCCAG
CTCAGTGAAACACTGAAGCTAATGGGATGTTGGGTAAGAAGGTTCTGTGCTGTCTCATTGAAAACCGAGCCAGTC
AACCACAAGGCTGGCAGGGTGTGATCCTTGTAACGTCTTGTGTCTGTTACCTCACGGATGTCGGTAAGGAGTTTC
CACAGAGCCAGCTGTGTACCACAGAGACTGAGAGTGGTGAGTGGACTTTGTGAGCCAATTATGTGTCGGAAGGAC
TTGGAGTCTGCCCTTCTTCCTGTATGTCATCATCAGCCCACAAATGCATTCAGTGGCAGTGACCCAGCACCATCA
CCATCACCCACTGCTCAGTCTGTCTTAGGATTCCTTATCTTTTTCTCCATCATCATAGAGACTGAAATTTCAGGG
GTGTTTTTGTACAGTGTATTTTTTTGTGGGGGGGTGATACATTGGGGTTTTTTGTTTGCATAGAGTGGGAACGGT
GTGCAATGTGCTCTTACCACAGAACTTAAAGTATGAATAGGCTCCATTCTTCCGCACCATGGGATCCATAAGAAG
TGCTCACTTTGCGAGGTACTCTGAGATTAGCGTTCCCCATTTGTTTGACCTACAGACGTTAAGTGGGTGACTTGT
GTTACACACGGGGAGTAAATTCAGAGATGGCACCTGTAGTCTTTGCAGTCTGTTGATACTTCTAAATAACTAACT
GGATGACTTTTTGGGGATTGACCAGCAGATGCCATCTCTTGCCCTCTTGATTCACCTGCTTGCCTTAATTTGTCC
CTAAATTCAACTAAACTTCAATAAGAGGGGTTGTCAAGGCCATGGGGCGCACTTGGAAGCACTGCCTGGGCTGGA
GCGTTGGAGGCATTGGCAGGCAGGTGGGAAGGAGCTCTCACTGCAGTGTTCACAGGCAGGGAGGCTGTGTGTGGA
TGTGTTAGAATTGTGTGCTGTTGCCTCTCAAAATATCCACTAGAAACAGGTGTAACCAGGAAAATACAGGTCTCT
GCTCACTGTTATTAACAGACTGTCATTTCCTGACATTGGGTCATGTGGCTTTACTCTAGGAGGCTGGTTCTCTAT
TTTTGTCTTAGTTCAATTTTCTGCATCCTCAAATGCCAACCCCAGTATGTGGCTGGGTAGGTAGAACTGTGCTGC
CTGCCTGCCATGGGGGCTGCTCTCCCTCCTTACCCCCACGCCCACAGCCCCCTTGGTTCTGTGGTGGGCACAGGA
TGTGTTTGGGTGTGAGTAAAGTCAAACTCTGAATGTATAATCTCTTGGTAGTAATATCTGAGTGGTGTTGCTACT
CCTGCTTTTTAAAAAGACTTTTCTTGCCATCTATAAAAAGCTTTTTTCTTTTTCCCAGCATTGCTCCTGTGCTGC
CACGCTTGCCCTTTTTCCTTACCTTCCTTTCAGTTTTCTATCAACAACTCCTCTAAACTTCAGTTTAAAATAAAA
AACAGCCCAAAAAGGCTCTTTGCCACCAGGGGGCGTGGTAGGACACGTTGCCAGTGGTCTGGATAGGGGAGCAGA
AATTTTGAATTTTAAAAATTAGCCACCAAGGCCAGGTGCAGTGGCTCACACCTGTAATCCCAGCACTTTGGGAAG
CTGAGGCAGGGGGATTGCTTGAGTCCAGGAGTTCAAGACCAGTCTGGGCAACATAGTGAGATCCCATCTCTCAAA
AAAATAATAATCTAGAAAATAAAGATTAGCCACCCAGTTTTCTTTCTCCAGATGCTAAAGTTGATTCCTGTTTGA
TAACAGTATTCCAGAAATGAGGGGAATAACATATCTGATAGGCCCAAGTCAGCTCTGGATAGTACAGTGTCTGGA
TAGTACAGATTCTGTGCTCCTGGGACATGCTTTGTTTATTCCTGCCAGGCCAGGGATTCAGCAGCCCTATTCCCC
AACCCCCGTTACTGTCTCTGTGGGCTAGCCAGGCTGTCCGTTATGTAAGCACAACAGGGGCAAGGTGGGGAAACC

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FIGURE 3505B

GTGTGTGGAAAAGGAGTGGAGTGGTGGCGGGTGGCCAAGGTAGACTAGGAAGAGTGGGTACCCAGAGACCACTTG
TTCAGAAGTTAACTCCTCTTCCCATCTGGCGTGAGCTACTCCATTGAATGGTGCCAACAACAGTAAAGTGAAGGA
GATAATGTTAGATTATTTTCAGGGATGATTCTCCAAGATGACAGCAGATCTTAAAACCAAAGAGCTGGGTCCTGG
AAGAAGGGATCTTGGATTATTAACTTCTGATGGAAGGACCAGAGTGGGAGAGAGAAGAGTTGGGGACCTAGAACA
TCAGGAGGACCCTGGGTCTTTGGGGATGAGGCTTCACCATCAGCTGGAAGAATCCATGCTTCACACACATGCCTC
TGCCATTAGTGGTACTGGGATGTTTAGGGTGACATCCTTGAGGGGAGAGCCACTGAAAAGAGGGACATTCACATT
TTGCTGTATTCTTGCAGCTGTCCGTGTCTTAATAATTCAAGCGTTCAATAGGTGTTTGAGGGCCAGGCACTGCTC
TTGAGGTGCTGGAGATAACGGTGACAAGCCCAGGTCCCTGACAAGCTCCACAAGCTTAATGGACAGTGAATGTGC
GGCTGTTGCGGCTGTTCACAGGGCCGCTGGTGAGGGCAGGTAGAAGAAAGTGCAGACCTTCTTAAATGCAGGTGT
AACGGATCTACATGAAAGAGCATAATTAACACCAATGTATACTTAAGGTAGTAACAGCTTCTTCATAAAGTAGCA
AAACTAAGGATCTGTGGGAAGGTTGCTGGTGCAAATGCTTTATAAGCTTACTAGAGACTGAGCCTTGGATTTAGG
ACTTTAGACGAGTATAGGATGGAACAAAATTTTTGCAGTAAATGTAAAAAATGCTGTGTAGGAGGAAGGCGTATA
AGGATGCCCCAGCTGTAGGTTCTTTAGATTGTCTGTAGTATTTCCACGAGTAAGTTGTTTTTGATGTGTGTACTG
GTATTGCTGGTAGATTTGAAGTGGAGTCTGGCGGCTTCTTCCACACTCCCCTCCCACTAGCTTGTGTCAAGATGT
GACATCCTATGCAGCAAAACTAGGTGAGCTTGCACCCCCAGGCGGTGGCTCTCAACTTTGTCTCATTGTTCAGAA
ATTTCGGCCAGGCGCCGTAGCTCACCCCTGTAATCCCAGCACTTTGGGAGGCCATGGCAGGTGGATCACTTGAGG
TCAGGAGTTCAAGACCAGCCTGGCCAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCAGGTGT
GGTGGCACATGCCTGTAGTCCCAGCTACTTGGTCAACTCAGGCAGGAGAATCACTTGAACCCAGGAGGCAGAGGT
TGCAGTGAGCTGAGATCAAGCCACTCCAGCCTGGGTGACAGACCGAGACTCTGTCTTTAAAAAAAAAGAAATGTC
ATCTAAGCCCCAGTGAACCTCCTGGGAGGAGAGCTAGCCCTGGCCAGCTGTCTCCAAAGTGACTGGATGCTACAG
AAGAACTGGGACTGTCTTCTGCACACTCGTGCCTCCTGGAGTTGTCAGAACACTGAGCAGTCTCCTAGTTCTGCG
TCCGTCTAGCCATGGGGTCTGCCATGAAAGCCTGTGGATCTGCTATTGGGTTGGTATTTTAAACTTTCACTTGGG
TGAAACTTGTTCATCATTTTAAATAAAGCAACATGATTTGG

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FIGURE 3506

CAGCCGCCCGTTGCCAGTTCTGCGCGTGTGAGTCTCTTTCGCCTTGCTCCGGGCTTTCTTCGCTCGCAGCGCGGC
AGGGTTATCACCAGATCTGGGCTTTCCCCTTCTTGCCGTCAGGTGCTACGGCCACGTGGCCCGCGGCTTCCCGCT
CGCGCAGTCTGGCAGCCCGGAGCCTTCCGCGGTCCCCCGCCCGCCCGGGGCCCAACGACGCCCTACTGGGCGAGC
ACGATTTCCGAGGACAGGGGGTCCGGGCCCAGCGCTTTCGATTCTCGGAGGAGCCGGGTCCGGGGGCCGACGGGG
CTGTCCTGGAGGTCCACGTCCCGCAGGTGCGTGCAGCAGCACCCGCCAGGAGGCGCCTGAGGTCCTGCATCTCCA
GTATGGAATGTATGTTTGGCCCTGTGCTGTGGTCCTGGCCCAGTACCTTTGGTTTCACAGAAGATCTCTGCCAGG
CAAGGCCATCTTAGAGATTGGAGCTGGAGTGAGCCTTCCAGGAATTTTGGCTGCCAAATGTGGTGCAGAAGTAAT
ACTGTCAGACAGCTCAGAACTGCCTCACTGTCTGGAAGTCTGTCGGCAAAGCTGCCAAATGAATAACCTGCCACA
TCTGCAGGTGGTAGGACTAACATGGGGTCATATATCTTGGGATCTTCTGGCTCTACCACCACAAGATATTATCCT
TGCATCTGATGTGTTCTTTGAACCAGAAGATTTTGAAGACATTTTGGCTACAATATATTTTTTGATGCACAAGAA
TCCCAAGGTCCAATTGTGGTCTACTTATCAAGTTAGGAGTGCTGACTGGTCACTTGAAGCTTTACTCTACAAATG
GGATATGAAATGTGTCCACATTCCTCTTGAGTCTTTTGATGCAGACAAAGAAGATATAGCAGAATCTACCCTTCC
AGGAAGACATACAGTTGAAATGCTGGTCATTTCCTTTGCAAAGGACAGTCTCTGAATTATACCTACAACCTGTTC
TGGGACAGTATCAATACTGATGAGCAACCTGGCACACAAACTATGAGCAGACCACTTCAGCTTGAGAATGCAGTG
GGTCTGAAGATGGTCAAGTCTGTTTGCCTTAGATTTTGATGTCACCTAGACAACACTTAAACTCATATGAAACAA
AAATTAAAATACGTATTACAAGT

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FIGURE 3507

CGCTAGCCTGCGGAGCCCGTCCGTGCTGTTCTGCGGCAAGGCCTTTCCCAGTGTCCCCACGCGGAAGGCAACTGC
CTGAGAGGCGCGGCGTCGCACCGCCCAGAGCTGAGGAAGCCGGCGCCAGTTCGCGGGGCTCCGGGCCGCCACTCA
GAGCTATGAGCTACGGCCGCCCCCCTCCCGATGTGGAGGGTATGACCTCCCTCAAGGTGGACAACCTGACCTACC
GCACCTCGCCCGACACGCTGAGGCGCGTCTTCGAGAAGTACGGGCGCGTCGGCGACGTGTACATCCCGCGGGATC
GCTACACCAAGGAGTCCCGCGGCTTCGCCTTCGTTCGCTTTCACGACAAGCGCGACGCTGAGGACGCTATGGATG
CCATGGACGGGGCCGTGCTGGACGGCCGCGAGCTGCGGGTGCAAATGGCGCGCTACGGCCGCCCCCCGGACTCAC
ACCACAGCCGCCGGGGACCGCCACCCCGCAGGTACGGGGGCGGTGGCTACGGACGCCGGAGCCGCAGCCCTAGGC
GGCGTCGCCGCAGCCGATCCCGGAGTCGGAGCCGTTCCAGGTCTCGCAGCCGATCTCGCTACAGCCGCTCGAAGT
CTCGGTCCCGCACTCGTTCTCGATCTCGGTCGACCTCCAAGTCCAGATCCGCACGAAGGTCCAAGTCCAAGTCCT
CGTCGGTCTCCAGATCTCGTTCGCGGTCCAGGTCCCGGTCTCGGTCCAGGAGTCCTCCCCCAGTGTCCAAGAGGG
AATCCAAATCCAGGTCGCGATCGAAGAGTCCCCCCAAGTCTCCTGAAGAGGAAGGAGCGGTGTCCTCTTAAGAAA
ATGATGTATCGGCAAGCAGTGTAAACGGAGGACTTGGGGAAAAAGGACCACATAGTCCATCGAAGAAGAGTCCTT
GGAACAAGCAACTGGCTATTGAAAAGGTTATTTTGTAACATTTGTCTAACTTTTTACTTGTTTAAGCTTTGCCTC
AGTTGGCAAACTTCATTTTATGTGCCATTTTGTTGCTGTTATTCAAATTTCTTGTAATTTAGTGAGGTGAACGAC
TTCAGATTTCATTATTGGATTTGGATATTTGAGGTAAAATTTCATTTTGTTATATAGTGCTGACTTTTTTTGTTT
GAAATTAAACAGATTGGTAACCTAATTTGTGGCCTCCTGACTTTTAAGGAAAACGTGTGCAGCCATTACACACAG
CCTAAAGCTGTCAAGAGATTGACTCGGCATTGCCTTCATTCCTTAAAATTAAAAACCTACAAAAGTTGGTGTAAA
TTTGTATATGTTATTTACCTTCAGATCTAAATGGTAATCTGAACCCAAATTTGTATAAAGACTTTTCAGGTGAAA
AGACTTGATTTTTTGAAAGGATTGTTTATCAAACACAATTCTAATCTCTTCTCTTATGTATTTTTGTGCACTAGG
CGCAGTTGTGTAGCAGTTGAGTAATGCTGGTTAGCTGTTAAGGTGGCGTGTTGCAGTGCAGAGTGCTTGGCTGTT
TCCTGTTTTCTCCCGATTGCTCCTGTGTAAAGATGCCTTGTCGTGCAGAAACAAATGGCTGTCCAGTTTATTAAA
ATGCCTGACAACTGCACTTCCAGTCACCCGGGCCTTGCATATAAATAACGGAGCATACAGTGAGCACATCTAGCT
GATGATAAATACACCTTTTTTTCCCTCTTCCCCCTAAAAATGGTAAATCTGATCATATCTACATGTATGAACTTA
ACATGGAAAATGTTAAGGAAGCAAATGGTTGTAACTTTGTAAGTACTTATAACATGGTGTATCTTTTTGCTTATG
AATATTCTGTATTATAACCATTGTTTCTGTAGTTTAATTAAAACATTTTCTTGGTGTTAGCTTT

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FIGURE 3508

CTTGGACTTGGACCTTCGTGCGGATCTGGACTTGGAGGTCGACCGAGATCGAGAACGAGTGCGGGACCGAGACTT
CGAGCGGCTGTAGCGAGATCGGCTGCGAGACCTGGAACGGCTCCGACTCCGGGATCGGCTGCGGCGACGCCGCCT
AGGGCTGCGGGCGGGACGAGCAAGCACAGCGGGGTTAATTCCAGGCAGCGGGGCCGGCCCCGCCCGCGCGNCTNC
CCGCCCAGGCCGCCATTATCTCGCCGCCAGACGCCATTTCCCCAGTCGCGAGGCGGGGTCCTCCGCCCCGCGCCG
CCCACACCCCGGCCACTCCCGGGTCGCAGACGGCGGAAGCTCGCGGGGTGGCCGGAGGGTCGCGAGACGCGGCGT
GCACCCCCGCCCCNGNTNCCGGGCCCGCACCACGTGCTTCGCCGCGGACCTTTGTGAGGTCGCCCGGGCCTCCCG
CGCGCCCCGCCCCGCCTCCCGCGGTCCCCTCAGCCCCGTTTACCTGCGGCTCCGGCGTCCGTAGCCACCGCCCCC
GTACCTGCGGGGTGGCGGTCCCCGGCGGCTGTGGTGTGAGTCCGGGGGGCGGCCGTAGCGCGCCATTTGCACCCG
CAGCTCGCGGCCGTCCAGCACGGCCCCGTCCATGGCATCCATAGCGTCCTCAGCGTCGCGCTTGTCGTGAAAGCG
AACGAAGGCGAAGCCGCGGGACTCCTTGGTGTAGCGATCCCGCGGGATGTACACGTCGCCGACGCGCCCGTACTT
CTCGAAGACGCGCCTCAGCGTGTCGGGCGAGGTGCGGTAGGTCAGGTTGTCCACCTTGAGGGAGGTCATACCCTC
CACATCGGGAGGGGGGCGGCCGTAGCTCATAGCTCTGAGTGGCGGCCCGGAGCCCCGCGAACTGGCGCCGGCTTC
CTCAGCTCTGGGCGGTGCGACGCCGCGCCTCTCAGGCAGTTGCCTTCCGCGTGGGGACACTGGGAAAGGCCTTGC
CGCAGAACAGCACGGACGGGCTCCGCAGGCTAGCGCACCTGAGTAACAACTGGGCGGGCAGCCGGCCTCTGCGCC
CGTTTATATCGCTCCTCACAAAATGGCGCCCGCGCCACCCGGAA**ATG**AAACCTTCTGATTGGCCCACCGCGCCCC
GCTTCGTAACGACCCTGCCGCGCGCCCCGCCCCTACCCGAAGCGCCTGCGCACAGCCCGGCGGGCGGGCCAAAAA
GCGCGGAGTCACGGCTGGAGGGAGGGGGAGCGGAATTAGCGGGCAGTTGGAAAGCCCGCGAAACGCTTTTTCCGC
CTGGGAGGCCGGACGATCGCGATTGGGCAGGAGNGNAAGAGGAGGTGCTCCCCATCTGGGCCCCCACCTTTTTTT
CATGCCAATACTCCAAGTTCACGCCCCTTTTTTGCTCAGCCGTCAGCCCCGTCTCCGTC**TGA**AGAGTGCTTCTGC
CCTCATTTGCCTCTCCCTGTGACCCCGGCCCCCTCAGACTCCGCTGCGTCGTCTCTCGGCCCCGTCCAGCCGTTC
CTGACTGCTCTTCGCCGGAGTCCGCTTCCCAACCCCCTTTCGCCAGAGCCCGAGAGCTCCGTCGGCTCTGCGTCC
TGGCGGTGGGGACTCCCCGCCGAGCGCTTGCGCGTGCCAGGTCACCCGGGACTACGTTTCCCNANGCNGNGNGCC
GAGCGGCCGGCGCCGCGGCTGCGGTCAGGTGACCCGGTCGCCTGGCCGCAGTGAGTCAGGCTGGGAGGGCGGGGC
CGCGCCGGCTGCTGCGGCTGGCACTTGGCCCTTTAATCCCCTTCGTGGGCCCCTCAACCTGGAGCGGATAAATTC
TTGGCGCTTCTNCCGGGGGTTGTGCTCTTCCGTACTCGGATCGCTTCTTAGGAGTATCCTAACTGCCGGTGGGGA
GAACTTCGCCCTAAACCTGGGGTTCCGATCCAGGAACTGGAAGTTGACAGCTTGGCTGCCTGGCTCCTACATCTG
CCTTCTCCACTCACCATCTCATTTCTTTCTCCAGGATTGTCAGTGGCTTCGCCCCGAGGAGAGCTGACTGCCCTG
GGCTGCTGCCTCCGGCAGAGCTGAGCCAAAATGTCCCCGGAATCTAAAAAGCTTTTCAACATCATTATTTTAGGA
GTTGCCTTTATGTTTATGTTCACTGCCTTTCAAACTTGTGG

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FIGURE 3509A

GGAATAAGCAATTCTGTGTGGGGACTGTCCCCAGGTAACCCTGCCACAGGAAATAGCAATTCTGGGTTCAGTCAG
GGGAATGGAGACACTGTGAACTCAGCATTAAGTGCTAAACAAAATGGATCCAGCAGTGCTGTGCAAAAGGAAGGA
AGTGGAGGAAATGCTTGGGATTCAGGACCTCCTGCTGGTCCTGGAATACTCGCCTGGGGAAGGGGCAGTGGCAAC
AATGGCGTTGGTAATATCCATTCAGGAGCTTGGGGCCACCCCAGCCGAAGCACCTCTAACGGTGTGAATGGGGAA
TGGGGAAAGCCCCCAAACCAGCATTCCAACAGTGACATCAATGGGAAAGGATCAACAGGGTGGGAGAGTCCTAGT
GTCACCAGCCAGAACCCTACCGTACAGCCTGGTGGTGAACACATGAACTCCTGGGCCAAAGCGGCATCTTCTGGA
ACTACAGCAAGTGAAGGAAGTAGTGATGGTTCTGGCAACCACAATGAAGGAAGCACTGGGAGGGAAGGAACGGGA
GAAGGCCGAAGGCGAGATAAAGGGATTATAGACCAAGGGCACATCCAGTTGCCAAGGAATGATCTTGACCCAAGA
GTTCTGTCTAATACTGGTTGGGGACAGACTCCTGTAAAGCAAAACACTGCCTGGGAATTTGAAGAATCCCCTAGG
TCTGAAAGGAAAAATGACAATGGGACAGAGGCCTGGGGTTGTGCAGCTACTCAGGCTTCAAACTCAGGGGGGAAG
AACGATGGGTCCATCATGAACAGTACAAATACCTCTTCAGTATCTGGGTGGGTCAACGCGCCACCTGCCGCTGTG
CCAGCAAACACAGGTTGGGGAGACAGCAACAACAAAGCGCCAAGTGGCCCGGGGGTTTGGGGGGACTCGATAAGC
TCTACTGCTGTTAGTACTGCTGCTGCTGCCAAGAGTGGCCATGCTTGGAGTGGGGCCGCAAATCAGGAGGACAAG
TCACCCACCTGGGGTGAGCCTCCAAAGCCCAAATCCCAACACTGGGGAGATGGACAAAGATCAAATCCAGCCTGG
AGTGCAGGAGGGGGAGATTGGGCAGATTCATCGTCTGTCCTTGGACACTTGGGGGATGGGAAAAAAAATGGATCT
GGATGGGATGCTGACAGTAATAGGTCAGGGTCTGGTTGGAATGACACCACGAGATCTGGGAACAGTGGCTGGGGC
AACAGCACAAATACAAAGGCCAATCCAGGTACAAACTGGGGGGAGACTTTAAAACCTGGCCCCCAACAGAACTGG
GCTAGCAAACCCCAAGACAACAATGTGAGTAACTGGGGAGGAGCTGCTTCTGTGAAACAGACAGGAACAGGGTGG
ATCGGGGGGCCGGTACCGGTCAAACAGAAGGACAGCAGTGAAGCAACTGGCTGGGAAGAACCCTCTCCACCGTCC
ATTCGCCGCAAAATGGAAATTGATGATGGTACCTCAGCTTGGGGGGACCCAAGCAACTATAACAATAAAACTGTA
AACATGTGGGATAGAAACAACCCGGTCATCCAGAGCAGTACCACGACCAATACCACCACCACCACCACCACTACC
ACGAGCAACACCACACACAGGGTCGAGACGCCGCCCCCGCACCAGGCCGGTACTCAGCTGAATCGATCACCGTTG
CTTGGTCCAGGTAGGAAAGTTTCATCAGGCTGGGGAGAAATGCCTA**ATG**TTCACTCAAAGACTGAAAACTCTTGG
GGAGAACCATCCNTCCCCTTCTACCCTGGTGGATAATGGCACAGCAGCATGGGGGAAGCCACCCAGCAGTGGCAG
CGGGTGGGGAGATCACCCTGCAGAGCCGCCGGTGGCATTTGGAAGAGCTGGCGCACCTGTTGCTGCCTCAGCCCT
GTGCAAACCAGCTTCAAAATCTATGCAAGAAGGCTGGGGCAGTGGTGGGGATGAAATGAACCTCAGTACCAGCCA
GTGGGAGGATGAAGAAGGGGACGTGTGGAATAATGCTGCTTCCCAAGAAAGCACCTCCTCCTGCAGCTCCTGGGG
GAACGCCCCCAAAAAAGGACTTCAAAAGGGCATGAAGACGTCTGGCAAGCAGGATGAGGCCTGGATCATGAGCCG
GCTGATCAAACAACTCACAGACATGGGCTTCCCGAGAGAGCCAGCTGAGGAGGCCTTGAAGAGTAACAATATGAA
TCTTGATCAGGCCATGAGCGCTCTGCTGGAAAAGAAGGTGGACGTGGACAAGCGTGGGCTGGGAGTGACCGACCA
TAATGGAATGGCCGCCAAGCCCCTCGGCTGCCGCCCGCCAATCTCCAAAGAGTCTTCCGTGGACCGCCCCACCTT
TCTTGACAAGGATGGCGGCCTCGTGGAAGAGCCCACGCCTTCACCGTTCTTGCCTTCCCCAAGCCTGAAGCTCCC
CCTTTCACACAGTGCACTCCCCAGTCAGGCCCTGGGTGGGATTGCCTCCGGGCTGGGCATGCAAAACTTGAATTC
TTCTAGACAGATACCGAGTGGCAATCTGGGTATGTTTGGCAATAGTGGAGCAGCACAAGCCAGGACCATGCAGCA
GCCGCCACAGCCACCAGTGCAGCCTCTTAACTCTTCCCAGCCCAGTCTCCGTGCTCAAGTGCCTCAGTTTCTATC
CCCTCAGGTTCAAGCACAGCTTTTGCAGTTTGCAGCAAAAAACATTGGTCTCAACCCTGCACTATTAACCTCGCC
AATTAATCCTCAACATATGACGATGTTGAACCAGCTCTATCAGCTGCAGCTGGCATACCAACGTTTACAAATCCA
GCAGCAGATGTTACAGGCCCAGCGTAATGTGTCCGGATCCATGAGACAACAGGAGCAGCAAGTTGCGCGCACAAT
CACTAATCTGCAGCAGCAGATCCAGCAGCACCAGCGCCAGCTGGCCCAGGCCCTGCTCGTGAAGCAGCCACCACC
GCCACCGCCCCCGCCGCACCTGTCTCTGCACCCCTCTGCAGGCAAATCGGCCATGGACAGCTTCCCCTCGCACCC
ACAGACTCCCGGCCTACCTGACCTGCAGACCAAAGAGCAGCAGTCTTCACCCAACACCTTTGCTCCTTACCCTCT
CGCTGGACTGAACCCAAACATGAATGTCAACAGCATGGACATGACCGGTGGCTTGTCGGTGAAGGACCCATCCCA
GTCCCAGTCACGCCTCCCCCAGTGGACGCACCCCAACTCCATGGATAACTTGCCCAGTGCCGCTTCCCCCCTGGA
GCAGAACCCTAGCAAGCATGGTGCTATCCCTGGAGGTCTAAGCATTGGGCCTCCAGGTAAGTCCTCCATTGATGA
CTCCTATGGCCGGTACGATTTAATCCAGAACAGTGAGTCACCAGCCAGTCCTCCCGTAGCTGTTCCCCATAGCTG
GTCACGTGCCAAATCTGACAGTGATAAAATCTCAAATGGCTCTAGCATCAACTGGCCCCCAGAATTCCATCCGGG
AGTTCCATGGAAAGGACTGCAGAATATTGACCCTGAGAATGACCCTGACGTCACTCCTGGCAGTGTCCCCACTGG
GCCTACCATCAACACCACCATCCAGGATGTCAACCGCTACCTCCTCAAGAGTGGAGGTAAACTGTCAGACATCAA

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FIGURE 3509B

ATCGACGTGGTCCTCTGGCCCTACCTCCCACACGCAAGCCTCTCTGTCTCATGAACTATGGAAGGTGCCCAGAAA
CAGTACTGCACCCACGAGGCCACCTCCAGGGTTAACCAATCCCAAGCCCTCCTCCACCTGGGGTGCCAGCCCCCT
CGGCTGGACCAGCTCCTACTCCTCGGGTTCTGCCTGGAGCACCGACACCTCAGGAAGAACCAGCAGCTGGCTCGT
TCTTCGAAACCTCACTCCCCAGATTGATGGTTCTACACTGCGGACATTGTGTTTGCAACATGGGCCTCTTATCAC
ATTCCACCTGAATCTGACTCAAGGCAATGCTGTGGTCCGGTACAGCTCCAAGGAGGAGGCTGCCAAGGCCCAGAA
GTCTCTGCACATGTGCGTCCTGGGAAACACTACCATCCTGGCCGAGTTCGCTGGTGAAGAAGAAGTGAATCGCTT
CTTAGCCCAAGGCCAGGCGCTGCCACCCACTTCCAGCTGGCAGTCCAGCAGCGCGTCCAGCCAGCCGCGGCTCAG
CGCAGCGGGCAGCTCCCATGGCCTGGTACGCAGCGACGCTGGCCACTGGAACGCCCCGTGCCTGGGTGGCAAGGG
GAGCAGTGAGCTGCTGTGGGGCGGGGTGCCCCAGTACTCCAGCAGCCTGTGGGGCCCGCCCAGCGCCGACGACAG
CAGGGTGATAGGCAGCCCCACGCCGCTAACCACCCTGCTGCCTGGGGACCTGCTCAGCGGGGAGTCCCTGTAGGC
TCTGCCATCATCAGCACCAGGAGAGCCGACCCCTCCCGGGACCCCTCCCGGGTGGGCGGCNCCCACAGACCCGGT
NGGAACCCAGCAGCGGNNCCGCCCTTTTGAGTACCTCTGTCCAGGACTGAAGACGNAACCTTGGCCGCAGTCCTT
GCGAACTGTTCGCAAAACAGTGCGGGCNTGCGGTGGGNTCAGCGTCACATGCTAATGACAGGATGTTCCTCGTAG
CTTTTTATTTTGTGCGTCTTATGTTTGTATAGTGTGTTGTCATTTTGATTTTTTTTTTTTTTTTAAGTATAAAAG
CTGCTTAGAATAGTTCTATCATGAAGGGCACTTTTCAGATTGTGGGCTGGAAAGGGTTATTTTATCTGTGGGGGA
GGGAGGGAGACGTGAAGCCTATTTAAAATGAGCCTGTGACGATTATGCACATGACCAGAGGCGGCCGGTAATCAG
GGCAGAGTCTGGTGTGGACCGCCGGGCGCAGAGCGGCTCCGCGGCGGGAGCTGAGCGGAAGGCGCGGGCTGCGAT
CTGCTCTCTGTTCCCCTGGATCCGCCTATGCACATTACCCTTGTTTCATTACTTTTTCATGTCATTTTTTTATCC
CAAAAAATATTTTTTAAAAGTTAAAAAAAAGACATATCAAACATGCAAATACTTGAATCCAGCAGGCCAATAGTGA
AATGTGAACACTTTCTAATTCTACACTTCCAGGTTGACATCAGTACACAGAAACAGGNNCTCTAGGAAAAATTTC
TAAGTTCATAGCCTACGTGTGTGTATGTGTGCGTGTTGAAACAGAAGTGTGTGTGTGTGTGCATGTGTGGCGCGT
GCTCCTGCACGGCGTGCAGTTTTCTGTGTTTGTGTGTTTGAAAGCGTGTGAGGATTTAACTGTGGGTTTTCCCTT
GTATTCAGTATACGCTTTTTTTTTGGCGCATTGGTCAAACGGTTGTTATTATTAGCTTCTAACTTTGCACTGAGT
GTCCTCGCCCTTCCTTTAGCTAATCCTATACATTACAGAGAATTCCTAGGACAGGGCTGGCGACAATTCATGTGT
AAATGTTTACTCAAGGACTCTGTGACTGCGTTTAAAAAGTACAGTGTATATCTCTGGAGAAATAACATGTATACC
TACCTTTAGCAGCTTTTTATTGTGGACTAATGCAAGAAAATTATTACCAGAGTATTGCACCATTTTTCCATTTGG
AATATAAAGTTAAAGAGAAAAAAAAAAAAAAACTGTTGTTGAACTGTGGCCATAGATACTTGTAAAGAATGGATGG
TTCCGTGGAAGGAACAGAAACAAGCACTTGGGCGTGGGTTGTGACTGCTTTTGGGGGAGCCTGGGGTTTGGGCTC
CCACCTGTTTACAGACCTTTTTTTCTCCTTCAGACTTTAAAATTTTAAAAATTTAAAAAGG

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FIGURE 3510A

AGGTGCGGCTACTCCCCCGGCCCCGGCAGACCTGCGACTGGCCCAGTCGCCCCTGGGGCCCTTTGCCACTCCCTT
GGCAAGGAGAGCCGAGACCTCAGTTCCCGGCGGCTCTTGCGGGGCACAGGTGAGCCCTGGCTGCGCGCGCGGCCC
CTCCTCCCCGGCGCCTCCCAGATGGGGGCTCCGGAGGTGGCGCCCAGGCTCTGAGCTACCCTAGGTCTGCAGACT
AGCGGGCATTGGCCAGAGACATGGCCCAGCCACTGGCCTTCATCCTCGATGTCCCTGAGACCCCAGGGGACCAGG
GCCAGGGCCCCAGCCCCTATGATGAAAGCGAAGTGCACGACTCCTTCCAGCAGCTCATCCAGGAGCAGAGCCAGT
GCACGGCCCAGGAGGGGCTGGAGCTGCAGCAGAGAGAGCGGGAGGTGACAGGAAGTAGCCAGCAGACACTCTGGC
GGCCCGAGGGCACCCAGAGCACGGCCACACTCCGCATCCTGGCCAGCATGCCCAGCCGCACCATTGGCCGCAGCC
GAGGTGCCATCATCTCCCAGTACTACAACCGCACGGTGCAGCTTCGGTGCAGGAGCAGCCGGCCCCTGCTCGGGA
ACTTTGTCCGCTCCGCCTGGCCCAGCCTCCGCCTGTACGACCTGGAGCTGGACCCCACGGCCCTGGAGGAGGAGG
AGAAGCAGAGCCTCCTGGTGAAGGAGCTCCAGAGCCTGGCAGTGGCACAGCGGGACCACATGCTTCGCGGGATGC
CCTTAAGCCTGGCTGAGAAACGCAGCCTGCGAGAGAAGAGCAGGACCCCGAGGGGGAAGTGGAGGGGCCAGCCGG
GCAGCGGCGGGGTCTGCTCCTGCTGTGGCCGGCTCAGATATGCCTGCGTGCTGGCCTTGCACAGCCTGGGCCTGG
CGCTGCTCTCCGCCCTGCAGGCCCTGATGCCGTGGCGCTACGCCCTGAAGCGCATCGGGGGCCAGTTCGGCTCCA
GCGTGCTCTCCTACTTCCTCTTTCTCAAGACCCTGCTGGCTTTCAATGCCCTCCTGCTGCTGCTGCTGGTGGCCT
TCATCATGGGCCCTCAGGTCGCCTTCCCACCCGCCCTGCCGGGCCCTGCCCCCGTCTGCACAGGCCTGGAGCTCC
TCACAGGCGCGGGTTGCTTCACCCACACCGTCATGTACTACGGCCACTACAGTAACGCCACGCTGAACCAGCCGT
GTGGCAGCCCCCTGGATGGCAGCCAGTGCACACCCAGGGTGGGTGGCCTGCCCTACAACATGCCCCTGGCCTACC
TCTCCACTGTGGGCGTGAGCTTCTTTATCACCTGCATCACCCTGGTGTACAGCATGGCTCACTCTTTCGGGGAGA
GCTACCGGGTGGGCAGCACCTCTGGCATCCACGCCATCACCGTCTTCTGCTCCTGGGACTACAAGGTGACGCAGA
AGCGGGCCTCCCGCCTCCAGCAGGACAATATTCGCACCCGGCTGAAGGAGCTGCTGGCCGAGTGGCAGCTGCGGC
ACAGCCCCAGGAGCGTGTGCGGGAGGCTGCGGCAGGCGGCTGTGCTGGGGCTTGTGTGGCTGCTGTGTCTGGGGA
CCGCGCTGGGCTGCGCCGTGGCCGTCCACGTCTTCTCGGAGTTCATGATCCAGAGTCCAGAGGCTGCTGGCCAGG
AGGCTGTGCTGCTGGTCCTGCCCCTGGTGGTTGGCCTCCTCAACCTGGGGGCCCCCTACCTGTGCCGTGTCCTGG
CCGCCCTGGAGCCGCATGACTCCCCGGTACTGGAGGTGTACGTGGCCATCTGCAGGAACCTCATCCTCAAGCTGG
CCATCCTGGGGACACTGTGCTACCACTGGCTGGGCCGCAGGGTGGGCGTCCTGCAGGGCCAGTGCTGGGAGGATT
TTGTGGGCCAGGAGCTGTACCGGTTCCTGGTGATGGACTTCGTCCTCATGTTGCTGGACACGCTTTTTGGGGAAC
TGGTGTGGAGGATTATCTCCGAGAAGAAGCTGAAGAGGAGGCGGAAGCCGGAGTTTGACATTGCCCGGAATGTCC
TGGAGCTGATTTATGGGCAGACTCTGACCTGGCTGGGGGTGCTCTTCTCGCCCCTCCTCCCCGCCGTGCAGATCA
TCAAGCTGCTGCTCGTCTTCTATGTCAAGAAGACCAGCCTTCTGGCCAACTGCCAGGCGCCGCGCCGGCCCTGGC
TGGCCTCACACATGAGCACCGTCTTCCTCACGCTGCTCTGCTTCCCCGCCTTCCTGGGCGCCGCTGTCTTCCTCT
GCTACGCCGTCTGGCAGGTGAAGCCCTNCGAGCACCTNGNCGGCCCCTTCCGGACCCTGGACANCCATGTACGNA
GGCCGGCAGGGTGNTGGGTGCGNCCACCTGGAGGCGGNCAGGCCCCAGGGTCTCCTGGCTGCCCTGGGTGCACCG
GTACCTGATGGAAAACACCTTCTTTGTCTTCCTGGTGTCAGCCCTGCTGCTGGCCGTGATCTACCTCAACATCCA
GGTGGTGCGGGGCCAGCGCAAGGTCATCTGCCTGCTCAAGGAGCAGATCAGCAATGAGGGTGAGGACAAAATCTT
CTTAATCAACAAGCTTCACTCCATCTACGAGAGGAAGGAGAGGGAGGAGAGGAGCAGGGTTGGGACAACCGAGGA
GGCTGCGGCACCCCCTGCCCTGCTCACAGATGAACAGGATGCCTAGGGGGACGGCGATGGGCCTCACGGGCCCGC
CCAGCACCCTGAGACCACACTGTTGCCTCCCAGTGACCCTGCTGGGACACCAGGACAAGGAAGACAGTTTCGCCT
CTCGAAAGCCGCAGCTGCGCCTAGGCTGGAGCTGGAAGGGTGGGTGAATCCGGCTTGGGCATCCCCAATGAACTC
TGCCCTGCCTGGGACTCTATTTATTCTGATTAAAGGGGTTTTGCAAATGGGCTTGTCCCTTGGGGCTCTGTGTCT
GTGACCACACCCGGGGCCTGCTTCCCGCTGCCCTGGGGCCACCTCCAGGCGCAGGTCTGGGTCCTGGGAACCTCA
GCTGGAGTGGGGGCGCCCTCTGCTGGCCAAGCCCCAGATGGCAGGGGCTGGACCGCGCCAGGGCTTGATTCGCTT
GCTGCCTTTGACCAGCCTGAACTCGCGCCCAGGAGGGGCTTACACCTGCACAAGTGAGCCGAGCAGGCACGGATT
GTGACCAGAGCGATGCGTCAACCATTGGGTGATGCTGTAGCATCTACTGGAGCAGGAGACAAATTTAGAGAGGGA
CTTGGAGGGGAGACATATCAGTTGCAAATGAGTTGTGGGGACAGTTGCCTCCCAGGCATAGGTAACCAGCACCTG
TGCTTGGAGGCGAACAGGGCTTGGTGAGGTGGGGCTGGCCCCCTGCTTCTGGCTGCCAGCAGCTGGCTGGGGGGT
GGTGATCCTGGGTCTGACTGGGCTGAGTTTGAGGAGCCCGTGGGATACCGAAAACCGTAGGCTGTGGGGGGTGGG
CACAGGGATTCGGGGACCAGCCCGTCATGACCCCGTGCTCCAGGTCTGCAGGGACCAGCCCATGACAGCCCAGGG
CTCCAGGTCTGCGGGGACCAGCCCATCACAGCCCAGGGCTCCAGGCCTGCGGGGACCAGCCCGTCAGCCTCAGTT

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FIGURE 3510B

CTCCAGGCCTGCGGGGACCAGCCCGTCATGACCCCAGTGCTCCAGGTCTGTGGGGACCAGCCCGTCAGCCTGTGC
TCCAGGCCTGCAGGAACCAGCCCGTCAGCCTCAGTGCTCCAGGCCTGCGGGGACCAGCCCGTCAGCCTGTGCTCC
AGGCCTGCGGGGACCAGCCCGTCATGACCCCAGTGCTCCAGGTCTGTGGGGACCAGCCCGTCAGCCTGTGCTCCA
GGCCTGCGGGAACCAGCCCGTCATGACCCCAGTGCTCCAGGCCTGCGGGGACCAGCCCGTCATGACCCCAGTGCT
CCAGGTCTGTGGGGACCAGCCCGTCACGGCGCAGGGTTCCAGGCTTGTGGGGACCAGCCTGTCACAGCCCAGGGC
TCCAGGCCTGCAGGAGCTGCGCTTGGGATTGGGGGAATGAACCCAGGTGGGGAAATGGTCAAAGAGCGATGGGCC
CAGAAAAGGGTCAGACCCAGATGGAGATGCCACTGGCTGCTAGCAGACCCCCACGCTGGGTCTAGCCCACCCAAT
NCCCATGGGGATGCTCCTGTGCTCTGCAGACATCTGGGTGCTGCCACAGGGGCCCGACAGAGTTGGCATCTGGGT
GGATCTGAGCCAAGTGGTGCTTCTGGGCCTCAGCAAGTAGCTGGTGCTGATTCTGGGCAGCCAACTGTGGCAGCA
TCTTCAGGTGCGAGTGCTGCTGGGTGAAGCTGCGTGGGCAGTCCAGAAAGTGACGTGACAGTCCACAGGGACCGA
CGTAGGGTTTCCAGCCCCTATCTGTGCAGATGCTGTCCTCCAAACCATCACGGTCCCTCTCTGGCTGGGGACGTG
CGCCTGCCACTGCTGGCTTGCCAGCATGATCATTGGTTGTGACCTGTTGAGCCCATCTTGCCAGCCTCACAAAGG
ACAGTACTAGCTGCTTATGACAGGAAAGTGGAAGAACTTGGCCTGGATATTTCTGGAGAATTACCGTGTGTGCTA
GTCAGTCTTTCGTGTCAACCAGGCCAGGCTGTGGGGCCCAGTGATCTCATCGAGAGGGGCCGAGGTGTTGCTGTG
ATCGTGTGCTGCTGGAATGTGGTGAACACCTACAGTCGATTTCACCTAAAGATCATCCTTGAGAATGTGGGTGGG
CCTCATCCTATCAGCTGAAAGCTTTAAGAGCAAAACCCGAGGTGTCCCAGAGAGGGAATTCTGCCTTGAGACGGC
GGCTTCCCACTCCCACTGGATGTCCAGCCCGCGGCCCCACGGCTGGGTGAGCCCGTCCTCTCCTCGTTTCTGTCT
CCGGACCCACCGTGTGGCCCCAGACCCTCCAGTGAGGACCTCCCGTATTTCTTCAGAGCAGCCCTTGCGTGCTGG
AGGCCTGGGCTTCAGTGTGTCCCTGGGTGCCCTGGGGCATGTTCTGTGACCTCCCAGCTCCTCGCCTCATGGGGC
CGCTGTATCAAGTGACACAGTTTGTGTGCTGCGTACCATGCCTGGCACCCATTTGAGGTGTTGCAAGGAGGCCAT
GTTTGCTCGATGAGAGCAGCCTAAGATCTACAAACTGTTGTTCGAGTGGATGGGAACTTGATGCTATTTTCAGGC
TGAATGACAAGACTCCGCGATGCTTCTCGGCCTGGGCTGCACAACGGAATCTACCAGGGAGGTTTTAAAAACACT
GGTACTTGCTGGAGGTGGTGGCGCCTGTCTGTAATTGCAGCTGCTCCAGAGGCTGAGGCGGAGGATTGCTTGAGC
CCAAGAGTTTCGGTTTATTTGCTTTTTCAGAG

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FIGURE 3511

CCGCCAGATTTGAATCGCGGGACCCGTTGGCAGAGGTGGCGGCGGCGGCATGGGTGCCCCGACGTTGCCCCCTGC
CTGGCAGCCCTTTCTCAAGGACCACCGCATCTCTACATTCAAGAACTGGCCCTTCTTGGAGGGCTGCGCCTGCAC
CCCGGAGCGGATGGCCGAGGCTGGCTTCATCCACTGCCCCACTGAGAACGAGCCAGACTTGGCCCAGTGTTTCTT
CTGCTTCAAGGAGCTGGAAGGCTGGGAGCCAGATGACGACCCCATAGAGGAACATAAAAAGCATTCGTCCGGTTG
CGCTTTCCTTTCTGTCAAGAAGCAGTTTGAAGAATTAACCCTTGGTGAATTTTTGAAACTGGACAGAGAAAGAGC
CAAGAACAAAATTGCAAAGGAAACCAACAATAAGAAGAAAGAATTTGAGGAAACTGCGGAGAAAGTGCGCCGTGC
CATCGAGCAGCTGGCTGCCATGGATTGAGGCCTCTGGCCGGAGCTGCCTGGTCCCAGAGTGGCTGCACCACTTCC
AGGGTTTATTCCCTGGTGCCACCAGCCTTCCTGTGGGCCCCTTAGCAATGTCTTAGGAAAGGAGATCAACATTTT
CAAATTAGATGTTTCAACTGTGCTCTTGTTTTGTCTTGAAAGTGGCACCAGAGGTGCTTCTGCCTGTGCAGCGGG
TGCTGCTGGTAACAGTGGCTGCTTCTCTCTCTCTCTCTCTTTTTTGGGGGCTCATTTTTGCTGTTTTGATTCCCG
GGCTTACCAGGTGAGAAGTGAGGGAGGAAGAAGGCAGTGTCCCTTTTGCTAGAGCTGACAGCTTTGTTCGCGTGG
GCAGAGCCTTCCACAGTGAATGTGTCTGGACCTCATGTTGTTGAGGCTGTCACAGTCCTGAGTGTGGACTTGGCA
GGTGCCTGTTGAATCTGAGCTGCAGGTTCCTTATCTGTCACACCTGTGCCTCCTCAGAGGACAGTTTTTTTGTTG
TTGTGTTTTTTTGTTTTTTTTTTTTTGGTAGATGCATGACTTGTGTGTGATGAGAGAATGGAGACAGAGTCCCTG
GCTCCTCTACTGTTTAACAACATGGCTTTCTTATTTTGTTTGAATTGTTAATTCACAGAATAGCACAAACTACAA
TTAAAACTAAGCACAAAGCCATTCTAAGTCATTGGGGAAACGGGGTGAACTTCAGGTGGATGAGGAGACAGAATA
GAGTGATAGGAAGCGTCTGGCAGATACTCCTTTTGCCACTGCTGTGTGATTAGACAGGCCCAGTGAGCCGCGGGG
CACATGCTGGCCGCTCCTCCCTCAGAAAAAGGCAGTGGCCTAAATCCTTTTTAAATGACTTGGCTCGATGCTGTG
GGGGACTGGCTGGGCTGCTGCAGGCCGTGTGTCTGTCAGCCCAACCTTCACATCTGTCACGTTCTCCACACGGGG
GAGAGACGCAGTCCGCCCAGGTCCCCGCTTTCTTTGGAGGCAGCAGCTCCCGCAGGGCTGAAGTCTGGCGTAAGA
TGATGGATTTGATTCGCCCTCCTCCCTGTCATAGAGCTGCAGGGTGGATTGTTACAGCTTCGCTGGAAACCTCTG
GAGGTCATCTCGGCTGTTCCTGAGAAATAAAAAGCCTGTCATTTC

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FIGURE 3512

GCGGCGGCGGCAGCGGCGGCGACGGCGACATGGAGAGCGGGGCCTACGGCGCGGCCAAGGCGGGCGGCTCCTTCG
ACCTGCGGCGCTTCCTGACGCAGCCGCAGGTGGTGGCGCGCGCCGTGTGCTTGGTCTTCGCCTTGATCGTGTTCT
CCTGCATCTATGGTGAGGGCTACAGCAATGCCCACGAGTCTAAGCAGATGTACTGCGTGTTCAACCGCAACGAGG
ATGCCTGCCGCTATGGCAGTGCCATCGGGGTGCTGGCCTTCCTGGCCTCGGCCTTCTTCTTGGTGGTCGACGCGT
ATTTCCCCCAGATCAGCAACGCCACTGACCGCAAGTACCTGGTCATTGGTGACCTGCTCTTCTCAGCTCTCTGGA
CCTTCCTGTNGGTTTGTTGGTTTCTGCTTCCTCACCAACCAGTGGGCAGTCACCAACCCGAAGGACGTGCTGGTG
GGGGCCGACTCTGTGAGGGCAGCCATCACCTTCAGCTTCTTTTCCATCTTCTCCTGGGTAGGATGGCCAGGGGCC
GGTTCTTGGGTCAAGGNGTGTGGAAGGGGGGGNANCCCCCANCCCACCTGTACCCTGCTGTGCTCCCCCTGCAGG
GTGTGCTGGCCTCCCTGGCCTACCAGCGCTACAAGGCTGGCGTGGACGACTTCATCCAGAATTACGTTGACCCCA
CTCCGGACCCCANACACTGCCTACGCCTCCTACCCAGGTGCATCTGTGGACAACTACCAACAGCCACCCTTCACC
CAGAACGCGGAGACCACCGAGGGCTACCAGCCGCCCCCTGTGTACTGAGCGGCGGTTAGCGTGGGAAGGGGGACA
GAGAGGGCCCTCCCNCTCTGCCCTGGACTTTCCCATGAGCCTCCTGGAACTGCC

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FIGURE 3513

CTTACTGCGGGACGGCCTTGGAGAGTACTCGGGTTCGTGAACTTCCCGGAGGCGCAATGAGCTGCATTAACCTGC
CCACTGTGCTGCCTGGCTCCCCCAGCAAGACCCGGGGGGCAGATCCAGGTGATTCTCGGGCCGATGTTCTCAGGAA
AAAGCACAGAGTTGATGAGACGCGTCCGTCGCTTCCAGATTNGCTCAGTACAAGTGCCTGGTGATCAAGTATGCC
AAAGACACTCGCTACAGCAGCAGNCTTCTGCACACATGACCGGAACACCATGGAGGCACTGCCCGCCTGCCTGCT
CCGAGACGTGGCCCAGGAGGCCCTGGGCGTGGCTGTCATAGGCATCGACGAGGGGCAGTTTTTCCCTGACATCGT
GGAGTTCTGCGAGGCCATGGCCAACGCCGGGAAGACCGTAATTGTGGCTGCACTGGATGGGACCTTCCAGAGGAA
GCCATTTGGGGCCATCCTGAACCTGGTGCCGCTGGCCGAGAGCGTGGTGAAGCTGACGGCGGTGTGCATGGAGTG
CTTCCGGGAAGCCGCCTATACCAAGAGGCTCGGCACAGAGAAGGAGGTCGAGGTGATTGGGGGAGCAGACAAGTA
CCACTCCGTGTGTCGGCTCTGCTACTTCAAGAAGGCCTCAGGCCAGCCTGCCGGGCCGGACAACAAAGAGAACTG
CCCAGTGCCAGGNAAAGCCAGGGGAAGCCGTGGCTGCCAGGAAGCTCTTTGCCCCACAGCAGATTCTGCAATGCA
GCCCTGCCAACTGAGGGACCTGCGAGGGCCGCCCGCTCCCTTCCTGCCACTGCCGCCTACTGGACGCTGCCCTGC
ATGCTGCCCAGCCACTCCAGGAGGAAGTCGGGAGGCGTNGGAGGGTGACCACACCTTGGCCTTNCTGGGAACTCT
CCTTTGTGTGGCTGCCCCACCTGCCGCATGCTCCCTCCTCTCCTACCCACTGGTCTGCTTAAAGCTTCCCTCTCA
GCTGCTGGGACGATCGCCCAGGCTGGAGCTGGCCCCGCTTGGTGGCCTGGGATCTGGCACACTCCCTCTCCTTGG
GGTGAGGGACAGAGCCCCACGCTGTTGACATCAGCCTGCTTCTTCCCCTCTGCGGCTTTCACTGCTGAGTTTCTG
TTCTCCCTGGGAAGCCTGTGCCAGCACCTTTGAGCCTTGGCCCACACTGAGGCTTAGGCCTCTCTGCCTGGGATG
GGCTCCCACCCTCCCCTGAGGATGGCCTGGATTCACGCCCTCTTGTTTCCTTTTGGGCTCAAAGCCCTTCCTACC
TCTGGTGATGGTTTCCACAGGNAACAACAGCATCTTTCACCAAGATGGGTGGCACCAACCTTGCTGGGACTTGGA
TCCCAGGGGCTTATCTCTTCAAGTGTGGAGAGGGCAGGGTCCACGCCTCTGCTGTAGCTTATGAAATTAACTAAT
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FIGURE 3514

GGCCGGGCGCCCTCGCCGCCCTCCGGCAGCCGCGCCGCTCCCTCCGCTGCACGCCCAGGCCTGAGCAGCGAGGCC
ACCGGGCCGCGCGCTCCCAGCTTCGCTCGGACGCGGCTTCGGCCCGCAGAGGGTTCGTGGCCCGGACGCGGCGAG
AGCTGGGCCCAGGACGGTGCGTCCGGCCTCGCCCGCGGCTGCTCGCACCAACAAGTTTGAACAATGATCACCGTC
AACCCCGATGGGAAGATAATGGTCAGAAGATGCCTGGTCACCCTGAGACCCTTTCGGCTTTTTGTCCTGGGCATC
GGCTTCTTCACTCTCTGCTTCCTGATGACGTCTCTGGGAGGCCAGTTCTCGGCCCGGCGCCTGGGGGACTCGCCA
TTCACCATCCGCACAGAAGTGATGGGGGGCCCCGAGTCCCGCGGCGTCCTGCGCAAGATGAGCGACCTGCTGGAG
CTGATGGTGAAGCGCATGGACGCACTGGCCAGGCTGGAGAACAGCAGTGAGCTGCACCGGGCCGGCGGCGACCTG
CACTTTCCCGCAGACAGGATGCCCCCTGGGGCCGGCCTCATGGAGCGGATCCAGGCTATTGCCCAGAACGTCTCC
GACATCGCTGTGAAGGTGGACCAGATCCTGCGCCACAGTCTGCTCCTGCACAGCAAGGTGTCAGAAGGCCGGCGG
GACCAGTGTGAGGCACCCAGTGACCCCAAGTTCCCTGACTGCTCAGGGAAGGTGGCAGTGGATGCGTGCCCGCTG
GACCTCTGACCCCTGCTACGCCTTCTTTGGGGTGGACGGCACCGAGTGCTCCTTCCTCATCTACCTCAGTGAGGT
CGAGTGGTTCTGCCCCCCGCTGCCCTGGAGGAACCAGACGGCTGCCCAGAGGGCACCCAAGCCCCTCCCCAAAGT
CCAGGCAGTTTTCCGAAGCAACCTGTCCCACCTTCTGGACCTGATGGGCAGCGGGAAGGAGTCCCTGATCTTCAT
GAAGAAGCGGACCAAGAGGCTCACAGCCCAGTGGGCGCTGGCTGCCCAGCGCCTGGCACAGAAGCTGGGGGCCAC
CCAGAGGGACCAGAAGCAGATCCTGGTCCACATCGGCTTCCTGACGGAGGAGTCCGGGGACGTGTTCAGCCCTCG
GGTCCTGA

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FIGURE 3515

CAGGTGAGGCGGAACCAACCCTCCTGGCCATGGGAGGGGCCGTGGTGGACGAGGGCCCACAGGCGTCAAGGCCCT
GACGGCGGCTGGGCGTGAGGCGTGCTCTTCGGCTGTTTCGTCATCACTGGCTTCTCCTACGCCTTCCCCAAGGCC
GTCAGTGTCTTCTTCAAGGAGCTCATACAGGAGTTTGGGATCGGCTACAGCGACACAGCCTGGATCTCCTCCATC
CTGCTGGCC**ATG**CTCTACGGGACAGGTCCGCTCTGCAGTGTGTGCGTGAACCGCTTTGGCTGCCGGCCCGTCATG
CTTGTGGGGGGTCTCTTTGCGTCGCTGGGCATGGTGGCTGCGTCCTTTTGCCGGAGCATCATCCAGGTCTACCTC
ACCACTGGGGTCATCACGGGGTTGGGTTTGGCACTCAACTTCCAGCCCTCGCTCATCATGCTGAACCGCTACTTC
AGCAAGCGGCGCCCCATGGCCAACGGGCTGGCGGCAGCAGGTAGCCCTGTCTTCCTGTGTGCCCTGAGCCCGCTG
GGGCAGCTGCTGCAGGACCGCTACGGCTGGCGGGGCGGCTTCCTCATCCTGGGCGGCCTGCTGCTCAACTGCTGC
GTGTGTGCCGCACTCATGAGGCCCCTGGTGGTCACGGCCCAGCCGGCTCGGGGCAGCCGCGACCCTCCCGGCGCC
TGC**TAG**ACCTGAGCGTCTTCCGGGACCGCGGCTTTGTGCTTTACGCCGTGGCCGCCTCGGTCATGGTGCTGGGGC
TCTTCGTCCCGCCCGTGTTCGTGGTGATGACGCCAAGGACCTGGCGTGCCCGACACCAAGGCGCCTTCCTGCTCA
CCATCCTGGGCTTCATTGACATACTTACGCCCGCGCGGGCTTCGTGCGGGGCTTGGGAAGGTGCGGCCCTATCCG

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FIGURE 3516

ATTTTCCTGGGGCTCCGGGGCGCGGAGAAGCTGCATCCCAGAGGAGCGCGTCCAGGAGCGGACCCGGGAGTGTTT
CAAGAGCCAGTGACAAGGACCAGGGCCCAAGTCCCACCAGCCATGCAGACCTGCCCCCTGGCATTCCCTGGCCAC
GTTTCCCAGGCCCTTGGGACCCTCCTGTTTTTGGCTGCCTCCTTGAGTGCTCAGAATGAAGGCTGGGACAGCCCC
ATCTGCACAGAGGGGGTAGTCTCTGTGTCTTGGGGCGAGAACACCGTCATGTCCTGCAACATCTCCAACGCCTTC
TCCCATGTCAACATCAAGCTGCGTGCCCACGGGCAGGAGAGCGCCATCTTCAATGAGGTGGCTCCAGGCTACTTC
TCCCGGGACGGCTGGCAGCTCCAGGTTCAGGGAGGCGTGGCACAGCTGGTGATCAAAGGCGCCCGGGACTCCCAT
GCTGGGCTGTACATGTGGCACCTCGTGGGACACCAGAGAAATAACAGACAAGTCACGCTGGAGGTTTCAGGTGCA
GAACCCCAGTCCGCCCCCGACACTGGGTTTGGCCTGTGCCAGCGGTGGTCACTGCTGTCTTCATCCTCTTGGTCG
CTCTGGTCATGTTCGCCTGGTACAGGTGCCGCTGTTCCAGCAACGCCGGGAGAAGAAGTTCTTCCTCCTAGAACC
CCAGATGAAGGTCGCAGCCCTCAGAGCGGGACGCAGCAGGGCCTGAGCAGACCTCCGCTGAACTGTGGACCCCAG
ACTCCGAGCCCACCCCAAGGCCGCTGGCACTGGTGTTCAAACCCTCACCACTTGGAGCCCTGGAGCTGCTGTCCC
CCCAACCCTTGTTTCCATATGCCGCAGACCCATAGCCGCCTGCAAGGCAGAGAGGACACAGGAGAGCCAGCCCTG
AGTGCCGACCTTGGGTGGCGGGGCATGGGTCTCTCGTCCCACCCGGAGCACCAGACACCGGCTTGCTTGGCAGGC
TGGGCTTCTGTGTCACCCACTCCTGGGTGCGTGCAGACCCTTCCCCTCCAACCCCCAGGTCTTCCAAGCTCTGCT
TCCTCAGTTTCCAAAATGGAACCAACTCACCTTCCGAGCAACCGAATTACCAGGAACGATGCCCCTCCCTCTGCC
CTCATCAAACCCACAGACCCGGACTCCCTTTCTGCCACCCCAGGCTGGTCCGGCCCCAGGTGTGGGTCCGCTCTC
TCCACTCCCAGGGCTCCGCGCCAAGTGAGGGGGCCCCTGCCGGAGCCTCAGACACACTCCAGTTCAGGGCTGTGG
GGGGCCTGGCCACATACCTGTCCCTTGGCTATGAGCAGGCTTTGGGGGCCCTTCCGCGGCAGCCCGGGGGCCGAG
GTAGGGTCGGGGGCTTAGAGGCTGGGATGGCTCCTGGCCCCACCGCCAGGGGGCAGCGCAGGCCGGGCTGGGAGG
CGGCGGCGGCGGCTCGGGCTGGGGGGTCAGGTGGACGCCGCCCTCCGGGGCTGGACGCGCATCCCTCAGTCCCTC
GGCCACCCGGGGGTCGCTCCCTCGTGCCCACCGCACCTGCCGAGCCTCTTTGGACCCAGATCTGTTCATGCTTTT
GTCTTCGTCACTGCGGCGGGGCCCTTTGATGTCTTCATCTGTATGGGGTGGAAAAATCACCGGGAATCCCCCTTC
AGTTCTTTGAAAAAGTTCCATGACTCGAATATCTGAAATGAAGAAAACAAACCGACTCACAAACCTCCAAGTAGC
TCCAAATGCAATTTTTAAAATGGAAAACAAAAATCTGAAAGAAACGTCTTTAGTGGCTTTAAGCCCCAAAACGTC
CCTAAGGCGTCCTCGAGATGAAGACGGGGGGGAGCCAGCCAGGTGGAGACCCGCGAGCGCGGCGGCGCCCGGTGA
CCGAGGCCTCGCACAGCCGGCCGCCCTGAGGGTCGGGCCGAGCCAGGGTCCAAGAGGGGCGCGTTTGTGTCTCGG
GTTAAAATAAGGTTCCGTCCGCGTGCTGGGTCAGA

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FIGURE 3517

GCGCGATGGGGCGGCTCCTTTAGGCAGCTGAAAGGGGATTTAGGCCCGGAAGATCCGAGTCCATCCGCGGCGGGG
AGAGGGCAAGCGGGACCGGTAGGGCATGCAGCGGCGGCGCCGATCGGACATGTCCCATCCGCCCCGTATTGAGGC
GCTGGGAGCGCGGTGCGCGACAGGAAAGCGATGGTGAAAGCGGGGCCGTGAGGTGGGCGGCAGGAACGGCCGGAC
CCGCAGTAGCGCAGCAGCGGCGCCGCCTCCCAGAGTTCAGACCCAGGAAGCGGCCGGGAGGCAGGAGCGAATCGG
GCCGCCGCCGCCATGGAGCTGAGAGTCGGGAACAGGTACCGGCTGGGCCGGAAGCATCGGCAGCGGCTCCTTCGG
AGACATCTATCTCGGTACGGACATTGCTGCAGGAGAAGAGGTTGCCATCAAGCTTGAATGTGTCAAAACCAAACA
CCCTCAGCTCCACATTGAGAGCAAAATCTACAAGATGATGCAGGGAGGAGTGGGCATCCCCACCATCAGATGGTG
CGGGGCAGAGGGGGACTACAACGTCATGGTGATGGAGCTGCTGGGGCCAAGCCTGGAGGACCTCTTCAACTTCTG
CTCCAGGAAATTCAGCCTCAAAACCGTCCTGCTGCTTGCTGACCAAATGATCAGTCGCATCGAATACATTCATTC
AAAGAACTTCATCCACCGGGATGTGAAGCCAGACAACTTCCTCATGGGCCTGGGGAAGAAGGGCAACCTGGTGTA
CATCATCGACTTCGGGCTGGCCAAGAAGTACCGGGATGCACGCACCCACCAGCACATCCCCTATCGTGAGAACAA
GAACCTCACGGGGACGGCGCGGTACGCCTCCATCAACACGCACCTTGGAATTGAACAATCCCGAAGAGATGACTT
GGAGTCTCTGGGCTACGTGCTAATGTACTTCAACCTGGGCTCTCTCCCCTGGCAGGGGCTGAAGGCTGCCACCAA
GAGACAGAAATACGAAAGGATTAGCGAGAAGAAAATGTCCACCCCCATCGAAGTGTTGTGTAAAGGCTACCCTTC
CGAATTTGCCACATACCTGAATTTCTGCCGTTCCTTGCGTTTTGACGACAAGCCTGACTACTCGTACCTGCGGCA
GCTTTTCCGGAATCTGTTCCATCGCCAGGGCTTCTCCTATGACTACGTGTTCGACTGGAACATGCTCAAATTTGG
TGCCAGCCGGGCCGCCGATGACGCCGAGCGGGAGCGCAGGGACCGAGAGGAGCGGCTGAGACACTCGCGGAACCC
GGCTACCCGCGGCCTCCCTTCCACAGCCTCCAGGCCGTCTGCGGGGGACGCAGGGAATGTGGCTCCCCCCACACC
CCTCACCCCTACCTCACACACGGCTAACACCTCCCCCCGGCCCGTCTCCGGCATGGAGAGAGAGCGGAAAGTGAG
TATGCGGCTGCACCCGGGGCCCCCGTCAACATCTCCTCGTCCGACCTCACAGGCCGACAAGATACCTCTCGCATG
TCCACCTCACAGAATAGCATTCCTTTCGAACACCACGGCAAGTAGCTGCTCGTCTCCCATCGGAAGGCAGCACTG
GATTCCTGGTCGGGTGGCTTCCAGTGGTCTTCAGTCTGTCGTGCACCGATGAGAACTCTCCTTATTGCTGTGAAG
GGCAGACAATGCATGGCTGATCTACTCTGTTACCAATGGCTTTACTAGTGACACGTCCCCCGGTCTAGGATCGAA
ATGTTAACACCGGGAGCTCTCCAGGCCACTCACCCAGCGACGCTCGTGGGGGGAAACATACTAAACGGACAGACTC
CAAGAGCTGCCACCGCTGGGGCTGCACTGCGGCCCCCCACGTGAACTCGGTTGTAACGGGGCTGGGAAGAAAAGC
AGAGAGAGAATTGCAGAGAATCAGACTCCTTTTCCAGGGCCTCAGCTCCCTCCAGTGGTGGCCGCCCTGTACTCC
CTGACGATTCCACTGTAACTACCAATCTTCTACTTGGTTAAGACAGTTTTGTATCATTTTGCTAAAAATTATTGG
CTTAAATCTGTGTAAAGAAAATCTGTCTTTTTATTGTTTCTTGTCTGTTTTTGCAGTCTTACAAAAAAAATGTTG
ACTAAGGAATTC

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FIGURE 3518

TCGTGAGCGGGGCTTGGGAAGGTGCGGCCCTACTCCGTCTACCTCTTCAGCTTCTCCATGTTCTTCAACGGCCTC
GCGGACCTGGCGGGTTCTACGGCGGGCGACTACGGCGGCTCGTGGTCTTCTGCATCTTCTTTGGCATCTCCTACG
GCATGGTGGGGGCCCTGCAGTTCGAGGTGCTCATGGCCATCGTGGGCACCCACAAGTTCTCCAGTGCCATTGCGC
TGGTGCTGCTGATGGAGGCGGTGGCAGACTCGTCGGGCCCCCTTCGGAAGGCAAACTCCTGGATGCGACCCACGT
CTACATGTACGTGTTCATCCTGGCGGGGGCCGAGGTGCTCACCTCCTCCCTGATTTTGCTGCTGGGCAACTTCTT
CTGCATTAGGAAGAAGCCCAAAGAGCCACAGCCTGAGGTGGCGGCCGCGGAGGAGGAGAAGCTCCACAAGCCTCC
TGCAGACTCGGGGGTGGACTTGCGGGAGGTGGAGCATTTCCTGAAGGCTGAGCCTGAGAAAAACGGGGAGGTGGT
TCACACCCCGGAAACAAGTGTCTGAGTGGCTGGGCGGGGCGGCAGGCACAGGGAGGAGGTACAGAAGCCGGCAAC
CTTGCTATTTATTTTACAAACTGGACTGGCTCAGGCAGGGCACGGCTGGGCTCCAC**ATG**ACCGGCCCAGCGAGAT
CGTCGCCCGATCAGTGTTTTGAGGGGGAAGGTGGCGGGGTGGGAACCGTGTCATTCCAGAGTGGATCTGCGGTGA
AGCCAAGCCGCAAGGTTACAAGGCATCCTCACCAGGGGCCCCGCCTGCTGCTCCCAGGTGGCCTGCAGCACATAT
GCTCAAGGACCTGGAAACCCATGCTTCGAGACAACGTGACTTTAATGGGAGGGTGGGTGGCCCGCAGACAGGCTG
GCAGGGCAGGTGCTGCGTGGGCCCTCTCCAGCCCGTCCTACCCTGGGCTCACATGGGGCCTGTGCCCACCCCTCT
TGAGTGTCTTGGGGACAGCTCTTTCCACCCCTGGAAGATGGAAA**TAA**ACCTGCGTGTGGGTGGAGTGTT

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FIGURE 3519

GTGAGCCGACCAGAAGGCCGTCCTCTTTGATATCTTTTGCAATTGTACCGAAAGTGACTTACTCCTCTGCCCTTC
CTGCTTCCGTCTCTTGCCGGTGCCGTGGTGTCGTCCGTGCCTGGTGAGGTTTTGTGCAGCGGTAAAGTGCTGGTG
CTTCTGGTGACCTTTGACCTGTGGGTGTCACTTCTTGTGTCTGTTTTCCCGTGTTCGTTTTTTGGGTTTAGTTGT
GCTTTTGCTTCTGCTGGCTTGCTGGACCTGGGCTGGGGTGCCAAGTGGCGCCTGCTGCGTCAGAGCTCAAGGAAT
CTGTGCCCACCACCAGCTCCTGGTCCGTAGGAGGTGAGACATGGGGTTCTGTCATGCCCCCTCCACTGAGCCTTG
CTACATCTGTGTCTAGGGCTTGGGCTGATCTAGTGGCGGGGTAGGTGAAACTGGGGTCCCTTGGGGCGCCCCACG
CTGCTTCCACACCCACCACCTCTGGCCTTGGGTGGTGGCATTACAGGGATGAGGGAGTCACTGTGGGTGGCCACA
GGGCTATGGCCAAGCGTTCCCTGGCCGTCTTCCTCTGGCCTCAGCTTTGTTCCTATAGGCTGCCCGCGCCGTGGG
CTGCAGGTCTCGCCGCCCGCTTGATCCCTGAGGTGTTTCCATGCTGCGGGTGGTGCTTCCAGGCAGAGTGGGTGG
GGGCCCACCGGCGACGCCCTTTCTTCCTTGTCCCTGCCTCACTCTGAGAGCCTTGGGGGTCTCCACCAGTGCAGA
CAAGGGCTACAGTCTCCAGGGCCGGGTCTTGTCCCTCTTCTCCGCTGGTCCACGCTGGCAGCTCTTGGCTTCGGG
CCTGCCTTCTGCCTCCCTTTGGGATCTGTGTCTTCCAGGGATCAGCTGCTTGGCTTCTGCTGGAGGTGCCTCCCT
GTGGGGCGCAGCCTGCCTCCTGCTCTCAGTTCCTCGCCAGAGGCTGCTGCCCTTCCTGGCTGGGCTCAGGAGGCT
CCTTGTAGGCATATGATGGGGAGGGGGTGCCCCTACCCACCTCCAAGAGGCTACAGCCCTGTGTCTGGCCATGTG
AGCCCTGGCCTTTCACCGGGTTGCTGGTTTCTTTTCTGTGGGGCCCAGACTTCTGTAAAGCACACAGATGTGGGT
AAGATGAAAAACTGTGGCCCAACAGGGCTTAACCCTATGGATGGTGGGATTTTTATCCAATAGTTTGGCCTGGTG
TGCCCACAGGATGGGAACAGGGAGGCACCATCAACACTTGTCATGTTAATGAGCTTTTCTTTGCTCGAGGTGTTC
AGAGACAAGTCCTGTGTCTACCTGCGTCAGCCTGAAAATGGAAATATTGGCTGTTGACTCTTGTCATTTAGTGAC
TTCATCCCCCTCCCCTCAGTCTGATCTTGTCTAAGTAGAATCCAGGCGTTAGTTGGAATCATATCATAAGTATCC
ATGAAGAAAACGTCATGATCTGCCTCGGAGTGGGGAGAAACAGGCCCTCCTTGTCCTTGTGCAGCCCCCACTTTT
GTCCTGGCTGTGGGTGGCCATCCATTTTGAGCACCTCTGCCAGGCTGCAGACCTGGAGGCGAAGGGAGTGTGGAA
GAGGAGGGTGTAAGGGTCGACGCGTGCTGAATGGGAGGTGCAGGTCCTCGGTGCGTTGGCAGAAGAGGCTTCTGG
AGTTTCGAGGCCATACCTCCTTTCAAGAGCTTTGGATTTGGGGCGACTTCCCTGGGTCTAGGGGAGTGTTCCTGT
CCCCTGTCAGGTCAGCCCTGCGGAGCCACTCCACCCCTCTTCCCCTTCCCCTGGATTTCCTGACATAGATGGTGT
GTTCATGTGCAGGTGTGAGTGTGCTGTCCTTCTGATCTCTGTTGATCCCGCTTTCCTACTGAGAGGGTGGTGGAG
AGGGTGGTGGTCTCTTCTCACCTCAGTTTTTCTGACACAGCGAATCGAGGGCTTTGGCCAAGGCCAGGTCTCTCA
AACTTGTCCGCCAAGTAAACCATGATATATGTCTTCCCTTCCACCTTAACTTTGCCCCAACTCCTCTTTTATCCT
AACATGGACGCTCAGATTTCAGAGGAATACCCAGCAGGGACAGGTCAGCTCTCACCAGGAGAGTGAGGCCCCTGG
CTGCTGCTCGGGGTGGCACTGGTGTTGCTGGCTCAGCTCTTGGTGCATGTTTCAGATATGTGTGTACACTTCTGA
CTGGTGATCAGGGCCCGCCCACGGCCCTGAGCGGCTGCAGCCTGCTTTGGGACGATGGTCAGGTCCCATGTTGTC
CCTGCTGCCTCCCTCTGGAGTGGCCACTTGGCCAAAGCGCCCATCCACATCTGGAAAGTCGGAGCCGCAGCCTGC
TGCACCGTTTCCGCTCTGGGATCTTGTGAGTTACTTTTTTAGGCTGTGGTTTGGTGAAAGGAACCAACACATTAA
CGATTTTTCCCCCAGAAGCCACTGAATAATTCTTTTTGGTGTATTTTTGCCTTCCTGTTGGCTGTCTGGCCTTGG
AGCAGGTCGGGAGAGTAGAGTACATAATCAGTGCCACACAGAGGCAGGGCGTGTCTGAGAGACTAATGCCTGTCC
TGCCTCTGGCCTGTGTCCTGGGTGTGTACCATACCTGCTGGGCCAGTCCCACACATTTCCACCCTGCCCCTGGAG
CAGCAGCTTTGATACCATGGGTGTCCCTTGAGTCTGAGCTAGAGTGTGTCCCCGATAAACTGTGAGACCTCCCTG
TTCTTGGTGACCCCAGTTGGGCTTTGGCCCCTCCAGCAACCTTGTGTCCCAGCCCTGCCCTTCTTCCCACCCCCT
CAATCTGCTAGTCCCTGAAGCCTTTAACCAAACGGGAGTGGGCACAGAAAGCCTTCTCCTGGCAACAGGACAAGG
GCTGCCCGCGTGTCCAGCCCTGTTGCTCTCCTGGCGCTGAGAGGTGGGTCCAAGCAGAGTTGATCAGTCCCTGCC
TGCCCTGCCTAGGTCTAGCCAGGGGAGGTTGTGTGTGTGGGAGAAGACCCCGGGATCTGCTGGGGTGGGATGGAG
GTTATTAAAGATCTAAGTGAGGAGGGGCTGGGGTTTGGATGCGGGGTGAGGCCCGAGCGCTCAACCTTCGTGTAG
GGCGGGCAGGGGCCTGACCTCTTGCAGGGCAGTGGCCTTGGTGCCCTACCCCTGCCCTGCGCAGTATTTATTGCT
AAATTATTGTCCAGGAGGGGCAGCATGTGGCCTGGCCCCCCGGGTATTTATTGCTGTACATAGTGTATGTTTGTG
ATATATAAGGTTTTCTTTATTTTGTATATGATCAATAAACCTTTTAAAGAG

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FIGURE 3520

GGCTCCCAGGCCCGCCTG**ATG**CCGCTTTCCCTTTTTGGCAGGTGGCAGGATCCCATTTTCTCACTGGCGACTCCC
CTGCGTGCTGGTGAAGAAGGCAGCCACAGTCGGAAGTCGCTGTGCAGAAGCAGAGAGGAGGCCCCGCCTGGGGAC
CGGGGTGCACCGCTTAGCTCGGCCCCCATCCTAGGGGGCTGGTTTGGCAGGGGCTGCACAAAACGCACAAAAAGG
AAGCCCCTTGCACTGCTGCGGTTGTACCCTGATACGGCCTGGCCATCGAGGACACCTGCCCATCCGGCCTCTGTG
TCAAGAGGTGGCAGCCGCACCTTTCTG**TGA**GAACGGAACTCGGGTTATTTCAGCCCCGGCCTGCAGAGTGGAAGC
GCCCAGCGGCCTTTCCTCGCTCACCAGGCCAGTCTCAGGGCCTCACCGTATTTCTACTACTACTTAATGAAAAAG
TGTGAACTTTATAGAATCCTCTCTGTACTGGATGTGCGGCAGAGGGGTGGCTCCGAGCCTCGGCTCTATGCAGAC
CTTTTTATTTCTATTAAACGTTTCTGCACTGG

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FIGURE 3521

GCGGGCGGCGGCGCTCGGAGTCGCCGGGAGCTGCCAGGCTGCTCCGCGCGCCGCTGCGGGGCC**ATG**ATCCGGAAC
GGGCGCGGGGCTGCAGGCGGCGCAGAGCAGCCGGGCCCGGGGGGCAGGCGCGCCGTGAGGGTGTGGTGCGATGGC
TGCTATGACATGGTGCATTACGGCCACTCCAACCAGCTGCGCCAGGCACGGGCCATGGGTGACTACCTCATCGTA
GGCGTGCACACCGATGAGGAGATCGCCAAGCACAAGGGGCCCCCGGTGTTCACTCAGGAGGAGAGATACAAGATG
GTGCAGGCCATCAAATGGGTGGACGAGGTGGTGCCAGCGGCTCCCTACGTCACTACACTAGAGACCCTGGACAAA
TACAACTGTGACTTCTGTGTTCACGGCAATGACATCACCCTGACTGTAGATGGCCGGGACACCTATGAGGAAGTA
AAGCAGGCTGGGAGGTACAGAGAATGCAAGCGCACGCAAGGGGTGTCCACCACAGACCTCGTGGGCCGCATGCTG
CTGGTAACCAAAGCCCATCACAGCAGCCAGGAGATGTCCTCTGAGTACCGGGAGTATGCAGACAGTTTTGGCAAG
TGCCCTGGTGGGCGGAACCCCTGGACCGGGGTATCCCAGTTCCTGCAGACATCTCAGAAGATCATCCAGTTTGCT
TCTGGGAAGGAGCCCCAGCCAGGGGAGACAGTCATCTATGTGGCTGGTGCCTTCGACCTGTTCCACATCGGGCAT
GTGGACTTCCTGGAGAAGGTGCACAGGCTGGCAGAGAGGCCCTACATCATCGCGGGCTTACACTTTGACCAGGAG
GTCAATCACTACAAGGGGAAGAACTACCCCATCATGAATCTGCATGAACGGACTCTGAGCGTGCTGGCCTGCCGG
TACGTGTCAGAAGTGGTGATTGGAGCCCCGTACGCGGTCACAGCAGAGCTCCTAAGTCACTTCAAGGTGGACCTG
GTGTGTCACGGCAAGACAGAAATTATCCCTGACAGGGATGGCTCCGACCCATACCAGGAGCCCAAGAGAAGGGGC
ATCTTCCGTCAGATTGACAGTGGCAGCAACCATCACCAAAGACTCATCGTCAGCGGATTATCACAAACAGAGGCG
CTAAACGAGAAGAAGGAAGCCAAGGAGCTCGCCTTCCTGGAGGTGCCAGGCAGCAGGCGCACAGCCCTGGGGAGC
GCGATGGTACTTCTAACCTGGCAGAGCCCTGCCGGCCCTCCCCCTGCTCTGCTTCTGCGCCTTCTGCGTTTGGAC
ATAGGACTCTGCAGGGCCGCCCTCTCTAACTGGCCTGGCTCTGGAAGGGCTGGTGAGGACTCTGCCTCCTTGCCT
GCCTACAAGGTGCCTGGTTTGCAGCAGGCTCTCCGCTCTTTCCAGCAAAGCTGCTCAGAGAGGGTGTCCAGCACA
GTGGAGAGGCCGGAAGTGAGACGGGCAGACGGCACCTGCAGCCTGAAACGCACCGCTCCTGCGTGCGCCCCCACC
TGGTCCCCGGATGCCCCCACCACCTGGACAGAGGCCACACTGACTGCCCACCCAGCTGTGGCGGGAGGTGCAGAG
CAGAGGGCTTTAGGGAGCAGTGACTGCGGTCACCCCTTTAGTTCTCTGGGTGTAGACCACACCACCTCCCACTGG
GCACCCCCCAACACGGTGTCCTGCCACCCAGCGCCTGGCTCCAGGAAAACACGCTTGCCTTCCTTCCCGGCAGCT
TCGCCACTCTCCTTATGGACTCTGTTCTGTTTGTACATGGCTGACGGAAATCTCTTTGGTACAACCGAA**TAA**AGC
CTGGTGGCAGTGCTGCGCGGGGCTCCCAGCC

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FIGURE 3522

AGAAGCAGAGGAGCCAGGAACCTCTCTGAAGTGACACCTCACCCCTACACACCGTCCGTTCACCCCCGTCTCTTC
CTTCTGCTTTTCGGTTTTTGGAAAGGGATCCATCTCCAGGCAGCCCACCCTGGTGGGGCTTGTTTCCTGAAACCA
TGATGTACTTTTTCATACATGAGTCTGTCCAGAGTGCTTGCTACCGTGTTCGGAGTCTCGCTGCCTCCCTCCCGC
GGGAGGTTTCTCCTCTTTTTGAAAATTCCGTCTGTGGGATTTTTAGACATTTTTCGACATCAGGGTATTTGTTCC
ACCTTGGCCAGGCCTCCTCGGAGAAGCTTGTCCCCCGTGTGGGAGGGACGGAGCCGGACTGGACATGGTCACTCA
GTACCGCCTGCAGTGTCGCCATGACTGATCATGGCTCTTGCATTTTTGGGTAAATGGAGACTTCCGGATCCTGTC
AGGGTGTCCCCCATGCCTGGAAGAGGAGCTGGTGGCTGCCAGCCCTGGGGCCCGGCACAGGCCTGGGCCTTCCCC
TTCCCTCAAGCCAGGGCTCCTCCTCCTGTCGTGGGCTCATTGTGACCACTGGCCTCTCTACAGCACGGCCTGTGG
CCTGTTCAAGGCAGAACCACGACCCTTGACTCCCGGGTGGGGAGGTGGCCAAGGATGCTGGAGCTGAATCAGACG
CTGACAGTTCTTCAGGCATTTCTATTTCACAATCGAATTGAACACATTGGCCAAATAAAGTTGAAATTTTACCAC
CTCAAAAAAAAAAAAAAAAAAATTAAAAAAAAAAAAAAAAAAAA

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FIGURE 3523

CCCCTACACACCGTCCGTTCACCCCCGTCTCTTCCTTCTGCTTTTCGGTTTTTGGAAAGGGATCCATCTCCAGGC
AGCCCACCCTGGTGGGGCTTGTTTCCTGAAACCATGATGTACTTTTTCATACATGAGTCTGTCCAGAGTGCTTGC
TACCGTGTTCGGAGTCTCGCTGCCTCCCTCCCGCGGGAGGTTTCTCCTCTTTTTGAAAATTCCGTCTGTGGGATT
TTTAGACATTTTTCGACATCAGGGGTGTCCCCCATGCCTGGAAGAGGAGCTGGTGGCTGCCAGCCCTGGGGCCCG
GCACAGGCCTGGGCCTTCCCCTTCCCTCAAGCCAGGGCTCCTCCTCCTGTCGTGGGCTCATTGTGACCACTGGCC
TCTCTACAGCACGGCCTGTGGCCTGTTCAAGGCAGAACCACGACCCTTGACTCCCGGGTGGGGAGGTGGCCAAGG
ATGCTGGAGCTGAATCAGACGCTGACAGTTCTTCAGGCATTTCTATTTCACAATCGAATTGAACACATTGGCCAA
ATAAAGTTGAAATTTT

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FIGURE 3524

GGAGTTTCGTCATGTTGGCCAGGCCCATTTGAGATCTTTGAAGATATCCTCAACGTGAGGCTCTGCTGCCATGAA
GGTGAAGATTAAGTGCTGGAACGGCGTGGCCACTTGGCTCTGGGTGGCCAACGATGAGAACTGTGGCATCTGCAG
GATGGCATTTAACGGATGCTGCCCTGACTGCAAGGTGCCCGGCGACGACTGCCCGCTGGTGTGGGGCCAGTGCTC
CCACTGCTTCCACATGCATTGCATCCTCAAGTGGCTGCACGCACAGCAGGTGCAGCAGCACTGCCCCATGTGCCG
CCAGGAATGGAAGTTCAAGGAGTGAGGCCCGACCTGGCTCTCGCTGGAGGGGCATCCTGAGACTCCTTCCTCATG
CTGGCGCCGATGGCTGCTGGGACAGCGCCCCTGAGCTGCAACAAGGTGGAAACAAGGGCTGGAGCTGCGTTTGTT
TTGCCATCACTATGTTGACACTTTTATCCAATAAGTGAAAACTCATTAAACTACTCAAATCTT

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FIGURE 3525

GGGGCGGCCGACGACGTTCGTCATTTAGTGCGGGAGGGATCCTGAACCGCGCGGCCGAAACCTCCGGTGTCCCGA
CCCAGGCTAAGCTTGAGCATGGCTGAGCAGGAGCCCACAGCCGAGCAGCTGGCCCAGATTGCAGCGGAGAACGAG
GAGGATGAGCACTCGGTCAACTACAAGCCCCCGGCCCAGAAGAGCATCCAGGAGATCCAGGAGCTGGACAAGGAC
GACGAGAGCCTGCGAAAGTACAAGGAGGCCCTGCTGGGCCGCGTGGCCGTTTCCGCAGACCCCAACGTCCCCAAC
GTCGTGGTGACTGGCCTGACCCTGGTGTGCAGCTCGGCCCCGGGCCCCCTGGAGCTGGACCTGACGGGCGACCTG
GAGAGCTTCAAGAAGCAGTCGTTTGTGCTGAAGGAGGGTGTGGAGTACCGGATAAAAATCTCTTTCCGGGTTAAC
CGAGAGATAGTGTCCGGCATGAAGTACATCCAGCATACGTACAGGAAAGGCGTCAAGATTGACAAGACTGACTAC
ATGGTAGGCAGCTATGGGCCCCGGGCCGAGGAGTACGAGTTCCTGACCCCCGTGGAGGAGGCACCCAAGGGTATG
CTGGCCCGGGGCAGCTACAGCATCAAGTCCCGCTTCACAGACGACGACAAGACCGACCACCTGTCCTGGGAGTGG
AATCTCACCATCAAGAAGGACTGGAAGGACTGAGCCCAGCCAGAGGCGGGCAGGGCAGACTGACGGACGGACGAC
GGACAGGCGGATGTGTCCCCCCCAGCCCCTCCCCTCCCCATACCAAAGTGCTGACAGGCCCTCCGTGCCCCTCCC
ACCCTGGTCCGCCTCCCTGGCCTGGCTCAACCGAGTGCCTCCGACCCCCCTCCTCAGCCCTCCCCCACCCACAGG
CCCAGCCTCCTCGGTCTCCTGTCTCGTTGCTGCTTCTGCCTGTGCTGTGGGGGAGAGAGGCCGCAGCCAGGCCTC
TGCTGCCCTTTCTGTGCCCCCCAGGTTCTATCTCCCCGTCACACCCGAGGCCTGGCTTCAGGAGGGAGCGGAGCA
GCCATTCTCCAGGCCCCGTGGTTGCCCCTGGACGTGTGCGTCTGCTGCTCCGGGGGTGGAGCTGGGGTGTGGGATG
CACGGCCTCGTGGGGGCCGGGCCGTCCTCCAGCCCCGCTGCTCCCTGGCCAGCCCCCTTGTCGCTGTCGGTCCCG
TCTAACCATGATGCCTTAACATGTGGAGTGTACCGTGGGGCCTCACTAGCCTCTAACTCCCTGTGTCTGCATGAG
CATGTGGCCTCCCCGTCCCTTCCCCGGTGGCGAACCCAGTGACCCAGGGACACGTGGGGTGTGCTGCTGCTGCTC
CCCAGCCCACCAGTGCCTGGCCAGCCTGCCCCCTTCCCTGGACAGGGCTGTGGAGATGGCTCCGGCGGCTTGGGG
AAAGCCAAATTGCCAAAACTCAAGTCACCTCAGTACAATCAGGAGGCTGGGTATTGTCCTGCCTCTGCCTTTTCT
GTCTCAGCGGGCAGTGCCCAGAGCCCACACCCCCCCAAGAGCCCTCGATGGACAGCCTCACTCACCCCACCTGGG
CCCAGCCAGGAGCCCCGCCTGGCCATCAGTATTTATTGCCTCCGTCCGTGCCGTCCCTGGGCCACTGGCCTGGCG
CCTGTTCCCCCAGGCTCTCAGTGCCACCACCCCCGGCAGGCCTTCCCTGACCCAGCCAGGAACAAACAAGGGACC
AAGTGCACACATTGCTGAGAGCCGTCTCCTGTGCCTCCCCCGCCCCATCCCCGGTCTTCGTGTTGTGTCTGCCAG
GCTCAGGCAGAGGCGCCTGTCCCTGCTTCTTTTCTGACCGGGAAATAAATGCCCCTGAAGG

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FIGURE 3526

CTCCGGACAGCATGAGCGTGGGCTTCATCGGCGCTGGCCAGCTGGCTTTTGCCCTGGCCAAGGCTTTCACAGCAG
CAGGCGTCTTGGCTGCCCACAAGATAATGGCTAGCTCCCCAGACATGGACCTGGCCACAGTTTCTGCTCTCAGGA
AGATGGGGGTGAAGTTGACACCCCACAACAAGGAGACGGTGCAGCACAGTGATGTGCTCTTCCTGGCTGTGAAGC
CACACATCATCCCCTTCATCCTGGATGAAATAGGCGCCGACATTGAGGACAGACACATTGTGGTGTCCTGCGCGG
CCGGCGTCACCATCAGCTCCATTGAGAAGAAGCTGTCAGCGTTTCGGCCAGCCCCCAGGGTCATCCGCTGCATGA
CCAACACTCCAGTCGTGGTGCGGGAGGGGGCCACCGTGTATGCCACAGGACGCACGCCCAGGTGGAGGACGGGAG
GCTC**ATG**GAGCAGCTGCTGAGCAGCGTGGGCTTCTGCACGGAGGTGGAAGAGGACCTGATTGATGCCGTCACGGG
GCTCAGTGGCAGCGGCCCCGCCTACGCATTCACAGCCCTGGATGCCCTGGCTGATGGGGGTGTGAAGATGGGACT
TCCAAGGCGCCTGGCAGTCCGCCTCGGGGCCCAGGCCCTCCTGGGGGCTGCCAAGATGCTGCTGCACTCAGAACA
GCACCCAGGCCAGCTCAAGGACAACGTCAGCTCTCCTGGTGGGGCCACCATCCATGCCTTGCATGTGCTGGAGAG
TGGGGGCTTCCGCTCCCTGCTCATCAACGCTGTGGAGGCCTCCTGCATCCGCACACGGGAGCTGCAGTCCATGGC
TGACCAGGAGCAGGTGTCACCAGCCGCCATCAAGAAGACCATCCTGGACAAGGTGAAGCTGGACTCCCCTGCAGG
GACCGCTCTGTCACCTTCTGGCCACACCAAGCTGCTCCCCCGCAGCCTGGCCCCAGCGGGCAAGGAT**TGA**CACGT
CCTGCCTGACCACCATCCTGCCACCACCTTCTCTTCTCTTGTCACTAGGGGGACTAGGGGGTCCCCAAAGTGGCC
CACTTTCTGTGGCTCTGATCAGCGCAGGGGCCAGCCAGGGACATAGCCAGGGAGGGGCCACATCACTTCCCACTG
GAAATCTCTGTGGTCTGCAAGTGCTTCCCAGCCCAGAACAGGGGTGGATTCCCCAACCTCAACCTCCTTTCTTCT
CTGCTCCCAAACCATGTCAGGACCACCTTCCTCTAGAGCTCGGGAGCCCGGAGGGTCTTCACCCACTCCTACTCC
AGTATCAGCTGGCACGGGCTCCTTCCTGAGAGCAAAGGTCAAGGACCCCCTCTGTGAAGGCTCAGCAGAGGTGGG
ATCCCACGCCCCCTCCCGGCCCCTCCCTGCCCTCCATTCAGGGAGAAACCTCTCCTTCCCGTGTGAGAAGGGCCA
GAGGGTCCAGGCATCCCAAGTCCAGCGTGAAGGGCCACAGCCCCTCTTGGCTGCCAAGCACGCAGATCCCATGGA
CATTTGGGGAAAGGGCTCCTTGGGCTGCTGGTGAACTTCTGTGGCCACCACCTCCTGCTCCTGACCTCCCTGGGA
GGGTGCTATCAGTTCTGTCCTGGCCCTTTCAGTTTTATAAGTTGGTTTCCAGCCCCCAGTGTCCTGACTTCTGTC
TGCCACATGAGGAGGGAGGCCCTGCCTGTGTGGGAGGGTGGTTACTGTGGGTGGAATAGTGGAGGCCTTCAACTG
ATTAGACAAGGCCCGCCCACATCTTGGAGGGCATCTGCCTTACTGATTAAAATGTCAATGTAATCT

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FIGURE 3527

GACATGGAGCTGTTCCTCGCGGGCCGCCGGGTGCTGGTCACCGGGGCAGGCAAAGGTATAGGGCGCGGCACGGTC
CAGGCGCTGCACGCGACGGGCGCGCGGGTGGTGGCTGTGAGCCGGACTCAGGCGGATCTTGACAGCCTTGTCCGC
GAGTGCCCGGGGATAGAACCCGTGTGCGTGGACCTGGGTGACTGGGAGGCCACCGAGCGGGCGCTGGGCAGCGTG
GGCCCCGTGGACCTGCTGGTGAACAACGCCGCTGTCGCCCTGCTGCAGCCCTTCCTGGAGGTCACCAAGGAGGCC
TTTGACAGATCCTTTGAGGTGAACCTGCGTGCGGTCATCCAGGTGTCGCAGATTGTGGCCAGGGGCTTAATAGCC
CGGGGAGTCCCAGGGGCCATCGTGAATGTCTCCAGCCAGTGCTCCCAGCGGGCAGTAACTAACCATAGCGTCTAC
TGCTCCACCAAGGGTGCCCTGGACATGCTGACCAAGGTGATGGCCCTAGAGCTCGGGCCCCACAAGATCCGAGTG
AATGCAGTAAACCCCACAGTGGTGATGACGTCCATGGGCCAGGCCACCTGGAGTGACCCCCACAAGGCCAAGACT
ATGCTGAACCGAATCCCACTTGGCAAGTTTGCTGAGGTAGAGCACGTGGTGAACGCCATCCTCTTTCTGCTGAGT
GACCGAAGTGGCATGACCACGGGTTCCACTTTGCCGGTGGAAGGGGGCTTCTGGGCCTGCTGAGCTCCCTCCACA
CACCTCAAGCCCCATGCCGTGCTCATCCTACCCCCAATCCCTCCAATAAACCTGATTCTGCTGCCC

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FIGURE 3528

TGCCCCCAGCCTGCGGCCTGACGACGTCTTCATCGCCGTCAAGACCACCCGGAAGAACCACGGGCCGCGCCTGCG
GCTGCTGCTGCGCACCTGGATCTCCCGGGCCCGCCAGCAGACGTTTATCTTCACCGACGGGGACGACCCTGAGCT
CGAGCTCCAGGGCGGCGACCGTGTCATCAACACCAACTGCTCGGCGGTGCGCACTCGTCAGGCCCTCTGCTGCAA
GATGTCCGTGGAGTATGACAAGTTCATTGAGTCCGGGCGCAAGTGGTTTTGCCACGTGGATGATGACAATTATGT
GAACGCCAGGAGCCTCCTGCACCTGCTCTCCAGCTTCTCACCCAGCCAGGACGTCTACCTGGGGCGGCCCAGCCT
GGACCACCCCATTGAGGCCACCGAGAGGGTCCAGGGTGGCAGAACTGTGACCACGGTCAAGTTCTGGTTTGCTAC
TGGTGGGGCCGGGTTCTGCCTCAGCAGAGGCCTTGCCCTCAAGATGAGCCCATGGGCCAGCCTGGGCAGCTTCAT
GAGCACAGCTGAGCAGGTGCGGCTGCCGGATGACTGCACAGTTGGCTACATCGTGGAGGGGCTCCTGGGCGCCCG
CCTGCTGCACAGCCCCCTCTTCCACTCTCACCTGGAGAACCTGCAGAGGCTGCCGCCCGACACCCTGCTCCAGCA
GGTTACCTTGAGCCATGGGGGTCCTGAGAACCCACATAACGTGGTGAACGTGGCTGGAGGCTTCAGCCTGCATCA
AGACCCCACACGGTTTAAGTCTATCCATTGTCTTCTGTACCCAGACACGGACTGGTGTCCCAGGCAGAAACAGGG
CGCCCCGACCTCTCGGTGACACCAACCACCCCGACCCAGGGCTGCCTGGCTCTGTCCCAGGCGCGGGGAACCAGA
GCCCCCTATGGGCTCAGTGGGCTCCCTCAGGTGCCACGGCCACACCAGTGAGATGCAGGCACCTGGCAGACCCTC
TGGCTAGCCTGCAGCCCCCCCTCTCCCAGCCCCTGGTGGGCTGCGGTGATGGGTGTTTTGGGAGAACGAAGACAG
CCAGGCTGATGGCCAGGGCCGCAGTGCCCCTCCCCCCGACCCAGCCCCAAGGTTGATCCCACGGGAACAGGCTTC
CACCCCAGCACTTGCGCACCTGGGAGGGAGCTGCCATCCGGGCTCCATTACCTGTTGCTGAAGGCGGGTGCTAGG
CTGGCTGGGTGTCAAGGAGCAGGCTCCAGGCCAAGGTCCTGGCCCAGCCACGGCCATTGCAAGGGCTCAGCCTGG
CAGGCTTTGTGGGGGACGCCGCCCTCTCTGCCGCAGGCTGGGTGCACGGCCGGGCACCACAGTGGGACTCAGGCC
CGGGAAGGTCATGTTCTCGACCAGAGCTTTGCTCCCAGTCCAGGCGCCTCATTCGGAGGCCTCTTGACTGGGACC
ACAGAGATGTTTTCTCCGCTCTGACTTGTGGCTCAGGACTACTTTCTGGGTCGTGCTCCTGCCCCACTGTGCCTG
GGCCCATAAACAACAGGAGCCTTTTGTTCCGCTGACCTGCCCATCCCAGCAGACCCACCTCCCCGCCTGGTGCCT
TCCATGGAGGGAAATGGGACAGGGGCCGTCATCTCCCCTCTGCCTCCTGCTTTGCTGTTGCCGAGCACGAGTAAA
GCTTTTGTTCTTACTTC

FIGURE 3529

GGAAGTGGACGGCACGCCGCGGCGGGGTGGGTGCAAGATGCCGCTGCCGGTTCAGGTGTTTAACTTGCAGGGGGC
CGTGGAGCCCATGCAGATCGACGTGGACCCCCAGGAAGACCCGCAGAATGCACCTGACGTCAACTACGTGGTGGA
GAACCCCAGCCTGGATCTGGAACAGTACGCGGCCAGCTACAGCGGCCTGATGCGCATCGAACGGCTGCAGTTCAT
TGCTGATCACTGCCCCACGCTGCGGGTGGAGGCCCTGAAGATGGCCCTCTCCTTCGTGCAGAGAACCTTTAACGT
GGACATGTACGAGGAGATCCACCGCAAGCTCTCAGAGGCCACCAGGGAGCTGCAGAACGCACCCGACGCCATCCC
TGAGAGCGGCGTGGAGCCCCCAGCCCTGGACACGGCCTGGGTGGAGGCCACGCGGAAGAAGGCGCTGCTGAAGCT
GGAGAAGCTGGACACAGACCTGAAGAACTACAAGGGCAACTCCATCAAAGAGAGCATCCGGCGCGGCCACGACGA
CCTGGGCGACCACTACCTGGACTGTGGGGACCTCAGCAACGCCCTCAAGTGCTATTCCCGGGCCCGGGACTACTG
CACCAGCGCCAAACACGTCATCAACATGTGCCTCAATGTCATCAAGGTCAGCGTCTACTTGCAGAATTGGTCTCA
TGTGCTCAGCTACGTCAGCAAGGCTGAGTCCACCCCAGAGATTGCCGAGCAGCGAGGAGAGCGTGACAGCCAGAC
CCAGGCCATCCTCACCAAGCTCAAGTGTGCCGCAGGCTTGGCAGAGCTGGCCGCCAGGAAGTACAAGCAGGCTGC
CAAGTGCCTCCTGCTGGCTTCCTTTGATCACTGTGACTTCCCTGAGCTGCTGTCCCCCAGCAACGTGGCCATCTA
CGGTGGCCTGTGCGCCTTGGCTACCTTTGACCGGCAGGAGCTGCAGCGCAATGTCATCTCCAGCAGCTCCTTCAA
GTTGTTCTTGGAGCTGGAGCCACAGGTCCGAGACATCATCTTCAAATTCTACGAGTCCAAGTACGCCTCATGTCT
CAAGATGCTGGACGAGATGAAGGACAACCTGCTCCTGGACATGTATCTGGCCCCCCATGTCAGGACCCTGTACAC
CCAGATTCGCAACCGTGCCCTCATCCAGTATTTCAGCCCCTACGTGTCAGCCGACATGCATAGGATGGCGGCAGC
CTTCAATACCACGGTGGCCGCCCTGGAGGACGAGCTGACGCAGCTAATCCTGGAGGGGCTGATCAGTGCCCGTGT
GGACTCACACAGCAAGATCCTATACGCCCGGGACGTGGATCAGCGCAGCACCACCTTTGAGAAGTCTCTGTTGAT
GGGCAAGGAGTTCCAGCGCCGCGCCAAGGCCATGATGCTGCGGGCAGCTGTGCTCCGCAACCAGATCCATGTCAA
GTCCCCGCCCAGAGAAGGGAGCCAGGGGGAGCTGACTCCAGCCAACAGCCAGTCCCGGATGAGCACCAACATGTG
AGGGGTGAACCTTGGCCTCCAGGACATCTGCACCCCCTCCCCACCTCCACGGACCTCGGACCTCCAGGCGGCTCA
GTGCTGCCTGCGGCCCAGCTAAGGGGCCTGGCCACTGGGTGCCACCCAGCCTGTGTGCCCTCCCTGGGGCTGAGG
AGGCAGGCGGCTGCTAGTTGTGGCCCTTCCTGGAAGGAGAGGCCTGCAGGGCTCGACCCTGTGGGTTTCTGTCCC
CAGGGAGCAGACTGTGCGGCACCCAGGCCCAGTGGCACCATTTCCCAGACCCCTCCTGTTCCCGCCTCAGTCAGG
TGCAGACAAGTGGGCGGTGTCCATTAAAGAGCAGACTCAGCGTT

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FIGURE 3530

AGGACGTGGAGCGCTGCCTCCGGGACACGGGTGTGCAGGGCGTCATGAGCGCAGAGGGCAACCTGCACAACCCCG
CCCTGTTCGAGGGCCGGAGCCCTGCCGTGTGGGAGCTGGCCGAGGAGTATCTGGACATCGTGCGGGAGCACCCCT
GCCCCCTGTCCTACGTCCGGGCCCACCTCTTCAAGCTGTGGCACCACACGCTGCAGGTGCACCAGGAGCTGCGAG
AGGAGCTGGCCAAGGTGAAGACCCTGGAGGGCATCGCTGCTGTGAGCCAGGAGCTGAAGCTGCGGTGTCAGGAGG
AGATATCCAGGCAGGAGGGAGCGAAGCCCACCGGCGACTTGCCCTTCCACTGGATCTGCCAGCCCTACATCCGGC
CGGGGCCCAGGGAGGGGAGCAAGGAGAAGGCAGGTGCGCGCAGCAAGCGGGCCCTGGAGGAAGAGGAGGGTGGCA
CGGAGGTCCTGTCCAAGAACAAGCAAAAGAAGCAGCTGAGGAACCCCCACAAGACCTTCGACCCCTCTCTGAAGC
CAAAATATGCAAAGTGTGACCAGTGTGGAAACCCAAAGGGCAACAGATGTGTGTTCAGCCTGTGCCGCGGCTGCT
GCAAGAAGCGAGCCTCCAAAGAGACTGCAGACTGCCCAGGTCACGGATTGCTTTTTAAAACCAAATTGGAGAAGT
CTCTGGCCTGGAAAGAGGCCCAGCCTGAGCTGCAGGAGCCTCAGCCAGCAGCACCTGGAACACCAGGTGGCTTCT
CCGAAGTCATGGGCAGTGCCCTGGCCTGAAGGCCCACAACCCCCACCCCCAGGACTGCTGCTGGAGCCTGGACAC
GTCCTACTTAAGAAAATGCCTTTTACTCAGGGAATCTCCTGCTACTTAATGTGGAAAGACACGCCCATGTCCCCC
TTCGGCCCACTCTGGGGGCCTGGAAATGCTGCAGTGGGGAGCAGGCCCCAGGCTGGACCTGCCCTGTCCTCAGCA
CGCGTGTGCAAAAGTGAACAATAAATCATTTCAAAGATGCG

FIGURE 3531A

ACGGCAGCGGCCCCGGCCTCCCTCTCCGCCGCGCTTCAGCCTCCCGCTCCGCCGCGCTCCAGCCTCGCTCTCCGC
CGCCCGCACCGCCGCCCGCGCCCTCACCAGAGCAGCCATGGAGGAGGTGGTGATTGCCGGCATGTCCGGGAAGCT
GCCAGAGTCGGAGAACTTGCAGGAGTTCTGGGACAACCTCATCGGCGGTGTGGACATGGTCACGGACGATGACCG
TCGCTGGAAGGCGGCTCTACGGCCTGCCCCGGCGGTCCGGCAAGCTGAAGGACCTGTCTAGGTTTGATGCCTCCT
TCTTCGGAGTCCACCCCAAGCAGGCACACACGATGGACCCTCAGCTGCGGCTGCTGCTGGAAGTCACCTATGAAG
CCATCGTGGACGGAGGCATCAACCCAGATTCACTCCGAGGAACACACACTGGCGTCTGGGTGGGCGTGAGCGGCT
CTGAGACCTCGGAGGCCCTGAGCCGAGACCCCGAGACACTCGTGGGCTACAGCATGGTGGGCTGCCAGCGAGCGA
TGATGGCCAACCGGCTCTCCTTCTTCTTCGACTTCAGAGGGCCCAGCATCGCACTGGACACAGCCTGCTCCTCCA
GCCTGATGGCCCTGCAGAACGCCTACCAGGCCATCCACAGCGGGCAGTGCCCTGCCGCCATCGTGGGGGGCATCA
ATGTCCTGCTGAAGCCCAACACCTCCGTGCAGTTCTTGAGGCTGGGGATGCTCAGCCCCGAGGGCACCTGCAAGG
CCTTCGACACAGCGGGGAATGGGTACTGCCGCTCGGAGGGTGTGGTGGCCGTCCTGCTGACCAAGAAGTCCCTGG
CCCGGCGGGTGTACGCCACCATCCTGAACGCCGGCACCAATACAGATGGCTTCAAGGAGCAAGGCGTGACCTTCC
CCTCAGGGGATATCCAGGAGCAGCTCATCCGCTCGTTGTACCAGTCGGCCGGAGTGGCCCCTGAGTCATTTGAAT
ACATCGAAGCCCACGGCACAGGCACCAAGGTGGGCGACCCCCAGGAGCTGAATGGCATCACCCGAGCCCTGTGCG
CCACCCGCCAGGAGCCGCTGCTCATCGGCTCCACCAAGTCCAACATGGGGCACCCGGAGCCAGCCTCGGGGCTGG
CAGCCCTGGCCAAGGTGCTGCTGTCCCTGGAGCACGGGCTCTGGGCCCCCAACCTGCACTTCCATAGCCCCAACC
CTGAGATCCCAGCGCTGTTGGATGGGCGGCTGCAGGTGGTGGACCAGCCCCTGCCCGTCCGTGGCGGCAACGTGG
GCATCAACTCCTTTGGCTTCGGGGGCTCCAACGTGCACATCATCCTGAGGCCCAACACGCAGCCGCCCCCCGCAC
CCGCCCCACATGCCACCCTGCCCCGTCTGCTGCGGGCCAGCGGACGCACCCCTGAGGCCGTGCAGAAGCTGCTGG
AGCAGGGCCTCCGGCACAGCCAGGACCTGGCTTTCCTGAGCATGCTGAACGACATCGCGGCTGTCCCCGCCACCG
CCATGCCCTTCCGTGGCTACGCTGTGCTGGGTGGTGAGCGCGGTGGCCCAGAGGTGCAGCAGGTGCCCGCTGGCG
AGCGCCCGCTCTGGTTCATCTGCTCTGGGATGGGCACACAGTGGCGCGGGATGGGGCTGAGCCTCATGCGCCTGG
ACCGCTTCCGAGATTCCATCCTACGCTCCGATGAGGCTGTGAAGCCATTCGGCCTGAAGGTGTCACAGCTGCTGC
TGAGCACAGACGAGAGCACCTTTGATGACATCGTCCATTCGTTTGTGAGCCTGACTGCCATCCAGATAGGCCTCA
TAGACCTGCTGAGCTGCATGGGGCTGAGGCCAGATGGCATCGTCGGCCACTCCCTGGGGGAGGTGGCCTGTGGCT
ACGCCGACGGCTGCCTGTCCCAGGAGGAGGCCGTCCTCGCTGCCTACTGGAGGGGACAGTGCATCAAAGAAGCCC
ATCTCCCGCCGGGCGCCATGGCAGCCGTGGGCTTGTCCTGGGAGGAGTGTAAACAGCGCTGCCCCCCGGGCGTGG
TGCCCGCCTGCCACAACTCCAAGGACACAGTCACCATCTCGGGACCTCAGGCCCCGGTGTTTGAGTTCGTGGAGC
AGCTGAGGAAGGAGGGTGTGTTTGCCAAGGAGGTGCGGACCGGCGGTATGGCCTTCCACTCCTACTTCATGGAGG
CCATCGCACCCCCACTGCTGCAGGAGCTCAAGAAGGTGATCCGGGAGCCGAAGCCACGTTCAGCCCGCTGGCTCA
GCACCTCTATCCCCGAGGCCCAGTGGCACAGCAGCCTGGCACGCACGTCCTCCGCCGAGTACAATGTCAACAACC
TGGTGAGCCCTGTGCTGTTCCAGGAGGCCCTGTGGCACGTGCCTGAGCACGCGGTGGTGCTGGAGATCGCGCCCC
ACGCCCTGCTGCAGGCTGTCCTGAAGCGTGGCCTGAAGCCGAGCTGCACCATCATCCCCCTGATGAAGAAGGATC
ACAGGGACAACCTGGAGTTCTTCCTGGCCGGCATCGGCAGGCTGCACCTCTCAGGCATCGACGCCAACCCCAATG
CCTTGTTCCCACCTGTGGAGTTCCCAGCTCCCCGAGGAACTCCCCTCATCTCCCCACTCATCAAGTGGGACCACA
GCCTGGCCTGGGACGTGCCGGCCGCCGAGGACTTCCCCAACGGTTCAGGTTCCCCCTCAGCCGCCATCTACAACA
TCGACACCAGCTCCGAGTCTCCTGACCACTACCTGGTGGACCACACCCTCGACGGTCGCGTCCTCTTCCCCGCCA
CTGGCTACCTGAGCATAGTGTGGAAGACGCTGGCCCGCGCCCTGGGCCTGGGCGTCGAGCAGCTGCCTGTGGTGT
TTGAGGATGTGGTGCTGCACCAGGCCACCATCCTGCCCAAGACTGGGACAGTGTCCCTGGAGGTACGGCTCCTGG
AGGCCTCCCGTGCCTTCGAGGTGTCAGAGAACGGCAACCTGGTAGTGAGTGGGAAGGTGTACCAGTGGGATGACC
CTGACCCCAGGCTCTTCGACCACCCGGAAAGCCCCACCCCCAACCCCACGGAGCCCCTCTTCCTGGCCCAGGCTG
AAGTTTACAAGGAGCTGCGTCTGCGTGGCTACGACTACGGCCCTCATTTCCAGGGCATCCTGGAGGCCAGCCTGG
AAGGTGACTCGGGGAGGCTGCTGTGGAAGGATAACTGGGTGAGCTTCATGGACACCATGCTGCAGATGTCCATCC
TGGGCTCGGCCAAGCACGGCCTGTACCTGCCCACCCGTGTCACCGCCATCCACATCGACCCTGCCACCCACAGGC
AGAAGCTGTACACACTGCAGGACAAGGCCCAAGTGGCTGACGTGGTGGTGAGCAGGTGGCTGAGGGTCACAGTGG
CCGGAGGCGTCCACATCTCCGGGCTCCACACTGAGTCGGCCCCGCGGCGGCAGCAGGAGCAGCAGGTGCCCATCC
TGGAGAAGTTTTGCTTCACTCCCCACACGGAGGAGGGGTGCCTGTCTGAGCGCGCTGCCCTGCAGGAGGAGCTGC
AACTGTGCAAGGGGCTGGTGCAGGCACTGCAGACCAAGGTGACCCAGCAGGGGCTGAAGATGGTGGTGCCCGGAC

FIGURE 3531B

TGGATGGGGCCCAGATCCCCCGGGACCCCTCACAGCAGGAACTGCCCCGGCTGTTGTCGGCTGCCTGCAGGCTTC
AGCTCAACGGGAACCTGCAGCTGGAGCTGGCGCAGGTGCTGGCCCAGGAGAGGCCCAAGCTGCCAGAGGACCCTC
TGCTCAGCGGCCTCCTGGACTCCCCGGCACTCAAGGCCTGCCTGGACACTGCCGTGGAGAACATGCCCAGCCTGA
AGATGAAGGTGGTGGAGGTGCTGGCTGGCCACGGTCACCTGTATTCCCGCATCCCAGGCCTGCTCAGCCCCCATC
CCCTGCTGCAGCTGAGCTACACGGCCACCGACCGCCACCCCCAGGCCCTGGAGGCTGCCCAGGCCGAGCTGCAGC
AGCACGACGTTGCCCAGGGCCAGTGGGATCCCGCAGACCCTGCCCCCAGCGCCCTGGGCAGCGCCGACCTCCTGG
TGTGCAACTGTGCTGTGGCTGCCCTCGGGGACCCGGCCTCAGCTCTCAGCAACATGGTGGCTGCCCTGAGAGAAG
GGGGCTTTCTGCTCCTGCACACACTGCTCCGGGGGCACCCCCTCGGGGACATCGTGGCCTTCCTCACCTCCACTG
AGCCGCAGTATGGCCAGGGCATCCTGAGCCAGGACGCGTGGGAGAGCCTCTTCTCCAGGGTGTCGCTGCGCCTGG
TGGGCCTGAAGAAGTCCTTCTACGGCTCCACGCTCTTCCTGTGCCGCCGGCCCACCCCGCAGGACAGCCCCATCT
TCCTGCCGGTGGACGATACCAGCTTCCGCTGGGTGGAGTCTCTGAAGGGCATCCTGGCTGACGAAGACTCTTCCC
GGCCTGTGTGGCTGAAGGCCATCAACTGTGCCACCTCGGGCGTGGTGGGCTTGGTGAACTGTCTCCGCCGAGAGC
CCGGCGGGAACCGCCTCCGGTGTGTGCTGCTCTCCAACCTCAGCAGCACCTCCCACGTCCCGGAGGTGGACCCGG
GCTCCGCAGAACTGCAGAAGGTGTTGCAGGGAGACCTGGTGATGAACGTCTACCGCGACGGGGCCTGGGGGGCTT
TCCGCCACTTCCTGCTGGAGGAGGACAAGCCTGAGGAGCCGACGGCACATGCCTTTGTGAGCACCCTCACCCGGG
GGGACCTGTCCTCCATCCGCTGGGTCTGCTCCTCGCTGCGCCATGCCCAGCCCACCTGCCCTGGCGCCCAGCTCT
GCACGGTCTACTACGCCTCCCTCAACTTCCGCGACATCATGCTGGCCACTGGCAAGCTGTCCCCTGATGCCATCC
CAGGGAAGTGGACCTCCCAGGACAGCCTGCTAGGTATGGAGTTCTCGGGCCGAGACGCCAGCGGCAAGCGTGTGA
TGGGACTGGTGCCTGCCAAGGGCCTGGCCACCTCTGTCCTGCTGTCACCGGACTTCCTCTGGGATGTGCCTTCCA
ACTGGACGCTGGAGGAGGCGGCCTCGGTGCCTGTCGTCTACAGCACGGCCTACTACGCGCTGGTGGTGCGTGGGC
GGGTGCGCCCCGGGGAGACGCTGCTCATCCACTCGGGCTCGGGCGGCGTGGGCCAGGCCGCCATCGCCATCGCCC
TCAGTCTGGGCTGCCGCGTCTTCACCACCGTGGGGTCGGCTGAGAAGCGGGCGTACCTCCAGGCCAGGTTCCCCC
AGCTCGACAGCACCAGCTTCGCCAACTCCCGGGACACATCCTTCGAGCAGCATGTGCTGTGGCACACGGGCGGGA
AGGGCGTTGACCTGGTCTTGAACTCCTTGGCGGAAGAGAAGCTGCAGGCCAGCGTGAGGTGCTTGGCTACGCACG
GTCGCTTCCTGGAAATTGGCAAATTCGACCTTTCTCAGAACCACCCGCTCGGCATGGCTATCTTCCTGAAGAACG
TGACATTCCACGGGGTCCTACTGGATGCGTTCTTCAACGAGAGCAGTGCTGACTGGCGGGAGGTGTGGGCGCTTG
TGCAGGCCGGCATCCGGGATGGGGTGGTACGGCCCCTCAAGTGCACGGTGTTCCATGGGGCCCAGGTGGAGGACG
CCTTCCGCTACATGGCCCAAGGGAAGCACATTGGCAAAGTCGTCGTGCAGGTGCTTGCGGAGGAGCCGGAGGCAG
TGCTGAAGGGGGCCAAACCCAAGCTGATGTCGGCCATCTCCAAGACCTTCTGCCCGGCCCACAAGAGCTACATCA
TCGCTGGTGGTCTGGGTGGCTTCGGCCTGGAGTTGGCGCAGTGGCTGATACAGCGTGGGGTGCAGAAGCTCGTGT
TGACTTCTCGCTCCGGGATCCGGACAGGCTACCAGGCCAAGCAGGTCCGCCGGTGGAGGCGCCAGGGCGTACAGG
TGCAGGTGTCCACCAGCAACATCAGCTCACTGGAGGGGGCCCGGGGCCTCATTGCCGAGGCGGCGCAGCTTGGGC
CCGTGGGCGGCGTCTTCAACCTGGCCGTGGTCTTGAGAGATGGCTTGCTGGAGAACCAGACCCCAGAGTTCTTCC
AGGACGTCTGCAAGCCCAAGTACAGCGGCACCCTGAACCTGGACAGGGTGACCCGAGAGGCGTGCCCTGAGCTGG
ACTACTTTGTGGTCTTCTCCTCTGTGAGCTGCGGGCGTGGCAATGCGGGACAGAGCAACTACGGCTTTGCCAATT
CCGCCATGGAGCGTATCTGTGAGAAACGCCGGCACGAAGGCCTCCCAGGCCTGGCCGTGCAGTGGGGCGCCATCG
GCGACGTGGGCATTTTGGTGGAGACGATGAGCACCAACGACACGATCGTCAGTGGCACGCTGCCCCAGCGCATGG
CGTCCTGCCTGGAGGTGCTGGACCTCTTCCTGAACCAGCCCCACATGGTCCTGAGCAGCTTTGTGCTGGCTGAGA
AGGCTGCGGCCTATAGGGACAGGGACAGCCAGCGGGACCTGGTGGAGGCCGTGGCACACATCCTGGGCATCCGCG
ACTTGGCTGCTGTCAACCTGGACAGCTCACTGGCGGACCTGGGCCTGGACTCGCTCATGAGCGTGGAGGTGCGCC
AGACGCTGGAGCGTGAGCTCAACCTGGTGCTGTCCGTGCGCGAGGTGCGGCAACTCACGCTCCGGAAACTGCAGG
AGCTGTCCTCAAAGGCGGATGAGGCCAGCGAGCTGGCATGCCCCACGCCCAAGGAGGATGGTCTGGCCCAGCAGC
AGACTCAGCTGAACCTGCGCTCCCTGCTGGTGAACCCGGAGGGCCCCACCCTGATGCGGCTCAACTCCGTGCAGA
GCTCGGAGCGGCCCCTGTTCCTGGTGCACCCAATCGAGGGCTCCACCACCGTGTTCCACAGCCTGGCCTCCCGGC
TCAGCATCCCCACCTATGGCCTGCAGTGCACCCGAGCTGCGCCCCTTGACAGCATCCACAGCCTGGCTGCCTACT
ACATCGACTGCATCAGGCAGGTGCAGCCCGAGGGCCCCTACCGCGTGGCCGGCTACTCCTACGGGGCCTGCGTGG
CCTTTGAAATGTGCTCCCAGCTGCAGGCCCAGCAGAGCCCAGCCCCCACCCACAACAGCCTCTTCCTGTTCGACG
GCTCGCCCACCTACGTACTGGCCTACACCCAGAGCTACCGGGCAAAGCTGACCCCAGGCTGTGAGGCTGAGGCTG

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FIGURE 3531C

AGACGGAGGCCATATGCTTCTTCGTGCAGCAGTTCACGGACATGGAGCACAACAGGGTGCTGGAGGCGCTGCTGC
CGCTGAAGGGCCTAGAGGAGCGTGTGGCAGCCGCCGTGGACCTGATCATCAAGAGCCACCAGGGCCTGGACCGCC
AGGAGCTGAGCTTTGCGGCCCGGTCCTTCTACTACAAGCTGCGTGCCGCTGAGCAGTACACACCCAAGGCCAAGT
ACCATGGCAACGTGATGCTACTGCGCGCCAAGACGGGTGGCGCCTACGGCGAGGACCTGGGCGCGGACTACAACC
TCTCCCAGGTATGCGACGGGAAAGTATCCGTCCACGTCATCGAGGGTGACCACCGCACGCTGCTGGAGGGCAGCG
GCCTGGAGTCCATCATCAGCATCATCCACAGCTCCCTGGCTGAGCCACGCGTGAGCGTGCGGGAGGGCTAGGCCC
GTGCCCCCGCCTGCCACCGGAGGTCACTCCACCATCCCCACCCCACCCCACCCCACCCCCGCCATGCAACGGGAT
TGAAGGGTCCTGCCGGTGGGACCCTGTCCGGCCCAGTGCCACTGCCCCCCGAGGCTGCTAGATGTAGGTGTTAGG
CATGTCCCACCCACCCGCCGCCTCCCACGGCACCTCGGGGACACCAGAGCTGCCGACTTGGAGACTCCTGGTCTG
TGAAGAGCCGGTGGTGCCCGTGCCCGCAGGAACTGGGCTGGGCCTCGTGCGCCCGTGGGGTCTGCGCTTGGTCTT
TCTGTGCTTGGATTTGCATATTTATTGCATTGCTGGTAGAGACCCCCAGGCCTGTCCACCCTGCCAAGACTCCTC
AGGCAGCGTGTGGGTCCCGCACTCTGCCCCCATTTCCCCGATGTCCCCTGCGGGCGCGGGCAGCCACCCAAGCCT
GCTGGCTGCGGCCCCCTCTCGGCCAGGCATTGGCTCAGCCCGCTGAGTGGGGGGTCGTGGGCCAGTCCCCGAGGA
GCTGGGCCCCTGCACAGGCACACAGGGCCCGGCCACACCCAGCGGCCCCCCGCACAGCCACCCGTGGGGTGCTGC
CCTTATGCCCGGCGCCGGGCACCAACTCCATGTTTGGTGTTTGTCTGTGTTTGTTTTTCAAGAAATGATTCAAAT
TGCTGCTTGGATTTTGAAATTTACTGTAACTGTCAGTGTACACGTCTGGACCCCGTTTCATTTTTACACCAATTT
GGTAAAAATGCTGCTCTCAGCCTCCCACAATTAAACCGCATGTGATCTCC

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FIGURE 3532

CAGGGAGTGCCTGCAGCACCCCGGCGGGGCCACCCCAGTCTGCGTGTACACGAGGGATGAGGTGACGGGTGAAGC
TGCCCTGCGGGGCACGACGCTGCAGTCGCTGGGCCTGACCGGGGGCAGCGCCACCATCAGGTTTGTCATGAAGTG
CTACGACCCCGTGGGCAAGACCCCAGGAAGCCTGGGCTCGTCAGCGTCGGCTGGCCAGGCAGCCGCCAGCGCTCC
ACTTCCCTTGGAATCTGGGGAGCTCAGCCGCGGCGACTTGAGCCGTCCGGAGGACGCGGACACCTCAGGGCCCTG
CTGCGAGCACACTCAGGAGAAGCAGAGCACAAGGGCACCCGCAGCTGCCCCCTTTGTTCCTTTCTCGGGTGGGGG
ACAGAGACTGGGGGGCCCTCCTGGGCCCACGAGGCCTCTGACATCATCTTCAGCTAAGTTGCCGAAGTCCCTCTC
CAGCCCTGGAGGCCCCTCCAAGCCAAAGAAGTCCAAGTCGGGCCAGGATCCCCAGCAGGAGCAGGAGCAGGAGCG
GGAGCGGGATCCCCAGCAGGAGCAGGAGCGGGAGCGGCCCGTGGACCGGGAGCCCGTGGACCGGGAGCCGGTGGT
GTGCCACCCCGACCTGGAGGAGCGGCTGCAGGCCTGGCCAGCGGAGCTGCCTGATGAGTTCTTTGAGCTGACGGT
GGACGACGTGAGAAGACGCTTGGCCCAGCTCAAGAGTGAGCGGAAGCGCCTGGAAGAAGCCCCCTTGGTGACCAA
GGCCTTCAGGGAGGCGCAGATAAAGGAGAAGCTGGAGCGCTACCCAAAGGTGGCTCTGAGGGTCCTGTTCCCCGA
CCGCTACGTCCTACAGGGCTTCTTCCGCCCCAGCGAGACAGGTGGGGGACTTGCGAGACTTCGTGAGGAGCCACC
TGGGGAACCCCGAGCTGTCATTTTACCTGTTCATCACCCCTCCAAAAACAGTCCTGGACGACCACACGCAGACCC
TCTTTCAGGCGAACCTCTTCCCGGCCGCTCTGGTGCACTTGGGAGCCGAAGAGCCGGCAGGTGTCTACCTGGAGC
CTGGCCTGCTGGAGCATGCCATCTCCCCATCTGCGGCCGATGTGCTGGTGGCCAGGTACATGTCCAGGGCCGCCG
GGTCCCCTTCCCCATTGCCAGCCCCTGACCCTGCACCTAAGTCTGAGCCAGCTGCTGAGGAGGGGGCGCTGGTCC
CCCCTGAGCCCATCCCAGGGACGGCCCAGCCCGTGAAGAGGAGCCTGGGCAAGGTGCCCAAGTGGCTGAAGCTGC
CGGCCAGCAAGAGGTGAGAGCTGCCAGCCTGAGGTGCCCACTCCGCCAGCCACAGGACCACCTCCTCTGCCAGCA
GGAATAAAGACTTGTGCATCCCTC

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FIGURE 3533

GGGCGCGCGTTGAGGCTGCGGTCATGGAGGGAGCAGGAGCTGGATCCGGCTTCCGGAAGGAGCTGGTGAGCAGGC
TGCTGCACCTGCACTTCAAGGATGACAAGACCAAAGGTGCGGGTGGGGGTGCGGGCGGGAGGTGGGTCCCCGTGT
CTGTCCTCAGGGACCCTTTCCTGCAACTCTGCAGGGCCAAGGCCTCGGGAGGGCGGGGGTATGTCTGGAGCACCC
AGCCAGAGCGGTGGGTGAGGGTCCCGCATAACCTCCCCCTGCCTTGCAGTGAGCGGGGACGCGCTGCAGCTC**ATG**

GTGGAGTTGCTGAAGGTCTTCGTTGTGGGTGAGCCCAGGGCCCACGCTCCCTCCGGGCACAGCATCCGGAATTTT
GCGTTTTTCCAGCGGGAAAACCAAGACGTGTTTTCCCGTTTCCCACAAGGGCCTAAACTTGGGTCTCCTGAGCCT
GTTTGTCAGGTGCTGTGGCCTGGTTCTGGGGGCTGCCCGTGGGTGTTGGGGGGGGCACCGGCCCAGGCTGAGGCC
CTCACTGGGCTCGGGTTTAAGATCCCCCCAGCATCCCCCACCTCTCGCGTTTCTCACCGCAGAAGCAGCAGTCCG
CGGCGTGCGGCAGGCCCAGGCAGAAGACGCGCTCCGTGTGGACGTGGACCAGCTGGAGAAGGTGCTTCCGCAGCT
GCTCCTGGACTTCTAGGGATCTCAGCCGTGGCTGAGGCCACCCCCAGAGGAGCCCCTGGTCCACAGAAGCAGGCC
TTGTGTTTCCAGCGGCCTCTGATAAGAGGCAGGGAAGGACCTGAAGGATTTGGAGTTGATTCAAACAAGATCTCT
GGGAGTCTCCAGCCTGTGCAGAAGGGGCAGGACTGCAGTGCACTGCGGGCCTTGGAGTGTCCAGTGGGGACACTG
GTGTGGGAAGGGGCAGCACCTGGGGAGTCCCTGCCTCTCCTCCCTGGGACAATAGTGTGCATGCCACCCGGGGTC
CTACAGGCAGGTGCTGGGAAAGGCCTGCCACCCGACATCAAAGCTGGCGTG**TGA**CCTTTCCAGCCATGCGATATT
CCCCTTGGAAGATGCTTCCCCAGGCTATAAATTTGTTCTCACAAAGCAACATCAATAAATCAAAACTGTCTCTCC
C

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FIGURE 3534

GAGGCCCCGACGCGGCTGTCGCGAGGGCGGGGGTCGGGGCTGCAGGCGGGGCAGGGCTGGGTGGGGGCGCGCGAC
GCACCTGCCTGCTTCCTGCACGGGTGGTCCCCAAGCACTGCGGGGCCCCAGCCCAAAGCGGACCTTGACTACCGC
CCAGCCCCGCGCTCCCAGGACCTCCCGCCCGCGGAGCCCACTCGGATTGCTCTCCGCCCGGGTCGGCGGAGGCCC
CGTCTCCTGTACCCGGCGCTGGGACTGCTCCGCACCGCGCGGCTCCCTTTCAGCAGCTGCGGGAGCATGCGGAGG
AGGCCCTGCCGGCCCCGCGGGTC**ATG**GAGGAGTTCCGGCGCTCCTACAGCCGCCTGTGCAGGGAGAGTGGGGCCG
AGCCCCAGGAGGCTGTCCTGCAGCAGCTGCACCAGCTTCCCAGGGGCCGGCTGGACCTGGCCACGCAAAGCCTGA
CGGTGGAGACCTGCAGGGCCCTGGGCAAGCTGCTGCCGAGGGAGACGCTGTGCACGGAGCTGGTCCTGAGTGACT
GCATGCTCAGCGAGGAAGGGGCCACACTGCTGCTCCGAGGCCTGTGTGCCAACACCGTGCTGCGCTTTCTGGACT
TAAAGGGCAACAACCTTCGGGCTGCAGGGGCCGAGGCTCTGGGAAAACTCCTCCAACAGAACAAGTCCATTCAGA
GCCTCACGCTGGAGTGGAACAGCCTGGGCACGTGGGACGATGCCTTCGCCACCTTCTGCGGGGGCCTGGCGGCCA
ACGGCGCCCTGCAGCGGCTGGACCTCCGCAACAACCAGATCAGTCACAAGGGCGCGGAGGAGCTGGCCCTAGCCC
TGAAGGGCAACACCACCCTCCAGCAGCTGGACCTGCGCTGGAATAACGTTGGCCTCCTGGGGGGCCGGGCCCTCA
TGAACTGTCTCCCCAGCAACAGAACCCTGTGGAGACTGGACCTGGCTGGGAACAACATCCCTGGAGACGTCCTCA
GAGCCGTGGAGCAAGCCATGGGCCACAGCCAGGACCGGCTCACCACCTTCCAGGAGAACCAAGCCCGCACTCACG
TCCTCAGCAAGGAGGTCCAGCACCTCCGGGAGGAGAAGTCCAAGCAGTTCCTCGACTTGATGGAGACTATTGATA
AGCAGCGAGAAGAGATGGCCAAGAGCAGCAGGGCGTCGGCAGCCCGTGTAGGGCAGCTTCAGGAAGCCCTGAATG
AGAGGCACTCCATCATCAACGCTCTCAAGGCCAAGCTGCAGATGACAGAGGCCGCCCTGGCTCTGTCGGAGCAGA
AGGCCCAGGACCTGGGGGAGCTCCTGGCCACAGCGGAGCAGGAGCAGCTGAGCCTGTCACAGAGGCAGGCCAAGG
AGCTCAAGCTGGAGCAGCAGGAAGCTGCAGAGCGGGAGTCTAAACTCCTCAGAGACTTGTCTGCTGCCAATGAAA
AGAACCTGCTTCTGCAAAACCAGGTAGACGAGTTGGAGCGGAAGTTCAGGTGTCAGCAGGAGCAGCTGTTCCAGA
CCAGGCAGGAGATGACCAGCATGTCAGCTGAGCTGAAGATGCGGGCCATCCAGGCCGAGGAGCGCCTGGACATGG
AGAAGAGAAGATGCAGACAGAGCCTGGAGGACTCCGAAAGCCTGCGCATCAAGGAGGTGGAGCATATGACCCGTC
ACCTGGAGGAGAGTGAGAAGGCCATGCAGGAGCGGGTGCAGAGGCTGGAGGCGGCGCGGCTGTCCCTGGAGGAGG
AGCTGAGCCGAGTGAAAGCAGCGGCACTCAGCGAGCGTGGCCAGGCTGAGGAGGAGCTGATCAAGGCCAAGAGCC
AGGCCCGCCTGGAGGAGCAACAGCGCCTGGCTCACCTGGAGGACAAGCTGAGACTGCTGGCGCAGGCACGGGACG
AGGCGCAGGGCGCTTGCCTACAGCAGAAGCAGGTGGTGGCCGAGGCCCAGACCCGGGTCAGCCAGCTGGGCCTGC
AAGTTGAGGGCCTGCGGCGGCGCCTGGAAGAGCTGCAGCAGGAGCTGAGCCTCAAGGACCAGGAAAGGGTGGCCG
AGGTGAGCAGGGTGCGCGTGGAGCTGCAGGAGCAGAACGGCCGGCTGCAGGCGGAGCTGGCGGCTCAGGAGGCGC
TGAGGGAGAAGGCGGCGGCCCTGGAGCGCCAGCTGAAAGTGATGGCGAGCGACCACCGAGAGGCGCTGCTGGACA
GGGAGAGCGAGAACGCGTCTCTCCGGGAGAAGCTGCGGCTCCGGGAGGCGGAGATCGCCCGCATCCGGGACGAGG
AGGCCCAGAGGGCGAGCTTCCTGCAGAACGCCGTCCTGGCTTACGTGCAGGCGTCCCCCGTGAGGACCCTGAGCC
CCCCAAAG**TGA**GACAGGCCGGGAGGACCCGGGCGCAGTAGGAGTGCATCAGGCGGCGCCCGAGATGGACCAGGGG
CTGCGTCCCGCCCGCGCCGCCTCTTTGAGACCCGGGTCGTCTGTTCCACGCGGCGGTTGCGGCGACTGTTGGTGG
TGTCGCGGCTGCGGGGGAACCCCGTGGGAGGCGCCTGGGAAGGGCTCCCTACCGGCCCCTTCTTCCCGGTCGACG
CCACGTGGGAGCACACCGGGAAGGGGTCCCGCGGGCGCGTCTCCCCCTCGCCTTTTGCGATGTCACCGTGAACGC
TGCGGCCGCCTGCGCGCGGCGGGGTTTGGAAATACAGCGCGTTTGCACTTTGTGAT

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FIGURE 3535

CCCCGCAGGCCGGGCATGGGTGGGGGCGCCGGGCCGTCACGATGAGCGCCCTGGGCAGCCCGGTCCGGGCCTACG
ACTTTCTGCTCAAGTTCCTGCTGGTGGGCGACAGCGACGTGGGCAAGGGCGAGATCCTGGCGAGCCTGCAGGATG
GCGCGGCCGAGTCCCCGTACGGCCACCCGGCGGGCATCGACTACAAGACGACCACCATCCTGCTGGACGGGCGGC
GGGTGAAGCTGCAGCTCTGGGATACTTCAGGCCAGGGAAGATTTTGTACCATATTCCGCTCCTACTCCCGGGGCG
CACAGGGTGTGATCCTGGTCTATGACATTGCGAACCGCTGGTCTTTTGACGGCATTGATCGATGGATTAAGGAGA
TCGATGAGCATGCCCCCGGAGTCCCCAAGATCCTGGTGGGGAACCGCCTGCACCTGGCGTTCAAGCGGCAGGTGC
CCACGGAGCAGGCCCAGGCCTACGCCGAGCGCCTGGGCGTGACCTTCTTTGAGGTCAGCCCTCTGTGCAATTTCA
ACATCACAGAGTCGTTCACGGAGCTGGCCAGGATCGTGCTGCTGCGGCATGGGATGGACCGGCTCTGGCGGCCGA
GCAAGGTGCTGAGCTTGCAAGACCTCTGCTGCCGGGCGGTCGTGTCCTGCACGCCGGTGCACCTGGTGGACAAGC
TCCCGCTCCCCATTGCCTTAAGAAGCCACCTCAAGTCCTTCTCGATGGCCAACGGCCTGAATGCCAGGATGATGC
ACGGCGGTTCCTACTCCCTCACCACCAGCTCCACCCACAAAAGGAGCAGCCTCCGCAAAGTGAAGCTCGTCCGCC
CCCCCCAGAGCCCCCCCAAAAACTGCACCAGAAACAGCTGCAAAATTTCTTAAGGAAGGCACTGAAAGAAACACG
GCGGAATCTCTCCAGGAGAAGCTCGGCGTTACCCCCGGCAGCTGGTGGATGCATCTCAGATCCCGGTTCCTCTCG
GCGAATGCTGCTTGCGAATGTGTGCGACGCCTTCCGTGTGATGGAAACACACTACCCCGTCGGACTTCGAATTTC
TACGTGGATGTGCATGAAGCTCTTGTTTTCGATGTGTGTTTGTAAAGGGAAAATTAGTACTCTGCTCGACTCTTG
GTAACATGAAATTCTGAATGTTACTTTATCATGATTGCACTGCAACTTTTTCCTTAAAATAACTGCTTTTGTAAG
AACGGTGATATTGGAGTGATTAGTATAAATTCAATGGAATTTGAGAAGCAATGGCAGCGGGATAATTTAGAGTCA
CTGATATTACGAGAGGGGTCTTTTTGTAAACCTCCTTTTCAATGTCAAAGCGCCAATTTATAAAACGCTGCAGAT
GTAGAGGTTATGTGCAACTGATCTGTCCAGTTTGTGTATGAAATGGATTTGATAAAGTTTTTGCTAGTTATTTAC
TACATTTTGGGATTAATAAGTGATTTATATGCATATTTTTCTGTAAATCTACAGTTTTTTGTACAAGATATTCTA
CAAGTTATGAAGCTAAGGGAAGAAAATGCCAAAGATACCTCTAGTTATGTTGAACACAGCCAGCACAGTTTCGAC
ATGTCAAGGAAGAGCTGTTTCAGTAAAGAATGAAGTGAAAACACTTATTTAGGAAAATGTTTCTCAACAATAAAA
TGTATAGTTGTTTCTCTC

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FIGURE 3536

CTCGCCTCGCCTCGCCCCGCCCCGCCCCTCCCCGCCCTGCCTCGCCTCGTCTCGCCTCGCTTCGGTTAGATGCGC
TCGGCGCTCCATAGGCTCCCTGGTGGGGCGCGGGCGCGCGCACGGACGTCCAGCACGCACGCACGCACGTCCAGC
ACACACGCACATCCAGCACGCACGCACGTACGTCCGGCACTTCCGGCCGCGGCGGCCTCAGCGCCGGCCCGAAGG
GACCAGGCCGCCGTCCCCAGCGAGAGGCATGCAGCGCTGAGGAGCGGCGACCCAGCACGGCGGCGCCATGAACCT
CCTGCCGTGTAACCCTCACGGCAACGGGCTGCTCTACGCCGGCTTCAACCAGGACCACGGATGCTTTGCGTGTGG
GATGGAAAATGGATTCCGAGTCTATAACACTGATCCACTAAAAGAAAAAGAGAAACAAGAATTTCTAGAAGGAGG
AGTTGGCCATGTTGAAATGTTATTTCGCTGCAACTATTTAGCTTTAGTTGGTGGTGGAAAAAAGCCGAAATACCC
TCCCAACAAAGTAATGATCTGGGATGACCTGAAGAAGAAGACTGTTATTGAAATAGAATTTTCTACAGAAGTCAA
GGCAGTCAAGCTGCGGCGAGATAGAATTGTGGTGGTTTTGGACTCCATGATTAAGGTGTTCACATTCACACACAA
TCCCCATCAGTTGCACGTCTTCGAAACCTGCTATAACCCCAAAGGCCTCTGTGTCCTTTGTCCCAATAGTAACAA
CTCCCTCCTGGCCTTTCCGGGCACGCACACGGGCCATGTGCAGCTTGTGGACCTGGCCAGCACGGAGAAGCCACC
CGTGGACATTCCTGCACACGAGGGTGTCCTGAGCTGCATTGCACTCAACCTGCAGGGAACAAGAATTGCAACTGC
ATCCGAGAAAGGGACGCTTATAAGAATATTTGATACTTCATCAGGGCATTTAATCCAGGAACTGCGAAGAGGATC
TCAAGCAGCCAATATTTACTGCATCAACTTCAATCAGGATGCGTCCCTCATCTGCGTATCCAGCGACCACGGCAC
AGTGCATATTTTTGCAGCTGAAGATCCAAAAAGGAATAAACAGTCCAGTTTGGCCTCAGCCAGTTTCCTTCCAAA
ATACTTCAGTTCCAAGTGGAGTTTCTCCAAGTTTCAGGTTCCCTCAGGCTCTCCGTGCATTTGTGCCTTTGGAAC
AGAGCCAAACGCCGTCATTGCAATTTGTGCAGACGGCAGCTACTACAAATTCCTGTTCAACCCCAAGGGGGAGTG
CATCCGAGATGTCTACGCGCAGTTTCTAGAGATGACCGATGACAAGCTGTGACTCCAGCTGGGGGCGCCACAGCA
CCCACCACCTGCCGCCTTCAGACTCTCGGGGCTGGTGCCAGTGCCCCAGGGGCCTCCTGGGCCACGGGCTGGAGG
GGCTGCCCAGGGACCTTGGTCTCGAAGCCATACGTGGTTGTCTGCTTTCCTAAGGACTCCCATTTCCAGTATTAA
AGAGAGAATCATCATCAAGGCACCGTAGGTAACTCAGTGGCTGTGACCAGCTCGACTGGCGGCCACTGGCTGTTC
CCATGAGTTCAGCTGTGACGTTAGCTTCAGTGGCTCCGCCGCATCCTCACACTGACGGGGGCTCCATACGGACCT
GGGGACTGGGCTGAGAGGGTGGACGAGTTCAGGTTTGTTTTTGCAGCAGATTCCGTCGTTCTTACTGAGTCTGCA
GCGGGGGAGTGAACAAGTGTGCAGATGTAAGTTCTTACATGATAAGCAGATTGAATACAACACCAGCAGCTTGCC
TTAGAAAGGAGAAAGGAATTCCTTTTCCCGCCCGAACATGAAGAAAAACGACCTGACCCTGTAGAGAGAACACAG
TGTGAATGTTTCCCCTCGTGTGAGCCCAGCCTGTGGTCTTCTCCGTACCCGCAACGTGGTCATCTGTGCCCGTGA
CGTCACCTGTGCCCGTGCGTGGCGTCCCCGTCTCCGTTGGGGCCATTAGAATGAGGCAGACACCAGGCCACTCTA
GAAGCCGAGCCGTCACACCTCAGGCGTGTGCGGGGCGGGGACGGGGGGTCTCCTGGTTACATTTTGGATTAAACC
TGTTTCCCGGTTATGTGTAGGGAACAGCAGAGTGATGCACGAACTTTGAACATTCGTTATGGGGAAAACATCCTT
TAACTTCGGGGTCGTCTACCAGAGCAGGGTCTGGGAGGGTCCATGCAGTTCCCGCTGGTGTGGAGGGAAATGCCC
TGGTCTGGCCTCCGAGCCCCCAGGTCCACCGTCTCCCCTCCCCTCATTTGTAAGAATAGCTACACACTAACATTT
TGGGAAGGAGAGGCACATAACTTTTTTTAACATTTGGTAACTAGGTTATGGGCTCTACATTGTCAGCTACTTGGG
ATATATATTTAATTTTCTTAAATTCCCGTTAAACTCTATTTTATGGTTTTGATTTCAGATTGCAAACATGTAAAA
CCTGCATAGCAGCGAGTCCTCGGTTTTGCCGGTTTCTTTAGTTCTTTACTGTCACTGTCATGTAATCAGCTAATT
CTCTGTGGATGTTGCTGTAAAGTATGCATGTTCCTTTCATGTGTATTTAATCATGATGTTTAATTTTGCACACTT
ATTTGTAATGTTTCTTTTAAATAAAAGTGACTAATTTTGTTGT

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FIGURE 3537

AAAATTAATAAAAATATTTTATTGAATTTCAGGAACTTGGTACTTTTTTAAAACTTCAAATCTTTGCACACAAAT
CACCACTATACTTTCTAGAATAGTGGAAGTTAGGACTTCAAGATTGTCACTTATCTCCTTGTGTCACACAGCACA
GAAACCCCAAGTCCTCACACTGCCCCCACCCCCCTTCTGGCCATGACTACCAACTACTCTGTTATTCTAGCGGAG
GACAATGACGGAAGTGGGTAGACGACTGAAGGAGATCAGCTGTCCACCGCGTACTCTACTAAAGTGAGAGGAGGA
GCAACCGAGGATCATGCCGCACACACTCTGAGTGCACCACGTGACGTGGGTCATACGGGAGTTCCCTTTTGTTTT
CTCGTTTGGTTCAGGGCAAAGCTACTGAAATTGTTCCTAGTCCCTGAGGAGCTCAGAAGTTGGGCAAAGGTCACA
GCAGACTTCCTGAAAAGCAGACACTGAGGAACACAGTGGAGAGCGGGAGTTCACAGCGACGCAGCTGAGGACGAC
GCAGGACCTCTCCCAAAGGTGCTGCAGCTCCAGCACCAGGGGCCAGGGCTGCGGCGACAGCAGCTCAGCAACCCT
TGCTGTGCTCAAGTTCTTGGGGATTCAGAGCTAAGTTCAAAATTTAGAAACAGTGCCTTAAAGACGGGCAAGAAA
ACCCGGTGTGGGAGTCTGCTCATCTATGGTTTGTTACTGCTCTCGCTTCGATATTCTTAAATTCCTAGGTACCAA
TGAAAAAGCCAAGTGAACGTGGCAGAGTGAGGAGGAGACAGGAGCGTGTGCACCTTCCATCTGTGAGAGGCACAC
TTCAGTCTGGGTTCAAGATGCAGAATGGTGCCTACGGCAAAAAAAAAAAAAAAAACACCCTCCTCCCTTCTTTAC
CATTTGAATGGACATTTTCCTTACCTGTGATCCCAACAGAAACAGATCCAGACCTATCATGTGAAGTCCACGTTC
CAGGATCAGAAGTAACCAGTTTATGGACTGAGCTTACACGGGAAAGTCTACCCCCGACTCCTTCTGGATAGTAAC
ATACACAGCTGCATAAAAACGTCTCCAAGGGGACATACGATGCATTTGCTTGGTGTCCCAGCCAAGCTCCCCACC
GGCGACCTCACTGTTCCTTAGAGCTCAAGAGCTCGTCTCCTATCAATCAGAGAACCCCATCAGCTGTGACCAACA
GAGCTGGAGCCCTCTGTGGAGGGAGCTGACCCCACACACAGGACAGAGCAGAATCCTGATTATTTTACAAACTGC
AAACCTTCTGAGTAAGAAGACAAAAATATACATTCCAAGGTATCTGTAAAGTGCTTGGAAGATGCAGACAGCTGC
ACCGAGGGGCTCTGATCCATCCACACGCTGCGCTTTGCTGCGGTCACACACACGGTCTCAGTCACGTGATGGTTT
TGCTTTTATTTCTTAAACGGCTGAGTGATAATCCAGCTAGTGTGCAGTCATTTCATACCTTTCAATGGGCGTCAC
CGCAGTGACGCTGCCCCAGCCCCATGCTGAGGGCCGACACAATTCACGGAACAGATTCATCATATTTGGTCTTTA
TGTAAATAATAAATGTTTTAAAATTGCCTAAATAT

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FIGURE 3538

GTGCACATTCAGGTTCCCGAGCACAAACATCAAGATAACGTTCACTGCCCTGTCCAGCGAGAAGAGAGAGAAGCA
GGAGGCGTCTGAGTCTCCAGTGAAGGCCGTACAGCCACACATCTCGCCCCTGACCATCAACATTCCAGACACCAT
GGCCCACCTCATCAGCCCTCTGCCCTCCCCCACGGGAACCATCAGCGCTGCAAACTCCTGCCCCTCCAGCCCCCG
GGGAGCGGGGTCTTCAGGGTACAAGGTGGGCCGAGTGATGCCATCTGACCTCAATTTAATGGCTGACAACTCACA
GCCTGAAAATGAAAAGGAAGCTTCAGGTGGAGACAGCCCGAAGGATGATTCAAAGCCGCCTTACTCCTACGCGCA
GCTGATAGTTCAGGCGATTACGATGGCTCCCGACAAACAGCTCACCCTGAACGGGATTTATACACACATCACTAA
AAATTATCCCTACTACAGGACTGCGGACAAGGGCTGGCAGAATTCAATTCGCCACAATCTCTCTCTGAATCGTTA
TTTCATCAAAGTGCCGCGTTCCCAGGAAGAACCAGGCAAAGGCTCGTTCTGGAGGATAGACCCAGCCTCTGAAAG
CAAATTAATAGAACAGGCTTTTAGGAAACGACGGCCTAGGGGCGTGCCCTGCTTTAGAACCCCTCTGGGACCGCT
CTCTTCTAGGAGTGCCCCAGCCTCTCCCAATCACGCGGGAGTGCTGTCTGCTCACTCTAGTGGCGCCCAGACCCC
TGAGAGCCTGTCGAGGGAAGGTTCGCCGGCCCCCCTGGAGCCTGAGCCTGGCGCTGCACAGCCCAAACTCGCTGT
CATCCAGGAAGCCCGGTTTGCCCAGAGCGCCCCAGGGTCACCTCTGTCCAGTCAGCCAGTCTTAATCACCGTCCA
GCGGCAGCTACCACAGGCCATCAAGCCTGTCACCTACACTGTGGCCACCCCAGTGACCACCTCGACCTCCCAGCC
ACCCGTCGTGCAGACGGTTCACGTCGTCCACCAGATCCCAGCGGTGTCGGTCACCAGTGTGGCCGGACTGGCCCC
AGCGAACACGTACACTGTCTCTGGACAAGCTGTGGTCACCCCGGCAGCCGTGCTGGCCCCTCCTAAGGCAGAGGC
CCAGGAGAATGGAGACCACAGGGAAGTCAAAGTGAAAGTAGAGCCTATTCCCGCCATTGGCCACGCCACGCTCGG
CACTGCCAGCCGGATCATTCAGACGGCACAGACCACCCCGGTCCAGACGGTGACCATAGTACAACAGGCACCTCT
AGGTCAACACCAGCTACCAATAAAAACTGTAACACAAAACGGCACTCACGTGGCATCAGTCCCCACTGCGGTCCA
CGGCCAGGTGAACAATGGGCCCCTTGGCCTCAGAAGGCCCCCATGTGCCAGCTCAGACTGGAGTTGCCTCAGTTG
ACACAGCAGGCCCCATCCAGACAGACCAGCAGGTGCTTCTGGAGACAAGAGCAAAGCCTTTTCCGGCAGCCCGGA
ACCTGGGATGAGAAACGACAGGTGGAAGGTTGTCCAGAGACACCTACAGTGTGGATGCTGTTCCGAGTCAGCGTA
GGAGAAAGGCCACTGGAAACCAGAGTCACACTGCGCGTCTGTGCATCTCTGGCCTACCGCAGTGGCCCCGGCTGT
CTGCACATTTTTTGTAGACACATTAGAGTCGGTTGAGGCCACACCTGCGGCCACAGACTGCGACCGCGATTGCAG
GGAGGAGCATCTGAGGTGGTCACGGGGTTTGCCCAGCTCACACCAACTGCAGCCGCGGCGAGTCCTTTGCACATG
TTGGCAACACACGCATCCGCATCGGCCTCCCTGCCCACAAAGCGCCACAACGGTGACCAGCCGGAGCAGCCGGAG
CTGAAGCGGATCAAGACAGAAGACGGCGAGGGCATCGTCATTGCCCTGAGCGTGGACACGCCACCGGCAGCCGTA
AGGGAAAAGGGTGTCCAGAACTAGCGACCGGGAGAGCTTTTCTTTAACGATATCAACTCTGTGGTGCCAAAAGGA
GACGCGGCCTCCCGCCAGCACTCGGGGGTGCAGGGCCCTGTGGTTGGACTTCACCTCTCAGCACTGAAAACCCAA
AACCCAGCTGGCCTTAACACTCCTTAAAGACAGAAGTCACACTTGAACAAAACCCACACACAACAAAACCTGATT
TGGGAGACGGTGTCTCCACTGAGCACCTGCTGGGCTGAGCTTCTACCTACGAGTGAAACTCTGTCCTCCTGCGAG
GACCAGGCATCGCTGTGTGAGGACGGCACGGCCAGCGCCTGCTGTGAGTGGGTCTCCCAAGACTAGGCCTCAGGA
CGCGGGGGGAGCCATCCCCGCCGCCCTCACAGGACCCACCAGGCAGCGGAGACATGTGGAATTAGAGTATTTTGA
GGTGTCCTTTCTTTACAAAATAATGGGGTCTTGGGCATTTCACATCACTCCATTTCTACTGAGACTTTCAGAATC
ACACAGGCCCTTTCCGTGGATTTCATTTGGGGCAAAGAAACAACGTAGTTTTGTTTTTGTTTTCAGCCTATGGAA
TGATTTCCTTTTGTCTGTCTTGTTCAAGTTCAGACGAAGCTACTCTGGCATCTGCACATTTCCGTGTTACAGCAG
CTGCCTGATGAATTTTATCCACCTCCATTTCAGCATGTGGCTCGCGTGGACAGGTGGACGGACGCTGTGGCCGCA
TGGAACCTTGAGAACCCAGGGACGAGCCAGTGCCGGGAAGGAACTGCCGGGACTCACCGAGCTGCACTTAACTGT
TCTCTTTCTGGCTATTTTTTGTTGTTTGTTTCTTTGTGTTGACTTTGTCCCTGGCAAAATTTTCCACTCTGAGTA
AAACAAGTCTC

FIGURE 3539

GACCCCTCCTCCTGTAGAGAGTGGTGCTGCCCTCTCGGGATGTACCTGCAGGTGGAGACCCGCACCAGCTCCCGC
CTCCATCTGAAGAGGGCTCCAGGCATCCGGTCCTGGTCCCTGCTGGTTGGAATCTTGTCGATTGGCCTGGCTGCT
GCCTACTACAGCGGAGATAGCCTGGGCTGGAAGCTCTTCTACGTCACAGGCTGCCTGTTTGTGGCTGTGCAGAAC
TTGGAGGACTGGGAGGAAGCCATCTTCGACAAGAGCACAGGGAAGGTTGTTTTGAAGACGTTCAGCCTCTACAAG
AAGCTGCTGACTCTTTTCAGAGCTGGCCACGACCAGGTGGTGGTCCTGCTCCATGATGTCCGTGATGTGAGCGTG
GAGGAGGAGAAGGTCCGGTACTTCGGGAAAGGCTACATGGTGGTGCTCCGGCTTGCGACGGGCTTCTCCCACCCC
CTCACGCAGAGTGCAGTCATGGGCCACCGCAGTGATGTGGAAGCATCGCCAAGCTCATCACCAGCTTCCTGGAGC
TGCACTGCCTTGAGAGCCCCACAGAGCTGTCTCAGAGCAGCGACAGTGAGGCCGGTGACCCTGCAAGCCAGAGCT
GACAGCCCCACTGTGCCTGAGCCCGTGCACCGCCCACAGGACCCATGGCACATTCCCGGTGTGCCTGAGCCCGTG
CACCGCCCACAGGACCCGTGGCACATTCCCGGTGTGCCTGAGCCCGTGCACCGCCCACAGGACCCGTGGCACATT
CCCGGTGTGCCTGAGCCCGTGCACCGCCCACAGGACCCGTGGCACATTCCCGGTGTGCCTGAGCCCGTGCACCGC
CCACAGGACCCGTGGCCTTGGCTTCAGTTGGTGCCTCCAGCCGAGTTGGCCTATTGCCTGCTCATGCTGCTGCTT
GCACACTGCATGAAACAGCAGGCCAGACCAGGACATCCAGACTTTCTCCATCGTGAGGCCTGGGCCTGCCTTTCT
GCAGCCGGAGGTCTCGCCAGCCCTGGACTCCTGCTTTGGGCCACAGCAAGACCTCGGGCGAGTGGAGAGGCGGGG
CCAGGCCGGGCCCTTGTGGGTGCTGATGCTGCATGTTGTCCCCGACACAGCGTCCTCTCCCTGGTGGACATCCCC
AGCGGTCAGGTGCTTCCCCAAGGGCAGTGAGGGGTGAACATCCAGGGCCTACCTGGCTGTGCACGCTGCAGCCAC
ACTGTGGAAGCTGCCCCTCCCCGAGGACCCGCCTCCCTTGCTGATGCCAGGATCTCAGCGCATAGACCACTCTGC
CCCAGCGGTCGTCACAGAAAGGTCTCTCTGTTCCTCACACTCAGCTTCAGCATAAGCTGTGAGGCCAGAAAAAAG
GTCAGCTCTTCTAGTATCGTGCAGTGCTTAAAAACCGGGAGCTCCAGCCGGGCGCAGTGGTTCATGCCAGTAATC
CCAGCACTTTCGGAGGCCGAGGTGGGAGGATTGCTTGAGGCCAGGAGTTCAAGACCAGCCTGGGCAACACAGCAA
GATCCTGTCTTTGTAAAAAAACTAACCAAACAGGAAAAACTGGGAGATTTTCTGCAGAAATTGAGTTCCAGCCTC
TCTCGAACCTGGGAAGACCTGGCAGGAGGGGGCTGGGCTCTCGGCTACAGACTTCTCCCCACCCCGTAGGAGCTG
AACGCCAACCATCCTGACCCGCCAGTGCTCTTGGTCTCCTGAGTGTACCCAGGTCCTCCCAGGTGCGGTGTGCAC
CGAGCGCGCCTGGCCTGATGCCCTGGCCTGTGAGCTGGGGACTCCTGGGCCCTGTGAGCCCCTAGGCGCAGGCCC
AGGAATGGCTGGGTAGGACAGGGAACACCTTTGCCCCACGTCTGGCTGTGACCTCGGTGAAAGCCGACAGGAGAG
AGATGGACCCTCCTCCTCAGTAGTGGCTGCCAGTCCCTCGTTGCAGGACAGGGTCATCATAACCATAAATAACCC
TTCACGTGTC

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FIGURE 3540

TGCCTGCAGGCCTCATGGGTTTGTTTCGGGTGCTCTAGAATATTCCATCGATTGTGTAAAACACAGTGGCAAACT
CTGCGTGAGCCCTGGACACCTGTGTGGGTCGGGCTGTGCCCAGCAGGAAGAGCCACTTGCTGTCCGGGTGTTGCT
GCTGGCAACACAGTCTTACTTCTGTTTTCTGATTTTTAAAATAAGGAACGTATTTCACGTGTTTAAAGAGAAGCA
GCAGGCCCATTTGCCGCCAGTCCCCTTGGCCGGCACACGCGGGGCTGGGCCTGGCCAGTGGCTCTCCATTGCCGC
CCGCCCACTGCCCCAGTACCTAGGCCTGCAGGTCCCAATGTAGCCCCCTCCCCTCCTCCAGAGGCCCCTCCAACC
GCCCCGCTCATTTGTGATTTCAGGAGGATTTG**ATG**AAGATGTTAAAGCGAAAGTGGAGAACCTTCTCGGGATTTC
CAGCCTGGAAAAAACGGACCCTGTTAGGGAGGGGGCCGGCTCCTTCCCTGGCAGCAACATCCTTGCCCTTGTCAC
ACAAGTCAGCCTCCATCTGCGCAGCTCTGTGGATGCGCTGCTGGAGGGCAACAGGTATGTCACTGGCTGGTTCAG
CCCCTACCACCGCCAGCGGAAGCTCATCCACCCGGTCATGGTTCAGCACATCCAGCCCGCAGCGCTCAGCCTCCT
GGCACAGTGGAGCACCCTCGTGCAGGAGCTGGAGGTGCCCTGCAGCTGGCTTTCTACCCGGATGCCGTGGAGGAG
TGGCTGGAGGAAAACGTGCACCCCAGCCTGCAGCGGCTGCAAGCTCTGCTGCAGGACCTCAGCGAGGTGTCTGCC
CCCCCGCTGCCACCCACCAGCCCTGGCAGGGACGTTGCTCAGGACCCCTGAGGGGAGAGCTCATGCCAGGGGGCT
CCTGCTGGAGGCTGGGGGGGCTCTGCACTGCCAAATGGCCTGGGCAATACGGGCCCACGTGGCGTCGTGCCCTCT
GGCCCAGCAGTGTCTTGCCCACACTCAGTTCC**TGA**GGGCCCTGGGCAGCCCCTGGGGGGAGAGACTAGAAAACACA
GAAGGAAGCAGCACAGGGAGACCCGCTTTGTGATCTGCATGTGTGACACTGATTCTTTGGAAATAAAGAGTGGAA
GCTG

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FIGURE 3541

ATGGCCTTCCTACTGCTCCGGTTTCTCATGACCATTCTCAGAGCAGAGCCCAGAACTATTCAAACAAGCAAAGAG
AAGCTGCCAGAAGAGGCAAAAGCTCTGGGCTCCAAGTGGGCAGCTGTGGTGGACCTCTGCTCAGCTCCTGGGTGT
CAGAAGTGTAACTATTTCCTCAATGTAGGTTCACGAGAGGCATGCAGCGCTGAGGAGCGGCGACCCAGCACGGCG
CGCATGAACCTCCTGCCGTGTAACCCTCACGGCAACGGGCTGCTCTACGCCGGCTTCAACCAGGACCACGCCCGG
GGTCCCCGCTCTCAGGTCTCTCCTGGGCGCCCCTTTCCGGCCAGGCCTTCCACCCGGGACCCCGCCCCGCCCGAG
CTCCCCTCCGAAGCCCCCGCGCCCGGCCCTCGCCGCTGCTCCCAGCCCGAGCCGGCGGATTCCGAACCCGCGACG
GTGGGCCGGCCCGTGCTGCAGCGCGGGCCCGCCGAGGCGGCGCTGCTCGGCTCCGGTTTGGGCTCTCCCTGTTCC
CTGCAGCACACC**TGA**

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FIGURE 3542

GCGTCGGGGGAGGACAACAAAGGGCCGCGGGCGGCGGGCAGTGGTGTCCCAGTCTCCCGGTGCTTCCCTGAGGCT
GAGGCGCCCGGCCTCCCGCCCGCCGCGCTCCAGATGAAGTGTGAGCACTGCACGCGCAAGGAATGTAGTAAGAAA
ACAAAAACTGATGACCAAGAGAATGTGTCAGCCGATGCACCGAGTCCAGCCCAGGAAAATGGAGAGAAGGGAGAA
TTCCACAAGTTGGCTGATGCCAAGATATTTTTGAGCGACTGCCTGGCATGTGACAGCTGTATGACTGCAGAGGAA
GGAGTCCAACTTTCCCAGCAAAATGCCAAGGACTTCTTCCGCGTTCTGAACCTTAACAAGAAATGTGATACCTCA
AAGCACAAAGTGCTGGTAGTGTCTGTGTGTCCTCAATCTTTGCCTTATTTTGCTGCTAAATTCAACCTCAGTGTA
ACTGATGCATCCAGAAGACTCTGTGGTTTCCTCAAAAGTCTTGGGGTGCACTATGTATTTGATACGACGATAGCT
GCGGATTTTAGTATCCTGGAGAGTCAAAAAGAATTCGTGCGTCTATCGCCAGCACAGTGAGGAGGAACGCACCCT
GCCCATGCTGACCTCTGCCTGTCCTGGCTGGGTCCGATACGCCGAGCGGGTGCTGGGTCGCCCCATCACTGCCCA
CCTCTGCACCGCCAAGTCCCCCCAGCAGGTCATGGGCTCTTTGGTGAAGGATTATTTCGCCAGACAGCAGAACCT
GTCTCCAGAGAAGATTTTCCACGTCATTGTGGCCCCTTGTTATGACAAGAAGCTGGAGGCTCTTCAGGAAAGCCT
TCCCCCTGCTTTGCATGGCTCCCGGGGCGCTGACTGCGTGTTAACATCAGAAATTAGCCAGGCGTGGTAGTGCAC
ACCTGTAATCACAGCTACTCAGGAGGCTGCGGCAAGAGAATCACTTGAACCCGGGAGGCAGAGGTTACAGCGAGA
CAAGATTGCACCACTGGACTCCAGCCTGGGCGGCGGAGGTGAAATTGCTCAAATA**ATG**GAGCAAGGTGACCTCTC
AGTGAGAGATGCTGCCGTCGACACTCTGTTTGGAGACTTGAAGGAGGACAAAGTGACGCGTCATGATGGAGCCAG
CTCAGACGGGCACCTGGCACACATCTTCAGACATGCGGCCAAGGAGCTGTTCAACGAGGATGTGGAGGAGGTCAC
TTACCGAGCCCTGAGAAACAAAGACTTCCAAGAGGTCACCCTTGAGAAGAACGGAGAGGTGGTGTTACGCTTTGC
TGCAGCCTATGGCTTTCGAAACATCCAGAACATGATCCTGAAGCTTAAGAAGGGCAAGTTCCCATTCCACTTTGT
GGAGGTCCTCGCCTGTGCTGGAGGATGCTTAAATGGCAGAGGCAAGCCCAGACTCCAGACGGACATGCGGATAAG
GCCCTGCTGCGGCAGATGGAAGGCATTTACGCTGACATCCCTGTGCGGCGTCCGGAGTCCAGTGCACACGTGCAG
GAGCTGTACCAGGAGTGGCTGGAGGGGATCAACTCCCCCAAGGCCCGAGAGGTGCTGCATACCACGTACCAGAGC
CAGGAGCGTGGCACACACAGCCTGGACATCAAGTGGTGAAGTCAGGCCAGGGCCTTCCAGCTGCTCTTGGGGCCA
GAGCCAAGAGCCTCTCAGTAGAGGGAGGGGCTGCCCTGAGTGGAGTATTAAAGACACT**TAA**GAAAACCGCTC

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FIGURE 3543

GCGGCCGCGGCGGGAAC**ATG**GAGGAGCTGCTGAGGCGCGAGCTGGGCTGCAGCTCTGTCAGGGCCACGGGCCACT
CGGGGGGCGGGTGCATCAGCCAGGGCCGGAGCTACGACACGGATCAAGGACGAGTGTTCGTGAAAGTGAACCCCA
AGGCGGAGGCCAGAAGAATGTTTGAAGGTGAGATGGCAAGTTTAACTGCCATCCTGAAAACAAACACGGTGAAAG
TGCCCAAGCCCATCAAGGTTCTGGATGCCCCAGGCGGCGGGAGCGTGCTGGTGATGGAGCACATGGACATGAGGC
ATCTGAGCAGTCATGCTGCAAAGCTTGGAGCCCAGCTGGCCGATTTACACCTTGATAACAAGAAGCTTGGAGAGA
TGCGCCTGAAGGAGGCGGGCACAGTGGGGAGAGGAGGTGGGCAGGAGGAACGGCCCTTTGTGGCCCGGTTTGGAT
TTGACGTGGTGACGTGCTGTGGATACCTCCCCCAGGTGAATGACTGGCAGGAGGACTGGGTCGTGTTCTATGCCC
GGCAGCGCATTCAGCCCCAGATGGACATGGTGGAGAAGGAGTCTGGGGACAGGGAGGCCCTCCAGCTTTGGTCTG
CTCTGCAGTTAAAGATCCCTGACCTGTTCCGTGACCTGGAGATCATCCCAGCCTTACTCCACGGGGACCTCTGGG
GTGGAAACGTAGCAGAGGATTCCTCTGGGCCGGTGATTTTTGACCCAGCTTCTTTCTACGGCCACTCGGAATATG
AGCTGGCAATAGCTGGCATGTTTGGGGGCTTTAGCAGCTCCTTTTACTCCGCCTACCACGGCAAAATCCCCAAGG
CCCCAGGATTCGAGAAGCGCCTTCAGTTGTATCAGCTCTTTCACTACTTGAACCACTGGAATCATTTTGGATCGG
GGTACAGAGGATCCTCCCTGAACATCATGAGGAATCTGGTCAAG**TGA**GCGGGCCTTACTCTGGAAGGAGGCCTCA
GAGGTTTCTCCACAGTCCTCTTCTGGGCAAATTCTTGTTTCTTCACATGCTGGACTAGCTTAAGACCAATGCAGT
AGCTTATTTCCAAGCCTTGCAAAGTATATAATATCTAAGAGGAAAGGTTTTGTCATCCCAGCGTTGTCCACTTTG
TGGGGCTTTGTAGGTAGACGGAGCCACACTACAGGCAGGGTATGAGCAGAGGGATGTATGGAGTGTGGGTGACTC
TGAGCCTCACTGCTGCTGCAAGGTGGGGAAACTGTAAGTGAACCCCTGTGGGTGCGGGGGAGGGTATCCGGTGCG
CAGGGAGGTGGCCAGCGCCCCCGGGCACTGCTGCTCATAGGTACCTTTCCACTGCCTCCTCCCTGCTCTCCTGTG
CAGGAATGTCTCTGAGCTGTTCACGTTGATGCTTCTTGGTTGGCAAGACTTGGGTGTAGACATGAAACCATCTTA
CTAAAAGCGTCTTAAAATGACCAATTCCAGAATCAAGCGTATTCCGTTTTCTTCCTGCATGATCCCTGGGCCCTC
CCGCAGGCTGAGCAAGTCTGTAAACTGATTCTGGGAGAAACCAAGCTGCTGGCCATAGGGTGTCCTTGGGTACAT
CCAGGAGTCTTCATTGCTTCTGTTATTACCCCGTCTCCTCTGCCATTTTCTACAGCTTGCTGAGTTGTCATTCCT
TTGCAACATTAAAATACATGCTGAACTC

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FIGURE 3544A

TAGCGGGCGCCTCCTTTTCATCCCTCATCCTTCATCCCTGGCTTTCGCGCTCTAGCGGAGTGGGATCTGCGAACA
CGTGAGGCGGGGGCGCGGTCCCCAGGCTGCCGAGATGGCCCTGAGCGACGAACCGGCCGCGGGCGGCCCCGAGGA
GGAGGCGGAGGACGAGACACTGGCCTTTGGCGCGGCGCTGGAAGCGTTCGGCGAGAGCGCGGAGACCCGGGCGCT
GCTGGGCCGCCTGCGGGAGGTGCACGGCGGCGGCGCGGAGCGCGAGGTGGCCCTGGAGCGGTTCCGCGTAATAAT
GGACAAATACCAGGAGCAGCCTCATCTGTTGGACCCGCACCTTGAATGGATGATGAACTTGTTGTTGGACATAGT
GCAAGATCAGACATCTCCAGCTTCCCTTGTACATCTGGCTTTTAAATTTCTTTACATCATCACCAAGGTTCGAGG
CTATAAAACATTTCTTCGTTTATTTCCTCATGAAGTTGCCGATGTAGAGCCTGTTTTAGATTTGGTCACAATTCA
GAATCCCAAGGACCATGAAGCTTGGGAAACCCGCTACATGCTTTTGCTCTGGCTCTCCGTGACCTGCCTGATCCC
TTTTGATTTTTCTCGCCTTGACGGGAACCTCCTCACCCAGCCTGGGCAAGCACGAATGTCCATAATGGACCGTAT
TCTCCAAATAGCAGAGTCCTACTTGATTGTCAGTGACAAGGCCCGAGATGCAGCTGCTGTCCTTGTGTCCAGATT
TATCACACGTCCTGATGTCAAGCAAAGCAAGATGGCTGAGTTCCTGGACTGGAGCCTGTGCAATCTGGCCCGTTC
CTCCTTCCAGACCATGCAGGGGGTCATCACCATGGATGGGACGCTGCAGGCCCTGGCACAAATATTTAAACATGG
AAAACGTGAAGACTGTTTGCCCTATGCTGCCACTGTCCTCAGGTGCCTCGATGGCTGCAGACTCCCTGAGAGCAA
CCAGACCCTGCTGCGGAAGCTGGGGGTGAAGCTTGTGCAGCGACTGGGGCTGACATTCCTGAAGCCGAAGGTGGC
AGCATGGAGGTACCAGCGTGGCTGCCGATCTTTGGCTGCAAATCTGCAGCTCCTCACTCAGGGTCAGAGTGAGCA
GAAGCCACTCATCCTGACCGAAGATGACGACGAAGATGACGACGTCCCAGAGGGGGTGGAGCGTGTGATAGAGCA
GCTGCTGGTCGGGCTGAAGGACAAGGACACGGTCGTGCGGTGGTCTGCAGCCAAGGGCATCGGTAGGATGGCTGG
CAGGCTTCCCAGAGCCCTGGCGGATGATGTGGTCGGGTCTGTGCTGGACTGCTTCAGTTTCCAGGAGACTGACAA
GGCGTGGCATGGGGGATGTCTGGCGCTGGCAGAGCTGGGCAGGAGAGGCCTGTTGCTGCCGTCTCGACTCGTGGA
TGTTGTCGCCGTGATCCTGAAGGCGCTGACCTACGACGAGAAGCGGGGTGCCTGCAGCGTGGGCACCAACGTCAG
GGACGCCGCCTGCTACGTGTGCTGGGCCTTCGCGCGTGCCTATGAGCCTCAGGAGCTGAAGCCCTTTGTGACTGC
AATCTCGAGTGCACTGGTGATTGCTGCGGTGTTTGACCGAGACATAAACTGCAGAAGAGCAGCCTCTGCCGCCTT
CCAGGAGAATGTGGGGAGACAGGGCACTTTCCCTCATGGTATTGATATTTTGACCACAGCTGACTATTTTGCCGT
CGGTAACAGATCCAACTGTTTCCTGGTTATAAGTGTGTTTATTGCCGGCTTTCCTGAGTACACGCAGCCAATGAT
AGACCACCTGGTTACCATGAAGATCAGCCACTGGGATGGGGTCATCCGAGAGTTGGCTGCGAGGGCGCTGCACAA
CCTGGCCCAGCAGGCACCCGAGTTCAGCGCCACGCAAGTCTTCCCGAGGCTGCTGTCCATGACACTGAGTCCAGA
TCTTCACATGAGGCATGGGTCGATTCTCGCCTGCGCAGAAGTTGCTTACGCCTTGTACAAACTTGCAGCCCAAGA
GAACAGGCCCGTCACGGACCATCTGGACGAGCAGGCAGTGCAGGGCCTGAAGCAGATTCACCAGCAGCTCTATGA
TCGTCAGTTATACAGGGGTCTGGGAGGACAGCTCATGAGACAAGCAGTGTGTGTTTTAATAGAAAAGTTGTCACT
TTCCAAAATGCCCTTTAGAGGTGACACCGTAATTGATGGTTGGCAATGGCTGATAAATGACACTTTGAGACATCT
CCATCTCATCTCAAGTCACTCCCGCCAGCAGATGAAGGATGCAGCAGTCTCGGCCCTGGCTGCTCTATGCAGTGA
ATATTACATGAAGGAGCCGGGGGAGGCAGATCCCGCAATTCAGGAGGAGCTGATCACGCAGTACCTGGCTGAGCT
TCGGAACCCCGAGGAGATGACTCGCTGTGGCTTCTCGTTGGCCTTGGGCGCCCTTCCAGGCTTCCTTCTGAAAGG
CCGGCTCCAGCAGGTTCTCACAGGTTTAAGAGCAGTTACCCACACTTCCCCCGAGGACGTAAGTTTTGCTGAGTC
CAGGAGAGACGGCTTGAAGGCCATTGCGAGGATTTGCCAGACTGTTGGTGTGAAAGCAGGAGCCCCAGACGAAGC
TGTGTGCGGAGAGAATGTTTCCCAGATTTACTGTGCGCTGCTGGGCTGCATGGACGACTACACCACGGACAGCAG
AGGGGACGTGGGCACCTGGGTCCGCAAGGCCGCCATGACCAGTCTGATGGATCTGACACTTCTGCTGGCTCGGAG
CCAGCCTGAGCTGATCGAGGCCCATACCTGTGAGCGCATCATGTGCTGTGTGGCCCAGCAGGCCAGTGAGAAGAT
TGACCGTTTCCGTGCTCACGCCGCCAGCGTGTTCCTGACGCTCCTGCACTTTGACAGCCCTCCCATCCCCCACGT
GCCCCACCGAGGAGAACTGGAAAAGCTGTTTCCCAGGTCCGATGTGGCCTCCGTGAACTGGAGTGCACCTTCCCA
GGCCTTCCCACGCATCACCCAGCTCCTTGGGCTGCCCACCTACCGCTACCACGTCCTGCTGGGGCTAGTCGTGTC
CCTGGGCGGCTTGACGGAGTCGACGATCCGGCACTCCACCCAGAGCCTCTTTGAGTACATGAAGGGCATTCAGAG
CGACCCGCAGGCCCTGGGCAGCTTCAGCGGGACCCTTCTGCAGATCTTTGAGGACAACCTTCTGAATGAGAGGGT
GTCCGTGCCGCTGCTGAAGACGCTGGACCACGTGCTCACCCACGGCTGCTTCGACATCTTCACCACGGAGGAGGA
CCACCCCTTTGCTGTGAAGTTGCTTGCGCTCTGTAAGAAAGAAATCAAGAATTCAAAAGATATCCAGAAGCTCCT
GTCAGGCATCGCAGTGTTCTGCGGGATGGTGCAGTTCCCCGGCGACGTGAGGAGGCAGGCCCTCCTGCAGCTGTG
TCTGCTCCTCTGCCACCGTTTCCCGCTGATCCGGAAGACCACGGCCAGCCAGGTGTACGAGACATTGCTCACCTA
CAGTGACGTCGTGGGCGCGGATGTGCTGGACGAGGTGGTGACTGTGCTCAGTGACACTGCGTGGGACGCGGAGCT

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FIGURE 3544B

TGCAGTGGTGAGAGAGCAGCGCAACCGTCTGTGTGACCTTCTGGGCGTACCCAGGCCCCAGCTGGTGCCCCAGCC
TGGTGCCTGC**TGA**AGCCAGTCCTGGAGCCCATACCTCACCCCTGCCTGGTGAGGATGTCTTGTTCCTGAGGGAGG
CCGGTGTGGAAAGCCTCGCACAGTGGTGCCTCCAGCTGTTGAAGGGTAGCGCTGGCCCTTGGAGGCTGGCACTAG
CTGACAGCTTTTCCTCTCTGCACCTGCGCTCTGGTGACTTGGGGTGGACGCCTCTGCCTTCACTTGAACACAAAT
GTGCTTCCTATAAAATCATGTACCAAG

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FIGURE 3545

GCCGCGGGCGGCGGCGGCAGCGGTTGGAGGTTGTAGGACCGGCGAGGAATAGGAATCATGGCGGCTGCGCTGTTC
GTGCTGCTGGGATTCGCGCTGCTGGGCACCCACGGAGCCTCCGGGGCTGCCGGCACAGTCTTCACTACCGTAGAA
GACCTTGGCTCCAAGATACTCCTCACCTGCTCCTTGAATGACAGCGCCACAGAGGTCACAGGGCACCGCTGGCTG
AAGGGGGGCGTGGTGCTGAAGGAGGACGCGCTGCCCGGCCAGAAAACGGAGTTCAAGGTGGACTCCGACGACCAG
TGGGGAGAGTACTCCTGCGTCTTCCTCCCCGAGCCCATGGGCACGGCCAACATCCAGCTCCACGGGCCTCCCAGA
GTGAAGGCTGTGAAGTCGTCAGAACACATCAACGAGGGGGAGACGGCCATGCTGGTCTGCAAGTCAGAGTCCGTG
CCACCTGTCACTGACTGGGCCTGGTACAAGATCACTGACTCTGAGGACAAGGCCCTCATGAACGGCTCCGAGAGC
AGGTTCTTCGTGAGTTCCTCGCAGGGCCGGTCAGAGCTACACATTGAGAACCTGAACATGGAGGCCGACCCCGGC
CAGTACCGGTGCAACGGCACCAGCTCCAAGGGCTCCGACCAGGCCATCATCACGCTCCGCGTGCGCAGCCACCTG
GCCGCCCTCTGGCCCTTCCTGGGCATCGTGGCTGAGGTGCTGGTGCTGGTCACCATCATCTTCATCTACGAGAAG
CGCCGGAAGCCCGAGGACGTCCTGGATGATGACGACGCCGGCTCTGCACCCCTGAAGAGCAGCGGGCAGCACCAG
AATGACAAAGGCAAGAACGTCCGCCAGAGGAACTCTTCCTGAGGCAGGTGGCCCGAGGACGCTCCCTGCTCCACG
TCTGCGCCGCCGCCGGAGTCCACTCCCAGTGCTTGCAAGATTCCAAGTTCTCACCTCTTAAAGAAAACCCACCCC
GTAGATTCCCATCATACACTTCCTTCTTTTTTAAAAAAGTTGGGTTTTCTCCATTCAGGATTCTGTTCCTTAGGT
TTTTTTCCTTCTGAAGTGTTTCACGAGAGCCCGGGAGCTGCTGCCCTGCGGCCCCGTCTGTGGCTTTCAGCCTCT
GGGTCTGAGTCATGGCCGGGTGGGCGGCACAGCCTTCTCCACTGGCCGGAGTCAGTGCCAGGTCCTTGCCCTTTG
TGGAAAGTCACAGGTCACACGAGGGGCCCCGTGTCCTGCCTGTCTGAAGCCAATGCTGTCTGGTTGCGCCATTTT
TGTGCTTTTATGTTTAATTTTATGAGGGCCACGGGTCTGTGTTCGACTCAGCCTCAGGGACGACTCTGACCTCTT
GGCCACAGAGGACTCACTTGCCCACACCGAGGGCGACCCCGTCACAGCCTCAAGTCACTCCCAAGCCCCCTCCTT
GTCTGTGCATCCGGGGGCAGCTCTGGAGGGGGTTTGCTGGGGAACTGGCGCCATCGCCGGGACTCCAGAACCGCA
GAAGCCTCCCCAGCTCACCCCTGGAGGACGGCCGGCTCTCTATAGCACCAGGGCTCACGTGGGAACCCCCCTCCC
ACCCACCGCCACAATAAAGATCGCCCCCACCTCCACCCTC

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FIGURE 3546

CGGGCGGCGGCGGCAGCGGTTGGAGGTTGTAGGACCGGCGAGGAATAGGAATCATGGCGGCTGCGCTGTTCGTGC
TGCTGGGATTCGCGCTGCTGGGCACCCACGGAGCCTCCGGGGCTGCCGGCACAGTCTTCACTACCGTAGAAGACC
TTGGCTCCAAGATACTCCTCACCTGCTCCTTGAATGACAGCGCCACAGAGGTCACAGGGCACCGCTGGCTGAAGG
GGGGCGTGGTGCTGAAGGAGGACGCGCTGCCCGGCCAGAAAACGGAGTTCAAGGTGGACTCCGACGACCAGTGGG
GAGAGTACTCCTGCGTCTTCCTCCCCGAGCCCATGGGCACGGCCAACATCCAGCTCCACGGGCCTCCCAGAGTGA
AGGCTGTGAAGTCGTCAGAACACATCAACGAGGGGGAGACGGCCATGCTGGTCTGCAAGTCAGAGTCCGTGCCAC
CTGTCACTGACTGGGCCTGGTACAAGATCACTGACTCTGAGGACAAGGCCCTCATGAACGGCTCCGAGAGCAGGT
TCTTCGTGAGTTCCTCGCAGGGCCGGTCAGAGCTACACATTGAGAACCTGAACATGGAGGCCGACCCCGGCCAGT
ACCGGTGCAACGGCACCAGCTCCAAGGGCTCCGACCAGGCCATCATCACGCTCCGCGTGCGCAGCCACCTGGCCG
CCCTCTGGCCCTTCCTGGGCATCGTGGCTGAGGTGCTGGTGCTGGTCACCATCATCTTCATCTACGAGAAGCGCC
GGAAGCCCGAGGACGTCCTGGATGATGACGACGCCGGCTCTGCACCCCTGAAGAGCAGCGGGCAGCACCAGAATG
ACAAAGGCAAGAACGTCCGCCAGAGGAACTCTTCCTGAGGTGGCCCGAGGACGCTCCCTGCTCCACGTCTGCGCC
GCCGCCGGAGTCCACTCCCAGTGCTTGCAAGATTCCAAGTTCTCACCTCTTAAAGAAAACCCACCCCGTAGATTC
CCATCATACACTTCCTTCTTTTTTAAAAAAGTTGGGTTTTCTCCATTCAGGATTCTGTTCCTTAGGTTTTTTTCC
TTCTGAAGTGTTTCACGAGAGCCCGGGAGCTGCTGCCCTGCGGCCCCGTCTGTGGCTTTCAGCCTCTGGGTCTGA
GTCATGGCCGGGTGGGCGGCACAGCCTTCTCCACTGGCCGGAGTCAGTGCCAGGTCCTTGCCCTTTGTGGAAAGT
CACAGGTCACACGAGGGGCCCCGTGTCCTGCCTGTCTGAAGCCAATGCTGTCTGGTTGCGCCATTTTTGTGCTTT
TATGTTTAATTTTATGAGGGCCACGGGTCTGTGTTCGACTCAGCCTCAGGGACGACTCTGACCTCTTGGCCACAG
AGGACTCACTTGCCCACACCGAGGGCGACCCCGTCACAGCCTCAAGTCACTCCCAAGCCCCCTCCTTGTCTGTGC
ATCCGGGGGCAGCTCTGGAGGGGGTTTGCTGGGGAACTGGCGCCATCGCCGGGACTCCAGAACCGCAGAAGCCTC
CCCAGCTCACCCCTGGAGGACGGCCGGCTCTCTATAGCACCAGGGCTCACGTGGGAACCCCCCTCCCACCCACCG
CCACAATAAAGATCGCCCCCACCTCCACCCTC

FIGURE 3547

AGCAAACGGCCGGCGGCGGGTGCCGCGCGGGGGGCGGGCGGCGCGGAGTAGGTGGCGGCGGCCATGGCCGAGGCG
TCGCCGCATCCCGGACGGTACTTCTGCCACTGCTGCTCCGTGGAGATCGTCCCGCGCCTGCCGGATTATATCTGT
CCAAGATGCGAGTCTGGTTTTATCGAGGAGCTTCCGGAAGAGACCAGGAGCACAGAAAATGGTTCTGCCCCCTCC
ACAGCTCCCACAGACCAGAGCCGGCCACCGTTGGAGCACGTGGACCAGCACCTGTTCACGCTGCCGCAGGGCTAC
GGACAGTTTGCTTTCGGCATCTTCGATGACAGCTTCGAGATCCCCACGTTCCCTCCTGGGGCGCAGGCTGACGAC
GGCAGGGACCCTGAGAGCCGGCGGGAGAGAGACCATCCGTCCCGGCACCGGTACGGCGCCCGACAGCCCCGCGCC
CGCCTCACCACGCGGCGGGCCACCGGCCGGCACGAAGGCGTCCCCACGCTGGAAGGGATCATCCAGCAGCTCGTC
AACGGCATCATCACGCCCGCCACCATCCCCAGCCTGGGCCCCTGGGGAGTCCTGCACTCAAACCCTATGGACTAC
GCCTGGGGGGCCAACGGCCTGGATGCCATCATCACACAGCTCCTCAATCAGTTTGAAAACACAGGCCCCCCACCG
GCAGATAAAGAGAAAATCCAGGCCCTCCCCACCGTCCCCGTCACTGAGGAGCACGTAGGCTCCGGGCTCGAGTGC
CCTGTGTGCAAGGACGACTACGCGCTGGGTGAGCGTGTGCGGCAGCTGCCCTGCAACCACCTGTTCCACGACGGC
TGCATCGTGCCCTGGCTGGAGCAGCACGACAGCTGCCCCGTCTGCCGAAAAAGCCTCACGGGACAGAACACGGCC
ACGAACCCCCCTGGCCTCACTGGGGTGAGCTTCTCCTCCTCGTCGTCATCGTCCTCCTCCAGCTCGCCCAGCAAC
GAGAACGCCACAAGCAACTCGTGAGCCCACGTCGGCCGTCGGGAAAGCACGGGGCCTTTCCCACCCACCCTCAGC
CAGCGCCACACGGCACCCACAGACTGGGTGCCCCGGCGGCGCCACGCTTGGCTGGTCAGCGCTGCAGGTCCCGCC
TGTTCCAGGGCAGGACCCGGGCCCGGCCCACCGGCCCCCTGGCTTGGGAAGGCGTGGGCCACATGGTCCCCTCTG
GGGCGTCCCCAGCCTCCCCGTCCTCTGTCTAACCTCACCCTCTAAACGTTCAGCGGTGGAAAGATTTTTATAATT
TTAAATTATTACTGCTTTGAAATAAACGGACGTTTGAGCTCACGTGGCGGCCATGCATGGTTTGTGGCGGAAGAC
GGGGCCCAGCGGCTCCCCCAGCGCTGAAGCACGGGGTTCAGCGGCTCCCCCAGTGCTGCAGGTGCCGCCAGGACG
GGCCACGTGGGCCCCCAGCCTCCCCCTCGGCCGCCTCCACGACCCGGAGTAGGGGGGCTCGGGACCATGAGGATG
ACCAGCAAAATTCAAGAACAAAACTGCTCCAACAGACTTTTTTAAAGGAAAAAATATGTGTATCTTGAAAGCTAT
TTAAAATACACTACTTACAAAGAG

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FIGURE 3548

GTTCGCCATGCGTCCCGGGGCGCCAGGGCCACTCTGGCCTCTGCCCTGGGGGGCCCTGGCTTGGGCCGTGGGCTT
CGTGAGCTCCATGGGCTCGGGGAACCCCGCGCCCGGTGGTGTTTGCTGGCTCCAGCAGGGCCAGGAGGCCACCTG
CAGCCTGGTGCTCCAGACTGATGTCACCCGGGCCGAGTGCTGTGCCTCCGGCAACATTGACACCGCCTGGTCCAA
CCTCACCCACCCGGGGAACAAGATCAACCTCCTCGGCTTCTTGGGCCTTGTCCACTGCCTTCCCTGCAAAGATTC
GTGCGACGGCGTGGAGTGCGGCCCGGGCAAGGCGTGCCGCATGCTGGGGGGCCGCCCGCGCTGCGAGTGCGCGCC
CGACTGCTCGGGGCTCCCGGCGCGGCTGCAGGTCTGCGGCTCAGACGGCGCCACCTACCGCGACGAGTGCGAGCT
GCGCGCCGCGCGCTGCCGCGGCCACCCGGACCTGAGCGTCATGTACCGGGGCCGCTGCCGCAAGTCCTGTGAGCA
CGTGGTGTGCCCGCGGCCACAGTCGTGCGTCGTGGACCAGACGGGCAGCGCCCACTGCGTGGTGTGTCGAGCGGC
GCCCTGCCCTGTGCCCTCCAGCCCCGGCCAGGAGCTTTGCGGCAACAACAACGTCACCTACATCTCCTCGTGCCA
CATGCGCCAGGCCACCTGCTTCCTGGGCCGCTCCATCGGCGTGCGCCACGCGGGCAGCTGCGCAGGCACCCCTGA
GGAGCCGCCAGGTGGTGAGTCTGCAGAAGAGGAAGAGAACTTCGTGTGAGCCTGCAGGACAGGCCTGGGCCTGGT
GCCCGAGGCCCCCCATCATCCCCTGTTATTTATTGCCACAGCAGAGTCTAATTTATATGCCACGGACACTCCTTA
GAGCCCGGATTCGGACCACTTGGGGATCCCAGAACCTCCCTGACGATATCCTGGAAGGACTGAGGAAGGGAGGCC
TGGGGGCCGGCTGGTGGGTGGGATAGACCTGCGTTCCGGACACTGAGCGCCTGATTTAGGGCCCTTCTCTAGGAT
GCCCCAGCCCCTACCCTAAGACCTATTGCCGGGGAGGATTCCACACTTCCGCTCCTTTGGGGATAAACCTATTAA
TTATTGCTACTATCAAGAGGGCTGGGCATTCTCTGCTGGTAATTCCTGAAGAGGCATGACTGCTTTTCTCAGCCC
CAAGCCTCTAGTCTGGGTGTGTACGGAGGGTCTAGCCTGGGTGTGTACGGAGGGTCTAGCCTGGGTGAGTACGGA
GGGTCTAGCCTGGGTGAGTACGGAGGGTCTAGCCTGGGTGAGTACGGAGGGTCTAGCCTGGGTGTGTATGGAGGA
TCTAGCCTGGGTGAGTATGGAGGGTCTAGCCTGGGTGAGTATGGAGGGTCTAGCCTGGGTGTGTATGGAGGGTCT
AGCCTGGGTGAGTATGGAGGGTCTAGCCTGGGTGTGTATGGAGGGTCTAGCCTGGGTGAGTATGGAGGGTCTAGC
CTGGGTGTGTACGGAGGGTCTAGTCTGAGTGCGTGTGGGGACCTCAGAACACTGTGACCTTAGCCCAGCAAGCCA
GGCCCTTCATGAAGGCCAAGAAGGCTGCCACCATTCCCTGCCAGCCCAAGAACTCCAGCTTCCCCACTGCCTCTG
TGTGCCCCTTTGCGTCCTGTGAAGGCCATTGAGAAATGCCCAGTGTGCCCCCTGGGAAAGGGCACGGCCTGTGCT
CCTGACACGGGCTGTGCTTGGCCACAGAACCACCCAGCGTCTCCCCTGCTGCTGTCCACGTCAGTTCATGAGGCA
ACGTCGCGTGGTCTCAGACGTGGAGCAGCCAGCGGCAGCTCAGAGCAGGGCACTGTGTCCGGCGGAGCCAAGTCC
ACTCTGGGGGAGCTCTGGCGGGGACCACGGGCCACTGCTCACCCACTGGCCCCGAGGGGGGTGTAGACGCCAAGA
CTCACGCATGTGTGACATCCGGAGTCCTGGAGCCGGGTGTCCCAGTGGCACCACTAGGTGCCTGCTGCCTCCACA
GTGGGGTTCACACCCAGGGCTCCTTGGTCCCCCACAACCTGCCCCGGCCAGGCCTGCAGACCCAGACTCCAGCCA
GACCTGCCTCACCCACCAATGCAGCCGGGGCTGGCGACACCAGCCAGGTGCTGGTCTTGGGCCAGTTCTCCCACG
ACGGCTCACCCTCCCCTCCATCTGCGTTGATGCTCAGAATCGCCTACCTGTGCCTGCGTGTAAACCACAGCCTCA
GACCAGCTATGGGGAGAGGACAACACGGAGGATATCCAGCTTCCCCGGTCTGGGGTGAGGAATGTGGGGAGCTTG
GGCATCCTCCTCCAGCCTCCTCCAGCCCCCAGGCAGTGCCTTACCTGTGGTGCCCAGAAAAGTGCCCCTAGGTTG
GTGGGTCTACAGGAGCCTCAGCCAGGCAGCCCACCCCACCCTGGGGCCCTGCCTCACCAAGGAAATAAAGACTCA
A

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FIGURE 3549

CCCCCGCGCCGCGCAGCCCCGGCCGCCAGGCCTTAGCCCGCCCCGGCCCCCGCCAGGCCGCGTCCCCCTCCCCTC
CCCTCCCCCCGCGCGCCACCCGCGCCCGCCCCCGCCCGGCACCGCGGACCCACCCGGACCTCGGCGGGGAGATGGA
GGTCCTGGCGGCAGAGACCACGTCCCAGCAGGAGCGGCTGCAGGCCATCGCAGAGAAGCGGAAGCGGCAGGCGGA
GATCGAGAACAAGCGCCGGCAGCTGGAGGACGAGCGGAGGCAGCTGCAGCACCTGAAGTCCAAGGCACTGCGGGA
GCGCTGGCTGCTGGAGGGGACGCCGTCCTCGGCCTCAGAGGGGGATGAGGACCTGAGGAGGCAGATGCAGGACGA
CGAGCAGAAGACACGGCTGCTGGAGGACTCGGTGTCCAGGTTGGAGAAGGAAATTGAGGTGCTGGAGCGTGGAGA
CTCCGCCCCAGCCACTGCCAAGGAGAACGCGGCGGCCCCGAGCCCAGTCCGGGCCCCAGCCCCGAGTCCAGCCAA
GGAGGAGCGCAAGACAGAGGTGGTGATGAATTCACAGCAGACGCCGGTGGGCACGCCCAAAGACAAGCGAGTCTC
CAACACGCCCCTGAGGACGGTTGACGGCTCCCCCATGATGAAGGCAGCCATGTACTCGGTTGAGATCACTGTGGA
GAAGGACAAGGTGACAGGGGAGACCAGGGTGCTGTCCAGCACCACGCTGCTCCCTCGGCAGCCGCTCCCTCTGGG
CATCAAAGTCTACGAGGACGAGACCAAAGTGGTCCATGCTGTGGACGGCACCGCCGAGAACGGGATCCACCCCCT
GAGCTCCTCCGAGGTGGACGAACTCATCCACAAAGCGGACGAGGTCACGCTGAGCGAGGCAGGGTCCACGGCCGG
GGCGGCAGAGACCCGGGGGGCTGTGGAGGGGGCAGCCCGGACCACGCCCTCCCGGCGGGAGATCACCGGTGTGCA
GGCACAGCCAGGCGAGGCCACGTCCGGCCCGCCGGGGATCCAGCCCGGCCAGGAGCCCCCGGTCACAATGATCTT
CATGGGTTACCAGAACGTGGAGGATGAGGCCGAGACCAAGAAGGTGCTGGGCCTTCAAGATACCATCACGGCGGA
GCTGGTGGTCATCGAAGACGCGGCTGAGCCCAAGGAGCCTGCACCACCCAACGGCAGTGCTGCCGAGCCTCCCAC
GGAGGCCGCCTCCAGGGAAGAGAATCAGGCGGGGCCCGAGGCCACCACCAGCGACCCCCAGGACCTCGACATGAA
GAAGCACCGTTGTAAATGCTGCTCCATCATGTGAGCCGGCCCCCGAGACCCCGGCCCCCACCCCACACCACAGAC
ACCCACCAGCCCGGCCCCTCCCGGCGCCTGCCCACCCTCCACCCACAGCCTCACGGGTCCAGGACTTGGCGTGTT
GTTACATGTTCCTTCCGAGTTTTCTTTCGCTGGAAAGAGGGACAGGGGCCCCCACCCGTCACCACGCCCCAACAC
TCCCCCCGAACCAGAGCCGTGCACTTGTGCCTGGTAGGAGAGAGACAGGACAGACCCGCTTTTCCCGAGACAAGG
ACCCCCCATGTCACGGCAGCTTCACAGACGCGGCTCGCGCCCACCGGGGTCCTGGCGGGTGGGACCCGCAGCCTC
CACGCGGCCCAGGCCAGCCTGCCACCCTCTGGGCCTCCTACCTGTGCCTTTCTCTGAGGGGACACCCCGCCAGAG
AGGGCCCCGGGAGCCGGGGGTGGGTACTGAGGCCTGCTCAGGCCCTGGAAGTGAGGCTCTATGGGGTTCCCTGGC
CAAGGCGCTGGCCCCCCAATCTCAGGCAGTTGGGGTGAGGCCGTGCCTCTTTGGGGGCTAAAGGTCTTGGGTGGA
GGACAGGCCCCTCTGCTGTGCCCCTATGCCCTGTGTGGGCCCAACCAGTGGACAATGGAGTCTGGGGGAGGGGGA
ACCCCGGGGACATGCCCCCACCCGGGAGGGGCCGGTAACCCCTGGGCTATCTTCTAGACGGGGCGAACCAGGGGT
CATTGACCTGCCCCCTGCACAGGGCAGGGACCGAGTGAGCCACTCCTTGTCCCGAGCTCCCGCCCCCACTGGGCC
CTCCTTCCTCCTGGTGCTAATTTGGGGACCCCAGGGGCCGCCCCCGGCCTCTTCTCCATCCTGCTTGGACCAGGG
TCCTGGGTCTTCCCAACCATACCCCGAGATCAGGCCCCACCTGCCAGCTCTACTGGGCTTGGAGCACGTCCGGGC
AGTGGAGGGAGGGACACAGCCTGGGACAGGAAGCCTCTTGGGTTGGAGCAGGAGACCCTCATTTGCCACCCAGAC
CAATGTGAGCCTGCCCCCAGCCCCCTCTCATTGGAAGTGGCAAGGGGCTTCCCTCCTGGGGGCAGCTACACTCGT
CCCCAGAGGCACATTCGTGCACATTCTCACAGACACCGTCTCACACGTTGGCTTTGGACAACCAGGCCCCAACTT
GGTCCCTGCCCTAGGGACCTCCAGCCTGGTGCCCAGTGCTCAGGCCACCTCCTGGTCCAGTCACCACCTGCAGCC
TCGGCAGGGCAGGTACAGGGGCCACCTCAGATGGGAGCCTGGGTCCCTGCCTCCGCTCTGCCCCTGGGTGGCTGG
GAGGAGAGGCCCTCTCGGGGGTGACCTGGGCGTCAGCCGTGGAACCCCCTCCTCCTCCCTGGAGTCTGCCTGAGT
CCCTCGAGCCGCGAGCCTTCGCTGAAGTGCCCTTGCTATAACCCCCTCTGCTTCTGGTGTGTGACGAGGCCCCCG
ATGTTCTTGATTTTCCCAGAGAAGCAAATAAACAGCGTGAACAGCCCC

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FIGURE 3550

CCTCAGCCCGGCCCCAGATGCCCGTGCGGCCGACCCAGCTCCAGAAGTGAGGAAGGTGAACCGCATCCCACCTGA
TGCCTACCAGCCGTACCTGAGCCCCGGGACCCCCCAGCTAGAATTCTCAGCCTTCGGAGCATTCGGCAAGCCCAG
CAGTCTCTCCACAGCGGAGGCCAAGGCTGCGACTTCACCAAAGGCCACGATGTCCCCGAGGCATCTCTCAGAATC
CTCTGGAAAACCCCTGAGCACAAAGCAAGAGGCATCGAAGCCCCCTCGGGGATGCCCGCAAGCCAACAGGGGTGT
CGTGCGGTGGGAGTACTTCCGCCTGCGTCCTCTGCGGTTCAGGGCCCCAGACGAGCCCCAGCAGGCCCAAGTCCC
CCATGTCTGGGGCTGGGAGGTGGCTGGGGCCCCTGCACTGAGGCTGCAGAAGTCCCAGTCATCTGATCTGCTGGA
AAGGGAGAGGGAGAGTGTCCTGCGCCGGGAGCAAGAGGTGGCAGAGGAGCGGAGAAATGCTCTCTTCCCAGAGGT
CTTCTCCCCAACGCCAGATGAGAACTCTGACCAGAACTCCAGGAGCTCCTCCCAGGCATCCGGCATCACGGGCAG
TTACTCGGTGTCTGAGTCTCCCTTCTTCAGCCCCATCCACCTACACTCAAACGTGGCGTGGACAGTGGAAGATCC
AGTGGACAGTGCTCCTCCCGGGCAGAGAAAGAAGGAGCAATGGTACGCTGGCATCAACCCCTCGGACGGTATCAA
CTCAGAGGTCCTGGAAGCCATACGGGTGACCCGTCACAAGAACGCCATGGCAGAGCGCTGGGAATCCCGCATCTA
CGCCAGTGAGGAGGATGACTGAGCCTCGGGATGGGGCGCCCACCCCCTGCCCTGCCCTGACCCTCGTGGGAACTG
CCAAGACCATCGCCAAGCCCCCACCCTAGGAAATGGGTCCTAGGTCCAGGATCCAAGAACCACAGCTCATCTGCC
AACAATCCCACCATGGGCACATTTGGGACTGTTGGGTTTTTCGTTTCCGTTTCTATCTTCCTTTAGAAATGTTTC
TGCCTTTGGGGTCTAAAGCTTTTGGGGATGAAATGGGACCCCTGCTGATTCTTTCTGCTTCTAAGACTTTGCCAA
ATGCCCTGGGTCTAAGAAAGAAAGAGACCCGCTCCTCCACTTTCAGGTGTAATTTGCTTCCGCTAGTCTGAGGGC
AGAGGGACCGGTCAAAGAGGGTGGCACAGATCGCAGCACCTTGAGGGGCTGCGGGTCTGAGGGAGGAGACACTCA
GCTCCTCCCTCTGAGAAGTCCCAAGCTGAGAGGGGAGACCTGCCCCTTTCCAACCCTGGGAAACCATCCAGTCTG
AGGGAGGAGGCCAAACTCCCAGTGCTGGGGGTCCCTGTGCAGCCCTCAAACCCTTCACCTTGGTGCACCCAGCCA
CACCTGGTGGACACAAAGCTCTCACATCGATAGGATCCCATGAGGATGGTCCCCTTCACCTGGGAGAAAAGTGAC
CCAGTTTAGGAGCTGGAGGGGGGTCTTTGTCCCCCACCCCCAAACTGCCCTGAAATAAACCTGGAGTGAGCTGCC

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FIGURE 3551

TTGTGAGTCTATAACTCGGAGCCGTTGGGTCGGTTCCTGCTATTCCGGCGCCTCCACTCCGTCCCCCGCGGGTCT
GCTCTGTGTGCCATGGACGGCATTGTCCCAGATATAGCCGTTGGTACAAAGCGGGGATCTGACGAGCTTTTCTCT
ACTTGTGTCACTAACGGACCGTTTATCATGAGCAGCAACTCGGCTTCTGCAGCAAACGGAAATGACAGCAAGAAG
TTCAAAGGTGACAGCCGAAGTGCAGGCGTCCCCTCTAGAGTGATCCACATCCGGAAGCTCCCCATCGACGTCACG
GAGGGGGAAGTCATCTCCCTGGGGCTGCCCTTTGGGAAGGTCACCAACCTCCTGATGCTGAAGGGGAAAAACCAG
GCCTTCATCGAGATGAACACGGAGGAGGCTGCCAACACCATGGTGAACTACTACACCTCGGTGACCCCTGTGCTG
CGCGGCCAGCCCATCTACATCCAGTTCTCCAACCACAAGGAGCTGAAGACCGACAGCTCTCCCAACCAGGCGCGG
GCCCAGGCGGCCCTGCAGGCGGTGAACTCGGTCCAGTCGGGGAACCTGGCCTTGGCTGCCTCGGCGGCGGCCGTG
GACGCAGGGATGGCGATGGCCGGGCAGAGCCCCGTGCTCAGGATCATCGTGGAGAACCTCTTCTACCCTGTGACC
CTGGATGTGCTGCACCAGATTTTCTCCAAGTTCGGCACAGTGTTGAAGATCATCACCTTCACCAAGAACAACCAG
TTCCAGGCCCTGCTGCAGTATGCGGACCCCGTGAGCGCCCAGCACGCCAAGCTGTCGCTGGACGGGCAGAACATC
TACAACGCCTGCTGCACGCTGCGCATCGACTTTTCCAAGCTCACCAGCCTCAACGTCAAGTACAACAATGACAAG
AGCCGTGACTACACACGCCCAGACCTGCCTTCCGGGGACAGCCAGCCCTCGCTGGACCAGACCATGGCCGCGGCC
TTCGGTGCACCTGGTATAATCTCAGCCTCTCCGTATGCAGGAGCTGGTTTCCCTCCCACCTTTGCCATTCCTCAA
GCTGCAGGCCTTTCCGTTCCGAACGTCCACGGCGCCCTGGCCCCCCTGGCCATCCCCTCGGCGGCGGCGGCAGCT
GCGGCGGCAGGTCGGATCGCCATCCCGGGCCTGGCGGGGGCAGGAAATTCTGTATTGCTGGTCAGCAACCTCAAC
CCAGAGAGAGTCACACCCCAAAGCCTCTTTATTCTTTTCGGCGTCTACGGTGACGTGCAGCGCGTGAAGATCCTG
TTCAATAAGAAGGAGAACGCCCTAGTGCAGATGGCGGACGGCAACCAGGCCCAGCTGGCCATGAGCCACCTGAAC
GGGCACAAGCTGCACGGGAAGCCCATCCGCATCACGCTCTCGAAGCACCAGAACGTGCAGCTGCCCCGCGAGGGC
CAGGAGGACCAGGGCCTGACCAAGGACTACGGCAACTCACCCCTGCACCGCTTCAAGAAGCCGGGCTCCAAGAAC
TTCCAGAACATATTCCCGCCCTCGGCCACGCTGCACCTCTCCAACATCCCGCCCTCAGTCTCCGAGGAGGATCTC
AAGGTCCTGTTTTCCAGCAATGGGGGCGTCGTCAAAGGATTCAAGTTCTTCCAGAAGGACCGCAAGATGGCACTG
ATCCAGATGGGCTCCGTGGAGGAGGCGGTCCAGGCCCTCATTGACCTGCACAACCACGACCTCGGGGAGAACCAC
CACCTGCGGGTCTCCTTCTCCAAGTCCACCATCTAGGGCACAGGCCCCCACGGCCGGGCCCCCTGGCGACAACT
TCCATCATTCCAGAGAAAAGCCACTTTAAAAACAGCTGAAGTGACCTTAGCAGACCAGAGATTTTATTTTTTTAA
AGAGAAATCAGTTTACCTGTTTTTAAAAAAATTAAATCTAGTTCACCTTGCTCACCCTGCGGTGACAGGGACAGC
TCAGGCTCTTGGTGACTGTGGCAGCGGGAGTTCCCGGCCCTCCACACCCGGGGCCAGACCCTCGGGGCCATGCCT
TGGTGGGGCCTGTGTCGGGCGTGGGGCCTGCAGGTGGGCGCCCCGACCACGACTTGGCTTCCTTGTGCCTTAAAA
AACCTGCCTTCCTGCAGCCACACACCCACCCGGGGTGTCCTGGGGACCCAAGGGGTGGGGGGGTCACACCAGAGA
GAGGCAGGGGGCCTGGCCGGCTCCTGCAGGATCATGCAGCTGGGGCGCGGCGGCCGCGGCTGCGACACCCCAACC
CCAGCCCTCTAATCAAGTCACGTGATTCTCCCTTCACCCCGCCCCCAGGGCCTTCCCTTCTGCCCCCAGGCGGGC
TCCCCGCTGCTCCAGCTGCGGAGCTGGTCGACATAATCTCTGTATTATATACTTTGCAGTTGCAGACGTCTGTGC
CTAGCAATATTTCCAGTTGACCAAATATTCTAATCTTTTTTCATTTATATGCAAAAGAAATAGTTTTAAGTAACT
TTTTATAGCAAGATGATACAATGGTATGAGTGTAATCTAAACTTCCTTGTGGTATTACCTTGTATGCTGTTACTT
TTATTTTATTCCTTGTAATTAAGTCACAGGCAGGACCCAGTTTCCAGAGAGCAGGCGGGGCCGCCCAGTGGGTCA
GGCACAGGGAGCCCCGGTCCTATCTTAGAGCCCCTGAGCTTCAGGGAAGGGGCGGGCGTGTCGCCGCCTCTGGCA
TCGCCTCCGGTTGCCTTACACCACGCCTTCACCTGCAGTCGCCTAGAAAACTTGCTCTCAAACTTCAGGGTTTTT
TCTTCCTTCAAATTTTGGACCAAAGTCTCATTTCTGTGTTTTGCCTGCCTCTGATGCTGGGACCCGGAAGGCGGG
CGCTCCTCCTGTCTTCTCTGTGCTCTTTCTACCGCCCCCGCGTCCTGTCCCGGGGGCTCTCCTAGGATCCCCTTT
CCGTAAAAGCGTGTAACAAGGGTGTAAATATTTATAATTTTTTATACCTGTTGTGAGACCCGAGGGGCGGCGGCG
CGGTTTTTTATGGTGACACAAATGTATATTTTGCTAACAGCAATTCCAGGCTCAGTATTGTGACCGCGGAGCCAC
AGGGGACCCCACGCACATTCCGTTGCCTTACCCGATGGCTTGTGACGCGGAGAGAACCGATTAAAACCGTTTGAG
AAACTCCTCCCTTGTCTAGCCCTGTGTTCGCTGTGGACGCTGTAGAGGCAGGTTGGCCAGTCTGTACCTGGACTT
CGAATAAATCTTCTGTATCCTCGCTCCGTTCCGCCTT

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FIGURE 3552

GAGGAGACGCGCTTTGTGCTGGGCGCCGGCCGCGCCAGCCACGGCCTGCGGCGCCCGCGGCACCATGATCTCCAC
CAAGGAGAAGAACAAGATCCCGAAGGACAGCATGACGCTTCTGCCCTGCTTCTACTTCGTGGAGCTGCCCATAGT
GGCTTCTTCCATCGTATCCTTGTACTTCCTGGAGCTGACCGACCTCTTCAAGCCGGCCAAGGTGGGCTTCCAGTG
CTATGACCGCACTCTCTCCATGCCCTACGTGGAGACCAACGAGGAGCTCATCCCGCTGCTGATGCTGCTCAGCTT
GGCCTTCGCGGCCCCTGCCGCCTCGATCATGGTGGCCGAGGGCATGTTGTACTGTCTGCAGTCCCGGCTGTGGGG
CCGTGCCGGGGGGCCCGCCGGGGCGGAGGGCAGCATCAACGCCGGCGGCTGCAACTTCAACTCCTTCCTGCGGCG
TACGGTGCGGTTTGTGGGTGTCCACGTGTTCGGCCTGTGTGCCACAGCCCTGGTGACGGACGTGATCCAGCTGGC
CACGGGTTACCACACTCCCTTCTTCCTCACCGTCTGCAAGCCCAACTACACTCTCCTGGGCACGTCCTGCGAGGT
CAACCCCTACATCACGCAGGACATCTGCTCCGGCCACGACATCCACGCCATCCTGTCTGCACGGAAGACCTTCCC
GTCCCAGCACGCCACGCTGTCAGCCTTCGCCGCGGTCTATGTGTCGGTGAGTCCGGCCCCTCACTGCCCTTCCCA
GGCCCTCTTGCTGACCCGTGGGGAGCCCTCCCTGACCCCAACCCCCATGCCCCAGATGTACTTCAACTCGGTCAT
CTCGGACACCACCAAGCTGCTGAAGCCCATCCTGGTCTTCGCCTTTGCCATCGCCGCGGGCGTATGCGGGCTCAC
GCAGATCACGCAGTACCGCAGCCACCCTGTGGACGTGTATGCCGGCTTCCTCATCGGGGCGGGCATCGCTGCCTA
CCTGGCCTGCCACGCGGTGGGCAACTTCCAGGCCCCACCTGCAGAGAAGCCCGCGGCCCCGGCCCCCGCCAAGGA
CGCGCTGCGGGCCCTGACGCAGCGGGGCCACGACTCGGTTTATCAGCAGAATAAGTCGGTGAGCACCGACGAGCT
GGGGCCCCCAGGGCGGCTGGAGGGCGCGCCCCGGCCCGTGGCCCGCGAGAAGACCTCGCTGGGCAGCCTGAAGCG
CGCCAGCGTGGACGTGGACCTGCTGGCCCCGCGCAGCCCCATGGCCAAGGAGAACATGGTGACCTTCAGCCACAC
GCTGCCCAGGGCCAGCGCGCCCTCGCTGGACGACCCCGCGCGCCGCCACATGACCATCCACGTGCCGCTGGACGC
CTCGCGCTCCAAGCAGCTCATCAGCGAGTGGAAGCAGAAGAGCCTGGAGGGCCGCGGCCTGGGGCTGCCCGACGA
CGCCAGCCCCGGGCACCTGCGCGCGCCCGCCGAACCCATGGCGGAGGAGGAGGAAGAGGAGGAGGACGAAGAGGA
AGAGGAGGAGGAGGAAGAGGAGGAGGACGAGGGCCCGGCCCCGCCCTCGCTCTACCCCACCGTGCAGGCGCGGCC
GGGGCTGGGGCCTCGGGTCATCCTCCCACCGCGCGCGGGGCCGCCGCCGCTGGTGCACATCCCGGAGGAGGGCGC
GCAGACGGGGGCCGGCCTGTCCCCCAAAAGCGGCGCCGGGGTGCGCGCCAAGTGGCTCATGATGGCCGAGAAGAG
CGGGGCGGCAGTGGCCAACCCTCCGCGGCTGCTGCAGGTCATCGCCATGTCCAAGGCTCCGGGCGCGCCGGGCCC
CAAGGCGGCCGAGACGGCGTCGTCGTCCAGCGCCAGCTCCGACTCCTCGCAGTACCGGTCGCCGTCGGACCGCGA
CTCCGCCAGCATCGTGACCATCGACGCGCACGCGCCGCACCACCCCGTGGTGCACCTGTCGGCCGGCGGCGCGCC
CTGGGAGTGGAAGGCGGCGGGCGGCGGGGCCAAGGCGGAGGCCGACGGCGGCTACGAGCTGGGGGACCTGGCGCG
CGGCTTCCGCGGCGGGGCCAAGCCCCCGGGCGTGTCCCCCGGCTCGTCGGTCAGCGACGTGGACCAGGAGGAGCC
GCGGTTCGGGGCCGTGGCCACCGTCAACCTGGCCACGGGCGAGGGGCTGCCCCCGCTGGGCGCGGCCGATGGGGC
GCTGGGCCCGGGCAGCCGGGAGTCCACGCTGCGGCGCCACGCGGGCGGCCTGGGGCTGGCGGAGCGCGAGGCGGA
GGCGGAGGCCGAGGGCTACTTCCGCAAGATGCAGGCGCGCCGCTTCCCCGACTAGCGCGGCGGGGCCGGGGGCGG
GCGGGGGGCGGGCCGAGGGCGCGGGCGGCCGC

FIGURE 3553

ATGTGTGATTTGCGGCGGCCAGCGGCAGGTGGGATGATGGACTTGGCCTACGTCTGTGAGTGGGAGAAATGGTCC
AAGAGCACCCACTGCCCATCGGTGCCCCTGGCCTGCGCCTGGTCCTGCCGAAATCTCATCGCCTTCACCATGGAC
CTGCGCAGCGATGACCAGGACCTGACCCGCATGATCCACATCCTGGACACGGAGCACCCCTGGGACCTGCACTCG
ATCCCCTCAGAGCACCACGAGGCTATCACCTGCCTGGAGTGGGACCAGTCAGGCTCCCGGCTCCTGTCAGCAGAT
GCCGACGGGCAGATCAAGTGCTGGAGCATGGCGGACCACCTGGCTAATAGCTGGGAGAGCTCAGTGGGCAGCCTA
GTGGAGGGGGACCCCATTGTGGCCCTGTCCTGGCTGCACAATGGTGTGAAACTGGCCCTGCACGTGGAGAAGTCG
GGCGCCTCCAGCTTCGGGGAGAAGTTCTCCCGAGTCAAGTTCTCACCGTCGCTCACGCTGTTCGGCGGCAAGCCC
ATGGAGGGCTGGATCGCGGTGACGGTCAGCGGCCTGGTCACCGTGTCCCTGCTGAAGCCCAGCGGGCAGGTGCTG
ACGTCCACCGAGAGCCTGTGCCGGCTGCGCGGCCGCGTGGCCCTGGCGACATCGCCTTCACCGGCGGCGGCAACA
TCGTGGTGGCCACGGCGGACGGCAGCAGCGCGTCGCCCGTGCAGTTCTACAAGGTGTGCGTGAGCGTGGTGAGCG
AGAAGTGCCGTATCGACACGGAGATCCTGCCCTCCCTGTTC**ATG**CGCTGCACCACCGACCTCAACCGCAAGGACA
AGTTCCCCGCCATCACCCACCTCAAGTTCCTGGCCCGGGACATGTCGGAGCAGGTGCTTTTGTGCGCGTCCAGCC
AGACCAGCAGCATCGTGGAGTGCTGGTCCCTGCGCAAGGAGGGACTCCCCGTGAACAACATCTTCCAGCAGATCT
CCCCCGTGGTTGGCGACAAACAGCCCACAATTCTCAAATGGCGGATCCTATCGGCCACCAACGATCTGGACCGTG
TGTCGGCCGTGGCGCTGCCCAAGCTGCCCATCTCGCTCACCAACACCGACCTCAAGCTGAGCGTGCTCCGCCTCT
CACCTTCCATGGGCCACCCGCTGGAGGTGGGGCTGGCGCTGCGGCACCTGCTCTTCCTGCTGGAGTACTGCATGG
TGACCGGCTACGACTGGTGGGACATCCTGCTGCACGTGCAGCCCAGTATGGTACAGAGCCTGGTGGAGAAGCTGC
ACGAGGAGTACACGCGCCAGACCGCTGCCCTGCAGCAGGTCCTCTCCACCCGGATCCTGGCCATGAAGGCCTCGC
TCTGCAAGCTGTCGCCCTGCACGGTGACTCGCGTGTGCGACTACCACACCAAGCTCTTCCTCATCGCCATCAGCT
CCACCCTGAAGTCGCTGCTGCGCCCCCACTTTCTCAACACGCCTGACAAGAGCCCCGGCGACCGGCTGACCGAGA
TCTGCACCAAGATCACCGACGTCGACATTGACAAGGTCATGATCAACCTCAAGACGGAGGAATTTGTGCTGGACA
TGAACACACTGCAGGCGCTGCAGCAGCTCTTGCAGTGGGTGGGCGACTTCGTGCTGTACCTGCTGGCCAGCCTAC
CCAACCAGGGTTCCCTGCTGAGGCCGGGCCACAGCTTTCTGCGGGACGGCACCTCGCTGGGCATGCTTCGGGAAT
TGATGGTGGTCATCCGCATCTGGGGCCTTCTGAAGCCCAGCTGCCTGCCCGTGTATACGGCCACTTCGGATACCC
AGGACAGCATGTCCCTGCTCTTCCGCCTGCTCACCAAGCTCTGGATCTGCTGTCGCGATGAGGGCCCAGCGAGCG
AGCCGGACGAGGCGCTGGTGGATGAATGCTGCCTGCTGCCCAGCCAGCTGCTTATCCCCAGCCTGGACTGGCTGC
CAGCCAGCGACGGCCTGGTCAGCCGCCTGCAGCCCAAGCAGCCCCTTCGTCTGCAGTTTGGCCGGGCGCCCACGC
TGCCTGGCAGTGCTGCCACCCTGCAGCTCGACGGCCTCGCCAGGGCCCCAGGCCAGCCCAAGATCGACCACCTGC
GGAGGCTGCACCTTGGCGCTTGCCCCACGGAGGAATGCAAGGCCTGCACCAGGTGCGGCTGTGTCACCATGCTCA
AGTCGCCCAACAGAACCACGGCGGTGAAGCAGTGGGAGCAGCGCTGGATCAAGAACTGCCTGGCTGTTGAAGGCC
GTGGGCCGGACGCCTGCGTGACCAGCAGAGCTTCTGAGGAAGCCCCTGCCTTTGTCCAGCTGGGCCCGCAGTCCA
CACACCACTCTCCCAGGACCCCCAGATCCCTGGACCATCTGCATCCAAAGGACCGTCCG**TGA**

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FIGURE 3554

GAAGGCCCTGCCGGGCGGCGGCGGCGGCGACAGCGTGCGAGCCATGGTCGCGCTGGAGAACCCCGAGTGCGGCCC
GGAGGCGGCGGAGGGCACCCCGGGCGGGCGGCGGCTGCTGCCCCTTCCCAGCTGCCTGCCTGCCCTAGCCAGCTC
CCAGGTGAAGAGACTCTCGGCTTCCAGGCGGAAACAGCACTTCATCAACCAGGCAGTGCGGAACTCAGACCTCGT
GCCCAAGGCCAAGGGGCGGAAGAGCCTCCAGCGCCTGGAGAACACCCAGTACCTCCTGACCCTGCTGGAGACAGA
CGGGGGCCTGCCTGGCCTGGAGGATGGGGACTTGGCACCCCCTGCATCACCAGGCATCTTTGCCGAGGCCTGCAA
CAACGCCACCTATGTGGAGGTCTGGAACGATTTCATGAACCGCTCCGGGGAGGAGCAGGAGCGGGTTCTTCGCTA
CCTGGAGGATGAGGGCAGGAGCAAGGCGCGGAGGAGGGGCCCTGGCCGTGGGGAGGACCGGAGGAGAGAGGACCC
CGCCTATACACCCCGCGAGTGCTTCCAGCGCATCAGCCGGCGTCTGCGAGCCGTCCTCAAGCGCAGCCGCATCCC
CATGGAAACGCTGGAGACCTGGGAGGAGCGGCTGCTTCGGTTCTTCTCCGTGTCCCCCCAGGCCGTGTACACAGC
AATGCTAGACAACAGCTTCGAGAGGCTTCTGCTGCACGCTGTCTGCCAGTACATGGACCTCATCTCAGCCAGTGC
TGACCTGGAGGGGAAGCGGCAGATGAAGGTCAGTAATCGGCACCTGGATTTCCTGCCGCCGGGGCTGCTCCTGTC
CGCCTACCTGGAGCAGCACAGCTGATGGCGGCCCCGCGGAGACCCCGCTGCCACCTCGCCCAGCCATCAAGCCCT
CCGATACCTTCGGCTAAAATATCTTTCATATTTTTAGAATTTGTCCTCGGAAACCTTTTTCGCTTGGGGTGGTCT
CTCTCACTCTGCCCCCTCCTCACGCAGCTCTTGGCAGTCAACAGACGCTGGCGGCTGGGGCTGCCCATGCCATCC
CAGCTCCAAGCTTCCCACTCCAGGACTTGTGTTTGGGTGGGGAGACCTGACCTGGGCATGTTCCTGTTTCTTCAT
CGTTGAGCTTTTCTGGCCCGGTCTGAAGCTCAAGTGAGGAGGGGGAGGCTGGGTTTTTATCACTTTTAATGAATT
TGGTGTGATTTGTTGTAGATTTTTAAATTTCCCTTTTGGAGAGAAAAACCAAAAAAACTCGCCCCACTGGTAAAA
CATGGGTCTTGGTCCCAGCCCCTGCTCAGCCCCTCCCAGTTTTTAGCTTGA**ATG**AGGGTGGGGTCTCTGGGACCC
TGCCCCTCATGCCAGAAGCATCTTGTGTTGTATATGTGTGCGCGCGTGTGCCCTGAGACCCAGGACAGAAGCCAC
GGTCCTAAGAGCCGGTTTTATCCTCGTCATTCTGCGTGTCCTCCCCCACGCCACCTGTGTCGGGGCTCAGGGTCT
CCTGCTTTATATGAGCCCCCTTCCTTTCCTCCCCTCCTTTATGCTGGGGGTCCAGGACTTCCAGCCAGAAGCCTC
TGCCCTTGCACTACCTTGTCTGTCACCCCATCCCGTGTCCCCTCGTCCCCCAGCCTGACTCCTGCC**TGA**TAGCTC
CTGTGTCCCCATGCTGGTCCTCCTGGCCCAGGCTGCAGGAGCCAGGCTGGGGGGCCTCCGCACCCCCTTGCTGCG
TGTGGGTAATTGTGTTTTGGGGGAAAGTGGGGAATTTAATAAATTTCTGGTGCTC

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FIGURE 3555

GGCAAGATGGCGGCGCCCATGGAGGTGGCCGTGTGTACGGACTCGGCGGCCCCGATGTGGAGCTGCATCGTGTGG
GAACTTCACTCGGGCGCCAACCTGCTCACCTACCGCGGCGGCCAGGCGGGACCCCGCGGCCTGGCGCTGCTCAAT
GGCGAGTATCTGCTGGCGGCGCAGCTGGGCAAGAATTACATCAGCGCCTGGGAGCTCCAGCGGAAGGACCAGCTC
CAGCAGAAGATCATGTGCCCCGGGCCTGTCACCTGTCTGACTGCATCACCCAATGGTCTCTACGTCCTGGCAGGA
GTTGCAGAAAGCATCCACCTGTGGGAGGTCTCCACCGGGAACCTTCTGGTCATCCTGAGTCGACACTACCAGGAC
GTCTCCTGCCTTCAGTTCACAGGGGACAGCAGCCACTTCATCTCAGGGGGCAAGGACTGCCTGGTGCTGGTTTGG
AGCCTCTGCAGCGTGCTGCAGGCCGACCCCTCCAGGATTCCGGCGCCCAGGCACGTCTGGTCTCACCACGCGCTC
CCCATCACGGACCTGCACTGCGGCTTTGGGGGCCCCCTGGCCCGGGTGGCCACCTCCTCACTGGACCAGACGGTG
AAGCTATGGGAGGTCTCCTCGGGGGAGCTGCTGCTCTCCGTCCTCTTTGACGTGTCCATCATGGCAGTGACCATG
GACCTGGCTGAGCACCATATGTTCTGCGGGGGCAGTGAGGGCTCCATCTTCCAGGTCGACCTCTTCACCTGGCCC
GGACAGAGGGAGAGGAGCTTCCACCCAGAGCAGGACGCCGGGAAGGTCTTCAAAGGGCACAGGAACCAGGTGACT
TGCCTGTCAGTGTCCACTGACGGCAGCGTGCTGCTCTCAGGCTCCCACGACGAGACCGTGCGCCTCTGGGACGTG
CAGAGCAAGCAGTGCATCCGGACGGTGGCCCTCAAAGGCCCAGTCACCAATGCCGCCATCCTGCTGGCGCCCGTC
AGCATGCTGAGCTCAGACTTCAGGCCCAGCCTGCCGCTGCCCCACTTCAACAAGCACCTGCTGGGCGCCGAGCAC
GGGGACGAGCCGCGCCACGGGGGCCTCACTCTGCGCCTGGGCCTCCACCAGCAGGGCTCGGAGCCCAGCTACCTG
GACCGCACGGAGCAGCTGCAGGCCGTCCTGTGCAGCACCATGGAGAAGAGCGTGCTCGGCGGCCAGGACCAGCTG
CGCGTCCGTGTGACGGAGCTGGAGGACGAGGTGCGCAACCTGCGCAAGATCAATCGGGACCTGTTCGACTTCTCC
ACGCGCTTCATCACGCGGCCGGCCAAGTGAGGCCCGGAGACCCCGGCCCGAGGCGCCCAGGCCTGAGCCCCATGC
CTCCCAGCAACCAGGGCCCGCGGGTGTGGCCCCCACCAGCCCAGGCCTGGACTCTCCTCAGTTCTGTGTCGTGTT
CGGGTTTTTCCTCTGTGACTGGGCCGTCTTGGTGTCTCGTGGCACGCGTCACAGTGGTGCTAGTCTGTTTTTAAC
AAAAGAGGATGAAAAGCC

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FIGURE 3556

GCTCTTGCCCGGCGTGGCGACTCGCTAGCGTCAGCAGCGCCGCAGCCGGACGAGAAAGCGGAAGATGGCGGCGGC
GGCCGGGAGGCCGTGAGGAGAGCGGCGGCTGCGAGGGCGGCCGATGGCGGCCGGGAGGCGCCCTCGGACACTTGC
GGGTCGTTAGGGCGCGACGCTGGGAGGCATGTCGGAGCACGTGGAGCCCGCAGCTCCGGGGCCCGGGCCCAACGG
CGGCGGCGGCGGCCCGGCCCCCGCGCGCGGGCCTCGCACCCCCAATCTCAACCCCAACCCCCTCATCAACGTGCG
CGACCGGCTCTTCCACGCGCTGTTCTTCAAGATGGCTGTCACCTATTCGCGGCTCTTCCCGCCCGCCTTCCGCCG
TCTCTTCGAGTTCTTCGTGCTGCTCAAGGCCCTGTTTGTGCTCTTCGTCCTGGCCTACATCCACATCGTCTTCTC
CCGCTCGCCCATCAACTGCCTGGAGCATGTGCGTGACAAGTGGCCGCGTGAGGGCATCCTGCGTGTGGAAGTGCG
GCACAACTCGAGCCGCGCGCCCGTCTTCCTACAGTTCTGTGACAGCGGCGGCCGCGGGAGCTTCCCGGGCCTGGC
CGTGGAACCAGGCAGCAACCTGGACATGGAAGATGAGGAGGAGGAAGAGCTGACCATGGAGATGTTTGGGAACAG
CTCCATCAAGTTTGAGCTGGACATCGAGCCCAAGGTGTTCAAGCCGCCGAGTAGCACAGAGGCCCTGAATGACAG
CCAGGAGTTCCCCTTCCCCGAGACGCCCACCAAAGTGTGGCCGCAGGACGAGTACATCGTGGAGTACTCACTAGA
GTATGGCTTCCTTCGCCTGTCGCAGGCCACCCGCCAGCGCCTGAGCATCCCCGTCATGGTGGTCACCCTGGGTGA
GTCTGAGCTGCTGGGCTTGGGGAGCTCCATGGCGGGGCCTCCCCTCCTCCCTCGGGTCTCCTCCTGCTGGTGCGG
GACGGGGGGCTGTGCAGGAAGCACTGGGGTCTGCCCCGCCCCAGGCACGCTTCCCAGGGCTGGGGTCCTGG**ATG**G
GTTTCCTAAGAATGGGCAGGGCCAGGAAGCAGGCCAGGCCTCAGCAATGGAGCCAGCTGGGGCAGGGCCCAGGGG
GTGGCCTGGGCGGGGCTCCCGGCTCCCTGATTCACCCACCCGCAGACCCCACGCGGGACCAGTGCTTCGGGGACC
GCTTCAGCCGCCTGCTGCTGGATGAGTTCCTGGGCTACGATGACATCCTCATGTCCAGCGTGAAGGGCCTGGCCG
AGAACGAGGAGAACAAGGGCTTCCTGCGGAATGTGGTGTCGGGCGAGCACTACCGCTTTGTGAGCATGTGGATGG
CGCGGACGTCCTACCTGGCCGCCTTCGCCATCATGGTCATCTTCACGCTGAGCGTGTCCATGCTGCTGCGGTACT
CACACCACCAGATCTTCGTCTTCATCGTGGACCTGCTGCAGATGCTGGAGATGAACATGGCCATCGCCTTCCCCG
CAGCGCCCCTGCTGACCGTCATCCTGGCCCTCGTCGGGATGGAGGCCATCATGTCGGAGTTCTTCAACGACACCA
CCACCGCCTTCTACATCATCCTCATCGTGTGGCTCGCGGACCAGTATGACGCCATCTGCTGCCACACCAGCACCA
GCAAGCGGCATTGGCTGCGGTTCTTCTATCTCTACCACTTCGCCTTCTATGCCTATCACTACCGCTTCAATGGGC
AGTATAGCAGCCTGGCCCTGGTCACCTCCTGGCTCTTCATCCAGCATTCCATGATCTACTTCTTCCACCACTACG
AGCTGCCTGCCATCCTGCAGCAGGTCCGCATCCAGGAGATGCTGCTTCAGGCGCCGCCACTGGGCCCCGGGACCC
CCACGGCGCTGCCCGATGACATGAACAACAACTCGGGCGCCCCGGCTACAGCCCCTGACTCTGCCGGCCAGCCCC
CCGCCCTGGGCCCCGTCTCGCCTGGGGCCAGCGGGAGTCCCGGGCCTGTGGCAGCGGCGCCCAGCTCCCTGGTGG
CCGCGGCAGCCTCAGTGGCAGCAGCTGCCGGTGGTGACCTGGGTTGGATGGCAGAGACCGCTGCCATCATCACAG
ACGCCTCCTTCCTGTCCGGCCTGAGCGCCTCCCTCCTGGAGCGGCGTCCAGCCAGCCCGCTGGGCCCTGCTGGGG
GCCTCCCCCACGCCCCCCAGGACAGTGTCCCCCCGAGTGACTCCGCAGCTTCTGACACAACTCCCCTGGGGGCTG
CGGTAGGCGGGCCTAGCCCGGCCTCCATGGCCCCAACGGAGGCGCCCTCGGAGGTGGGGTCC**TGA**GCCGCACAGC
TGAGCCGCCTCTGACCCCTGCTGGCTGGGCCTGACCTTCCCGAGCCCGTGGGGGTGGGGGAGGCCAGCCACCTCC
TTCCTCTGGGACTGCCCAGCCTGTGTCGGGGGCTTTCAGGGTTTCGTGGGGTTTGCCCGGAAGGCGGCTTTCCTC
CCCCTGGTGTGAGGTCGCGCCCGAGGCTTGTACCCGCTAGTGAGGTGTTTGAGCTGGTCAGCAAGGAGAGGGGGT
GGGGTTCCGCGGAAGGTTCTGGAGGGGTCTTGGTAGGTCTGCAGTGAACCGTCCTGAGGATGGAGTGGGGTCCCA
TGGTGCAGGTCTCTGAGCAAGGCGGAGGTGTGGAGGAGAGGCCGGCTTGGGGTGGGGCCTCGCGCCCTAGTGCCG
GCCGGCCTCAGCCCGGCTCTGCCTGGTGCTCCCTGCAGTGCCTTCTCCATGGCCCCGCCCTCCCCGCGTGTGCGC
CAGGCTTGGGGTCCCCGGGAGAGCAGAGCTTGCGCCTCGGGCATAGGGACGTGGGGTGCAGGCGCCAACATCAGT
GGCAGCAGCCAGGGCCGTGGTCCAGTCCCACTCGGGGATGGAGTGGGCCGGCGGCCAAACCAGTCACTCGGGGAG
GAATGCGGAGGAGCGCTCATTCCATTCTATTTAATTGCAGTGTACAAAATTGTGTTTGTATATAGAATAAACTGT
CTGTTGACAGCGGC

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FIGURE 3557

ATGAGCTCCACGCAGTTCAACAAGGGCCCCTCGTACGGGCTGTCGGCCGAGGTCAAGAACCGGGCTCCCGCGAAT
CTTGGGGAGCACCCAGGTCTGAGATCTGGGGGACGAGTGACCCATTCCCCCCCCCAACATCTAGGGGTAGTTGGG
TCTGACTTCGTCCCCTCGCCATGGCCCCAGGACCCCCACGTGTCCTTACAGCTGACTTCTGCAGGGGAAACTGCC
TCTGCACGCTCTGAGGGCACCGGCCCTGCCAGCCCCAACAGCCACCTGCCCGGCGGCACTCCAGGGCCGGCAGAC
TGGAGGGAGAATTCCTGCTTCCCCGCTGGGCCATCTGCACCCTGCATTCATAGAGCCCCCCGTGCAGTGGGGTGG
GCACCCTGCCGCACCCTGCATACAGCCGGC**TAA**

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FIGURE 3558

ACCAGCTCCTGTCCAAATATGACCCCCAGAAGGAGGCAGAGCTCCGCACCTGGATCGAGGGACTCACCGGCCTCT
CCATCGGCCCCGACTTCCAGAAGGGCCTGAAGGATGGAACTATCTTATGCACACTCATGAACAAGCTACAGCCGG
GCTCCGTCCCCAAGATCAACCGCTCCATGCAGAACTGGCACCAGCTAGAAAACCTGTCCAACTTCATCAAGGCCA
TGGTCAGCTACGGCATGAACCCTGTGGACCTGTTCGAGGCCAACGACCTGTTTGAGAGTGGGAACATGACGCAGG
TGCAGGTGTCTCTTCTCGCCCTGGCGGGGAAGGCCAAGACTAAGGGGCTGCAGAGCGGGGTGGACATTGGCGTCA
AGTACTCGGAGAAGCAGGAGCGGAATTTCGACGATGCCACCATGAAGGCTGGCCAGTGCGTCATCGGGCTGCAGA
TGGGCACCAACAAATGCGCCAGCCAGTCGGGCATGACTGCCTACGGCACGAGAAGGCATCTCTATGACCCCAAGA
ACCATATCCTGCCCCCCATGGACCACTCGACCATCAGCCTCCAGATGGGCACGAACAAGTGTGCCAGCCAGGTGG
GCATGACGGCTCCCGGGACCCGGCGGCACATCTATGATACCAAGCTGGGAACCGACAAGTGTGACAACTCCTCCA
TGTCCCTGCAGATGGGCTACACGCAGGGCGCCAACCAGAGCGGCCAGGTCTTCGGCCTGGGCCGGCAGATATATG
ACCCCAAGTACTGCCCGCAAGGCACAGTGGCCGATGGGGCTCCCTCGGGCACCGGCGACTGCCCGGACCCGGGGG
AGGTCCCTGAATATCCCCCTTACTACCAGGAGGAGGCCGGCTACTGAGGCTCCCAGCACGCTCTCTCCCCACATC
GTCTGCCCATCTGGGTTTTTGGGTTTTTCTGTGTTTTCATCTTTTTTTTTTTTTTCTTAACCCGTTCAGTGCTGC
CAGTCAACCAAGGGTCTGTGAGTGTCAGCGTGGGATCAGGCAGCAGAGCTTTTTTCCCCTTTGCCTTGATCCTTC
GCAAGGCTGAGCCACTGGGCTGTGGGGGAAGGGGTCAAGGCCATATCCCAATACGTGTAGGGCGAGGGTCCCTGC
TGGCACATTCAGGCTGTGCTGGGAAGAAGAGACCTGGGCTTGGAAGGAACCGGTCCCCGACGGTTTCTGCTTGCC
TCGCCTCTTCCCCCTTTTGTCAGCTGAGCAGTTTGTGGTTTCTATGCCCGCAAGTTTCAGGAAGTATTCACAAAA
GAAAAATACATTTTTTCCCCCAGGGGTGGGGCAAGGACAGTGGAGAGAGTGCTAGGAAATGAGTCCCCTGGGAAA
GGGGACCGGGCCGTGATGTTAAATATCTCCGGCTCCCAAGTGACTGGATTTGCCTAGGACCTTCAGACCAACAGA
CTTCAGACCCTCAGACCTGCCCCGGGGCCAGGTGGAGAAAGTGAGGGCCGTACAAGGAAGTGAAATTCTGAGTTG
TTGGGGCTAAGCCTGACCCCCTCTCCATGCTCCCCGCCCCAACCCACTCTGGCCTCAGTAGATTTTTTTTTCAGT
TGTGGTTGTTGCCCAGGCTGGAGTGCAGTGGCGCCATCTTGGCTCACTGCACCTCCACCTTCCGGGCTCAAGCGA
TTCTCCAGCCTCAGCCTCCTGAGTAGCTAGGACTGCAGGTGCTCCACCACGCCCGGCTAATTTTTGTATTTTTAG
TAGAGATGGGGTTTCCCCATGTTGGCCAGGCTGGTCTCGAACTCCTGGCCTCAGGTGTGATCCGCCCGCCTCCGC
CTCCCCAAGCGCTGAGATTACAGGTGTGAGCCACCGTGCCCAGCCCCTCAGTAGGTTTTAAGGAGCCCCCAGCCC
TCCTCCCTTCTGGGCCCGACCAGCTTATACTGCTCCATCTTCCCCGGCCACATGCCCCGCCAAGTACTGCACAGG
GACCCCCCACCCAGGGGACCTGCTCCGTGAGATAATGTGAAATACGACTGTGGACCAAACGCAATAAAACCTCTG
TTTGTACGAAG

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FIGURE 3559A

CGCCTCCCCGAAGCCTTTTCCTGTTGGGGGGAGGGCCCGCCAGTGACGGCCGGGCCTGTCACGTGGGCCTGACAG
CTGGGGAGGGGGTGGCCGGCGACAATGTGGTCCCGAAGCGGCCAGCGCCGGGAGCTGCAGCGCTGAGACCCCCAG
CCCGCCCCCTCGGGCTCCCGGCCGGGGCCCCATC**ATG**TTCTCCAGGAAGAAACGAGAGCTCATGAAAACCCCTTC
CATCTCGAAAAAGAACCGCGCGGGAAGCCCCAGCCCGCAGCCCTCGGGGGAGCTGCCCAGGAAGGATGGGGCTGA
CGCGGTGTTCCCCGGACCAAGCCTGGAGCCGCCCGCTGGGTCCTCCGGCGTCAAGGCCACAGGGACCCTCAAGCG
GCCCACCAGCCTGAGCCGCCACGCCAGCGCGGCTGGCTTCCCCCTGTCGGGTGCTGCCTCCTGGACACTGGGCCG
GAGCCACCGGAGCCCACTGACAGCCGCCAGCCCGGGCGAGCTGCCCACCGAGGGTGCCGGCCCGGACGTCGTCGA
GGACATCTCCCATCTGCTGGCGGACGTGGCCCGCTTCGCTGAGGGCCTTGAGAAACTTAAGGAGTGTGTGTTGCG
TGACGACCTCCTTGAGGCCCGCCGCCCGCGGGCCCACGAGTGCCTGGGTGAGGCTCTGCGTGTCATGCATCAGAT
CATCTCCAAGTACCCGCTGCTGAACACCGTGGAGACGCTCACCGCAGCCGGCACCCTCATTGCCAAGGTCAAAGC
CTTCCATTATGAGAGCAACAATGATCTGGAGAAACAGGAGTTCGAGAAGGCCCTGGAGACGATTGCTGTGGCCTT
CAGTAGCACAGTGTCCGAGTTCCTCATGGGTGAAGTGGACAGCAGCACCCTCCTAGCAGTGCCTCCTGGGGACTC
GAGCCAGTCCATGGAAAGCCTGTATGGACCGGGCAGTGAGGGCACGCCTCCCAGCCTGGAAGACTGTGACGCCGG
CTGCCTGCCCGCCGAGGAGGTGGACGTGCTGCTACAGCGCTGTGAGGGGGGCGTGGATGCCGCACTGCTGTATGC
CAAGAACATGGCCAAGTACATGAAGGACCTCATCAGCTACCTGGAGAAGCGGACGACGCTGGAGATGGAGTTTGC
CAAGGGCCTGCAGAAGATCGCTCACAACTGCAGACAGAGCGTCATGCAGGAGCCCCACATGCCGCTCCTGTCCAT
CTACTCGCTGGCCCTGGAGCAGGACCTGGAGTTCGGCCACAGCATGGTGCAGGCGGTGGGCACCTTGCAGACCCA
GACCTTCATGCAGCCCCTGACCCTGCGGCGGCTTGAACACGAGAAGCGCAGGAAGGAGATCAAGGAGGCCTGGCA
CCGTGCCCAGAGGAAGCTGCAAGAGGCGGAGTCCAACCTGCGCAAGGCCAAGCAGGGTTACGTGCAGCGCTGCGA
GGACCACGACAAGGCTCGCTTCCTCGTGGCCAAGGCGGAGGAGGAGCAGGCTGGCAGCGCGCCGGGAGCAGGCAG
CACGGCCACCAAGACCCTGGACAAGCGGCGGCGGCTGGAGGAGGAGGCCAAGAACAAGGCGGAGGAAGCTATGGC
CACCTACCGCACCTGCGTGGCCGACGCGAAGACGCAGAAGCAGGAGCTGGAGGATACCAAGGTGACGGCGCTGCG
GCAGATCCAGGAGGTCATCCGGCAGAGCGACCAAACCATCAAGTCGGCCACGATCTCCTACTACCAGATGATGCA
TATGCAGACGGCGCCGCTGCCCGTGCACTTCCAGATGCTGTGTGAGAGCAGCAAGCTGTATGACCCAGGCCAGCA
GTACGCCTCCCACGTGCGCCAGCTGCAGCGGGACCAGGAGCCCGATGTGCACTACGACTTTGAGCCCCACGTCTC
CGCCAACGCCTGGTCCCCCGTCATGCGTGCCCGGAAGAGCAGCTTCAACGTGAGTGATGTGGCGCGGCCGGAGGC
TGCCGGGAGCCCCCCAGAAGAAGGCGGGTGCACTGAGGGCACACCTGCCAAGGACCACAGGGCCGGGCGAGGACA
CCAGGTTCACAAGTCATGGCCGCTCTCGATCTCAGACTCGGACAGTGGGCTGGACCCCGGCCCTGGCGCAGGGGA
CTTTAAGAAGTTCGAGCGGACGTCATCCAGTGGTACCATGTCGTCCACGGAGGAGCTGGTGGACCCAGACGGTGG
AGCCGGGGCTTCAGCCTTTGAGCAGGCTGACCTCAACGGCATGACCCCCGAGCTGCCGGTGGCCGTGCCCAGTGG
ACCGTTCCGCCACGAGGGGCTGTCCAAGGCGGCCCGTACTCACCGGCTCCGGAAGCTCCGCACGCCCGCCAAGTG
CCGCGAGTGCAACAGCTACGTCTACTTCCAGGGTGCTGAGTGTGAAGAGTGCTGCCTGGCCTGCCACAAGAAATG
TCTGGAGACGCTGGCCATACAGTGCGGGCACAAGAAGCTGCAAGGCCGCCTGCAGCTGTTCGGCCAGGACTTCAG
CCACGCGGCCCGCAGCGCCCCCGACGGCGTGCCCTTCATCGTCAAGAAGTGCGTCTGCGAGATCGAGCGGCGGGC
GCTGCGCACCAAGGGCATCTACCGGGTCAATGGGGTAAAGACACGCGTGGAGAAGCTGTGCCAGGCCTTCGAGAA
CGGCAAGGAGCTGGTCGAGCTGTCGCAGGCCTCGCCCCACGACATCAGCAACGTCCTCAAGCTCTACCTGCGTCA
GCTTCCCGAGCCGCTCATCTCCTTCCGCCTCTACCACGAGCTCGTAGGGCTGGCCAAGGACAGCCTGAAGGCAGA
GGCCGAGGCCAAGGCGGCGTCCCGGGGCCGGCAGGACGGCTCGGAGAGCGAGGCAGTGGCGGTGGCCCTGGCAGG
TCGGCTGCGGGAGCTCCTGCGGGACCTGCCGCCTGAGAACCGGGCCTCGCTGCAGTACCTGCTGCGTCACCTACG
CAGGATCGTGGAGGTGGAGCAGGACAACAAGATGACCCCCGGGAACCTGGGCATCGTGTTCGGGCCCACGCTGCT
TCGGCCACGGCCCACCGAGGCCACCGTGTCCCTCTCCTCCCTGGTGGATTATCCCCATCAGGCCCGCGTCATCGA
GACTCTCATCGTCCACTACGGCCTGGTCTTCGAGGAGGAGCCGGAGGAGACCCCCGGGGGCCAGGACGAGTCATC
CAACCAGCGAGCTGAGGTAGTCGTCCAGGTGCCGTACCTGGAGGCGGGCGAGGCGGTGGTCTACCCGCTGCAGGA
GGCGGCGGCGGACGGGTGCAGAGAATCCCGAGTTGTGTCCAACGATTCGGACTCGGACCTAGAGGAGGCCTCCGA
GCTGCTGTCCTCATCGGAGGCCAGTGCCCTGGGCCACCTCAGCTTCCTGGAGCAGCAGCAGAGCGAGGCCAGCCT
AGAGGTGGCTTCTGGCAGCCACAGCGGCAGTGAGGAGCAGCTGGAGGCCACAGCCCGGGAGGACGGGGACGGGGA
CGAGGACGGCCCGGCCCAGCAGCTCTCAGGATTCAACACCAACCAGTCCAACAACGTGCTGCAGGCCCCACTGCC
CCCCATGAGGCTCCGTGGCGGGCGGATGACACTGGGCTCCTGCAGGGAAAGGCAGCCGGAATTCGTG**TGA**GCTGG

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FIGURE 3559B

GGTGGGGCTGGGACCACAGGTGGCTTCTCTCTTGCCTGCTCCTGTCCCTCCAGCACGTCCCCTGCACCACGGCAT
AGCTTAGGTGCGCCGTCCTGGGGTCGCTGCCGAGAGCGCCTGGACTTCGACGTCCCACCAGCGGGCGCCTCCTCC
CAGAGGCTTCCAGGAGCACGAGGGCCTTGCGGCACAGGACTGTGCCCTGTGCTGTCCCCTGCACCCCGGCTCAGC
TGAGCTGGGGAACACTGCTGTCGTGTGAAGTCACAGTGGCCTTGTTGGTGCCCACAGGGCTGTGTGGATGGAGGA
AGCTGTCCCTGCCCAGTGCATCCCCCAGGTCATCACGGGGACGCAGGAGGCAGGCCCTGCCCTGCCCTCTCCTCA
CAGGTCTGTTGCAGGGACTCCAGAAACCATTCTGGGAGCCGTGGATGGGGGCGGAGCTGGGGTTTGGTGCAGTTT
CCAGGGTGCAGTACAGCAGGGCCTGAATACTGGCCCTGGACTCCCTTTTCCAGAACACCAGGTGTGGCCACCTGG
GGCTCAGGTACACAGTGGGGTCTCTCGGAAGCCACCGTGTGGTTCTTTCACAGGCACGTTTATTTTGCTGAAATA
AAAAGTTTTTAATCGGG

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FIGURE 3560

GGCGGCGGCGGCGGAGGCTGCCATGGACGACGAGGAGGAGACGTACCGGCTCTGGAAAATCCGCAAGACCATCAT
GCAGCTGTGCCACGACCGTGGCTATCTGGTGACCCAGGACGAGCTTGACCAGACCCTGGAGGAGTTCAAAGCCCA
ATCTGGGGACAAGCCGAGTGAGGGGCGGCCGCGGCGCACGGACCTCACCGTGCTGGTGGCCCACAACGATGACCC
CACCGACCAGATGTTTGTGTTCTTTCCAGAGGAGCCCAAGGTGGGCATCAAGACCATCAAGGTGTACTGCCAGCG
CATGCAGGAGGAGAACATCACACGGGCTCTCATCGTGGTGCAGCAGGGCATGACACCCTCCGCCAAGCAGTCCCT
GGTCGACATGGCCCCCAAGTACATCCTGGAGCAGTTTCTGCAGCAGGAGCTGCTCATCAACATCACGGAGCACGA
GCTAGTCCCTGAGCACGTCGTCATGACCAAGGAGGAGGTGACAGAGCTGCTGGCCCGATATAAGCTCCGAGAGAA
CCAGCTGCCCAGGATCCAGGCGGGGGACCCTGTGGCGCGCTACTTTGGGATAAAGCGTGGGCAGGTGGTGAAGAT
CATCCGGCCCAGTGAGACGGCTGGCAGGTACATCACCTACCGGCTGGTGCAGTAGCTACCGCCTGACAGCCCCTA
GAGGCGGACACACAGCGACCCCCATCCCTGCAGGACAAACGCCCCTGCCCTGCCAGAATCCGGCCCCCACAGCTC
TCACGGCTGCTGCTCCTCTGGACTCCCCAAGGCAGGTGGCCTCCACCCACGTTCTCCCGTCCTGGGGTGAGGCTT
CCTGTGGCCCAGCCCGCCCCATTCACCTGTGGATTTGTGCGAGATGCAGCCTCAGAAGGAACAAGGCCCCCAGAG
GGAGGTCACCTGGGGGCAGCTGGTGCCGGGTCTTCACCCAGACCACGCTGGGTCCCCTCTGTTGGGGGTTTGGGG
TCCGGGTCTCCCACCAGCCACTGCTTCCTCCTGGGCCCTCGGCCTTCCACCCCTCGTCTTCCCTCCCTCGGGGGC
CCTGATGCGTGGCGGCCCCCGCCCGGCCTCGGCTCTTTACTCCATTCACAGCCATGCACGCGCTCAAGCCACCAG
GGTGCGAGATGCCAGCTCTGGAGTTCTCGGTTGTTGTAGGAGGTTGGGTGTTTTCAAATGGTAAAGATGTTTTGA
GCAAATAAATTTGCTTGATACAG

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FIGURE 3561

GGAGGCGCGGAAAGCCGACGCGCGTCCATTGGTCGGCTGGACGAGGGGAGGAGCCGCTGGCTCCCAGCCCCGCCG
CGATGAGCCTCGGCCGCCTTTGCCGCCTACTGAAGCCGGCGCTGCTCTGTGGGGCTCTGGCCGCGCCTGGCCTGG
CCGGGACCATGTGCGCGTCCCGGGACGACTGGCGCTGTGCGCGCTCCATGCACGAGTTTTCCGCCAAGGACATCG
ACGGGCACATGGTTAACCTGGACAAGTACCGGGGCTTCGTGTGCATCGTCACCAACGTGGCCTCCCAGTGAGGCA
AGACCGAAGTAAACTACACTCAGCTCGTCGACCTGCACGCCCGATACGCTGAGTGTGGTTTGCGGATCCTGGCCT
TCCCGTGTAACCAGTTCGGGAAGCAGGAGCCAGGGAGTAACGAAGAGATCAAAGAGTTCGCCGCGGGCTACAACG
TCAAATTCGATATGTTCAGCAAGATCTGCGTGAACGGGGACGACGCCCACCCGCTGTGGAAGTGGATGAAGATCC
AACCCAAGGGCAAGGGCATCCTGGGAAATGCCATCAAGTGGAACTTCACCAAGTTCCTCATCGACAAGAACGGCT
GCGTGGTGAAGCGCTACGGACCCATGGAGGAGCCCCTGGTGATAGAGAAGGACCTGCCCCACTATTTCTAGCTCC
ACAAGTGTGTGGCCCCGCCCGAGCCCCTGCCCACGCCCTTGGAGCCTTCCACCGGCACTCATGACGGCCTGCCTG
CAAACCTGCTGGTGGGGCAGACCCGAAAATCCAGCGTGCACCCCGCCGGAGGAAGGTCCCATGGCCTGCTGGGCT
TGGCTCGGCGCCCCCACCCCTGGCTACCTTGTGGGAATAAACAGACAAATTAG

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FIGURE 3562A

GCCCGAAACCCGGAAGTGAGCGGCGGCAGCTGCGAGGCTCGGAGAAACAGGCGCCGCGGGCTCCGCGCCCGGCCG
GACCCGGGCCCGAGATCATGATGCTGCCGCCACCGCCGCCACCACGGAGCGAGAAGCCCAGATAGACGCCCCGGC
GGCCCCGGGTCCTGGAGTCCCGCCGCCTGCTGCCCGGCCGAGGACCCCACCCCGCCTGCCGCCCGATGCTTGCAG
TGGGGCCCGCCATGGACAGGGATTACCCGCAGCATGAACCCCCGCCGGCGGGCAGCCTCCTGTACAGCCCGCCGC
CCCTGCAGAGCGCCATGCTGCACTGCCCCTACTGGAACACCTTCTCGCTGCCGCCATACCCTGCCTTCTCCAGCG
ACAGCCGCCCGTTCATGAGCTCCGCCTCCTTCCTCGGCAGCCAGCCCTGCCCAGACACCAGCTATGCCCCCGTGG
CCACCGCCTCCAGCTTGCCACCAAAGACCTGCGACTTTGCTCAGGACTCCTCCTATTTTGAGGACTTCTCCAACA
TCTCCATCTTCTCCTCGTCCGTGGACTCCCTGTCGGACATCGTGGACACGCCCGACTTCCTGCCGGCTGACAGCC
TCAACCAGGTGTCCACCATCTGGGACGATAACCCTGCCCCCTCCACCCACGATAAGCTGTTCCAGCTCAGCAGGC
CGTTTGCAGGCTTCGAGGACTTTCTGCCCTCCCACAGCACCCCGCTTCTCGTCAGCTACCAGGAGCAGAGTGTGC
AGAGCCAGCCAGAGGAGGAGGACGAGGCTGAGGAGGAGGAGGCGGAGGAGCTGGGGCACACAGAGACCTACGCCG
ACTACGTGCCGTCCAAGTCCAAGATCGGGAAGCAGCACCCAGACCGCGTGGTGGAGACCAGCACACTGTCCAGCG
TCCCACCCCCAGACATCACCTACACCCTGGCCCTGCCCTCGGACAGCGGGGCCCTGTCTGCCCTGCAGCTAGAGG
CCATCACCTACGCCTGCCAGCAACACGAGGTCCTGCTCCCCAGCGGGCAGCGCGCGGGCTTTCTCATCGGCGATG
GGGCCGGCGTGGGCAAAGGCCGGACGGTGGCCGGAGTCATCCTGGAGAACCACCTGCGCGGCCGGAAGAAAGCAT
TGTGGTTCAGCGTCTCCAACGACCTCAAGTACGATGCGGAGCGCGACCTGCGGGACATCGAAGCCACGGGCATCG
CGGTGCACGCGCTCAGCAAGATCAAGTACGGTGACACCACTACCTCAGAGGGCGTCCTCTTCGCCACCTACTCCG
CCCTGATTGGGGAGAGCCAGGCCGGCGGCCAGCACCGCACTCGCCTCCGGCAGATCCTGGACTGGTGTGGGGAGG
CCTTCGAGGGCGTCATCGTGTTCGACGAGTGTCACAAAGCCAAGAATGCCGGCTCCACCAAGATGGGCAAGGCTG
TGCTAGACCTGCAGAACAAGCTGCCCCTGGCCCGCGTGGTCTACGCCAGCGCCACAGGTGCCTCTGAGCCTCGGA
ACATGATCTACATGAGCCGCTTGGGTATCTGGGGCGAGGGCACACCCTTCCGGAACTTTGAGGAGTTCCTGCACG
CCATCGAGAAGAGGGGCGTTGGCGCCATGGAGATCGTGGCCATGGACATGAAGGTCAGCGGCATGTACATCGCAC
GCCAGCTCAGCTTCTCCGGCGTCACCTTCCGCATCGAGGAGATCCCGCTGGCCCCAGCCTTCGAGTGCGTCTACA
ACCGCGCGGCCCTGCTGTGGGCCGAGGCCCTGAACGTGTTCCAGCAGGCGGCCGACTGGATCGGCCTGGAGTCGC
GCAAGTCCCTGTGGGGCCAGTTCTGGTCGGCACACCAGCGCTTCTTCAAGTATCTGTGCATCGCAGCCAAGGTGC
GCCGGCTGGTGGAGCTGGCCCGAGAGGAGCTGGCGCGAGACAAGTGCGTGGTCATCGGGCTGCAGTCCACGGGCG
AGGCGCGCACGCGGGAGGTGCTGGGGGAGAACGATGGGCACCTCAACTGCTTCGTCTCGGCCGCTGAAGGCGTGT
TCCTGTCGCTAATTCAGAAGCACTTTCCGTCCACCAAGAGAAAGCGGGACAGAGGAGCGGGCAGCAAGCGGAAAC
GGCGACCTCGGGGACGCGGGGCCAAAGCCCCCCGGCTGGCGTGCGAGACAGCGGGCGTCATCCGCATCAGTGACG
ACAGCAGCACGGAGTCGGACCCTGGCCTGGACAGCGACTTCAACTCCTCCCCCGAGTCCCTGGTGGATGACGACG
TTGTCATCGTTGATGCAGTCGGGCTCCCCAGTGACGACCGGGGACCCCTGTGCCTCCTGCAGAGAGACCCGCATG
GCCCCGGGGTCCTGGAGCGGGTGGAGCGGCTGAAGCAGGATCTGCTGGACAAAGTGCGGCGGCTGGGCCGGGAAC
TGCCAGTCAACACCCTGGACGAGCTCATCGACCAGCTGGGCGGCCCCCAGCGGGTGGCGGAGATGACCGGCAGGA
AAGGCCGCGTGGTGTCCAGGCCCGACGGGACGGTGGCCTTCGAGTCGCGGGCAGAGCAGGGTCTGTCCATCGACC
ACGTGAACCTCAGGGAGAAGCAGCGCTTCATGAGCGGCGAGAAGCTCGTGGCCATCATCTCGGAGGCCTCCAGCT
CGGGTGTCTCCCTCCAAGCCGACCGCCGTGTCCAGAACCAGCGGCGCCGCGTGCACATGACCTTGGAGCTGCCGT
GGAGCGCCGACCGCGCCATCCAGCAGTTCGGCCGCACCCACCGGTCCAACCAGGTCTCCGCGCCAGAGTATGTCT
TCCTCATCTCGGAGCTGGCCGGGGAGCGCCGGTTCGCCTCCATCGTGGCCAAGCGCCTGGAGAGTCTGGGGGCCC
TGACCCACGGAGACCGCCGCGCCACGGAGTCCCGTGACCTCAGCAAGTACAACTTTGAGAACAAGTATGGCACCC
GGGCCCTGCACTGTGTCCTCACCACCATCCTGAGCCAGACTGAGAACAAAGTGCCTGTGCCCCAGGGATACCCTG
GAGGGGTCCCCACCTTCTTCCGGGACATGAAGCAGGGCCTGCTGTCTGTGGGCATTGGTGGCCGGGAGTCCCGGA
ATGGCTGCCTGGACGTGGAGAAGGACTGTTCCATCACCAAGTTCCTGAACCGCATCCTGGGGCTGGAGGTGCACA
AGCAGAACGCCCTGTTCCAGTACTTCTCAGACACCTTCGACCACCTCATCGAGATGGACAAGCGGGAGGGCAAAT
ACGACATGGGCATCCTGGACCTTGCTCCCGGTATCGAGGAGATCTACGAGGAGAGCCAGCAGGTGTTCCTGGCTC
CCGGGCACCCGCAGGACGGGCAGGTGGTCTTCTACAAGATCAGCGTGGACCGCGGCCTGAAGTGGGAGGACGCCT
TTGCCAAGTCGCTGGCGCTGACGGGCCCCTATGACGGCTTCTACCTCTCCTACAAGGTCCGCGGTAACAAGCCCA
GCTGCCTGCTGGCGGAGCAGAACCGCGGCCAGTTCTTCACGGTGTACAAGCCCAACATCGGCCGGCAGAGCCAGC
TGGAGGCCCTGGACAGCCTCCGCCGCAAGTTCCACCGGGTCACCGCGGAGGAGGCCAAGGAGCCCTGGGAGAGTG

FIGURE 3562B

GCTACGCTTTGTCGCTGACGCACTGCAGCCACAGCGCCTGGAACCGGCACTGCCGGCTGGCGCAGGAGGGTAAGG
ACTGCCTGCAGGGGCTGCGGCTGCGGCACCACTACATGCTGTGCGGCGCGCTGCTGCGCGTGTGGGGCCGCATCG
CCGCCGTCATGGCCGACGTCAGCAGCAGCAGCTACCTGCAGATCGTGCGGCTGAAGACCAAGGACAGGAAGAAGC
AAGTGGGCATCAAGATCCCCGAGGGCTGCGTGCGCCGGGTGCTGCAGGAGCTGCGGCTGATGGATGCGGACGTGA
AGCGCAGGCAGGCGCCCGCCCTGGGCTGCCCCGCCCCGCCCGCCCCGCGCCCGCTGGCGCTGCCTTGCGGCCCCG
GAGAGGTGCTGGACCTCACCTACAGCCCCCCGGCCGAGGCCTTCCCGCCGCCCCCGCACTTCTCTTTCCCGGCGC
CGCTGTCCCTGGACGCCGGCCCCGGCGTCGTGCCGCTGGGCACCCCCGACGCCCAGGCCGACCCTGCGGCCCTCG
CGCACCAGGGCTGCGACATCAACTTCAAGGAGGTGCTGGAGGACATGCTGCGCTCGCTGCACGCGGGGCCGCCCT
CCGAGGGCGCGCTGGGGGAGGGCGCGGGGGCGGGGGGCGCGGCGGGCGGTGGTCCCGAGCGGCAGAGCGTGATCC
AGTTCAGCCCACCCTTCCCCGGCGCCCAGGCTCCTCTC**TGA**CACGCCTTTAGGCGAAACATGCCCCAAGACACAG
GGACCGTTTCTCCCCTAGGAGCAGCGGTGGGGAGCAGGGCCAAGGTCCCCTGACCACTGCTCAGAGGAGCCCTAG
GCCCTGGCCGCAGTGCCTTCAGCGCCCGACCCGGGCCCCCACCTGGTCAGCCCTGGCGGGGCCCACTCAGGACAG
CTGGGGGCCGGGGCGTGGCAGGGCCCTCTCTGTGCCTCTCCTCCCAAGTAGGAAGGGGCTCCGGGTGGCTGCTCT
GGGACTGGGCACCCACAAGGGCTCAGTGGGCCCAAACCCTTGAAATCCGTGAAACCGGGTGGTCCCAAGAGCTAG
AAACTCAGGAAACCCCAGGTGCTCAGGGCCCCGCGTCTCGGGGGCTCCGTGGGGCAGACCCCTGCTAATATATGC
AATTCTCCCTCCCCCAGCCCTTCCCTGACCCCTAAGTTATTGCCCGCTCACCTCTCCCAGGCCCCAGGCCGCGGA
GCTGGCAGGGTGGCGCCTGCGGTTTCTATGTATTTATAGCAAGTTCTGATGTACATATGTAAAGGACTTTTTTAA
AT

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FIGURE 3563

CCCAGGGTCCCCGAGGACGAAGTTGACCCTGACCGGGCCGTCTCCCAGTTCTGAGGCCCGGGTCCCACTGGAACT
CGCGTCTGAGCCGCCGTCCCGGACCCCCGGTGCCCGCCGGTCCGCAGACCCTGCACCGGGCTTGGACTCGCAGCC
GGGACTGACGTGTAGAACAATCGTTTCTGTTGGAAGAAGGGTTTTTCCCTTCCTTTTGGGGTTTTTGTTGCCTTT
TTTTTTTCTTTTTTCTTTGTAAAATTTTGGAGAAGGGAAGTCGGAACACAAGGAAGGACCGCTCACCCGCGGACT
CAGGGCTGGCGGCGGGACTCCAGGACCCTGGGTCCAGCATGGAGGTGGTGGACCCGCAGCAGCTGGGCATGTTCA
CGGAGGGCGAGCTGATGTCGGTGGGTATGGACACGTTCATCCACCGCATCGACTCCACCGAGGTCATCTACCAGC
CGCGCCGCAAGCGGGCCAAGCTCATCGGCAAGTACCTGATGGGGGACCTGCTGGGGGAAGGCTCTTACGGCAAGG
TGAAGGAGGTGCTGGACTCGGAGACGCTGTGCAGGAGGGCCGTCAAGATCCTCAAGAAGAAGAAGTTGCGAAGGA
TCCCCAACGGGGAGGCCAACGTGAAGAAGGAAATTCAACTACTGAGGAGGTTACGGCACAAAAATGTCATCCAGC
TGGTGGATGTGTTATACAACGAAGAGAAGCAGAAAATATATATGGTGATGGAGTACTGCGTGTGTGGCATGCAGG
AAATGCTGGACAGCGTGCCGGAGAAGCGTTTCCCAGTGTGCCAGGCCCACGGGTACTTCTGTCAGCTGATTGACG
GCCTGGAGTACCTGCATAGCCAGGGCATTGTGCACAAGGACATCAAGCCGGGGAACCTGCTGCTCACCACCGGTG
GCACCCTCAAAATCTCCGACCTGGGCGTGGCCGAGGCACTGCACCCGTTCGCGGCGGACGACACCTGCCGGACCA
GCCAGGGCTCCCCGGCTTTCCAGCCGCCCGAGATTGCCAACGGCCTGGACACCTTCTCCGGCTTCAAGGTGGACA
TCTGGTCGGCTGGGGTCACCCTCTACAACATCACCACGGGTCTGTACCCCTTCGAAGGGGACAACATCTACAAGT
TGTTTGAGAACATCGGGAAGGGGAGCTACGCCATCCCGGGCGACTGTGGCCCCCCGCTCTCTGACCTGCTGAAAG
GGATGCTTGAGTACGAACCGGCCAAGAGGTTCTCCATCCGGCAGATCCGGCAGCACAGCTGGTTCCGGAAGAAAC
ATCCTCCGGCTGAAGCACCAGTGCCCATCCCACCGAGCCCAGACACCAAGGACCGGTGGCGCAGCATGACTGTGG
TGCCGTACTTGGAGGACCTGCACGGCGCGGACGAGGACGAGGACCTCTTCGACATCGAGGATGACATCATCTACA
CTCAGGACTTCACGGTGCCCGGACAGGTCCCAGAAGAGGAGGCCAGTCACAATGGACAGCGCCGGGGCCTCCCCA
AGGCCGTGTGTATGAACGGCACAGAGGCGGCGCAGCTGAGCACCAAATCCAGGGCGGAGGGCCGGGCCCCCAACC
CTGCCCGCAAGGCCTGCTCCGCCAGCAGCAAGATCCGCCGGCTGTCGGCCTGCAAGCAGCAGTGAGGCTGGCCGC
CTGCAGCCCGTGTCCAGGAGCCCCGCCAGGTGCCCGCGCCAGGCCCTCAGTCTTCCTGCCGGTTCCGCCCGCCCT
CCCGGAGAGGTGGCCGCCATGCTTCTGTGCCGACCACGCCCCAGGACCTCCGGAGCGCCCTGCAGGGCCGGGCAG
GGGGACAGCAGGGACCGGGCGCAGCCCTCCCCCCTCGGCCGCCCGGCAGTGCACGCGGCTTGTTGACTTCGCAGC
CCCGGGCGGAGCCTTCCCGGGCGGGCGTGGGAGGAGGGAGGCGGCCTCCATGCACTTTATGTGGAGACTACTGGC
CCCGCCCGTGGCCTCGTGCTCCGCAGGGCGCCCAGCGCCGTCCGGCGGCCCCGCCGCAGACCAGCTGGCGGGTGT
GGAGACCAGGCTCCTGACCCCGCCATGCATGCAGCGCCACCTGGAAGCCGCGCGGCCGCTTTGGTTTTTTGTTTG
GTTGGTTCCATTTTCTTTTTTTCTTTTTTTTTTTAAGAAAAAATAAAAGGTGGATTTG

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FIGURE 3564

GTCCTCCTCGCCCTCCAGGCCGCCCGCGCCGCGCCGGAGTCCGCTGTCCGCCAGCTACCCGCTTCCTGCCGCCCG
CCGCTGCCATGCTGCCCGCCGCGCTGCTCCGCCGCCCGGGACTTGGCCGCCTCGTCCGCCACGCCCGTGCCTATG
CCGAGGCCGCCGCCGCCCCGGCTGCCGCCTCTGGCCCCAACCAGATGTCCTTCACCTTCGCCTCTCCCACGCAGG
TGTTCTTCAACGGTGCCAACGTCCGGCAGGTGGACGTGCCCACGCTGACCGGAGCCTTCGGCATCCTGGCGGCCC
ACGTGCCCACGCTGCAGGTCCTGCGGCCGGGGCTGGTCGTGGTGCATGCAGAGGACGGCACCACCTCCAAATACT
TTGTGAGCAGCGGTTCCATCGCAGTGAACGCCGACTCTTCGGTGCAGTTGTTGGCCGAAGAGGCCGTGACGCTGG
ACATGTTGGACCTGGGGGCAGCCAAGGCAAACTTGGAGAAGGCCCAGGCGGAGCTGGTGGGGACAGCTGACGAGG
CCACGCGGGCAGAGATCCAGATCCGAATCGAGGCCAACGAGGCCCTGGTGAAGGCCCTGGAGTAGGCGGTGCGTA
CCCGGTGTCCCGAGGCCCGGCCAGGGGCTGGGCAGGGATGCCAGGTGGGCCCAGCCAGCTCCTGGGGTCCCGGCC
ACCTGGGGAAGCCGCGCCTGCCAAGGAGGCCACCAGAGGGCAGTGCAGGCTTCTGCCTGGGCCCCAGGCCCTGCC
TGTGTTGAAAGCTCTGGGGACTGGGCCAGGGAAGCTCCTCCTCAGCTTTGAGCTGTGGCTGCCACCCATGGGGCT
CTCCTTCCGCCTCTCAAGATCCCCCCAGCCTGACGGGCCGCTTACCATCCCCTCTGCCCTGCAGAGCCAGCCGCC
AAGGTTGACCTCAGCTTCGGAGCCACCTCTGGATGAACTGCCCCCAGCCCCCGCCCCATTAAAGACCCGGAAGCC
TG

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FIGURE 3565

CAGCAGCGGGCGGCCGCGGCGTGACATCGGCACCATCCTGCAGATCCTGAACGACCTCCTGAGCGCCACCCGGCA
CTACCAGGGCATGCCCCCTTCGCTGGCCCAGCTCCGCTGCCACGCCCAGTGCTCCCCGGCCTCACCGGCCCCCGA
CCTGGCCCCCAGAACTACCTCCTGCGAGAAGCTCACGGCTGCCCCCTCAGCCTCCCTGCTGCAGGGCCAGAGCCA
GATCCGCATGTGCAAGCCCCCGGGGGACCGGCTTCGGCAGACAGAAAACCGCGCCACGCGCTGCAAGGTGGAACG
GCTGCAGCTGCTTCTGCAGCAGAAACGGCTCCGTAGAAAGGCCCGGCGGGACGCGCGGGGTCCGTACCACTGGTC
ACCCAGCCGCAAGGCCGGCCGCAGCGACAGCAGTAGCAGCGGGGGCGGCGGCAGCCCCAGCGAGGCCTCCGGCTT
GGGCCTCGACTTCGAGGACTCCGTGTGGAAGCCAGAAGTCAACCCTGACATCAAGTCAGAGTTCGTGGTGGCTTA
GGATCTTCGGATCGGCCACCCTCGCCCCTCGCACCCCAGCCCAGGGCGGCGGGGACTCCGAGAGCCCCGGAGAGA
ACGTGGCCCAGCCCTGGAGGGCAGGCGGCCACTCCCCCAGCCAGAAGTCTTTTTTTCTTTTCTTCTTTTTTATTA
TTTTTTTCTTTTTTTAAAAAGTTCTGACCGTGGTTTCCTGGACTCTTC**ATG**GGCTTTGCTTCCTACCTCCTTCAC
CCTTCACTCCTGCCCTCCTCTTCCTCCTCCTCCTCCTCCTCCGTCTGTCTCCTTTCACCTCTGCGCCAGGTCGGT
CCTCCCTGCCAACCTTCCCCAGCTCCAATATGTAGCAGTCTCTCTGGATGGCGGAGAGTGAAGGAGACGGAGAAA
CGCGCCCCATCCCTTCCGCCGCCTCCTTTCCCCCCCCGACCCTATTCAGGTTTTAAGTCAAAAATGTCGATATGTC
ATTATGCACTTTACAGATGAGGGGAGGGGCCGCAGTGCGCAGAACCCACCCCACCCCCCAGTGCAGACTTCGGGG
TCTCCACCCCAGGCCAGCAGCGCCCACTGGGCTACAGCAAGCCAACAGGTCACAGAAGCCAACGAGGGGACTGTT
TCTCTTCCACTCCTATCCTCTTTTCTTGATCTTTTTTTTGCATTTTCCTTCATTTCTTTAACAAGGAGAGCAAAG
CTGTTT**TAG**CAGAGGCTGGGGCTGAGGTCCCCATGGGGTTTGGGTGCAGGGGCATGGCACCCTTTCCTGTCGGGA
AGGGAGAGGGGAACTACCCCCCCAGCCTGCCCTCCGCCCCGCCCCAGCCGGCGGACTGTGCTGTTTCCTCCGCCC
CCACTCCCGTGTTTTCTGACCTCCTGCCTGAGTTTGGGGTATTTATAGACTATTAATTTTCTGACTGAGCCAATA
GTGGTTGGGGAACTCTTGAAAAAGGGGAGAGAATGGCTGGGTGCTGGGGAGTTCCCCCCTCCGAGCCCTCCTTCC
CGGCCCAACCTGAGGGATGTGGATTTGGGACTGTCTGGGGGCCCCTCCTGCAGCGAGGATGGGAGGGGGTGCTGA
GCTGTGAATCCCCTGGGCAGGGGGCGACAACTCCGTGTAGCATTAACCCCCGTGGCGGGGTCCGCTGCTGGTCTA
ATTTGGACCCCCTGCCTCTCAGTGCCCCTGCCCTAGGGGTGTCTGTCTCCAGAGGGGAGGGACAAATCCCCTACT
GGGGCCATTTCAATGGGGTAGTTTTTGGATTTTTTTCCCCACTCACTTTTTATTTTTTAATGATAATGGAGATGT
CTGGACCCTTCCTCACCCCACCTGTCGGTCTTGTCCTGGCTCTGCCTGTCCCCCACCGTTGTTCTCGTAGGTGAA
CCCCAGGTCCTCAACTCCCCCCCTTTATGTGTTGAAAGTTAATGGTTTCAGATGTGAACATCACGTGTTATAACT
GTAGCGCTGTAAATTTTTTTGTGGGAGGGTGGGCAGGGAGGGGTCCCAGAGGGTAGAGCTCAAGGATTTTGGGTT
TTGTTTTGTTTTCATTTTTCCAAAAAAAAAAGAAAAAAAAATAGAAAAAAAAGGAGTAAAAGGGGCGGGTTTGTT
TTTTGAAGAACTGTCTTGGATACCTATTTAAATGTGTGTTCTGTTTTGTTTTTTAACGATTTTTAAATAACGTCT
GTGCCTCCACTGGTTGAGGGTGGAACCTCCAGGCAGGAACCGGCTCGCCACCCTCTGCCCGGTAAGGGCTGCCCA
AGAAAGCATTACCCGCCCTCGGGGGGTCGGGCTGTGGGGGTCCCGGCACCTGGCGTGAGTTTCATGTATGAAAAC
ATAAAATTGAAAAAAAAAAAAAAAACCTACACGAGCACCGTGATTTCAAGTAATAAACAGAAAATGAAACAC

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FIGURE 3566

GAGGCTCGGGTCGTTGTGGTGCGCTGTCTTCCCGCTTGCGTCAGGGACCTGCCCGACTCAGTGGCCGCCATGGCA
TCAGATGAAGGCAAACTTTTTGTTGGAGGGCTGAGTTTTGACACCAATGAGCAGTCGCTGGAGCAGGTCTTCTCA
AAGTACGGACAGATCTCTGAAGTGGTGGTTGTGAAAGACAGGGAGACCCAGAGATCTCGGGGATTTGGGTTTGTC
ACCTTTGAGAACATTGACGACGCTAAGGATGCCATGATGGCCATGAATGGGAAGTCTGTAGATGGACGGCAGATC
CGAGTAGACCAGGCAGGCAAGTCGTCAGACAACCGATCCCGTGGGTACCGTGGTGGCTCTGCCGGGGGCCGGGGC
TTCTTCCGTGGGGGCCGAGGACGGGGCCGTGGGTTCTCTAGAGGAGGAGGGGACCGAGGCTATGGGGGGAACCGG
TTCGAGTCCAGGAGTGGGGGCTACGGAGGCTCCAGAGACTACTATAGCAGCCGGAGTCAGAGTGGTGGCTACAGT
GACCGGAGCTCGGGCGGGTCCTACAGAGACAGTTATGACAGTTACGCTACACACAACGAGTAAAAACCCTTCCTG
CTCAAGATCGTCCTTCCAATGGCTGTGTGTTTAAAGATTGTGGGAGCTTCGCTGAACGTTAATGTGTAGTAAATG
CACCTCCTTGTATTCCCACTTTCGTAGTCATTTCGGTTCTGATCTTGTCAAACCCAGCCTGACCGCTTCTGACGC
CGGGATGGCCTCGTTACTAGACTTTTCTTTTTAAGGAAGTGCTGTTTTTTTTTGAGGGTTTTCAAAACATTTTGA
AAAGCATTTACTTTTTTGACCACGAGCCATGAGTTTTCAAAAAAATCGGGGGTTGTGTGGGTTTTTGGTTTTTGT
TTTAGTTTTTGGTTGCGTTGCCTTTTTTTTTTTAGTGGGGTTGGCCCCATGAAGTGGGTGCCCCACTCACTTCTC
TGAGATCGAACGGACTGTGAATCCGCTCTTTGTCGGAAGCTGAGCAAGCTGTGGCTTTTTTCCAACTCCGTGTGA
CGTTTCTGAGTGTAGTGTGGTAGGACCCCGGCGGGTGTGGCAGCAACTGCCCTGGAGCCCCAGCCCCTGCGTCCA
TCTGTGCTGTGCGCCCCACAGTAGACGTGCAGACGTCCCTGAGAGGTTCTTGAAGATGTTTATTTATATTGTCCT
TTTTTACTGGAAGACGTACGCATACTCCATCGATGTTGTATTTGCAGTGGCTGAGGAATTCTTGTACGCAGTTTT
CTTTGGCTTTACGAAGCCGATTAAAAGACCGTGTGAAATG

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FIGURE 3567A

GCGGTGGCGGAGGCGGACACATTGGCGTGAGACCTGGGAGTACGTTGTGCCAAATCATTGCCACTTGCCACATGA
GTGTAAATGATGGCGGATGCCAAGTATGTCCTCTGCCGATGGGAAAAGCGATTATGGCCTGCGAAGGTTTTGGCC
CGAACCGCGACTTCAACAAAAAATAAGAGAAGAAAGGAATATTTTCTAGCTGTGCAAATCCTCTCTCTAGAGGAA
AAAATTAAGGTGAAAAGCACTGAAGTTGAGATCCTAGAGAAGTCTCAAATTGAAGCCATTGCTTCCTCGTTAGCC
TCACAGAATGAGGTTCCTGCGGCACCCCTGGAAGAACTGGCCTACAGACGGTCGCTTCGCGTGGCTCTGGACGTT
CTGAGCGAGGGCTCGATTTGGAGTCAAGAAAGCTCTGCAGGGACAGGTAGAGCTGACCGGTCTCTGCGAGGGAAG
CCCATGGAGCATGTCTCCTCGCCCTGTGATTCGAACTCCTCATCTCTTCCCCGCGGAGACGTGTTGGGCAGTTCC
AGACCTCACAGGAGGAGGCCATGTGTGCAACAAAGCCTGTCAAGTTCGTTCACTTGTGAAAAGGACCCCGAGTGC
AAAGTGGACCACAAGAAGGGGCTCAGGAAAAGTGAAAACCCAAGAGGCCCGTTGGTCCTCCCAGCTGGAGGTGGT
GCCCAAGATGAGAGTGGGTCCAGAATCCACCACAAAAATTGGACTCTTGCAAGTAAGAGGGGAGGAAACTCAGCG
CAGAAGGCTAGCTTGTGCCTGAATGGATCTTCCCTTTCAGAGGACGACACGGAGAGAGACATGGGGAGCAAAGGA
GGCAGCTGGGCAGCCCCGTCCTTGCCCTCCGGGGTCAGGGAGGACGATCCCTGTGCCAACGCTGAGGGACACGAC
CCCGGTCTGCCGTTGGGCAGCCTCACTGCGCCCCCAGCCCCTGAGCCCTCGGCCTGCTCAGAGCCTGGAGAATGC
CCTGCGAAAAAGAGGCCGCGCCTGGATGGCAGCCAAAGGCCGCCTGCCGTGCAGCTGGAGCCCATGGCAGCAGGG
GCCGCACCATCCCCCGGGCCGGGGCCAGGGCCCAGAGAGTCTGTGACCCCGCGCAGCACCGCCAGGCTGGGCCCG
CCTCCCTCCCACGCCTCTGCGGATGCAACCAGATGTCTTCCTTGCCCGGATTCCCAGAAGCTGGAGAAAGAGTGC
CAGTCTTCCGAAGAGTCCATGGGGTCTAATTCCATGCGTTCTATCCTGGAGGAAGACGAGGAAGACGAGGAGCCA
CCAAGAGTCCTTTTATACCACGAACCACGTTCGTTTGAAGTAGGAATGCTAGTCTGGCATAAACATAAAAAATAC
CCCTTCTGGCCAGCAGTGGTCAAAAGCGTCAGGCAGAGAGATAAGAAAGCAAGTGTGCTATACATCGAAGGACAC
ATGAACCCGAAAATGAAAGGTTTCACAGTGTCTCTTAAAAGTTTAAAGCACTTTGATTGTAAAGAGAAACAGACG
CTTCTGAATCAAGCCAGGGAGGACTTCAACCAGGACATCGGCTGGTGTGTCTCCCTCATCACCGACTACAGGGTC
CGGTTAGGCTGCGGGTCTTTTGCTGGCTCTTTCCTGGAATATTACGCGGCTGATATAAGCTATCCTGTCCGAAAA
TCCATCCAGCAGGACGTCTTGGGGACCAAGCTTCCTCAACTGAGCAAGGGGAGCCCCGAGGAGCCCGTGGTGGGG
TGCCCCCTGGGGCAGAGGCAGCCCTGCCGGAAAATGCTCCCCGACCGCTCGCGGGCCGCCCGGGACCGGGCCAAC
CAGAAGCTGGTGGAGTACATTGTGAAGGCCAAGGGCGCGGAGAGCCACCTGCGGGCCATCCTAAAGAGCAGGAAG
CCATCTCGCTGGCTGCAGACCTTCCTGAGCTCCAGCCAGTACGTGACCTGTGTGGAGACCTACCTGGAGGATGAG
GGGCAGCTGGACCTGGTGGTGAAGTACCTGCAGGGCGTCTACCAGGAGGTGGGGGCCAAGGTGCTCCAGCGCACC
AACGGCGACCGGATCCGGTTCATTCTGGACGTGCTTCTGCCCGAGGCCATCATCTGTGCGATCTCTGCGGTGGAC
GAGGTGGACTACAAGACGGCTGAGGAGAAGTACATCAAGGGGCCTTCGCTGAGCTACCGGGAAAAAGAAATATTT
GACAACCAGCTCCTTGAAGAGCGGAACCGGCGCCGTCGGTGAGGGAGCAGCCGGCTGTGCTGTCAGCGGGGCCTG
GCGGTGGAAGCGCCTCCAGTGTGCATGAGCGTGTCTGAAGATGGGGGGCTCAGGGGGCACGTTTGCGTTTGGACC
TGTCTGTGCGTTCTCCTGCGTGGCAGTCCTGATTTCCATGCTTCTGGAGAATCCATTTCGTTAACACTGAAAGCC
AGTTCTCTTTTCCTGGCAGTTTTTTTCATTTTATTTTTGGCATTTTTTACAAGATACCGTTCGGGAAAGGCTTTT
GAAAGGACGGAAGCGTATTCACTGTGCGCCAGTACTCCTGGCTGTGCTGTGGTTTCTCCCGACGTGCACATCGAT
CTCGTATGTGTGGCATCTGATATTAAACGGGAGGTTTTAAGAAGCGTCTGCCGTGATCATGGAGCTTCGGAAGCG
GGAATGGTTCTTCCGGGTTTGCTGTTTTGTCTGTTTCCCCCTTGTGTGGTTTCCGCCTGCGACAGTTCCAGAATT
TGCTCTCCCACTCAGTGTGCTCTGCAGCTGTGAGGAAACAGCCTTCGTTAGAGGCGGGAGCAGAGACGAGCCGCT
GCTCTGTGTCGTGTTTGCTGTGGCCGCAGGGAGAGGAGCAGGACACGCACCTTTCCAGGGGCCTCTGTGTCCCGC
ACTGTGTGTGAGTGGACCGCAGCGCGCAGCCACATGCCCTGGCTGCCATGGGCCAGACCGCCTCCACCTCCCCCG
CCCGCCTGGCCTGTCCTGAGTGCATTTCCCTGCACTGTGTCGTCACTGCACAGCCAGTCACCGCGGTCTCAGTCA
TCGGCGCGGATGGCTATGCTGGGGTCCCAGGGTGGCCGCAGCAGTCAGGGTCACTGTGGGAGCCCTGGGGTGGAG
TGACAAACCGCATTGTCCTGTGCCCGCCATGGCAGAAGCGCAGCCTTTGTATGGAGGCCCAACCGCGCTCCCGTC
TGGAGAAGCGGCTTCCGGGGTGTGGCTGCCGGGTCGGCTCTGGTCCACAGCACGGTGCCGGGGCTGCAGGTTGTT
GAGGGCTGTGACTCCGTGGGGCTCAGCCAGGCTCCAGCAGGGTCAGACGTGCTGTTAAGAGCAAAGCCACAGACG
ATGACTTGTCCATTCTCAGTGGATGCTCCAGGCTGTGCCTACACAGCAGTGCTGGTGACATGTCCAGGGTTCCAG
GGCCCGGTGGCCTGGGAGCTGCTTTCTCCCCACTGGCTGGGCTGCATCTGGCCCTGGCTGGAGGCCTTGCTTTGA
GGGGCTGTGACCCTCTTCCCCCAGGCCCTCCCCAGCCGACGACAGCCACCGGAGAGGAGATCGGAACACGATTGT
CTCAGATGCAGGGCGCTGTGCGGGACGAAGCCGCAAGGACTCTCGTATCGGGCCCTTGGGACTCGGGAGGTGCCA

FIGURE 3567B

GAGGCGGCGGCTGCTCTGGACCTCGGTGTTCACTGACCTTTGTTTCACTTGCCTCTGCTCGACTCCGAGAGCAGG
AAACCCGGCCGTGGCCTGGCAGCTCCGCCTCCCATGCCCGCACGCTGGGGTCTGTCTTGTCTGGAGCAGTGGGGC
ACACCCCGGAGGAGGCGGGGGTCAGGGCTGTCGGCCTTGGCCCCCTGCTGGTCGCTGTTTCGGGGACTCGGGGCG
GCCAGTACCACCGCCTGAGGCGGGGCTCAGCAGCGTTGCATGTACGGGCCTCGTACTGCCTCATGGAAAATCCTC
CGGAGCCGCCCTCCATTGTGGGTTCCTGAGAGTAGGACACATTGCCATGGTTTTGTGGGAATCACGCGCCCCTGA
TGGAACTTTTCTGCTGTTGTGAAGTACTTTTATCCATTTGCTTCTCTGCTGACCTTGCCAAGTTGTTCGAGGTGG
AATTAAACACCTCCCAGACC

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FIGURE 3568

CTGCGCGCTGCGGTCCACTCACACACAGTGCGGGACACAGAGGCCCCTGGAAAGAGCACACTGAGTGGGAGAGCA
AATTCTGGAACTGTCGCAGGCGGAAACCACACAAGGGGGAAACAGACAAAACAGCAAACCCGGAAGAACCATTCC
CGCTTCCGAAGCTCCATGATCACGGCAGACGCTTCTTAAAACCTCCCGTTTAATATCAGATGCCACACATACGAG
ATCGATGTGCACGTCGGGAGAAACCACAGCACAGCCAGGAGTACTGGCGCACAGTGAATACGCTTCCGTCCTTTC
AAAAGCCTTTCCCGAACGGTATCTTGTAAAAAATGCCAAAAATAAAATGAAAAAAACTGCCAGGAAAAGAGAACT
GGCTTTCAGTGTTAACGAAATGGATTCTCCAGAAGCATGGAAATCAGGACTGCCACGCAGGAGAACGCACAGACA
GGTCCAAACGCAAACGTGCCCCCTGAGCCCCCCATCTTCAGACACGCTCATGCACACTGGAGGCGCTTCCACCGC
CAGGCCCCGCTGACAGCACAGCCGGCTGCTCCCTCACTGGCTTGTTATTTTGAGCATGTCCCCGGCGTGATGAAA
TCACGGCCTGTGTGCTCAGCCCAAGTAACTTCTCCATCAGCACCAGCACCATTCTCACAGGTCACGGGAGGCTTT
CATGGCAACTGGAAGCTGTGATGAACTCCTAACGGGTTTTGATGTCGGCAACCCAGACTCAAAAAAAAAAATCAG
GATGAAAGATTTCCACAGATGGGCGTGGAGCGGTGAAGAGGCTTCTGAGACGGAGGGAGAGGACAAACCAGCAGG
CTGGGTCCAGGTGTCCTGGCTCCGACCTTACCCCCTCCCCGGACCTCACTTATTCTTACGGCAAGCATGACGGGG
GAACC**ATG**AAGATCCAGCAGGAAAACACCCAGTTTCTGTATCCAAAGGCCTTTCCTGTTTTGGTAAGCCAGCTGG
GCCAACACTCCCTAAACAAGGCCAAATTCCACCTTTGTGCAGCTCTGCGGGGGTGGCCTGCCAATGCCACCGAGG
CCCCACACCTCCTCCCTGGCCTCTCCAGGGGCCCCTCCTGCCCTGCCCAGGGAGGACATGGGGCTGGTGAGGGAG
TTCAGTGTCTTCACCAGGAGTCTCCTGTGACTGTGGGCCCGGGAGACGTCGGTGGCTGCGCAAGCCACCCTGGCC
GGAGACCCTGTCCT**TGA**CTCTAGTTGAGTCTTCAGCCTGTCACTGCCCCGTGGGCCCCGCCTGGCTCCCAGCAAG
GCCTGGCCGCATGCCCAGAGACAGGATTAGGCGCTCTGGGGGCCAAACATCCAAGGGCAGCTAAGCACACGGATG
TGAGAGAAACATCTTGATCACAGCATTCTTCTGGCTGCTGGAAAGCACCGGGCCGTGCTGCTGCTTAATCTTGCT
GTATTTCTCACACAGCCATGGGGCTGTGGAAAGAGGGGAGGAAAGTGCAAAAAGCAAACATCAGCCCCTGCAAAA
AGAGATTAAGAACAGACACGGCCCAGGCACGTGCCCGTGGCCCCGTGCTGCCCACAGCGACCAGCTGGGAGACCC
GGGCACAGCCTTCCTGGGGGGCAGGAGTGACCCACAGGGTGAGTTCAGCGTATGTGATCAGCTCACCACCCAGCA
CCTGGGCCACCTCATGAGGGAGAGGGGCTGCGGCAGCCTGGAGTCAAACTGCCTGTGGGTGTGGAAATAGAAACT
GCAAGGCAGAGACGCAAGTGGCTGGAGATAGCGCCGGGAGCGGCCTACCGGTAGCTCAGCGAAGGCCCCTTGATG
TACTTCTCCTCAGCCGTCTTGTAGTCCACCTCGTCCACCGCAGAGATCGCACAGATGATGGCCTGTGAGAGGGCA
CGGGGCTCAATAGCAGCAGGCACTGCCCAACTGGCCCCAAGTGGCCTGCGGTTAAGAAGGCCGCAGGGAGCCTGG
GTCACCAGGTTCCAGCCTCCAGACATGGTCTAGCTCATGGTTCAGAAGGTGCAAACCTAGTCCATGAATCCCTGC
TTGTAATGATGTTTCTTAATTAAATCAGTACTATCTTTCGGACTAGACACAATAGCTCAGATCACTAAAAGCAGA
GAAGAAAAGGCAAGACCCAAACCCACAAGAGCATTTCTCAAAAATTTTAAGTTTTTTTTTTGGTGGCGGTTTTTT
CTGGTACAGAGTCTCGCCCTGTCGCCCAGGCTGGAGCGCAATGGCATAATCTCAGCTCACTGCAACCTCTGCCTC
CCGGGTTCAGGTGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTATAGGTACGCGCCACCACGCCCAGCTA
ATTTTTGTATTTTTAGTAGAAACGGGGTTTCACCATGTTGGCCAGGCTGGTCTCAAGCTCCTGGCCTCATGATCC
ACCTGCCTCGGCCTCCCAAAGTGCTGGAATTACCGATGCGAGCCACCACACCCGGCCTTAAGTTTATTGTTATAA
AAAAAAAAGAGTATCCTGAATACACAATACATACCTGACATTAAGAAATCATCCCTATTTTTTACTTTTGTGATT
ATGGTAAACACATTTTTAACAGAGTCCATTCGGTTCAGAGCAGAGTCTCTCCCACTCGGCCCTGTGGACGTCGGG
GCCAGACTGTTCTCTGAGGTGGGGCTGTCCTAGGCGCTGCAGGGTGCTGAGCAGCGTCCCTGCCCCAACCC

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FIGURE 3569

CCAAGATGGCGGTGCTGTCAGCTCCTGGCCTGCGCGGCTTCCGGATCCTTGGTCTGCGCTCCAGCGTGGGCCCGG
CTGTGCAGGCACGAGGTGTCCATCAGAGCGTGGCCACCGATGGCCCAAGCAGCACCCAGCCTGCCCTGCCAAAGG
CCAGAGCCGTGGCTCCCAAACCCAGCAGCCGGGGCGAGTATGTGGTGGCCAAGCTGGATGACCTCGTCAACTGGG
CCCGCCGGAGTTCTCTGTGGCCCATGACCTTCGGCCTGGCCTGCTGCGCCGTGGAGATGATGCACATGGCAGCAC
CCCGCTACGACATGGACCGCTTTGGCGTGGTCTTCCGCGCCAGCCCGCGCCAGTCCGACGTCATGATCGTGGCCG
GCACACTCACCAACAAGATGGCCCCAGCGCTTCGCAAGGTCTACGACCAGATGCCGGAGCCGCGCTACGTGGTCT
CCATGGGGAGCTGCGCCAACGGAGGAGGCTACTACCACTATTCCTACTCGGTGGTGAGGGGCTGCGACCGCATCG
TGCCCGTGGACATCTACATCCCAGGCTGCCCACCTACGGCCGAGGCCCTGCTCTACGGCATCCTGCAGCTGCAGA
GGAAGATCAAGCGGGAGCGGAGGCTGCAGATCTGGTACCGCAGGTAGCGCCGCCGCCGCCGCCGCCGGAGCCTGT
CGCCGTCCTGTCCCCAGCCTGCTTGTGTCCCGTGAGGTTGTCAATAAACCTGCCCTCGGGCTGCCGCC

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FIGURE 3570

CCCCGGCCCACAAGCCCCTGCAGGGAGCGGGCCCGGGCGGCGCGCGATCGAGGTCGGGTCGCCGTCCAGCCTGCA
GC**ATG**AGCGCCCCCAGCGCGACCCCCATCTTCGCGCCCGGCGAGAACTGCAGCCCCGCGTGGGGGGCGGCGCCCG
CGGCCTACGACGCAGCGGACACGCACCTGCGCATCCTGGGCAAGCCGGTGATGGAGCGCTGGGAGACCCCCTATA
TGCACGCGCTGGCCGCCGCCGCCTCCTCCAAAGGGGGCCGGGTCCTGGAGGTGGGCTTTGGCATGGCCATCGCAG
CGTCAAAGGTGCAGGAGGCGCCCATTGATGAGCATTGGATCATCGAGTGCAATGACGGCGTCTTCCAGCGGCTCC
GGGACTGGGCCCCACGGCAGACACACAAGGTCATCCCCTTGAAAGGCCTGTGGGAGGATGTGGCACCCACCCTGC
CTGACGGTCACTTTGATGGGATCCTGTACGACACGTACCCACTCTCGGAGGAGACCTGGCACACACACCAGTTCA
ACTTCATCAAGAACCACGCCTTTCGCCTGCTGAAGCCGGGGGGCGTCCTCACCTACTGCAACCTCACCTCCTGGG
GGGAGCTGATGAAGTCCAAGTACTCAGACATCACCATCATGTTTGAGGAGACGCAGGTGCCCGCGCTGCTGGAGG
CCGGCTTCCGGAGGGAGAACATCCGTACGGAGGTGATGGCGCTGGTCCCACCGGCCGACTGCCGCTACTACGCCT
TCCCACAGATGATCACGCCCCTGGTGACCAAAGGC**TGA**GCCCCCACCCCGGCCCGGCCACACCCATGCCCTCCTC
CGTGCCTTCCTGGCCGGGAGTCCAGGGTGTCGCACCAGCCCTGGGCTGATCCCAGCTGTGTGTCACCAGAAGCTT
TCCCGGCTTCTCTGTGAGGGGTCCCACCAGCCCAGGGCTGATCCCAGCTGTGTGTCACCAGCAGCTTTCCCAGCT
TCTCTGTGAGGGTCACTGCTGCCCACTGCAGGGTCCCTGAGGTGAAGTAAACGCCGGCGCTGGGCTTGGCCAGTC
GGCAGTGA

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FIGURE 3571

ATGGCCTGGGCGCTCGAGGTGACCCCTCTGAGCCTCTGTCCTCTCCCCAGTAGGCCAGGCATGGGCCCTATCCCT
GACACCTGGTCTACCACCCAGGCGCCTAGCACCCAGCGGCTACTCAACAGGATGTGGCGACCCCGGCCGCGCTGT
GTCAGCTTCCCAGAATCCAAGTCAGAGGCGCTCAAGCCAGACTTTAAGATGACTTCACAAGGCCAGGGAGGGCAC
ACTGGAGACTCGGGCCTTCCTGATCTCGCGTGCTCTGAGCGCTCCAGGCCACCTGCTGGTGCCAACCCTCTAACC
CTCCTGACAGGCTGCAGAGAGGGAGCTGATGCCAGAATGAGGGGGAACCCCCGGAGCTTCTCGCATCGGGTGGGA
CCGGCATCCGAGGCAGAGCTGTCATCGTGGGCACTGGGAAGTAGCCTGCAGTGTCAGCACAGACCGGCGCTCACC
AACGACACGGCACGGAGGCTTTCTAGGGAGCAGTCCCCCCAGGACAGCAATACGTTCAGGCGACAGCGACACAGG
GCAGCAACAGCGGTAACCCTGTCTGCTGGCACTGAGGGCCTCATCAGACCCCTGCAGGCCTGCAACCACAGCCAA
AATCAGTGTGCCTTCTCCAAAGCCACCTTCTGA

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FIGURE 3572

GGAAGCTCTTCGTGGGCGGTCTTGACTGGAGCACGACCCAAGAGACTCTGCGCAGCTACTTTTCCCAATATGGAG
AAGTCGTAGATTGTGTTATC**ATG**AAAGATAAAACCACCAACCAGTCTCGAGGCTTTGGGTTTGTCAAATTTAAAG
ACCCAAACTGTGTGGGGACGGTGCTGGCCAGCAGACCGCACACGCTAGATGGCCGAAACATCGACCCCAAGCCAT
GCACACCCCGGGGGATGCAGCCGGAGAGAACACGGCCGAAGGAAGGATGGCAGAAAGGACCCAGGAGCGATAACA
GTAAATCAAATAAGATATTTGTCGGTGGAATTCCTCACAATTGTGGTGAGACAGAGCTCAGGGAATACTTCAAGA
AGTTCGGAGTGGTCACGGAGGTAGTCATGATCTATGACGCCGAGAAGCAGAGGCCCCGAGGTTTTGGATTTATTA
CTTTCGAGGACGAACAATCAGTGGACCAGGCTGTCAACATGCATTTTCACGACATCATGGGCAAAAAAGTGGAAG
TTAAACGAGCTGAGCCTCGGGACAGCAAGAGCCAAGCGCCGGGACAGCCAGGTGCCAGCCAGTGGGGGAGCCGGG
TTGTGCCCAACGCTGCCAATGGCTGGGCAGGCCAGCCCCCGCCCACGTGGCAGCAAGGATATGGCCCGCAAGGAA
TGTGGGTGCCGGCAGGACAGGCGATTGGTGGCTATGGACCGCCCCCTGCAGGAAGAGGAGCCCCCCCGCCACCCC
CACCGTTCACCTCCTACATCGTGTCCACCCCTCCTGGAGGCTTTCCCCCTCCCCAGGGCTTCCCTCAGGGCTACG
GTGCCCCGCCACAGTTCAGTTTTGGCTACGGGCCTCCACCTCCACCGCCAGATCAGTTTGCCCCTCCGGGGGTTC
CTCCTCCACCAGCCACTCCCGGGGCAGCACCTCTGGCTTTCCCACCGCCTCCGTCTCAGGCTGCCCCGGACATGA
GCAAGCCCCCGACAGCTCAGCCAGACTTCCCCTATGGTCAGTATGGCCTGGGTTCCTATTCTCCAGCCCCGCCGG
GCTGCGGCCCACACTTTGTTTACAGTCTTATGGTCAGGCTGAGCAGTGATGTGGCC**TAG**CAGGTTACGGGCAGGA
CTTGAGTGGCTTCGGACAGGGCTTCTCAGACCCCAGCCAGCAGCCTCCTTCCTACGGGGGTCCCTCCGTGCCAGG
GTCGGGGGGCCCCCCCCGCCGGCGGCAGCGGCTTTGGACGAGGGCAGAACCACAACGTGCAAGGGTTCCACCCCTA
CCGACGCTAGCCCGCGGCGCCGCGACGTCTGCACGGCCCAGACCCAGGATTCCAAACTTGTGAACTCGTGACAAT
CACAAACTTGGCGGCAAAGTGGCGACTCAACCTTGGGGGGGGGGGCGGGGGGAGGGCGCGAGGCTTTTGGAGCGG
CTGTGGGTGTCGTCTGGACTGAGGTTTTTAAATATTTCTTTCTCTAACCCATCAGCACAATAAAAAAAAGTCACT
GGTTCAACAACAGGGTTTAAAAAAAATGTCTTCAGCTTTAATTCAAAACTTCAGGTTTCTTTTTCTTCCTTTTTT
TTGGAAATTATTTTCCTGAGCCTTTTGTTTTACGGTATATTGTAAACTTTTATGTTAAAGAAAAAATATACATTT
ACAAATTGTGAGATTTTTAAGAGAAATTTTCTACGATGTATACTGGCTTATTTTTTAATTTAAAACGGGGTTTCC
GTCGGCACTGGTGGAGGGGGTGCGCTGTTAGTCCCCTCGCTCCTGGCTTTGGGGGTTGGGACTTGGTGGTCCAGA
AACTCTGGGAGCTTCTAGAAGAAATCTACTGAGTGTATTTCTGTTTTTTGTTTAATTCCTTGCTTTTGTCGACTG
ACCTGCTTGGTAGTGTCTGAGGTGAACTGTGGGGGTTGCGCACAGCCAGCCGCGTGGATCCCACGCAGCGCTGAA
CCGAACCGAGTAGGAAGCCTTTCTCCCCAGGCACGTGGCTTCAGGGCGTTTCCCATTGACCAGTTTGACCCTGGT
TTGAATAAAGAGAAGTGCGTTTGGATTAG

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FIGURE 3573

CTGCGCAGGCGCGGACCAAAGCGATCTCTTCTGAGGATCCGGCAAGATGGCAGAAGTAGAGCAGAAGAAGAAGCG
GACCTTCCGCAAGTTCACCTACCGCGGCGTGGACCTCGACCAGCTGCTGGACATGTCCTACGAGCAGCTGATGCA
GCTGTACAGTGCGCGCCAGCGGCGGCGGCTGAACCGGGGCCTGCGGCGGAAGCAGCACTCCCTGCTGAAGCGCCT
GCGCAAGGCCAAGAAGGAGGCGCCGCCCATGGAGAAGCCGGAAGTGGTGAAGACGCACCTGCGGGACATGATCAT
CCTACCCGAGATGGTGGGCAGCATGGTGGGCGTCTACAACGGCAAGACCTTCAACCAGGTGGAGATCAAGCCCGA
GATGATCGGCCACTACCTGGGCGAGTTCTCCATCACCTACAAGCCCGTAAAGCATGGCCGGCCCGGCATCGGGGC
CACCCACTCCTCCCGCTTCATCCCTCTCAAGTAATGGCTCAGCTAATAAAGGCGCACATGACTCC

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FIGURE 3574A

GGGTTTGGGGAGCAGGAGGCAGACATGTGTTGCTTTGCACGTCATCTGGTCCTTCCACCTGGCTGGGCATGGGAT
GGTGACCTCAGCTGGAACATGGGGCTCGAGCCAGACCCCAGGGTCTCCCTGCGTGTAGCCCCCAACCCCAAGCCT
GATCCCCACTGGAGACCTGAACAGCCTTGGACATCATCGGATCAGGGTGGGAGGTGCCAGCCTCTGCCACCTGAC
TTCCAGTCCCTGTGCCCCTCCCACCCTGCCCTTGGGCACTCCTGCCCTGCAGGTTCCTCAGAGGGGCAACCCAAA
GCCAGAGAGGGGCGGGTCTTGTCGGGCCTCCAGCCTGGACTTCCCAGCCCCTCTGGGGCAGCATCTGGGTGCCAG
ACCTCGGTTCCTAGGGCCTCGTTTCTCCCTCTGGGAACAGCCAAATGGTGGTCCCTGAGACTCAGGACAGACCAA
GAAGGAGCCGGATGACATGGCAAGCCACACACTGCGTCCCCTGAGCAGGACGGGACAGCCCGACTCCATCCTCCC
ACCTGCGACTGAGCCCCCACCCCTACTCCTGTCCCAGCCGTGCCCCTGGTGACATTTGGGTGGGAGGGGAGGGGA
TGAGGGGGCACCTGGGGGTCAGAGAACAAATGACGGGTGAATACATGTGTGTGGCCAGGTGGAGGAGGGAGGGGA
GGAGCAGGTGGGCTGGACAGGGCCGGTGTGAGGAAGGGGCTCAGGCTGGCAGGGGGAGGTGGCAGAGGGATGGGC
TGCCATTGGTGCGTCTGAGACAAAGGCGGAGGGAGGAGGCGAGCGCTGATGGGAAAGGAACAAAGAGGGAAGGGG
GGCGTGAAGGGGGGCTCCGGCGGGAGGGCCGAGCCGAGGGAGGAGGCGCCGGCCAGCTGGACAGAGGGAGGAGGC
CAGGCCAGAGCCAGAAGACGGCCAGAGGCACAAAGAAGCCAGCGCGCTGGCAGAGTCAAGGGATGGGGCAGGGGC
TGCCGGGGCCAGCAGGGACCAGCTGAAGGCTGCGCAGGGGGTGCGGGCCACACAGGTAGCCACCCTGAGCTCAGC
CACCGATGGAGGGTCGTGGGGCTGCTGCGGTGATGGCGGTGGGCTTGGGTCCATCTGTCCTGCCGTTTCTGCACA
GCTTAGGTGTCACCCACTGGCCTTCGTGGTGTTTTCATTGTCCATCGGCAGGGACAGCTGGTGGTCTGTCCGCCC
CGCGTGTCTGGCTGTCAGCCTCTGGGCAGGCTTGCTTTTATGGGGGAGGGTCCTGTCTGTCTGTCTGTCGCCCTC
TCTGGCTGTGAGCCTGGGGGTGCTGGGCTGGCCAGTCGGCTTGCTGGGTTAGGCTGTCCCAGCTGTCTGTGTGTT
TGTCCGGCTGTCAGGATGTGTCCTGGGGGCTGGGAAGGAGAGGCCGACCCATCGTCTGTCGGTCGACTGGTCAGT
TGGACGTTCAGCTGTCTGTACGTCTGTCTGCTGGCCCCTCTGTCTCCCCTTGGGGCCACCTCTCACTCCACCTGC
CCCTCTGCGCCCCGGATTGCCTGGCCACCACCACGTGGGCCTGTACTTGTCCACACCAGTGACTCCTGCCTGAGA
CCCCCCCCAACCCAGGATCAGGCAGGACGGCTGGGGCTTAGGTCAGGGGCCGTCTGTCCGGAAGGCATCACCGCG
CCCTCCCCAGACCATCAGCTGAACCCTCTGACCCTGTGATCCCAGACGCTGCAGGAGCTGAAG**ATG**GCGAGCTCC
GTGGCGCCCTACGAGCAGCTGGTGAGGCAGGTGGAGGCCTTGAAGGCTGAGAACAGCCACCTGAGGCAGGAGCTA
AGGGACAACTCCAGCCACCTGTCCAAGCTGGAGACAGAGACGTCGGGCATGAAGGAGGTCCTGAAGCACCTACAG
GGAAAACTGGAGCAGGAGGCCCGAGTGCTGGTGTCCTCGGGGCAGACGGAGGTGCTGGAGCAGCTGAAGGCCCTA
CAGATGGACATCACCAGCCTGTACAACCTCAAGTTCCAGCCGCCCACCCTGGGCCCGGAGCCTGCCGCCCGGACC
CCCGAGGGCAGCCCAGTACACGGCTCCGGGCCCTCCAAGGACAGCTTTGGGGAGCTGAGCCGGGCCACCATCCGG
CTGCTGGAGGAACTGGACCGGGAACGGTGTTTCCTGCTGAATGAGATTGAGAAGGAGGAGAAGGAGAAGCTCTGG
TACTACTCTCAGCTGCAGGGCCTGTCCAAGCGCCTGGACGAGCTGCCGCACGTGGAGACGCAGTTCTCGATGCAG
ATGGACCTGATCCGGCAGCAGCTTGAGTTCGAGGCCCAGCACATCCGCTCGCTGATGGAGGAGCGCTTCGGCACC
TCGGACGAGATGGTGCAGCGGGCACAGATCCGCGCCTCGCGCCTGGAGCAGATTGACAAGGAGCTGCTGGAGGCG
CAGGACCGAGTGCAGCAGACGGAGCCCCAGGCCTTGCTGGCGGTGAAGTCGGTGCCGGTGGACGAGGACCCCGAG
ACAGAGGTCCCCACACACCCTGAGGATGGCACCCCTCAGCCGGGCAACAGCAAGGTGGAGGTGGTCTTCTGGCTG
TTGTCCATGTTGGCGACGCGCGACCAGGAGGATACAGCGCGCACGCTGCTGGCCATGTCCAGCTCGCCCGAGAGC
TGCGTGGCCATGCGCCGCTCGGGCTGTCTGCCTCTGCTGCTGCAAATCCTCCACGGCACCGAGGCCGCGGCCGGG
GGTCGCGCCGGGGCCCCAGGGGCACCGGGCGCCAAGGACGCACGCATGCGCGCCAACGCGGCGCTGCACAACATC
GTCTTCTCGCAGCCGGACCAGGGCCTGGCGCGCAAGGAGATGCGCGTCCTGCACGTGCTGGAGCAGATCCGGGCC
TACTGCGAGACCTGCTGGGACTGGCTGCAGGCCCGAGACGGCGGGCCCGAGGGAGGTGGCGCCGGCAGCGCCCCG
ATCCCCATCGAGCCGCAGATCTGCCAGGCCACCTGTGCTGTTATGAAGCTGTCCTTTGATGAGGAGTACCGCCGT
GCCATGAACGAGCTAGGTGGGCTGCAGGCCGTGGCAGAGCTGCTGCAGGTTGACTATGAGATGCACAAGATGACC
CGGGACCCGCTGAACCTGGCGCTGCGCCGCTACGCGGGCATGACCCTCACCAACCTCACCTTTGGGGACGTTGCC
AACAAGGCCACCCTGTGTGCGCGCCGCGGCTGCATGGAGGCCATCGTGGCCCAGCTGGCCTCCGACAGTGAGGAG
CTCCACCAGGTGGTGTCCAGCATCCTTCGGAACTTGTCCTGGAGGGCCGACATCAACAGCAAGAAGGTGCTGAGG
GAGGCGGGCAGCGTGACTGCCCTGGTGCAGTGTGTCCTGCGGGCCACCAAGGAGTCCACCCTGAAGAGCGTGCTG
AGCGCCCTGTGGAATCTGTCTGCACACAGCACAGAGAACAAGGCGGCCATCTGCCAGGTGGATGGCGCCCTGGGC
TTCCTGGTGAGCACCCTGACCTACAAGTGTCAGAGCAACTCGCTGGCCATCATCGAGAGCGGCGGCGGCATCCTC
CGCAATGTGTCCAGCCTCGTCGCCACCCGTGAGGACTACAGGCAGGTGCTCCGGGATCACAACTGTCTGCAGACG

FIGURE 3574B

CTGCTGCAGCATCTGACTTCGCACAGCCTGACCATCGTGAGCAACGCGTGCGGCACGCTCTGGAACCTGTCGGCC
CGCAGCGCCCGTGACCAGGAGCTGCTGTGGGACCTGGGCGCCGTGGGCATGCTGCGTAATCTGGTGCACTCCAAG
CACAAGATGATCGCCATGGGCAGCGCCGCCGCCCTGCGCAACCTGCTGGCCCATCGGCCCGCCAAGCACCAGGCG
GCCGCCACCGCCGTGTCCCCAGGCAGCTGCGTGCCCAGCCTGTACGTGCGCAAGCAGCGGGCGCTGGAGGCCGAG
CTGGACGCACGGCACCTCGCGCAGGCGCTGGAGCACCTGGAGAAGCAGGGCCCGCCGGCAGCCGAGGCCGCCACT
AAGAAGCCGCTGCCGCCCCTGCGACACCTGGACGGCCTGGCCCAAGACTATGCTTCCGATTCGGGCTGCTTTGAC
GACGACGATGCACCGTCATCCCTGGCTGCGGCCGCGGCCACCGGGGAGCCAGCCAGCCCTGCCGCGCTGTCCCTC
TTCCTGGGCAGCCCCTTCCTGCAGGGGCAGGCGCTGGCTCGCACCCCGCCCACCCGCCGAGGCGGCAAGGAGGCA
GAGAAGGACACCAGTGGGGAGGCAGCCGTGGCGGCCAAGGCCAAGGCCAAGCTGGCGCTTGCAGTGGCGCGCATC
GACCAGCTGGTGGAGGACATCTCCGCCCTGCACACCTCGTCCGACGATAGCTTCAGCCTCAGCTCTGGAGACCCG
GGACAGGAGGCGCCACGGGAGGGCCGCGCCCAGTCCTGCTCGCCATGCCGCGGCCCGGAGGGCGGGCGGCGAGAG
GCAGGAAGCCGGGCGCACCCGCTGCTGCGGCTCAAGGCGGCCCACGCCAGCCTCTCCAACGACAGCCTCAACAGC
GGCAGTGCCAGCGACGGGTACTGCCCACGCGAACATATGCTGCCCTGCCCGCTGGCCGCACTGGCTTCGCGCCGC
GAGGACCCCAGGTGTGGGCAGCCTCGGCCCAGCCGGCTTGACCTTGACCTGCCCGGCTGCCAGGCCGAGCCCCCG
GCCCGCGAGGCCACCTCCGCCGACGCCCGCGTGCGCACCATCAAGCTGTCGCCTACCTATCAGCACGTGCCACTG
CTTGAGGGTGCCTCAAGGGCGGGTGCAGAGCCCCTCGCGGGGCCTGGAATCTCTCCAGGGGCCCGGAAGCAGGCC
TGGCTGCCGGCAGACCACCTGAGCAAGGTTCCCGAGAAGCTGGCGGCTGCCCCGCTGTCTGTGGCCAGCAAGGCA
CTGCAGAAACTGGCGGCGCAAGAGGGGCCACTCTCGCTGTCCCGATGCAGCTCCCTTTCCTCGCTGTCCTCGGCC
GGCCGCCCAGGCCCCAGCGAGGGTGGTGACCTGGATGACAGTGACTCCTCCCTGGAGGGGCTGGAGGAGGCCGGC
CCCAGCGAGGCTGAGCTGGACAGCACGTGGCGGGCGCCCGGGGCCACCTCGCTGCCCGTAGCCATTCCGGCTCCC
CGGCGTAACCGAGGCCGGGGCCTGGGGGTGGAAGACGCCACGCCGTCCAGCTCGTCGGAGAACTACGTGCAGGAG
ACACCGCTTGTGCTGAGCCGCTGCAGCTCTGTGAGCTCGCTGGGCAGCTTCGAGAGCCCGTCCATCGCCAGCTCC
ATCCCCAGTGAACCTTGCAGCGGGCAGGGCAGCGGCACCATCAGCCCTAGCGAGCTGCCCGACAGCCCCGGACAG
ACCATGCCTCCCAGCCGGAGCAAGACGCCACCGCTGGCGCCCGCGCCACAGGGTCCCCCCGAGGCCACCCAGTTC
AGCCTGCAGTGGGAGAGCTACGTGAAGCGCTTCCTGGACATCGCCGACTGCCGGGAGCGCTGCCGGCTGCCATCT
GAGCTGGACGCAGGCAGCGTGCGCTTTACCGTGGAGAAGCCAGACGAGAACTTCTCGTGCGCCTCCAGCCTCAGC
GCGCTGGCCTTGCACGAGCACTACGTGCAGCAGGACGTGGAGCTGCGGCTGCTGCCCTCGGCCTGCCCCGAGCGC
GGCGGGGGCGCCGGGGGCGCCGGCCTCCACTTTGCAGGGCACCGGCGGCGGGAGGAGGGGCCGGCGCCCACGGGT
TCTCGCCCTCGCGGCGCCGCGGACCAGGAGCTGGAACTGCTGCGGGAGTGCCTGGGAGCCGCCGTGCCTGCCCGG
CTGCGCAAGGTGGCCTCCGCGCTGGTGCCAGGTCGCCGCGCACTCCCCGTGCCCGTCTACATGTTGGTGCCCGCC
CCGGCCCCGGCCCAGGAGGACGACTCCTGCACTGACTCCGCGGAGGGCACGCCGGTCAACTTCTCTAGCGCCGCC
TCGCTCAGCGACGAGACGCTGCAGGGACCCCCCAGGGACCAGCCCGGGGGACCAGCGGGCAGGCAAAGACCCACC
GGCCGCCCCACCTCTGCCAGACAGGCCATGGGGCACCGGCACAAGGCGGGAGGCGCCGGCCGCAGCGCGGAGCAG
TCTCGGGGCGCGGGCAAGAACAGAGCAGGGCTGGAGCTGCCCCTGGGCCGGCCCCCGAGCGCCCCCGCAGACAAG
GACGGCTCAAAGCCCGGCCGGACCCGCGGGGACGGGGCGCTCCAGTCGCTGTGCCTCACGACGCCCACTGAGGAG
GCCGTGTACTGCTTCTACGGCAACGACTCGGACGAGGAGCCCCCGGCGGCCGCGCCCACGCCAACCCACCGGCGC
ACATCGGCCATCCCTCGCGCTTTTACGCGGGAGCGTCCGCAGGGCCGGAAGGAGGCCCCTGCCCCGTCCAAGGCT
GCACCAGCTGCCCCGCCGCCCGCCCGGACCCAGCCCAGCCTCATTGCTGACGAGACCCCGCCCTGCTACTCCCTG
AGCTCCTCCGCCAGCTCCCTCAGCGAGCCCGAGCCCTCGGAGCCGCCGGCCGTCCATCCACGAGGCCGGGAGCCC
GCGGTCACCAAGGACCCGGGCCCAGGAGGCGGACGCGACAGCTCGCCCAGCCCGCGGGCCGCGGAGGAGCTTCTG
CAGCGGTGCATCAGCTCGGCCCTGCCCAGGCGCCGGCCCCCCGTGTCTGGCCTGCGGCGCCGCAAGCCCCGAGCC
ACCCGGCTGGATGAGCGGCCCGCAGAGGGGTCCCGGGAACGCGGCGAGGAGGCAGCGGGCTCGGACCGGGCCTCC
GACCTGGATAGCGTGGAGTGGCGCGCCATCCAGGAGGGCGCCAATTCAATTGTCACGTGGCTGCACCAGGCAGCA
GCTGCCACGCGGGAGGCCTCGTCCGAGTCCGACTCCATCCTGTCCTTCGTATCCGGGCTGTCAGTGGGATCCACC
CTACAGCCCCCCAAGCACAGGAAGGGACGACAGGCGGAGGGAGAAATGGGCAGTGCCCGGCGGCCAGAGAAAAGG
GGCGCAGCCTCAGTCAAGACCAGCGGGAGCCCCCGTTCCCCTGCAGGCCCCGAGAAGCCACGTGGCACACAGAAG
ACCACGCCCGGGGTGCCAGCTGTGCTCCGGGGACGAACAGTGATCTACGTCCCCAGCCCGGCACCCCGTGCCCAG
CCCAAAGGGACCCCCGGCCCCCGCGCCACACCGCGGAAGGTGGCGCCCCCTTGCCTGGCACAGCCCGCGGCTCCA

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FIGURE 3574C

GCCAAAGTCCCGAGCCCCGGGCAGCAGCGGTCGCGGAGCCTACACCGGCCTGCCAAGACCTCGGAGCTGGCGACG
CTGAGCCAGCCCCCCAGAAGCGCCACACCGCCCGCCCGCCTCGCCAAGACCCCCTCCTCCAGCTCCTCCCAGACC
TCGCCCGCCTCCCAGCCCCTGCCCAGAAAGCGCCCCCCGGTCACCCAGGCTGCTGGGGCCCTGCCCGGCCCCGGA
GCCTCCCCGGTGCCCAAAACGCCGGCGCGCACCCTTCTGGCGAAGCAGCACAAGACGCAGAGATCGCCCGTGCGG
ATCCCGTTCATGCAGAGGCCGGCCCGGCGTGGGCCGCCACCGCTGGCTCGGGCAGTCCCGGAGCCGGGCCCCAGG
GGCCGGGCGGGGACCGAGGCGGGCCCGGGGGCGCGCGGGGGCCGCCTGGGCCTGGTGCGTGTGGCCTCAGCCCTC
TCCAGCGGCAGCGAGTCCTCCGACCGCTCGGGCTTCCGGCGACAGCTAACCTTCATCAAGGAGTCGCCGGGCTTG
CGGCGCCGCCGCTCCGAGCTGTCCTCGGCCGAGTCCGCGGCCTCTGCCCCCCAGGGCGCCTCGCCCCGCCGCGGC
CGGCCCGCGCTGCCCGCCGTCTTCCTCTGCTCCTCGCGCTGCGAAGAGCTCCGAGCGGCACCCCGGCAGGGCCCG
GCCCCGGCCCGGCAGCGGCCCCCCGCGGCCCGACCCAGCCCTGGCGAGCGCCCTGCCCGGCGCACCACCTCCGAG
AGCCCGTCCCGCCTGCCTGTGCGCGCGCCCGCCGCCCGGCCGGAGACTGTCAAGCGCTACGCGTCGCTGCCGCAC
ATCAGCGTGGCCCGCAGGCCCGACGGCGCCGTCCCCGCGGCCCCTGCCTCAGCCGACGCCGCGCGCCGCAGCAGC
GACGGGGAGCCCCGGCCGCTCCCCAGGGTGGCCGCGCCGGGCACGACCTGGCGGCGCATCCGAGATGAGGACGTG
CCCCACATCCTGCGCAGCACGCTTCCCGCCACGGCCCTGCCACTGCGGGGCTCCACGCCCGAGGACGCCCCGGCC
GGGCCCCCGCCGCGCAAGACCAGCGACGCCGTGGTCCAGACCGAGGAGGTCGCCGCCCCCAAGACCAACTCCAGC
ACGTCCCCGAGCCTGGAGACCAGGGAGCCCCCCGGGGCCCCCGCCGGCGGCCAGCTCTCCCTCCTCGGCAGCGAC
GTGGACGGTCCCAGCCTCGCCAAGGCTCCCATCTCCGCACCCTTCGTGCACGAGGGCCTGGGGGTCGCCGTGGGG
GGCTTCCCCGCCAGCCGGCACGGCTCCCCCAGCCGCTCGGCCCGAGTACCCCCCTTCAACTATGTGCCCAGCCCC
ATGGTGGTCGCAGCCACCACCGACTCGGCCGCGGAGAAAGCCCCGGCCACTGCCTCCGCCACCCTCCTGGAA**TAG**

TGGCCTAGGCCGGCCTTCTGGAACGTTCTCTCCCGGCCCTGCGGCGCGGTCTGGCTGCCCCATGGGCCTGCGCTG
TAGACGTCCCCCATAGGTCGCCCCAGGGCCTCTGCCCACCCGAGCCCCACCACTCTCAGAACCCCCGCCCAGCGC
ACGGCGACCTCGCGCCTCACCGGAAGACCTTGCCTCTGTGCCGCGGAGGTCCAGGAGGAAACGGGGCGGCCGCTA
GGCCTCAAGTCCCGACCGTGGAGCGCTGGCAAGGGCGTCCTGGCCCAGCCCTGAGCGCGCGGCCCTTCCCCTGTC
GGAAGCCGTTGCTTGACCCCGGGCGAGGGAGGCGGTAGCCTCCGGGTCCGGGTCTGGGTCTGGGTCCGCTGCTTC
GCAGGGACAGCGCTGGGGAGGTGACGGCGCCCGCCGCAGGTGGGGCGAGGCTGGGGGAGGGCGGCGCCGCGGCGG
GCCTGCCAGCTGGGGGCCTTTGCGGCGCGCAGGGGCGAAGCCTGTAATCACTGCAGCCGCCGGTAATTCGCTAAT
GAGGGCTTTGCAGGGATTGTTTTCATTCTCAGCCCCAGCTGTGGGAGTGCGGGTGGGGGTGTGGCCGAGCCCCGG
CAGGAAGCCCCGCCCAGACGGTGTTCAGGGAACCCGGAGCCCAAGCGCTCCGGCGGAGCCCAAAAGGGTGGGGGT
GGGAGGGGCAGAGGCCAACGGATCCCCCTGCCTGTCGCACCCCTTGGCGGGAGACGGGAAGGCAGCGGGCTGCGT
ACGATGGGACCCTGGTGCAGACGCCGGGCCGGCTGACATTTGGACCCCATCCCAGAGGAGATGCTGGCTACCAGC
TGGGGCGACCCCAAGGGTCGCTGGAGTCAGTATCGGCCCGGCGCAGCCGCGGCGGGCGAGGCCAATGGAAAGGAG
ACTGAGGGGAGTCCCGGCAGTGAGCCCGAGGCCCTGGGACCTGGAGCCCGCGCTGGCCTCTCCCCAGCGGAGCCT
GCACGTTACGGAGACCATCACATGTGGGCGTGGTCAGTGCCCAGGACCGCACCGCTGCTCATCTTGTCCCTTTTC
AATTCCCTTCTGGTTCATGATGCATAAAGCGCTAGGCCCTAGAACTCCAGAAACAGCACAGCTGGGGCGGGGACC
CAGCCTTGCCCTCCACCCGAGGCTCTGGGACAAGGCGGGAGGTTCGGGGGCCTTCCGGCAGGTGAACGCAGGGCT
GGAGAGTATTTGGTGCCAGATGAGGTGAAAGCTTATAGAAGGGCCTGAGGGGCTCGGCTGCCTCATCCCCTGGCG
GGGGAGGCTGGGAGCTGGGCCTCCTGCGTGGGGTGGGACTCGCAGGGGCCGGGTCTCCGTGACTGGGGCAACGCC
TCGTCCTGCAGAGGGAGCCGACGACCTCTTTTCTGCAGAAAAGCTCCAGCAGGCGCTGCCTTCACCCACGGATCT
GCCCAGGCTGAAGGCACACGCTCAATGCCCCACGTGCCTTCTCCAGGAGGAACGAAGCAGGGTTTGAGGGTTGGG
TGGATGGAGCTCAGAAGGAAACCCCAGCCCCACCACGGATGACACCATCCCTCCCGTCCCATCCCCAGCATGGGC
AAGGCCAGCCTTTCTGGCAGAAGGAGCTGTCCTCAACTCAGGGCCGCTGTGAGCAAAGCTGACCCCAGCCCCCAC
CCCCAGTTAACACTGCTGCTTCTCTGAATGCATGTCACGCTGCACCCCATGCTCCGGGCCCACACCCTGCAGGAC
AAGGAGCTCCAGACAGGACGTCCATAAGTCACCGAGGTGTGCCACCCAGCAGGTGCTGGAGGTGCCCAATGCTCC
CTCCTAGGACCTCGCAGCCAGGCAAGGCTGTCAGGTTGTTTTGGGGGAAGAGGGGGTCATGGATGGCTGAGCAGA
GAGCGGGGAAAATGCAGGCTGAGTGGGGCGACCTCCTGCCTGCCAGGAGCCCCCTTTCAGGACACAGCGGGGGTC
TCACACTTGCTGTCCCCATCCATGGCCCGAGGGGGAACCTGGTGGTCTCTTCTGAGCTTTTGGACTTGGGGATGC
CAAACACGTGCTCACCCTCACACTCGCCCCGGCCCGCTGCGCCCCTAATTGCCAAAGGGTAGGGAAATGGCGAAG
CCAGCCACCAGGTCGCTGGTGACAGGGCCAGGGTTATGCAGGAAGGTGGTGCGGCATTGCCTTCCACATATGTAA

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FIGURE 3574D

GTCTCTGGGCGGCGCCCTCCCAGCTCCCTGCCTCTGTTTCCCCATGTGGGCCGTGGGGAACTCCCAGAGCTACCT
CTTGGGGGAGCGTGGTGGCAGCGATGATGGGGAGACGCCTGGAAGCTCACAGAACTTGGGTCTGGCTGGCTCCTG
CCCGTGACGCCTTGCCCAGCAGCAAGGTGCGCAACATGGCTGCCAGCCCCGCCTCCCACCCCCACCCCGAGTCCT
GAGCTCACTTTCGCCTTCTCCATCCCCTGCCGTGGGGGCCACAGCCACACCTCACCGCCCAGTCCAGCTGTCTCC
AGAAGGGGACAGGCAGTCCGCGGTCTCTGGACAATCAACTCAAGGTACGCCCACTGCAAGGCCTCCCTCCCACCG
CGGCCCCTGCCTGGCCACCTGGCCTCTCTGCACCAGGGTGACAAGGGGTCCTCGTCTGCCCCCCAATGCTCCAGG
GCCAGTCCTAAGGAGCTGAGGGTCTGAGGACGCAGGGAGGGTGGAGGTGTCCTGAGGCTGATGGACAGTGACCGC
CACTGGCCCCCCAACATGACCACACGTGGGTGCTGAACTCGGGGCGCCGTGCCCACCGGCATGGTCCTCCCGAGCT
CCGACAGCATTACCTCACCCGGCCCCATCTGTTGCCCCGGTCCAGCCCTGATGGCGCGCGCCTGGTCTGTCTGAT
TCCCCTAGCCGCCACCCCACGTTTCTGTACCGGGTCTCTGCAGTGTTAAACGGACGTGTAAATAGTGGTAAATAG
TGAAAGCCTGTCCTTCCCTAAATGTAAAGCCATCTGTCCGGCGTAAGGACGACACCGTCAGCTGTCCGACTCGCA
CACATTTAATAAACTGAGCTCTTGC

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FIGURE 3575

CGCGGGGAAACTGAGGCAGAGAGATGGGCTCCAAGGCAAAGAAGCGCGTGCTGCTGCCCACCCGCCCAGCGCCCC
CCACGGTGGAGCAGATCCTGGAGGATGTGCGGGGTGCGCCGGCAGAGGATCCAGTGTTCACCATCCTGGCCCCGG
AAGGTAGGGGGAGCCCGGTCCCGGGGAAAAGCGGACCTGAGACCCCGGCAGCAAGGGGACGGGAGAGAAGCACAC
CCCTAACTCCTGACCCCACGCCCTGGGAACCCCCGCAACATGGGCACGGTCCGTATCCTCTCCGAGTCTCCCTCT
ACTCCTCCGTAGAGTGGGACCGATTTTCAGAGGGTTCTTCTGACAGGGGTGGAGGCCGGGCGCTGTGGTTCAGGC
CTGTAAGCCCAGCACTTTCGGAGGATGAGGCGGGAGGATCGCTTGAGCCCAGGAGTTCGAGACCAGCCTGGCCAA
CATGGTGAAACCCCGTCTCTGCTAAAAATGAAAAAACAAAAC

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FIGURE 3577

GCGGGCCGAGGAGCCGGGCGCAATGGAGCGGAAGAGGTGGGAGTGCCCGGCGCTCCCGCAGGGCTGGGAGAGGGA
AGAAGTGCCCAGAAGGTCGGGGCTGTCGGCCGGCCACAGGGATGTCTTTTACTATAGCCCGAGCGGGAAGAAGTT
CCGCAGCAAGCCGCAGCTGGCGCGCTACCTGGGCGGCTCCATGGACCTGAGCACCTTCGACTTCCGCACGGGCAA
GATGCTGATGAGCAAGATGAACAAGAGCCGCCAGCGCGTGCGCTACGACTCCTCCAACCAGGTCAAGGGCAAGCC
CGACCTGAACACGGCGCTGCCCGTGCGCCAGACGGCGTCCATCTTCAAGCAGCCGGTGACCAAGATTACCAACCA
CCCCAGCAACAAGGTCAAGAGCGACCCGCAGAAGGCGGTGGACCAGCCGCGCCAGCTCTTCTGGGAGAAGAAGCT
GAGCGGCCTGAACGCCTTCGACATTGCTGAGGAGCTGGTCAAGACCATGGACCTCCCCAAGGGCCTGCAGGGGGT
GGGACCTGGCTGCACGGATGAGACGCTGCTGTCGGCCATCGCCAGCGCCCTGCACACTAGCACCATGCCCATCAC
GGGACAGCTCTCGGCCGCCGTGGAGAAGAACCCCGGCGTATGGCTCAACACCACGCAGCCCCTGTGCAAAGCCTT
CATGGTGACCGACGAGGACATCAGGAAGCAGGAAGAGCTGGTGCAGCAGGTGCGGAAGCGGCTGGAGGAGGCGCT
GATGGCCGACATGCTGGCGCACGTGGAGGAGCTGGCCCGTGACGGGGAGGCGCCGCTGGACAAGGCCTGCGCTGA
GGACGACGACGAGGAAGACGAGGAGGAGGAGGAGGAGGAGCCCGACCCGGACCCGGAGATGGAGCACGTCTAGGG
CAGGTGCTGCGGGGCCACGGGGGCTCCCTGGAGTCGGGTCCTGGCAGTGGGGACTGCCTGGTGAACACAGATGTG
CTTGGGATGACGGGTGCCTCCCAAGAGCTTCCCATCTCCCTAGAAGAGCCCAAGCGTCCCCGTCCCGTGGAGTCG
CTAAAGCCAGCCCTCCCTGTCCTTTCCAGAGGCCCTGCCGAGAGCCCGTGCTGCCTGCTGGAGCCGCCTGCAGAC
GCGGTCCTCGGCCCCACGTGAACCAGGCTCGGCGGCGAAGCCCAGCCTTGGAGACACCCAGGAGGAAGGCCGTGC
TCCTGGCTCCCTCCTCGGCCCGTCCCCACTTCCCGGGGCCTCGGGGCACACAGCTGGGGCTGCCCCCACCCGAAA
GACCCTCCACGCTCGTCCTCTACAGAGTCCGGCTTCGGGAAGTGCCGGGTGCTCCTGGGCCCTGCCTGGCTCCCT
ACGACCTTTGGGCTCGAGGCCAGCTCCTCCCCATGCCCGCTGTCCCAGCTCCTTGAGACTGGAGAGCAGCCAGCA
GGTGCCCGGCAGCTCGGCGCCACGGCTTGCTGACAGCTGGGAGGGTTTCTCGGTCTGGAGGCGTAGTTTTGAAAC
TCACATCACCCACTGTGCAGCGTGAGGACGGGACTCTGGTCTGCTGTGGGGGGCATGCAGGACGGCGCCACTCTC
TGCCCTGCCATGCGGCTGGTGGTGCCACAGAGCCTCACCGTGCCTGAGTGGCATGCCCAGGAGGCCGCTCTCCTT
CAGTAAATGTAACACAGTCGAGGCACGTCATCGGGCAGCCTTCCCTGTGTGCCAACGCCAGCCTTCGCTTCTGAA
AACCAAACTCCAGCCGCTGCCAGTCGGGACTTGGTCGCCCGGCGCTGCCAGAATGCTCCACTGCCAGCCGGCCCC
CCTGCCTCGGTTTCCCTTCTGTTTAGTGGCGACACAGGCACCCAGCTTTGGGGTGGTGCTGACGCTCCCAGGGGT
GCCAGGAGCCACTGGGACAGGGTGAGGCTCCCAGACGCTCCTCGAGGTGCCCAGCTCTCCAGGGAGCTTCTGGCC
CAAGGCCGTCTGAGGGATCTGCTCCTTAACCCCCCAGTGCCTTGGCGAGGGCAGGTTCCAAGCCACAGACGCCTG
CCCCGAGTGGACTCTGCGGCCAGTCCCTGGTGCCCTCCTGGCCCTGCTGCCCAGTGAGGGCTCCTACGGGTGGGT
TCATTGGCCTGGGCCCAGCGAGCCCCCACCTGCATTGACCTTAGGCCCATAGAGAGGGCCTGTCCCGGTGCTGCC
CCAGCCAGGATCTGGTCGCTGCCCCAGGGGGACTGATGGGCAGAGTCGCCCCTGTGGCTGGACTGTGACCATCCC
TGATGGGGCCTGACCGCGGGAGCTGAGGAAGCGCCGCTCCACCGTCTGCCCTCCAAGGACCCGCATGGAGGCAGT
GGGCTGGCAGCTTCCTGCTGCTCCCTGTCAGAGTCAAAGCACAAATCCTCAGGACGGGCTCAAGGGCCAGGGCAG
CCGAGGGAAGCTCCAGGTGGGGACCACGTCTTCCTGAGGTTGGTGCCCACTGGCTGGGACCCTTTGCAGTGGGGT
GGCCTCCCCTCTGTCTGCCTGGTGGAGGGAGCCGTGGGCGTGGGGACGTGACTGAATAAAGCCACCATGGGTGGA
TGTGCTTGG

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FIGURE 3578

AGTGTAGCCGGGTCAGCTGGACAGGGTCATCCTGAGGGTGCGACTCCGCCGCG**ATG**GTGACCCGGTTCCTGGGCC
CACGCTACCGGGAGCTGGTCAAGAACTGGGTCCCGACGGCCTACACATGGGGCGCTGTGGGCGCCGTGGGGCTGG
TGTGGGCCACCGATTGGCGGCTGATCCTGGACTGGGTACCTTACATCAATGGCAAGTTTAAGAAGGATAAT**TAA**T
TACACAAACCCTTCACAGACTGCTCTGGTGCCTGGTGGTGCTAGCTCCTCCCACCTCAGCACCTGCTGCATCTGG
AGCAGCCCAAGCCTCAGGATGGACAAGAGGAAACCCACAGCTCAGCTTCAGGCTTCTTATGTTTCTGAAAACAGC
TTGGATATTTTAATGCACGTTGCATTAAACCTCACTGAAACCTGCTCCGTGCCCGGATGTTGATCATGCTGGTGG
CTTGGTTACTGTGACTGTAGCTGGAGTGGCACAGGTGACCCAGGCGTCCTTTCAGCTCCAGAATGTTGCAAGTCT
AGGAGAGTGTTCCAATGGCTGACAGAAACTGCCTATTTGAAATGGCTCATAAGTAGTATCTGCAGTGTGTTCATC
CGTTGCTGCCTTAACAAGTCACCCACACGTAGTGGCTTAAAGCAACGAACATTCACTCTCTCACAGTCTGTGTCA
GTCGGGGATTTGGGAGTGATGTATCTGGGTGGTTGTGGCCCAGAGTCTCTCATGAGGTTGCAGTTAAGACATCAG
CCAAGGCCACTTCGTCTGAGGAAGGCTCAACTGGGGCTGGAGCCACTTCCAAGCCAGTGCCCTCACGTGGCTGTC
GGTGACAGCCACAGTTCCTTCCCATGGGGGCCCCTACACGAAGCTGCTTGAGCATCCTCACGGCATGGCCTCTGC
CTTCCCCAGAGCAGGTGAACCAAGGGAGAGGAAGGAGCAAGCCACAGTGCTTCTATGAGCCACCCTGAGAAGTCT
CACGTGATCACTTCCGCCACAGCCTGTTTATCAAAAGCAAGCCCCCCAGGCCCAGCCCACGTGCAGAGGGAGGAG
AATGAGGTTCTGTGTTTTGAAGGGAAGAATATCAGAATTGGTAGACATTTCAAACTGTCACATTAGGGATACAAA
AATGAACAGGCTGGGAGTGGTGGCTCAGCCTACAATCCCAACACTTTGGGAGGCTGAGGAAGGGGCATCACTTGA
ACCAGGAGTTCAGTACTAACCTGGGCAACAAAGAGGCCCCTGTCTCTGATAAAAAGAAAAAAAATGAAAAAATAA
AAATGAACAGGTATAAAAAG

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FIGURE 3579A

GCCTGAGGTGCCCGCCCTGGCCCCAGGAGAATGAACCAGCCGCAGAGGATGGCGCCTGTGGGCACAGACAAGGAG
CTCAGTGACCTCCTGGACTTCAGCATGATGTTCCCGCTGCCTGTCACCAACGGGAAGGGCCGGCCCGCCTCCCTG
GCCGGGGCGCAGTTCGGAGGTTCAGGTCTTGAGGACCGGCCCAGCTCAGGCTCCTGGGGCAGCGGCGACCAGAGC
AGCTCCTCCTTTGACCCCAGCCGGACCTTCAGCGAGGGCACCCACTTCACTGAGTCGCACAGCAGCCTCTCTTCA
TCCACATTCCTGGGACCGGGACTCGGAGGCAAGAGCGGTGAGCGGGGCGCCTATGCCTCCTTCGGGAGAGACGCA
GGCGTGGGCGGCCTGACTCAGGCTGGCTTCCTGTCAGGCGAGCTGGCCCTCAACAGCCCCGGGCCCCTGTCCCCT
TCGGGCATGAAGGGGACCTCCCAGTACTACCCCTCCTACTCCGGCAGCTCCCGGCGGAGAGCGGCAGACGGCAGC
CTAGACACGCAGCCCAAGAAGGTCCGGAAGGTCCCGCCGGGTCTTCCATCCTCGGTGTACCCACCCAGCTCAGGT
GAGGACTACGGCAGGGATGCCACCGCCTACCCGTCCGCCAAGACCCCCAGCAGCACCTATCCCGCCCCCTTCTAC
GTGGCAGATGGCAGCCTGCACCCCTCAGCCGAGCTCTGGAGTCCCCCGGGCCAGGCGGGCTTCGGGCCCATGCTG
GGTGGGGGCTCATCCCCGCTGCCCCTCCCGCCCGGTAGCGGCCCGGTGGGCAGCAGTGGAAGCAGCAGCACGTTT
GGTGGCCTGCACCAGCACGAGCGTATGGGCTACCAGCTGCATGGAGCAGAGGTGAACGGTGGGCTCCCATCTGCA
TCCTCCTTCTCCTCAGCCCCCGGAGCCACGTACGGCGGCGTCTCCAGCCACACGCCGCCTGTCAGCGGGGCCGAC
AGCCTCCTGGGCTCCCGAGGGACCACAGCTGGCAGCTCCGGGGATGCCCTCGGCAAAGCACTGGCCTCGATCTAC
TCCCCGGATCACTCAAGCAATAACTTCTCGTCCAGCCCTTCTACCCCCGTGGGCTCCCCCCAGGGCCTGGCAGGA
ACGTCACAGTGGCCTCGAGCAGGAGCCCCCGGTGCCTTATCGCCCAGCTACGACGGGGGTCTCCACGGCCTGCAG
AGTAAGATAGAAGACCACCTGGACGAGGCCATCCACGTGCTCCGCAGCCACGCCGTGGGCACAGCCGGCGACATG
CACACGCTGCTGCCTGGCCACGGGGCGCTGGCCTCAGGTTTCACCGGCCCCATGTCACTGGGCGGGCGGCACGCA
GGCCTGGTTGGAGGCAGCCACCCCGAGGACGGCCTCGCAGGCAGCACCAGCCTCATGCACAACCACGCGGCCCTC
CCCAGCCAGCCAGGCACCCTCCCTGACCTGTCTCGGCCTCCCGACTCCTACAGTGGGCTAGGGCGAGCAGGTGCC
ACGGCGGCCGCCAGCGAGATCAAGCGGGAGGAGAAGGAGGACGAGGAGAACACGTCAGCGGCTGACCACTCGGAG
GAGGAGAAGAAGGAGCTGAAGGCCCCCCGGGCCCGGACCAGCCCAGACGAGGACGAGGACGACCTTCTCCCCCCA
GAGCAGAAGGCCGAGCGGGAGAAGGAGCGCCGGGTGGCCAATAACGCCCGGGAGCGGCTGCGGGTCCGTGACATC
AACGAGGCCTTTAAGGAGCTGGGGCGCATGTGCCAACTGCACCTCAACAGCGAGAAGCCCCAGACCAAACTGCTC
ATCCTGCACCAGGCTGTCTCGGTCATCCTGAACTTGGAGCAGCAAGTGCGAGAGCGGAACCTGAATCCCAAAGCA
GCCTGTTTGAAACGGCGAGAAGAGGAAAAGGTGTCAGGTGTGGTTGGAGACCCCCAGATGGTGCTTTCAGCTCCC
CACCCAGGCCTGAGCGAAGCCCACAACCCCGCCGGGCACATGTGAAAGGTATGCCTCCGTGGGACGAGCCACCCG
CTTTCAGCCCTGTGCTCTGGCCCCAGAACGGCCACTCGAGACCCCGGGCTTCATCCACATCCACACCTCACACAC
CTGTTGTCAGCATCGAGCCAACACCAACCTGACAAGGTTCGGAGTGATGGGGGCGGCCAAGGTGACACTGGGTCC
AGGAGCTCCCTGGGGCCCTGGCCTACCACTCACTGGCCTCGCTCCCCCTGTCCCCGAATCTCAGCCACCGTGTCA
CTCTGTGACCTGTCCCATGGATCCTGAAACTGCATCTTGGCCCTGTTGCCTGGGCTGACAGGAGCATTTTTTTTT
TTTCCAGTAAACAAAACCTGAAAGCAAGCAACAAAACATACACTTTGTCAGAGAAGAAAAAAATGCCTTAACTAT
AAAAAGCGGAGAAATGGAAACATATCACTCAAGGGGGATGCTGTGGAAACCTGGCTTATTCTTCTAAAGCCACCA
GCAAATTGTGCCTAAGCGAAATATTTTTTTTAAGGAAAATAAAAACATTAGTTACAAGATTTTTTTTTCTTAAT
GTAGATGAAAATTAGCAAGGATGCTGCCTTTGGTCTCTGGTTTTTTTAAGCTTTTTTTGCATATGTTTTGTAAGC
AACAAATTTTTTTGTATAAAAGTCCCGTGTCTCTCGCTATTTCTGCTGCTGTTCCTAGACTGAGCATTGCATTTC
TTGATCAACCAGATGATTAAACGTTGTATTAAAAAGACCCCGTGTAAACCTGAGCCCCCCCGTCCCCCCCCCCCC
CCGGAAGCCACTGCACACAGACAGAACGGGGACAGGCGGCGGGTCTTTTGTTTTTTTGATGTTGGGGGTTCTCTT
GGTTTTGTCATGTGGAAAGTGATGCGTGGGCGTTCCCTGATGAAGGCACCTTGGGGCTTCCCTGCCGCATCCTCT
CCCCTCAGGAAGGGGACTGACCTGGGCTTGGGGGAAGGGACGTCAGCAAGGTGGCTCTGACCCTCCCAGGTGACT
CTGCCAAGCAGCTGTGGCCCCCAGGGCTACCCTACACAACGCCCTCCCCAGGCCCCCCTAAGCTGCTCTCCCTTG
GAACCTGCACAGCTCTCTGAAATGGGGCATTTTGTTGGGACCAGTGACCCCTGGCATGGGGACCACACCCTGGAG
CCCGGTGCTGGGGACCTCCTGGACACCCTGTCCTTCACTCCTTTGCCCCAGGGACCCAGGCTCATGCTCTGAACT
CTGGCTGAGAGGATGCTGCTCAGGAGCCAGCACAGGACACCCCCCACCCCACCCCACCATGTCCCCATTACACCA
GAGGGCCATCGTGACGTAGACAGGATGCCAGGGGCCTGGCCAGCCTCCCCCAATGCTGGGGAGCATCCCTGGGCC
TGGGGCCACACCTGCTGCCCTCCCTCTGTGTGGTCCAAGGGCAAGAGTGGCTGGAGCCGGGGGACTGTGCTGGTC
TGAGCCCCACGAAGGCCTTGGGCTGTGCGTCCGACCCTGCTGCAGAACCAGCAGGGTGTCCCCTCGGGCCCATCT
GTGTCCCATGTCCCAGCACCCAGGCCTCTCTCCAGGTCTCCTTTTCTGGTCTTTTGCCATGAGGGTAACCAGCTC

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FIGURE 3579B

TTCGCAGGTGGCTGGGGACTGTCTTGGGTTTAAAACTGCAAGTCTCCTACCCTGGGATCCCATCCAGTTCCACAC
GAACTAGGGCAGTGGTCACTGTGGCACCCAGGTGTGGGCCTGGCTAGCTGGGGGCCTTCATGTGCCCTTCATGCC
CCTCCCTGCATTGAGGCCTTGTGGACCCCTGGGCTGGCTGTGTTCATCCCCGCTGCAGGTCGGGCGTCTCCCCCC
GTGCCACTCCTGAGACTCCCACCGTTACCCCCAGGAGATCCTGGACTGCCTGACTCCCCTCCCCAGACTGGCTTG
GGAGCCTGGGCCCCATGGTAGATGCAAGGGAAACCTCAAGGCCAGCTCAATGCCTGGTATCTGCCCCCAGTCCAG
GCCAGGCGGAGGGGAGGGGCTGTCCGGCTGCCTCTCCCTTCTCGGTGGCTTCCCCTACGCCCTGGGAGTTTGATC
TCTTAAGGGAACTTGCCTCTCCCTCTTGTTTTGCTCCTGGCCCTGCCCCTAGGTCTGGGTGGGCAGTGGCCCCAT
AGCCTCTGGAACTGTGCGTTCTGCATAGAATTCAAACGAGATTCACCCAGCGCGAGGAGGAAGAAACAGCAGTTC
CTGGGAACCACAATTATGGGGGGTGGGGGGTGTGATCTGAGTGCCTCAAGATGGTTTTCAAAAAAATTTTTTTAA
AGAAAATAATTGTATACGTGTCAACACAGCTGGCTGGATGATTGGGACTTTAAAACGACCCTCTTTCAGGTGGAT
TCAGAGACCTGTCCTGTATATAACAGCACTGTAGCAATAAACGTGACATTTTATAACG

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FIGURE 3580A

GCGGGCGGCGGCGACCGCGGCGCCAGTGAGGGGGCCCTGGGGCCCGGGCGGCTCCGGGCCGGGGCCCCGCCGCGG
GACGGACCATGCTACGCTCCACTGGCTTCTTCCGGGCCATTGACTGCCCCTATTGGTCTGGGGCGCCCGGGGGGC
CCTGCCGGCGGCCCTACTGCCACTTCCGGCACCGCGGGGCCCGGGGCTCCGGCGCGCCCGGTGACGGCGGAGAGG
CGCCCCCCGCAGCAGGGCTGGGTTACGACCCCTACAACCCTGAGCTGCCCAAGCCCCCCGCGCAGAGGGAGAATG
GCACCCTGGGCCTGGGGGAGGAGCCGCGCCCGGATGTGCTGGAGTTGGAGCTGGTCAACCAGGCCATCGAGGCCG
TGCGCAGTGAGGTGGAGCTGGAGCAGCGGCGCTACCGGGAGCTGCTGGAGACGACCCGTGAGCACCGCTCCGCCG
AGGCCCCCGCCCTGGCGCCCCGCGGCCCCAACGCCAGCCCCACTGTGGGCCCGGACGAGGATGCCTTCCCACTGG
CCTTCGACTACAGCCCCGGCAGCCACGGCCTATTAAGCCCTGATGCCGGCTACCAGCCCACCCCACTGGCCGCCC
CTGCCGAGCCGGGCAGCAAGTACTCGCTGGCGTCCCTGGACAGGGGTCAGGGCAGAGGTGGAGGGGGTGGCGGTG
CCCTGGAATACGTCCCCAAGGCTGTGAGCCAGCCCCGGCGGCACAGCCGCCCCGTTCCCAGTGGCAAGTACGTGG
TGGACAACTCCAGGCCACCCACAGACCTGGAGTATGACCCTCTCTCCAACTACTCGGCCCGGCACCTCAGCAGGG
CCAGCTCCCGGGATGAGCGGGCCGCCAAGCGGCCCCGGGGCTCCCGCGGCAGTGAGCCCTACACACCTGCTCCCA
AGAAGCTCTGTGACCCCTTTGGCAGTTGCGATGCAAGGTTCTCAGACTCAGAAGATGAGGCCGCCACGGTCCCAG
GTAACGAGCCCACCACGGCCAGCACCCCCAAAGCCAGGGCCGACCCTGAGATCAAGGCCACCGGGCAGCCACCCT
CCAAAGAGGGCCTGGAGGCCGAGGGGGGCGGCCTGCGGGAGACCAAGGAGACGGCCGTGCAGTGCGACGTGGGGG
ACCTCCAGCCGCCCCCAGCCAAGCCCGCCTCCCCAGCCCAGGTCCAGTCCTCACAGGATGGGGGCTGCCCCAAGG
AGGGAAAACCCAAGAAGAAAAAAACCGGGGCCCCACCTGCCCCCAGCTGCAAAGACGGGGCCCAGGGGAAGGACA
AGACCAAGGACAAGGGCCGAGGGCGGCCTGTGGAGAAGCCCCGTGCGGACAAGAAGGGCCCGCAGGCCAGCAGCC
CCCGGCGCAAGGCAGAGCGGCCGGAAGGGACCAAGAAGAAGCCATCTTCGGCCACTCCTGTGGCCACCTCAGGGA
AAGGGAGGCCTGACCGGCCAGCGCGGCGGCCGAGCCCCACAAGCGGGGACTCCCGACCGGCGGCCGGCAGAGGCC
CACCCCGCCCCCTCCAGCTGCCCGACAGGAAGAGCACCAAGGCCCCGTCGGGGAAGCTAGTGGAGCGGAAAGCCC
GCTCACTAGACGAGGGCGCCTCCCAGGACGCCCCCAAGCTGAAGAAGCGGGCCCTGAGCCACGCCGACCTCTTTG
GGGACGAGAGTGAGGACGAGGCCGCAGGGCCAGGGGTGCCGAGCGTGTGGCCCTCTGCCCTCCCCAGCCTCAGCT
CGGACTCAGACTCCGACTCAGACTCCAGCCTGGGCTTCCCGGAGGCGCAGGGGCCGCCCAAGCGGCTCAAGGCCT
CCCCGCCCCCCTCCCCCGCCCCATCCTCCTCCTCCTCCTCCTCCTCCACCTCCAGCGCGGGGGCGGATGTGG
ACTACTCGGCCCTGGAGAAGGAGGTGGACTTTGACTCCGACCCCATGGAGGAGTGCCTGCGGATCTTCAACGAGT
CCACCAGCGTCAAGACGGAGGACAGAGGCCGGCTGGCCCGGCAGCCCCCCAAGGAAGAGAAGAGTGAGGAGAAGG
GGCTTTCGGGTCTGACCACTCTGTTCCCCGGGCAGAAGAGGAGGATCTCCCACCTTTCCAAGCAAGGCCAGGAGG
TGGAGCCCCCGAGGAGGGGTCCCGCGGTGCCCCCGGCCCGGCCCCCGACGGCGCAGGAGGTGTGCTACCTGCGGG
CCCAGCAGGCGCAGAGGGCATCGGCGAGCTTGCTGCAGGCCCCCGCCAGGCTGGCAGAGAAGTCGCCCTCCGTCC
ACATTTCCGCCCCTGGCGAGAAGAGGAGGATCGCCCACATCCCCAACCCCCGCCTGGCTGCAGCCCCCACAGGTG
CCAAGAGGACCCTTGCGGCCAGCGGCAGCCAGTCCTCCAACGGCCCTGAGCCAGGTGGCCAGCAGCTGAAAACAC
GCACATTGTCGGGGATGGCGTCCAAGACTACCACCACCATCATCCCTAAGCGAATCGCCCACAGTCCATCCTTAC
AGAGTTTAAAGAAACCCATTATCCCCAAAGAGTTTGGGGGCAAAGTCCCCACCGTCATCCGCCAGCGCTATCTCA
ACCTGTTCATCGAGGAGTGTCTCAAGTTCTGTACCTCCAACCAGGAGGCCATAGAGAAGGCACTGAACGAGGAGA
AGGTGGCCTATGACCGCAGCCCCAGCAAGAACATCTACCTGAATGTGGCCGTGAACACCCTCAAGAAGCTCAGGG
GCCTGGCCCCCAGCGCTGTGCCCGGCCTCAGCAAAACCAGTGGCCGCAGGGTTGTGTCCCACGAGGTGGTGTTGG
GGGGCAGGTTGGCCGCCAAGACCAGCTTCTCGCTCAGCCGTCCAAGCAGCCCCCGGGTGGAGGACCTGAAAGGGG
CTGCCCTGTACAGCCGCCTCAGGGAGTACCTGCTCACCCAGGACCAGCTCAAGGAGAACGGCTACCCCTTCCCGC
ACCCAGAGCGGCCCGGGGGCGCAATCATCTTCACAGCTGAGGAGAAGAGGCCCAAGGACTCTTCCTGCAGGACCT
GCTGCCGCTGTGGCACCGAGTACCTCGTGTCCTCTTCAGGCCGCTGCATCCGGGACGAGGAGTGTTATTACCACT
GGGGACGGCTGCGCCGGAACCGGGTGGCCGGAGGCTGGGAGACCCAGTACATGTGCTGCTCGGCTGCCGCCGGCT
CTGTCGGCTGCCAAGTCGCAAAGCAACACGTGCAGGATGGCCGGAAGGAGCGCCTTGAGGGCTTCGTGAAGACCT
TTGAGAAAGAGCTCTCAGGAGACACCCACCCGGGGATCTACGCCCTGGACTGCGAGATGTCCTACACCACATATG
GCCTGGAGCTGACGCGCGTCACGGTGGTCGACACGGACGTGCACGTGGTTTATGACACCTTCGTGAAGCCTGACA
ACGAGATCGTGGACTACAACACCAGGTTTTCGGGGGTGACGGAGGCTGACCTTGCCGACACAAGTGTCACGCTGC
GTGACGTCCAGGCCGTTCTGCTGAGCATGTTCAGCGCTGACACCATCCTCATCGGACACAGCCTGGAGAGCGACC
TCCTGGCCCTGAAGGTCATCCACAGCACCGTGGTGGACACGTCTGTGCTCTTCCCCCACCGCCTGGGCCTCCCCT

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FIGURE 3580B

ACAAGCGGTCCCTGCGGAACCTCATGGCCGACTACCTCAGACAGATCATCCAGGACAATGTGGATGGGCACAGCT
CCAGCGAGGACGCCGGCGCCTGCATGCACCTGGTGATCTGGAAGGTTCGAGAAGACGCCAAGACCAAGCGATGAC
GCCTGCCCGCCTCCCACCCGCCTCTCCTGCCGTCCCGCTGGTCCTTAGCCCCATGCCTCTTCCAAAACAGTGCAA
TAAATCTCCGGTAACCCGTCCACCTGGCCGAGGCAGCCCAGAGCAGCGGGATGAGCTGGCGGCCAGAGAACGCCC
AGCCCAGCCCACCCCCGCTCACGTCCTGCCGCACCCCTCCGCCGGTCCCCACCCTCTGCCCCCCAGCCCTCTGGC
GTCTCTAGAAACTGCTGCTGATGGAGACCAGGACAGAGCCCGCCCCCACCCGGCCCGCAGCCCCTCCTGCCCCTC
CTGCCAGGCCCTCCCTCCCGGGTGGTGGCCGGCACCTCTGCTCCTCACGTGGGTCGCGGGGCGGGCTTGTCCCAG
GTTTGTTTGAGACAGTCTTTTTTTATTTTGTATTGTTATTTTTATTATTTTTAATTTAAACCTGATGACTTGCAC
AGCATCTTTCCCACCGGGAAGAGCGGGCCTGCTGCCTTCCCTCCTGCGGGGTGGGGGTGGGACAGACCCCAGTGG
GGGCCAGGGCCACACTCAGCGCAGTGTGGGCTGGACCCGCCTCTGTGCTCCAGGGGCTGGCCGGTCTTCGGGGGC
GCCGGCTTCCACCACTCGCCGCCCCACCCCTGCACTCCGTGACCTCTGAGAACCCAGCTGGCCCCTCGTTAGCCC
CAGGGTCTGCCGTCTAGAGGGAGCCCACCGGCCTCCGGACACTGTCTTCCCGCTAGAGCCCCGTCCTCCTCTGCG
GGGCTCTCCGGACCCCCTTCCCCCTCACCTCCAGGCAGGGACAGAATAAATGTTTGTATGGATTTT

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FIGURE 3581

ATGTCGGCGGCCGTGGCGTGCGTGGATTACTTCGCCGCCGACGTGCTCATGGCCATCTCTTCGGGCGCCGTGGTG
CACCGCGGGCGGCCCGGCCCCGAGGGCGCGGGCCCCGCCGCCGGCCTGGATGTGCGCGCGGCGCGCCGCGAGGCC
GCCTCACCCCGGGACCCCGGGGCCACCCCCGCCGCCCCCCGCCGCTTCTGGCCCGGGCCCCGGCGCCGCCGCGGC
GCCCCACCTGCTGGCCGCCAGCATCCTGGCCGACCTGCGCGGCGGACCCGGAGCCGCCCCGGGGGGCGCCTCGCC
CGCCTCCTCCTCCTCAGCCGCCTCGTCCCCGTCCTCGGGCCGCGCCCCCGGCGCCGCGCCCTCCGCCGCCGCCAA
GAGCCACCGCTGTCCCTTCCCGGACTGCGCCAAAGCCTACTACAAGTCCTCGCACCTAAAGTCGCACCTGCGGAC
GCACACAGGGGAACGCCCTTTTGCTTGTGACTGGCAGGGCTGCGACAAGAAGTTCGCCCGCTCCGACGAGCTGGC
CCGCCACCACCGGACGCACACGGGCGAGAAGCGCTTCTCCTGCCCTCTGTGCTCCAAGCGCTTCACCCGCAGTGA
CCACCTGGCCAAGCACGCCCGCCGCCACCCCGGCTTCCACCCGGACCTGCTCCGGCGCCCTGGTGCCCGCAGTAC
CTCCCCCAGCGACTCGCTGCCCTGCAGCCTGGCCGGGAGCCCTGCGCCCAGCCCCGCGCCCAGCCCAGCCCCCGC
AGGCCTGTAGGGCCCTCGTGCAGCCCACCCTGACCGCCAGGATGCTTCTGCCATCCAGGGGTGTAGTGAGGACCC
ACGGGGAGCCTGGGCCCCTTCCAGCCGTGGGCAAACCCTGAAGACACCCCTGCCCCCCTCCAGAGAGTGAGGAGG
GGGCCTGAGACTGGACCTGGGTCTGCCTGACCTCAGAGTGTCCAGGGGCTTGGAGAGACCTGCGCCCACCCCTCC
ACTCTCCCAGGAGTCGCTGATCACTGGGACCTGGTTCCAGCCGTTTGCAGGGGAGGCGGCTCCGAGAGGCGTGTG
CTTTCCGTGGGTGGCGCCCCTCCCCCGCCCTGCCTGGCCTCATCCTTGTATTTAATTAATTAAACAAGCCCCTTT
TTAAACCCT

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FIGURE 3582

GGCTGCTGTCTGGGGCGGTAGCTGGGGGGGCGCTCTCCCCCCTGCCCGCGACTCGGAGCACCCCCACCCCTCCCC
TGCCGGGCCAGGCCGGGCGGCGTTGTTGGCGGGGGCCCCGGTGGAGGCCCGGCCTGGGCGGCGCCCGCCATGAAT
GGGCTGTCGCTGAGTGAGCTCTGCTGCCTCTTCTGCTGCCCGCCCTGCCCCGGCCGCATCGCTGCCAAGCTCGCC
TTCCTGCCGCCGGAGGCCACCTACTCCCTGGTGCCTGAGCCCGAGCCGGGGCCTGGTGGGGCCGGGGCCGCCCCC
TTGGGGACCCTGAGAGCCTCCTCGGGCGCACCCGGGCGCTGGAAGCTGCACCTGACGGAGCGTGCCGACTTCCAG
TACAGCCAGCGCGAGCTGGACACCATCGAGGTCTTCCCCACCAAGAGCGCCCGCGGCAACCGCGTCTCCTGCATG
TATGTTCGCTGCGTGCCTGGTGCCAGGTACACGGTCCTCTTCTCGCACGGCAATGCCGTGGACCTGGGCCAGATG
AGCAGCTTCTACATTGGCCTGGGCTCCCGCCTCCACTGCAACATCTTCTCCTACGACTACTCCGGCTACGGTGCC
AGCTCGGGCAGGCCTTCCGAGAGGAACCTCTATGCCGACATCGACGCCGCCTGGCAGGCCCTGCGCACCAGGTAC
GGCATCAGCCCGGACAGCATCATCCTGTACGGGCAGAGCATCGGCACGGTGCCCACCGTGGACCTGGCCTCGCGC
TACGAGTGTGCCGCGGTGGTGCTGCACTCGCCGCTCACCTCGGGCATGCGCGTCGCCTTCCCCGACACCAAGAAG
ACCTACTGCTTCGACGCCTTCCCTAAGTGAGCGGCCCGGGCGGGGACGGGGGCGGGGCGGGGCCCGGGCCGGGCG
CGAAGTCTCACCGGCTCCACGACCCTCCCGCAGCATCGAGAAGGTGTCCAAGATCACGTCTCCCGTGCTCATCAT
CCACGGCACGGAGGACGAGGTGATCGACTTCTCGCACGGGCTGGCGCTCTACGAGCGCTGCCCCAAGGCGGTGGA
GCCGCTGTGGGTGGAGGGCGCCGGGCACAACGACATCGAGCTCTACAGCCAGTACCTGGAGCGCCTGCGTCGCTT
CATCTCCCAGGAGCTGCCCAGCCAGCGCGCCTAGCGGCGGCCCCAACCGGCCGGACCTCAGCAATAAGGCGGCCC
CCGGACCTCACCCCGCGCCGGCCCCCACCCAGGGGCTGCATGTGGACCCCCCGGGCGGCCCAGGGGACCCCGCCC
CGACCCAGGGGCTGTGGACGATGTACAGGCAACAGAGCTACGCACTCCTTTCCTTTTGGAAGCAAGAAGAAAATA
CGTGAAAACGGAAATTAAAGATTTAAAATTTT

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FIGURE 3583

AGACTTGGCGAAGCGCTGCGCTCGCGCCCGGATCCCTCAGGCGGCTGCAGGCTTCAGCCTGCGCTGGTTGGTGAA
ACAGAGATGTCAGAAAAGGAGAACAACTTCCCGCCACTGCCCAAGTTCATCCCTGTGAAGCCCTGCTTCTACCAG
AACTTCTCCGACGAGATCCCAGTGGAGCACCAGGTCCTGGTGAAGAGGATCTACCGGCTGTGGATGTTTTACTGC
GCCACCCTCGGCGTCAACCTCATTGCCTGCCTGGCCTGGTGGATCGGCGGAGGCTCGGGGACCAACTTCGGCCTG
GCCTTCGTGTGGCTGCTCCTGTTCACGCCTTGCGGCTACGTGTGCTGGTTCCGGCCTGTCTACAAGGCCTTCCGA
GCCGACAGCTCCTTTAATTTCATGGCGTTTTTCTTCATCTTCGGAGCCCAGTTTGTCCTGACCGTCATCCAGGCG
ATTGGCTTCTCCGGCTGGGGCGCGTGCGGCTGGCTGTCGGCAATTGGATTCTTCCAGTACAGCCCGGGCGCTGCC
GTGGTCATGCTGCTTCCAGCCATCATGTTCTCCGTGTCGGCTGCCATGATGGCCATCGCGATCATGAAGGTGCAC
AGGATCTACCGAGGGGCTGGCGGAAGCTTCCAGAAGGCACAGACGGAGTGGAACACGGGCACTTGGCGGAACCCA
CCGTCGAGGGAGGCCCAGTACAACAACTTCTCAGGCAACAGCCTGCCCGAGTACCCCACTGTGCCCAGCTACCCG
GGCAGTGGCCAGTGGCCTTAGAGGGAGCCTGCCCTGCCCCCACCGCCCACCACCTCCTCCCCTTCATTCCTGCTG
CTACCCCTGGTCCCGAGGGCTGGGAGTACCTGGGGCCCCATCCCCCCAGCTGGGATGGTGGAAGCCGGTGGTGGC
CACGGACCGCCCCCCTCCTGCCAGGGCCACAGAACCCGTGTTCATCTCATCCGAGAGCGGAGTTCCTCACAAGCA
CTCCCCAGCAGCCCTTGGCCTCTGCCGTCCACAGGACGCCCTCTTGCTCCCGGAAACGTGTGGTCACCCGCCGTC
CACTGCACGGCTGGTACGGCCTTGTCTTCAGGTCTCGAGGCCTGACTCCGGGGGACAGGTGGCAGCAGGTCGGCC
GCCCTCCCGTCCTCCCAGAGCTGCTGGCGCTGAGGTCAGAGCGGGTCTGATGGGGAGCTCCGTCTCACCGGCCAC
CCGCCGTCACCATGGCAGATGCCCTTGGCCGGAACTAATAAGAGGCGTCGGGGCCAGCTTCCGGTCCCCTGCAGT
GATAGAGGGCTTGGTGCCTAGCTGAGTCCTCGCTGTCCCCGCCATCCCCTGATCTGTGCGGCTCCAGCCTCGCCC
CCTCCCCACGTGCACCATACCTGGGGAGTTCCTGGTCCAGGGTATCCTGGGGCCACCCTCCCTGCCTCCAAAACA
GGGATCCCTGGCAGGCTGTCTTTCCACGCCCCTGAGTTCAGAGTCGGGGACCCAGGCCAGGTCGGGAGCACAGCC
GCTCCCCAAACCCAGCAAACCGGCAGAGAGCCGGTTTCCCAGCAGCCGGAGCCCTGCAGGAGAGGCCTTTGTGTT
TTGTTTTGTTTTGTTTTTTCTCTTTTGAGACAAGAGTTTCACTCTGTCGCCCAGGCTGGAGTGCAGTGGTGTGAT
CTCGGCTCACTGCAACCTCTGCCTCCCGTGTTCAAGCAGTTCTCCTGCCTCAGCCTCCCAAATAGCTGGGATTAC
AGTTGCCTGCCACCACGCCCAGCTAATTTTTATATTTTTAGTACAGATGGGGTTTCACCATGTTGGCCAGGCTGG
TCTCGAACTCCTGACCTCAAGTGATCCACCCGCCTTGGCCTCCCAAAGTGCTGGGATAATAGGTGTCAGCCACCG
CGCCCAGCCTGGAGTGGCCTTTTATGAGAGGGGACCCGTCAAATCTGTGCCTTATGGAGGGGTCCGGCAGCGGCC
ACAATTGTCTTGTCCCCTCACCCCCCAACTCCCCCTGGAACACCTCTCCCAGGCAAGACATTTTCACAGCACCAT
TCACAACGGTTGGGCCAAAAAGAAACTTTTCCTTCATCATTTCCTGCACTCGCTGACCACAACTTTGGACACCCC
AGGCTGCCACCCCTCCCCACCCGTTCACCCCCAGGATGCTGTTGCTGTAGGACGCCTGCTGCCCTGGAGCCCTCC
CCAGGATGTGAGCCAGTCCCCTCGCTGGTACGGAATGCCGCTGGGTGCCCGGAGGCGGCCATGGTGTCTCGATGG
ACGGCAGCCAGGATGGAGCACCCATGGGTCTCACGGCCATGCTTCAGGGTCTTCAGGTCCTGCCCCCGGCCAGTC
TGCCAAGAGGCACCCCCTTCCCCAGCCTCTCGCCTGCACTGATGCAGACAAAATCTCACCTGGCAGGCCCAACCC
CCCCCCACCCCTCCCCCGCCGTGTGTGGCCCCTCGCCGCATCGTTGGGGTTTTGTTATGTGAAAATATCCTGGAA
ATAAATACATGTTTCTGCACTTAG

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FIGURE 3584

CAGCAGAATGTCTCCTGCCCCCGAGAGCGACCCCGAGGCCACTGAGAAGAGCAGCGCGGCCTGGCCGGCCCGAAC
GCCTGCGTCTCAGTAGCTGGGAGCCACGGGCCCACGCCCGCCCACCGGCCGCAGTGATGTTCTAGCCACAGAGGA
GCCAAGACCTCAGGTTTCCAGAGACTTGGGATTTGCACGGCAGCAGAGTCACCGTGGAGAGGCCAGGGTATCACA
AACTTATGGATTTTGACAAGAAAGGAGGGAAAGGGGAGACGGAGGAGGGCCGGAGAATGTCCAAGGCCGGCGGGG
GCCGGAGCAGCCACGGCATCCGGAGCTCGGGGACCAGCTCGGGGGTCCTGATGGTGGGCCCCAACTTCCGCGTCG
GCAAGAAGATCGGCTGCGGCAACTTCGGGGAGCTCCGCCTAGGAAAGAATCTCTATACAAATGAATACGTGGCTA
TCAAATTGGAGCCGATCAAGTCCCGGGCCCCGCAGCTGCACCTGGAGTACCGGTTCTACAAGCAGCTCAGCGCCA
CAGAGGGCGTCCCTCAGGTCTACTACTTCGGTCCGTGCGGGAAGTACAACGCCATGGTGCTGGAGCTGCTGGGGC
CCAGCCTGGAGGACCTGTTCGACCTGTGCGACCGGACCTTCACGCTCAAGACGGTGCTGATGATCGCCATCCAGC
TGATCACGCGCATGGAGTATGTGCACACCAAGAGCCTAATCTACCGGGACGTGAAGCCCGAGAACTTCCTGGTGG
GCCGCCCGGGGACCAAGCGGCAGCATGCCATCCACATCATCGACTTCGGGCTGGCCAAGGAGTACATCGACCCCG
AGACCAAGAAGCACATCCCGTACCGCGAGCACAAGAGCCTGACGGGCACGGCGCGCTACATGAGCATCAACACGC
ACCTGGGCAAGGAGCAGAGCCGCCGCGACGACCTGGAGGCGCTGGGCCACATGTTCATGTACTTCCTGCGCGGCA
GCCTCCCCTGGCAGGGGCTCAAGGCCGACACGCTCAAGGAGCGGTACCAGAAGATCGGGGACACCAAACGCGCCA
CGCCCATCGAGGTGCTCTGCGAGAACTTCCCAGAGGAGATGGCCACGTACCTGCGCTATGTGCGGCGCCTGGACT
TCTTCGAGAAGCCCGACTATGACTACCTGCGGAAGCTCTTCACCGACCTCTTCGACCGCAGTGGCTTCGTGTTCG
ACTATGAGTACGACTGGGCCGGGAAGCCCCTGCCGACCCCCATCGGCACCGTCCACACCGACCTGCCCTCCCAGC
CTCAGCTCCGGGACAAAACCCAGCCGCACAGCAAAAACCAGGCGTTGAACTCCACCAACGGGGAGCTGAATGCGG
ACGACCCCACGGCCGGCCACTCCAACGCCCCGATCACAGCGCCTGCAGAGGTGGAGGTGGCCGATGAAACCAAAT
GCTGCTGTTTCTTCAAGAGGAGAAAGAGAAAATCGCTGCAGCGACACAAGTGACCCTGGGCGCGTGCAGCCCCCT
GAATCTTCTCCGTGCAGCCCCTTGGGGCGCGACCTTGTGCGAGGCCCTCGGGGCCCACCCACAGCGGCCCAGGGC
CAGACCCTGGCTGGAAGCCAGAACGCAGACTGCAGGGGCCGCGCCTGGCTCAGGCGGCCCCACCCCCGGGACGTG
GGGTCACTTCCTTCATGTAAGACTTTGGCCGAAATTTCTACACCTGTGTCTAGTCCTCCCCTCCAAGAGCATTAA
CTATTTAAAACAAGGAAAAGAGGAAAAAAAAAACAGAGGCCCGCCCTACCCCACTCCTGCCCCTCCGTTTCTTTG
CTGAAGTGAGTAGTGTGATCCTGGAGGCCCCCCGGCCTGGCCCCGCCCCGCCAGCCGCCCCCGTTAGCGTCATAA
AGTCCAGCTTGTCTCCCTCGATCCAAAGGCCGTTTTCTCGAGGGGAGGGCAGGCCCGGCCTGGAGGGGTGCTGTG
GAGCTGTCTTGCCCAGGCCCTCCTGGGAGGGGGACAGGCATTGTTGCCAGGGGTGAGGCCGTGCCCCAGGCCTCC
CCGAAACCAAAGGGGAAGGCAGGGGTGGGGCCGTGGCTGAAGCCGGCTCCCCAACCAAAATGCTGCACCAAAGCT
CGGGCGCCGCGGGCACGGCTGCTGCAGTCTCTTCCCAGCCTGGCCCTGGCAAGGGGCGGGTGGGCGCTGCCAGGC
GGGTGCTTCTCGACGCACTTGCTCCCGGAGGCTGCGCCCCGGCGCCTGGAACCCGAGGTGGGAGGACCGGTTGGT
GTCACCCTGCTCGGCCCTCAGCCCTGCCGCGTGGGGCGCGTGGGCACGGAGCTTCCTGCCTCTCTGCTCCGACAC
CCGGCAAGCAGCCGGAGACAAAACGCCTTAAAGCCCCCGGCCCAGCCCTGCAGGTATATTGCAGGGGCCTGGGGG
CGGCCCTGGACTGGCGGGCGGTTCCCCAGTGGGGTGCCCTGGAGGCTGCCGGGCAGAGTGGAGCAGCTTGGGGCC
GTGCCCAGGGCGGTGGCTGTGAGTCTAGTTTTTGCTTTACCAAGTGTACAGAAATGGCATTTACGTTTCTCTGAT
GCTCCCTTGAAGCCATAGAATTTAGGGGCTTTTTTAAAAAAATAAAAGAAAAATGAAACC

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FIGURE 3585

ATGGCGGCGGGTGGGAGCGGCGGGCGTGCGTCGTGCCCGCCGGGGGTCGGGGTCGGCCCGGGCACGGGGGGCAGT
CCCGGGCCCAGCGCCAACGCCGCCGCCACCCCGGCCCCCGGCAACGCGGCCGCCGCCGCCGCCGCCGCCGCC
GCCGCCGCCGCCCCTGGGCCGACGCCGCCCGCCCCGCCGGGCCCCGGGACAGACGCGCAGGCCGCGGGCGCGGAG
CGGGCGGAGGAGGCGGCGGGCCCGGGGGCGGCGGCGCTGCAGCGCGAGGCCGCGTACAACTGGCAGGCCAGCAAG
CCCACCGTGCAGGAGCGCTTCGCCTTCCTCTTCAACAACGAGGTGCTGTGCGACGTGCACTTCCTGGTGGGCAAG
GGGCTCAGCTCGCAGCGCATCCCCGCGCACAGGTTCGTGCTGGCCGTGGGCAGCGCCGTCTTTGATGCCATGTTC
AACGGGGGAATGGCCACAACATCCACGGAGATTGAGCTGCCCGACGTGGAACCCGCTGCCTTCCTCGCACTGCTC
AAGTTTCTCTACTCGGACGAGGTGCAGATTGGCCCGGAGACGGTGATGACCACGCTATACACCGCCAAGAAGTAC
GCGGTGCCAGCGCTCGAGGCCCATTGCGTGGAGTTCCTGAAGAAGAACCTGCGAGCCGACAACGCCTTCATGCTG
CTCACGCAGGCGCGACTCTTCGATGAACCGCAGCTGGCCAGCCTGTGCCTGGAGAACATCGACAAAAACACTGCA
GACGCCATCACCGCGGAGGGCTTCACCGACATTGACCTGGACACGCTGGTGGCTGTCCTGGAGCGCGACACACTG
GGCATCCGTGAGGTGCGGCTGTTCAATGCCGTTGTCCGCTGGTCCGAGGCCGAGTGTCAGCGGCAGCAGCTGCAG
GTGACGCCAGAGAACAGGCGGAAGGTTCTGGGCAAGGCCCTGGGCCTCATTCGCTTCCCGCTCATGACCATCGAG
GAGTTCGCTGCAGGTCCCGCACAGTCGGGCATCCTGGTGGACCGCGAGGTGGTCAGCCTCTTCCTGCACTTCACC
GTCAACCCCAAGCCACGAGTGGAGTTCATTGACCGGCCCCGCTGCTGCCTGCGTGGGAAGGAGTGCAGCATCAAC
CGCTTCCAGCAGGTGGAGAGTCGCTGGGGCTACAGCGGGACCAGTGACCGCATCAGGTTCTCAGTCAACAAGCGC
ATCTTCGTGGTGGGATTTGGGCTGTATGGATCCATCCACGGGCCCACCGACTACCAAGTGAACATCCAGATTATT
CACACCGATAGCAACACCGTCTTGGGCCAGAACGACACGGGCTTCAGCTGCGACGGCTCAGCCAGCACCTTCCGC
GTCATGTTCAAGGAGCCGGTGGAGGTGCTGCCCAACGTCAACTACACGGCCTGTGCCACGCTCAAGGGCCCAGAC
TCCCACTACGGCACCAAAGGCCTGCGCAAGGTGACACACGAGTCGCCCACCACGGGCGCCAAGACCTGCTTCACC
TTTTGCTACGCGGCCGGGAACAACAATGGCACATCCGTGGAGGACGGCCAGATCCCCGAGGTCATCTTCTACACC
TAGGCTGCCCGACACCGACACCGCCCTCCCTCCGTGGGGATAGCCGCAGCCCCAGGCCATCATCTGCTGCTGGGG
CCCCCCCACCACGCGGTGCCAGGCCCAGTGTCCCCCAGGCCGTCTGTCCACTCCATGCCACCTTTCTCAGCATCA
GGACGGGGTTGCCCTGTGTTCACCACGAGTGTGGCTGCTGGATCAGGGCAGCCGGGGAGGTGGCCAGGCCAGTGG
CCAGGCCCTGTGGAGACAATCCCTCAGGACTAGGGACAGGGCTGTGCCGGCCTGGGCCAGGGCCCACGGACCCGC
AGCTCAGGGCGCCTGCCCACGTCGTCTGCCGGCGGTGCGCCGCGGGCGTCCCTCGCGTCTCTTCACTGCACATTG
CAATGCATTTGCGATTCCCATTTCTCTGCTAGGAGCCAGCCTGGGTGGCGCTGCTCCCAGAGCCGTGGGTCCCAG
ACCTTGCGTTCCTTTTGTTCCTGTCCGTTTATCAGGACACGGGCCCCACCTGTCACGTGCCCGAGGCCACCCAAG
CCCAGCCTGCGGGGCGTTCCCACTGCCTGGATGCCGGCTTGAGTTCTGCGCACGCAGGATTCAGTGTGGGGACGG
CCCCTGCCGGATAGGCCTAGCCCTGGCCCAGGTGGTGAGCGGTTTGCAGTGTCCGTTCTCATCCACCTGATGGGC
CCAGATAAAGGCCCCCGCTGTCCAGCCTCCCTGGACGGCCCTCGCGGTCCCTGCAGCCCAAGATGGGACTCAGAC
CCTGTGCCCCAGAGCTCCCCTGCCGCAGAATGGGGCCCCAGCCGGCCCCGACCGGGTCCAGGAGCACTGCTCGCC
TGTACATACTGTTGCCCTAGCCCACCTGGTGCCGTGGGAGCCACCCCCAGGTGCTGGGGGCACAGCCCCTCCCCA
CTCCGGCCACGCCCCCACCCACCCCGCGTGTTTCTGCCCTGTGACTCCTGGAACCTGCGTCCTCCCCAAAGCCAT
GGGAGGGGTGTCCTCCTCAGACCATGCCCCCAGATGATTTTTTTAAATAAAGAAACAAATGCACCTGC

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FIGURE 3586

GCTGGCGGGGCCCGGACAGAAGATGGTGCAGAAGAAACCAGCCGAACTTCAGGGTTTCCACCGTTCGTTCAAGGG
GCAGAACCCCTTCGAGCTGGCCTTCTCCCTAGACCAGCCCGACCACGGAGACTCTGACTTTGGCCTGCAGTGCTC
AGCCCGCCCTGACATGCCCGCCAGCCAGCCCATTGACATCCCGGACGCCAAGAAGAGGGGCAAGAAGAAGAAGCG
CGGCCGGGCCACCGACAGCTTCTCGGGCAGGTTTGAAGACGTCTACCAGCTGCAGGAAGATGTGCTGGGGGAGGG
CGCTCATGCCCGAGTGCAGACCTGCATCAACCTGATCACCAGCCAGGAGTACGCCGTCAAGATCATTGAGAAGCA
GCCAGGCCACATTCGGAGCAGGGTTTTCAGGGAGGTGGAGATGCTGTACCAGTGCCAGGGACACAGGAACGTCCT
AGAGCTGATTGAGTTCTTCGAGGAGGAGGACCGCTTCTACCTGGTGTTTGAGAAGATGCGGGGAGGCTCCATCCT
GAGCCACATCCACAAGCGCCGGCACTTCAACGAGCTGGAGGCCAGCGTGGTGGTGCAGGACGTGGCCAGCGCCTT
GGACTTTCTGCATAACAAAGGCATCGCCCACAGGGACCTAAAGCCGGAAAACATCCTCTGTGAGCACCCCAACCA
GGTCTCCCCCGTGAAGATCTGTGACTTCGACCTGGGCAGCGGCATCAAACTCAACGGGGACTGCTCCCCTATCTC
CACCCCGGAGCTGCTCACTCCGTGCGGCTCGGCGGAGTACATGGCCCCGGAGGTAGTGGAGGCCTTCAGCGAGGA
GGCTAGCATCTACGACAAGCGCTGCGACCTGTGGAGCCTGGGCGTCATCTTGTATATCCTACTCAGCGGCTACCC
GCCCTTCGTGGGCCGCTGTGGCAGCGACTGCGGCTGGGACCGCGGCGAGGCCTGCCCTGCCTGCCAGAACATGCT
GTTTGAGAGCATCCAGGAGGGCAAGTACGAGTTCCCCGACAAGGACTGGGCCCACATCTCCTGCGCTGCCAAAGA
CCTCATCTCCAAGCTGCTGGTCCGTGACGCCAAGCAGAGGCTGAGTGCCGCCCAAGTCCTGCAGCACCCCTGGGT
TCAGGGGTGCGCCCCGGAGAACACCTTGCCCACTCCCATGGTCCTGCAGAGGTGGGACAGTCACTTCCTCCTCCC
TCCCCACCCCTGTCGCATCCACGTGCGACCTGGAGGACTGGTCAGAACCGTTACTGTGAATGAGTGAAGATCCTG
GAGGACCCTGGGCCCCAGGCCAGCTCCCATCGCTGGGGGACGGTGAACGGCCATGTGTTAATGTTACGATGTTTT
TAAAAGACAAAAAAAAAAAAAAAACCTCAAAAGTTTTTTTAAAGTGGGGGAAAAACATCCAAGCACTTTAATTCC
AATGTACCAGGTGAACTGACGGAGCTCAGAAGTTTTCCTTTACACCAACTGTCAATGCCGGAATTTTGTATTCTG
TTTTGTAAAGATTTAATAAAAGTCAAAAAACTTGC

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FIGURE 3587

GGAATTCTGAGAGCTGATTCCTGCCTTGTCTTCTCCACTGTTCCTGGAGGAATCCGAGAAGAGCAGAGCGGAGGG
AGCCCCAGACACGGTCCGCGGGAGAGCTGTGGGGCTTGGTGAGTGTTTCGTGGCCTCTCGGGTTGGTCAGCACCC
CCAGCCAGCTGGCCCAGGACCCCTCTACAGAAGTCCAGGAGAGCAGGCGTCACCAAGATGTCCAACCCCTTCCTG
AAGCAAGTCTTCAACAAGGACAAGACATTCCGCCCCAAGCGCAAGTTTGAGCCAGGCACCCAGCGCTTCGAGCTG
CACAAGAAGGCGCAGGCGTCGCTGAACGCCGGGCTGGACCTGCGGCTGGCCGTGCAGTTGCCCCCGGGCGAGGAC
CTGAACGACTGGGTGGCTGTTCACGTGGTGGACTTCTTTAACCGCGTCAACCTCATCTACGGCACCATCAGCGAC
GGCTGCACGGAGCAGTCCTGCCCCGTCATGTCGGGGGGCCCCAAGTATGAGTACCGCTGGCAGGATGAGCATAAG
TTCCGGAAGCCCACGGCACTCTCCGCGCCCAGGTACATGGACCTGCTGATGGACTGGATCGAGGCGCAGATCAAC
AACGAGGACCTCTTCCCCACCAACGTTGGCACTCCGTTTCCCAAGAACTTCCTGCAGACGGTGCGGAAGATCCTG
TCGCGGCTGTTCCGCGTGTTCGTGCACGTCTACATCCACCACTTTGACCGCATCGCGCAGATGGGCTCCGAGGCC
CACGTGAACACCTGCTACAAGCACTTCTACTATTTCGTCAAGGAGTTCGGCCTCATCGACACCAAGGAGCTGGAG
CCACTGAAAGAAATGACCGCCCGGATGTGCCACTGAGAGCCCCGCGGGTCTCCCGGTGCCCGAACCGCCGCTGGG
GCCTCGGAGACTTGGAGGAGGACGCTCTGGAACCATCATCCCGCTTCTCTCCGGCCTGAGCATCTCAGGGAGACC
AGGGGCCGAGCCGCTGAGCAGGTGTTGGTCCTCAGGAGCTCCAACCCCGGACGGCAGATGCCTTCCTCAGTCTCG
AGCCTCAGTCTCCCGTCTGGGACTAAAACGTGAACTCTGTAATTCTATGTGTTACTAGCAACCGGAAAAGCCCAC
TGTGTTTTTAAACCACTTCCACTTTCCAGGAGGCTGGATGGCTTCCAGGGTCACTCCTTGCCCTGGGTGGCTCCC
AGGCTCCTGGAACTTCTGCCTCCACCTCGCTGGGGAGCCCCCAGGGCTGCTGTGGCCACAGCCCTGCCTGGGCCT
GTCTCTCAAGGGCACCCAGCTTGCTCGGCCTCCTACATGTCTCCCGTTGGGGAGGCAAGAGGCTGAGGGGCTTCC
GAGCCCCTGAGAGCGGACATCTCCTCCCGCAGGCCTTTACTCCGCACTCCCCACTGGCAGCCGCTGGTGTCTCTT
CACACAGAGGCACAACCTGGACCCAGGCAGCCTCTTTCCTCCCTCCCCAATCTCTTCCATTTTTCTACAGATTTT
TTTTTTTTTGGTCATACTAGAGACAGGGGTCTCGCTGAACTCCTGGCCTCCAGTGATCCTCCATCCTCGGCCTCC
CAAAGTGCTGGAATCACAGGGGTGAGCCACCGCACCCAGCCCTCTCTCTTCCTCAATGCACTCTGCTTCTTCCGT
TCTTCCGAAACATTCAGCTGACTGTATCCAGGGCTTCCTGGACTCCTGGGACCCCACGTCCTGCACCCCGGCTTC
TGACTCATTTCCTAAGGGCCCCTTTGTGTATCATAAAGGGTTTGATTTTTATAGTCACATTTACAACCATCTTGA
GATTTTTATTTTTTTTGAACGGAGTCTCCCACTGTCGCCCAGACTGGAGTCCAGTGGCACAATCTCGGCTCACTG
CATCCTCCACCTCCTGGGTTCAAGTGATTCTCCTGCTTCAGCCTCCCAAGTAGCTGGGATTACAGGTGTGCGCCA
CCACGCCCAGGAAATTATTGTAGTTTTAGTAGAGACAAGATTTCACCATGTTGGCCAGGCTGGTCTCAAACTCCT
GACTTCAGGTGATCCGCCTACCTTGGCCTCCAAAAGTGCTGGGATTACAGGCATGAGCTACTGCACCCGGCCTAA
CCAGGCTGGAGTGCAGTGGTGGGATCTCGGCTCACTGCAAGCTCCGCCTCCCAGATTCACGCCATTCTCCTGCCT
CAGCCTCCCCAGCAGCTGGGACTACAGGCACCCACCGTCACACCCGGCTAATTTTTTTGTATTTTAGTAGAGACA
GGGTTTCACCGTGTTAGCCAGGATGGTCTTGATCTCCTGACCTTGTGATCCACCAGCCTCAGCCTCCCAAAGTGC
TGGGATTACAGGCGTGAGCCACTGTGCCCGGCCAAGAATTTTTTTATCGATAACATAGTGAGCTCTCTGCCTCTT
CGGAACGATGTCCACTTTGCTTATGATCAACCCAAGCAGGACTCTTCTCTCCCTGGACGCCTCTCCCCTGGTCTG
GAATCTTCCAGTTCTGCCAGAATTGGCCTTTCCCAGATGCTGCAAACTTCCAGTTGAACCCCTTTTTCTGTGTGG
CCCCTGGGGCTGCGAGACCAAAATCCATGAGTTCTGTGTACCCTAGACCTTTGGAAGGTGAGAGCAGGGCCCTGA
GAAAAGGCAGCCACCTCCTCTCCCTGGCTGAACCCCTGCCACCCTACTCCTCACCAGAATTGTCAGTGGCCTTTC
ACCACAGTGGTCCTTCCTGCCTGAGCCCTGCACTGTCCCAGACCACACAGAAGTCTGGTCACCTCTGGGCGCCTG
GGATGGTCACCGAAGAGAAGCACGCTGTCCCCGTCTCTCCTGGCTTCTGCCAGAAAATCGAACAAGTGCAATTAA
CACACTGTTACTGCCGAAGCCTGAAACTCCCAGGACTTGTCCTTGATCCTTCCAGAAACCACCAGGTCCGGCACT
TGGAGCCCCCCGGAGAGGGACCTCCCAGCCGAGCCCTCAAAGAACTCCATGAAATCAGGAACTGCTTGATGAAAT
GTATCTCCTTGTACCTGGAAGATGAAGCCCAAACACCCACACCTCTGTCTCCCCCAGGGCTCGGGATGTCTCCAG
CAGCCCGGCCACGCAGCTTCCCAGGTGGGCTCGGGGAGGTGGGAGCAGGGACCATCTCTGTCCCCTCCACCCTCA
CTCCATCCACCTCGGAGACCACCCTCCCCCAGCCAGATACGGAATAAAACTACAGACGCAGACGTCGG

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FIGURE 3588A

GGGGCCCGGAGCGGGATCGCGGCACCTGCCGAGCGGGTCGCCGCCTCTGCCGCGGTCCTTGGACCCCGCCGCCGC
CCTGGCCTGGGAGCTTGCCCCGCCGCAGCGGCCGGCAGCGCGGCGCTCCGCGGGCGGCAGGCACGGGCCCCGGGC
CCCCTCACGGCGCCCAGCCGCGGGCCTCCCGAGGCAAAAGCCCGTGGGCCGCCGCGATGGCCCTCAAGATGGTGA
AGGGCAGCATCGACCGCATGTTCGACAAGAATCTGCAGGACTTGGTCCGCGGCATCCGTAACCACAAGGAGGACG
AGGCAAAATACATATCTCAGTGCATTGATGAGATCAAGCAGGAGCTGAAGCAGGACAACATAGCGGTGAAGGCGA
ACGCGGTCTGCAAGCTGACGTATTTACAGATGTTGGGATACGACATCAGCTGGGCCGCCTTCAACATCATAGAAG
TGATGAGTGCCTCCAAGTTCACCTTCAAGCGAATTGGCTACCTCGCTGCTTCCCAGAGCTTTCACGAAGGCACCG
ACGTCATCATGCTGACCACCAATCAGATCCGTAAGGACTTGAGCAGCCCCAGCCAGTACGACACAGGTGTTGCAC
TGACGGGTCTGTCCTGCTTCGTCACCCCAGACCTTGCCAGAGACCTGGCAAATGACATCATGACACTGATGTCAC
ACACCAAGCCCTACATCAGGAAGAAGGCTGTGCTGATCGAGCCCCTCACCAATCTCATCCACAGCACGTCTGCCA
TGTCTCTCCTCTATGAATGTGTGAACACCGTGATTGCAGTGCTCATCTCGCTGTCCTCCGGCATGCCCAACCACA
GCGCCAGCATCCAGCTTTGTGTTCAGAAATTAAGGATATTGATCGAGGACTCCGATCAGAACTTGAAGTACCTGG
GGCTGCTGGCAATGTCCAAGATCCTGAAGACCCACCCCAAGTCCGTGCAGTCCCACAAGGACCTCATCCTGCAGT
GCCTGGACGACAAGGACGAGTCCATCCGGCTGCGGGCCCTGGACCTGCTCTATGGGATGGTGTCCAAGAAGAACC
TGATGGAGATCGTGAAGAAGCTGATGACCCACGTAGACAAGGCAGAGGGTACCACCTACCGTGACGAGCTGCTCA
CCAAGATCATTGACATCTGCAGCCAGTCCAACTACCAGTACATCACCAACTTCGAGTGGTACATCAGCATCCTGG
TGGAGCTGACCCGGCTGGAGGGCACACGGCACGGCCACCTCATCGCCGCCCAAATGCTGGACGTGGCCATCCGCG
TGAAGGCCATCCGCAAGTTCGCCGTGTCCCAGATGTCTGCGCTGCTTGACAGTGCACACCTGCTGGCCAGCAGCA
CCCAGCGGAACGGGATCTGTGAGGTGCTGTACGCTGCCGCCTGGATCTGCGGGGAGTTCTCAGAGCATCTGCAGG
AACCACACCACACTTTGGAGGCCATGCTGCGGCCCAGAGTCACCACGCTGCCAGGCCACATCCAGGCCGTGTATG
TGCAGAACGTGGTCAAGCTCTACGCCTCCATCCTGCAGCAGAAGGAGCAGGCCGGGGAGGCAGAGGGCGCTCAGG
CCGTCACCCAGCTCATGGTGGACCGGCTGCCCCAGTTTGTGCAGAGCGCAGACCTGGAGGTGCAGGAGCGGGCGT
CCTGCATCCTGCAGCTGGTCAAGCACATCCAGAAGCTTCAGGCCAAGGACGTGCCTGTGGCAGAGGAGGTCAGCG
CTCTCTTTGCTGGGGAGCTGAACCCAGTGGCCCCCAAGGCCCAGAAGAAGGTTCCAGTCCCCGAAGGCCTGGACC
TGGACGCCTGGATCAATGAGCCACTCTCGGACAGCGAGTCAGAGGACGAGAGGCCCAGGGCCGTCTTCCACGAGG
AGGAGCAGCGGCGTCCCAAGCACCGGCCGTCGGAGGCGGACGAGGAAGAGCTGGCTCGGCGCCGAGAGGCCCGGA
AGCAGGAGCAGGCCAACAACCCCTTCTACATCAAGAGCTCGCCATCGCCACAGAAGCGGTACCAGGACACCCCGG
GCGTGGAGCACATTCCCGTGGTGCAGATTGACCTCTCCGTCCCCTTGAAGGTTCCAGGGCTGCCTATGTCAGATC
AGTATGTGAAGCTGGAGGAGGAGCGGCGGCACCGGCAGAAGCTGGAGAAGGACAAGAGGAGGAAAAAGAGGAAGG
AGAAGGAGAAGAAGGGCAAGCGCCGCCACAGCTCGCTGCCCACGGAGAGCGACGAGGACATCGCCCCTGCCCAGC
AGGTGGACATCGTCACAGAGGAGATGCCTGAGAATGCTCTGCCCAGCGACGAGGATGACAAAGACCCCAACGACC
CCTACAGGGCTCTGGATATTGACCTGGATAAGCCCTTAGCCGACAGCGAGAAACTGCCTATTCAGAAACACAGAA
ACACCGAGACCTCAAAATCCCCTGAGAAGGACGTTCCCATGGTAGAAAAGAAGAGCAAGAAACCCAAGAAGAAAG
AGAAAAAACACAAAGAGAAAGAGAGAGACAAGGAGAAGAAGAAGGAGAAGGAGAAGAAGGCTGAGGACCTGGACT
TCTGGCTGTCTACCACCCCACCGCCTGCCCCCGCCCCCGCCCCCGCCCCCGTTCCATCCACGGACGAGTGTGAGG
ACGCCAAGACGGAGGCGCAGGGCGAGGAGGACGATGCCGAGGGGCAAGACCAGGACAAGAAATCTCCCAAGCCTA
AGAAGAAGAAGCACAGGAAGGAGAAGGAGGAGCGGACCAAAGGCAAGAAGAAGTCCAAGAAGCAGCCTCCAGGCA
GCGAGGAGGCAGCGGGGGAGCCGGTGCAGAATGGCGCGCCAGAGGAGGAGCAGCTCCCGCCTGAGTCCAGCTACT
CCCTCCTCGCTGAAAATTCCTATGTTAAAATGACCTGTGACATCCGGGGCAGTCTGCAGGAGGACAGCCAGGTCA
CTGTGGCCATCGTGCTGGAGAACAGGAGCAGCAGCATCCTCAAGGGCATGGAGCTCAGCGTGCTGGACTCACTCA
ATGCCAGGATGGCCCGGCCGCAGGGCTCCTCCGTCCACGATGGCGTCCCCGTGCCTTTCCAGCTGCCCCCAGGCG
TCTCCAACGAAGCCCAGTATGTGTTCACCATCCAGAGCATCGTCATGGCGCAGAAGCTCAAGGGGACCCTGTCCT
TCATTGCCAAGAATGACGAGGGTGCGACCCACGAGAAGCTGGACTTCAGGCTGCACTTCAGCTGCAGCTCCTACT
TGATCACCACTCCCTGCTACAGTGACGCCTTTGCTAAGTTGCTGGAGTCTGGGGACTTGAGCATGAGCTCAATCA
AAGTCGATGGCATTCGGATGTCCTTCCAGAATCTTCTGGCGAAGATCTGTTTTCACCACCATTTTTCCGTTGTGG
AGCGAGTGGACTCCTGCGCCTCCATGTACAGCCGCTCCATCCAGGGCCACCATGTCTGCCTCCTGGTGAAAAAGG
GTGAGAACTCTGTCTCAGTCGACGGGAAGTGCAGTGACTCCACGCTACTGAGCAACTTGTTAGAAGAGATGAAGG
CGACGCTGGCCAAGTGTTGAGAGCTGCCTGCGAGCCCCGCACCACCCCGCGGAGCACGTACCCAGGGACCGCAGC

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FIGURE 3588B

CCTGACGTGTCTCGCCTCTCCTCAGTCGTGTGTACTGTACCCAAGCCTGAGTGTTAATTTAACTCTATGTTGTCC
GCCGTGTAGACATCCGAGGTCATTTGTTGCGTTGAATTATCTGACCATCCTTTTTTACTGTGACTCTTCCCATTC
TCTTTGGCAAGAAGTCCCCTTCTCGCCCCCAAACCAGCAAGGGACTCCCCCACCTGGGTCTGTGCCCTGCCCCGC
GCTGGGGGCCGAGTCCTTGAATGTGGCTTCAGGGGCTCCTGTCCTGGGCCAGGGCCTGATGGGCACCACGTGAGG
GGCACTTGGTGGACAGGGCGGGGCTGACGTGGCCTCCTCTGGGGTCGCCTGCTTTTGACCCAAAGGTCCTGACGG
TTGCGTCCGGGGGAGGGGAAGGAAGGGCCGCTGTCGCCAAGGTTTTCTCTCCCAGAACCCACAGTGGGAAAGCGG
TCTTGCCAGGCGTTGTCCATTGTCAGTGTGCTCGTGGGCTGGTGACTGGGTCTTGGGATCCCAGGCCACGCGCCA
GCCAGGCTGTGGGCAGGGCGGGGCCAGGGACGCCAAAGAGAGGTTGCAGTCAGAACCGTGGACGGGGTGGGTTGA
GGCCTCTCTGCCACCCGTCTTCCTGGTCAGCAGAAGTGCATCTCGGCTTGGGTTTGGGGTGGTCCGCATCCCCTG
CTTGCCACTATGCGCACCAAGGTTTCCCCACATCCTTCCCAGCACCCTTAGGAAGGCCCAGGCAGGGCCTGGAAG
CAGCGGACCTGGGCTGTTCTGTGTTGAAGGAGTGTGCCCAGTGCCCTTGGGCAGGACCTGTGAGAGCCACCTCAC
AGGCAGAGCCCCCACCAGGCAGGGCAAGGAGACTCCGCTCACTCCCCACGGCCAGCGTGGGCACAGGACTGACCC
TTCTTCAGAGATAATGACATTTTATCTTCTCCTTTTGATGAAAACTGTCACTTTAGCATGTAATCCATTACAGAA
TCCCATGCAGTGATTCCAGGATTTGAAATTGTATGATGTGTTACATAAGAATTTATTTGCTATCGACATTCCCGT
ATAAAGAGAGAGACATATCACGCTGCTGTCATGATTTTGTGTCAAGATGATCCAATAAAGTTGTAAAACAGG

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FIGURE 3589A

GCGGCCGTCCACTGGACTCCTGCGCCATATCCTGCAGCAGGTCTACAACCACTCGGTGACCGACCCCGAGAAGCT
CAACAACTACGAGCCCTTCTCCCCCGAGGTGTACGGGGAGACCTCCTTCGACCTGGTGGCCCAGATGATTGATGA
GATCAAGATGACCGACGACGACCTGTTTGTGGACTTGGGGAGCGGTGTGGGCCAGGTCGTGCTCCAGGTTGCTGC
TGCCACCAACTGCAAACATCACTATGGCGTCGAGAAAGCAGACATCCCGGCCAAGTATGCGGAGACCATGGACCG
CGAGTTCAGGAAGTGGATGAAATGGTATGGAAAAAAGCATGCAGAATACACATTGGAGAGAGGCGATTTCCTCTC
AGAAGAGTGGAGGGAGCGAATCGCCAACACGAGTGTTATATTTGTGAATAATTTTGCCTTTGGTCCTGAGGTGGA
TCACCAGCTGAAGGAGCGGTTTGCAAACATGAAGGAAGGTGGCAGAATCGTGTCCTCGAAACCCTTTGCACCTCT
GAACTTCAGAATAAACAGTAGAAACTTGAGTGACATCGGCACCATCATGCGCGTGGTGGAGCTCTCGCCCCTGAA
GGGCTCGGTGTCGTGGACGGGGAAGCCAGTCTCCTACTACCTGCACACTATCGACCGCACCATACTTGAAAACTA
TTTTTCTAGTCTGAAAAACCCAAAACTCAGGGAGGAACAGGAGGCAGCCCGGCGCCGCCAGCAGCGCGAGAGCAA
GAGCAACGCGGCCACGCCCACTAAGGGCCCAGAGGGCAAGGTGGCCGGCCCCGCCGACGCCCCCATGGACTCTGG
TGCTGAGGAAGAGAAGGCGGGAGCAGCCACCGTGAAGAAGCCGTCTCCCTCCAAAGCCCGCAAGAAGAAGCTAAA
CAAGAAGGGGAGGAAGATGGCTGGCCGCAAGCGCGGGCGCCCCAAGAAGATGAACACTGCGAACCCCGAGCGGAA
GCCCAAGAAGAACCAAACTGCACTGGATGCCCTGCACGCTCAGACCGTGTCTCAGACGGCGGCCTCCTCACCCCA
GGATGCCTACAGATCCCCTCACAGCCCGTTCTACCAGCTACCTCCGAGCGTGCAGCGGCACTCCCCCAACCCGCT
GCTGGTGGCGCCCACCCCGCCCGCGCTGCAGAAGCTTCTAGAGTCCTTCAAGATCCAGTACCTGCAGTTCCTGGC
ATACACAAAGACCCCCCAGTACAAGGCCAGCCTGCAGGAGCTGCTGGGCCAGGAGAAGGAGAAGAACGCCCAGCT
CCTGGGTGCGGCTCAGCAGCTCCTCAGCCACTGCCAGGCCCAGAAGGAGGAGATCAGGAGGCTGTTTCAGCAAAA
ATTGGATGAGCTGGGTGTGAAGGCGCTGACCTACAACGACCTGATTCAAGCGCAGAAGGAGATCTCCGCCCATAA
CCAGCAGCTGCGGGAGCAGTCGGAGCAGCTGGAGCAGGACAACCGCGCGCTCCGCGGCCAGAGCTTGCAGCTGCT
CAAGGCTCGCTGCGAGGAGCTGCAGCTGGACTGGGCCACGCTGTCGCTGGAGAAGCTGTTGAAGGAGAAGCAGGC
CCTGAAGAGCCAGATCTCGGAGAAGCAGAGGCACTGCCTGGAGCTGCAGATCAGCATTGTGGAGCTAGAGAAGAG
CCAGCGGCAGCAGGAGCTCCTGCAGCTCAAGTCCTGTGTGCCGCCTGACGACGCCCTGTCCCTGCACCTGCGTGG
GAAGGGCGCCCTGGGCCGCGAGCTGGAGCCTGACGCCAGCCGGCTGCACCTGGAGCTGGACTGCACCAAGTTCTC
GCTGCCTCACTTGAGCAGCATGAGCCCGGAGCTCTCCATGAACGGCCAGGCTGCTGGCTATGAGCTCTGCGGTGT
GCTGAGCCGGCCTTCGTCGAAGCAGAACACGCCCCAGTACCTGGCCTCACCCCTGGACCAGGAGGTGGTGCCCTG
TACCCCTAGCCACGTCGGCCGGCCGCGCCTGGAGAAGCTGTCTGGCCTAGCCGCACCCGACTACACTAGGCTGTC
CCCGGCCAAGATTGTGCTGAGGCGGCACCTGAGCCAGGACCACACGGTGCCCGGCAGGCCGGCTGCCAGTGAGCT
GCATTCGAGAGCTGAGCACACCAAGGAGAACGGCCTTCCCTACCAGAGCCCCAGCGTGCCTGGCAGCATGAAGCT
GAGCCCTCAGGACCCGCGGCCCCTGTCCCCTGGGGCCTTGCAGCTTGCTGGAGAGAAGAGCAGTGAGAAGGGCCT
GAGAGAGCGCGCCTACGGCAGCAGCGGGGAGCTCATCACCAGCCTGCCCATCAGCATCCCGCTCAGCACCGTGCA
GCCCAACAAGCTCCCGGTCAGCATTCCCCTGGCCAGCGTGGTGCTGCCCAGCCGCGCCGAGAGGGCGAGGAGCAC
CCCCAGTCCCGTGCTGCAGCCCCGTGACCCCTCGTCCACACTTGAAAAGCAGATTGGTGCTAATGCCCACGGTGC
TGGGAGCAGAAGCCTTGCCCTGGCCCCCGCAGGCTTCTCCTACGCTGGCTCGGTGGCCATCAGCGGGGCCTTGGC
GGGCAGCCCGGCCTCTCTCACACCTGGAGCCGAGCCGGCCACCTTGGATGAGTCCTCCAGCTCTGGGAGCCTTTT
TGCCACCGTGGGGTCCCGCAGCTCCACGCCACAGCACCCCCTGCTGCTGGCACAGCCCCGGAACTCGCTTCCTGC
CTCTCCCGCCCACCAGCTCTCCTCCAGTCCCCGGCTTGGTGGGGCCGCCCAGGGCCCGTTGCCCGAGGCCAGCAA
GGGAGACCTGCCCTCCGATTCCGGCTTCTCAGATCCTGAGAGTGAAGCCAAGAGGAGGATTGTGTTCACCATCAC
CACTGGTGCGGGCAGTGCCAAGCAGTCGCCCTCCAGCAAGCACAGCCCCCTGACCGCCAGCGCCCGTGGGGACTG
TGTGCCGAGCCACGGGCAGGACAGTCGCAGGCGCGGCCGGCGGAAGCGAGCATCTGCGGGGACGCCCAGCTTGAG
CGCAGGCGTGTCCCCCAAGCGCCGAGCCCTGCCGTCCGTCGCTGGCCTTTTCACACAGCCTTCGGGGTCTCCCCT
CAACCTCAACTCCATGGTCAGTAACATCAACCAGCCCCTGGAGATTACAGCCATCTCGTCCCCGGAGACCTCCCT
GAAGAGCTCCCCTGTGCCCTACCAGGACCACGACCAGCCCCCCGTGCTCAAGAAGGAGCGGCCTCTGAGCCAGAC
CAATGGGGCACACTACTCCCCACTCACCTCAGACGAGGAGCCAGGCTCTGAGGACGAGCCCAGCAGTGCTCGAAT
TGAGAGAAAAATTGCAACAATCTCCTTAGAAAGCAAATCTCCCCCGAAAACCTTGGAAAATGGTGGTGGCTTGGC
GGGAAGGAAGCCCGCGCCCGCCGGCGAGCCAGTCAATAGCAGCAAGTGGAAGTCCACCTTCTCGCCCATCTCCGA
CATCGGCCTGGCCAAGTCGGCGGACAGCCCGCTGCAGGCCAGCTCCGCCCTCAGCCAGAACTCCCTGTTCACGTT
CCGGCCCGCCCTGGAGGAGCCCTCTGCCGATGCCAAGCTGGCCGCTCACCCCAGGAAAGGCTTTCCCGGCTCCCT

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FIGURE 3589B

GTCGGGGGCTGACGGACTCAGCCCGGGCACCAACCCTGCCAACGGCTGCACCTTCGGCGGGGGCCTGGCCGCGGA
CCTGAGTTTACACAGCTTCAGTGATGGTGCTTCTCTTCCCCACAAGGGCCCCGAGGCGGCCGGCCTGAGCTCCCC
GCTGAGCTTCCCCTCGCAGCGCGGCAAGGAGGGCTCGGACGCCAACCCTTTCCTGAGCAAGAGGCAGCTGGACGG
CCTGGCTGGGCTGAAGGGCGAGGGCAGCCGCGGCAAGGAGGCAGGGGAGGGCGGCCTACCGCTGTGCGGGCCCAC
GGACAAGACCCCACTGCTGAGCGGCAAGGCCGCCAAGGCCCGGGACCGCGAGGTCGACCTCAAGAATGGCCACAA
CCTCTTCATCTCTGCGGCGGCCGTGCCTCCCGGAAGCCTCCTCAGCGGCCCCGGCCTGGCCCCGGCGGCGTCCTC
CGCAGGCGGCGCGGCGTCCTCCGCCCAGACGCACCGGTCCTTCCTGGGCCCCTTCCCGCCGGGACCGCAGTTCGC
GCTCGGCCCCATGTCCCTGCAGGCCAACCTCGGCTCCGTGGCCGGCTCCTCCGTGCTGCAGTCGCTGTTCAGCTC
TGTGCCGGCCGCCGCAGGCCTGGTGCACGTGTCGTCCGCTGCCACCAGACTGACCAACTCGCACGCCATGGGCAG
CTTTTCCGGGGTGGCAGGCGGCACAGTTGGAGGTAACTAGGATTTCTACCTCAACCGCGAGACCTATGCAAGGAC
GGTGTGGACCAACTCGCGCCCGCGGCATGGTGCCCGCCGGCCTGCCGGGCTCCCACCCCTGGACGGCAGAGGCAA
GGACGGACGGGAGCTCCACTGTGAATCGGCGGCACGCGCCGCAGGAGGCTGGGACTGGTCCAGTTTGTACTGTCG
ATAGTTTTAGATAAAGTATTTATCATTTTTTAAAAAGTATAAACAATTCTGACTTATTTTATTCCATCTAAGTGG
TAAAAGGCAACTTATTGAGAAATATAAATATCTATATATGAGAGCTCTATATAAAGACACGTGTCTGCAGGGCGG
GCCCGCCAGCGGATTCGCCACAGCCTGCCCCGGTGCTATCTCGTCCCCAGGCCCGCGCCTGCCTCCACCCGCTTG
GTGCTGACTAGACGCTGACAACGCCGAACCCCGTTCTCGGAAACGCCGCCCGGCCGGCTCCCCCGACGCGCTGCT
CCCGTACCAAAGGCAGGCCCGTCGCCACCACATTCCTCGGAGGCCTCCCCGCGGCCTGAGCCCCTTCCTGAGCGC
CCTGGCGCCTGCCCTGAGCTCTTCACCTTTACCCCGGCACTGTGAACCCCCAGACTGTTCACCCTCCGGGGCGTG
GGTTGCGCCCTTGCATGTGAAGGGGCCTGCGCGGTGACGCAGCTGGCCATGTGCTGCGCGATGGTGCTGTGAGGA
CGGCGCGGGCACGTTGAACAAGTGCATTTACTTTTGTATTTCTCGGCTGTCCATGGCTCGCAGCATGCCCTGCGA
TGCGGGGCAGGCCTGTCGTGGGTCCCTTGGTGTTTCTGTACAGGAGAGAGTCACACTAATGAGTGGCAGTATTTT
ATAGAGATGTGATGAGAATTTATAAATTTCATAGATTTGACAGCTTTTATTTTTAGATGGTATAATGCACAGTGA
AGAGGAAAGAAAAGCGAGGGGAAAAAACCTTATTTATTCAAACAGTGCACAAAATGGCCCCAGCGTCAGCCCCGA
CCCTAGACCCCTCAGTTGCAGCTCCCAGCAGCCCAGACAGAGCTGCCGGCGCCCCTGCCTGCCCCACATCCCTTC
CTGTCAGGGCCACGCCTGGCACCCATCCCTTGGAGCCTGTGCTGGTTCTCCCAGCTGCTGTGGGTGTGCTGGGGC
CAGGGTGCACTGCTGAAACCTGGCCTCTCTGGCCCTAGGCCCCAGGGTGACGTCGGCCCCCCACTCTGCAGCCTT
GGCGGGTGCCTGGGACTGGGTGTGGAAGGAGAGGAGCTGAGGCCGGGGTGTAGCAGGCAGGCAGGGCCACTCCAG
TGCTTCTGGAGCCCTGAGCAGTCAGGGCCTGGGTTGTCTGAGCAGTGGTGGCTCTGTGCCCTCCCTGGAGGATGG
GATCTGGGA

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FIGURE 3590

GACATTTTTGGCGCCGGCCCCAGCCTGAGCGGGGACGGCGGCCGGGAGGGCGCGGCCCGGGTTCCCGTTCCCCGC
GGAGCCATGCGGTACAACGAGAAGGAGCTGCAGGCTCTGTCCCGGCAGCCGGCCGAGATGGCGGCCGAGCTGGGC
ATGAGGGGCCCCAAGAAGGGCAGCGTGCTGAAGCGGCGGCTGGTGAAGCTGGTGGTGAATTTCCTCTTCTACTTT
CGGACAGACGAGGCCGAGCCCGTCGGAGCCCTGCTGCTGGAGCGCTGCAGAGTCGTCCGGGAAGAGCCCGGCACC
TTCTCCATCAGCTTCATTGAGGACCCTGAGAGGAAGTATCACTTTGAGTGCAGCAGCGAGGAGCAGTGTCAGGAG
TGGATGGAGGCTCTGCGTCGGGCCAGCTACGAGTTCATGCGGAGAAGCCTCATCTTCTACAGGAACGAAATCCGG
AAGGTGACGGGCAAGGACCCCCTGGAACAGTTCGGCATATCCGAGGAGGCCAGGTTCCAGCTGAGTGGCTTGCAG
GCGTGAGCGCAGGGCACGGTGGTCAGCGTGCAGCGGGACGGGACTGGCCCTGCCCAGCCATGAATCGCTTGGCCA
TGCCTGGATCTGTTTTGTTTTGGTTTTTGGTTTTTGGGTCAGGGTTTCACTGTGTTGCCCAGGCTAGAGTGCAGT
GGTGCCACAGCTCACTGTGACCTTGACCTTCTGGACTCAAGTGATCCTCCTGCCTCAGCTTCCCAAGTAGCGGGG
ATCACAGGCATGAGCCGCCACACCCGGCCATCACACCTGGATTTTCAGTGGGAGGTTTTTGGTTTGGAGACATCC
AAAGCCTGAAGCCAGGTGGGTGTGGGCAGGGGCTGCATTTTATGAAACTGCCCAGCAAGCTGCGCTCCCTGGGGC
CCCAGGATCCACCTAACTGGCCTGGCACCTGGTGCCACGTGCTGCTGCCGCCAGGATATGCGCCTTCCCACAGGT
GCCCTGCCTGAGTTGTGTGCATCCAGGGGCCTGGTGAGCCCCCAGGCTGGTGGCATGGCCCCCCTGCCCCGTGCT
GAATGAATGTACAGAGCCAGACAAAGCTGTGAATGGCCTAGGGGCTGAGTCCCACACCAGCTGTGAATTCTCCTG
CAGACAGGAGGGCCCTGGCTGTGCACCTGGGGAAGTGGTTGCCCTGGGGCCAGGGTGCTTGTTCTGTTCAAATAA
AGGTACCTCTTTTCC

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FIGURE 3591

ATGGACTTCCAGCATCGCCCCGGGGGCAAGACCGGGAGCGGGGGCGTGGCCTCCTCCTCCGAGAGCAACCGTGAC
CGCAGGGAGCGCCTCCGGCAGCTGGCCCTGGAGACCATCGACATCAACAAGGACCCGTACTTCATGAAGAACCAC
CTGGGCTCCTATGAATGCAAACTCTGCCTGACACTTCACAACAATGAGGGGAGCTACCTGGCACATACGCAGGGG
AAGAAGCACCAGACCAACCTGGCCCGGCGAGCAGCCAAGGAGGCCAAGGAGGCCCCTGCCCAGCCCGCGCCTGAG
AAGGTCAAGGTGGAGGTGAAGAAGTTTGTGAAGATCGGCCGCCCGGGCTACAAAGTGACCAAGCAGAGAGACTCG
GAGATGGGCCAGCAGAGCCTCCTCTTCCAGATTGACTACCCTGAGATCGCCGAGGGCATCATGCCACGTCACCGC
TTCATGTCTGCGTACGAGCAGAGGATCGAGCCTCCGGACCGGCGCTGGCAGTACCTGCTCATGGCCGCCGAGCCC
TACGAGACCATTGCCTTCAAGGTGCCGAGCAGAGAGATCGACAAGGCGGAGGGCAAGTTCTGGACACACTGGAAC
CGGGAGACCAAGCAGTTCTTCCTCCAGTTCCACTTTAAGATGGAGAAGCCCCCGGCTCCACCCAGCCTCCCTGCT
GGCCCCCCTGGGGTGAAGCGGCCTCCACCCCCGCTGATGAACGGTCTGCCCCCTCGGCCACCGCTGCCTGAGTCT
TTGCCACCGCCCCCGCCAGGAGGCCTGCCTCTGCCACCCATGCCCCCCACAGGGCCTGCGCCCTCAGGGCCCCCG
GGACCACCCCAGCTACCCCCGCCAGCTCCAGGGGTCCACCCCCCGGCCCCAGTGGTGCATCCCCCTGCATCTGGG
GTCCATCCCCCAGCTCCTGGCGTCCACCCCCCAGCTCCTGGCGTCCATCCCCCAGCCCCTGGGGTCCACCCACCA
ACCTCTGGGGTCCACCCCCCAGCTCCTGGAGTCCACCCTCCAGCCCCCGGGGGTTCACCCACCAGCCCCCGGAGTC
CACCCACCAGCCCCTGGGGTTCACCCACCAGCCCCAGGGGTCCATCCTCCCCCATCAGCGGGGGTTCACCCCCAG
GCCCCGGGGGTGCACCCAGCAGCCCCCGCCGTTCACCCTCAGGCCCCAGGGGTGCACCCACCAGCCCCAGGGATG
CACCCTCAGGCCCCGGGGGTCCACCCCCAACCTCCCGGGGTCCATCCGTCGGCTCCTGGGGTCCACCCTCAGCCT
CCGGGAGTTCACCCCTCAAATCCTGGGGTGCACCCCCCAACTCCCATGCCCCCAATGCTGAGGCCCCCACTTCCC
TCCGAAGGCCCAGGGAACATACCTCCCCCTCCCCCAACCAACTGA

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FIGURE 3592

TGCGAACGGCGAGCAGCGGCGGCGGCGCGGAGAGACGCAGCGGAGGTTTTCCTGGTTTCGGACCCCAGCGGCCGG
ATGGTGAAATCCTCCCTGCAGCGGATCCTCAATAGCCACTGCTTCGCCAGAGAGAAGGAAGGGGATAAACCCAGC
GCCACCATCCACGCCAGCCGCACCATGCCGCTCCTAAGCCTGCACAGCCGCGGCGGCAGCAGCAGTGAGAGTTCC
AGGGTCTCCCTCCACTGCTGTAGTAACCCGGGTCCGGGGCCTCGGTGGTGCTCC**TGA**TGCCCCTCACCCACCCCT
GAAGATCCCAGGTGGGCGAGGGAATAGTCAGAGGGATCACAATCTTTCAGCTAACTTATTCTACTCCGATGATCG
GCTGAATGTAACAGAGGAACTAACGTCCAACGACAAGACGAGGATTCTCAACGTCCAGTCCAGGCTCACAGACGC
CAAACGCATTAACTGGCGAACAGTGCTGAGTGGCGGCAGCCTCTACATCGAGATCCCGGGCGGCGCGCTGCCCGA
GGGGAGCAAGGACAGCTTTGCAGTTCTCCTGGAGTTCGCTGAGGAGCAGCTGCGAGCCGACCATGTCTTCATTTG
CTTCCACAAGAACCGCGAGGACAGAGCCGCCTTGCTCCGAACCTTCAGCTTTTTGGGCTTTGAGATTGTGAGACC
GGGGCATCCCCTTGTCCCCAAGAGACCCGACGCTTGCTTCATGGCCTACACGTTCGAGAGAGAGTCTTCGGGAGA
GGAGGAGGAGTAGGGCCGCCTCGGGGCTGGGCATCCGGCCCCTGGGGCCACCCCTTGTCAGCCGGGTGGGTAGGA
ACCGTAGACTCGCTCATCTCGCCTGGGTTTGTCCGCATGTTGTAATCGTGCAAATAAACGCTCACTCCGAATTAG
CGGTGTATTTCTTGAAGTTTAATATTGTGTTTGTGATACTGAAGTATTTGCTTTAATTCTAAATAAAAATTTATA
TTTTACTTTTT

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FIGURE 3593

CGCGACAAGATGGCGGATAAGGAGAAGAAGAAAAAGGAGAGCATCTTGGACTTGTCCAAGTACATCGACAAGACG
ATCCGGGTAAAGTTCCAGGGAGGCCGCGAAGCCAGTGGAATCCTGAAGGGCTTCGACCCACTCCTCAACCTTGTG
CTGGACGGCACCATTGAGTACATGCGAGACCCTGACGACCAGTACAAGCTCACGGAGGACACCCGGCAGCTGGGC
CTCGTGGTGTGCCGGGGCACGTCCGTGGTGCTAATCTGCCCGCAGGACGGCATGGAGGCCATCCCCAACCCCTTC
ATCCAGCAGCAGGACGCCTAGCCTGGCCGGGGGCGCGGGGGGTGCAGGGCAGGCCCGAGCAGCTCGGTTTCCCGC
GGACTTGGCTGCTGCTCCCACCGCAGTACCGCCTCCTGGAACGGAAGCATTTTCCTTTTTGTATAGGTTGAATTT
TTGTTTTCTTAATAAAATTGCAAACCTC

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FIGURE 3594

GCCGTTGGTTGCGGCGGGCACCGGCCGACATGGCGGCAGCGGTGGCGGCTGCGCTGGCGCGGCTTTTGGCGGCCT
TTCTGCTCCTCGCGGCCCAGGTGGCCTGTGAGTACGGCATGGTGCACGTGGTCTCCCAGGCCGGGGGCCCCGAAG
GCAAAGACTACTGCATCCTCTACAACCCGCAGTGGGCCCATCTTCCGCACGACCTCAGCAAGGCATCTTTCCTGC
AGCTGCGCAACTGGACGGCCTCCCTGCTCTGCTCCGCAGCCGACCTCCCCGCCCGTGGCTTCAGCAACCAGATCC
CGCTGGTGGCGCGGGGGAACTGCACCTTCTATGAGAAAGTGAGGCTGGCCCAGGGCAGCGGAGCACGCGGGCTGC
TCATCGTCAGCAGGGAGAGGCTGGTCCCCCCGGGGGGTAATAAGACGCAGTATGATGAGATTGGCATTCCCGTGG
CCCTGCTCAGCTACAAAGACATGCTGGACATCTTCACGCGTTTCGGCCGCACGGTGAGGGCGGCGCTGTATGCGC
CTAAGGAGCCGGTGCTGGACTACAACATGGTCATCATCTTCATCATGGCTGTGGGCACCGTCGCCATCGGCGGCT
ACTGGGCCGGGAGTCGGGACGTGAAGAAAAGGTACATGAAGCACAAGCGCGACGATGGGCCCGAGAAGCAGGAGG
ACGAGGCGGTGGACGTGACGCCGGTGATGACCTGCGTGTTTGTGGTGATGTGCTGCTCCATGCTGGTGCTGCTCT
ACTATTTCTACGATCTCCTCGTGTACGTGGTCATCGGGATCTTCTGCCTGGCCTCCGCCACCGGCCTCTACAGCT
GCCTGGCGCCCTGTGTGCGGCGGCTGCCTTCGGCAAGTGCAGGATCCCCAACAACAGCCTGCCCTACTTCCACAA
GCGCCCGCAGGCCCGTATGCTGCTCCTGGCGCTCTTCTGCGTGGCCGTCAGCGTGGTGTGGGGCGTCTTCCGCAA
CGAGGACCAGTGGGCCTGGGTCCTCCAGGATGCCCTGGGCATCGCCTTCTGCCTCTACATGCTGAAGACCATCCG
TCTGCCCACCTTCAAGGCCTGCACGCTGCTGCTGCTGGTGCTGTTCCTCTACGACATCTTCTTCGTGTTCATCAC
GCCCTTCCTGACCAAGAGTGGGAGCAGCATCATGGTGGAGGTGGCCACTGGGCCCTCGGACTCAGCCACCCGTGA
GAAGCTGCCCATGGTCCTGAAGGTGCCCAGGCTGAACTCCTCACCTCTGGCCCTGTGTGACCGGCCCTTCTCCCT
CCTGGGTTTCGGAGACATTTTGGTGCCAGGGCTGCTGGTGGCCTACTGCCACAGGTTTGACATCCAGGTACAGTC
CTCCAGGGTATACTTCGTGGCCTGCACCATCGCCTATGGCGTTGGCCTCCTTGTGACATTCGTGGCACTGGCCCT
GATGCAGCGTGGCCAGCCCGCTCTCCTCTACCTGGTGCCCTGCACGCTGGTGACGAGCTGCGCTGTGGCGCTCTG
GCGCCGGGAGCTGGGCGTGTTCTGGACGGGCAGCGGCTTTGCGAAAGTCCTACCTCCATCTCCGTGGGCCCCAGC
ACCAGCCGACGGCCCGCAGCCTCCCAAAGACTCTGCCACGCCACTCTCCCCGCAGCCGCCCAGCGAAGAACCAGC
CACATCCCCCTGGCCTGCTGAGCAGTCCCCAAAATCACGCACGTCCGAGGAGATGGGGGCTGGAGCCCCCATGCG
GGAGCCTGGGAGCCCAGCTGAATCCGAGGGCCGGGACCAGGCCCAGCCGTCCCCGGTAACCCAGCCTGGCGCCTC
GGCCTAGGGGAGGGGTGAGACGCTCGCTGCCGTGCCCGCCACACCAAGATGTTGGGGCTGCCTGGCGCCCACTGG
AGACAGACAGACAGACGCCTGTCCCCCGGGACCGAGGCCTGTGCCGTCCCCACCCGCCCCAACATGGTGCTCATC
CTTGCCGAGACCCCTGCGGTCTGTGCCCGCGCCCAGCCCAGCTGCCCCGGCTGCACGCCTGCTGCTCCCAGCTCG
CCCGGCTGCCACAAGCTCTCTGCGGGTCCATCCTCCCCACCGGGGTCCGTCCTCGCAGGCCCTGCCCGGCCTCTC
TGCAGACCCTCAAGCGTCGTCTGCATGAGTGAGCAGGCGTGGGTGGACTCTGGCCGCGGCCACACTTGGTGCTCA
CCAGCTGCTTCGGCCTTCAGGTGACCTCCCTCCCCACGGCATCCTGCTCTCCGGGTGGAAGAGCAGCTTTCTGTC
TCCCAGAAGGCATCGCTTTTCCCTCTTGAGCAGATCGGAGCCCCTGGGAGGTTTGGAAGCTGCCTCCAAGCCTAG
GACACGGACCAGTGGCCGGGGCGGCCTCTGGCCCCTGACGCTGGCTGAGACAGGCCCGTGGGGCGGGGTTTTGGG
GCGTGAACAAGGCTGGCAGTAAGTGGACAAGCTGCTCCCCTGGCTAAGGCCCTGCCCTGCCCTCAGCCAGAGGTG
CCTGGCCATGCCTGCACACTCCTCCCCATTTTAATAAATGGTCGCAACTTCTAGAAGTCCTGCTGGTGCCACCTG
GTGGGGTGGACGTCTCTCAGACTGCCCTTCTGACAAGCAGGGGTGGGCGCCAGGCAGGCTGGGTCAGGCCCTCAG
GGGTCCCTGGAGCCCTGGGAGGGAGGGACTGGGTCGTGGGAGGTCCTGGTAGCTCCCGGCACCCAACCTCGCTTC
CCGTGTGGGCCCCGTGTTGCTTTTCTGCTGAGAGGGGCTTGGGCCTCGGTTCTCCCTGTGGCAGCGGCATTGGTG
CCTGGGTTCTTAACCCTCTGGACCCAGCAGCTAGGAGCTTCTGGAACCCACGAGGACATCTGCCACTGGCATGGT
CTACTCACTGATGGGGTCCTCCTGACTCCAGGGCAGAGACGTCCGTGCGGGAACTGACCGAGGCGTGGCCCCAGG
CCCCGGCATCCTCCCCTCGCTGCACGTGGTCACTTCCGAAGCAGCGCTCCCTGTGGCCGCAGAGACAGAGCCCGC
ACCCTGGCTGTCTGTGGTGCCTGGGCCCCAGCTCCCGCCCGCCACCCGCCCTGTTGAGTGCGGCCTCCAGACTCG
AGTCCAGAATCTGTTTCTGTCAAGTCAGTCGTCCCCAGCTGCACACGGGGACTGCTGAGCGCTGCGCTCTCACGG
GTCTGTTCCGGACAGAGGGTGGCAGGGGTGAGCCCTGATCCCTTACAAAAAATACCAGCTTCCCAGGGAGTAATG
GCGCCTTCACTGAAGCCATTTTGTACATGGGGACGGGGTGGGGACGTCTCTTTTTTGGTGTTGGACGTTTGACCA
GTGGGGAGGGGTTCAGAGGCGGCGGTCCTGTCCTTGGCTCCGTCTGTCCGTGTGGCCTTGCTGCCATTCCGTCTG
ATCATTAAACACAGCTTTTGATAC

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FIGURE 3595

ACCCCCAAGGAAAAAGGTCACTGGCTAGTGTAGCTAGTGTAAACAGGACCCAGGCGATGCATGGGACCCTGCCCT
TTTTTTTCTAGTGAGCCTCCGACGCTGTTGCACAAGCTGACTCTTCGTCACGTGATGCGACCGGGCTCCGCCCCG
GCGGCAACACGCTGTATAGACGCGCCGGGTGCCTCGTGCGCATGCGCGGCAGGCCCTTCGGGACGAGCTGGAGGC
AGAGCGTGAGTACAAAGTGATCGGCCTCGGCCGCACGTAGTAGCCCCCCTACTCCCCGGCCAAGTCAGGGCCTCC
CTCTTCCCGCGGAGTCGCAACCACGGGTAGCTCGTGTAGGTAACGGCAGGTCCAGGCCTCCGCATGAGCGGAGGG
CCCCCCGCGCGACCTTGAATGGCCCGGGCGCGCGCGGTCGTGTGGGAGTTGTAGTCCTCCGTCCCCGTCCGCGCG
GACTCCGTTTCCCGTGGTGCCCCGGGCGGCCCGCTTCCGGCGCAGTTAGTTACGAGTCGGCGCACGCGGCCTCGG
TCCGGTTGACTTTGCGGAGCC**ATG**GAGGGCGGCTTCGGCTCCGATTTCGGGGGCTCCGGCAGCGGGAAGCTGGAC
CCAGGGCTCATAATGGAGCAGGTGAAAGTGCAGATCGCCGTGGCCAACGCGCAGGAGCTGCTGCAGAGGATGACG
GACAAGTGTTTCCGGAAGTGTATAGGGAAACCTGGGGGCTCCCTGGACAACTCCGAGCAGAAGTGCATCGCCATG
TGCATGGACCGCTACATGGACGCCTGGAACACCGTGTCTCGCGCCTACAACTCGCGGCTGCAGCGGGAACGAGCC
AACATG**TGA**CCGGCGAGCGCGGGCCACCCCACCCTGTTCATTTCCATAAACGTGCTTTGAGAGGCGGGGTCCGCA
TGTACGTACTGCCTGCCCGGGGCTTAGGAGGGTGGCACCGGTGCTGGGACACACGGGACTGTGTCCTCGCCACCC
CCCGCCCTGCCCCCTGCCAGCCAGTGCAGCTTGGATCTCGGGGGTGTGGGGCCCTGTGCCTTCCTGAAGTGCTGG
CAGCCCAGTGGCACCTCCTTCAGGCCTTTGGGGTATTCCCCTAGTGTGCCCAAGTCAGCCTCATATTCTGGGCGG
ACAGCTTGTCTGGACTTCGGAGTTGGGGGTGGTCAGACACCACAGGAGCTGTCACCTCCTGCGGATGGGCAAATA
AATTGGTGGAGGACGGAGAGAAACCTCTTTATTTCCCTCCTGAGGGGTCTCTGGGAAGAGGTGACGCGTGTCCCT
GGAACCCCAGCTCGGAGGGTCTCAGCCTCCCCTGGGTTGGGAGAAGTCCATCTTTCCCCTTAGTGCCACCGGGCT
GCTGAGTCACGAGGAATGTGTTGCTGCTGCCACCCCTGCCCCAAAGGCTAAGGGGGACAGCCTTCCCCTTGTCAG
GGCTTGCTTTGACCCTGCTTCGTTCCACCCCGGGTCCTGGTGGAGCACCAGGCAGGTGGTCCTCGCTGTGACACT
GAGGTGCTGAGCCAGTGAGCTAGGGTGGAGGGGCTGTGTTTATTGGAACAAAGGGTGGTACCAAAATGCATCCCC
ATGACCCACAGCCCCCCCACACCCGTCCTTGGGTAGGGTACGGTGGGGTGGGGTGTTGGGTGGCCTGCTGCTCCT
GTTGCTTTCACGTAGAGTCTCGGCCTGGGCAGTCACGTGGTGGTCACTCCTGGATGTGCTGTCCTATCCAGCCTC
TCACAGCTGCCACCCGGGTATAGACACCTGGGAAGTGGGGCCGGCCACAGCCATAGCCCCAGCTAGTGACCCCAG
TTAGCACCCACCGTCCAGAGGGCTCCCTGCAGGCCAGGGGTCCCCCAGCGTCACCCTGTTGGGGAGAGAAGAAAG
GGGGTTCAGAGGCCGGTACCTCCCCTACAGCAGCCCTTGGGTCATTGGCCCCTCTAGGAGTGACCCTAGTGACTT
CCCCTGGGAGCCGCATTTTCACTATCTGGAAAATGGGCTCAATGCAAAGGTGGCAGACATTTATGGACACCCGCC
ACGTGGTCCCGGAGTGGAACGGTGCCTCCCACTGCAGCCTCTGCCTGCTCTGCCGCCGAGGCCCGGGGATGGGAT
GCGGTGGGTTGCCCAATAAACGGCTGTGGAGTGGAAATTCCTCCAGAGCCAAAAAGGC

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FIGURE 3596

TTTTAATGGATATTTATTTTTTTACATTGGTCAGTACACAGGTCAGGAGCTCACGCCAGGGCCTTGAGGACAGGC
TGACCCTCCTCCCCGGGGTGGCGTGGGGCTGGGGCACCCTCCGACGGCAGAGCCTCCTTCAGAAAGTGCAGCTCA
AGTCTTAAAGACACCAAAACTGAGCCATGGGCACGCGCCGTCTCCGGGCC**ATG**GCGTTCACTGCAGGGCGGGGGC
GGCACCGCTCCCCTGTGACTGCATCCCGCCTCCCTGGGGACCTGCCTGTGGCAGGAAGGAATGGGGGGCCCCAGC
CCCAGGCCGGGAAGGAGCCAGCGGCCGACAAAGCAGAAACACCCGCTGCTCCACGTAGCCCCTGCTCGCTGTCCT
TGCTCTCAGAAGTCCCGGTCCCATGTAGA**TAG**AGGGGGGCGCATCTTACCAAAGCATTTCCTCCTGGAGGCTACG
CCGCTGTGCTCCCAGTCAGGCGGCTGGTAGGGAGCTTTGCCTGCCCCGGGGATACCCTCTGCCAGCCGCTGGAAG
TGGGAATGCTGGCGACAGACTGTGTCCTCTTTCCCACCTTCATAGCAGGAATCACCCGGACCCGACTGGCTGGGC
TTCGTGCTAGCGAGGGTTCTGGGGGTGGGTCTTGGTGATCTTGTCCTATGGGGAGTCTGCAGTGGTCTCAGCCAC
ATCCTATGTATTTTGGCTCTGGAGGAGCAAAGCTGTATCCTGGAGTTGGTCTGTGATTTGCCGACAGCCTTGCAG
GCTGGGCTCAGGGACAAAGTCCCCCCCAAAACCCGCAGGTCCTCATGTCCAGACGCTGCCCAGTCCTGTCCTGAA
AACAGCACGCCCCAGGCCCACAGAACCCCCCACCCTACATTTGCCTTGGGTGGAGCTGGGGGTGGTCCTAGGACT
GCGGGTGCCCTTAGCTGAAGGGGGTGGGGAGAAGCGTGGACTGGGCAGCCTGTGGGTAATTGGAGGTTCATTGAG
AATTGAGTCTTTGGAAACACTAAGAAAATCAAATTTTTAAAAGTTATTTATGGCCTGGGAAACAATTTGCATTTG
TCCCCAAATACGCTTAGCTGTGTGCCGCTTAGAACGATGCGAAACCATCCCTCTGTGTAAGCCCGTGCCGTGTGA
CTCGAAGCCTAGCGCCCTCCCTGCGAAGCATCAGACGCCACCCAGCCCTGGGGGGAGGCCCACGCCTGCTGGACC
AACGCGGGTTCTGGGGTGCACAGCGCCAGGTTAACGCTGAAGCCTGCCCCGCTGAGCCCAGGAGCCGGGAGGCCT
GCGGGCTGACCCAGAATCCGATCATGCACCTGTCCTCATGCCAGCGGCTTTGGCTGGGGTTGGTCTGAAGCCTGC
ACGCGGCAGTTCTTTGTTAAAGATCTGAGGGACTCCTCAGTCCTGGGGCGTCGCCGCCTGCAGCCTCTTCCAAGC
CCTGCGTCCAGCGAGCGTCACAGCACAACCTGCAAAAACGGAGCTGGGCTGCAGCTGGGGCTGGCATGGACTTTC
ATTTCAGAGATTCGGTTTTTAAGAAGATGCATGCCTAATGTGTTCTTTTTTTTTTCCAATGATTTGTAATATACA
TTTTATGACTGGAAACTTTTTTGTACAACACTCCAATAAACATTTTGATTTT

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FIGURE 3597

AGCTCTGACCAGAACGACAAGGCGGCCAGTGCGGCTCGCGAGGAGCTGAAGGAGGCCCGCATGCGCCTGGAGTCC
CTCAGCTACCAGCTCTCCGCCTCACTTCGCTGCCACTTCGCCGCTGCCCCGGAGACTTTTCAATCCCACCCCACT
CCTCATCTCACCATTTGGTCAAATTGGAAGCCCAGGGCCAGGACCCGGAGGTTTAGAAGATGCTTGGGCTTGGAG
GGAGGAGGGCCGGCGAGGCTAGCGAGGGGACAGGAGACGGCCCTGCTGCGGACGGAGCGCGGAAACTGCGTAGGA
ATTCAGTGGTGGTGGGTTTTTTTAAGGCTTTCTACAAAACCAAATTCAGAATCCAGGCGTCGACCTGGTGGGGCC
CGGGGCCAAGCCTGCATTCTGGCTGCCCAGCTTCGGACAGCGGGAACTCCTCAGGCAGCCACGCAGCGGGTGTGG
GCCAGCATGGGGATGGCGTGGCCCCCAGGGCGGGTTTTCACTCCGCTGCCTGGGCTTCCAGATTCCCGTTCTGGC
AGCGCACCGGCCGGGTTTCTCGGACCGTTGACTTTATTTGGGGGAGTTTTCCCGCAGTTCAGTTCCTGACTGTGC
AAGGCCAACAGGGCAGGGGAGGGGAAGACCTGGGGAAGGAAGAATGAGGACAGTCCCGTCGTAAGACCTGTCACA
ACAATA

FIGURE 3598

CGTCGGACTACCGTTGGTTTCCGCAACTTCCTGGATTATCCTCGCCAAGGACTTTGCAATATATTTTTCCGCCTT
TTCTGGAAGGATTTCGCTGCTTCCCGAAGGTCTTGGACGAGCGCTCTAGCTCTGTGGGAAGGTTTTGGGCTCTCT
GGCTCGGATTTTGCAATTTCTCCCTGGGGACTGCCGTGGAGCCGCATCCACTGTGGATTATAATTGCAACATGAC
GCTGGAAGAGCTCGTGGCGTGCGACAACGCGGCGCAGAAGATGCAGACGGTGACCGCCGCGGTGGAGGAGCTTTT
GGTGGCCGCTCAGCGCCAGGATCGCCTCACAGTGGGGGGTGTACGAGTCGGCCAAGTTGATGAATGTGGACCCAGA
CAGCGTGGTCCTCTGCCTCTTGGCCATTGACGAGGAGGAGGAGGATGACATCGCCCTGCAAATCCACTTCACGCT
CATCCAGTCCTTCTGCTGTGACAACGACATCAACATCGTGCGGGTGTCGGGCATGCAGCGCCTGGCGCAGCTCCT
GGGAGAGCCGGCCGAGACCCAGGGCACCACCGAGGCCCGAGACCTGCATTGTCTCCTGGTCACGAACCCTCACAC
GGACGCCTGGAAGAGCCACGGCTTGGTGGAGGTGGCCAGCTACTGCGAAGAAAGCCGGGGCAACAACCAGTGGGT
CCCCTACATCTCTCTTCAGGAACGCTGAGGCCCTTCCCAGCAGCAGAATCTGTTGAGTTGCTGCCACAAACAAAA
AATACAATAAATATTTGAACCCCCTCCCCCCCAGCACAACCCCCCCAAAACAACCCAACCCACGAGGACCATCGG
GGGCAGAGTCGTTGGAGACTGAAGAGGAAGAGGAGGAGGAGAAGGGGAGTGAGCGGCCGCCCCCAGGGCGGAGAT
CCAGGAGCTGGCGGCCGCCGATCCGATGGAGAAGGGGGGACCCAGGCCAGCAGGAGACAGGACCCCCGAAGCTGA
GGCCTTGGGATGGAGCAGAAGCCGGAGTGGCGGGGCACGCTGCCGCCTTCCCCATCACGGAGGGTCCAGACTGTC
CACTCGGGGGTGGAGTGAGACTGACTGCAAGCCCCACCCTCCTTGAGACTGGAGCTGGCGTCTGCATACGAGAGA
CTTGGTTGAACTTGGTTGGTCCTTGTCTGCACCCTCGACAAGACCACACTTTGGGACTTGGGAGCTGGGGCTGAA
GTTGCTCTGTACCCATGAACTCCCAGTTTGCGAATTATAGAGACAATCTATTTTGTTACTTGCACTTGTTATTCG
AACCACTGAGAGCGAGATGGGAAGCATAGATATCTATATTTTTATTTCTACTATGAGGGCCTTGTAATAAATTTC
TAAAGCCTC

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FIGURE 3599

CATGTTTTTGGATTTTTTTTTTTTTTCTTTTTTTGAGATGGAGTTTCATTCTTGTTACCCAGGCTGGAGTGCAGC
TGCATGATTTCAGCTCACCGCAACCTCTGCCTCCCCGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCT
GAGACTACAGGCGTGTGCCACTACGCCCGGCTAATTGTTGTATTTTTAGTAGAGACGGGGTTTCACCGTATTGGC
CAGGCCGCTCTCAAACTCCTGACCTCGGGATCCGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAG
CCACCGCGCCCAGTGTGTTTTAAGCATGAGGCATCCGCGTGGCTGGGAGAGGCTTTGACCATCCTTGGCTCTTCC
AGGTTGTCCTACCCTCTGGCATCCACCATAGACGTTTTTCAAACAGAAAATGCAGGCTGGGGAGCCGCGGCAGGG
CGGGTGGGGCTACCCTGTGCTGCTGTGTGTACAAAATTGTTCCATGATCTTGGAGTGACTCTGAAGGACTCTGGG
AGGTGAGACGTTGTCCCGGAGATCAAAACGTCCGCTCAAAACGTTACCCTGTCGCTCGAACCCGATCTTTTTGCT
TTTCCACCCCCGTGCAACCCAGGACGGCTGTCTGAGGCCGGGAGATGCCTTAGACGCAGGATGGGCCACTCCTCC
CAGCGGCAAGTGGAAATCGAAGATGTCATGGGGTCGGGGGGAGGCTTCTGAAAGATGACTGCGTCCTCCTCTGCG
GCACGGACGGGAGCAGGTGCAGCCACATCTTCCAGGGCCTGCCGGCATCACCTGCGGCCACACCTGAGATGGACC
CCACGCAGCCCTGATCGCAGGAGGCCTGGCCGCCCCGACCCCCTCCACGGGGCTGGCCTAGAAGCAAGTAGTAGA
ATAAAACTAGCCTAGTCCTGTCCCTCCGGCCCCAGTGGAGACAGGCGTCTAAGAACCCGTGCCGAGAGGGTTCCT
GGACGGCCGCCCAGGTCCTCCGTGCAGGCCCGTGAGGCGGGGATCCCTGCTTGGCTCACTTCCTGAGCTGGTGAC
TGCCAGGGTTCCCACCTCGCCAAGGCTAGAGGGCTCCGGGTGTGTGTGCAGGTGTCGGGGGAGTGACCTCCACTC
CTCAACCTCGGGCAGCTCCCACAGGCCACAGCCGGGCTCCCCACCCCCGGCACCCAGCTCTCTACGGCAGGTCCG
GGAGGGCTGGGGCTTCGGGGAGCCCTACCCGCCAAACCTGCTGTTGGCCCGGGAGAGCCCCAGAGGCTCCCGGAG
ACTGCAGCCTCCTGTGGTTGGGCTGGGAGCCGGCAGGGTTTGGGGTGTGGGCGTCCCCACCACGCATAGCAGGAA
TGGCAGGAAGGGACAAAAGCCTGTTCCAGAGACCCTGGGAGGACCCCAGGCAGGGAGAGCCCGCCTGCCTCCACC
CTTTCCAACAAGCCATCTTGGTAACTGGGAACAAACACACCCCACCCCGTTTTTCCTTAAAAGAGGCCTTAATCC
CCGAGCCCCCGCTGCCAGGGCAGAGGGAGGAGGGGGCACAGCTGTGCCAAGCCCGGCCCCACTGGTGTGTCCTCA
CAATGTGACCCCAGAAATGCCAGCAGGGAACGGAGGCTGCTGCAGAGACGCAGCCCCAGGCAGCCGGGGCTCCTA
GGCTGGTGCAGATGGTGGGGTTAAACGGGCTGAGCGTTCCAGGTAAACTGAGGCTCGGGGAGGGGAAGGACAGGC
TGGCCTCTCCTTCACTGTCCACAGGGCCTTGGGTTCCCTGAGCTGTCCAGACCCCACCATCTCCCGGACCCCAGG
GAGGTGGCCATTGCCAGAAGCCTGTGGGTTTCTTTCTAGCTTGGGGGATTAAAAAAAAAATTCTCCACTTTTTTT
TTTCTTGAGTAGACTTCAGTGACCACACTGTGGAAAATACCTTTGCAGACGTGGCACCCGAGTGCACACACCGAC
CGCCACATGTGCTTTTCTGCCGGGAATCCCTGGGGTGAACGCATGTTTTATGGGCGTTTCCAGGAGCGCGCGTGC
ACCTCCAGACGGGGAGCTGGCGGGCGGGGGTGGCAGCAGCAGCTCTAGCCTTGGGGGGACAAGCCTCTCTCAGCT
ACGCCAGGGGAAAAGAGAGTTAAGGACACTCACCCCCACCCACGCACACACACAAGGCAGCGTCGGGTGGGAGAG
AGAAGGCCGTTTCTCCTTCTGTAGCCTGGGTCTCCCACGGGCCTTCCCCGCTGCTGAGCGAGACACCAGTAGCCA
GGTGAAGGGCCACAGCGGGCCAGGCCCCGACCCTGTTGTGACCCACCTGGGCACCTTCCCGGACCAGCTCCGCCT
CCCCTGCCCTCCTCTCTCCAGGAAGGAGCCAGAACCCTCACCCCTCTCCCACCCTCCCCAGGGGTAACCCCAGGC
CAAGCACAGATAGCTCAGCTGCGACCTCTGGCCTCTGGGGACATAAACGGGGCGGCTGGGCCAGGGCGGAAGGTG
CTCCTGTTTCCCTCCTTCTGCGTGGTCCCTTTGACGGGCCGGCCACCGTGTCCGAGGCGCAACGCTAGGCCTCCA
GGCCACGCATCCATCTCCAAGTTAACAGCCCGTCCTGCCCAAGTTCTGGGGCAGGTAGGAGAGGGCCGTCACACA
CCTGTCCGCCCGTGAGTGACCCGGGGGGGCTTCCGGGTGGAGGTGGAGCCACCACGCCCTTCCTCAAGGGGTCAC
TTATTAAAAAGTCCACGGCCTGAGGCCAGGCCCTCTGCACAGAAGCCATATGCC

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FIGURE 3600

GGGCAGGGGCGTGGGCGGGGCGTGGACCAGCCGCGCCGAGCGGGGCCTCTCCGGGCCGCGTCTGTGGGGTCGAGA
CTGCGCGGCCGTTGGGCGTGCAGCGGCGCCAGTCGGCGGACGAGGGGCCCCCGGGAGTTGCTGGACTGAGACATG
AGCCTCCAACTGTGTGGTTGGGCTCGGTAGCACATCGTGGGACTTGGGTGTGCGCCCACAGATGGTTTGGCCCTG
CAGTGACCAGAGCAGCCCAAGCCGCCACC**ATG**GTGAAATTGCTAGTGGCCAAAATCCTGTGCATGGTGGGCGTGT
TCTTCTTCATGCTGCTCGGCTCCCTGCTCCCCGTGAAGATCATCGAGACAGATTTTGAGAAGGCCCATCGCTCGA
AAAAGATCCTCTCTCTCTGCAACACCTTTGGAGGAGGGGTGTTTCTGGCCACGTGCTTCAACGCTCTGCTGCCCG
CTGTGAGGGAAAAGCTCCAGAAGGTCCTGAGCCTCGGCCACATCAGCACCGACTACCCGCTGGCCGAAACCATCC
TCCTGCTGGGCTTCTTCATGACCGTCTTCCTGGAGCAGCTGATCCTGACCTTCCGCAAGGAGAAGCCGTCCTTCA
TCGACCTGGAGACCTTCAACGCCGGATCGGACGTGGGCAGCGACTCGGAGTATGAGAGCCCCTTCATGGGGGGCG
CGCGGGGCCACGCGCTGTACGTGGAGCCCCACGGCCACGGCCCCAGCCTGAGCGTGCAGGGCCTCTCGCGCGCCA
GCCCCGTGCGCCTGCTCAGCCTGGCCTTCGCGCTGTCGGCCCACTCGGTCTTTGAGGGCCTGGCCCTGGGCCTGC
AGGAGGAGGGGGAGAAAGTGGTGAGCCTGTTCGTGGGGGTGGCCGTCCACGAGACACTGGTGGCCGTGGCCCTGG
GCATCAGCATGGCCCGGAGTGCCATGCCCCTGCGGGACGCGGCCAAGCTGGCGGTCACCGTAAGCGCCATGATCC
CCCTGGGCATCGGCCTGGGCCTGGGCATTGAGAGCGCCCAGGGCGTGCCGGGCAGCGTGGCGTCCGTGCTGCTGC
AGGGCCTGGCGGGCGGCACCTTCCTCTTCATCACCTTCCTGGAGATCCTGGCCAAGGAGCTGGAGGAGAAGAGTG
ACCGTCTGCTCAAGGTCCTCTTCCTGGTGCTGGGCTACACCGTCCTGGCCGGGATGGTCTTCCTCAAGTGG**TGA**G
CGGCCTCGCCATTGTCCCTGCCGCCGGAGCCCGCCGGGAGCCCCGGGCCGGACACAGGCCGCGTCCCCCGGCCGC
GCGTCCCCCAAGAGCGAGCACTGTGGCCCTGGGCCACCACCTGTGCACAAGGGGCCTCCCGGGACCAGGCTGTGC
CCCCGATCCTACACCCTGAGCCTCAGAGCACTGCTACTTTTTAAAATACTTCTTTCTCTTAAAAGTCTTTACC

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FIGURE 3601

GGCGTCGCGCCCTGGGGCCGGGGCCGGGCGGCACCGCGGTGCGCAAGCGCAACCGTCGGTGGGTCGGGGATCGGT
CGCCTGAGAGGTATCACCTCTTCTGGGCTCAAG**ATG**GACAACAAGAAGCGCCTGGCCTACGCCATCATCCAGTTC
CTGCATGACCAGCTCCGGCACGGGGGCCTCTCGTCCGATGCTCAGGAGAGCTTGGAAGTCGCCATCCAGTGCCTG
GAGACTGCGTTTGGGGTGACGGTAGAAGACAGTGACCTTGCGCTCCCTCAGACTCTGCCGGAGATATTTGAAGCG
GCTGCCACGGGCAAGGAGATGCCGCAGGACCTGAGGAGCCCCGCGCGAACCCCGCCTTCCGAGGAGGACTCAGCA
GAGGCAGAGCGCCTCAAAACCGAAGGAAACGAGCAGATGAAAGTGGAAAACTTTGAAGCTGCCGTGCATTTCTAC
GGAAAAGCCATCGAGCTCAACCCAGCCAACGCCGTCTATTTCTGCAACAGAGCCGCAGCCTACAGCAAACTCGGC
AACTACGCAGGCGCGGTGCAGGACTGTGAGCGGGCCATCTGCATTGACCCGGCCTACAGCAAGGCCTACGGCAGG
ATGGGCCTGGCGCTCTCCAGCCTCAACAAGCACGTGGAGGCCGTGGCTTACTACAAGAAGGCTCTGGAGCTGGAC
CCCGACAACGAGACATACAAGTCCAACCTCAAGATAGCGGAGCTGAAGCTGCGGGAGGCCCCCAGCCCCACGGGA
GGCGTGGGCAGCTTCGACATCGCCGGCCTGCTGAACAACCCTGGCTTCATGAGCATGGCTTCGAACCTAATGAAC
AATCCCCAGATTCAGCAGCTCATGTCCGGCATGATTTCGGGTGGCAACAACCCCTTGGGAACTCCCGGCACCAGC
CCCTCGCAGAACGACCTGGCCAGCCTCATCCAGGCGGGCCAGCAGTTTGCCCAGCAGATGCAGCAGCAGAACCCA
GAGTTGATAGAGCAGCTCAGGAGCCAGATCCGGAGTCGGACGCCCAGCGCCAGCAACGACGACCAGCAGGAG**TGA**

CGCTGCCTGCTCCCGGTGTGACCGCGTCCTTCCCTGGCCGACCCGAAGGAAGCCTTCTGGTTGTCTGCCACTTCC
TCCTGTTGGACTGCCTGAGAGAGGGGAAGAGAGAGACCTCGGACCTGCATGTCAAGATGGATTTTCCCCTTTTAT
CTCTGCCCTCCTCCACTCCCTTTTTGTAACTCCCTTACAGCCCCCAGACCCTTCTTGAAACGAGAGCCAGCAAGC
TGAGCACAGACCAGCAGCGACCTCCCTTCCAGCCCCCAGAAAGCTCGGTCACTTGAGTGTTTTCTAGAATCCTGG
GGTGCTCCCGGGCCGCTCTCAGAGAAGTGGCAGGTTTCACGTTCAGCCGTGTGGCGGATCGTGTGGCTTCCAAAG
CCTTTTACAGCCCCCGCCCCCCATCCCGTGGTCTGTCTGCAGGAACTCTCCCGTCTGTGAGAAGCCTCTTTCCGA
GTCGACCTCCCGGCCACCCCGGCCCTGTGCCTGCTCGGAAGAGCTCACTGCCAGCTGCGGCCTGGGCACCGCGGG
CCATGTGTGTTTGCATGAGGAACTCTTTAGTGGCAGACACCTAAGAGACGGCTGCGGTCACCCCACGCCTCCGCG
GCTCAGGAGCCGTCCTGGGTGCATAGGACCAGTTTCTGTGACTTTTCTCCAGTTGGGCATGTTGACAGACATGTT
TCCCCTCCTCCCACCCTCATTTTCTGGTCCTCGCGACTGAGAGCCAGGGGCGACATCATGACCTTCTGTCCCGGC
CGCCTTAGCCCCGGGCACAGGGAAGGCAGCTGGGCCGTTTCTGTCTGTGTCCCATCCTGCTGTCCTTCTGTCCTG
GATGTTTCATGGGCCCGGGGCCCCCCAGGGAAGCTTACCCCTCCTGTGCTGGGTGGAGGCCACGGGACACCTCAG
GTGCCACCCACCTTGGCCCTAAAACAGCCACCAGGAAAGCAGCCGGAGAGCCGGACAGCAGGCAGCCTGTCTGGG
TTCCTGAGGCCTGGGGGTGGCAGACGAGCCCACGGCGCCGTGGTCCCAGCAGCAGGGTTGTCAGTCGGAGCATCC
TGGGGCTCCCTGGCTCCTGGCCGTCTGTGAGGTAGGCGCAGTACCGTGTATCGTAGGTAGCAGTAGGAACGGGGG
CCGCCGCGGCCCTGCAGCCGCTCATGGCGGTGAGGTGTGTGCCAAGCCCACCCGGGGTGCAGGGCGTGACGTGTG
GGGAATAAATAGGCGTTGTGACCTCT

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FIGURE 3602

GTGGCGGCGGTTGGGCCGAGGCAGGCGGCCTCAGTGGCCGAGGTGGCTGGACGCGTAGCAGGTGGAAGGAGGGAG
GGAGCCGCAGGCGCAGACCCACCCGCCATGAAGCCCCCCGCAGCCTGTGCAGGAGACATGGCGGACGCAGCATCT
CCGTGCTCTGTGGTAAACGACCTGCGGTGGGACCTGAGTGCCCAGCAGATAGAGGAGCGCACCAGGGAGCTCATC
GAGCAGACCAAGCGCGTGTATGACCAGGTTGGCACCCAGGAGTTTGAGGACGTGTCCTACGAGAGCACGCTCAAG
GCGCTGGCCGATGTGGAGGTCACCTACACAGTTCAGAGGAATATCCTTGACTTCCCCCAGCATGTTTCCCCCTCC
AAGGACATCCGGACAGCCAGCACAGAGGCCGACAAGAAGCTCTCTGAGTTCGACGTGGAGATGAGCATGAGGGAG
GACGTGTACCAGAGGATCGTGTGGCTCCAGGAGAAAGTTCAGAAGGACTCACTGAGGCCCGAGGCTGCGCGGTAC
CTGGAGCGGCTAATCAAGCTGGGCCGGAGAAATGGGCTTCACCTCCCCAGAGAGACTCAGGAAAACATCAAACGC
ATCAAGAAGAAGCTGAGCCTTCTGTGCATCGACTTCAACAAGAACCTGAACGAGGACACGACCTTCCTGCCCTTC
ACGCTCCAGGAGCTAGGAGGGCTCCCCGAGGACTTTCTGAACTCCCTGGAGAAGATGGAGGACGGCAAGTTGAAG
GTCACCCTCAAGTACCCCCATTACTTCCCCCTCCTGAAGAAATGCCACGTGCCTGAGACCAGGAGGAAAGTGGAG
GAGGCCTTCAACTGCCGGTGCAAGGAGGAGAACTGCGCTATCCTCAAGGAGCTGGTGACGCTGCGGGCCCAGAAG
TCCCGCCTGCTGGGGTTCCACACGCACGCCGACTATGTCCTGGAGATGAACATGGCCAAGACCAGCCAGACCGTG
GCCACCTTCCTAGATGAGCTGGCGCAGAAGCTGAAGCCCCTGGGGGAGCAGGAGCGTGCGGTGATTCTGGAGCTG
AAGCGTGCGGAGTGCGAGCGCCGGGGCCTGCCCTTCGACGGCCGCATCCGTGCCTGGGACATGCGCTACTACATG
AACCAGGTGGAGGAGACGCGCTACTGCGTGGACCAGAACCTGCTCAAGGAGTACTTCCCCGTGCAGGTGGTCACG
CACGGGCTGCTGGGCATCTACCAGGAGCTCCTGGGGCTGGCCTTCCACCACGAGGAGGGCGCCAGTGCCTGGCAT
GAGGACGTGCGGCTCTACACCGCGAGGGACGCGGCCTCGGGGGAGGTGGTCGGCAAGTTCTACCTGGACCTGTAC
CCGCGGGAAGGAAAGTACGGGCACGCGGCCTGCTTTGGCCTGCAGCCCGGCTGCCTGCGGCAGGATGGGAGCCGC
CAGATCGCCATCGCGGCCATGGTGGCCAACTTCACCAAGCCCACAGCCGACGCGCCCTCGCTGCTGCAGCATGAC
GAGGTGGAGACCTACTTCCATGAGTTTGGCCACGTGATGCACCAGCTCTGCTCCCAGGCGGAGTTCGCCATGTTC
AGCGGGACCCACGTGGAGCGGGACTTTGTGGAGGCGCCGTCGCAGATGCTGGAGAACTGGGTGTGGGAGCAGGAG
CCGCTGCTGCGGATGTCGCGGCACTACCGCACAGGCAGCGCCGTGCCCCGGGAGCTCCTGGAGAAGCTCATTGAG
TCCCGGCAGGCCAACACAGGCCTCTTCAACCTGCGCCAGATCGTCCTCGCCAAGGTGGACCAGGCCCTGCACACG
CAGACGGACGCAGACCCCGCCGAGGAGTATGCGCGGCTCTGCCAGGAGATCCTCGGGGTCCCGGCCACGCCAGGA
ACCAACATGCCTGCAACCTTCGGCCATCTGGCAGGTGGCTACGACGCCCAGTACTACGGGTACCTGTGGAGCGAG
GTGTATTCCATGGACATGTTCCACACGCGCTTCAAGCAGGAGGGTGTCCTGAACAGCAAGGTTGGCATGGATTAC
AGAAGCTGCATCCTGAGACCCGGCGGTTCCGAGGATGCCAGCGCCATGCTGAGGCGCTTCCTGGGCCGTGACCCC
AAGCAGGACGCCTTCCTCCTGAGCAAGGGGCTGCAGGTCGGGGGCTGCGAGCCCGAGCCGCAGGTCTGCTGAGGC
CTGGCACTGCGACTGCCCAGTCTGGCCTGCGCTCCCGCCGCCCTGGTGCCTTAGCCCCCGGCACAGGATGGGGCA
GGCTCTGGCACAGTGCCTGGGACTGGCAGGGTGGCTGAGCGGCTGTCTTGCCTCTTGTCATTGTCTGTCCCCACC
CGGTCGTGGCCCACCCGGCTAGAGACGGCGTCCTCAAGGCATCTGGAGGGCTTTCGTGGCTGCCAGGGCCTGGTC
TTTGTTGCACTAACACGTCTCCTCTCTGGGAAACGTCCCTTGTCAGGAGACGGCTCTTCTTTGAAATGAGGTCAT
TAAAAGGAAAC

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FIGURE 3603A

TCTAATCAGGCCCCTGGGACGGGACGCCTCTGTCCTAGCCGTGAGTGCCCCGCCTGCCCCTAGCGGTCCCTGGCG
TCCCGGTTCCTGTCGCGCTCACCTGCGCCGGTAGCGAAGAAATCGCCCCGGGACATGGACTCAGTGGTCTTTGAG
GATGTGGCTGTGGACTTCACCCTGGAGGAGTGGGCTTTGCTGGATTCTGCTCAGAGGGACCTCTACAGAGATGTG
ATGCTGGAGACCTTTCAGAACCTGGCCTCAGTAGATGATGAAACTCAATTTAAGGCCAGTGGGTCAGTTTCTCAG
CAGGATATTTATGGAGAGAAAATACCCAAGGAATCTAAAATAGCCACGTTCACCAGAAATGTTTCCTGGGCCTCT
GTTTTAGGAAAAATTTGGGACAGTCTTAGCATCGAAGATCAAACCACAAACCAGGGGAGAAATCTCAGTAGAAAT
CATGGGTTGGAGAGACTCTGTGAAAGTAATGATCAATGTGGAGAAGCCCTCAGCCAGATTCCACATCTTAATCTG
TACAAGAAAATTCCACCTGGAGTAAAACAGTATGAATACAACACGTACGGAAAAGTCTTCATGCATCGCCGCACA
TCCCTCAAGAGTCCCATCACAGTTCACACTGGACACAAACCATATCAGTGCCAGGAATGTGGGCAGGCCTACAGT
TGTCGTTCACACCTAAGA**ATG**CATGTGAGAACCCACAATGGAGAGAGACCCTATGTGTGTAAATTATGTGGGAAA
ACCTTTCCTCGTACTTCCTCCCTCAATCGGCATGTAAGGATTCACACTGCTGAGAAAACCTACGAATGTAAGCAA
TGTGGGAAAGCCTTTATTGACTTCTCAAGTCTTACTAGTCATCTCAGAAGTCACACCGGAGAGAAGCCATATAAG
TGTAAGGAATGTGGGAAAGCTTTCAGTTATTCCTCAACGTTTCGAAGACACACAATAACACACACTGGCGAGAAG
CCATATAAATGTAAGGAATGTGCGGAAGCCTTTAGTTATTCCTCAACTTTTCGAAGACATATGATTTCACACACT
GGAGAGAAGCCACATAAATGTAAAGAATGTGGGGAGGCCTTCAGTTATTCTTCGGCTTTTCGAAGACACATGATA
ACACACACTGGAGAGAAACCCTACGAATGCAAACAATGTGGGAAAACCTTCATTTATCTCCAGTCCTTTCGAAGA
CATGAAAGGATTCACACTGGAGAGAAACCCTACGAATGCAAACAGTGTGGGAAGACCTTCATTTATCCCCAGTCC
TTTCGAAGACATGAAAGGACTCATGGTGGAGAGAAACCCTATGAATGCAACCAGTGCGGGAAAGCATTCAGTCAC
CCCTCCTCCTTTCGAGGACACATGAGGGTGCACACTGGAGAGAAACCCTATGAGTGCAAGCAATGTGGGAAAACT
TTCAATTGGCCCATATCTTTACGAAAACATATGAGAACACATACTAGAGAGAAACCCTATGAATGTAAGCAGTGT
GGGAAAGCCTTCAGCTTGTCTGCTTGCTTTCGAGAACATGTGAGAATGCACCCTGAAGACAAATCCTATGAATGC
AAGCTATGTGGGAAAGCTTTCTATTGCCACATATCCTTACAAAAACATATGAGAAGACATACCGCAGAGAAACTC
TATAAATGCAAGCAGTGTGGGAAAGCTTTCAGTTGGCCTGAACTTTTGCAACAACATGTGAGAACGCACACTGTA
GAGAAGCCCTATGAATGTAAGGAATGTGGGAAGGTCTTCAAATGGCCATCATCTTTACCAATACATATGAGACTG
CACACTGGAGAGAAACCTTATCAATGTAAGCATTGTGGGAAAGCATTCAATTGTTCCTCATCCTTAAGGCGACAT
GTGAGAATACACACTACAGAAAAACAGTATAAGTGTAATGTAGGACATCCTCCTGCAAATGAATTCATGTGCAGT
GCTTCAGAAAAGTCACACCAGGAGAGAGATCTGATCAAAGTTGTAAATATGGTGTTGCCTTTA**TGA**GTTCCTTAT
CCTGAAAGTGGACACTCAAGGAGTGTGTCTGTAGTTCATTTGCAAATAAACATTTAGTTGAAAAATAATTCTCCA
AATACTCTCAGCTATCCTACATGAATTTGAACAGGTAGTTTCTTACGATTCAGTAAATAAAACTTTCATCTTAGA
GTGTTTTGGACTCATGGATGATTTGAAGTGTATTTTTAATATGCAAGTAGGTTCAAGTTTTATTTAATTTCTTAA
ATTGTAACTGACTTAGTGTGACAGGTATTGGATATTACGTATCTATTATATTTTCCACCTTTTTTACTGGGAGTA
TTTTTATTGTTTGGCCAGAGGAGCCTTATTCCATTTTTTAAGAAGTAGTTGGCAGAATTTTGTAATTATGCAAAG
TTGTTTAAGGAGTATAGCCTCAAATGAATTGTAATTTTTAATGTTTGCCCATTGCTGTTTGTCTTTGCTTGTGAT
TGTGAATTGGACAGTAGGCTTTGACTTGTGATGTGACGGAGAAATCCAGAGTTGCAGATAGTTCTTCTGCATTGT
TGTCAGTGTGGGTAGTGTTAGGAACTTCATTTGCTGGAATGCATTTCCTTTATGGTTCCATGTCCAAATTTACCA
ATAGCAATAACTTGAATGAAATTTAGAATGAAGAAGAAGTAAGTCATCGCTGAGCTTTTGGGGTCACATTAAATG
GAGATGGACAGATGCATAGGGGCTTTGTGAACATCAACCTTCAGCTTATTTTCCAGATTCTTATTCCTGCCAATC
AAGAGTACCATCAAAAGAAACACTTAAGTGCTTGATTTCCACTGTGTCAGAGGTGTAGTCTTCCTCAGACATCTC
CATTAACTTGATATTAGGGATATTCCTGTGTGGTCAGTCACCTAGAGTCTGGATTTTTCTCAAAACCCTGCATGA
CCTCTTGACCACTGATTCAGACTGTCTTGTTTGGCAGTCTCTGAGCTTCTGATTCTCCCGTTCTGTAGATCTTAA
CATATTTGCATGGGGTCTAATTTATATAGTGAACACCTTGTTATCTTAATACTTCCAGTGGCTCTGTGATCCTGA
TTCCACCACGAAAGCCACAGTGTTGCAGTCAAAGAAGAAAAACAACACATGGGACTTTGTACCCTATTGCATTTT
TAAGTGTGCCTGCCGAGTCCTATGTGAGAACAAATACCTTCCTCATATATTAGATTTAGGGAGATTTCTGTTACT
CAGAACTAAATGCAGTTTCTTGATATAGGTTAAATTATTAGGTTTGATTATGTATCATTAAAAATAATGTGGATT
TTGTTTCAAGGAAAACCTTCTGTAGATATTTCTTAGAAATATCCTGTTTAGCTGGGCACAGTAGCTCATGCCTGT
AATCCCTGCACTTTGGGAGGCTTGAGGTCAGGAGTTTGAGACCAGCCTGGTTAACATGGTGAAACCCTGTCTCTA
CTAAAAACACAAAAATTAGCCAGGCATGGTGGTGAGTACCTGTAACCCCAGCTACTTGGGAGGCTGAGACAGGAG
AAGTGCTTGAACCTAGGAGGCGGAGGTTGCAGTGAGCCAAGATCACACCACTGCACTCCAGCCTGGGAGACGGGG

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FIGURE 3603B

AAAGACTCCATCACACAAGCAAG

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FIGURE 3604

GCAAGGTCACGTCCTGTCCCCACCTTTCGCCCCTCACCCTAGCTCCCCCAACGCCAAAGACAAGGTTAAGAAAGT
GATATCGCGAAATAGTTTTTTAAAGCATTTTATTGCATTTTATGACTTGGAGTTTATGTGAAACCTCAACGGTAT
TAGCCGAACAGCCTGCCGCACCTTCCGGGAGTTCCAGAGTGGGCCTACAACTCCCACAGGGCTCCGCGAGCGCCG
GACGGACGGACTACAATTCCCGACAGGCAGCGCGGCTGGCGGGGCGGTTCGCCGCGGTGCCCACAGGACCTCAGG
GCGAGTGCGGGCTGCCCCGCGCGGCGCCCGCAGGACCCCGGCGGCTACCCATGCCGAGGTGAGTCCGCGGGAGCC
GCCGCCGCCGCCGTCCCGTCCCAGCTGCCGCCCCGCGCGGCCCCGCCGCCGGCCAGGATGCTGGAGGAAGCGGGC
GAGGTGCTGGAGAAC**ATG**CTGAAGGCGTCTTGTCTGCCGGTCGGCTTCATCGTCTTCCTGCCCGCTGTGCTGCTG
CTGGTGGCGCCGCCGCTGCCTGCCGCCGACGCCGCGCACGAGTTCACCGTGTACCGCATGCAGCAGTACGACCTG
CAGGGCCAGCCCTACGGCACACGGAATGCAGTGCTGAACACGGAGGCGCGCACGATGGCGGCGGAGGTGCTGAGC
CGCCGCTGCGTGCTCATGCGGCTACTGGACTTCTCCTACGAGCAGTACCAGAAGGCCCTGCGGCAGTCGGCGGGC
GCCGTGGTCATCATCCTGCCCAGGGCCATGGCCGCCGTGCCCCAGGACGTCGTCCGGCAATTCATGGAGATCGAG
CCGGAGATGCTGGCCATGGAGACCGCCGTCCCCGTGTACTTTGCCGTGGAGGACGAGGCCCTGCTGTCTATCTAC
AAGCAGACCCAGGCTGCCTCCGCCTCCCAGGGCTCCGCCTCTGCTGCTGAAGTACTGCTGCGCACGGCCACTGCC
AACGGCTTCCAGATGGTCACCAGCGGGGTACAGAGCAAGGCCGTGAGTGACTGGCTGATTGCCAGCGTGGAGGGG
CGGCTGACGGGGCTGGGCGGAGAGGACCTTCCCACCATCGTCATCGTGGCCCACTACGACGCCTTTGGAGTGGCC
CCCTGGCTGTCGCTGGGCGCGGACTCCAACGGGAGCGGCGTCTCTGTGCTGCTGGAGCTGGCACGCCTCTTCTCC
CGGCTCTACACCTACAAGCGCACGCACGCCGCCTACAACCTCCTGTTCTTTGCGTCTGGAGGAGGCAAGTTTAAC
TACCAGGGAACCAAGCGCTGGCTGGAAGACAACCTGGACCACACAGACTCCAGCCTGCTTCAGGACAATGTGGCC
TTCGTGCTGTGCCTGGACACCGTGGGCCGGGGCAGCAGCCTGCACCTGCACGTGTCCAAGCCGCCTCGGGAGGGC
ACCCTGCAGCACGCCTTCCTGCGGGAGCTGGAGACGGTGGCCGCGCACCAGTTCCCTGAGGTACGGTTCTCCATG
GTGCACAAGCGGATCAACCTGGCGGAGGACGTGCTGGCCTGGGAGCACGAGCGCTTCGCCATCCGCCGACTGCCC
GCCTTCACGCTGTCCCACCTGGAGAGCCACCGTGACGGCCAGCGCAGCAGCATCATGGACGTGCGGTCCCGGGTG
GATTCTAAGACCCTGACCCGTAACACGAGGATCATTGCAGAGGCCCTGACTCGAGTCATCTACAACCTGACAGAG
AAGGGGACACCCCCAGACATGCCGGTGTTCACAGAGCAGATGCAGATCCAGCAGGAGCAGCTGGACTCGGTGATG
GACTGGCTCACCAACCAGCCGCGGGCCGCGCAGCTGGTGGACAAGGACAGCACCTTCCTCAGCACGCTGGAGCAC
CACCTGAGCCGCTACCTGAAGGACGTGAAGCAGCACCACGTCAAGGCTGACAAGCGGGACCCAGAGTTTGTCTTC
TACGACCAGCTGAAGCAAGTGATGAATGCGTACAGAGTCAAGCCGGCCGTCTTTGACCTGCTCCTGGCTGTTGGC
ATTGCTGCCTACCTCGGCATGGCCTACGTGGCTGTCCAGCACTTCAGCCTCCTCTACAAGACCGTCCAGAGGCTG
CTCGTGAAGGCCAAGACACAG**TGA**CACAGCCACCCCCACAGCCGGAGCCCCCGCCGCTCCACAGTCCCTGGGGCC
GAGCACGAGTCGTCATGATGGATGCACTGACTGACCGTCTGGGGCTCAGGCTGGTGTGGGATGCAGCCGGCCGAT
GAGAAAATAAAGCCATATTGAATGATC

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FIGURE 3605

GCAAGGTCACGTCCTGTCCCCACCTTTCGCCCCTCACCCTAGCTCCCCCAACGCCAAAGACAAGGTTAAGAAAGT
GATATCGCGAAATAGTTTTTTAAAGCATTTTATTGCATTTTATGACTTGGAGTTTATGTGAAACCTCAACGGTAT
TAGCCGAACAGCCTGCCGCACCTTCCGGGAGTTCCAGAGTGGGCCTACAACTCCCACAGGGCTCCGCGAGCGCCG
GACGGACGGACTACAATTCCCGACAGGCAGCGCGGCTGGCGGGGCGGTTCGCCGCGGTGCCCACAGGACCTCAGG
GCGAGTGCGGGCTGCCCCGCGCGGCGCCCGCAGGACCCCGGCGGCTACCCATGCCGAGGTGAGTCCGCGGGAGCC
GCCGCCGCCGCCGTCCCGTCCCAGCTGCCGCCCCGCGCGGCCCCGCCGCCGGCCAGGATGCTGGAGGAAGCGGGC
GAGGTGCTGGAGAAC**ATG**CTGAAGGCGTCTTGTCTGCCGCTCGGCTTCATCGTCTTCCTGCCCGCTGTGCTGCTG
CTGGTGGCGCCGCCGCTGCCTGCCGCCGACGCCGCGCACGAGTTCACCGTGTACCGCATGCAGCAGTACGACCTG
CAGGGCCAGCCCTACGGCACACGGAATGCAGTGCTGAACACGGAGGCGCGCACGATGGCGGCGGAGGTGCTGAGC
CGCCGCTGCGTGCTCATGCGGCTACTGGACTTCTCCTACGAGCAGTACCAGAAGGCCCTGCGGCAGTCGGCGGGC
GCCGTGGTCATCATCCTGCCCAGGGCCATGGCCGCCGTGCCCCAGGACGTCGTCCGGCAATTCATGGAGATCGAG
CCGGAGATGCTGGCCATGGAGACCGCCGTCCCCGTGTACTTTGCCGTGGAGGACGAGGCCCTGCTGTCTATCTAC
AAGCAGACCCAGGCTGCCTCCGCCTCCCAGGGCTCCGCCTCTGCTGCTGAAGTACTGCTGCGCACGGCCACTGCC
AACGGCTTCCAGATGGTCACCAGCGGGGTACAGAGCAAGGCCGTGAGTGACTGGCTGATTGCCAGCGTGGAGGGG
CGGCTGACGGGGCTGGGCGGAGAGGACCTTCCCACCATCGTCATCGTGGCCCACTACGACGCCTTTGGAGTGGCC
CCCTGGCTGTCGCTGGGCGCGGACTCCAACGGGAGCGGCGTCTCTGTGCTGCTGGAGCTGGCACGCCTCTTCTCC
CGGCTCTACACCTACAAGCGCACGCACGCCGCCTACAACCTCCTGTTCTTTGCGTCTGGAGGAGGCAAGTTTAAC
TACCAGGGAACCAAGCGCTGGCTGGAAGACAACCTGGACCACACAGACTCCAGCCTGCTTCAGGACAATGTGGCC
TTCGTGCTGTGCCTGGACACCGTGGGCCGGGGCAGCAGCCTGCACCTGCACGTGTCCAAGCCGCCTCGGGAGGGC
ACCCTGCAGCACGCCTTCCTGCGGGAGCTGGAGACGGTGGCCGCGCACCAGTTCCCTGAGGTACGGTTCTCCATG
GTGCACAAGCGGATCAACCTGGCGGAGGACGTGCTGGCCTGGGAGCACGAGCGCTTCGCCATCCGCCGACTGCCC
GCCTTCACGCTGTCCCACCTGGAGAGCCACCGTGACGGCCAGCGCAGCAGCATCATGGACGTGCGGTCCCGGGTG
GATTCTAAGACCCTGACCCGTAACACGAGGATCATTGCAGAGGCCCTGACTCGAGTCATCTACAACCTGACAGAG
AAGGGGACACCCCCAGACATGCCGGTGTTCACAGAGCAGATGCAGATCCAGCAGGAGCAGCTGGACTCGGTGATG
GACTGGCTCACCAACCAGCCGCGGGCCGCGCAGCTGGTGGACAAGGACAGCACCTTCCTCAGCACGCTGGAGCAC
CACCTGAGCCGCTACCTGAAGGACGTGAAGCAGCACCACGTCAAGGCTGACAAGCGGGACCCAGAGTTTGTCTTC
TACGACCAGCTGAAGCAAGTGATGAATGCGTACAGAGTCAAGCCGGCCGTCTTTGACCTGCTCCTGGCTGTTGGC
ATTGCTGCCTACCTCGGCATGGCCTACGTGGCTGTCCAGCACTTCAGCCTCCTCTACAAGACCGTCCAGAGGCTG
CTCGTGAAGGCCAAGACACAG**TGA**CACAGCCACCCCCACAGCCGGAGCCCCCGCCGCTCCACAGTCCCTGGGGCC
GAGCACGAGTCGTCATGATGGATGCACTGACTGACCGTCTGGGGCTCAGGCTGGTGTGGGATGCAGCCGGCCGAT
GAGAAAATAAAGCCATATTGAATGATC

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FIGURE 3606

GGCCGCCCGGCGCCCCCAGCAGCCCGAGCCGGGGCGCACAGCCGGGGCGCAGCCCGCGCCCCCCGCCGCGATTGA
CATGATGTTTCCACAAAGCAGGCATTCGGGCTCCTCGCACCTACCCCAGCAACTCAAATTCACCACCTCGGACTC
CTGCGACCGCATCAAAGACGAATTTCAGCTACTGCAAGCTCAGTACCACAGCCTCAAGCTCGAATGTGACAAGTT
GGCCAGTGAGAAGTCAGAGATGCAGCGTCACTATGTGATGTACTACGAGATGTCCTACGGCTTGAACATCGAGAT
GCACAAACAGGCTGAGATCGTCAAAAGGCTGAACGGGATTTGTGCCCAGGTCCTGCCCTACCTCTCCCAAGAGCA
CCAGCAGCAGGTCTTGGGAGCCATTGAGAGGGCCAAGCAGGTCACCGCTCCCGAGCTGAACTCTATCATCCGACA
GCAGCTCCAAGCCCACCAGCTGTCCCAGCTGCAGGCCCTGGCCCTGCCCTTGACCCCACTACCCGTGGGGCTGCA
GCCGCCTTCGCTGCCGGCGGTCAGCGCAGGCACCGGCCTCCTCTCGCTGTCCGCGCTGGGTTCCCAGGCCCACCT
CTCCAAGGAAGACAAGAACGGGCACGATGGTGACACCCACCAGGAGGATGATGGCGAGAAGTCGGATTAGCAGGG
GGCCGGGACAGGGAGGTTGGGAGGGGGGACAGAGGGGAGACAGAGGCACGGAGAGAAAGGAATGTTTAGCACAAG
ACACAGCGGAGCTCGGGATTGGCTAAACTCCCATAGTATTTATGGTGGCCGCCGGCGGGGGCCCCAGCCCAGCTT
GCAGGCCACCTCTAGCTTTCTTCCTACCCCATTCCCGGCTTCCCTCCTCCTCCCCTGCAGCCTGGTTAGGTGGAT
ACCTGCCCTGACATGTGAGGCAAGCTAAGGCCTGGAGGGTCAGATGGGAGACCAGGTCCCAAGGGAGCAAGACCT
CGCGAAGCGCAGCAGCCCCGGCCCTTCCCCCGTTTTGAACATGTGTAACCGACAGTCTGCCTGGGCCACAGCCCT
CTCACCCTGGTACTGCATGCACGCAATGCTAGCTGCCCCTTTCCCGTCCTGGGCACCCCGAGTCTCCCCCGACCC
CGGGTCCCAGGTATGCTCCCACCTCCACCTGCCCCACTCACCACCTCTGCTAGTTCCAGACACCTCCACGCCCAC
CTGGTCCTCTCCCATCGCCCACAAAAGGGGGGGCACGAGGGACGAGCTTAGCTGAGCTGGGAGGAGCAGGGTGAG
GGTGGGCGACCCAGGATTCCCCCTCCCCTTCCCAAATAAAGATGAGGGTACT

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FIGURE 3607

AATGACTCAGTAAGTTCAGCGCGCCCGCTCCGGCCGGCCCTGCGCCTCCCGCCGCGCCCGGGATGTATTCGTCCC
CGCTCTGCCTCACCCAGGATGAGTTCCACCCGTTCATCGAGGCCCTGCTGCCTCACGTCCGCGCCTTCGCCTACA
CCTGGTTCAACCTGCAGGCGCGGAAGCGCAAGTACTTCAAGAAGCACGAGAAGCGGATGTCGAAGGACGAGGAGC
GTGCGGTCAAGGACGAGCTGCTGGGCGAGAAGCCCGAGGTCAAGCAGAAGTGGGCGTCGCGGCTGCTGGCCAAGC
TGCGCAAGGACATCCGGCCCGAGTGCCGCGAGGACTTCGTGCTGAGCATCACCGGCAAGAAGGCGCCGGGCTGCG
TGCTCTCCAACCCCGACCAGAAGGGCAAGATGCGGCGCATCGACTGTCTCCGGCAGGCGGACAAGGTGTGGCGGC
TGGACCTGGTCATGGTCATCCTGTTCAAGGGCATCCCGCTGGAGAGCACCGACGGCGAGCGCCTGGTCAAGGCTG
CGCAGTGCGGTCACCCGGTCCTGTGCGTGCAGCCGCACCACATTGGCGTGGCCGTCAAGGAGCTGGACCTCTACC
TGGCCTACTTCGTGCGTGAGCGAGATGCAGAGCAAAGCGGCAGTCCCCGGACAGGGATGGGCTCTGACCAGGAGG
ACAGCAAGCCCATCACGCTGGACACGACCGACTTCCAGGAGAGCTTTGTCACCTCCGGCGTGTTCAGCGTCACTG
AGCTCATCCAAGTGTCCCGGACACCCGTGGTGACTGGAACAGGACCCAACTTCTCCCTGGGGGAGCTGCAGGGGC
ACCTGGCATACGACCTGAACCCAGCCAGCACTGGCCTCAGAAGAACGCTGCCCAGCACCTCCTCCAGTGGGAGCA
AGCGGCACAAATCGGGCTCGATGGAGGAAGACGTGGACACGAGCCCTGGCGGCGATTACTACACTTCGCCCAGCT
CGCCCACGAGTAGCAGCCGCAACTGGACGGAGGACATGGAAGGAGGCATCTCGTCCCCGGTGAAGAAGACAGAGA
TGGACAAGTCACCATTCAACAGCCCGTCCCCCCAGGACTCTCCCCGCCTCTCCAGCTTCACCCAGCACCACCGGC
CCGTCATCGCCGTGCACAGCGGGATCGCCCGGAGCCCACACCCGTCCTCCGCTCTGCATTTCCCTACGACGTCCA
TCCTACCCCAGACGGCCTCCACCTACTTCCCCCACACGGCCATCCGCTACCCACCTCATCTCAACCCCCAGGACC
CGCTCAAAGATCTTGTCTCGCTGGCCTGCGACCCAGCCAGCCAGCAACCTGGACCGTCCTGGTATCTGGGATAGC
AAAGGTCTTCTTCCCTCGCCCCTTCTCCATCGTCCCAGGAATCCCAGGGGGCAGCACAGCCGGCCCCCGGCCCAC
GTTTTCGGTGGAAAATTAGAGTGAACAAGAACACCCCTGCCGACTCCCAGCCCGGCCAAAAAGACAAAACACATA
GACGCACACACTCAGGAGGAAAAGAAAAAACAAAGGCAGAAGAAGAAGAAGAAGAAATAAAAACCCACCCAAGCA
AGAAGACAAAAGGTAAAGACGCAACGTTTCCAACTCTCGGGACGCCAAGGCCGCAGGACTGGAGGGCCAGGCCCC
GCCACCCCCACGGGAGACCCGGGACAGGGCGTCTTCCTAAGTTATTCATCTCCTCTCCGCCTGCTGCTCGGGAAG
GACAGACGCCGGCCGCCCGCCCGCGCCCCGGAGGCCCTGGCTCTGTCCGGAGACCAGGTGAGCACAGCCTGGAGC
CTGTGCCCAGGGCCGACAGGCGCGACACCCAGCAAGGCCACCTCTCCCCGGGCCCCCGCGCCTCTGCCGGACACG
GACCGGCCCCTCAGCCCCCACCGAGGACGCAGCCACTGGGGGGAAAGGGAGACACAGCGGACCCCGGCCGGGCAG
CGGAGACCGCAGAGGCGGGCAGGGTGGGGCAGGCGAGTGGTGTCGCGGGGGTGCGTGGCGCTTGCGAGCCCTGGC
CAGGGGAGGAAGTGAGGCCCAGGCACCTGCTGCCCCTCGAGGGGGCCCTGCCTGCCGCGGGGCCTCCCCACAAGC
CCCTCCCAAAGCGCCGGCCGACTCGCTGTCTCGCTGGGGACTCTTTCAGCCCTCGCGCCCGCCCGTTTGGGAGGA
GAAGTCTCTATGCAATTGGCCCCGGCCCCTCCACCCCCCACCCCCGGCATAGGAGGCCCCCCCACCTCGCCCGGC
TCACACCCCCCACTTCCTCTTTAAA

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FIGURE 3608

ATGGACCAGGACTATGAGCGGCGCCTGCTTCGCCAGATCGTCATCCAGAATGAGAACACGATGCCACGCGTCACA
GAGATGCGGCGGACCCTGACGCCTGCCAGCTCCCCAGTGTCCTCGCCCAGCAAGCACGGAGACCGCTTCATCCCC
TCCAGAGCCGGAGCCAACTGGAGCGTGAACTTCCACAGGATTAACGAGAATGAGAAGTCTCCCAGTCAGAACCGG
AAAGCCAAGGACGCCACCTCAGACAACGGCAAAGACGGCCTGGCCTACTCTGCCCTGCTCAAGAATGAGCTGCTG
GGTGCCGGCATCGAGAAGGTGCAGGACCCGCAGACTGAGGACCGCAGGCTGCAGCCCTCCACGCCTGAGAAGAAG
GGTCTGTTCACGTATTCCCTTAGCACCAAGCGCTCCAGCCCCGATGACGGCAACGATGTGTCTCCCTACTCCCTG
TCTCCCGTCAGCAACAAGAGCCAGAAGCTGCTCCGGTCCCCCCGGAAACCCACCCGCAAGATCTCCAAGATCCCC
TTCAAGGTGCTGGACGCGCCCGAGCTGCAGGACGACTTCTACCTCAATCTGGTGGACTGGTCGTCCCTCAATGTG
CTCAGCGTGGGGCTAGGCACCTGCGTGTACCTGTGGAGTGCCTGTACCAGCCAGGTGACGCGGCTCTGTGACCTC
TCAGTGGAAGGGGACTCAGTGACCTCCGTGGGCTGGTCTGAGCGGGGGAACCTGGTGGCGGTGGGCACACACAAG
GGCTTCGTGCAGATCTGGGACGCAGCCGCAGGGAAGAAGCTGTCCATGTTGGAGGGCCACACGGCACGCGTCGGG
GCGCTGGCCTGGAATGCTGAGCAGCTGTCGTCCGGGAGCCGCGACCGCATGATCCTGCAGAGGGACATCCGCACC
CCGCCACTGCAGTCGGAGCGGCGGCTGCAGGGCCACCGGCAGGAGGTGTGCGGGCTCAAGTGGTCCACAGACCAC
CAGCTCCTCGCCTCGGGGGGCAACGACAACAAGCTGCTGGTCTGGAATCACTCGAGCCTGAGCCCCGTGCAGCAG
TACACGGAGCACCTGGCGGCCGTGAAGGCCATCGCCTGGTCCCCACATCAGCACGGGCTGCTGGCCTCGGGGGGC
GGCACAGCTGACCGCTGTATCCGCTTCTGGAACACGCTGACAGGACAACCACTGCAGTGTATCGACACGGGCTCC
CAAGTGTGCAATCTGGCCTGGTCCAAGCACGCCAACGAGCTGGTGAGCACGCACGGCTACTCACAGAACCAGATC
CTTGTCTGGAAGTACCCCTCCCTGACCCAGGTGGCCAAGCTGACCGGGCACTCCTACCGCGTGCTGTACCTGGCA
ATGTCCCCTGATGGGGAGGCCATCGTCACTGGTGCTGGAGACGAGACCCTGAGGTTCTGGAACGTCTTTAGCAAA
ACCCGTTCGACAAAGGTAAAGTGGGAGTCTGTGTCTGTGCTCAACCTCTTCACCAGGATCCGGTAA

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FIGURE 3609

CTGGGCTCAAGTGATCCTCCTGTCTTAGCCTTCCAAAGTGCTGGGATTACAGGTGTGGGCCACCATGCCCAGCCA
CCATCTTGGTTTAATTTCTTTCCTTGGAAATGGAGCAAAGGGCTTTCACTCTTCTTTTTCATGGCTGCATAGTAT
TCCATAATTGTTTAAACAATTGATAATAGACACTGTATCGGGGTGACTGGTATACCCCCAAAATCACATCTGCCC
AGAGCCTCAGGACATGGCCTTGTTTGGAA**ATG**GTTTTAGCAGATGCAGCTAAGATGAGGTCACCCCGTGTTAGGA
TGGCCCCGAATCCAGTGCCTGGCACCCTTATAAGGAGAGGGAAACTTGGACGCAGACAGGAAGGCCGGGTGAAGA
CAGAAGCAGAGACCGGGGGCCAAGGAGTGCCTGGGGTTGCCCAGAGCCACCACGGGCTGCAAGAGGTGTGGGACA
GACTCTCTCAGCCACAGAAGGGCCCAGCCCCGCACAGGCCTGGATTTCAGAGGGCGAACATTTCTGTGGCCGAAG
CTCCCAGTGCGTTTGCAGTCCTTGGAGACGGCCGCAGACACATTTGTTCTTGGCCTGTCTCCAGGTCTGTAGACC
CCACAGTGAGCGGCCACTGGCCGGAGGGGAACAGGAAGAGCTGGAGGGGACGTCACACACATGAGCCTTTTAGGA
ATAACGAG**TGA**CACGTGCAAGACCCCAAACCAAACACCATGTAACCTGACACCCAGGGAGGGAGGGAGGGAGGGG
CTGGGAGGGGCTCACCTGTAGGGAGGGGCTCACCTGTACAGCGGTGCTGGGAAGCTGGCCTCGAGGGTCCCCGAG
GGGATACAGGGCCGTGCAGCCTCTTGCCTGAGGGTTTGCATGTCTGCCTGGATCCCCCGGGCTCCTGCCAGAAGG
CCTCTGAGGCCACCGTTGACAGCATAAAGGCCACCCAGTGTCTCGGCAACCACGCTGACCACTCCCTCCTCCCAG
CTGCGGGGTGAGGTGGCCTCGAGGGAAGGGCTGGAGAGTCGTTCTGAGTATTTAACAACTGGGGGTGACACAGTG
TGGGTGGGCAAGGCCAGGGCCACTGCCAGGTGGGGTCCGTGGCCCTGAGCCCCCAGCTCTATGCACCCCCCACCT
GGGGTCTGGCTTCTCCATCTCCACACCCCCTTGAGGGGCTTCTGTCTCCCCCTGCCCCTTCGATCGCAGGAGGCA
GTGCCTGGCCGGGGTCGCAGGCACCTGTCACCCCAGCTCCTCACTCCTCACCCACTCACATCCAGTCCGTTTGTA
AAATACACCCAGGATGAGACCTGCACGCAGTGGCTCACAGCAGCACGATTTGTGACAGCCCGAGGCGGAGAACAC
CGAACACCCAGTGAAGGTGAGGGGATCAGCACGGCGCCGCCACCGTGCTGGAACGAGACTCAGCCACAAGGAGGT
GCGAAGCTCTGACCCAGGCCACAGTGCGGATGCACCTTGAGGATGTCACGCTCAGTGAGAGACACCAGACACAGA
AGGGTACGCTGTGATCCCACTTCTATGAAATGTCCAGGACAGACCAATCCACAGAATCAGGGAGAGGATTCGTGG
GTGCCGGGACTGGGGAGGGGGACCTGGGGGTGACTAGGTGACATAATGGGGACAGGGCTGCCTTCTGGGTGATGA
GAATGTTCTGGAATCAGATGGGATGGCTGCACGGCGTGGTGAAGGTACTGAACGCCACCTCACTGTAAGACGGTA
GATTTTGTATTTTACCACAATAAACAAAACAAAACAAAACC

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FIGURE 3610

TTTCCCGAGATCACCAAGATGCTGGGCGCCGAGTGGAGCAAGCTGCAGCCAACGGAAAAGCAGCGGTACCTGGAT
GAGGCCGAGAGAGAGAAGCAGCAGTACATGAAGGAGCTGCGGGCGTACCAGCAGTCTGAAGCCTATAAGATGTGC
ACGGAGAAGATCCAGGAGAAGAAGATCAAGAAAGAAGACTCGAGCTCTGGGCTCATGAACACTCTCCTGAATGGA
CACAAGGGTGGGGACTGCGATGGCTTCTCCACCTTCGATGTTCCCATCTTCACTGAAGAGTTCTTGGACCAAAAC
AAAGCGCGTGAGGCGGAGCTTCGGCGCTTGCGGAAGATGAATGTGGCCTTCGAGGAGCAGAACGCGGTACTGCAG
AGGCACACGCAGAGCATGAGCAGCGCGCGCGAGCGTCTGGAGCAGGAGCTGGCGCTGGAGGAGCGGAGGACGCTG
GCGCTGCAGCAGCAGCTCCAGGCCGTGCGCCAGGCGCTCACCGCCAGCTTCGCCTCACTGCCGGTGCCGGGCACG
GGCGAAACGCCCACGCTGGGCACTCTGGACTTCTACATGGCCCGGCTTCACGGAGCCATCGAGCGCGACCCCGCC
CAGCACGAGAAGCTCATCGTCCGCATCAAGGAAATCCTGGCCCAGGTCGCCAGCGAGCACCTGTGAGGAGTGGGC
GGGCCCACGATGCAGAGGAGAAGCTGTGGGCGCGGCCCTGCCACACCCCACCCCGTGGACGAGAGGCTGGGGGTC
CACCCTTTGGGGCCTGGTCCCATCCTGCACCTTGGGGGCTCCAGCCCCCCTAAAATTAAATTTCTGCAGCATCCC
TTTAGCTTTCAATCTCCCCAGCCCCCTGAACCCGGAAAAAGCACTCGCTGCGCGATACACCCAGAAGAACCTCAC
AGCCGAGGGTGCCCCTCCTCGGAGGACAGCCACGCGCTACACTGGCTCTCCGGGCCACCCCCAGGACACAGGGCA
GACGAAACCCACCCCCAGCACACGGCAGGACCCCCCAAATTACTCACTACGGGGGGCTGTGCCATAGGCCACACA
GGAAGCTGCCTTGTGGGGACTTACCTGGGGTGTCCCCCGCATGCCTGTACCCCAGATGGGTGGGGGCCGGCTTTG
CCCATCCTGCTCTCCTCCAGCCGAGGGACCCTGGTGGGGGTGGCTCCTTCTCACTGCTGGATCCGGACTTTTTAA
ATAAAAACAAGTAAAATTTGTGTTTTAA

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FIGURE 3611

AGCGCCACCAGGACGTGCTGCGGCAGAAGCTGTACAAACTGAAGCAGGAGCAGGGCGTGGAGAGCGAGCCGCTGT
TCCCCATCCTCAAGCAGGAGCCCCAGTCCCCCAGCCGCAGCCTGGAGCCTGAGGACGCGGCGCCCACCCCGCCCG
GGCCCTCCTCGGAGGGCGGCCCCGCGGAGGCCGAGGTGGACGGCGCGACCCCGACAGAGGGCGACGGCGACGGGG
ACGGTGAGGGCGAGGGCGAGGGCGAGGCGGTGCTC**ATG**GAGGAGGACCTGATCCAGCAGAGCCTGGACGACTACG
ACGCCGGCAGGTACAGCCCGCGGCTGCTCACGGCGCACGAGCTGCCACTGGACGCGCACGTGCTGGAACCGGATG
AGGACCTGCAGCGCCTGCAGCTCTCGCGCCAGCAGCTCCAGGTCACGGGAGACGCCAGCGAGAGCGCCGAGGACA
TCTTCTTCCGGCGGGCCAAGGAGGGCATGGGCCAGGACGAGGCGCAGTTCAGCGTGGAGATGCCACTCACCGGCA
AGGCCTACCTGTGGGCCGACAAGTACCGGCCACGCAAGCCGCGCTTCTTCAACCGCGTGCACACGGGCTTCGAGT
GGAACAAGTACAACCAGACGCACTACGACTTTGACAACCCACCGCCCAAGATCGTGCAGGGATACAAGTTCAACA
TCTTCTACCCCGACCTCATCGACAAGCGCTCCACGCCCGAGTACTTCCTGGAGGCCTGCGCCGACAACAAGGATT
TCGCCATCCTGCGCTTCCACGCGGGGCCGCCCTACGAGGACATCGCTTTCAAGATCGTCAACCGCGAGTGGGAAT
ACTCGCACCGCCACGGCTTCCGCTGCCAGTTTGCCAACGGCATCTTCCAGCTGTGGTTTCACTTCAAGCGCTACC
GCTATCGGCGG**TGA**CGGCCCTGGGGAACGGCAGGCAGGTGTCCTCGGGGGCACAGTAAAGGGGCTTCGGTGAAGC
TGGTGGTCACTCCGGGGCCGCTGTCTGGGCTGCAGGGCCGCGGGTTCACGTCCCACCTCAGGCCGCATCTTTCTT
TCGCCAGGCCTCAGTTTCCTCCTATATAAAAGGGGGGTCACCATTGAGCCTGCCATGGTGAGCTGAGGAGACACT
GGGACAGGCTGGCCTAGGGTCCTGATGCAACGGAGGGGGCGCTAGGGGCATCTTTCGAGCACGAGGGTGGCCAGC
AGCCGCCAGCTGACCTCACCGTCCAGGCGGACACTCTCCACCGCCCCTCAGCCAGGCTGGGTGGGGCCCACAGGG
CCTGCCCCAAGTGGCGGCCACACAGGGTGTTGTGGAGATGGGCCAGAGGGGCCTGGGCTTGGCGGTGCCAGGCTC
GTGAGAAGCAGGAAACTCAAGGCCAGCCCTGCCACATCACGGGGCACCCACTGGGCGTGAGGCAGAGCCCGCGGC
TGTGGGGCAGCTCCAGCCCTGCCCACAGGCCACCCTCGCCCGCACAGGCAGCACTGAGGCCGGGACCCTGCTGGC
GCCCGATCCGCCACTGCAGAAGAGACCCTCTGTGGACACCCACACTCTGCAGGGACTGGCCCCCAACTCACCCCG
TGCTGGCTGGTGGGGTCCATTTCCCCGCAGCGGGTATGGAGGATGCGTCGAGGTCCCTGTCTCTGTCAAGGTCGT
GGGAACCAAAAGTCACTGAGCCGTCCTCCCCCCACCTCTGAGCACAGGGCCTGGAGGGCAGGGGCTCCCCGAAGG
CTGGGGGTTGGAGAAGGGTGAGGGGCTTCCCCCAGGGATCCCCCCACCTGGCCTGCTCACGGGGCCTTGGAGCAT
GAGACCAGTGACCCCGAGTTTTGCCCATATCAGGACAGTGGCTCCTTCTCACTCCCCTTTCTCAGGCCAGGAGGG
CCGAGGGCCACACGGGTGCCACAGCCCAGGTCGGAGTGGCCCAGCCGGCAGGCTTGTTCTTCAGCATCCGACGGG
AACATCTCCAACAGAAGCAAAACGGAAAGTGCCTCCCGGACCCCCAGAGGGCCACCCAACCTCACCAGTCACCAG
CCCCAGACCACCCACAGCCCCTCCCAGACACCCCGCCTCATCTGGAAATAGTTCCGTTTGTTTCTCTAAAAAGAC
TTGTAGGTGGGAAAAAAAATCTTTTGTTCTCATGGAATTGGCCTATTGGCAAGATCGCATGTTTTTTTAATAAAC
GTTGTATTTTAGAATAA

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FIGURE 3612A

GCGGCGGTCGCAGCTCGGGTCCCCCTCGGGCGCCCCCGCCGCCGTCCGCGCGCGGCCATGGAGCTGGAGGTACCG
GACGAGGCGGAGAGCGCTGAGGCGGGGGCCGTGCCCTCGGAGGCGGCGTGGGCGGCAGAGAGCGGGGCGGCGGCA
GGTTTGGCTCAGAAGAAGGCGGCCCCAACAGAGGTTCTGTCCATGACGGCACAGCCGGGCCCTGGCCATGGGAAG
AAGTTGGGCCATCGAGGTGTGGACGCATCCGGCGAAACCACCTACAAGAAGACCACCTCCTCCACCCTGAAGGGT
GCCATCCAGCTGGGCATCGGCTACACCGTGGGCCACCTGAGCTCCAAGCCCGAACGCGACGTGCTCATGCAGGAC
TTCTACGTGGTGGAGAGCATCTTCTTCCCCAGCGAAGGCAGCAACCTCACCCCCGCCCACCACTTCCAGGACTTC
CGCTTCAAGACCTATGCACCTGTCGCCTTCCGCTACTTCCGGGAGCTCTTTGGGATCCGGCCAGATGATTACTTG
TACTCCCTGTGCAATGAGCCGCTGATCGAGCTGTCCAACCCGGGCGCCAGTGGCTCCCTCTTCTACGTCACCAGC
GACGACGAGTTCATCATCAAGACCGTCATGCACAAGGAGGCCGAGTTCCTGCAGAAGCTGCTCCCTGGCTACTAC
ATGAACCTCAACCAGAACCCGCGGACGCTGCTGCCCAAGTTCTATGGGCTGTACTGCGTGCAGTCGGGGGGCAAG
AACATCCGCGTCGTGGTCATGAACAACATCCTGCCCCGCGTGGTCAAGATGCACCTCAAGTTCGACCTCAAGGGC
TCCACCTACAAGCGGCGCGCCAGCAAGAAGGAGAAGGAGAAGAGCTTCCCCACCTACAAGGACCTGGACTTCATG
CAGGACATGCCCGAGGGGCTCCTGCTGGACGCCGACACCTTCAGCGCCCTGGTCAAGACGCTGCAGCGGGACTGC
CTGGTCCTGGAAAGTTTCAAGATCATGGACTACAGCCTGCTGCTGGGCGTGCACAACATCGACCAGCACGAGCGC
GAGCGGCAGGCGCAGGGCGCCCAGAGCACCTCAGATGAGAAGCGGCCTGTGGGCCAGAAGGCGCTCTACTCCACG
GCCATGGAGTCCATCCAGGGTGGCGCCGCGCGCGGGGAGGCCATCGAATCGGATGACACGATGGGCGGGATCCCC
GCTGTGAACGGCCGCGGGGAGCGGCTGCTGCTGCACATTGGCATCATCGACATCCTGCAGTCCTACAGGTTCATC
AAGAAACTGGAGCACACCTGGAAGGCCCTCGTCCACGATGGGGACACGGTGTCCGTCCACCGCCCCAGCTTCTAT
GCCGAGCGCTTTTTCAAGTTCATGAGCAACACGGTCTTTCGGAAGAACTCCTCCCTGAAGTCCTCGCCCTCCAAG
AAGGGGCGCGGCGGAGCCTTGCTAGCTGTGAAACCGCTGGGGCCCACCGCTGCCTTCTCGGCCAGCCAGATCCCT
AGCGAGCGGGAGGAGGCCCAGTACGACCTGCGGGGGGCCCGCAGCTACCCCACGCTGGAGGACGAAGGCCGGCCC
GACCTCCTGCCCTGCACGCCACCTTCTTTCGAAGAAGCCACTACAGCCTCCATTGCCACGACTCTGTCATCCACA
TCCCTCTCCATTCCTGAGCGGTCCCCCTCGGAGACGTCGGAGCAGCCGCGGTACAGGCGGCGCACACAGTCGTCT
GGACAGGATGGCAGGCCGCAGGAGGAGCCACCCGCGGAAGAGGATCTGCAGCAGATTACAGTGCAGGTGGAGCCT
GCGTGCAGCGTGGAGATTGTGGTCCCCAAAGAGGAGGACGCAGGGGTGGAGGCTTCCCCGGCCGGTGCCTCTGCT
GCTGTTGAAGTAGAAACTGCCAGCCAGGCCTCAGACGAGGAGGGCGCACCTGCCAGCCAGGCCTCGGACGAGGAG
GACGCGCCCGCCACCGACATCTACTTTCCCACCGATGAGAGGAGCTGGGTGTACTCCCCGCTCCACTATAGCGCC
CAGGCCCCCCCGGCCTCCGACGGCGAGAGCGACACATAATTTCTATGCAGCCCCCGACCCAGAGCCGAGCTCCAC
TTCTGCTCCGGCTGCCCCCGAAGGCGCTGCCCACCCCGCTGAGGCCCAGAGCTCGGGAGATGCCCGCCTCGCCGC
CCCACCGGACCTCGTCCTCCCCCTGCACGGATGCCGACGGCCGGGCCCCTCCCCGACAAGCCTCCCAGGGCCCCG
GCACCCCGGTCGGCAGCCTGCCCCTGTGAGACCCACCCTCCCGAGCGGCCAATCGCATTTGAGTCCTTATTTGGC
ACAGAGACGGAAGCACGTGTGTGCCGTTTTAGGAAAAGAACAAAAAAGACACAAACAAACCAACCAGAGGGAGAA
GAGCCCCTGCCCACTGCACTCTTTGGTTCTCTGCTGTGCCTGCCTGTGTCCTGAGGAAGAAGCCAGGCTGTTCGC
GGTGGCCTCTGGGGACCTGAGCCCCGGGGGCCCCATCGGCCTGCAGAGGGGACGGCTGGGGTCCCGAGCAACTCT
GCCTCCATCCACGTGGGAAGCGGACCCTCCTGCCCTCAGCTTGGGTTTGGGGGCCTCAGTGCAGGACATCTGGCC
TGAACATCGACTGTGGGGACAGCCCTCGCCCTGCCAAGCACTGCGGCCACTCAGCAGCTATGTTCCCGCCGCAGT
GGGGCCCTGACGCCCACCTCCCAGGTGCCCCTCGAGCAAAAACCTCTGGCGCCTCCAATCCAGACCCACCACAGC
TGGAGGGCCAGGCCTCCTCTTCCCCAGGCTGCCACCCACGCTGGCGGAGCTCAGGGCTGGGGACTTGTCCTTCTC
TTCCAACGTAGGCCACTCAGCAACTGGCATGGAGGGCCCAGGCAACGGAGACGTTTTCTCCATGGCAGGACAGAG
CGGGAGGCCGGGCCTTGGGCCACAGGAGACCAGCTCAGGGCGGAAGGTCAGGCTCCCCGCCCCCTCCACGTGGAG
ACATGGCCTAGGGGGCCAGGCCCGGCTCCACAGGAGTCTCCTTCAGGACTGGTGTGGATGTCCGCCGCCTCTTTC
TTGTTTAAGTGATGTGATGTCTCCGAGGAGGGGAGAGAAGACTTTGTTTCCGACTCATCACCCTCCAAGAGGGCA
GCGCTCCCAGTGGTGGGACTCAGCCCAGACTGCCCTGGGGCAGCTTCCTGGGCCCGCTGCGCTCAGAGGGTGCTG
GTTGGAGGCCAGAGCTCGGCAGAGTCACCCACCCTGCCCTTCCCCAGGACCCCTGAGAGGGGCTTATTGGTGATG
GCTGTGGGAATCCCCCACTTCCAAGATGTGCCCAGGATGTGAGGAGCTGGAGTGGAAGCTGCACCTTTGGGAAGA
ATTCCTCTCCAGACCTGGCAGAGCCTGGTGTGGGGTCTGAGACGGCCGGAGAACCTCCCAGGCAGGGCTCTGTGT
TTTGTCTGTTACAACCTCCGTATGACGCCACGCCACCCGCTGTTCACGTCCCGTCGGCCTCCTGCACAGCCCACA
CGCTGCGCCCGGAAGGCCCCTGCTGTGGAGAAGCCGGACCCATCCCCGAGGTCCCCAGCGAGGACACACACTCCA

FIGURE 3612B

CGAGAGCAGCCCCTCCACTCTGCCCAGGAGAGGGGCCGACCCTCCTCGGGAACCGGCCAGCCGCGTGGCTCCCAG
CATCCATCAGGACAAGCCCACGTGGGGTCCTCCCTGCGTGCTCAGAGGGTCTGTCCAGCCCTGGGAAGCGACCTT
GGCCTCAGTTCACAGCCTGGTGCTCATCTGCTGGCACCGGGCATCCACCCATCAGCCCCCGCCCTGTCCCTCCGA
AGGACACCCAGCAGGCACCCCCCGGGGAGGCAGGGGCAGAGGTCAGAAGGGGTGTCTGGGACCTGGATGGCCAGC
AGGGACAGGGGCATTGTCATCTCAAAGGCCCAACCCCCAGAGGCCACACCAGTCCTCCCAGGGAGTCCTCGAGTC
GCCCTGCCCAGAGCCCTGGCACCAGAGACGCCAAGAGCCTGTGGGGTGACTCGGAGCAGCAGGTGTGGCCCCGGG
CGGGCGGCACCGCGTCCAGGGCAGCCTCCCTCCGCTGAGTGACACGGGACACCAGTGCCCGGCCGACGCGCCTTT
GCAGGAGAAATGTGCAAACCTCTGTGGATACCATTTCATTTCCATTCTTGTGTTGTCTCCAAGGCCCTTTTGGAG
ATATACTTGGTGTTGGTTGTGTTTTTTGGTTCCTTTTCAGAGAACTGTAAACCGAGGCTGACGTGCTCCACTGAC
TGTGCCGAGGGGCGGGGGCAGGAGGACGGCAAGACCTATTTATAATATTTAGCGAACTCGGTCTCCCTCAGATCC
CCCGCGAGGGAGGCTGCTGGACCCACCCCGCTGTCCCCCATGATAGAAGTCTGTAAATACCTTGGTGACCAATGC
CCACTTCCCCTCCTGGGTCACCTCTGATGGCTGCTGTCCACTGAGAACGTGGGCAGTGTCCAAATTCCTGTACTG
TAAAGACTAAAAGGCGTTTGCTCTGAGACTGACAAGGCGGAAACTTCCATGTGTCTCCTGCCAGGCTCTGTCCCC
CTACGCCATCCCGACACGTCCCCGTTCCCCCGAAACCTGGCTCAGTGCAATACTCCCATTGCCATGGGGTCCTTC
ACCATGGTACTGTCTCCACAGCCCTCAGTCCCCACCCCAGGAGAGGCGCCTGCCACCTCCTCCTCATCTCCGGTG
GTTCAATCGCTCCGCCTGTCCCCAACCCAGTCCCATTTTTATGGCCAAACTGATTCTGAAACAAAATGAAACTGC
AAACCTCGTGTGTCTTAACTCCCCCCAGGGATGCCACTCCATTCCTCCGCCCCGTGGTCTGGTGCGTGACAATCC
AAAGCGCCGAGACGAGGGTGCTGTGTCCCTCAAACCCAGAGTGGTGGGCGCCTCTGAAACCATACAGCCACTCCT
GGCCCCAAACACTGGTTTGCATCCCAGGTTCCTCGCCCACCTACCCCCGCCACACCCCGTCTTTTTAGAGATCTC
TCTAATAAATCGGGTAATAAGC

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FIGURE 3613

GGAGCGGGCGCCGGGACCGGGAATCCCCGAGCTGCGCCTTCTGGGGACGCGGCCCGGGCTACGTCGGGGCCGTCC
GTGGGGAGCGGGGTCCTGGAGGCTGCGCGGGGCTGAGGCGGCCTCGATTTGGGAACTGCCTGAAGATGCCGGCCT
AAGCCTGGAGTCCAGGCATGGACTTCCCCACAATTTCCCGATCCCCTTCGGGGCCTCCAGCCATGGACTTGGAGG
GGCCCAGGGACATTCTTGTGCCTTCGGAGGACCTCACCCCTGACAGCCAGTGGGACCCTATGCCAGGAGGCCCCG
GCAGCCTCAGTCGGATGGAACTTGATGAGTCAAGCCTTCAGGAGCTGGTGCAGCAGTTTGAAGCTCTGCCAGGCG
ATCTGGTGGGCCCATCCCCAGGTGGAGCCCCCTGTCCCCTACACATTGCCACAGGCCATGGCCTGGCCTCCCAGG
AGATTGCTGATGCCCACGGGCTCCTGTCTGCCGAAGCTGGCCGGGATGACCTGCTGGGCCTCTTGCACTGCGAGG
AATGCCCGCCTTCCCAGACTGGTCCTGAAGAGCCTCTAGAGCCTGCCCCCCGACTGTTGCAGCCCCCTGAGGACC
CAGATGAGGATTCTGACTCCCCAGAATGGGTGGAGGGGGCCTCTGCTGAGCAGGAGGGCAGCAGGAGCTCAAGCA
GTTCCCCGGAACCCTGGCTGGAGACGGTGCCTCTAGTCACACCTGAAGAGCCACCCGCTGGTGCCCAGAGCCCCG
AGACCCTGGCTTCCTACCCTGCCCCCCAGGAGGTGCCTGGTCCCTGTGACCATGAAGACCTCCTGGACGGTGTCA
TATTTGGGGCCAGGTACCTGGGGTCCACCCAGCTGGTGTCGGAACGGAACCCGCCCACCAGCACGCGCATGGCCC
AGGCCCGGGAGGCCATGGACCGCGTCAAGGCCCCCGATGGGGAGACCCAGCCCATGACGGAGGTGGACCTGTTCG
TCTCCACCAAGAGGATCAAGGTCTTGACAGCGGACTCCCAGGAGGCCATGATGGACCACGCCCTGCATACCATCT
CCTACACAGCCGACATCGGCTGCGTGCTGGTGCTGATGGCGCGGCGGCGGCTGGCACGGAGGCCGGCACCCCAGG
ACCACGGCCGCCGCCTCTACAAGATGCTCTGCCACGTATTCTACGCGGAGGACGCCCAGCTCATCGCCCAGGCCA
TTGGCCAGGCCTTCGCCGCCGCCTACAGCCAGTTCCTACGGGAAAGCGGTATTGACCCCAGCCAGGTGGGCGTGC
ACCCGAGCCCAGGCGCCTGCCACCTCCATAATGGGGACCTGGACCACTTCTCCAACAGTGACAACTGCCGGGAGG
TGCACCTCGAGAAGCGGCGAGGGGAGGGCCTGGGCGTGGCCCTGGTGGAGTCGGGCTGGGGCTCCCTGCTGCCCA
CAGCCGTCATCGCCAACCTGCTGCACGGGGGGCCTGCTGAGCGCTCGGGGGCCCTCAGCATCGGGGACCGCCTGA
CCGCCATCAACGGGACCAGCCTGGTGGGGCTGCCCCTGGCTGCGTGCCAGGCCGCTGTCCGCGAGACGAAGTCGC
AGACGTCGGTGACACTCAGCATCGTCCACTGCCCTCCCGTCACCACCGCCATCATCCACCGGCCCCACGCCCGCG
AGCAGCTGGGCTTCTGCGTGGAGGACGGCATCATCTGCAGCCTCCTCCGTGGTGGCATCGCCGAGCGTGGGGGCA
TCCGCGTCGGCCACCGCATCATTGAGATCAATGGGCAGAGTGTGGTGGCCACGCCACACGCCCGCATCATCGAGC
TGCTCACCGAGGCCTATGGCGAGGTGCATATCAAGACGATGCCAGCTGCCACATATCGCCTCCTTACAGGCCAGG
AGCAGCCCGTGTACCTGTGACCACCTCATCCCTTGCCTGCCACTGTGCCTTCGCCTCCATGGCCCCGGAGCCCCA
TCCTGGGCCTGCCCTGGCTGGCCAGGACCCCAGCGGTTCTTGGTCCTGTATGATTTCCTAATATAAAAACAGTAA

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FIGURE 3614

GCACTTGCAAGCTGCCCGCAATACGTCATGGCGACCAAACGCCTTTTCGGGGCTACCCGGACGTGGGCCGGCTGG
GGGGCCTGGGAGCTCCTAAACCCCGCCACTTCCGGAAGACTCCTGGCCCGGGATTATGCCAAGAAACCAGTTATG
AAGGGGGCCAAATCGGGAAAAGGTGCAGTGACCAGCGAGGCCCTCAAGGACCCCGACGTATGCACAGATCCTGTC
CAGCTCACCACATATGCCATGGGCGTCAACATCTACAAGGAAGGGCAGGATGTACCCCTGAAACCGGATGCTGAG
TACCCTGAATGGCTGTTCGAGATGAACTTGGGTCCCCCAAAGACCCTGGAGGAGCTGGACCCCGAGAGCCGGGAG
TACTGGCGGCGGCTGCGGAAACAGAACATCTGGCGCCACAACCGGCTGAGCAAGAACAAGAGGTTGTAGCATGGA
GGGCCCGGCATCGCTGACCCCCACGCCGAGGGCTTGCCGTTTTCCCGGAGGACGTGGACTTTTGTGAGACAAGAG
GCGGCTCCCCAGCCTGGGTTTCCATGTGACCCCACAGTGGGGCTGGACCAGGGCCCTGGAGGCCAATAAAGAGCT
TTCTGGGTAGACCCTATTTCCCCTTGGTATTGTCTGGTGTCGGCCTGGCGGGAAGTGGGTCCCTCAGACCCCAGG
GATCCCAGCCTCCACCCCAGCCAGTGGTGGGCCGTCTGCAGGTCCCCTGTGCCTCCGGCCCTTGGTGGGCTTCTC
TCCCCAACTCCTGGAATTCCTGACACTGCTCACGAGGCCCCGGCCCCAAATCTCAAGTTGCTGGGTGAGGGGGTT
GTCCTAGCTAAGCCACTCTTGGTTGCAAGGGACTCAAACCTAACTATCTCAAGCCATCAGAGTCAGAAAAGAGGC
TTTATGAGCTTCAAGAA

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FIGURE 3615

GTTGCCATTAGGGGACTCCTGAGGTCCTATCTCCAGGCTGCGGTGACTGCACTTTCCCTGGAGTGGAAGCTGCTG
GAAGGCGGACCGGCCGCC**ATG**TCCACGTTCAGGCAGGAGGACGTGGAGGACCATTATGAGATGGGGGAGGAGCTG
GGCAGCGGCCAGTTTGCGATCGTGCGGAAGTGCCGGCAGAAGGGCACGGGCAAGGAGTACGCAGCCAAGTTCATC
AAGAAGCGCCGCCTGTCATCCAGCCGGCGTGGGGTGAGCCGGGAGGAGATCGAGCGGGAGGTGAACATCCTGCGG
GAGATCCGGCACCCCAACATCATCACCCTGCACGACATCTTCGAGAACAAGACGGACGTGGTCCTCATCCTGGAG
CTGGTCTCTGGCGGGGAGCTCTTTGACTTCCTGGCGGAGAAGGAGTCGCTGACGGAGGACGAGGCCACCCAGTTC
CTCAAGCAGATCCTGGACGGCGTTCACTACCTGCACTCTAAGCGCATCGCACACTTTGACCTGAAGCCGGAAAAC
ATCATGCTGCTGGACAAGAACGTGCCCAACCCACGAATCAAGCTCATCGACTTCGGCATCGCGCACAAGATCGAG
GCGGGGAACGAGTTCAAGAACATCTTCGGCACCCCGGAGTTTGTGGCCCCAGAGATTGTGAACTATGAGCCGCTG
GGCCTGGAGGCGGACATGTGGAGCATCGGTGTCATCACCTATATCCTCCTGAGCGGTGCATCCCCGTTCCTGGGC
GAGACCAAGCAGGAGACGCTCACCAACATCTCAGCCGTGAACTACGACTTCGACGAGGAGTACTTCAGCAACACC
AGCGAGCTGGCCAAGGACTTCATTCGCCGGCTGCTCGTCAAAGATCCCAAGCGGAGAATGACCATTGCCCAGAGC
CTGGAACATTCCTGGATTAAGGCGATCCGGCGGCGGAACGTGCGTGGTGAGGACAGCGGCCGCAAGCCCGAGCGG
CGGCGCCTGAAGACCACGCGTCTGAAGGAGTACACCATCAAGTCGCACTCCAGCTTGCCGCCCAACAACAGCTAC
GCCGACTTCGAGCGCTTCTCCAAGGTGCTGGAGGAGGCGGCGGCGCCGAGGAGGGCCTGCGCGAGCTGCAGCGCA
GCCGGCGGCTCTGCCACGAGGACGTGGAGGCGCTGGCCGCCATCTACGAGGAGAAGGAGGCCTGGTACCGCGAGG
AGAGCGACAGCCTGGGCCAGGACCTGCGGAGGCTACGGCAGGAGCTGCTCAAGACCGAGGCGCTCAAGCGGCAGG
CGCAGGAGGAGGCCAAGGGCGCGCTGCTGGGGACCAGCGGCCTCAAGCGCCGCTTCAGCCGCCTGGAGAACCGCT
ACGAGGCGCTGGCCAAGCAAG**TAG**CCTCCGAGATGCGCTTCGTGCAGGACCTCGTGCGCGCCCTGGAGCAGGAGA
AGCTGCAGGGCGTGGAGTGCGGGCTGCGCTAGGCGCAGTGGGGTGGGCCAGGCCCCAGGACAGCCGGAGCTCGGC
CTGCGGTGGGGGCGCTTCCTGTGGACGCTGCGCCTCCCATCGCCCGGGTGCCTGTCCTTGCCCAGCGCCACCAGG
CTGGAGGCGGAGTGGGAGGAGCTGGAGCCAGGCCCGTAAGTTCGCAGGCAGGGGTGGGTGTGGGACGGGGCTGCT
TCTCTACACAGCCTCCACGCTGGCCTTCACCTTCACCCCTGCATCGTCGGTGACCCTGGGACCCTCCAGGCAGCG
TGGCCTGTGGCACCGTGAGGGTTGGGACCCACCGAGGCGCAGAGGCGGCCCGAATGCAGCCCTGGTTCAGGCCCG
GAGGAGGGTTTGCGGGTAGTTGCACGGACAATTCGGCGGGGTGCTGCCTGTTGCTGCCATTAGCCCAGGAGGAGG
TCGTGGGACGGGGAGGGTGGGATGGACGGCGGACAGGCAGTCCCCACGCTGCTGGGTGGCGCCGGGCTTGGTGGG
GTCTTCCACTGTGTGCCCTTCTCGCCGAGGCCGGTCCCCCGGGTGTGGGGTGCCCTGCTGCGGACTCCTCCGCGA
GCCCCATCGTCGCGCCTGTGGACGCCTAGGCAAGAGCGGCCCTCTGCAGCCAAGAGAAATAAAATACTGGCTTCC
AGAT

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FIGURE 3616

ACGGTAGACCAGATCCGCGCCATC**ATG**GACAAGAAGGCCAACATCCGCAACATGTCTGTCATCGCCCACGTGGAC
CATGGCAAGTCCACGCTGACAGACTCCCTGGTGTGCAAGGCGGGCATCATCGCCTCGGCCCGGGCCGGGGAGACA
CGCTTCACTGATACCCGGAAGGACGAGCAGGAGCGTTGCATCACCATCAAGTCAACTGCCATCTCCCTCTTCTAC
GAGCTCTCGGAGAATGACTTGAACTTCATCAAGCAGAGCAAGGACGGTGCCGGCTTCCTCATCAACCTCATTGAC
TCCCCCGGGCATGTCGACTTCTCCTCGGAGGTGACTGCTGCCCTCCGAGTCACCGATGGCGCATTGGTGGTGGTG
GACTGCGTGTCAGGCGTGTGCGTGCAGACGGAGACAGTGCTGCGGCAGGCCATTGCCGAGCGCATCAAGCCTGTG
CTGATGATGAACAAGATGGACCGCGCCCTGCTGGAGCTGCAGCTGGAGCCCGAGGAGCTCTACCAGACTTTCCAG
CGCATCGTGGAGAACGTGAACGTCATCATCTCCACCTACGGCGAGGGCGAGAGCGGCCCCATGGGCAACATCATG
ATCGATCCTGTCCTCGGTACCGTGGGCTTTGGGTCTGGCCTCCACGGGTGGGCCTTCACCCTGAAGCAGTTTGCC
GAGATGTATGTGGCCAAGTTCGCCGCCAAGGGGGAGGGCCAGTTGGGGCCTGCCGAGCGGGCCAAGAAAGTAGAG
GACATGATGAAGAAGCTGTGGGGTGACAGGTACTTTGACCCAGCCAACGGCAAGTTCAGCAAGTCAGCCACCAGC
CCCGAAGGGAAGAAGCTGCCACGCACCTTCTGCCAGCTGATCCTGGACCCCATCTTCAAGGTGTTTGATGCGATC
ATGAATTTCAAGAAAGAGGAGACAGCAAAACTGATAGAGAAACTGGACATCAAACTGGACAGCGAGGACAAGGAC
AAAGAAGGCAAACCCCTGCTGAAGGCTGTGATGCGCCGCTGGCTGCCTGCCGGAGACGCCTTGTTGCAGATGATC
ACCATCCACCTGCCCTCCCCTGTGACGGCCCAGAAGTACCGCTGCGAGCTCCTGTACGAGGGGCCCCCGGACGAC
GAGGCTGCCATGGGCATTAAAAGCTGTGACCCCAAAGGCCCTCTTATGATGTATATTTCCAAAATGGTGCCAACC
TCCGACAAAGGTCGGTTCTACGCCTTTGGACGAGTCTTCTCGGGGCTGGTCTCCACTGGCCTGAAGGTCAGGATC
ATGGGGCCCAACTATACCCCTGGGAAGAAGGAGGACCTCTACCTGAAGCCAATCCAGAGAACAATCTTGATGATG
GGCCGCTACGTGGAGCCCATCGAGGATGTGCCTTGTGGGAACATTGTGGGCCTCGTGGGCGTGGACCAGTTCCTG
GTGAAGACGGGCACCATCACCACCTTCGAGCACGCGCACAACATGCGGGTGATGAAGTTCAGCGTCAGCCCTGTT
GTCAGAGTGGCCGTGGAGGCCAAGAACCCGGCTGACCTGCCCAAGCTGGTGGAGGGGCTGAAGCGGCTGGCCAAG
TCCGACCCCATGGTGCAGTGCATCATCGAGGAGTCGGGAGAGCATATCATCGCGGGCGCCGGCGAGCTGCACCTG
GAGATCTGCCTGAAGGACCTGGAGGAGGACCACGCCTGCATCCCCATCAAGAAATCTGACCCGGTCGTCTCGTAC
CGCGAGACGGTCAGTGAAGAGTCGAACGTGCTCTGCCTCTCCAAGTCCCCCAACAAGCACAACCGGCTGTACATG
AAGGCGCGGCCCTTCCCCGACGGCCTGGCCGAGGACATCGATAAAGGCGAGGTGTCCGCCCGTCAGGAGCTCAAG
CAGCGGGCGCGCTACCTGGCCGAGAAGTACGAGTGGGACGTGGCTGAGGCCCGCAAGATCTGGTGCTTTGGGCCC
GACGGCACCGGCCCCAACATCCTCACCGACATCACCAAGGGTGTGCAGTACCTCAACGAGATCAAGGACAGTGTG
GTGGCCGGCTTCCAGTGGGCCACCAAGGAGGGCGCACTGTGTGAGGAGAACATGCGGGGTGTGCGCTTCGACGTC
CACGACGTCACCCTGCACGCCGACGCCATCCACCGCGGAGGGGGCCAGATCATCCCCACAGCACGGCGCTGCCTC
TATGCCAGTGTGCTGACCGCCCAGCCACGCCTCATGGAGCCCATCTACCTTGTGGAGATCCAGTGTCCAGAGCAG
GTGGTCGGTGGCATCTACGGGGTTTTGAACAGGAAGCGGGGCCACGTGTTCGAGGAGTCCCAGGTGGCCGGCACC
CCCATGTTTGTGGTCAAGGCCTATCTGCCCGTCAACGAGTCCTTTGGCTTCACCGCTGACCTGAGGTCCAACACG
GGCGGCCAGGCGTTCCCCCAGTGTGTGTTTGACCACTGGCAGATCCTGCCCGGAGACCCCTTCGACAACAGCAGC
CGCCCCAGCCAGGTGGTGGCGGAGACCCGCAAGCGCAAGGGCCTGAAAGAAGGCATCCCTGCCCTGGACAACTTC
CTGGACAAATTG**TAG**GCGGCCCTTCCTGCAGCGCCTGCCGCCCCGGGGACTCGCAGCACCCACAGCACCACGTCC
TCGAATTCTCAGACGACACCTGGAGACTGTCCCGACACAGCGACGCTCCCCTGAGAGGTTTCTGGGGCCCGCTGC
GTGCCATCACTCAACCATAACACTTGATGCCGTTTCTTTCAATATTTATTTCCAGAGTCCGGAGGCAGCAGACAC
GCCCTCTTAGTAGGGACTTAATGGGCCGGTCGGGGAGGGGGAGGCGGGATGGGACACCCAACACTTTTTCCATTT
CTTCAGAGGGAAACTCAGATGTCCAAACTAATTTTAACAAACGCATTAAGAGGTTTATTTGGGTACATGGCCCGC
AGTGGCTTTTGCCCCAGAAAGGGGAAAGGAACACGCGGGTAGATGATTTCTAGCAGGCAGGAAGTCCTGTGCGGT
GTCACCATGAGCACCTCCAGCTGTACTAGTGCCATTGGAATAATAAATTTGATAAGGTG

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FIGURE 3617

AACATGGTGATGAGTTTTCGAGTCTCCGACCTTCAGATGCTCCTGGGTTTCGTGGGCCGGAGTAAGAGTGGACTG
AAGCACGAGCTCGTCACCAGGGCCCTCCAGCTGGTGCAGTTTGACTGTAGCCCTGAGCTGTTCAAGAAGATCAAG
GAGCTGTACGAGACCCGCTACGCCAAGAAGAACTCGGAGCCTGCCCCACAGCCGCACCGGCCCCTGGACCCCCTG
ACCATGCACTCCACCTACGACCGGGCCGGCGCTGTGCCCAGGACTCCGCTGGCAGGCCCCAATATTGACTACCCC
GTGCTCTACGGAAAGTACTTAAACGGACTGGGACGGTTGCCCGCCAAGACCCTCAAGCCAGAAGTCCGCCTGGTG
AAGCTGCCGTTCTTTAATATGCTGGATGAGCTGCTGAAGCCCACCGAATTAGTCCCACAGAACAACGAGAAGCTT
CAGGAGAGCCCGTGCATCTTCGCATTGACGCCAAGACAGGTGGAGTTGATCCGGAACTCCAGGGAACTGCAGCCC
GGAGTTAAAGCCGTGCAGGTCGTCCTGAGAATCTGTTACTCAGACACCAGCTGCCCTCAGGAGGACCAGTACCCG
CCCAACATCGCTGTGAAGGTCAACCACAGCTACTGCTCCGTCCCGGGCTACTACCCCTCCAATAAGCCCGGGGTG
GAGCCCAAGAGGCCGTGCCGCCCCATCAACCTCACCCACCTCATGTACCTGTCCTCGGCCACCAACCGCATCACT
GTCACCTGGGGGAACTACGGCAAGAGCTACTCGGTGGCCCTGTACCTGGTGCGGCAGCTGACCTCATCGGAGCTG
CTGCAGAGGCTGAAGACCATTGGGGTAAAGCACCCGGAGCTGTGCAAGGCACTGGTCAAGGAGAAGCTGCGCCTT
GATCCTGACAGCGAGATCGCCACCACCGGTGTGCGGGTGTCCCTCATCTGTCCGCTGGTGAAGATGCGGCTCTCC
GTGCCCTGCCGGGCAGAGACCTGTGCCCACCTGCAGTGCTTCGACGCCGTCTTCTACCTGCAGATGAACGAGAAG
AAGCCCACCTGGATGTGCCCCGTGTGCGACAAGCCAGCCCCCTACGACCAGCTCATCATCGACGGGCTCCTCTCG
AAGATCCTGAGCGAGTGTGAGGACGCCGACGAGATCGAGTACCTGGTGGACGGCTCGTGGTGCCCGATCCGCGCC
GAAAAGGAGCGCAGCTGCAGCCCGCAGGGCGCCATCCTCGTGCTGGGCCCCTCGGACGCCAATGGGCTCCTGCCC
GCCCCCAGCGTCAACGGGAGCGGTGCCCTGGGCAGCACGGGTGGCGGCGGCCCGGTGGGCAGCATGGAGAATGGG
AAGCCGGGCGCCGATGTGGTGGACCTCACGCTGGACAGCTCATCGTCCTCGGAGGATGAGGAGGAGGAGGAAGAG
GAGGAGGAAGACGAGGACGAAGAGGGGCCCCGGCCCAAGCGCCGCTGCCCCTTCCAGAAGGGCCTGGTGCCGGCC
TGCTGA

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FIGURE 3618

CCCCTGCCTCTCGGACTCGGGCTGCGGCGTCAGCCTTCTTCGGGCCTCGGCAGCGGTAGCGGCTCGCTCGCCTCA
GCCCCAGCGCCCCTCGGCTACCCTCGGCCCAGGCCCGCAGCGCCGCCCGCCCTCGGCCGCCCCGACGCCGGCCTG
GGCCGCGGCCGCAGCCCCGGGCTCGCGTAGGCGCCGACCGCTCCCGGCCCGCCCCCTATGGGCCCCGGCTAGAGG
CGCCGCCGCCGCCGGCCCGCGGAGCCCCG**ATG**CTGGCCCGGAGGAAGCCGGTGCTGCCGGCGCTCACCATCAACC
CTACCATCGCCGAGGGCCCATCCCCTACCAGCGAGGGCGCCTCCGAGGCAAACCTGGTGGACCTGCAGAAGAAGC
TGGAGGAGCTGGAACTTGACGAGCAGCAGAAGAAGCGGCTGGAAGCCTTTCTCACCCAGAAAGCCAAGGTCGGCG
AACTCAAAGACGATGACTTCGAAAGGATCTCAGAGCTGGGCGCGGGCAACGGCGGGGTGGTCACCAAAGTCCAGC
ACAGACCCTCGGGCCTCATCATGGCCAGGAAGCTGATCCACCTTGAGATCAAGCCGGCCATCCGGAACCAGATCA
TCCGCGAGCTGCAGGTCCTGCACGAATGCAACTCGCCGTACATCGTGGGCTTCTACGGGGCCTTCTACAGTGACG
GGGAGATCAGCATTTGCATGGAACACATGGACGGCGGCTCCCTGGACCAGGTGCTGAAAGAGGCCAAGAGGATTC
CCGAGGAGATCCTGGGGAAAGTCAGCATCGCGGTTCTCCGGGGCTTGGCGTACCTCCGAGAGAAGCACCAGATCA
TGCACCGAGATGTGAAGCCCTCCAACATCCTCGTGAACTCTAGAGGGGAGATCAAGCTGTGTGACTTCGGGGTGA
GCGGCCAGCTCATCGACTCCATGGCCAACTCCTTCGTGGGCACGCGCTCCTACATGGCTCCGGAGCGGTTGCAGG
GCACACATTACTCGGTGCAGTCGGACATCTGGAGCATGGGCCTGTCCCTGGTGGAGCTGGCCGTCGGAAGGTACC
CCATCCCCCCGCCCGACGCCAAAGAGCTGGAGGCCATCTTTGGCCGGCCCGTGGTCGACGGGGAAGAAGGAGAGC
CTCACAGCATCTCGCCTCGGCCGAGGCCCCCCGGGCGCCCCGTCAGCGGTCACGGGATGGATAGCCGGCCTGCCA
TGGCCATCTTTGAACTCCTGGACTATATTGTGAACGAGCCACCTCCTAAGCTGCCCAACGGTGTGTTCACCCCCG
ACTTCCAGGAGTTTGTCAATAAATGCCTCATCAAGAACCCAGCGGAGCGGGCGGACCTGAAGATGCTCACAAACC
ACACCTTCATCAAGCGGTCCGAGGTGGAAGAAGTGGATTTTGCCGGCTGGTTGTGTAAAACCTGCGGTGAACCAG
CCCGGCACACCCACGCGCACCGCCGTGTGACAGTGGCCGGGCTCCCTCGGTCCCGCTGG**TGA**CCTGCCCACCGTC
CCTGTCCATGCCCCGCCCTTCCAGCTGAGGACCGTGGCGCCTCCACCCACCCTCCTGCCTCACCCTGCGGAGAGC
ACCGTGGCGGGGCGACAGCGCATGCAGGAACGGGGGTCTCCTCTCCTGCCGTCCTGGCCGGGGTGCCTCTGGGGA
CGGGCGACGCTGCTGTGTGTGGTCTCAGAGGCTCTGCTTCCTTAGGTTACAAAACAAAACAGGGAGAGAAAAAGC

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FIGURE 3619

GCTTCCGGCGGAAGCGGCCTCAACAAGGGAAACTTTATTGTTCCCGTGGGGCAGTCGAGGATGTCGGTGAATTAC
GCGGCGGGGCTGTCGCCGTACGCGGACAAGGGCAAGTGCGGCCTCCCGGAGATCTTCGACCCCCCGGAGGAGCTG
GAGCGGAAGGTGTGGGAACTGGCGAGGCTGGTCTGGCAGTCTTCCAGTGTGGTGTTCCACACGGGTGCCGGCATC
AGCACTGCCTCTGGCATCCCCGACTTCAGGGGTCCCCACGGAGTCTGGACCATGGAGGAGCGAGGTCTGGCCCCC
AAGTTCGACACCACCTTTGAGAGCGCGCGGCCCACGCAGACCCACATGGCGCTGGTGCAGCTGGAGCGCGTGGGC
CTCCTCCGCTTCCTGGTCAGCCAGAACGTGGACGGGCTCCATGTGCGCTCAGGCTTCCCCAGGGACAAACTGGCA
GAGCTCCACGGGAACATGTTTGTGGAAGAATGTGCCAAGTGTAAGACGCAGTACGTCCGAGACACAGTCGTGGGC
ACCATGGGCCTGAAGGCCACGGGCCGGCTCTGCACCGTGGCTAAGGCAAGGGGGCTGCGAGCCTGCAGGGGAGAG
CTGAGGGACACCATCCTAGACTGGGAGGACTCCCTGCCCGACCGGGACCTGGCACTCGCCGATGAGGCCAGCAGG
AACGCCGACCTGTCCATCACGCTGGGTACATCGCTGCAGATCCGGCCCAGCGGGAACCTGCCGCTGGCTACCAAG
CGCCGGGGAGGCCGCCTGGTCATCGTCAACCTGCAGCCCACCAAGCACGACCGCCATGCTGACCTCCGCATCCAT
GGCTACGTTGACGAGGTCATGACCCGGCTCATGAAGCACCTGGGGCTGGAGATCCCCGCCTGGGACGGCCCCCGT
GTGCTGGAGAGGGCGCTGCCACCCCTGCCCCGCCCGCCCACCCCCAAGCTGGAGCCCAAGGAGGAATCTCCCACC
CGGATCAACGGCTCTATCCCCGCCGGCCCCAAGCAGGAGCCCTGCGCCCAGCACAACGGCTCAGAGCCCGCCAGC
CCCAAACGGGAGCGGCCCACCAGCCCTGCCCCCCACAGACCCCCCAAAAGGGTGAAGGCCAAGGCGGTCCCCAGC
TGACCAGGGTGCTTGGGGAGGGTGGGGCTTTTTGTAGAAACTGTGGATTCTTTTTCTCTCGTGGTCTCACTTTGT
TACTTGTTTCTGTCCCCGGGAGCCTCAGGGCTCTGAGAGCTGTGCTCCAGGCCAGGGGTTACACCTGCCCTCCGT
GGTCCCTCCCTGGGCTCCAGGGGCCTCTGGTGCGGTTCCGGGAAGAAGCCACACCCCAGAGGTGACAGCTGAGCC
CCTGCCACACCCCAGCCTCTGACTTGCTGTGTTGTCCAGAGGTGAGGCTGGGCCCTCCCTGGTCTCCAGCTTAAA
CAGGAGTGAACTCCCTCTGTCCCCAGGGCCTCCCTTCTGGGCCCCCTACAGCCCACCCTACCCCTCCTCCATGGG
CCCTGCAGGAGGGGAGACCCACCTTGAAGTGGGGGATCAGTAGAGGCTTGCACTGCCTTTGGGGCTGGAGGGAGA
CGTGGGTCCACCAGGCTTCTGGAAAAGTCCTCAATGCAATAAAAACAATTTCTTTCTTGCA

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FIGURE 3620

CCGCAGCCATGACCCCGCAGCTTCTCCTGGCCCTTGTCCTCTGGGCCAGCTGCCCGCCCTGCAGTGGAAGGAAAG
GGCCCCCAGCAGCTCTGACACTGCCCCGGGTGCAATGCCGAGCCTCTCGGTACCCGATCGCCGTGGATTGCTCCT
GGACCCTGCCGCCTGCTCCAAACTCCACCAGCCCCGTGTCCTTCATTGCCACGTACAGGCTCGGCATGGCTGCCC
GGGGCCACAGCTGGCCCTGCCTGCAGCAGACGCCAACGTCCACCAGCTGCACCATCACGGATGTCCAGCTGTTCT
CCATGGCTCCCTACGTGCTCAATGTCACCGCCGTCCACCCCTGGGGCTCCAGCAGCAGCTTCGTGCCTTTCATAA
CAGAGCACATCATCAAGCCCGACCCTCCAGAAGGCGTGCGCCTAAGCCCCCTCGCTGAGCGCCAGCTACAGGTGC
AGTGGGAGCCTCCCGGGTCCTGGCCCTTCCCAGAGATCTTCTCACTGAAGTACTGGATCCGTTACAAGCGTCAGG
GAGCTGCGCGCTTCCACCGGGTGGGGCCCATTGAAGCCACGTCCTTCATCCTCAGGGCTGTGCGGCCCCGAGCCA
GGTACTACGTCCAAGTGGCGGCTCAGGACCTCACAGACTACGGGGAACTGAGTGACTGGAGTCTCCCCGCCACTG
CCACAATGAGCCTGGGCAAGTAGCAAGGGCTTCCCGCTGCCTCCAGACAGCACCTGGGTCCTCGCCACCCTAAGC
CCCGGGACACCTGTTGGAGGGCGGATGGGATCTGCCTAGCCTGGGCTGGAGTCCTTGCTTTGCTGCTGCTGAGCT
GCCGGGCAACCTCAGATGACCGACTTTTCCCTTTGAGCCTCAGTTTCTCTAGCTGAGAAATGGAGATGTACTACT
CTCTCCTTTACCTTTACCTTTACCACAGTGCAGGGCTGACTGAACTGTCACTGTGAGATATTTTTTATTGTTTAA
TTAGAAAAGAATTGTTGTTGGGCTGGGCGCAGTGGATCGCACCTGTAATCCCAGTCACTGGGAAGCCGACGTGGG
AGGGTAGCTTGAGGCCAGGAGCTCGAAACCAGTCCGGGCCACACAGCAAGACCCCATCTCTAAAAAATTAATATA
AATATAAAATAAA

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FIGURE 3621

AAGCCGGAGTCTAGAGCTCCGGGCGCGGGGAGGCGCGGCCATGGCAGCTCCGGAGCCGCTGTCCCCGGCGGGCGG
TGCGGGCGAGGAGGCGCCGGAGGAGGACGAGGACGAAGCGGAGGCCGAGGACCCTGAGCGGCCGAATGCGGGAGC
GGGCGGTGGACGCAGTGGCGGCGGCGGCAGTAGCGTCAGCGGAGGAGGCGGCGGCGGCGGGGCCGGGGCGGGGGG
CTGCGGCGGGCCCGGGGGCGCGCTCACCAGGCGCGCGGTCACACTGCGGGTGCTCCTCAAAGACGCGCTGCTGGA
GCCTGGCGCCGGGGTGCTGTCCATCTACTACCTGGGGAAGAAGTTCCTGGGCGACCTGCAGCCAGACGGAAGGAT
CATGTGGCAGGAGACCGGGCAGACCTTCAACTCACCCAGCGCCTGGGCCACCCACTGCAAGAAGCTGGTGAACCC
TGCCAAGAAGTCGGGCTGTGGCTGGGCCTCTGTCAAGTACAAAGGCCAGAAACTGGACAAGTACAAGGCCACCTG
GCTCCGGCTGCACCAGCTGCACACGCCTGCCACGGCTGCTGATGAGAGCCCAGCCAGTGAAGGGGAGGAGGAGGA
GTTGCTGATGGAAGAGGAGGAGGAGGACGTTCTGGCAGGGGTCTCAGCAGAGGACAAGAGTCGGAGACCACTGGG
GAAGAGCCCTTCAGAGCCTGCCCACCCGGAGGCCACAACCCCAGGGAAGCGGGTGGACAGCAAGATCCGGGTTCC
GGTCCGCTACTGCATGCTGGGCAGCCGCGACTTGGCCAGGAACCCCCACACCCTGGTGGAAGTAACATCCTTTGC
AGCCATCAACAAGTTCCAGCCGTTCAACGTGGCTGTTTCTAGCAACGTGCTGTTCCTGCTGGACTTCCACAGTCA
CCTGACACGGAGTGAGGTCGTGGGTTACCTGGGGGGCCGCTGGGACGTCAACAGCCAGATGCTGACGGTGCTCAG
AGCCTTCCCTTGTCGGAGCCGGCTCGGGGACGCAGAGACTGCAGCTGCCATCGAAGAGGAGATCTACCAGAGCCT
GTTCCTGCGGGGCCTGTCCCTGGTGGGCTGGTACCACAGCCACCCACACAGCCCGGCGCTGCCATCTCTGCAGGA
CATCGACGCACAGATGGACTACCAGCTGCGGCTGCAGGGCTCCAGCAATGGCTTCCAGCCCTGCCTCGCCCTGCT
CTGCTCCCCTTACTATTCTGGCAACCCAGGCCCCGAGTCCAAGATCTCACCTTTCTGGGTGATGCCTCCTCCCGA
GCAAAGGCCCAGTGACTATGGCATCCCCATGGATGTGGAGATGGCCTACGTCCAGGACAGCTTCCTGACCAATGA
CATCCTTCACGAGATGATGCTGCTGGTGGAGTTCTACAAGGGTTCCCCTGACCTCGTGAGGCTCCAGGAACCCTG
GAGCCAGGAGCACACCTACCTCGACAAGCTTAAGATCTCCTTGGCCAGCAGGACGCCCAAGGACCAGAGCCTGTG
TCACGTCCTGGAACAGGTGTGCGGCGTCCTCAAGCAGGGGAGCTGAGCCTTCCAGGGCAGGGTGGGCTCCAGTTG
TCTTGAGGGTCCGGATGGGCTCAGGTAATAAAGAAACGGAAGCAGCAGCC

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FIGURE 3622

GTGCGGTTGCCATGTAATATCCTGGCCGCGCGGGCGCGCGAGCGGCTGAGGCGGCGCCGGGGCGGGCGCGGAGCT
GGCAAGCGGGTGGCGGAGGCGGCGCCGACGGGGACTGCTGAGGCGCGCAGAGGGTCGGCGGCGCCCGGGAGCCTG
TCGCTGGCGCGGTCCGGGCGGGAGGCTCGGCGGCGGGCGGCAGCATGTCGGTGGCGGGGCTGAAGAAGCAGTTCT
ACAAGGCGAGCCAGCTGGTCAGTGAGAAGGTCGGAGGGGCCGAGGGGACCAAGCTGGATGATGACTTCAAAGAGA
TGGAGAAGAAGGTGGATGTCACCAGCAAGGCGGTGACAGAAGTGCTGGCCAGGACCATCGAGTACCTGCAGCCCA
ACCCAGCCTCGCGGGCTAAGCTGACCATGCTCAACACGGTGTCCAAGATCCGGGGCCAGGTGAAGAACCCCGGCT
ACCCGCAGTCGGAGGGGCTTCTGGGCGAGTGCATGATCCGCCACGGGAAGGAGCTGGGCGGCGAGTCCAACTTTG
GTGACGCATTGCTGGATGCCGGCGAGTCCATGAAGCGCCTGGCAGAGGTGAAGGACTCCCTGGACATCGAGGTCA
AGCAGAACTTCATTGACCCCCTCCAGAACCTGTGCGAGAAAGACCTGAAGGAGATCCAGCACCACCTGAAGAAAC
TGGAGGGCCGCCGCCTGGACTTTGACTACAAGAAGAAGCGGCAGGGCAAGATCCCCGATGAGGAGCTACGCCAGG
CGCTGGAGAAGTTCGAGGAGTCCAAGGAGGTGGCAGAAACCAGCATGCACAACCTCCTGGAGACTGACATCGAGC
AGGTGAGTCAGCTCTCGGCCCTGGTGGATGCACAGCTGGACTACCACCGGCAGGCCGTGCAGATCCTGGACGAGC
TGGCGGAGAAGCTCAAGCGCAGGATGCGGGAAGCTTCCTCACGCCCTAAGCGGGAGTATAAGCCCAAGCCCCGGG
AGCCCTTTGACCTTGGAGAGCCTGAGCAGTCCAACGGGGGCTTCCCCTGCACCACAGCCCCCAAGATCGCAGCTT
CATCGTCTTTCCGATCTTCCGACAAGCCCATCCGGACCCCTAGCCGGAGCATGCCGCCCCTGGACCAGCCGAGCT
GCAAGGCGCTGTACGACTTCGAGCCCGAGAACGACGGGGAGCTGGGCTTCCATGAGGGCGACGTCATCACGCTGA
CCAACCAGATCGATGAGAACTGGTACGAGGGCATGCTGGACGGCCAGTCGGGCTTCTTCCCGCTCAGCTACGTGG
AGGTGCTTGTGCCCCTGCCGCAGTGACTCACCCGTGTCCCCGCCCCGCCCCTCCGTCCACACTGGCCGGCACCCC
CTGCTGGGTCTCCTGCATTCCACGGAGCCCCTGCTGCCAGGGCGGTGTCTGAGCCTGCCGGCGCCACCTGGGCCC
CGGCCCTTGAGGTACTCCCTGAGCAGGACCCCACACTTGGGTGGGGGGGCTTATCTGGGTGGGTGGGGATGCCTG
TTTACACTAGCGCTGACTCCCAACGGTGACGGCTCCCTTCCCCACTCCATGGCGCCAGCCTCCTCCCCCGCTCCC
CAACTTCTCGCCCAGCTGGCCGAGGCGGGGCAACACTAAGGTGCTCTTAGAAACACTAATGTTCCTCTGGGGCAG
CCCCCACCTCCGTCCTGACCCGACGGGGGCCCGGCCCACTGCCTACCCTCGAGTCCCGCAGCCTTAACAGGATGG
GATCGAGGGTCCCCATGGGGTGGCTCAGAGATAGGACCCTGGTTTTAAATCCCTCCCAGCCTGGTGCTGGTGATG
GGCCCTGGCCCTACTCCAGGGCCAATGCACCCCCGCCTCACACACGCACTCCTTCTCCTCAAGGCCAGGGCAGAG
GGCCTCACCGCCTCCCGGGCCTGCTGTCAGCTTGCAGCCCGGGGACAGAGGCCAGCTGGGATCTGCCTGAGGACA
GAGAACATGGTCTCCTGCAGGGCCCTGCCTCCCAAGCCCCGCCCTCAGAAAGCCAAGTACCTTTTCAGCTTTTTA
ACTGCCCCCATCCCAACCCAGGGAGGCCTGTGTCACTCTGGCACAAGCTGCCACCACCAGCCACCCACACCCACC
CCAGCACACCTCACACGGGACCACAGCCGCGCTGCCGAGGGCCAAGCACAAAGGTTCCAGTGAGCGCATGTCCCA
GCCCCTGGTGGCCAGGCTCCCCTTGCTGAGCCGCTGCCACTTCACCCTGTGGGAAGTGGCCCCAGCCATCTCCTC
TAGACCAAGGCAGGCAGCCCCGACATCTGCTTCCTCTATCGCCCAATGCAAAATCGATGAAATGGGGAGTTCTCT
GGGCCAGGCCACATTCACATTCCCCTCCCCCTGTGGTCCAGTGAAGCCTCCGGACCCCAGGCTCTGCTCTGCCCT
GCCCTGCACCCCCCTCGTCAGAAGTACATGAGGGGCGCAGAGATGAGCACACAGCTTTGGGCACGGTCCAGGGCA
AACTGAAATGTACGCCTGAATTTTGTAAACAGAAGTATTAAATGTCTCTTTCTAC

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FIGURE 3623

GGAGTGCGGGGCGCCCGGCGCCAGGGGAGCCGCCACAGCCATGGATTGCAAAGATAGACCAGCTTTTCCAGTTAA
GAAGTTAATACAAGCCCGTCTGCCGTTTAAGCGCCTGAATCTTGTCCCAAAGGGGAAAGCCGATGACATGTCAGA
CGATCAGGGTACTTCTGTGCAAAGTAAAAGCCCCGATTTAGAGGCCTCTTTGGACACCTTGGAAAACAACTGTCA
TGTGGGTTCTGACATAGACTTTAGACCGAAACTTGTCAACGGGAAGGGTCCCTTAGATAACTTTTTAAGAAATAG
AATCGAAACCAGTATTGGCCAGAGCACAGTCATCATTGATTTGACAGAGGACTCGAATGAGCAGCCAGACAGTCT
TGTGGACCACAATAAACTAAATTCTGAAGCCTCTCCCTCCAGGGAGGCAATAAATGGCCAGCGAGAAGACACTGG
GGATCAGCAGGGGTTGTTGAAGGCCATTCAGAACGACAAGTTGGCATTTCCTGGAGAGACCCTTTCAGACATTCC
TTGCAAAACAGAGGAGGAGGGTGTTGGCTGTGGAGGTGCAGGGAGGAGAGGCGACTCCCAGGAATGTTCGCCACG
GAGCTGCCCGGAGCTGACGAGTGGCCCGAGAATGTGCCCCAGAAAGGAGCAGGACAGTTGGAGTGAAGCTGGGGG
CATCCTGTTCAAAGGGAAGGTGCCTATGGTGGTCTTGCAGGACATCTTGGCTGTGAGACCACCGCAAATCAAGTC
CCTTCCAGCCACACCCCAAGGCAAGAACATGACCCCTGAGAGTGAGGTGCTGGAATCTTTCCCCGAAGAAGACTC
TGTACTCAGCCATTCGTCCCTGAGCTCTCCCTCTTCCACCAGCTCGCCCGAGGGGCCGCCTGCTCCCCCAAAGCA
GCACAGCAGTACCAGTCCCTTCCCCACCTCCACGCCCCTCCGCAGAATAACTAAGAAATTCGTCAAAGGCTCTAC
AGAGAAGAACAAGCTCAGACTGCAAAGAGATCAGGAGCGTCTGGGCAAGCAGCTCAAGTTACGTGCAGAAAGGGA
AGAAAAGGAGAAGCTGAAAGAGGAGGCCAAGCGGGCCAAGGAGGAGGCCAAGAAGAAGAAGGAGGAAGAGAAGGA
GCTTAAGGAAAAGGAGAGGCGGGAGAAGCGGGAGAAGGATGAGAAGGAGAAGGCGGAGAAGCAGCGGCTCAAGGA
GGAGCGGCGCAAGGAGAGACAGGAAGCCCTGGAGGCTAAACTTGAGGAAAAAAGGAAAAAGGAAGAAGAGAAACG
GTTAAGAGAAGAAGAGAAGCGCATTAAAGCAGAGAAGGCCGAAATCACGAGGTTCTTCCAGAAACCAAAGACTCC
ACAGGCCCCCAAGACCCTGGCCGGCTCCTGTGGGAAGTTTGCCCCCTTTGAAATTAAAGAGCACATGGTCCTGGC
CCCTCGGCGTCGGACCGCTTTCCATCCAGACCTCTGCAGTCAGCTGGACCAGCTCCTCCAGCAGCAGAGCGGCGA
GTTCTCCTTCTTGAAAGACCTCAAAGGCCGGCAGCCCCTGAGGTCCGGACCCACGCACGTTTCCACCCGGAATGC
AGATATTTTTAACAGTGATGTCGTCATCGTGGAGCGTGGGAAGGGCGACGGTGTTCCCGAGAGGAGGAAGTTTGG
CAGGATGAAGCTCCTGCAGTTCTGTGAGAACCACCGGCCTGCCTACTGGGGTACCTGGAATAAGAAGACGGCACT
CATCCGCGCGCGAGACCCCTGGGCCCAGGACACGAAGCTCCTGGACTATGAGGTGGACAGTGATGAGGAGTGGGA
AGAAGAGGAGCCTGGGGAGTCCCTGTCCCACAGTGAGGGGGATGATGATGACGACATGGGAGAGGATGAAGATGA
GGACGATGGTTTCTTTGTGCCCCATGGGTACCTGTCTGAGGACGAAGGTGTGACAGAGGAGTGTGCCGACCCTGA
GAACCATAAGGTCCGCCAGAAACTGAAGGCCAAGGAGTGGGACGAGTTCCTGGCTAAGGGGAAGCGCTTTCGCGT
CCTGCAACCTGTGAAGATCGGCTGCGTGTGGGCGGCTGACAGAGACTGCGCAGGCGATGACCTGAAGGTACTGCA
GCAGTTCGCAGCCTGCTTCCTGGAGACCCTGCCGGCCCAGGAGGAGCAGACGCCCAAGGCCTCCAAGCGGGAGAG
GAGAGACGAGCAGATCCTGGCCCAGCTGCTGCCGCTCCTGCACGGCAATGTGAACGGGAGCAAGGTCATCATCCG
GGAGTTCCAGGAGCACTGCCGCCGGGGACTGCTCAGCAACCACACCGGCAGCCCGCGGAGCCCCTCCACCACCTA
CCTGCACACCCCCACCCCCAGCGAGGATGCCGCCATCCCCTCTAAGTCCCGGCTCAAGCGGCTCATTTCCGAGAA
CTCAGTGTATGAGAAGCGGCCTGACTTCAGGATGTGCTGGTACGTGCACCCGCAGGTGCTACAGAGCTTCCAGCA
GGAGCACCTGCCCGTGCCGTGCCAGTGGAGCTATGTGACATCGGTGCCCTCGGCCCCCAAAGAGGACAGTGGCAG
CGTCCCCTCCACGGGGCCCAGCCAGGGCACTCCCATCTCGCTGAAGAGGAAGTCAGCGGGCAGCATGTGCATCAC
CCAATTCATGAAGAAGCGCAGGCACGACGGCCAGATTGGTGCTGAAGACATGGACGGCTTCCAGGCAGACACGGA
GGAGGAGGAAGAGGAGGAGGGCGACTGTATGATCGTGGATGTCCCGGATGCTGCGGAGGTCCAAGCCCCGTGTGG
AGCCGCTTCCGGAGCTGGGGGTGGTGTGGGGGTGGACACCGGCAAGGCCACCCTGACCTCGAGCCCACTGGGTGC
ATCCTGAGAGCAGGGGTGACGTATGTAGAATGCTTAGGGTGTCCTCCCCACAGAGCAGATACTTGAACCGACTCA
ATTCCTGTGTAAAGAGCACTTTGTCCTGCTTCACGGACCTCCCCAAAGTGTGCAGAGTTCTATATAGGATGCTGG
ATTAGTTCCTTTGATATTTGTAAAAATTCCCCCAAGAGCCGCATATGAATCTGCCCTTTAATAAAGCATTATTGA
GATTGCTGGCCTATTGGGGAAGCCTGCGGGCACAGGA

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FIGURE 3624

TTTTCTTCCGGTGGCTGGTCTCCGGCGGCCCCGTCCCCGACTGGGCCCCGTGCCCCCCCGCCCCCGCGGCCCCCC
GCCGCCGGGCCAGCCGCCACC**ATG**AAGAAATTCTTTCAGGAGTTCAAGGCCGACATCAAGTTCAAGAGCGCGGGA
CCCGGTCAGAAGCTCAAAGAGTCCGTGGGGGAAAAGGCCCACAAAGAGAAGCCCAACCAGCCAGCCCCCAGGCCG
CCCCGCCAGGGACCCACCAATGAGGCACAGATGGCAGCCGCTGCCGCCCTAGCCCGGCTGGAGCAGAAGCAGTCC
CGGGCCTGGGGCCCCACATCGCAGGACACCATCCGAAACCAGGTGAGAAAGGAACTTCAAGCCGAAGCCACCGTC
AGCGGGAGCCCCGAGGCCCCAGGGACCAACGTGGTATCTGAGCCCAGAGAGGAAGGCTCTGCCCACCTGGCTGTG
CCTGGCGTGTACTTCACCTGTCCGCTCACTGGGGCCACCCTGAGGAAGGACCAGCGGGACGCCTGCATCAAGGAG
GCCATTCTCTTGCACTTCTCCACCGACCCAGTGGCCGCCTCCATCATGAAGATCTACACGTTCAACAAAGACCAG
GACCGGGTGAAGCTGGGTGTGGACACCATTGCCAAGTACCTGGACAACATCCACCTGCACCCCGAGGAGGAGAAG
TACCGGAAGATCAAGCTGCAGAACAAGGTGTTTCAGGAGCGCATTAACTGCCTGGAAGGGACCCACGAGTTTTTT
GAGGCCATTGGGTTCCAGAAGGTGTTGCTTCCCGCCCAGGATCAGGAGGACCCCGAGGAGTTCTACGTGCTGAGC
GAGACCACCTTGGCCCAGCCCCAGAGCCTGGAGAGGCACAAGGAACAGCTGCTGGCTGCGGAGCCCGTGCGCGCC
AAGCTGGACAGGCAGCGCCGCGTCTTCCAGCCCTCGCCCCTGGCCTCGCAGTTCGAACTGCCTGGGGACTTCTTC
AACCTCACAGCAGAGGAGATCAAGCGGGAGCAGAGGCTCAGGTCCGAGGCGGTGGAGCGGCTGAGCGTGCTGCGG
ACCAAGGCCATGCGGGAGAAGGAGGAGCAGCGGGGGCTGCGCAAGTACAACTACACGCTGCTGCGCGTGCGCCTC
CCCGATGGCTGCCTCCTGCAGGGCACTTTCTACGCTCGGGAGCGGCTGGGGGCGGTGTACGGGTTCGTCCGGGAG
GCCCTGCAGAGCGACTGGCTGCCTTTTGAGCTGCTGGCCTCGGGAGGGCAGAAGCTGTCCGAGGACGAGAACCTG
GCCTTGAACGAGTGCGGGCTGGTGCCCTCTGCCCTCCTGACCTTCTCGTGGGACATGGCTGTGCTGGAGGACATC
AAGGCCGCGGGGGCCGAGCCGGACTCCATCCTGAAACCCGAGCTCCTGTCAGCCATCGAGAAGCTCTTG**TGA**AAT
AAAAGCAGGGTTGGCCTCAGCCCTGTGGGTCTGTCTCATGCTCTCCCTGTTCCTCTCCCCGCCACCCCAGGGCCT
CCAAGCCACCTCTGGAAATACTTGGCTCTGCCCCATGGGCACGGGAGGGGCGCCAGCCGTGGAGCTGTGGAATTG
GGCCCCGTGGCAGAGCCCCCATCCCTTGGGGGCTGTGGGGATGCGCCCAAGCCCCCGAGGGAGAGGCCTGGGGAC
ACCAAC

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FIGURE 3625

CGCCGCTGCAGCCGCTTTCCGCGGCCTGGGCCTCTCGCCGTCAGCATGCCACACGCCTTCAAGCCCGGGGACTTG
GTGTTCGCTAAGATGAAGGGCTACCCTCACTGGCCTGCCAGGATCGACGACATCGCGGATGGCGCCGTGAAGCCC
CCACCCAACAAGTACCCCATCTTTTTCTTTGGCACACACGAAACAGCCTTCCTGGGACCCAAGGACCTGTTCCCC
TACGACAAATGTAAAGACAAGTACGGGAAGCCCAACAAGAGGAAAGGCTTCAATGAAGGGCTGTGGGAGATCCAG
AACAACCCCCACGCCAGCTACAGCGCCCCTCCGCCAGTGAGCTCCTCCGACAGCGAGGCCCCCGAGGCCAACCCC
GCCGACGGCAGTGACGCTGACGAGGACGATGAGGACCGGGGGGTCATGGCCGTCACAGCGGTAACCGCCACAGCT
GCCAGCGACAGGATGGAGAGCGACTCAGACTCAGACAAGAGTAGCGACAACAGTGGCCTGAAGAGGAAGACGCCT
GCGCTAAAGATGTCGGTCTCGAAACGAGCCCGAAAGGCCTCCAGCGACCTGGATCAGGCCAGCGTGTCCCCATCC
GAAGAGGAGAACTCGGAAAGCTCATCTGAGTCGGAGAAGACCAGCGACCAGGACTTCACACCTGAGAAGAAAGCA
GCGGTCCGGGCGCCACGGAGGGGCCCTCTGGGGGGACGGAAAAAAAAGAAGGCGCCATCAGCCTCCGACTCCGAC
TCCAAGGCCGATTCGGACGGGGCCAAGCCTGAGCCGGTGGCCATGGCGCGGTCGGCGTCCTCCTCCTCCTCTTCC
TCCTCCTCCTCCGACTCCGATGTGTCTGTGAAGAAGCCTCCGAGGGGCAGGAAGCCAGCGGAGAAGCCTCTCCCG
AAGCCGCGAGGGCGGAAACCGAAGCCTGAACGGCCTCCGTCCAGCTCCAGCAGTGACAGTGACAGCGACGAGGTG
GACCGCATCAGTGAGTGGAAGCGGCGGGACGAGGCGCGGAGGCGCGAGCTGGAGGCCCGGCGGCGGCGAGAGCAG
GAGGAGGAGCTGCGGCGCCTGCGGGAGCAGGAGAAGGAGGAGAAGGAGCGGAGGCGCGAGCGGGCCGACCGCGGG
GAGGCTGAGCGGGGCAGCGGCGGCAGCAGCGGGGACGAGCTCAGGGAGGACGATGAGCCCGTCAAGAAGCGGGGA
CGCAAGGGCCGGGGCCGGGGTCCCCCGTCCTCCTCTGACTCCGAGCCCGAGGCCGAGCTGGAGAGAGAGGCCAAG
AAATCAGCGAAGAAGCCGCAGTCCTCAAGCACAGAGCCCGCCAGGAAACCTGGCCAGAAGGAGAAGAGAGTGCGG
CCCGAGGAGAAGCAACAAGCCAAGCCCGTGAAGGTGGAGCGGACCCGGAAGCGGTCCGAGGGCTTCTCGATGGAC
AGGAAGGTAGAGAAGAAGAAAGAGCCCTCCGTGGAGGAGAAGCTGCAGAAGCTGCACAGTGAGATCAAGTTTGCC
CTAAAGGTCGACAGCCCGGACGTGAAGAGGTGCCTGAATGCCCTAGAGGAGCTGGGAACCCTGCAGGTGACCTCT
CAGATCCTCCAGAAGAACACAGACGTGGTGGCCACCTTGAAGAAGATTCGCCGTTACAAAGCGAACAAGGACGTA
ATGGAGAAGGCAGCAGAAGTCTATACCCGGCTCAAGTCGCGGGTCCTCGGCCCAAAGATCGAGGCGGTGCAGAAA
GTGAACAAGGCTGGGATGGAGAAGGAGAAGGCCGAGGAGAAGCTGGCCGGGGAGGAGCTGGCCGGGGAGGAGCTG
GCCGGGGAGGAGGCCCCCCAGGAGAAGGCGGAGGACAAGCCCAGCACCGATCTCTCAGCCCCAGTGAATGGCGAG
GCCACATCACAGAAGGGGGAGAGCGCAGAGGACAAGGAGCACGAGGAGGGTCGGGACTCGGAGGAGGGGCCAAGG
TGTGGCTCCTCTGAAGACCTGCACGACAGCGTACGGGAGGGTCCCGACCTGGACAGGCCTGGGAGCGACCGGCAG
GAGCGCGAGAGGGCACGGGGGGACTCGGAGGCCCTGGACGAGGAGAGCTGAGCCGCGGGCAGCCAGGCCCAGCCC
CCGCCCGAGCTCAGGCTGCCCCTCTCCTTCCCCGGCTCGCAGGAGAGCAGAGCAGAGAACTGTGGGGAACGCTGT
GCTGTTTGTATTTGTTCCCTTGGGTTTTTTTTCCTGCCTAATTTCTGTGATTTCCAACCAACATGAAATGACTA
TAAATGGTTTTTTAATG

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FIGURE 3626

CCCCGGCCCCGGCTCCGGCGCTGCTCCCACCGCCGCGGCAACGGCCCCGGCCCACGGAGGCGGCTGGACGGACCC
CCGACGGTTGGACGTACGGACTCTGCTTCGAGAGTAGGCCATGGACACCTTCAGCACCAAGAGCCTGGCTCTGCA
GGCGCAGAAGAAGCTCCTGAGTAAGATGGCGTCCAAGGCAGTGGTGGCCGTGCTGGTGGATGACACCAGCAGTGA
GGTGCTGGATGAGCTGTACCGCGCCACCAGGGAGTTCACGCGCAGCCGCAAGGAGGCCCAGAAGATGCTCAAGAA
CCTGGTCAAGGTGGCCCTGAAGCTGGGACTGCTGCTGCGTGGGGACCAGCTGGGCGGTGAGGAGCTGGCGCTGCT
GCGGCGCTTCCGCCACCGGGCGCGCTGCCTGGCCATGACGGCCGTCAGCTTCCACCAGGTGGACTTCACCTTCGA
CCGGCGCGTGCTGGCCGCCGGGCTGCTCGAGTGCCGCGACCTGCTGCACCAGGCCGTGGGTCCCCACCTGACCGC
CAAGTCCCACGGCCGCATCAACCACGTGTTCGGCCACCTAGCCGACTGCGACTTCCTGGCTGCGCTCTACGGCCC
CGCCGAGCCCTACCGCTCCCACCTGCGCAGGATCTGCGAGGGCCTGGGCCGGATGCTGGACGAGGGCAGCCTCTG
AACCCCGGCGCCGCCCAACCGCGCCCCTCGCGCCTTTTGGGGCTCTCCTGCTGGGCGCGGGTGGGGTTTGTGGGT
TTTTTTCCACCTCTTTTCTCCCAATCGGACTCCGGCCAAACTCCCCTAGACAGATGGGTGACCTGTCTCCTTTGA
GAGGATGCTGAGGCATCTGTAGCAGCTGTTTCAAACACCAATGTCACCTCTCCTCCTGGCCCCCGCCCAATGGGG
AGAGGAATTTGGGGCCCTACTCTGGGGACCACCTTTCACCCGTTTGTACTTTCTGGGCCACGCCGACCCCTGGGT
CGCTTGATGTAAAAGCCAAAAGCTGCTGCCTCCCACTTGGATCATGTCGCCTGGGATTTTCATCCCTCGCACAAG
GACTACGGGTTCACACGGTGAACTGGGGGAAGGGAAGTGTTAGGGGGCAAGTCGCGGCACCCCCCCTTCCATAAA
CTCACGTCCTAACCCCCAGGACCTCAGAAGATGATCTGATTTGGAAATAGGATCATTACAGATGGAATTAGTTCA
GATGATCTCATCTTGGAGTAGGGTGGGCCCCAATTCAAGGACTGGGGTCCTTAAAAAAAGGGGGCCTGGGGCAGG
GCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGAGAGGCTGAGGCGGGCGGATCACGAGGTCAGGAGATCGAG
ACCATCCTGGCTAACACGGTGAAACCCCATCTCTACTGAAAATACAAAAAATTAGCTGGGCATGGTGGCACATGC
CTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGATAATCACTTGAACCAGGAGGAGGAGGTTGCAGTGAGCCGA
GATTGTGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTGTCTCAAAAAAAGAAGCGGGGGAGTGGGGGA
TTGAGGCCACGTGCAGTGGCTCACTACTCTAATTCCAGCACTTTGGGAGGCCGAGGCAGGAAGATTGCTTGAACT
CAGAAGTTCAAGACCAGTCTGGGCAACATGGTGAGACCCTCGTCTCTACAAAAAAAAAATTATCGTGGTGGGCCG
GGCGTGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCAGATCACAAGGTCAAGAGATCGA
GACCATCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGTTGCGTGC
CTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGCAGGTTGCAGGGAGGCG
GAGGTTGCAGTGAGCCGAGATTGCACCACTGCACTTCAGCCTGGTGACAGAGCGAGACTCGTCTCAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAGTGACTGTGGTGGTGCACACGTATAATCCCAGCTACTTGAGAGATGACGAGGGAAGA
TCACTTGAGCCCAGGAGTTAAGAGGCTGCAGTGACCGATGATCATGCCACTGCACTCCAGCTTGGGTGAGAGTGG
GACTCTGTCTT

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FIGURE 3627

GTCTACCCGCCCCTGCCCTGAGGACCCTAGTCCAAC**ATG**GCGGCGCCCAGCGGAGGGTGGAACGGCGTCGGCGCG
AGCTTGTGGGCCGCGCTGCTCCTAGGGGCCGTGGCGCTGAGGCCGGCGGAGGCGGTGTCCGAGCCCACGACGGTG
GCGTTTGACGTGCGGCCCGGCGGCGTCGTGCATTCCTTCTCCCATAACGTGGGCCCGGGGGACAAATATACGTGT
ATGTTCACTTACGCCTCTCAAGGAGGGACCAATGAGCAATGGCAGATGAGTCTGGGGACCAGCGAAGACCACCAG
CACTTCACCTGCACCATCTGGAGGCCCCAGGGGAAGTCCTATCTGTACTTCACACAGTTCAAGGCAGAGGTGCGG
GGCGCTGAGATTGAGTACGCCATGGCCTACTCTAAAGCCGCATTTGAAAGGGAAAGTGATGTCCCTCTGAAAACT
GAGGAATTTGAAGTGACCAAAACAGCAGTGGCTCACAGGCCCGGGGCATTCAAAGCTGAGCTGTCCAAGCTGGTG
ATTGTGGCCAAGGCATCGCGCACTGAGCTG**TGA**CCAGCAGCCCTGTTGCGGGTGGCACCTTCTCATCTCCGGTGA
AGCTGAAGGGGCCCTCCTGGCTCCCAACAGCTTCTCAGTTCCCACTTCCTGCTGAGCTCTTCTGGACTCAGGATC
GCAGATCCGGGGCACAAAGAGGGTGGGGAACATGGGGGCTATGCTGGGGAAAGCAGCCATGCTCCCCCCGACCTC
CAGCCGAGCATCCTTCATGAGCCTGCAGAACTGCTTTCCTATGTTTACCCAGGGGACCTCCTTTCAGATGAACTG
GGAAGAGATGAAATGTTTTTTCATATTTAAATAAATAAGAACATTAAAAAGC

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FIGURE 3628A

AAGGTGCCTGAGCCGGCGGGTCCCCTGTGTCCGCCGCGGCTGTCGTCCCCCGCTCCCGCCACTTCCGGGGTCGCA
GTCCCGGGCATGGAGCCGCGACCGTGAGGCGCCGCTGGACCCGGGACGACCTGCCCAGTCCGGCCGCCGCCCCAC
GTCCCGGTCTGTGTCCCACGCCTGCAGCTGGAATGGAGGCTCTCTGGACCCTTTAGAAGGCACCCCTGCCCTCCT
GAGGTCAGCTGAGCGGTTAATGCGGAAGGTTAAGAAACTGCGCCTGGACAAGGAGAACACCGGAAGTTGGAGAAG
CTTCTCGCTGAATTCCGAGGGGGCTGAGAGGATGGCCACCACCGGGACCCCAACGGCCGACCGAGGCGACGCAGC
CGCCACAGATGACCCGGCCGCCCGCTTCCAGGTGCAGAAGCACTCGTGGGACGGGCTCCGGAGCATCATCCACGG
CAGCCGCAAGTACTCGGGCCTCATTGTCAACAAGGCGCCCCACGACTTCCAGTTTGTGCAGAAGACGGATGAGTC
TGGGCCCCACTCCCACCGCCTCTACTACCTGGGAATGCCATATGGCAGCCGAGAGAACTCCCTCCTCTACTCTGA
GATTCCCAAGAAGGTCCGGAAAGAGGCTCTGCTGCTCCTGTCCTGGAAGCAGATGCTGGATCATTTCCAGGCCAC
GCCCCACCATGGGGTCTACTCTCGGGAGGAGGAGCTGCTGAGGGAGCGGAAACGCCTGGGGGTCTTCGGCATCAC
CTCCTACGACTTCCACAGCGAGAGTGGCCTCTTCCTCTTCCAGGCCAGCAACAGCCTCTTCCACTGCCGCGACGG
CGGCAAGAACGGCTTCATGGTGTCCCCTATGAAACCGCTGGAAATCAAGACCCAGTGCTCAGGGCCCCGGATGGA
CCCCAAAATCTGCCCTGCCGACCCTGCCTTCTTCTCCTTCATCAATAACAGCGACCTGTGGGTGGCCAACATCGA
GACAGGCGAGGAGCGGCGGCTGACCTTCTGCCACCAAGGTTTATCCAATGTCCTGGATGACCCCAAGTCTGCGGG
TGTGGCCACCTTCGTCATACAGGAAGAGTTCGACCGCTTCACTGGGTACTGGTGGTGCCCCACAGCCTCCTGGGA
AGGTTCAGAGGGCCTCAAGACGCTGCGAATCCTGTATGAGGAAGTCGATGAGTCCGAGGTGGAGGTCATTCACGT
CCCCTCTCCTGCGCTAGAAGAAAGGAAGACGGACTCGTATCGGTACCCCAGGACAGGCAGCAAGAATCCCAAGAT
TGCCTTGAAACTGGCTGAGTTCCAGACTGACAGCCAGGGCAAGATCGTCTCGACCCAGGAGAAGGAGCTGGTGCA
GCCCTTCAGCTCGCTGTTCCCGAAGGTGGAGTACATCGCCAGGGCCGGGTGGACCCGGGATGGCAAATACGCCTG
GGCCATGTTCCTGGACCGGCCCCAGCAGTGGCTCCAGCTCGTCCTCCTCCCCCCGGCCCTGTTCATCCCGAGCAC
AGAGAATGAGGAGCAGCGGCTAGCCTCTGCCAGAGCTGTCCCCAGGAATGTCCAGCCGTATGTGGTGTACGAGGA
GGTCACCAACGTCTGGATCAATGTTCATGACATCTTCTATCCCTTCCCCCAATCAGAGGGAGAGGACGAGCTCTG
CTTTCTCCGCGCCAATGAATGCAAGACCGGCTTCTGCCATTTGTACAAAGTCACCGCCGTTTTAAAATCCCAGGG
CTACGATTGGAGTGAGCCCTTCAGCCCCGGGGAAGATGAATTTAAGTGCCCCATTAAGGAAGAGATTGCTCTGAC
CAGCGGTGAATGGGAGGTTTTGGCGAGGCACGGCTCCAAGATCTGGGTCAATGAGGAGACCAAGCTGGTGTACTT
CCAGGGCACCAAGGACACGCCGCTGGAGCACCACCTCTACGTGGTCAGCTATGAGGCGGCCGGCGAGATCGTACG
CCTCACCACGCCCGGCTTCTCCCATAGCTGCTCCATGAGCCAGAACTTCGACATGTTCGTCAGCCACTACAGCAG
CGTGAGCACGCCGCCCTGCGTGCACGTCTACAAGCTGAGCGGCCCCGACGACGACCCCCTGCACAAGCAGCCCCG
CTTCTGGGCTAGCATGATGGAGGCAGCCAGCTGCCCCCCGGATTATGTTCCTCCAGAGATCTTCCATTTCCACAC
GCGCTCGGATGTGCGGCTCTACGGCATGATCTACAAGCCCCACGCCTTGCAGCCAGGGAAGAAGCACCCCACCGT
CCTCTTTGTATATGGAGGCCCCCAGGTGCAGCTGGTGAATAACTCCTTCAAAGGCATCAAGTACTTGCGGCTCAA
CACACTGGCCTCCCTGGGCTACGCCGTGGTTGTGATTGACGGCAGGGGCTCCTGTCAGCGAGGGCTTCGGTTCGA
AGGGGCCCTGAAAAACCAAATGGGCCAGGTGGAGATCGAGGACCAGGTGGAGGGCCTGCAGTTCGTGGCCGAGAA
GTATGGCTTCATCGACCTGAGCCGAGTTGCCATCCATGGCTGGTCCTACGGGGGCTTCCTCTCGCTCATGGGGCT
AATCCACAAGCCCCAGGTGTTCAAGGTGGCCATCGCGGGTGCCCCGGTCACCGTCTGGATGGCCTACGACACAGG
GTACACTGAGCGCTACATGGACGTCCCTGAGAACAACCAGCACGGCTATGAGGCGGGTTCCGTGGCCCTGCACGT
GGAGAAGCTGCCCAATGAGCCCAACCGCTTGCTTATCCTCCACGGCTTCCTGGACGAAAACGTGCACTTTTTCCA
CACAAACTTCCTCGTCTCCCAACTGATCCGAGCAGGGAAACCTTACCAGCTCCAGATCTACCCCAACGAGAGACA
CAGTATTCGCTGCCCCGAGTCGGGCGAGCACTATGAAGTCACGTTGCTGCACTTTCTACAGGAATACCTCTGAGC
CTGCCCACCGGGAGCCGCCACATCACAGCACAAGTGGCTGCAGCCTCCGCGGGGAACCAGGCGGGAGGGACTGAG
TGGCCCGCGGGCCCCAGTGAGGCACTTTGTCCCGCCCAGCGCTGGCCAGCCCCGAGGAGCCGCTGCCTTCACCGC
CCCGACGCCTTTTATCCTTTTTTAAACGCTCTTGGGTTTTATGTCCGCTGCTTCTTGGTTGCCGAGACAGAGAGA
TGGTGGTCTCGGGCCAGCCCCTCCTCTCCCCGCCTTCTGGGAGGAGGAGGTCACACGCTGATGGGCACTGGAGAG
GCCAGAAGAGACTCAGAGGAGCGGGCTGCCTTCCGCCTGGGGCTCCCTGTGACCTCTCAGTCCCCTGGCCCGGCC
AGCCACCGTCCCCAGCACCCAAGCATGCAATTGCCTGTCCCCCCCGGCCAGCCTCCCCAACTTGATGTTTGTGTT
TTGTTTGGGGGGATATTTTTCATAATTATTTAAAAGACAGGCCGGGCGCGGTGGCTCACGTCTGTAATCCCAGCA
CTTTGGGAGGCTGAGGCGGGCGGATCACCTGAGGTTGGGAGTTCAAGACCAGCCTGGCCAACATGGGGAAACCCC
GTCTCTACTAAAAATACAAAAAATTAGCCGGGTGTGGTGGCGCGTGCCTATAATCCCAGCTACTCGGGAGGCTGA

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FIGURE 3628B

GGCAGGAGAATCGCTTGAACCCGGGAGGTGGAGGTTGCGGTGAGCCAAGATCGCACCATTGCACTCCAGCCTGGG
CAACAAGAGCGAAACTCTGTCTCAAAATAAATAAAAAATAAAAGACAGAAAGCAAGGGGTGCCTAAATCTAGACT
TGGGGTCCACACCGGGCAGCGGGGTTGCAACCCAGCACCTGGTAGGCTCCATTTCTTCCCAAGCCCGAGCAGAGG
GTCATGCGGGCCCCACAGGAGAAGCGGCCAGGGCCCGCGGGGGGCACCACCTGTGGACAGCCCTCCTGTCCCCAA
GCTTTCAGGCAGGCACTGAAACGCACCGAACTTCCACGCTCTGCTGGTCAGTGGCGGCTGTCCCCTCCCCAGCCC
AGCCGCCCAGCCACATGTGTCTGCCTGACCCGTACACACCAGGGGTTCCGGGGTTGGGAGCTGAACCATCCCCAC
CTCAGGGTTATATTTCCCTCTCCCCTTCCCTCCCCGCCAAGAGCTCTGCCAGGGGCGGGCAAAAAAAAAAAGTAAA
AAGAAAAGAAAAAAAAAAAAAA

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FIGURE 3629A

GGGGGACGGTGAAGGTTGCCTCCCGCCCGTCCGGGCTCTGATCCTCCGTCTCCCCGTCCCCCGGCGGCCGGCCCA
TGGCCTGGCGGAGGCCCGAACCATGGACCTCCGCACCGCCGTGTACAACGCCGCCCGTGATGGCAAGCTGCAGCT
GCTCCAGAAGCTGCTCAGCGGCCGGAGCCGGGAGGAACTGGACGAGCTGACGGGCGAGGTGGCCGGCGGGGGAAC
GCCGCTACTCATCGCCGCCCGCTACGGCCACCTGGACGTGGTGGAGTACCTGGTGGACCGGTGCGGCGCGAGCGT
GGAGGCCGGTGGCTCGGTGCACTTCGATGGCGAGACCATCGAGGGCGCGCCGCCGCTGTGGGCCGCCTCCGCAGC
CGGCCACCTGGACGTGGTGCGGAGCCTGCTGCGCCGCGGGGCCTCGGTGAACCGCACCACGCGCACCAACTCCAC
GCCTCTCCGCGCCGCCTGCTTCGACGGCCACCTGGAGGTGGTGCGCTACCTGGTCGGCGAGCACCAGGCCGACCT
GGAGGTGGCCAACCGGCACGGCCACACGTGCCTCATGATCTCGTGCTACAAGGGCCACCGTGAGATCGCCCGCTA
CCTGCTGGAGCAGGGCGCCCAGGTGAACCGGCGCAGCGCCAAGGGCAACACGGCCCTGCATGACTGCGCCGAGTC
CGGCAGCCTGGAGATCCTGCAGCTGCTGCTGGGGTGCAAGGCCCGCATGGAACGTGACGGCTACGGCATGACCCC
GCTGCTCGCGGCCAGCGTGACGGGCCACACCAACATCGTGGAGTACCTCATCCAGGAGCAGCCCGGCCAGGAGCA
GGTCGCAGGGGGAGAGGCTCAGCCTGGGCTGCCCCAAGAAGACCCCTCCACCAGCCAGGGGTGTGCGCAGCCTCA
GGGGGCTCCGTGCTGCAGCTCCTCCCCAGAGGAACCACTGAACGGGGAATCTTACGAAAGCTGCTGTCCCACCAG
CCGGGAAGCTGCCGTGGAAGCCTTGGAATTGCTGGGAGCTACGTATGTGGATAAGAAACGAGATCTGCTTGGGGC
CCTTAAACACTGGAGGCGGGCCATGGAGCTGCGTCACCAGGGGGGCGAGTACCTGCCCAAACCGGAGCCCCCACA
GCTGGTCCTGGCCTATGACTATTCCAGGGAGGTCAACACCACCGAGGAGCTGGAGGCGCTGATCACCGACCCGGA
TGAGATGCGCATGCAGGCCCTGTTGATCCGGGAGCGCATCCTCGGTCCCTCGCACCCGGACACTTCCTATTACAT
CCGTTACAGGGGTGCCGTGTACGCCGACTCGGGCAATTTCGAGCGCTGCATCCGCTTGTGGAAGTACGCCCTGGA
CATGCAACAGAGCAACCTGGAGCCTCTGAGCCCCATGACCGCCAGCAGCTTCCTCTCCTTCGCGGAACTCTTCTC
CTACGTGCTTCAGGACCGGGCCGCCAAAGGCAGCCTGGGCACCCAGATCGGCTTTGCAGACCTCATGGGGGTTCT
CACCAAAGGGGTCCGGGAAGTGGAACGGGCCCTGCAGCTGCCCAGGGAGCCCGGAGACTCAGCCCAGTTCACCAA
GGCGCTGGCCATCATCCTCCACCTGCTCTACCTGCTGGAGAAAGTGGAGTGCACCCCCAGCCAGGAGCACCTGAA
GCACCAGACCGTCTACCGCCTGCTCAAGTGCGCGCCCAGGGGCAAGAACGGCTTCACCCCTCTGCACATGGCTGT
GGACAAGGACACCACAAACGTGGGCCGCTATCCCGTGGGCAGATTCCCCTCCCTGCACGTGGTCAAAGTGCTGCT
CGACTGCGGGGCCGACCCGGACAGCAGGGATTTTGACAACAACACCCCGCTACACATAGCAGCCCAGAACAACTG
CCCGGCCATCATGAATGCCCTGATCGAAGCAGGGGCCCACATGGACGCCACCAATGCCTTCAAGAAGACGGCCTA
CGAGCTGCTGGACGAGAAGCTGCTGGCCAGGGGTACCATGCAGCCCTTCAACTACGTGACCCTGCAGTGCCTTGC
GGCCCGGGCCCTGGATAAGAACAAGATCCCTTACAAGGGCTTCATCCCGGAAGATCTGGAGGCGTTCATCGAACT
GCACTGACCTGCCCAGAACGCCTGCACCCTCACCTCTCCCCTCTCCTGCTGAGATGGGGGAAATCCGGCTGCGGC
ATAGCAGATGCTCGTTCTTGCCTCCTTCAGGCACCAATCAGGAGAAGGGTTCTGCCTCCCATCCCCTCTACCTGC
AGACAGGGTCGGAGGTGTTAGCGAGCCTTTGGTGCTAGAAGCCTGCGGGGTCATGTGCTAAGAGGACAGTCTTTC
TCCGGGAGCCCGCTCACTCATTCTGAGTTAGGAAAAGACACAAGACCTTCCCCACATCCTGTCTGCCTGGGTTAG
GGAGGCCTTTGCCTTGTTACCTAGAGGCGGAGGGACTGAAGCCATTGCGTTCCTTCCCTGCTAGAAACACAGGAA
GAAGTTGAGGACTGTCTGCCTTCCCTCGTCCCTTTACCTGGCCAGATAACTCCAGCCGCTGAATACAGTGTTAGG
ACTGGGGGCTCCTGAGATGAGAGTTTGAGATTCAGGGAATGAGACCACCTCTCATTTCTTCCAGCATGATCGCGC
CCTGCTCCCGTGCCACCGTAGTCCCTGGCAGACAGGCAGGGCTCTGCCCAGGGCAGCCTGCCACTTGCATAGCTT
TCGGTTGGTTTGGTGTTCTGTTTATTTAATAAGTGGGCAGGTTGCAAGCGTTGCACAGAAATTCTGAGATTTTAC
TGCCTTTTTTTTTTTTTTTAAGAAAGTTGTTTGTTGGACTCCATAAGTGAATTTCAAGCAGTGAGGATTTTGTGG
TGCCTGAGATGGCCGAGGGCACAGGGAGTGAGCTGTATGTGTGAGGAATTTGGTGAGCGAGATAAAAGTCCACGG
TGTCAACCCCTAAAACATGGGTGACCGTACATTTTTATACATCTCCACTCTACGGCCTTTTACAGGCTTTCCGAT
TTTACAGGCCTTTCCAAGTTTCCATTCTCCTTAGAGAGAGAACTGTGCTTCCAAACAGAAATCAGGAGTGACCAC
AAAGCCTGAAAACACTTTGCCACCCAGCAAAGAACTGGCACAATTGGTTTGGGTCTGCATTGCCATAGTGCCCGA
GTTAAAACTGCAGGCCACTCTGCCTTGCAGTGGCCTCTGATTTCATTGTGGGTGCATCCACAGGTGGCCCGAGCT
GTTCTTTCAGCTGCTCCAAGGATTGAGACCCAAGTCATCATGAAAAAGGCCCAAGTACAGTCTTAATGCGATAAA
TCCACTAGCTAAGACGTCGAGTGCCAAGACCAGCCTTCCAGCCGAGGTTTGGACAAAGTCTCAGGTTCCCGTGAC
TCAGGGTAAGGTGCTGGGGCTGCCAGAGGACCTGCCCCAGCAAGATTTTTGTCAAGAGCGAGACTCCATCAGCCC
AGGCAGACGGGAGCAGGTTCTTGGCCAGCGTAGACAGCAGCAAACAGCAGCAGGGAAGCCATTCTCACTGCATCC
TCCCTGCAGTAGCCACGGCCAGGCCCTTAGGAGGAGCAGTGACCGGGGGTGTCCAGAAATATCCTGTCCCTGGAT

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FIGURE 3629B

GGAAACTAGGTCTCGTTTGGATTTTTTTTTTTTTTTGCCGTGTTAGGAAATTATTTATTAATTTACAAGACAGGT
TTTAACTCAGCCGAGGTGGGAAATGGTGTCCCTGTCCCTCCCAAAGCACAGAGCACAGAAATGAGGCCGTTTACA
TGGCGAGTCTCCGTGCTGGTGTTTAAGTCATTAAAAAGATACTCAAAGAG

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FIGURE 3630

ATGCAACCTCCACTGGCCTCCCTGATACCCCCGCAGCTCCAGAAACCAGCACCAACTACCCAGTGGAGTGCACCG
AGGGGTCTGCAGGCCCCCAGTCTCTCCCCTTGCCTATTCTGGAGCCGGTCAAAAACCCCTGCTCTGTCAAAGACC
AGACGCCACTCCAACTTTCTGTAGAAGATACCACCTCTCCAAATACCAAGCCGTGCCCACCTACTCCCACCACCC
CAGAAACATCCCCTCCTCCTCCTCCTCCTCCTTCATCTACTCCTTGTTCAGCTCACCTGACCCCCTCCTCCC
TGTTCCCTTCCTCCCTGGAATCATCATCGGAACAGAAATTCTATAACTTTGTGATCCTCCACGCCAGGGCAGACG
AACACATCGCCCTGCGGGTTCGGGAGAAGCTGGAGGCCCTTGGCGTGCCCGACGGGGCCACCTTCTGCGAGGATT
TCCAGGTGCCGGGGCGCGGGGAGCTGAGCTGCCTGCAGGACGCCATAGACCACTCAGCTTTCATCATCCTACTTC
TCACCTCCAACTTCGACTGTCGCCTGAGCCTGCACCAGGTGAACCAAGCC**ATG**ATGAGCAACCTCACGCGACAGG
GGTCGCCAGACTGTGTCATCCCCTTCCTGCCCCTGGAGAGCTCCCCGGCCCAGCTCAGCTCCGACACGGCCAGCC
TGCTCTCCGGGCTGGTGCGGCTGGACGAACACTCCCAGATCTTCGCCAGGAAGGTGGCCAACACCTTCAAGCCCC
ACAGGCTTCAGGCCCGAAAGGCCATGTGGAGGAAGGAACAGGACACCCGAGCCCTGCGGGAACAGAGCCAACACC
TGGACGGTGAGCGGATGCAGGCGGCGGCACTGAACGCAGCCTACTCAGCCTACCTCCAGAGCTACTTGTCCTACC
AGGCACAGATGGAGCAGCTCCAGGTGGCTTTTGGGAGCCACATGTCATTTGGGACTGGGGCGCCCTATGGGGCTC
GAATGCCCTTTGGGGGCCAGGTGCCCCTGGGAGCCCCGCCACCCTTTCCCACTTGGCCGGGGTGCCCGCAGCCGC
CACCCCTGCACGCATGGCAGGCTGGCACCCCCCCACCGCCCTCCCCACAGCCAGCAGCCTTTCCACAGTCACTGC
CCTTCCCGCAGTCCCCAGCCTTCCCTACGGCCTCACCCGCACCCCCTCAGAGCCCAGGGCTGCAACCCCTCATTA
TCCACCACGCACAGATGGTACAGCTGGGGCTGAACAACCACATGTGGAACCAGAGAGGGTCCCAGGCGCCCGAGG
ACAAGACGCAGGAGGCAGAA**TGA**CCGCGTGTCCTTGCCTGACCACCTGGGGAACACCCCTGGACCCAGGCATCGG
CCAGGACCCCATAGAGCACCCCGGTCTGCCCTGTGCCCTGTGGACAGTGGAAGATGAGGTCATCTGCCACTTTCA
GGACATTGTCCGGGAGCCCTTCATTTAGGACAAAACGGGCGCGATGATGCCCTGGCTTTCAGGGTGGTCAGAACT
GGATACGGTGTTTACAATTCCAATCTCTCTATTTCTGGGTGAAGGGTCTTGGTGGTGGGGGTATTGCTACGGTCT
TTTAATTATAATAAATATTTATTGAATGCT

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FIGURE 3631

TTCCAAGCTGGTTTTGAAGTCGCGGCAGCTGTTCCTGGGACGTCCGGTTGACCGCGCGTCTGCTGCAGAGACCATGTCTGCCGACGGGGCAGAGGCTGATGGCAGCACCCAGGTGACAGTGGAAGAACCGGTACAGCAGCCCAGTGTGGTGGACCGTGTGGCCAGCATGCCTCTGATCAGCTCCACCTGCGACATGGTGTCCGCAGCCTATGCCTCCACCAAGGAGAGCTACCCGCACATCAAGACTGTCTGCGACGCAGCAGAGAAGGGAGTGAGGACCCTCACGGCGGCTGCTGTCAGCGGGGCTCAGCCGATCCTCTCCAAGCTGGAGCCCCAGATTGCATCAGCCAGCGAATACGCCCACAGGGGGCTGGACAAGTTGGAGGAGAACCTCCCCATCCTGCAGCAGCCCACGGAGAAGGTCCTGGCGGACACCAAGGAGCTTGTGTCGTCTAAGGTGTCGGGGGCCCAAGAGATGGTGTCTAGCGCCAAGGACACGGTGGCCACCCAATTGTCGGAGGCGGTGGACGCGACCCGCGGTGCTGTGCAGAGCGGCGTGGACAAGACAAAGTCCGTAGTGACCGGCGGCGTCCAATCGGTCATGGGCTCCCGCTTGGGCCAGATGGTGTTGAGTGGGGTCGACACGGTGCTGGGGAAGTCGGAGGAGTGGGCGGACAACCACCTGCCCCTTACGGATGCCGAACTGGCCCGCATCGCCACATCCCTGGATGGCTTTGACGTCGCGTCCGTGCAGCAGCAGCGGCAGGAACAGAGCTACTTCGTACGTCTGGGCTCCCTGTCGGAGAGGCTGCGGCAGCACGCCTATGAGCACTCGCTGGGCAAGCTTCGAGCCACCAAGCAGAGGGCACAGGAGGCTCTGCTGCAGCTGTCGCAGGTCCTAAGCCTGATGGAAACTGTCAAGCAAGGCGTTGATCAGAAGCTGGTGGAAGGCCAGGAGAAGCTGCACCAGATGTGGCTCAGCTGGAACCAGAAGCAGCTCCAGGGCCCCGAGAAGGAGCCGCCCAAGCCAGAGCAGGTCGAGTCCCGGGCGCTCACCATGTTCCGGGACATTGCCCAGCAACTGCAGGCCACCTGTACCTCCCTGGGGTCCAGCATTCAGGGCCTCCCCACCAATGTGAAGGACCAGGTGCAGCAGGCCCGCCGCCAGGTGGAGGACCTCCAGGCCACGTTTTCCAGCATCCACTCCTTCCAGGACCTGTCCAGCAGCATTCTGGCCCAGAGCCGTGAGCGTGTCGCCAGCGCCCGCGAGGCCCTGGACCACATGGTGGAATATGTGGCCCAGAACACACCTGTCACGTGGCTCGTGGGACCCTTTGCCCCTGGAATCACTGAGAAAGCCCCGGAGGAGAAGAAGTAGGGGGAGAGGAGAGGACTCAGCGGGCCCCGTCTCTATAATGCAGCTGTGCTCTGGAGTCCTCAACCCGGGGCTCATTTCAAACTTATTTTCTAGCCACTCCTCCCAGCTCTTCTGTGCTGTCCACTTGGGAAGCTAAGGCTCTCAAAACGGGCATCACCCAGTTGACCCATCTCTCAGCCTCTCTGAGCTTGGAAGAAGCCTGTTCTGAGCCTCACCCTATCAGTCAGTAGAGAGAGATGTCCAGAAAAAATATCTTTCAGGAAAGTTCTCCCCTGCAGAATTTTTTTTCCTTGTTAAATATCAGGAATATAGGCCGGGTGCGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCGGAACACCTGAGGTCAGGTGTTCGAGACCAGCCAGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAAAAAAATGAGCCGGGCATGGTAGCAGGTGTCTGTTATCCCAGTTAGGAGGCTGAGGCAAGAGAATCTCTTGAACCTGAGAGGCGGAGGTTGCAGTGAGCCAAGATCGCGCCATTGCACTCCAGCCTGGGGGACAAGAGTGAGACTTAGTCTCA

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FIGURE 3632A

CGACTCCTTAGAGCATGGCATGGCTCAGAGGTGCTGGTAAAACTGATGGGGGTTTTTGCTGTCCCTCCCCTCAGC
GCCGACACCATGTGGATCCAGGTTCGGACCATGGACGGGAGGCAGACCCACACGGTGGACTCGCTGTCCAGGCTG
ACCAAGGTGGAGGAGCTGAGGCGGAAGATCCAGGAGCTGTTCCACGTGGAGCCAGGCCTGCAGAGGCTGTTCTAC
AGGGGCAAACAGATGGAGGACGGCCATACCCTCTTCGACTACGAGGTCCGCCTGAATGACACCATCCAGCTCCTG
GTCCGCCAGAGCCTCGTGCTCCCCCACAGCACCAAGGAGCGGGACTCCGAGCTCTCCGACACCGACTCCGGCTGC
TGCCTGGGCCAGAGTGAGTCAGACAAGTCCTCCACCCACGGTGAGGCGGCCGCCGAGACTGACAGCAGGCCAGCC
GATGAGGACATGTGGGATGAGACGGAATTGGGGCTGTACAAGGTCAATGAGTACGTCGATGCTCGGGACACGAAC
ATGGGGGCGTGGTTTGAGGCGCAGGTGGTCAGGGTGACGCGGAAGGCCCCCTCCCGGGACGAGCCCTGCAGCTCC
ACGTCCAGGCCGGCGCTGGAGGAGGACGTCATTTACCACGTGAAATACGACGACTACCCGGAGAACGGCGTGGTC
CAGATGAACTCCAGGGACGTCCGAGCGCGCGCCCGCACCATCATCAAGTGGCAGGACCTGGAGGTGGGCCAGGTG
GTCATGCTCAACTACAACCCCGACAACCCCAAGGAGCGGGGCTTCTGGTACGACGCGGAGATCTCCAGGAAGCGC
GAGACCAGGACGGCGCGGGAACTCTACGCCAACGTGGTGCTGGGGGATGATTCTCTGAACGACTGTCGGATCATC
TTCGTGGACGAAGTCTTCAAGATTGAGCGGCCGGGTGAAGGGAGCCCCATGGTTGACAACCCCATGAGACGGAAG
AGCGGGCCGTCCTGCAAGCACTGCAAGGACGACGTGAACAGACTCTGCCGGGTCTGCGCCTGCCACCTGTGCGGG
GGCCGGCAGGACCCCGACAAGCAGCTCATGTGCGATGAGTGCGACATGGCCTTCCACATCTACTGCCTGGACCCG
CCCCTCAGCAGTGTTCCCAGCGAGGACGAGTGGTACTGCCCTGAGTGCCGGAATGATGCCAGCGAGGTGGTACTG
GCGGGAGAGCGGCTGAGAGAGAGCAAGAAGAAGGCGAAGATGGCCTCGGCCACATCGTCCTCACAGCGGGACTGG
GGCAAGGGCATGGCCTGTGTGGGCCGCACCAAGGAATGTACCATCGTCCCGTCCAACCACTACGGACCCATCCCG
GGGATCCCCGTGGGCACCATGTGGCGGTTCCGAGTCCAGGTCAGCGAGTCGGGTGTCCATCGGCCCCACGTGGCT
GGCATACACGGCCGGAGCAACGACGGAGCGTACTCCCTAGTCCTGGCGGGGGGCTATGAGGATGATGTGGACCAT
GGGAATTTTTTCACATACACGGGTAGTGGTGGTCGAGATCTTTCCGGCAACAAGAGGACCGCGGAACAGTCTTGT
GATCAGAAACTCACCAACACCAACAGGGCGCTGGCTCTCAACTGCTTTGCTCCCATCAATGACCAAGAAGGGGCC
GAGGCCAAGGACTGGCGGTCGGGGAAGCCGGTCAGGGTGGTGCGCAATGTCAAGGGTGGCAAGAATAGCAAGTAC
GCCCCCGCTGAGGGCAACCGCTACGATGGCATCTACAAGGTTGTGAAATACTGGCCCGAGAAGGGGAAGTCCGGG
TTTCTCGTGTGGCGCTACCTTCTGCGGAGGGACGATGATGAGCCTGGCCCTTGGACGAAGGAGGGGAAGGACCGG
ATCAAGAAGCTGGGGCTGACCATGCAGTATCCAGAAGGCTACCTGGAAGCCCTGGCCAACCGAGAGCGAGAGAAG
GAGAACAGCAAGAGGGAGGAGGAGGAGCAGCAGGAGGGGGGCTTCGCGTCCCCCAGGACGGGCAAGGGCAAGTGG
AAGCGGAAGTCGGCAGGAGGTGGCCCGAGCAGGGGCCGGGTCCCCGCGCCGGACATCCAAGAAAACCAAGGTGGA
GCCCTACAGTCTCACGGCCCAGCAGAGCAGCCTCATCAGAGAGGACAAGAGCAACGCCAAGCTGTGGAATGAGGT
CCTGGCGTCACTCAAGGACCGGCCGGCGAGCGGCAGCCCGTTCCAGTTGTTCCTGAGTAAAGTGGAGGAGACGTT
CCAGTGTATCTGCTGTCAGGAGCTGGTGTTCCGGCCCATCACGACCGTGTGCCAGCACAACGTGTGCAAGGACTG
CCTGGACAGATCCTTTCGGGCACAGGTGTTCAGCTGCCCTGCCTGCCGCTACGACCTGGGCCGCAGCTATGCCAT
GCAGGTGAACCAGCCTCTGCAGACCGTCCTCAACCAGCTCTTCCCCGGCTACGGCAATGGCCGGTGATCTCCAAG
CACTTCTCGACAGGCGTTTTGCTGAAAACGTGTCGGAGGGCTCGTTCATCGGCACTGATTTTGTTCTTAGTGGGC
TTAACTTAAACAGGTAGTGTTTCCTCCGTTCCCTAAAAAGGTTTGTCTTCCTTTTTTTTTTTATTTTTATTTTTC
AAATCTATACATTTTCAGGAATTTATGTATTCTGGCTAAAAGTTGGACTTCTCAGTATTGTGTTTAGTTCTTTGA
AAACATAAAAGCCTGCAATTTCTCGACAAAACAACACAAGATTTTTTAAAGATGGAATCAGAAACTACGTGGTGT
GGAGGCTGTTGATGTTTCTGGTGTCAAGTTCTCAGAAGTTGCTGCCACCAACTCTTTAAGAAGGCGACAGGATCA
GTCCTTCTCTCGGGTTCTGGCCCCCAAGGTCAGAGCAAGCATCTTCCTGACAGCATTTTGTCATCTAAAGTCCAG
TGACATGGTTCCCCGTGGTGGCCCGTGGCAGCCCGTGGCATGGCGTGGCTCAGCTGTCTGTTGAAGTTGTTGCAA
GGAAAAGAGGAAACATCTCGGGCCTAGTTCAAACCTTTGCCTCAAAGCCATCCCCCACCAGACTGCTTAGCGTCT
GAGATCCGCGTGAAAAGTCCTCTGCCCACGAGAGCAGGGAGTTGGGGCCACGCAGAAATGGCCTCAAGGGGACTC
TGCTCCACGTGGGGCCAGGCGTGTGACTGACGCTGTCCGACGAAGGCGGCCACGGACGGACGCCAGCACACGAAG
TCACGTGCAAGTGCCTTTGATTCGTTCCTTCTTTCTAAAGACGACAGTCTTTGTTGTTAGCACTGAATTATTGAA
AATGTCAACCAGATTCTAGAAACTGCGGTCATCCAGTTCTTCCTGACACCGGATGGGTGCTTGGGAACCGTTTGA
GCCTTATAGATCATTTACATTCAATTTTTTTAACTCAGCAAGTGAGAACTTACAAGAGGGTTTTTTTAAAATTTT
TTTTTCTCTTAATGAACACATTTTCTAAATGAATTTTTTTTGTAGTTACTGTATATGTACCAAGAAAGATATAAC
GTTAGGGTTTGGTTGTTTTTGTTTTTGTATTTTTTTTCTTTTGAAAGGGTTTGTTAATTTTTCTAATTTTACCAA

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FIGURE 3632B

AGTTTGCAGCCTATACCTCAATAAAACAGGGATATTTTAAATCACATACCTGCAGACAAACTGGAGCAATGTTAT
TTTTAAAGGGTTTTTTTCACCTCCTTATTCTTAGATTATTAATGTATTAGGGAAGAATGAGACAATTTTGTGTAG
GCTTTTTCTAAAGTCCAGTACTTTGTCCAGATTTTAGATTCTCAGAATAAATGTTTTTCACAGAT

FIGURE 3633A

GTCGCCAGCAACCGAGCGGGGCCCGGCCCGAGCGGGGCCTGGGGGTGCGACGCCGAGGGCGGGGGAGAGCGCGCC
GCTGCTCCCGGACCGGGCCGCGCACGCCGCCTCAGGAACCATCACTGTTGCTGGAGGCACCTGACAAATCCTAGC
GAATTTTTGGAGCATCTCCACCCAGGAACCTCGCCATCCAGAAGTGTGCTTCCCGCACAGCTGCAGCCATGGGGT
CTGAGGACCACGGCGCCCAGAACCCCAGCTGTAAAATCATGACGTTTCGCCCAACCATGGAAGAATTTAAAGACT
TCAACAAATACGTGGCCTACATAGAGTCGCAGGGAGCCCACCGGGCGGGCCTGGCCAAGATCATCCCCCCGAAGG
AGTGGAAGCCGCGGCAGACGTATGATGACATCGACGACGTGGTGATCCCGGCGCCCATCCAGCAGGTGGTGACGG
GCCAGTCGGGCCTCTTCACGCAGTACAATATCCAGAAGAAGGCCATGACAGTGGGCGAGTACCGCCGCCTGGCCA
ACAGCGAGAAGTACTGTACCCCGCGGCACCAGGACTTTGATGACCTTGAACGCAAATACTGGAAGAACCTCACCT
TTGTCTCCCCGATCTACGGGGCTGACATCAGCGGCTCTTTGTATGATGACGACGTGGCCCAGTGGAACATCGGGA
GCCTCCGGACCATCCTGGACATGGTGGAGCGCGAGTGCGGCACCATCATCGAGGGCGTGAACACGCCCTACCTGT
ACTTCGGCATGTGGAAGACCACCTTCGCCTGGCACACCGAGGACATGGACCTGTACAGCATCAACTACCTGCACT
TTGGGGAGCCTAAGTCCTGGTACGCCATCCCACCAGAGCACGGCAAGCGCCTGGAGCGGCTGGCCATCGGCTTCT
TCCCCGGGAGCTCGCAGGGCTGCGACGCCTTCCTGCGGCATAAGATGACCCTCATCTCGCCCATCATCCTGAAGA
AGTACGGGATCCCCTTCAGCCGGATCACGCAGGAGGCCGGGGAATTCATGATCACATTTCCCTACGGCTACCACG
CCGGCTTCAATCACGGGTTCAACTGCGCAGAATCTACCAACTTCGCCACCCTGCGGTGGATTGACTACGGCAAAG
TGGCCACTCAGTGCACGTGCCGGAAGGACATGGTCAAGATCTCCATGGACGTGTTCGTGCGCATCCTGCAGCCCG
AGCGCTACGAGCTGTGGAAGCAGGGCAAGGACCTCACGGTGCTGGACCACACGCGGCCCACGGCGCTCACCAGCC
CCGAGCTGAGCTCCTGGAGTGCATCCCGGGCCTCGCTGAAGGCCAAGCTCCTCCGCAGGTCTCACCGGAAACGGA
GCCAGCCCAAGAAGCCGAAGCCCGAAGACCCCAAGTTCCCTGGGGAGGGTACGGCTGGGGCAGCGCTCCTAGAGG
AGGCTGGGGGCAGCGTGAAGGAGGAGGCTGGGCCGGAGGTTGACCCCGAGGAGGAGGAGGAGGAGCCGCAGCCAC
TGCCACACGGCCGGGAGGCCGAGGGCGCAGAAGAGGACGGGAGGGGCAAGCTGCGGCCAACCAAGGCCAAGAGCG
AGCGGAAGAAGAAGAGCTTCGGCCTGCTGCCCCCACAGCTGCCGCCCCCGCCTGCTCACTTCCCCTCAGAGGAGG
CGCTGTGGCTGCCATCCCCACTGGAGCCCCCGGTGCTGGGCCCAGGCCCTGCAGCCATGGAGGAGAGCCCCCTGC
CGGCACCCCTTAATGTCGTGCCCCCTGAGGTGCCCAGTGAGGAGCTAGAGGCCAAGCCTCGGCCCATCATCCCCA
TGCTGTACGTGGTGCCGCGGCCGGGCAAGGCAGCCTTCAACCAGGAGCACGTGTCCTGCCAGCAGGCCTTTGAGC
ACTTTGCCCAGAAGGGTCCGACCTGGAAGGAACCAGTTTCCCCCATGGAGCTGACGGGGCCAGAGGACGGTGCAG
CCAGCAGTGGGGCAGGTCGCATGGAGACCAAAGCCCGGGCCGGAGAGGGGCAGGCACCGTCCACATTTTCCAAAT
TGAAGATGGAGATCAAGAAGAGCCGGCGCCATCCCCTGGGCCGGCCGCCCACCCGGTCCCCACTGTCGGTGGTGA
AGCAGGAGGCCTCAAGTGACGAGGAGGCATCCCCTTTCTCCGGGGAGGAAGATGTGAGTGACCCGGACGCCTTGA
GGCCGCTGCTGTCTCTGCAGTGGAAGAACAGGGCGGCCAGCTTCCAGGCCGAGAGGAAGTTCAACGCAGCGGCTG
CGCGCACGGAGCCCTACTGCGCCATCTGCACGCTCTTCTACCCCTACTGCCAGGCCCTACAGACTGAGAAGGAGG
CACCCATAGCCTCCCTCGGAAAGGGCTGCCCGGCCACATTACCCTCCAAAAGCCGTCAGAAGACCCGACCGCTCA
TCCCTGAGATGTGCTTCACCTCTGGCGGTGAGAACACGGAGCCGCTGCCTGCCAACTCCTACATCGGCGACGACG
GGACCAGCCCCCTGATCGCCTGCGGCAAGTGCTGCCTGCAGGTCCATGCCAGTTGCTATGGCATCCGTCCCGAGC
TGGTCAATGAAGGCTGGACGTGTTCCCGGTGCGCGGCCCACGCCTGGACTGCGGAGTGCTGCCTGTGCAACCTGC
GAGGAGGTGCGCTGCAGATGACCACCGATAGGAGGTGGATCCACGTGATCTGTGCCATCGCAGTCCCCGAGGCGC
GCTTCCTGAACGTGATTGAGCGCCACCCTGTGGACATCAGCGCCATCCCCGAGCAGCGGTGGAAGCTGAAATGCG
TGTACTGCCGGAAGCGGATGAAGAAGGTGTCAGGTGCCTGTATCCAGTGCTCCTACGAGCACTGCTCCACGTCCT
TCCACGTGACCTGCGCCCACGCCGCAGGCGTGCTCATGGAGCCGGACGACTGGCCCTATGTGGTCTCCATCACCT
GCCTCAAGCACAAGTCGGGGGGTCACGCTGTCCAACTCCTGAGGGCCGTGTCCCTAGGCCAGGTGGTCATCACCA
AGAACCGCAACGGGCTGTACTACCGCTGTCGCGTCATCGGTGCCGCCTCGCAGACCTGCTACGAAGTGAACTTCG
ACGATGGCTCCTACAGCGACAACCTGTACCCTGAGAGCATCACGAGTAGGGACTGTGTCCAGCTGGGACCCCCTT
CCGAGGGGGAGCTGGTGGAGCTCCGGTGGACTGACGGCAACCTCTACAAGGCCAAGTTCATCTCCTCCGTCACCA
GCCACATCTACCAGGTGGAGTTTGAGGACGGGTCCCAGCTGACGGTGAAGCGTGGGGACATCTTCACCCTGGAGG
AGGAGCTGCCCAAGAGGGTCCGCTCTCGGCTGTCACTGAGCACGGGGGCACCGCAGGAGCCCGCCTTCTCGGGGG
AGGAGGCCAAGGCCGCCAAGCGCCCGCGTGTGGGCACCCCGCTTGCCACGGAGGACTCCGGGCGGAGCCAGGACT
ACGTGGCCTTCGTGGAGAGCCTCCTGCAGGTGCAGGGCCGGCCCGGAGCCCCCTTCTAGGACAGCTGGCCGCTCA
GGCGACCCTCAGCCCGGCGGGGAGGCCATGGCATGCCCCGGGCGTTCGCTTGCTGTGAATTCCTGTCCTCGTGTC

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FIGURE 3633B

CCCGACCCCCGAGAGGCCACCTCCAAGCCGCGGGTGCCCCCTAGGGCGACAGGAGCCAGCGGGACGCCGCACGCG
GCCCCAGACTCAGGGAGCAGGGCCAGGCGGGCTCGGGGGCCGGCCAGGGGAGCACCCCACTCAACTACTCAGAAT
TTTAAACCATGTAAGCTCTCTTCTTCTCGAAAAGGTGCTACTGCAATGCCCTACTGAGCAACCTTTGAGATTGTC
ACTTCTGTACATAAACCACCTTTGTGAGGCTCTTTCTATAAATACATATTGTTTAAAAAAAAGCAAGAAAAAAAG
GAAAACAAAGGAAAATATCCCCAAAGTTGTTTTCTAGATTTGTGGCTTTAAGAAAAACAAAACAAAACAAACACA
TTGTTTTTCTCAGAACCAGGATTCTCTGAGAGGTCAGAGCATCTCGCTGTTTTTTTGTTGTTGTTTTAAAATATT
ATGATTTGGCTACAGACCAGGCAGGGAAAGAGACCCGGTAATTGGAGGGTGAGCCTCGGGGGGGGGGCAGGACGC
CCCGGTTTCGGCACAGCCCGGTCACTCACGGCCTCGCTCTCGCCTCACCCCGGCTCCTGGGCTTTGATGGTCTGG
TGCCAGTGCCTGTGCCCACTCTGTGCCTGCTGGGAGGAGGCCCAGGCTCTCTGGTGGCCGCCCCTGTGCACCTGG
CCAGGGGAAGCCCGGGGGTCTGGGGCCTCCCTCCGTCTGCGCCCACCTTTGCAGAATAAACTCTCTCCTGGGGTT
TGTCTATCTTTGTTTCTCTCACCTGAGAGAAACGCAGGTGTTCCAGAGGCTTCCTTGCAGACAAAGCACCCCTGC
ACCTCCTATGGCTCAGGATGAGGGAGGCCCCCAGGCCCTTCTGGTTGGTAGTGAGTGTGGACAGCTTCCCAGCTC
TTCGGGTACAACCCTGAGCAGGTCGGGGGACACAGGGCCGAGGCAGGCCTTCGGGGCCCCTTTCGCCTGCTTCCG
GGCAGGGACGAGGCCTGGTGTCCTCGCTCCACCCACCCACGCTGCTGTCACCTGAGGGGAATCTGCTTCTTAGGA
GTGGGTTGAGCTGATAGAGAAAAAACGGCCTTCAGCCCAGGCTGGGAAGCGCCTTCTCCAGGTGCCTCTCCCTCA
CCAGCTCTGCACCCCTCTGGGGAGCCTTCCCCACCTTAGCTGTCTCCTGCCCCAGGGAGGGATGGAGGAGATAAT
TTGCTTATATTAAAAACAAAAAATGGCTGAGGCAGGAGTTTGGGACCAGCCTGGGCTATATAGCAAGACCCCATC
ACTACAAATTTTTTACAAATTAGCTAGGTGTGGTGGTGCGCACCTGTGGTCCCAGCTACTCGGGAGGCTGTGGTG
GGAGGATTGCTTGAGTCCAGGAGGTTGAGGCTGCAGTCAGCTCAGATTGCACCACTGCACTCCAGCCTGGGCAAC
AGAGCGAGACCCTGTCTCCAAAAAAAAAAAAAAAGCAATGTTTATATTATAAAAGAGTGTCCTAACAGTCCCCGGG
CTAGAGAGGACTAAGGAAAACAGAGAGAGTGTTACGCAGGAGCAAGCCTTTCATTTCCTTGGTGGGGGAGGGGGG
CGGTTGCCCTGGAGAGGGCCGGGGTCGGGGAGGTTGGGGGGTGTCAGCCAAAACGTGGAGGTGTCCCTCTGCACG
CAGCCCTCGCCCGGCGTGGCGCTGACACTGTATTCTTATGTTGTTTGAAAATGCTATTTATATTGTAAAGAAGCG
GGCGGGTGCCCCTGCTGCCCTTGTCCCTTGGGGGTCACACCCATCCCCTGGTGGGCTCCTGGGCGGCCTGCGCAG
ATGGGCCACAGAAGGGCAGGCCGGAGCTGCACACTCTCCCCACGAAGGTATCTCTGTGTCTTACTCTGTGCAAAG
ACGCGGCAAAACCCAGTGCCCTGGTTTTTCCCCACCCGAGATGAAGGATACGCTGTATTTTTTGCCTAATGTCCC
TGCCTCTAGGTTCATAATGAATTAAAGGTTCATGAACGCTGC

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FIGURE 3634A

GGCGCACGCTGGCGGTGGCAGCGGTGGCAGCGGTGCCGGCGGCCCCGCGGGCCGGGGGCTGAGCGGCGCCCGCTG
GGGTCGCTCGGGCTCCGCAGGCCACGAGAAGCTGCCGGTGCACGTAGAAGACGCCCTCACCTATCTGGACCAGGT
GAAGATCCGCTTTGGCAGCGACCCTGCCACCTACAACGGCTTCCTGGAGATCATGAAGGAGTTCAAAAGCCAGAG
CATCGATACTCCTGGAGTCATCAGACGTGTCTCGCAGCTCTTCCACGAGCACCCTGACCTCATTGTTGGATTCAA
CGCTTTTCTTCCCCTCGGATATAGAATAGACATTCCCAAGAATGGCAAGTTAAACATACAGTCGCCTCTGACAAG
CCAGGAGAATTCGCACAACCACGGGGACGGTGCAGAGGACTTCAAGCAGCAGGTGCCGTATAAAGAGGACAAACC
CCAGGTGCCCCTGGAGTCCGATTCCGTGGAATTCAACAACGCCATCAGCTATGTGAATAAGATTAAAACCCGCTT
CCTAGACCACCCAGAAATCTACAGGTCATTCCTGGAGATCCTGCACACGTACCAGAAGGAGCAGCTGAACACGAG
GGGCCGGCCATTCCGAGGCATGTCTGAAGAGGAGGTGTTCACCGAGGTGGCCAACCTCTTCCGGGGCCAGGAGGA
CCTGCTCTCAGAGTTTGGACAGTTCCTGCCCGAAGCCAAGCGGTCTCTGTTCACAGGAAACGGGCCGTGCGAGAT
GCACAGCGTGCAGAAGAACGAGCACGACAAGACCCCGGAGCACAGCAGGAAGCGCTCCCGGCCCTCGCTCCTCCG
CCCCGTGTCTGCACCCGCCAAGAAAAAAATGAAACTTCGTGGTACCAAAGACCTGTCCATCGCTGCAGTGGGGAA
GTACGGGACTCTGCAGGAATTTTCTTTCTTTGACAAGGTCCGCCGGGTGCTGAAGAGCCAGGAGGTGTATGAAAA
CTTCCTCCGCTGCATCGCACTCTTCAACCAGGAGCTGGTGTCTGGCTCTGAGCTCCTGCAGCTCGTCAGCCCATT
TCTGGGGAAATTTCCAGAACTCTTTGCACAGTTCAAGTCCTTCCTGGGGGTAAAAGAGCTGTCCTTCGCGCCACC
CATGAGCGACAGATCCGGGGACGGGATAAGCCGGGAAATTGATTATGCATCCTGCAAGCGCATAGGATCCAGCTA
CCGGGCACTCCCCAAAACCTACCAGCAGCCCAAGTGCAGTGGGAGGACAGCCATCTGCAAGGAGGTACTGAACGA
CACCTGGGTCTCCTTCCCTTCCTGGTCTGAGGACTCCACGTTCGTCAGCTCCAAGAAGACACCGTACGAGGAGCA
GCTTCACCGCTGTGAGGACGAGCGCTTCGAGTTAGACGTTGTCCTGGAGACGAACCTGGCCACAATCCGTGTGTT
GGAAAGTGTGCAGAAGAAGCTATCTCGGATGGCGCCGGAAGACCAGGAGAAGTTCCGGCTGGACGACTCCCTGGG
AGGCACGTCGGAGGTGATCCAGCGCCGTGCCATTTATCGCATCTATGGCGACAAGGCCCCGGAGATCATCGAGAG
CCTCAAGAAGAACCCTGTCACCGCTGTCCCCGTTGTCCTGAAAAGACTGAAGGCCAAGGAAGAGGAGTGGCGGGA
GGCCCAGCAGGGCTTCAACAAGATCTGGCGGGAGCAGTATGAGAAGGCGTACCTCAAGTCCCTTGACCACCAGGC
TGTGAACTTCAAGCAGAACGACACCAAGGCCCTGCGCTCCAAGAGCTTGCTCAACGAGATCGAGAGCGTCTACGA
CGAGCACCAGGAGCAGCACTCGGAGGGCCGCAGTGCCCCCTCTAGCGAGCCGCACCTCATCTTTGTGTACGAGGA
CCGGCAGATCCTGGAGGACGCAGCAGCGCTCATCAGCTACTACGTGAAGCGGCAGCCGGCCATCCAGAAGGAGGA
CCAGGGCACCATCCACCAGCTGCTGCACCAGTTCGTGCCCAGCCTCTTCTTCTCTCAGCAGCTGGACCTGGGCGC
CTCCGAGGAGTCAGCTGATGAGGACCGGGACAGCCCCCAGGGGCAGACCACAGACCCCAGTGAGCGGAAGAAGCC
GGCGCCAGGACCCCACAGTAGCCCCCCAGAGGAGAAGGGGGCCTTCGGGGATGCCCCGGCCACTGAGCAGCCACC
CCTGCCGCCCCCAGCCCCGCACAAGCCCCTGGACGATGTCTACAGCCTATTTTTTGCCAACAACAACTGGTACTT
CTTCCTGCGCCTGCACCAGACCCTGTGCTCCAGGCTGCTGAAGATCTACCGCCAGGCGCAGAAGCAGCTTCTGGA
GTATCGGACCGAGAAGGAGCGGGAGAAGCTGCTGTGTGAGGGCCGCAGGGAGAAGGGCAGCGACCCCGCCATGGA
GCTGCGGCTGAAGCAGCCCAGTGAAGTGGAGCTGGAGGAGTACTACCCGGCCTTCCTGGACATGGTGCGGAGCCT
GCTGGAGGGCAGCATCGACCCCACGCAGTACGAGGACACCCTACGCGAGATGTTCACCATCCATGCCTACGTGGG
CTTCACCATGGACAAGCTGGTGCAGAACATTGCGCGGCAGCTGCACCACCTCGTGAGCGATGACGTCTGCCTGAA
GGTGGTGGAGCTCTACCTGAACGAGAAGAAGCGGGGTGCCGCTGGTGGGAACCTGTCCTCCCGCTGCGTCCGCGC
TGCTAGGGAGACCAGCTACCAGTGGAAGGCTGAGCGCTGCATGGCCGACGAGAACTGCTTCAAGGTGATGTTCCT
GCAGCGCAAAGGGCAGGTGATCATGACCATCGAGCTCCTGGACACCGAGGAGGCCCAGACGGAGGACCCTGTGGA
GGTCCAGCACCTGGCTCGGTACGTGGAGCAGTATGTGGGGACCGAGGGCGCGTCCAGCTCGCCCACTGAGGGCTT
CCTCCTGAAACCTGTGTTCCTGCAGAGGAACCTCAAGAAGTTCCGCCGCCGGTGGCAGAGCGAGCAGGCGCGGGC
CCTGCGCGGTGAGGCCAGGAGCTCCTGGAAGCGGCTGGTGGGCGTGGAGAGCGCCTGCGACGTGGACTGCCGCTT
CAAGCTCAGCACTCACAAGATGGTGTTCATCGTGAACTCCGAGGACTACATGTACCGTCGCGGGACCCTCTGCCG
GGCCAAGCAGGTGCAGCCCCTGGTCCTGCTCCGCCACCACCAGCACTTTGAGGAGTGGCACAGCCGCTGGCTGGA
GGACAATGTGACGGTGGAGGCGGCTAGCCTGGTGCAGGACTGGCTGATGGGTGAGGAGGACGAGGACATGGTACC
CTGCAAGACGCTGTGTGAGACAGTGCACGTGCACGGCCTGCCCGTGACCCGCTACCGCGTGCAGTACAGCCGCCG
CCCGGCCTCGCCCTGACCCGCCCTCATGGGCACCGGGCAGGCGCCTCACAGAGCACAGACGTGCCCTCGGCCTTG
GTCGTGTCGGGGCCGTTTTCTTGAACGACGTGAGAGGCATCTCCCAGCCCCTCTGCTGCCGGACAGCGCACTCCA
GGGCAGGACGCCGCCCCCGTGGCTCCCGGTCTCCTGTGGGCCTGCTGTGTGCCAAACCTGAGCTACCTGCACCCG

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FIGURE 3634B

AGCCCTGGGGCTCAGCCCCACCACAGGGGCGGGTGGACGTGCTGGCCGAGGAACAAGCAATCATGTTTGCGTCCC
CGTCCGTCACATGTGCCAAATCCCTGGCAGGCAGATGGCTCCTGCCCCATATTCTTGCCGTGTCTTGGAAAAGTC
ACAGGTGACAGCCCTCCTGAGGCCCACACTTTGGAGGGGGTCCATGTCCAAGAGACCCTGACAAGGAAGGAGTTG
AGCCCTGGGTAGGCTTGCTTGAAAAGTGAGTCCTTCCAGAATATTCTCAGAGCTGCCAGAAACATCATCTGAGGG
TTTGGGCATCAGCTCTGCCTGGCTGGTGTTCAGGCCCTCAGTCACTTTGGAAGTGAGAAGAACCCTTCAGCCAAA
CCTTTGGGATCCCATTTTGAAGTCCAGAGCTGGAGCAGGCGGGCAGTGCCCTGGGAGACCCCGCTCTGGATAAGA
CACCCAACCCCAACTCCAGCAGCTGGACTCTGGGCCCACAAGGGGAGGGACCCCAGCCAGTATTCCCTCAGAGCC
GGCACGACCCTGCTGTGGGGCGGCGGGCCCAGTCGTGTTCCTGCAGTGGGCACCCTAGGCGTATGTGTATACACG
CACAGATATTTATTCCTTTCGCTTTTAGTGGTTGTTATTTCTGTAGCAGCCAAGTCCTGCGGCTCCCTGGGGCTG
AGATCTCCCTTTGTGGAACTCCGAGAGCCGCCCTGACAGTCCCAGCCGCCACCCAAGGAGCCCCATCCGCCCACC
CACCCTGGGACCCACGCGGCCACTCCAGGGATCATTGTTGTCCTTTTGTGAGGGGCTGAGGCGACTGTCCCATGG
AGGCATCCAAGGCTTTCTGTGCCAAGAATCCCAAGTGACTGGGGCTGGGGACCACTTCTCCAGGCCTCTCTCCCC
GACCATGAGAGCCCCTGGCCCTGGCCCCTGCACACCAGTAGGCCCAGAATAACCGCCACCCTTGCCATCCTGCAA
CAGCTGGACTCAAGTTTCCAGGAAGTGGAGATGTGTTTCTAGAAGTTTCCTGTGGAACCTGGAGGCTCCTGATGC
CTTTGACTCCAGGCTGGGCGATTCCGATGCTGACCCGTCCTCCTGGGCTCCCCACCCCCGCTCCCCAAGTGTCAC
ACAGGCACTTTGTACACATCCTGGTTTTCTAAGAAGGGAACTTGCCATCAAGATTCCTGTACCAGGCCCACGGCC
GTCTCGGGCAGAGCCACCTGGGCCCCGGGTGCAGCCGGAGACCCCGCCGAGCCCCTCCTCCCAGTATTCCCATCC
CCGCATGCTTCTAGGGAGCGCCTCTTTTCCGTTCTTGAGGAATTTCTGTTCTGGGGCTTGTCCTTCCTTTGCAGC
TGTTTTGAATGTAGTTTTCCTTTTCTATTTATTTGCACATTAAAGTTAATAATTGAATATTGA

FIGURE 3635A

CTCCCACGGGCTGGCTGGCAAGCGGCCCTGGTGGGTCTGCGGGGGCAGGGGCAGCCTTCCTGGTTTATCTCTACC
GGCGCGATCTGCTCGTCCGCCTCGGCTCCAGAAGCTGGGGCTCAGGGTCCGGCGAGGCAGGAAGCCTGAGGCCAC
AGCCCAGAGCAGCCTGAGTGCAGTC**ATG**TGGGGGCGACTGCTCCTGTGGCCCCTGGTGCTGGGGTTCAGCCTGTC
TGGCGGCACCCAGACCCCCAGCGTCTACGACGAGAGCGGGAGCACCGGAGGTGGTGATGACAGCACGCCCTCAAT
CCTGCCTGCCCCCCCGCGGCTACCCAGGCCAAGTCTGTGCCAATGACAGTGACACCCTGGAGCTCCCGGACAGCTC
ACGGGCACTGCTTCTGGGCTGGGTGCCCACCAGGCTGGTGCCCGCCCTCTATGGGCTGGTCCTGGTGGTGGGGCT
GCCGGCCAATGGGCTGGCGCTGTGGGTGCTGGCCACGCAGGCACCTCGGCTGCCCTCCACCATGCTGCTGATGAA
CCTCGCGGCTGCTGACCTCCTGCTGGCCCTGGCGCTGCCCCCGCGGATCGCCTACCACCTGCGTGGCCAGCGCTG
GCCCTTCGGGGAGGCCGCCTGCCGCCTGGCCACGGCCGCACTCTATGGTCACATGTATGGCTCAGTGCTGCTGCT
GGCCGCCGTCAGCCTGGATCGCTACCTGGCCCTGGTGCACCCGCTGCGGGCCCGCGCCCTGCGTGGCCGGCGCCT
GGCCCTTGGACTCTGCATGGCTGCTTGGCTCATGGCGGCCGCCCTGGCACTGCCCCTGACACTGCAGCGGCAGAC
CTTCCGGCTGGCGCGCTCCGATCGCGTGCTCTGCCATGACGCGCTGCCCCTGGACGCACAGGCCTCCCACTGGCA
ACCGGCCTTCACCTGCCTGGCGCTGTTGGGCTGTTTCCTGCCCCTGCTGGCCATGCTGCTGTGCTACGGGGCCAC
CCTGCACACGCTGGCGGCCAGCGGCCGGCGCTACGGCCACGCGCTGAGGCTGACCGCAGTGGTGCTGGCCTCCGC
CGTGGCCTTCTTCGTGCCCAGCAACCTGCTGCTGCTGCTGCATTACTCGGACCCGAGCCCCAGCGCCTGGGGCAA
CCTCTATGGTGCCTACGTGCCCAGCCTGGCGCTGAGCACCCTCAACAGCTGCGTGGATCCCTTCATCTACTACTA
CGTGTCGGCCGAGTTCAGGGACAAGGTGCGGGCAGGGCTCTTCCAACGGTCGCCGGGGGACACCGTGGCCTCCAA
GGCCTCTGCGGAAGGGGGCAGCCGGGGCATGGGCACCCACTCCTCTTTGCTCCAG**TGA**CACAAAGTGGGGAAGGC
TGTACTGGGTCGAACAGGGTCCCTTCCCCCACTTCACGTCCTTCCTGGGACCTCAGAATGTGACCTTATTTGGAA
ATAGGGTTGTTACAACTGTCACTAGCGGAGGTCACTTTGGAGAAGGGTGGGCCTTACATCCAGTGTGGGTGGTGT
CCTCATAAGATAAGGAGAGGCCAGGCCTGGTGGCTCACGCCTGTAATCCCAGCACTTTAAGAGGCCAAGGCGGAT
GGATCACTTGAGCCCAGGAGTTCAACACCAGCCTGAGCAACATGGTAAAACCCCATCTCTACCAAAAATACAAAA
ATTAGCTGGGCTTGGTGGCTGGCGCCTGTAATCCCAGCTACTCAGGAGACTGAGGCAGAAGGATCGCTTGAACCT
GGGAGGCAGAGGTTGCAGTGAGCCGAGATTGCGCCACTGGACTCCAGCCTGCGTGACAGAGAGCCTGTCTCTAAA
TTAATTAATTAATTAATTTAATTCAATTTTAAAAAGACGAAAAGTGACGGCCAGGTGCAGTGGCTCACGCCTATA
ATCTCAGCACTCTGGGAGGCCAAGATGGAGGATTGCTTGAAGCCAGGAGTTTGGGACCAGCCTGGGCAACATAGG
GGGATCCCATCTCTACACACAAAAAAATTTTTTAATGAACCAGGCATTGTGGCATGCGCCTATAGTCCCAGCCAC
TCAAGAGGCACAGGCGGGAGGATCACTTGAGCCTGGGAGGTTGTGGTTGCAGTGAGCTATGATTGTACCACTGCA
CTCCAGCCTGGGCAACAGAGCAAGACCTTGTCTCAAAAATAAACAAACTAAAATTAAAAAAAGAAGACGAGAGAT
AGTGGGTGTGGTGGCTCACACCTGCAATCCCAGCACTTTGGAAGGCCGAGGTGGGCAGATCATCTGAGGCCAGGA
GTTCAAGACCAGCCTGGCTAACATGGTGAAATCCTATCTCTACCAAAAATACAAAAATTAGCCAGGCGTGGTGGT
GGGCACCTGTACTGGGGAGGTGCCCACCCAGCTACTGGGGAGGCTGAGTCAGGAGAATCGCTTGAACCTGGGAGG
CGGAGGTTGCGGTCAGCTGAGATGGTGCCACTGCACTCCAGCCTGGGCGAAAGAGCGACTCTGTCTCCAAAAAAA
AGAGAAGAGGAGAGGACACAGAGACACACAGAGAAGAAAGCCATGTGGCGGCAGAGGCAGAGATGGGAGTGATGC
GGACGGACACAAACTAAGGGATGCCACGATGCCAAGCACAGCCAACAGCCACCAGCAGCCAGGAGACAGGCCTGG
GACGGGCTCTCCCTCACAGCCTCCAGAGGGAACCAGCCCTGCCACCACCTTGACCCTGGACTTCTGGCCTGCAGA
ACTGTGAGACAATAAACTCTCATTGTTTTAAGCTGCCTGGCATGTGGCACTTTGTCAGGGCAGCCCAGGAATCTG
AAACAGGATCAAACTCTGCTTCCTGGGCCCTGCCAGCATCTCTGGCTCGGCTTTCTGGGCTGGATGCAGCCCACG
ACGCACTGGTGTCTGAGATGGGGCTGGAGCTGGGGCTGGGGCTGCATTCCCTGGAGACTCACTGCAAGTTCCTGC
CCAGGAGGCTGAGGGCACCCCATCCTCAGTGCCCAATGCTGTGGCCCCACCAGGCCCAGAGCCTGGTTGGCCATT
CTCATGCCCACCAGCTTCTGGCTTTGGGATGTCTCTTGAGCAACCAGAATAGCACCCCCAACTCTGCTCCCCAAA
ACCCATCACTAGCACGGCTCAGCCTCCTGCTATCCCCTGACTGCTGGGGACCCTCGCCTTCCCTCCTCTCACCTG
CAGGCTGATCCTTCTTTTCACTTTCTGTCAATGTCACCAGGGATAAGGTGGGACAATGGGGGGTGGGGGTGGACA
GTGTGTGCTGGGGGGTTCGGGTGCTGCAGACCTGGAACTCCCTTCTGCCAGGATGTTGGCAGCCGGTTGTAAGCC
TTGCACGGGACAGACCACACCCACCGCAACCTCATCCCCTCAGCACTAACCACATCCACTCTCAACCCCGTCCCC
TTCGCACTGACCACACCCACCCCGTTCGGCCCCGCCCCCCGCACTGAACACACCCGCCCTCAACCCCGCACCCTC
CGCACTCACCTCCCCCTCGCCGCTCGACCCCGCCCTCACCACACTGACCACCCTCAACCCATTGCGCCCAGTCCC
CACCACAGTGACCACACCCTCACTGGCTCGGCCCTGCCCCCAGTATACTGACCATTCCCCAGCCACTTCCCTTCC

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FIGURE 3635B

GCACTTACCACTCCCCCAGCCACGCCCCTCCCCGCTGACCGCTCCTCCAGCCCCGCCTCCCCCGTACAGGCAGAG
CGCCCGCCCACCTCTATGCTGCGTTCTCCTGACTTTACGTTGGCCCCTCCTCTGCCAAGCCCCCAGGGGAGCCCT
CCCTGGCGTCCGAGGGTGGGAGTCGGGGTGTGGCAGGCCGCGGTGGGGGGCGGCAGTGGCTCCGCGCACTCACCC
GGGCCCCGGGCAGGGGCGCGCTCCACTTCGTTGCACGCGGGTCCGGCGCACAGTTCCCGGGCGAGTGGGCTGTGG
GTGCTGACGTTGTAGAAGCGAGTGGCCTCGAAGGCTACGGGACGAGGGTGGCGGGTGACCAAGTGCAGGCGCGAC
GGGTCAGGGACCGGGCCGGGCCGGGGGTGCGGGCGCGCGGGCCTACCGGGTTCGTAGTAGTCGTACACGGAGACT
GGCAGCGCCGACGTCCTGCCCACCACGCACTCCCGGAGAGCACGGAACCGCACGCACGTCAGGCACCGGCTGGGG
ATCTGTGGGGCAGCGGCGGGCGCAGGCTCGACCCGGGCCAGGAGGCCCGGGGCGCTGAGCTCAGGCCCAGAACTG
GCTGATTTCAGGGATACCCAGGACGCGTGAAACACAGAAGAAACGTGATCCCATTTTCTTTTTTTCTTTTACTTT
TCTTTTTTTTTTTTTTTCCTGAGACAGAGTCTCGCGCTGTTGCCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCT
CACTGCAAGCTCGGCCTCCTGGGTTCAAATGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATAACAGGCGCC
CACCACCGCACCCTGCTAATTTTTTGTATTTTTGATCAAGACGGAGTTTCACCATGTTGGCCAGGCTGGTCTCCA
ACTCCTGCCCTCAAGTGATCCGCCTCGGTCCCATTTTTTATTCTTTGGGTCCTTCCATCCCACTGGGAAAACGTC
TCAGGTGGCCTCTGAAACACCACTCCTTTTTGTGTGTGTGCACGCATGGCTGAGCATGTGTGGGTGGGAGTCAGC
ACATTCACGATACTGTGCAATCATCACCTCTGTCTAGTTACAGAACGGTTTCTTTCTCCCCCAAAGAAACCCCAT
CGCCATCAGCACTCACTCCCCACTCCCCCAGCCCCTGGCAACCACAAATCTTTCCAACTCTACGGATTTGCCTGT
TCTGGGCATTTCATGTCAATGGAATCATGTACTCTGTG

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FIGURE 3636

GCGAGACCAAGTGCGAGGGGAGGACAGGCGAAGCGCGCGTCTGGGGCCGCGCTCTCCACACTTAGCCGGCGCTGC
CTCACGCCTCGCAGCCACCCCTCCTGCGTCTCCACAAATGGTCCGACCCGCAAGCAAGGGGGCGGGTCCGGCTTT
GAAAAGCCGGCGGGTCGGGCCTTGAGGTGGAAGGCGGGAAAATGGCGGATTCCTCGGGGCGAGGCGCTGGGAAGC
CTGCAACCGGCCCCACAAATTCTAGCAGTGCCAAGAAGAAGGATAAAAGAGTTCAAGGTGGAAGAGTGATTGAGT
CCCGGTATCTGCAGTATGAAAAGAAGACAACCCAAAAGGCTCCTGCAGGAGATGGGTCACAGACCCGAGGGAAGA
TGTCTGAAGGTGGAAGGAAATCCAGCCTGCTCCAGAAAAGCAAAGCAGATAGCAGTGGGGTCGGAAAGGGTGACC
TGCAGTCCACGTTGCTGGAAGGGCATGGCACAGCTCCACCTGACCTGGATCTCTCTGCTATTAATGACAAAAGCA
TCGTCAAAAAGACGCCACAGTTAGCAAAAACAATATCAAAGAAACCTGAGTCAACATCATTTTCTGCCCCTCGGA
AAAAGAGCCCGGATTTATCTGAAGCAATGGAAATGATGGAGTCTCAGACACTACTGCTGACGCTACTATCCGTAA
AGATGGAGAACAATCTTGCTGAGTTTGAAAGAAGGGCAGAAAAGAATTTATTAATAATGTGTAAGGAGAAGGAGA
AGCTACAGAAAAAGGCCCACGAGCTGAAGCGCAGGCTTCTCCTCTCTCAGAGGAAGCGGGAGCTGGCAGATGTCC
TGGATGCCCAGATCGAGATGCTCAGCCCCTTCGAGGCAGTGGCCACACGCTTCAAGGAGCAATACAGGACATTCG
CCACGGCCCTGGACACTACCAGGCACGAGCTGCCCGTGAGGTCCATCCACCTGGAGGGAGATGGGCAGCAGCTCT
TAGACGCCCTGCAGCATGAACTGGTGACCACTCAGCGCCTCCTGGGAGAACTTGATGTTGGTGATTCGGAAGAAA
ATGTGCAGGTGCTGGACTTACTGAGCGAACTCAAGGACGTGACGGCGAAAAAGGACCTTGAGCTCCGAAGGAGCT
TTGCCCAGGTGCTGGAACTCTCCGCAGAGGCAAGCAAAGAGGCAGCCTTGGCAAACCAGGAAGTCTGGGAAGAGA
CCCAGGGCATGGCGCCCCCCAGCCGGTGGTATTTCAATCAAGACAGTGCCTGCAGAGAATCTGGGGGAGCACCCA
AGAACACGCCCCTGTCTGAGGACGACAACCCGGGTGCCTCGTCAGCCCCCGCTCAGGCCACGTTCATCAGCCCAA
GCGAAGATTTTTCTTCAAGCAGCCAGGCAGAAGTCCCGCCCTCTCTCTCTCGTTCAGGGAGGGACTTGTCATGAC
TCATGGTTACATTCAGGATACTTGAGCACTTTATATACTACCGTAGCACTGTAGCTATTTTTTATGTGATAATCT
TGTTTGATAAAAAAGTAAACCTGTTTTGCAATTGAAGCCTCCATTTTCTATGAAGGGGCCAGTTGG

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FIGURE 3637A

ATGAGTGTGAAAGAGGCAGGCAGCTCGGGCCGCCGGGAGCAGGCGGCCTACCACCTGCACATCTACCCCCAGCTG
TCCACCACCGAGAGCCAGGCCTCGTGCCGCGTGACTGCCACCAAGGACAGCACCACCTCGGACGTCATCAAGGAC
GCCATTGCCAGCCTGCGGCTGGACGGCACCAAATGTTATGTGCTGGTGGAGGTCAAAGAGTCGGGAGGCGAGGAA
TGGGTGCTGGACGCCAACGACTCGCCTGTGCACCGGGTGCTGCTATGGCCCCGGCGGGCACAGGACGAGCACCCT
CAGGAGGATGGCTACTACTTCCTGCTGCAGGAGCGCAACGCAGATGGAACCATCAAGTACGTGCATATGCAGCTG
GTGGCGCAGGCCACAGCCACCCGGCGCCTAGTGGAGCGTGGCCTCCTGCCACGGCAGCAGGCGGACTTTGATGAC
CTGTGTAACCTCCCCGAGCTAACCGAGGGCAACCTCCTGAAGAACCTCAAGCACCGCTTCCTGCAACAAAAGATC
TACACGTACGCGGGGAGCATCCTGGTGGCCATCAACCCCTTTAAGTTCCTGCCCATCTACAACCCCAAGTACGTG
AAGATGTATGAGAACCAGCAGCTGGGCAAGCTGGAGCCACACGTCTTCGCGCTGGCCGACGTGGCCTACTACACC
ATGCTCAGGAAGCGCGTGAACCAGTGCATCGTGATCTCGGGTGAGAGCGGCTCCGGCAAGACCCAGAGCACCAAC
TTCCTCATCCACTGCCTCACCGCCCTCAGCCAGAAGGGCTACGCCAGCGGCGTCGAGAGGACCATCCTGGGTGCT
GGCCCTGTGCTGGAGGCTTTTGGAAATGCCAAGACAGCCCACAACAACAACTCCAGCCGGTTTGGGAAATTCATC
CAAGTCAGCTACCTAGAGAGTGGCATCGTGAGAGGAGCTGTCGTCGAGAAATATCTGCTTGAAAAGTCTCGCCTG
GTGTCTCAGGAGAAGGATGAGAGGAACTACCATGTGTTTTATTATTTGTTACTTGGGGTCAGCGAGGAAGAGCGC
CAAGAATTTCAGCTCAAGCAGCCTGAAGATTATTTCTACCTCAACCAGCATAACTTGAAGATTGAAGATGGGGAG
GACCTGAAGCATGACTTTGAGAGGCTCAAGCAGGCCATGGAGATGGTGGGCTTCCTCCCCGCCACCAAGAAGCAG
ATTTTTGCCGTCCTCTCGGCCATCCTGTACCTGGGCAACGTCACTTATAAGAAGAGAGCTACAGGCCGAGAGGAA
GGGTTGGAGGTCGGGCCACCCGAGGTGCTGGACACCCTGTCGCAGCTTCTGAAGGTGAAGCGAGAAATCTTGGTG
GAGGTTCTGACCAAAAGAAAAACGGTGACCGTCAACGACAAGCTTATCCTTCCCTACAGCCTCAGCGAGGCCATC
ACTGCCCGCGACTCCATGGCCAAGTCTCTGTACAGCGCCCTGTTCGACTGGATTGTGCTGCGGATCAACCACGCA
CTCCTCAACAAGAAGGACGTGGAAGAGGCAGTCTCGTGCCTGTCCATTGGGGTCCTGGACATCTTCGGGTTTGAA
GACTTCGAGAGGAACAGCTTTGAGCAGTTCTGCATCAACTACGCCAATGAGCAGCTGCAGTATTACTTCAACCAG
CACATCTTCAAGCTGGAGCAGGAGGAATATCAGGGCGAGGGGATCACGTGGCACAACATCGGCTACACAGACAAT
GTCGGCTGCATCCATCTCATCAGCAAGAAACCCACGGGCCTCTTCTACCTGCTGGACGAGGAGAGCAACTTCCCC
CACGCCACGAGCCAGACCCTGCTGGCCAAGTTCAAACAGCAACATGAGGACAATAAGTACTTCCTGGGCACCCCG
GTCATGGAGCCAGCTTTCATCATCCAGCACTTCGCAGGGAAGGTGAAATATCAGATCAAGGACTTCCGGGAGAAG
AACATGGACTACATGCGGCCAGACATCGTGGCCCTGCTGCGGGGCAGTGACAGCTCCTACGTGCGGGAGCTCATC
GGCATGGACCCCGTGGCCGTGTTCCGCTGGGCCGTGCTCCGGGCTGCTATCCGGGCCATGGCAGTGCTTCGGGAG
GCCGGACGCCTGCGGGCCGAGAGGGCCGAAAAGGCTGCAGGTATGAGCAGCCCTGGTGCCCAAAGTCACCCAGAA
GAGCTGCCAAGAGGAGCCAGCACCCCTTCGGAAAAACTTTACCGCGATTTGCATAACCAAATGATCAAGAGCATC
AAAGGATTGCCCTGGCAGGGCGAGGACCCCCGTAGCCTTCTCCAGTCCCTCAGTCGGCTCCAGAAACCCCGCGCC
TTCATCCTGAAAAGTAAAGGTATCAAACAAAAGCAGATCATTCCAAAGAACCTACTGGACTCCAAGTCCCTGAAA
CTCATCATCAGCATGACTCTGCACGACCGCACCACCAAGTCCCTACTGCACCTGCACAAGAAGAAAAAGCCACCA
AGCATCAGCGCCCAGTTCCAGACATCCCTTAACAAGCTCTTGGAGGCACTGGGGAAGGCGGAGCCCTTCTTTATC
CGCTGCATCCGTTCCAATGCTGAAAAGAAAGAGCTGTGCTTTGACGACGAGCTGGTCCTGCAGCAGCTGCGCTAC
ACCGGCATGCTGGAGACCGTGCGCATCCGGAGGTCAGGGTACAGCGCCAAGTACACGTTCCAGGATTTCACCGAG
CAGTTCCAGGTGCTCCTGCCCAAGGATGCCCAGCCCTGCAGGGAGGTCATCTCCACCCTCCTGGAGAAAATGAAG
ATAGACAAGAGGAACTACCAGATCGGGAAGACCAAGGTCTTCCTGAAGGAGACGGAGCGGCAAGCCCTGCAGGAG
ACGCTGCACCGGGAGGTGGTGCGGAAAATCCTGCTGCTGCAGAGCTGGTTCCGGATGGTGCTGGAGCGTCGGCAC
TTCCTGCAGATGAAGCGGGCCGCCGTCACCATCCAGGCCTGCTGGCGGTCCTACCGGGTCCGGAGGGCGCTGGAG
AGGACGCAGGCTGCCGTGTACCTCCAGGCCTCATGGAGGGGCTACTGGCAGCGGAAGCTCTACCGGCACCAGAAA
CAGAGCATCATCCGCCTGCAGAGCCTGTGTCGGGGGCACCTGCAGCGCAAGAGCTTCAGCCAGATGATCTCGGAG
AAGCAGAAGGCAGAAGAGAAGGAGAGGGAAGCCCTGGAAGCCGCAAGAGCAGGTGCTGAGGAGGGCGGACAGGGT
CAGGCGGCTGGAGGGCAGCAGGTAGCTGAGCAGGGGCCGGAGCCAGCGGAGGATGGCGGGCACCTGGCATCGGAG
CCTGAGGTGCAGCCAAGTGACAGGTCCCCCCTAGAGCACTCCTCACCTGAGAAGGAGGCCCCAAGCCCAGAGAAG
ACTCTCCCACCCCAGAAAACCGTGGCGGCTGAAAGTCACGAGAAAGTCCCCAGCAGCCGGGAGAAGCGTGAGTCG
CGTCGGCAAAGAGGGCTGGAGCACGTCAAGTTCCAGAACAAACACATCCAGTCCTGCAAGGAGGAGAGTGCCCTC
AGAGAACCTTCCAGAAGGGTCACCCAGGAGCAAGGGGTGAGTCTCCTGGAAGACAAAAAGGAGAGCAGAGAAGAT

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FIGURE 3637B

GAAACCCTTCTAGTCGTAGAGACGGAGGCTGAGAACACATCTCAAAAGCAGCCCACAGAGCAACCCCAGGCCATG
GCAGTTGGCAAGGTCTCTGAAGAAACTGAGAAGACGCTGCCCAGTGGGAGCCCCAGGCCTGGCCAGTTGGAGCGG
CCGACCAGCCTGGCCCTGGACAGCAGGGTCAGCCCACCGGCCCCTGGCAGCGCCCCCGAGACCCCCGAGGACAAG
AGCAAACCATGTGGCAGCCCAAGGGTTCAGGAAAAGCCCGACAGCCCCGGAGGCTCCACGCAGATCCAGCGGTAC
CTGGACGCCGAGCGGCTGGCCAGCGCCGTGGAACTGTGGCGGGGCAAGAAGCTGGTGGCCGCCGCCAGCCCTAGT
GCCATGCTCAGCCAGTCCCTGGACCTCAGCGACAGACACCGGGCCACAGGGGCCGCCCTCACGCCCACAGAGGAG
AGGCGCACCTCCTTCTCCACGAGCGACGTCTCCAAGCTCCTCCCGTCCCTGGCCAAGGCTCAGCCTGCAGCAGAA
ACCACGGACGGAGAGCGAAGTGCGAAAAAGCCAGCTGTCCAGAAGAAGAAGCCAGGCGACGCATCCTCCCTCCCA
GACGCAGGGCTGTCCCCGGGCTCTCAGGTCGACTCTAAATCCACGTTTAAGAGGCTTTTTCTGCATAAAACCAAG
GATAAAAAATACAGCCTGGAGGGCGCAGAGGAGCTGGAGAATGCAGTGTCCGGGCACGTGGTGCTGGAAGCCACC
ACCATGAAGAAGGGCCTGGAAGCCCCCTCCGGACAGCAGCATCGCCACGCTGCAGGTGAGAAGCGCACCAAGGAA
CCAGGAGGCAAAGGGAAGAAGAACCGAAATGTCAAGATTGGGAAGATCACAGTGTCAGAGAAGTGGCGGGAATCG
GTGTTCCGCCAGATCACCAACGCCAATGAGCTCAAGTACCTGGACGAGTTCCTGCTCAACAAGATAAATGACCTC
CGTTCCCAGAAGACGCCCATTGAGAGCTTGTTTATCGAAGCCACCGAGAAGTTCAGGAGCAACATCAAAACGATG
TACTCTGTCCCGAACGGGAAGATCCACGTGGGCTACAAGGATCTGATGGAGAACTACCAGATCGTCGTCAGCAAC
CTGGCCACTGAGCGTGGCCAGAAGGACACCAACCTGGTCCTCAACCTCTTCCAGTCACTGCTAGATGAGTTCACC
CGTGGCTACACCAAGAACGACTTCGAGCCAGTGAAGCAGAGCAAAGCTCAGAAGAAGAAGCGGAAGCAGGAGCGT
GCTGTCCAGGAGCACAACGGGCACGTGTTCGCCAGCTACCAGGTTAGCATCCCGCAGTCGTGCGAGCAGTGCCTC
TCCTATATCTGGCTCATGGACAAGGCCCTGCTCTGCAGCGTGTGCAAGATGACCTGCCACAAGAAGTGCGTGCAC
AAGATTCAGAGCCACTGCTCCTACACCTACGGGAGGAAGGGCGAGCCAGGCGTTGAGCCTGGCCACTTCGGCGTG
TGCGTAGACAGCCTGACCAGCGACAAGGCCTCGGTGCCCATCGTGCTGGAGAAGCTCCTGGAACACGTGGAGATG
CACGGCCTGTACACCGAGGGCCTCTACCGCAAGTCGGGTGCTGCCAACCGCACTCGGGAGCTCCGGCAGGCGCTG
CAGACAGACCCCGCAGCAGTCAAGCTGGAGAACTTCCCCATCCACGCCATCACAGGGGTGCTGAAGCAGTGGCTG
CGGGAGCTGCCCGAGCCCCTCATGACCTTCGCACAGTACGGCGACTTCCTCCGAGCCGTCGAGCTGCCGGAGAAG
CAGGAGCAGCTGGCTGCCATCTATGCCGTCCTGGAGCACCTTCCAGAAGCCAACCACAACTCCCTGGAGAGACTC
ATCTTCCACCTTGTCAAGGTGGCCCTGCTCGAGGATGTCAACCGCATGTCACCTGGGGCGCTGGCCATTATCTTC
GCACCCTGCCTCCTGCGCTGCCCTGACAACTCGGACCCGCTGACCAGCATGAAGGACGTCCTCAAGATCACCACG
TGCGTGGAGATGCTGATCAAGGAGCAGATGAGGAAATACAAAGTGAAGATGGAGGAGATCAGCCAACTGGAGGCT
GCAGAGAGTATCGCCTTCCGCAGGCTTTCGCTCCTGCGACAAAATGCTCCATGGCCTCTCAAACTGGGGTTTTCG
TCTCCCTATGAGGGGGTCCTGAACAAGAGCCCCAAGACCCGGGACATCCAGGAGGAGGAGCTGGAGGTGCTGCTG
GAGGAGGAGGCAGCCGGCGGCGATGAGGACCGGGAAAAGGAGATTCTCATTGAACGGATCCAGTCCATCAAGGAG
GAGAAGGAGGACATCACCTACCGGCTGCCGGAGCTGGACCCAAGGGGCTCGGACGAGGAGAACCTGGACTCGGAG
ACGTCGGCCAGCACCGAGAGCCTGCTGGAGGAGCGGGCCGGGCGGGGGGCCTCGGAAGGGCCCCCTGCGCCTGCT
CTCCCTTGCCCCGGCGCGCCCACCCCGAGCCCCCTCCCCACCGTGGCCGCCCCTCCACGACGAAGGCCGTCGTCC
TTCGTAACGGTCAGAGTGAAGACCCCCCGGCGGACCCCCATCATGCCCACGGCCAACATCAAGCTCCCACCAGGC
CTGCCCTCCCACCTGCCTCGCTGGGCACCGGGTGCCCGGGAGGCGGCTGCCCCAGTGCGGCGCCGGGAGCCACCT
GCCCGCCGCCCGGACCAGATACATTCCGTGTACATCACGCCCGGGGCAGACCTGCCAGTGCAGGGCGCCCTGGAG
CCCCTAGAAGAGGATGGCCAGCCACCTGGGGCCAAGCGGAGGTACTCGGATCCCCCAACGTACTGCCTGCCCCCC
GCCTCGGGCCAGACCAATGGC**TGA**GAGCCACAGCTGACAAAGTCTGCATGTCCGAGGACGGCCCCTGCACTGGAG
CTGGGCGCCAGAGCTGCAGAGCTAGTGTTCGGCCCTCAGAGAAGGATCCAGAATCAAAAGCTCAAGAGTGACGTG
AGGTGGGCACCGGCCCCAAGTGCAGAGTCAAGGCAGGGAGAGGCCGGCTGGAGCCAGGCCCCCTCGCACGCAGCC
CCCAAATCATGGACGCACCTGTGGGGAGCACCACATCTCCACCTGCGGCCTCACATCTCCCCACTCCCCTTTTTG
TACGTTTAACTGTTTCTTTGTACGTGGTTTACGTAACTTTAAACTGTAACAGCCTTAATGGAAGACCAAATGGTT
TTTTATATGTGTATGTACAAAGTTTTCTATTAACGCTGCCCGTCTCCCTTATAACCTGGACGTGAGCTGTCAGAG
CAGAAGCCACTAGGCCACTGCGCGTCTGAGGCTCAGACCCTGCTGTGGTTGGCTTGGGGTGGCCAATGGGCTGGG
ACCCTCCATGAGAGTTTTGGACACTTGGGTCACCTGACCCGTGCCTCTCTGACACATGTCTCCGGGGGGCAGCCA
CCTGGCCAATGTGCATTTTTGCACATGCTGGAACCTTCCATGGGGGTCTGGGCTATTGGCTGGAGCCAGGACATG
AGTCAGGGGCACCATGGACCTCACGTGCCAGGGAGACTTGAATGTGGCTGTCACTCTTCCGGACGCCAAGGGCTG

FIGURE 3637C

CAGGAGGCTGCTTTTGGCACTACCCACCCCGTGTGACAGAATAGGAGCCAGCGACTCAGGACTGCTCACGGGTCA
GGAGGGCAACGCCTGAAGTCAGACCTCCCTATAGGTCAACAGGGACAACCTGGGGATCTCTGGAGCAGGGCCCTC
CTCTCTCAGGCTTGGCCCACTCCCCCAGACACCTGGACACGTGGCCACAAATCTGGGACAAGGGGCCCCCGCACA
GCATGAAATAAAAAGTGCCTGAGAAGTGTG

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FIGURE 3638

CGCGCAACTTGCGGCCAAACTTTCCCCCCGGCCTCCCGCGCTCGGATGGCGGCCCGCTGAGTTGGCCGCAGCCCC
CGGGCGAGCGGCGGCCAGGCCAGAGGACGCCCCCTGCGCGGCTCGGGCCGGGCCATGGCCCGCGCGCCCCCGCCG
GGGCCCCAGGGCGGCGGGACGCGAGTCCTCTGGGCCCCCGGCCCGCGCCTCTAGCGTGCCCCTCCCGGCCCCGGG
CCCGGCCCCGCGCACGCGTGGGAAAGTTGGCCTGGAACCGGCCCGACCAGTTCCGCCCGGGCGCGAGGACCGGCC
GCAGGAAGTTGCTGCAAAACTTTTTTGGGGGGTGCAGCCCGTGCCCCCCGCGCGCCGGGGCCGAATGCGCGCCGC
GTAGGGTCCCCCGGGCCGAGAGGGGTGCCCGGAGGGAAGAGCGCGGTGGGGGCGCCCCGGCCCCGCTGCCCTGGG
GCTATGGCCATGGTGACCGGCGGCTGGGGCGGCCCCGGCGGCGACACGAACGGCGTGGACAAGGCGGGCGGCTAC
CCGCGCGCGGCCGAGGACGACTCGGCCTCGCCCCCCGGTGCCGCCAGCGACGCCGAGCCGGGCGACGAGGAGCGG
CCGGGGCTGCAGGTGGACTGCGTGGTGTGCGGGGACAAGTCGAGCGGCAAGCATTACGGTGTCTTCACCTGCGAG
GGCTGCAAGAGCTTTTTCAAGCGAAGCATCCGCCGCAACCTCAGCTACACCTGCCGGTCCAACCGTGACTGCCAG
ATCGACCAGCACCACCGGAACCAGTGCCAGTACTGCCGTCTCAAGAAGTGCTTCCGGGTGGGCATGAGGAAGGAG
GCGGTGCAGCGCGGCCGCATCCCGCACTCGCTGCCTGGTGCCGTGGCCGCCTCCTCGGGCAGCCCCCCGGGCTCG
GCGCTGGCGGCAGTGGCGAGCGGCGGAGACCTCTTCCCGGGGCAGCCGGTGTCCGAACTGATCGCGCAGCTGCTG
CGCGCTGAGCCCTACCCTGCGGCGGCCGGACGCTTCGGCGCAGGGGGCGGCGCGGCGGGCGCGGTGCTGGGCATC
GACAACGTGTGCGAGCTGGCGGCGCGGCTGCTCTTCAGCACCGTGGAGTGGGCGCGCCACGCGCCCTTCTTCCCC
GAGCTGCCGGTGGCCGACCAGGTGGCGCTGCTGCGCCTGAGCTGGAGCGAGCTCTTCGTGCTGAACGCGGCGCAG
GCGGCGCTGCCCCTGCACACGGCGCCGCTACTGGCCGCCGCCGGCCTCCACGCCGCGCCTATGGCCGCCGAGCGC
GCCGTGGCTTTCATGGACCAGGTGCGCGCCTTCCAGGAGCAGGTGGACAAGCTGGGCCGCCTGCAGGTCGACTCG
GCCGAGTATGGCTGCCTCAAGGCCATCGCGCTCTTCACGCCCGACGCCTGTGGCCTCTCAGACCCGGCCCACGTT
GAGAGCCTGCAGGAGAAGGCGCAGGTGGCCCTCACCGAGTATGTGCGGGCGCAGTACCCGTCCCAGCCCCAGCGC
TTCGGGCGCCTGCTGCTGCGGCTCCCCGCCCTGCGCGCGGTCCCTGCCTCCCTCATCTCCCAGCTGTTCTTCATG
CGCCTGGTGGGGAAGACGCCCATTGAGACACTGATCAGAGACATGCTGCTGTCGGGGAGTACCTTCAACTGGCCC
TACGGCTCGGGCCAGTGACCATGACGGGGCCACGTGTGCTGTGGCCAGGCCTGCAGACAGACCTCAAGGGACAGG
GAATGCTGAGGCCTCGAGGGGCCTCCCGGGGCCCAGGACTCTGGCTTCTCTCCTCAGACTTCTATTTTTTAAAGA
CTGTGAAATGTTTGTCTTTTCTGTTTTTTAAATGATCATGAAACCAAAAAGAGACTGATCATCCAGGCCTCAGCC
TCATCCTCCCCAGGACCCCTGTCCAGGATGGAGGGTCCAATCCTAGGACAGCCTTGTTCCTCAGCACCCCTAGCA
TGAACTTGTGGGATGGTGGGGTTGGCTTCCCTGGCATGATGGACAAAGGCCTGGCGTCGGCCAGAGGGGCTGCTC
CAGTGGGCAGGGGTAGCTAGCGTGTGCCAGGCAGATCCTCTGGACACGTAACCTATGTCAGACACTACATGATGA
CTCAAGGCCAATAATAAAGACATTTCCTACCTG

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FIGURE 3639

GGGGCTGCGCCGTACAACTTCCGGCTGTAAAGATGGCGGCTTCCTAGTGAGTCGGCGGCTGATTTAGAAGGAGGT
TCAGGCTACGGTGAGCCGAAGCCACACAGGAGCCATGGAAGTGGCAGAGCCCAGCAGCCCCACTGAAGAGGAGGA
GGAGGAAGAGGAGCACTCGGCAGAGCCTCGGCCCCGCACTCGCTCCAATCCTGAAGGGGCTGAGGACCGGGCAGT
AGGGGCACAGGCCAGCGTGGGCAGCCGCAGCGAGGGTGAGGGTGAGGCCGCCAGTGCTGATGATGGGAGCCTCAA
CACTTCAGGAGCCGGCCCTAAGTCCTGGCAGGTGCCCCCGCCAGCCCCTGAGGTCCAAATTCGGACACCAAGGGT
CAACTGTCCAGAGAAAGTGATTATCTGCCTGGACCTGTCAGAGGAAATGTCACTGCCAAAGCTGGAGTCGTTCAA
CGGCTCCAAAACCAACGCCCTCAATGTCTCCCAGAAGATGATTGAGATGTTCGTGCGGACAAAACACAAGATCGA
CAAAAGCCACGAGTTTGCACTGGTGGTGGTGAACGATGACACGGCCTGGCTGTCTGGCCTGACCTCCGACCCCCG
CGAGCTCTGTAGCTGCCTCTATGATCTGGAGACGGCCTCCTGTTCCACCTTCAATCTGGAAGGACTTTTCAGCCT
CATCCAGCAGAAAACTGAGCTTCCGGTCACAGAGAACGTGCAGACGATTCCCCCGCCATATGTGGTCCGCACCAT
CCTTGTCTACAGCCGTCCACCTTGCCAGCCCCAGTTCTCCTTGACGGAGCCCATGAAGAAAATGTTCCAGTGCCC
ATATTTCTTCTTTGACGTTGTTTACATCCACAATGGCACTGAGGAGAAGGAGGAGGAGATGAGTTGGAAGGATAT
GTTTGCCTTCATGGGCAGCCTGGATACCAAGGGTACCAGCTACAAGTATGAGGTGGCACTGGCTGGGCCAGCCCT
GGAGTTGCACAACTGCATGGCGAAACTGTTGGCCCACCCCCTGCAGCGGCCTTGCCAGAGCCATGCTTCCTACAG
CCTGCTGGAGGAGGAGGATGAAGCCATTGAGGTTGAGGCCACTGTCTGAACCATCCCTGTACATCTGCACCTTCT
TGTGCAAGGAAGTCCTTGGCCTAAAGCCTTGGTTCTCAAACTGGGTTCCTTGGGACCTCCGGGGGTGGGGGGGTTC
CAGGAGGCACGTAGGGTACCTTGCAGGGTCCTAGGAGGGAAACCCAGGATTCCAGGAGGGATCCCAGGAACTGTG
GGCACCCATTTTCTGTGTCTCCCAGCCCATTTCCACTCCTAGTTTGTCATGGATAATTTTTGTTCTTCCCTGTGT
GATTTTTGCCATCAAAATAAAAATTTGAGACTCGTTAA

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FIGURE 3640

AAAGGGCCGGCTGTTTCGGCGGCCGCGGGATGCCCCTGCGCTGACCGCCAGGGGCAGGTGCCCGCCCGCGTAGAC
GCACCCGGCCTGACCCCGCGCCACCATGTAAACGGCGCCAGCAGGCGGACGCTGGCTTCTCCGCCTGGGACCCCT
CCGCCCCGACCCGGGCCCCGCGGCCCTCGATGAGGACACACC**ATG**CTGACCGGGGTGACCGACGGTATCTTCTGT
TGCCTGCTGGGCACGCCCCCCAACGCCGTGGGGCCACTGGAGAGCGTCGAGTCCAGCGATGGCTACACCTTTGTA
GAGGTCAAGCCCGGCCGCGTGCTGCGGGTGAAGCATGCAGGACCCGCCCCAGCCGCTGCCCCACCTCCACCATCA
TCCGCATCCTCGGATGCAGCCCAGGGGGACCTCTCCGGCTTGGTCCGCTGTCAGCGCCGGATCACCGTGTACCGC
AATGGGCGGTTGCTGGTGGAAAACCTGGGCCGAGCCCCTCGAGCCGACCTCCTACACGGGCAGAATGGCTCTGGG
GAGCCGCCGGCCGCCCTGGAGGTGGAGCTGGCAGATCCGGCGGGCAGCGATGGCCGCTTGGCCCCCGGCAGCGCA
GGCAGCGGCAGCGGCAGTGGCAGTGGTGGGCGGCGGCGGCGAGCCAGGCGCCCCAAGAGGACCATCCATATTGAC
TGTGAGAAGCGCATCACTAGCTGCAAAGGCGCCCAGGCCGACGTGGTGCTCTTTTTCATCCATGGTGTCGGCGGT
TCCCTGGCCATCTGGAAGGAGCAGCTGGACTTCTTTGTGCGCCTAGGCTATGAGGTGGTGGCTCCTGACCTGGCC
GGCCACGGGGCCAGCTCTGCGCCCCAGGTGGCCGCAGCCTACACCTTCTATGCGCTGGCTGAGGACATGCGAGCA
ATCTTCAAGCGCTATGCCAAGAAGCGAAATGTGCTCATTGGCCATTCCTACGGTGTCTCTTTCTGCACATTCCTG
GCACATGAGTACCCAGACCTAGTGCACAAGGTGATCATGATCAATGGCGGGGGCCCTACGGCGCTGGAGCCCAGC
TTCTGCTCAATCTTCAACATGCCCACCTGCGTCCTGCACTGCTTGTCGCCCTGCCTGGCCTGGAGCTTCCTCAAG
GCCGGCTTCGCCCGCCAAGGAGCCAAGGAGAAGCAGCTGTTAAAGGAGGGCAACGCTTTCAACGTGTCATCCTTC
GTACTCCGGGCCATGATGAGCGGCCAGTACTGGCCCGAGGGCGACGAGGTCTACCACGCCGAGCTCACCGTGCCC
GTCCTGCTTGTCCACGGCATGCACGATAAGTTTGTGCCGGTGGAGGAAGACCAGCGCATGGCCGAGATCCTGCTC
CTGGCATTCCTGAAGCTCATCGACGAGGGCAGCCACATGGTGATGCTGGAATGCCCTGAGACGGTCAACACGCTG
CTCCACGAATTCCTGCTCTGGGAGCCCGAGCCCTCGCCCAAGGCTCTACCGGAGCCACTGCCGGCGCCTCCAGAA
GACAAGAAG**TAG**CCGCTGGGCCGGCGGGGCATCGCTTGGTGAGCACAGCCGCAGCAGGAGGAGGCCCGAGCCTGC
GCCAGGTCTGCAGCGCAGACCACCTGGGCGGGCCGTTCGCTCCGGTGGGCGGGGCCAGGTCAGGGAGACGCCCCC
AGGCTGCCTGGGCGGGGCGTGGCATCCGAGGGAGCCCAGCGGACATTCCGCTCTCCGCTTCCGTCCCGCGGGGCC
CATCGGCGTTTTGGGGCCGCAGCCGGGACCCTCACGGAAGATGACCTTGTACAGAAGCTCTCCCTCACCTTCCCC
CCAACGCCACGGCCAAGGCAGGCCCCCCACCCCGCTGTCTTCCGTGTCAGCCGTGCTTGATCCTGGGACCCACGA
GCCCCACAGGGACCCTCGAGGCCCCATCCCGTTATCCGAGACCCTTCCTACCCCCCATTCCTCGGCGCTGGGAGC
TATTTTTGCCCAAGGGGGGGGGATGGGGGGGCTGGCGCCACCGAACCTGCACATCTCAACTTGTAACTCAATAAA
CAGAAGTGACAATCGG

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FIGURE 3641

GCGGCTCTGGGCTCCGGAATCGCCCGCAGCCGGTACTGCGGGACCCACTGCGGATATGGCTGTCTTGGCTGGATC
CCTGTTGGGCCCCACGAGTAGGTCGGCAGCGTTGCTGGGTGGCAGGTGGCTCCAGCCCCGGGCCTGGCTGGGGTT
CCCAGACGCCTGGGGCCTCCCCACCCCGCAGCAGGCCCGGGGCAAGGCTCGCGGGAATGAGTATCAGCCGAGCAA
CATCAAACGCAAGAACAAGCACGGCTGGGTCCGGCGCCTGAGCACGCCGGCCGGCGTGCAGGTCATCCTTCGCCG
AATGCTCAAGGGCCGCAAGTCGCTGAGCCATTGAGGATCGCGACGCAGTCGGCGGGACCCTCATGGAAGCATCGC
CCTCGCCTCGGACCTTGCCTGGCGCTATTTTTGCAGGGAGCTGGGGAGCAGGAACGCCTCGGACCTGAGTGCTCT
CCATATTGTGGGGTTGAAGTCTGGATGGGAGCTTGCCAAGTCCCTTTTTAGGCTTTTTAATTAGGAAGCATTTCG
AACCTGCGCAACAGACCAAAGAACAGTACAAAGAACATCCGTGTACCCAGTACCCTGACTACCGACTACCTACAA
CCCGTCCCTGCCCCATCCTGAGTTCTTTTGAAGCTGATCTCAGGCATCGGATTATTTCTTCTGTAAATATTTCAG
AATGTATCTCTCCAAGATGAGAGCTCATTAAAAGACAATTACAAAGCTTATCACATCCAAAAGAATTATCAATAA
TTTTGAAATATTATTAAACGTGTAATAAATGTTCAAAGTTCCACTTGC

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FIGURE 3642

GGGAGGTGGTGGCGCCATCAGTGTGGGCTGTGCCGTGGCTGGAAGTTACTGTGAGGCGGCGGCTAAGAAGGCGGC
TCTGGTGGCGGCGGTGGAGGCTGAGGCGGCGGCCGAGGCGGCGACGGAGGAAACAGAAG**ATG**GCAGATTTTTTGA
AAGGACTGCCTGTCTACAACAAAAGCAATTTTAGTCGATTTCACGCGGACTCCGTGTGCAAAGCCTCGAACCGAC
GGCCCTCAGTCTACCTGCCTACCCGCGAGTACCCGTCTGAACAGATCATCGTGACAGAAAAGACAAACATCCTCC
TGCGCTACCTGCATCAGCAATGGGACAAAAAGAACGCTGCCAAGAAGAGAGACCAGGAGCAAGTGGAGCTGGAAG
GCGAGAGCTCCGCACCTCCCCGCAAGGTGGCGCGGACCGACAGCCCAGACATGCACGAGGACACT**TAA**GACTCTC
AACTCCACAGGCGCCTCCTGCCAGGTCTGCTCCTCGGTCGCCCACCCGCCTGCCCGCCATGTGTAAGCACCCCGC
CCGCCCGCCTCCCTGCCGGCCCATCCACACCCTGCGTCCACACCACTTCCAACCTCATAGGAGCCGATGTATTTA
TTTTCCTTGAGTTTTTATTTATGCTGTAACCTGTATCAAGCGTTGGTTAAAGGGGACATCAGACCCAGTAGTGTG
ATGTTGGTAGATGCTTTTTAAAAAAAACAACATTGTCCCCCCGACCCCCGCCTTCCATCGGGCCAGTTCCCCGAT
TCCTGCCCCCAGTTCTCCAGAGAACCAGAGTGTGTCTGTGAGAGTCTCTAGCGGGGGCTTTACTGTGGCCGGGCG
ACAGGGGCGGGCCCGGGGTGGCCTGACCTACCAGGACAGCCGAGTGGCCTTCTCCCCCCCAACACCGGTCCAGGC
CATTGAGACTCGGTCTTGTCCCACGCTTCGCCCGGAACTTTCCCATGCCCAGGCCTCACTCAGCGTGCACGCACG
TTGGGGAGAAGTCGGCCCTTGGGATCTTTCTCTTGAGTCATTTTATTTTTATCATGGACTAGTGCGTGCTCCGTG
TCCACCCCAATAAAAGGGTCTTTCCTA

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FIGURE 3643

GGTGAGCAGGGACGGTGCACCGGACGGCGGGATCGAGCAAATGGGTCTGGCCATGGAGCACGGAGGGTCCTACGC
TCGGGCGGGGGGCAGCTCTCGGGGCTGCTGGTATTACCTGCGCTACTTCTTCCTCTTCGTCTCCCTCATCCAATT
CCTCATCATCCTGGGGCTCGTGCTCTTCATGGTCTATGGCAACGTGCACGTGAGCACAGAGTCCAACCTGCAGGC
CACCGAGCGCCGAGCCGAGGGCCTATACAGTCAGCTCCTAGGGCTCACGGCCTCCCAGTCCAACTTGACCAAGGA
GCTCAACTTCACCACCCGCGCCAAGGATGCCATCATGCAGATGTGGCTGAATGCTCGCCGCGACCTGGACCGCAT
CAATGCCAGCTTCCGCCAGTGCCAGGGTGACCGGGTCATCTACACGAACAATCAGAGGTACATGGCTGCCATCAT
CTTGAGTGAGAAGCAATGCAGAGATCAATTCAAGGACATGAACAAGAGCTGCGATGCCTTGCTCTTCATGCTGAA
TCAGAAGGTGAAGACGCTGGAGGTGGAGATAGCCAAGGAGAAGACCATTTGCACTAAGGATAAGGAAAGCGTGCT
GCTGAACAAACGCGTGGCGGAGGAACAGCTGGTTGAATGCGTGAAAACCCGGGAGCTGCAGCACCAAGAGCGCCA
GCTGGCCAAGGAGCAACTGCAAAAGGTGCAAGCCCTCTGCCTGCCCCTGGACAAGGACAAGTTTGAGATGGACCT
TCGTAACCTGTGGAGGGACTCCATTATCCCACGCAGCCTGGACAACCTGGGTTACAACCTCTACCATCCCCTGGG
CTCGGAATTGGCCTCCATCCGCAGAGCCTGCGACCACATGCCCAGCCTCATGAGCTCCAAGGTGGAGGAGCTGGC
CCGGAGCCTCCGGGCGGATATCGAACGCGTGGCCCGCGAGAACTCAGACCTCCAACGCCAGAAGCTGGAAGCCCA
GCAGGGCCTGCGGGCCAGTCAGGAGGCGAAACAGAAGGTGGAGAAGGAGGCTCAGGCCCGGGAGGCCAAGCTCCA
AGCTGAATGCTCCCGGCAGACCCAGCTAGCGCTGGAGGAGAAGGCGGTGCTGCGGAAGGAACGAGACAACCTGGC
CAAGGAGCTGGAAGAGAAGAAGAGGGAGGCGGAGCAGCTCAGGATGGAGCTGGCCATCAGAAACTCAGCCCTGGA
CACCTGCATCAAGACCAAGTCGCAGCCGATGATGCCAGTGTCAAGGCCCATGGGCCCTGTCCCCAACCCCCAGCC
CATCGACCCAGCTAGCCTGGAGGAGTTCAAGAGGAAGATCCTGGAGTCCCAGAGGCCCCCTGCAGGCATCCCTGT
AGCCCCATCCAGTGGCTGAGGAGGCTCCAGGCCTGAGGACCAAGGGATGGCCCGACTCGGCGGTTTGCGGAGGAT
GCAGGGATATGCTCACAGCGCCCGACACAACCCCCTCCCGCCGCCCCCAACCACCCAGGGCCACCATCAGACAAC
TCCCTGCATGCAAACCCCTAGTACCCTCTCACACCCGCACCCGCGCCTCACGATCCCTCACCCAGAGCACACGGC
CGCGGAGATGACGTCACGCAAGCAACGGCGCTGACGTCACATATCACCGTGGTGATGGCGTCACGTGGCCATGTA
GACGTCACGAAGAGATATAGCGATGGCGTCGTGCAGATGCAGCACGTCGCACACAGACATGGGGAACTTGGCATG
ACGTCACACCGAGATGCAGCAACGACGTCACGGGCCATGTCGACGTCACACATATTAATGTCACACAGACGCGGC
GATGGCATCACACAGACGGTGATGATGTCACACACAGACACAGTGACAACACACACCATGACAACGACACCTATA
GATATGGCACCAACATCACATGCACGCATGCCCTTTCACACACACTTTCTACCCAATTCTCACCTAGTGTCACGT
TCCCCCGACCCTGGCACACGGGCCAAGGTACCCACAGGATCCCATCCCCTCCCGCACAGCCCTGGGCCCCAGCAC
CTCCCCTCCTCCAGCCTCCTGGCCTCCCAGCCACTTCCTCACCCCCAGTGCCTGGACCCGGAGGTGAGAACAGGA
AGCCATTCACCTCCGCTCCTTGAGCGTGAGTGTTTCCAGGACCCCCTCGGGGCCCTGAGCCGGGGGTGAGGGTCA
CCTGTTGTCGGGAGGGGAGCCACTCCTTCTCCCCCAACTCCCAGCCCTGCCTGTGGCCCGTTGAAATGTTGGTGG
CACTTAATAAATATTAGTAAATCCTT

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FIGURE 3644

ATGGCATCTACTTCGTATGACTATTGCAGAGTGCCCATGGAAGACGGGGATAAGCGCTGTAAGCTTCTGCTGGGG
ATAGGAATTCTGGTGCTCCTGATCATCGTGATTCTGGGGGTGCCCTTGATTATCTTCACCATCAAGGCCAACAGC
GAGGCCTGCCGGGACGGCCTTCGGGCAGTGATGGAGTGTCGCAATGTCACCCATCTCCTGCAACAAGAGCTGACC
GAGGCCCAGAAGGGCTTTCAGGATGTGGAGGCCCAGGCCGCCACCTGCAACCACACTGTGATGGCCCTAATGGCT
TCCCTGGATGCAGAGAAGGCCCAAGGACAAAAGAAAGTGGAGGAGCTTGAGGGAGAGATCACTACATTAAACCAT
AAGCTTCAGGACGCGTCTGCAGAGGTGGAGCGACTGAGAAGAGAAAACCAGGTCTTAAGCGTGAGAATCGCGGAC
AAGAAGTACTACCCCAGCTCCCAGGACTCCAGCTCCGCTGCGGCGCCCCAGCTGCTGATTGTGCTGCTGGGCCTC
AGCGCTCTGCTGCAGTGAGATCCCAGGAAGCTGGCACATCTTGGAAGGTCCGTCCTGCTCGGCTTTTCGCTTGAA
CATTCCCTTGATCTCATCAGTTCTGAGCGGGTCATGGGGCAACACGGTTAGCGGGGAGAGCACGGGGTAGCCGGA
GAAGGGCCTCTGGAGCAGGTCTGGAGGGGCCATGGGGAAGTCCTGGGTGTGGGGACACAGTCGGGTTGACCCAGG
GCTGTCTCCCTCCAGAGCCTCCCTCCGGACAATGAGTCCCCCCTCTTGTCTCCCACCCTGAGATTGGGCATGGGG
TGCGGTGTGGGGGGCATGTGCTGCCTGTTGTTATGGGTTTTTTTTGCGGGGGGGGTTGCTTTTTTCTGGGGTCTT
TGAGCTCCAAAAAATAAACACTTCCTTTGAGGGAGAGC

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FIGURE 3645

TTCCGGCGGAAGTTGCTGGGCGCGGAAAGCCGGCAAGACCTTTTTTTCCGCCATCATCGCTCACGCGCGCAACCC
TGGCGACGCGTGGTGGCGAGGCTCCGCCTCCCCACGCCATTGGCCAGCAGCTCCTCGGGCACGCGTATACTGCGC
TTCCGGGCAATCTCCGCCCCCCCCCCCCCGCATGGCCTTCTGGGAGTTGTAGTTCGGTCGCGAGCGCTGCCGTCGG
GAGGCGCTCCGAGGTTCGAGGCTGTGCCCCGCGACCCCGCCTTCGGCGCTCGGCTCGCAGGATGGATCCCGTACC
CGGGACAGACTCGGCGCCGCTGGCTGGCCTGGCCTGGTCGTCGGCCTCTGCACCCCCGCCGCGGGGGTTCAGCGC
GATCTCCTGCACCGTCGAGGGGGCACCCGCCAGCTTTGGCAAGAGCTTCGCGCAGAAATCTGGCTACTTCCTGTG
CCTTAGTTCTCTGGGCAGCCTAGAGAACCCGCAGGAGAACGTGGTGGCCGATATCCAGATCGTGGTGGACAAGAG
CCCCCTGCCGCTGGGCTTCTCCCCCGTCTGCGACCCCATGGATTCCAAGGCCTCTGTGTCCAAGAAGAAACGCAT
GTGTGTGAAGCTGTTGCCCCTGGGAGCCACGGACACGGCTGTGTTTGATGTCCGGCTGAGTGGGAAGACCAAGAC
AGTGCCTGGATACCTTCGAATAGGGGACATGGGCGGCTTTGCCATCTGGTGCAAGAAGGCCAAGGCCCCGAGGCC
AGTGCCCAAGCCCCGAGGTCTCAGCCGGGACATGCAGGGCCTCTCTCTGGATGCAGCCAGCCAGCCAAGTAAGGG
CGGCCTCCTGGAGCGGACAGCGTCAAGGCTGGGCTCTCGGGCATCCACTCTGCGGAGGAATGACTCCATCTACGA
GGCCTCCAGCCTCTATGGCATCTCAGCCATGGATGGGGTTCCCTTCACACTCCACCCACGATTTGAGGGCAAGAG
CTGCAGCCCCCTGGCCTTCTCTGCTTTTGGGGACCTGACCATCAAGTCTCTGGCGGACATTGAGGAGGAGTATAA
CTACGGCTTCGTGGTGGAGAAGACCGCGGCTGCCCGCCTGCCCCCCAGCGTCTCATAGTCCCTCACCCTTCCGCG
GAAAGAGCCCCCTTACTCCACCTCCCCGCCAGCCTGGGGCCACCCCCCCTCACTGCATCCTGGGGCCACCCCCAC
TCACTGCATCCTGGGAACCTTCGCCCTGCAAGGCGTTTGCTATCTTCAGCCACTGGGCGGAGCTGCAGCCCTGGA
GGAGGGGGCGGGTCGAGGCTGCGTGGTGATGGGGTCTCCGCCCCCACGCCCTGCCGGGCAGGGCTGGAGCTGGAC
AGAAGCCAGTGCCTTTAAGTCATTTGTGTCAAAACCCTCTGGGGTCCGGAGGCTGTGCGGGTGTCCTCCTGGCAA
TAAACACTACCCGGTTCTCGCC

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FIGURE 3646

GCCGGAGTTCGTGGGGCTGTGGCTGGGCCTGGCCAAGGCGGGCATGGAGGCCGCGCTGCTCAACGTGAACCTGCG
GCGCGAGCCCCTGGCCTTCTGCCTGGGCACCTCGGGCGCTAAGGCCCTGATCTTTGGAGGAGAAATGGTGGCGGC
GGTGGCCGAAGTGAGCGGGCATCTGGGGAAAAGTTTGATCAAGTTCTGCTCTGGAGACTTGGGGCCCGAGGGCAT
CTTGCCGGACACCCACCTCCTGGACCCGCTGCTGAAGGAGGCCTCTACTGCCCCCTTGGCACAGATCCCCAGCAA
GGGCATGGACGATCGTCTTTTCTACATCTACACGTCGGGGACCACCGGGCTGCCCAAGGCTGCCATTGTCGTGCA
CAGCAGGTACTACCGCATGGCAGCCTTCGGCCACCACGCCTACCGCATGCAGGCGGCTGACGTGCTCTATGACTG
CCTGCCCCTGTACCACTCGGCAGGAAACATCATCGGCGTGGGGCAGTGTCTCATCTATGGGCTGACAGTCGTCCT
CCGCAAGAAATTCTCGGCCAGCCGCTTCTGGGACGACTGCATCAAGTACAACTGTACCTGGCACGGCCCATCCTG
GACTGAGAAACTGGAACCTCAGAGGAACCCGTGCCTCTCTGCTGCCTTGGTGCCCCTGTGTCTGCCTCCTCTCCC
TGCTTTTCAGCCTCTGTCTCCTTCCATCCCTGTCCCTGTCTGGCCTTAACTCTTCCCTCTTTTTCTTTTCTTTCT
TTCTTTCTTTTTTTTTTAAGATAGAGTCTCACTCTGCTGCCCGGGCTAGAGTGCAGTGGTGGGATCTCGGCTCAC
TGCAACCTCTGCCTCCTGGGGTTCAAGTGATCCTCCCACCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACCCG
CCACCACGTCCAGCTAATTTTTATATTTTTAGTAGAGACGGGGTTTCACCATGTTGGTCAGGTTGGTCTTGAACT
CCTGACCTCAGGTGATCCGCTGGCCTCGGCCTCCCAGAGTGCTGGGATTATAGGCGTGAGCCTCTGGCCCGGCCT
TTCCTTTTTCCTCTCCTCTCCTGCCGAGAGTGGAACACGCGTGTCCTGGGAGCTGCATCTTGTGTAGGGTCCAGC
TGCTTTTGGGGACTGCAGGAATCATCTCCCCTGGGCCCTGGACTCGGACTGGGGCCTCCCCACCTCCCTCTCGGC
TGTGCCTTACGGAGCCCCGATCCAGGCCTCCTGTGGCTGTTGGGTTCCAGATGCTGCAGCTCCATGTGACTTCCA
AGCAGGCCCTCCGCCCTCCCTGCTGAATGGAGGAGCCGGGGGTCCCCCAGGCCAACTGGAAAATCTCCCAGGCTA
GGCCAATTGCCTTTTGCACTTCCCCGTTCCTGTCACATTTCCCCAGCCCCACCTTCCCCTCCTGATGCCCTGAAA
GCTTCCGGAATTGACTGTGACCACTTGGATGTCACCACTGTCAGCCCCTGCCTTGATGTCCCCATTTAGCCATCT
CCATGGAGCTCCTGCTGGAGGGCCCTGAACCCTGCACTGCGTGGCTGCCCAGCCAGCTGCCTCCTGTCCTGGGAG
GAGGCCTCCTGGGTGTCCTCATCTGGTGTGTCTACTGGAGGGTCCCACAGGAGAGGCAGCAGAGGGGTCAGGGGA
GGTCTCCTGCCGGGGGTTGGCCTCTCAAGCCTCAGGGGTTCTAGCCTGTTGAATATACCCCACCTGGTGGTGGCC
CCTCCGATGTCCCCACTGATGGCTCTGACACCGTGTTGGTGGCGATGTCCCAGACAATCCCACCAGGACGGCCCA
GACATCCCTACTGGCTTCGCTGGTGGCTCATCTCGAACATCCACGCCAGCCTTTCTGGGGCCGGCCACCCAGGCC
GCCTGTCCGTCTGTCCTCCCTCCAGCAGCACCCCCTGGCCCCTGGAGTGGTGGGGCCATGGCAAGAGACACCGTG
GCGTCTCATGTGAACTTTCCTGGGCACTGTGGTTTTATTTCCTAATTGATTTAAGAAATAAACCTGAAGACCGTC

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FIGURE 3647

CCGCCGCCGCCCTCGCCATGGCCGCGCCGGCCCCGGGCCTCATCTCGGTGTTCTCGAGTTCCCAGGAGCTGGGTG
CGGCGCTAGCGCAGCTGGTGGCCCAGCGCGCAGCATGCTGCCTGGCAGGGGCCCGCGCCCGTTTCGCGCTCGGCC
TGTCGGGCGGGAGCCTCGTCTCGATGCTAGCCCGCGAGCTACCCGCCGCCGTCGCCCCTGCCGGGCCAGCTAGCT
TAGCGCGCTGGACGCTGGGCTTCTGCGACGAGCGCCTCGTGCCCTTCGATCACGCCGAGAGCACGTACGGCCTCT
ACCGGACGCATCTTCTCTCCAGACTGCCGATCCCAGAAAGCCAGGTGATCACCATTAACCCCGAGCTGCCTGTGG
AGGAGGCGGCTGAGGACTACGCCAAGAAGCTGAGACAGGCATTCCAAGGGGACTCCATCCCGGTTTTCGACCTGC
TGATCCTGGGGGTGGGCCCCGATGGTCACACCTGCTCACTCTTCCCAGACCACCCCCTCCTACAGGAGCGGGAGA
AGATTGTGGCTCCCATCAGTGACTCCCCGAAGCCACCGCCACAGCGTGTGACCCTCACACTACCTGTCCTGAATG
CAGCACGAACTGTCATCTTTGTGGCAACTGGAGAAGGCAAGGCAGCTGTTCTGAAGCGCATTTTGGAGGACCAGG
AGGAAAACCCGCTGCCCGCCGCCCTGGTCCAGCCCCACACCGGGAAACTGTGCTGGTTCTTGGACGAGGCGGCCG
CCCGCCTCCTGACCGTGCCCTTCGAGAAGCATTCCACTTTGTAGCTGGCCAGAGGGACGCCGCAGCTGGGACCAG
GCACGCGGCCCATGGGGCTGGGCCCCTGCTGGCCGCCACTCTCCGGGCTCTCCTTTCAAAAAGCCACGTCGTGCT
GCTGCTGGAAGCCAACAGCCTCCGGCCAGCAGCCCTACCCGGGGCTCAACACACAGGCTGTGGCTCTGGACATCC
GGATATTAAAAGGAGCGTTGCTGG

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FIGURE 3648

CCCCTTTAAGGCGCGGCCAGAGTCCTCCCGCAGAAAAACGACTTAAAGGAGACGCGTGGCGCGATGGCGGCGGCC
CCACGCGCGGGCCGGCGGCGCGGGCAGCCGCTCCTGGCGCTGCTGCTTCTGCTGCTGGCGCCACTGCCGCCGGGG
GCCCCGCCGGGCGCCGACGCCTACTTCCCCGAGGAGCGCTGGAGCCCGGAGTCGCCCCTGCAGGCGCCGCGCGTG
CTCATCGCGCTGTTGGCGCGAAACGCGGCCCACGCGTTGCCCACCACGCTGGGCGCACTCGAGCGGCTGCGGCAC
CCGCGGGAGCGCACGGCGCTATGGGTGGCTACGGACCACAACATGGATAACACGTCAACTGTGCTGCGGGAGTGG
CTGGTGGCCGTGAAGAGTTTGTACCATTCCGTGGAGTGGCGGCCAGCAGAGGAGCCCAGGTCCTACCCGGACGAG
GAAGGCCCGAAACACTGGTCTGACTCACGCTACGAGCATGTCATGAAGTTGCGCCAGGCAGCCCTGAAATCAGCT
CGAGACATGTGGGCTGATTACATCCTGTTTGTAGATGCGGACAACCTGATCCTCAACCCTGACACACTGAGCCTG
CTCATCGCTGAGAACAAGACGGTGGTCGCCCCCATGCTGGATTCCCGGGCTGCGTACTCCAACTTCTGGTGTGGA
ATGACTTCCCAGGGCTACTACAAGCGCACACCTGCCTACATCCCTATCCGCAAGCGAGACCGCCGGGGCTGCTTT
GCAGTTCCCATGGTGCACTCGACCTTCCTGATCGACCTGCGGAAGGCGGCGTCCAGGAACCTGGCCTTCTACCCA
CCTCACCCTGACTACACCTGGTCCTTTGACGACATCATCGTCTTTGCCTTCTCCTGCAAGCAGGCAGAGGTTCAG
ATGTATGTGTGCAACAAGGAGGAGTACGGATTCTTGCCAGTGCCATTGCGCGCCCACAGCACCCTCCAGGATGAG
GCCGAGAGCTTCATGCATGTGCAGCTGGAGGTCATGGTGAAGCACCCGCCCGCAGAGCCCTCCCGCTTCATCTCG
GCTCCCACCAAGACACCGGACAAGATGGGCTTCGACGAGGTCTTCATGATCAACCTGAGGCGGCGGCAGGACCGG
CGGGAGCGCATGCTGCGGGCGCTGCAGGCACAGGAGATCGAGTGCCGGCTGGTGGAGGCCGTGGACGGCAAAGCC
ATGAACACCAGCCAGGTGGAGGCGCTGGGGATCCAGATGCTGCCTGGCTACCGGGACCCCTACCACGGCCGGCCC
CTCACCAAGGGTGAGCTGGGCTGCTTCCTGAGCCACTACAACATCTGGAAGGAGGTGGTGGACCGGGGGCTGCAG
AAATCGCTTGTGTTTGAGGATGACCTGCGTTTTGAGATCTTCTTCAAGAGACGTCTGATGAACCTCATGCGGGAT
GTGGAGCGGGAGGGCCTGGACTGGGACCTCATCTATGTGGGCCGGAAGCGGATGCAGGTGGAGCACCCCGAGAAG
GCTGTGCCTCGCGTGAGGAACCTGGTGGAGGCCGACTATTCCTACTGGACAGTGCTGCCCGGGATGAACTCTGAG
GGGTAGCAGCCAGAAAGCCAAAGCAGCCATCGGTGGCCCAGGCTCCACGTGCTTACTGAGGACATCAGGTCCACC
TCTGGACCCCTTGGCAGGCCACAGAGGGCTCTCGTGTGGGGTGGTGTCCAGCCA

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FIGURE 3649

AAGATGGCGGCGGTGGCTGGATCTGGGGCTGCCGCGGCTCCGAGCTCACTGCTCCTCGTGGTGGGCAGCGAGTTC
GGGAGCCCGGGGCTCCTCACCTACGTCCTGGAGGAGCTCGAAAGAGGCATCCGGTCTTGGGATGTCGATCCTGGC
GTCTGCAACCTTGATGAACAGCTCAAGGTCTTTGTGTCCCGACACTCTGCCACCTTCTCCAGCATTGTGAAAGGC
CAGCGGAGCCTGCACCACCGTGGAGACAACCTGGAGACCCTGGTCCTCCTGAACCCATCAGACAAGTCCCTGTAT
GATGAGCTCCGGAACCTTCTGTTGGACCCTGCCTCTCACAAGCTACTGGTGTTGGCTGGGCCCTGCCTGGAGGAG
ACGGGGGAGCTGCTGCTACAGACAGGGGGCTTCTCGCCTCACCACTTCCTCCAGGTCCTGAAGGACAGAGAGATC
CGGGACATCCTGGCCACCACGCCCCCACCTGTGCAGCCGCCCATACTCACCATCACCTGCCCCACCTTCGGTGAC
TGGGCTCAGCTGGCACCCGCTGTGCCTGGCCTTCAGGGGGCGCTCCGGCTCCAGCTGCGGCTGAACCCCCCGGCG
CAGCTGCCCAACTCTGAGGGCCTGTGCGAATTCCTGGAGTACGTGGCTGAGTCTCTGGAGCCACCGTCCCCCTTC
GAGCTGCTGGAGCCCCCGACCTCCGGGGGCTTCCTCAGGCTGGGCCGGCCCTGCTGCTACATCTTCCCTGGAGGC
CTCGGGGATGCCGCCTTCTTCGCCGTCAATGGCTTCACTGTGCTGGTCAACGGTGGCTCAAACCCCAAGTCCAGT
TTCTGGAAGCTGGTGCGGCACCTGGACCGCGTGGATGCCGTGCTGGTGACCCACCCTGGCGCCGACAGCCTCCCC
GGCCTCAACAGCCTGCTGCGGCGCAAACTGGCGGAGCGCTCCGAGGTGGCTGCTGGTGGGGGCTCCTGGGACGAC
AGGCTGCGCAGGCTCATCTCCCCCAACCTGGGGGTCGTGTTCTTCAACGCCTGCGAGGCCGCGTCGCGGCTGGCG
CGCGGCGAGGATGAGGCGGAGCTGGCGCTGAGCCTCCTGGCGCAGCTGGGCATCACGCCTCTGCCACTCAGCCGC
GGCCCCGTGCCAGCCAAACCCACCGTGCTCTTCGAGAAGATGGGCGTGGGCCGGCTGGACATGTATGTGCTGCAC
CCGCCCTCCGCCGGCGCCGAGCGCACGCTGGCCTCTGTGTGCGCCCTGCTGGTGTGGCACCCCGCCGGCCCCGGC
GAGAAGGTGGTGCGCGTGCTGTTCCCCGGTTGCACCCCGCCCGCCTGCCTCCTGGACGGCCTGGTCCGCCTGCAG
CACTTGAGGTTCCTGCGAGAGCCCGTGGTGACGCCCCAGGACCTGGAGGGGCCGGGGCGAGCCGAGAGCAAAGAG
AGCGTGGGCTCCCGGGACAGCTCGAAGAGAGAGGGCCTCCTGGCCACCCACCCTAGACCTGGCCAGGAGCGCCCT
GGGGTGGCCCGCAAGGAGCCAGCACGGGCTGAGGCCCCACGCAAGACTGAGAAAGAAGCCAAGACCCCCCGGGAG
TTGAAGAAAGACCCCAAACCGAGTGTCTCCCGGACCCAGCCGCGGGAGGTGCGCCGGGCAGCCTCTTCTGTGCCC
AACCTCAAGAAGACGAATGCCCAGGCGGCACCCAAGCCCCGCAAAGCGCCCAGCACGTCCCACTCTGGCTTCCCG
CCGGTGGCAAATGGACCCCGCAGCCCGCCCAGCCTCCGATGTGGAGAAGCCAGCCCCCCCAGTGCAGCCTGCGGC
TCTCCGGCCTCCCAGCTGGTGGCCACGCCCAGCCTGGAGCTGGGGCCGATCCCAGCCGGGGAGGAGAAGGCACTG
GAGCTGCCTTTGGCCGCCAGCTCAATCCCAAGGCCACGCACACCCTCCCCTGAGTCCCACCGGAGCCCCGCAGAG
GGCAGCGAGCGGCTGTCGCTGAGCCCACTGCGGGGCGGGGAGGCCGGGCCAGACGCCTCACCCACAGTGACCACA
CCCACGGTGACCACGCCCTCACTACCCGCAGAGGTGGGCTCCCCGCACTCGACCGAGGTGGACGAGTCCCTGTCG
GTGTCCTTTGAGCAGGTGCTGCCGCCATCCGCCCCCACCAGTGAGGCTGGGCTGAGCCTCCCGCTGCGTGGCCCC
CGGGCGCGGCGCTCGGCTTCCCCACACGATGTGGACCTGTGCCTGGTGTCACCCTGTGAATTTGAGCATCGCAAG
GCGGTGCCAATGGCACCGGCACCTGCGTCCCCCGGCAGCTCGAATGACAGCAGTGCCCGGTCACAGGAACGGGCA
GGTGGGCTGGGGGCCGAGGAGACGCCACCCACATCGGTCAGCGAGTCCCTGCCCACCCTGTCTGACTCGGATCCC
GTGCCCCTGGCCCCCGGTGCGGCAGACTCAGACGAAGACACAGAGGGCTTTGGAGTCCCTCGCCACGACCCTTTG
CCTGACCCCCTCAAGGTCCCCCCACCACTGCCTGACCCATCCAGCATCTGCATGGTGGACCCCGAGATGCTGCCC
CCCAAGACAGCACGGCAAACGGAGAACGTCAGCCGCACCCGGAAGCCCCTGGCCCGCCCCAACTCACGCGCTGCC
GCCCCCAAAGCCACTCCAGTGGCTGCTGCCAAAACCAAGGGGCTTGCTGGTGGGGACCGTGCCAGCCGACCACTC
AGTGCCCGGAGTGAGCCCAGTGAGAAGGGAGGCCGGGCACCCCTGTCCAGAAAGTCCTCAACCCCCAAGACTGCC
ACTCGAGGCCCGTCGGGGTCAGCCAGCAGCCGGCCCGGGGTGTCAGCCACCCCACCCAAGTCCCCGGTCTACCTG
GACCTGGCCTACCTGCCCAGCGGGAGCAGCGCCCACCTGGTGGATGAGGAGTTCTTCCAGCGCGTGCGCGCGCTC
TGCTACGTCATCAGTGGCCAGGACCAGCGCAAGGAGGAAGGCATGCGGGCCGTCCTGGACGCGCTACTGGCCAGC
AAGCAGCATTGGGACCGTGACCTGCAGGTGACCCTGATCCCCACTTTCGACTCGGTGGCCATGCATACGTGGTAC
GCAGAGACGCACGCCCGGCACCAGGCGCTGGGCATCACGGTGTTGGGCAGCAACAGCATGGTGTCCATGCAGGAT
GACGCCTTCCCGGCCTGCAAGGTGGAGTTCTAGCCCCATCGCCGACACGCCCCCCACTCAGCCCAGCCCGCCTGT
CCCTAGATTCAGCCACATCAGAAATAAACTGTGACTACACTTG

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FIGURE 3650

CGCGCCGCAGCCGCGGAGGGAGGGGCGGGGCGGGCTCCGGTGTCAGCGACCAAGCCGCAGGTGGCGGCGAGCGCG
GGGCTCGGCCCGAGCTCAGGAGATGGGGAAACTGAGGCACGGAGCTGGACAGTGACTCAGACACCAGACAGGCAC
TGGACGGGGCCTGCAGGGGTCTCCACAGAGACCATCAGGATGTCGTATTTTGGGGAGCATTTTTGGGGCGAGAAA
AATCATGGCTTTGAGGTCCTGTACCACAGCGTGAAGCAGGGGCCCATCTCCACCAAGGAGCTGGCGGACTTCATC
CGGGAGAGGGCCACCATCGAGGAGACCTACTCGAAGGCGATGGCGAAACTCTCCAAGCTGGCCAGCAACGGGACC
CCCATGGGGACCTTCGCCCCGCTCTGGGAGGTCTTCCGCGTCTCCTCGGACAAGCTGGCGCTGTGCCACCTGGAA
CTGACACGGAAGTTACAGGATCTCATCAAGGACGTTCTCCGCTACGGCGAGGAACAGCTCAAGACCCACAAGAAG
TGCAAGGAGGAAGTGGTGAGCACCTTGGATGCTGTGCAGGTACTCTCGGGCGTCAGCCAGCTCCTGCCCAAGTCC
CGCGAGAACTACCTGAACCGTTGCATGGACCAGGAGCGGCTGCGGAGGGAGAGTACCAGCCAGAAGGAGATGGAC
AAGGCGGAGACTAAAACCAAGAAGGCGGCAGAGAGCCTGCGGCGCTCAGTGGAAAAATACAACTCAGCCCGAGCT
GACTTTGAGCAGAAGATGCTGGACTCAGCCCTGCGGTTCCAAGCCATGGAGGAGACACACCTGAGGCACATGAAG
GCACTGCTGGGCTCATATGCTCACTCGGTGGAGGACACGCACGTGCAGATTGGGCAGGTGCATGAGGAATTTAAG
CAGAACATCGAGAACGTCAGCGTGGAGATGCTACTCAGGAAGTTTGCAGAGAGTAAGGGCACAGGCCGGGAGAAG
CCTGGACCTCTGGACTTCGAGGCATACAGTGCGGCTGCCCTGCAGGAAGCGATGAAACGTTTGCGGGGAGCCAAG
GCCTTTCGCCTTCCAGGACTAAGCCGGCGGGAGCGGGAGCCAGAGCCACCTGCAGCTGTAGATTTCCTGGAGCCC
GATTCAGGGACATGTCCAGAGGTGGATGAAGAAGGTTTCACTGTCCGGCCTGATGTGACCCAGAACAGCACGGCC
GAGCCCTCCCGTTTCTCGTCCAGCGACTCCGACTTCGACGATGAAGAGCCCCGCAAGTTCTATGTGCACATCAAG
CCTGCCCCGGCCCGGGCTCCAGCCTGCAGCCCCGAGGCAGCAGCGGCACAGCTCAGGGCCACCGCGGGCAGCCTC
ATCCTTCCTCCTGGCCCAGGGGGCACCATGAAACGCCATTCTTCACGGGACGCTGCTGGGAAACCCCAGAGACCT
CGGTCTGCCCCCAGAACCAGCAGCTGTGCAGAGAGATTGCAGTCAGAGGAGCAGGTGTCCAAGAACCTCTTTGGG
CCGCCCCTGGAGTCAGCCTTTGACCACGAAGATTTTACAGGCTCTAGCAGCCTGGGCTTCACCTCCAGCCCCTCC
CCTTTCTCCTCCTCGTCGCCCGAAAACGTGGAGGATTCCGGCCTGGACTCTCCGTCCCACGCGGCACCTGGCCCC
TCCCCAGATTCCTGGGTCCCCCGCCCAGGCACCCCGCAGAGCCCGCCCAGCTGTAGGGCGCCACCCCCAGAGGCC
AGGGGTATCCGGGCACCGCCTCTGCCAGACTCGCCGCAGCCCCTCGCCTCGTCTCCAGGCCCCTGGGGGCTGGAG
GCCTTGGCCGGAGGAGACCTGATGCCTGCACCTGCTGACCCCACAGCCAGGGAGGGCCTGGCAGCCCCACCCAGG
AGACTTCGCTCTAGGAAGGTGTCCTGCCCTCTCACACGTAGCAATGGGGACCTGTCTCGTTCCCTGAGCCCCTCC
CCACTGGGCTCTTCAGCCGCCAGCACTGCCTTGGAACGGCCCAGCTTCTTATCCCAGACAGGACACGGAGTCTCC
CGGGGTCCGAGCCCTGTGGTCCTGGGCTCCCAGGATGCCCTGCCCATAGCCACAGCCTTCACAGAGTATGTCCAC
GCCTACTTCCGTGGCCACAGCCCCAGCTGCCTGGCTCGAGTAACTGGGGAGCTGACCATGACCTTCCCTGCTGGC
ATCGTGCGTGTGTTCAGCGGGACCCCACCACCACCTGTCCTCAGCTTCCGGCTTGTACACACAACCGCTATTGAG
CACTTCCAGCCCAACGCCGATCTGCTGTTCAGTGACCCCTCCCAGAGTGACCCTGAGACCAAAGACTTCTGGCTC
AACATGGCAGCTCTGACCGAAGCCCTGCAGCGCCAGGCAGAGCAGAACCCCACTGCCTCCTACTACAACGTGGTG
CTGCTGCGATACCAGTTCTCCCGCCCGGGTCCCCAGTCTGTGCCTCTGCAGCTCAGTGCCCACTGGCAGTGTGGA
GCCACCCTCACCCAGGTCTCAGTGGAGTACGGCTACCGGCCCGGTGCCACGGCTGTGCCCACACCACTCACGAAC
GTCCAGATCCTGCTGCCTGTGGGGGAGCCTGTGACCAACGTCCGCTTGCAGCCGGCTGCCACCTGGAACCTGGAG
GAGAAGCGGCTCACTTGGAGGCTTCCAGATGTGTCCGAGGCAGGCGGTTCTGGCCGCCTCTCTGCCAGCTGGGAG
CCGCTCTCAGGGCCCAGCACACCCAGCCCCGTGGCTGCACAGTTCACCAGCGAGGGGACCACTCTGTCGGGCGTG
GACTTGGAACTGGTGGGCAGCGGTTACCGCATGTCGCTGGTGAAGAGGAGGTTTGCCACAGGGATGTACCTGGTG
AGCTGCTGAACCCGCAAATGCTGCTGCCCCAGCTCTACACTGCGCCCTGGTGCTGGCTGACCACCCCCTGCCCTC
CTGCCGGACCCTGGGGCCTCCCACCCCAGCCTCCCTGAGGCCCATACTCCACGGAGAGGAGCCCCATGCCCAGCC
TGGCTGAGCCCGAGATTCGCTCCTCCCCCTCATGCCAACCCCACACAGGTCCCGGCCTTTTAATGTTCTTTGAAT
AAACACTTTATTTTCTAATAAAATAAAAAAGGAAACCT

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FIGURE 3651

CTTTTGCGGGTGGCGGCGAACGCGGAGAGCACGCCATGAAGGCCTCGGGCACGCTACGAGAGTACAAGGTAGTGG
GTCGCTGCCTGCCCACCCCCAAATGCCACACGCCGCCCCTCTACCGCATGCGAATCTTTGCGCCTAATCATGTCG
TCGCCAAGTCCCGCTTCTGGTACTTTGTATCTCAGTTAAAGAAGATGAAGAAGTCTTCAGGGGAGATTGTCTACT
GTGGGCAGGTGTTTGAGAAGTCCCCCCTGCGGGTGAAGAACTTCGGGATCTGGCTGCGCTATGACTCCCGGAGCG
GCACCCACAACATGTACCGGGAATACCGGGACCTGACCACCGCAGGCGCTGTCACCCAGTGCTACCGAGACATGG
GTGCCCGGCACCGCGCCCGAGCCCACTCCATTCAGATCATGAAGGTGGAGGAGATCGCGGCCAGCAAGTGCCGCC
GGCCGGCTGTCAAGCAGTTCCACGACTCCAAGATCAAGTTCCCGCTGCCCCACCGGGTCCTGCGCCGTCAGCACA
AGCCACGCTTCACCACCAAGAGGCCCAACACCTTCTTCTAGGTGCAGGGCCCTCGTCCGGGTGTGCCCCAAATAA
ACTCAGGAACGCCCCGGT

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FIGURE 3652

CGGCGCTGGGGTAAGAAGCCTGCTGAGGGATGCCCAAGAAGTTCCAGGGTGAGAACACCAAGTCGGCAGCGGCCC
GGGCACGTAGGGCAGAGGCCAAGGCGGCCGCTGATGCCAAGAAGCAGAAGGAGCTGGAGGATGCCTACTGGAAGG
ACGACGACAAACACGTCATGAGGAAGGAGCAGCGCAAGGAGGAGAAGGAGAAGCGGCGCCTCGACCAGCTGGAAC
GTAAGAAGGAGACGCAGCGCCTACTGGAGGAGGAGGACTCCAAGCTCAAGGGCGGCAAGGCGCCGCGGGTGGCCA
CGTCCAGCAAGGTCACCCGGGCCCAGATCGAGGACACGCTGCGCCGAGACCATCAGCTCAGGGAGGCCCCGGACA
CAGCCGAGAAAGCCAAGAGCCATCTGGAGGTGCCGCTGGAGGAGAACGTGAACCGCCGCGTGCTGGAGGAGGGCA
GCGTGGAGGCGCGCACCATCGAGGACGCCATTGCAGTGCTCAGCGTGGCGGAGGAGGCGGCCGACCGGCACCCAG
AAAGACGCATGCGGGCAGCCTTCACAGCCTTTGAGGAAGCCCAGCTGCCGCGGCTCAAACAAGAGAACCCCAACA
TGCGGCTGTCGCAGCTGAAACAGCTGCTCAAGAAGGAGTGGCTCCGCTCTCCTGACAACCCCATGAACCAGCGGG
CCGTGCCCTTCAATGCCCCCAAGTGAGCCCAGAACTTGGGGAGCCAGTTCACCCACGGGTGGTCCAGGTCACGAC
TCTGCACGCCCTTAGGCCAGGTCAGCTGCGAGGGTCACAGAGCGTTCCGGGGGCCAAGGCGCCGGGCCCCGGGGC
CATGCTCTTATCACCAGCCACCCGTCCTCCCGCCAGAGGGTCCCTGCCCCGAGTGACACCCCATCCCCTCCCATC
CCCCGGCGCGTGTGTGTAGAGCCTCAGGGCTGAGTGCCCAATAAAGGTGGCGGCAAGGCT

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FIGURE 3653

GGGATTTTCTGCTCCGGTTGGTGAGCGCGCCTGCGCGTTGACGGCGATTTTGCGTTCTGAGGCTGCAGCGTCGGC
ATCTTGAGCTGCCGGTTCGCGAGTTCGAGGCCAGGTTCCGCCTGTCGTGGGTTCGCACCCCGGACGCGATGCTAT
TCGACAAGGTGAAAGCGTTCTCGGTGCAGTTGGACGGCGCGACCGCGGGCGTCGAGCCCGTGTTTAGCGGCGGCC
AGGCCGTGGCGGGCCGGGTGCTGCTGGAGCTGTCAAGCGCCGCGCGTGTGGGTGCCCTGAGGCTGCGCGCGCGGG
GCCGCGCCCACGTGCACTGGACCGAGTCGCGCAGCGCGGGCTCGAGCACGGCTTACACGCAGAGCTACAGTGAAC
GCGTGGAGGTCGTGAGCCACCGCGCCACGCTCCTGGCGCCAGATACCGGGGAGACCACGACGCTGCCTCCTGGGC
GCCATGAGTTCCTGTTCAGCTTCCAGCTGCCCCCGACCCTGGTGACATCCTTCGAGGGCAAACACGGTAGTGTCC
GCTACTGTATCAAGGCCACCCTGCACCGGCCCTGGGTCCCAGCACGCCGGGCAAGGAAGGTGTTCACTGTCATCG
AGCCTGTGGACATCAACACGCCAGCCCTGCTGGCACCTCAAGCGGGGGCTCGGGAAAAGGTTGCCCGATCCTGGT
ACTGTAACCGTGGCCTAGTCTCCCTTTCGGCCAAGATCGACCGCAAGGGCTACACCCCAGGAGAGGTCATCCCTG
TCTTTGCCGAGATCGACAACGGCTCCACACGTCCTGTGCTGCCTCGGGCAGCCGTGGTGCAGACACAGACGTTCA
TGGCCCGAGGCGCCCGAAAGCAGAAACGGGCAGTGGTGGCCAGCCTCGCGGGCGAGCCGGTGGGCCCCGGGCAGC
GGGCGCTGTGGCAGGGCCGGGCACTGCGGATCCCCCCAGTGGGTCCTTCCATCCTGCACTGCCGCGTTCTACACG
TGGACTACGCACTCAAGGTCTGTGTGGATATCCCAGGAACGTCCAAGCTGCTGCTGGAGCTGCCACTGGTGATCG
GCACCATTCCCTTGCACCCTTTTGGCAGCCGTTCCTCCAGCGTGGGCAGCCACGCCAGCTTCCTGCTGGACTGGA
GGCTGGGGGCCTTGCCGGAGCGGCCTGAGGCTCCTCCTGAGTACTCGGAGGTGGTAGCCGACACTGAGGAGGCAG
CCTTGGGGCAGAGCCCCTTCCCGCTTCCGCAGGACCCCGACATGAGCCTTGAAGGCCCGTTCTTCGCCTACATCC
AAGAGTTCCGCTACCGCCCGCCACCCCTGTACTCTGAGGAGGATCCAAACCCACTCTTGGGGGACATGAGGCCGC
GCTGCATGACTTGCTGAACGGCACAGGGACCCCTCGAGGAACAAGGTTGCACACCAGCTTTCAGCCACCATGACT
GTGGGGAGTGGCTGGACCAAGGGCTGACCTCCCCGACTGCATCAAAGTTGGGGAACCAAGTCTCAGAGTGAGGCG
GGGGCCTTTCGGATATCACATGGGACAGAGGAAGAGCCCGGCTGGAATCTGACTTACCTGGACCGCTGTCCTTGT
GAGGCATTGAATGCCCAGTGCAGTATCCGAGAGACTGTTTAATAACCTGTCTTCCCAGCCAATTGGTGGTGCTGG
AATCCCCTAGGAGCCTTCAGTCTGGGAGAAACAGAGCCAGACATAGACAGTTCCAGCATCACAGAACCAGAAGAA
GAGACCTGCAACTGTGAGAGTCCAGACAGGAAGCAGAGAAGGCGTCCTTGCGGAAAGGGCATTTTAGCTGAGGCT
TTGGAGTACGAATAGGAGCTCAGCAGGCAGACGAATGAGGAATAAAGGTCAGAGAAGGTCAGAGCTGAGTGACGT
TTGGAATCCACCCCGTTTATTGTAGAACTGGGGGTTCAGAGGGCAGGTGCCTCAGAGTTGAGGCCACACAGTGAG
GTCTGGTGGGTGAAAGGACCCAGGAACGAGGCGTTCAGGAAAGCAGGTTGTCAGAGCTATGTGGAGTCTGTGGGT
GGCAGGGGCAGCCGCTCCAGCCTTTGAAGACTTTGAAAGCCAGAGATTCCTGGCGCAGGCTTGGACTTCCTGGGA
GCTCCTCCAAGTACCCAGGGGCATCAGAGCTGCCTGGGTGTTACATGGCCCAGGGAACCCAGGTTCAGGGTAGGA
CAGGCAAGACCAGATACCCAATGTGCAAAGTGAAAACACTGGGCTCCCTGTTAAACGATGAAGAATTCAAGACAG
TGACAGCATTACGTCACCCCTGGGGACAGAGGTCAGCCTAAGGTGACACACGGGGACTACTGTGCTTCCGGAGGC
TCCCTGTGTCCTGGAGGAGAAAAGCATTAGAGGGGGCAGCTGGACAAGCTCCCAACTGCAGAGTCCCAGCCCTGG
CTGGGGCAGGGCCCCGGCCTGGGACTCAGCATTTCTGATATGCCTTAAGAATTCATTCTGTTTTGTACAATTATT
TTTTAAAAGTAAACGTGTGGAGAAAG

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FIGURE 3654

CCTGAAGGCTGTGGGACCCATGATCCTGGTTAGATTCTCCTTCTGCTTGTCCCTGGCTGTGCTGCCTCAGGCACA
TTACTTAACCTTTCTGGGCCTCTGCCACCTCATCTGTAAAATGGGCATGATGGTGAAGCCAGGTTGCCAGATAAA
ATATAGGCTACTCAGCTAAATGTGAAGTTCAGATCAATATTGAATTTGGTTTTACTGTAAGTATATCCCATGCAA
CATTTGGGATATACTTATACTAAAAAAAAAATTATTCATTGATGCTATGGTTTGAATGGTCCCCCAAAGTTCATAT
GTTTGAAACTTAATCCTCAAAGCAGTCCTTTCAACCTTGTCAACCTGTCGGCGCGGCCTCTGGTGCAGTGGCGGC
GGCTCCTGTTCCTGCCGCAGCTCTCTCCCCTTCTTACCTCCCCACCAGATCCCGGAGATCGCCCGCCATGGCTTT
ACTTACTGCGGCCGCCCGGCTCTTGGGAACCAAGAATGCATCTTGTCTTGTTCTTGCAGCCCAGCATGCCAGTGC
TTCCTCCATGAATTTGAAAGACATATTGGCTGACCTCATACCTAAGGAGCAGGCCAGAATTAAGACCTTCAGGCA
GCAACATGGCAAGAAGGTGGTGGGCCAAATCACTGTGGACATGATGTATGGTGGCATGAGAGGCATGAAGGGATT
GGTCTATGAAACATCAGTTCTTGATCCTGATGAGGGCATCCGTTTCTGAGGCTTTAGTATCCCTGAATGCCAGAA
ACTGCTACCCAAGGCTAAGGGTGGGGAAGAACCCCTGCCTGAGGGCTTATTTTGGCTGCTGGTAACTGGATGTAT
CCCAACAGAGGAACAGGTATCTTGGCTCTCAAAAGAGTGGGCAAAGAGGGCAGCTCTGCCTTCCC**ATG**TGGTCAC
CATGCTGGACAACTTTCCCACCAATCTACACCCCATGTCTCAGCTCAGTGCAGCTGTTACAGCCCTCAACAGTGA
AAGTAACTTTGCCCAAGCATATGCACGGGGTATCAGCCGAACCCAAGTACTGGGAGTTGATTTATGAAGACTCTG
TGGATCTAATCACAAAGCTACCTTGTGTCGCAGCAAAGATCTACCGAAATCTCTATGGAGAAGGCAGTGGTATTG
GGGCCATTGACTCTAACCTGGACTGGTCTCACAGTTTCACCAACATGTTAGGCTATACTGATCATCAGTTCCCTG
AGCTCATGCACCTGTACCTCACTATCCACAGTGACCATGAGGGCGGCAATGTAAGTGCCCATACCAGCCACTTGG
TGGGCAGTGGCCTTTCAGACCCTTACCTGTCCTTTGCAGCAGCCATGAACGGGCTGGCAGGGCCTCTCCATGGAC
TGGCAAATCAGGAAGTGCTTGTCTGGCTAACACAGCTGCAGAAGGAAGTTGGCAAAGATGTGTCAGATGAGAAGT
TA**TGA**GACTACATCTGGAACACACTCAACTCAGGACGGGCTGTTCCAGGCTATGGCCATGCAGTACTAAGGAAGA
CTGATCCACGATATACCTGTCAGCGAGAGTTTGCTCTGAAACACCTGCCTAATGACCCCATGTTTAAGTTGGTTG
CTCAGCTATGCAAGATTGTGCCCAATGTCCTCTTAGAGCAGGGTAAGGCCAAGAATCCTTGGCCCAATGTAGATG
CTCACAGTGGGGTGCTGCTCCAGTATTATGGCATGATGGAGATGAATTACTACACAGTCCTGTTTGGGGTGTCAC
GAGCATTGGGTGTACTGGCACAGCTCATCTGGAGCCGAGCCTTAGGCTTCCCTCTAGAAAGGCCCAAGTCCATGA
GCACAGAGGGTCTGATGAAGTTTGTGGACTCTAAGTCAGGGTAAAACTGGAGACTGGGGGAAAGTGACTACCAGA
AAGTGAGGAAGCCTAAATAAAAAGTATACTTTTGTTTCAGGGGGCCTTTAAAGACTTAAGATTAAATTATATCTG
AGGCACTGATAATATGTTTGAGGTTAAAATATAAATTAAGACTTTAAAAGATGAAAAATGGTCCCTTCTTCCCTA
ATCAGCTCCTTTCCCCTGCCTGGTATGAGTTGCCCATCACAGGCATGGTCCTGGAGGATGACCAGGACTAATGCA
TGTGGTATGAGTAGGTTTGGCCCCCTCACTATCTCTAGAGTGAGAATCTGGCTCCTGTTTCCATGGCTCAAAGCC
GGTTGCAGAGAATCTGCAGTCACTTCGGAGCTTTAGCTTCTTCTCTGCCAAGCCCTCAATAAGCCAGCAAACCAG
GACTCTGCCCCTTCTGTTTCCATAGGAATCATGTTGGATAGTCAGCTGTACCAAGCCCCTTGGCCTTCCCATGCA
CACAAACACCTCCTAGCAAGACCTGTTGGTTAGCTGGACATGCTTTGGCAATTTTTTTATACTGCCAAGTGACCA
TAAAGGCATGGCATTTGTTGTGACTGGCACCCAATGTTTGATTTTTTTTTTAAACTATCCAATTAAAATTAAGGT
CTGGGAGTGTTCTGTTTCCCATTACTTTAATACTCACCCCCCTCCCAGACTTTCTACACCTGTTTCACCTCAGGC
TGAGGATGTTCTGGACCTCCCCCTCTTAGTCCCTACTAGAGACCTCTCAACAGATCTGTGGGCCCAGTCATTGGG
TTTTATCAGTGCTTAATGTGAACTAAGTTTTTTACTTCCAACAGAATACAAGCCACTACCTTCTGACCTCCCCAC
CCCCCACCAACCCCCAGCTTTTAATATGCTGTGGGGCATAGAACAGGGACTCCGGAATGACCAGCATGATATTTT
CAGAGTCTTGTCCCTGGGGTATTAGCACCTCTTTTTGAACAGAGAATTGATTCAAGATTGGACATGGTCTCCTCT
GATTATCAGGTACTGGGGCTGAGGGCATTAAAAATAGTAAGCCTCCTTCCTCGTCCCCTGCCTCAAGAAATTGCC
TCCTTATTTATCAACATCTTTTTCCTCCCTTTCCCTGAGAGCTCACAGTACAATGTTTGTTTCAGAAGCCCCATT
TGCACAGGTTTTCAGCAACTCAGAATGCTCTACTTCTTTTTCTTTGAGAAAGGATTGAGATACGCTCCTGCTGTG
CCCCCATCTTTCCTCCAAACTCCTGCCTGTGTTTGTGTGGATACCCAGTCCCAGAACCACACTGTTGAGTTGGAC
ACACTGTAAACCCCTGGCTAACTGTCAAGTCATGATGCAGACTTCAGGTTGTTCTGTATAAAATGCAAAATAAAT
GTTTTAATTAAC

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FIGURE 3655A

TGGGCACTGAGCACATTCGGTTATTTCCAGAAACGCTCCGCGGTCTTGGGGATCAGCCTCAGTTGTGCCAGTGCG
GCCGTAGAGAGTGTTCGGCCATTTCCGAAAGCGCTCGGGCGTCTCTAAGCCCAGCCGAGCCCAGTCTCGGATCCC
TCGCCGACCCGATTGCACTCGGCTACCTCTGGAAACGCTCGGCTGTCTCGGGGGCACCCTCTAGTCCACCAGTCC
CGCGGGATTACGTTCGGCTACTTCCGGAAACACTCGGGTGCCCCCTTACCTCAGGCTCCGCCTCGGCCTCGGTTC
ATCCGCCCGGCTCGAATGCGCTCGGGCATTTCCGCCGGGGGCGGGCCAGGCCGCTCGGAACCGTGGCGGCGGCGG
AGGCGGGGATCCCGCGGCTGCGGCGACGGTGGCCGCGGTGGAGCCACGGGGCGGGCTTGGCTTGGTGTGACGGCG
GCTGCGGCGGCGGTGGCGGCCGCGACCAGGTCGGCGTCCTCAGCTGGCCGAGCATGGTGGCAGCCTGCACCCTTG
GCTCCCTTGTCTGGTGCAGCCAGCAGAGCCGCCAGCCTTGGGCGCCCATGGCCCTCCGTGTGAGGGCGTGAGCGG
CCTGCCCCAGCCTCACCTGCTGATGGAGGACTCAATGGCCCAGTGACCTGACACCACACCACCAACTCCCTCCCA
CCAGCTGACGAATGGTGGACCCAGTGACGAGTGGCCCTTGTAAGGGTCATGGAATAATTTGAAGCGAGGCATGAG
CGGCCCCTGTGGTCGCCTGTGACTGCTGGAGATAGAGGTCCCAGCACCCCAAGCCAACCCAGCGGACCCTCCCAG
CCCTGCTTCAACCAATGGGGCCAGTGGGGCTCCAAGCAGCCACCTAACCATCCAGACCCCACCCCACTCACGCGG
CCATGGCGGGCCCTGAGGGCTTCCAGTACCGCGCTCTGTACCCGTTCCGCCGGGAGCGGCCGGAGGACCTGGAGC
TGCTGCCCGGCGACGTGCTGGTAGTGAGCCGGGCGGCCTTGCAGGCGCTGGGCGTGGCCGAGGGTGGCGAGCGCT
GCCCACAGAGCGTGGGCTGGATGCCCGGCCTCAACGAGCGCACACGGCAGCGAGGTGACTTCCCTGGCACCTATG
TGGAGTTCCTGGGGCCCGTGGCCCTGGCCCGGCCCGGCCCTCGCCCACGGGGCCCCCGCCCACTGCCCGCCAGGC
CCCGTGATGGGGCCCCTGAGCCAGGCCTCACACTCCCCGACTTGCCCGAGCAGTTCTCCCCACCTGATGTGGCTC
CCCCTCTTCTGGTGAAGCTTGTGGAGGCCATTGAAAGGACAGGGCTGGACAGCGAATCTCACTACCGCCCGGAGC
TGCCCGCACCGCGTACAGACTGGTCCCTGAGCGACGTGGATCAGTGGGACACGGCAGCCCTGGCTGACGGCATTA
AGAGCTTCCTGCTGGCACTGCCCGCGCCGCTCGTGACCCCCGAGGCCTCGGCCGAGGCGCGCCGGGCCCTGCGGG
AGGCCGCGGGGCCCGTGGGGCCGGCGCTGGAGCCACCGACGCTGCCGCTGCACCGCGCGCTCACGCTGCGCTTCC
TGCTCCAGCACCTGGGCCGCGTGGCCAGCCGCGCCCCGGCCCTGGGTCCCGCGGTCCGGGCCCTGGGCGCCACCT
TTGGGCCGCTGCTGCTGCGCGCGCCGCCGCCGCCGTCCTCGCCGCCGCCAGGGGGCGCTCCCGACGGGAGTGAGC
CCAGCCCTGACTTCCCGGCGCTGCTGGTGGAGAAGCTGCTTCAGGAACACTTGGAAGAGCAGGAGGTTGCGCCCC
CAGCGCTGCCGCCTAAACCCCCCAAGGCAAAGCCGGCCTCCACAGTCCTGGCCAATGGAGGGAGCCCACCCTCCC
TGCAGGATGCTGAGTGGTACTGGGGGGACATTTCAAGGGAGGAGGTGAACGAGAAACTCCGGGACACTCCCGATG
GCACCTTCCTAGTCCGAGATGCTTCTAGCAAGATCCAGGGCGAGTACACGCTGACCCTCAGGAAAGGCGGGAACA
ATAAGCTGATCAAGGTCTTCCACCGAGATGGGCACTATGGCTTCTCAGAGCCACTCACCTTCTGCTCCGTTGTGG
ACCTCATCAATCACTACCGCCACGAGTCTCTGGCCCAGTACAATGCCAAGCTGGACACACGGCTCCTCTACCCTG
TGTCCAAATACCAGCAGGACCAGATTGTCAAGGAGGACAGCGTGGAGGCAGTGGGCGCCCAGCTTAAGGTCTATC
ACCAGCAGTACCAGGACAAGAGCCGCGAGTATGACCAGCTTTATGAAGAGTACACACGGACCTCCCAGGAGCTGC
AGATGAAGCGTACTGCAATTGAGGCCTTCAATGAGACTATCAAGATCTTTGAAGAGCAGGGCCAGACTCAAGAGA
AATGCAGCAAGGAATACCTGGAGCGCTTCCGGCGTGAGGGCAACGAGAAAGAGATGCAAAGGATCCTGCTGAACT
CCGAGCGGCTCAAGTCCCGCATTGCCGAGATCCATGAGAGCCGCACGAAGCTGGAGCAGCAGCTGCGGGCCCAGG
CCTCGGACAACAGAGAGATCGACAAGCGCATGAACAGCCTCAAGCCGGACCTCATGCAGCTGCGCAAGATCCGAG
ACCAGTACCTCGTGTGGCTCACCCAGAAAGGCGCCCGGCAGAAGAAAATCAACGAGTGGCTGGGGATTAAAAATG
AGACTGAGGACCAGTACGCACTCATGGAGGACGAGGACGATCTCCCGCACCACGAGGAACGCACTTGGTACGTGG
GCAAGATCAACCGCACGCAGGCAGAGGAGATGCTGAGTGGCAAGCGGGATGGCACCTTCCTCATCCGCGAGAGCA
GCCAGCGGGGCTGCTACGCCTGCTCCGTGGTAGTGGACGGCGACACCAAGCACTGCGTCATCTACCGCACGGCCA
CCGGCTTCGGCTTCGCGGAGCCCTACAACCTGTACGGGTCGCTGAAGGAGCTGGTGCTGCACTACCAGCACGCCT
CGCTGGTGCAGCACAACGACGCGCTCACCGTCACCCTGGCGCACCCAGTGCGCGCCCCGGGCCCCGGCCCGCCGC
CTGCCGCCCGCTTGAGCACCGAGGACCCGCCCCAAGCAGAGCCGCCCCTGGGCCCGTCTGCGCCGGAGGCTGCGGC
GGCGGGAGCCACGGACCAGACCAGCCACATCCAGGGGTCCTCATTTCTCCGGCTCTGGCTCTTGTTTGGGGTTCT
CTCACCCTCTTTCTCTTTCCTTCCCTCCCCCATTCTCCAGATCTCCCTCTGTCTCCTTTTCTCTGTCTTTCTTGG
CCCCTGTCTCTCTCCATGTTGGGGGTCCTAACTCCCCCACCCCATATCTACGTGTCCTCCGGGCATTGCCCTCTC
CATGGCTCTGGTCACCCTGACCCTCTGCCCTGCCCACCGCAGGTCCCCCGGGGTCCCGGAAGCCCCTTCTGGCTG
CACCTGCCATGTTTACAGAGGGCCCCTGGGCTGCGCGGCCCCAGCCTGGGCACCCTGATTTTTAAGCCATAGACC
TGGGGTCAGGGCAGGAAGGAACTTCACTCTGCTGCTTCCGAGAACCTCGGCCGTGACATTCGGGGCCGGGCGGGA

FIGURE 3655B

CCCGCCCCACAGACTCCAACTTCCCCTCCAAACCCCGAAGTGAAACCCGCCACCGGGTTACCCCCACAAGGGGGC
CGCTGCGAGAAGTTCACCCACCCCCGAAAAAATAATTAAACTCGCAGGCCAGGCACGGTGGCTCATGCCTGTAAT
CCCAGCACTTTGGGAGGCCAAGACGGGCGGATCTTTTGAGGTCGGGAGTTGGAGGCCAGCCTGGCCAAAATGGCA
AAACCCCGCATCTACTAAAATACAAAAATTAGCCGGGCGTGGTGGCGGCCGCCTGTAATCCCAGCTACTTGGGAG
GCTGAGGCGTGAGAATCTCTTGAACCCAGGAGATGGAGGTTGCAGTGAGCAGAGATCGTGCCACTGCACTCCAGC
CTGGGTAACAGAGGGAGACTCCTCCGTCTCAAAAAAATAAATAAATAAACTTGTGAGCTGGCCCCAACCCCTCCT
AGGAATCACAGCTCCCCGTACTGGTGCCGCCGCAGTGGCCAAGTTGCGACACTGCCCACGGCCCCTCCCTCTGAT
GCAGATTCAGGGCTTCTCTTCGATCATGTTGGGTTTTGATTCTGTTTTTCCTTGACTGCAAAACCCTCTTTCCTC
TCCTCTTTTGGGACAAGAGCCCTGGTTTTCTACGCTGCCCTTGGCCACCACACTGCCTGCCCCACGAGCTGGGAG
GCAGGTTTTGTACGGTACGTTGTTATTGATATGATATAAAACATCAAACGTC

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FIGURE 3656

GGACCGCCGCCTGGTTAAAGGCGCTTATTTCCCAGGCAGCCGCTGCAGTCGCCACACCTTTGCCCCTGCTGCGATG
ACCCTGTCGCCACTTCTGCTGTTCCTGCCACCGCTGCTGCTGCTGCTGGACGTCCCCACGGCGGCGGTGCAGGC
GTCCCCTCTGCAAGCGTTAGACTTCTTTGGGAATGGGCCACCAGTTAACTACAAGACAGGCAATCTATACCTGCG
GGGGCCCCTGAAGAAGTCCAATGCACCGCTTGTCAATGTGACCCTCTACTATGAAGCACTGTGCGGTGGCTGCCG
AGCCTTCCTGATCCGGGAGCTCTTCCCAACATGGCTGTTGGTCATGGAGATCCTCAATGTCACGCTGGTGCCCTA
CGGAAACGCACAGGAACAAAATGTCAGTGGCAGGTGGGAGTTCAAGTGCCAGCATGGAGAAGAGGAGTGCAAATT
CAACAAGGTGGAGGCCTGCGTGTTGGATGAACTTGACATGGAGCTAGCCTTCCTGACCATTGTCTGCATGGAAGA
GTTTGAGGACATGGAGAGAAGTCTGCCACTATGCCTGCAGCTCTACGCCCCAGGGCTGTCGCCAGACACTATCAT
GGAGTGTGCAATGGGGGACCGCGGCATGCAGCTCATGCACGCCAACGCCCAGCGGACAGATGCTCTCCAGCCACC
ACACGAGTATGTGCCCTGGGTCACCGTCAATGGGAAACCCTTGGAAGATCAGACCCAGCTCCTTACCCTTGTCTG
CCAGTTGTACCAGGGCAAGAAGCCGGATGTCTGCCCTTCCTCAACCAGCTCCCTCAGGAGTGTTTGCTTCAAGTG
ATGGCCGGTGAGCTGCGGAGAGCTCATGGAAGGCGAGTGGGAACCCGGCTGCCTGCCTTTTTTTCTGATCCAGAC
CCTCGGCACCTGCTACTTACCAACTGGAAAATTTTATGCATCCCATGAAGCCCAGATACACAAAATTCCACCCCA
TGATCAAGAATCCTGCTCCACTAAGAATGGTGCTAAAGTAAAACTAGTTTAAT

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FIGURE 3657

CGAAAGCAGAGCGGCGCGCCGGTTCCTTGGTTCCTGAGGGCGATGGCGCGGGGTGGCTGGCGCCGGCTACGCCGC
CTGTTATCCGCGGGGCAGCTTCTATTCCAGGGCCGCGCGCTGCTCGTCACTAACACGCTGGGCTGCGGCGCGCTC
ATGGCGGCCGGTGATGGCGTGCGCCAGTCCTGGGAGATCCGCGCCCGGCCCGGCCAGGTTTTCGACCCACGGCGC
TCCGCGAGCATGTTTGCGGTGGGCTGCAGCATGGGTCCCTTCCTGCACTACTGGTACTTGTCGCTGGACCGCCTA
TTCCCTGCGTCTGGCCTCCGAGGCTTCCCAAATGTCCTCAAGAAGGTCCTCGTGGATCAGCTGGTAGCCTCTCCA
TTGCTGGGCGTCTGGGAATTCTACAAGGCAGACTGGTGCGTGTGGCCTGCTGCGCAGTTCGTGAACTTCCTCTTC
GTGCCCCCCCAATTTCGAGTCACCTACATCAACGGCCTGACGCTGGGCTGGGACACGTACCTGTCCTACTTGAAG
TACCGGAGCCCAGTTCCTCTGACACCCCCAGGCTGTGTGGCCCTGGACACCCGAGCAGACTGAACTGTCTGCTTC
CTGGACCAGATGCAAGACTGTCTCCTGGCGGACCACCCCCTCTGACAGAAGGGGAATGGGCTCCTGCAGCAAGCT
CGGGTCTTGAGCCACGTCCCAGCACCACTTCAGCTCCGGAGCATTGGGCTGAGCCGCCCTTTCCAAGCTCACTTC
TGGGACTGAGTTTCCTCAACCGGAACACACCCATGAAGATGGATGATCATCCCCTAGCCCTTCTCAGCAGGAACC
TCATGCGACCTGTGACCAAGATGTCCCATCCTCAGCACAGGGCCCACTCTGCCAACCAGTCTCAAGCACCAGCCC
CTCAACACTGCCATCCACCTGGCTCTGGGCCAAGCCACCAATCCAGAGCTCCCTCAGGTCCTGGGACTAAGGCGG
GGACATGACTGATCCCCTCAGAGCAGGCTCAGGCCTGGAGTCGGCCCCCAAAAGTTTCACATAGGGCCAGGCAGC
CTCTGTGTTTCTTTCCCTGGTCCTGAACTGTGGAAATGCCATTAAACTCTCTCTATAATGTAACTGAAACTGCTG
GCTGGGCGCAGTGGCTCCCACCTGTAATCTCAGCCCTTCCCGAGGCTGAGGTGGAAGGATTGCTCGAGGCCAGGT
GTTCGAGACCAGCCTGGGCAACATAGCAAGACCCTGTCTCTATTTATATTGAAAAATAAAAATAACAAAAG

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FIGURE 3658A

GCACAGCCATCTGTGGTGACTAGGAGGTCCCCAAGCCGAGGACACCCATCAAGGACCTTTAGAGTGGCCTCAGAC
CAAGGTCACCAATCAATGGCTAACTGGGGGTCCCAAAACCTAGCCCAGCCATCTATGGACAGTGGGGAGCCCTCA
AGCCTAGCCCAGCCATCTCAAGCCCCTGGGGTAACCTCAAATCTGGCCCAGCCATCTCAAGCCTTTGGGGTGTCT
CCAAGTCCAGACTACCCATCTCAGTCTGTTGGGGAGTACCCAATGCTGGCTCAGCCATTTCAGCCCACTGAGGTG
TCCCCAAGTCCAACCTACCCATCTCAGGCCATTAGGGAGTACCCAACCCTGGCCCACCCATATCAGCTCACTGAG
GTGTCCCCAAGTGCAGCCTACTCATATCAGCCCACTGAGGTGTCCCCAAACCCAGGCTACCTATCTATGGCCATT
GAGATGTCCCCAAGCCCAGAATACCCATCTGTGGCCACTGAGGTGTCCCCAAGCCCAACCTACCCATATCAGCCC
ACTGAGATATCCCCAAGCTCAGGCTACCTATCTGTGGCCACTGAGGTGTCCCCAAGCCCAGGCTACCCATCTCAG
CTCACTGAGGTGTCCCCAAGCTCAGGCTACCTATCTGTGGCCACTGAAGTGTCCCCAAGCCCAGACTACTCATCT
CAGCCTACTGAGATGTCCCCAAGCTCAGGCTACCTATCTATGGCCACTGAGGTGTCCCCAAGCCCAGGCTACCCA
TTTCAGCCCACTGAGGTGTCCCCAAGCCCAGACTATCCATGTGTGGCCACTGGGGAGTCCCCTAGCCTTGCCCAG
CCATCTCAGCCCACTGAGGTGTCCCCAAGCTCAGCCTACCCATCTGTGGTCACTGGGGAGTCTCCAAGCCTGGCC
CAGTCATATCAGCGCACTGAGGTGTTCCCAAGCCCAGCCTACCCATTTATGGCCACTGAGGTGTCCCCAAGCCCA
GGCGACCCATCTGTGGTCACTGGGGAGTCCCCAAGCCCAGCCTACCCATCTCAGCCCACTGAGATGTCCCCAAGC
CCAGCCTACCCATCTCAGCCCACTGGGGAGTCTCCAAGCCTGACCCAGCCATCTCTGACCATCAGAGTGTCCCCA
AGCCTAGCCATGTCATCTCAGACTATTGGAGTGTCCCCAAGCCTAGCCATGCCATCTCAGACCATTGGAGTGTCC
CCAAGCCTAGCCATGCCATTTCACACCATTGGAGTGTCCCCAACCCTAGCTCACCCATCTATGGCCATTCGGGAG
TCTCCAAGCCTGGCCCAGCCTCCTCAGTCCACTGGGGAATCCCCAAGCTTGACCTGGCCATCTCAGGCCACTGGG
GTGTCCCCAAGTGTAGCCCACCAATCTGTGGCCAGTAGGGTTTCCTCAAGCCTAGCCCAGCCATCTCAAGCCAGT
GGGATGTCCCCTAGACAAGATTACCCACCAGTGGCCTCCAGGGTGTCCCCAAACCAAGCTCACGCATCTATAACC
AGCAGGATGTCCCCTAGCAGAGCTCATGCATCTATGACCTGTATGGTGTCCCCAAGCCAGGTTCATCGATCTATG
CCCAGTGAGGTGTCCCCAAGCCTTGCCCAGCTATCTCAGGCCACCACTGCAGTGCCCTTAAGACCAGCTCATCAA
CCTATGGCCTGTGGTGTATCCCCAAGCCTAGCCCAGCCGTCTCAAGCCACAGGGATGTCTTCAAGGCTAGCCCAC
CAACCTATGACCTGTGTGGTGTCCTTAAGCCCAGCCCAGCCATCTCAAGCCATTGGTGTGTCCCCAAGCCTAGCC
CACCCATCAGGACCCCATGGGTTGTCTCCAAGTCTAGCTCACCCATATGTGGCCAGTGGGGCGGGCTCCAGCCTA
GCCCACCCATCTCAGACCACTGCAGTATCCCCAAGGCAAGCCCAACCATCTGTGGCCTCCAGTCCAGGCAAGACA
AATTCATCCTGTACCCTAGCCTCCAGCCTAGCCGAGCCAGCTATAGCCCCCAGCCTATTCCCACCATCTGTGGCC
CACACGGAAGCCCTAAGCCTGGCTCAGTCACCCCCGGACACTAGGTTGGCCCCAAGCCGATCCCAGCCATCTGTG
GTCAGTGGTACATGTCATGGCCTCAATGAGCCATGCTGGGGCTCTAGGCTGGATTCAAATCTGCAGTGTTCAAGG
GTGGACTCAGTAGCCCCGTGTCTGTGTCACCCATCAGCGTTTGTTTCAGTTAGCCTGGGTGGACCATATCCCTCT
GTGGCTGGAAATATGGACCAGGGTCTGAACCAGCCATCCCTGGGTACTGGGGTGAACCTATGTGAAGAACCTCTG
ATGGTTAGTGAGATGGTATCCAGCCCCCCGGACTTCAAGTTCAACGACGTGTCCCTTGGGTTCCATCATCCACCC
AGGGTTGGTGGGAGGCATGTGTGTCCACCCTCTGTGGTTAGTGTTTCAACACCAAATCTCTCTCATGCTGATGAG
GAGGCCTGTTGTGTAGGCCAGTGAATCACGCCTCTGTTCAGGGGTGTGGCTGTAAGCCATCCCCAGGAGCCTTTG
GCTGATGCTATGTTCCCCAGTGGGTCTCAGGGGACCACATCTCCTGGCCTAGCTGGGAATCTCCCCTGGAGAACC
ATAGCAACTGGCATGGGCCAAAGTCAATGTCAGGTGGCCAATGGCATGGCTTCCCTTGCATCCCAGGTCTTAGAG
GCAGGTGGCCCTTTGACACATCCCTCTGGAACCACAGGGATGGCCCCCAGCCCCTCTCTGGCTTCAGTGCCCAAC
AGACTGGCCGTGACTCAGTCTAATCTTTCCCTGAACAGCATGGACCCCAGCAGCTCCCAGATCAGTGTGGTTATT
CCAAAAAACATAGACTGCTGGCACCCTTCTGAGGCATCCATGGTCCCACCCAGTTACCAGCAGAGAGATGTGATT
CCGCAGGACTCTCTGAAGAGCAGGGCTGGTCGTGGTGCGGCAGGAGGTTTTGTAGCCAGTAGAATGAGCACGGGC
GCAGTCCCAGGCACTCTGCCTGGTGGCATAACCTCCAGCCTTCCCCCGGGCTCCACCATCCGAGGCATGGGTCAC
AGCCTTCCCGCAGGCTCTGTGTCCAGTTGGGTGGCTCCCAGTCTGATGGCAGACAGAAAGAAGCCAAGTCTATCT
GTAAGACCCTCCGCTAGCTTAGCTGCTCCAAACTTGCTCCCAGGTTCAGTAGTGAGTCGGGTGAGCCCAGTTGTC
CCCCTGGTTCTGTGCCAATGATGGGGGCCTCTAGTGTGGCTCAGAGCTGCTCCAAGGGGCCCATGGTGATTGACA
TCACTGCCCCTCCTTACCTCAAAGCCTGGCTGGGGAGAGGTCTTTAGCCCCCTTGCAGATGCCCCACACCACCAG
TCTGGCTCCAGGTCACTCCTCAGCCCCGGCAGCTAGTGGCACAGTGAGGAGTCTACACCGAGTGCCCACGGTTCT
ATCAAGAGCCTTACAATTGAGCCAAGATGCTAGGATAATGCCATCTGGGGTCACAGGGGACCAAGCCAAGCTAGG
AGAATTGGATGAGGCTGTGTTCCAAGTGTCAGGATCAAGTGGATCCAATGACCTATTCAGCAAAGCCAGGGTCAC

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FIGURE 3658B

TGGTGCAACCCAGTGGATGTACTCCAGTCCTCTGGGAGCTGATGGGGGCCATGATCATAGGTCCCTGTCTGAGAA
AGGGTCTCTTCCCCAAGGGAGGTGGCTCCCAGCCATGCTAGTGGCATGGTCCCTGTCCCTTTCCAGGCCCCGGGT
TTAGCCACTAAGTCCCCCTCAGTTTATCAACAGGGGTCTGTCACTCACGTCATACCCCCAAATCACTCTCAGGGT
ACAGTGGCTTCTAATGTAGTCTCAGGATCACCCCAGCTGGCCCGTGGCAGTACTGAGGCTTTCAGATTGCTTTCA
GTGTCTGTGGGCAGGATGGGGAATCCTAGTCTTCTTCAGAGGTCAGGGACCACCAGCATGGTCTCACATGTGCCA
CTATATCCGTCCTCGGCTAGAAGGGCATTGTCCAGTCCCTTCCAGACAGAAGCTGTCCCCAATCCACTCCAGAAA
ACAGTGTCTGGAAACATGGCTCCGAGCAGCCGCTGGGACGCCATGGGCCCTAAAAATTCCTACAGATCCGTGCAT
GGTAGGATTGTTCCAGAACTGCTAGAAAGTTCTGTGGCCAGGGTTAGGCCCTTACAGTATGTGCAAAGACAACCA
TCCCAGGCCTCAGCCCGAAGTGGTGCAAACCCCACCCACAGGCCCTCTGCAGAGGTAAGGCCCGTCATCCGCACT
GGGGAGATGACACACTCCTCGGTCATTCCTCCGCTGGCCCCGGGAGTTCGGAGGGTGTCTCTAGGCTATGAGTCT
TCCCCAAGTGGTTCCCTGCCACCCCTTTTTAACCAGGAGTCACCGTGGAGACGGCAGGACTCCTATAGCCCCCAG
AATCCTGCCGTTAGTCACAAGGCATCCCTGAACTCCACTATACTCCAGGGCCCCGCGGACGCTGGTGTGGTTGGT
GGCCAATCGTGGAACCGCGCATGGGAGCCAGCCAGGGGTGCTGCGTCCTGGGACACCTGGCGCAACAAGGCGGTG
GTGCCTCCCAGGCGGTCCGGGGAGCCAATGGTGTCCATGCAGGCTGCAGAGGAGATCCGCATCCTCGCAGTGATC
ACTATCCAGGCGGGCGTCCGTGGCTACCTGGCGCGTCGCAGGATCCGGCTGTGGCACCGGGGGGCCATGGTCATC
CAAGCTACTTGGCGCGGCTACCGTGTGCGGCGGAACCTGGCACACCTCTGCAGAGCCACCACGACCATCCAGTCT
GCCTGGCGCGGCTACAGCACCCGCCGGGACCAAGCCCGGCACTGGCAGATGCTCCACCCCGTCACGTGGGTGGAG
CTGGGCAGCCGGGCCGGGGTCATGTCTGACCGAAGCTGGTTCCAGGATGGCAGAGCCAGGACAGTATCTGACCAT
CGCTGCTTCCAGTCCTGCCAGGCACACGCTTGCAGCGTCTGCCACTCCCTGAGCTCCAGGATCGGGAGCCCGCCC
AGCGTGGTGATGCTAGTGGGCTCCAGCCCTCGCACCTGTCATACCTGTGGACGCACACAGCCCACCCGTGTGGTG
CAGGGCATGGGCCAGGGCACTGAGGGCCCCGGGGCAGTGTCTTGGGCCTCCGCCTACCAGCTGGCTGCCCTGAGT
CCCAGGCAGCCGCATCGCCAGGACAAAGCGGCCACAGCCATCCAGTCCGCCTGGAGGGGCTTTAAGATCCGCCAG
CAGATGAGGCAGCAGCAAATGGCAGCGAAGATAGTTCAAGCCACCTGGCGAGGCCACCATACCCGGAGCTGTCTG
AAGAACACAGAGGCGCTCTTGGGACCAGCAGACCCCTCGGCCAGCTCACGGCACATGCATTGGCCTGGCATCTAG
GACCCTGGCTCCCTGCAGTGGGGACTTCGTGGGAGGCACTCATGGCTCTCTGGGTCTAATGAATAAAGTCCTCCA
CAGCCT

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FIGURE 3659A

GCTAGGTTTAGCTTCAGGGGCAGCCCAGGGCAGTGTTGCTGCATATTGCATGGATGAAAGGCTGAAGGCTGCCTC
CTCTTGCAGGCTGGCTTCTGAGATTGCACCTTCTTCTCCTGCTACTCCTCCAAATCTATGACCCTTCAAGGCAGA
GCTGACCTGTCCGGTAATCAAGGCAATGCAGCCGGCCGCCTAGCTACAGTTCACGAGCCAGTTGTCACCCAGTGG
GCGGTGCATCCTCCAGCCCCCGCTCACCCCAGTCTCCTGGACAAAATGGAGAAAGCGCCTCCACAGCCCCAGCAC
GAGGGCCTCAAGTCCAAGGAGCATCTTCCGCAACAGCCTGCCGAAGGCAAGACGGCGTCCCGCCGCGTCCCACGC
CTCCGGGCTGTGGTCGAGAGCCAGGCCTTCAAGAACATCCTGGTAGACGAGATGGACATGATGCACGCCCGTGCA
GCCACGCTCATCCAAGCCAACTGGAGGGGCTATTGGCTCCGGCAGAAGCTGATTTCCCAGATGATGGCGGCCAAG
GCCATCCAGGAGGCCTGGCGGCGCTTCAACAAGAGACACATCCTTCACTCCAGCAAGTCGTTGGTAAAGAAAACG
AGGGCGGAGGAGGGGGACATACCTTATCACGCCCCACAGCAGGTGCGCTTCCAGCATCCGGAAGAGAACCGCCTT
CTGTCCCCGCCCATCATGGTGAACAAGGAGACCCAGTTCCCTTCCTGTGACAATCTGGTCCTCTGCAGACCCCAG
TCGTCCCCCCTCCTGCAGCCCCCAGCAGCTCAGGGTACCCCAGAGCCCTGTGTGCAGGGTCCTCATGCTGCCAGA
GTCCGGGGGCTGGCCTTCCTGCCACACCAGACGGTCACCATCAGATTTCCCTGCCCAGTGAGTCTGGACGCAAAA
TGCCAGCCATGCCTGCTGACCAGAACCATCAGAAGCACCTGCCTCGTCCACATAGAGGGTGACTCAGTGAAGACC
AAACGTGTAAGTGCCCGGACCAACAAAGCCAGGGCTCCGGAGACACCATTGTCCAGAAGGTATGACCAGGCAGTT
ACGAGACCATCCAGAGCCCAAACCCAGGGCCCTGTGAAAGCAGAGACCCCCAAAGCCCCCTTCCAGATATGTCCA
GGGCCCATGATCACCAAGACTCTACTCCAGACATATCCAGTGGTCTCCGTGACCCTGCCACAGACATATCCAGCG
TCCACGATGACCACCACCCCACCCAAGACTAGCCCAGTTCCCAAAGTAACAATAATCAAGACCCCAGCCCAGATG
TATCCGGGGCCCACAGTGACCAAAACTGCACCTCACACATGCCCCATGCCCACAATGACCAAGATCCAGGTACAC
CCCACAGCCTCCAGAACTGGCACCCCACGGCAGACATGCCCTGCGACCATCACGGCAAAGAACCGACCTCAGGTT
TCCCTTCTGGCTTCCATCATGAAGAGCCTGCCCCAGGTATGCCCGGGGCCTGCGATGGCAAAGACCCCACCCCAG
ATGCACCCGGTCACCACCCCAGCCAAAAACCCATTGCAAACATGTCTGTCAGCCACAATGTCCAAGACTTCATCC
CAGAGGAGCCCAGTTGGGGTGACCAAGCCCTCACCCCAGACCCGCCTGCCAGCCATGATAACCAAGACCCCAGCC
CAGTTACGCTCGGTGGCCACCATCCTCAAGACTCTGTGTCTGGCCTCTCCAACAGTGGCAAATGTCAAGGCTCCA
CCCCAAGTGGCGGTAGCAGCCGGAACTCCCAACACCTCAGGCTCCATCCATGAGAACCCACCCAAGGCCAAGGCC
ACCGTGAATGTGAAGCAGGCTGCAAAGGTGGTGAAAGCCTCATCCCCCTCCTATTTGGCTGAGGGGAAGATCAGG
TGCCTGGCTCAACCACATCCGGGAACTGGGGTCCCCAGGGCTGCAGCTGAGCTTCCTTTGGAAGCCGAGAAAATC
AAGACTGGCACCCAGAAACAGGCGAAAACAGACATGGCATTTAAGACCAGTGTGGCAGTGGAAATGGCTGGGGCT
CCATCCTGGACAAAAGTTGCTGAGGAAGGGGACAAGCCACCTCACGTGTATGTGCCTGTAGACATGGCTGTCACC
CTGCCCCGGGGACAGCTGGCTGCCCCACTGACCAATGCCTCATCCCAGAGACATCCACCCTGCCTGTCCCAGAGA
CCACTGGCCGCCCCGCTGACCAAGGCCTCATCTCAGGGACATCTGCCCACTGAGCTGACCAAGACCCCATCCCTG
GCCCATCTGGACACCTGTCTGAGCAAGATGCATTCCCAGACACATCTGGCCACAGGTGCCGTGAAGGTCCAGTCC
CAAGCGCCTCTAGCCACCTGTCTGACCAAGACGCAGTCCCGGGGGCAGCCGATCACAGACATAACCACGTGCCTC
ATCCCAGCGCACCAGGCTGCTGATCTCAGCAGCAACACCCACTCCCAGGTGCTCCTAACAGGGTCCAAGGTGTCC
AACCACGCCTGCCAGCGCCTCGGTGGCCTCAGCGCCCCACCCTGGGCCAAGCCAGAGGACAGACAGACCCAGCCA
CAGCCCCACGGACACGTGCCGGGGAAGACCACTCAGGGGGGACCATGCCCGGCAGCCTGTGAGGTCCAGGGTATG
CTGGTGCCGCCGATGGCACCCACCGGCCATTCCACATGCAACGTTGAGTCCTGGGGAGACAACGGAGCCACACGT
GCCCAGCCATCAATGCCCGGCCAGGCGGTGCCCTGCCAGGAGGACACGGGCCCCGCGGACGCTGGTGTGGTTGGT
GGCCAATCGTGGAACCGCGCATGGGAGCCAGCCAGGGGTGCTGCGTCCTGGGACACCTGGCGCAACAAGGCGGTG
GTGCCTCCCAGGCGGTCCGGGGAGCCAATGGTGTCCATGCAGGCTGCAGAGGAGATCCGCATCCTCGCAGTGATC
ACTATCCAGGCGGGCGTCCGTGGCTACCTGGCGCGTCGCAGGATCCGGCTGTGGCACCGGGGGGCCATGGTCATC
CAAGCTACTTGGCGCGGCTACCGTGTGCGGCGGAACCTGGCACACCTCTGCAGAGCCACCACGACCATCCAGTCT
GCCTGGCGCGGCTACAGCACCCGCCGGGACCAAGCCCGGCACTGGCAGATGCTCCACCCCGTCACGTGGGTGGAG
CTGGGCAGCCGGGCCGGGGTCATGTCTGACCGAAGCTGGTTCCAGGATGGCAGAGCCAGGACAGTATCTGACCAT
CGCTGCTTCCAGTCCTGCCAGGCACACGCTTGCAGCGTCTGCCACTCCCTGAGCTCCAGGATCGGGAGCCCGCCC
AGCGTGGTGATGCTAGTGGGCTCCAGCCCTCGCACCTGTCATACCTGTGGACGCACACAGCCCACCCGTGTGGTG
CAGGGCATGGGCCAGGGCACTGAGGGCCCCGGGGCAGTGTCTTGGGCCTCCGCCTACCAGCTGGCTGCCCTGAGT
CCCAGGCAGCCGCATCGCCAGGACAAAGCGGCCACAGCCATCCAGTCCGCCTGGAGGGGCTTTAAGATCCGCCAG
CAGATGAGGCAGCAGCAAATGGCAGCGAAGATAGTTCAAGCCACCTGGCGAGGCCACCATACCCGGAGCTGTCTG

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FIGURE 3659B

AAGAACACAGAGGCGCTCTTGGGACCAGCAGACCCCTCGGCCAGCTCACGGCACATGCATTGGCCTGGCATC**TAG**

GACCCTGGCTCCCTGCAGTGGGGACTTCGTGGGAGGCACTCATGGCTCTCTGGGTCTAATGAATAAAGTCCTCCA
CAGCCT

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FIGURE 3660

ATGTGCCCAGAAGGATGTCAGTACACGGGGAGGGGCCACACGCTGAGGACCCCGCAGCTAGGCGAGGCAGGAGGC
CTCCACCAGCCTCCAGGCCTCTGCCCGCGCCGTTCCCTCCGCCTGGAATGCGCCTCCCGCCCCAACCCAACCCTG
TGTTTACTGCGACTTCCCTCCCTTCGGCCTGGCCCTGACCCCTCCGGGGCAGGGCGTGTCCGTGTCTGGCTGCTA
GCACCACCCTGCCCTCAGTCTGTCAGCGGGGAAATGGCTCAGTACCTGGAAAAGCCACGAGTATGTGGTCGGATG
CAGGCAAAACCCACACATCATGACACTGCCCTGAGAAGTGGGATAACGTCCCTCACCACTCGTGGAGCTGCTGCT
GAGATAAAGGTGAAAATGCAGAGTCCCGGACCAAGCCCTAGTGTTGCCCCAACCTCATCTGCAACTTTCATTGCC
TTGGGGACTTTCAGGATTAAGCGATTCCTGGACAAGAAACAAAAGCAAAATCGTCCCATTCCCCAGTGGATTTGG
ATGAAAACTGGAAATAAAATCAGGTACAACTCCAAAAGGACACTGGAGAAGAACCAAGCTGGGTCTATAAGGAAT
TGCACATGA

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FIGURE 3661

CAGCGGCGGCGGCGGAAGTGGCCGGCGAGCCCGGTCCCCGCCGGCACCATGCTTCCCTTGTCACTGCTGAAGACG
GCTCAGAATCACCCCATGTTGGTGGAGCTGAAAAATGGGGAGACGTACAATGGACACCTGGTGAGCTGCGACAAC
TGGATGAACATTAACCTGCGAGAAGTCATCTGCACGTCCAGGGACGGGGACAAGTTCTGGCGGATGCCCGAGTGC
TACATCCGCGGCAGCACCATCAAGTACCTGCGCATCCCCGACGAGATCATCGACATGGTCAAGGAGGAGGTGGTG
GCCAAGGGCCGCGGCCGCGGAGGCCTGCAGCAGCAGAAGCAGCAGAAAGGCCGCGGCATGGGCGGCGCTGGCCGA
GGTGTGTTTGGTGGCCGGGGCCGAGGTGGGATCCCGGGCACAGGCAGAGGCCAGCCAGAGAAGAAGCCTGGCAGA
CAGGCGGGCAAACAGTGAGCGCCCACCCAGACCGGCTGCTGCGCCCCCTCCTGCCAGGGTGGCGATTCCGCTCCA
CAGTCTCGGACGGATCTGCTCAGAAAGGAAGAGGCAGGCGCCAGGGGGAACCCCCTTCGTGTTTTGTGACCCTCC
CTTTTAGGTGAAGCCCCTTTTTCTTGCTAAAACCGGCAATTCTCCGGTTAGAAATGTTACTTGGTGTTTTTTGGT
TTTGTGAAACGGCCGTCCCAAAACTGGCTGGATTCCTAGAAGAGTCTGTGTTGAAGGCATCTTTCAAGCCCTCGC
TCTGGTTCTCAGGGCAGCATTTTCCAGGCGGGTTTGTTTTGCATTTCTTGGAGCCTCTCCGAGCAGCAACCAGAC
GGGAGATTTTTATTTTAAGCTGTTCATGCTGGGACTGACAGCCTGCAGGGTTTCCTTGGGCGCGGCCCCAAAATT
GCCTTCAAAACAAACCCGGGACGGTTGAAAGCCTTCGAACCGTGCAGGGGATGCCTCGGGCCCTGGCCCTTCGCT
TCCTCTCTTGTGTTATGGAAATAAAAACAAATAAAACTACA

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FIGURE 3662

GCAACCTGCACAGCCATGCCCGGGCAAGAACTCAGGACGGTGAATGGCTCTCAGATGCTCCTGGTGTTGCTGGTG
CTCTCGTGGCTGCCGCATGGGGGCGCCCTGTCTCTGGCCGAGGCGAGCCGCGCAAGTTTCCCGGGACCCTCAGAG
TTGCACTCCGAAGACTCCAGATTCCGAGAGTTGCGGAAACGCTACGAGGACCTGCTAACCAGGCTGCGGGCCAAC
CAGAGCTGGGAAGATTCGAACACCGACCTCGTCCCGGCCCCTGCAGTCCGGATACTCACGCCAGAAGTGCGGCTG
GGATCCGGCGGCCACCTGCACCTGCGTATCTCTCGGGCCGCCCTTCCCGAGGGGCTCCCCGAGGCCTCCCGCCTT
CACCGGGCTCTGTTCCGGCTGTCCCCGACGGCGTCAAGGTCGTGGGACGTGACACGACCGCTGCGGCGTCAGCTC
AGCCTTGCAAGACCCCAGGCGCCCGCGCTGCACCTGCGACTGTCGCCGCCGCCGTCGCAGTCGGACCAACTGCTG
GCAGAATCTTCGTCCGCACGGCCCCAGCTGGAGTTGCACTTGCGGCCGCAAGCCGCCAGGGGGCGCCGCAGAGCG
CGTGCGCGCAACGGGGACCACTGTCCGCTCGGGCCCGGGCGTTGCTGCCGTCTGCACACGGTCCGCGCGTCGCTG
GAAGACCTGGGCTGGGCCGATTGGGTGCTGTCGCCACGGGAGGTGCAAGTGACCATGTGCATCGGCGCGTGCCCG
AGCCAGTTCCGGGCGGCAAACATGCACGCGCAGATCAAGACGAGCCTGCACCGCCTGAAGCCCGACACGGTGCCA
GCGCCCTGCTGCGTGCCCGCCAGCTACAATCCCATGGTGCTCATTCAAAAGACCGACACCGGGGTGTCGCTCCAG
ACCTATGATGACTTGTTAGCCAAAGACTGCCACTGCATATGAGCAGTCCTGGTCCTTCCACTGTGCACCTGCGCG
GAGGACGCGACCTCAGTTGTCCTGCCCTGTGGAATGGGCTCAAGGTTCCTGAGACACCCGATTCCTGCCCAAACA
GCTGTATTTATATAAGTCTGTTATTTATTATTAATTTATTGGGGTGACCTTCTTGGGGACTCGGGGGCTGGTCTG
ATGGAACTGTGTATTTATTTAAAACTCTGGTGATAAAAATAAAGCTGTCTGAACTGTT

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FIGURE 3663

GAGGAAAAAAAGCCACCCTGCGGCCGGGGCCGGAGCTGGAGCCGCCGCTGCCGCCGCCGCCGCGGCCGTCTGGAG
CTCCCCCGCGCGGACGATGCCTGCCGTGCCCGCCTGGGGCTCGGGGCGGTGAGGCCCGGGGCGCGGGGTAGCTAT
GGCGACGGCAAGCGCGGCCCGCGGCGCCGCCTGACAGGTGTGGGCCCCGGCGGCGGCGGCGTGGAGCAGC**ATG**TA
CGCCAAGGGGGGCAAGGGTTCGGCCGTGCCCTCCGACAGCCAGGCCCGCGAGAAGTTGGCGCTGTACGTTTATGA
GTACCTGCTGCACATCGGTGCCCAGAAGTCAGCCCAGACCTTCCTGTCTGAGATCCGATGGGAGAAGAACATCAC
GCTGGGGGAGCCCCCTGGGTTCCTGCACTCCTGGTGGTGCGTCTTCTGGGACCTGTACTGCGCGGCGCCTGACAG
AAGAGAGGCCTGCGAGCACTCCGGCGAGGCCAAGGCCTTCCAGGACTATAGTGCTGCAGCCGCCCCCAGCCCCGT
TATGGGGAGTATGGCCCCAGGTGACACAATGGCCGCAGGCTCCATGGCGGCTGGCTTCTTCCAGGGCCCCCCCGG
CTCCCAGCCGTCCCCCCACAACCCCAACGCCCCCATGATGGGGCCTCACGGTCAGCCCTTCATGTCACCGCGCTT
CCCAGGGGGCCCCCGGCCCACCCTGCGGATGCCGAGTCAGCCTCCCGCAGGCCTCCCTGGCTCCCAGCCCCTCCT
CCCTGGCGCCATGGAGCCCTCCCCACGAGCCCAGGGGCATCCGAGCATGGGCGGCCCAATGCAGAGGGTGACGCC
TCCTCGTGGCATGGCCAGCGTGGGGCCCCAGAGCTATGGAGGTGGCATGCGACCCCCACCCAACTCCCTCGCCGG
CCCAGGCCTGCCTGCCATGAACATGGGCCCAGGAGTTCGTGGCCCGTGGGCCAGCCCCAGTGGAAACTCGATCCC
CTACTCCTCCTCATCCCCCGGCAGCTACACCGGACCCCCAGGAGGAGGTGGGCCCCCTGGAACACCCATCATGCC
TAGCCCTGGAGATTCCACCAACTCCAGCGAAAACATGTACACTATCATGAACCCCATCGGGCAGGGCGCCGGCAG
GGCTAATTTCCCGCTCGGCCCTGGCCCGGAGGGCCCCATGGCCGCCATGAGCGCGATGGAGCCTCACCACGTGAA
CGGATCCCTGGGCTCGGGCGACATGGACGGGTTGCCGAAGAGTTCCCCCGGCGCCGTGGCCGGCCTGAGCAACGC
CCCGGGCACCCCGCGGGACGACGGCGAGATGGCGGCCGCCGGGACCTTCCTGCACCCGTTCCCGAGCGAAAGCTA
CTCGCCAGGGATGACCATGAGCGTG**TGA**TGGGGCGGCAGCCCCGGGCCTCTCTGCGGGCCTAGGCTTCTGCCCAG
CGCCCCTGCTCAGGGCGAGGGGCTGAGGTCACACCTCGGGCACCTGGACTCCTGGCCAATCAAGGCTTGCCCAGC
TGGGAGGCCCCACACGAAAGACTCTTACCATTTTATTAAAAACGCAAGGACCTCAGAGACGTTCTTTTCTGTATG
GACCCTTCCTGCCATTTGTATTTTGTCCCAGAGAGAAAGGCTCTTTGGGGGGCCCCTCTCCCCAGGACGTCAGGG
GGTGGGGCCCATAAATAAATGGAAGCTGGTTTTGGTTTTTGGT

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FIGURE 3664

GACTTTGTCCCCCGAGATGGATGGGGGCGGACATGGGGAGCCAGGGGATGGGACTGCCTGGTAGGTGCTGCTGCC
CACGAAGGGGGAGTAGGTGGCAGTGTGGCTCCGAGGAGATTCTGGCTTTGGAGTTCTGGTCCTCTGCCTGTTTCC
CCTGCAGTGTCTCTGACCCAGACCCCCTACCTACCCCCCCCGGAGGCCCAGCTTCCCTGCCCAGCTCCACCCCCTG
GCTTGTGGCTGGGCTCATGTGTAGCCTCATTGTCCTCTTGTAAAGGGGGGATAGGCAGCCATGAGCCCCTGGGGG
CTGCGGAGCGAGCGAGGTGAACCTATACGCGCCGCGCTCGTGGACGCCTGGCCACTTCCGCCAGGCGGGGACCCG
ATGGCCACGGTGGCTCTGGGTTGTCGGGCCTCGAACCGGGTCTCCAGACGTTGGGCCCCTCCCTCCCAGCGCGGG
AGAGGCGGGGAAGGGGGCGGGGCGGGGGAGGGGCCGCAGCGCTTTTCTCCGGAGGTCGCGCGCCCGAGAGCCCGC
GCTGTCCGCCGCCGCTGCCTGAGTCGACTCTGCGCCGCCCGCCGCGATGGAGGCCGCCGCCCAGTTCTTCGTCGA
GAGCCCGGACGTGGTCTACGGCCCCGAGGCCATCGAGGCGCAATACGAGTACCGGACGACGCGCGTCAGCCGCGA
GGGTGGCGTTCTCAAGGTGCACCCCACGTCCACGCGCTTCACCTTCCGGACCGCCCGGCAGGTGCCCCGGCTCGG
GGTCATGCTTGTCGGCTGGGGCGGGAACAACGGCTCCACACTCACCGCCGCGGTGCTGGCCAATCGACTGCGTTT
GTCCTGGCCCACGCGCAGCGGCCGCAAGGAGGCCAACTACTACGGCTCGCTGACTCAGGCGGGCACCGTGAGCCT
GGGCCTGGACGCCGAGGGCCAGGAGGTGTTCGTACCCTTCAGCGCGGTGCTGCCCATGGTGGCGCCCAACGACCT
CGTGTTCGATGGCTGGGACATCTCGTCGCTGAACCTGGCCGAGGCGATGCGGCGCGCGAAGGTGCTGGACTGGGG
GCTGCAGGAGCAACTGTGGCCGCACATGGAGGCCCTGCGGCCCCGGCCTTCTGTTTACATCCCCGAATTCATCGC
GGCCAACCAGAGCGCGCGCGCGGACAACCTCATCCCAGGCTCGCGTGCGCAGCAGCTGGAGCAGATCCGCAGGGA
CATCCGAGACTTCCGGTCTAGCGCGGGGCTGGACAAAGTCATAGTGCTGTGGACGGCGAACACGGAGCGCTTCTG
TGAGGTGATTCCAGGCCTCAACGACACAGCCGAGAACCTGCTGCGCACCATTGAGCTCGGTCTGGAGGTGTCGCC
CTCCACGCTCTTCGCCGTGGCCAGCATCCTGGAGGGCTGTGCCTTCCTCAATGGGTCTCCGCAGAACACCCTGGT
GCCCGGAGCTCTTGAGCTCGCGTGGCAGCACCGGGTTTTTGTGGGCGGAGATGACTTCAAGTCAGGCCAGACCAA
AGTCAAGTCCGTGCTTGTGGACTTCCTCATTGGCTCCGGCCTCAAGACCATGTCCATCGTGAGTTACAACCACCT
GGGCAACAACGATGGGGAGAACCTATCGGCGCCATTGCAGTTCCGCTCTAAGGAGGTGTCCAAGAGCAACGTGGT
GGACGACATGGTGCAGAGCAACCCAGTGCTCTATACGCCCGGCGAAGAGCCTGACCACTGCGTGGTCATCAAGTA
TGTGCCGTACGTGGGTGACAGCAAGCGCGCGCTGGATGAGTATACCTCGGAGCTGATGCTGGGCGGAACCAACAC
ACTGGTGCTGCACAACACGTGTGAGGACTCGCTGCTGGCCGCACCCATCATGCTGGACCTAGCGCTGCTGACCGA
GCTGTGCCAGCGCGTGAGCTTCTGCACTGACATGGACCCCGAGCCGCAGACCTTCCACCCCGTGCTGTCCCTGCT
CAGCTTCCTCTTCAAGGCGCCACTAGTGCCGCCCGGCAGCCCGGTGGTCAATGCGCTTTTCCGCCAGCGCAGCTG
CATCGAGAACATCCTCAGGGCCTGCGTGGGGCTCCCGCCACAGAACCACATGCTCCTGGAACACAAAATGGAGCG
CCCAGGGCCCAGCCTCAAGCGAGTTGGACCCGTGGCTGCCACCTACCCTATGTTGAACAAGAAAGGACCGGTACC
CGCTGCCACCAATGGCTGCACCGGTGATGCCAATGGGCATCTGCAAGAGGAGCCCCCAATGCCCACCACCTGAGG
CCCCGGTCACACAGTTTCTCGGCTCTTCCTCCCCGCTGCCCCCCACGACCCTACCTTGAAGGCCCCCACAAATAA
AGGCGCTGCCACTCAGCCCTCCTTCCACCTGGGGTTCTTGGGGCCTGTGACCTGA

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FIGURE 3665

GATGGTCGCAAGATGGCGGCGCTGAAGGAGGATAGGAGCTACGGGCTGTCGTGCGGGCGGGTTAGCGACGGCAGC
AAGGTGTCGGTGTTCCACGTGAAGCTCACCGACAGTGCCCTGAGGGCCTTCGAGAGCTACCGCGCCAGACAGGAT
TCTGTTTCACTGAGGCCATCTATCCGATTTCAAGGAAGCCAAGGGCACATCTCCATCCCCCAGCCTGACTGCCCC
GCAGAGGCGCGGACGTTCTCCTTCTACCTCTCCAACATCGGCCGCGACAACCCCCAGGGCAGCTTCGACTGCATC
CAGCAGTATGTCTCCAGTCATGGGGAAGTTCACCTGGACTGCCTGGGCAGCATACAGGACAAGATCACGGTGTGT
GCCACCGACGACTCCTACCAGAAGGCGCGGCAGAGCATGGCCCAGGCGGAGGAGGAGACGCGGAGCCGAAGTGCC
ATTGTCATCAAGGCTGGAGGCCGCTACCTGGGCAAGAAGGTTCAGTTTCGGAAACCAGCCCCAGGTGCAACAGAC
GCGGTGCCCTCCCGGAAGCGGGCAACCCCCATCAACTTGGCGAGTGCCATCAGGAAGAGTGGTGCCAGTGCCGTG
AGTGGGGGCAGCGGGGTGTCCCAGAGGCCCTTCCGTGACCGAGTGCTGCACCTCCTGGCACTACGGCCCTACCGC
AAGGCTGAGCTGCTGCTGCGACTGCAGAAGGACGGCCTGACGCAGGCGGACAAGGACGCGCTGGATGGCCTCCTC
CAGCAGGTGGCCAACATGAGTGCTAAGGACGGCACGTGTACACTGCAGGACTGCATGTACAAGGATGTGCAGAAG
GACTGGCCTGGCTACTCGGAGGGGGACCAGCAGCTGCTGAAGCGGGTGCTCGTCCGGAAGCTGTGCCAGCCACAG
AGCACTGGCAGCCTCCTTGGAGACCCTGCTGCCTCCAGCCCCCCAGGCGAGCGTGGGCGCTCGGCCTCGCCCCCA
CAGAAGCGGCTGCAGCCTCCTGATTTCATCGACCCCCTAGCCAACAAGAAACCCCGGATATCGCACTTCACTCAG
AGAGCTCAGCCTGCCGTCAACGGGAAGCTGGGCGTGCCCAATGGCCGTGAGGCCTTGCTGCCCACCCCGGGCCCA
CCAGCCAGCACGGACACCCTCAGCTCCAGCACTCACCTGCCCCCGCGGCTGGAGCCCCCGAGGGCCCACGACCCC
CTGGCCGATGTCAGCAATGACCTGGGCCACAGCGGCCGAGACTGTGAGCACGGAGAGGCGGCTGCCCCAGCCCCC
ACTGTGCGCCTCGGCCTGCCCCTGCTGACGGACTGTGCCCAGCCCAGCAGGCCACACGGCAGCCCCTCGCGCAGC
AAGCCCAAGAAGAAGTCCAAGAAGCACAAAGACAAGGAGAGGGCGGCTGAGGACAAGCCCCGGGCCCAGCTTCCA
GACTGTGCACCTGCCACCCATGCCACCCCCGGAGCCCCAGCAGACACCCCAGGTTTAAACGGAACCTGCAGCGTT
TCCAGTGTTCCCACGTCCACGTCGGAGACGCCTGACTACTTGCTGAAGTACGCAGCCATCTCCTCTTCGGAGCAG
CGCCAGAGCTACAAGAACGACTTCAATGCCGAGTACAGCGAGTACCGCGACCTGCACGCCCGCATTGAGCGCATC
ACGCGGCGGTTCACCCAGCTCGACGCCCAGCTCCGGCAGCTCTCCCAGGGCTCCGAGGAGTATGAGACTACTCGA
GGGCAGATTTTGCAGGAATATCGAAAAATCAAAAAGACCAACACCAACTACAGCCAGGAGAAGCACCGCTGCGAG
TACCTGCACAGCAAGCTGGCCCACATCAAGAGGCTCATCGCCGAGTACGACCAGCGGCAGCTGCAGGCTTGGCCC
TAGCCGCCCTCCCCGATGGCGGGGATCTGGGAGGGTCGGGGGAGCAAAAGGCGGTGAGAGAGGATTTATTTAAAA
AAATAAACCCGAGGAAGATGCTCATCTGAGCCAGCACCGCCGGCTTTCAGGGCAGCCCCTGCAGACGTCTGGCCC
TGGCGGGTGGCTGCAAGCCCACCTCGGCCCTCCCTGCGCTTCCTGAGCAGTCCCTGCTTATGATGGGCTCCCCAG
GAAGCCCACTGCCTCCTCCCTGGCTGCAGCCTCCGGGGTTCAGCCTCCTGTCTCGCCAGAAGACTCCTAGGCCCT
TGGGGTGGCGCGCCTGCCTTTTCTAGTTTTATACAAAGACAGCCACTTTTAGCTACTGCTAATGAGACTTGAGTC
TATTTTTGTACAAAAGAGAAGCAAAATCTTTTTTCTAAACCTGTGCCTCCCTCTCCTCGGACACCCAGGGTCTAG
CCGCTGCCCTGGGTCCTGCCTGCAGTATTACAGAGGTCGTCGAAAGGTGCAGCTGCGTTCTGAGGGCGTGGGGAA
TGGGCAGGTGGCCTCTGCTGGTCTCTGGCTCTACGTTTAGGCACCCCTTTCCCCAGCCTCTCCTCCTTGGGCAGG
GTCTCTGCTCCAGCAAGCAAACAGGGTGGCCCAGGTGGCTATTTTGAGAACTCCAGCTGGTGCCCCCAGACAGCT
GCTCAGAGCCAAGGGGGCAGAGGGCTTTCAGCGCCCCCAGGCCTGCCCTGCTATTTCAGGCCCTCAGCTGTCGGG
GGCCACTGTGTTTCTGTGCTCCAAGTTGAGACTCGGCCGCAGCGGCGTCAGACTTTTCTTTGCGATGTCCTCGGT
TTCCCATTTGTTGCTGCTGCTGCTCATTCCACACTGTTGAGACCTTGTGGTCTCGATGCTGCTGGCCTCCCTCCG
TCCCTCTGTCCACTTGTGGGTCCTGGGGTC

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FIGURE 3666

GGGTGAGGAGGAAGAGGAGGAGGAAGAGGAGGAAGAGGATGACCTGAGTGAGCTGCCACCGCTGGAGGACATGGG
ACAACCCCCGGCGGAGGAGGCTGAGCAGCCTGGGGCCCTGGCCCGAGAGTTCCTTGCTGCCATGGAGCCCGAGCC
CGCCCCAGCCCCGGCCCCAGAAGAGTGGCTGGACATTCTGGGGAACGGGCTGTTGAGGAAGAAGACGCTGGTCCC
AGGGCCGCCAGGTTCGAGCCGCCCGGTCAAGGGCCAGGTGGTCACCGTACATCTGCAGACGTCGCTGGAGAATGG
CACACGGGTGCAGGAGGAGCCGGAGCTGGTGTTCACTCTGGGTGACTGTGACGTCATCCAGGCCCTGGATCTCAG
TGTCCCACTCATGGACGTGGGGGAGACGGCCATGGTCACTGCTGACTCCAAGTACTGCTACGGCCCCCAAGGCAG
CAGGAGCCCATACATCCCCCCGCACGCGGCCCTGTGCCTGGAGGTGACCCTGAAGACGGCTGTGGACGGGCCTGA
CCTGGAGATGCTCACGGGGCAGGAGCGCGTGGCCCTGGCCAACCGGAAGCGGGAGTGCGGCAACGCCCACTACCA
GCGGGCGGACTTCGTCCTGGCCGCCAACTCCTACGACCTCGCCATCAAGGCTATCACCTCCAGCGCCAAAGTGGA
CATGACGTTCGAGGAGGAGGCACAGCTCCTGCAGTTGAAGGTGAAGTGTCTGAACAACCTGGCGGCCTCGCAGCT
GAAGCTCGACCACTACCGCGCAGCCCTGCGCTCCTGCAGCCTTGTGCTGGAGCACCAGCCAGACAACATCAAGGC
TCTCTTCCGCAAGGGCAAGGTGCTGGCCCAGCAGGGGGAGTACAGTGAGGCCATCCCCATCCTGAGGGCAGCCCT
GAAGCTGGAACCTTCCAACAAGACGATCCACGCAGAGCTCTCAAAGCTGGTGAAGAAGCATGCGGCGCAGCGGAG
CACGGAGACCGCCTTGTACCGGAAAATGCTGGGCAACCCCAGCCGGCTGCCTGCTAAGTGCCCTGGCAAGGGTGC
CTGGTCCATCCCATGGAAGTGGCTGTTTGGGGCGACTGCTGTTGCCTTGGGGGGTGTGGCACTCTCTGTGGTCAT
CGCTGCCAGGAACTGACCACCTAGGTGGCTGCCACCCCCTCTGCACACCATGGACCCTGCCCTGCGCTCCCCAAC
TCCCCCAGGCTCCCTGTCCACTGCCCTCCCTGGTCTGGCCCCCTCCTCCGGGTTAGGGGAGCAAGGATTGGGGGT
CGTGCAGCCCAGCCAGCAGGAGGGACTGAGGCCCTCTAGGAGGAAAGCCCAGAGGGAGGGGGCCCTCATTCCTTC
AGACCCAGTTTTCCCCCACCCTCCTTACCCCGCTGGGCTAGGTCTCCGCCAGGGCTGGCCTCAGTTTCTCCTCAA
CAGGCCTGGGGGCAGCCCTTCCCCTGCCTAGTCCCCGCCTGAGTGCCAGCCCCCCACCCCGCCTGCCGCCCCCTG
TCCAGGTTCCCTCCCCGCCACAGTGAAATAAAGCATCCCACCCTGC

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FIGURE 3667

ACGCACGCAAGCGGCTCCAGGGTACGTCCCCGCCACGCGCGCTCGCAGGATCGGTGCGTGGTGACGTTTCGCCGG
CGCGGGCGCCATCCCGGAAGCGCGAGCAAGGCCGCCAGATGTGCAGGCAGCGGAGGAGGAGAAAGAGATGGACCT
CCCGGACTCGGCCTCGAGGGTCTTCTGCGGCCGCATCCTGAGCATGGTGAACACAGATGATGTCAACGCCATCAT
CCTGGCCCAGAAGAACATGCTGGACCGCTTTGAGAAGACCAATGAGATGCTGCTCAACTTCAACAACCTGTCCAG
TGCCCGCCTGCAGCAGATGAGCGAACGCTTCCTGCACCACACGAGGACCCTAGTAGAGATGAAACGGGACCTGGA
CAGCATCTTCCGCCGTATCAGGACGCTGAAAGGGAAACTGGCCAGGCAGCACCCAGAGGCCTTCAGCCATATCCC
AGAGGCATCCTTCCTGGAGGAAGAGGATGAAGACCCCATCCCACCCAGCACCACGACCACCATTGCCACCTCAGA
ACAGAGCACGGGCTCATGTGACACCAGCCCCGACACCGTCTCGCCCTCCCTGAGCCCCGGCTTCGAGGACCTGTC
CCATGTCCAGCCTGGCTCCCCAGCCATCAACGGCCGCAGCCAGACAGATGACGAGGAGATGACGGGCGAATAGCC
CTGCTGCCCGGTGCCTTGAGGGGGTCTCAGGGCAGCAGCATACAAGGTGGCAGCGGGTAACCCTGCCTTGTTCTG
TCATCCAGGGCTCCTTTGCTGCCCCGTTCTGTCACCCAGGGCTCCTAGGGGGACAAGGCTCTCTCCCGAGGGGTG
TGGAATTCCTGGGGGGGTCTTTAATTCTGGCTCCTTCCTTCCTCAGAACATCTCTATTCTGCAAGACCCCTCTGC
CATGCCAGGGCACGCCCATTCCAGCTGGAGTCGTGGGGCTGGGCACAGGGGAATTTTTCCAGAGCTGAGCCTGAC
GTCTGCTCTGAAGAATGCTTAGAAGGTTCCCAGACACCAGAGCCAGATGTCCCCCACCACCGGTCAGGACCTCCT
TGAGGTGCACAAGCACGGTCTCCTCTGAGTTCACCCCAGCCCACCCCCGCACCCACTAATTCTGCTTTTCCTGCC
CCTTGCTCCGTAAAAGTATCAAATACTTTCTCCTTGGTATCTCAAGGAGGTTTCTGAGATAGGTAGAAGTCTTGA
GACGGAGGCTGGCCATCCATTCAGCCCTGAGCGTGCTGAGTTCTGTGTTTCTCTGAATAGAGGTGTGGAACCTGA
GGGGCCAGCAGGCCTCTCTGAAGGCCTCCATGGAGCAAACGGAGCCACCTCGGGAAAGAGTTTAATGGAATATTT
TTGTACCCGATGTTTACAGATGCTGTTGGGAAGTTATCAATAAAAAGACACCATTACTAAAAAGGG

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FIGURE 3668

TTCTTTTTCTTCAGCGAGGCGGCCGAGCTGACGCAAACATGCAGATCTTTGTGAAGACCCTCACTGGCAAAACCA
TCACCCTTGAGGTCGAGCCCAGTGACACCATTGAGAATGTCAAAGCCAAAATTCAAGACAAGGAGGGTATCCCAC
CTGACCAGCAGCGTCTGATATTTGCCGGCAAACAGCTGGAGGATGGCCGCACTCTCTCAGACTACAACATCCAGA
AAGAGTCCACCCTGCACCTGGTGTTGCGCCTGCGAGGTGGCATTATTGAGCCTTCTCTCCGCCAGCTTGCCCAGA
AATACAACTGCGACAAGATGATCTGCCGCAAGTGCTATGCTCGCCTTCACCCTCGTGCTGTCAACTGCCGCAAGA
AGAAGTGTGGTCACACCAACAACCTGCGTCCCAAGAAGAAGGTCAAATAAGGTGGTTCTTTCCTTGAAGGGCAGC
CTCCTGCCCAGGCCCCGTGGCCCTGGAGCCTCAATAAAGTGTCCCTTTCATTGACTGGAGCAGCA

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FIGURE 3669

AGTC**ATG**ATCACCGAGACCGCGGCGGAGCCTACGGTCCCTGCAGTGCCTGCTGCTGAGGAGGCCACCGAAGCTCG
GGGACGCGAGGAGCCGGCGTGGCCCTGGAAAGACGCCCCGATCCGGACGCTGGTGCAGCGCATCCACCAGCTGCA
GGCTGAGCGCGCGCAGGGCTTCCGCCGACTGGAGGAGTGGTTGGCGCCGGTGCAGGGCCTGAGAGCCTGGGGGCG
CGGCCTCAGGGTCCCCACATGCCGCAGAGGCCACCGCCAGTACCTGCGCAGCGGCCCTGACTACGACTTCGCGCG
CTACCGGAGCACAGTGCACGGGGTGACCCAGGCCTTCGCCGCCGCCTCGCGGGAGGTGCTGGCGGTGGAAGCAGA
GCTGGGCGGGCCTCGCAGGCAGCCGCTGCTCGCCGGCCACGTGCGCAGCCTGCAGGAGCTGGAGCAGACGCGGCT
GGGCACGGTGGCCCTGCTGCAGTTGATGGAGACGCCAGAGCTGGCGGGGCAGGAGGACGCTGTACGGATGCAGCA
GCTGAAAATGAAGGTAATTAAAACCATGGAGGCGATCAGCGAGGTTCTCCAGGACCTTAGGTTTGATGCGGAATC
TGCCGAG**TGA**TGGCGGCTCCCCAGGGATGCGCCGAGGGAGATGGGAAACGGGGCGGATGGCGCCCAGCCCAGCCC
TAACTGCCAGCTGGCTGGGGTTGCGCCCCACTGCGCTGCTGACCTTCCTGCAGTTCCAGACACCTCCCACAATAA
AGAGCTCCTCCTCTGT

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FIGURE 3670

ATCCTCCGTGCCCGGCCTGAGCTGGAGTCCCCCGCGCCCCCCGCGTTCCGCCCGGCC**ATG**GCTGCGGTGGCGCTG
ATGCCACCGCCGCTGCTGCTGCTGCTGCTGTTGGCGTCGCCGCCCGCCGCCTCCGCGCCGTCCGCCCGCGATCCC
TTCGCCCCCCAGCTCGGGGACACGCAGAACTGCCAGCTGCGGTGCCGCGACCGCGACCTCGGCCCGCAGCCCTCG
CAGGCGGGGCTGGAGGGCGCCTCCGAGTCTCCCTATGACAGAGCCGTTCTGATCAGCGCTTGCGAGCGTGGCTGC
CGCCTCTTCTCCATCTGCCGATTTGTGGCCAGAAGCTCCAAGCCCAATGCCACCCAAACTGAGTGTGAAGCAGCC
TGCGTGGAAGCCTATGTGAAGGAGGCAGAGCAGCAGGCCTGTAGCCACGGCTGCTGGAGCCAGCCCGCGGAGCCT
GAGCCGGAGCAGAAGAGAAAGGTCCTGGAGGCTCCAAGTGGGGCCCTCTCCCTCTTGGACTTGTTTTCCACCCTC
TGCAATGACCTTGTCAACTCAGCCCAGGGATTTGTCTCCTCCACCTGGACATACTACTTGCAGACTGACAATGGG
AAAGTGGTGGTGTTTCAGACTCAGCCCATAGTGGAGAGCCTCGGCTTCCAGGGGGGCCGTCTGCAGCGCGTGGAG
GTGACCTGGCGAGGCTCCCACCCTGAAGCCCTGGAGGTGCACGTGGACCCTGTAGGCCCCCTGGACAAGGTGAGG
AAGGCCAAGATCCGAGTCAAGACCAGCAGCAAGGCCAAGGTGGAGTCTGAAGAGCCACAGGACAATGACTTCCTC
AGTTGCATGTCCCGGCGCTCGGGTCTGCCTCGCTGGATCCTGGCCTGCTGCCTCTTCCTCTCCGTGCTGGTGATG
CTGTGGCTGAGCTGCTCCACCCTGGTGACCGCGCCTGGCCAGCACCTCAAGTTCCAGCCTCTGACCCTGGAGCAG
CACAAGGGCTTCATGATGGAGCCCGATTGGCCCCTGTACCCGCCGCCGTCCCACGCCTGTGAGGACAGCCTACCA
CCCTACAAGCTGAAGCTGGACCTGACCAAGCTG**TAG**GCCTCCACTGGCCCCATCACTGCCAACTGCAGGGGGCCC
CTCGGGCCTCACTTGCCCTGAGCCCAGGAGTCCAAGGGCAGGGTGGGTCCAGCCTTGAGCCCCTCCACCCCCAAA
TCCTTCCTCTCCTCCCAGTCCCACCCCTTGCCCCACGGAGTCCTGGGGACGCAGTGCCCCAGCTGGGAAGAGGGC
GGGATCGGGCACTGGTTCCTCCTTGTCCCCGCTTTCTTGGGGGCTTGCTACTTTTTGTCTTCTATTGTGTGGCTT
TCTGAGTATTTGAACCCCAGTCCTGTGTCACCTTCCTTTTTCCTTCTATGTCCCCTCTCTGCGGGGGGGGCGCTG
AGGCTGAGGGGGAGCTGCGTCTTGCTAGGGCTTCCCCCTTCTCCCCATCCCGGTCTCCAGAGACCCAGCTTCTGA
GAGACAGGGTGTGGGCATCTCCATGCCCCTATAAAGCGTGCCTGGGGCTTGTCTGGGGCTGG

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FIGURE 3671

CAGCACGGCCGACAAGAACGGGGCCCTCAAGTGCACCTTCTCGGCACCCAGCCACAGCACCAGCCTCCTGCAGGG
CCTGGCCACCCTCCGCGCTCAGGGCCAGCTCCTCGATGTTGTGCTGACTATTAACAGAGAGGCCTTTCCTGCACA
CAAGGTCGTCCTGGCTGCCTGCAGCGACTACTTCAGGGCCATGTTCACCGGCGGCATGCGGGAGGCAAGCCAGGA
CGTCATCGAGCTGAAGGGCGTGTCGGCCCGTGGCCTGCGGCACATCATCGACTTCGCCTACAGCGCCGAGGTGAC
ACTGGACCTGGACTGCGTGCAGGACGTGCTGGGCGCGGCCGTGTTCTTGCAGATGCTGCCCGTGGTGGAGCTGTG
CGAGGAGTTCCTGAAGGCGGCCATGAGCGTGGAGACCTGCCTCAACATCGGCCAGATGGCCACCACCTTCAGCCT
GGCCTCGCTGCGAGAGTCGGTGGATGCCTTCACCTTCCGGCACTTCCTGCAGATCGCCGAGGAGGAGGATTTCCT
GCGCCTGCCACTGGAGCGCCTGGTCTTCTTCCTGCAGAGCAACCGGCTGCAGAGCTGTGCCGAGATCGACCTGTT
CCGCGCGGCCGTCCGCTGGCTGCAGCATGACCCGGCCCGGCGGCCGCGCGCCAGCCACGTGCTCTGCCACATTCG
CTTCCCGCTCATGCAGTCGTCCGAGCTGGTGGACAGCGTGCAGACGCTGGACATCATGGTGGAGGACGTGCTGTG
CCGCCAGTATCTGCTGGAGGCCTTCAACTACCAGGTGCTGCCCTTCCGGCAGCACGAGATGCAGTCTCCGCGCAC
CGCCGTGCGCTCGGATGTGCCCTCGCTCGTCACCTTCGGCGGCACGCCCTACACCGACAGCGACCGCTCGGTCAG
CAGCAAGGTCTACCAGCTGCCTGAGCCGGGAGCCCGCCACTTCCGCGAGCTCACGGAGATGGAGGTAGGCTGCAG
CCACACGTGCGTGGCCGTGCTGGACAATTTTGTGTACGTGGCCGGGGGGCAGCACCTGCAGTACCGCAGCGGCGA
GGGCGCAGTGGACGCCTGCTACCGCTACGACCCCCACCTGAATCGCTGGCTGCGCCTGCAGGCCATGCAGGAAAG
CCGCATCCAGTTCCAGCTGAACGTGCTGTGCGGCATGGTGTACGCCACGGGCGGCCGCAACCGAGCCGGCAGCCT
GGCCTCCGTGGAGCGGTACTGCCCCCGGCGCAATGAGTGGGGCTACGCCTGCTCGCTGAAGCGCCGTACCTGGGG
CCATGCTGGGGCCGCCTCAGGGGGCCGCCTCTACATCTCGGGTGGCTACGGGATCTCAGTGGAGGACAAGAAGGC
CCTGCACTGCTACGACCCCGTGGCCGACCAGTGGGAGTTCAAGGCGCCCATGAGCGAACCCCGCGTGCTACACGC
CATGGTGGGTGCCGGCGGCCGCATCTATGCCCTCGGGGGCCGCATGGACCACGTGGACCGCTGCTTCGACGTGCT
GGCTGTGGAGTACTATGTGCCGGAGACGGACCAGTGGACCAGCGTGAGCCCCATGCGGGCCGGCCAGTCAGAGGC
CGGCTGCTGCCTGCTGGAGAGGAAGATCTACATCGTCGGGGGCTACAACTGGCGTCTCAACAACGTCACGGGCAT
CGTACAGGTGTACAACACGGACACCGACGAGTGGGAGCGGGACCTGCACTTCCCGGAGTCCTTCGCAGGCATAGC
CTGCGCCCCCGTCCTGCTGCCCCGGGCCGGGACCAGGAGGTAGCCCCCAAGACCCCCGGGACCCTGGCCTGACCG
CATGTTGTCTCCAAGTGGGGCTTGGCGAATGCACGTCTGCCTGAGAACCCCAGTGCCCCCCTTCGCCCGGGCTGC
CCTTGAGGGGCCTGCTGCGTTGATAAGCCCCCCTCCCAGGGGTCCCTCCCTCCCTCCTTCCCAAAGCAGATCCTG
GCTGCGAGTCCATCCGAGGGAGCCTGCCGGCAAAGCGTCTGACATGTGGTGGCAGCAAATTCGTCCCCGGGGTGG
TTTCCTCGCCTGGCCCCCGAGTCCCCACGGGCTGGCGGGTGGAATCCCAGGTCTCCAGGGGGTCCCTGTGCAGCT
CCATCTCACTTCTCTACTGCCTCCCAGCCCCACGGTTTCAGGCATTCAGATGTGAGCTCATCAACATTGAACCCA
AAGTCGGTGGTATATGACTCACCCTCCTTCCAAGTCTCCTGCGCGCGTGTTTTTAAAATAAACTCACCCGAAACG
TCCGTAACACACGGACCTCCAGGAGCAGTGAGAGGTGGCTTAGAAGCCCCTGGTTTGGGGTGGGTGGAGGAGGAG
GGCACGTGTCTGCCTCCCCTGGGGTGCCCTCCTTCCCCCATCCCAAGCTGCTGAGGGGAGGCCCTGGTCATGCCT
CAGTTCCTGCCTTCATCTGCTTTCCGGAGGAAAAACCATATCAACTCCTAGAAACGCTCCTTAGGGGCTTGGGAC
CTTCCATTTGGCACTGAGCATCTTGTGGGGCCTTAACTGGCTGAGACATCCCGGCCCTCTACATTTGCCCTGTTG
GCCAGGCAGTCCCCTTCCCGCAATTGGAGGGCGACGCTAACTTCAGAATCCCATAGTGGCGCTTGCCGCAGGTCT
GGTGGGGTGTCTTTTTTCTCCTCCCTCCTTTCCACCCCTCCGCGCCCTGCCACTCCCTGGCCTGCCCTGTTTTTG
GGTCAACATTGCTACGGAGCCAGCAGTGAGGCCTTTCCCTTCAAGGGCTCTGTGGTATCTCTGGCCACATTTGTT
CTAATGTCTGAACCTCTAAATCTTTTCTTTTTGATTGGTTTTACTGTTTTTAAGAAGCCAGCACTGCTGTCTCAT
AGATGGGATTTGTACTCTTGGGGCAACTTAAAGTGTCTCTCTCGCTGCTAACAGACGATTGATGTCTTGTCTCTG
TGACCCACTCACCATGTAAAGAATTAACCTCCTATCTTAGCAGACATCGTCTCCTAATATTTCCCTTTATTTAAT
AAAAATGTTATGGTG

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FIGURE 3672

CCAGCCGGCGCTTGCGCGGTGGCACGGGCGAGTGGGGGGGCGAGGAGGTGGAGGAGGAGGAGGAGGAGGAGG
TGGCGGCGAGAAGATGGCGACTTCGAACAATCCGCGGAAATTCAGCGAGAAGATCGCGCTGCACAATCAGAAGCA
GGCGGAGGAGACGGCGGCCTTCGAGGAGGTCATGAAGGACCTGAGCCTGACGCGGGCCGCGCGGCTCCAGCTCCA
GAAATCCCAGTACCTGCAACTGGGCCCCAGCCGAGGCCAGTACTATGGCGGGTCCCTGCCCAACGTGAACCAGAT
CGGGAGTGGCACCATGGACCTGCCCTTCCAGACCCCCTTCCAATCCTCGGGCCTGGACACCAGCCGGACCACCCG
GCACCATGGGCTGGTGGACAGGGTGTACCGGGAGCGTGGCCGGCTCGGCTCCCCACACCGCCGGCCCCTGTCAGT
GGACAAACACGGACGGCAGGCCGACAGCTGCCCCTATGGCACCATGTACCTCTCACCACCCGCGGACACCAGCTG
GAGAAGGACCAATTCTGACTCCGCCCTGCACCAGAGCACAATGACGCCCACGCAGCCAGAATCCTTTAGCAGTGG
GTCCCAGGACGTGCACCAGAAAAGAGTCTTACTGTTAACAGTCCCAGGAATGGAAGAGACCACATCAGAGGCAGA
CAAAAACCTTTCCAAGCAAGCATGGGACACCAAGAAGACGGGGTCCAGGCCCAAGTCCTGTGAGGTCCCCGGAAT
CAACATCTTCCCGTCTGCCGACCAGGAAAACACTACAGCCCTGATCCCCGCCACCCACAACACAGGGGGGTCCCT
GCCCGACCTGACCAACATCCACTTCCCCTCCCCGCTCCCGACCCCGCTGGACCCCGAGGAGCCCACCTTCCCTGC
ACTGAGCAGCTCCAGCAGCACCGGCAACCTCGCGGCCAACCTGACGCACCTGGGCATCGGTGGCGCCGGCCAGGG
AATGAGCACACCTGGCTCCTCTCCACAGCACCGCCCAGCTGGCGTCAGCCCCCTGTCCCTGAGCACAGAGGCAAG
GCGTCAGCAGGCATCGCCCACCCTGTCCCCGCTGTCACCCATCACTCAGGCTGTAGCCATGGACGCCCTGTCTCT
GGAGCAGCAGCTGCCCTACGCCTTCTTCACCCAGGCGGGCTCCCAGCAGCCACCGCCGCAGCCCCAGCCCCCGCC
GCCTCCTCCACCCGCGTCCCAGCAGCCACCACCCCCGCCACCCCCACAGGCGCCCGTCCGCCTGCCCCCTGGTGG
CCCCCTGTTGCCCAGCGCCAGCCTGACTCGTGGGCCACAGCCGCCCCCGCTTGCAGTCACGGTACCGTCCTCTCT
CCCCCAGTCCCCCCCAGAGAACCCTGGCCAGCCATCGATGGGGATCGACATCGCCTCGGCGCCGGCTCTGCAGCA
GTACCGCACTAGCGCCGGCTCCCCGGCCAACCAGTCTCCCACCTCGCCAGTCTCCAATCAAGGCTTCTCCCCAGG
GAGCTCCCCGCAACTGGAGCAGTTCAACATGATGGAGAACGCCATCAGCTCCAGCAGCCTGTACAGCCCGGGCTC
CACACTCAACTACTCGCAGGCGGCCATGATGGGCCTCACGGGCAGCCACGGGAGCCTGCCGGACTCGCAGCAACT
GGGATACGCCAGCCACAGTGGCATCCCCAACATCATCCTCACAGTGACAGGAGAGTCCCCCCCCAGCCTCTCTAA
AGAACTGACCAGCCACCGAGGACACCTTCCGGATGGACCGCCTGTGAGCGGGCACGCCGGCACCCTGCCGCTCAG
CCGTCCCGACGGCGCCTCCCCAGCCCGGGGACGGCCGTGCTCCGTCCCTCGCCAACGGCCGAGCTTGTGATTCTG
AGCTTGCAATGCCGCCAAGCGCCCCCCGCCAGCCCGCCCCCGGTTGTCCACCTCCCGCGAAGCCCAATCGCGAGG
CCGCGAGCCGGGCCGTCCACCCACCCGCCCGCCCAGGGCTGGGCTGGGATCGGAGGCCGTGAGCCTCCCGCCCCT
GCAGACCCTCCCTGCACTGGCTCCCTCGCCCCCAGCCCCGGGGCCTGAGCCGTCCCCTGTAAGATGCGGGAAGTG
TCAGCTCCCGGCGTGGCGGGCAGGCTCAGGGGAGGGGCGCGCATGGTCCGCCAGGGCTGTGGGCCGTGGCGCATT
TTCCGACTGTTTGTCCAGCTCTCACTGCCTTCCTTGGTTCCCGGTCCCCCAGCCCATCCGCCATCCCCAGCCCGT
GGTCAGGTAGAGAGTGAGCCCCACGCCGCCCCAGGGAGGAGGCGCCAGAGCGCGGGGCAGACGCAAAGTGAAATA
AACACTATTTTGACGGC

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FIGURE 3673

CACCCAGCTCCCCGCCACCGCC**ATG**GTCCCCGACACCGCCTGCGTTCTTCTGCTCACCCTGGCTGCCCTCGGCGC
GTCCGGACAGGGCCAGAGCCCGTTGGGCTCAGACCTGGGCCCGCAGATGCTTCGGGAACTGCAGGAAACCAACGC
GGCGCTGCAGGACGTGCGGGAGCTGCTGCGGCAGCAGGTCAGGGAGATCACGTTCCTGAAAAACACGGTGATGGA
GTGTGACGCGTGCGGGATGCAGCAGTCAGTACGCACCGGCCTACCCAGCGTGCGGCCCCTGCTCCACTGCGCGCC
CGGCTTCTGCTTCCCCGGCGTGGCCTGCATCCAGACGGAGAGCGGCGCGCGCTGCGGCCCCTGCCCCGCGGGCTT
CACGGGCAACGGCTCGCACTGCACCGACGTCAACGAGTGCAACGCCCACCCCTGCTTCCCCCGAGTCCGCTGTAT
CAACACCAGCCCGGGGTTCCGCTGCGAGGCTTGCCCGCCGGGGTACAGCGGCCCCACCCACCAGGGCGTGGGGCT
GGCTTTCGCCAAGGCCAACAAGCAGGTTTGCACGGACATCAACGAGTGTGAGACCGGGCAACATAACTGCGTCCC
CAACTCCGTGTGCATCAACACCCGGGGCTCCTTCCAGTGCGGCCCGTGCCAGCCCGGCTTCGTGGGCGACCAGGC
GTCCGGCTGCCAGCGGCGCGCACAGCGCTTCTGCCCCGACGGCTCGCCCAGCGAGTGCCACGAGCATGCAGACTG
CGTCCTAGAGCGCGATGGCTCGCGGTCGTGCGTGGCTGGGCCGGCAACGGGATCCTCTGTGGTCGCGACACTGAC
C**TAG**ACGGCTTCCCGGACGAGAAGCTGCGCTGCCCGGAGCGCCAGTGCCGTAAGGACAACTGCGTGACTGTGCCC
AACTCAGGGCAGGAGGATGTGGACCGCGATGGCATCGGAGACGCCTGCGATCCGGATGCCGACGGGGACGGGGTC
CCCAATGAAAAGGACAACTGCCCGCTGGTGCGGAACCCAGACCAGCGCAACACGGACGAGGACAAGTGGGGCGAT
GCGTGCGACAACTGCCGGTCCCAGAAGAACGACGACCAAAAGGACACAGACCAGGACGGCCGGGGCGATGCGTGC
GACGACGACATCGACGGCGACCGGATCCGCAACCAGGCCGACAACTGCCCTAGGGTACCCAACTCAGACCAGAAG
GACAGTGATGGCGATGGTATAGGGGATGCCTGTGACAACTGTCCCCAGAAGAGCAACCCGGATCAGGCGGATGTG
GACCACGACTTTGTGGGAGATGCTTGTGACAGCGATCAAGACCAGGATGGAGACGGACATCAGGACTCTCGGGAC
AACTGTCCCACGGTGCCTAACAGTGCCCAGGAGGACTCAGACCACGATGGCCAGGGTGATGCCTGCGACGACGAC
GACGACAATGACGGAGTCCCTGACAGTCGGGACAACTGCCGCCTGGTGCCTAACCCCGGCCAGGAGGACGCGGAC
AGGGACGGCGTGGGCGACGTGTGCCAGGACGACTTTGATGCAGACAAGGTGGTAGACAAGATCGACGTGTGTCCG
GAGAACGCTGAAGTCACGCTCACCGACTTCAGGGCCTTCCAGACAGTCGTGCTGGACCCGGAGGGTGACGCGCAG
ATTGACCCCAACTGGGTGGTGCTCAACCAGGGAAGGGAGATCGTGCAGACAATGAACAGCGACCCAGGCCTGGCT
GTGGGTTACACTGCCTTCAATGGCGTGGACTTCGAGGGCACGTTCCATGTGAACACGGTCACGGATGACGACTAT
GCGGGCTTCATCTTTGGCTACCAGGACAGCTCCAGCTTCTACGTGGTCATGTGGAAGCAGATGGAGCAAACGTAT
TGGCAGGCGAACCCCTTCCGTGCTGTGGCCGAGCCTGGCATCCAACTCAAGGCTGTGAAGTCTTCCACAGGCCCC
GGGGAACAGCTGCGGAACGCTCTGTGGCATACAGGAGACACAGAGTCCCAGGTGCGGCTGCTGTGGAAGGACCCG
CGAAACGTGGGTTGGAAGGACAAGAAGTCCTATCGTTGGTTCCTGCAGCACCGGCCCCAAGTGGGCTACATCAGG
GTGCGATTCTATGAGGGCCCTGAGCTGGTGGCCGACAGCAACGTGGTCTTGGACACAACCATGCGGGGTGGCCGC
CTGGGGGTCTTCTGCTTCTCCCAGGAGAACATCATCTGGGCCAACCTGCGTTACCGCTGCAATGACACCATCCCA
GAGGACTATGAGACCCATCAGCTGCGGCAAGCCTAGGGACCAGGGTGAGGACCCGCCGGATGACAGCCACCCTCA
CCGCGGCTGGATGGGGGCTCTGCACCCAGCCCCAAGGGGTGGCCGTCCTGAGGGGGAAGTGAGAAGGGCTCAGAG
AGGACAAAATAAAGTGTGTGTGCAGGG

FIGURE 3674A

AGCGGCTGGCGGCTTCGAGGGGAGCTGAGGCGCGGAGGGGCTCGGCGGCAGCGGCGGCGGCTCGGCACTGTTACC
TCTCGGTCCGGCTGGCGCCGGGGCGCGCGGTTTGGTCCTTTCCGGGCGCGCGGGGGCGACAGCGGCAGCGACCCG
AGGCCTGCGGCCTAGGCCTCAGCGCGGCGGCGGGCTCGAGTGCAGCGCGGAACCGGCCCGAGGGCCCTACCCGGA
GGCACC**ATG**AGCGTGGAGGCGTACGGGCCCAGCTCGCAGACTCTCACTTTCCTGGACACGGAGGAGGCCGAGCTG
CTTGGCGCCGACACACAGGGCTCCGAGTTCGAGTTCACCGACTTTACTCTTCCTAGCCAGACGCAGACGCCCCCC
GGCGGCCCCGGCGGCCCGGGCGGTGGCGGCGCGGGAGGCCCGGGCGGCGCGGGCGCGGGCGCTGCGGCGGGACAG
CTCGACGCGCAGGTTGGGCCCGAAGGCATCCTGCAGAACGGGGCTGTGGACGACAGTGTAGCCAAGACCAGCCAG
TTGTTGGCTGAGTTGAACTTCGAGGAAGATGAAGAAGACACCTATTACACGAAGGACCTCCCCATACACGCCTGC
AGTTACTGTGGAATACACGATCCTGCCTGCGTGGTTTACTGTAATACCAGCAAGAAGTGGTTCTGCAACGGACGT
GGAAATACTTCTGGCAGCCACATTGTAAATCACCTTGTGAGGGCAAAATGCAAAGAGGTGACCCTGCACAAGGAC
GGGCCCCTGGGGGAGACAGTCCTGGAGTGCTACAACTGCGGCTGTCGCAACGTCTTCCTCCTCGGCTTCATCCCG
GCCAAAGCTGACTCAGTGGTGGTGCTGCTGTGCAGGCAGCCCTGTGCCAGCCAGAGCAGCCTCAAGGACATCAAC
TGGGACAGCTCGCAGTGGCAGCCGCTGATCCAGGACCGCTGCTTCCTGTCCTGGCTGGTCAAGATCCCCTCCGAG
CAGGAGCAGCTGCGGGCACGCCAGATCACGGCACAGCAGATCAACAAGCTGGAGGAGCTGTGGAAGGAAAACCCT
TCTGCCACGCTGGAGGACCTGGAGAAGCCGGGGGTGGACGAGGAGCCGCAGCATGTCCTCCTGCGGTACGAGGAC
GCCTACCAGTACCAGAACATATTCGGGCCCCTGGTCAAGCTGGAGGCCGACTACGACAAGAAGCTGAAGGAGTCC
CAGACTCAAGATAACATCACTGTCAGGTGGGACCTGGGCCTTAACAAGAAGAGAATCGCCTACTTCACTTTGCCC
AAGACTGACTCTGGTAATGAGGATTTAGTCATAATTTGGTTAAGAGACATGCGGCTCATGCAGGGGGATGAGATA
TGCCTGCGGTACAAAGGGGACCTTGCGCCCCTGTGGAAAGGGATCGGCCACGTCATCAAGGTCCCTGATAATTAT
GGCGATGAGATCGCCATTGAGCTGCGGAGCAGCGTGGGTGCACCTGTGGAGGTGACTCACAACTTCCAGGTGGAT
TTTGTGTGGAAGTCGACCTCCTTTGACAGGATGCAGAGCGCATTGAAAACGTTTGCCGTGGATGAGACCTCGGTG
TCTGGCTACATCTACCACAAGCTGTTGGGCCACGAGGTGGAGGACGTAATCATCAAGTGCCAGCTGCCCAAGCGC
TTCACGGCGCAGGGCCTCCCCGACCTCAACCACTCCCAGGTTTATGCCGTGAAGACTGTGCTGCAAAGACCACTG
AGCCTGATCCAGGGCCCGCCAGGCACGGGGAAGACGGTGACGTCGGCCACCATCGTCTACCACCTGGCCCGGCAA
GGCAACGGGCCGGTGCTGGTGTGTGCTCCGAGCAACATCGCCGTGGACCAGCTAACGGAGAAGATCCACCAGACG
GGGCTAAAGGTCGTGCGCCTCTGCGCCAAGAGCCGTGAGGCCATCGACTCCCCGGTGTCTTTTCTGGCCCTGCAC
AACCAGATCAGGAACATGGACAGCATGCCTGAGCTGCAGAAGCTGCAGCAGCTGAAAGACGAGACTGGGGAGCTG
TCGTCTGCCGACGAGAAGCGGTACCGGGCCTTGAAGCGCACCGCAGAGAGAGAGCTGCTGATGAACGCAGATGTC
ATCTGCTGCACATGTGTGGGCGCCGGTGACCCGAGGCTGGCCAAGATGCAGTTCCGCTCCATTTTAATCGACGAA
AGCACCCAGGCCACCGAGCCGGAGTGCATGGTTCCCGTGGTCCTCGGGGCCAAGCAGCTGATCCTTGTAGGCGAC
CACTGCCAGCTGGGCCCAGTGGTGATGTGCAAGAAGGCGGCCAAGGCCGGGCTGTCACAGTCGCTCTTCGAGCGC
CTGGTGGTGCTGGGCATCCGGCCCATCCGCCTGCAGGTCCAGTACCGGATGCACCCTGCACTCAGCGCCTTCCCA
TCCAACATCTTCTACGAGGGCTCCCTCCAGAATGGTGTCACTGCAGCGGATCGTGTGAAGAAGGGATTTGACTTC
CAGTGGCCCCAACCCGATAAACCGATGTTCTTCTACGTGACCCAGGGCCAAGAGGAGATTGCCAGCTCGGGCACC
TCCTACCTGAACAGGACCGAGGCTGCGAACGTGGAGAAGATCACCACGAAGTTGCTGAAGGCAGGCGCCAAGCCG
GACCAGATTGGCATCATCACGCCCTACGAGGGCCAGCGCTCCTACCTGGTGCAGTACATGCAGTTCAGCGGCTCC
CTGCACACCAAGCTCTACCAGGAGGTGGAGATCGCCAGTGTGGACGCCTTTCAGGGACGCGAGAAGGACTTCATC
ATCCTGTCCTGTGTGCGGGCCAACGAGCACCAAGGCATTGGCTTTTTAAATGACCCCAGGCGTCTGAACGTGGCC
CTGACCAGAGCAAGGTATGGCGTCATCATTGTGGGCAACCCGAAGGCACTATCAAAGCAGCCGCTCTGGAACCAC
CTGCTGAACTACTATAAGGAGCAGAAGGTGCTGGTGGAGGGGCCGCTCAACAACCTGCGTGAGAGCCTCATGCAG
TTCAGCAAGCCACGGAAGCTGGTCAACACTATCAACCCGGGAGCCCGCTTCATGACCACAGCCATGTATGATGCC
CGGGAGGCCATCATCCCAGGCTCCGTCTATGATCGGAGCAGCCAGGGCCGGCCTTCCAGCATGTACTTCCAGACC
CATGACCAGATTGGCATGATCAGTGCCGGCCCTAGCCACGTGGCTGCCATGAACATTCCCATCCCCTTCAACCTG
GTCATGCCACCCATGCCACCGCCTGGCTATTTTGGACAAGCCAACGGGCCTGCTGCAGGGCGAGGCACCCCGAAA
GGCAAGACTGGTCGTGGGGGACGCCAGAAGAACCGCTTTGGGCTTCCTGGACCCAGCCAGACTAACCTCCCCAAC
AGCCAAGCCAGCCAGGATGTGGCGTCACAGCCCTTCTCTCAGGGCGCCCTGACGCAGGGCTACATCTCCATGAGC
CAGCCTTCCCAGATGAGCCAGCCCGGCCTCTCCCAGCCGGAGCTGTCCCAGGACAGTTACCTTGGTGACGAGTTT
AAATCACAAATCGACGTGGCGCTCTCACAGGACTCCACGTACCAGGGAGAGCGGGCTTACCAGCATGGCGGGGTG

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FIGURE 3674B

ACGGGGCTGTCCCAGTATTAAAAGGTGGCGGCGGAAGAGCTAAGCAACGTGGCTTAGTCCATCAGCATCTTATTC
TGGGTAATAAAAAATAAAAATAAACGGATACCTGTTTTCCACTGCTAAAACTGAAGCACCACTGTGTGAGCAACA
GGAAGGGAGAGCGCACGAGGGAGAGGAGCCGAGGCCGAGCGCCCCCTGCTGGCCCGCGGCGGCGAGGAGCAGAGG
GAGCGGAGGAGGGGCCGGCCCGCGGGAGCCGCGGCCACCAGGAGGCCCCGCTCCGTCCCATCGGGGCTGCGGCCA
GGGCGGAGGGAGGAAGACCCTCATCTCAGAGTAGCCCTTTCCTCTGTTCTTTTATTTCTTTTTCTCTTTGATTGA
AAGGGGACTACGTCTTAGCAGGAAAAAAAACTTCGCATTTCTGTGCCCGAGCAGGCTCCTTGCAAAGACAGCAGC
GTGCGGGGCAGAGCCCCGGGAGGGCGCGTCTGTCCACGCCTACCGGACGCGCCGAGGTCGCGCTGCCTGTGTTCT
CCGAGGGCCTTCATTTAAAGAAAATAAGGGTGTTTTGGGTTTTTCTCTTTGTTTTTTTCAAGATTCTTTTAAAGG
AGTACTGAAGAATACTTTCCTAAGTTTGTCTGTAAAATCTTAGCGGTGGACCTGGGAGATTTGAGAAGCTTCCAG
AAACAGTTTAAACAAGCCAGCGCTACTGGAGAAGAGGAGCAACACCTGTGCCGCGGCCGGAGGAGTTTTGTTGTT
GGTTTTAGCTTCCAGTGGCTTCTTTCTGCGGGGCATCAGGCTGCTGGGGTAGCCGCCCGCCGAGCCTGGAAGCTG
CTCGTTCTCCGCTGGACTCAGAAGCCAAGCTGCTTCCCGCCTAGACTCGGCGCAGGGCCCCGCACCGGTGAGGAA
GGTGCTTTTGGCCCCATTGCGAGGGGCCTTGGCCAGGACTGGCCCTGTGGCCAGGAGGCGAGAAGGTGGCTGTTC
CCGGATTGACGGCTTTTTCCCGGGGGCCTTTGGAAGATTTGGTGGAAGGACAAGAGGGCCTGTCCCTGTCCCCGT
CCCCAGGAGGTACCGACAGTCCCTGTGCTGGTTAGACACGGAGCGCTGCACACCGAAAGCCCAAATTGGGAGCTC
TGCCTGCCGGCAACTTTGCTGATGGGGTGATTGCTGCTTCTGGGGGGTAAGGAAACAAGTTACAGAAATTACCGC
GTTCTGTGTGAAGGGACTGAGGGTGTGGTGTCATTGGCAGAGGGTCATTTTAGGAGAGCTGCCCCAGCCCCTCGA
ACGCCTGGCTTGGGGTGTCATTCTGCCTGGCGGCCAGGCCTCCAGCTTCCCCTGCCCCGGGCCTGGGGCTGTCAC
TGGCCCTGATCCGAACACCTCCAGATTCCGGCTTCTACATGGGACAGACGGGGACGCACAGGCCACCTTCCTTCT
GGCAGGGACTCTTATTTATTCCCATTGCTCTAGGGCTTTCGGTTTCCCCTTCTTCCGGTAGGCCGCGTAGAGGCA
TGCACCGGGTAGGTTTCCGCGGTGACCCCGCGGCGGCCTGAGGGACGCTCCCTGCCCCATCCCGGCTGTTGGGCT
GGGCCGCTTTGCCTCTGCTTCGCCCTGTGCTGTGTTCTCCAGCTTTGTAGCAGCAGCCTTGACAAACCCAGGCGC
ACTGTACCAAGGCAATGTAACTTTTGATTTTCGGTCAATTTAAGTTCTTTTGTCACCAAATATTAATAAACAGTT
TTGACTTC

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FIGURE 3675

ACGCGGGGCGCGCGGCTCCGTCGGCTACCGCGGGCGGGCGCAGGCGACGGGCACGGCGGGCGAGCGGGCGGT**ATG**

GCGGCGGCGGGGCCCGCGGCGGGGCCGACGGGGCCCGAGCCCATGCCGAGCTACGCGCAGCTAGTGCAGCGCGGC
TGGGGCAGCGCGCTGGCGGCGGCGCGGGGCTGCACGGACTGCGGCTGGGGGCTGGCGCGTCGCGGCCTGGCTGAG
CACGCGCACCTGGCGCCGCCCGAGCTGCTGCTGCTGGCGCTCGGCGCGCTGGGCTGGACCGCCCTGCGCTCCGCG
GCCACTGCGCGCCTCTTTCGGCCCCTGGCGAAGCGGTGCTGCCTCCAGCCCAGAGATGCCGCCAAGATGCCCGAG
AGCGCTTGGAAGTTTCTCTTCTACCTGGGCAGCTGGAGCTACAGTGCCTACCTGCTGTTTGGCACCGACTACCCC
TTCTTCCATGACCCACCATCTGTCTTCTACGACTGGACGCCGGGCATGGCAGTGCCACGGGACATTGCAGCCGCC
TACCTGCTCCAGGGAAGCTTCTATGGCCACTCCATCTACGCTACGCTATACATGGACACCTGGCGCAAGGACTCG
GTGGTCATGCTGCTCCACCACGTGGTCACTCTCATCCTCATCGTCTCCTCCTACGCCTTCCGGTACCACAATGTG
GGCATCCTTGTGCTCTTCCTGCACGATATCAGTGACGTGCAGCTTGAGTTCACCAAGCTCAACATTTACTTCAAG
TCCCGCGGCGGCTCCTACCATCGGCTGCATGCCTTGGCAGCAGACTTGGGCTGCCTCAGCTTCGGCTTCAGCTGG
TTCTGGTTCCGCCTCTACTGGTTCCCGCTCAAGGTCCTGTATGCCACCAGTCACTGCAGTCTGCGCACGGTGCCT
GACATCCCCTTCTACTTCTTCTTCAATGCGCTCCTGCTGCTGCTCACCCTTATGAACCTCTACTGGTTCCTGTAC
ATCGTGGCGTTTGCAGCCAAGGTGTTGACAGGCCAGGTGCACGAGCTGAAGGACCTGCGGGAGTATGACACAGCC
GAGGCCCAGAGCCTGAAGCCCAGCAAAGCCGAGAAGCCACTGAGGAACGGCCTGGTGAAGGACAAGCGCTTC**TGA**

ACCCCTCGGCCCCGCCCCCGTGGACCCGGCCCCACCCCGAATACCCCGGCCACGCTCCCCGTCCTTGGCCGCCCC
TCCACCCCCTCCAACTCTGCTCCTCTAGGGCCGCCGCCACCTCCCCTGGGACCCCGCCCCCTCATCCTGCCTCCA
GTTCCCGGCCACGCCCCCCAGGACCCCTGCCCCTCCGGGGACACCGGCCCCGCCCTCAGCCCACTGGTCCCGGGC
CGCCGCGGACCCTGCGCACTCTCTGGTCATCGCCTGGGAGGAAGATGCCACCGCCGCAGCAAGGTCCCTGCGGCC
ACCACCTCCTCCTCCTCCTGGCCCTGCTGCTGCCCTCGCTGCCCCTGACCCGCGCCCCCGTGCCCCCAGGCCCAG
CCGCCGCCCTGCTCCAGGCTCTAGGACTGCGCGATGAGCCCCAGGGTGCCCCCAGGCTCCGGCCGGTTCCCCCGG
TCATGTGGCGCCTGTTTCGACGCCGGGACCCCCAGGAGACCAGGTCTGGCTCGCGGCGGACGTCCCCAGGGGTCA
CCCTGCAACCGTGCCACGTGGAGGAGCTGGGGGTCGCCGGAAACATCGTGCGCCACATCCCGGACCGCGGTGCGC
CCACCCGGGCCTCGGAGCCTGCCTCGGCCGCGGGGCATTGCCCTGAGTGGACAGTCGTCTTCGACCTGTCGGCTG
TGGAACCCGCTGAGCGCCCGAGCCGGGCCCGCCTGGAGCTGCGTTTCGCGGCGGCGGCGGCGGCAGCCCCGGAGG
GCGGCTGGGAGCTGAGCGTGGCGCAAGCGGGCCAGGGCGCGGGCGCGGACCCCGGGCCGGTGCTGCTCCGCCAGT
TGGTGCCCGCCCTGGGGCCGCCAGTGCGCGCGGAGCTGCTGGGCGCCGCTTGGGCTCGCAACGCCTCATGGCCGC
GCAGCCTCCGCCTGGCGCTGGCGCTACGCCCCCGGGCCCCTGCCGCCTGCGCGCGCCTGGCCGAGGCCTCGCTGC
TGCTGGTGACCCTCGACCCGCGCCTGTGCCACCCCCTGGCCCGGCCGCGGCGCGACGCCGAACCCGTGTTGGGCG
GCGGCCCCGGGGGCGCTTGTCGCGCGCGGCGGCTGTACGTGAGCTTCCGCGAGGTGGGCTGGCACCGCTGGGTCA
TCGCGCCGCGCGGCTTCCTGGCCAACTACTGCCAGGGTCAGTGCGCGCTGCCCGTCGCGCTGTCGGGGTCCGGGG
GGCCGCCGGCGCTCAACCACGCTGTGCTGCGCGCGCTCATGCACGCGGCCGCCCCGGGAGCCGCCGACCTGCCCT
GCTGCGTGCCCGCGCGCCTGTCGCCCATCTCCGTGCTCTTCTTTGACAACAGCGACAACGTGGTGCTGCGGCAGT
ATGAGGACATGGTGGTGGACGAGTGCGGCTGCCGCTAACCCGGGGCGGGCAGGGACGCGGGCCCAACAATAAATG
CCGCGTGGTCTGCTC

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FIGURE 3676

GGAAGAGGAGCTGGTGAGAAGACAGCGAAATGGCGCCTCCGGCCCCCGGCCCGGCCTCCGGCGGCTCCGGGGAGG
TAGACGAGCTGTTCGACGTAAAGAACGCCTTCTACATCGGCAGCTACCAGCAGTGCATAAACGAGGCGCAGCGGG
TGAAGCTATCAAGCCCAGAGAGAGACGTGGAGAGGGACGTCTTCCTGTATAGAGCGTACCTGGCGCAGAGGAAGT
TCGGTGTGGTCCTGGATGAGATCAAGCCCTCCTCGGCCCCTGAGCTCCAGGCCGTGCGCATGTTTGCTGACTACC
TCGCCCACGAGAGTCGGAGGGACAGCATCGTGGCCGAGCTGGACCGAGAGATGAGCAGGAGCGTGGACGTGACCA
ACACCACCTTCCTGCTCATGGCCGCCTCCATCTATCTCCACGACCAGAACCCGGATGCCGCCCTGCGTGCGCTGC
ACCAGGGGGACAGCCTGGAGTGCACAGCCATGACAGTGCAGATCCTGCTGAAGCTGGACCGCCTGGACCTCGCCC
GGAAGGAGCTGAAGAGAATGCAGGACCTGGACGAGGATGCCACCCTCACCCAGCTCGCCACTGCCTGGGTCAGCC
TGGCCACGGGTGGTGAGAAGCTGCAGGATGCCTACTACATCTTCCAGGAGATGGCTGACAAGTGCTCGCCCACCC
TGCTGCTGCTCAATGGGCAGGCGGCCTGCCACATGGCCCAGGGCCGCTGGGAGGCCGCTGAGGGCCTGCTGCAGG
AGGCGCTAGACAAGGATAGTGGCTACCCAGAGACGCTGGTCAACCTCATCGTCCTGTCCCAGCACCTGGGCAAGC
CCCCTGAGGTGACAAACCGATACCTGTCCCAGCTGAAGGATGCCCACAGGTCCCATCCCTTCATCAAGGAGTACC
AGGCCAAGGAGAACGACTTTGACAGGCTGGTGCTACAGTACGCTCCCAGCGCCTGAGGCTGGCCCAGAGCTGTCA
GGACCATGAAGCCAGGACAGAGGCCAGGAGCCAGCCCTGCAGCCCTCCCCACCCGGCATCCACCTGCATCCCCTC
TGGGGGCAGGAGCCCACCCCCAGCACCCCCATCTGTTAATAAATATCTCAACTCC

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FIGURE 3677

ACAAGCGGCCACAAGGATGGCAGGCTTCGCGGAGCTCGGGCTGTCATCGTGGCTCGTGGAACAATGTCGGCAGCT
GGGTTTGAAGCAGCCCACGCCCGTGCAGCTCGGCTGCATCCCCGCCATCCTGGAGGGTCGAGACTGCTTGGGCTG
TGCTAAGACAGGCAGTGGGAAGACAGCAGCGTTTGTCCTTCCCATCTTGCAGAAGCTGTCTGAGGATCCCTATGG
CATCTTCTGCCTCGTCCTGACACCCACCAGGGAGCTGGCCTACCAGATCGCAGAGCAGTTCCGGGTCCTGGGGAA
GCCTCTAGGGCTGAAAGACTGCATCATCGTCGGTGGCATGGACATGGTGGCCCAGGCGCTGGAGCTCTCTCGGAA
ACCACACGTGGTCATCGCCACGCCGGGGCGCCTGGCAGATCACCTGCGCAGCTCCAACACTTTTAGTATAAAGAA
GATCCGCTTCCTGGTGATGGATGAGGCAGACCGGCTGCTGGAACAGGGCTGCACTGACTTCACCGTGGACCTGGA
GGCCATCCTGGCGGCTGTGCCGGCCCGCAGGCAGACACTGCTGTTCAGCGCCACGCTGACCGACACACTCCGGGA
GCTGCAGGGTCTGGCCACCAACCAGCCCTTCTTCTGGGAAGCACAGGCCCCGGTGAGCACCGTGGAGCAGCTGGA
CCAGCGCTACCTGCTGGTGCCTGAGAAGGTCAAGGACGCCTACCTGGTCCACCTGATCCAGCGCTTCCAGGATGA
GCACGAGGACTGGTCCATTATCATCTTCACCAACACGTGCAAGACCTGCCAGATTCTGTGCATGATGCTGCGCAA
ATTCAGCTTCCCCACCGTGGCTCTGCACTCCATGATGAAGCAGAAAGAACGCTTTGCCGCCCTAGCCAAGTTCAA
GTCCAGCATCTACCGGATCCTGATCGCAACAGACGTGGCCTCCCGGGGCCTGGACATCCCTACGGTACAGGTGGT
CATCAACCACAACACCCCCGGGCTCCCCAAGATCTACATCCACCGAGTCGGCCGGACGGCCCGTGCAGGGCGGCA
GGGTCAGGCCATCACGCTGGTGACACAGTACGACATCCACCTGGTGCACGCCATCGAGGAGCAGATCAAGAAGAA
GCTGGAGGAGTTCTCCGTGGAAGAGGCCGAGGTGCTACAGATCCTCACACAGGTCAACGTGGTGCGAAGAGAGTG
TGAGATCAAACTGGAGGCGGCCCACTTTGACGAAAAGAAGGAGATCAACAAACGGAAGCAGCTGATCCTGGAGGG
GAAGGACCCTGACCTGGAGGCCAAGCGCAAGGCTGAGCTGGCCAAGATCAAGCAGAAGAACCGGCGCTTCAAGGA
GAAGGTGGAGGAGACGCTGAAGCGACAGAAGGCTGGCAGGGCTGGCCACAAGGGGCGTCCACCCAGGACACCGTC
TGGGTCCCACTCAGGCCCAGTCCCCTCCCAGGGCCTGGTCTGAGCCCCACACGGCCATCTGCCCAGTCCTTGACT
CGTCCATGGAGCTGAGGGTCGGAGGAACCTTCCTTGGGGGCAGCAGCCCTTCCCGGGGGCCTACCCAGTGCCCCA
CAGCAGAACCCGTGGGCGCTCGTGTTGTGCGGGCCCTGCTCCTCTGCCCCGAAACCACTGGCTGGTCCCTTCCCT
GAGCCCTGGCCAAGATTCAGGCTGCAGGGGAAGAAAGAACATGACCGGGAGGTTGTGACCCCAACCCAAGGTCAC
CCCCCAGGGGTGCCGCATACAGGAGGTGCTTAATAAACGGGTCTTTTGACTTCCTC

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FIGURE 3678

GGCGCATGACTAGTTGGGGCCAAACCAGTGCTCCTGCCACCTCTCTGGCTGCCCCCTAGAGCCTGCCCATCCCAG
CCTGACCAATGTCCACAGCCAGGGAGCAGCCAATCTTCAGCACACGGGCGCACGTGTTCCAAATTGACCCAGCCA
CCAAGCGAAACTGGATCCCAGCGGGCAAGCACGCACTCACTGTCTCCTATTTCTACGATGCCACCCGCAATGTGT
ACCGCATCATCAGCATCGGAGGCGCCAAGGCCATCATCAACAGCACTGTCACTCCCAACATGACCTTCACCAAAA
CTTCCCAGAAGTTCGGGCAGTGGGCCGACAGTCGCGCCAACACAGTCTACGGCCTGGGCTTTGCCTCTGAACAGC
ATCTGACACAGTTTGCCGAGAAGTTCCAGGAAGTGAAGGAAGCAGCCAGGCTGGCCAGGGAGAAATCTCAGGATG
GCGGGGAGCTCACCAGTCCAGCCCTGGGGCTCGCCTCCCACCAGGTGCCCCCGAGCCCTCTCGTCAGTGCCAACG
GCCCCGGCGAGGAAAAACTGTTCCGCAGCCAGAGCGCTGATGCCCCCGGCCCCACAGAGCGCGAGCGGCTAAAGA
AGATGTTGTCTGAGGGCTCCGTGGGCGAGGTACAGTGGGAGGCCGAGTTTTTCGCACTGCAGGACAGCAACAACA
AGCTGGCAGGCGCCCTGCGAGAGGCCAACGCCGCCGCAGCCCAGTGGAGGCAGCAGCTGGAGGCTCAGCGTGCAG
AGGCCGAGCGGCTGCGGCAGCGGGTGGCTGAGCTGGAGGCTCAGGCAGCTTCAGAGGTGACCCCCACCGGTGAGA
AGGAGGGGCTGGGCCAGGGCCAGTCGCTGGAACAGCTGGAAGCTCTGGTGCAAACCAAGGACCAGGAGATTCAGA
CCCTGAAGAGTCAGACTGGGGGGCCCCGCGAGGCCCTGGAGGCTGCCGAGCGTGAGGAGACTCAGCAGAAGGTGC
AGACCCGCAATGCGGAGTTGGAGCACCAGCTGCGGGCGATGGAGCGCAGCCTGGAGGAGGCACGGGCAGAGCGGG
AGCGGGCGCGGGCTGAGGTGGGCCGGGCAGCGCAGCTGCTGGACGTCAGCCTGTTTGAGCTGAGTGAGCTGCGTG
AGGGCCTGGCCCGCCTGGCTGAGGCTGCGCCCTGAGCCGGGGCTGGTTTTCTATGAACGATTCCGGCCTGGGATG
CGGGCCAGGCTGCAGGCGGCATAGTTGGGCCCATTCGTCCTGGAAAGGGACTGGGGGGTCCCAACTTAGCCCTGG
GTGGGCCGGGCCGGGCTGGGCTGGGGTGGGCCCCAGTCGGCTCTGGTTGTTGGCAGCTTTGGGGCTGTTTTTGAG
CTTCTCATTGTGTAGAATTTCTAGATCCCCCGATTACATTTCTAAGCGTG

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FIGURE 3679A

GGTTCATTTGCATGTCCCCGCCTCGCGCGGCGGCGGCGGCGGGTGAGGAGCCTGAGGCGGCGGCGGGGGTGGCTC
CGCGCGCGGTGGTCTCGGGGGCAAAATAACATGGCAGCCAGACGAATTACACAGGAGACTTTTGATGCTGTATTA
CAAGAAAAAGCCAAACGATATCACATGGATGCCAGTGGTGAGGCTGTAAGCGAAACTCTTCAGTTTAAAGCTCAA
GATCTCTTAAGGGCAGTCCCAAGATCCAGAGCAGAGATGTATGATGACGTCCACAGCGATGGCAGATACTCCCTC
AGTGGATCTGTAGCTCACTCTAGAGATGCCGGAAGAGAAGGCCTGAGAAGTGACGTATTTCCAGGGCCTTCCTTC
AGATCAAGCAACCCTTCCATCAGTGATGACAGCTACTTTCGCAAAGAATGTGGCCGGGATCTGGAATTTTCTCAC
TCTGATTCTCGGGACCAGGTCATTGGCCACCGGAAATTGGGGCATTTCCGTTCTCAGGACTGGAAATTTGCGCTC
CGTGGTTCTTGGGAACAAGACTTTGGCCATCCAGTTTCTCAAGAGTCCTCTTGGTCACAGGAGTATAGTTTTGGT
CCCTCTGCAGTTTTGGGGGACTTTGGATCTTCCAGGCTGATTGAGAAAGAGTGTTTGGAGAAGGAGAGTCGGGAT
TATGACGTGGACCATCCTGGGGAGGCTGACTCTGTGCTTAGGGGCGGCAGTCAAGTCCAGGCCAGAGGTCGAGCT
CTAAACATCGTTGACCAGGAAGGTTCCCTCCTAGGAAAGGGGGAGACTCAGGGCCTGCTCACAGCTAAGGGGGGT
GTTGGGAAACTTGTCACATTGAGAAATGTGAGCACAAAAAAAATACCCACCGTGAATCGTATTACTCCCAAAACT
CAGGGCACTAACCAAATCCAGAAAAACACTCCAAGTCCTGATGTGACCCTGGGGACAAACCCAGGGACAGAAGAT
ATCCAGTTCCCCATTCAGAAGATCCCTCTGGGGCTGGATCTGAAGAATCTTCGGCTCCCCAGAAGAAAGATGAGC
TTTGACATCATAGATAAGTCTGATGTTTTTTCAAGATTTGGGATAGAAATAATCAAATGGGCAGGATTCCACACC
ATAAAAGATGATATTAAATTTTCCCAACTTTTCCAGACTCTCTTTGAACTTGAAACAGAAACCTGTGCTAAAATG
CTTGCCTCATTCAAATGTTCCTTAAAACCAGAGCACAGAGATTTTTGCTTTTTTACTATCAAATTTTTAAAGCAC
TCTGCTTTGAAAACACCCAGAGTTGATAATGAGTTTTTAAACATGCTTTTAGACAAAGGTGCTGTGAAGACCAAA
AATTGCTTTTTTGAAATCATAAAGCCTTTTGACAAGTACATAATGAGACTTCAAGACCGGCTTCTGAAGAGTGTC
ACACCTTTGCTTATGGCCTGCAATGCCTACGAGCTAAGTGTCAAGATGAAGACCCTCAGTAACCCCCTGGACTTG
GCTCTTGCCCTAGAAACCACCAACTCTCTCTGCCGGAAGTCTTTGGCCCTTTTGGGACAGACATTTTCCTTGGCC
TCTTCTTTCCGGCAGGAGAAAATCTTAGAAGCTGTCGGCCTGCAAGATATAGCTCCCTCACCTGCTGCGTTTCCA
AACTTCGAAGACTCCACTTTGTTTGGGCGAGAGTACATAGACCACCTGAAGGCCTGGCTAGTCAGCAGCGGATGT
CCCCTCCAGGTTAAGAAAGCCGAACCAGAGCCGATGCGAGAGGAGGAGAAAATGATTCCTCCTACGAAACCTGAA
ATTCAGGCCAAGGCTCCAAGTAGTCTGAGTGATGCTGTCCCCCAGCGAGCAGATCACAGGGTAGTGGGCACCATC
GACCAGCTTGTGAAACGTGTCATCGAAGGCAGCCTGTCTCCCAAAGAGAGAACTCTTCTCAAAGAGGACCCTGCT
TACTGGTTTTTGTCTGATGAAAATAGTCTGGAGTATAAATATTACAAGCTGAAGTTGGCAGAAATGCAGCGGATG
AGCGAGAACTTGCGAGGAGCCGACCAGAAGCCGACCTCAGCAGACTGTGCAGTGAGGGCCATGCTGTACTCCCGG
GCTGTCCGCAACCTCAAGAAGAAACTCCTTCCGTGGCAGCGGCGGGGGCTCCTCCGTGCTCAAGGGCTCCGGGGC
TGGAAGGCGAGGAGAGCGACCACCGGGACCCAGACCCTCCTATCCTCAGGCACCAGGCTGAAACACCACGGCCGG
CAGGCTCCAGGCCTCTCACAGGCAAAACCATCCCTGCCAGACAGAAATGATGCTGCCAAGGACTGCCCGCCAGAC
CCAGTTGGACCTTCTCCTCAGGACCCCAGCTTAGAAGCCTCAGGCCCATCCCCCAAGCCAGCAGGAGTGGACATC
TCTGAAGCACCTCAGACCTCTTCTCCCTGCCCATCTGCTGACATTGACATGAAGACAATGGAGACTGCAGAGAAA
CTGGCTAGATTTGTTGCTCAGGTGGGACCAGAGATCGAACAATTCAGCATAGAAAACAGCACCGATAACCCTGAC
CTGTGGTTTCTACATGACCAAAATAGTTCTGCTTTCAAATTCTATCGAAAGAAAGTGTTTGAACTATGTCCATCA
ATTTGTTTCACGTCATCTCCGCACAACCTTCACACTGGTGGTGGTGACACCACGGGTTCTCAGGAGAGCCCCGTG
GACCTCATGGAAGGGGAAGCAGAGTTTGAAGACGAGCCCCCTCCGCGGGAGGCTGAGCTGGAGAGCCCAGAGGTG
ATGCCTGAGGAGGAGGACGAGGACGATGAGGATGGGGGAGAGGAGGCCCCCGCTCCTGGAGGGGCGGGCAAGTCT
GAGGGCAGCACCCCTGCCGACGGCCTTCCCGGCGAGGCTGCCGAGGACGACCTGGCTGGAGCACCTGCCTTGTCA
CAGGCCTCCTCAGGTACCTGCTTCCCTCGGAAGAGGATCAGCAGCAAGTCATTGAAGGTTGGCATGATTCCAGCT
CCCAAGAGAGTGTGTCTCATCCAGGAGCCAAAAGTCCATGAACCAGTTCGAATTGCCTATGACAGGCCTCGGGGT
CGTCCCATGTCCAAAAAGAAGAAACCCAAGGACTTGGACTTCGCCCAGCAGAAGCTGACCGATAAGAACCTGGGC
TTCCAGATGCTGCAGAAGATGGGCTGGAAGGAGGGCCATGGCCTGGGCTCCCTCGGAAAGGGCATCAGGGAGCCG
GTCAGCGTGGGAACCCCCTCGGAAGGGGAAGGGTTGGGTGCTGACGGGCAGGAGCACAAAGAAGACACATTCGAT
GTGTTCCGACAGAGGATGATGCAGATGTACAGACACAAGCGGGCCAACAAATAGATCAAAACCACTGATGTGAAA
GATAAGCCTTGAAGCAGCAATTGCCCTTAAAACATCATCCCTGCCCTGGATCGGCCTGGAGCCAGTGCCCAAGTA
CGGTTTGGTGTGTACATGAAAACAAACGTCTCTGCAGTCTCTGGGGCGGAGGTTTCGCTGGCTTTTCTTTCTCTC
AAAGAAAAAAACATGCACCATTTTCAATGTGCTTTTGCCTCTCCTCTCTGTTCACATGCTTTTAGCAGCAAGTCC

FIGURE 3679B

CCTCCAAATCTGTCTTGGTTCCCCTTCAGAAGGTGGCGCTGCCCCCGAAAGGCACCTCAGCCTGTGAGTGCTGAG
GAACCAGCTCCTCTGGCTGATTTTCCAGTTGGACTGGCCATTGCTCTCCAGAAGTGCTCTGTTAGCAAACGTGAT
GTGGAAACGATCACAGATGGTGTTTTCTCGTTGTTCGCCAGAATTTATACGGGGGAGACAAATTCCCGGTAATTA
CCAAGTCTGCACTCGGGTACCAAAGCTCTGAAGCTCTCTGAACAGTTGCCATACTTGAGTTGATGAATGTGTTAT
TCATGGTGTCTCATCTCATCAATGCATCTTGAGAGACTTAATGAAATTTTAGCAACAGTATAGAATAGCTCTATC
GGGTGGGGAGTAATCATTAAACAGATGAAATCGGCCCCAGATTTAC

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FIGURE 3680

GCAAAACATTTCCCTGCTGGGGGCGGCGACCACCGTGAGCGTCCCGGAAGGGGCGGCAAAGACGCCTCCGTCGCG
CACGAGGTGGCCTCGTTGGCTTTACCTTGGTTCGCGGTCGTCCTTGGTTATCGTGAGCGTCCGCGAGTCTCTGGG
AGGCCAAGCCTAGGGGCGCCACAGCGCCTGCGCGCGTACGGCGGCCGGAAGGGGCTAGAGGCGGCTCCCTGGGTG
ACAACCGCGCGCCCCACCTTTCCCCACGTGGCCGCGAAGACCGGCTCAGGAGCATCTATCGGCTGCACGCCAACA
TCAACACAGGCGAAG**ATG**GTCTCCAAGCGCATTGCCCAGGAGACCTTTGATGCAGCTGTGCGCGAGAACATCGAG
GAGTTTGCGATGGGGCCAGAGGAGGCAGTGAAAGAGGCCGTGGAGCAGTTTGAATCGCAAGGGGTTGATCTGAGC
AACATTGTAAAGACGGCACCTAAAGTCTCTGCAGACGGATCCCAGGAGCCCACACATGACATCCTGCAGATGCTC
AGTGACCTCCAGGAGTCTGTGGCCAGCTCTCGCCCCCAGGAGGTGTCAGCATACCTCACCCGCTTCTGCGACCAG
TGCAAACAGGACAAGGCCTGCCGCTTCCTCGCGGCCCAGAAGGGGGCCTACCCCATCATCTTCACTGCCTGGAAG
CTGGCCACTGCAGGTGACCAGGGCCTTCTGCTCCAGTCCCTCAATGCCCTGTCGGTGCTGACTGATGGACAGCCA
GACCTCCTGGATGCCCAGGGCCTGCAGCTCCTAGTGGCCACGCTGACCCAGAATGCTGATGAGGCTGACCTGACC
TGCTCTGGGATCCGCTGTGTGCGTCACGCTTGCCTGAAACATGAACAGAATCGGCAAGACCTGGTGAAAGCTGGC
GTGCTGCCTCTGCTGACTGGTGCCATCACCCATCATGGCCACCACACTGACGTGGTCAGGGAAGCCTGCTGGGCC
CTGCGTGTCATGACCTTCGATGACGACATCCGTGTGCCCTTTGGCCATGCCCACAACCATGCCAAGATGATTGTG
CAGGAGAACAAAGGCTTGAAGGTGCTCATCGAAGCCACCAAAGCGTTCCTGGATAACCCTGGCATCCTGAGCGAG
CTCTGTGGAACCCTGTCCCGCCTGGCCATTCGCAACGAGTTCTGCCAGGAGGTCGTCGACCTCGGGGGCCTGAGC
ATTCTGGTGTCCCTGCTAGCCGACTGCAATGACCACCAGATGAGGGACCAGAGCGGCGTTCAGGAGCTCGTGAAG
CAAGTGCTGAGCACCCTGCGAGCCATCGCAGGCAACGACGACGTGAAAGATGCTATTGTCCGTGCTGGTGGGACG
GAGTCCATCGTGGCTGCTATGACCCAGCATCTGACCAGCCCCCAGGTGTGTGAGCAGAGCTGCGCGGCCCTGTGC
TTCCTGGCCCTGCGTAAGCCCGACAACAGCCGCATCATCGTGGAGGGTGGCGGGGCTGTGGCAGCACTGCAGGCC
ATGAAGGCACACCCGCAGAAGGCCGGCGTGCAGAAACAGGCTTGCATGCTGATCCGAAACCTGGTGGCCCACGGC
CAGGCCTTCTCGAAGCCCATCCTGGACCTGGGGGCTGAGGCACTCATCATGCAGGCCCGATCTGCCCACCGTGAC
TGTGAGGACGTGGCCAAGGCCGCCCTGCGGGACCTGGGTTGTCATGTCGAGCTCCGAGAGCTGTGGACAGGCCAG
AGGGGCAACCTGGCGCCA**TGA**CCCCAGGCCCAGTCTGGGCCGTGACTCTGGGTGAGTCGTGTGACTCAGGAATGG
GGGTAGATCCATGTCCTCCACTGTCCCCCATTAGTTCTGTCCCCTTCACAATGAGAAGTGTTTTCTGGCAGGCCC
TAGGTAAAGGGTCGGGGGAGGGGGGAGCCTTGTAGGGAGGCCTCTACACAGAAGAAAGCAGCCCCCATGTCCCAG
CCACTTCTGGGTCCCAGCCAGCAGCACGGATGTTACTGTCCTGCTCCTTCCCCCAGCCCCACGCCCTACCAGAGG
GGGCAAAGGGCACGTCCCATCACTCACTGCCCTGTCTGAAATGTGGCAGCCACTGTGGGCCAGGCTCAGGGCAGG
GCAGGCGATTCCAGTGGGGTTGGGCCCCCTGGCGCCTGCTGCTTACTGCAGTTTCATGCAGGCCTCTGCTCCTTG
TCTTTCTTACCTGTAAAATGGGTCTCAGATGCTCCGCCCTGCTTGGCCCCAGCTTGTCTGTCTCTGGGTCCTGGG
CCAGCCAGGATACCTGATAATAAAAGATCATTGGGTG

FIGURE 3681

GGCCGGTGGGTGAGTGCACCGCGTTCTCGCACGCGTCATGGCGGTCCTCGGAGTACAGCTGGTGGTGACCCTGCT
CACTGCCACCCTCATGCACAGGCTGGCGCCACACTGCTCCTTCGCGCGCTGGCTGCTCTGTAACGGCAGTTTGTT
CCGATACAAGCACCCGTCTGAGGAGGAGCTTCGGGCCCTGGCGGGGAAGCCGAGGCCCAGAGGCAGGAAAGAGCG
GTGGGCCAATGGCCTTAGTGAGGAGAAGCCACTGTCTGTGCCCCGAGATGCCCCGTTCCAGCTGGAGACCTGCCC
CCTCACGACCGTGGATGCCCTGGTCCTGCGCTTCTTCCTGGAGTACCAGTGGTTTGTGGACTTTGCTGTGTACTC
GGGCGGCGTGTACCTCTTCACAGAGGCCTACTACTACATGCTGGGACCAGCCAAGGAGACTAACATTGCTGTGTT
CTGGTGCCTGCTCACGGTGACCTTCTCCATCAAGATGTTCCTGACAGTGACACGGCTGTACTTCAGCGCCGAGGA
GGGGGGTGAGCGCTCTGTCTGCCTCACCTTTGCCTTCCTCTTCCTGCTGCTGGCCATGCTGGTGCAAGTGGTGCG
GGAGGAGACCCTCGAGCTGGGCCTGGAGCCTGGTCTGGCCAGCATGACCCAGAACTTAGAGCCACTTCTGAAGAA
GCAGGGCTGGGACTGGGCGCTTCCTGTGGCCAAGCTGGCTATCCGCGTGGGACTGGCAGTGGTGGGCTCTGTGCT
GGGTGCCTTCCTCACCTTCCCAGGCCTGCGGCTGGCCCAGACCCACCGGGACGCACTGACCATGTCGGAGGACAG
ACCCATGCTGCAGTTCCTCCTGCACACCAGCTTCCTGTCTCCCCTGTTCATCCTGTGGCTCTGGACAAAGCCCAT
TGCACGGGACTTCCTGCACCAGCCGCCGTTTGGGGAGACGCGTTTCTCCCTGCTGTCCGATTCTGCCTTCGACTC
TGGGCGCCTCTGGTTGCTGGTGGTGCTGTGCCTGCTGCGGCTGGCGGTGACCCGGCCCCACCTGCAGGCCTACCT
GTGCCTGGCCAAGGCCCGGGTGGAGCAGCTGCGAAGGGAGGCTGGCCGCATCGAAGCCCGTGAAATCCAGCAGAG
GGTGGTCCGAGTCTACTGCTATGTGACCGTGGTGAGCTTGCAGTACCTGACGCCGCTCATCCTCACCCTCAACTG
CACACTTCTGCTCAAGACGCTGGGAGGCTATTCCTGGGGCCTGGGCCCAGCTCCTCTACTATCCCCCGACCCATC
CTCAGCCAGCGCTGCCCCCATCGGCTCTGGGGAGGACGAAGTCCAGCAGACTGCAGCGCGGATTGCCGGGGCTCT
GGGTGGCCTGCTTACTCCCCTCTTCCTCCGTGGCGTCCTGGCCTACCTCATCTGGTGGACGGCTGCCTGCCAGCT
GCTCGCCAGCCTTTTCGGCCTCTACTTCCACCAGCACTTGGCAGGCTCCTAGCTGCCTGCAGACCCTCCTGGGGC
CCTGAGGTCTGTTCCTGGGGCAGCGGGACACTAGCCTGCCCCCTCTGTTTGCGCCCCCGTGTCCCCAGCTGCAAG
GTGGGGCCGGACTCCCCGGCGTTCCCTTCACCACAGTGCCTGACCCGCGGCCCCCCTTGGACGCCGAGTTTCTGC
CTCAGAACTGTCTCTCCTGGGCCCAGCAGCATGAGGGTCCCGAGGCCATTGTCTCCGAAGCGTATGTGCCAGGTT
TGAGTGGCAAGGGTGATGCTGGCTGCTCTTCTGAACAAATAAAGGAGCATGCCGATTTTT

FIGURE 3682

GGTCGCTATGGAGGAGCCGGAGATGCAGCTCAAGGGGAAGAAAGTCACGGACAAGTTCACTGAGAGCGTCTACGT
CCTGGCCAACGAGCCATCCGTGGCCCTGTACCGGCTGCAGGAGCATGTGCGTCGCTCCCTCCCCGAGCTGGCCCA
GCACAAGGCAGACATGCAGCGTTGGGAGGAGCAGAGCCAGGGAGCCATCTACACTGTGGAGTACGCCTGCAGCGC
CGTGAAGAACCTGGTGGACAGCAGCGTCTACTTCCGCAGCGTGGAGGGTCTGCTCAAACAGGCCATCAGCATCCG
GGACCATATGAATGCCAGTGCCCAGGGCCACAGCCCGGAGGAACCACCCCCGCCCTCCTCAGCCTGATCCTGGAA
GAGACTCGGGGCCCCCCAGCCTCCGCCAACCCAGACAAAGATCATTCCACTCAGCCTGGGACGATGGGAGGAAA
AAAATCCAGATCTCCCGCATCCTGGACCAAAGGAATCGGCAGGTGACGTTCACCAAGCGGAAGTTCGGGCTGATG
AAGAAGGCCTATGAGCTGAGCGTGCTCTGTGACTGTGAGATAGCCCTCATCATCTTCAACAGCGCCAACCGCCTC
TTCCAGTATGCCAGCACGGACATGGACCGTGTGCTGCTGAAGTACACAGAGTACAGCGAGCCCCACGAGAGCCGC
ACCAACACTGACATCCTCGAGACGCTGAAGCGGAGGGGCATTGGCCTCGATGGGCCAGAGCTGGAGCCGGATGAA
GGGCCTGAGGAGCCAGGAGAGAAGTTTCGGAGGCTGGCAGGCGAAGGGGGTGATCCGGCCTTGCCCCGACCCCGG
CTGTATCCTGCAGCTCCTGCTATGCCCAGCCCAGATGTGGTATACGGGGCCTTACCGCCACCAGGCTGTGACCCC
AGTGGGCTTGGGGAAGCACTGCCCGCCCAGAGCCGCCCATCTCCCTTCCGACCAGCAGCCCCCAAAGCCGGGCCC
CCAGGCCTGGTGCACCCTCTCTTCTCACCAAGCCACCTCACCAGCAAGACACCACCCCCACTGTACCTGCCGACG
GAAGGGCGGAGGTCAGACCTGCCTGGTGGCCTGGCTGGGCCCCGAGGGGGACTAAACACCTCCAGAAGCCTCTAC
AGTGGCCTGCAGAACCCCTGCTCCACTGCAACTCCCGGACCCCCACTGGGGAGCTTCCCCTTCCTCCCCGGAGGC
CCCCCAGTGGGGGCCGAAGCCTGGGCGAGGAGGGTCCCCCAACCCGCGGCGCCTCCCCGCCGACCCCCCCAGTCA
GCATCAAGTCTGAGCGCCTCTCTCCGGCCCCCGGGGGCCCCGGCGACTTTCCTAAGACCTTCCCCTATCCCTTGC
TCCTCGCCCGGTCCCTGGCAGAGCCTCTGCGGCCTGGGCCCGCCCTGCGCCGGCTGCCCTTGGCCGACGGCTGGC
CCCGGTAGGAGATCACCCGGTGGCACCAGCCCAGAGCGCTCGCCAGGTACGGCGAGGGCACGTGGGGACCCCACC
TCCCTCCAGGCCTCTTCAGAGAAGACCCAACAGTGACGCCCCCCTCCGCGGTGGGGGCTTGGAGGTGGGCGGCTG
GACTCAATCCACCCTGGGGGGCTCCTTTCCTTCTTCCTATTTGTGTGTATATCCACAAATAAAACGCGCGTGGCG
TCCGTGGACC

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FIGURE 3683

ACGCAGGGAAGGAGGCACACCCGGGGGTGGCGCAGTGAGGAGGGGGCGCGACGGCCAGGAGGCTGGTGGAGCGAC
ACCCAGGCAGGAGAGGGGGAAGAACTCTCTCCCTTTCTGAACCCCCTTTTCCTTGAGAGACGAGTTGGGGGAGTC
CTCCACGCATTACCCACTCGGGCCGCAAAAACTCCCTTCTTTAGCCCTCTGCCCCCGCCCTTGCTTATAAGCCTT
TGAGACCGCAGAAGGGACCTTGTTGTGGAACGGGACGGCCAAGAGGAAGCCAGATCGCTGAGGGTCCGGTCTCCA
GTTTGCCTCCTGCTATATCCATTGGAAGAGAAAAGTTTGTGACTTGGGCCCCCAAGTTTTGAGAGAACTGGGCTT
TCGGCGCGGGGGGACAGAGGAGGCTCGTGGGGAGCTTTCCCC**ATG**GAGCTTACCCAGCCTGCAGAAGACCTCATC
CAGACCCAGCAGACCCCTGCCTCAGAACTTGGGGACCCTGAAGACCCCGGAGAGGAGGCTGCAGATGGCTCAGAC
ACTGTGGTCCTCAGTCTCTTTCCCTGCACCCCTGAGCCTGTGAATCCTGAACCGGATGCCAGTGTTTCCTCTCCA
CAGGCAGGCAGCTCCCTGAAGCACTCCACCACTCTCACCAACCGGCAGCGAGGGAACGAGGTGTCAGCTCTGCCG
GCCACCCTAGACTCCCTGTCCATCCACCAGCTCGCAGCACAGGGGGAGCTGGACCAGCTGAAGGAGCATTTGCGG
AAAGGTGACAACCTCGTCAACAAGCCAGACGAGCGCGGCTTCACCCCCCTCATCTGGGCCTCCGCCTTTGGAGAG
ATTGAGACCGTTCGCTTCCTGCTGGAGTGGGGTGCCGACCCCCACATCCTGGCAAAAGAGCGAGAGAGCGCCCTG
TCGCTGGCCAGCACAGGCGGCTACACAGACATTGTGGGGCTGCTGCTGGAGCGTGACGTGGACATCAACATCTAT
GATTGGAATGGAGGGACGCCACTGCTGTACGCTGTGCGCGGGAACCACGTGAAATGCGTTGAGGCCTTGCTGGCC
CGAGGCGCTGACCTCACCACCGAAGCCGACTCTGGCTACACCCCGATGGACCTTGCCGTGGCCCTGGGATACCGG
AAAGTGCAACAGGTGATCGAGAACCACATCCTCAAGCTCTTCCAGAGCAACCTGGTGCCCGCTGACCCTGAG**TGA**

AGGCCGCCTGCCGGGGACTCAGACACTCAGGGAACAAAATGGTCAGCCAGAGCTGGGGAAACCCAGAACTGACTT
CAAAGGCAGCTTCTGGACAGGTGGTGGGAGGGGACCCTTCCCAAGAGGAACCAATAAACCTTCTGTGCAG

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FIGURE 3684

CACGCGGTTCCGGGTCCCAAGATTTGGCTCCAAGAGCTATTCGCAGAGAAACAGCCTCGCACAAAAAGCCACCGC
CCCCGAAACCCGCGGGAAATCTGTTTCCTGTGAAAGGCCTGGCCTCCGGGCATTGGCGGTTTCCCTGATCCTCTC
TCCCAAATTTTCCGGCAGGGGATTGATCGAGGCGACATTTAGGACTGGGGTGGGCGAGGGAGTGGCGGTTCTCGT
CCCAAGTTACAGGTGAGGACGTTCAGGCCAAGGCGTAGCCAAGATCGCGCCGCCCTGTAGCTTGAGGAGGCGCCG
GGATTCGAACCAAGGCTGTGCCCAATCCTAAGCCCTGCGAGGTCTTGTGGAACCGACATGACCCACTCTTTGGTT
TGTCCAGAGACAGTGAGCAGGGTGAGTTCAGTGCTGAATCGCAACACTCGGCAGTTTGGAAAAAAACATCTTTTC
GACCAGGATGAGGAGACATGTTGGAACTCAGACCAGGGCCCCTCCCAGTGGGTGACGCTGGAGTTTCCCCAGCTC
ATCCGTGTCTCCCAGCTGCAGATCCAGTTTCAGGGTGGCTTCTCCAGTCGCCGGGGCTGCCTGGAAGGTTCACAG
GGCACTCAGGCTCTCCACAAGATTGTAGATTTCTACCCTGAGGACAACAACTCGCTTCAGACTTTCCCCATACCA
GCTGCTGAAGTGGACCGGCTGAAGGTGACGTTTGAGGATGCCACTGACTTTTTTGGCCGTGTGGTCATCTACCAC
CTGCGGGTGCTTGGGGAGAAGGTGTGAGACCTCTAGGGGCTGTCTCCTCCAGGAAGCCCTCCGGGAAGCACAGCA
AAGTCCCTCATTCTGCACAGAAGGTTTATTGGTTCCTCTTGGGAAGGGTCCCCTCCCACCACCTGTCCAGAAGCT
GCCTTTGAAGTCAGTTCTGGGTTTCCCCAGCTCTGGCTGACCATTTTGTTCCCTGAGTGTCTGAGTCCCCGGCAG
GCGGCCTTCACTCAGGGTCAGCGGGCACCAGGTTGCTCTGGAAGAGCTTGAGGATGTGGTTCTCGATCACCTGTT
GCACTGAGATGGGGCAGGGAAAAGGTGGGCTGTGAGCTTGAATCGGGAGTGGGGTGGAGGCACAGGCCAACCTGC
GCTCTCCCCTTAGGGGACAAACAGGGACCCTTGCAGAGACCTGCATTACAGAGCAAAGCTGGGAGAACCGAGGAC
TCACCCCAGGAACCTCAACTTCCCCTAAGTTTGTAAAAATGCACTTTTGTAGCTTTTCAGAATTAATATAAAAAT
ATTTCCTACC

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FIGURE 3685

GTCTCAAGATGGACAACCGGGATGTTGCAGGAAAGGCTAACCGGTGGTTTGGGGTTGCTCCCCCTAAATCTGGAA
AAATGAACATGAACATCCTTCACCAGGAAGAGCTCATCGCTCAGAAGAAACGGGAAATTGAAGCCAAAATGGAAC
AGAAAGCCAAGCAGAATCAGGTGGCCAGCCCTCAGCCCCCACATCCTGGCGAAATCACAAATGCACACAACTCTT
CCTGCATTTCCAACAAGTTTGCCAACGATGGTAGCTTCTTGCAGCAGTTTCTGAAGTTGCAGAAGGCACAGACCA
GCACAGACGCCCCGACCAGTGCGCCCAGCGCCCCTCCCAGCACACCCACCCCCAGCGCTGGGAAGAGGTCCCTGC
TCATCAGCAGGCGGACAGGCCTGGGGCTGGCCAGCCTGCCGGGCCCTGTGAAGAGCTACTCCCACGCCAAGCAGC
TGCCCGTGGCGCACCGCCCGAGTGTCTTCCAGTCCCCTGACGAGGACGAGGAGGAGGACTATGAGCAGTGGCTGG
AGATCAAAGTTTCACCCCCAGAGGGAGCCGAGACTCGGAAAGTGATAGAGAAATTGGCCCGCTTTGTGGCAGAAG
GAGGCCCCGAGTTAGAAAAAGTAGCTATGGAGGACTACAAGGATAACCCAGCATTTGCATTTTTGCACGATAAGA
ATAGCAGGGAATTCCTCTACTACAGGAAGAAGGTGGCTGAGATAAGAAAGGAAGCACAGAAGTCGCAGGCAGCCT
CTCAGAAAGTTTCACCCCCAGAGGACGAAGAGGTCAAGAACCTTGCAGAAAAGTTGGCCAGGTTCATAGCGGACG
GGGGTCCCGAGGTGGAAACCATTGCCCTCCAGAACAACCGTGAGAACCAGGCATTCAGCTTTCTGTATGAGCCCA
ATAGCCAAGGGTACAAGTACTACCGACAGAAGCTGGAGGAGTTCCGGAAAGCCAAGGCCAGCTCCACAGGCAGCT
TCACAGCACCTGATCCCGGCCTGAAGCGCAAGTCCCCTCCTGAGGCCCTGTCAGGGTCCTTACCCCCAGCCACCA
CCTGCCCCGCCTCGTCCACGCCTGCGCCCACTATCATCCCTGCTCCAGCTGCCCCCGGGAAGCCAGCCTCCGCAG
CCACCGTGAAGAGGAAGCGGAAGAGCCGGTGGGGGCCTGAAGAGGATAAGGTAGAGCTCCCACCTGCTGAACTGG
TGCAGAGGGACGTGGATGCCTCTCCCTCGCCTCTGTCAGTTCAGGACCTCAAGGGGCTCGGCTATGAGAAGGGGA
AGCCTGTGGGTCTAGTGGGCGTCACAGAGCTTTCAGACGCCCAGAAGAAGCAGCTGAAGGAGCAGCAGGAGATGC
AGCAGATGTACGACATGATCATGCAGCACAAGCGGGCCATGCAGGACATGCAGCTGCTGTGGGAGAAGGCAGTCC
AACAGCACCAGCACGGCTATGACAGTGATGAGGAGGTGGACAGCGAGCTGGGCACCTGGGAGCACCAGCTGCGGC
GCATGGAGATGGATAAGACCAGGGAATGGGCCGAGCAGCTGACAAAGATGGGCCGGGGCAAGCACTTCATCGGAG
ACTTCCTGCCTCCAGACGAGCTGGAAAAGTTTATGGAGACCTTCAAGGCCCTGAAGGAGGGCCGTGAGCCTGACT
ACTCAGAGTACAAGGAGTTCAAGCTGACTGTGGAGAACATCGGCTACCAGATGCTGATGAAGATGGGCTGGAAGG
AGGGCGAGGGGCTGGGCTCAGAGGGCCAGGGCATCAAGAACCCAGTGAACAAGGGCACCACCACAGTGGACGGCG
CTGGCTTCGGCATTGACCGGCCGGCGGAGCTCTCCAAGGAGGACGACGAGTATGAGGCGTTCCGCAAGAGGATGA
TGCTGGCCTACCGCTTCCGGCCCAACCCCCTGAACAATCCCAGACGGCCTTACTACTGAGTGTTCTGGAAATACA
TACTTTCTGAATGACCAACCGTCCCTGGACTGTGGAATGTTCCGGCCTGCATTTCTGCCCACCCCTTCCGTTGTC
ACGAGTGCCGTGCCGTGTAATAAAGTCCCAGTGCTCATCCACC

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FIGURE 3686A

GCGGCTTGTTGTTGTGGAGGCCAAAATGGCGGCTCAGGCGGCGGCAGCGGCCCAGGCGGCGGCGGCCCAGGCTGC
GCAGGCCGAGGCGGCCGACTCGTGGTACCTGGCGCTTCTGGGCTTCGCTGAGCACTTCCGCACTTCCAGCCCGCC
CAAAATCCGCCTGTGCGTGCACTGCCTGCAGGCCGTGTTCCCCTTCAAGCCGCCGCAGCGCATCGAGGCCCGTAC
ACACCTGCAGCTGGGCTCCGTTCTCTATCACCACACCAAGAACAGCGAGCAGGCGCGCAGCCACCTGGAGAAGGC
GTGGTTGATATCACAGCAAATCCCGCAGTTCGAAGATGTTAAATTTGAAGCAGCAAGTCTGTTGTCTGAATTGTA
CTGTCAAGAGAATTCCGTTGATGCAGCAAAGCCGCTGCTGCGGAAGGCGATCCAGATCTCACAGCAGACCCCATA
TTGGCACTGCCGCCTGCTCTTCCAGCTCGCTCAACTGCACACGCTTGAGAAGGACCTGGTGTCGGCCTGTGACCT
CCTGGGTGTAGGGGCCGAGTACGCCCGGGTGGTGGGATCTGAATACACACGGGCGCTGTTCCTCCTCAGCAAGGG
GATGCTGCTGCTGATGGAGCGAAAGCTGCAGGAGGTGCACCCGCTGCTGACCCTCTGCGGGCAGATCGTGGAGAA
CTGGCAGGGGAACCCCATCCAGAAGGAGTCGCTGCGTGTCTTCTTCCTGGTGCTCCAGGTCACCCACTATCTGGA
TGCCGGGCAGGTGAAGAGCGTGAAGCCGTGTCTGAAGCAGCTGCAGCAGTGCATCCAGACCATCTCCACACTGCA
CGATGATGAGATCCTGCCCAGCAACCCCGCTGACCTCTTCCACTGGCTGCCCAAGGAGCACATGTGTGTGCTTGT
CTACCTGGTGACTGTGATGCACTCCATGCAGGCCGGCTACCTGGAGAAGGCGCAGAAGTACACGGACAAGGCCCT
CATGCAGCTGGAGAAGCTCAAGATGCTGGACTGCAGCCCCATCCTGTCATCCTTCCAAGTGATCCTGCTGGAGCA
CATCATCATGTGCCGCCTTGTCACGGGTCACAAGGCCACGGCGCTGCAGGAGATCTCCCAGGTCTGCCAGCTGTG
CCAGCAGTCCCCCCGGCTCTTCTCCAACCATGCAGCACAGCTGCACACATTGCTGGGCCTGTACTGTGTCTCTGT
CAACTGCATGGACAACGCGGAAGCCCAGTTCACCACGGCCCTGCGGCTCACCAACCACCAGGAGCTGTGGGCCTT
CATCGTCACCAACCTGGCGAGTGTGTATATACGGGAAGGAAATAGACACCAAGAGGTACTCTACAGTCTGCTGGA
GAGGATCAACCCGGACCACAGCTTCCCTGTCAGCTCGCACTGCCTCCGAGCAGCCGCCTTCTATGTGCGTGGGCT
CTTCTCCTTCTTCCAGGGACGCTACAACGAGGCCAAGCGATTTCTGCGGGAAACTCTGAAGATGTCCAATGCTGA
GGACCTGAACCGGCTCACAGCCTGCTCCCTCGTGCTTCTGGGCCACATCTTCTATGTGCTGGGAAACCACAGGGA
GAGTAACAACATGGTGGTGCCTGCCATGCAGCTCGCCAGCAAGATCCCGGACATGTCGGTACAGCTGTGGTCGTC
AGCACTGCTGAGAGACCTGAATAAAGCCTGTGGGAACGCCATGGATGCCCATGAAGCCGCCCAGATGCACCAGAA
CTTCTCGCAGCAGCTGCTCCAGGACCACATTGAGGCCTGCAGCCTCCCCGAACACAACCTCATCACGTGGACAGA
CGGTCCACCCCCCGTGCAGTTCCAAGCTCAGAATGGACCCAACACCAGCCTGGCCAGCCTCCTGTGAGGCCTTGA
TGGGGCCATCCAGCTCCGCAGGGCCTGCGCGTCTCCGGCTTCCACCCAGACGGCACTCAAGCCTGCCCCCGAGGC
GTGCTTCCTTCCTGATTGTCTCTAGAGCTTCCAAGTCCTGGGAATGTGCGGGGCCAGTCCCTGCCCTCCCAGGAG
GGGTGGTAGCCGTTCCCACCTCGCAGCAGGACCCCCAGTGCAGAGGCTCACAGGTGGCACACAGGCGCTGTCTCT
CCAGAGCCATCCTTCAGAGTGGACCTCAGTGCCAGTCCTGCCTCAGCATCTGGGTCACGTCGGCCAGGAGTAGGG
TGCAGGCCTCCAGCAGGTCCTAATCCTGTGTGCCAGGGCAGGCAGTGCCCCAGGGGCACCACGCCTGACTCTCCA
TCACCCAGGCCTTGATGCCGAGCGGGAGTAGAGTGTTTCCTCTGCTCAAGGCAATTTCCAGAGCCCGGATGCCAG
TTTCTGGCCTGAATTTGGAGGGAAGAAGTAATGGCGCTAGTGTGGGACGAAGCACAGATCCCAGCACTTTTCCCA
GCTTTCTCTCCAGCATCAGTCCCTGCAGCAGCTGGGGCCTCTGGTCAGGAACCCTCAGGGACCCAGGAACTCAGC
TTCCAAACATCTGCACCTTGACCGGACTCGCCATCCCGCCGTGGGGGTGCAGGTGATTGTAAACACGGGTGTGCA
TGTGGATGCACACGGGTGTGCGGTGAAGATCTGTGGAGATGGAGCTGGGAGCTGAGGCTCCTGTTGCACCAGCCA
CCTTCCCCCATCTTGTGGCTGCTGAGGGGCAGGAAGCGGGGGAGTGGGCTCGTCTCCTAAATTTAAGATCACCTC
CTCAGCTAGCTTAGAGTGCGTGGCACGGGCCCCCCGCCCCCGAGATCTGGAGCCCAGGGACTTTCTTCCTGGCAG
ATCTGTGGCCTTCCCTGCTCAGCCTCTTGGTCCCCCCACTCCCTCCACCGCCTCACCTTCCCTGCTGGGTCTCTG
GGGCACAGTGTGAAACCCGCACCCTAGCCAGGCCCCAGGGAGCCTCCGCTGGGCCCAGACAGCAGCGTTTGGTTT
TATCCACTTTTCTTGGATAATCAGGAGGTGCCCCAGTGGTCACAGTGTGGCATTCCGAGTTGGGGCGGGTGGTCG
GGTCAAGATAGCAGCAGCAGGTGTCAGGGCTCAAGACACCACCCCCTCCAGCTTCTGGGGCCCAGGAGCCTCTCC
CTGCTACAGGGGGTGGGGGTCCTGCTCAGCAGGGTAGGTGGTGGTTTTAGGTCTTGTCACCCTCACTCAGTGGAA
CTGCCTCTGGGAGCTTTGGCGTCTGTGACTAAAGGGACGCTGGATTGCTCAGGTCAGCTGCTTGGGGCTCCCAGG
CTGGGTGTGCCTTAGCCACAGGCAGGGCTGTCAATAACCCCCTTCCTCACTGGCCACCACCTGACATCAGCACCA
GTGACAGGCTGGTCAGAGGGCGGGGCTGGTGAGGGTTTGTCCTAAGAGGACCACCGCCATCTCTGGGTCTCCAGG
GGGAGAGCCTGGCCCTGTCCTTTGCTACCCAGGGCTGCCCCCAGGCCCATGAAGCCAATAGGAGAGCGTGTGGCA
CTGGCCCACAAACTGTCCCTGTCCTGTCTTCCTCCCGAGCCATGGCCTCTGCTAGCTCCACCTTGAAGGAGCCCC
CCACATCCTCCCCTACATCCCAGAGATGCCACCACTTGTGTCTCCACAATGTGCTCCTGCCCACCCGGGTTCCGC

FIGURE 3686B

ACTGTCCGACCCCTGCACACCACTCATGTCACCACGGCGTGCATCATGTTCATCCCCATCTATTTATTTAAGCCT
TTCTTTGCTTGTAGGGCATTTTGTATGTAGAGCAGTTGAAAACAGAACCTCAGAACTTAACATCTGTCCTGATGT
TAAAGTGCTTTTCATGACCACCCTGTTATCTATGTATATGTAAAGTTAAGGATGAGATCTTAAGTTTACAATTAA
AAACTCAGTACTCAATATTTAATATTCTACTCGAGCTTTATGGAAGCCAAATCATGTGCATGTGTGTGTGTGCGT
GTGTGCAAGCTTTGAACCTCCTTCCACAGCCGCATCTTCTCATGACACAAAGCTTTTGATAAGTACTTTCCTGTG
GGTCGCTCAGCGCCTCATAGCATCTCATTCAATTGCAAGAATAGAGGCCAGACACGGTGGCGCATGCCTGTAGTC
CCAGCTAACTGGGAGGCTGAGGCAGGAGGATCACTTGAGCCCAGGAGATTGAGGCTGCAGTGAGCATGATCGCGA
CACTGCACTCCAGCCTGGGTGACGGTGAGACTTTGTCTC

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FIGURE 3687

GGAGATTGTTGCCAGGGCTCTGGTGAGTTCAGAATGACCGAAGAAGCATGCCGAACACGGAGTCAGAAACGAGCG
CTTGAACGGGACCCAACAGAGGACGATGTGGAGAGCAAGAAAATAAAAATGGAGAGAGGATTGTTGGCTTCAGAT
TTAAACACTGACGGAGACATGAGGGTGACACCTGAGCCGGGAGCAGGTCCAACCCAAGGATTGCTGAGGGCAACA
GAGGCCACGGCCATGGCCATGGGCAGAGGCGAAGGGCTGGTGGGCGATGGGCCCGTGGACATGCGCACCTCACAC
AGTGACATGAAGTCCGAGAGGAGACCCCCCTCACCTGACGTGATTGTGCTCTCCGACAACGAGCAGCCCTCGAGC
CCGAGAGTGAATGGGCTGACCACGGTGGCCTTGAAGGAGACTAGCACCGAGGCCCTCATGAAAAGCAGTCCTGAA
GAACGAGAAAGGATGATCAAGCAGCTGAAGGAAGAATTGAGGTTAGAAGAAGCAAAACTCGTGTTGTTGAAAAAG
TTGCGGCAGAGTCAAATACAAAAGGAAGCCACCGCCCAGAAGCCCACAGGTTCTGTTGGGAGCACCGTGACCACC
CCTCCCCCGCTTGTTCGGGGCACTCAGAACATTCCTGCTGGCAAGCCATCACTCCAGACCTCTTCAGCTCGGATG
CCCGGCAGTGTCATACCCCCGCCCCTGGTCCGAGGTGGGCAGCAGGCGTCCTCGAAGCTGGGGCCACAGGCGAGC
TCACAGGTCGTCATGCCCCCACTCGTCAGGGGGGCTCAGCAAATCCACAGCATTAGGCAACATTCCAGCACAGGG
CCACCGCCCCTCCTCCTGGCCCCCCGGGCGTCGGTGCCCAGTGTGCAGATTCAGGGACAGAGGATCATCCAGCAG
GGCCTCATCCGCGTCGCCAATGTTCCCAACACCAGCCTGCTCGTCAACATCCCACAGCCCACCCCAGCATCACTG
AAGGGGACAACAGCCACCTCCGCTCAGGCCAACTCCACCCCCACTAGTGTGGCCTCTGTGGTCACCTCTGCCGAG
TCTCCAGCAAGCCGACAGGCGGCCGCCAAGCTGGCGCTGCGCAAACAGCTGGAGAAGACGCTACTCGAGATCCCC
CCACCCAAGCCCCCAGCCCCAGAGATGAACTTCCTGCCCAGCGCCGCCAACAACGAGTTCATCTACCTGGTCGGC
CTGGAGGAGGTGGTGCAGAACCTACTGGAGACACAAGCAGGCAGGATGTCGGCCGCCACTGTGCTGTCCCGGGAG
CCCTACATGTGTGCACAGTGCAAGACGGACTTCACGTGCCGCTGGCGGGAGGAGAAGAGCGGCGCCATCATGTGT
GAGAACTGCATGACAACCAACCAGAAGAAGGCGCTCAAGGTGGAGCACACCAGCCGGCTGAAGGCCGCCTTTGTG
AAGGCGCTGCAGCAGGAACAGGAGATTGAGCAGCGGCTCCTGCAGCAGGGCACGGCCCCTGCACAGGCCAAGGCC
GAGCCCACCGCTGCCCCACACCCCGTGCTGAAGCAGGTCATAAAACCCCGGCGTAAGTTGGCGTTCCGCTCAGGA
GAGGCCCGCGACTGGAGTAACGGGGCTGTGCTACAGGCCTCCAGCCAGCTGTCCCGGGGTTCGGCCACGACGCCC
CGAGGTGTCCTGCACACGTTCAGTCCGTCACCCAAACTGCAGAACTCAGCCTCGGCCACAGCCCTGGTCAGCAGG
ACCGGCAGACATTCTGAGAGAACCGTGAGCGCCGGCAAGGGCAGCGCCACCTCCAACTGGAAGAAGACGCCCCTC
AGCACAGGCGGGACCCTTGCGTTTGTCAGCCCAAGCCTGGCGGTGCACAAGAGCTCCTCGGCCGTGGACCGCCAG
CGAGAGTACCTCCTGGACATGATCCCACCCCGCTCCATCCCCCAGTCAGCCACGTGGAAATAGTGCGAGCCAGGC
CCCGTGGAAGACGGGCTCCCTCCTCCCCCACCTGGCCCCTGGTCTAGAAGGACCCACTGCACCACCCTCCGCTGG
CTCGGGAAGACACCGTGCCCGCCCCAAGAGCAAGCACCGGCCATGCTGCAGAGGCAAGACCTCAATTCTTGGCTG
CAAAGTTTCATCAGGGCTAGGGGGCTGGTGCCGCCTCATAGGCAGACGAGGATCATCGCTGGGGGACCTTTCCCG
TGGGCTTTCTTCCTTTCTCTCTTTGCCTTTAGTTTGCCCGACACCAGCAGAAAAGTGGACCTTGGGGGCTGGTTC
TGCTCCTGGCCCCCTTGTTCAGCCCCTGCCGGCACACGGGCGGCTCACCCTGGACACTGTGATGCGCATGGGCAA
GGCCAGCGCCCGGGGCTTCTGAACCGAGCGGGGTGTTTCATTTTTTTGCTTTTCCCTGTCTTAGGCTCCCAGTCT
TTGACTGCCTTCCCATGGCGATCTATAAGTTGAAAGATTTTTTTTTTTTTTAATCACCTCATGATGATGGAGTTA
AAAGTAAACCGTGCAGACCCTGGGGTCCCTGTTGTACGCTGCATCATCCCGCTGGCCCTGTGCCCTGGAGGGTGG
GCGGCTCATGGTGCCACAGCCCCTGGCAGGGACGGCCGGCCCGCCCCCGTGACTGACTGACAGATGCAGGGATGG
CCGAGGCAGCCCTCGCTCCAGCTGAACGCCTCCATTGCTGCTTGTTCTGGAGACCCCCGCCCCCGCACCTTCCAG
ACTTAGCAGAAGAACAAACTGAAGAACAGACCCAGCCAGAGAAGCAGGGATTCCAGAAGCTGCCCATTAAGGGAG
AAGGAGAGGATCCGGTCGGCAGCAGCCCTGAGCAGAAAGCTGGAGGGGGGACTGTCGCGGGGTTTTTCTGTTGTG
GTTTATTTTATTAAATTTTTTCCTTTTTTCTATTCATTTCGATGGACGCAATCTTAAGCCACCCTGGCCTTGCTC
CTGGGAGGTGAGCGTGCACAGGTGTGTGCAGGTCAGGAGGTGCCGTCCAGGTGTGCGGCGAGCCGCTGCGCACAG
ATGTCAGGATTTCCGTTTGGGTCTAGTTTAGAACCTGTCCTTAAACCTAGGGGTTGCTGTCAGGATTTGCTTTCA
GACTTTTTTTTTTTTTGTAATTCCCTTTAGAGTCTACAAAAATGTTTTTAAAAGGATCAGGTCTGCTTTTAGTTT
CATTTTTGTTTCTTTCCCGTCCCACTCTTTAAAAACTGGTTCCGTGAGGAAAGGCAGAAGCCGTTCCGTGTCTCT
TGCAGGCTGGGCCGGCTTCATGCCAGTGCGAGGGCGTCCCGTGCCCACGTACATACGTATGTCTCCATGAGTTCT
GGGCTCCACTGGTTCCAATTGAGCTCCAGCCCTGGTTTTCCTACCCATGCAGTTAGGGACTTTAATTTAATTTTT
TTTTTGTAGGGCCACCGCCTTCAAACACAACTGCTACAACATTCTAATAAAGGCTCATTTAACCCCC

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FIGURE 3688

TGCGAGTATGGCGGCGTCAAAGGTGAAGCAGGACATGCCTCCGCCGGGGGGCTATGGGCCCATCGACTACAAACG
GAACTTGCCGCGTCGAGGACTGTCGGGCTACAGCATGCTGGCCATAGGGATTGGAACCCTGATCTACGGGCACTG
GAGCATAATGAAGTGGAACCGTGAGCGCAGGCGCCTACAAATCGAGGACTTCGAGGCTCGCATCGCGCTGTTGCC
ACTGTTACAGGCAGAAACCGACCGGAGGACCTTGCAGATGCTTCGGGAGAACCTGGAGGAGGAGGCCATCATCAT
GAAGGACGTGCCCGACTGGAAGGTGGGGGAGTCTGTGTTCCACACAACCCGCTGGGTGCCCCCCTTGATCGGGGA
GCTGTACGGGCTGCGCACCACAGAGGAGGCTCTCCATGCCAGCCACGGCTTCATGTGGTACACGTAGGCCCTGTG
CCCTCCGGCCACCTGGATCCCTGCCCCTCCCCACTGGGACGGAATAAATGCTCTGCAGACCTGG

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FIGURE 3689

AGGAAATCGGGGCTCGGCCCCGCCGGCGCGCGACCCCATCCCCATCCCGGTCCCTGCAGAGCGATCCCCGGGCCC
AGATATGGACGCAGCAGAGCCGGGACTCCCCCCAGGTCCTGAGGGCAGGAAGAGGTACAGTGACATCTTCCGGAG
CCTGGACAACCTCGAAATCTCACTGGGGAACGTGACCCTTGAGATGCTGGCTGGAGACCCTCTACTCTCAGAAGA
CCCAGAACCTGACAAGACCCCTACAGCCACTGTTACCAACGAAGCCAGCTGTTGGAGCGGCCCCTCCCCAGAGGG
TCCTGTACCCCTCACAGGGGAGGAACTGGACTTGCGGCTCATTCGGACAAAGGGGGGTGTGGACGCAGCCCTGGA
ATATGCCAAGACCTGGAGCCGCTATGCCAAGGAACTGCTTGCCTGGACTGAAAAGAGAGCCAGCTATGAGCTGGA
GTTTGCTAAGAGCACCATGAAGATCGCTGAAGCTGGCAAGGTGTCCATTCAACAGCAGAGCCACATGCCTCTGCA
GTACATCTACACCCTGTTTCTGGAGCACGATCTCAGCCTGGGAACCCTGGCCATGGAGACAGTGGCCCAGCAGAA
AAGAGACTACTACCAGCCCCTCGCCGCCAAACGGACTGAGATTGAGAAGTGGCGGAAGGAGTTCAAGGAGCAGTG
GATGAAGGAGCAGAAGCGGATGAATGAGGCGGTGCAGGCACTGCGGCGCGCCCAGCTGCAGTATGTGCAACGCAG
CGAGGACCTGCGGGCACGCTCCCAGGGGTCCCCTGAGGACTCGGCCCCCCAGGCCTCGCCGGGACCTAGCAAGCA
GCAGGAGCGGCGGCGGCGCTCGCGAGAGGAGGCCCAGGCCAAGGCGCAGGAGGCCGAGGCGCTGTACCAGGCCTG
TGTCCGCGAGGCCAACGCGCGGCAGCAGGACCTGGAGATCGCCAAGCAGCGAATCGTGTCGCACGTGCGCAAGCT
GGTGTTTCAGGGGGATGAAGTGCTGAGGCGGGTGACGCTGAGTCTCTTCGGGCTGCGGGGGGCGCAGGCAGAGCG
TGGCCCCCGCGCCTTCGCCGCCCTGGCCGAGTGCTGTGCGCCCTTTGAGCCGGGCCAGCGCTACCAGGAGTTTGT
ACGGGCGCTGCGGCCCGAGGCCCCGCCGCCCCCGCCGCCCGCCTTCTCCTTCCAGGAGTTCCTTCCCTCCTTGAA
CAGCTCCCCTCTGGACATCAGAAAGAAGCTCTCTGGGCCTCTTCCTCCAAGGCTGGATGAGAATTCAGCTGAGCC
AGGCCCTTGGGAGGATCCGGGCACAGGCTGGCGCTGGCAAGGGACTCCAGGCCCCACTCCGGGCAGCGATGTGGA
CAGCGTGGGTGGCGGCAGCGAGTCTCGGTCCCTGGACTCACCCACTTCCAGCCCAGGCGCTGGCACGAGGCAGCT
GGTGAAGGCTTCGTCCACAGGCACTGAGTCCTCAGATGACTTTGAGGAGCGAGACCCTGACCTGGGAGACGGGCT
GGAGAATGGGCTGGGCAGCCCCTTCGGGAAGTGGACACTGTCCAGCGCGGCTCAGACCCACCAGCTGCGGCGACT
GCGGGGCCCAGCCAAGTGCCGCGAGTGCGAAGCCTTCATGGTCAGCGGGACGGAGTGTGAGGAGTGCTTTCTGAC
CTGCCACAAGCGCTGCCTGGAGACTCTCCTGATCCTCTGTGGACACAGGCGGCTCCCAGCCCGGACACCCCTTTT
TGGGGTTGACTTCCTGCAGCTACCCAGGGACTTCCCGGAGGAGGTACCCTTTGTGGTCACGAAGTGCACGGCTGA
GATAGAACACCGTGCCCTGGATGTGCAGGGCATTTACCGGGTCAGCGGGTCCCGGGTCCGTGTGGAGCGGCTGTG
CCAGGCTTTCGAGAATGGCCGAGCGTTGGTGGAGCTGTCGGGGAACTCGCCTCATGACGTCTCGAGTGTCCTCAA
GCGATTTCTTCAGGAGCTCACCGAGCCCGTGATCCCCTTCCACCTCTACGACGCCTTCATCTCTCTGGCTAAGAC
CTTGCATGCAGACCCTGGGGACGACCCTGGGACCCCCAGCCCCAGCCCTGAGGTTATCCGCTCGCTGAAGACCCT
CTTGGTACAGCTGCCTGACTCTAACTACAACACCCTGCGGCACCTGGTGGCCCATCTGTTCAGGGTGGCTGCACG
ATTTATGGAAAACAAGATGTCTGCCAACAACCTGGGCATTGTGTTTGGGCCGACACTGCTGCGGCCGCCGGACGG
CCCGCGGGCAGCCAGCGCCATCCCTGTCACCTGCCTGCTGGACTCTGGGCATCAGGCCCAGCTTGTGGAGTTCCT
CATCGTGCACTACGAGCAGATCTTTGGGATGGATGAGCTCCCCCAGGCCACTGAGCCCCCGCCCCAAGACTCCAG
CCCAGCCCCTGGGCCCCTCACAACCAGCTCCCAACCGCCACCCCCGCACCTTGACCCAGACTCCCAGCCCCCAGT
CCTAGCCTCAGACCCCGGCCCAGACCCCCAGCACCACAGTACCCTGGAGCAGCATCCCACGGCCACACCTACCGA
GATTCCAACTCCACAGAGTGACCAGAGAGAGGACGTGGCTGAAGACACCAAAGATGGGGGAGGGGAAGTGTCCAG
CCAAGGCCCAGAGGACTCACTCCTGGGGACACAGTCTCGTGGCCACTTCAGCCGCCAGCCAGTGAAGTATCCCCG
GGGCGGTGTGAGGCCTGTAACCCACCAGCTGTCCAGTCTGGCCCTGGTGGCTTCCAAGCTGTGCGAGGAGACCCC
CATCACATCAGTGCCCAGAGGGAGTTTGCGGGGGCGGGGGCCCAGCCCTGCAGCTGCCTCCCCTGAGGGCAGCCC
CCTGCGCCGCACCCCGCTGCCCAAGCATTTTGAGATTACCCAGGAGACAGCCCGGCTACTCTCGAAATTGGACAG
CGAGGCTGTGCCCAGGGCCACCTGCTGCCCGGACGTCCAGCCTGAGGAAGCCGAGGACCATCTCTGACCACCCTG
GCACCTTAAATAAGGAAGAGGCCCAGATTGTGAAGACGGACCCATATATCCCTACCTCCCACCACCTAGTGGCCA
AACACCCCGCCAGGAGTTCAATGCTGGGAGAGGTCCAGAGGGTTCCTATAAGGAAAAACTATTTAATACATGACC
TAGGGGAGGCCTAAAACCCTTTTGGGGATAATGTCCCAGAGTCCCCCCACTAGACACAGGTCACTGCCAAGCATC
AGGGCCACTCGGGCTCAGAGGTCACTCAGGGTCAATACTCAGGGTCAGTGCAGGTTATGAGATCCTTGGGGTCCA
CCCTAGTCTCTGACACCTGGGACAGGGGTGCTTTTGCTACTTTGGTTGTGGTCACTCCCCCACACCTGCCTGCCT
CCTTCACGGACTCGAAGTGACCTTCCTGGAGGAGGTGGGCAGCTCAGACTCCACATGCTGGTGGTGCCTGAGGTC
TGATGGCCTCTAATAAACTGTGTCCTATA

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FIGURE 3690

ATGGAGAAGTGGGAGGAGCTGAACAGCCATCAGCCAGGAGAGGAGTACGACCCCAGCAAAGCGACCTTTGTGAAG
GTGGTGCCAACCCCCAACAATGGCTCCACGGAGCTCGTGGCCCTGCACCGCAATGAGGGCGAAGACGGGCTTGAG
GTGCTGTCCTTCGAATTCCAGAAGATCAAGTATTCCTACGATGCCCTGGAGAAGAAGCAGTTTCTCCCCGTGGCC
TTTCCTGTGGGAAACGCCTTCTCATACTATCAGAGCAACAGAGGCTTCCAGGAAGACTCAGAGATCCGAGCAGCT
GAGAAGAAATTTGGGAGCAACAAGGCCGAGATGGTGGTGCCTGACTTCTCGGAGCTTTTCAAGGAGAGAGCCACA
GCCCCCTTCTTTGTATTTCAGGTGTTCTGTGTGGGGCTCTGGTGCCTGGATGAGTACTGGTACTACAGCGTCTTT
ACGCTATCCATGCTGGTGGCGTTCGAGGCCTCGCTGGTGCAGCAGCAGATGCGGAACATGTCGGAGATCCGGAAG
ATGGGCAACAAGCCCCACATGATCCAGGTCTACCGAAGCCGCAAGTGGAGGCCCATTGCCAGTGATGAGATCGTA
CCAGGGGACATCGTCTCCATCGGCCGCTCCCCACAGGAGAACCTGGTGCCATGTGACGTGCTTCTGCTGCGAGGC
CGCTGCATCGTAGACGAGGCCATGCTCACGGGGGAGTCCGTGCCACAGATGAAGGAGCCCATCGAAGACCTCAGC
CCAGACCGGGTGCTGGACCTCCAGGCTGATTCCCGGCTGCACGTCATCTTCGGGGGCACCAAGGTGGTGCAGCAC
ATCCCCCCACAGAAAGCCACCACGGGCCTGAAGCCGGTTGACAGCGGGTGCGTGGCCTACGTCCTGCGGACCGGA
TTCAACACATCCCAGGGCAAGCTGCTGCGCACCATCCTCTTCGGGGTCAAGAGGGTGACTGCGAACAACCTGGAG
ACCTTCATCTTCATCCTCTTCCTCCTGGTGTTTGCCATCGCTGCAGCTGCCTATGTATGGATTGAAGGTACCAAG
GACCCCAGCCGGAACCGCTACAAGCTGTTTCTGGAGTGCACCCTGATCCTCACCTCGGTCGTGCCTCCTGAGCTG
CCCATCGAGCTGTCCCTGGCCGTCAACACCTCCCTCATCGCCCTGGCCAAGCTCTACATGTACTGCACAGAGCCC
TTCCGGATCCCCTTTGCTGGCAAGGTCGAGGTGTGCTGCTTTGACAAGACGGGGACGTTGACCAGTGACAGCCTG
GTGGTGCGCGGTGTGGCCGGGCTGAGAGACGGGAAGGAGGTGACCCCAGTGTCCAGCATCCCTGTAGAAACACAC
CGGGCCCTGGCCTCGTGCCACTCGCTCATGCAGCTGGACGACGGCACCCTCGTGGGTGACCCTCTAGAGAAGGCC
ATGCTGACGGCCGTGGACTGGACGCTGACCAAAGATGAGAAAGTATTCCCCCGAAGTATTAAAACTCAGGGGCTG
AAAATTCACCAGCGCTTTCATTTTGCCAGTGCCCTGAAGCGAATGTCCGTGCTTGCCTCGTATGAGAAGCTGGGC
TCCACCGACCTCTGCTACATCGCGGCCGTGAAGGGGGCCCCCGAAACTCTGCACTCCATGTTCTCCCAGTGCCCG
CCCGACTACCACCACATCCACACCGAGATCTCCCGGGAAGGAGCCCGCGTCCTGGCGCTGGGGTACAAGGAGCTG
GGACACCTCACTCACCAGCAGGCCCGGGAGGTCAAGCGGGAGGCCCTGGAGTGCAGCCTCAAGTTCGTCGGCTTC
ATTGTGGTCTCCTGCCCGCTCAAGGCTGACTCCAAGGCCGTGATCCGGGAGATCCAGAATGCGTCCCACCGGGTG
GTCATGATCACGGGAGACAACCCGCTCACTGCATGCCACGTGGCCCAGGAGCTGCACTTCATTGAAAAGGCCCAC
ACGCTGATCCTGCAGCCTCCCTCCGAGAAAGGCCGGCAGTGCGAGTGGCGCTCCATTGACGGCAGCATCGTGCTG
CCCCTGGCCCGGGGCTCCCCAAAGGCACTGGCCCTGGAGTACGCACTGTGCCTCACAGGCGACGGCTTGGCCCAC
CTGCAGGCCACCGACCCCCAGCAGCTGCTCCGCCTCATCCCCCATGTGCAGGTGTTCGCCCGTGTGGCTCCCAAG
CAGAAGGAGTTTGTCATCACCAGCCTGAAGGAGCTGGGCTACGTGACCCTCATGTGTGGGGATGGCACCAACGAC
GTGGGCGCCCTGAAGCATGCTGACGTGGGTGTGGCGCTCTTGGCCAATGCCCCTGAGCGGGTTGTCGAGCGGCGA
CGGCGGCCCCGGGACAGCCCAACCCTGAGCAACAGTGGCATCAGAGCCACCTCCAGGACAGCCAAGCAGCGGTCG
GGGCTCCCTCCCTCCGAGGAGCAGCCAACCTCCCAGAGGGACCGCCTGAGCCAGGTGCTGCGAGACCTCGAGGAC
GAGAGTACGCCCATTGTGAAACTGGGGGATGCCAGCATCGCAGCACCCTTCACCTCCAAGCTCTCATCCATCCAG
TGCAGTCTGCCACGTGATCAAGCAGGGCCGCTGCACGCTGGTGACCACGCTACAGATGTTCAAGATCCTGGCGCT
CAATGCCCTCATCCTGGCCTACAGCCAGAGCGTCCTCTACCTGGAGGGAGTCAAGTTCAGTGACTTCCAGGCCAC
CCTACAGGGGCTGCTGCTGGCCGGCTGCTTCCTCTTCATCTCCCGTTCCAAGCCCCTCAAGACCCTCTCCCGAGA
ACGGCCCCTGCCCAACATCTTCAACCTGTACACCATCCTCACCGTCATGCTCCAGTTCTTTGTGCACTTCCTGAG
CCTTGTCTACCTGTACCGTGAGGCCCAGGCCCGGAGCCCCGAGAAGCAGGAGCAGTTCGTGGACTTGTACAAGGA
GTTTGAGCCAAGCCTGGTCAACAGCACCGTCTACATCATGGCCATGGCCATGCAGATGGCCACCTTCGCCATCAA
TTACAAAGGCCCGCCCTTCATGGAGAGCCTGCCCGAGAACAAGCCCCTGGTGTGGAGTCTGGCAGTTTCACTCCT
GGCCATCATTGGCCTGCTCCTCGGCTCCTCGCCCGACTTCAACAGCCAGTTTGGCCTCGTGGACATCCCTGTGGA
GTTCAAGCTGGTCATTGCCCAGGTCCTGCTCCTGGACTTCTGCCTGGCGCTCCTGGCCGACCGCGTCCTGCAGTT
CTTCCTGGGGACCCCGAAGCTGAAAGTGCCTTCCTGAGATGGCAGTGCTGGTACCCACTGCCCACCCTGGCTGCC
GCTGGGCGGGAACCCCAACAGGGCCCCGGGAGGGAACCCTGCCCCCAACCCCCCACAGCAAGGCTGTACAGTCTC
GCCCTTGGAAGACTGAGCTGGGACCCCCACAGCCATCCGCTGGCTTGGCCAGCAGAACCAGCCCCAAGCCAGCAC
CTTTGGTAAATAAAGCAGCATCTGAGATTTTAAA

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FIGURE 3691

CCCCTCTAGCCTAGGCGAGGACTTCTACCGCGAGGCCATCGAGCACTGCCGCAGTTACAACGCGCGCCTGTGCGC
CGAGCGCAGCCTGCGACTGCCCTTCCTCGACTCGCAGACCGGCGTGGCCCAGAACAACTGCTACATCTGGATGGA
GAAGACCCACCGCGGGCCGGGTTTGGCCCCGGGACAGATTTACACGTACCCCGCCCGCTGTTGGAGGAAGAAACG
GAGACTCAACATCCTGGAGGACCCCAGACTCAGGCCCTGCGAGTACAAGATCGACTGTGAAGCACCCCTGAAGAA
GGAGGGTGGCCTCCCGGAAGGGCCGGTCCTCGAGGCTCTACTGTGTGCAGAGACGGGGGGAGAAGAAGATTGAGCT
GAAGGAGGAGGAGACCATTATGGACTGTCAGAAACAGCAGTTGCTGGAGTTTCCGCATGACCTCGAGGTGGAAGA
CTTGGAGGATGACATTCCCAGGAGGAAGAACAGGGCCAAAGGAAAGGCATATGGCATCGGGGGTCTCCGGAAACG
CCAGGACACCGCTTCCCTGGAGGACCGAGACAAGCCGTATGTCTGTGATAAGTTTTACAAAGAATTGGCCTGGGT
CCCTGAGGCACAAAGGAAACACACAGCCAAGAAGGCGCCCGACGGCACTGTCATCCCCAACGGCTACTGTGACTT
CTGCCTGGGGGGCTCCAAGAAGACGGGGTGTCCCGAGGACCTCATCTCCTGTGCGGACTGTGGGCGATCAGGACA
CCCCTCGTGTTTACAATTCACGGTGAACATGACGGCAGCCGTGCGGACCTACCGCTGGCAGTGCATCGAGTGCAA
ATCCTGCAGCCTGTGCGGAACCTCCGAGAACGACGGTGCCAGCTGGGCGGGTCTCACCCCCCAGGACCAGCTGCT
GTTTTGTGATGACTGCGATCGGGGTTACCACATGTACTGCCTGAGTCCCCCCATGGCGGAGCCCCCGGAAGGGAG
CTGGAGCTGTCACCTCTGTCTCCGGCACCTGAAGGAAAAGGCTTCTGCTTACATCACCCTCACCTAGGCCGGCTC
GGCTCGCCGCGACTCTGGGGTGGTGCTCGCCTACCTGCCTCTCCGAGCTCCTCAATTCTCCCCCACCCTGAACAT
CCCGCAGGGGGAGGGGGAGAGGGGGAAGCCGAGAGGGGGCTGGGCCACCCCCTCCCCTCTGTGCAAGTGGAATGT
CTGCCCTGTGGGTGGGTGGGCCCGGCCAGGGCCTCTCCCTCCCTCCCTCCCTCTCTGTCCCTTGGCAAATGGACA
CCAGGGGCTTCTCCCCTCAAAGCCATACCCCGCCTCTGGGCGGGCATGGGGGGTGGTGGGTGCCAGCCAGGGGCA
TGGACAGAGCCTTTTTCTAAAGAAAAAGACAAAAAGTT

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FIGURE 3692

GCCTCAAGCCGACGCAGCGGCCTACTCTCGCACTGCAGACGGGGAAACTGAGGCCTGAGGCGGCCGGGGTGGGGC
AGACCTCCCGGCGAGCCCGAGCCCCCGCCCCCGGCTAGCCCCGCCCTGGCCCGTAAGAAGCACCCGGGGCGCGAG
GCGAAGGCGCACAGCGCGGGGCCAGGCTGGGTCCAGCAGCGCG**ATG**GCAGCTCAGCGGCTGGGCAAGCGCGTGCT
GAGCAAGCTGCAGTCTCCATCGCGGGCCCGCGGGCCAGGGGGCAGTCCCGGGGGGCTGCAGAAGCGGCACGCGCG
CGTCACCGTCAAGTATGACCGGCGGGAGCTGCAGCGGCGGCTGGACGTGGAGAAGTGGATCGACGGGCGCCTGGA
GGAGCTGTACCGCGGCATGGAGGCAGACATGCCCGATGAGATCAACATTGATGAATTGTTGGAGTTAGAGAGTGA
AGAGGAGAGAAGCCGGAAAATCCAGGGACTCCTGAAGTCATGTGGGAAACCTGTCGAGGACTTCATCCAGGAGCT
GCTGGCAAAGCTTCAAGGCCTCCACAGGCAGCCCGGCCTCCGCCAGCCAAGCCCCTCCCACGACGGCAGCCTCAG
CCCCCTCCAGGACCGGGCCCGGACTGCTCACCCC**TGA**CCCTCTTGCACTCTCCCTGCCCCCCGGACGCCGCCCAG
CTTGCTTGTGTATAAGTTGTATTTAATGGTTCTGTAACAATAA

FIGURE 3693

GTTGGGAGGTGTAGCGCGGCTCTGAACGCGCTGAGGGCCGTTGAGTGTCGCAGGCGGCGAGGGCGCGAGTGAGGA
GCAGACCCAGGCATCGCGCGCCGAGAAGGCCGGGCGTCCCCACACTGAAGGTCCGGAAAGGCGACTTCCGGGGGC
TTTGGCACCTGGCGGACCCTCCCGGAGCGTCGGCACCTGAACGCGAGGCGCTCCATTGCGCGTGCGCGTTGAGGG
GCTTCCCGCACCTGATCGCGAGACCCCAACGGCTGGTGGCGTCGCCTGCGCGTCTCGGCTGAGCTGGCC**ATG**GCG
CAGCTGTGCGGGCTGAGGCGGAGCCGGGCGTTTCTCGCCCTGCTGGGATCGCTGCTCCTCTCTGGGGTCCTGGCG
GCCGACCGAGAACGCAGCATCCACGACTTCTGCCTGGTGTCGAAGGTGGTGGGCAGATGCCGGGCCTCCATGCCT
AGGTGGTGGTACAATGTCACTGACGGATCCTGCCAGCTGTTTGTGTATGGGGGCTGTGACGGAAACAGCAATAAT
TACCTGACCAAGGAGGAGTGCCTCAAGAAATGTGCCACTGTCACAGAGAATGCCACGGGTGACCTGGCCACCAGC
AGGAATGCAGCGGATTCCTCTGTCCCAAGTGCTCCCAGAAGGCAGGATTCTGAAGACCACTCCAGCGATATGTTC
AACTATGAAGAATACTGCACCGCCAACGCAGTCACTGGGCCTTGCCGTGCATCCTTCCCACGCTGGTACTTTGAC
GTGGAGAGGAACTCCTGCAATAACTTCATCTATGGAGGCTGCCGGGGCAATAAGAACAGCTACCGCTCTGAGGAG
GCCTGCATGCTCCGCTGCTTCCGCCAGCAGGAGAATCCTCCCCTGCCCCTTGGCTCAAAGGTGGTGGTTCTGGCG
GGGCTGTTCGTGATGGTGTTGATCCTCTTCCTGGGAGCCTCCATGGTCTACCTGATCCGGGTGGCACGGAGGAAC
CAGGAGCGTGCCCTGCGCACCGTCTGGAGCTCCGGAGATGACAAGGAGCAGCTGGTGAAGAACACATATGTCCTG
TGACCGCCCTGTCGCCAAGAGGACTGGGGAAGGGAGGGGAGACTATGTGTGAGCTTTTTTTAAATAGAGGGATTG
ACTCGGATTTGAGTGATCATTAGGGCTGAGGTCTGTTTCTCTGGGAGGTAGGACGGCTGCTTCCTGGTCTGGCAG
GGATGGGTTTGCTTTGGAAATCCTCTAGGAGGCTCCTCCTCGCATGGCCTGCAGTCTGGCAGCAGCCCCGAGTTG
TTTCCTCGCTGATCGATTTCTTTCCTCCAGGTAGAGTTTTCTTTGCTTATGTTGAATTCCATTGCCTCTTTTCTC
ATCACAGAAGTGATGTTGGAATCGTTTCTTTTGTTTGTCTGATTTATGGTTTTTTTAAGTATAAACAAAAGTTTT
TTATTAGCATTCTGAAAGAAGGAAAGTAAAATGTACAAGTTTAATAAAAAGGGGCCTTCCCCTTTAGAATAAATT
TCAGCATGTGCTTTC

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FIGURE 3694

ATTCCTCCAACGGGCAGGTCTCAGCGCTCCTCCCCCTGCTCCGCTCCTCTGCAGGGCCCAGGCGCCCTTGGCCTT
AGGACCCAACTTCTCTTACCGCCATGGAGTTCGACCTGGGAGCAGCCCTGGAGCCCACCTCCCAGAAGCCCGGTG
TGGGGGCGGGCCACGGGGGAGATCCCAAGCTCAGTCCCCACAAAGTTCAGGGCCGGTCGGAGGCAGGGGCAGGTC
CGGGTCCAAAGCAAGGACACCACAGCTCTTCCGACTCCAGCAGCAGCTCCAGCGATTCGGACACGGATGTGAAGT
CCCACGCTGCTGGCTCCAAGCAGCACGAGAGCATCCCGGGCAAGGCCAAGAAGCCCAAAGTGAAGAAGAAGGAGA
AGGGCAAGAAGGAGAAGGGCAAGAAGAAGGAGGCTCCCCACTGAAGGGCCCTGGACAGGGCTCATTAAACCTTCC
TCTCTGCCTTC

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FIGURE 3695

TGCCAGTCCATCTGACATCAAAGCCAGTGTCTCTAATGGTGACACCACCCTCCTCTGCAGCAGGAGGCAGAGCTG
TGGGATGAATGAGGTTCGCCAGGTCTCCCTTACCTATCCTGGGTCCCCAGCTCCTTCTCACTCTCTTCCCTTGCA
GCCTCGAAGCGGAGGATCCCTGTGTCCCAGCCGGGCATGGCGACCCCCACCAGCTTTTCGATGACACAAGTTCAG
CCCAGAGCCGGGGCTATGGGGCCCAGCGGGCACCTGGTGGCCTGAGTTATCCTGCAGCCTCTCCCACGCCCCATG
CAGCCTTCCTGGCTGACCCGGTGTCCAACATGGCCATGGCCTATGGGAGCAGCCTGGCCGCGCAGGGCAAGGAGC
TGGTGGATAAGAACATCGACCGCTTCATCCCCATCACCAAGCTCAAGTATTACTTTGCTGTGGACACCATGTATG
TGGGCAGAAAGCTGGGCCTGCTGTTCTTCCCCTACCTACACCAGGACTGGGAAGTGCAGTACCAACAGGACACCC
CGGTGGCCCCCCGCTTTGACGTCAATGCCCCGGACCTCTACATTCCAGCAATGGCTTTCATCACCTACGTTTTGG
TGGCTGGTCTTGCGCTGGGGACCCAGGATAGGTTCTCCCCAGACCTCCTGGGGCTGCAAGCGAGCTCAGCCCTGG
CCTGGCTGACCCTGGAGGTGCTGGCCATCCTGCTCAGCCTCTATCTGGTCACTGTCAACACCGACCTCACCACCA
TCGACCTGGTGGCCTTCTTGGGCTACAAATATGTCGGGATGATTGGCGGGGTCCTCATGGGCCTGCTCTTCGGGA
AGATTGGCTACTACCTGGTGCTGGGCTGGTGCTGCGTAGCCATCTTTGTGTTCATGATCCGGACGCTGCGGCTGA
AGATCTTGGCAGACGCAGCAGCTGAGGGGGTCCCGGTGCGTGGGGCCCGGAACCAGCTGCGCATGTACCTGACCA
TGGCGGTGGCGGCGGCGCAGCCTATGCTCATGTACTGGCTCACCTTCCACCTGGTGCGGTGAGCGCGCCCGCTGA
ACCTCCCGCTGCTGCTGCTGCTGCTGGGGGCCACTGTGGCCGCCGAACTCATCTCCTGCCTGCAGGCCCCAAGGT
CCACCCTGTCTGGCCACAGGCACCGCCTCCATCCCATGTCCCGCCCAGCCCCGCCCCCAACCCAAGGTGCTGAGA
GATCTCCAGCTGCACAGGCCACCGCCCCAGGGCGTGGCCGCTGTTACAGAAACAATAAACCCTGATGGGCATGG

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FIGURE 3696

TGCCGCGCCTGTAGCACTCCCGGAACTGGAACTAGGTGCCAGACGGTCCGGAGGCGGGGGCCACGTCAGCGGGGC
CACCCAGGGCTCGCGGGGTCCCGGTGGGTGCCATGCGGAGGGGCGCGCTTCTGGCGGGCGCCTTGGCCGCGTACG
CCGCGTACCTGGTGCTGGGCGCGCTGTTGGTGGCGCGGCTGGAGGGGCCGCACGAAGCCAGGCTCCGAGCCGAGC
TGGAGACGCTGCGGGCGCAGCTGCTTCAGCGCAGCCCGTGTGTGGCTGCCCCCGCCCTGGACGCCTTCGTGGAGC
GAGTGCTGGCGGCCGGACGGCTGGGGCGGGTCGTGCTTGCTAACGCTTCGGGGTCCGCCAACGCCTCGGACCCCG
CCTGGGACTTCGCCTCTGCTCTCTTCTTCGCCAGCACGCTGATCACCACCGTGGGCTATGGGTACACAACGCCAC
TGACTGATGCGGGCAAGGCCTTCTCCATCGCCTTTGCGCTCCTGGGCGTGCCGACCACCATGCTGCTGCTGACCG
CCTCAGCCCAGCGCCTGTCACTGCTGCTGACTCACGTGCCCCTGTCTTGGCTGAGCATGCGTTGGGGCTGGGACC
CCCGGCGGGCGGCCTGCTGGCACTTGGTGGCCCTGTTGGGGGTCGTAGTGACCGTCTGCTTTCTGGTGCCGGCTG
TGATCTTTGCCCACCTCGAGGAGGCCTGGAGCTTCTTGGATGCCTTCTACTTCTGCTTTATCTCTCTGTCCACCA
TCGGCCTGGGCGACTACGTGCCCGGGGAGGCCCCTGGCCAGCCCTACCGGGCCCTCTACAAGGTGCTGGTCACAG
TCTACCTCTTCCTGGGCCTGGTGGCCATGGTGCTGGTGCTGCAGACCTTCCGCCACGTGTCCGACCTCCACGGCC
TCACGGAGCTCATCCTGCTGCCCCCTCCGTGCCCTGCCAGTTTCAATGCGGATGAGGACGATCGGGTGGACATCC
TGGGCCCCCAGCCGGAGTCGCACCAGCAACTCTCTGCCAGCTCCCACACCGACTACGCTTCCATCCCCAGGTAGC
TGGGGCAGCCTCTGCCAGGCTTGGGTGTGCCTGGCCTGGGACTGAGGGGTCCAGGCGACCAGAGCTGGCTGTACA
GGAATGTCCACGAGCACAGCAGGTGATCTTGAGGCCTTGCCGTCCACCGTCTCTCCTTTGTTTCCCAGCATCTGG
CTGGGATGTGAAGGGCAGCACTCCCTGTCCCCATGTCCCGGGCTCCACTGGGCACCAACATAACCTTGTTCTCTG
TCCTTTCTCTCATCCTCTTTACACTGTGTCTCTCTGGCTCTCTGGCATTCTCGCTGCCTCTGTCTTTCCCTCTTG
CTGTCTCTGTTTCTCATTCTCTTTCATGTTCCGTCTGTGTCTCTCAATTAACCACTCGTCAACTGCTGATTCTAC
TGGGCTGTGGGCTCAGACCTCATTTCAGGCACCAGATTGGTCGCTACACCCTGGACAAGTGACTGCCCGTCTCTG
AGCCTTGATTTCCTCAGCTGCCAAATGGGAAGAATAGAAGAATTTGCCCCTAAACCCCTCCTGTGTGCTGGCCCT
GTGCTAGACAGTGCTGGAGACATAGTTGGGGGTGGAGAACTGCCCTTATGGAGCTTGCAGTCCAGTGAGGTGGAC
AGACCTGTCCCCAGACAGTGATGGCCCAAAATGGTCAGGACTTTAATGGAGGAGGTGAGGTGTTGAAAGCACAGG
CAGAGTGGTCAGGGCTGAAGTCGGAGAAGCATAGGGACTAGGCCCAATCCAGCCTGGAAAGTCAGGGAGGACTTC
CTAGAGGAAGGGACATCGAACTAAGACCTGAACTATGAGAAATAGGCAGGAAGAAGTTGTACCTGACTCATTTTT
CTCAGGTGTCTCCAGGGAGCAGGACCCATGGAGGGACCCCTGGTGTAGGCCTGGGCGATAGACTCTTCCTCAGCA
GCCTGGCAGGCAGGAAACAGACATAGGACCCCAGCCCAGATCTGAATGGCATGGGAGGTGCTGCCCTTAACCATG
ACACCATTGTAAGAGCTGTCCACATTTGTATGTTGTGCCCTGGAATCAGCCTGGTTGAGCTCAAATCCCAACTTA
GCCACGTCTGGCCTGTGTCCTTGGGCAGTCACACTACCTCTCTGATTTTGTTTCCTTATCTGTAAAATGGTGATC
ATCATAATACAACTTCAAAAGGATTTCAGGCTGAGTGTGGTGGCTCACGCCTATACACCCAGCACTTTGGAAGGC
TGAGGAAGGAGGATCGCTTGAGGCCAGGAGTTTGAGACTAGCCTAGGCAACACAGTGAGGCCTTATCTCAACAAC
AACCACAAAATCTAAAAATTAGCTGGGTGTGGTGGTGCATGCCTGTGATCCTGGCTACTTCAGAGGCTGAGGTGG
AAGGATCACTTGAGGCCAGGAGTTTGAGGCTGCAGTGAGTTATGATGGCACTGCTGCACTCCAGCCTGCGGGACA
GAGTGAGACCCTGTCTGAAAGAAAGAGAGAAAGAAAGAAAGAAAGAGAGAGAAAGAAAGAAAGAAAGAAAGGGAA
AGATGGAAGGAAGGAAGGAAAAAGAAAGAGAAAGAGAGAGAGAGAGAAAGAAAAAGAAAGAAAAGTAAGAAAGAA
AAAAGAAAAAGAAAGAAAAGTAAGAAAG

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FIGURE 3697

CGGGGCGGCAGGCTTCTCGAGCTCCGGGCCCGCGGCAACCTCGGGCGCTGTTCTGCAGGCCGCGACCGGC**ATG**TA
CGAGCAACTCAAGGGCGAGTGGAACCGTAAAAGCCCCAATCTTAGCAAGTGCGGGGAAGAGCTGGGTCGACTCAA
GCTAGTTCTTCTGGAGCTCAACTTCTTGCCAACCACAGGGACCAAGCTGACCAAACAGCAGCTAATTCTGGCCCG
TGACATACTGGAGATCGGGGCCCAATGGAGCATCCTACGCAAGGACATCCCCTCCTTCGAGCGCTACATGGCCCA
GCTCAAATGCTACTACTTTGATTACAAGGAGCAGCTCCCCGAGTCAGCCTATATGCACCAGCTCTTGGGCCTCAA
CCTCCTCTTCCTGCTGTCCCAGAACCGGGTGGCTGAGTTCCACACGGAGTTGGAGCGGCTGCCTGCCAAGGACAT
ACAGACCAATGTCTACATCAAGCACCCAGTGTCCCTGGAGCAATACCTGATGGAGGGCAGCTACAACAAAGTGTT
CCTGGCCAAGGGTAACATCCCCGCCGAGAGCTACACCTTCTTCATTGACATCCTGCTCGACACTATCAGGGATGA
GATCGCTGGGTGCATCGAGAAGGCCTACGAGAAAATCCTTTTCACTGAGGCCACCCGGATCCTCTTCTTCAACAC
ACCCAAAAAGATGACAGACTACGCCAAGAAGCGAGGGTGGGTCCTGGGCCCCAACAACTACTACAGTTTTGCCAG
CCAGCAGCAGAAGCCGGAAGACACCACCATTCCCTCCACAGAACTGGCCAAACAGGTCATCGAGTATGCCCGGCA
GCTGGAGATGATCGTC**TGA**GCCCCCCGGGCACTGGGTGGGGCAGGGCACGAGTTATTTAAAACAGTTACACTGCA
GGGTTTCGCCCAATAAAGGTGGACTGAC

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FIGURE 3698

CCTGCAGGTACATGGTGCGGGTCCGAGCTGTGGTGATGGCCCGAGATGACTCCAGTGGGGGCTGGCTGCCTGTGG
GGGGCGGGGGCCTCAGCCAGACAACCTTGGAGTGTACACTGAAGCCAGGCTTGGTTTACAACAAGGTGAATCCCA
TCTTTCACCACTGGAGCCTGGGTGACTGCAAGTTTGGACTGACGTTTCAGAGCCCTGCAGAGGCTGATGAGTTCC
AGAAGAGCCTGCTGGCTGCGCTGGCCGCACTGGGTCGAGGCTCACTCACCCCCTCCTCCTCCTCCTCCTCCTCCT
CTCCTTCCCAGGATACTGCAGAGACCCCCTGCCCTCTGACGCTCTCCCAGTACTTCAGGCATATGCTGTGCCCTTG
ACAGTGGCCCTAACCGCATCCTTATGAATAGGTACTCTTAGGATCCCCGTTTTACAGAGGAGGAAACTGAGGCT
CAAAGAGTCCCACGTGGACAGCGACTCCTCCTCCAGTCACAGCCGCCAGGAGACTCCTCCCAGCGCCGCTGCGGC
CCCCATCATCACGATGGAGTCAGCTTCAGGCTTCGGGCCGACCACGCCCCCCCAGCGCCGCCGCTCCTCCGCTCA
G

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FIGURE 3699

GGAAGCGTGGGAGGGGGCCGCGGTGGCCCAGGACCTGCTGGCTCTGGGGTATGGAGGTGTCCCGGGGGCGGCGTC
GCGGGGCGCCTCATGCCCAGACTTCAGGGGGCTGTGCGTGCGGCTGGCGGCGGAGCTGGCGACGCTGGGCGCCCT
CGAGCAGCAGCGAGAGGCGGGCGCGGAGGTGCTGAGCGCCGGCGACGGCCCTGGCGCGGAGGAGGACTTTCTGCG
GCAGCTCGGCAGCCTGCTGCGGGAGCTGCACTGCCCGGATCGCGCGCTCTGCGGCGGGGATGGCGCGGCTGCGCT
TCGGGAACCCGGTGCCGGACTGCGCCTGCTGCTAGAGACACAGTTTCACCATGTTGGCCAGGCTGGTCTCCATCT
CCTGACCTCGTGATCCGCCCGCCTCTGCCTCCCAAAGTGCTGGGATTACAGGCTTTCTCTGCTCAGAGCTCCAAG
CCACCCGCCTCCTGTGCCTCCGCTCTCTGCTGGATCCGAGTCCTAGGCCACCCCTTGGTGAAGGGGTAGTGGAGG
GAGCCGGC**ATG**GTCCAAGAACTGGACCTTACCCTCCAAGCCCTGGGGCTGCCCAGACCTGCACCAGGGACCCCCG
CCAGCCAGCTGCTGCAGGAGTTGCATGCTAAGATCTCAGAGCTGCAGCCTTCTCTGCCCCCAGGGTCCCTGCAGC
CCCTCCTCAGCTGCTCGCTAGATGCACCCAGATGGGAAGCGTTGGAGTCTCTGTCCCAAAGCCTCAGAGATCAGT
ACCGCTGCCGCCGCTGCCTCCTCCTCAAGCGCCTTGACCTCACTACATCTGCTTTCCACTGGAGTGACCGGGCAG
AGGCCCAAGGAGAGGCCATGAGGGCAGTGCTGATCCCAATTCGAGAGGTTCTGACCCCAGAATCGGACATCTCCA
TTGCACACGTTCTGGCTGCCCGAGCCGACCTGTCTTGTCTCGTCCCAGCCACCAGCGTGGCTGTCCGCAGAGGGA
CCTGCTGTGCCATCAACAAGGTGCTTATGGGCAACGTTCCAGACCGGGGGGGCCGCCCAAATGAGCTGGAGCCTC
CCATGCCCACCTGGAGGAGCCGAAGAGAGGATGGAGGCCCCCAGTGTTGGGGTCGCAAGAAGAAGAAGAAGAAG**T**
AAAGGGGGACTGGTGGTCGGGGGCGGGGGGTCCTCCATGAGATGCTAATGCTATCGGTAATCTCTGGGGAGTCCG
TTTAAGGCTTTCCTTGGTATTTGGCACCCAAGCCCCCCATCTCCTATTCCTGAGTCCCCAAATGCCCTGCTCCCA
TTCACGTCAATACCAAGAACCATGTTCTCCAGAGAATAAATTTAATTTATGAC

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FIGURE 3700A

TCTACCTCGCGGGTGCCTCTGGTGTCTCCAGAGGTCTCCGACCCCAGCCCGCCCCCAGCCCTCCCGCCCAGCCCG
CAGCCCCCTCCCTCTGTTCCCCGACCTCAGACCCTGGGCTTCCGACCTCGACATCATGGGTGACGCAGAAGGCGA
AGACGAGGTCCAGTTCCTGCGGACGGACGATGAGGTGGTCCTGCAGTGCAGCGCTACCGTGCTCAAGGAGCAGCT
CAAGCTCTGCCTGGCCGCCGAGGGCTTCGGCAACCGCCTGTGCTTCCTGGAGCCCACTAGCAACGCGCAGAATGT
GCCCCCCGATCTGGCCATCTGTTGCTTCGTCCTGGAGCAGTCCCTGTCTGTGCGAGCCCTGCAGGAGATGCTGGC
TAACACGGTGGAGGCTGGCGTGGAGTCATCCCAGGGCGGGGGACACAGGACGCTCCTGTATGGCCATGCCATCCT
GCTCCGGCATGCACACAGCCGCATGTATCTGAGCTGCCTCACCACCTCCCGCTCCATGACTGACAAGCTGGCCTT
CGATGTGGGACTGCAGGAGGACGCAACAGGAGAGGCTTGCTGGTGGACCATGCACCCAGCCTCCAAGCAGAGGTC
TGAAGGAGAAAAGGTCCGCGTTGGGGATGACATCATCCTTGTCAGTGTCTCCTCCGAGCGCTACCTGCACCTGTC
GACCGCCAGTGGGGAGCTCCAGGTTGACGCTTCCTTCATGCAGACACTATGGAACATGAACCCCATCTGCTCCCG
CTGCGAAGAGGGCTTCGTGACGGGAGGTCACGTCCTCCGCCTCTTTCATGGACATATGGATGAGTGTCTGACCAT
TTCCCCTGCTGACAGTGATGACCAGCGCAGACTTGTCTACTATGAGGGGGGAGCTGTGTGCACTCATGCCCGCTC
CCTCTGGAGGCTGGAGCCACTGAGAATCAGCTGGAGTGGGAGCCACCTGCGCTGGGGCCAGCCACTCCGAGTCCG
GCATGTCACTACCGGGCAGTACCTAGCGCTCACCGAGGACCAGGGCCTGGTGGTGGTTGACGCCAGCAAGGCTCA
CACCAAGGCTACCTCCTTCTGCTTCCGCATCTCCAAGGAGAAGCTGGATGTGGCCCCCAAGCGGGATGTGGAGGG
CATGGGCCCCCCCTGAGATCAAGTACGGGGAGTCACTGTGCTTCGTGCAGCATGTGGCCTCAGGACTGTGGCTCAC
CTATGCTGCTCCAGACCCCAAGGCCCTGCGGCTCGGCGTGCTCAAGAAGAAGGCCATGCTGCACCAGGAGGGCCA
CATGGACGACGCACTGTCGCTGACCCGCTGCCAGCAGGAGGAGTCCCAGGCCGCCCGCATGATCCACAGCACCAA
TGGCCTATACAACCAGTTCATCAAGAGCCTGGACAGCTTCAGCGGGAAGCCACGGGGCTCGGGGCCACCCGCTGG
CACGGCGCTGCCCATCGAGGGCGTTATCCTGAGCCTGCAGGACCTCATCATCTACTTCGAGCCTCCCTCCGAGGA
CTTGCAGCACGAGGAGAAGCAGAGCAAGCTGCGAAGCCTGCGCAACCGCCAGAGCCTCTTCCAGGAGGAGGGGAT
GCTCTCCATGGTCCTGAATTGCATAGACCGCCTAAATGTCTACACCACTGCTGCCCACTTTGCTGAGTTTGCAGG
GGAGGAGGCAGCCGAGTCCTGGAAAGAGATTGTGAATCTTCTCTATGAACTCCTAGCTTCTCTAATCCGTGGCAA
TCGTAGCAACTGTGCCCTCTTCTCCACAAACTTGGACTGGCTGGTCAGCAAGCTGGATCGGCTGGAGGCCTCGTC
TGGCATCCTGGAGGTCCTGTACTGTGTCCTCATTGAGAGTCCAGAGGTTCTGAACATCATCCAGGAGAATCACAT
CAAGTCCATCATCTCCCTCCTGGACAAGCATGGGAGGAACCACAAGGTCCTGGACGTGCTATGCTCCCTGTGTGT
GTGTAATGGTGTGGCTGTACGCTCCAACCAAGATCTTATTACTGAGAACTTGCTGCCTGGCCGTGAGCTTCTGCT
GCAGACAAACCTCATCAACTATGTCACCAGCATCCGCCCCAACATCTTTGTGGGCCGAGCGGAAGGCACCACGCA
GTACAGCAAATGGTACTTTGAGGTGATGGTGGACGAGGTGACTCCATTTCTGACAGCTCAGGCCACCCACTTGCG
GGTGGGCTGGGCCCTCACCGAGGGCTACACCCCCTACCCTGGGGCCGGCGAGGGCTGGGGCGGCAACGGGGTCGG
CGATGACCTCTATTCCTACGGCTTTGATGGACTGCATCTCTGGACAGGACACGTGGCACGCCCAGTGACTTCCCC
AGGGCAGCACCTCCTGGCCCCTGAAGACGTGATCAGCTGCTGCCTGGACCTCAGCGTGCCGTCCATCTCCTTCCG
CATCAACGGCTGCCCCGTGCAGGGTGTCTTTGAGTCCTTCAACCTGGACGGGCTCTTCTTCCCTGTTGTCAGCTT
CTCGGCTGGTGTCAAGGTGCGGTTCCTCCTTGGTGGCCGCCATGGTGAATTCAAGTTCCTGCCCCCACCTGGCTA
TGCTCCATGCCATGAGGCTGTGCTCCCTCGAGAGCGACTCCATCTTGAACCCATCAAGGAGTATCGACGGGAGGG
GCCCCGGGGGCCTCACCTGGTGGGCCCCAGTCGCTGCCTCTCACACACCGACTTCGTGCCCTGCCCTGTGGACAC
TGTCCAGATTGTCCTGCCGCCCCATCTGGAGCGCATTCGGGAGAAGCTGGCGGAGAACATCCACGAGCTCTGGGC
GCTAACCCGCATCGAGCAGGGCTGGACCTACGGCCCGGTTCGGGATGACAACAAGAGGCTGCACCCGTGTCTTGT
GGACTTCCACAGCCTTCCAGAGCCTGAGAGGAACTACAACCTGCAGATGTCTGGGGAGACGCTCAAGACTCTGCT
GGCTCTGGGCTGCCACGTGGGCATGGCGGATGAGAAGGCGGAGGACAACCTGAAGAAGACAAAACTCCCCAAGAC
GTATATGATGAGCAATGGGTACAAGCCGGCTCCGCTGGACCTGAGCCACGTGCGGCTGACGCCGGCGCAGACGAC
ACTGGTGGACCGTCTGGCAGAAAATGGGCACAACGTGTGGGCCCGAGACCGCGTGGGCCAGGGCTGGAGCTACAG
CGCAGTGCAGGACATCCCAGCGCGCCGAAACCCTCGGCTGGTGCCCTACCGCCTGCTGGATGAAGCCACCAAGCG
CAGCAACCGGGACAGCCTCTGCCAGGCCGTGCGCACCCTCCTGGGCTACGGCTACAACATCGAGCCTCCTGACCA
GGAGCCCAGTCAGGTGGAGAACCAGTCTCGTTGTGACCGGGTGCGCATCTTCCGGGCAGAGAAATCCTATACAGT
GCAGAGCGGCCGCTGGTACTTCGAGTTTGAAGCAGTCACCACAGGCGAGATGCGCGTGGGCTGGGCGAGGCCCGA
GCTGAGGCCTGATGTAGAGCTGGGAGCTGACGAGCTGGCCTATGTCTTCAATGGGCACCGCGGCCAGCGCTGGCA
CTTGGGCAGTGAACCATTTGGGCGCCCCTGGCAGCCGGGCGATGTCGTTGGCTGTATGATCGACCTCACAGAGAA

FIGURE 3700B

CACCATTATCTTCACCCTCAATGGCGAGGTCCTCATGTCTGACTCAGGCTCCGAAACAGCCTTCCGGGAGATTGA
GATTGGGGACGGCTTCCTGCCCGTCTGCAGCTTGGGACCTGGCCAGGTGGGTCATCTGAACCTGGGCCAGGACGT
GAGCTCTCTGAGGTTCTTTGCCATCTGTGGCCTCCAGGAAGGCTTCGAGCCATTTGCCATCAACATGCAGCGCCC
AGTCACCACCTGGTTCAGCAAAGGCCTGCCCCAGTTTGAGCCAGTGCCCCTTGAACACCCTCACTATGAGGTATC
CCGAGTGGACGGCACTGTGGACACGCCCCCCTGCCTGCGCCTGACCCACCGCACCTGGGGCTCCCAGAACAGCCT
GGTGGAGATGCTTTTCCTGCGGCTGAGCCTCCCAGTCCAGTTCCACCAGCACTTCCGCTGCACTGCAGGGGCCAC
CCCGCTGGCACCTCCTGGCCTGCAGCCCCCCGCCGAGGACGAGGCCCGGGCGGCGGAACCCGACCCTGACTACGA
AAACCTGCGCCGCTCAGCTGGGGGCTGGAGCGAGGCAGAGAACGGCAAAGAAGGGACTGCGAAGGAGGGCGCCCC
CGGGGGCACCCCGCAGGCGGGGGGAGAGGCGCAGCCCGCCAGGGCGGAGAATGAGAAGGATGCCACCACCGAGAA
GAACAAGAAGAGAGGCTTCTTATTCAAGGCCAAGAAGGTCGCCATGATGACCCAGCCACCGGCCACCCCCACGCT
GCCCCGACTCCCTCACGACGTGGTGCCTGCAGACAACCGCGATGACCCCGAGATCATCCTCAACACCACCACGTA
CTATTACTCCGTGAGGGTCTTTGCTGGACAGGAGCCCAGCTGCGTGTGGGCGGGCTGGGTCACCCCTGACTACCA
TCAGCACGACATGAGCTTCGACCTCAGCAAGGTCCGGGTCGTGACGGTGACCATGGGGGATGAACAAGGCAACGT
CCACAGCAGCCTCAAGTGTAGCAACTGCTACATGGTGTGGGGCGGAGACTTTGTGAGTCCCGGGCAGCAGGGCCG
GATCAGCCACACGGACCTTGTCATTGGGTGCCTGGTGGACTTGGCCACTGGCTTAATGACCTTTACAGCCAATGG
CAAAGAGAGCAACACCTTTTTCCAGGTGGAACCCAACACTAAGCTATTTCCTGCCGTCTTCGTCCTGCCCACCCA
CCAGAACGTCATCCAGTTTGAGCTGGGGAAGCAGAAGAACATCATGCCGTTGTCAGCCGCCATGTTCCAAAGCGA
GCGCAAGAACCCGGCCCCGCAGTGCCCACCGCGGCTGGAGATGCAGATGCTGATGCCAGTGTCCTGGAGCCGCAT
GCCCAACCACTTCCTGCAGGTGGAGACGAGGCGTGCCGGCGAGCGGCTGGGCTGGGCCGTGCAGTGCCAGGAGCC
GCTGACCATGATGGCGCTGCACATCCCCGAGGAGAACCGGTGCATGGACATCCTGGAGCTGTCGGAGCGCCTGGA
CCTGCAGCGCTTCCACTCGCACACCCTGCGCCTCTACCGCGCTGTGTGCGCCCTGGGCAACAATCGCGTGGCGCA
CGCTCTGTGCAGCCACGTAGACCAAGCTCAGCTGCTGCACGCCCTGGAGGACGCGCACCTGCCAGGCCCACTGCG
CGCAGGCTACTATGACCTCCTCATCAGCATCCACCTCGAAAGTGCCTGCCGCAGCCGCCGCTCCATGCTCTCTGA
ATACATCGTGCCCCTCACGCCTGAGACCCGCGCCATCACGCTCTTCCCTCCTGGAAGGAGCACAGAAAATGGTCA
CCCCCGGCATGGCCTGCCGGGAGTTGGAGTCACCACTTCGCTGAGGCCCCCGCATCATTTCTCGCCCCCCTGTTT
CGTGGCCGCTCTGCCAGCTGCTGGGGCAGCAGAGGCCCCGGCCCGCCTCAGCCCTGCCATCCCGCTGGAGGCCCT
GCGGGACAAGGCACTGAGGATGCTGGGGGAGGCGGTGCGCGACGGTGGGCAGCACGCTCGCGACCCCGTCGGGGG
CTCCGTGGAGTTCCAGTTTGTGCCTGTGCTCAAGCTCGTGTCCACCCTGCTGGTGATGGGCATCTTTGGCGATGA
GGATGTGAAACAGATCTTGAAGATGATTGAGCCTGAGGTCTTCACTGAGGAAGAAGAGGAGGAGGACGAGGAGGA
AGAGGGTGAAGAGGAAGATGAGGAGGAGAAGGAGGAGGATGAGGAGGAAACAGCACAGGAAAAGGAAGATGAGGA
AAAAGAGGAAGAGGAGGCAGCAGAAGGGGAGAAAGAAGAAGGCTTGGAGGAAGGGCTGCTCCAGATGAAGTTGCC
AGAGTCTGTGAAGTTACAGATGTGCCACCTGCTGGAGTATTTCTGTGACCAAGAGCTGCAGCACCGTGTGGAGTC
CCTGGCAGCCTTTGCGGAGCGCTATGTGGACAAGCTCCAGGCCAACCAGCGGAGCCGCTATGGCCTCCTCATAAA
AGCCTTCAGCATGACCGCAGCAGAGACTGCAAGACGTACCCGCGAGTTCCGCTCCCCACCCCAGGAACAGATCAA
TATGCTATTGCAATTCAAAGATGGTACAGATGAGGAAGACTGTCCTCTCCCTGAAGAGATTCGACAGGATTTGCT
TGACTTTCATCAAGACCTGCTGGCACACTGTGGAATTCAGCTAGATGGAGAGGAGGAGGAACCAGAGGAAGAGAC
CACCCTGGGCAGCCGCCTCATGAGCCTGTTGGAGAAAGTGCGGCTGGTGAAGAAGAAGGAAGAGAAACCTGAGGA
GGAGCGGTCAGCAGAGGAGAGCAAACCCCGGTCCCTGCAGGAGCTGGTGTCCCACATGGTGGTGCGCTGGGCCCA
AGAGGACTTCGTGCAGAGCCCCGAGCTGGTGCGGGCCATGTTCAGCCTCCTGCACCGGCAGTACGACGGGCTGGG
TGAGCTGCTGCGTGCCCTGCCGCGGGCGTACACCATCTCACCGTCCTCCGTGGAAGACACCATGAGCCTGCTCGA
GTGCCTCGGCCAGATCCGCTCGCTGCTCATCGTGCAGATGGGCCCCCAGGAGGAGAACCTCATGATCCAGAGCAT
CGGGAACATCATGAACAACAAAGTCTTCTACCAACACCCGAACCTGATGAGGGCGCTGGGCATGCACGAGACGGT
CATGGAGGTCATGGTCAACGTCCTCGGGGGCGGCGAGTCCAAGGAGATCCGCTTCCCCAAGATGGTGACAAGCTG
CTGCCGCTTCCTCTGCTATTTCTGCCGAATCAGCCGGCAGAACCAGCGCTCCATGTTTGACCACCTGAGCTACCT
GCTGGAGAACAGTGGCATCGGCCTGGGCATGCAGGGCTCCACGCCCCTGGACGTGGCTGCTGCCTCCGTCATTGA
CAACAATGAGCTGGCCTTGGCATTGCAGGAGCAGGACCTGGAAAAGGTTGTGTCCTACCTGGCAGGCTGTGGCCT
CCAGAGCTGCCCCATGCTTGTGGCCAAAGGGTACCCAGACATTGGCTGGAACCCCTGTGGTGGAGAGCGCTACCT
GGACTTCCTGCGCTTTGCTGTCTTCGTCAACGGCGAGAGCGTGGAGGAGAACGCCAATGTGGTGGTGCGGCTGCT

FIGURE 3700C

CATCCGGAAGCCTGAGTGCTTCGGACCCGCCCTGCGGGGTGAGGGTGGCTCAGGGCTGCTGGCTGCCATCGAAGA
GGCCATCCGCATCTCCGAGGACCCTGCGAGGGATGGCCCAGGCATCCGCAGGGACCGGCGGCGCGAGCACTTTGG
TGAGGAACCGCCTGAAGAAAACCGGGTGCACCTGGGACACGCCATCATGTCCTTCTATGCCGCCTTGATCGACCT
GCTCGGACGCTGTGCACCAGAGATGCATCTAATCCAAGCCGGCAAGGGTGAGGCCCTGCGGATCCGCGCCATCCT
CCGCTCCCTTGTGCCCTTGGAGGACCTTGTGGGCATCATCAGCCTCCCACTGCAGATTCCCACCCTGGGCAAAGA
TGGGGCTCTGGTGCAGCCAAAGATGTCAGCATCCTTCGTGCCGGACCACAAGGCGTCCATGGTGCTCTTCCTGGA
CCGTGTGTATGGCATCGAGAACCAGGACTTCTTGCTGCACGTGCTGGACGTGGGGTTCCTGCCCGACATGAGGGC
AGCCGCCTCGCTGGACACGGCCACTTTCAGCACCACCGAGATGGCGCTGGCGCTGAACCGCTACCTGTGCCTGGC
CGTGCTGCCGCTCATCACCAAGTGTGCGCCGCTCTTTGCGGGCACAGAACACCGCGCCATCATGGTGGACTCTAT
GCTGCATACCGTGTACCGCCTGTCTCGGGGTCGTTCGCTCACCAAGGCGCAGCGTGACGTCATCGAGGACTGCCT
CATGTCGCTCTGCAGGTACATCCGCCCGTCGATGCTGCAGCACCTGTTGCGCCGCCTGGTGTTCGACGTGCCCAT
CCTCAACGAGTTCGCCAAGATGCCACTCAAGCTCCTCACCAACCACTATGAGCGCTGTTGGAAGTACTACTGCCT
ACCCACGGGCTGGGCCAACTTCGGGGTCACCTCAGAGGAGGAGCTGCACCTCACACGGAAACTCTTCTGGGGCAT
CTTTGACTCTCTGGCCCATAAGAAATACGACCCGGAGCTGTACCGCATGGCCATGCCTTGTCTGTGCGCCATTGC
CGGGGCTCTGCCCCCCGACTATGTGGATGCCTCATACTCATCTAAGGCAGAGAAAAAGGCCACAGTGGATGCTGA
AGGCAACTTTGATCCCCGGCCTGTGGAGACCCTCAATGTGATCATCCCGGAGAAGCTGGACTCCTTCATTAACAA
GTTTGCGGAGTACACACACGAGAAGTGGGCCTTCGACAAGATCCAGAACAACTGGTCCTATGGAGAGAACATAGA
CGAGGAGCTGAAGACCCACCCCATGCTGAGGCCCTACAAGACCTTTTCAGAGAAGGACAAAGAGATTTACCGCTG
GCCCATCAAGGAGTCCCTGAAGGCCATGATTGCCTGGGAATGGACGATAGAGAAGGCCAGGGAGGGTGAGGAGGA
GAAGACGGAAAAGAAAAAAACGCGGAAGATATCACAAAGTGCCCAGACCTATGATCCTCGAGAAGGCTACAACCC
TCAGCCCCCCGACCTTAGTGCTGTTACCCTGTCCCGGGAGCTGCAGGCCATGGCAGAACAACTGGCAGAAAATTA
CCACAACACGTGGGGACGGAAGAAGAAGCAGGAGCTGGAAGCCAAAGGCGGTGGGACCCACCCCCTGCTGGTCCC
CTACGACACGCTCACGGCCAAGGAGAAGGCACGAGATCGAGAGAAGGCCCAGGAGCTACTGAAATTCCTGCAGAT
GAATGGCTACGCGGTTACAAGAGGCCTTAAGGACATGGAACTGGACTCGTCTTCCATTGAAAAGCGGTTTGCCTT
TGGCTTCCTGCAGCAGCTGCTGCGCTGGATGGACATTTCTCAGGAGTTCATTGCCCACCTGGAGGCTGTGGTCAG
CAGTGGGCGAGTGGAAAAGTCCCCACATGAACAGGAGATTAAATTCTTTGCCAAGATCCTGCTCCCTTTGATCAA
CCAGTACTTCACCAACCACTGCCTCTATTTCTTGTCCACTCCGGCTAAAGTGCTGGGCAGCGGTGGCCACGCCTC
TAACAAGGAGAAGGAAATGATCACCAGCCTCTTCTGCAAACTTGCTGCTCTCGTCCGCCACCGAGTCTCTCTCTT
TGGGACAGACGCCCCAGCTGTGGTCAACTGTCTTCACATCCTGGCCCGCTCCCTGGATGCCAGGACAGTGATGAA
GTCAGGCCCTGAGATCGTGAAGGCTGGCCTCCGCTCCTTCTTCGAGAGTGCCTCGGAGGACATCGAGAAGATGGT
GGAGAACCTGCGGCTGGGCAAGGTGTCGCAGGCGCGCACCCAGGTGAAAGGCGTGGGCCAGAACCTCACCTACAC
CACTGTGGCACTGCTGCCGGTCCTCACCACCCTCTTCCAGCACATCGCCCAGCACCAGTTCGGAGATGACGTCAT
CCTGGACGACGTCCAGGTCTCTTGCTACCGAACGCTGTGCAGTATCTACTCCCTGGGAACCACCAAGAACACTTA
TGTGGAAAAGCTTCGGCCAGCCCTCGGGGAGTGCCTGGCCCGTCTGGCAGCAGCCATGCCGGTGGCGTTCCTGGA
GCCGCAGCTGAACGAGTACAACGCCTGCTCCGTGTACACCACCAAGTCTCCGCGGGAGCGGGCCATCCTGGGGCT
CCCCAACAGTGTGGAGGAGATGTGTCCCGACATCCCGGTGCTGGAGCGGCTCATGGCAGACATTGGGGGGCTGGC
CGAGTCAGGTGCCCGCTACACAGAGATGCCGCATGTCATCGAGATCACGCTGCCCATGCTATGCAGCTACCTGCC
CCGATGGTGGGAGCGCGGGCCCGAGGCACCCCCTTCCGCCCTGCCCGCCGGCGCCCCCCCACCCTGCACAGCTGT
CACCTCTGACCACCTCAACTCCCTGCTGGGGAATATCCTGAGAATCATCGTCAACAACCTGGGCATTGACGAGGC
CTCCTGGATGAAGCGGCTGGCTGTGTTCGCACAGCCCATTGTGAGCCGTGCACGGCCGGAGCTCCTGCAGTCCCA
CTTCATCCCAACTATCGGGCGGCTGCGCAAGAGGGCAGGGAAGGTGGTGTCCGAGGAGGAGCAGCTGCGCCTGGA
GGCCAAGGCGGAGGCCCAGGAGGGCGAGCTGCTGGTGCGGGACGAGTTCTCTGTGCTCTGCCGGGACCTCTACGC
CCTGTATCCGCTGCTCATCCGCTACGTGGACAACAACAGGGCGCAGTGGCTGACGGAGCCGAATCCCAGCGCGGA
GGAGCTGTTCAGGATGGTGGGCGAGATCTTCATCTACTGGTCCAAGTCCCACAACTTCAAGCGCGAGGAGCAGAA
CTTTGTGGTCCAGAATGAGATCAACAACATGTCCTTCCTGACTGCTGACAACAAAAGCAAAATGGCTAAGGCGGG
AGATATACAGTCCGGTGGCTCGGACCAGGAACGCACCAAGAAGAAGCGCCGGGGGGGACCGGTACTCTGTGCAGAC
GTCACTGATCGTGGCCACACTGAAGAAGATGCTGCCCATCGGCCTGAATATGTGTGCGCCCACCGACCAAGACCT
CATCACGCTGGCCAAGACCCGTTACGCCCTGAAAGACACAGATGAGGAGGTCCGGGAATTTCTGCACAACAACCT

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FIGURE 3700D

TCACCTTCAGGGAAAGGTCGAAGGCTCCCCGTCTCTGCGCTGGCAGATGGCTCTGTACCGGGGCGTCCCGGGTCG
CGAGGAGGACGCCGATGACCCCGAGAAAATCGTGCGCAGAGTCCAGGAAGTGTCAGCCGTGCTCTACTACCTGGA
CCAGACCGAGCACCCTTACAAGTCTAAGAAGGCCGTGTGGCACAAGCTTTTGTCCAAACAGCGCCGGCGGGCAGT
CGTGGCCTGTTTCCGTATGACGCCCCTGTACAACCTGCCCACGCACCGGGCATGTAACATGTTCCTGGAGAGCTA
CAAGGCTGCATGGATCCTGACTGAAGACCACAGTTTTGAGGACCGCATGATAGATGACCTTTCAAAAGCTGGGGA
GCAGGAGGAGGAGGAGGAAGAGGTGGAAGAGAAGAAGCCAGACCCCCTGCACCAGTTGGTCCTGCACTTCAGCCG
CACTGCCCTGACGGAAAAGAGCAAACTGGATGAGGATTACCTGTACATGGCCTATGCTGATATCATGGCAAAGAG
CTGCCACCTGGAGGAGGGAGGGGAGAACGGTGAAGCTGAAGAGGAGGTTGAGGTCTCCTTTGAGGAGAAACAGAT
GGAGAAGCAGAGGCTCTTGTACCAGCAAGCACGGCTGCACACCCGGGGGGCGGCCGAGATGGTGCTGCAGATGAT
CAGTGCCTGCAAAGGAGAGACAGGTGCCATGGTGTCCTCCACCCTGAAGCTGGGCATCTCCATCCTCAATGGAGG
CAATGCTGAGGTCCAGCAGAAAATGCTGGATTATCTTAAGGACAAGAAGGAAGTTGGCTTCTTCCAGAGTATCCA
GGCACTGATGCAAACATGCAGCGTCCTGGATCTCAATGCCTTTGAGAGACAGAACAAGGCCGAGGGGCTGGGCAT
GGTGAATGAGGATGGCACTGTCATCAATCGCCAGAACGGAGAGAAGGTCATGGCGGATGATGAATTCACACAAGA
CCTGTTCCGATTCCTACAATTGCTCTGTGAGGGGCACAATAATGATTTCCAGAACTACCTACGGACACAGACAGG
GAACACGACCACTATTAACATCATCATTTGCACTGTGGACTACCTCCTGCGGCTGCAGGAATCCATCAGCGACTT
CTACTGGTACTACTCGGGCAAGGATGTCATTGAAGAGCAGGGCAAGAGGAACTTCTCCAAAGCCATGTCGGTGGC
TAAGCAGGTGTTCAACAGCCTCACTGAGTACATCCAGGGTCCCTGCACCGGGAACCAGCAGAGCCTGGCGCACAG
TCGCCTATGGGACGCAGTGGTGGGATTCCTGCACGTGTTCGCCCACATGATGATGAAGCTCGCTCAGGACTCAAG
CCAGATCGAGCTGCTGAAGGAGCTGCTGGATCTGCAGAAGGACATGGTGGTGATGTTGCTGTCGCTACTAGAAGG
GAACGTGGTGAACGGCATGATCGCCCGGCAGATGGTGGACATGCTCGTGGAATCCTCATCCAATGTGGAGATGAT
CCTCAAGTTCTTCGACATGTTCCTGAAACTCAAGGACATTGTGGGCTCTGAAGCCTTCCAGGACTACGTAACGGA
TCCCCGTGGCCTCATCTCCAAGAAGGACTTCCAGAAGGCCATGGACAGCCAGAAGCAGTTCAGCGGTCCAGAAAT
CCAGTTCCTGCTTTCGTGCTCCGAAGCGGATGAGAACGAAATGATCAACTGCGAAGAGTTCGCCAACCGCTTCCA
GGAGCCAGCACGCGACATCGGCTTCAACGTGGCGGTGCTGCTGACCAACCTGTCGGAGCATGTGCCGCATGACCC
TCGCCTGCACAACTTCCTGGAGCTGGCCGAGAGCATCCTTGAGTACTTCCGCCCCTACCTGGGCCGCATCGAGAT
CATGGGCGCGTCACGCCGCATCGAGCGCATCTACTTCGAGATCTCAGAGACCAACCGCGCCCAGTGGGAGATGCC
CCAGGTGAAGGAGTCCAAGCGCCAGTTCATCTTCGACGTGGTGAACGAGGGCGGCGAGGCTGAGAAGATGGAGCT
CTTCGTGAGTTTCTGCGAGGACACCATCTTCGAGATGCAGATCGCCGCGCAGATCTCGGAGCCCGAGGGCGAGCC
GGAGACCGACGAGGACGAGGGCGCGGGCGCGGCGGAGGCGGGCGCGGAAGGCGCGGAGGAGGGCGCGGCGGGGCT
CGAGGGCACGGCGGCCACGGCGGCGGCGGGGGCGACGGCGCGGGTTGTGGCGGCCGCAGGCCGGGCCCTGCGAGG
CCTCAGCTACCGCAGCCTGCGGCGGCGCGTGCGGCGGCTGCGGCGGCTTACGGCCCGCGAGGCGGCCACCGCAGT
GGCGGCGCTGCTCTGGGCAGCAGTGACGCGCGCTGGGGCCGCTGGCGCGGGGGCGGCGGCGGGCGCGCTGGGCCT
GCTCTGGGGCTCGCTGTTCGGCGGCGGCCTGGTGGAGGGCGCCAAGAAGGTGACGGTGACCGAGCTCCTGGCAGG
CATGCCCGACCCCACCAGCGACGAGGTGCACGGCGAGCAGCCGGCCGGGCCGGGCGGAGACGCAGACGGCGAGGG
TGCCAGCGAGGGCGCTGGAGACGCCGCGGAGGGCGCTGGAGACGAGGAGGAGGCGGTGCACGAGGCCGGGCCGGG
CGGTGCCGACGGGGCGGTGGCCGTGACCGATGGGGGCCCCTTCCGGCCCGAAGGGGCTGGCGGTCTCGGGGACAT
GGGGGACACGACGCCTGCGGAACCGCCCACACCCGAGGGCTCTCCCATCCTCAAGAGGAAATTGGGGGTGGATGG
AGTGGAGGAGGAGCTCCCGCCAGAGCCAGAGCCCGAGCCGGAACCAGAGCTGGAGCCGGAGAAAGCCGATGCCGA
GAATGGGGAGAAGGAAGAAGTTCCCGAGCCCACACCAGAGCCCCCCAAGAAGCAAGCACCTCCCTCACCCCCTCC
AAAGAAGGAGGAAGCTGGAGGCGAATTCTGGGGAGAACTGGAGGTGCAGAGGGTGAAGTTCCTGAACTACCTGTC
CCGGAACTTTTACACCCTGCGGTTCCTTGCCCTCTTCTTGGCATTTGCCATCAACTTCATCTTGCTGTTTTATAA
GGTCTCAGACTCTCCACCAGGGGAGGACGACATGGAAGGCTCAGCTGCTGGGGATGTGTCAGGTGCAGGCTCTGG
TGGCAGCTCTGGCTGGGGCTTGGGGGCCGGAGAGGAGGCAGAGGGCGATGAGGATGAGAACATGGTGTACTACTT
CCTGGAGGAAAGCACAGGCTACATGGAACCCGCCCTGCGGTGTCTGAGCCTCCTGCATACACTGGTGGCCTTTCT
CTGCATCATTGGCTATAATTGTCTCAAGGTGCCCCTGGTAATCTTTAAGCGGGAGAAGGAGCTGGCCCGGAAGCT
GGAGTTTGATGGCCTGTACATCACGGAGCAGCCTGAGGACGATGACGTGAAGGGGCAGTGGGACCGACTGGTGCT
CAACACGCCGTCTTTCCCTAGCAACTACTGGGACAAGTTTGTCAAGCGCAAGGTCCTGGACAAACATGGGGACAT
CTACGGGCGGGAGCGGATTGCTGAGCTACTGGGCATGGACCTGGCCACACTAGAGATCACAGCCCACAATGAGCG

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FIGURE 3700E

CAAGCCCAACCCGCCGCCAGGGCTGCTGACCTGGCTCATGTCCATCGATGTCAAGTACCAGATCTGGAAGTTCGG
GGTCATCTTCACAGACAACTCCTTCCTGTACCTGGGCTGGTATATGGTGATGTCCCTCTTGGGACACTACAACAA
CTTCTTCTTTGCTGCCCATCTCCTGGACATCGCCATGGGGGTCAAGACGCTGCGCACCATCCTGTCCTCTGTCAC
CCACAATGGGAAACAGCTGGTGATGACCGTGGGCCTTCTGGCGGTGGTCGTCTACCTGTACACCGTGGTGGCCTT
CAACTTCTTCCGCAAGTTCTACAACAAGAGCGAGGATGAGGATGAACCTGACATGAAGTGTGATGACATGATGAC
GTGTTACCTGTTTCACATGTACGTGGGTGTCCGGGCTGGCGGAGGCATTGGGGACGAGATCGAGGACCCCGCGGG
TGACGAATACGAGCTCTACAGGGTGGTCTTCGACATCACCTTCTTCTTCTTCGTCATCGTCATCCTGTTGGCCAT
CATCCAGGGTCTGATCATCGACGCTTTTGGTGAGCTCCGAGACCAACAAGAGCAAGTGAAGGAGGATATGGAGAC
CAAGTGCTTCATCTGTGGAATCGGCAGTGACTACTTTGATACGACACCGCATGGCTTCGAGACTCACACGCTGGA
GGAGCACAACCTGGCCAATTACATGTTTTTCCTGATGTATTTGATAAACAAGGATGAGACAGAACACACGGGTCA
GGAGTCTTATGTCTGGAAGATGTACCAAGAGAGATGTTGGGATTTCTTCCCAGCTGGTGATTGTTTCCGTAAGCA
GTATGAGGACCAGCTTAGC**TGA**CACACCCCCAGCTGGCCCTCCACCCCCACCTCAAGTGCCTTATTCTCACAGCA
AGCCCCTTAGTCCCCAAGCCCCTCCCCCTAAGGCAGCTGGGGGAGAGGTGACCTAGTAC

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FIGURE 3701

GGAAAGCGTGGCGGCTGCTGCTAGAGCCTTTCCCTTTACCGCACCCAAGGAGCTGGAGCGACAACAACGACGTCG
TTTCCGTTTCCACCACCTCTTCCTGTTCCCGTCCTTGAGGACGCCGTGCCGGGTCAGTGTTAGCCTCCAGCCCTG
GTTGTGGAAGGCGACAGAAGTC**ATG**GCGATGTTTGAGCAGATGAGAGCCAACGTGGGCAAGTTGCTCAAGGGTAT
CGACAGGTACAATCCTGAGAACCTGGCCACCCTGGAGCGCTATGTAGAGACGCAGGCCAAGGAAAATGCCTATGA
TCTGGAAGCCAACCTGGCTGTCCTGAAGCTGTACCAGTTCAACCCAGCCTTCTTTCAGACCACGGTCACCGCCCA
GATCCTGCTGAAGGCCCTCACCAACTTGCCGCACACAGACTTCACCCTGTGCAAGTGCATGATCGACCAGGCACA
TCAAGAAGAACGGCCAATCCGACAGATTTTGTACCTCGGGGACCTGCTGGAGACCTGCCATTTCCAGGCCTTCTG
GCAAGCCCTGGATGAAAACATGGACCTCTTGGAAGGTATAACTGGCTTTGAAGACTCTGTCCGAAAGTTTATCTG
CCATGTTGTGGGTATCACTTACCAGCACATTGACCGCTGGCTGCTGGCCGAGATGCTCGGGGATCTGTCGGACAG
CCAGCTAAAGGTGTGGATGAGCAAATACGGCTGGAGTGCCGACGAGTCGGGGCAGATCTTCATCTGTAGCCAAGA
AGAGAGCATTAAACCCAAGAACATTGTGGAGAAGATTGACTTTGACAGTGTGTCCAGCATCATGGCCTCCTCCCA
G**TAA**CTTCAGGTGTTTAATAAAGATGTGTTGACTCAG

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FIGURE 3702

AGAGGGGCGGGAGCTGAGGCGGGAGCGGACAGGCTGGTGGGCGAGCGAGAGGCGGCGGAATGGTGGACTACCACG
CGGCGAACCAGTCGTACCAGTACGGCCCCAGCAGCGCGGGCAATGGCGCTGGCGGCGGGGGCAGCATGGGCGACT
ACATGGCCCAGGAGGACGACTGGGACCGGGACCTGCTGCTGGACCCGGCCTGGGAGAAGCAGCAGCGCAAGACCT
TCACGGCATGGTGCAACTCCCACCTGCGGAAGGCAGGCACACAGATCGAGAACATTGATGAGGACTTCCGAGACG
GGCTCAAGCTCATGCTGCTCCTGGAGGTCATATCAGGGGAGCGGTTACCTAAGCCGGAGCGGGGGAAGATGAGAG
TGCACAAAATCAACAATGTGAACAAAGCGCTGGACTTTATTGCCAGCAAAGGCGTCAAGCTGGTCTCCATCGGGG
CAGAAGAGATTGTGGACGGCAACGCAAAGATGACCCTGGGAATGATCTGGACCATCATCCTTAGGTTCGCCATCC
AGGACATCTCCGTGGAAGAGACCTCGGCCAAGGAAGGGCTCCTTCTCTGGTGCCAGAGAAAGACAGCCCCGTATA
AGAACGTCAATGTGCAGAACTTCCACATCAGCTGGAAGGATGGTCTTGCCTTCAATGCCCTGATCCACCGGCACA
GACCAGAGCTGATTGAGTATGACAAGCTGAGGAAGGACGACCCTGTCACCAACCTGAACAATGCCTTCGAAGTGG
CTGAGAAATACCTCGACATCCCCAAGATGCTGGATGCAGAGGACATCGTGAACACGGCCCGGCCCGACGAGAAGG
CCATAATGACCTATGTGTCCAGCTTCTACCATGCCTTTTCAGGAGCGCAGAAGGCTGAAACTGCCGCCAACCGGA
TCTGTAAGGTGCTGGCTGTCAACCAAGAGAACGAGCACCTGATGGAGGACTACGAGAAGCTGGCCAGCGACCTCC
TGGAGTGGATCCGGCGCACCATCCCCTGGCTGGAGGACCGTGTGCCCCAAAAGACTATCCAGGAGATGCAGCAGA
AGCTGGAGGACTTCCGCGACTACCGGCGTGTGCACAAGCCGCCCAAGGTGCAGGAGAAGTGCCAGCTGGAGATCA
ACTTCAACACGCTGCAGACCAAGCTGCGCCTCAGCAACCGGCCCGCCTTCATGCCCTCCGAGGGCAAGATGGTCT
CGGACATCAACAATGGCTGGCAGCACTTGGAGCAGGCTGAGAAGGGCTACGAGGAGTGGCTGCTGAATGAGATCC
GCAGGCTGGAGCGGCTCGACCACCTGGCAGAGAAGTTCCGGCAGAAGGCCTCCATCCACGAGGCCTGGACTGACG
GGAAGGAAGCCATGCTGAAGCACCGGGACTACGAGACGGCCACACTATCGGACATCAAAGCCCTCATTCGCAAGC
ACGAGGCCTTCGAGAGCGACCTGGCTGCGCACCAGGACCGCGTGGAGCAGATCGCCGCCATTGCCCAGGAGCTCA
ACGAGCTGGATTACTACGACTCCCACAATGTCAACACCCGGTGCCAGAAGATCTGTGACCAGTGGGACGCCCTCG
GCTCTCTGACACATAGTCGCAGGGAAGCCCTGGAGAAAACAGAGAAGCAGCTGGAGGCCATCGACCAGCTGCACC
TGGAATACGCCAAGCGCGCGGCCCCCTTCAACAACTGGATGGAGAGCGCCATGGAGGACCTCCAGGACATGTTCA
TCGTCCATACCATCGAGGAGATTGAGGGCCTGATCTCAGCCCATGACCAGTTCAAGTCCACCCTGCCGGACGCCG
ATAGGGAGCGCGAGGCCATCCTGGCCATCCACAAGGAGGCCCAGAGGATCGCTGAGAGCAACCACATCAAGCTGT
CGGGCAGCAACCCCTACACCACCGTCACCCCGCAAATCATCAACTCCAAGTGGGAGAAGGTGCAGCAGCTGGTGC
CAAAACGGGACCATGCCCTCCTGGAGGAGCAGAGCAAGCAGCAGTCCAACGAGCACCTGCGCCGCCAGTTCGCCA
GCCAGGCCAATGTTGTGGGGCCCTGGATCCAGACCAAGATGGAGGAGATCGGGCGCATCTCCATTGAGATGAACG
GGACCCTGGAGGACCAGCTGAGCCACCTGAAGCAGTATGAACGCAGCATCGTGGACTACAAGCCCAACCTGGACC
TGCTGGAGCAGCAGCACCAGCTCATCCAGGAGGCCCTCATCTTCGACAACAAGCACACCAACTATACCATGGAGC
ACATCCGCGTGGGCTGGGAGCAGCTGCTCACCACCATTGCCCGCACCATCAACGAGGTGGAGAACCAGATCCTCA
CCCGCGACGCCAAGGGCATCAGCCAGGAGCAGATGCAGGAGTTCCGGGCGTCCTTCAACCACTTCGACAAGGATC
ATGGCGGGGCGCTGGGGCCCGAGGAGTTCAAGGCCTGCCTCATCAGCCTGGGCTACGACGTGGAGAACGACCGGC
AGGGTGAGGCCGAGTTCAACCGCATCATGAGCCTGGTCGACCCCAACCATAGCGGCCTTGTGACCTTCCAAGCCT
TCATCGACTTCATGTCGCGGGAGACCACCGACACGGACACGGCTGACCAGGTCATCGCTTCCTTCAAGGTCTTAG
CAGGGGACAAGAACTTCATCACAGCTGAGGAGCTGCGGAGAGAGCTGCCCCCCGACCAGGCCGAGTACTGCATCG
CCCGCATGGCGCCATACCAGGGCCCTGACGCCGTGCCCGGTGCCCTCGACTACAAGTCCTTCTCCACGGCCTTGT
ATGGCGAGAGCGACCTGTGAGGCCCCAGAGACCTGACCCAACACCCCCGACGGCCTCCAGGAGGGGCCTGGGCAG
CCCCACAGTCCCATTCCTCCACTCTGTATCTATGCAAAGCACTCTCTGCAGTCCTCCGGGGTGGGTGGGTGGGCA

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FIGURE 3703

GCCCCGCGAGGATGAGCCCAGGGCTCCACGGTCCCTACCTAGACCCCACGCGATTCCTCACCTGAGACCCCGTCC
CACACAGCCCCAGCTGGGGCAAACAGCCCCCTCCCCACTTCCCATCTGTAATTTGCAGGGAGATCGACGACGTGA
TCAGCGCAGACCTGCAGTCTCTCCAGGTGGGGACTGTTCCTGGAGGGGCGGCATGGGCGGGGATCTTGGCCAGC
GCTAAACTTCCGCCATGCGGCAGGGCCCCTACCTGCCCCTGGAGCTGGGGTTGGAGCAGCTGTTTCAGGAGCTGG
CTGGAGAGCCAGGGCCCATACCTCCACCCCCAGAGAGATCGGGCTCAGGACCTGTGAGCAGCTGCTGCAGTGTTT
CGGGCATGGGCAAAGCCTGGCCTTACACCACTTCCAGCAGCTCTGGGGCTACCTCCTGGAGTGGCAGGCCATATT
TAACAAGTTCGATGAGGACACCTCTGGAACCATGAACTCCTACGAGCTGAGGCTGGCACTGAATGCAGCAGGCTT
CCACCTGAACAACCAGCTGACCCAGACCCTCACCAGCCGCTACCGGGATAGCCGTCTGCGTGTGGACTTCGAGCG
GTTCGTGTCCTGTGTGGCCCACCTCACCTGCATCTTCTGCCACTGCAGCCAGCACCTGGATGGGGGTGAGGGGGT
CATCTGCCTGACCCACAGACAGTGGATGGAGGTGGCCACCTTCTCCTAGGATCTCCGGATGGGCGCACCTGCTGC
TCAGGGCAGGGTTGCTGAGCAAGACCACCTCCCTAGGCCTTGCCTGGCATGGGTGCCACTCTCTCTGGCATCCAC
CTGTCTGGGGCTAGTCTCTGGCCCTCACTGCTCACGGCCGGGTGACCACTCTGGCCTGCGTACTCCTCACTCAGA
AACAAGAACAGCGACAGCCCTTCTCGAGCAGATGACACGAGCTAGTCCACGTTGACAGCTTAAGACAGTGCTAGC
TCTGCCCTGGCTCTCCTAGAAGGTGGAGGACAGACACAGGAGAAATAAAAAAAGATGATGCTGCAGGAATCCTTC
TTAAAAATATTACATGTTTTATTATCCTGTCCCCAGAGGGTGGTTTATCCAGAAACCAAGAAAAAAAATCAATCA
GAATAAACTCAAAAAAAAAAGGTAGGGGGAGCAAAACCATCAACCACCAGGCAGCCAGGCCATCAGCCCACCTCC
ACCTCTGGAGGGTCCCCAGAGACCCACGCCCGACGCAGACCCGGAGGAGCATCAGCAAGGGGCCCGGGCAGAGAA
TCGGCTATGTCTTCATTATGAGAGCAGGAGAGACGGCAGAGATATGTTGCTAGGTGAATATATATTTATATAATA
AATCCGTAAGTTAATAAAGTAAATAGTAATTCTCTGAAA

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FIGURE 3704

ATGGCTCTGTACCTCTCCTGTGCTGGGAGCCATCTGGTGACCATGATGCCCTGCCCTGGCCCACGCCACTCAGAG
TCTGGATGGAGCAGTATTTCCCCCAAAGGACTCTGGAGCCATTGGAGGAAATGGGAGAAACAGAACTACCTGTCC
CGGAACTTTTATCCACTGCGGTTCCTTGCCCTCTTCTATGCATTTGCCATCAACTTCATCTTGCTATTTTATAAG
GTCTCAGACTCTCCACCAGGGGAGGACGACATGGAAGGCTCAGCTGCTGGGGATGTGTCAGGTGCAGGCTCTGGT
GGCAGCTCTGGCTGGGGCTTGGGGGCCGGAGAGGAGGCAGAGGGCGATGAGGATGAGAACATGGTGTACTACTTC
CTGGAGGAAAGCACAGGCTACATGGAACCCGCCCTGCGGTGTCTGAGCCTCCTGCATACACTGGTGGCCTTTCTC
TGCATCATTGGCTATAATTGTCTCAAGGTGCCCCTGGTAATCTTTAAGCGGGAGAAGGAGCTGGCCCGGAAGCTG
GAGTTTGATGGCCTGTACATCACGGAGCAGCCTGAGGACGATGACGTGAAGGGGCAGTGGGACCGACTGGTGCTC
AACACGCCG**TAA**

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FIGURE 3705

ATCTCCCACTCCTGCAGCTCTTCTCACAGGACCAGCCACTAGCGCAGCCTCGAGCG**ATG**GCCTATGTCCCCGCAC
CGGGCTACCAGCCCACCTACAACCCGACGCTGCCTTACTACCAGCCCATCCCGGGCGGGCTCAACGTGGGAATGT
CTGTTTACATCCAAGGAGTGGCCAGCGAGCACATGAAGCGGTTCTTCGTGAACTTTGTGGTTGGGCAGGATCCGG
GCTCAGACGTCGCCTTCCACTTCAATCCGCGGTTTGACGGCTGGGACAAGGTGGTCTTCAACACGTTGCAGGGCG
GGAAGTGGGGCAGCGAGGAGAGGAAGAGGAGCATGCCCTTCAAAAAGGGTGCCGCCTTTGAGCTGGTCTTCATAG
TCCTGGCTGAGCACTACAAGGTGGTGGTAAATGGAAATCCCTTCTATGAGTACGGGCACCGGCTTCCCCTACAGA
TGGTCACCCACCTGCAAGTGGATGGGGATCTGCAACTTCAATCAATCAACTTCATCGGAGGCCAGCCCCTCCGGC
CCCAGGGACCCCCGATGATGCCACCTTACCCTGGTCCCGGACATTGCCATCAACAGCTGAACAGCCTGCCCACCA
TGGAAGGACCCCCAACCTTCAACCCGCCTGTGCCATATTTCGGGAGGCTGCAAGGAGGGCTCACAGCTCGAAGAA
CCATCATCATCAAGGGCTATGTGCCTCCCACAGGCAAGAGCTTTGCTATCAACTTCAAGGTGGGCTCCTCAGGGG
ACATAGCTCTGCACATTAATCCCCGCATGGGCAACGGTACCGTGGTCCGGAACAGCCTTCTGAATGGCTCGTGGG
GATCCGAGGAGAAGAAGATCACCCACAACCCATTTGGTCCCGGACAGTTCTTTGATCTGTCCATTCGCTGTGGCT
TGGATCGCTTCAAGGTTTACGCCAATGGCCAGCACCTCTTTGACTTTGCCCATCGCCTCTCGGCCTTCCAGAGGG
TGGACACATTGGAAATCCAGGGTGATGTCACCTTGTCCTATGTCCAGATC**TAA**TCTATTCCTGGGGCCATAACTC
ATGGGAAAACAGAATTATCCCCTAGGACTCCTTTCTAAGCCCCTAATAAAATGTCTGAGGGTGTCTC

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FIGURE 3706

GAACGCAGTAGACGAAGGCGGCGGCGATGGCGGCGGGGATAGTGGCTTCTCGCAGACTCCGCGACCTACTGACCC
GGCGACTGACAGGCTCCAACTACCCGGGACTCAGTATTAGCCTTCGCCTCACTGGCTCCTCTGCACAAGAGGAGG
CTTCCGGAGTAGCCCTCGGTGAAGCCCCAGACCACAGCTATGAGTCCCTTCGTGTGACGTCTGCGCAGAAACATG
TTCTGCATGTCCAGCTCAACCGGCCCAACAAGAGGAATGCCATGAACAAGGTCTTCTGGAGAGAGATGGTAGAGT
GCTTCAACAAGATTTCGAGAGACGCTGACTGTCGGGCGGTGGTGATCTCTGGTGCAGGAAAAATGTTCACTGCAG
GTATTGACCTGATGGACATGGCTTCGGACATCCTGCAGCCCAAAGGAGATGATGTGGCCCGGATCAGCTGGTACC
TCCGTGACATCATCACTCGATACCAGGAGACCTTCAACGTCATCGAGAGGTGCCCCAAGCCCGTGATTGCTGCCG
TCCATGGGGGCTGCATTGGCGGAGGTGTGGACCTTGTCACCGCCTGTGACATCCGGTACTGTGCCCAGGATGCTT
TCTTCCAGGTGAAGGAGGTGGACGTGGGTTTGGCTGCCGATGTAGGAACACTGCAGCGCCTGCCCAAGGTCATCG
GGAACCAGAGCCTGGTCAACGAGCTGGCCTTCACCGCCCGCAAGATGATGGCTGACGAGGCCCTGGGCAGTGGGC
TGGTCAGCCGGGTGTTCCCAGACAAAGAGGTCATGCTGGATGCTGCCTTAGCGCTGGCGGCCGAGATTTCCAGCA
AGAGCCCCGTGGCGGTGCAGAGCACCAAGGTCAACCTGCTGTATTCCCGCGACCATTCGGTGGCCGAGAGCCTCA
ACTACGTGGCGTCCTGGAACATGAGCATGCTGCAGACCCAAGACCTCGTGAAGTCGGTCCAGGCCACGACTGAGA
ACAAGGAACTGAAAACCGTCACCTTCTCCAAGCTCTGAGAGCCCTCGCGTCCCAGGCCCCAGCCAGGGGGCCGGC
CTTGTCCCGCCTCATCCACAGAAAGGGAGGATGGGCGATGACAGTTGTTTCTATGCCTTCTGACCCAGTTTCCCA
GTTTATAACTTTATGACAATGAGTTTCTCAAGCCCAAGGCCTTATCTTCACCCCACAAACAATAAAGCAAA

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FIGURE 3707

GGACGAGCAGCGGAGGCGGTCGGGAGCGATGGTGAAGATGGCGGCGGCGGGCGGCGGAGGCGGCGGTGGCCGCTA
CTACGGCGGCGGCAGTGAGGGCGGCCGGGCCCCTAAGCGGCTCAAGACTGACAACGCCGGCGACCAGCACGGAGG
CGGCGGCGGTGGCGGTGGAGGAGCCGGGGCGGCGGGCGGCGGCGGCGGTGGGGAGAACTACGATGACCCGCACAA
AACCCCTGCCTCCCCAGTTGTCCACATCAGGGGCCTGATTGACGGTGTGGTGGAAGCAGACCTTGTGGAGGCCTT
GCAGGAGTTTGGACCCATCAGCTATGTGGTGGTAATGCCTAAAAAGAGACAAGCACTGGTGGAGTTTGAAGATGT
GTTGGGGGCTTGCAACGCAGTGAACTACGCAGCCGACAACCAAATATACATTGCTGGTCACCCAGCTTTTGTCAA
CTACTCTACCAGCCAGAAGATCTCCCGCCCTGGGGACTCGGATGACTCCCGGAGCGTGAACAGTGTGCTTCTCTT
TACCATCCTGAACCCCATTTATTCGATCACCACGGATGTTCTTTACACTATCTGTAATCCTTGTGGCCCTGTCCA
GAGAATTGTCATTTTCAGGAAGAATGGAGTTCAGGCGATGGTGGAATTTGACTCAGTTCAAAGTGCCCAGCGGGC
CAAGGCCTCTCTCAATGGGGCTGATATCTATTCTGGCTGTTGCACTCTGAAGATCGAATACGCAAAGCCTACACG
CTTGAATGTGTTCAAGAATGATCAGGATACTTGGGACTACACAAACCCCAATCTCAGTGGACAAGGTGACCCTGG
CAGCAACCCCAACAAACGCCAGAGGCAGCCCCCTCTCCTGGGAGATCACCCCGCAGAATATGGAGGGCCCCACGG
TGGGTACCACAGCCATTACCATGATGAGGGCTACGGGCCCCCCCCACCTCACTACGAAGGGAGAAGGATGGGTCC
ACCAGTGGGGGGTCACCGTCGGGGCCCAAGTCGCTACGGCCCCCAGTATGGGCACCCCCCACCCCCTCCCCCACC
ACCCGAGTATGGCCCTCACGCCGACAGCCCTGTGCTCATGGTCTATGGCTTGGATCAATCTAAGATGAACTGTGA
CCGAGTCTTCAATGTCTTCTGCTTATATGGCAATGTGGAGAAGGTGAAATTCATGAAAAGCAAGCCGGGGGCCGC
CATGGTGGAGATGGCTGATGGCTACGCTGTAGACCGGGCCATTACCCACCTCAACAACAACTTCATGTTTGGGCA
GAAGCTGAATGTCTGTGTCTCCAAGCAGCCAGCCATCATGCCTGGTCAGTCATACGGGTTGGAAGACGGGTCTTG
CAGTTACAAAGACTTCAGTGAATCCCGGAACAATCGGTTCTCCACCCCAGAGCAGGCAGCCAAGAACCGCATCCA
GCACCCCAGCAACGTGCTGCACTTCTTCAACGCCCCGCTGGAGGTGACCGAGGAGAACTTCTTTGAGATCTGCGA
TGAGCTGGGAGTGAAGCGGCCATCTTCTGTGAAAGTATTCTCAGGCAAAAGTGAGCGCAGCTCCTCTGGACTGCT
GGAGTGGGAATCCAAGAGCGATGCCCTGGAGACTCTGGGCTTCCTGAACCATTACCAGATGAAAAACCCAAATGG
TCCATACCCTTACACTCTGAAGTTGTGTTTCTCCACTGCTCAGCACGCCTCCTAATTAGGTGCCTAGGAAGAGTC
CCATCTGAGCAGGAAGACATTTCTCTTTCCTTTATGCCATTTTTTGTTTTTGTTATTTGCAAAAGATCTTGTATT
CCTTTTTTTTTTTTTTTTTTTTTTTTTAAATGCTAGGTTTGTAGAGGCTTACTTAACCTTAATGGAAACGCTGG
AAATCTGCAGGGGGAGGGAGAGGGGAACTGTTATCTCCCAAGATTAACCTTCACTTTTAAAAAATTATTGTACAT
GTGATTTTTTTTTTTCCTGTTCATACATTTGTGCTGCCCATGTACTCTTGGCACATTTCAATAAAATTGTTTGGA
AAATAAACACAGC

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FIGURE 3708

AGAGCCCCGCCCCCGCCTTGCGGAGCCGCATCCACGAGCGCCTTGCGCACCTCCACGCTGCCTGCGCCCCGCGCC
GCAAGGTGGCGCTCCTCTTGGAGGTGTGCAGAGATGTCTATGCGGGCCTGGCTCGAGGCGAGAACCAAGATCCCC
TGGGGGCCGACGCCTTCCTGCCGGCGCTGACCGAGGAACTCATCTGGAGCCCGGACATTGGGGACACGCAGCTGG
ACGTAGAGTTTCTTATGGAGCTCTTAGATCCAGATGAGCTGCGGGGAGAGGCTGGGTACTACCTGACCACGTGGT
TTGGGGCGCTGCACCACATTGCCCACTACCAGCCCGAAACAGACCGCGCTCCCCGGGGGCTCAGCTCCGAGGCCC
GCGCCTCCCTGCACCAGTGGCACCGCAGGCGGACGCTGCACAGAAAGGATCATCCCAGAGCCCAGGTGACTGCCC
ATCTGGCTGCAAGTAGAAGGGAGGGTGAGACCTGGTGCCCTTCTGACCCAGCTCCCACCTCTCCCCACAGGCCAA
CCTGCCCTTTAAGGAGCCATGGGCAGAAGAGACTGTGACAGGGACCAGTGACAACTAGGGGTTTCACACCCCTCC
GTTCATGCCTGTAATCCCAACATTTTGGGAGGCCAAGGTGGGAGGATTGCTTGAGCCCAGGAGTTTGAGACCAGC
CTGGGCAAAACAGTGGGACCCCCATCTACCAAAAAAAAAAAAAAAC

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FIGURE 3709

GTGTTGTACGAAAGCGCGTCTGCGGCCGCAATGTCTGCTGAGAGTTGTAGTTCTGTGCCCTATCACGGCCACTCC
CATTTCTGGTGCCGTCACGGGACAGAGCAGTCGGTGACAGGACAGAGCAGTCGGTGACGGGACACAGTGGTTGGT
GACGGGACAGAGCGGTCGGTGACAGCCTCAAGGGCTTCAGCACCGCGCCCATGGCAGAGCCAGACCCCTCTCACC
CTCTGGAGACCCAGGCAGGGAAGGTGCAGGAGGCTCAGGACTCAGATTCAGACTCTGAGGGAGGAGCCGCTGGTG
GAGAAGCAGACATGGACTTCCTGCGGAACTTATTCTCCCAGACGCTCAGCCTGGGCAGCCAGAAGGAGCGTCTGC
TGGACGAGCTGACCTTGGAAGGGGTGGCCCGGTACATGCAGAGCGAACGCTGTCGCAGAGTCATCTGTTTGGTGG
GAGCTGGAATCTCCACATCCGCAGGCATCCCCGACTTTCGCTCTCCATCCACCGGCCTCTATGACAACCTAGAGA
AGTACCATCTTCCCTACCCAGAGGCCATCTTTGAGATCAGCTATTTCAAGAAACATCCGGAACCCTTCTTCGCCC
TCGCCAAGGAACTCTATCCTGGGCAGTTCAAGCCAACCATCTGTCACTACTTCATGCGCCTGCTGAAGGACAAGG
GGCTACTCCTGCGCTGCTACACGCAGAACATAGATACCCTGGAGCGAATAGCCGGGCTGGAACAGGAGGACTTGG
TGGAGGCGCACGGCACCTTCTACACATCACACTGCGTCAGCGCCAGCTGCCGGCACGAATACCCGCTAAGCTGGA
TGAAAGAGAAGATCTTCTCTGAGGTGACGCCCAAGTGTGAAGACTGTCAGAGCCTGGTGAAGCCTGATATCGTCT
TTTTTGGTGAGAGCCTCCCAGCGCGTTTCTTCTCCTGTATGCAGTCAGACTTCCTGAAGGTGGACCTCCTCCTGG
TCATGGGTACCTCCTTGCAGGTGCAGCCCTTTGCCTCCCTCATCAGCAAGGCACCCCTCTCCACCCCTCGCCTGC
TCATCAACAAGGAGAAAGCTGGCCAGTCGGACCCTTTCCTGGGGATGATTATGGGCCTCGGAGGAGGCATGGACT
TTGACTCCAAGAAGGCCTACAGGGACGTGGCCTGGCTGGGTGAATGCGACCAGGGCTGCCTGGCCCTTGCTGAGC
TCCTTGGATGGAAGAAGGAGCTGGAGGACCTTGTCCGGAGGGAGCACGCCAGCATAGATGCCCAGTCGGGGGCGG
GGGTCCCCAACCCCAGCACTTCAGCTTCCCCCAAGAAGTCCCCGCCACCTGCCAAGGACGAGGCCAGGACAACAG
AGAGGGAGAAACCCCAGTGACAGCTGCATCTCCCAGGCGGGATGCCGAGCTCCTCAGGGACAGCTGAGCCCCAAC
CGGGCCTGGCCCCCTCTTAACCAGCAGTTCTTGTCTGGGGAGCTCAGAACATCCCCCAATCTCTTACAGCTCCCT
CCCCAAAACTGGGGTCCCAGCAACCCTGGCCCCCAACCCCAGCAAATCTCTAACACCTCCTAGAGGCCAAGGCTT
AAACAGGCATCTCTACCAGCCCCACTGTCTCTAACCACTCCTGGGCTAAGGAGTAACCTCCCTCATCTCTAACTG
CCCCCACGGGGCCAGGGCTACCCCAGAACTTTTAACTCTTCCAGGACAGGGAGCTTCGGGCCCCCACTCTGTCTC
CTGCCCCCGGGGGCCTGTGGCTAAGTAAACCATACCTAACCTACCCCAGTGTGGGTGTGGGCCTCTGAATATAAC
CCACACCCAGCGTAGGGGGAGTCTGAGCCGGGAGGGCTCCCGAGTCTCTGCCTTCAGCTCCCAAAGTGGGTGGTG
GGCCCCCTTCACGTGGGACCCACTTCCCATGCTGGATGGGCAGAAGACATTGCTTATTGGAGACAAATTAAAAAC
AAAAACAACTAAC

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FIGURE 3710

ATGGCTGGGGTCGCGTGCTTGGGAAAAGCTGCCGACGCAGATGAATGGTGCGACAGCGGCCTGGGCTCCCTGGGT
CCGGACGCAGCGGCCCCCGGAGGACCTGGGTTGGGCGCGGAGTTGGGCCCGGGGCTGTCGTGGGCTCCCCTCGTC
TTCGGCTACGTCACTGAGGATGGGGACACGGCACTGCACTTGGCTGTGATTCATCAGCATGAACCCTTCCTGGAT
TTTCTTCTAGGCTTCTCGGCCGGCACTGAGTACATGGACCTGCAGAATGACCTAGGCCAGACAGCCCTGCACCTG
GCAGCCATCCTGGGGGGAGACATCCACGGTGGAGAAGCTGTACGCAGCAGGCGCCGGGCTGTGTGTGGCGGAGCGT
AGGGGCCACACGGCGCTGCACCTGGCCTGCCGTGTGGGGGCACACGCCTGTGCCCGTGCCCTGCTTCAGCCCCGC
CCCCGGCGCCCCAGGGAAGCCCCCGACACCTACCTCGCTCAGGGCCCTGACCGTACTCCCGACACCAACCATACC
CCTGTCGCCTTGTACCCCGATTCCGACTTGGAGAAGGAAGAAGAGGAGAGTGAGGAGGACTGGAAGCTGCAGCTG
GAGGCTGAAAACTACGAGGGCCACACCCCACTCCACGTGGCCGTTATCCACAAAGATGTGGAGATGGTCCGGCTG
CTCCGAGATGCTGGAGCTGACCTTGACAAACCGGAGCCCACGTGCGGCCGGAGCCCCCTTCATTTGGCAGTGGAG
GCCCAGGCAGCCGATGTGCTGGAGCTTCTCCTGAGGGCAGGCGCGAACCCTGCTGCCCGCATGTACGGTGGCCGC
ACCCCACTCGGCAGTGCCATGCTCCGGCCCAACCCCATCCTCGCCCGCCTCCTCCGTGCACACGGAGCCCCTGAG
CCCGAGGGCGAGGACGAGAAATCCGGCCCCTGCAGCAGCAGTAGCGACAGCGACAGCGGAGACGAGGGCGTGAGT
CAGGAGGAGAGACAGGGCAGCCCAGCTGGGGGGTCAGGATAG

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FIGURE 3711

TGAAGAGGCGGGACACAGACGACGATTGGGCGACGAAGGACTCTATCGCGGTCAACTTTCCTCAGGATCTGATTG
GCTCGTCACGGTCAGGTTCGCTGCCTTGCAATTGGTCTAAACGCGGAGTGGGCGGGACGAAGTGCCGCCTTGTTC
CCGGTCCAAGATGGCTGCGTCCATGGCGCGGCGCTTGTGGCCTTTGCTGACTCGTCGGGGGTTCCGGCCCCGGGG
AGGCTGCATCTCCAACGATAGTCCAAGGAGAAGTTTCACTACAGAGAAACGAAACCGGAACCTCCTGTACGAGTA
TGCGCGCGAGGGCTACAGCGCACTCCCTCAGCTGGACATAGAGCGGTTCTGCGCATGCCCAGAAGAGGCCGCACA
CGCCCTGGAGCTCCGCAAGGGGGAGCTGCGCTCGGCGGACCTGCCCGCGATCATCTCGACATGGCAGGAGCTGAG
GCAGCTGCAGGAGCAGATCCGGAGCCTGGAGGAAGAGAAGGCAGCTGTGACTGAGGCAGTGCGGGCCCTGCTGGC
AAACCAGGACAGTGGTGAAGTGCAGCAGGACCCCAAGTACCAGGGTCTGCGGGCACGTGGCCGGGAGATCCGGAA
GGAGCTTGTTCACCTGTACCCCAGGGAGGCCCAGCTTGAGGAGCAGTTCTACCTGCAGGCGCTGAAGCTGCCCAA
CCAGACCCACCCAGACGTGCCCGTCGGGGATGAGAGCCAGGCTCGAGTGCTCCACATGGTCGGAGACAAGCCAGT
TTTCTCCTTCCAACCTCGGGGCCACCTGGAAATTGGCGAGAAACTCGACATCATCCGTCAGAAGCGCCTGTCCCA
CGTGTCTGGCCACCGGTCCTATTACCTGCGCGGGGCTGGAGCCCTCCTGCAGCACGGCCTGGTCAACTTCACATT
CAACAAGCTTCTCCGCCGGGGCTTCACCCCCATGACGGTGCCAGACCTTCTCCGCGGAGCAGTGTTTGAAGGCTG
TGGGATGACACCAAATGCCAACCCATCCCAAATTTACAACATCGACCCTGCCCGCTTCAAAGATCTCAACCTGGC
TGGAACAGCGGAGGTGGGGCTTGCAGGCTACTTCATGGACCACACCGTGGCCTTCAGGGACCTGCCAGTCAGGAT
GGTTTGCTCCAGCACCTGCTACCGGGCAGAGACAAACACGGGACAGGAACCCCGGGGGCTGTATCGAGTACACCA
CTTCACCAAGGTGGAGATGTTTGGGGTGACAGGCCCTGGGCTGGAGCAGAGCTCACAGCTGCTGGAGGAGTTCCT
GTCCCTTCAGATGGAGATCTTGACAGAGCTGGGCTTGCACTTCCGGGTCCTGGATATGCCCACCCAAGAACTGGG
CCTCCCCGCCTACCGCAAGTTTGACATTGAGGCCTGGATGCCAGGCCGAGGCCGCTTTGGAGAGGTCACCAGTGC
TTCCAACTGCACAGACTTCCAGAGCCGCCGCCTCCACATCATGTTCCAGACCGAGGCTGGGGAGCTGCAGTTTGC
CCACACGGTGAACGCCACCGCCTGTGCTGTCCCCCGCCTTCTCATCGCGCTCCTGGAGAGTAACCAGCAGAAGGA
CGGCTCAGTGCTCGTGCCCCCTGCCCTCCAGTCCTACCTCGGCACTGATCGGATCACAGCCCCTACCCACGTGCC
TCTCCAGTACATCGGCCCCAACCAGCCCCGGAAGCCTGGGCTGCCTGGCCAGCCTGCTGTAAGCTAAGAACCCAC
CCACAGCAGCCCTCGGGGGTGTCACTGCTTCCTGGAGTTCAGGAGACCCCGGACACCTGGGACCTGTGTTGCTGA
GCCCGTCCTGACATCTGTGTTCTTCCTGTCAGCTCCACGCCCGGGCCCCTGGACCACGGGGTCCACCTCTCCTCT
GTCCTTGCTGCCTCAGAGTCAGTCACTGACCCTGTTATCATTGAGGGTCCCAGTGGGAAGCAGGACGTCTGGGCT
TTACGGTTCTAGGGACAGGAGAAGCAGAGGAAGAGGCTTCCATCCCTCCTTCCTTCTTTCCTCCTACAGTGCTGA
GCAAAAAGTCCCCAATAAATGGTCAGGAC

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FIGURE 3712

AGCTGGATTCAGCGTGTCCGCGACCTCACCTTTAGGTCCTGTGAGGTCGGTGGAATCCTGGGGTCCTCCAAATCT
ACCAGGCCATCTCCCCAGTTTCCCAGTTCTTCCTGCGTGCGGGCGAGAGTGGTTGGGCCCTCGGGAACCCACTCA
GAGCGAGGCTAAATTTACGGAGGGACTTTCTGTTAGCAGCATGAGGGCCTGTGGTTAGACCTATAGAGGTATTTC
CTTTGATTTAAGCCAGAAAGTCCTGAGAGCGGATCGGGGAGCATTTGCGGATCGGTCACTTTTTCCTCCTTTCTG
AGTCTCTTATCCCCTACCACAGGGACGGCCCAGGTGGCAGGATGTCCTGGTCTGGCCTTCTCCATGGCCTCAACA
CGTCCCTAACTTGTGGCCCAGCTCTGGTTCCCCGGCTCTGGGCTACCTGCTCCATGGCTACCCTGAACCAGATGC
ACCGCCTGGGGCCCCCCAAGCGGCCGCCTCGGAAGCTGGGCCCCACGGAAGGCCGGCCGCAGCTGAAGGGTGTGG
TCCTGTGCACGTTTACCCGCAAGCCGAAGAAGCCCAACTCAGCCAATCGCAAGTGCTGTCGAGTGCGGCTCAGCA
CTGGCCGCGAGGCCGTCTGCTTCATCCCTGGGGAGGGCCACACCCTGCAGGAGCACCAGATTGTCCTTGTGGAGG
GCGGCCGCACCCAGGACCTGCCAGGCGTCAAGCTCACCGTTGTGCGTGGCAAGTACGACTGTGGCCACGTGCAGA
AGAAGTGACGGCTGGGGGCACAGTGGGCTGGGCGCCCCTGCAGAACATGAACCTTCCGCTCCTGGCTGCCACAGG
GTCCTCCGATGCTGGCCTTTGCGCCTCTAGAGGCAGCCACTCATGGATTCAAGTCCTGGCTCCGCCTCTTCCATC
AGGACCACTATTAAGCCATAGGAGTCCTGGGGGTGCAAAGGGTGCCCCTCTGTCAACACCCTTGGCTCCTGTGTT
TAGAGGGGTGGCCTGAAGGACCTTTTCTGCTGGGACAAGACACTGTACTGCCCTCTGCTGGGAAGGGGTTTTAAT
AAACAGACCCTGGCGCTTGTGATGT

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FIGURE 3713

AGCCGCCACGCCCCGGGAGAGGACCGACCGCCCAGACCGCCGGTCCCGGGGCCCCCTGGGCCACGCCGATCACGG
GGAGCCCCTCGACTGCCTCCCAGAACAAAGTGGGAAAGGGAAGCTTAGCCCGCCGCTGCCGCCTCCGAGCAGCCC
GCCAGGACTCTGGCTACTGGAGATGGGCGCCCGGCTATCGCGGCGACGGCTGCCGGCGGACCCATCCCTGGCCCT
GGACGCGCTGCCCCCGGAGCTGCTGGTGCAGGTGCTGAGCCACGTGCCGCCACGCTCCTTGGTCACGCGATGCCG
CCCAGTGTGCCGCGCCTGGCGCGACATAGTGGACGGGCCCACTGTGTGGCTGCTGCAGCTGGCCCGCGACCGCAG
CGCCGAGGGCCGCGCACTCTACGCAGTGGCTCAACGCTGCCTGCCCAGCAACGAAGACAAGGAGGAGTTCCCGCT
GTGCGCCCTGGCGCGCTACTGTCTGCGCGCGCCCTTCGGCCGCAATCTCATCTTCAACTCCTGCGGAGAGCAGGG
CTTCAGAGGCTGGGAGGTGGAGCATGGCGGGAACGGCTGGGCCATAGAAAAGAACCTAACACCGGTGCCTGGGGC
TCCTTCGCAGACCTGCTTCGTGACCTCTTTCGAATGGTGCTCCAAGAGGCAGCTTGTGGACCTGGTGATGGAAGG
GGTGTGGCAGGAGCTGCTGGACAGCGCCCAGATTGAGATCTGTGTGGCTGACTGGTGGGGCGCTCGAGAGAACTG
CGGCTGCGTCTACCAGCTCCGGGTCCGCCTTCTGGATGTGTATGAAAAGGAAGTGGTCAAGTTCTCAGCCTCACC
TGACCCGGTCCTTCAGTGGACTGAGAGGGGCTGCCGACAGGTCTCCCACGTCTTCACCAACTTTGGCAAGGGCAT
CCGCTACGTATCTTTTGAGCAGTACGGGAGAGACGTGAGTTCCTGGGTGGGGCACTATGGCGCCCTTGTGACCCA
CTCCAGTGTGAGGGTCAGGATCCGTCTGTCCTAGCGACTGGACTACTGCCTGACGTTGTCAGTCAAGACCAGCCT
TGCAGCCAGGTGCAGTGGCTCACACCTGTGGAATCCCAGCACTTCAGGAGGCCGAGGTGGGAGGATCACTGGAGC
TCGGGAGTTCAAGACCAGCCTGGGCAACATAGTGAAACCGTCTCCACAAATAATTTTTAAAAAATTAGCCAGGCA
TGGTGGTGCCGCCTGTAGTCCCAGCTACTCAGGAGGCTTGGGTGGGAGGATTGCCTGAGACCAGGAGGTTGAGGC
TGCAGTGAGCCGTGATTTCACCACCACTCCAGCCTGGGTGAGAAAGCAAGACCCTATATCAATGAAAAAAAAAAA
AAAAAAGACCAGCTTTGCAGCCAGAAGCCAGAGGATACCCAGGGACAGTAGGGCTCCCAGGTGGCTGGTTCTCAG
CACACCTTCCATGAATCTGCTTGCTGCTGCTTCAGTGTGGTGGCCATCATGCTGTGTGACAAACCAGGCTGTTCA
CAGCTTCCTCAGCCCCCCAGAAGGGGAGTGTCAGGAAGAGACATTTAGTTCATTTGCCTGCAAATTTTCTTCTCC
TGCAAGGATCTCGGTGGACTCAGTCACAAAACAAAGGCTAAACCAGGATTTATAAGAGAGGGCTTATAAATCCCT
CTGCCGACGCAGGGAGCAGAGACTTGCCGGCATGTTTTGGGGGTAATGATCGTGGGCAGGGAGCAGAGGTCCGCT
GAGGCAGTCTGTCCTTGAGACTAACAAAGTCATCTGCTGTTTGGGGAAATCTCTGGTGTTGGGAACAGGCCCCCA
AATCTGGCCATAAACTGGCCCCAAAACTGGCCATAAACAAAATATCTGCAGCACTGTGACATGTTTGTGATGGCC
ATGACCCCCACCCTGAAGGTTGTGGGTTTACTGGAACGAGGGCGAGGAACACCTGGCCCACCCAGGGCGGAAAAC
CGCTTAAAGGGGTTCCTGAACCACAAACCATAGCATAAGTGATCTGTGCCTTAACGACATGTTCCTGCTGCAGAT
AACTAGCCAGACCCATCCCTTTATTTCAGCCCATCCCTTTATTTCCTGTAAGAAATGTTTTTAGTTAATCTATAA
TCTATAGAAATAATGCTTATCACTGGCTTGCTGTCAATAAATATGTGGGTAAATCTCTGTTCAAGGCTCTCAGCT
CTGAAGGCCGTGAGACCCCTGATTTCCCACTCCACACC

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FIGURE 3714

GGGGAGCTTGCGGCACAGCTAGGGCATCCCGGCGAGGAGCGCCGCCAGGCCCCGGGCCACAGCCGGGCCTGGCGG
GGGGACCATGGGCGCCTCGGTCTCCAGGGGCCGGGCCGCCCGGGTCCCCGCGCCGGAGCCGGAACCCGAAGAGGC
GCTGGACCTGAGCCAACTACCCCCAGAGCTGCTTCTGGTGGTGCTGAGCCACGTCCCCCCGCGCACGCTGCTCGG
GCGCTGCCGCCAAGTGTGCCGGGGCTGGCGAGCCCTGGTGGACGGCCAGGCCCTGTGGCTGCTGATCCTGGCCCG
CGACCACGGCGCCACCGGCCGCGCGCTGCTGCACCTCGCCCGCAGCTGCCAGTCTCCCGCCCGTAACGCCAGGCC
TTGCCCCCTGGGCCGCTTCTGCGCGCGCAGACCCATCGGACGCAACCTTATTCGCAACCCCTGCGGCCAAGAAGG
CCTCCGAAAGTGGATGGTGCAACACGGTGGGGACGGCTGGGTGGTGGAGGAAAACAGGACAACCGTGCCTGGGGC
CCCTTCTCAGACGTGCTTCGTGACTTCATTCAGCTGGTGTTGCAAGAAGCAGGTCTTGGACCTAGAGGAGGAGGG
TCTGTGGCCAGAACTGCTGGATAGTGGCAGGATTGAGATTTGTGTCTCTGACTGGTGGGGAGCCCGACACGACAG
CGGCTGTATGTACAGACTCCTCGTCCAACTTCTAGACGCCAACCAGACTGTTCTAGATAAATTCTCTGCTGTGCC
TGATCCCATCCCGCAGTGGAACAACAATGCCTGCCTTCACGTCACCCACGTGTTCTCCAACATCAAGATGGGCGT
CCGCTTTGTGTCTTTCGAACACCGGGGCCAGGACACACAGTTCTGGGCTGGCCACTATGGAGCCCGTGTGACCAA
CTCCAGTGTGATCGTGCGAGTCCGTCTGTCCTAGTCCAGCACTACCCTTCTTGCAAGACAGCCTGACTGTGCCTT
CCAGGGCCTGGGACCATTGGCTGGGACCCCTCATTAACCAACCAAGCACTTGTACCTCCCTGGCATACTGAGAAT
TCCTGGGTCCAATCAAAGGCCCTGACGGGCCCTGTCTTCAGGTTCTAGAAACTACCAGAAGAAGCTTCTTCCATC
TTATCTACCTACTGCAGCTGCTGCTTTGCGGGGGGGCCCTACTGTACTGAGGGGAAACCCACAAGTGAGCATGGG
GGAATGCCCATCCTGGAGAAGAATTCTTGCCCTCCCCTCTCTTCTCCTCCCAACCAAAACCCTCCGATCCAGCCC
CAGGCCCCTCTGTACCATCCCCTCCCCTCCGCACCACTGACCTCTTGTCTCCTGTTGTTTCTGCCACAGGGACTT
CCTTGGTCCCTTCAGGGAAGCCCTCAACTCATCTCTGAACTTAGAATCTCATCCTTAGGGCTCAGAGAGTCCCAG
CCCTAAGGGTGTGAACCTCACCTCCTGGGGCTTCCGAGCTACAGGGCTGGGACCAGGTCATGCAGCTGAAAGTCT
ACGTTAAAAAAAAAAAGTTTGGGCCAGGCACAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCA
GGCGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATCCA
AAAAATTAGCCGGGCTTGGTGGTGTGCACCTGTAATTCCAGCTACTCGGGAGGCTGAGGCAGGAGAATTGCTTGA
GCCCGGGAGGCAGAGGCTGCAGTGAACCAAGATCATGCCACTGCACTCCAGCCTGGGCAACACAGCGAGACTCCG
TCTCAAAAAGAAAAAGTTTGGATCAGGCAGGGTGGCTCACACCTGTAATCCCTGCACTTTGGGAGGCCAAGGTGG
GAGGATCAGTTGAGCCCCAGAGTTCAAGACCAGCCTGGGCAATGTAGTAAGACCCCCATCGCTACAAAAAATACA
AAAGTTAGCCAGGTACAGTAGTACACACCTGTAGTCCAAGCTACTTGGGAGGCTGAAGTGGGAGGATCATTTGTG
CCCAGGTTGAGGCTATAGTGAGCCATGATCATACCACTGCACTCCAGCCTGGGTGACAGAGCGAGACCCTGTCTC
AAAAAAAAAAAAGAATTTGGAGATGGTTCTGCCCACTCTGGTTTCTCTGAAAAAACGAGGTAATTCCCTGAGCCC
AACCCTGATCCTCAAGGACCTGTAATTGTGTGGTATTTAAAATTAAAATAACATTATTTTTATTTTGACTTTTTT
TCAAACAGTAAGAATAATATATCAGCAGCATGTATCTGCCAATCATATGTAATAAATTTCTTATTTTGCC

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FIGURE 3715A

GGGGATTCAACATGGCGGCGGGAGTGTCCGCGGTGGTGGCGGTGCAAGAGAGCTGAGGGAGGCGCGAGGGCGCGG
AGTTCCAGGTCGAGCAGTTAGGCCGCGAGCGACTGCGGCGCCGAGCCGATGAGTAACCCGAAGCCCCTAGAGGAG
TGGTCACCTGCCTGAGGGCACTTCTGTCCCACCAGCATCAGACCAGGCCGCACCGAGTCCCCGGCACCATGTTTG
GGAAGAGGAAGAAGCGGGTGGAGATCTCCGCGCCGTCCAACTTCGAGCACCGCGTGCACACGGGCTTCGACCAGC
ACGAGCAGAAGTTCACGGGGCTGCCCCGCCAGTGGCAGAGCCTGATCGAGGAGTCGGCTCGCCGGCCCAAGCCCC
TCGTCGACCCCGCCTGCATCACCTCCATCCAGCCCGGGGCCCCCAAGACCATCGTGCGGGGCAGCAAAGGTGCCA
AAGATGGGGCCCTCACGCTGCTGCTGGACGAGTTTGAGAACATGTCGGTGACACGCTCCAACTCCCTGCGGAGAG
ACAGCCCGCCGCCGCCCGCCCGTGCCCGCCAGGAAAATGGGATGCCAGAGGAGCCGGCCACCACGGCCAGAGGGG
GCCCAGGGAAGGCAGGCAGCCGAGGCCGGTTCGCCGGTCACAGCGAGGCGGGTGGCGGCAGTGGTGACAGGCGAC
GGGCGGGGCCAGAGAAGAGGCCCAAGTCTTCCAGGGAGGGCTCAGGGGGTCCCCAGGAGTCCTCCCGGGACAAAC
GCCCCCTCTCCGGGCCTGATGTCGGCACCCCCCAGCCTGCTGGTCTGGCCAGTGGGGCGAAACTGGCAGCTGGCC
GGCCCTTTAACACCTACCCGAGGGCTGACACGGACCACCCATCCCGGGGTGCCCAGGGGGAGCCTCATGACGTGG
CCCCTAACGGGCCATCAGCGGGGGGCCTGGCCATCCCCCAGTCCTCCTCCTCCTCCCGGCCTCCCACCCGAG
CCCGAGGTGCCCCCAGCCCTGGAGTGCTGGGACCCCACGCCTCAGAGCCCCAGCTGGCCCCTCCAGCCTGCACCC
CCGCCGCCCCCTGCTGTTCCTGGGCCCCCTGGCCCCCGCTCACCACAGCGGGAGCCACAGCGAGTATCCCATGAGC
AGTTCCGGGCTGCCCTGCAGCTGGTGGTGGACCCAGGCGACCCCCGCTCCTACCTGGACAACTTCATCAAGATTG
GCGAGGGCTCCACGGGCATCGTGTGCATCGCCACCGTGCGCAGCTCGGGCAAGCTGGTGGCCGTCAAGAAGATGG
ACCTGCGCAAGCAGCAGAGGCGCGAGCTGCTCTTCAACGAGGTGGTAATCATGAGGGACTACCAGCACGAGAATG
TGGTGGAGATGTACAACAGCTACCTGGTGGGGGACGAGCTCTGGGTGGTCATGGAGTTCCTGGAAGGAGGCGCCC
TCACCGACATCGTCACCCACACCAGGATGAACGAGGAGCAGATCGCGGCCGTGTGCCTTGCAGTGCTGCAGGCCC
TGTCGGTGCTCCACGCCCAGGGCGTCATCCACCGGGACATCAAGAGCGACTCGATCCTGCTGACCCATGATGGCA
GGGTGAAGCTGTCAGACTTTGGGTTCTGCGCCCAGGTGAGCAAGGAAGTGCCCCGAAGGAAGTCGCTGGTCGGCA
CGCCCTACTGGATGGCCCCAGAGCTCATCTCCCGCCTTCCCTACGGGCCAGAGGTAGACATCTGGTCGCTGGGGA
TAATGGTGATTGAGATGGTGGACGGAGAGCCCCCCTACTTCAACGAGCCACCCCTCAAAGCCATGAAGATGATTC
GGGACAACCTGCCACCCCGACTGAAGAACCTGCACAAGGTGTCGCCATCCCTGAAGGGCTTCCTGGACCGCCTGC
TGGTGCGAGACCCTGCCCAGCGGGCCACGGCAGCCGAGCTGCTGAAGCACCCATTCCTGGCCAAGGCAGGGCCGC
CTGCCAGCATCGTGCCCCTCATGCGCCAGAACCGCACCAGATGAGGCCCAGCGCCCTTCCCCTCAACCAAAGAGC
CCCCCGGGTCACCCCCGCCCCACTGAGGCCAGTAGGGGGCCAGGCCTCCCACTCCTCCCAGCCCGGGAGATGCTC
CGCGTGGCACCACCCTCCTTGCTGGGGGTAGATGAGACCCTACTACTGAACTCCAGTTTTGATCTCGTGACTTTT
AGAAAAACACAGGGACTCGTGGGAGCAAGCGAGGCTCCCAGGACCCCCACCCTCTGGGACAGGCCCTCCCCCATG
TTCTTCTGTCTCCAGGAAGGGCAGCGGCCCTCCCATCACTGGAAGTCTGCAGTGGGGGTCGCTGGGGGTGGAGAG
AACACTAAGAGGTGAACATGTATGAGTGTGTGCACGCGTGTGAGTGTGCATGTGTGTGTGTGCAAAGGTCCAGCC
ACCCCGTCCTCCAGCCTGCAAGGGGTGTCTGGCGCCTTGCCTGACACCCAGCCCCCTCTCCCCCTGAGCCATTGT
GGGGGTCGATCATGAATGTCCGAAGAGTGGCCTTTTCCCGTAGCCCTGCGCCCCCTTTCTGTGGCTGGATGGGGA
GACAGGTCAGGGCCCCCCACCCTCTCCAGCCCCTGCAGCAAATGACTACTGCACCTGGACAGCCTCCTCTTTTCT
AGAAGTCTATTTATATTGTCATTTTATAACACTCTAGCCCCTGCCCTTATTGGGGGACAGATGGTCCCTGTCCTG
CGGGGTGGCCCTGGCAGAACCACTGCCTGAAGAACCAGGTTCCTGCCCGGTCAGCGCAGCCCCAGCCCGCCCACC
CCTGCCTCGAGTTAGTTTTACAATTAAAACATTGTCTTGTTTTGTGTCTGTGTGCGATGTGTGGGGGGCAGGGGG
CCCTGCCCGGCTGTCTTGGGTGGGAATTTGCAGGGAGAGGGTCTGGATCTGGGAGCAAACCACGATTCCAGCCAA
GGCAGGGCAAGGGTGGGGTGGGGAGTGGGGAGTTCAGGTCATAGCAGCCAGTAAGCTCCCCCAGCCTGCCACTCC
CCAGAATGGGGCAGGATTGTCCCCACCCCTGGAAGCAGCCAGTTTGCCACAGTCCATGTGCAGACTGATCCCAGT
TTGCCAAATCTGCAATTTCCTGGAACCTTTTAAAGGCTGTCTTGAGCGCGTTTGGTGAGTAGGAGCTAACCCAAG
TTAGTAAATTGAAGGCCATTTGGCAAATTGGTCAGTGGGCAGATGGGCTTTTGGGGATTGACTGAGGCTGACTGG
CCTGGAGCTGCTGGCTTCGGAGAGACACCCTGTGAAGTGTGTCCTTCCACGCAGGAGCCCAGAGCCGAGCCCACG
CTGGGGGGAATCTGACTGGCATGGAGGTGGCCATGCCACCATCGCTGCTGCAGCTGCATCCTGGCACTTTGCGCC
TCAGGCCCTGTTGGGCTCCACTTTCTGCATCCTCCCCAGCCCCCAGGGAGGCAGTGGAGTGGGGAGAGAGCCAGG
AGTGAGCCTCCGTCCCCAAAGCCAGCCAGGCGTCATCAGCACCAGAGACCTCAGCCTGGTCCTCTCGGGAAGTGA
GTGGCCAGGGCAGAGATTCCAGGTTAGTCCACGCCTCCCACCCTTCACAGGTCCTGACCCCAAGAATCAGAGCAC

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FIGURE 3715B

TGTGTGTGTGGCAGGGCCTATGCCAAGTGCAAACACAGCCTAGATGGATCATCACAGAGTGAAACCCAGCGGTGC
AAGCAGCTGTGCTCTCTGCGATGTATTGGAGGCTTAGGTGAGGTGGATGCCTTTCTGGAAAAAAAAAAAAATGCTA
ACATTGGCAAAAGAAGAAATAGAAAACAAGACCAAAATAACTGTCTCCTCACTGCACACACACTCCAGAATAAAT
AAAAGGTTTCAGGCTTGAATGCACTTTCAAATGAGATTTTTTTTTTTTTTTTGAGACGGAGTATCGCTCTGTCGC
CCAGGCTGGAGTGCAGTGGCACGATCTTGGCTCACTGCAACTTCTGCCTCCTGGGTTCAAGCGATTCTCCTGCCT
CAGCCTCCCAAGTAGCTGGGATTACAGGCGCTTGCCACCACGCCAGGCTAATTTTTTGTATTTTGAGTAGAGACT
GGATTTCGCCATCTTGGCCAGACTGGTCTTGAACTCCTGACCTCGTGATCCACCCACCTCAGCCTCCCAAAGTGC
TGGGATTACAGGCATGAGCCACCATGCCTGGCCTCAAATGAGGTTTACCAGACTTTGAAGGAGCAGGTAATTCCT
TCTACCTTGTGAACAAGTTGTTCCAGAAAGATAGCAGCTCAGGAGGCCTCTGTGACCATGGTTCCAGACCCAGAT
AAGGACGGCAAAGAACAGAGCATCTCAGAAACGCAAGGCTCACAGCCAGGGTGCCCGGCGACCCCACGGGCACTG
AGAACAGCTAGCTCTAGGAGCTCCACTCTCCTGCTGAAGAAACCACGGGCTCAGAGACGGGGAGCTCCCTCGCCC
AGCCACATCTGTGACCCCACGGTAACTCTGCTGGTTTTGGTGCCTTCAGTCACTCACTGCAGGTTTGTTTTGTTT
TGTTTTGTTTTGAGTTTTTTTGTTTTTTGTTTTTTGTTTTTAGAGACAAGATGTTGCTATGTTGCCTAGGCTGGT
TTCGAACTCCTGGCCTCAAGGGATCCTCCCTCCTTGGCCCCGCAAAGTGCTGGGATTACAGGCGTGAGCCACCGT
GCCCAGCCCGCTCACTGCAGTTTGAAGGCATGGCTTTGGGTGGCGTGGGGTGAAAGCTGCCCGAGGCCCCGTTCC
TCCCCACGTGGCTGCCTCCTGCCAGAGCCAGTCAGGAAAACAGACCCCAACTAGAGTTGTTTCAAATGGCAGGGA
TTTGGTACCGGTGGTTGGATCATGACAAAGCTCTGAGAAGGCTGGAGGAGCCACAGAGTGCCAAGTGCCCAGCAA
TCATTAGAGGAAGGAGGCTGCTGCCACCTGTGTGGCTAGAGGAACAGAGGGGCCAATGGCATTCCCCAAACCCCA
CTCTCGCCTCTGTCTGGCCAGAGCAGAATGGCTTCTTCCAGCTTCCCACCCTGGACTCCCACCCAGGAGCCTCCT
CCTGGCAGACCCTTCCTGACCCCACCGGCCCGGGGGGTCTACAGATCCATGTTTCAGGCGTCCGCCTGGAGCGGA
ACAGGGGAGTGCTTAGGACAAGGGTGGTGCCAGAGGATCCACTCTGCCCACATTTAGTTGACCAGCTGAGGCACT
CCACGGGAATGAATGACTCTCGACAGGTGCCGGAGGTGAGGAGGGGCCCGGAGGCCCAGGAGGGGCACAGGGATG
GATTCGTCCGCCTGGGGGCTGGAGGTGTGTTTACAGAGCCCCAAAATAAACAATGCAACCAGGTCAGACCAGCGG
TTCTCACAGTGTGGTTCCCAGACCAGCAGCATCACTGGGAGCTTACTGGACACGCAAATAAATCCCTGTGTGCCA
CCCCAGCTGCATCAGATGCTGGTGGGGCCCAGTGATCTGTATTTAACACACCCTCCGGGGGATGCCGGTGCCCAC
TCACGTTTGAGAACCCCTGCGATCCACGACTGCCCTCCCGTGTAAAAGGCCCACCTCTGTGGGACTCCAAGTCAT
CAGCACCCTAGGGTCCTTCCGTCTTTTTCCTTCCTCCTGGGACACCTGCCTCTCCCATGTCGTATTAGAGAATTC
CTTATGCTCCCAAGTGGGCACGGGGAGAGGAAGGCACTCCTCTTTAAGGACCGACCCAGAGGTTTTGCCATTGCT
TCACTGGCCAGAGCTTAGTCACGCAGCCTCACCCAGAGGCAAGGGAGGTTGGAAAATGTAGTGTTTGTGTGTGTC
TAACACAAATTCTATTACCATGCAGTCAGGATTCTCCACTCTTGCTCTTTCATTAGATTTGCTGGGCTTCACCCT
GGACTTTCTGATTTAGTGACAGAACAGAGAACCCAGAGGCAGACCCAGATGTGTACAAGGGCTTCATATACAATC
AGGAGATTTAATAATCATGCTAGGGGCCGGGTGCAGTGGCTCACGCCTGTAATCCCAAGCACTTTGGGGAGCCGA
GGCAGGCAGATCACTTGAGGTCAGGAGTTTGAGACCAGCCTGGGCAACAAAGTGAGACCCTGTCTCTACTAAAAA
TAACAAAAATTAGCCGGGCGTGGTGGTGGGCGCCTGTAATCCCAGCTCCTCGGGTGGCTGAGGCATGAGAATCAC
TTGAACCCAGGAGGCAGAGGTTTCAGTGAGCTGAGATCACATCACTGCACTCCAGCCTGGGTGACAGAGTGAGAT
TCTGTC

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FIGURE 3716

ATGTCCCCGCTGCGCCCGCTGCTGCTGGCCCTGGCCCTTGCCTCCGTGCCTTGCGCCCAGGGCGCCTGCCCCGCC
TCCGCCGACCTCAAGCACTCGGACGGGACGCGCACTTGCGCCAAGCTCTATGACAAGAGCGACCCCTACTATGAG
AACTGCTGCGGGGGCGCCGAGCTGTCGCTGGAGTCGGGCGCAGACCTGCCCTACCTGCCCTCCAACTGGGCCAAC
ACCGCCTCCTCACTTGTGGTGGCCCCGCGCTGCGAGCTCACCGTGTGGTCCCGGCAAGGCAAGGCGGGCAAGACG
CACAAGTTCTCTGCCGGCACCTACCCGCGCCTGGAGGAGTACCGCCGGGGCATCTTAGGAGACTGGTCCAACGCT
ATCTCCGCGCTCTACTGCAGGTGCCCGGCCGCCCAAAGCTCCGAGCCCACCCCAGGCCCAGGCCCCAGCTCCGCA
TAA

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FIGURE 3717

GTTGGATGAAACCTTCCTCCTACTGCACAGCCCGCCCCCCTACAGCCCCGGTCCCCACGCCTAGAAGACAGCGGA
ACTAAGAAAAGAAGAGGCCTGTGGACAGAACAATC**ATG**TCTGACTCCCTGGTGGTGTGCGAGGTAGACCCAGAGC
TAACAGAAAAGCTGAGGAAATTCCGCTTCCGAAAAGAGACAGACAATGCAGCCATCATAATGAAGGTGGACAAAG
ACCGGCAGATGGTGGTGCTGGAGGAAGAATTTCAGAACATTTCCCCAGAGGAGCTCAAAATGGAGTTGCCGGAGA
GACAGCCCAGGTTCGTGGTTTACAGCTACAAGTACGTGCATGACGATGGCCGAGTGTCCTACCCTTTGTGTTTCA
TCTTCTCCAGCCCTGTGGGCTGCAAGCCGGAACAACAGATGATGTATGCAGGGAGTAAAAACAGGCTGGTGCAGA
CAGCAGAGCTCACAAAGGTGTTCGAAATCCGCACCACTGATGACCTCACTGAGGCCTGGCTCCAAGAAAAGTTGT
CTTTCTTTCGT**TGA**TCTCTGGGCTGGGGACTGAATTCCTGATGTCTGAGTCCTCAAGGTGACTGGGGACTTGGAA
CCCCTAGGACCTGAACAACCAAGACTTTAAATAAATTTTAAAATGCAAAAACTCGG

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FIGURE 3718

GGCGGCGGTGGTCGGTGCGGGAGGAGGGAGGGGAGCTTGCGGGCCCGAGAGGGGGCGACGGCGGCGGCGGTGGCC
TGAGGAGGCCCGAGCGGCGGCGGTGGCGGCGAAGGCCGAGGCGTCTAGGTGTTTTTGGAAGAGCTGAGGCCAGAG
CCGGGACCATGTGACGGCGCTGGCCCTCGCCACCGCCGTCCCCCGACCCTGGCCCCAGGCCCGGCACC**ATG**ATGT
TCCGAGACCAGGTGGGCATCCTCGCTGGCTGGTTCAAAGGCTGGAATGAGTGTGAGCAGACAGTGGCCCTCCTGT
CACTTCTGAAACGGGTCACCCGTACCCAGGCCCGCTTCCTGCAGCTCTGCCTGGAGCACTCACTGGCGGACTGCA
ATGACATCCACCTGCTGGAGTCGGAGGCCAACAGTGCTGCCATCGTCAGCCAGTGGCAGCAGGAGTCCAAAGAGA
AGGTGGTGTCCCTCCTGCTGTCCCACCTTCCCCTGCTTCAGCCAGGCAACACAGAGGCCAAGTCGGAGTACATGA
GGCTACTGCAGAAAGTGCTGGCCTACTCAATCGAGAGCAATGCTTTCATCGAGGAGAGTCGCCAGCTGCTTTCCT
ATGCCCTCATCCACCCAGCCACCACACTGGAGGACCGCAACGCACTGGCCCTCTGGCTGAGCCACCTGGAAGAGC
GGTTGGCTAGTGGCTTCCGCTCCCGGCCAGAGCCCTCCTACCATTCACGTCAAGGCTCAGATGAGTGGGGGGGCC
CTGCAGAGCTAGGCCCTGGGGAGGCAGGGCCAGGCTGGCAGGACAAGCCACCCCGGGAAAATGGACACGTGCCCT
TCCACCCATCCAGCTCAGTGCCGCCAGCCATCAACAGTATTGGGAGCAATGCAAACACAGGTCTCCCCTGCCAAA
TCCACCCTAGCCCACTGAAGCGCTCCATGTCACTCATCCCTACAAGCCCCCAGGTCCCTGGTGAGTGGCCGAGTC
CAGAGGAGCTTGGGGCCCGGGCTGCTTTTACCACGCCCGATCACGCACCTCTCTCGCCCCAGAGCAGCGTGGCCT
CCTCTGGCAGTGAGCAGACAGAGGAGCAGGGCTCCAGCCGGAACACCTTCCAGGAGGATGGCAGTGGCATGAAAG
ATGTGCCCTCATGGCTCAAGAGCCTCCGTTTGCACAAGTATGCAGCCCTCTTCTCACAGAATCAGCTT**TGA**GTAA
CTGTACAGTTTTTCTCGCTGTTGGAGAAGACTTATTTGTTGGAGTTTCACTTGTTTAATGGTCTGGGCTTATTTT
GGAAAAAAAAAAAACAAACAAAAAAAACGAATTCTGACCTT

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FIGURE 3719

AGTTGGTGGAACCGGAGCTTCGAGTCCGTCCCCGGTGCTGCCTGCGCGTTCACCTGAGTCTCGCTGGAGCTCTTC
TCGCCCGCCCACCTCATCTCAACCCACTTTCCGCGGGGAGCGGCGCCAAGCTGGGCCTTCCTCGGATCAGGCGTC
CCCTGAAGTCGGCACGCCCCTCTGCGTCCCCCTTCGGTCCCGCTAGGACCCCGTCCGGGCTGCCGTCGCCTCGTC
GCTATGGCGCCCACCATCCAGACCCAGGCCCAGCGGGAGGATGGCCACAGGCCCAATTCCCACCGGACTCTGCCT
GAGAGGTCTGGAGTGGTCTGCCGAGTCAAGTACTGCAATAGCCTCCCTGATATCCCCTTCGACCCCAAGTTCATC
ACCTACCCCTTCGACCAGAACAGGTTCGTCCAGTACAAAGCCACTTCCTTGGAGAAACAGCACAAACATGACCTC
CTGACTGAGCCAGACCTGGGGGTCACCATCGATCTCATCAATCCTGACACCTACCGCATCGACCCCAATGTTCTT
CTAGATCCAGCTGATGAGAAACTTTTGGAAGAGGAGATTCAGGCCCCCACCAGCTCCAAGAGATCCCAGCAGCAC
GCGAAGGTGGTGCCATGGATGCGAAAGACAGAGTACATCTCCACTGAGTTCAACCGTTATGGCATCTCCAATGAG
AAGCCTGAGGTCAAGATTGGGGTTTCTGTGAAGCAGCAGTTTACCGAGGAAGAAATATACAAAGACAGGGATAGC
CAGATCACAGCCATTGAGAAGACTTTTGAGGATGCCCAGAAATCAATCTCACAGCATTACAGCAAACCCCGAGTC
ACACCGGTGGAGGTCATGCCTGTCTTCCCAGACTTTAAGATGTGGATCAATCCATGTGCTCAGGTGATCTTTGAC
TCAGACCCAGCCCCCAAGGACACGAGTGGTGCAGCTGCGTTGGAGATGATGTCTCAGGCCATGATTAGGGGCATG
ATGGATGAGGAAGGGAACCAGTTTGTGGCCTATTTCCTGCCTGTAGAAGAGACGTTGAAGAAACGAAAGCGGGAC
CAGGAGGAGGAGATGGACTATGCACCAGATGATGTGTATGACTACAAAATTGCTCGGGAGTACAACTGGAACGTG
AAGAACAAAGCTAGCAAGGGCTATGAGGAAAACTACTTCTTCATCTTCCGAGAGGGTGACGGGGTTTACTACAAT
GAGTTGGAAACCAGGGTCCGCCTTAGTAAGCGCCGGGCCAAGGCTGGGGTTCAGTCAGGCACCAACGCCCTGCTT
GTGGTCAAACATCGGGACATGAATGAGAAGGAACTGGAAGCTCAGGAGGCACGGAAGGCCCAGCTAGAAAACCAC
GAACCGGAGGAGGAAGAGGAAGAGGAGATGGAGACAGAAGAGAAAGAAGCTGGGGGCTCAGATGAGGAGCAGGAG
AAGGGCAGCAGCAGTGAGAAGGAGGGCAGTGAAGATGAGCACTCGGGCAGCGAGAGTGAACGGGAGGAAGGTGAC
AGGGACGAGGCCAGTGACAAGAGTGGCAGTGGTGAGGACGAGAGCAGCGAGGATGAGGCCCGGGCTGCCCGTGAC
AAAGAGGAGATCTTTGGCAGTGATGCTGATTCTGAGGACGATGCCGACTCTGATGATGAGGACAGAGGACAGGCC
CAAGGTGGCAGTGACAATGATTCAGACAGCGGCAGCAATGGGGGTGGCCAGCGGAGCCGGAGCCACAGCCGCAGC
GCCAGTCCCTTCCCCAGTGGCAGCGAGCACTCGGCCCAGGAGGATGGCAGTGAAGCTGCAGCTTCTGATTCCAGT
GAAGCTGATAGTGACAGTGACTGAGTCCCAGGGCATTCAGGGCTGGTTCAGACACCATTATTGTGAGCAGCAAAG
CACTTTTCTAGTGGTCTGTTTGTGAGCCTTTCACTTGTTTGTTCCCCACCCCCAAACCTTTGCTGTTAATAAAGT
CAACTTCTCTTTA

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FIGURE 3720

GGGGTTTACTACAATGAGTTGGAAACCAGGGTCCGCCTTAGTAAGCGCCGGGCCAAGGCTGGGGTTCAGTCAGGC
ACCAACGCCCTGCTTGTGGTCAAACATCGGGACATGAATGAGAAGGAACTGGAAGCTCAGGAGGCACGGAAGGCC
CAGCTAGAAAACCACGAACCGGAGGAGGAAGAGGAAGAGGAGATGGAGACAGAAGAGAAAGAAGCTGGGGGCTCA
GATGAGGAGCAGGAGAAGGGCAGCAGCAGTGAGAAGGAGGGCAGTGAAGATGAGCACTCGGGCAGCGAGAGTGAA
CGGGAGGAAGGTGACAGGGACGAGGCCAGTGACAAGAGTGGCAGTGGTGAGGACGAGAGCAGCGAGGATGAGGCC
CGGGCTGCCCGTGACAAAGAGGAGATCTTTGGCAGTGATGCTGATTCTGAGGACGATGCCGACTCTGATGATGAG
GACAGAGGACAGGCCCAAGGTGGCAGTGACAATGATTCAGACAGCGGCAGCAATGGGGGTGGCCAGCGGAGCCGG
AGCCACAGCCGCAGCGCCAGTCCCTTCCCCAGTGGCAGCGAGCACTCGGCCCAGGAGGATGGCAGTGAAGCTGCA
GCTTCTGATTCCAGTGAAGCTGATAGTGACAGTGACTGAGTCCCAGGGCATTCAGGGCTGGTTCAGACACCATTA
TTGTGAGCAGCAAAGCACTTTTCTAGTGGTCTGTTTGTGAGCCTTTCACTTGTTTGTTCCCCACCCCCAAACCTT
TGCTGTTAATAAAGTCAACTTCTCTTT

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FIGURE 3721

AGGCCCAGCGGGAGGATGGCCACAGGTCTGGAGTGGTCTGCCGAGTCAAGTACTGCAATAGCCTCCCTGATATCC
CCTTCGACCCCAAGTTCATCACCTACCCCTTCGACCAGAACAGGTTCGTCCAGTACAAAGCCACTTCCTTGGAGA
AACAGCACAAACATGACCTCCTGACTGAGCCAGACCTGGGGGTCACCATCGATCTCATCAATCCTGACACCTACC
GCATCGACCCCAATGTTCTTCTAGATCCAGCTGATGAGAAACTTTTGGAAGAGGAGATTCAGGCCCCCACCAGCT
CCAAGAGATCCCAGCAGCACGCGAAGGTGGTGCCATGG**ATG**CGAAAGACAGAGTACATCTCCACTGAGTTCAACC
GTTATGGCATCTCCAATGAGAAGCCTGAGGTCAAGATTGGGGTTTCTGTGAAGCAGCAGTTTACCGAGGAAGAAA
TATACAAAGACAGGGATAGCCAGATCACAGCCATTGAGAAGACTTTTGAGGATGCCCAGAAATCAATCTCACAGC
ATTACAGCAAACCCCGAGTCACACCGGTGGAGGTCATGCCTGTCTTCCCAGACTTTAAGATGTGGATCAATCCAT
GTGCTCAGGTGATCTTTGACTCAGACCCAGCCCCCAAGGACACGAGTGGTGCAGCTGCGTTGGAGATGATGTCTC
AGGCCATGATTAGGGGCATGATGGATGAGGAAGGGAACCAGTTTGTGGCCTATTTCCTGCCTGTAGAAGAGACGT
TGAAGAAACGAAAGCGGGACCAGGAGGAGGAGATGGACTATGCACCAGATGATGTGTATGACTACAAAATTGCTC
GGGAGTACAACTGGAACGTGAAGAACAAAGCTAGCAAGGGCTATGAGGAAAAC**TAA**TACTTCATCTTC

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FIGURE 3722

GTCGTAACGCACTTCCGGCGGTCTACGCGAGGAAGATGGCTGCATCCCAGCAGCAAGCTTCAGCGGCTTCCTCAG
CTGCTGGTGTATCGGGTCCTAGTTCGGCTGGCGGCCCGGGTCCCCAGCAGCAGCCGCAACCGCCAGCACAACTGG
TGGGCCCTGCCCAGAGCGGCCTCCTGCAGCAACAGCAACAGGACTTCGATCCTGTGCAGCGTTATAAGATGCTCA
TCCCGCAGCTGAAGGAGAGTCTACAGACCTTGATGAAGGTTGCGGCCCAAAACTTGATTCAGAACACTAACATCG
ACAATGGACAAAAGAGCAGTGATGGACCCATACAGCGCTTTGACAAGTGCCTGGAAGAGTTCTATGCACTCTGTG
ACCAGCTGGAGCTGTGCCTGCGCCTGGCGCATGAGTGCCTGTCACAGAGTTGTGACAGTGCCAAGCACTCTCCAA
CGTTGGTGCCCACAGCCACCAAGCCCGACGCAGTGCAGCCTGACAGCCTCCCCTACCCACAGTACCTGGCGGTCA
TCAAAGCCCAGATTTCCTGTGCCAAGGACATTCACACCGCCCTGCTGGACTGTGCCAACAAGGTCACGGGCAAGA
CACCCGCACCACCTGCTGGCCCTGGGGGCACTCTGTGAAGTGGGGGACAGGGAGTGGGGCAGGCAGTGGTTGGTG
GGTGGTGTGCAAAGGGAATGAAGAGCGTCCTGGGCCTAAACACAGCAGCCTCCTCTCTTCCTGCCTGAGCACCGC
AGCGGGAGCCAGCAGGGGGCAGCAGAGGCCAACAGGGAGCTCGCAGGCCGGGCCCCTGCGTCCCTGCCCCTTCTT
CCTGCTCCCCCTCCTAGCCTAGGGTAGACTTTGAACTGTGTGTGTTGATGACTTCTCTGTTCCACAGGCCCTCCC
CCATTCTTGCCTGGGTGTGGAGCCCTGGCTGTCCCCTCTCCCTCAGTCCTTCCTGACTGTCTCCAGCTGGGAGGT
GGTCTCTGTGTGCCACTCCTCTGTGTCTCTATTACAGTTGTGTCTCTCTCATCCTGTCTCTTTTTCCCTTGTTTC
TCTGTTCCTGTTAATGTGTTTCTCCCCATGGTCCTATTTCTCTCACTCTGACCTCTCTCTCTTAGTCCCCTTTAG
CTGTCTTCTATCCCCAGCTCCTAACTGGGACTCTGTGTCTATGCAGGGGGCCAGCACCCCTGGGTTATCTGGGGC
TAAGGGAAGGGACTTCATTTCCAGGGGCCACAGCCAAGCCCAGAGTCCCCCAGCGGCTCGCATGTCAGCCCAGAC
CCCAGGGTCCTTGGCCTAGGAGAGGAGCAGTGGAGGGGCCCAGGCTCTGAGCTCCACAGGTCTGAGCTGGGAGCA
ACTCAGGCCCCCACCCAAGCCTGCGTCAGCGGAACTTGAGTGAGGGGCGTTGTGCAATTTGTGGCAAGGCTGGCC
CAGCTGGATGCCTGGGTCCCAGTATTTTTAGCCCCAAAGGAGAAGTGAAAAGGCCCCAGCCGGGGTGAATCATCA
GTCCTGGGGAAGAACCCAGGCGCCTGAGCCCCAGCTCCGGGAAGCAGGCACTGGGGAGGGGGCTTCAAGGAGGGA
GTGCCCCCTCAGACTCCCTGCTTCCCTGGAAGCTTCAGGAAGCTCAGCCTCAGCCTTCAGGCCTGAGCAAGTGCA
GGGCGGAGCTACCAGCCCAGGCTCAGATGTTGGGGTGTGAAAGCCTCAAGTGACTCAGCCTGGTTGGAGAACTGC
CCCACCCAGTATCTTCTGTGCCATGGTTCCCACATTCGCACTCCATGGCCTCCTGTCCTGGACCCCACGTCTGCA
AGGAAACCCTAGGACCATGGATACCTCTGTGATTCACGCTGAGCCCAAGTCCCCACACTGGAAAACTGGGAAATG
GCCAGCTGTGTGTCCCAGGAAATTCCTCCCCTTATTCTTCCTTGAAGTGCCCGAGCATGTAGGGCAAGAAGGAAG
GCTGAAGCGCTGTCCCTAGGAGGAATTTCTCCTTCAGGGAAGCCTCAGTTTTGCCCATTTATCTAATTGAATCAG
TTTTTTACCCAATCCCCCGATTTTGTAGGATAATCTCCCTTATCTAAAGTCAACTGATTATGGACTTTAATCACA
TCTACAAAACACTTCCATGGCGACAGCTAGATGAGTGTTTGAATAACTGGGACTGTAGCCCGTCCAAGTTGACAC
ATAAAACTGACCATCGGGCCGGGGGCGGTGGCTCACGCCTGTAATCCCAACACTTTGGGAGCCCGAGGCGGGCGG
ATCACAAGGTCAGGAGTTCGAGACCAGCCTGGCCAACACGGTGAAACCCCGACTCTACTAAAAATACAAAAAATT
AGCTGGGTGTGGTGGCACACACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGTTTGAACCTGGG
AGGCAGAGGTTGCAGTGAGCCAAGATCACACTATTGCACTCCAGCCTGGGCGACAGGGCAAGACTCTGTCTCAAA
AAAAATAAAAAACTGACCATCTAGTCCTTGTCATCTGGGCACCCTCACACATCTCCTTAACCACACTTAATCTCC
AAATAAGTACGATAACATAGTCATAGTCCCACCCAACATGATGCAGTTATCTTGCATACAACTGAAGACAACTAA
CCCTTTCCCCAACAGAGCCCACCAGCAGTGGTGGAGATGTCGGTCCATGAGCGCACACACAAGACTGAGGGACTG
TCGGCCCTCCCAGGTGGTGTCAACACAACATCACACACAGGTGGGGGGGCCTGATAGCCCAGCACCCATGATACA
GGGCCTACCAATGCTTAAAACCACACCCAGGGAGCCCACAGAGGCACTCAGTGGGTGGTGGGGTGATGGATACAC
ATCTATCAGGCACAGGGCGGAGGTGGGCACCACTGAGTTGCACTCAGCAAACACATTGGGTATCTTGTGCCCAAG
GCCTGTATTTGTGGAGCTGATGTTCTAGTGAGAGACAGTAAATGTGACAAAAGTAAAATATATCAGATGGTGAGA
AAACAGAAAAATGAGATCAGAAGTGGAGATGTTGGGGCCAGGCACAGTGGCCCAGGCCTGTAATCCCATCACTTT
GGGAGGTGCAGGCAGGCAGATGGCTTGAGCCCAGGAATTCAAGACCAGTCCGAGCAACATAGCAAAAGCCCTTAT
CTGCAAAAAATTCAAAAATTAGCCAGGTGTGGTGGTGCGTGCCCAGGTTCCCAGGTACTCGGAGGCTGAGAGGTG
GGAGGATGCCTTGAGCTTGAGAGGTTGAAGCTGCAGTGAGCTGTGATCGCACCACTGCACTCCAGCTTGGTTCAT
GGAGACCCTGTTTTTTTAAAAAAAGAAGTGGAGGTGTTTACACCAGCAAAATACTCATTTTTTAAGTGTAATTAA
GTTGAAGATCAAAAAATGGAAATGTATAATTAAATCATACTTAGCAAATCTAACACATGAAATGTAACATCTGCA
TATGGAGAATCGTGTTACTTTATTGAAAAACATTAAAAGTTTGAGAACTT

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FIGURE 3723

AGCCTGACTTCAGCGCTCCCACTCTCGGCCGACACCCCTCATGGCCAACCGTTACACCATGGATCTGACTGCCAT
CTACGAGAGCCTCCTGTCGCTGAGCCCTGACGTGCCCGTGCCATCCGACCATGGAGGGACTGAGTCCAGCCCAGG
CTGGGGCTCCTCGGGACCCTGGAGCCTGAGCCCCTCCGACTCCAGCCCGTCTGGGGTCACCTCCCGCCTGCCTGG
CCGCTCCACCAGCCTAGTGGAGGGCCGCAGCTGTGGCTGGGTGCCCCCACCCCCTGGCTTCGCACCGCTGGCTCC
CCGCCTGGGCCCTGAGCTGTCACCCTCACCCACTTCGCCCACTGCAACCTCCACCACCCCCTCGCGCTACAAGAC
TGAGCTATGTCGGACCTTCTCAGAGAGTGGGCGCTGCCGCTACGGGGCCAAGTGCCAGTTTGCCCATGGCCTGGG
CGAGCTGCGCCAGGCCAATCGCCACCCCAAATACAAGACGGAACTCTGTCACAAGTTCTACCTCCAGGGCCGCTG
CCCCTACGGCTCTCGCTGCCACTTCATCCACAACCCTAGCGAAGACCTGGCGGCCCCGGGCCACCCTCCTGTGCT
TCGCCAGAGCATCAGCTTCTCCGGCCTGCCCTCTGGCCGCCGGACCTCACCACCACCACCAGGCCTGGCCGGCCC
TTCCCTGTCCTCCAGCTCCTTCTCGCCCTCCAGCTCCCCACCACCACCTGGGGACCTTCCACTGTCACCCTCTGC
CTTCTCTGCTGCCCCTGGCACCCCCCTGGCTCGAAGAGACCCCACCCCAGTCTGTTGCCCCTCCTGCCGAAGGGC
CACTCCTATCAGCGTCTGGGGGCCCTTGGGTGGCCTGGTTCGGACCCCCTCTGTACAGTCCCTGGGATCCGACCC
TGATGAATATGCCAGCAGCGGCAGCAGCCTGGGGGGCTCTGACTCTCCCGTCTTCGAGGCGGGAGTTTTTGCACC
ACCCCAGCCCGTGGCAGCCCCCCGGCGACTCCCCATCTTCAATCGCATCTCTGTTTCTGAGTGACAAAGTGACTG
CCCGGTCAGATCAGCTGGATCTCAGCGGGGAGCCACGTCTCTTGCACTGTGGTCTCTGCATGGACCCCAGGGCTG
TGGGGACTTGGGGGACAGTAATCAAGTAATCCCCTTTTCCAGAATGCATTAACCCACTCCCCTGACCTCACGCTG
GGGCAGGTCCCCAAGTGTGCAAGCTCAGTATTCATGATGGTGGGGGATGGAGTGTCTTCCGAGGTTCTTGGGGGA
AAAAAAATTGTAGCATATTTAAGGGAGGCAATGAACCCTCTCCCCCACCTCTTCCCTGCCCAAATCTGTCTCCTA
GAATCTTATGTGCTGTGAATAATAGGCCTTCACTGCCCCTCCAGTTTTTATAGACCTGAGGTTCCAGTGTCTCCT
GGTAACTGGAACCTCTCCTGAGGGGGAATCCTGGTGCTCAAATTACCCTCCAAAAGCAAGTAGCCAAAGCCGTTG
CCAAACCCCACCCATAAATCAATGGGCCCTTTATTTATGACGACTTTATTTATTCTAATATGATTTTATAGTATT
TATATATATTGGGTCGTCTGCTTCCCTTGTATTTTTCTTCCTTTTTTTGTAATATTGAAAACGACGATATAATTA
TTATAAGTAGACTATAATATATTTAGTAATATATATTATTACCTTAAAAGTCTATTTTTGTGTTTTGGGCATTTT
TAAATAAACAATCTGAGTGT

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FIGURE 3724

GAATTAGGGGAACTCAGAAATCCATCCCCCACCCCACGGCCCTACCTAGAAGACTTAGGAATGTGGGTCCCCAGC
GCCGCCATCTGAGACTCCAGAGTCGAGGCTCCTAGCATCCCCTACGTAGAACACTGAGAAATTCCGACTGCGGGA
CCCCAGTCTCCGAGAGACCCCAGATTCTATTCCTGGAGCCTGAGAGCCCGAAGTTCACGCCCCTGAGTCTGGGCT
CCGCACCTCCCTGGGGACCGCGTCGGGGTCGCGCAGGAGCCGGGCTGCCTCGAGCCGGGGCTGGAGGCTCCCCGG
GAGGACTCTGCTGGGCCGCTCAGCC**ATG**CCTGAGGGAGCCCAAGGACTGAGCCTCTCCAAACCTAGCCCAAGCCT
CGGGTGTGGCCGAAGAGGTGAAGTGTGTGACTGTGGCACCGTGTGTGAGACTCGGACAGCTCCTGCAGCCCCCAC
CATGGCCTCCCCCCGAGGTTCTGGGAGCTCCACATCCCTGAGCACAGTGGGCTCTGAGGGGGATCCAGCCCCTGG
GCCCACTCCAGCCTGCTCAGCCTCCAGGCCAGAGCCCCTTCCAGGGCCTCCCATCCGCCTACATCTCTCTCCGGT
GGGGATCCCAGGTTCAGCCAGACCCTCAAGGCTGGAGCGTGTGGCCCGGGAGATCGTGGAGACAGAACGGGCCTA
TGTCAGGGACCTCCGCAGCATCGTGGAGGACTACCTGGGCCCTCTGCTGGACGGCGGGGTCCTGGGGCTGAGCGT
GGAGCAGGTGGGCACGCTGTTTGCCAACATTGAGGACATCTACGAGTTCAGCAGCGAGCTCCTGGAGGACTTGGA
GAACAGCAGCAGCGCCGGGGGTATTGCCGAGTGCTTCGTGCAGAGGAGCGAGGATTTTGACATCTACACATTGTA
CTGCATGAACTACCCGAGCTCCCTGGCCCTGCTCCGGGAGCTGTCGTTGTCTCCGCCAGCAGCCCTGTGGCTGCA
GGAGCGCCAGGCCCAGCTTCGCCACTCGCTGCCCCTGCAGAGCTTCCTGCTGAAACCTGTCCAGCGCATTCTCAA
GTACCATCTGCTGCTGCAGGAACTAGGGAAGCACTGGGCGGAGGGCCCAGGCACTGGGGGTCGCGAGATGGTGGA
GGAAGCTATTGTGTCCATGACAGCGGTTGCCTGGTACATCAACGACATGAAGCGCAAGCAGGAGCATGCAGCGCG
CCTCCAGGAAGTGCAGCGGCGGCTGGGTGGCTGGACCGGACCAGAGCTCAGTGCTTTTGGGGAACTGGTGTTGGA
GGGCGCGTTCCGAGGAGGCGGAGGGGGTGGCCCCCGGCTACGAGGGGGTGAGCGGCTGCTCTTCCTGTTCTCTCG
GATGCTGCTGGTGGCCAAGCGCAGGGGGCTGGAGTACACCTACAAAGGCCACATCTTCTGCTGCAACCTGAGCGT
GAGCGAGAGTCCCCGAGACCCTCTAGGGTTCAAGGTGTCTGATCTGACCATTCCCAAGCACAGACACCTGCTCCA
GGCCAAGAACCAAGAAGAGAAGAGGCTGTGGATTCACTGTCTCCAGCGCCTCTTCTTTGAGAACCACCCTGCCTC
CATCCCTGCCAAGGCAAAGCAAGTTCTCCTTGAAAACAGCCTGCATTGTGCCCCCAAAAGTAAGCCTGTCCTAGA
GCCCCTGACACCCCCACTTGGGTCTCCTCGACCTCGAGATGCTAGAAGTTTTACCCCTGGGCGAAGGAACACAGC
TCCATCTCCTGGGCCCTCTGTGATTCGCCGAGGCCGCAGGCAGTCTGAGCCGGTGAAGGACCCTTATGTCATGTT
CCCACAGAACGCTAAGCCTGGATTCAAGCACGCTGGCAGCGAAGGGGAACTCTACCCTCCAGAATCTCAGCCACC
AGTTTCAGGCTCTGCACCCCCTGAGGACCTGGAGGATGCTGGACCCCCAACACTGGACCCCTCTGGGACCTCAAT
CACTGAAGAAATCCTGGAACTGCTGAATCAGCGAGGCCTTCGAGATCCAGGGGAATCTATGGGCCTTCACAGGGC
CCAGGGGGCTCCTGATGCCCCCTTCCACATG**TGA**GCCAGGACATGAGGCTTCCCTGAAGCAAGGATTTCAGCCAG
ATGCCATAGACCCTCAGAACTTGACCTGGAAGTCCAGACACTGAACGCAGGCCTCAAAACTGCTGCGGCCTTCCA
ACTCCTGGTATCTGCATCGGCGAATGGCCCTTCTTGCCTTGATCCACAGGGATGGGGAAGGGAGGAATGTCATTA
ATGTTTTGTTAATACTGATTCTTTCATGC

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FIGURE 3725

GGTGGCCCCTAGCTTTCCTTTTCCGGTTGCGGCGCCGCGCGGTGAGGTTGTCTAGTCCACGCTCGGAGCCATGCC
GTCCAAGGGCCCGCTGCAGTCTGTGCAGGTCTTCGGACGCAAGAAGACAGCGACAGCTGTGGCGCACTGCAAACG
CGGCAATGGTCTCATCAAGGTGAACGGGCGGCCCCTGGAGATGATTGAGCCGCGCACGCTACAGTACAAGCTGCT
GGAGCCAGTTCTGCTTCTCGGCAAGGAGCGATTTGCTGGTGTAGACATCCGTGTCCGTGTAAAGGGTGGTGGTCA
CGTGGCCCAGATTTATGCTATCCGTCAGTCCATCTCCAAAGCCCTGGTGGCCTATTACCAGAAATATGTGGATGA
GGCTTCCAAGAAGGAGATCAAAGACATCCTCATCCAGTATGACCGGACCCTGCTGGTAGCTGACCCTCGTCGCTG
CGAGTCCAAAAAGTTTGGAGGCCCTGGTGCCCGCGCTCGCTACCAGAAATCCTACCGATAAGCCCATCGTGACTC
AAAACTCACTTGTATAATAAACAGTTTTTGAGGGATTTTAAAGTTTCAAAAAAAAAAAAAAAAAAAA

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FIGURE 3726A

AGAGAACAGATTCGGAAACTGGGGAGGTCTAGCATGTGGCGTAGGAGGGGGTCCTCACTCCGCTTCGCGATTGCC
AAAACGAGCCTGCCGGAAGCGCCCTAAGGGGTTTTCTTCTCCCAGGGAACCAGCGGGGAAACTGAGGCTCGGGGT
GGAGCGCAGGATTGTGGGACGCGCCAAGGCTGCTGTCTTTCCCAGCAGCAGCGGAAGATGTCGGACAGCGAGGAC
AGCAACTTTTCCGAGGAGGAGGACAGCGAGCGCAGCAGTGACGGCGAGGAGGCCGAGGTAGACGAAGAGCGGCGG
AGTGCAGCGGGCAGTGAGAAAGAAGAAGAGCCTGAGGACGAAGAGGAGGAGGAAGAGGAGGAGGAATACGATGAG
GAAGAGGAGGAAGAAGATGATGACCGACCCCCCAAGAAACCCCGCCATGGAGGCTTCATTCTGGACGAGGCTGAT
GTTGACGATGAGTATGAGGACGAGGACCAGTGGGAGGATGGAGCAGAGGACATTCTAGAGAAAGAAGAGATTGAA
GCCTCCAATATCGATAATGTTGTCCTGGATGAAGATCGTTCTGGGGCTCGCCGCCTGCAAAACCTCTGGAGGGAC
CAGCGAGAAGAAGAACTGGGCGAGTATTACATGAAGAAATACGCCAAGTCATCTGTGGGAGAGACGGTGTATGGA
GGATCTGATGAGCTCTCAGACGACATCACCCAGCAGCAGCTGCTCCCAGGAGTCAAGGATCCCAATCTGTGGACT
GTCAAATGTAAGATTGGGGAGGAACGGGCCACGGCCATTTCCTTGATGCGCAAGTTCATTGCCTACCAGTTCACA
GACACGCCCCTGCAGATCAAGTCAGTAGTGGCACCAGAGCATGTGAAGGGCTACATCTACGTGGAGGCCTACAAG
CAGACCCACGTGAAGCAGGCCATTGAGGGGGTGGGCAACCTGCGGCTTGGCTACTGGAACCAGCAGATGGTGCCC
ATCAAGGAGATGACAGACGTGCTCAAAGTGGTGAAGGAGGTGGCCAACCTGAAACCAAAGTCCTGGGTCCGCCTC
AAGCGGGGCATCTACAAGGATGACATTGCTCAGGTGGACTACGTGGAGCCCAGCCAGAACACCATCTCCCTGAAG
ATGATCCCACGCATCGACTACGATCGCATCAAGGCCCGCATGAGCTTGAAAGACTGGTTTGCCAAAAGGAAGAAG
TTTAAGCGGCCTCCACAGAGGCTGTTTGATGCTGAGAAGATCAGGTCCCTGGGGGGTGATGTTGCCTCTGATGGT
GACTTCCTCATCTTTGAGGGGAACCGTTACAGCCGGAAGGGCTTTCTGTTCAAGAGCTTCGCCATGTCTGCTGTG
ATCACGGAGGGTGTGAAGCCAACACTCTCTGAGCTGGAAAAGTTTGAGGACCAGCCAGAGGGCATTGACCTGGAG
GTGGTGACTGAGAGCACAGGGAAGGAGCGGGAGCACAACTTCCAACCTGGGGACAACGTGGAGGTCTGTGAGGGT
GAGCTCATCAACCTGCAGGGCAAGATCCTCAGCGTGGATGGCAACAAGATCACCATCATGCCCAAGCATGAGGAC
CTCAAGGACATGTTGGAGTTCCCAGCCCAGGAACTTAGAAAATACTTCAAGATGGGGGACCACGTGAAGGTGATT
GCTGGCCGATTCGAGGGCGACACAGGCCTCATTGTGCGGGTGGAGGAGAATTTCGTTATCCTGTTCTCTGACCTC
ACCATGCATGAGCTGAAGGTGCTCCCCCGGGACCTGCAGCTCTGCTCAGAGACAGCATCAGGTGTGGATGTTGGG
GGCCAGCATGAATGGGGCGAGCTGGTGCAGCTGGATCCCCAGACTGTGGGTGTCATCGTGCGACTAGAACGGGAG
ACCTTCCAGGTGCTGAACATGTACGGGAAGGTGGTGACTGTCAGACATCAGGCTGTGACCCGGAAGAAGGACAAC
CGCTTTGCTGTGGCCTTGGACTCAGAGCAGAACAACATCCATGTGAAAGACATCGTTAAGGTCATTGATGGCCCC
CACTCAGGCCGAGAAGGGGAGATTCGCCATCTCTTCCGAAGCTTCGCCTTCCTACATTGCAAGAAACTGGTGGAG
AACGGGGGCATGTTTGTCTGCAAGACCCGCCACCTGGTGCTGGCTGGGGGCTCAAAGCCCCGTGATGTGACCAAC
TTCACCGTGGGTGGCTTTGCGCCTATGAGTCCCCGGATCAGCAGCCCCATGCACCCCAGTGCTGGAGGTCAGCGT
GGCGGCTTTGGTAGCCCAGGTGGCGGCAGTGGTGGCATGAGCAGGGGCCGGGGCCGGAGGGACAACGAACTCATC
GGCCAGACCGTGCGCATCTCCCAGGGGCCCTACAAAGGCTACATCGGTGTGGTGAAAGATGCCACAGAGTCCACG
GCCCGTGTGGAGCTGCACTCCACCTGCCAGACCATCTCTGTGGACCGTCAGCGGCTCACCACGGTGGGCTCACGG
CGCCCGGGCGGCATGACCTCGACCTATGGGAGGACGCCCATGTATGGCTCCCAGACGCCCATGTATGGCTCTGGC
TCCCGAACACCCATGTACGGCTCACAGACACCCCTCCAGGATGGTAGCCGCACCCCACACTACGGCTCACAGACG
CCCCTGCATGATGGCAGCCGCACTCCTGCCCAGAGTGGGGCCTGGGACCCCAACAACCCCAACACGCCGTCACGG
GCTGAGGAAGAATATGAGTATGCTTTCGATGATGAGCCCACCCCGTCCCCGCAGGCCTATGGGGGAACCCCCAAT
CCCCAAACACCTGGCTACCCAGACCCCTCGTCCCCACAGGTCAACCCACAATACAACCCGCAGACGCCAGGGACG
CCGGCCATGTACAACACAGACCAGTTCTCTCCCTATGCTGCCCCCTCCCCACAAGGTTCCTACCAGCCCAGCCCC
AGCCCCCAGAGCTACCACCAGGTGGCGCCAAGCCCAGCAGGCTACCAGAATACCCACTCCCCAGCCAGCTACCAC
CCTACACCGTCGCCCATGGCCTATCAGGCTAGCCCCAGCCCGAGCCCCGTTGGCTACAGTCCTATGACACCTGGA
GCTCCCTCCCCTGGTGGCTACAACCCACACACGCCAGGCTCAGGCATCGAGCAGAACTCCAGCGACTGGGTAACC
ACTGACATTCAGGTGAAGGTGCGGGACACCTACCTGGATACACAGGTGGTGGGACAGACAGGTGTCATCCGCAGT
GTCACGGGGGGCATGTGCTCTGTGTACCTGAAGGACAGTGAGAAGGTTGTCAGCATTTCCAGTGAGCACCTGGAG
CCTATCACCCCCACCAAGAACAACAAGGTGAAAGTGATCCTGGGCGAGGATCGGGAAGCCACGGGCGTCCTACTG
AGCATTGATGGTGAGGATGGCATTGTCCGTATGGACCTTGATGAGCAGCTCAAGATCCTCAACCTCCGCTTCCTG
GGGAAGCTCCTGGAAGCCTGAAGCAGGCAGGGCCGGTGGACTTCGTCGGATGAAGAGTGATCCTCCTTCCTTCCC
TGGCCCTTGGCTGTGACACAAGATCCTCCTGCAGGGCTAGGCGGATTGTTCTGGATTTCCTTTTGTTTTTCCTTT

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FIGURE 3726B

TAGTTTTCCATCTTTTCCCTCCCTGGTGCTCATTGGAATCTGAGTAGAGTCTGGGGGAGGGTCCCCACCTTCCTG
TACCTCCTCCCCACAGCTTGCTTTTGTTGTACCGTCTTTCAATAAAAAGAAGCTGTTTGGTCT

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FIGURE 3727

CTCAGAGGCTGGAGGGATCCTCCGTATGCTGAACGCTGGTCCCCTGGGCCCCCTTTATTTCTTTCTCTATACTTT
GTTTCTGTGTCTTTTTCTCTTCCAAAGTCTCTCGTTCCACCTAACGAGAAACACCCACAGGTGTGGAGGGGCAAC
CCATCCCTTCAGACAATTGGGAGGTGAGGGCCGATTGCCTTACACGGTGAGACAAGCGGCCTGACTCGTGACTAT
TTTTTTGGACAAATCAGGCAGCCACTGACTCCCTTCATTATGGCCTCAGCTTTATCTCTGGGCAATAAGTGTGAT
CCCTTCCTTCGCTGCGTCCTTTGCAGGGGCGGTGGCGCTCTGCAAGGCCCAAGGGGGCGTGGTCCAGATGACTTT
GAATCCCAGTTGTCGCCCCCAGGGTCAGCCAGGAGACTAGTCAGAAGCAAACGCGCCTGCGGCAATCCGCCCGAT
GCCTTTGGTCTCTCTCGGGCTTCCGTCCACCCGCCCCTCCCCCGCGTTTCCATTGGCTGTAGCTCCGGCCCGGGG
CGGGCGAAGAGGGAGCGAGTGGGCGGGGCCGCGTGGCGTCAGCGCAAGATGGCGGCCTCGGCAGCGGTGTTCTCG
CGCTTGCGAAGCGGGCTCCGGCTCGGCTCGCGGGGACTGTGCACGAGGTTGGCGACGCCGCCCCGCCGGGCCCCA
GATCAGGCCGCAGAGATCGGGAGCCGCGGGAGCACTAAGGCGCAAGGGCCACAGCAGCAGCCGGGCTCAGAGGGT
CCCAGCTATGCCAAAAAAGTTGCGCTCTGGCTTGCTGGGCTGCTTGGAGCTGGTGGGACTGTGAGCGTCGTCTAT
ATCTTTGGAAACAACCCGGTGGACGAAAATGGTGCCAAGATTCCTGATGAGTTCGACAATGATCCAATTCTGGTA
CAGCAGTTGCGCCGGACATACAAATATTTCAAAGATTATAGACAGATGATCATCGAGCCCACCAGCCCTTGCCTT
CTCCCAGACCCTCTGCAGGAACCGTACTACCAGCCACCCTACACGCTCGTTTTGGAGCTCACCGGCGTCCTCTTG
CATCCTGAGTGGTCGCTGGCCACTGGCTGGAGGTTTAAGAAGCGCCCAGGCATCGAGACCTTGTTCCAGCAGCTT
GCCCCTTTATATGAAATTGTCATCTTTACGTCAGAGACTGGCATGACTGCGTTTCCACTCATTGATAGTGTGGAC
CCCCATGGCTTCATCTCCTACCGCCTATTCCGGGACGCCACAAGATACATGGATGGACACCATGTAAAGGATATT
TCATGTCTGAATCGGGACCCAGCTCGAGTAGTAGTTGTGGACTGCAAGAAGGAAGCCTTCCGCCTGCAGCCCTAT
AACGGCGTTGCCCTGCGGCCCTGGGACGGCAACTCTGATGACCGGGTCTTGTTGGATCTGTCTGCCTTCCTCAAG
ACCATTGCACTGAATGGTGTGGAGGACGTGCGAACCGTGCTGGAGCACTATGCCCTGGAGGATGACCCGCTGGCG
GCTTTCAAACAGCGGCAAAGCCGGCTAGAGCAGGAGGAGCAGCAGCGCCTGGCCGAGCTCTCCAAGTCCAACAAG
CAGAACCTCTTCCTTGGCTCCCTCACCAGCCGCTTGTGGCCTCGCTCCAAACAGCCCTGAACTCTGGGCCTCCTC
AAACTCAGTGCCTGGGTCCAGGGCCCCAGTGCTTCCAGACCAAGACTTGGGCCACCACTTGTCCAATAAAGTACA
TCCCAGACGCCACACCTGCTGTGTCCCGAGAGTCTCCAGATGGGGGCATCAGGGTGAGGTCCGGGACTCTTGGGT
CATCGTCCCACAGTGGCTGATCGGCTGCCAAGCACAGTGGGGGTGCTTTGTTGGATCAGAGCAGATTTTTCACCC
TGGTCTCGGAATCTAAAAACCCTCGCTGTGTCTTCCTGTGTGTTGCGTGATCTGTGAAAAATACATCTCCCTCTG
ACCACAGACTCCTCATCTGTGGAGAAGGGAAGAGAGGATGGCACTTGGCTTTAAAGACAGGTAGCTGCCAGGCTA
CTGTGGAGAGAATGTGTTATGGGCCTAGTGGGCCTCTGGTGGACCAGAGATTACCCCTCTCAACAGGCCAGCTGC
TGGTTGGCTCCAGCCAGTGTGGCCCTGGGGTAAAGGGGGCCTGGAGTTGCTTGACACGCCAGTTGTTCAAA

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FIGURE 3728

GAAGGCCATGGTCTCCCCACGGATGTCCGGGCTCCTCTCCCAGACTGTGATCCTAGCGCTCATTTTCCTCCCCCA
GACACGGCCCGCTGGCGTCTTCGAGCTGCAGATCCACTCTTTCGGGCCGGGTCCAGGCCCTGGGGCCCCGCGGTC
CCCCTGCAGCGCCCGGCTCCCCTGCCGCCTCTTCTTCAGAGTCTGCCTGAAGCCTGGGCTCTCAGAGGAGGCCGC
CGAGTCCCCGTGCGCCCTGGGCGCGGCGCTGAGTGCGCGCGGACCGGTCTACACCGAGCAGCCCGGAGCGCCCGC
GCCTGATCTCCCACTGCCCGACGGCCTCTTGCAGGTGCCCTTCCGGGACGCCTGGCCTGGCACCTTCTCTTTCAT
CATCGAAACCTGGAGAGAGGAGTTAGGAGACCAGATTGGAGGGCCCGCCTGGAGCCTGCTGGCGCGCGTGGCTGG
CAGGCGGCGCTTGGCAGCCGGAGGCCCGTGGGCCCGGGACATTCAGCGCGCAGGCGCCTGGGAGCTGCGCTTCTC
GTACCGCGCGCGCTGCGAGCCGCCTGCCGTCGGGACCGCGTGCACGCGCCTCTGCCGTCCGCGCAGCGCCCCCTC
GCGGTGCGGTCCGGGACTGCGCCCCTGCGCACCGCTCGAGGACGAATGTGAGGCGCCGCTGGTGTGCCGAGCAGG
CTGCAGCCCTGAGCATGGCTTCTGTGAACAGCCCGGTGAATGCCGATGCCTAGAGGGCTGGACTGGACCCCTCTG
CACGGTCCCTGTCTCCACCAGCAGCTGCCTCAGCCCCAGGGGCCCGTCCTCTGCTACCACCGGATGCCTTGTCCC
TGGGCCTGGGCCCTGTGACGGGAACCCGTGTGCCAATGGAGGCAGCTGTAGTGAGACACCCAGGTCCTTTGAATG
CACCTGCCCGCGTGGGTTCTACGGGCTGCGGTGTGAGGTGAGCGGGGTGACATGTGCAGATGGACCCTGCTTCAA
CGGCGGCTTGTGTGTCGGGGGTGCAGACCCTGACTCTGCCTACATCTGCCACTGCCCACCCGGTTTCCAAGGCTC
CAACTGTGAGAAGAGGGTGGACCGGTGCAGCCTGCAGCCATGCCGCAATGGCGGACTCTGCCTGGACCTGGGCCA
CGCCCTGCGCTGCCGCTGCCGCGCCGGCTTCGCGGGTCCTCGCTGCGAGCACGACCTGGACGACTGCGCGGGCCG
CGCCTGCGCTAACGGCGGCACGTGTGTGGAGGGCGGCGGCGCGCACCGCTGCTCCTGCGCGCTGGGCTTCGGCGG
CCGCGACTGCCGCGAGCGCGCGGACCCGTGCGCCGCGCGCCCCTGTGCTCACGGCGGCCGCTGCTACGCCCACTT
CTCCGGCCTCGTCTGCGCTTGCGCTCCCGGCTACATGGGAGCGCGGTGTGAGTTCCCAGTGCACCCCGACGGCGC
AAGCGCCTTGCCCGCGGCCCCGCCGGGCCTCAGGCCCGGGGACCCTCAGCGCTACCTTTTGCCTCCGGCTCTGGG
ACTGCTCGTGGCCGCGGGCGTGGCCGGCGCTGCGCTCTTGCTGGTCCACGTGCGCCGCCGTGGCCACTCCCAGGA
TGCTGGGTCTCGCTTGCTGGCTGGGACCCCGGAGCCGTCAGTCCACGCACTCCCGGATGCACTCAACAACCTAAG
GACGCAGGAGGGTTCCGGGGATGGTCCGAGCTCGTCCGTAGATTGGAATCGCCCTGAAGATGTAGACCCTCAAGG
GATTTATGTCATATCTGCTCCTTCCATCTACGCTCGGGAGGTAGCGACGCCCCTTTTCCCCCCGCTACACACTGG
GCGCGCTGGGCAGAGGCAGCACCTGCTTTTTCCCTACCCTTCCTCGATTCTGTCCGTGAAATGAATTGGGTAGAG
TCTCTGGAAGGTTTTAAGCCCATTTTCAGTTCTAACTTACTTTCATCCTATTTTGCATCCCTCTTATCGTTTTGA
GCTACCTGCCATCTTCTCTTT

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FIGURE 3729

CGCATACAGCAGTGCAGTGCCGTTATTCCAGTCTCCGTAGAAACGCTGGGACTATGGCGGAGCCGACTGGGCTGT
TGGAGATGTCCGAGCTCCCCGGAGATAGCAGTGTCCCACAGGTGGGCACCGCGAGTGGCGTCAGCGACGTACTGC
GGGGGGCAGTCGGCGGCGGGGTTCGGGTGCAGGAGGCTCGGGAAGGCCCAGTGGCCGAAGCTGCGCGGTCCATGG
CGCGGATGCCGGGCCCTGTGCCCGGGCCCATCCCCAGCAGCGTCCCGGGCCTGGCCTCCGCGCCAGACCCCCATC
AGCAGCTCGCTTTCTTAGAAATTAACCGGCAGCTGTTGTTCCGCGAGTATCTGGATGGTAGCTCCATGATTCCGG
TCAGATTACTACGGGATTTCGAGGAACGCCGCAGGCTGTTTGTGGAAGGCTGCAAGGCGAGGGAAGCAGCCTTTG
ACGCGGATCCCCCGCAGATGGACTTCGCTGCTGTCGCGTTTACGGTAGCGCTGACTGCCTCCGAGGCCCTCAGTC
CTCTGGCCGACTGAGTCGGCTGTGATGATGACATTGGTGGCAAGGAATAGCCAAGTGACCCTTTTGGGATCAAAA
GAACAGGCAGGCTGTGCCAGTTTAGTTAACTCAGTCATTAGGGGGAATGCAAACTGGAAGGGAATACGGCAATGT
GCAATTGAAGGAGGAAGCACACTCCGAAATGGAAACAGACAAGACTGTTGAATCTTGTTTTCTTTCTTCTTTTTT
AGTATTATTTAAATAGAGAAGGGAGTCTCGCATCCCTAGGCTGGTCCCGAACGCTTGGACCCGAGCGATCCTCCC
GCTTCGGCCTCCCAAAGTGCTGGGATTACTTTACAGGCGTGAGCCACCGCGCCCGGCCGAATCTTGTTTTCAAAC
AGGTCCCAAGACACTTCTGACTTAGCACTTTGTTAGCAATGCATTTTCCTGCATTTGTGAAGAATCCTTCATGAC
TTTCACCATAAAGGATGGTTTTGCAAAGATATGAGAAAAAAAAAAATGCCAATAACAGAACCCATAGAAATGAACC
TAAGTGATGAAAGAAAACAAAGAAATAGAGTTGTCAGGAATCCAGGTGTACCTGAGTTACTAGGATTGGAAGGCT
ATTGAGAGGACTTTGAAATTTCACAATTTGTGGTCATGTCAACAAATCCTAGTGTAAGATTCATATTTGTGTTTT
CTGAGGTACTTTAGATGAACAGTAAATATTCAATAGAAAAAACCACGTATTATATGATCAGTGTTTTCAAGTCTA
TGTGAAATTGGGTAGGTGTGGAATAAACTTGTTTTTTGTTAA

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FIGURE 3730

GGGATGGGGGCGGAGTCCAGGGCGTGGGGGGGCCGGTTTGTTGTGGTCGCCATTTTGCTGGTTGCATTACTGGGT
AATCGGGGCCCTGGCTTGCCGCGTCCGCCGGATACCCTCAGCCAGTGGGCAGGTCTGAGCTCGGGCTCCCCGAGC
AGTTTGAGTCCCCTTGCCCGCTCCTTCAGGTCTCAGCGGCGGTGGCAGCCGAGGTGCAGGATGCAAGAAGGCGCC
CCCCGGCCGGGCTCCCGCTCCAGGCCTCGCTCCCCTGCGGCCCTCTGAGCCCACCATGGCCGTCCCACCGGGCCA
TGGTCCCTTCTCTGGCTTCCCAGGGCCCCAGGAGCACACGCAGGTATTGCCTGATGTGCGGCTACTGCCTCGGAG
GCTGCCCCTGGCCTTCCGGGATGCAACCTCAGCCCCGCTGCGTAAGCTCTCTGTGGACCTCATCAAGACCTACAA
GCACATCAATGAGGTATACTATGCGAAGAAGAAGCGGCGGGCCCAGCAGGCGCCACCCCAGGATTCGAGCAACAA
GAAGGAGAAGAAGGTCCTGAACCATGGTTATGATGACGACAACCATGACTACATCGTGCGCAGTGGCGAGCGCTG
GCTGGAGCGCTACGAAATTGACTCGCTCATTGGCAAAGGCTCCTTTGGCCAGGTGGTGAAAGCCTATGATCATCA
GACCCAGGAGCTTGTGGCCATCAAGATCATCAAGAACAAAAAGGCTTTCCTGAACCAGGCCCAGATTGAGCTGCG
GCTGCTGGAGCTGATGAACCAGCATGACACGGAGATGAAGTACTATATAGTACACCTGAAGCGGCACTTCATGTT
CCGGAACCACCTGTGCCTGGTATTTGAGCTGCTGTCCTACAACCTGTACGACCTCCTGCGCAACACCCACTTCCG
CGGCGTCTCGCTGAACCTGACCCGGAAGCTGGCGCAGCAGCTCTGCACGGCACTGCTCTTTCTGGCCACGCCTGA
GCTCAGCATCATTCACTGCGACCTCAAGCCCGAAAACATCTTGCTGTGCAACCCCAAGCGCAGCGCCATCAAGAT
TGTGGACTTCGGCAGCTCCTGCCAGCTTGGCCAGAGGATCTACCAGTATATCCAGAGCCGCTTCTACCGCTCACC
TGAGGTGCTCCTGGGCACACCCTACGACCTGGCCATTGACATGTGGTCCCTGGGCTGCATCCTTGTGGAGATGCA
CACCGGAGAGCCCCTCTTCAGTGGCTCCAATGAGGTCGACCAGATGAACCGCATTGTGGAGGTGCTGGGCATCCC
ACCGGCCGCCATGCTGGACCAGGCGCCCAAGGCTCGCAAGTACTTTGAACGGCTGCCTGGGGGTGGCTGGACCCT
ACGAAGGACGAAAGAACTCAGGAAGGATTACCAGGGCCCCGGGACACGGCGGCTGCAGGAGGTGCTGGGCGTGCA
GACGGGCGGGCCCGGGGGCCGGCGGGCGGGGGAGCCGGGCCACAGCCCCGCCGACTACCTCCGCTTCCAGGACCT
GGTGCTGCGCATGCTGGAGTATGAGCCCGCCGCCCGCATCAGCCCCCTGGGGGCTCTGCAGCACGGCTTCTTCCG
CCGCACGGCCGACGAGGCCACCAACACGGGCCCGGCAGGCAGCAGTGCCTCCACCTCGCCCGCGCCCCTCGACAC
CTGCCCCTCTTCCAGCACCGCCAGCTCCATCTCCAGTTCTGGAGGCTCCAGTGGCTCCTCCAGTGACAACCGGAC
CTACCGCTACAGCAACCGATATTGTGGGGGCCCTGGGCCCCCTATCACAGACTGTGAGATGAACAGCCCCCAGGT
CCCACCCTCCCAGCCGCTGCGGCCCTGGGCAGGGGGTGATGTGCCCCACAAGACACATCAAGCCCCTGCCTCTGC
CTCGTCACTGCCTGGGACCGGGGCCCAGTTACCCCCCCAGCCCCGATACCTTGGTCGTCCCCCATCACCAACCTC
ACCACCACCCCCGGAGCTGATGGATGTGAGCCTGGTGGGCGGCCCTGCTGACTGCTCCCCACCTCACCCAGCGCC
TGCCCCCCAGCACCCGGCTGCCTCAGCCCTCCGGACTCGGATGACTGGAGGTCGTCCACCCCTCCCGCCTCCTGA
TGACCCTGCCACTCTGGGGCCTCACCTGGGCCTCCGTGGTGTACCCCAGAGCACAGCAGCCAGCTCGTGACCCTG
CCCCCTCCCTGGGGCCCCTCCTGAAGCCATACCCTCCCCCATCTGGGGGCCCTGGGCTCCCATCCTCATCTCTCT
CCTTGACTGGAATTGCTGCTACCCAGCTGGGGTGGGTGAGGCCTGCACTGATTGGGGCCTGGGGCAGGGGGGTCA
AGGAGAGGGTTTTGGCCGCTCCCTCCCCACTAAGGACTGGACCCTTGGGCCCCTCTCCCCCTTTTTTTCTATTTA
TTGTACCAAAGACAGTGGTGGTCCGGTGGAGGGAAGACCCCCCCTCACCCCAGGACCCTAGGAGGGGGTGGGGGC
AGGTAGGGGGAGATGGCCTTGCTCCTCCTCGCTGTACCCCCAGTAAAGAGCTTTCTCACA

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FIGURE 3731

CGGACTCCGGAGCCGCACAAACCAGGGCTCGCCATGAAGCCAGGATTCAGTCCCCGTGGGGGTGGCTTTGGCGGC
CGAGGGGGCTTTGGTGACCGTGGTGGTCGTGGAGGCCGAGGGGGCTTTGGCGGGGGCCGAGGTCGAGGCGGAGGC
TTTAGAGGTCGTGGACGAGGAGGAGGTGGAGGCGGCGGCGGCGGTGGAGGAGGAGGAAGAGGTGGTGGAGGCTTC
CATTCTGGTGGCAACCGGGGTCGTGGTCGGGGAGGAAAAAGAGGAAACCAGTCGGGGAAGAATGTGATGGTGGAG
CCGCATCGGCATGAGGGTGTCTTCATTTGTCGAGGAAAGGAAGATGCACTGGTCACCAAGAACCTGGTCCCTGGG
GAATCAGTTTATGGAGAGAAGAGAGTCTCGATTTCGGAAGGAGATGACAAAATTGAGTACCGAGCCTGGAACCCC
TTCCGCTCCAAGCTAGCAGCAGCAATCCTGGGTGGTGTGGACCAGATCCACATCAAACCGGGGGCTAAGGTTCTC
TACCTCGGGGCTGCCTCGGGCACCACGGTCTCCCATGTCTCTGACATCGTTGGTCCGGATGGTCTAGTCTATGCA
GTCGAGTTCTCCCACCGCTCTGGCCGTGACCTCATTAACTTGGCCAAGAAGAGGACCAACATCATTCCTGTGATC
GAGGATGCTCGACACCCACACAAATACCGCATGCTCATCGCAATGGTGGATGTGATCTTTGCTGATGTGGCCCAG
CCAGACCAGACCCGGATTGTGGCCCTGAATGCCCACACCTTCCTGCGTAATGGAGGACACTTTGTGATTTCCATT
AAGGCCAACTGCATTGACTCCACAGCCTCAGCCGAGGCCGTGTTTGCCTCCGAAGTGAAAAAGATGCAACAGGAG
AACATGAAGCCGCAGGAGCAGTTGACCCTTGAGCCATATGAAAGAGACCATGCCGTGGTCGTGGGAGTGTACAGG
CCACCCCCCAAGGTGAAGAACTGAAGTTCAGCGCTGTCAGGATTGCGAGAGATGTGTGTTGATACTGTTGCACGT
GTGTTTTTCTATTAAAAGACTCATCCGTC

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FIGURE 3732

CAACGGGGGCATCCACTACATCACCCTTGATGGCCGTGTCTACGACCTGCATGGCTCCTGCTCCTATGTCTTGGC
CCAAGTCTGCCACCCAAAGCCTGGGGACGAGGACTTTTCCATCGTGCTTGAGAAGAATGCAGCTGGAGATCTCCA
ACGCCTCCTGGTTACTGTGGCTGGCCAGGTTGTGAGCCTAGCTCAGGGGCAGCAGGTCACCGTGGACGGCGAGGC
TGTGGCCCTGCCTGTGGCTGTGGGCCGCGTGCGGGTGACCGCCGAGGGCCGAAAC**ATG**GTTCTGCAGACGACCAA
GGGGCTGCGGCTTCTCTTTGATGGCGATGCCCACCTCCTCATGTCCATCCCCAGCCCCTTCCGTGGACGGCTCTG
TGGCCTCTGTGGGAACTTCAATGGCAACTGGAGTGACGACTTTGTCCTGCCCAATGGCTCAGCAGCGTCCAGTGT
GGAGACCTTCGGGGCTGCATGGCGGGCGCCCGGCTCCTCCAAGGGCTGTGGCGAGGGCTGCGGGCCCCAAGGCTG
CCCAGTGTGCTTGGCAGAGGAGACTGCACCCTATGAGAGCAACGAGGCCTGCGGGCAGCTCCGGAACCCCCAGGG
CCCCTTCGCGACCTGCCAGGCGGTGCTGAGTCCCTCTGAGTACTTCCGCCAATGCGTATACGACCTGTGCGCGCA
AAAGGGTGACAAAGCCTTCCTGTGCCGCAGCCTGGCAGCCTACACGGCGG©CTGTCAGGCAGCTGGCGTGGCCGT
GAAGCCCTGGAGGACAGACAGCTTCTGCCCGCTCCATTGCCCCGCCCACAGCCACTACTCCATCTGCACTCGCAC
CTGCCAGGGATCCTGTGCGGCTCTCTCCGGCCTCACGGGCTGCACCACCCGCTGTTTTGAGGGCTGTGAGTGCGA
CGACCGCTTCCTGCTTTCCCAGGGTGTCTGCATCCCTGTCCAAGATTGTGGCTGCACCCATAATGGCCGATACTT
GCCGGTAAACTCCTCCCTGCTGACCTCAGACTGCAGCGAGCGCTGTTCCTGTTCCTCAAGCTCTGGCCTGACATG
CCAGGCAGCTGGCTGCCCACCAGGCCGTGTATGTGAGGTCAAGGCTGAAGCCCGGAACTGCTGGGCCACCCGTGG
TCTCTGTGTCCTGTCTGTGGGTGCCAACCTCACCACCTTTGATGGGGCCCGTGGTGCCACCACCTCTCCTGGTGT
CTATGAGCTCTCTTCCCGCTGCCCAGGACTACAGAATACCATCCCCTGGTACCGTGTAGTTGCCGAAGTCCAGAT
CTGCCATGGCAAAACGGAGGCTGTGGGCCAGGTCCACATCTTCTTCCAGGATGGGATGGTGACGTTGACTCCAAA
CAAGGGTGTGTGGGTGAATGGTCTCCGAGTGGATCTCCCAGCTGAGAAGTTAGCATCTGTGTCCGTGAGTCGTAC
ACCTGATGGCTCCCTGCTAGTCCGCCAGAAGGCAGGGGTCCAGGTGTGGCTTGGAGCCAATGGGAAGGTGGCTGT
GATTGTCAGCAATGACCATGCTGGGAAACTGTGTGGGGCCTGTGGAAACTTTGACGGGGACCAGACCAATGATTG
GCATGACTCCCAGGAGAAGCCAGCGATGGAGAAATGGAGAGCGCAGGACTTCTCCCCATGTTATGGC**TGA**TCAGT
CATCCACCAGGAACGAAGATTTCCTGAAGAAGACCTGGTCCCTCTGGAGGTTGCAGTGGCTGAAGGATGCATCAT
GTGCTCCTACCCTGCTCTACCGCTTTTCTGGGTCACAGAGGCCAAATGTGAGAGCATTGAATAAATATCTTAAGC
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FIGURE 3733

GTCAACTTAGTGTACAATGCTGTCAGATGAACCTTACCCTTGTAAGGCTTGTAACTTGGTTCCTCCCTTTCTTAA
GCCCTTATTGGCTATCTTTCTTCTTTTAATATTTAAAGTTTTTAATCTTTAAATTTTTAATTTTTAAACCATGCT
TGTTTAACCTGCTGGTAAAATTCACGTCTTTCAGACTGTAATGCTTTCATGCCAAGTAAATGGTCTTGCCAGGCT
TCCAGCCTGTTTCAGAGACCACTAGCCCAGAGCCGTATCAGCCCCTTCAGCAAGCCATAAGAAATTTCTACTCCT
CCTGGAAATAGATGTAGAGACTATGTCCATGCTTAGCAGGAAGTAGTTCCAGAAGAGACCTTTGCTCCTTAAGAA
TAAGGAGAATGAGGACTGCGAAGGAGAACGCAGCAAGCCCAGGCGGCGGTGGAAAGGCTGGAGGACACACCTAAA
C**ATG**TGGAATCCCAATGCCGGGCAGCCAGGGCCAAATCCATATCCCCCCAATATTGGGTGCCCTGGAGGTTCCAA
TCCTGCCCACCCACCACCTATTAATCCACCCTTTCCCCCAGGCCCCTGTCCTCCTCCCCCAGGAGCTCCCCATGG
CAATCCAGCTTTCCCCCCAGGTGGGCCCCCTCATCCTGTGCCACAGCCAGGGTATCCAGGATGCCAACCGTTGGG
TCCCTACCCTCCTCCATACCCACCGCCTGCCCCTGGAATCCCTCCTGTGAATCCCTTGGCTCCTGGCATGGTTGG
ACCAGCAGTGATAGTGGACAAGAAGATGCAGAAGAAAATGAAGAAAGCTCATAAAAAAGATGCACAAGCACCAAAA
GCACCACAAGTACCACAAGCATGACAAGCATTCCTCCTCTTCCTCCTCCTCTTCCAGCAGTGATTCTGAC**TGA**AT
ACAGGCCCTGGACCCTTCCCTCAAGTCCCACCAGTTCTGCTCTCCCATCAAGCTTCAGATGCCACGTTGTACTGG
GGGAATGTAGCCCTTGTGCTCCCCACCCCCTACCTCCACCTGAGCCTCACCCTGCTGTTGAGCCCTGAGTGGCTA
GGGGAAATAGGAAGAGGATTGCCATGGCCTGGCCATCTTGTTGCTGCTTGGAGAGATCATATAGCTAATGAATTA
GGCAGGGGAGCTATTTTTTGAAGATGATGAACTAAATGTTGAAGACAAGTTTGAGATCTGTAAAATGTGATTTTT
TACTTCCACTTATAATACTTGTGATTGGGGAGGTTTGTGGAAATTCAATTATGATGAAAAACCTCTATCTTTTTT
GTAATGTTGGCATACTTGGGGGATTTAGTGGCAAATACATTCCCCAGCAGGCCTTTTGTTGGTTGCACTAACTGC
AAGGTTGCTGGGAAGTAGAGTCCATTTGGTTGATGAGCTTTGACTGCGGTTTTGGAACCTTACCTCTCCTCCTTA
GCCCAATATGCTGTCTCGGGTCCTATTCAAATAAAGTTATTTCTCCTGGTCT

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FIGURE 3734

GGCTTGGTCACTATGGAGGAGATAGGCATCTTGGTGGAGAAGGCTCAGGATGAGATCCCAGCACTGTCCGTGTCC
CGGCCCCAGACCGGCCTGTCCTTCCTGGGCCCTGAGCCTGAGGACCTGGAGGACCTGTACAGCCGCTACAAGAAG
CTGCAGCAAGAGCTGGAGTTCCTGGAGGTGCAGGAGGAATACATCAAAGATGAGCAAAAGAACCTGAAAAAGGAA
TTTCTCCATGCCCAGGAGGAGGTGAAGCGAATCCAAAGCATCCCGCTGGTCATCGGACAATTTCTGGAGGCTGTG
GATCAGAATACAGCCATCGTGGGCTCTACCACAGGCTCCAACTATTATGTGCGCATCCTGAGCACCATCGATCGG
GAGCTGCTCAAGCCCAACGCCTCAGTGGCCCTCCACAAGCACAGCAATGCACTGGTGGACGTGCTGCCCCCCGAA
GCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGCCAGATGTGATGTACGCGGACATCGGAGGCATGGAC
ATCCAGAAGCAGGAGGTGCGGGAGGCCGTGGAGCTCCCGCTCACGCATTTCGAGCTCTACAAGCAGATCGGCATC
GATCCCCCCCCGAGGCGTCCTCATGTATGGCCCACCTGGCTGTGGGAAGACCATGTTGGCAAAGGCGGTGGCACAT
CACACAACAGCTGCATTCATCCGGGTCGTGGGCTCGGAGTTTGTACAGAAGTATCTGGGTGAGGGCCCCCGCATG
GTCCGGGATGTGTTCCGCCTGGCCAAGGAGAATGCACCTGCCATCATCTTCATAGACGAGATTGATGCCATCGCC
ACCAAGAGATTCGATGCTCAGACAGGGGCCGACAGGGAGGTTCAGAGGATCCTGCTGGAGCTGCTGAATCAGATG
GATGGATTTGATCAGAATGTCAATGTCAAGGTAATCATGGCCACAAACAGAGCAGACACCCTGGATCCGGCCCTG
CTACGGCCAGGACGGCTGGACCGTAAAATTGAATTTCCACTTCCTGACCGCCGCCAGAAGAGATTGATTTTCTCC
ACTATCACTAGCAAGATGAACCTCTCTGAGGAGGTTGACTTGGAAGACTATGTGGCCCGGCCAGATAAGATTTCA
GGAGCTGATATTAACTCCATCTGTCAGGAGAGTGGAATGTTGGCTGTCCGTGAAAACCGCTACATTGTCCTGGCC
AAGGACTTCGAGAAAGCATACAAGACTGTCATCAAGAAGGACGAGCAGGAGCATGAGTTTTACAAGTGACCCTTC
CCTTCCCTCCACCACACCACTCAGGGGCTGGGGCTTCTCTCGCACCCCCAGCACCTCTGTCCCAAAACCTCATTC
CCTTTTTTCTTTACCCAGGATTGGTTTCTTCAATAAATAGATAAGATCGAATCC

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FIGURE 3735

GTTTTTTTTCTTGCTCCTGCGGAGGGCGCCCCAGCCATGGCCCTCAGGAGCTCCCTAGACCCCGCAGGGACTGCC
CTCCATCCCGGCCGCCGGGGCCCGCCCTCTGCATCCCGCGGGCAGCCTGTGTGAAGCGGCCTCCCGCAGCCCCCG
GCCCCTCCCCCATGGAGGAGGAGGAGGGGGCGGTGGCCAAGGAGTGGGGCACGACCCCCGCGGGGCCCGTCTGGA
CCGCGGTGTTCGACTACGAGGCGGCGGGCGACGAGGAGCTGACCCTGCGGAGGGGCGATCGCGTCCAGGTGCTTT
CCCAAGACTGTGCGGTGTCCGGCGACGAGGGCTGGTGGACCGGGCAGCTCCCCAGCGGCCGCGTGGGCGTCTTCC
CCAGCAACTACGTGGCCCCCGGCGCCCCCGCTGCACCCGCGGGCCTCCAGCTGCCCCAGGAGATCCCCTTCCACG
AGCTGCAGCTAGAGGAGATCATCGGTGTGGGGGGCTTTGGCAAGGTCTATCGGGCCCTGTGGCGTGGCGAGGAGG
TGGCAGTCAAGGCCGCCCGGCTGGACCCTGAGAAGGACCCGGCAGTGACAGCGGAGCAGGTGTGCCAGGAAGCCC
GGCTCTTTGGAGCCCTGCAGCACCCCAACATAATTGCCCTTAGGGGCGCCTGCCTCAACCCCCCACACCTCTGCC
TAGTGATGGAGTATGCCCGGGGTGGTGCACTGAGCAGGGTGCTGGCAGGTCGCCGGGTGCCACCTCACGTGCTGG
TCAACTGGGCTGTGCAGGTGGCCCGGGGCATGAACTACCTACACAATGATGCCCCTGTGCCCATCATCCACCGGG
ACCTCAAGTCCATCAACATCCTGATCCTGGAGGCCATCGAGAACCACAACCTCGCAGACACGGTGCTCAAGATCA
CGGACTTCGGCCTCGCCCGCGAGTGGCACAAGACCACCAAGATGAGCGCTGCGGGGACCTACGCCTGGATGGCGC
CGGAGGTTATCCGTCTCTCCCTCTTCTCCAAAAGCAGTGATGTCTGGAGCTTCGGGGTGCTGCTGTGGGAGCTGC
TGACGGGGGAGGTCCCCTACCGTGAGATCGACGCCTTGGCCGTGGCGTATGGCGTGGCTATGAATAAGCTGACGC
TGCCCATTCCCTCCACGTGCCCCGAGCCCTTTGCCCGCCTCCTGGAGGAATGCTGGGACCCAGACCCCCACGGGC
GGCCAGATTTCGGTAGCATCTTGAAGCGGCTTGAAGTCATCGAACAGTCAGCCCTGTTCCAGATGCCACTGGAGT
CCTTCCACTCGCTGCAGGAAGACTGGAAGCTGGAGATTCAGCACATGTTTGATGACCTTCGGACCAAGGAGAAGG
AGCTTCGGAGCCGTGAGGAGGAGCTGCTGCGGGCGGCACAGGAGCAGCGCTTCCAGGAGGAGCAGCTGCGGCGGC
GGGAGCAGGAGCTGGCAGAACGTGAGATGGACATCGTGGAACGGGAGCTGCACCTGCTCATGTGCCAGCTGAGCC
AGGAGAAGCCCCGGGTCCGCAAGCGCAAGGGCAACTTCAAGCGCAGCCGCCTGCTCAAGCTGCGGGAAGGCGGCA
GCCACATCAGCCTGCCCTCTGGCTTTGAGCATAAGATCACAGTCCAGGCCTCTCCAACTCTGGATAAGCGGAAAG
GATCCGATGGGGCCAGCCCCCCTGCAAGCCCCAGCATCATCCCCCGGCTGAGGGCCATTCGCCTGACTCCCGTGG
ACTGTGGTGGCAGCAGCAGTGGCAGCAGCAGTGGAGGAAGTGGGACATGGAGCCGCGGTGGGCCCCCAAAGAAGG
AAGAACTGGTCGGGGGCAAGAAGAAGGGACGAACGTGGGGGCCCAGCTCCACCCTGCAGAAGGAGCGGGTGGGAG
GAGAGGAGAGGCTGAAGGGGCTGGGGGAAGGAAGCAAACAGTGGTCATCAAGTGCCCCCAACCTGGGCAAGTCCC
CCAAACACACACCCAGTCGCCGCTGGCTTCGCCAGCCTCAATGAGATGGAGGAGTTCGCGGAGGCAGAGGATGGA
GGCAGCAGCGTGCCCCCTTCCCCCTACTCGACCCCGTCCTACCTCTCAGTGCCACTGCCTGCCGAGCCCTCCCCG
GGGGCGCGGGCGCCGTGGGAGCCGACGCCGTCCGCGCCCCCCGCTCGGTGGGGACACGGCGCCCGGCGGCGCTGC
GACCTGGCGCTGCTAGGCTGCGCCACGCTGCTGGGGGCTGTGGGCCTGGGCGCCGACGTGGCCGAGGCGCGCGCG
GCCGACGGTGAGGAGCAGCGGCGCTGGCTCGACGGCCTCTTCTTTCCCCGCGCCGGCCGCTTCCCGCGGGGCCTC
AGCCCACCCGCGCGTCCCCACGGCCGCCGCGAAGACGTGGGCCCCGGCCTGGGCCTGGCGCCCTCGGCCACCCTC
GTGTCGCTGTCGTCCGTGTCCGACTGCAACTCCACGCGTTCACTGCTGCGCTCTGACAGTGACGAGGCCGCACCG
GCCGCGCCCTCCCCACCACCCTCCCCGCCCGCGCCCACACCCACGCCCTCGCCCAGCACCAACCCCCTGGTGGAC
CTGGAGCTGGAGAGCTTCAAGAAGGACCCCCGCCAGTCGCTCACGCCCACCCACGTCACGGCTGCATGCGCTGTG
AGCCGCGGGCACCGGCGGACGCCATCGGATGGGGCGCTGGGGCAGCGGGGGCCGCCCGAGCCCGCGGGCCATGGC
CCTGGCCCTCGTGACCTTCTGGACTTCCCCCGCCTGCCCGACCCCCAGGCCCTGTTCCCAGCCCGCCGCCGGCCC
CCTGAGTTCCCAGGCCGCCCCACCACCCTGACCTTTGCCCCGAGACCTCGGCCGGCTGCCAGTCGCCCCCGCTTG
GACCCCTGGAAACTGGTCTCCTTCGGCCGGACACTCACCATCTCGCCTCCCAGCAGGCCAGACACTCCGGAGAGC
CCTGGGCCCCCCAGCGTGCAGCCCACACTGCTGGACATGGACATGGAGGGGCAGAACCAAGACAGCACAGTGCCC
CTGTGCGGGGCCCACGGCTCCCACTAAGGCCTGCCCACCACCGCCCGCCTGGGCAGCCATGAATGTAGCGCCCCA
GGCCCTGCCCCAGCCCGCCATGCCACAAGGTGGGGGAGGCCCTGGGCAGGATGTTCACTCTATTTATT

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FIGURE 3736

AACACCCTCCTGGAGGATGCTGGTGAGAGGCAGGGACCAGGGGTCCGGCTCCCGGCTCGGGCCTATCGTTAGGCG
CTGGGCCCCCAGGCCCTCTCCTTTGCAGAGTCTCGCTGCCTCCCTCGACGCAGAGCCTTCAAGCGCCGCAGTCCC
CGACGGCTTCCCCGCGGGCCCCACTGTCTCCCCAAGACGCCTGGCGAGGCCGCCGGGGCTGGAGGAGGCGCTGAG
CGCGCTGGGGCTGCAGGGAGAACGCGAGTACGCCGGGGACATCTTCGCCGAAGTCATGGAGTACCTGGGTCTGGC
TGGTGACACACTTTATCTGGCGGTTCACCTGCTTGATTCCTACCTGAGCGCTGGCCGCGTGCGTCTACATCGCCT
GCAGCTGCTGGGCGTGGCTTGCCTGTTTGTGGCGTGCAAAATGGAAGAGTGCGTGCTTCCCGAGGAAACTGAGGT
CCGGAACTTGGGGCCTTTCCAGGGCAGGGAGTAAAGAGCCCGGATCCAAGACTCCTTCACCTCCCCCCGCATCCC
CCATCTGCAGCCCGCCTTCCTCTGCCTCCTGAGCGCGGACTCCTTCTCACGGGCGGAGCTGCTGCGCGCCGAGCG
TCGCATCCTGAGCCGCCTGGATTTCCGGCTGCACCACCCCGGCCCGCTGCTGTGCCTCGGGCTGCTGGCCGCGCT
GGCAGGGAGCAGCCCCCAGGTGATGTTACTTGCCACCTACTTCCTGGAGCTGTCTTTGCTGGAGGCCGAGGCGGC
GGGATGGGAGCCGGGTCGTCGTGCGGCTGCGGCTCTGAGCCTGGCGCACCGCTTGCTCGACGGGGCGGGCTCCAG
GCTCCAGCCAGAACTTTACAGGTGTAGTCTTGGCGGAGGAAGTGTATGGGGTCACCGCAGCTTCAGGGACTTACC
TTCCTGGTCATTTTTACGGTCTCGGAGAATGAGAGACAATTATTGAGGAGGAGGTGGCACCTAGACTTGCTTTTT
CTGGGTGTGGGAGAGAATGGGGTGGGAGGACCCCATTAGTCCAGATCTGGGGTCTCTTAACCTTGCCCCAGAGTG
GAAGATAGTCTCCCAGGCCCAGAAGATGCTCCTATTGCCTTCCAGGGCTGAGAACGAAGGATCACCCAGGCCTCG
AGTCCTCCATCTCTGTATCTGGTGGTGGATGGGGTGTTCCTTTAGCTGCTAGGGCCGCTAACCATGCTACCAGGT
GGCAGGGCGAACCATGGTTTCCCTCAGCCTGTGCACCCAGCATAGAGAGGATGGCTGCCCATCCTCAGCTCCCCT
CCTTGCTTCCTCGAGTGTTCTGACTCCGCACTAGCCGCGCCCTGTAGGAAGAATAGGGTGTCCACCTCTCCCCGG
TGCTCGCCTAGTCACTCCAGTTGAAGACGGGACGCGTGCCCGATCTCAAGAGAGCCCCCGACCCGTCCGTGGGGA
ACCACATCGACGCTTCTTCTCAGCCTCCAGTCTCCAGTTCCAAGGATGGGTCATCTCCAACCCCTTGCCCTGCCT
CAGTTTCTCCATCTCCCTGCTGCAGCCCCGAGGAACTGGGCACCCTCGAGCCGTGCATGGCCCGCGCTGCGCTCC
GAGGTCCCGCGCCGGGTCGCGCCGCAGTCTTCCTCAAGTATGCGCGGCCCCAGCGCCAGGGGACCAGCCTTGCCG
CCGCCTGCCTGCTCCGCCGCCTCCAGTCTGAGCCTCCCTGAGTACTGGGACTCAGTCACAAAAAAATCAACAACA
AAAAACAAAACCCTCCCAGTGTGTGTCCGTCTCTCATCTCAATAAAAGAATTTATTTT

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FIGURE 3737

ACTGTGCCCTGTCCACGGTGCCTCCTGCATGTCCTGCTGCCCTGAGCTGTCCCGAGCTAGGTGACAGCGTACCAC
GCTGCCACCATGAATGAGGTGTCTGTCATCAAAGAAGGCTGGCTCCACAAGCGTGGTGAATACATCAAGACCTGG
AGGCCACGGTACTTCCTGCTGAAGAGCGACGGCTCCTTCATTGGGTACAAGGAGAGGCCCGAGGCCCCTGATCAG
ACTCTACCCCCCTTAAACAACTTCTCCGTAGCAGAATGCCAGCTGATGAAGACCGAGAGGCCGCGACCCAACACC
TTTGTCATACGCTGCCTGCAGTGGACCACAGTCATCGAGAGGACCTTCCACGTGGATTCTCCAGACGAGAGGGAG
GAGTGGATGCGGGCCATCCAGATGGTCGCCAACAGCCTCAAGCAGCGGGCCCCAGGCGAGGACCCCATGGACTAC
AAGTGTGGCTCCCCCAGTGACTCCTCCACGACTGAGGAGATGGAAGTGGCGGTCAGCAAGGCACGGGCTAAAGTG
ACCATGAATGACTTCGACTATCTCAAACTCCTTGGCAAGGGAACCTTTGGCAAAGTCATCCTGGTGCGGGAGAAG
GCCACTGGCCGCTACTACGCCATGAAGATCCTGCGGAAGGAAGTCATCATTGCCAAGGATGAAGTCGCTCACACA
GTCACCGAGAGCCGGGTCCTCCAGAACACCAGGCACCCGTTCCTCACTGCGCTGAAGTATGCCTTCCAGACCCAC
GACCGCCTGTGCTTTGTGATGGAGTATGCCAACGGGGGTGAGCTGTTCTTCCACCTGTCCCGGGAGCGTGTCTTC
ACAGAGGAGCGGGCCCGGTTTTATGGTGCAGAGATTGTCTCGGCTCTTGAGTACTTGCACTCGCGGGACGTGGTA
TACCGCGACATCAAGCTGGAAAACCTCATGCTGGACAAAGATGGCCACATCAAGATCACTGACTTTGGCCTCTGC
AAAGAGGGCATCAGTGACGGGGCCACCATGAAAACCTTCTGTGGGACCCCGGAGTACCTGGCGCCTGAGGTGCTG
GAGGACAATGACTATGGCCGGGCCGTGGACTGGTGGGGGCTGGGTGTGGTCATGTACGAGATGATGTGCGGCCGC
CTGCCCTTCTACAACCAGGACCACGAGCGCCTCTTCGAGCTCATCCTCATGGAAGAGATCCGCTTCCCGCGCACG
CTCAGCCCCGAGGCCAAGTCCCTGCTTGCTGGGCTGCTTAAGAAGGACCCCAAGCAGAGGCTTGGTGGGGGGCCC
AGCGATGCCAAGGAGGTCATGGAGCACAGGTTCTTCCTCAGCATCAACTGGCAGGACGTGGTCCAGAAGAAGCTC
CTGCCACCCTTCAAACCTCAGGTCACGTCCGAGGTCGACACAAGGTACTTCGATGATGAATTTACCGCCCAGTCC
ATCACAATCACACCCCCTGACCGCTATGACAGCCTGGGCTTACTGGAGCTGGACCAGCGGACCCACTTCCCCCAG
TTCTCCTACTCGGCCAGCATCCGCGAGTGAGCAGTCTGCCCACGCAGAGGACGCACGCTCGCTGCCATCACCGCT
GGGTGGTTTTTTCCCCCT

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FIGURE 3738

CTCTTTATAATTTAGTTTCCATAGAAGTTATATGTGCATTTAAAAAAATTCAATGCTGGAGCGACCGTGTCTGGG
GAGCCGAGCCCCGCTTCTCGCTGCGGTGAGCCCGGACTGGGGCACGCACTGCGCAGACTCCCCGCTGCAGTGGGC
GGAGCTCCCACAGGCCCCGCCCCCTCCTCCCACCCTCGTTCAGCCTGTCCAGACAGAAGCTGGGGCCCAGCGGAG
GTAGCAGCAGACGCCTGAGAGCGAGGCCGAGGCCCCTCAGGGTTTGGAGACCCTGACACACCCACCTTCTCACCT
GGGCTCTGCGTATCCCCCAGCCTTGAGGGAAGATGAAGCCTAAACTGATGTACCAGGAGCTGAAGGTGCCTGCAG
AGGAGCCCGCCAATGAGCTGCCCATGAATGAGATTGAGGCGTGGAAGGCTGCGGAAAAGAAAGCCCGCTGGGTCC
TGCTGGTCCTCATTCTGGCGGTTGTGGGCTTCGGAGCCCTGATGACTCAGCTGTTTCTATGGGAATACGGCGACT
TGCATCTCTTTGGGCCCAACCAGCGCCCAGCCCCCTGCTATGACCCTTGCGAAGCAGTGCTGGTGGAAAGCATTC
CTGAGGGCCTGGACTTCCCCAATGCCTCCACGGGGAACCCTTCCACCAGCCAGGCCTGGCTGGGCCTGCTCGCCG
GTGCGCACAGCAGCCTGGACATCGCCTCCTTCTACTGGACCCTCACCAACAATGACACCCACACGCAGGAGCCCT
CTGCCCAGCAGGGTGAGGAGGTCCTCCGGCAGCTGCAGACCCTGGCACCAAAGGGCGTGAACGTCCGCATCGCTG
TGAGCAAGCCCAGCGGGCCCCAGCCACAGGCGGACCTGCAGGCTCTGCTGCAGAGCGGTGCCCAGGTCCGCATGG
TGGACATGCAGAAGCTGACCCATGGCGTCCTGCATACCAAGTTCTGGGTGGTGGACCAGACCCACTTCTACCTGG
GCAGTGCCAACATGGACTGGCGTTCACTGACCCAGGTCAAGGAGCTGGGCGTGGTCATGTACAACTGCAGCTGCC
TGGCTCGAGACCTGACCAAGATCTTTGAGGCCTACTGGTTCCTGGGCCAGGCAGGCAGCTCCATCCCATCAACTT
GGCCCCGGTTCTATGACACCCGCTACAACCAAGAGACACCAATGGAGATCTGCCTCAATGGAACCCCTGCTCTGG
CCTACCTGGCGAGTGCGCCCCCACCCCTGTGTCCAAGTGGCCGCACTCCAGACCTGAAGGCTCTACTCAACGTGG
TGGACAATGCCCGGAGTTTCATCTACGTCGCTGTCATGAACTACCTGCCCACTCTGGAGTTCTCCCACCCTCACA
GGTTCTGGCCTGCCATTGACGATGGGCTGCGGCGGGCCACCTACGAGCGTGGCGTCAAGGTGCGCCTGCTCATCA
GCTGCTGGGGACACTCGGAGCCATCCATGCGGGCCTTCCTGCTCTCTCTGGCTGCCCTGCGTGACAACCATACCC
ACTCTGACATCCAGGTGAAACTCTTTGTGGTCCCCGCGGATGAGGCCCAGGCTCGAATCCCATATGCCCGTGTCA
ACCACAACAAGTACATGGTGACTGAACGCGCCACCTACATCGGAACCTCCAACTGGTCTGGCAACTACTTCACGG
AGACGGCGGGCACCTCGCTGCTGGTGACGCAGAATGGGAGGGGCGGCCTGCGGAGCCAGCTGGAGGCCATTTTCC
TGAGGGACTGGGACTCCCCTTACAGCCATGACCTTGACACCTCAGCTGACAGCGTGGGCAACGCCTGCCGCCTGC
TCTGAGGCCCGATCCAGTGGGCAGGCCAAGGCCTGCTGGGCCCCCGCGGACCCAGGTGCTCTGGGTCACGGTCCC
TGTCCCCGCGCCCCCGCTTCTGTCTGCCCCATTGTGGCTCCTCAGGCTCTCTCCCCTGCTCTCCCACCTCTACCT
CCACCCCCACCGGCCTGACGCTGTGGCCCCGGGACCCAGCAGAGCTGGGGGAGGGATCAGCCCCCAAAGAAATGG
GGGTGCATGCTGGGCCTGGCCCCCTGGCCCACCCCCACTTTCCAGGGCAAAAAGGGCCCAGGGTTATAATAAGTA
AATAACTTGTCTGT

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FIGURE 3739

AGAACTGCGTCTCGCGACCCAGGCGCGGGTTTCCAGAGGACAGCCAACAAGCGATGCTGCCGCCGCCGTTTCCTG
ATTGGTTGTGGGTGGCTACCTCTTCGTTCTGATTGGCCGCTAGTGAGCAAGATGCTGAGCAAGGGTCTGAAGCGG
AAACGGGAGGAGGAGGAGGAGAAGGAACCTCTGGCAGTCGACTCCTGGTGGCTAGATCCTGGCCACACAGCGGTG
GCACAGGCACCCCCGGCCGTGGCCTCTAGCTCCCTCTTTGACCTCTCAGTGCTCAAGCTCCACCACAGCCTGCAG
CAGAGTGAGCCGGACCTGCGGCACCTGGTGCTGGTCGTGAACACTCTGCGGCGCATCCAGGCGTCCATGGCACCC
GCGGCTGCCCTGCCACCTGTGCCTAGCCCACCTGCAGCCCCCAGTGTGGCTGACAACTTACTGGCAAGCTCGGAC
GCTGCCCTTTCAGCCTCCATGGCCAGCCTCCTGGAGGACCTCAGCCACATTGAGGGCCTGAGTCAGGCTCCCCAA
CCCTTGGCAGACGAGGGGCCACCAGGCCGTAGCATCGGGGGAGCAGCGCCCAGCCTGGGTGCCTTGGACCTGCTG
GGCCCAGCCACTGGCTGTCTACTGGACGATGGGCTTGAGGGCCTGTTTGAGGATATTGACACCTCTATGTATGAC
AATGAACTTTGGGCACCAGCCTCTGAGGGCCTCAAACCAGGCCCTGAGGATGGGCCGGGCAAGGAGGAAGCTCCG
GAGCTGGACGAGGCCGAATTGGACTACCTCATGGATGTGCTGGTGGGCACACAGGCACTGGAGCGACCGCCGGGG
CCAGGGCGCTGAGCCCTCGTGCTGGAATGGTTGTCTGGTATCTGAACTGAGCCTGCTGGCTGGACCAACTGTCCT
CGAAAAGACACAGCTGGCTTCCCTAGTACAGAGAACAGGGCTTGGGCCACTTTGGAGAGACAGAATCTAGTCCTG
GGCAACTTCACATCCGTCCTCCTGTCTCAGGGCTGGCAGGGGGAGCCTGGAATTACCCCCTAGTGATGGAATGAC
AGGGTCTGGTGGGGACTGAATTCCCTGGCCCTGGGGTCATAGCTTGGGCTGTTCCTTCTCTGATACGGGAAGAGA
CCCCAATCAGATTTTTCAAATTAAAGCCAGTCCTGGG

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FIGURE 3740

GGGCAGAGAGCACCGCCCAGCAGCCAGTGGGTTCCCGCGCGTGCCGAGACTCTGAGGCCTTGCACCCCCACGATC
CCGTACG**ATG**GCCGTCAAGAAGATCGCGATCTTCGGCGCCACTGGCCAGACCGGGCTCACCACCCTGGCGCAGGC
GGTGCAAGCAGGTTACGAAGTGACAGTGCTGGTGCGGGACTCCTCCAGGCTGCCATCAGAGGGGCCCCGGCCGGC
CCACGTGGTAGTGGGAGATGTTCTGCAGGCAGCCGATGTGGACAAGACCGTGGCTGGGCAGGACGCTGTCATCGT
GCTGCTGGGCACCCGCAATGACCTCAGTCCCACGACAGTGATGTCCGAGGGCGCCCGGAACATTGTGGCAGCCAT
GAAGGCTCATGGTGTGGACAAGGTCGTGGCCTGCACCTCGGCTTTCCTGCTCTGGGACCCTACCAAGGTGCCCCC
ACGACTGCAGGCTGTGACTGATGACCACATCCGGATGCACAAGGTGCTGCGGGAATCAGGCCTGAAGTACGTGGC
TGTGATGCCGCCACACATAGGAGACCAGCCACTAACTGGGGCGTACACAGTGACCCTGGATGGACGAGGGCCCTC
AAGGGTCATCTCCAAACATGACCTGGGCCATTTCATGCTGCGCTGCCTCACCACCGATGAGTACGACGGACACAG
CACCTACCCCTCCCACCAGTACCAG**TAG**CACTCTGTCCCCATCTGGGAGGGTGGCATTCTGGGACATGAGGAGCA
AAGGAAGGGGGCAATAAATGTTGAGCCAAGAGCTTCAAATTACTCTAG

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FIGURE 3741

GCACACCCGGAAGTGGGTGCGGGCCAGCCGGCTCGCCCGGGGGCCATGGCAGCAGCGGCTACTGCAGCCGAGGGG
GTCCCCAGTCGGGGGCCTCCCGGGGAAGTCATTCATCTGAATGTGGGAGGCAAGAGATTCAGTACCTCTCGCCAG
ACTCTCACCTGGATCCCAGACTCCTTCTTCTCCAGTCTTCTGAGCGGACGCATCTCGACGCTGAAAGATGAGACC
GGAGCAATCTTCATCGATCAGGGACCATTACAGTCTTCGCCCACCCGTCACTCTACGTCTTGCGCATCACAAAGA
GTTGGATCCCAGGGGTGTCCACGGTTCCAGCCTCCTCCATGAAGCCCAGTTCTATGGGCTCACTCCTCTGGTTCG
TCGCCTGCAGCTTCGAGAGGAGTTGGATCGATCTTCTTGTGGAAACGTCCTCTTCAATGGTTACCTGCCGCCACC
AGTGTTCCCAGTGAAGCGGCGGAACCGGCACAGCCTAGTGGGGCCTCAGCAGCTAGGAGGACGGCCAGCCCCTGT
CCGACGGAGCAACACGATGCCCCCCAACCTTGGCAATGCAGGGCTGCTGGGCCGAATGCTGGATGAGAAAACCCC
TCCCTCACCCTCAGGACAACCTGAGGAGCCGGGGATGGTGCGCCTGGTGTGTGGACACCATAATTGGATCGCTGT
GGCCTATACCCAGTTTCTAGTCTGCTACAGGTTGAAGGAAGCCTCTGGCTGGCAGCTGGTGTTTTCCAGCCCCCG
CCTGGACTGGCCCATCGAACGACTGGCGCTCACAGCCCGGGTGCATGGTGGGGCTTTGGGTGAACATGACAAGAT
GGTGGCAGCAGCCACCGGCAGCGAGATCCTGCTATGGGCTCTGCAGGCGGAAGGCGGTGGCTCCGAGATAGGGGT
CTTTCATCTGGGGGTGCCTGTGGAGGCCTTGTTCTTCGTCGGGAACCAGCTCATTGCTACAAGCCACACAGGGCG
CATCGGGGTGTGGAATGCCGTCACCAAGCACTGGCAGGTCCAGGAGGTGCAGCCCATCACCAGTTATGACGCGGC
AGGCTCCTTCCTCCTCCTGGGCTGCAACAACGGCTCCATTTACTACGTGGATGTGCAGAAGTTCCCCTTGCGCAT
GAAAGACAACGACCTCCTTGTCAGCGAGCTCTATCGGGACCCAGCGGAGGATGGGGTCACCGCCCTCAGTGTCTA
CCTCACCCCCAAGACCAGTGACAGTGGGAACTGGATCGAGATCGCCTATGGCACCAGCTCAGGGGGCGTGCGGGT
CATCGTGCAGCACCCGGAGACTGTGGGCTCGGGGCCTCAGCTCTTCCAGACCTTCACTGTGCACCGCAGCCCTGT
CACCAAGATCATGCTGTCGGAGAAGCACCTCATCTCAGTCTGTGCCGACAACAACCACGTGCGGACATGGTCTGT
GACTCGCTTCCGCGGCATGATTTCCACCCAGCCCGGCTCCACCCCACTCGCTTCCTTTAAGATCCTGGCTCTGGA
GTCGGCAGATGGGCATGGCGGCTGCAGTGCTGGCAATGACATTGGCCCCTACGGTGAGCGGGACGACCAGCAAGT
GTTCATCCAGAAGGTGGTGCCCAGTGCCAGCCAGCTCTTCGTGCGTCTCTCATCTACTGGGCAGCGGGTGTGCTC
CGTGCGCTCCGTGGACGGCTCACCCACGACAGCCTTCACAGTGCTGGAGTGCGAGGGCTCCCGGCGGCTCGGCTC
TCGGCCCCGGCGCTACCTGCTCACTGGCCAGGCCAACGGCAGCTTGGCCATGTGGGACCTAACCACCGCCATGGA
CGGCCTCGGCCAGGCCCCTGCAGGTGGCCTGACGGAGCAAGAGCTGATGGAACAGCTGGAACACTGTGAGCTGGC
CCCGCCGGCTCCTTCAGCTCCCTCATGGGGCTGTCTCCCCAGCCCCTCACCCCGCATCTCCCTCACCAGCCTCCA
CTCAGCCTCCAGCAACACCTCCTTGTCTGGCCACCGTGGGAGCCCAAGCCCCCCGCAGGCTGAGGCCCGGCGCCG
TGGTGGGGGCAGCTTTGTGGAACGCTGCCAGGAACTGGTGCGGAGTGGGCCAGACCTCCGACGGCCACCCACACC
AGCCCCGTGGCCCTCCAGCGGTCTCGGCACTCCCCTCACACCTCCCAAGATGAAGCTCAATGAAACTTCCTTTTG
AACAACGCAGCTGCCATGATGCCTTGGGATGCCCTGGTCCTGGGGGACTCAGGTGCCTCCCTGATTCCTGTGGGA
ACCCCGGGTTCAGGGCCAGGGCCTCCTTGGAATAAATGGTTATTGTTACTAGGTCCCCACCTTCCCTCTTTTCTG
GAAGCCAAAGTCACCCTCCCCAATAAAGTCCTCACTGCC

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FIGURE 3742A

CGTTGCTGTTTGTCGCTGCTGCCCGGGCCAGACGTCTAGGAGGAGCCGCTGCATCCGAGTCCCTGGCTGTCTCCG
AAGCCTTCTGCAGGGTCCGAAGCTGCCAGCCCAAAAAGTGTGCAGGCCCCCAGCGGTGCCTGAACCCAGTGCCTG
CAGTGCCCAGTCCCAGCCCCAGCGTGAGGAAGAGACAGGTGTCCCTCAACTGGCAGCCACTGACGCTCCAGGAGG
CCAGAGCTCTACTGAAGCGGCGGCGGCCCCGGGGGCCAGGGGGCCGGGGACTACTGAGAAGGAGGCCCCCACAGC
GTGCCCCCGCTGGCAAGGCCCCGGTCCTGTGTCCCTTGATCTGTCACAATGGCGGTGTGTGCGTGAAGCCTGACC
GCTGCCTCTGTCCCCCGGACTTCGCTGGCAAGTTCTGCCAGTTGCACTCCTCGGGCGCCCGGCCCCCGGCCCCGG
CTGTACCAGGCCTCACCCGCTCCGTGTACACTATGCCACTGGCCAACCACCGCGACGACGAGCACGGCGTGGCAT
CTATGGTGAGCGTCCACGTGGAGCACCCGCAGGAGGCGTCGGTGGTGGTGCACCAGGTGGAGCGTGTGTCTGGCC
CTTGGGAGGAGGCGGACGCTGAGGCGGTGGCGCGGGCGGAAGCGGCGGCGCGGGCGGAGGCGGCAGCGCCCTACA
CGGTGTTGGCACAGAGCGCGCCGCGGGAGGACGGCTACTCAGATGCCTCGGGCTTCGGTTACTGCTTTCGGGAGC
TGCGCGGAGGCGAATGCGCGTCCCCGCTGCCCGGGCTCCGGACGCAGGAGGTCTGCTGCCGAGGGGCCGGCTTGG
CCTGGGGCGTTCACGACTGTCAGCTGTGCTCCGAGCGCCTGGGGAACTCCGAAAGAGTGAGCGCCCCAGATGGAC
CTTGTCCAACCGGCTTTGAAAGAGTTAATGGGTCCTGCGAAGATGTGGATGAGTGCGCGACTGGCGGGCGCTGCC
AGCACGGCGAGTGTGCAAACACGCGCGGCGGGTACACGTGTGTGTGCCCCGACGGCTTTCTGCTCGACTCGTCCC
GCAGCAGCTGCATCTCCCAACACGTGATCTCAGAGGCCAAAGGGCCCTGCTTCCGCGTGCTCCGCGACGGCGGCT
GTTCGCTGCCCATTCTGCGGAACATCACTAAACAGATCTGCTGCTGCAGCCGCGTAGGCAAGGCCTGGGGCCGGG
GCTGCCAGCTCTGCCCACCCTTCGGCTCAGAGGGTTTCCGGGAGATCTGCCCGGCTGGTCCTGGTTACCACTACT
CGGCCTCCGACCTCCGCTACAACACCAGACCCCTGGGCCAGGAGCCACCCCGAGTGTCACTCAGCCAGCCTCGTA
CCCTGCCAGCCACCTCTCGGCCATCTGCAGGCTTTCTGCCCACCCATCGCCTGGAGCCCCGGCCTGAACCCCGGC
CCGATCCCCGGCCCGGCCCTGAGCTTCCCTTGCCCAGCATCCCTGCCTGGACTGGTCCTGAGATTCCTGAATCAG
GTCCCTCCTCCGGCATGTGTCAGCGCAACCCCCAGGTCTGCGGCCCAGGACGCTGCATTTCCCGGCCCAGCGGCT
ACACCTGCGCTTGCGACTCTGGCTTCCGGCTCAGCCCCCAGGGCACCCGATGCATTGATGTGGACGAATGTCGCC
GCGTGCCCCCGCCCTGTGCTCCCGGGCGCTGCGAGAACTCACCAGGCAGCTTCCGCTGCGTGTGCGGCCCGGGCT
TCCGAGCCGGCCCACGGGCTGCGGAATGCCTGGATGTGGACGAGTGCCACCGCGTGCCGCCGCCGTGTGACCTCG
GGCGCTGCGAGAACACGCCAGGCAGCTTCCTGTGCGTGTGCCCCGCCGGGTACCAGGCTGCACCGCACGGAGCCA
GCTGCCAGGATGTGGATGAATGCACCCAGAGCCCAGGCCTGTGTGGCCGAGGGGCCTGCAAGAACCTGCCTGGCT
CTTTCCGCTGTGTTTGCCCGGCTGGCTTCCGGGGCTCGGCGTGTGAAGAGGATGTGGATGAGTGTGCCCAGGAGC
CGCCGCCCTGTGGGCCCGGCCGCTGTGACAACACGGCAGGCTCCTTTCACTGTGCCTGCCCTGCTGGCTTCCGCT
CCCGAGGGCCCGGGGCCCCCTGCCAAGATGTGGATGAGTGTGCCCGAAGCCCCCCACCCTGCACCTACGGCCGGT
GTGAGAACACAGAAGGCAGCTTCCAGTGTGTCTGCCCCATGGGCTTCCAACCCAACACTGCTGGCTCCGAGTGCG
AGGATGTGGATGAGTGTGAGAACCACCTCGCATGCCCTGGGCAGGAGTGTGTGAACTCGCCCGGCTCCTTCCAGT
GCAGGACCTGTCCTTCTGGCCACCACCTGCACCGTGGCAGATGCACTGATGTGGACGAATGCAGTTCGGGTGCCC
CTCCCTGTGGTCCCCACGGCCACTGCACTAACACCGAAGGCTCCTTCCGCTGCAGCTGCGCGCCAGGCTACCGGG
CGCCGTCGGGTCGGCCCGGGCCCTGCGCAGACGTGAACGAGTGCCTGGAGGGCGATTTCTGCTTCCCTCACGGCG
AGTGCCTCAACACTGACGGCTCCTTTGCCTGTACTTGTGCCCCTGGCTACCGACCCGGACCCCGCGGAGCCTCTT
GCCTCGACGTTGACGAGTGCAGCGAGGAGGACCTTTGCCAGAGCGGCATCTGTACCAACACCGACGGCTCCTTCG
AGTGCATCTGTCCTCCGGGACACCGCGCTGGCCCGGACCTCGCCTCCTGCCTCGACGTGGACGAATGTCGCGAGC
GAGGCCCAGCCCTGTGCGGGTCGCAGCGCTGTGAGAACTCTCCCGGCTCCTACCGCTGTGTCCGGGACTGCGATC
CTGGGTACCACGCGGGCCCCGAGGGCACCTGTGACGATGTGGATGAGTGCCAAGAATATGGTCCCGAGATTTGTG
GAGCCCAGCGTTGTGAGAACACCCCTGGCTCCTACCGCTGCACACCAGCCTGTGACCCTGGCTATCAGCCCACGC
CAGGGGGCGGATGCCAGGATGTGAACGAGTGTGAAACACTACAGGGTGTATGTGGAGCTGCCCTGTGTGAAAATG
TCGAAGGCTCCTTCCTCTGTGTCTGCCCCAACAGCCCGGAAGAGTTTGACCCCATGACTGGACGCTGTGTTCCCC
CACGAACTTCTGCTGGCACGTTCCCAGGCTCGCAGCCCCAGGCACCTGCTAGCCCCGTTCTGCCCGCCAGGCCAC
CTCCGCCACCCCTGCCCCGCCGACCCAGCACACCTAGGCAGGGCCCTGTGGGGAGTGGGCGCCGGGAGTGCTACT
TTGACACAGCGGCCCCGGATGCATGTGACAACATCCTGGCTCGGAATGTGACATGGCAGGAGTGCTGCTGTACTG
TGGGTGAGGGCTGGGGCAGCGGCTGCCGCATCCAGCAGTGCCCGGGCACCGAGACAGCTGAGTACCAGTCATTGT
GCCCTCACGGCCGGGGCTACCTGGCGCCCAGTGGAGACCTGAGCCTCCGGAGAGACGTGGACGAATGTCAGCTCT
TCCGAGACCAGGTGTGCAAGAGTGGCGTGTGTGTGAACACGGCCCCGGGCTACTCATGCTATTGCAGCAACGGCT

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FIGURE 3742B

ACTACTACCACACACAGCGGCTGGAGTGCATCGACAATGACGAGTGCGCCGATGAGGAACCGGCCTGTGAGGGCG
GCCGCTGTGTCAACACTGTGGGCTCTTATCACTGTACCTGCGAGCCCCCACTGGTGCTGGATGGCTCGCAGCGCC
GCTGCGTCTCCAACGAGAGCCAGAGCCTCGATGACAATCTGGGAGTGTGCTGGCAGGAAGTGGGGGCTGACCTCG
TGTGCAGCCACCCTCGGCTGGACCGTCAGGCCACCTACACAGAGTGCTGCTGCCTGTATGGAGAGGCCTGGGGCA
TGGACTGCGCCCTCTGCCCTGCGCAGGACTCAGATGACTTCGAGGCCCTGTGCAATGTGCTACGCCCCCCCGCAT
ATAGCCCCCCGCGACCAGGTGGCTTTGGACTCCCCTACGAGTACGGCCCAGACTTAGGTCCACCTTACCAGGGCC
TCCCATATGGGCCTGAGTTGTACCCACCACCTGCGCTACCCTACGACCCCTACCCACCGCCACCTGGGCCCTTCG
CCCGCCGGGAGGCTCCTTATGGGGCACCCCGCTTCGACATGCCAGACTTTGAGGACGATGGTGGCCCCTATGGCG
AATCTGAGGCTCCTGCGCCACCTGGCCCGGGCACCCGCTGGCCCTATCGGTCCCGGGACACCCGCCGCTCCTTCC
CAGAGCCCGAGGAGCCTCCTGAAGGTGGAAGCTATGCTGGTTCCCTGGCTGAGCCCTACGAGGAGCTGGAGGCGG
AGGAGTGCGGGATCCTGGACGGCTGCACCAACGGCCGCTGCGTGCGCGTCCCCGAAGGCTTCACCTGCCGTTGCT
TCGACGGCTACCGCCTGGACATGACCCGCATGGCCTGCGTTGACATCAACGAGTGTGATGAGGCCGAGGCTGCCT
CCCCGCTGTGCGTCAACGCGCGTTGCCTCAACACGGATGGCTCCTTCCGCTGCATCTGCCGCCCGGGATTCGCAC
CCACGCACCAGCCGCACCACTGTGCGCCCGCACGGCCCCGGGCCTGAGCCCTGGCACCCGCTGGCCGCCCACCCG
CGCCCGCCACTCGGGGCCCCTGCCGCGCATCCTGCAGCCCGCTTATGCGTATGTGCACGGGGCCGCCCGCCTGGA
CCTGGAGAAGGGACCTACGGACGCCTGGAAGCTGCGACGCCCTGCACTGCTCCCGCCTCCACCAGCGCCTCCCAC
TGATGTCGTGGTCCCGGGCCTGGCCCAGGGGCCCCTTTACATGCCCTCTCCCTTTTATAAAATTTTCCATTAAAA
ACCACCTATTTTCT

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FIGURE 3743

GCTCGCGCGCGTGCATCCCGCACCATCCCCCGGCCCCGGGCCCTGGCCGGCGTCAGACCGAGCTGCCGCCGCCAC
CACCGCAGCAGCAGCAGTCGGGGAGCCAGGCCCAGCCAGGGCCGCGGGAGGCGGGGGCGCCCGGGCCCTGGATGT
CCCGCAGCGCGGCGGCCAGCGGCGGACCCCGGAGGCCTGAGCGGCACCTGCCCCCAGCCCCCTGTGGGGCCCCGG
GGCCCCCAGAAACCTGCAGGACGGAGCCAGACGGGGCGGGCACCATGAACAAGTTACGGCAGAGCCTGCGGCGGA
GGAAGCCAGCCTACGTGCCCGAGGCGTCGCGCCCGCACCAGTGGCAGGCAGACGAGGACGCGGTGCGGAAGGGCA
CGTGCAGCTTCCCGGTCAGGTACCTGGGTCACGTGGAGGTAGAGGAGTCCCGGGGAATGCACGTGTGTGAAGATG
CGGTGAAGAAGCTGAAGGCGATGGGCCGAAAGTCCGTGAAGTCTGTCCTGTGGGTGTCAGCCGATGGGCTCCGAG
TGGTGGACGACAAAACCAAGGATCTTCTGGTCGACCAGACCATCGAAAAGGTCTCCTTTTGTGCTCCTGACCGCA
ACCTGGACAAGGCTTTCTCCTATATCTGTCGTGACGGGACTACCCGCCGCTGGATCTGCCACTGTTTTCTGGCAC
TGAAGGACTCCGGCGAGAGGCTGAGCCACGCTGTGGGCTGTGCTTTTGCCGCCTGCCTGGAGCGAAAACAGCGAC
GGGAGAAGGAATGTGGGGTCACGGCCGCCTTCGATGCCAGCCGCACCAGCTTCGCCCGCGAGGGCTCCTTCCGCC
TGTCTGGGGGTGGGCGGCCTGCTGAGCGAGAGGCCCCGGACAAGAAGAAAGCAGAGGCAGCAGCTGCCCCCACTG
TGGCTCCTGGCCCTGCCCAGCCTGGGCACGTGTCCCCGACACCAGCCACCACATCCCCTGGTGAGAAGGGTGAGG
CAGGCACCCCTGTGGCTGCAGGCACCACTGCGGCCGCCATCCCCCGGCGCCATGCACCCCTGGAGCAGCTGGTTC
GCCAGGGCTCCTTCCGTGGGTTCCCAGCACTCAGCCAGAAGAACTCGCCTTTCAAACGGCAGCTGAGCCTACGGC
TGAATGAGCTGCCATCCACGCTGCAGCGCCGCACTGACTTCCAGGTGAAGGGCACAGTGCCTGAGATGGAGCCTC
CTGGTGCCGGCGACAGTGACAGCATCAACGCTCTGTGCACACAGATCAGTTCATCTTTTGCCAGTGCTGGAGCGC
CAGCACCAGGGCCACCACCTGCCACAACAGGGACTTCTGCCTGGGGTGAGCCCTCCGTGCCCCCTGCAGCTGCCT
TCCAGCCTGGGCACAAGCGGACACCTTCAGAGGCTGAGCGATGGCTGGAGGAGGTGTCACAGGTGGCCAAGGCCC
AGCAGCAGCAGCAGCAGCAACAGCAACAGCAGCAGCAGCAGCAGCAACAGCAGCAAGCAGCCTCAGTGGCCC
CAGTGCCCACCATGCCTCCTGCCCTGCAGCCTTTCCCCGCCCCCGTGGGGCCCTTTGACGCTGCACCTGCCCAAG
TGGCCGTGTTCCTGCCACCCCCACACATGCAGCCCCCTTTTGTGCCCGCCTACCCGGGCTTGGGCTACCCACCGA
TGCCCCGGGTGCCCGTGGTGGGCATCACACCCTCACAGATGGTGGCAAACGCCTTCTGCTCAGCCGCCCAGCTCC
AGCCTCAGCCTGCCACTCTGCTTGGGAAAGCTGGGGCCTTCCCGCCCCCTGCCATACCCAGTGCCCCTGGGAGCC
AGGCCCGCCCTCGCCCCAATGGGGCCCCCTGGCCCCCTGAGCCAGCGCCTGCCCCAGCTCCAGAGTTGGACCCCT
TTGAGGCCCAGTGGGCGGCATTAGAAGGCAAAGCCACTGTAGAGAAACCCTCCAACCCCTTTTCTGGCGACCTGC
AAAAGACATTCGAGATTGAACTGTAG

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FIGURE 3744

TCTGAGCATCCGAAGCGCGGCCAGGTATGCATCTAGGGCACCGGGGTCCTGGTGGCGCGCCAGTGGGCCCCCTCC
CTCCACCCCTGTGACTAAACCACCCTCCCTACACGGTTGAATGACAAGTTCAACCTTCCCTAAAACCCCCGGTGA
CGAGTCCAGCCGCGCGCCCATTCTTCACGCAGGGGCGGGACGGACTTTCAAAGACTTGGAGTTCCCACGGGTGTG
GGTTCGAGACCTTCCTCTGCCAGTTCCCAGCTCCGCTACCCTGAGCAAATGACTTACGCTCCATTGGATTTTCCG
CAATGTGGCTGAAGGTGGGGGGCCTACTTCGGGGGACCGGTGGACAGCTGGGCCAGACTGTTGGTTGGCCTTGTG
GGGCCCTGGGGCCTGGGCCCCACCGCTGGGGACCATGTGGAGGTTCTTGGGCCCAAAAGTTTTACCAGGATGGGC
CTGGGAGAGGCCTGGGTGAGGAGGACATTCGCAGGGCACGGGAGGCCCGTCCCAGGAAGACACCCCGGCCCCAGC
TGAGTGACCGCTCTCGAGAACGCAAGGTGCCTGCCTCCCGCATCAGCCGCTTGGCCAACTTTGGGGGACTGGCTG
TGGGCTTGGGGCTAGGAGTACTGGCCGAGATGGCTAAGAAGTCCATGCCAGGAGGTCGTCTGCAGTCAGAGGGTG
GTTCTGGGCTGGACTCCAGCCCCTTCCTGTCGGAGGCCAATGCCGAGCGGATTGTGCAGACCTTATGTACAGTTC
GAGGGGCCGCCCTCAAGGTTGGCCAGATGCTCAGCATCCAGGGTACAGCATGACCCTCGACTCCTGACCCCTGAC
CTCCCTTCTACCCCAGCCCTACCCACCAACAGGCCCCAACTTCAGATACTCACACGGGGTCCCTCCTCACCTCTT
CGCTTACTTCCCCCCTGGTTCCACTGTCTCCCAAGACAACAGCTTCATCAGCCCTCAGCTGCAGCACATCTTTGA
GCGGGTCCGCCAGAGCGCCGACTTCATGCCCCGCTGGCAGATGCTGGTGAGTGCCCAGTGGGGGAGGGCGGTGAG
GGAGGCAGGCTCCATCTCCTCTGACCTGCCTGACCTTCCTGGCTTCACTGCCCCACTCCCTGCCTCTGAGCCTCA
CTTTCCCCATCTGTAAAATGGGAATCACCAGAGTACACACCTCCTAGCATTGCTGTGGTGATTAAAACAGGGAAC
AGCAGCCTGACCTCTCTGTGCTTCAGTTCCCTTCCCTGGGAAATGGCGATAGTGACAGCCACACCCACATCATAG
GGTCACATAAATCAGTTTACACTGAGCACTGAGAACGGCCCCTGATTCACTGTGAGCAACATGCAGGTGTTAGCT
GTGATTATTACTGTTTTTTTAATTAAAGGAGATCGTGTCTGTAATAGGTTGGCACGGCGCCTGGCACCAAGTAAG
TGCCCAGGACATGAGCTGTTCTAATAACTGGGTAAGGCATGGAATCCAGGATTCCGCCACCCACCTGCTCTCCCA
TCCCTGTTCTGCTTATTCGCCATGCGGCCCCAGGCAGGTACTGCCTCTCTCTGGGCCACTCTGAATAGGACCTGG
CCCACAGGAAGCCCATTGTAAATTTTAGCTCTTCTTGATCACAGTAACTGTGAGTTAATAATAACATATAAGAGC
ATAATAAAGGATGGTTGGCCACGTGTAATGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGCGGTGGGAGG
ATCATTTGAGCTCAGGACTTCCAGACCACCCTGGGCAACATAGTGAGACCTTGTCTCTACTAAACATAATAACAG
TAATAATTAGCTGGGCACAGTGGCACATATCTGTAGTCCCAGCTATTCAGGAGGCAGGAGGATGGCTTGAGCTCG
GGAGGTTGATGCTGCAGTGAGCCGTGAGAGTGCCACTACACTCCAGCCTGGGCTACAGAACAAGACCCTGTCTC

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FIGURE 3745

ATGAGGCGCTGCCCGTGCCGTGGGAGCCTGAACGAGGCGGAGGCCGGGGCGCTGCCCGCGGCGGCCCGCATGGGA
CTGGAGGCGCCGCGAGGAGGGCGGCGGCGGCAGCCGGGACAGCAGCGACCTGGGCCCGGCGCAGGGGCCCCGGCG
GGGCGGCCGGAGGGGGGCGGGCCCTGGGCCCGGACAGAGGGGTCCAGCCTCCACAGCGAGCCTGAGAGGGCCGGC
CTCGGGCCTGCGCCGGGGACAGAGAGTCCGCAGGCAGAATTCTGGACAGACGGACAGACTGAGCCCGCGGCAGCT
GGCCTTGGAGTAGAGACCGAGAGGCCCAAGCAAAAGACGGAGCCAGACAGGTCCAGCCTCCGGACGCATCTAGAA
TGGAGCTGGTCAGAGCTGGAGACGACTTGTCTTTGGACGGAGACCGGGACAGATGGCCTTTGGACTGATCCGCAC
AGGTCCGACCTCCAGTTTCAGCCCGAGGAGGCCAGCCCCTGGACACAGCCAGGGGTTCATGGGCCCTGGACAGAG
CTGGAAACGCATGGGTCACAGACTCAGCCAGAGAGGGTCAAGTCCTGGGCTGATAACCTCTGGACCCACCAGAAC
AGTTCCAGCCTCCAGACTCACCCAGAAGGAGCCTGTCCCTCAAAAGAGCCAAGTGCTGATGGCTCCTGGAAAGAA
TTGTATACTGATGGCTCCAGGACACAACAGGATATTGAAGGTCCCTGGACAGAGCCATATACTGATGGCTCCCAG
AAAAAACAGGATACTGAAGCAGCCAGGAAACAGCCTGGCACTGGTGGTTTCCAAATACAACAGGATACTGATGGC
TCCTGGACACAACCTAGCACTGACGGTTCCCAGACAGCACCTGGGACAGACTGCCTCTTGGGAGAGCCTGAGGAT
GGCCCATTAGAGGAACCAGAGCCTGGAGAATTGCTGACTCACCTGTACTCTCACCTGAAGTGTAGCCCCCTGTGC
CCTGTGCCCCGCCTCATCATTACCCCTGAGACCCCTGAGCCTGAGGCCCAGCCAGTGGGACCCCCCTCCCGGGTT
GAGGGGGGCAGCGGCGGCTTCTCCTCTGCCTCTTCTTTCGACGAGTCTGAGGATGACGTGGTGGCCGGGGGCGGA
GGTGCCAGCGATCCCGAGGACAGGTCTGGGAGCAAACCCTGGAAGAAGCTGAAGACAGTTCTGAAGTATTCACCC
TTTGTGGTCTCCTTCCGAAAACACTACCCTTGGGTCCAGCTTTCTGGACATGCTGGGAACTTCCAGGCAGGAGAG
GATGGTCGGATTCTGAAACGTTTCTGTCAGTGTGAGCAGCGCAGCCTGGAGCAGCTGATGAAAGACCCGCTGCGA
CCTTTCGTGCCTGCCTACTATGGCATGGTGCTGCAGGATGGCCAGACCTTCAACCAGATGGAAGACCTCCTGGCT
GACTTTGAGGGCCCCTCCATTATGGACTGCAAGATGGGCAGCAGGACCTATCTGGAAGAGGAGCTAGTGAAGGCA
CGGGAACGTCCCCGTCCCCGGAAGGACATGTATGAGAAGATGGTGGCTGTGGACCCTGGGGCCCCTACCCCTGAG
GAGCATGCCCAGGGTGCAGTCACCAAGCCCCGCTACATGCAGTGGAGGGAAACCATGAGCTCCACCTCTACCCTG
GGCTTCCGGATCGAGGGCATCAAGAAGGCAGATGGGACCTGTAACACCAACTTCAAGAAGACGCAGGCACTGGAG
CAGGTGACAAAAGTGCTGGAGGACTTCGTGGATGGAGACCACGTCATCCTGCAAAAGTACGTGGCATGCCTAGAA
GAACTTCGTGAAGCTCTGGAGATCTCCCCCTTCTTCAAGACCCACGAGGTGGTAGGCAGCTCCCTCCTCTTCGTG
CACGACCACACCGGCCTGGCCAAGGTCTGGATGATAGACTTCGGCAAGACGGTGGCCTTGCCCGACCACCAGACG
CTCAGCCACAGGCTGCCCTGGGCTGAGGGCAACCGTGAGGACGGCTACCTCTGGGGCCTGGACAACATGATCTGC
CTCCTGCAGGGGCTGGCACAGAGCTGA

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FIGURE 3746

GTGGTTATCGCGGCGCCCACCGGCCTCTGATCTCTGAGTCTTCTCCAACCCACAGACGTTTTTTGTTGCTCTGGT
TCCAGGACCTTCTCCACAACTAGGCCATTTTCCCTGCCAGGTGTCCTTTTTGACCTCTTGACCTCTGACTCAAAG
GTCAGCTCAAAGGTTCCGAACTCGGGCCTGGGATGTGAGGGGGTACTGAACCTAAGTTCTCCGAATCTTTAGCCC
TGGGTCCCTAAGTCGCATCCTTAAGGCACCTCACTCTAGATCTGAGCCTTCATATCCCAAACTCACTCATGAGTT
TCCACATCCAGCCCCAAAGAATGAGTTAACTCCTACTAACTCTCCACCTAAGACTCCCGAGGTAACCCAACCGGT
ACCACAGATCCGGTTCCGGATTTAAGGACCCCACCCTGTTAACCGTCAGGTGCCTTATGACTTGAGTCAGCCTCG
CAATTCCTGCTCCCGTGGTTTCAAATATTAGCCCTGGTCCTTTCACACCCACTGCTCAGTCCCCAGATTCTGGAA
CTCAGCTCTTAAACCTTTAAAATCTCCATCCCTGAGACCGTTCTCCGTTGGAGGATCCTTCCCTCCCCGCTTTCT
GAACCTCTCAACACCTCCTGTAGACCCCAAA**ATG**ACTTCTCCATGCTCTCCTCCCCTAAAACCACCAATTTCTCC
TCCAAAAACCCCTGTACCCCAAGCCAGCAGCATTCCATCTCCTCCTCTACCCCCAAGTCCCCTGGACTTTTCAGC
TTTACCATCCCCTCCCTGGAGTCAGCAGACCCCTGTTCCCCCACCGCTCCCACTGCCTCCTCCACCCGCTGCCAC
AGGGCCTGCTCCCCGTCATGTCTTCGGCCTGGAGAAGAGCCAGCTCCTGAAGGAGGCCTTTGATAAGGCCGGCCC
GGTCCCCAAGGGCAGAGAAGATGTGAAGAGGCTTCTGAAACTACACAAGGACCGGTTCCGAGGTGACCTGCGGTG
GATCCTCTTCTGTGCAGACCTGCCGTCCCTCATCCAAGAAGGCCCTCAATGCGGGCTGGTGGCCTTGTGGATGGC
AGGTACTCTCCTGTCGCCCCCCAGTGGCGTCCCCCTGGAGAGACTCATACGGGTGGCCACGGAAAGAGGCTACAC
GGCCCAGGGAGAGATGTTCTCAGCACCAGCTACGACGAGGACTTCAACCATGAGCCGTGTCAGAGGAAGGGCCAC
AAGGCACACTGGGCGG**TGA**GTGCAGGGGTCCTGCTGGGTGTTCGGGCTGTGCCCAGTCTCGGCTACACTGAGGAC
CCTGAGCTGCCGGGCCTGTTCCACCCAGTGCTGGGCACGCCCTGCCAACCACCATCCCTGCCAGAGGAGGGCTCC
CCGGGAGCTGTCTACCTGCTGTCCAAGCAGGGCAAGAGTTGGCACTATCAGCTGTGGGACTACGACCAGGTCCGG
GAGAGCAACCTGCAGCTGACGGACTTCTCGCCCTCACGGGCCACTGACGGCCGGGTGTACGTGGTGCCCGTGGGT
GGGGTACGGGCTGGCCTCTGTGGCCAGGCCCTGCTCCTCACACCACAGGACTGCAGCCATTAGCTGCGGCTGCGG
TCTCAGGCTGCAGCCTAGCTCGTTTTAAAGCCCATCTGGGAGCAGTTACCTGTGCCAGCCCCTCTACCTGTGTTA
GCAGATCTGGCAACCCTGTAAGGGGGGTGCTAGATGGACCCGATTTGACAGATGGCAAGACTGAGGCCTGGAGAA
GTGGAATCACTGGCCTGAGGTCACATGACTAGCACATGGCAAGATGGAGTCTCGTTCTGTCGTCCAGGCTGGAGT
GCGGTGGCGTGATCTCAGCTCACTCCAGCCTCCACTTCCCAGGTTCAAGTGATTCTCCTGCCTCAGCCCCCCAAG
TAACTGGGATTACAGGCATGCACCACCATGCCTGGCTAATTTTTTGTATTTTTAGTAGAGACGGGGCTTTGCCAT
GTTGGCCAGGCTGGTCTCGAACTCCTGACCTTGAGTAATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACA
GGTGTGAGCCACTGAGCCCGGCCACAGTGCAGTATTTCTAACCAGTGATCAGGGTAAAGAGGATGCGTGTCCACC
ATCCCAGCCCTGATCAGCCTGTCTGTGCATCCCCCATCCCAGCCAGGGCTTGGAGCAGCCTTGCTCACCACTGTG
TCCCCTGCATTGTAACACATCCAGGCACAAGAATAGCCGCCCAGTGACTGCCAAGTGAGTGAACCAGCCTGCTTG
GAGCCTGCCTCTTTCCCAAACTGCTCATTATCCTGTTACCCCACCCAGCCCACGTGTCCAAATACACTCCAGATG
CAAAATAAAAAGCTCTACGACA

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FIGURE 3747

CCTGACTTCCTTTTCGGAGGAAGATCCTTGAGCAGCCGACGTTGGGACAAAGGATTTGGAGAAACCCAGGGCTAA
AGTCACGTTTTTCCTCCTTTAAGACTTACCTCAACACTTCACTCC**ATG**GCAGTTCCCGAGACCCGCCCTAACCAC
ACTATTTATATCAACAACCTCAATGAGAAGATCAAGAAGGATGAGCTAAAAAAAGTCCCTGTACGCCATCTTCTCC
CAGTTTGGCCAGATCCTGGATATCCTGGTATCACGGAGCCTGAAGATGAGGGGCCAGGCCTTTGTCATCTTCAAG
GAGGTCAGCAGCGCCACCAACGCCCTGCGCTCCATGCAGGGTTTCCCTTTCTATGACAAACCTATGCGTATCCAG
TATGCCAAGACCGACTCAGATATCATTGCCAAGATGAAAGGCACCTTCGTGGAGCGGGACCGCAAGCGGGAGAAG
AGGAAGCCCAAGAGCCAGGAGACCCCGGCCACCAAGAAGGCTGTGCAAGGCGGGGGAGCCACCCCCGTGGTGGGG
GCTGTCCAGGGGCCTGTCCCGGGCATGCCGCCGATGACTCAGGCGCCCCGCATTATGCACCACATGCCGGGCCAG
CCGCCCTACATGCCGCCCCCTGGTATGATCCCCCCGCCAGGCCTTGCACCTGGCCAGATCCCACCAGGGGCCATG
CCCCCGCAGCAGCTTATGCCAGGACAGATGCCCCCTGCCCAGCCTCTTTCTGAGAATCCACCGAATCACATCTTG
TTCCTCACCAACCTGCCAGAGGAGACCAACGAGCTCATGCTGTCCATGCTTTTCAATCAGTTCCCTGGCTTCAAG
GAGGTCCGTCTGGTACCCGGGCGGCATGACATCGCCTTCGTGGAGTTTGACAATGAGGTACAGGCAGGGGCAGCT
CGCGATGCCCTGCAGGGCTTTAAGATCACGCAGAACAACGCCATGAAGATCTCCTTTGCCAAGAAG**TAG**CACCTT
TTCCCCCCATGCCTGCCCCTTCCCCTGTTCTGGGGCCACCCCTTTCCCCCTTGGCTCAGCCCCCTGAAGGTAAGT
CCCCCCTTGGGGGCCTTCTTGGAGCCGTGTGTGAGTGAGTGGTCGCCACACAGCATTGTACCCAGAGTCTGTCCC
CAGACATTGCACCTGGCGCTGTTAGGCCGGAATTAAAGTGGCTTTTTGAGGTTTGGTTTTTCAC

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FIGURE 3748A

GTGTGAGTCCCATGTGCTTGGTGGGAGGCGCTGTGTGAGAATGTACAGGGCAGGAGGAAACATAGCAGGGCTGGG
GTGCAGAGGAGGCCCAGAGCAGTGCACTCCAGTCTGCAGGTACTGCACTGGGCACTGGGGAGACCAACCTGGCCC
CAGGGGCTTCCCTGTGGCTGCCTTCCAGGGCAGTACTAGGTAAACAGGTGCCTGTGCTGATGCCATGTTGCTAGG
AGTGGAACGGACAATCAGCCGGAGTACTCAAGGTGACCCTTGGTCTCTGAATCCTGAATAACAAAGAGGGTCAGA
AGGAAGAGTGTCCCAGGCCAGTGCTGAGGCCTTGTGGTGGCGATGAGCTCAGCCTGTTGAGGCATGGAGCAGAGT
GATGGGAGAGGCACATGAGGTTGGGGGCCTTTGAGGCTGTGGTTGGGAATTTGTATTTTCTCAGGATGGAGTGAA
GACCTGGAGAGGAGGGGCTCTGGCTGCTGTGTGGGGATGAATTGTGGGAAGAGGGTGCAGCACTGGACCCCTTCC
CTGCCACCCATCCACGTGCATCATCAGTGTAATCTCTGATTGGATTCCTAATTGGGGAGGTCTTGCCCATCTCTA
GTCAGTAACTCACTGTTTCTAAGCCTCCTGGACCATGGCCCAATTCTTCTCCCAGTGAGGTGGTTGCTCAGAGTG
CCGACCCTTCCATAGGGAGTGAGCAGTGCAAAGAAGGTGCCCCCTCCTGAACCTTGAAGTGTAGCCATTAGGGTT
TTCCCTGGGGGGCCTTCTCACTAATTGTACTCTGGTGCTGCCAGAGAGAAGGTTGTCAGCTTCCCACTGCTAGGT
GGCAGTAGATGGTGGCAGCCCTCTCTTTCCAGGGCAAGGTCTGGTGGATGAGGTGCACATGGTTAATGCAGAGCA
GCTTAACATCCACCACAGAGGGTGAGCCCTGGGATAATGTGTTGGGAGGCGTCCTGGGGAGGGTGAGGATTGAAG
CAGCCCAGTCTGCTGTGGCGTGCGTGCTTGGCAAGCATCCTGTTGTGGCAGTGGCCACTGATGTTTGATCGTGAA
TGTTTATCTTGGGACTGTCTTGCTGGGCCGGGCCCATAGGTGTAGCTGAGCATTCGTGGGGAATGGACGCCAGCA
GAGTTGTACCAGGGCAGAGAGGTCAGGGCAGAGAGGTCAAGACAGATGGTCCGGGCTGGGGAGAAGTTGAAGGGT
CCTTGTGCCAGTCCTCCCCTTTTTGTGTGCTACCTCATCTTGCCACTGCAGTGACTTTGGGCAGAGGGTGGGACA
GGGACCTTTTAAAATTTTTAAATGGCATTTCAGCCTGTGCTCCAGTTCTCCATGTGGCAGGCACTGTGCTGGCTG
TCTTCCCAGACACTTGTTATCTTGTTCACTTGTTCCACAACAACCTGTGAAATAGCTGTGAGCTCCATTGGATCC
ATGGATGAGGAACCTGAGACCAGGAAGTCACCTGCCTGATGCCACAGCTCATGTGGCAGCACTGAGACTTGAACC
AGGGAATTGTGTCTGCAGAAGTGGCTGGGCCATTTCCTTTACCTCTCAGCCACCTTTCTGCCAGCTCCCTGATGA
CAAACATCCCGGGGCCCTGGCCACAGCATTGTAGGGCTGGGTCAGGGGAGTGGCAACTGTCAGGCAGAGGAAAGA
ACCCTGTAGACAGAGAAACCAAGCCCTGCAATGAGTCCTGTTAGATCTCCAGGAGTTGGGGCTCCAGAACCTCCC
AAGTTATGTTCTCAGAGAGATTAATTGCTACCGCTGTAAACAGCAGTGTTTATTACCCCTGCTGTACACATCAGG
CAGTTGAGGCCCATTCAGGTGTTGGAACTGGCTAGGGTTACCCAGCAAATTATCCTTGGAGTTGGAATTAGGTCT
TTCTATTCAGACTGTAGCTTTTGGCTCCTGTTCGGAGGTCTATGGGACAGATAATTTAGTGGGGATTCTTTGTAG
TCCAGGGCAGCAGTTCTTAACATTGCTGCATGGTAGAATTACCTGGGAAGCTTTACCAATTTCAGGCCCTTCCTT
AGGCCAGGTACTTCAGAACCTCAGAGCTCCCCAGGGGGCTCCACTCCACAGCCAAGGGTAAGAATTCCTGGTCTA
GGGCTGTGAGGCCACCTCCTTGCACACCTGAAAATGTTTAAATTGGTATTATTCTACTGAAATGGCTGAGGTGGG
GTTTGGGGTATCTTGAAACAAATCAAACTCTGTTACTAATTGAGCCCTAGCTGGGTGCCAGGCCCCAGGTATGTG
TGTTGGGAGGGAGTGGGCTCTTGAGGCCCAGGAGCTGAGGTTTCTGATAGACTTGGGGATGGGATTTTGGCTGAA
AAAGAAAGTCTTTTGGGGCAGGAGCTTGGAACCCTTGACCCAAGGAGTCATGGGGAAGATGGGGCAAGGAGGGGT
GGGAAAATAGGTAATTCATGGCTGCTTCTCTAAG**ATG**TGCCTGCCTAGCCCCAGTAAACCTACCTCCCTCCATCC
CTGCCAGGCCATGGTGGCGTGTTACCCAGGCAACGGGCTCGGGTACGTAAGGCACGTTGACAATCCCCACGGCGA
TGGGCGCTGCATCACCTGTATCTATTACCTGAATCAGAACTGGGACGTTAAGGTAGGGGTGAGGGTGAGGGTGAG
GGTGGCGCTGGGGCTAGGGCTGGGGCGGGGGTGGCGTGCGTCCACTCCATTTTCCACTCTCAGCCCAGATTCTGG
CATTCTCCTGTTTCTCTTCTCAACACACAGCGGGCAGTGCGATCTGCCGGCTCTTCCTGGGAAATGGCACCTCCT
CCTCTCTAGCGGACTGTGTGGTGGGAACTCCCCTCTTTCCGGGAATGGTGCTGTCTGCCCAGCCCCACCCGGCCT
TGTAATGAACACTTTCCCCCTTTTCCTGTCTTTAGTAGCTTCCTGCCCATCTCCATGG**TGA**TGCAGTCTCTGGGT
TGTCATTCACTTTGAGAGCCCGAGGGGTGGGAGGGAGTGATGCAGGCAGACGCTGCGCCTCCTAGTGGGCTCCCG
GGGCACCGTGGGAGGCAGCGGCTCCTGGCCGTACCAGCTAGCCTCATCCTTTGGCCTGCCCCCAGGTGCATGGCG
GCCTGCTGCAGATCTTCCCTGAGGGCCGGCCCGTGGTAGCCAACATCGAGCCACTCTTTGACCGGTTGCTCATTT
TCTGGTCTGACCGGCGGAACCCCCACGAGGTGAAGCCAGCCTATGCCACCAGGTACGCCATCACTGTCTGGTATT
TTGATGCCAAGGAGCGGGCAGCAGCCAAAGACAAGTATCAGCTAGCATCAGGACAGAAAGGTGTCCAAGTACCTG
TATCACAGCCGCCTACGCCCACCTAGTGGCCAGTCCCAGAGCCGCATGGCAGACAGCTTAAATGACTTCAGGAGA
GCCCTGGGCCTGTGCTGGCTGCTCCTTCCCTGCCACCGCTGCTGCTTCTGACTTTGCCTCTGTCCTGCCTGGTGT
GGAGGGCTCTGTCTGTTGCTGAGGACCAAGGAGGAGAAGAGACCTTTGCTGCCCCATCATGGGGGCTGGGGTTGT
CACCTGGACAGGGGGCAGCCGTGGAGGCCACCGTTACCAACTGAAGCTGGGGGCCTGGGTCCTACCCTGTCTGGT

FIGURE 3748B

CATGACCCCATTAGGTATGGAGAGCTGGGAGGAGGCATTGTCACTTCCCACCAGGATGCAGGACTTGGGGTTGAG
GTGAGTCATGGCCTCTTGCTGGCAATGGGGTGGGAGGAGTACCCCCAAGTCCTCTCACTCCTCCAGCCTGGAATG
TGAAGTGACTCCCCAACCCCTTTGGCCATGGCAGGCACCTTTTGGACTGGGCTGCCACTGCTTGGGCAGAGTAAA
AGGTGCCAGGAGGAGCATGGGTGTGGAAGTCCTGTCAGCCAAGAAATAAAAGTTTACCTCAGAGCTGCA

FIGURE 3749A

GAGTGGAGTTCTGGAGGAATGTTTACCAGACACAGAGCCCAGAGGGACAGCGCCCAGAGCCCGGATAGAGAGACA
CGGCCTCACTGGCTCAGGACAGGGGGCACAGCCACCAGGGTCCCCTTCCCCCTCCTCAGCTCCCTCCCTGGCCCC
TTTAAGAAAGAGCTGATCCTCTCCTCTCTTGAGTTAACCCCTGATTGTCCAGGTGGCCCCTGGGCTCTGGCCCTG
GTGGGCGGAGGCAAAGGGGGAGCCAGGGGCGGAGAAAGGGTTGCCCAAGTCTGGGAGTGAGGGAAGGAGGCAGGG
GTGCTGAGAAGGCGGCTGCTGGGCAGAGCCGGTGGCAAGGGCCTCCCCTGCCGCTGTGCCAGGCAGGCAGTGCCA
AATCCGGGGAGCCTGGAGCTGGGGGGAGGGCCGGGGACAGCCCGGCCCTGCCCCCTCCCCCGCTGGGAGCCCAAC
AACTTCTGAGGAAAGTTTGGCACCCATGGCGTGGCGGTGCCCCAGGATGGGCAGGGTCCCGCTGGCCTGGTGCTT
GGCGCTGTGCGGCTGGGCGTGCATGGCCCCCAGGGGCACGCAGGCTGAAGAAAGTCCCTTCGTGGGCAACCCAGG
GAATATCACAGGTGCCCGGGGACTCACGGGCACCCTTCGGTGTCAGCTCCAGGTTCAGGGAGAGCCCCCCGAGGT
ACATTGGCTTCGGGATGGACAGATCCTGGAGCTCGCGGACAGCACCCAGACCCAGGTGCCCCTGGGTGAGGATGA
ACAGGATGACTGGATAGTGGTCAGCCAGCTCAGAATCACCTCCCTGCAGCTTTCCGACACGGGACAGTACCAGTG
TTTGGTGTTTCTGGGACATCAGACCTTCGTGTCCCAGCCTGGCTATGTTGGGCTGGAGGGCTTGCCTTACTTCCT
GGAGGAGCCCGAAGACAGGACTGTGGCCGCCAACACCCCCTTCAACCTGAGCTGCCAAGCTCAGGGACCCCCAGA
GCCCGTGGACCTACTCTGGCTCCAGGATGCTGTCCCCCTGGCCACGGCTCCAGGTCACGGCCCCCAGCGCAGCCT
GCATGTTCCAGGGCTGAACAAGACATCCTCTTTCTCCTGCGAAGCCCATAACGCCAAGGGGGTCACCACATCCCG
CACAGCCACCATCACAGTGCTCCCCCAGCAGCCCCGTAACCTCCACCTGGTCTCCCGCCAACCCACGGAGCTGGA
GGTGGCTTGGACTCCAGGCCTGAGCGGCATCTACCCCCTGACCCACTGCACCCTGCAGGCTGTGCTGTCAAACGA
TGGGATGGGCATCCAGGCGGGAGAACCAGACCCCCCAGAGGAGCCCCTCACCTCGCAAGCATCCGTGCCCCCCCA
TCAGCTTCGGCTAGGCAGCCTCCATCCTCACACCCCTTATCACATCCGCGTGGCATGCACCAGCAGCCAGGGCCC
CTCATCCTGGACCCACTGGCTTCCTGTGGAGACGCCGGAGGGAGTGCCCCTGGGCCCCCCTGAGAACATTAGTGC
TACGCGGAATGGGAGCCAGGCCTTCGTGCATTGGCAAGAGCCCCGGGCGCCCCTGCAGGGTACCCTGTTAGGGTA
CCGGCTGGCGTATCAAGGCCAGGACACCCCAGAGGTGCTAATGGACATAGGGCTAAGGCAAGAGGTGACCCTGGA
GCTGCAGGGGGACGGGTCTGTGTCCAATCTGACAGTGTGTGTGGCAGCCTACACTGCTGCTGGGGATGGACCCTG
GAGCCTCCCAGTACCCCTGGAGGCCTGGCGCCCAGGGCAAGCACAGCCAGTCCACCAGCTGGTGAAGGAACCTTC
AACTCCTGCCTTCTCGTGGCCCTGGTGGTATGTACTGCTAGGAGCAGTCGTGGCCGCTGCCTGTGTCCTCATCTT
GGCTCTCTTCCTTGTCCACCGGCGAAAGAAGGAGACCCGTTATGGAGAAGTGTTTGAACCAACAGTGGAAAGAGG
TGAACTGGTAGTCAGGTACCGCGTGCGCAAGTCCTACAGTCGTCGGACCACTGAAGCTACCTTGAACAGCCTGGG
CATCAGTGAAGAGCTGAAGGAGAAGCTGCGGGATGTGATGGTGGACCGGCACAAGGTGGCCCTGGGGAAGACTCT
GGGAGAGGGAGAGTTTGGAGCTGTGATGGAAGGCCAGCTCAACCAGGACGACTCCATCCTCAAGGTGGCTGTGAA
GACGATGAAGATTGCCATCTGCACGAGGTCAGAGCTGGAGGATTTCCTGAGTGAAGCGGTCTGCATGAAGGAATT
TGACCATCCCAACGTCATGAGGCTCATCGGTGTCTGTTTCCAGGGTTCTGAACGAGAGAGCTTCCCAGCACCTGT
GGTCATCTTACCTTTCATGAAACATGGAGACCTACACAGCTTCCTCCTCTATTCCCGGCTCGGGGACCAGCCAGT
GTACCTGCCCACTCAGATGCTAGTGAAGTTCATGGCAGACATCGCCAGTGGCATGGAGTATCTGAGTACCAAGAG
ATTCATACACCGGGACCTGGCGGCCAGGAACTGCATGCTGAATGAGAACATGTCCGTGTGTGTGGCGGACTTCGG
GCTCTCCAAGAAGATCTACAATGGGGACTACTACCGCCAGGGACGTATCGCCAAGATGCCAGTCAAGTGGATTGC
CATTGAGAGTCTAGCTGACCGTGTCTACACCAGCAAGAGCGATGTGTGGTCCTTCGGGGTGACAATGTGGGAGAT
TGCCACAAGAGGCCAAACCCCATATCCGGGCGTGGAGAACAGCGAGATTTATGACTATCTGCGCCAGGGAAATCG
CCTGAAGCAGCCTGCGGACTGTCTGGATGGACTGTATGCCTTGATGTCGCGGTGCTGGGAGCTAAATCCCCAGGA
CCGGCCAAGTTTTACAGAGCTGCGGGAAGATTTGGAGAACACACTGAAGGCCTTGCCTCCTGCCCAGGAGCCTGA
CGAAATCCTCTATGTCAACATGGATGAGGGTGGAGGTTATCCTGAACCCCCTGGAGCTGCAGGAGGAGCTGACCC
CCCAACCCAGCCAGACCCTAAGGATTCCTGTAGCTGCCTCACTGCGGCTGAGGTCCATCCTGCTGGACGCTATGT
CCTCTGCCCTTCCACAACCCCTAGCCCCGCTCAGCCTGCTGATAGGGGCTCCCCAGCAGCCCCAGGGCAGGAGGA
TGGTGCCTGAGACAACCCTCCACCTGGTACTCCCTCTCAGGATCCAAGCTAAGCACTGCCACTGGGGAAAACTCC
ACCTTCCCACTTTCCCACCCCACGCCTTATCCCCACTTGCAGCCCTGTCTTCCTACCTATCCCACCTCCATCCCA
GACAGGTCCCTCCCCTTCTCTGTGCAGTAGCATCACCTTGAAAGCAGTAGCATCACCATCTGTAAAAGGAAGGGG
TTGGATTGCAATATCTGAAGCCCTCCCAGGTGTTAACATTCCAAGACTCTAGAGTCCAAGGTTTAAAGAGTCTAG
ATTCAAAGGTTCTAGGTTTCAAAGATGCTGTGAGTCTTTGGTTCTAAGGACCTGAAATTCCAAAGTCTCTAATTC
TATTAAAGTGCTAAGGTTCTAAGGCCTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGCGATAGAGTCTCAC

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FIGURE 3749B

TGTGTCACCCAGGCTGGAGTGCAGTGGTGCAATCTCGCCTCACTGCAACCTTCACCTACCGAGTTCAAGTGATTT
TCCTGCCTTGGCCTCCCAAGTAGCTGGGATTACAGGTGTGTGCCACCACACCCGGCTAATTTTTATATTTTTAGT
AGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTAAAACTCCTGACCTCAAGTGATCTGCCCACCTCAGCCTC
CCAAAGTGCTGAGATTACAGGCATGAGCCACTGCACTCAACCTTAAGACCTACTGTTCTAAAGCTCTGACATTAT
GTGGTTTTAGATTTTCTGGTTCTAACATTTTTGATAAAGCCTCAAGGTTTTAGGTTCTAAAGTTCTAAGATTCTG
ATTTTAGGAGCTAAGGCTCTATGAGTCTAGATGTTTATTCTTCTAGAGTTCAGAGTCCTTAAAATGTAAGATTAT
AGATTCTAAAGATTCTATAGTTCTAGACATGGAGGTTCTAAGGCCTAGGATTCTAAAATGTGATGTTCTAAGGCT
CTGAGAGTCTAGATTCTCTGGCTGTAAGGCTCTAGATCATAAGGCTTCAAAATGTTATCTTCTCAAGTTCTAAGA
TTCTAATGATGATCAATTATAGTTTCTGAGGCTTTATGATAATAGATTCTCTTGTATAAGATCCTAGATCCTAAG
GGTCGAAAGCTCTAGAATCTGCAATTCAAAAGTTCCAAGAGTCTAAAGATGGAGTTTCTAAGGTCCGGTGTTCTA
AGATGTGATATTCTAAGACTTACTCTAAGATCTTAGATTCTCTGTGTCTAAGATTCTAGATCAGATGCTCCAAGA
TTCTAGATGATTAAATAAGATTCTAACGGTCTGTTCTGTTTCAAGGCACTCTAGATTCCATTGGTCCAAGATTCC
GGATCCTAAGCATCTAAGTTATAAGACTCTCACACTCAGTTGTGACTAACTAGACACCAAAGTTCTAATAATTTC
TAATGTTGGACACCTTTAGGTTCTTTGCTGCATTCTGCCTCTCTAGGACCATGGTTAAGAGTCCAAGAATCCACA
TTTCTAAAATCTTATAGTTCTAGGCACTGTAGTTCTAAGACTCAAATGTTCTAAGTTTCTAAGATTCTAAAGGTC
CACAGGTCTAGACTATTAGGTGCAATTTCAAGGTTCTAACCCTATACTGTAGTATTCTTTGGGGTGCCCCTCTCC
TTCTTAGCTATCATTGCTTCCTCCTCCCCAACTGTGGGGGTGTGCCCCCTTCAAGCCTGTGCAATGCATTAGGGA
TGCCTCCTTTCCCGCAGGGGATGGACGATCTCCCACCTTTCGGGCCATGTTGCCCCCGTGAGCCAATCCCTCACC
TTCTGAGTACAGAGTGTGGACTCTGGTGCCTCCAGAGGGGCTCAGGTCACATAAAACTTTGTATATCAACGA

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FIGURE 3750

CGGACGAGGCACGAGTGAGGGGGGAGGCGGTGGCGGCGGCCATTTTGAGCCGCTGCCGCCATTGGAGTGGGCCCC
CCCCCTTTCCCCCTTCGCCTCCTGACAGGAAAGGTTTAAGGGGGACAGAGCCCTGGGAGGCCGGGCCGGGCTCGG
GGGCCACCCCGGGGGCCCGGGCCATGGATGTGCGCCGTCTGAAGGTGAACGAACTTCGCGAGGAGCTGCAGCGCC
GCGGCCTGGACACTCGAGGCCTCAAGGCCGAGCTTGCTGAGCGGCTGCAGGCGGCGTTGGAGGCCGAGGAGCCTG
ACGACGAGCGGGAGCTCGACGCCGACGACGAACCGGGGCGACCCGGGCACATCAACGAGGAGGTCGAGACCGAGG
GGGGCTCCGAGCTGGAGGGGACCGCGCAGCCACCGCCGCCCGGGCTGCAGCCGCACGCGGAGCCCGGCGGCTACT
CGGGGCCGGACGGACATTATGCCATGGACAATATTACCAGGCAGAACCAATTCTACGATACCCAAGTCATCAAAC
AAGAAAACGAGTCAGGCTACGAGAGGAGACCACTGGAAATGGAGCAGCAGCAGGCCTATCGTCCAGAAATGAAGA
CAGAGATGAAGCAAGGAGCACCCACCAGCTTCCTCCCGCCTGAAGCTTCTCAACTCAAGCCAGACAGGCAGCAAT
TCCAGAGTCGAAAGAGGCCTTATGAAGAAAACCGGGGACGGGGGTACTTTGAGCACCGAGAGGATAGGAGGGGCC
GCTCTCCTCAGCCTCCTGCTGAAGAGGATGAAGATGACTTTGATGATACCCTTGTTGCTATTGACACCTATAACT
GCGACCTCCACTTCAAGGTGGCCCGAGATCGGAGTAGTGGCTATCCGCTCACAATTGAGGGCTTTGCATACCTGT
GGTCAGGAGCCCGTGCCAGCTATGGGGTCAGAAGGGGCCGTGTATGCTTCGAGATGAAGATCAATGAGGAAATCT
CCGTGAAGCACCTTCCGTCTACAGAGCCTGACCCCCACGTGGTCCGTATCGGCTGGTCCCTGGACTCCTGCAGCA
CCCAGCTAGGCGAAGAGCCTTTCTCCTATGGCTATGGAGGCACTGGGAAGAAGTCCACCAATAGCCGGTTTGAAA
ACTACGGAGACAAGTTTGCAGAGAACGATGTGATTGGCTGCTTTGCGGATTTTGAATGTGGAAATGACGTGGAAC
TGTCTTTTACCAAGAATGGAAAGTGGATGGGCATTGCTTTCCGAATCCAGAAGGAAGCCTTGGGGGGTCAGGCCC
TCTATCCTCATGTCCTGGTGAAGAATTGCGCAGTGGAGTTCAACTTCGGACAGAGAGCAGAGCCCTACTGTTCTG
TCCTCCCGGGGTTTACCTTCATCCAGCACCTTCCCCTTAGTGAGCGTATCCGGGGCACCGTTGGACCAAAGAGCA
AGGCAGAATGTGAGATTCTGATGATGGTGGGCCTGCCTGCTGCTGGCAAGACCACATGGGCCATCAAACATGCAG
CCTCCAACCCTTCCAAGAAGTACAACATCCTGGGTACCAATGCCATCATGGATAAGATGCGGGTGATGGGCCTAC
GCCGGCAGCGGAACTATGCTGGCCGCTGGGATGTCCTGATCCAGCAGGCCACCCAGTGCCTCAACCGCCTCATCC
AGATTGCTGCCCGCAAGAAACGCAACTATATCCTAGATCAGACAAATGTTTATGGGTCAGCCCAGAGACGAAAAA
TGAGACCATTTGAAGGCTTCCAGCGCAAAGCTATTGTAATTTGTCCCACTGACGAGGACCTAAAAGACCGAACAA
TAAAGCGAACCGACGAGGAAGGGAAGGATGTCCCAGATCATGCGGTCTTAGAAATGAAAGCCAACTTCACGTTGC
CAGATGTTGGGGACTTCCTGGATGAGGTTCTGTTCATTGAGCTGCAGCGGGAGGAAGCGGACAAGCTAGTGAGGC
AGTACAACGAGGAAGGCCGCAAGGCTGGGCCACCCCCTGAAAAGCGCTTTGACAACCGAGGTGGTGGTGGCTTCC
GGGGCCGCGGGGGTGGTGGTGGCTTCCAGCGCTATGAAAACCGAGGACCCCCTGGAGGCAACCGTGGCGGCTTCC
AGAACCGAGGGGGAGGCAGCGGTGGAGGAGGCAACTACCGAGGAGGTTTCAACCGCAGCGGAGGTGGTGGCTATA
GCCAGAACCGCTGGGGTAACAACAACCGGGATAACAACAACTCCAACAACAGAGGCAGCTACAACCGGGCTCCCC
AGCAACAGCCGCCACCACAGCAGCCTCCGCCACCACAGCCACCACCCCAGCAGCCACCGCCACCACCCAGCTACA
GCCCTGCTCGGAACCCCCCAGGGGCCAGCACCTACAATAAGAACAGCAACATCCCTGGCTCAAGCGCCAATACCA
GCACCCCCACCGTCAGCAGCTACAGCCCTCCACAGCCGAGTTACAGCCAGCCACCCTACAACCAGGGAGGTTACA
GCCAGGGCTACACAGCCCCACCGCCTCCACCTCCACCACCACCTGCCTACAACTATGGGAGCTACGGCGGTTACA
ACCCGGCCCCCTATACCCCACCGCCACCCCCCACTGCACAGACCTACCCTCAGCCCAGCTATAACCAGTATCAGC
AGTATGCCCAGCAGTGGAACCAGTACTATCAGAACCAGGGCCAGTGGCCGCCATACTACGGGAACTACGACTACG
GGAGCTACTCCGGGAACACACAGGGTGGCACAAGTACACAGTAGCCAGTGTGACCCAGAGGCTCCCGGAGGCCCC
TGCCGGCTTCCTCCACCAGCGCCTGCCTCGGCCCCTCCTCTGCCCCCGCCAGATCCCGTGGTGCTGGGGATGGGG
TCATCCCAGGGCTGCCTCCCTCCAGCCCACTGCCTCCCCTCTGAGGGGCTTCCTTCCCCTCCATAGGGCCAGGCA
TTTTTTTCTGGATTCAAACAGGCAACAATGACCTTTTATTTTCTGTTTGTCCCCACCTCCCCAGCCTTCCACCTC
CTGTTCTTCCTACCTTCTTCCTTTTTGACTAAATAATCCCCACCTCCCTTGATCATACAGTGAGGCTACAGTGAC
TGAGGGGAGAATCCCCTCCTGTTCACTCTCCCAACCCTGCTCCAGCCCCTCAGCTTCCCAGACCCTCATGCAGTT
GGTTGTAAATTCTCCCAGGAGCTGTTTTACTGTCTACTTTTCAGGATTAAAAAAAAAAATCAAAACTTAAAAAAAA
AAAAGTTTAAAAAGCAAAATGGGGAGGGGGAGGAAGCAGTGACTTTTTTTTGGTAATTATGCGCTTTTTTTTAAT
TTTTAGAATTTGTCTTTTTACTGTGGGTGGGCTGTTGATATTTCATCAAGATAAGCATTTCTTTCCTGAGTTCAG
GTGACTGAGGAAGAGCCACAAAACAAAACACAACAAAACCAAACC

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FIGURE 3751

GCCTGGGCGCAGCGGTGCACCCGGACCCGGAACATTCTCAGGCGAAAGTGTCTCTTGCGTGCGTGGGCCGGAGGT
TAGTGTGCGGGGCCCGCCGGGCGGTTGAAAAGTCCGAGAGAATCAGGATGGAGGCCGTGGCGACGGCGACGGCGG
CGAAGGAACCCGATAAGGGCTGCATAGAGCCTGGACCTGGGCACTGGGGTGAGCTGAGCCGGACACCAGTCCCAT
CTAAACCCCAGGACAAAGTGGAAGCAGCTGAGGCAACACCAGTGGCCCTGGACAGTGACACCTCCGGGGCTGAAA
ATGCAGCAGTGAGTGCTATGCTGCACGCTGTAGCCGCCAGCCGCCTGCCTGTTTGCAGCCAGCAGCAGGGTGAAC
CCGACTTGACAGAGCATGAGAAAGTGGCCATCCTGGCCCAGCTGTACCACGAGAAGCCACTGGTGTTCCTGGAGC
GCTTCCGCACAGGCCTCCGTGAGGAGCATCTGGCCTGCTTTGGCCACGTGCGTGGCGACCACCGTGCAGACTTCT
ACTGTGCTGAGGTGGCCCGGCAGGGCACTGCCCGGCCCCGCACCCTGCGTACCCGCCTGCGTAACCGGCGCTATG
CTGCCCTGCGAGAGCTGATCCAAGGGGGCGAGTACTTCAGTGATGAGCAGATGCGGTTCCGGGCCCCCCTGCTAT
ATGAGCAGTACATCGGGCAGTATCTCACCCAGGAGGAGCTCAGTGCCCGCACCCCAACCCACCAGCCCCCCAAGC
CCGGGTCCCCCGGGAGACCTGCTTGCCCGCTCTCCAACTTGCTGCTCCAGTCCTACGAGGAGCGGGAGCTACAGC
AGCGTCTGCTCCAACAGCAGGAGGAGGAGGAGGCCTGCTTGGAGGAAGAGGAAGAGGAGGAGGACAGTGACGAGG
AAGACCAGAGGTCAGGCAAGGACTCGGAGGCCTGGGTTCCCGACTCGGAGGAGAGGCTGATCCTGCGAGAGGAGT
TCACCAGCCGCATGCACCAGCGCTTCCTAGATGGCAAGGACGGGGACTTTGACTACAGCACAGTAGACGACAACC
CCGACTTCGACAACCTCGACATCGTGGCACGGGATGAGGAGGAGAGGTACTTTGATGAGGAAGAACCTGAGGATG
CGCCCAGCCCAGAGCTGGATGGGGACTGATGGCCGCCACCCTTCCCACCGCCTGCCCCATCCCCATCCCCAACAA
GGCAGCTGATTCCAGGCCTGCTCAGTGACCCTTTCTCTAGGGGGACATCAGGGCAGTGCCCCACAACCCACACAC
ACCACCATCTCACTGGGTCTAGTCTCATCTCAGACAACCCCCACCCCCACTGTTTCTGGGGTTCCCTTTCTCATC
TCTCCCACCCTGTCTCCTGCCTCTGTCTTTCTTGGTGTCTGTCTGGGCTTCTTTCTGTCTCTTTCTGTCTTTCTG
TCTCTCTCCCTACCCCCGCTCCCTCTTTCCAGTGCTCTGGCTGGCTGTCTCTCCCTTTCTCCCCCTCTCTCTCTG
CCTTAGGCTCTGTCTCCACCGCAGGGCCCAAGGTGAAAGTCCTCCCCTTGCCGGAGGCCAGCTGGCAGGGCCTTT
CGTGGCTGGAAGTGGCCAGTTTGGTTCCGGTGCTGACCCCTAGGCCCCAGCGCAGCTGCCTCCCGTGCTGTCTGT
CTCCCCCTCTCTGTTTATGTCTGCGCTGTGTCTCACACTCAGAGCCTCCTTGCTTCTGTTAGGTTCCCATCTCTC
CTTCTGCCTCACTCTGGGCCTCTTCTTTCTACTTGTACATTTCCACCTCTCTAGGCCTCTGCTCTCACTGTCCCT
CTCTGTCTGTCTCTCAGCCTTTATCTCTGGGTTTTGATCCCCCACTCCAGGCTCTGGGCCCCTTCTTCCCCCTTC
CCTCAAACCTGGCTGCTATAGGCAGCAGAACCCTGACCACTGAGTAATACAGCCCCAGGGGAGGGAGGAGACCCC
AGGCAGGGAGGATGGGGGCAGCTCTCTTCTCTCCCCAGGACCCAGGCTGTGGATCACGGGGCCTGCCAGCTTGAG
TGTAGAGGGAGGGGGGACTCTACCCTTCTCAGCCCCACCAGCCCCCCTCTGCCCAACCACAATTTTCCCTTCCTC
CGCCTTCCTCTCCCTCTCCTGTTTACACTCCCCAAATGCGCACAGGCTGTTATCATGGGTCCTGAGTCATCCCAC
ACACAGCCTGCCCCAGCGTCCCTGCCCCCAGCTGGCCGCAGGGCCCGCCCCATGGAGCCCCCTGCCGCCCTGGGC
TAATGGGAGCCAGATGGCCGCCTGGTGACTCAGCCACCGGGCCTGTGGGAACCCAGGCGTCCCGCCTTCCCATGC
CCCCACACCCGGCTCCTGCTCCCCCAGCAGACACACACAGGAGGGCCTGGCCACTGTTGAGGGGGCACACAGGGC
AAGGGTCACCAAGTCGGGGCCTAGGGACTCCTCATGCCTCTGAGATGGAATGGTGGTATCCTGCCGTGGCCAAGC
CTGAAGGACCCTCAAAACTGCCTCCTGGAGTCCACGGTTCCTGACCTCCGAGCCTCAGCTATGCCCTCTGGGTCA
ACCAGAATTAGAGCCAGACAGGGAAAGTGAGAGCTGGATGGAGGCAGACAAGATGCTCAGAGCGACTATTAAAGA
ACGAAAGCCTCTGCTACGGAGCGCTTCTGTCCTCTGTCAGGCCCGAGCGAAGTGCCTGACACCGGGTTGGATCCT
CAGATGGCCCCATGAACTAGTGAAGTGGGTCAAAGGAGGCCTGGAAAGATGTTGCTTCCTCAAGGCCACTCGGCC
ATCAGAGGCAGAAATGAAACAGGAACCCAGGCCTAGAATCACAAAGGTCCTAGAAACCACTTGGCTGTCTGGCCT
CTCAGGTGTCAGGGCCATCCAGAGTGAGACAGCATTGGAGGGACAAGTGTGCATGCAGATGTCCTCAGACGGGAA
GGTTTGAGAAGGGTCAGATGGTAGGCGGGCCTAACAAGGGCTCCGTGCTAGCCACTGTCCCGCACACAGACAGGA
TCAGGTCATCTTGATATGGAGATCAGTCCCCAAATCACTGAATTGTCCCAGCAGTGCTATGCCCTAGGTACTACC
AATATCACTCCTCTATTTCCCAGAGGAGGAAGCAGCAGCTAGACTCCAGGACCTTGGGGTCATATCTCTCAGAAA
GCCAAGAGTGCAGGATGAGAGCTGTCTGTCTCTTACCTGCCTGTATTTGTGCCCCATTTTTAAAGAGCAGAGGGC
CTGGGCCACAGGAAAGGTATCAGCCCTTGGTGATAGGCACATTTTTTACCAGTCTATCATTTGGTCATTAAATTT
GTTTACAATATACTTTGCTAT

FIGURE 3752

ACCTCCCTCCGCGGAGCAGCCAGACAGCGAGGGCCCCGGCCGGGGGCAGGGGGGACGCCCCGTCCGGGGCACCCC
CCCGGCTCTGAGCCGCCCGCGGGGCCGGCCTCGGCCCGGAGCGGAGGAAGGAGTCGCCGAGGAGCAGCCTGAGGC
CCCAGAGTCTGAGACGAGCCGCCGCCGCCCCCGCCACTGCGGGGAGGAGGGGGAGGAGGAGCGGGAGGAGGGACG
AGCTGGTCGGGAGAAGAGGAAAAAAACTTTTGAGACTTTTCCGTTGCCGCTGGGAGCCGGAGGCGCGGGGACCTC
TTGGCGCGACGCTGCCCCGCGAGGAGGCAGGACTTGGGGACCCCAGACCGCCTCCCTTTGCCGCCGGGGACGCTT
GCTCCCTCCCTGCCCCCTACACGGCGTCCCTCAGGCGCCCCCATTCCGGACCAGCCCTCGGGAGTCGCCGACCCG
GCCTCCCGCAAAGACTTTTCCCCAGACCTCGGGCGCACCCCCTGCACGCCGCCTTCATCCCCGGCCTGTCTCCTG
AGCCCCCGCGCATCCTAGACCCTTTCTCCTCCAGGAGACGGATCTCTCTCCGACCTGCCACAGATCCCCTATTCA
AGACCACCCACCTTCTGGTACCAGATCGCGCCCATCTAGGTTATTTCCGTGGGATACTGAGACACCCCCGGTCCA
AGCCTCCCCTCCACCACTGCGCCCTTCTCCCTGAGGACCTCAGCTTTCCCTCGAGGCCCTCCTACCTTTTGCCGG
GAGACCCCCAGCCCCTGCAGGGGCGGGGCCTCCCCACCACACCAGCCCTGTTCGCGCTCTCGGCAGTGCCGGGGG
GCGCCGCCTCCCCC**ATG**CCGCCCTCCGGGCTGCGGCTGCTGCCGCTGCTGCTACCGCTGCTGTGGCTACTGGTGC
TGACGCCTGGCCGGCCGGCCGCGGGACTATCCACCTGCAAGACTATCGACATGGAGCTGGTGAAGCGGAAGCGCA
TCGAGGCCATCCGCGGCCAGATCCTGTCCAAGCTGCGGCTCGCCAGCCCCCCGAGCCAGGGGGAGGTGCCGCCCG
GCCCGCTGCCCGAGGCCGTGCTCGCCCTGTACAACAGCACCCGCGACCGGGTGGCCGGGGAGAGTGCAGAACCGG
AGCCCGAGCCTGAGGCCGACTACTACGCCAAGGAGGTCACCCGCGTGCTAATGGTGGAAACCCACAACGAAATCT
ATGACAAGTTCAAGCAGAGTACACACAGCATATATATGTTCTTCAACACATCAGAGCTCCGAGAAGCGGTACCTG
AACCCGTGTTGCTCTCCCGGGCAGAGCTGCGTCTGCTGAGGCTCAAGTTAAAAGTGGAGCAGCACGTGGAGCTGT
ACCAGAAATACAGCAACAATTCCTGGCGATACCTCAGCAACCGGCTGCTGGCACCCAGCGACTCGCCAGAGTGGT
TATCTTTTGATGTCACCGGAGTTGTGCGGCAGTGGTTGAGCCGTGGAGGGGAAATTGAGGGCTTTCGCCTTAGCG
CCCACTGCTCCTGTGACAGCAGGGATAACACACTGCAAGTGGACATCAACGGGTTCACTACCGGCCGCCGAGGTG
ACCTGGCCACCATTCATGGCATGAACCGGCCTTTCCTGCTTCTCATGGCCACCCCGCTGGAGAGGGCCCAGCATC
TGCAAAGCTCCCGGCACCGCCGAGCCCTGGACACCAACTATTGCTTCAGCTCCACGGAGAAGAACTGCTGCGTGC
GGCAGCTGTACATTGACTTCCGCAAGGACCTCGGCTGGAAGTGGATCCACGAGCCCAAGGGCTACCATGCCAACT
TCTGCCTCGGGCCCTGCCCCTACATTTGGAGCCTGGACACGCAGTACAGCAAGGTCCTGGCCCTGTACAACCAGC
ATAACCCGGGCGCCTCGGCGGCGCCGTGCTGCGTGCCGCAGGCGCTGGAGCCGCTGCCCATCGTGTACTACGTGG
GCCGCAAGCCCAAGGTGGAGCAGCTGTCCAACATGATCGTGCGCTCCTGCAAGTGCAGC**TGA**GGTCCCGCCCCGC
CCCGCCCCGCCCCGGCAGGCCCGGCCCCACCCCGCCCCGCCCCCGCTGCCTTGCCCATGGGGGCTGTATTTAAGG
ACACCCGTGCCCCAAGCCCACCTGGGGCCCCATTAAAGATGGAGAGAGGACTGCGGATCTCTGTGTCATTGGGCG
CCTGCCTGGGGTCTCCATCCCTGACGTTCCCCCACTCCCACTCCCTCTCTCTCCCTCTCTGCCTCCTCCTGCCTG
TCTGCACTATTCCTTTGCCCGGCATCAAGGCACAGGGGACCAGTGGGGAACACTACTGTAGTTAGATCTATTTAT
TGAGCACCTTGGGCACTGTTGAAGTGCCTTACATTAATGAACTCATTCAGTCACCATAGCAACACTCTGAGATGC
AGGGACTCTGATAACACCCATTTTAAAGGTGAGGAAACAAGCCCAGAGAGGTTAAGGGAGGAGTTCCTGCCCACC
AGGAACCTGCTTTAGTGGGGGATAGTGAAGAAGACAATAAAAGATAGTAGTTCAGGCCAGGCGGGGTGGCTCACG
CCTGTAATCCTAGCACTTTTGGGAGGCAGAGATGGGAGGATTACTTGAATCCAGGCATTTGAGACCAGCCTGGGT
AACATAGTGAGACCCTATCTCTACAAAACACTTTTAAAAAATGTACACCTGTGGTCCCAGCTACTCTGGAGGCTA
AGGTGGGAGGATCACTTGATCCTGGGAGGTCAAGGCTGCAG

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FIGURE 3753

CCTCCCACCTCCCTCCGCGGAGCAGCCAGACAGCGAGGGCCCCGGCCGGGGGCAGGGGGGACGCCCCGTCCGGGG
CACCCCCCCCGGCTCTGAGCCGCCCGCGGGGCCGGCCTCGGCCCGGAGCGGAGGAAGGAGTCGCCGAGGAGGGACG
AGCTGGTCGGGAGAAGAGGAAAAAAACTTTTGAGACTTTTCCGTTGCCGCTGGGAGCCGGAGGCGCGGGGACCTC
TTGGCGCGACGCTGCCCCGCGAGGAGGCAGGACTTGGGGACCCCAGACCGCCTCCCTTTGCCGCCGGGGACGCTT
GCTCCCTCCCTGCCCCCTACACGGCGTCCCTCAGGCGCCCCCATTCCGGACCAGCCCTCGGGAGTCGCCGACCCG
GCCTCCCGCAAAGACTTTTCCCCAGACCTCGGGCGCACCCCCTGCACGCCGCCTTCATCCCCGGCCTGTCTCCTG
AGCCCCCGCGCATCCTAGACCCTTTCTCCTCCAGGAGACGGATCTCTCTCCGACCTGCCACAGATCCCCTATTCA
AGACCACCCACCTTCTGGTACCAGATCGCGCCCATCTAGGTTATTTCCGTGGGATACTGAGACACCCCCGGTCCA
AGCCTCCCCTCCACCACTGCGCCCTTCTCCCTGAGGACCTCAGCTTTCCCTCGAGGCCCTCCTACCTTTTGCCGG
GAGACCCCCAGCCCCTGCAGGATGTCCCACCTCCCTCCGCGGAGCAGCCAGACAGCGAGGGCCCCGGCCGGGGGC
AGGGGGGACGCCCCGTCCGGGGCACCCCCCCGGCTCTGAGCCGCCCGCGGGGCCGGCCTCGGCCCGGAGCGGAGG
AAGGAGTCGCCGAGGAGGGACGAGCTGGTCGGGAGAAGAGGAAAAAAACTTTTGAGACTTTTCCGTTGCCGCTGG
GAGCCGGAGGCGCGGGGACCTCTTGGCGCGACGCTGCCCCGCGAGGAGGCAGGACTTGGGGACCCCAGACCGCCT
CCCTTTGCCGCCGGGGACGCTTGCTCCCTCCCTGCCCCCTACACGGCGTCCCTCAGGCGCCCCCATTCCGGACCA
GCCCTCGGGAGTCGCCGACCCGGCCTCCCGCAAAGACTTTTCCCCAGACCTCGGGCGCACCCCCTGCACGCCGCC
TTCATCCCCGGCCTGTCTCCTGAGCCCCCGCGCATCCTAGACCCTTTCTCCTCCAGGAGACGGATCTCTCTCCGA
CCTGCCACAGATCCCCTATTCAAGACCACCCACCTTCTGGTACCAGATCGCGCCCATCTAGGTTATTTCCGTGGG
ATACTGAGACACCCCCGGTCCAAGCCTCCCCTCCACCACTGCGCCCTTCTCCCTGAGGACCTCAGCTTTCCCTCG
AGGCCCTCCTACCTTTTGCCGGGAGACCCCCAGCCCCTGCAGGG

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FIGURE 3754

CAGCCGCACGTGGGCTCGGCGCGATGGAGGAGGAGACGCATACTGACGCCAAAATCCGTGCTGAAAATGGAACAG
GGTCCAGCCCTCGGGGTCCTGGCTGCAGCCTCCGGCACTTTGCCTGCGAACAGAACCTGCTGTCGCGGCCAGATG
GCTCTGCTTCCTTCCTGCAAGGTGACACCTCTGTCCTGGCGGGTGTGTACGGGCCGGCCGAGGTGAAGGTCAGCA
AAGAGATTTTCAACAAGGCCACACTCGAAGTGATCCTGAGGCCGAAGATTGGGCTGCCTGGTGTTGCAGAGAAGA
GCCGGGAGCGGCTGATCAGGAACACGTGCGAGGCGGTGGTGCTGGGCACGTTGCACCCCCGCACCTCCATCACCG
TGGTGCTGCAGGTTGTCAGCGATGCCGGCTCTCTCCTGGCCTGTTGTCTGAATGCCGCCTGCATGGCATTGGTGG
ATGCAGGTGTGCCCATGCGGGCTCTCTTCTGTGGGGTCGCCTGCGCCCTGGACTCTGATGGGACCCTCGTGCTGG
ATCCTACATCCAAGCAAGAAAAGGAGGCCCGGGCAGTCCTGACCTTTGCCCTGGACAGCGTGGAACGGAAGCTGC
TGATGTCCAGCACCAAGGGGCTCTACTCAGACACTGAGCTCCAGCAGTGCCTGGCTGCGGCCCAGGCCGCTTCGC
AACACGTCTTCCGTTTCTACCGGGAATCGCTGCAGAGGCGTTACTCCAAGAGCTGAGGCAAGCTGGGGCAAGGGG
CCGCTCCCATTGCCTCCACCCACTCACCCCCTACAGCCTGAAGCAAACCAGCAGCCCAGCCTTGCCTCTCTGACC
CATGGGCTCCTTGAGCCTGCAGCTCTGTAACCACAGGGCTCCTGTGGGGAGGCCTTGGCCTGTGACAGCCCCCAG
GCCTGGGGGCACAGATCCCCCCAGCAAGGATAACATTCAAAGGAGCTCACATTTATGGAATGGATGAATCAATAA
ATTAATTCACTTT

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FIGURE 3755

AGCAAGATGGCGGCTCCCTGGGCGTCCCTGCGCCTGGTCGCCCCCATGTGGAATGGGCGTATCAGGGGCATCCAT
CGCCTGGGTGCGGCAGTGGCCCCAGAGGGCAATCAGAAGAAGAAAAGGACAATACTCCAGTTCCTGACCAACTAT
TTCTACGATGTGGAGGCTCTGAGGGATTACTTGCTCCAAAGGGAGATGTACAAGGTGCATGAGAAAAATCGATCT
TACACCTGGCTGGAGAAGCAACATGGTCCATACGGCGCAGGTGCCTTTTTCATCCTGAAGCAGGGAGGCGCAGTC
AAGTTTCGAGACAAGGAGTGGATCAGGCCAGATAAGTATGGCCATTTCTCTCAGGAGTTCTGGAATTTCTGTGAA
GTGCCTGTCGAAGCTGTGGATGCCGGTGACTGTGACATCAACTACGAGGGCCTGGATAACCTCCTCCGCCTGAAG
GAGCTCCAGTCCTTGTCGCTGCAGCGCTGCTGCCACGTGGACGACTGGTGTCTCAGCCGCCTCTACCCACTGGCC
GACTCGTTGCAGGAGCTCTCGCTGGCCGGTTGCCCCCGCATCTCCGAACGGGGCCTCGCCTGCCTCCACCACCTC
CAGAACCTCCGCAGGCTGGACATCTCGGACCTCCCTGCCGTGTCCAACCCTGGCCTCACTCAGATATTGGTGGAG
GAGATGCTGCCCAATTGCGAGGTTGTGGGAGTCGACTGGGCTGAGGGCCTGAAGTCAGGGCCGGAGGAGCAGCCT
CGGGACACAGCCAGCCCTGTCCCTGCCTAGCCTTTAGCCCTGTCCCCACTCACGTGGCTTCTCAGCGGGCTGCAT
GGAATGTCTGGTAGCTCACCACACTTCTGGCTTCCATTTGTCTTCACTCAACGTCAGGGTGGGGGAGTGGTGCTG
GCCAATCACAGGAGAGAGCGTGAGTTCCCAGTATTTATTCCTGGCTGCCCTTGGCTAAAGGTCACAGCTCCTGTC
ACCCTGTCAGGCAGCCCTTTCCATGCCCCTGTTCAGGCCTGGGGAGGTAAAGGCTCAGGCTGTTAGTAGCCGCAG
AGAGCCACACTCACCTTGTCAGGAGACTCTTCTCAAACTGTCCTTATGTGAGTGCACTGCCATTTCTTGCAGGGA
CCCTGACTGACACAGGGGCTACTACTGACACTTTACAGGGATGGTTCTCCCCCGTGCAGGGCCGCTGTGCCCACT
GCAGGACATGCAGCATCCTTCGCCCCACTCCACTCACTAAAGGCCAGCGCACCCCAGGCCCCATAGTATTGCTGG
TTATGGATTTATTGACTTTATGTTCCAAATTCAGCTTTTTCAGTTGGCTGTTTTTTGAAAGGGGATAAGCTTTGT
CAGTAGAGGGCACCAAACAGGCATTATAGGAGGAAAGGCGCCTCCTTCGTGGTTCTTGTTGGTTGTGCTTCTGCC
TCTGGACGCCGCAGTGCATGTGGCTTCCCCAGCACCCAGCTCCTGAAGCACCAGGCGGTCAGCAGCTGCCCTTGG
CACCCTCCAGCCCTCAGAAGTTGCGTAGGAGACACAGCGCCTCCACTGAGGCACCTCTCTGGGAATAACGTTCCC
CAGCACCCCAAATGGATTTCCAGTCAATTCAGAAGCATTTTACCAGTGAAGCCCTCATTATTCCAGTTCACTGTT
AAAGCCAGTAATTCTCTATATTAAACTTTCCCTGTTCAAGTT

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FIGURE 3756

GGAGGCTGCAACGCCGATCGGAGGAGGCAGGAACCGGAGCTCTAGCAGTAGCTGGGTGGGCACCATGGCTGGGAT
CACCACCATCGAGGCGGTGAAGCGCAAGATCCAGGTTCTGCAGCAGCAGGCAGATGATGCAGAGGAGCGAGCTGA
GCGCCTCCAGCGAGAAGTTGAGGGAGAAAGGTGGGCCCGGGAACAGGCTGAGGCTGAGGTGGCCTCCTTGAACGT
GGGATCCAGCTGGTTGAAGAGGAGCTGGACCGTGCTCAGGAGCACCTGGCTACTGCCCTGCAAAAGCTGGAAGAA
GCGGAAAAAAGCTGCTGATGAGAGTGAGAGAGGTAAGAAGGTTATTGAAAACCGGGCCTTAAAAGATGAAGAAAAG
ATGGAACTCCAGGAAATCCAACTCAGAGAAGCTAAGCACATTGCAGAAGAGGCAGATAGGAAGTATGAAGAGGTG
GCTCGTAAGTTGGTGATCATTGAAGGAGACTTGGAACGCACAGAGGAACGAGCTGAGCTGGCAGAATCCCTACTC
TCAAAAAGAAGACAAATATGAGGAAGAGATCAAGATTCTTACTGATAAAATAAAGGAGGCGGAGACCCATGCTGA
GTTTGCTGAGAGATCGGTAGCCAAGCTGGAAAAGACAATTGATGACTTGGAAGATAAACTGAAATGCACCAAAGG
GGAGCACCTCTGTACACAAAGGATGCTGGACCAGACTCTTTCTCCTTTCGCCGCCCCCTCCTTCCGCCGCCCGCT
CCTTCCCTGTATCTTTTAAAGTTTCTTTCCCTACCCTGTCCCCATTTTCTGGTAAGGTTTCTAGGAGGTCTGTTA
GGTGTACATCCTACAGCTTATTGGCTTAATATGTACTCTCCTTTGATGTGGTCTACTTGGGGCCGATTGGGAGAA
AGAGAAATCAATAGTGCAACTGTTTTGATAATGAATATTGACAAGTGTCTTTTTGAAATAAAGAACCAGTCC

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FIGURE 3757

CCATGGGGTCCCCTTCAGCCTGTCCATACAGAGTGTGCATTCCCTGGCAGGGGCTCCTGCTCACAGCCTCGCTTT
TAACCTTCTGGAACCTGCCAAACAGTGCCCAGACCAATATTGATGTCGTGCCGTTCAATGTCGCAGAAGGGAAGG
AGGTCCTTCTAGTAGTCCATAATGAGTCCCAGAATCTTTATGGCTACAACTGGTACAAAGGGGAAAGGGTGCATG
CCAACTATCGAATTATAGGATATGTAAAAAATATAAGTCAAGAAAATGCCCCAGGGCCCGCACACAACGGTCGAG
AGACAATATACCCCAATGGAACCCTGCTGATCCAGAACGTCACCCACAATGACGCAGGATTCTATACCCTACACG
TTATAAAAGAAAATCTTGTGAATGAAGAAGTAACCAGACAATTCTACGTATTCTCGGAGCCACCCAAGCCCTCCA
TCACCAGCAACAACTTCAATCCGGTGGAGAACAAAGATATTGTGGTTTTAACCTGTCAACCTGAGACTCAGAACA
CAACCTACCTGTGGTGGGTAAACAATCAGAGCCTCCTGGTCAGTCCCAGGCTGCTGCTCTCCACTGACAACAGGA
CCCTCGTTCTACTCAGCGCCACAAAGAATGACATAGGACCCTATGAATGTGAAATACAGAACCCAGTGGGTGCCA
GCCGCAGTGACCCAGTCACCCTGAATGTCCGCTATGAGTCAGTACAAGCAAGTTCACCTGACCTCTCAGCTGGGA
CCGCTGTCAGCATCATGATTGGAGTACTGGCTGGGATGGCTCTGATATAGCAGCCTTGGTGTAGTTTCTGCATTT
CGGGAAGAGTGTTTTTATTATCCACCTGCAGACTGGACTGGATTCTTCTAGCTCCTTCAATCCCATTTTCTCCTG
TGGCATCACTAAGTATAAGACCTGCTCTCTTCCTGAAGACCTATAAGCTGGAGGTGGACAACTCAATGTAAATTT
CAAGGAAAAACCCTCATGCCTGAGATGTGGGCCACTCAGAGCTAACCAAAATGTTCAACACCATAACTAGAGACA
CTCAAATTGCCAACCAGGACAAGAAGTTGATGACTTCATGCTGTGGACAGTTTTTCCCAAGATGTCCCAAGCCTC
ATCGTGACGAGGCTCTTATCCCACTCCATTTTTCCCTGCTCATGCCTGCCTCTTTAATTTGGTAAGATAATGCTG
TAACTAGAATTTCACAATCAGCGCCTTGTGCAGGTAATTTGACAGAGTGTTGGATGTGTCATGTCATCATGTCAA
ACCCAAATATTTGACCTAAGGGATCCTTTATTCTGCCCAGTGGCTAACTTTAACAACATCCCTAATACAACTGTT
TATTCAAATGCACGGTGGTCCCTGTTAGAGTTAGACCTCTAGACTCACCTGTTCTCACGCCCTGTTTTAATTTAA
CCCAGCTATGGGATGCCAGATAACAGAATTGCTGCCTACTAGCTGAACAGGGAGGAGTTTGTGCAGTTGCTGACA
CTTCTTGTTGCACATAAATAAATACAGTGGGTACTATAGAGACTCAGTTGCAAAAATTAACAAATATGCTGCTTG
ATTAAAATGGGTAGGCTTCTCATGTGGCTCATTCTTTAATCTATTCTCTTTTATTTGGTTTGGTTCATGGGGTCT
CTGCCTATGGATCATACTTCAAACTCTTGGTGTGATCCTCCTGATTGTCACAATATTAGTTACCCTGGTGTGCTG
TATTCTCTAAAACCTTTAAATGTTTGCATGCAGCCATTCGTCAAATGTCAAATATTCTCTCTTTGGCTGGAATGA
CAAAAACTCAAATAAATGTATGATTAGGAGGACATCATAACCTATGAATGATGGAAGTCCAAAATGATGGTAACT
GACAGTAGTGTTAATGCCTTATGTTTAGTCAAACTCTCATTTAGGTGACAGCCTGGTGACTCCAGAATGGAGCCA
GTCATGCTAAATGCCATATACTCACACTGAAACATGAGGAAGCAGGTAGATCCCAGAACAGACAAAATTTTCCTA
AAAACATGAGAGTCCAGGCTGTCTGAGTCAGCACAGTAAGAAAGTCCTTTCTGCTTTAACTCTTAGAAAAAAGTA
ATATGAAGTATTCTGAAATTAACCAATCAGTTTATTTAAATCAATTTATTTATATTCTTCTGTTCCTGGATTCCC
ATTTTACAAAACCCACTGTTCTACTGTTGTATTGCCCAGTAGGAGCTATCACTATATTTTGCAGAATGGAAACTG
CCCTGACTCATGAATCACAAATAAAAGCCAATTGTATCT

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FIGURE 3758

CTCAGGGCAGAGGGAGGAAGGACAGCAGACCAGACAGTCACAGCAGCCTTGACAAAACGTTCCTGGAACTCAAGC
TCTTCTCCACAGAGGAGGACAGAGCAGACAGCAGAGACCATGGAGTCTCCCTCGGCCCCTCCCCACAGATGGTGC
ATCCCCTGGCAGAGGCTCCTGCTCACAGCCTCACTTCTAACCTTCTGGAACCCGCCCACCACTGCCAAGCTCACT
ATTGAATCCACGCCGTTCAATGTCGCAGAGGGGAAGGAGGTGCTTCTACTTGTCCACAATCTGCCCCAGCATCTT
TTTGGCTACAGCTGGTACAAAGGTGAAAGAGTGGATGGCAACCGTCAAATTATAGGATATGTAATAGGAACTCAA
CAAGCTACCCCAGGGCCCGCATACAGTGGTCGAGAGATAATATACCCCAATGCATCCCTGCTGATCCAGAACATC
ATCCAGAATGACACAGGATTCTACACCCTACACGTCATAAAGTCAGATCTTGTGAATGAAGAAGCAACTGGCCAG
TTCCGGGTATACCCGGAGCTGCCCAAGCCCTCCATCTCCAGCAACAACTCCAAACCCGTGGAGGACAAGGATGCT
GTGGCCTTCACCTGTGAACCTGAGACTCAGGACGCAACCTACCTGTGGTGGGTAAACAATCAGAGCCTCCCGGTC
AGTCCCAGGCTGCAGCTGTCCAATGGCAACAGGACCCTCACTCTATTCAATGTCACAAGAAATGACACAGCAAGC
TACAAATGTGAAACCCAGAACCCAGTGAGTGCCAGGCGCAGTGATTCAGTCATCCTGAATGTCCTCTATGGCCCG
GATGCCCCCACCATTTCCCCTCTAAACACATCTTACAGATCAGGGGAAAATCTGAACCTCTCCTGCCACGCAGCC
TCTAACCCACCTGCACAGTACTCTTGGTTTGTCAATGGGACTTTCCAGCAATCCACCCAAGAGCTCTTTATCCCC
AACATCACTGTGAATAATAGTGGATCCTATACGTGCCAAGCCCATAACTCAGACACTGGCCTCAATAGGACCACA
GTCACGACGATCACAGTCTATGCAGAGCCACCCAAACCCTTCATCACCAGCAACAACTCCAACCCCGTGGAGGAT
GAGGATGCTGTAGCCTTAACCTGTGAACCTGAGATTCAGAACACAACCTACCTGTGGTGGGTAAATAATCAGAGC
CTCCCGGTCAGTCCCAGGCTGCAGCTGTCCAATGACAACAGGACCCTCACTCTACTCAGTGTCACAAGGAATGAT
GTAGGACCCTATGAGTGTGGAATCCAGAACAAATTAAGTGTTGACCACAGCGACCCAGTCATCCTGAATGTCCTC
TATGGCCCAGACGACCCCACCATTTCCCCCTCATACACCTATTACCGTCCAGGGGTGAACCTCAGCCTCTCCTGC
CATGCAGCCTCTAACCCACCTGCACAGTATTCTTGGCTGATTGATGGGAACATCCAGCAACACACACAAGAGCTC
TTTATCTCCAACATCACTGAGAAGAACAGCGGACTCTATACCTGCCAGGCCAATAACTCAGCCAGTGGCCACAGC
AGGACTACAGTCAAGACAATCACAGTCTCTGCGGAGCTGCCCAAGCCCTCCATCTCCAGCAACAACTCCAAACCC
GTGGAGGACAAGGATGCTGTGGCCTTCACCTGTGAACCTGAGGCTCAGAACACAACCTACCTGTGGTGGGTAAAT
GGTCAGAGCCTCCCAGTCAGTCCCAGGCTGCAGCTGTCCAATGGCAACAGGACCCTCACTCTATTCAATGTCACA
AGAAATGACGCAAGAGCCTATGTATGTGGAATCCAGAACTCAGTGAGTGCAAACCGCAGTGACCCAGTCACCCTG
GATGTCCTCTATGGGCCGGACACCCCCATCATTTCCCCCCCAGACTCGTCTTACCTTTCGGGAGCGAACCTCAAC
CTCTCCTGCCACTCGGCCTCTAACCCATCCCCGCAGTATTCTTGGCGTATCAATGGGATACCGCAGCAACACACA
CAAGTTCTCTTTATCGCCAAAATCACGCCAAATAATAACGGGACCTATGCCTGTTTTGTCTCTAACTTGGCTACT
GGCCGCAATAATTCCATAGTCAAGAGCATCACAGTCTCTGCATCTGGAACTTCTCCTGGTCTCTCAGCTGGGGCC
ACTGTCGGCATCATGATTGGAGTGCTGGTTGGGGTTGCTCTGATATAGCAGCCCTGGTGTAGTTTCTTCATTTCA
GGAAGACTG

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FIGURE 3759

ACAGCAGGGCCAACAGTCACAGCAGCCCTGACCAGAGCATTCCTGGAGCTCAAGCTCCTCTACAAAGAGGTGGAC
AGAGAAGACAGCAGAGACCATGGGACCCCCCTCAGCCCCTCCCTGCAGATTGCATGTCCCCTGGAAGGAGGTCCT
GCTCACAGCCTCACTTCTAACCTTCTGGAACCCACCCACCACTGCCAAGCTCACTATTGAATCCACGCCGTTCAA
TGTCGCAGAGGGGAAGGAGGTTCTTCTACTCGCCCACAACCTGCCCCAGAATCGTATTGGTTACAGCTGGTACAA
AGGCGAAAGAGTGGATGGCAACAGTCTAATTGTAGGATATGTAATAGGAACTCAACAAGCTACCCCAGGGCCCGC
ATACAGTGGTCGAGAGACAATATACCCCAATGCATCCCTGCTGATCCAGAACGTCACCCAGAATGACACAGGATT
CTATACCCTACAAGTCATAAAGTCAGATCTTGTGAATGAAGAAGCAACCGGACAGTTCCATGTATACCCGGAGCT
GCCCAAGCCCTCCATCTCCAGCAACAACTCCAACCCCGTGGAGGACAAGGATGCTGTGGCCTTCACCTGTGAACC
TGAGGTTCAGAACACAACCTACCTGTGGTGGGTAAATGGTCAGAGCCTCCCGGTCAGTCCCAGGCTGCAGCTGTC
CAATGGCAACATGACCCTCACTCTACTCAGCGTCAAAAGGAACGATGCAGGATCCTATGAATGTGAAATACAGAA
CCCAGCGAGTGCCAACCGCAGTGACCCAGTCACCCTGAATGTCCTCTATGGCCCAGATGGCCCCACCATTTCCCC
CTCAAAGGCCAATTACCGTCCAGGGGAAAATCTGAACCTCTCCTGCCACGCAGCCTCTAACCCACCTGCACAGTA
CTCTTGGTTTATCAATGGGACGTTCCAGCAATCCACACAAGAGCTCTTTATCCCCAACATCACTGTGAATAATAG
CGGATCCTATATGTGCCAAGCCCATAACTCAGCCACTGGCCTCAATAGGACCACAGTCACGATGATCACAGTCTC
TGGAAGTGCTCCTGTCCTCTCAGCTGTGGCCACCGTCGGCATCACGATTGGAGTGCTGGCCAGGGTGGCTCTGAT
ATAGCAGCCCTGGTGTATTTTCGATATTTCAGGAAGACTGGCAGATTGGACCAGACCCTGAATTC

FIGURE 3760

ATGTCTAAGTCAGAGTGTCCCGAAGAGCCTGAACAGCTGAGGAAGCTCTTCATTGGAGGATTGAGCTTTGAAACA
ACTGATAAGAGCCTGAGAAGCCATTTTGAGCAATGGAGAATGCTCACGGACTGTGTGGTGGATAGAAGAGTTGTG
GAACCAAAGAGAGCTGTCTCAAGAGAAGATTCTCAAAGACCAGAACATCACCTAAGAGATTATTTTGAACAGTAT
GGAAAAATTGAAGTGACTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGGCTTTGCCTTTCTAACCTTT
GATGACCGTGACTCCGTGGGTGGCTATGGCGGTTCCAGTAGCAGCAGTAGCTATGGCAGTGGCAGAAGATTTTAA

FIGURE 3761

GTACTTTCGCCATCATAGTATTCTCCACCACTGTTCCTTCCAGCCACGAACGACGCAAACGAAGCCAAGTTCCCC
CAGCTCCGAACAGGAGCTCTCTATCCTCTCTCTATTACACTCCGGGAGAAGGAAACGCGGGAGGAAACCCAGGCC
TCCACGCGCGACCCCTTGGCCCTCCCCTTTACCTCTCCACCCCTCACTAGACACCCTCCCCTCTAGGCGGGGACG
AACTTTCGCCCTGAGAGAGGCGGAGCCTCAGCGTCTACCCTCGCTCTCGCGAGCTTTCGGAACTCTCGCGAGACC
CTACGCCCGACTTGTGCGCCCGGGAAACCCCGTCGTTCCCTTTCCCCTGGCTGGCAGCGCGGAGGCCGCACG**ATG**

CCTGGAGTTACTGTAAAAGACGTGAACCAGCAGGAGTTCGTCAGAGCTCTGGCAGCCTTCCTCAAAAAGTCCGGG
AAGCTGAAAGTCCCCGAATGGGTGGATACCGTCAAGCTGGCCAAGCACAAAGAGCTTGCTCCCTACGATGAGAAC
TGGTTCTACACGCGAGCTGCTTCCACAGCGCGGCACCTGTACCTCCGGGGTGGCGCTGGGGTTGGCTCCATGACC
AAGATCTATGGGGGACGTCAGAGAAACGGCGTCATGCCCAGCCACTTCAGCCGAGGCTCCAAGAGTGTGGCCCGC
CGGGTCCTCCAAGCCCTGGAGGGGCTGAAAATGGTGGAAAAGGACCAAGATGGCGGCCGCAAACTGACACCTCAG
GGACAAAGAGATCTGGACAGAATCGCCGGACAGGTGGCAGCTGCCAACAAGAAGCAT**TAG**AACAAACCATGCTGG
GTTAATAAATTGCCTCATTCGTAAAAAAAAAAAAAAAAAAAAA

FIGURE 3762

TGCTGCAACTCAAACTAACCAACCCACTGGGAGAAGATGCCTGGGGGTCCAGGAGTCCTCCAAGCTCTGCCTGCC
ACCATCTTCCTCCTCTTCCTGCTGTCTGCTGTCTACCTGGGCCCTGGGTGCCAGGCCCTGTGGATGCACAAGGTC
CCAGCATCATTGATGGTGAGCCTGGGGGAAGACGCCCACTTCCAATGCCCGCACAATAGCAGCAACAACGCCAAC
GTCACCTGGTGGCGCGTCCTCCATGGCAACTACACGTGGCCCCCTGAGTTCTTGGGCCCGGGCGAGGACCCCAAT
GGTACGCTGATCATCCAGAATGTGAACAAGAGCCATGGGGGCATATACGTGTGCCGGGTCCAGGAGGGCAACGAG
TCATACCAGCAGTCCTGCGGCACCTACCTCCGCGTGCGCCAGCCGCCCCCCAGGCCCTTCCTGGACATGGGGGAG
GGCACCAAGAACCGAATCATCACAGCCGAGGGGATCATCCTCCTGTTCTGCGCGGTGGTGCCTGGGACGCTGCTG
CTGTTCAGGAAACGATGGCAGAACGAGAAGCTCGGGTTGGATGCCGGGGATGAATATGAAGATGAAAACCTTTAT
GAAGGCCTGAACCTGGACGACTGCTCCATGTATGAGGACATCTCCCGGGGCCTCCAGGGCACCTACCAGGATGTG
GGCAGCCTCAACATAGGAGATGTCCAGCTGGAGAAGCCGTGACACCCCTACTCCTGCCAGGCTGCCCCCGCCTGC
TGTGCACCCAGCTCCAGTGTCTCAGCTCACTTCCCTGGGACATTCTCCTTTCAGCCCTTCTGGGGGCTTCCTTAG
TCATATTCCCCCAGTGGGGGGTGGGAGGGTAACCTCACTCTTCTCCAGGCCAGGCCTCCTTGGACTCCCCTGGGG
GTGTCCCACTCTTCTTCCCTCTAAACTGCCCCACCTCCTAACCTAATCCCCCCGCCCCGCTGCCTTTCCCAGGCT
CCCCTCACCCCAGCGGGTAATGAGCCCTTAATCGCTGCCTCTAGGGGAGCTGATTGTAGCAGCCTCGTTAGTGTC
ACCCCCTCCTCCCTGATCTGTCAGGGCCACTTAGTGATAATAAATTCTTCCCAACTGC

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FIGURE 3763

GGGCGCCCCGCCGGTCACCTCCGCGCGGACACCAGCCCTGCAGAGCCCAGGGAGATGGAAGACTTCGCCCGAGGG
GCGGCCTCCCCAGGCCCCTCCCGGCCTGGCCTGGTTCCCGTCAGCATCATCGGGGCTGAGGATGAGGATTTTGAG
AACGAGCTGGAGACAAACTCAGAAGAGCAAAACAGCCAGTTCCAGAGCCTGGAGCAGGTGAAGCGGCGCCCAGCC
CACCTCATGGCCCTCCTGCAGCACGTGGCCCTGCAGTTTGAGCCAGGACCCCTGCTTTGCTGTCTGCATGCCGAC
ATGCTGGGCTCACTGGGCCCCAAGGAGGCCAAGAAGGCCTTCCTGGACTTCTACCACAGCTTCCTGGAGAAGACA
GCGGTTCTCCGGGTGCCGGTCCCTCCCAACGTCGCCTTTGAACTTGACCGCACTAGGGCTGACCTCATCTCCGAG
GATGTCCAGCGGCGGTTCGTGCAGGAGGTGGTGCAAAGCCAGCAGGTAGCCGTGGGCCGGCAGCTGGAGGACTTC
CGTTCCAAGCGGCTCATGGGCATGACGCCCTGGGAGCAGGAGCTGGCCCAGCTGGAGGCTTGGGTTGGGCGGGAC
CGAGCCAGCTACGAGGCCCGGGAGCGGCACGTGGCGGAGCGGCTGCTCATGCACCTGGAGGAGATGCAACATACC
ATCTCTACCGACGAAGAAAAGAGTGCTGCCGTGGTCAACGCCATTGGCCTGTACATGCGCCACCTTGGGGTGCGG
ACCAAGAGTGGAGACAAGAAGTCGGGGAGGAACTTCTTCCGGAAAAAGGTGATGGGGAACCGGCGGTCGGACGAG
CCTGCCAAGACCAAGAAGGGGCTGAGCAGCATCCTGGATGCCGCCCGCTGGAACCGGGGAGAGCCCCAGGTTCCA
GATTTTCGACACCTCAAAGCAGAGGTTGATGCCGAGAAGCCAGGTGCTACAGACCGGAAGGGAGGCGTGGGGATG
CCCTCTCGGGACCGGAATATCGGGGCTCCTGGGCAGGACACCCCTGGAGTCTCTCTGCACCCTCTGTCCCTGGAC
AGCCCAGACCGGGAACCAGGTGCTGACGCCCCCCTGGAGCTGGGGGACTCATCCCCGCAGGGCCCAATGAGCCTG
GAGTCCTTGGCGCCCCCAGAGAGTACCGACGAGGGGGCCGAAACCGAGAGCCCCGAGCCTGGAGATGAGGGGGAG
CCGGGGCGGTCGGGACTGGAGCTTGAACCAGAAGAGCCTCCCGGCTGGCGGGAACTCGTCCCCCCAGACACCCTG
CACAGCCTGCCCAAGAGCCAGGTGAAGCGGCAGGAGGTCATCAGCGAGCTGCTGGTGACAGAGGCGGCCCACGTG
CGCATGCTGCGGGTGCTGCACGACCTCTTCTTCCAGCCCATGGCAGAATGCCTGTTCTTCCCCTTGGAGGAGCTG
CAGAACATCTTCCCCAGCCTGGACGAGCTCATCGAGGTGCATTCCCTGTTCCTCGATCGCCTGATGAAGCGGAGG
CAGGAGAGTGGCTACCTCATCGAGGAGATCGGAGACGTGCTGCTGGCCCGGTTTGATGGTGCTGAGGGCTCCTGG
TTCCAGAAAATCTCCTCCCGCTTCTGCAGCCGCCAGTCATTTGCCTTAGAGCAGCTCAAAGCCAAGCAACGCAAG
GACCCTCGGTTCTGTGCCTTCGTGCAGGAAGCTGAGAGCCGCCCGCGGTGCCGCCGCCTGCAGCTGAAGGACATG
ATCCCCACGGAGATGCAGCGGCTGACCAAGTACCCCCTGCTCCTGCAGAGCATCGGGCAGAACACAGAAGAGCCC
ACAGAACGGGAGAAAGTGGAGCTGGCAGCCGAGTGCTGCCGGGAAATTCTACACCACGTCAACCAAGCCGTGCGT
GACATGGAGGACCTGCTGAGGCTCAAGGACTATCAGCGGCGCCTGGACTTGTCCCACCTTCGGCAGAGCAGCGAC
CCTATGCTGAGCGAGTTCAAGAACCTGGACATCACCAAGAAGAAATTGGTCCACGAGGGCCCACTGACGTGGCGG
GTGACTAAGGACAAGGCAGTGGAGGTGCATGTGCTGCTGCTGGACGACCTGCTGCTGCTGCTCCAGCGCCAGGAC
GAGCGGCTGCTGCTCAAGTCCCATAGCCGGACACTGACGCCCACGCCCGATGGCAAGACCATGCTGCGGCCCGTG
CTGCGGCTCACCTCCGCCATGACCCGCGAGGTGGCCACCGATCACAAAGCCTTCTACGTCCTTTTTACCTGGGAC
CAGGAGGCCCAGATATACGAGCTGGTGGCACAGACTGTGTCGGAGCGGAAAAACTGGTGTGCTCTCATCACTGAG
ACTGCCGGATCCCTGAAAGTCCCTGCCCCTGCCTCTCGCCCTAAGCCCCGGCCCAGCCCGAGCAGCACCCGAGAA
CCCCTCCTCAGCAGCTCTGAGAACGGCAATGGTGGCCGAGAGACGTCTCCAGCTGATGCCCGGACCGAGAGAATC
CTCAGTGACCTCCTGCCCTTCTGCAGACCAGGCCCCGAGGGCCAGCTCGCTGCCACGGCCCTTCGGAAAGTGCTG
TCCCTGAAGCAGCTTCTGTTTCCGGCGGAGGAAGACAATGGGGCGGGGCCTCCTCGAGATGGGGATGGGGTCCCA
GGGGGCGGCCCCCTGAGCCCAGCACGGACCCAGGAAATCCAGGAGAACCTGCTCAGCTTGGAGGAGACCATGAAG
CAGCTGGAGGAGTTGGAGGAGGAATTTTGCCGCCTGAGACCCCTCCTGTCTCAGCTTGGGGGGAACTCTGTCCCC
CAGCCTGGCTGCACTTGAGGTTCCCGCCCAGGAAGGCCTTTTGCAAGAAGGAGAGGAATGGGGGAGAGGACGTGA
GGGACCACCCCCACCCACACAGCTGCCGCAGCATCTCACACCCCGAGGGCCTGAGGAGAGGGAGCTGTGGGCCAC
GCCTGGGAGGGGCCCAGCTGGGGTTACTGGCCCCGCATGAGCCTCGGCCATCTCTCCCTCCTGCCCTCTGCTTGG
GGGACTCAGGGCTCCATTCTGGAGGGCACCACGGTGACCCGGGCCATCTCAGTATTGCCTGTGGGGGCCACCCCT
CCACCCCCACCCCCAAGTGCCTTCGCTCTGTTTTTATACCCTGAATTGGAGGTTTATTTTTTAATATATATTATC
TAAGAAG

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FIGURE 3764

AGCAGCTCTACCCCTCACGACGCAGACATGGCAGCGCAGAAGGACCAGCAGAAAGATGCCGAGGCGGAAGGGCTG
AGCGGCACGACCCTGCTGCCGAAGCTGATTCCCTCCGGTGCAGGCCGGGAGTGGCTGGAGCGGCGCCGCGCGACC
ATCCGGCCCTGGAGCACCTTCGTGGACCAGCAGCGCTTCTCACGGCCCCGCAACCTGGGAGAGCTGTGCCAGCGC
CTCGTACGCAACGTGGAGTACTACCAGAGCAACTATGTGTTCGTGTTCCTGGGCCTCATCCTGTACTGTGTGGTG
ACGTCCCCTATGTTGCTGGTGGCTCTGGCTGTCTTTTTCGGCGCCTGTTACATTCTCTATCTGCGCACCTTGGAG
TCCAAGCTTGTGCTCTTTGGCCGAGAGGTGAGCCCAGCGCATCAGTATGCTCTGGCTGGAGGCATCTCCTTCCCC
TTCTTCTGGCTGGCTGGTGCGGGCTCGGCCGTCTTCTGGGTGCTGGGAGCCACCCTGGTGGTCATCGGCTCCCAC
GCTGCCTTCCACCAGATTGAGGCTGTGGACGGGGAGGAGCTGCAGATGGAACCCGTGTGAGGTGTCTTCTGGGAC
CTGCCGGCCTCCCGGGCCAGCTGCCCCACCCCTGCCCATGCCTGTCCTGCACGGCTCTGCTGCTCGGGCCCACAG
CGCCGTCCCATCACAAGCCCGGGGAGGGATCCCGCCTTTGAAAATAAAGCTGTTATGGGTGTCATTCAGG

FIGURE 3765

GGAGCAGGCGAGAGGCGACGGCGAGAGCTAGAGCGGGCGCAGCGTTAGGGTGGCCGTGCAAGGGGAGCCGTGGCC
CGGGCCCGGGGCGTGCGAGACGGCGGAAGCAGCCCAGGGCCTTGCTGCCGCCATGACTGAGGAATCAGAGGAGAC
AGTCCTGTACATTGAGCACCGCTATGTCTGCTCTGAGTGCAACCAGCTGTATGGATCACTGGAAGAGGTGCTTAT
GCACCAAAACTCCCACGTGCCCCAGCAGCACTTTGAGCTGGTGGGCGTGGCTGATCCCGGAGTCACTGTGGCCAC
AGACACAGCTTCAGGCACGGGCCTCTATCAGACCCTTGTGCAGGAGAGCCAGTACCAGTGCCTGGAGTGTGGTCA
ACTGCTGATGTCACCCAGCCAGCTCCTGGAGCACCAGGAGCTGCACCTGAAGATGATGGCACCCCAGGAGGCAGT
GCCAGCTGAGCCATCACCTAAGGCACCACCCCTGAGCTCCAGCACCATCCACTACGAGTGTGTGGATTGCAAGGC
TCTCTTTGCCAGCCAGGAGCTCTGGCTGAACCACCGGCAGACGCACCTCCGGGCCACACCCACCAAGGCTCCTGC
CCCTGTTGTCCTGGGGTCCCCAGTTGTTCTAGGGCCTCCTGTGGGCCAGGCCCGAGTGGCTGTGGAGCACTCATA
CCGAAAGGCAGAAGAGGGTGGGGAAGGGGCGACTGTCCCATCTGCCGCTGCCACCACCACTGAGGTAGTGACTGA
GGTGGAGCTGCTCCTCTACAAGTGCTCTGAGTGCTCCCAGCTCTTCCAGCTGCCGGCGGATTTCCTGGAGCACCA
GGCCACTCACTTCCCTGCTCCTGTACCCGAGTCTCAGGAGCCTGCCTTACAGCAGGAGGTGCAGGCCTCGTCACC
TGCAGAGGTGCCTGTGTCTCAGCCTGACCCCTTGCCAGCTTCTGACCACAGTTACGAGCTGCGCAATGGTGAAGC
CATTGGGCGGGATCGCCGGGGGCGCAGGGCCCGGAGGAACAACAGTGGAGAAGCAGGCGGGGCAGCCACACAGGA
GCTCTTCTGCTCAGCCTGTGACCAGCTCTTTCTCTCACCCCACCAGCTACAGCAGCACCTGCGGAGTCACCGGGA
GGGCGTCTTTAAGTGCCCCCTGTGCAGTCGTGTCTTCCCTAGCCCTTCCAGTCTGGACCAGCACCTTGGAGACCA
TAGCAGCGAGTCACACTTCCTGTGTGTAGACTGTGGCCTGGCCTTCGGCACAGAGGCCCTCCTCCTGGCCCACCG
GCGAGCCCACACCCCGAATCCTCTGCATTCATGTCCATGTGGGAAGACCTTTGTCAACCTTACCAAGTTCCTTTA
TCACCGGCGTACTCATGGGGTAGGGGGTGTCCCTCTGCCCACAACACCAGTCCCACCAGAGGAACCTGTCATTGG
TTTCCCTGAGCCAGCCCCAGCAGAGACTGGAGAGCCAGAGGCCCCTGAGCCCCCTGTGTCTGAGGAGACCTCAGC
AGGGCCCGCTGCCCCAGGCACCTACCGCTGCCTCCTGTGCAGCCGTGAATTTGGAAAGGCCTTGCAGCTGACCCG
GCACCAACGTTTTGTGCATCGGCTGGAGCGGCGCCATAAATGCAGCATTTGTGGCAAG**ATG**TTCAAGAAGAAGTC
TCACGTGCGTAACCACCTGCGCACACACACAGGGGAGCGGCCCTTCCCCTGCCCTGACTGCTCCAAGCCCTTCAA
CTCACCTGCCAACCTGGCCCGCCACCGGCTCACACACACAGGAGAGCGGCCCTACCGGTGTGGGGACTGTGGCAA
GGCTTTCACGCAAAGCTCCACACTGAGGCAGCACCGCTTGGTGCATGCCCAGCACTTCCCCTACCGCTGCCAGGA
ATGTGGGGTGCGTTTTCACCGTCCTTACCGCCTGCTCATGCACCGCTACCATCACACAGGTGAATACCCCTACAA
GTGTCGCGAGTGCCCCCGCTCCTTCTTGCTGCGTCGGCTGCTGGAGGTGCACCAGCTCGTGGTCCATGCCGGGCG
CCAGCCCCACCGCTGCCCATCCTGTGGGGCTGCCTTCCCCTCCTCACTGCGGCTCCGGGAGCACCGCTGTGCAGC
CGCTGCTGCCCAGGCCCCACGGCGCTTTGAGTGTGGCACCTGTGGCAAGAAAGTGGGCTCAGCTGCTCGACTGCA
GGCACACGAGGCGGCCCATGCAGCTGCTGGGCCTGGAGAGGTCCTGGCTAAGGAGCCCCCTGCCCCTCGAGCCCC
ACGGGCCACTCGTGCACCAGTTGCCTCTCCAGCAGCCCTTGGAAGCACTGCTACAGCATCCCCTGCGGCCCCTGC
CCGCCGCCGGGGTCTAGAGTGCAGCGAGTGCAAGAAGCTGTTCAGCACAGAGACGTCACTGCAGGTGCACCGGCG
CATCCACACAGGTGAGCGGCCATACCCATGTCCAGACTGTGGCAAAGCGTTCCGTCAGAGTACCCACCTGAAAGA
CCACCGGCGCCTGCACACAGGTGAGCGGCCCTTTGCCTGTGAAGTGTGTGGCAAGGCCTTTGCCATCTCCATGCG
CCTGGCAGAACATCGCCGCATCCACACAGGCGAACGACCCTACTCCTGCCCTGACTGTGGCAAGAGCTACCGCTC
CTTCTCCAACCTCTGGAAGCACCGCAAGACCCATCAGCAGCAGCATCAGGCAGCTGTGCGGCAGCAGCTGGCAGA
GGCGGAGGCTGCCGTTGGCCTGGCCGTCATGGAGACTGCTGTGGAGGCGCTACCCCTGGTGGAAGCCATTGAGAT
CTACCCTCTGGCCGAGGCTGAGGGGGTCCAGATCAGTGGC**TGA**CTCTGCCCGACTTCCTCTTTGGCACCTCCATT
CCCTGTTGCTGAAGGCCCTCCAGCATCCCCTTAAGCATCTGTACATACTGTGTCCCTTCCTCTTCCCATCCCCAC
CACCTTGTAAGTTCTAAATTGGATTTATTCTCTCGTGAGGGGGGTGCTCTGGGGTCCTTGACACACATAAAGGTG
CCCCCCCACCTTCCACCTCTTAGCACTGGTGACCCCAAAAATGAAACCATCAATAAAGACTGAGTTGCC

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FIGURE 3766

GCGCGAGTTGGGGGAAGGAGGAGGGGCGAGGTGACGCAGGCGTAATAATAGAGAAGGTGCCAGAAAGATCCAAAA
CAAGTGGCTGCGGCCGTCGCCCAGGAGTCATCGGACGCCAGAATCTGGCCGGGTTCTGAGCTTGTTCCGCCTCCC
TCCCCCGGGA**ATG**GCGCTATCCGGGTCGACCCCGGCCCCGTGCTGGGAGGAGGATGAGTGCCTGGACTACTACGG
GATGCTGTCGCTTCACCGTATGTTCGAGGTGGTGGGCGGGCAACTGACCGAGTGCGAGCTGGAGCTCCTGGCCTT
TCTGCTGGATGAGGCTCCTGGCGCCGCCGGAGGCTTAGCCCGGGCCCGCAGCGGCCTAGAGCTCCTGCTGGAGCT
GGAGCGCCGCGGGCAGTGCGACGAGAGCAACCTGCGGCTGCTGGGGCAACTCCTGCGCGTGCTGGCCCGCCACGA
CCTGCTGCCGCACCTGGCGCGCAAGCGGCGCCGGCCAGTGTCTCCAGAACGCTATAGCTATGGCACCTCCAGCTC
TTCAAAGAGGACAGAGGGTAGCTGCCGTCGCCGTCGGCAGTCAAGCAGTTCTGCAAATTCTCAGCAGGGTCAGTG
GGAGACAGGCTCCCCCCCAACCAAGCGGCAGCGGCGGAGTCGGGGCCGGCCCAGTGGTGGTGCCAGACGGCGGCG
GAGAGGGGCCCCAGCCGCACCCCAGCAGCAGTCAGAGCCCGCCAGACCTTCCTCTGAAGGCAAAGTGACCTGTGA
CATCCGGCTCCGGGTTCGAGCAGAGTACTGCGAGCATGGGCCAGCCTTGGAGCAGGGCGTGGCATCCCGGCGGCC
CCAGGCGCTGGCGCGGCAGCTGGACGTGTTTGGGCAGGCCACCGCAGTGCTGGGCTCAAGGGACCTGGGCTCTGT
GGTTTGTGACATCAAGTTCTCAGAGCTCTCCTATCTGGACGCCTTCTGGGGCGACTACCTGAGTGGCGCCCTGCT
GCAGGCCCTGCGGGGCGTGTTCCTGACTGAGGCCCTGCGAGAGGCTGTGGGCCGGGAGGCTGTTCGCCTGCTGGT
CAGTGTGGATGAGGCTGACTATGAGGCTGGCCGGCGCCGCCTGTTGCTGATGGAGGAGGAAGGGGGGCGGCGCCC
GACAGAGGCCTCC**TGA**TCCAGGACTGGCAGGATTGATCCCACCTCCAAGTCTCCGGGCCACCTTCTCCTGGGAGG
ACGACCATCTCTACCCCTAGAGGACTGTCACTCTAGCATCTTTGAGGACTGCGACAGGACCGGGACAGCAGGCCC
CTTGACAGCCCCTCCCACAGGATGTGGGCTCTGAGGCCTAAACCATTTCCAGCTGAGTTTCCTTCCCAGACTCCT
CCTACCCCCAGGTGTGCCCCCTTAGCCTCCGGAGGCGGGGGCTGGGCCTGTATCTCAGAAGGGAGGGGCACAGCT
ACACACTCACCAAAGGCCCCCCTGCACATTGTATCTCTGATCTTGGGCTGTCTGCACTGTCACAGGTGCACACAC
TCGCTCATGCTCACACTGCCCCTGCTGAGATCTTCCCTGGGCCTCTGCCCTGGCCTGCTTCCCAGCACACACTTC
TTTGGCCTAAGGGCTTCTCTCTCAGGACCTCTAATTTGACCACAACCAACCTGGGCTTCAGCCACATCAGTGGGC
ACTGGAGCTGGGGTGCACATGGGGCCTGCTCACCTTGCCCACACATCTCCAGCCAGCCAGGGCCCTGCCCAGCTT
CAATTTACAGACCTGACTCTCCTCACCTTCCCCCCTGCTGTCCAGAGCTGAACATAGACTTGCACTTGGATGTCA
CCTGGAGTGTCACATGGGAGTGTTATGGCAGCATCATACCAAGGCCTACTGTTGCACATGGGGCCAAAACCAGTA
AACAGCCACCTTCTTGGAAAGGGAATGCAAAGGCTTTGGGGGTGATGGAAAAGACCTTTTACAAATGATACCAAT
TAAACTGCCCTGGAAAGGGCATAGGTGGG

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FIGURE 3767A

GTCTGTGTCAAGAGCGGCAGGGGCTGCAGGAGATAAGAGAAACGGGCTGCCGTGGGGTGTGTGTAGGCTTCAGAG
ACATGGGATCACGGAAGACTGAAGCAGAAACAGTGGATTAAGACTTCCTGAGCGATAGCTGGCACTGCCTTCCCC
ACAATGGCAGAGGTGGTGGCTGAGGTGGCCGAGATGCCAACACAGATGTCACCAGGGGCAGTGGAGATGTCAACA
CCTATGTCGGCAGAGATGATGGAGATGTCAACAGAAGTGACTGAGATGACACCTGGGGAGGCCCTTGCCTCATCC
CTCTTCTTCCAGCATCACCAGTTCATGTGCTCTGAGTGTGGCAGCCTCTATAACACACTGGAGGAAGTCCTCTCA
CACCAGGAGCAGCACATGCTTGCTGTCTCAGAGGAGGAGGCACTGACCACACAGAATGTTGGCCTGGAGCCGGAG
CTGGTGCCGGGTGCTGAGGGGCCCTTCCAGTGTGGTGAATGCAGCCAGCTCATCCTCTCCCCTGGGGAGCTCCTG
GCCCACCAGGATGCCCACCTCCGAGAGTCTGCAAACCAGATCCAATACCAGTGCTGGGACTGCCAGGAGCTGTTC
CCCTCGCCCGAGCTGTGGGTGGCTCATCGAAAGGCCCAGCACCTTTCTGCTACGGTAGCTGAGCCACCAGTGCCA
CCTCCTTTGCCTCCCCCAACACCACTGCCTCCACCTTCTCCCCCATCCGAAGTCAAGATGGAGCCCTATGAGTGT
CCTGAGTGCTCTACCCTCTGCGCCACCCCTGAGGAGTTCTTGGAGCATCAGGGCACCCACTTTGACTCCCTAGAG
AAAGAGGAGCGCAATGGGTTGGAGGAGGAGGAAGAGGACGATGAGGAGGATGAAGAAGATGATGAAGAGATGGAG
GATGAGGAGGCCATGGCAGAGGTCGGTGATGATGCTGTGGGAGGTGACGAGTCCACAGCTGGCTGGGCTCAGGGC
TGCGGGGACTGTCCCCAGCACCAGCCCTCAGCAGGGGCTCGCCGGCAACACCGGCGGACGGCTCACAGCCCGGCA
TCTGCCACCCACCCCTTCCACTGCAGCCAGTGTCAGCGCAGTTTCAGCTCCGCCAACCGGCTGCAGGCTCATGGG
CGGGCCCATGTTGGTGGCACACATGAGTGTACAACCTGCTCCAAGGTCTTCAAGAAAGCAGCATCGCTTGAGCAG
CACTTGCGGCTGCATCGCGGGGAAGCCCGCTACCTCTGTGTAGACTGTGGCCGCGGCTTTGGCACAGAACTCACG
TTGGTGGCTCACCGGCGGGCCCACACTGCCAACCCATTGCATCGCTGTCGTTGCGGCAAGACGTTCAGCAACATG
ACCAAGTTCCTCTACCACCGGCGCACTCACGCCGGCAAAAGCGGGGCACCTCCCACAGGAGCAACAGCTCCCCCA
GCTCCAGCGGAGCCCACCCCTCCACCACCACCCCCTGCCCCACCTGCCCAGCTGCCCTGCCCACAGTGCTCCAAG
TCCTTTGCCTCAGCTTCCCGGCTGTCCCGGCACCGGCGTGCAGTACACGGGCCCCCTGAACGGCGTCACCGCTGT
GGGGTTTGTGGCAAGGGCTTCAAGAAGCTGATCCACGTGCGCAACCACCTGCGGACACACACGGGTGAGAGGCCC
TTCCAGTGCCACTCATGTGGCAAGACCTTTGCTTCTTTGGCCAACCTCAGCCGCCACCAGCTGACCCATACGGGT
GCACGTCCCTACCAATGCCTGGACTGTGGCAAGCGCTTCACACAGAGCTCCAACCTGCAGCAGCACCGGCGGTTG
CACTTGCGGCCAGTCGCCTTTGCCCGCGCCCCCCGCCTCCCCATCACTGGTCTCTACAACAAGAGTCCCTACTAC
TGCGGGACTTGTGGCCGCTGGTTCCGCGCCATGGCGGGCTTGCGACTGCATCAGCGGGTCCATGCCCGAGCTCGG
ACTTTGACGCTACAGCCTCCCAGATCACCATCTCCTGCCCCACCCCCACCTCCAGAGCCTCAACAGACTATCATG
TGCACAGAGCTGGGGGAGACCATCGCCATCATTGAGACATCCCAGCCACTGGCGCTTGAGGACACCCTGCAGCTG
TGCCAGGCTGCACTGGGGGCCAGTGAAGCAGGCGGGCTCTTGCAGTTGGACACGGCCTTCGTGTGACGCAGCTGA
AAAGCAACAACAAAAGGGTTTGGTTGCAACAGCCAGTGTGGGTACCTCTGGGGAGAGAGGACCTCCTCTGACAAA
CTGGTCTGGTACCCACCATGTGCCAGGATCCACCCTGGCCTCTTTTTACCCACTGACTCCCCAGAACAACCCTTC
CAGGCTTCTCTTGTCATCTTTCTCTGCCTGAGGGGAAACTGAAGCTCTGAAATGCGATGTGATCTGTACCAGGTC
ACCCAGCTATGCTGCAAAGTGGGTTGGCCAAGGCCCTTTGCACTGCATCACCCTGGTGCCCAGCAACATCAGGTA
ACCTTCACTGAGCACCAAGCTTATGCCAGGTCTGTGCTGGCCACTCTCATATACCTCTTCAGATCCTCTGCTTGT
ACCCCCAGCCCTTGCCTTCCCTGGATTTTGGGCACCCAGGACTTTGCTCTGCCTGGTGGAGGGTACTTGATTTCT
CTGGGCTTCCTTCATCTCAATTCTGACAGTGTGGAAGGAAATCTGTAGGTACCCAGGTCCTCAGCTCCAGACTGG
GTGATGCTGGAGACCCAGGAGCAAGTCAGCACAGGCTCTGCCCACAGGAGGCATGCACAATCTGGTAGGAGAAAC
GCACAAGTACAGATAGCTTGCTCTCTGAGTGTGTCTCATTGATTCATTCAGCCTGTGTGTCCTAAAGCCTCCCTT
CTCCCATACTGGGTGATGCTGGGGGCAGAGATGAGTCAGGCCTAAGGCTTCTCTGGGCTGTGATGGGGATGTGCA
GGGACAGTGGGATCCCAGGAAACAGACCTCCATGGTGGGAGATCAGGAGTTAAGGACTTCCTAGAGAAGGTAGTC
CCTGAAGGAAAAGTAGGAATCTGGCAGTGAAAGAGGAAAAGAACATTCCAGGCAGACAGCACTGCAAGAGGGTGA
GCTCTTGGTGTATTTGGAGACCATCCAGTTATTCATCTGACTGCCTACCTGAGGCAAGCACCACACTTACCACTG
TATGTGTACTATGATCCCAACAGGCTTGTGACATAGATTTCATATTATCCCTGTTGTATAGATTTTTAAAACTGG
TGGCTGGGCGTGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGCAGATCACGAGGTCAGGA
GATCGAGACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCAGGAGTGGTGG
CGGGCGCCTGTGGTGGCCAGCTACTCAGGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGGCGGAGCTTGCA
GTGAGCCGAGATCGCGCCACTGCACTCCAGCCTGGGCGACAGAGTGAGACTCCCTCTCAAAAGAAAATAAAAATA
AAAATAAACTGGCCAGGTGCGGTGGCTCACGCTTGCAATCCCAGTGCTTTGGGAGACTGAGGCAGGAGGATCACT

FIGURE 3767B

TAAGGCCAGGAGTTCGAGACCAGCCTGGGCAACAGCAAGACCTCATCTCTACAAAACTTAAAAGTTAGCCAGGCC
TGGTGGCACATGCCTGTAATCCGAGTGCTTTGGGAGGCTGAGGCAGGAGGATCACTCGAGCTCAAGAATTCAAGA
CCTGGGCAAGAGAGAGAGACTTTGTCTCTATTAAAAATAAAAATGATTGGCCGAGCATGGTGGTGCACACCAGTA
TTCCCAGCTACTCTGGAGGCTGAGGCGGAGGCAGGATTGCTTGATATGAGGGAGATTGAGGCTGCAGTGAGCTGT
GTTCACACCACTGCACTCCAGTCTGGGCAACAGTGCAAGACCCTGTCACTT

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FIGURE 3768

TCTGAGAGGCGAGGCCGGGTGAGGCGGCGAGGGCGGCCCGACGGGCGCGGGACGGGACGGGGCAGCGAGGGCGCC
GGGAGCCGCGGCCCGGAATCGGGGCGCTTCGCCCCGGGCCCCCCAGC**ATG**AAGACCCCGGCGGACACAGGGTTTG
CCTTCCCGGATTGGGCCTACAAGCCAGAGTCGTCCCCTGGCTCAAGGCAGATCCAGCTGTGGCACTTTATCCTGG
AGCTGCTGCGGAAGGAGGAGTACCAGGGCGTCATTGCCTGGCAGGGGGACTACGGGGAATTCGTCATCAAAGACC
CTGATGAGGTGGCCCGGCTGTGGGGCGTTCGCAAGTGCAAGCCCCAGATGAATTACGACAAGCTGAGCCGGGCCC
TGCGCTATTACTATAACAAGCGCATTCTGCACAAGACCAAGGGGAAACGGTTCACCTACAAGTTCAATTTCAACA
AACTGGTGCTGGTCAATTACCCATTCATTGATGTGGGGTTGGCTGGGGGTGCAGTGCCCCAGAGTGCCCCGCCAG
TGCCGTCGGGTGGTAGCCACTTCCGCTTCCCTCCCTCAACGCCCTCCGAGGTGCTGTCCCCCACCGAGGACCCCC
GCTCACCACCAGCCTGCTCTTCATCTTCATCTTCCCTCTTCTCGGCTGTGGTGGCCCGCCGCCTGGGCCGAGGCT
CAGTCAGTGACTGTAGTGATGGCACGTCAGAGCTGGAGGAACCGCTGGGAGAGGATCCCCGCGCCCGACCACCCG
GCCCTCCGGATCTGGGTGCCTTCCGAGGGCCCCCGCTGGCCCGCCTGCCCCATGACCCTGGTGTCTTCCGAGTCT
ATCCCCGGCCTCGGGGTGGCCCTGAACCCCTCAGCCCCTTCCCTGTGTCGCCTCTGGCCGGTCCTGGATCCCTGC
TGCCCCCTCAGCTCTCCCCGGCTCTGCCCATGACGCCCACCCACCTGGCCTACACTCCCTCGCCCACGCTGAGCC
CGATGTACCCCAGTGGTGGCGGGGGGCCCAGCGGCTCAGGGGGAGGCTCCCACTTCTCCTTCAGCCCTGAGGACA
TGAAACGGTACCTGCAGGCCCACACCCAAAGCGTCTACAACTACCACCTCAGCCCCCGCGCCTTCCTGCACTACC
CTGGGCTGGTGGTGCCCCAGCCCCAGCGCCCTGACAAGTGCCCGCTGCCGCCCATGGCACCCGAGACCCCACCGG
TCCCCTCCTCGGCCTCGTCATCCTCTTCTTCTTCTTCCTCCCCATTCAAGTTTAAGCTCCAGCCGCCCCCACTCG
GACGCCGGCAGCGGGCAGCTGGGGAGAAGGCCGTAGCCGGTGCTGACAAGAGCGGTGGCAGTGCAGGCGGGCTGG
CTGAGGGGGCAGGGGCGCTAGCCCCACCGCCCCCGCCACCACAGATCAAGGTGGAGCCCATCTCGGAAGGCGAGT
CGGAGGAGGTAGAGGTGACTGACATCAGTGATGAGGATGAGGAAGACGGGGAGGTGTTCAAGACGCCCCGTGCCC
CACCTGCACCCCCTAAGCCTGAGCCCGGCGAGGCACCCGGGGCATCCCAGTGCATGCCCCTCAAGCTACGCTTTA
AGCGGCGCTGGAGTGAAGACTGTCGCCTCGAAGGGGGTGGGGGCCCCGCTGGGGGCTTTGAGGATGAGGGTGAGG
ACAAGAAGGTGCGTGGGGAGGGGCCTGGGGAGGCTGGGGGGCCCCTCACCCCAAGGCGGGTGAGCTCTGACCTCC
AGCATGCCACGGCCCAGCTCTCCCTGGAGCACCGAGACTCC**TGA**GGGCTGTGGGCAGGGGACCTGTGTGCCCCGC
ACCCCCCATGCTTCTTTTGCTGCCTTAAGCCCCCTATGCCCTGGAGGTGAGGGCAGCTCTCTTGTCTCTTCCCTG
CCTCCTCCCTTTTCCCTCCCCACATTTTGTATAAAACTTTAATTTCTTTTTTTTAAAAATGGTGGGGGTGGGTGG
GTGCCCAGGGCTAGGGGCTATTCCCTGTCTCTGTGGGTTTCTAAGCTCTGGGCAAAGTGGTGGTAGGGGGAGGGA
GGGGGAAGTTAAGGGGGTCACCTCCATTCTGGGGAATTTATATTTGAATTGAGGCTTTGGCCTTAACACCCAGGA
ACTTTTCTATTACAATCGCTTAGGAAGTAAAGCCTTGTCTCCCTCCCTGTTCTCTGCCTCTTGTACCCCTCTGAC
CCACCCGCTCTGCCCCACTCCCAGCCCTCCTCAGCCCCAGCCCTGCCTGCCCTGCCCCTCCAGGGGGCCATGAGT
GCCTAGGTTTCTCATACCCCACAAGGTCACAGCAGGGGAGGGAGGGACAATTTTATAATGAACCAAAAATTCCAT
GTGTTGGGGGGTGGGGGGCGGAGGAGGGTGAGGGGTGCCGCCCATGGGCCACAAATCTCTACAAGTGCCTGCTAT
CCCTCTCCCACTCCCCACCCCAGCACCGGTCCAACCCCTTCATCCCCAGCTGCTCCTAGGACTGGCCCATGGGCA
GGCGGGTGGGGGGGATGGGAAGGGGGTGCCCTGAAACCAAACTGGAAGCCCCCTCTGCCTCCCAGCTGGGGCCTCT
GGGGTGGGGTGGGGGGCTGTGGTCAAGCCTTATTCTGTATTGGGGACTGAGGGTGGGGGGAGTAGAGGGGCCGCT
GGAGAATGTATTCAAAACAATAAAACTTTGGACCTTTGGA

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FIGURE 3769A

GGAGGTGCGAGCCCCTGCCGGGTCCCCCCTGCGCCGGACCATGTATTCGGCCCACAGGCCCCTGATGCCCGCGTC
CAGCGCGGCCTCCCGTGGCCTCGGCATGTTCGTGTGGACGAATGTGGAACCTCGCTCTGTGGCTGTGTTCCCTTG
GCACTCCTTAGTCCCCTTCCTGGCACCCAGCCAGCCTGACCCCTCCGTGCAGCCGAGCGAGGCCCAGCAACCTGC
CAGCCACCCAGTGGCCTCCAACCAGAGCAAAGAACCTGCTGAGTCGGCAGCTGTTGCTCATGAACGGCCACCAGG
TGGGACAGGGAGTGCTGACCCTGAGCGGCCCCCTGGAGCCACATGCCCTGAGAGCCCAGGACCCGGACCCCCACA
CCCTTTGGGGGTGGTGGAATCTGGTAAGGGTCCGCCTCCCACCACGGAGGAGGAGGCCTCCGGCCCCCCAGGAGA
GCCCCGGCTGGACAGTGAGACAGAGAGTGACCATGATGATGCCTTCCTCTCCATCATGTCTCCTGAGATCCAGTT
GCCTCTACCGCCCGGAAAACGTCGGACCCAGTCCCTCAGTGCCCTACCCAAGGAACGGGACTCATCTTCTGAGAA
GGATGGACGCAGCCCCAACAAGCGGGAGAAGGACCACATCCGGCGGCCCATGAATGCCTTCATGATCTTCAGCAA
GCGGCACCGGGCCCTGGTCCACCAGCGTCATCCCAACCAGGACAACCGGACCGTCAGCAAGATCCTGGGCGAGTG
GTGGTATGCCCTGGGGCCCAAGGAGAAGCAGAAGTACCACGACCTGGCCTTCCAGGTGAAGGAGGCCCACTTCAA
GGCCCACCCAGATTGGAAGTGGTGCAACAAGGACCGAAAGAAGTCCAGCTCAGAGGCCAAGCCCACGAGCCTGGG
GCTGGCAGGAGGGCACAAGGAGACGCGGGAGCGGAGCATGTCGGAGACGGGCACTGCTGCTGCCCCTGGGGTGTC
CTCTGAGCTCCTGTCCGTTGCAGCCCAGACACTCCTGAGCTCAGACACCAAGGCTCCGGGGAGCAGCTCCTGTGG
GGCAGAACGGCTACACACAGTTGGGGGACCTGGCTCAGCCCGGCCCCGAGCTTTCTCCCACAGCGGGGTACACAG
CCTGGACGGCGGAGAAGTAGACAGTCAGGCGCTACAGGAACTGACGCAGATGGTGTCTGGCCCTGCATCGTACTC
TGGCCCAAAGCCTTCTACCCAGTATGGAGCTCCAGGACCCTTTGCAGCCCCTGGTGAGGGAGGTGCCTTGGCGGC
CACTGGGCGGCCCCCCGCTGCTGCCCACCCGAGCTTCTCGTTCTCAGCGTGCGGCCAGTGAGGACATGACGAGTGA
TGAGGAGCGCATGGTCATCTGTGAGGAGGAAGGGGATGATGATGTCATTGCTGACGATGGCTTCGGCACCACTGA
CATTGATCTCAAGTGCAAGGAGCGGGTGACCGACAGCGAGAGTGGGGACAGCTCTGGGGAGGACCCAGAGGGCAA
CAAGGGCTTTGGTCGGAAGGTGTTTTCACCTGTGATCCGTTCCTCCTTTACCCACTGCCGCCCCCCACTGGACCC
TGAGCCCCCAGGGCCCCCGGATCCTCCTGTAGCCTTTGGCAAAGGCTATGGTTCCGCCCCATCCTCCTCTGCGTC
CTCGCCTGCTTCCTCCTCAGCCTCGGCAGCCACCTCCTTCTCACTGGGCTCAGGAACCTTCAAGGCCCAGGAGTC
TGGTCAGGGCAGCACAGCGGGCCCCCTACGGCCCCCACCCCCTGGGGCTGGGGGTCCAGCGACACCTTCCAAGGC
AACCCGGTTCCTCCCAATGGATCCTGCCACCTTCCGGCGCAAGAGACCCGAAAGTGTGGGTGGCCTGGAGCCACC
AGGCCCCTCAGTCATCGCGGCCCCTCCCAGCGGAGGAGGAAACATCCTGCAGACACTGGTGCTGCCCCCAAACAA
GGAGGAGCAAGAGGGCGGCGGAGCCAGAGTGCCCTCCGCCCCCGCCCCATCACTGGCCTATGGGGCCCCAGCAGC
TCCCCTGTCCCGTCCTGCCGCCACCATGGTCACCAATGTGGTGCGGCCTGTCAGCAGCACTCCTGTGCCCATCGC
CTCTAAGCCCTTCCCCACCTCTGGCCGGGCTGAGGCGTCTCCAAATGACACAGCAGGTGCCAGGACTGAAATGGG
CACTGGGTCTCGGGTGCCTGGGGGCTCCCCGCTGGGTGTCAGCTTAGTGTATTCGGACAAGAAGTCGGCAGCAGC
CACCTCACCAGCCCCACACTTGGTGGCTGGACCCCTGCTGGGCACTGTGGGGAAGGCGCCTGCCACTGTCACTAA
CCTACTGGTGGGCACCCCGGGGTATGGGGCCCCTGCGCCCCCTGCTGTCCAGTTCATTGCCCAGGGGGCCCCTGG
TGGTGGGACCACTGCGGGCTCAGGAGCAGGTGCTGGGAGTGGCCCCAATGGGCCAGTACCCCTGGGCATCCTGCA
ACCAGGTGCCCTGGGCAAGGCTGGGGGAATCACCCAGGTACAGTACATCCTGCCCACGCTGCCCCAGCAGCTTCA
GGTGGCACCTGCCCCAGCACCAGCCCCTGGGACCAAGGCAGCGGCTCCCAGCGGCCCTGCACCCACCACCAGCAT
CCGTTTCACCCTCCCACCGGGCACTTCCACCAACGGCAAAGTCCTGGCTGCCACTGCACCCACTCCTGGCATCCC
CATCCTGCAGTCTGTACCCTCCGCCCCACCCCCCAAAGCCCAGTCAGTTTCTCCCGTGCAGGCCCCGCCCCCGGG
TGGCTCAGCCCAGCTGCTGCCTGGGAAGGTCCTAGTGCCTCTGGCCGCCCCTAGCATGTCAGTGCGGGGTGGAGG
GGCCGGCCAGCCACTGCCACTGGTGAGCCCGCCCTTCTCAGTACCTGTGCAGAATGGTGCCCAGCCCCCCAGCAA
GATCATCCAGCTGACCCCGGTGCCTGTGAGCACACCCAGCGGCCTGGTGCCGCCCCTGAGCCCAGCCACACTCCC
TGGACCCACCTCTCAGCCTCAGAAGGTCCTGTTGCCCTCCTCCACCAGAATCACCTATGTGCAGTCAGCGGGCGG
GCACGCGCTGCCCCTGGGTACCAGCCCTGCGTCCAGCCAGGCTGGAACAGTCACCTCGTACGGGCCCACGAGCTC
TGTAGCTCTAGGCTTCACCTCGCTGGGGCCCAGCGGCCCCGCCTTCGTGCAGCCCCTGCTCTCAGCAGGCCAAGC
CCCACTGCTGGCTCCCGGTCAGGTGGGCGTGTCACCTGTGCCCAGTCCCCAGCTGCCGCCTGCCTGTGCAGCCCC
CGGAGGTCCTGTCATAACAGCATTTTACTCTGGCAGCCCTGCACCCACCTCCTCAGCACCCCTGGCCCAGCCATC
CCAGGCCCCCCCAAGCCTGGTCTACACTGTGGCCACCAGCACAACCCCACCTGCAGCCACCATTCTGCCCAAGGG
CCCGCCAGCCCCTGCCACTGCCACCCCAGCCCCGACTAGCCCTTTCCCCAGCGCCACAGCAGGTTCCATGACCTA
CAGCTTAGTGGCCCCCAAGGCCCAGCGGCCCAGCCCGAAGGCCCCCCAGAAAGTGAAGGCAGCCATCGCCAGCAT

FIGURE 3769B

TCCCGTGGGGTCCTTTGAGGCAGGTGCCTCTGGGCGGCCTGGCCCTGCACCCCGGCAGCCTCTGGAGCCTGGCCC
AGTCCGAGAGCCAACTGCCCCAGAGTCTGAGCTTGAGGGGCAGCCCACACCACCAGCCCCTCCACCCCTGCCAGA
GACCTGGACTCCCACGGCCCGGAGCAGCCCCCCACTGCCCCCACCTGCTGAGGAGCGGACCAGCGCCAAGGGCCC
TGAGACCATGGCCAGCAAATTCCCCAGCTCATCTTCAGACTGGCGCGTCCCTGGGCAGGGCCTGGAGAATCGTGG
GGAGCCTCCCACTCCTCCCAGCCCGGCCCCAGCTCCAGCTGTAGCCCCTGGTGGCAGCAGCGAGAGCAGCAGTGG
GCGGGCAGCCGGGGACACCCCGGAGCGCAAGGAGGCGGCTGGTACTGGCAAGAAGGTGAAGGTGCGGCCCCCGCC
CCTGAAGAAGACCTTTGACTCTGTGGACAACAGGGTCCTGTCAGAAGTGGACTTCGAAGAGCGCTTTGCTGAGTT
GCCTGAGTTTCGGCCTGAGGAGGTGCTGCCCTCCCCCACCCTGCAGTCTCTGGCCACCTCACCCCGGGCCATCCT
GGGCTCTTACCGCAAGAAGAGGAAGAACTCCACGGACCTGGATTCAGCACCCGAGGACCCCACCTCGCCCAAGCG
CAAGATGAGAAGACGCTCCAGCTGCAGCTCGGAGCCCAACACCCCCAAGAGTGCCAAGTGCGAGGGGGACATCTT
CACCTTTGACCGTACAGGTACAGAAGCCGAGGACGTGCTTGGGGAGCTAGAGTATGACAAGGTGCCATACTCCTC
CCTGCGGCGCACCCTGGACCAGCGCCGGGCCCTGGTCATGCAGCTCTTTCAGGACCATGGCTTCTTCCCGTCAGC
CCAGGCCACAGCCGCCTTCCAGGCCCGCTATGCAGACATCTTTCCCTCCAAGGTTTGTCTGCAGTTGAAGATCCG
TGAGGTGCGCCAGAAGATCATGCAGGCTGCCACTCCCACGGAGCAGCCCCCTGGAGCTGAGGCTCCTCTCCCTGT
ACCGCCCCCCCACTGGCACCGCTGCTGCCCCTGCCCCCACTCCCAGCCCCGCAGGGGGCCCTGACCCCACCTCACC
CAGCTCGGACTCTGGCACGGCCCAGGCTGCCCCGCCACTGCCTCCACCCCCAGAGTCGGGGCCTGGACAGCCTGG
CTGGGAGGGGGCTCCCCAGCCCTCCCCCCCACCCCCAGGTCCCTCCACAGCTGCCACAGGCAGGTGAGGGACCCC
TGAGAAGATGCCAGGACTTATAGTACCCCCTCAGGACATGGACAGTATGTGGGGGCAGGAAGGTTATCTCCTCCC
GGGTAAAGCCATTTCGTCCTCTCCAGTTTGGGGCGGAATGAGGCCTGCTCCTCTTGTAAATACCCCCTTCCCTCG
AAGCTCCCTCCCGGTGCTGGGGGGCAGCTGAGGGGCTGCAGGGGCAGTCTCCCTCCTCCAAGCCCCTGTACATAA
CCTGGAGCGTGTGACCTTCAGAGCTTTTCACTTTATGCAAAATGGCTCCTGTGAGGGCTGCAAGCTGGAGGGTGG
TGCAGGCCTTGGGCCACAGGGAGGCGCCTGTGGAATAGGGGGAGTTCATGCACCCCTTTTTTCCCCAGAGGGGCT
GGACTCAGGTTAGTTTGGGGGTGGGGGCTCCTGCACTTTGCCACAGGCACGGGGAGGGTTTTCTCCTCACCCCCT
CTGCCCTCCCAACTTGGGTTGTACTTTCTAAGAAGGTGATTCCCCCTGCCCTTGCCCCCTTCCCCAGAACAAAAC
ATGTTGATCATGTGCAATATTTCTTACTGTGCCGAGAAGCCGCAATGAGCGAGATTAAAGCTGTTTAACACAC

FIGURE 3770

GCGCGGCCTGGGAGTCAGCGGCCCGAGCGGGAAGCGCCGGGCGAGCCCACTGTGCGGCCGTCGTGGGGGAAGCGA
AGGTTCCTGATTCCACCTACCTCCTAAGTGAAGGCTTCCGTCCCTGGAGAGGAGGCGGCGCCCTGTATCGGCCTT
CGTCCTCCGCGGGTGTGCTAGCGTTGGGACGGTCCTTTGTTGCCGCGAGGGGTAGGAGTGGGCGTGGCGGAGCCA
GCTCCGTTCGGAACACTCCCGGGCCGACCCGACTCGCTCATCCTGCAGGAGCTGCGGCGCCAAGATGAGTGGAGA
GGAGAACCCAGCCAGCAAGCCCACGCCGGTGCAGGACGTACAGGGCGACGGGCGCTGGATGTCCCTGCACCATCG
GTTCGTGGCTGACAGCAAAGATAAGGAACCCGAAGTCGTCTTCATCGGGGACTCCTTGGTCCAGCTCATGCACCA
GTGCGAGATCTGGCGCGAGCTCTTCTCTCCTCTGCATGCACTTAACTTTGGCATTGGTGGTGACGGCACACAGCA
TGTACTGTGGCGGCTGGAGAATGGGGAGCTGGAACACATCCGGCCCAAGATTGTGGTGGTCTGGGTGGGCACCAA
CAACCACGGACACACAGCAGAGCAGGTGACTGGTGGCATCAAGGCCATTGTGCAACTGGTGAATGAGCGACAGCC
CCAGGCCCGGGTTGTGGTGCTGGGCCTGCTTCCGCGAGGCCAACATCCCAACCCACTTCGGGAGAAGAACCGACA
GGTGAACGAGCTGGTACGGGCGGCACTGGCTGGCCACCCTCGGGCCCACTTCCTAGATGCCGACCCTGGCTTTGT
GCACTCAGATGGCACCATCAGCCATCATGACATGTATGATTACCTGCATCTGAGCCGCCTGGGCTACACACCTGT
TTGCCGGGCTCTGCACTCCCTGCTTCTGCGTCTGCTGGCCCAAGACCAGGGCCAAGGTGCTCCCCTGCTGGAGCC
CGCACCCTAAGCATCCTGCTGCCTTCCCACAACATTAAACTCTCCTTCCTCAG

FIGURE 3771A

GTGATGGCATCTCACACTGCAACCGCACGTGCTTGGAGGACTGTGGCCATGGTGTGTGCAGTGGCCCCCCGGACT
TTACCTGCGTGTGTGACCTAGGCTGGACATCAGACCTGCCCCCTCCCACACCCGCCCCGGGTCCGCCAGCCCCCC
GCTGCTCCCGGGACTGTGGCTGCAGCTTCCACAGCCACTGCCGCAAGCGGGGCCCTGGCTTCTGCGACGAGTGCC
AGGACTGGACATGGGGGGAGCACTGCGAACGATGCCGGCCCGGCAGCTTCGGCAACGCCACAGGCTCTAGGGGCT
GCCGGCCCTGCCAGTGCAACGGGCACGGGGACCCACGCCGTGGCCACTGCGACAACCTCAGTGGGCTCTGCTTCT
GCCAGGACCACACCGAGGGTGCCCACTGCCAGCTCTGCTCCCCAGGCTATTATGGGGATCCCCGGGCCGGTGGTT
CCTGCTTTCGGGAGTGTGGGGGTCGCGCCCTCCTCACCAACGTGTCCTCAGTGGCACTGGGCTCACGCCGGGTCG
GGGGGCTGCTGCCTCCAGGTGGCGGGGCTGCAAGAGCCGGGCCTGGCCTGTCCTACTGTGTGTGGGTTGTCTCGG
CCACTGAGGAGCTACAGCCCTGTGCTCCCGGGACCCTCTGTCCCCCACTCACCCTCACCTTCTCCCCCGACAGCA
GCACCCCCTGCACGCTGAGCTACGTCCTGGCGTTTGATGGATTCCCACGCTTCCTGGACACTGGTGTTGTCCAGT
CGGACCGCAGCCTCATAGCTGCCTTCTGCGGCCAGCGACGGGACAGGCCCCTCACTGTTCAGGCCCTGTCTGGGC
TGCTCGTGCTGCACTGGGAGGCCAATGGCTCCTCATCCTGGGGCTTCAATGCTTCGGTGGGCTCTGCCCGCTGTG
GGTCAGGGGGCCCCGGGAGCTGTCCCGTCCCCCAGGAATGCGTGCCCCAGGACGGTGCTGCAGGTGCGGGGCTCT
GCCGATGTCCTCAGGGCTGGGCTGGCCCACACTGCCGCATGGCTCTGTGTCCTGAGAACTGCAATGCCCACACTG
GGGCAGGAACTTGTAACCAGAGCCTGGGTGTGTGCATCTGTGCCGAGGGCTTCGGGGGCCCCGACTGCGCCACCA
AGCTGGATGGCGGGCAGCTGGTCTGGGAGACCCTCATGGACAGCCGCCTCTCAGCCGACACTGCCAGCCGCTTCC
TGCACCGCCTGGGCCACACCATGGTGGATGGACCCGATGCCACCTTGTGGATGTTTGGGGGCCTGGGCCTGCCCC
AGGGGCTGCTGGGAAACCTGTACAGGTACTCAGTGAGTGAGCGGCGGTGGACACAGATGCTGGCGGGAGCCGAGG
ACGGGGGCCCAGGCCCATCGCCCCGCTCCTTCCATGCAGCCGCATATGTGCCCGCTGGCCGTGGTGCCATGTATC
TGCTGGGGGGACTTACCGCTGGAGGCGTCACCCGTGATTTCTGGGTCCTCAACCTCACCACCCTGCAATGGCGGC
AGGAGAAGGCCCCCCAGACCGTGGAGCTGCCAGCCGTTGCTGGTCACACCCTTACTGCCCGCCGAGGCCTGTCTC
TGCTCCTGGTGGGCGGTTACTCCCCGGAAAATGGCTTCAACCAGCAGCTGCTGGAGTACCAGCTGGCAACCGGCA
CCTGGGTGTCAGGAGCCCAGAGTGGGACACCCCCCACAGGTCTCTATGGTCACTCTGCTGTCTACCACGAGGCCA
CCGACTCCCTCTACGTGTTTGGGGGGTTCCGATTCCATGTGGAGCTGGCGGCCCCATCCCCCGAGCTCTACTCCC
TGCACTGTCCTGACCGCACCTGGAGTCTGCTGGCCCCTTCTCAGGGGGCAAAGCGAGATCGTATGAGGAATGTGC
GTGGCTCATCTCGGGGTCTGGGCCAAGTTCCTGGGGAGCAGCCTGGGTCATGGGGGTTCCGGGAAGTCAGGAAGA
AGATGGCTCTGTGGGCTGCTCTTGCTGGTACAGGAGGTTTCCTGGAGGAAATCTCACCTCACCTGAAGGAGCCCC
GCCCCCGGCTTTTCCACGCCTCAGCCCTGTTAGGGGACACCATGGTGGTTCTTGGGGGGCGCTCGGACCCTGACG
AGTTCAGCAGCGACGTTCTGCTCTACCAGGTCAACTGCAATGCCTGGCTTCTGCCCGACCTCACCCGCTCGGCCT
CTGTGGGGCCCCCAATGGAGGAGTCTGTGGCCCATGCTGTGGCAGCAGTCGGGAGCCGCCTGTATATCTCTGGGG
GTTTCGGGGGAGTGGCCCTGGGCCGCCTGCTGGCACTGACCCTGCCCCCTGACCCCTGCCGCCTGCTGTCCTCAC
CTGAAGCTTGTAACCAGTCTGGGGCCTGCACCTGGTGCCATGGGGCCTGCTTGTCCGGGGATCAGGCCCACAGGC
TGGGCTGCGGGGGCTCCCCCTGCTCCCCAATGCCTCGCTCCCCGGAGGAATGTCGACGTCTCCGGACCTGCAGTG
AGTGCCTGGCCCGCCATCCTCGGACCCTGCAACCTGGAGATGGAGAGGCGTCCACCCCCCGCTGTAAGTGGTGTA
CCAACTGCCCCGAAGGTGCTTGCATTGGACGCAATGGGTCCTGCACCTCTGAGAATGACTGTCGGATCAACCAGC
GAGAGGTCTTCTGGGCAGGGAACTGCTCCGAGGCTGCGTGCGGGGCTGCTGACTGCGAGCAGTGCACGCGGGAGG
GCAAGTGCATGTGGACGCGGCAGTTCAAGAGGACAGGGGAGACCCGCCGCATCCTCTCCGTGCAGCCCACCTATG
ACTGGACGTGCTTCAGCCACTCTCTGCTGAATGTGTCCCCCATGCCGGTGGAATCATCACCCCCACTGCCCTGCC
CCACCCCTTGTCACCTCCTACCCAACTGTACCTCCTGCCTGGACTCTAAGGGAGCAGATGGGGGCTGGCAGCACT
GTGTTTGGAGCAGCAGCCTGCAGCAGTGTCTGAGCCCTTCCTACCTGCCCCTGCGATGTATGGCCGGAGGCTGTG
GGCGGCTGCTCCGGGGACCTGAGAGCTGCTCCCTGGGCTGTGCTCAGGCAACTCAGTGCGCCTTGTGCCTGCGGC
GCCCCCATTGCGGCTGGTGTGCCTGGGGGGGCCAGGATGGGGGTGGCCGCTGCATGGAGGGTGGACTCAGCGGCC
CCCGTGATGGGCTGACATGTGGGCGTCCGGGGGCCTCCTGGGCCTTCCTGTCCTGCCCCCCTGAGGACGAGTGTG
CAAACGGGCACCACGACTGCAACGAGACGCAGAATTGCCACGACCAGCCCCACGGCTATGAGTGCAGCTGCAAGA
CCGGCTATACCATGGACAACATGACAGGGCTGTGCCGCCCTGTGTGCGCCCAGGGCTGCGTGAACGGCTCATGTG
TGGAGCCCGACCACTGCCGCTGCCACTTTGGCTTTGTGGGCCGCAACTGCTCCACGGAATGCCGCTGCAACCGCC
ACAGTGAATGCGCTGGTGTTGGGGCGCGTGACCACTGCTTGCTCTGCCGCAACCACACCAAGGGCAGCCACTGTG
AGCAGTGCCTCCCGCTGTTTGTGGGTTCAGCTGTCGGAGGCGGGACCTGCCGGCCCTGCCACGCCTTTTGTCGTG

FIGURE 3771B

GAAATAGCCACATCTGCATCTCCAGGAAGGAGTTACAAATGTCCAAGGGAGAGCCAAAGAAGTACTCACTGGACC
CAGAGGAGATTGAAAACTGGGTGACAGAGGGTCCTAGTGAAGACGAGGCCGTGTGCGTGAACTGCCAGAATAACA
GCTATGGGGAGAAATGCGAGAGCTGCCTGCAGGGCTACTTCCTCCTGGACGGGAAGTGCACCAAATGCCAGTGTA
ATGGCCACGCGGACACATGTAACGAGCAGGATGGGACGGGCTGTCCATGTCAGAATAACACAGAGACGGGCACAT
GCCAGGGCAGCTCCCCCAGTGACCGTCGAGACTGCTACAAGTACCAGGTGCGCCAAGTGCCGGGAATCATTTCAC
GGGAGTCCGCTGGGCGGCCAGCAGTGCTACCGCCTCATCTCGGTGGAGCAGGAGTGCTGCCTGGACCCCACGTCC
CAGACCAACTGCTTCCATGAGCCCAAACGCCGGGCGCTAGGCCCCGGCCGCACTGTCCTCTTTGGCGTGCAGCCC
AAATTCACCAACGTGGACATCCGCCTGACGCTGGACGTGACCTTCGGGGCCGTGGACCTCTATGTCTCCACCTCC
TATGACACCTTCGTGGTCCGTGTGGCCCCTGACACTGGCGTCCATACTGTACACATCCAGCCACCCCCAGCCCCA
CCACCTCCACCACCCCCTGCAGATGGTGGGCCCCGGGGGGCTGGGGATCCAGGAGGAGCAGGGGCCAGCAGTGGG
CCGGGCGCCCCAGCAGAGCCACGGGTACGGGAGGTATGGCCGCGGGGCCTGATTACCTACGTGACGGTGACGGAG
CCGTCGGCAGTGCTGGTGGTCCGCGGCGTGCGGGACCGGCTGGTCATCACCTACCCACACGAGCACCATGCCCTC
AAGTCGAGCCGCTTCTACCTGCTGCTGCTGGGCGTGGGAGACCCAAGTGGGCCCGGCGCCAACGGCTCAGCCGAC
TCGCAGGGCCTGCTCTTCTTCCGGCAGGACCAGGCCCACATTGACCTGTTTGTCTTCTTCTCCGTCTTCTTCTCC
TGCTTCTTCCTCTTCCTCTCACTCTGTGTGCTCCTCTGGAAGGCCAAGCAGGCTCTGGACCAGCGGCAGGAGCAG
CGCCGGCACTTGCAGGAGATGACCAAGATGGCCAGCCGCCCCTTCGCCAAGGTCACCGTCTGCTTCCCACCTGAC
CCTACTGCCCCGGCCTCCGCCTGGAAGCCGGCTGGGCTCCCACCTCCCGCCTTCCGCCGCTCTGAGCCCTTCCTG
GCACCCCTGCTGCTGACAGGGGCCGGTGGGCCCTGGGGACCCATGGGAGGGGGCTGCTGCCCACCAGCCATCCCC
GCCACCACTGCTGGGCTGCGAGCTGGGCCCATCACTCTCGAGCCCACAGAAGATGGCATGGCTGGCGTGGCCACA
CTGCTGCTCCAGCTGCCTGGCGGGCCCCATGCACCCAACGGCGCCTGCCTGGGGTCAGCCCTCGTCACACTGCGG
CACAGGCTGCACGAGTACTGTGGGGGTGGTGGGGGTGCTGGGGGCAGTGGGCATGGGACTGGTGCGGGCCGGAAG
GGACTGTTGAGCCAGGACAACCTCACCAGCATGTCCCTCTGACATGCCCAGGGTTCTCATCCACAGCAGCTGGGT
CACCTGATAGGGCCGCCCTGGACTTGGGGTCCCTCCACCTGGGGGCCCCTGGACACTGTCTACTTGGAGACCACT
GGCCCCCTTCCCCCAGGGTTGCCCAGATGGGGCCTCCTTTGTTCTGCATTCAGCAGCTATTTATCGAGTACCTAC
TCTGTCAGGCACTGTCATAGGCGTGGGGCAAAGCAGGAACCAAGAGACGAGGTTCCCTGATCTCATGGGACTTAG
GTTCTGGTGAAGGGAGACAATCAGTGCACATGCACACACCCCACACGCATACACACATGAACACATGCACATGTG
CACACACAAGTAAGATGGCTTCAGAGAGGGAGAAGCACTGTGAGGCCTCCAGAGGATGTGGCAGTGAGGGACGAT
GGGGTGAAGTCAGCTGGGCATTCAAAGAAGCTAGACTGAGAACGCCTGAGAAGAACCAGCTACGGGAAGAGCTTT
GGGAAGCAAAGGCAGAGGCCCTGGGGTGGGAGCAGGCTTGTTTTATTGGAAGGACCAGAAAACTGGTAAGTGTGA
CCCAGATCAAGTGTGAGGAGATGAGGCTGGGGATAGTCAGGGGCTGGATCACCCAGGGCCTTGTGGGCCCCACAT
AGGGTTTTGGGTTTTATTCTCAGGGCAATGGGAAGCTGTTGGATGGTTTGATGAAGGGGAGTGACAGGATCCGAT
GTACCTATTTAAGAATTTAAGAGGGTCGGGTGCGGTGGCTCATGCCTATAATCCTAGCACTTTGAGAGGCCAAGG
TGGGCTGATCACAAGGTCAAGAGTTCGTGACCAGCCTGGCCAATATGGTGAAACCCCATGTCTACTAAAAATACA
AAAATTAGCTGGGCATGGTGGCACACACTTGTAGTCCGAGCTACTCGGGAGGCTGAGGCAGAAGAATCGCTTGAA
CCCAGGAGGCGGAGGTTGCAGTGAGCTCAGATTGCGTCACTGCACTCCAACCTGGGTGACAGAGCGAGACTCCAC
CTC

FIGURE 3772A

CTTCTTGTAAGAGAGTGCTAGGCACATAGCCTCCTCCTATTCCTAATCCTCCCACCAAAGAAAGAGGCACAGAGT
TCATTACTTAGTGGGGGCCAGCTGTGATCGGCCAACTGCCAGCTGCCTTAAAAAGGAAGACCAGTGATGCTAGGA
TGGAGTGAAACCCAAGAGGAAGTGCCATCATGAGGAATCAATGAGAGATCTGTGAAGAGAGAGGGCTGGGTGGGA
GCCCAGAAGGATAGAACCTGGAAGATCAATATCTCCCGTGAGGGAAATAACAATGGAGCCAGGTTCTAAGTCAGT
GTCTAGGTCAGACTGGCAACCTGAACCACACCAGAGGCCTATAACCCCGCTAGAGCCTGGGCCAGAAAAGACACC
CATAGCCCAGCCAGAATCGAAGACTCTGCAGGGATCCAATACCCAACAGAAGCCTGCTTCAAACCAAAGACCCCT
CACCCAGCAGGAGACCCCTGCACAACATGATGCTGAATCCCAGAAGGAACCTAGAGCCCAACAAAAATCTGCTTC
ACAAGAGGAATTTCTTGCCCCACAGAAGCCCGCACCACAGCAATCACCTTACATCCAAAGGGTGCTGCTCACTCA
ACAGGAAGCTGCCTCCCAGCAGGGACCTGGGCTAGGAAAAGAATCTATAACTCAACAGGAGCCAGCATTGAGACA
AAGACATGTAGCCCAGCCAGGGCCTGGGCCAGGAGAGCCACCTCCAGCTCAACAAGAAGCTGAATCAACACCTGC
GGCCCAGGCTAAACCTGGAGCCAAAAGGGAGCCATCTGCCCCGACTGAATCTACGTCCCAAGAGACACCTGAACA
GTCAGACAAGCAAACAACGCCAGTCCAGGGAGCCAAATCCAAGCAGGGATCTTTGACAGAGCTGGGATTTCTAAC
AAAACTTCAGGAACTATCCATACAGCGATCAGCCCTAGAGTGGAAGGCACTTTCTGAGTGGGTCACAGATTCTGA
GTCAGAATCAGATGTGGGATCATCTTCAGACACAGATTCTCCAGCCACGATGGGTGGAATGGTGGCCCAGGGAGT
GAAGCTAGGCTTCAAAGGAAAATCTGGTTATAAAGTGATGTCAGGATACAGTGGGACGTCGCCACATGAGAAAAC
CAGTGCTCGGAATCACAGACACTACCAGGATACAGCCTCAAGGCTCATCCACAACATGGACCTGCGCACAATGAC
ACAGTCGCTGGTGACTCTGGCGGAGGACAACATAGCCTTCTTCTCGAGCCAGGGTCCTGGGGAAACGGCCCAGCG
GCTGTCAGGCGTTTTTGCCGGTGTACGGGAGCAGGCGCTGGGGCTGGAGCCGGCCCTGGGCCGCCTGCTGGGTGT
GGCGCACCTCTTTGACCTGGACCCAGAGACACCGGCCAACGGGTACCGCAGCCTAGTGCACACAGCCCGCTGCTG
CCTGGCGCACCTCCTGCACAAATCCCGCTATGTGGCCTCCAACCGCCGCAGCATCTTCTTCCGCACCAGCCACAA
CCTGGCCGAGCTGGAGGCCTACCTGGCTGCCCTCACCCAGCTCCGCGCTCTGGTCTACTACGCCCAGCGCCTGCT
GGTTACCAATCGGCCGGGGGTACTCTTCTTTGAGGGCGACGAGGGGCTCACCGCCGACTTCCTCCGGGAGTATGT
CACGCTGCATAAGGGATGCTTCTATGGCCGCTGCCTGGGCTTCCAGTTCACGCCTGCCATCCGGCCATTCCTGCA
GACCATCTCCATTGGGCTGGTGTCCTTCGGGGAGCACTACAAACGCAACGAGACAGGCCTCAGTGTGGCCGCCAG
CTCTCTCTTCACCAGCGGCCGCTTTGCCATCGACCCCGAGCTGCGTGGGGCTGAGTTTGAGCGGATCACACAGAA
CCTGGACGTGCACTTCTGGAAAGCCTTCTGGAACATCACCGAGATGGAAGTGCTATCGTCTCTGGCCAACATGGC
ATCGGCCACCGTGAGGGTAAGCCGCCTGCTCAGCCTGCCACCCGAAGCCTTTGAGATGCCACTGACTGCCGACCC
CACGCTCACGGTCACCATCTCACCCCCACTGGCCCACACAGGCCCTGGGCCCGTCCTCGTCAGGCTCATCTCCTA
TGACCTGCGTGAAGGACAGGACAGTGAGGAGCTCAGCAGCCTGATAAAGTCCAACGGCCAACGGAGCCTGGAGCT
GTGGCCGCGCCCCCAGCAGGCACCCCGCTCGCGGTCCCTGATAGTGCACTTCCACGGCGGTGGCTTTGTGGCCCA
GACCTCCAGATCCCACGAGCCCTACCTCAAGAGCTGGGCCCAGGAGCTGGGCGCCCCCATCATCTCCATCGACTA
CTCCCTGGCCCCTGAGGCCCCCTTCCCCCGTGCGCTGGAGGAGTGCTTCTTCGCCTACTGCTGGGCCATCAAGCA
CTGCGCCCTCCTTGGCTCAACAGGGGAACGAATCTGCCTTGCGGGGGACAGTGCAGGCGGGAACCTCTGCTTCAC
CGTGGCTCTTCGGGCAGCAGCCTACGGGGTGCGGGTGCCAGATGGCATCATGGCAGCCTACCCGGCCACAATGCT
GCAGCCTGCCGCCTCTCCCTCCCGCCTGCTGAGCCTCATGGACCCCTTGCTGCCCCTCAGTGTGCTCTCCAAGTG
TGTCAGCGCCTATGCTGGTGCAAAGACGGAGGACCACTCCAACTCAGACCAGAAAGCCCTCGGCATGATGGGGCT
GGTGCGGCGGGACACAGCCCTGCTCCTCCGAGACTTCCGCCTGGGTGCCTCCTCATGGCTCAACTCCTTCCTGGA
GTTAAGTGGGCGCAAGTCCCAGAAGATGTCGGAGCCCATAGCAGAGCCGATGCGCCGCAGTGTGTCTGAAGCAGC
ACTGGCCCAGCCCCAGGGCCCACTGGGCACGGATTCCCTCAAGAACCTGACCCTGAGGGACTTGAGCCTGAGGGG
AAACTCCGAGACGTCGTCGGACACCCCCGAGATGTCGCTGTCAGCTGAGACACTTAGCCCCTCCACACCCTCCGA
TGTCAACTTCTTATTACCACCTGAGGATGCAGGGGAAGAGGCTGAGGCCAAAAATGAGCTGAGCCCCATGGACAG
AGGCCTGGGCGTCCGTGCCGCCTTCCCCGAGGGTTTCCACCCCCGACGCTCCAGCCAGGGTGCCACACAGATGCC
CCTCTACTCCTCACCCATAGTCAAGAACCCCTTCATGTCGCCGCTGCTGGCACCCGACAGCATGCTCAAGAGCCT
GCCACCTGTGCACATCGTGGCGTGCGCGCTGGACCCCATGCTGGACGACTCGGTCATGCTCGCGCGGCGACTGCG
CAACCTGGGCCAGCCGGTGACGCTGCGCGTGGTGGAGGACCTGCCGCACGGCTTCCTGACCCTAGCGGCGCTGTG
CCGCGAGACGCGCCAGGCCGCAGAGCTGTGCGTGGAGCGCATCCGCCTCGTCCTCACTCCTCCCGCCGGAGCCGG
GCCGAGCGGGGAGACGGGGGCTGCGGGGGTAGACGGGGGCTGCGGGGGGCGACACTAAAAGCCTGTTGTTCCCAT
CTGCGCCGGCCTCCGTCATGAATGCCTTCCGGGCCGGGCGGAAGGGGACGCGGGCTGTGCCTTACTTAAGTCGGG

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FIGURE 3772B

GGTGGCAAGGGGGCGGGGCGGGGGCCCGAAAGCTGAGACCCTCGCCACGGGGAGGGGGACGCGCACACACACCGG
TCACCGAGACGGCTGGACCTGCACGCCACCGCTGCCTTTTGCTGCTGCTGCTGCGGCGACCGCCGCAGGGACGGG
GACTGGCCCTCCCTTGCAGGTCGGTTTGGTTTGTTGTAAATAAAAGTATTTAATTA

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FIGURE 3773

CTCGCCCTCAAATGGGAACGCTGGCCTGGGACTAAAGCATAGACCACCAGGCTGAGTATCCTGACCTGAGTCATC
CCCAGGGATCAGGAGCCTCCAGCAGGGAACCTTCCATTATATTCTTCAAGCAACTTACAGCTGCACCGACAGTTG
CGATGAAAGTTCTAATCTCTTCCCTCCTCCTGTTGCTGCCACTAATGCTGATGTCCATGGTCTCTAGCAGCCTGA
ATCCAGGGGTCGCCAGAGGCCACAGGGACCGAGGCCAGGCTTCTAGGAGATGGCTCCAGGAAGGCGGCCAAGAAT
GTGAGTGCAAAGATTGGTTCCTGAGAGCCCCGAGAAGAAAATTCATGACAGTGTCTGGGCTGCCAAAGAAGCAGT
GCCCCTGTGATCATTTCAAGGGCAATGTGAAGAAAACAAGACACCAAAGGCACCACAGAAAGCCAAACAAGCATT
CCAGAGCCTGCCAGCAATTTCTCAAACAATGTCAGCTAAGAAGCTTTGCTCTGCCTTTGTAGGAGCTCTGAGCGC
CCACTCTTCCAATTAAACATTCTCAGCCAAGAAGACAGTGAGCACACCTACCAGACACTCTTCTTCTCCCACCTC
ACTCTCCCACTGTACCCACCCCTAAATCATTCCAGTGCTCTCAAAAAGCATGTTTTTCAAGATCATTTTGTTTGT
TGCTCTCTCTAGTGTCTTCTTCTCTCGTCAGTCTTAGCCTGTGCCCTCCCCTTACCCAGGCTTAGGCTTAATTAC
CTGAAAGATTCCAGGAAACTGTAGCTTCCTAGCTAGTGTCATTTAACCTTAAATGCAATCAGGAAAGTAGCAAAC
AGAAGTCAATAAATATTTTTAAATGTCACAGATCAAAATTGTTTCCTTCAAATGGGGTCTGCCAATTCACAACCA
GATGACCCATTTTACCCTATTCACTGCAGACTGAATCCAGATTCTACACATACTTATCCCCACCAAGACCCTCAC
TCTGTCTCCATTGGCCTACTTGTTCATCTTTCACTCATTCGACAAATCTTTCTGAGGTAAGAGCGAGGTGGGACA
AAAAAAAAAAAGCATACCAATGAACCAGACACGGTCTTATTAAAGATAATATAGGTTTAAAAAAAAAA

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FIGURE 3774

AAACAGCAGAGGTGACAGAGCAGCCGTGCTCGAAGCGTTCCTGGAGCCCAAGCTCTCCTCCACAGGTGAAGACAG
GGCCAGCAGGAGACACCATGGGGCACCTCTCAGCCCCACTTCACAGAGTGCGTGTACCCTGGCAGGGGCTTCTGC
TCACAGCCTCACTTCTAACCTTCTGGAACCCGCCCACCACTGCCCAGCTCACTACTGAATCCATGCCATTCAATG
TTGCAGAGGGGAAGGAGGTTCTTCTCCTTGTCCACAATCTGCCCCAGCAACTTTTTGGCTACAGCTGGTACAAAG
GGGAAAGAGTGGATGGCAACCGTCAAATTGTAGGATATGCAATAGGAACTCAACAAGCTACCCCAGGGCCCGCAA
ACAGCGGTCGAGAGACAATATACCCCAATGCATCCCTGCTGATCCAGAACGTCACCCAGAATGACACAGGATTCT
ACACCCTACAAGTCATAAAGTCAGATCTTGTGAATGAAGAAGCAACTGGACAGTTCCATGTATACCCGGAGCTGC
CCAAGCCCTCCATCTCCAGCAACAACTCCAACCCTGTGGAGGACAAGGATGCTGTGGCCTTCACCTGTGAACCTG
AGACTCAGGACACAACCTACCTGTGGTGGATAAACAATCAGAGCCTCCCGGTCAGTCCCAGGCTGCAGCTGTCCA
ATGGCAACAGGACCCTCACTCTACTCAGTGTCACAAGGAATGACACAGGACCCTATGAGTGTGAAATACAGAACC
CAGTGAGTGCGAACCGCAGTGACCCAGTCACCTTGAATGTCACCTATGGCCCGGACACCCCCACCATTTCCCCTT
CAGACACCTATTACCGTCCAGGGGCAAACCTCAGCCTCTCCTGCTATGCAGCCTCTAACCCACCTGCACAGTACT
CCTGGCTTATCAATGGAACATTCCAGCAAAGCACACAAGAGCTCTTTATCCCTAACATCACTGTGAATAATAGTG
GATCCTATACCTGCCACGCCAATAACTCAGTCACTGGCTGCAACAGGACCACAGTCAAGACGATCATAGTCACTG
AGCTAAGTCCAGTAGTAGCAAAGCCCCAAATCAAAGCCAGCAAGACCACAGTCACAGGAGATAAGGACTCTGTGA
ACCTGACCTGCTCCACAAATGACACTGGAATCTCCATCCGTTGGTTCTTCAAAAACCAGAGTCTCCCGTCCTCGG
AGAGGATGAAGCTGTCCCAGGGCAACACCACCCTCAGCATAAACCCTGTCAAGAGGGAGGATGCTGGGACGTATT
GGTGTGAGGTCTTCAACCCAATCAGTAAGAACCAAAGCGACCCCATCATGCTGAACGTAAACTATAATGCTCTAC
CACAAGAAAATGGCCTCTCACCTGGGGCCATTGCTGGCATTGTGATTGGAGTAGTGGCCCTGGTTGCTCTGATAG
CAGTAGCCCTGGCATGTTTTCTGCATTTCGGGAAGACCGGCAGGGCAAGCGACCAGCGTGATCTCACAGAGCACA
AACCCTCAGTCTCCAACCACACTCAGGACCACTCCAATGACCCACCTAACAAGATGAATGAAGTTACTTATTCTA
CCCTGAACTTTGAAGCCCAGCAACCCACACAACCAACTTCAGCCTCCCCATCCCTAACAGCCACAGAAATAATTT
ATTCAGAAGTAAAAAAGCAGTAAATGAAACCTGTCCTGCTCACTGCAGTGCTGATGTATTTCAAGTCTCTCACCCT
CATCACTAGGAGATTCCTTTCCCCTGTAGGGGTAGAGGGGTGGGGACAGAAACAACTTTCTCCTACTCTTCCTTC
CTAATAGGCATCTCCAGGCTGCCTGGTCACTGCCCCTCTCTCAGTGTCAATAGATGAAAGTACATTGGGAGTCTG
TAGGAAACCCAACCTTCTTGTCATTGAAATTTGGCAAAGCTGACTTTGGGAAAGAGGGACCAGAACTTCCCCTCC
CTTCCCCTTTTCCCAACCTGGACTTGTTTTAAACTTGCCTGTTCAGAGCACTCATTCCTTCCCACCCCCAGTCCT
GTCCTATCACTCTAATTCGGATTTGCCATAGCCTTGAGGTTATGTCCTTTTCCATTAAGTACATGTGCCAGGAAA
CAAGAGAGAGAGAAAGTAAAGGCAGTAATGCCTTCTCCTATTTCTCCAAAGCCTTGTGTGAACTCACCAAACACA
AGAAAATCAAATATATAACCAATAGTGAAATGCCACACCTTTGTCCACTGTCAGGGTTGTCTACCTGTAGGATCA
GGGTCTAAGCACCTTGGTGCTTAGCTAGAATACCACCTAATCCTTCTGGCAAGCCTGTCTTCAGAGAACCCACTA
GAAGCAACTAGGAAAATCACTTGCCAAAATCCAAGGCAATTCCTGATGGAAAATGCAAAAGCACATATATGTTTT
AATATCTTTATGGGCTCTGTTCAAGGCAGTGCTGAGAGGGAGGGGTTATAGCTTCAGGAGGGAACCAGCTTCTGA
TAAACACAATCTGCTAGGAACTTGGGAAAGGAATCAGAGAGCTGCCCTTCAGCGATTATTTAAATTATTGTTAAA
GAATACACAATTTGGGGTATTGGGATTTTTCTCCTTTTCTCTGAGACATTCCACCATTTTAATTTTTGTAACTGC
TTATTTATGTGAAAAGGGTTATTTTTACTTAGCTTAGCTATGTCAGCCAATCCGATTGCCTTAGGTGAAAGAAAC
CACCGAAATCCCTCAGGTCCCTTGGTCAGGAGCCTCTCAAGATTTTTTTTGTCAGAGGCTCCAAATAGAAAATAA
GAAAAGGTTTTCTTCATTCATGGCTAGAGCTAGATTTAACTCAGTTTCTAGGCACCTCAGACCAATCATCAACTA
CCATTCTATTCCATGTTTGCACCTGTGCATTTTCTGTTTGCCCCCATTCACTTTGTCAGGAAACCTTGGCCTCTG
CTAAGGTGTATTTGGTCCTTGAGAAGTGGGAGCACCCTACAGGGACACTATCACTCATGCTGGTGGCATTGTTTA
CAGCTAGAAAGCTGCACTGGTGCTAATGCCCCTTGGGGAAATGGGGCTGTGAGGAGGAGGATTATAACTTAGGCC
TAGCCTCTTTTAACAGCCTCTGAAATTTATCTTTTCTTCTATGGGGTCTATAAATGTATCTTATAATAAAAAGGA
AGGACAGGAGGAAGACAGGCAAATGTACTTCTCACCCAGTCTTCTACACAGATGGAATCTCTTTGGGGCTAAGAG
AAAGGTTTTATTCTATATTGCTTACCTGATCTCATGTTAGGCCTAAGAGGCTTTCTCCAGGAGGATTAGCTTGGA
GTTCTCTATACTCAGGTACCTCTTTCAGGGTTTTCTAACCCTGACACGGACTGTGCATACTTTCCCTCATCCATG
CTGTGCTGTGTTATTTAATTTTTCCTGGCTAAGATCATGTCTGAATTATGTATGAAAATTATTCTATGTTTTTAT
AATAAAAATAATATATCAGACATCG

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FIGURE 3775

TTTGAGCCATTTCTGCGTCTTGCAGGACATTTTGAACGAACCCCCTTTGCTTGAGGCTCGCAACCACCCGATGAT
CGATGATCGTCTCAGGGGAAAAGAAGCCTTGGCGAAGAGCAGAGGTTTAGAGGCACAATTCTGCTTTCCCTGGAA
CTGTGTCATTCAGGACTCTGCAAATTCCCTAAAGTAGGAGGAAAA**ATG**ACCATGTCCAAGGAGGCAGTGACCTTC
AAGGATGTGGCAGTGGTCTTCACTGAGGAGGAGCTGGGGCTGCTGGACCTTGCCCAGAGGAAGCTGTATCGAGAT
GTGATGCTGGAGAACTTCAGGAACCTGCTGTCAGTGGGGCATCAACCATTCCACCGAGATACTTTCCACTTTCTA
AGGGAGGAAAAGTTTTGGATGATGGATATAGCAACCCAAAGGGAAGGGAATTCAGGAGGCAAGATCCAACCTGAG
ATGAAGACTTTTCCAGAAGCAGGACCACATGAAGGGTGGTCCTGCCAGCAGATCTGGGAAGAAATTGCAAGTGAT
TTAACCAGGCCTCAAGACTCTACCATAAAGAGCTCTCAGTTCTTTGAACAGGGTGATGCCCACTCCCAGGTTGAG
GAAGGACTATCTATAATGCACACAGGACAGAAACCTTCCAATTGTGGGAAGTGTAAACAATCCTTCAGTGATATG
TCCATCTTTGATCTTCCTCAGCAAATACGCTCAGCAGAGAAGTCTCATTCCTGTGATGAGTGTGGAAAAAGCTTC
TGTTACATCTCAGCGCTTCATATTCATCAGAGAGTCCACCTGGGAGAGAAACTCTTTAAGTGTGACGTGTGTGGT
AAGGAATTCAGTCAGAGTTTACATCTGCAAACTCATCAGAGAGTCCATACTGGAGAGAAACCTTTCAAATGTGAA
CAATGTGGGAGAGGCTTCAGATGTAGATCAGCACTTACAGTTCATTGCAAATTACACATGGGAGAGAAACATTAT
AATTGTGAGGCATGTGGGAGGGCCTTCATTCATGATTTCCAGCTTCAGAAACATCAGAGAATTCACACAGGGGAG
AAGCCATTCAAATGTGAGATATGTAGTGTGAGCTTCCGTCTTAGGTCAAGTCTTAATAGGCATTGTGTGGTCCAC
ACAGGAAAGAAACCAAACAGCACTGGGGAATATGGAAAAGGCTTCATTCGTAGGCTGGATTTGTGTAAGCATCAG
ACGATCCACACAGGAGAGAAACCATATAATTGTAAAGAATGTGGGAAGAGCTTCAGACGGTCCTCCTATCTTTTG
ATCCATCAGCGAGTCCACACTGGAGAAAAGCCATACAAATGTGACAAGTGTGGGAAGAGCTACATTACTAAGTCA
GGTCTTGACTTGCACCATAGAGCCCACACAGGAGAGAGACCTTATAACTGTGATGACTGTGGGAAGAGCTTTAGA
CAGGCCTCAAGTATTTTGAATCATAAGAGACTCCATTGCCGAAAAAAACCATTCAAATGTGAGGATTGTGGAAAG
AAGCTTGTATACCGGTCATACCGTAAAGACCAACAAAAAAACCACAGTGGAGAAAATCCATCCAAATGTGAAGAC
TGTGGGAAGCGCTACAAGAGGCGCTTGAATCTTGATATAATTTTATCATTATTTTTAAATGACACG**TAA**GTGTTG
TACATATTTATGGGGTACAGTGTGATATTTAAATATATGTATATGATGTATAATGATCAAATCAGTGTAATTAGC
ACATTTATCACCTCAATTATCTCTTTTTTGTGTTGAGAAAATTAAAAATTCATTGTTCCAGCAGTTTGAAAATAA
ATTGTTGTCGATGATAGTCACCTTTAGTGCTGCAGAACAGCAGAACTTCTTCCTCTTATCTACCTGTACTTTTGC
ATCCATTAGCCAACCTTTGGCCATCCCACCTATCCCTTACCCTTCCCTGCCTCTAGAGCCACTGTTCTCACTACT
TCTAAGAAATCAGCTTTTTAAGCTTCCCCATGTGAT

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FIGURE 3776

GAGCCTGCGGTTGCTACATAACCGCGTAGTTTGAGCCATTTCTGCGTCTGGCGGGTCCTTCTGAACTTGTCACCT
TCGCTTGGGGTCGCAACGACCCGATGATCGATGATCCAAGCAAGGGAAAAGAAGCCTTGGCGGAGAGCGGAGGCA
CAATTCCACCTTCCTTTGTGCTCCATTACTCAAGACACTGAAGACTCCAAAAAGTAGTAGGAAAA**ATG**ACCACAT
TCAAGGAGGCAGTGACCTTCAAGGATGTGGCTGTGTTCTTCACTGAGGAGGAACTGGGGCTACTGGACCCTGCCC
AGAGGAAGCTGTACCAAGACGTGATGCTTGAGAACTTCACGAACCTGCTGTCAGTGGGGCATCAACCATTCCACC
CTTTCCACTTCCTAAGGGAAGAAAAGTTTTGGATGATGGAGACAGCAACCCAAAGAGAAGGAAATTCAGGCGGCA
AGACTATTGCGGAAGCAGGACCACATGAAGACTGCCCTTGCCAGCAAATCTGGGAACAAACTGCAAGTGACTTAA
CCCAGTCTCAAGACTCCATCATAAATAATTCTCACTTCTTTGAACAAGGTGATGTCCCCTCCCAGGTTGAGGCAG
GACTATCTATAATTCATACAGGACAGAAACCTTCACAGAATGGGAAGTGTAAACAGTCCTTCAGTGATGTTGCCA
TCTTTGATCCTCCTCAGCAGTTCCACTCAGGAGAGAAGTCTCATACATGCAATGAGTGTGGAAAAAGCTTCTGTT
ACATCTCAGCTCTTCGTATTCACCAGAGAGTTCACTTGAGAGAGAAACTCTCTAAGTGTGACATGCGTGGTAAGG
AATTCAGTCAGAGCTCATGTCTGCAAACTCGTGAGAGAGTCCACACTGGAGAGAAACCATTCAAATGTGAGCAAT
GTGGGAAAGGCTTCAGATGTAGAGCGATACTTCAAGTTCACTGCAAATTACACACAGGAGAGAAACCTTATATTT
GTGAGAAATGTGGGAGGGCCTTCATTCACGATTTCCAGCTTCAGAAACATCAGATAATTCATACTGGGGAGAAGC
CGTTCAAATGTGAAATATGTGGTAAGAGCTTCTGCCTTAGGTCAAGTCTTAATAGGCATTGCATGGTCCACACAG
CAGAGAAACTGTACAAATCTGAGGAGTGTGGAAAAGGCTTCACTGATAGCCTAGATTTGCATAAGCATCAGATAA
TTCACACAGGACAGAAACCGTACAATTGTAAAGAATGTGGGAAGAGCTTCAGATGGTCCTCATATCTTTTGATCC
ATCAGCGAATCCACAGTGGAGAAAAACCATACAGATGTGAGGAGTGTGGGAAGGGCTACATTAGTAAGTCAGGTC
TTAACTTGCACCAGAGGGTCCATACTGGAGAGAGACCTTATAATTGTAAGGAATGTGGGAAGAGCTTTAGCCGGG
CTTCAAGTATTTTGAATCATAAGAAACTCCACTGCCGGAAAAAACCCTTCAAATGTGAGGATTGTGGAAAGAGGC
TTGTACACCGGTCTTTCTGTAAAGACCAACAAGGAGACCACAATGGAGAAAACTCATCCAAATGTGAGGACTGTG
GGAAGCGCTACAAGAGGCGCTTGAATCTGGATATAATTTTATCATTATTTTTAAATGATATG**TAA**GTTGTACATA
TATATGGGATATGGTATGAAATTTTAATATGTGTATATAATACGTAATGATCAAATTGATGTAATTAGTGTATTA
CCTTAAACAATTAACATTTCTTTGTTTTGGGAAAATTCAAAATCCATTGTTCTAGCGATTTGAAAAGAAACAATA
AATTATTGTTGATTATAGTC

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FIGURE 3777

TTTTTTTTTTGGCCAAACTCTCATGGCTTTTTTCTCCTTCCCTCATGTTTTCTCCTTCCCTCTTAAGACTTGGCA
CTTCTCCAGAAGGAGGAGGACAAA**ATG**ACGAAGTCTAAGGAGGCAGTGACATTCAAGGACGTGGCTGTGGTCTTC
TCTGAGGAGGAGCTGCAACTGCTGGACCTTGCCCAGAGGAAGCTGTACCGAGATGTGATGCTGGAGAACTTCAGG
AATGTGGTCTCAGTGGGGCATCAGTCCACACCAGATGGCCTACCACAGTTAGAGAGAGAAGAAAAGCTGTGGATG
ATGAAGATGGCAACCCAGAGAGATAACTCCTCAGGAGCCAAGAATCTAAAAGAGATGGAGACTCTTCAAGAAGTA
GGATTAAGGTACCTGCCTCATGAAGAGCTTTTCTGCTCCCAGATCTGGCAACAGATTACAAGAGAGTTAATCAAG
TATCAAGATTCTGTGGTAAATATTCAAAGAACAGGCTGCCAGTTGGAAAAACGAGATGATTTGCACTATAAAGAT
GAGGGATTCAGTAATCAGAGTTCCCATCTTCAAGTTCACAGAGTCCACACTGGTGAAAAACCCTACAAAGGAGAA
CATTGTGTGAAAAGTTTCAGCTGGAGCTCTCATCTTCAAATTAACCAAAGGGCTCATGCAGGAGAGAAGCCCTAC
AAATGTGAAAAATGTGATAATGCCTTCCGTCGGTTTTCAAGTCTTCAAGCCCATCAGAGAGTCCACAGTAGAGCA
AAATCATACACAAATGATGCAAGTTACAGGAGTTTTAGTCAGAGGTCACATCTTCCCCATCATCAGAGAGTTCCC
ACTGGAGAGAATCCATACAAATATGAAGAGTGTGGGAGGAATGTTGGGAAAAGCTCACATTGTCAAGCTCCTCTG
ATAGTTCATACGGGAGAGAAACCCTATAAATGTGAGGAGTGTGGGGTGGGCTTCAGTCAGAGATCATATCTTCAA
GTTCATCTGAAAGTTCACACTGGAAAGAAACCATATAAGTGTGAAGAGTGTGGGAAGAGCTTCAGTTGGCGTTCA
CGACTGCAGGCTCATGAGCGAATCCACACTGGCGAGAAACCATACAAATGCAATGCATGTGGCAAGAGCTTTAGT
TACAGCTCACACCTTAATATTCATTGTAGAATCCACACAGGAGAGAAACCCTATAAGTGTGAGGAGTGTGGGAAA
GGTTTCAGTGTGGGTTCACACCTTCAGGCCCATCAGATAAGCCACACTGGAGAGAAGCCATACAAATGTGAGGAG
TGTGGGAAAGGCTTCTGCCGGGCCTCAAATCTGCTGGACCATCAAAGAGGCCATACTGGAGAGAAACCGTATCAG
TGTGATGCATGTGGTAAGGGCTTCAGTCGTAGCTCAGATTTTAACATTCATTTTAGAGTCCATACAGGGGAAAAA
CCCTATAAATGTGAGGAGTGTGGCAAGGGCTTCAGCCAGGCCTCAAATCTTCTGGCCCATCAAAGAGGCCACACT
GGAGAGAAACCCTACAAATGTGGTACATGTGGGAAGGGCTTCAGTCGGAGCTCAGATCTTAATGTACACTGTAGA
ATCCACACAGGAGAGAAACCCTATAAATGCGAGAGGTGTGGTAAGGCCTTCAGTCAGTTCTCCAGCCTTCAGGTG
CATCAGAGAGTTCACACTGGAGAGAAACCATATCAGTGTGCAGAGTGTGGGAAGGGCTTCAGTGTAGGTTCACAG
CTTCAAGCCCATCAGAGGTGCCACACTGGAGAGAAACCCTATCAATGTGAGGAGTGTGGGAAGGGCTTCTGTCGG
GCCTCCAATTTTCTGGCACATCGTGGAGTCCACACAGGAGAAAAACCATACCGATGTGATGTGTGTGGTAAGCGC
TTCAGACAGAGATCCTACCTTCAAGCCCACCAGAGGGTCCACACAGGAGAGAGACCATACAAATGTGAGGAATGT
GGGAAAGTCTTCAGCTGGAGCTCATACCTTCAAGCCCATCAAAGAGTTCACACCGGAGAAAAACCATACAAATGT
GAGGAGTGTGGGAAGGGCTTCAGTTGGAGCTCAAGTCTTATCATTCATCAGCGAGTCCATGCTGATGATGAGGGT
GACAAGGACTTTCCTTCATCAGAGGATTCACACAGGAAAACTCGA**TAA**AATATGTTTTACTATCTCAGATGGGTG
CTGAAATATTTTAATAATCAGAGCTATCATAGACAAAACATTTGTTTTATAGAGTCAGTAGTTCAGCCAAGTGAT
TGGGAGACCACACAGCAGAGAAGCCTCACAAGAGTGGAGACATATGGACTGCATTCAGAACATTGACCATTAGCT
GATACATGCAGACAAGAGGATCAGGAAGGATGAGTCTGATCTGGAGTAAATCAGAAGTACTAAGATAGAAATGCT
GAATTC

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FIGURE 3778

ATGGCCCGGGTGCCATTGACATTCAGCGATGTTGCCATAGACTTCTCTCAGGAGGAGTGGGAATATTTAAACTCG
GATCAGAGGGATTTGTACAGAGATGTGATGTTGGAGAATTATACTAACTTGGTCTCATTGGACTTTAATTTCACA
ACTGAAAGCAACAAGTTATCTTCAGAAAAAAGAAATTATGAAGTAAATGCGTACCATCAGGAGACATGGAAAAGA
AATAAAACCTTCAACCTTATGAGGTTTATTTTCAGAACTGACCCACAGTACACAATTGAATTTGGGAGACAACAG
AGACCTAAAGTGGGATGTTTTAGTCAAATGATATTCAAAAAACATAAATCCCTTCCTCTACATAAGAGAAATAAC
ACAAGAGAGAAATCATATGAGTGTAAGGAATATAAGAAGGGCTTTAGAAAATATTTGCACCTTACTGAACATCTG
AGAGACCATACTGGTGTGATACCCTATGAATGTAATGAATGTGGAAAAGCATTTGTAGTTTTCCAGCATTTTATT
AGACATCGAAAAATCCACACTGATTTGAAACCCTATGAATGCAATGGATGTGAGAAGGCCTTTAGGTTTTATTCA
CAGCTTATTCAGCATCAGATAATTCATACTGGTATGAAACCCTATGAATGTAAGCAATGCGGGAAGGCTTTTAGA
CGTCATTCTCACCTTACAGAACATCAGAAAATTCATGTTGGCTTGAAACCCTTTGAATGTAAGGAATGTGGGGAA
ACGTTTAGATTATATCGACATATGTGTCTGCATCAGAAAATTCATCATGGTGTGAAACCCTACAAATGTAAAGAA
TGTGGAAAGGCTTTTGGTCATCGTTCAAGTCTTTACCAACATAAGAAAATTCATTCTGGTGAGAAACCATATAAA
TGTGAACAATGTGAAAAGGCCTTTGTTCGCAGCTATCTACTTGTTGAACATCAAAGAAGTCATACTGGTGAGAAA
CCTCATGAATGCATGGAATGTGGAAAGGCTTTTGGTAAGGGCTCAAGCCTTCTTAAACATAAGAGAATTCATAGT
AGTGAGAAACTCTATGATTGTAAGGATTGTGGAAAGGCCTTTTGTAGAGGCTCTCAACTTACACAGCATCAGAGA
ATTCATACTGGTGAGAAGCCACATGAATGTAAAGAATGTGGGAAGACTTTTAAGCTTCATTCATATCTTATTCAA
CATCAGATAATTCATACTGATTTGAAGCCATATGAATGTAAGCAATGTGGGAAAGCCTTCAGTCGTGTTGGAGAC
CTTAAGACACATCAATCAATTCATGCTGGGGAGAAACCCTATGAATGTAAGGAATGTGGAAAAACCTTTAGACTT
AATTCTCAACTAATTTATCATCAGACAATTCATACTGGTTTGAAACCCTATGTATGTAAAGAATGTAAGAAGGCC
TTTCGTTCTATCTCAGGTCTTTCTCAACATAAGAGAATTCATACTGGTGAAAAACCCTATGAATGTAAAGAATGT
GATAAGGCCTTTAATCGCAGTGATCGACTTACTCAACATGAGACAATTCATACTGGTGTGAAACCACAGAAATGC
AAAGAATGTGGTAAGGCCTTTAGTCATTGCTATCAACTTAGTCAACATCAAAGATTTCACCATGATCTTATCCAG
AATGAACTATCTGAAATTCAAATGGATGAGTGGTTATGGGAAGCTTTTCTGAATTCATTCCTCAAAACGGTTGTG
CCTCTCCTAAGAATTCACCAGTAG

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FIGURE 3779

GTCCTTCGGTGTCTGGGTGTGGTGAGTAGAGGTGTGTGTCACAAAGTACAGACCATTGTGTGTGACAAAGCCCAT
CGTGTGTCTGTGTGTGTCTTTATCCACGTGGATGGACGTCTCTTTCTTGCTCTGCCCCAAGACACACCCTAGCCC
CTCCTTATTCTCAAAAGGGGGAGCTGGGGAGCCTCCCCCTACCCTGGGGCCTCCCCTGCCCCTCCCCGCCCTGCC
TGGCCGTCACCACTCCCCAGAGGGCACAGGGCTCTGCTGTGCCTCAGAGCAAAAGTCCCAGAGCCAGCAGAGCAG
GCTGACGACCTGCAAGCCACAGTGGCTGCCCTGTGCGTGCTGCGAGGTGGGGGACCCTGGGCAGGAAGCTGGCTG
AGCCCCAAGACCCCGGGGGCCATGGGCGGGGATCTGGTGCTTGGCCTGGGGGCCTTGAGACGCCGAAAGCGCTTG
CTGGAGCAGGAGAAGTCTCTGGCCGGCTGGGCACTGGTGCTGGCAGGAACTGGCATTGGACTCATGGTGCTGCAT
GCAGAGATGCTGTGGTTCGGGGGGTGCTCGTGGGCGCTCTACCTGTTCCTGGTTAAATGCACGATCAGCATTTCC
ACCTTCTTACTCCTCTGCCTCATCGTGGCCTTTCATGCCAAAGAGGTCCAGCTGTTCATGACCGACAACGGGCTG
CGGGACTGGCGCGTGGCGCTGACCGGGCGGCAGGCGGCGCAGATCGTGCTGGAGCTGGTGGTGTGTGGGCTGCAC
CCGGCGCCCGTGCGGGGCCCGCCGTGCGTGCAGGATTTAGGGGCGCCGCTGACCTCCCCGCAGCCCTGGCCGGGA
TTCCTGGGCCAAGGGGAAGCGCTGCTGTCCCTGGCCATGCTGCTGCGTCTCTACCTGGTGCCCCGCGCCGTGCTC
CTGCGCAGCGGCGTCCTGCTCAACGCTTCCTACCGCAGCATCGGCGCTCTCAATCAAGTCCGCTTCCGCCACTGG
TTCGTGGCCAAGCTTTACATGAACACGCACCCTGGCCGCCTGCTGCTCGGCCTCACGCTTGGCCTCTGGCTGACC
ACCGCCTGGGTGCTGTCCGTGGCCGAGAGGCAGGCTGTTAATGCCACTGGGCACCTTTCAGACACACTTTGGCTG
ATCCCCATCACATTCCTGACCATCGGCTATGGTGACGTGGTGCCGGGCACCATGTGGGGCAAGATCGTCTGCCTG
TGCACTGGAGTCATGGGTGTCTGCTGCACAGCCCTGCTGGTGGCCGTGGTGGCCCGGAAGCTGGAGTTTAACAAG
GCAGAGAAGCACGTGCACAACTTCATGATGGATATCCAGTATACCAAAGAGATGAAGGAGTCCGCTGCCCGAGTG
CTACAAGAAGCCTGGATGTTCTACAAACATACTCGCAGGAAGGAGTCTCATGCTGCCCGCAGGCATCAGCGCAAG
CTGCTGGCCGCCATCAACGCGTTCCGCCAGGTGCGGCTGAAACACCGGAAGCTCCGGGAACAAGTGAACTCCATG
GTGGACATCTCCAAGATGCACATGATCCTGTATGACCTGCAGCAGAATCTGAGCAGCTCACACCGGGCCCTGGAG
AAACAGATTGACACGCTGGCGGGGAAGCTGGATGCCCTGACTGAGCTGCTTAGCACTGCCCTGGGGCCGAGGCAG
CTTCCAGAACCCAGCCAGCAGTCCAAGTAGCTGGACCCACGAGGAGGAACCAGGCTACTTTCCCCAGTACTGAGG
TGGTGGACATCGTCTCTGCCACTCCTGACCCAGCCCTGAACAAAGCACCTCAAGTGCAAGGACCAAAGGGGGCCC
TGGCTTGGAGTGGGTTGGCTTGCTGATGGCTGCTGGAGGGGACGCTGGCTAAAGTGGGTAGGCCTTGGCCCACCT
GAGGCCCCAGGTGGGAACATGGTCACCCCCACTCTGCATACCCTCATCAAAAACACTCTCACTATGCTGCTATGG
ACGACCTCCAGCTCTCAGTTACAAGTGCAGGCGACTGGAGGCAGGACTCCTGGGTCCCTGGGAAAGAGGGTACTA
GGGGCCCGGATCCAGGATTCTGGGAGGCTTCAGTTACCGCTGGCCGAGCTGAAGAACTGGGTATGAGGCTGGGGC
GGGGCTGGAGGTGGCGCCCCCTGGTGGGACAACAAAGAGGACACCATTTTTCCAGAGCTGCAGAGAGCACCTGGT
GGGGAGGAAGAAGTGTAACTCACCAGCCTCTGCTCTTATCTTTGTAATAAATGTTAAAGCCAG

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FIGURE 3780

ATGGCTGCAATTGATGAGGAAGGAGGGAGAGAGATAGGAGATGAAGTCAATATATTGGTGAAGGAACAGACACAG
TTAGGGGTCAAGACTCTCATGAGGTTACTCAAGGAACCAGAGAAAGAACGGGACTCAGACTCAGATTTCTCCCCT
CTTCAGCAGACTGAGGGATGCCAGCGAAGAGACAAGCACTTCCGTCATGCAGAAAACCCCCATCATCCTCTCAAA
ACCTCCAGCAGAGCGGCCCCTCTGGAGAAGCCCATCGTTCTCATGAAGCCACGGGAGGAGGGGAAGGGGCCTGTG
GCCGTGACAGGTGCCTCTACCCCTGAGGGCACCGCCCCACCACCCCCTGCAGCCCCTGCGCCACCCAAGGGGGAG
AAGGAGGGGCAGAGACCCACACAGCCTGTGTACCAGATCCAGAACCGGGGCATGGGCACTGCCGCACCAGCAGCC
ATGGACCCTGTCGTGGGTCAGGCCAAACTACTGCCCCCAGAGCGCATGAAGCACAGCATCAAGTTGGTGGATGAC
CAGATGAATTGGTGTGACAGTGCCATCGAGTACCTGTTGGATCAGACTGATGTGTTGGTGGTTGGTGTCCTGGGC
CTCCAGGGGACAGGCAAGTCCATGGTCATGTCATTGTTGTCAGCCAACACTCCAGAGGAGGACCAGAGGACTTAT
GTTTTCCGGGCCCAGAGCGCTGAAATGAAGGAACGAGGGGGCAACCAGACCAGTGGCATCGACTTCTTTATTACC
CAAGAACGGATTGTTTTCCTGGACACACAGCCCATCCTGAGCCCTTCTATCCTAGACCATCTCATCAATAATGAC
CGCAAACTGCCTCCAGAGTACAACCTTCCCCACACTTACGTTGAAATGCAGTCACTCCAGATTGCTGCCTTCCTT
TTCACGGTCTGCCATGTGGTGATTGTTGTCCAGGACTGGTTCACAGACCTCAGTCTCTACAGGCTGTGGGACCTG
GGGTGCAAGTGCAAGAGCAACAGCCACTCACCCCAAACCCCAAGGTTCCTGCAGACAGCAGAGATGGTGAAGCCC
TCCACCCCATCCCCCAGCCACGAGTCCAGCAGCTCATCGGGCTCCGATGAAGGCACCGAGTACTACCCCCACCTA
GTCTTCTTGCAGAACAAAGCTCGCCGAGAGGACTTCTGTCCTCGGAAGCTGCGGCAGATGCACCTGATGATTGAC
CAGCTCATGGCCCACTCCCACCTGCGTTACAAGGGAACTCTGTCCATGTTACAATGCAATGTCTTCCCGGGGCTT
CCACCTGACTTCCTGGACTCTGAGGTCAACTTATTCCTGGTACCCTTCATGGACAGTGAAGCAGAGAGTGAAAAC
CCACCAAGAGCAGGACCTGGTTCCAGCCCACTCTTCTCCCTGCTGCCTGGGTATCGTGGCCACCCCAGTTTCCAG
TCCTTGGTGAGCAAGCTCCGGAGCCAAGTGATGTCCATGGCCCGGCCACAGCTGTCACACACGATCCTCACCGAG
AAGAACTGGTTCCACTACGCTGCCCGGATCTGGGATGGGGTGAGAAAGTCCTCTGCTCTGGCAGAGTACAGCCGC
CTGCTGGCCTGA

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FIGURE 3781

CAGTATCCCTCCTGACAAAACTAACAAAAATCCTGTTAGCCAAATAATCAGCCACATTCATATTTACCGTCAAAG
TTTTTATCCTCATTTTACAGCAGTGGAGAGCGATTGCCCCGGGTCCCACGTTAGGAAGAGAGAGAACTGGGATTT
GCACCCAGGCAATCTGGGGACAGAGCTGTGATCACAACTCCATGAGTCAGGGCCGAGCCAGCCCCTTCACCACCA
GCCGGCCGCGCCCCGGGAAGGGAAGTTTGTGGCGGAGGAGGTTCGTACGGGAGGAGGGGGAGGCGCCCACGCATC
TGGGGCTGACTCGCTCTTTCGCAAAACGTCTGGGAGGAGTCCCTGGGGCCACAAAACTGCCTCCTTCCTGAGGCC
AGAAGGAGAGAAGACGTGCAGGGACCCCGCGCACAGGAGCTGCCCTCGCGAC**ATG**GGTCACCCGCCGCTGCTGCC
GCTGCTGCTGCTGCTCCACACCTGCGTCCCAGCCTCTTGGGGCCTGCGGTGCATGCAGTGTAAGACCAACGGGGA
TTGCCGTGTGGAAGAGTGCGCCCTGGGACAGGACCTCTGCAGGACCACGATCGTGCGCTTGTGGGAAGAAGGAGA
AGAGCTGGAGCTGGTGGAGAAAAGCTGTACCCACTCAGAGAAGACCAACAGGACCCTGAGCTATCGGACTGGCTT
GAAGATCACCAGCCTTACCGAGGTTGTGTGTGGGTTAGACTTGTGCAACCAGGGCAACTCTGGCCGGGCTGTCAC
CTATTCCCGAAGCCGTTACCTCGAATGCATTTCCTGTGGCTCATCAGACATGAGCTGTGAGAGGGGCCGGCACCA
GAGCCTGCAGTGCCGCAGCCCTGAAGAACAGTGCCTGGATGTGGTGACCCACTGGATCCAGGAAGGTGAAGAAGG
GCGTCCAAAGGATGACCGCCACCTCCGTGGCTGTGGCTACCTTCCCGGCTGCCCGGGCTCCAATGGTTTCCACAA
CAACGACACCTTCCACTTCCTGAAATGCTGCAACACCACCAAATGCAACGAGGGCCCAATCCTGGAGCTTGAAAA
TCTGCCGCAGAATGGCCGCCAGTGTTACAGCTGCAAGGGGAACAGCACCCATGGATGCTCCTCTGAAGAGACTTT
CCTCATTGACTGCCGAGGCCCCATGAATCAATGTCTGGTAGCCACCGGCACTCACGAACCGAAAAACCAAAGCTA
TATGGTAAGAGGCTGTGCAACCGCCTCAATGTGCCAACATGCCCACCTGGGTGACGCCTTCAGCATGAACCACAT
TGATGTCTCCTGCTGTACTAAAAGTGGCTGTAACCACCCAGACCTGGATGTCCAGTACCGCAGTGGGGCTGCTCC
TCAGCCTGGCCCTGCCCATCTCAGCCTCACCATCACCCTGCTAATGACTGCCAGACTGTGGGGAGGCACTCTCCT
CTGGACC**TAA**ACCTGAAATCCCCCTCTCTGCCCTGGCTGGATCCGGGGGACCCCTTTGCCCTTCCCTCGGCTCCC
AGCCCTACAGACTTGCTGTGTGACCTCAGGCCAGTGTGCCGACCTCTCTGGGCCTCAGTTTTCCCAGCTATGAAA
ACAGCTATCTCACAAAGTTGTGTGAAGCAGAAGAGAAAAGCTGGAGGAAGGCCGTGGGCCAATGGGAGAGCTCTT
GTTATTATTAATATTGTTGCCGCTGTTGTGTTGTTGTTATTAATTAATATTCATATTATTTATTTTATACTTACA
TAAAGATTTTGTACCAGTGG

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FIGURE 3782

CTGCCCCGCACACGCACGCGCGAACCCTTCAGCTTCTTGTTCCTTTGGGCCGCGGGCTGTACCAAGTAAACCCAG
GCAGCGAGGGGCAAAGCACGGCGCCCCCCGCGCGGGTCTCGTCGACGGCCCGACGCGCATAGCCCCTCTTCCCAC
AGCGCTACAGGACTAGTCCGTCTCGCCGCGCAAGCGCCCTAGGCTCTTCACGCCCCCTGCGCGCTGTCCTACCCT
ACTTGCGACGCAGGCGCAGAGGCTGGGCGTGCAGCCGCCGCCGCAGAGCCGGAGCGGGGGCCGCCGGCGCCGCAT
CCCTCTCTACCTGCCAACATCCTGTATTAGAGAACTTGTGGCCGGAGGTGTGGCTGTGGAGAGCTGGCCGGGGAG
GGACGCTGCTCAGCTGCTGCTCTGCTCCTGTCTCCTGTCCCCTCCCCCGGTC**ATG**ACAGAGACCCGTGAGCCAGC
TGAGACTGGGGGCTACGCCAGCTTGGAAGAAGATGATGAAGACCTTTCCCCAGGCCCCGAGCATTCCTCTGATTC
AGAATACACTCTCTCAGAGCCGGACTCCGAAGAGGAAGAAGATGAGGAGGAGGAGGAAGAGGAGACCACTGACGA
TCCTGAATATGATCCTGGCTACAAGGTGAAGCAGCGCCTTGGCGGGGGCCGTGGTGGCCCATCCCGCCGGGCCCC
CCGTGCAGCCCAGCCCCCGGCCCAGCCTTGCCAGCTCTGTGGCCGCTCACCCCTTGGGGAGGCCCCACCGGGAAC
CCCACCCTGCCGGCTCTGCTGCCCTGCTACAGCCCCCCAGGAAGCACCAGCCCCTGAAGGCAGGGCCCTCGGGGA
GGAAGAGGAGGAACCACCTCGGGCTGGGGAGGGCCGACCAGCTGGGCGGGAGGAGGAGGAGGAAGAGGAGGAGGA
GGGAACCTACCACTGTACGGAATGTGAGGATTCCTTCGACAACCTGGGGGAGCTGCACGGGCACTTCATGCTGCA
TGCCCGGGGTGAGGTG**TAG**GCAGAGCCCCCATACGGGGAGCTTGGCAGAAGGGGTGGGGTGGGAGGAGGGGGCTG
AGGAAATTGGGGTTGTGACAGTGGTCATGGGGGATGGGGTACTGCCGGTCTGTGTTGTCTTAGAAGTAGATGTGT
GATGGCCAGAATAAAAGCCAAAATCTGT

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FIGURE 3783

ACTTTAGCCAGCGCAGGGCGCACCCCGCCCCCTCCCACTCTCCCTGCCCCTCGGACCCCATACTCTACCTCATCC
TTCTGGCCAGGCGAAGCCCACGACGTTGACATGCCGGAGATCCGCCTCCGCCATGTCGTGTCCTGCAGCAGCCAG
GACTCGACTCACTGTGCAGAAAATCTTCTCAAGGCAGACACTTACCGAAAATGGCGGGCAGCCAAGGCAGGCGAG
AAGACCATCTCTGTGGTCCTACAGTTGGAGAAGGAGGAGCAGATACACAGTGTGGACATTGGGAATGATGGCTCA
GCTTTCGTGGAGGTGCTGGTGGGCAGTTCAGCTGGAGGCGCTGGGGAGCAAGACTATGAGGTCCTTCTGGTCACC
TCATCTTTCATGTCCCCTTCCGAGAGCCGCAGTGGCTCAAACCCCAACCGCGTTCGCATGTTTGGGCCTGACAAG
CTGGTCCGGGCAGCCGCCGAGAAGCGCTGGGACCGGGTCAAAATTGTTTGCAGCCAGCCCTACAGCAAGGACTCC
CCCTTTGGCTTGAGTTTTGTACGGTTTCATAGCCCCCCAGACAAAGATGAGGCAGAGGCCCCGTCCCAGAAGGTG
ACAGTGACCAAGCTTGGCCAGTTCCGTGTGAAGGAGGAGGATGAGAGCGCCAACTCTCTGAGGCCGGGGGCTCTC
TTCTTCAGCCGGATCAACAAGACATCCCCAGTCACAGCCAGCGACCCAGCAGGACCTAGCTATGCAGCTGCTACC
CTCCAGGCTTCTAGTGCTGCCTCCTCAGCCTCTCCAGTCTCCAGGGCCATAGGCAGCACCTCCAAGCCCCAGGAG
TCTCCCAAAGGGAAGAGGAAGTTGGATTTGAACCAAGAAGAAAAGAAGACCCCCAGCAAACCACCAGCCCAGCTG
TCGCCATCTGTTCCCAAGAGACCTAAATTGCCAGCTCCAACTCGTACCCCAGCCACAGCCCCAGTCCCTGCCCGA
GCACAGGGGGCAGTGACAGGCAAACCCCGAGGAGAAGGCACCGAGCCCAGACGACCCCGAGCTGGCCCAGAGGAG
CTGGGGAAGATCCTTCAGGGTGTGGTAGTGGTGCTGAGTGGCTTCCAGAACCCCTTCCGCTCCGAGCTGCGAGAT
AAGGCCCTAGAGCTTGGGGCCAAGTATCGGCCAGACTGGACCCGGGACAGCACGCACCTCATCTGTGCCTTTGCC
AACACCCCCAAGTACAGCCAGGTCCTAGGCCTGGGAGGCCGCATCGTGCGTAAGGAGTGGGTGCTGGACTGTCAC
CGCATGCGTCGGCGGCTGCCCTCCCAGAGGTACCTCATGGCAGGGCCAGGTTCCAGCAGTGAGGAGGATGAGGCC
TCTCACAGCGGTGGCAGCGGAGATGAAGCCCCCAAGCTTCCTCAGAAGCAACCCCAGACCAAAACCAAGCCCACT
CAGGCAGCTGGACCCAGCTCACCCCAGAAGCCCCCAACCCCTGAAGAGACCAAAGCAGCCTCACCAGTGCTCCAG
GAAGATATAGACATTGAGGGGGTACAGTCAGAAGGACAGGACAATGGGGCGGAAGATTCTGGGGACACAGAGGAT
GAGCTGAGGAGGGTGGCAGAGCAGAAGGAACACAGACTGCCCCCTGGCCAGGAGGAGAATGGGGAAGACCCGTAT
GCAGGCTCCACGGATGAGAACACGGACAGTGAGGAACACCAGGAGCCTCCTGATCTGCCAGTCCCTGAGCTCCCA
GATTTCTTCCAGGGCAAGCACTTCTTTCTTTACGGGGAGTTCCCTGGGGACGAGCGGCGGAAACTCATCCGATAC
GTCACAGCCTTCAATGGGGAGCTCGAGGACAATATGAGTGACCGGGTTCAGTTTGTGATCACAGCACAGGAATGG
GATCCCAGCTTTGAGGAGGCCCTGATGGACAACCCCTCCCTGGCATTCGTTCGTCCCCGATGGATCTACAGTTGC
AATGAGAAGCAGAAGTTACTTCCTCACCAGCTCTATGGGGTGGTGCCGCAAGCCTGAAGTATGTGCTATACACAC
ACACACACACACACACACACACACACACACACGATGCATTTAATAAAGATGAGTTGGTTCTC

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FIGURE 3784

GGCTGGCGCACCCAGCCCCTCCTTCCATTCCTTCTTCCCCCTCTCTGCAGCCTCTGCCAGCCCGCACTGCGCATG
CTTTCTGACGCCCCCTTTGGTCCAGCGTGGGAGGAGGGGATGGAAATGAGGTTGGGCTAAGCAGCTTGCGCGCGC
TCCCTTGCCTGCCCTCCCCCGACGCCGGACGCGCGCCGGGCGGGGCAGCTCCGCTGGTCCGAGGGCAGTGCAGCA
GCGGCGACAGCGGCTGCGGCCGTGGCCGTGGCGGGAGGAGCCGGAAGCCCCGCCCCCGGGGAGGGGCCGTCCTGC
AGGTCCCCCCTCTATCCTCCACGGCCCCATCCAAGCCAGGGATGAAATTTAACGGCAAGAAGGGCGCAGTTGACG
CGGCGTCAATGAACTGAGACTAAGTCAAAAGCCGGGCCCTCCAACCCTATCCCCATCAGCCTGGTCATCACCGGC
GTCACCCCCGCCCCGCGCCCTGCCCCTAGGTTCCTGTGCCAGCAAGATGCTGGAGCGAGGCGCGGAGTCCGCGGC
CGGGGCTACCGATCCTAGTCCCACTGGCAAGGAACCAGTGACCAAAGAAGCTCCCCACCAGGGCCCACCGCAGAA
GCCCAGCCAGTCAGCTCCAGGGCCCACCGCGTCCGCGGGCTCGCCTCCCCGGCCTCGCCGGCGGCCCCCGCCCCA
GCGCCCGCACCGCTGCCCCGACTGTGACAAGGCCTTCTCGTACCCGTCCAAGCTGGCCACGCACCGCTTAGCACA
CGGAGGCGCCCGACCCCACCCATGCCCAGACTGCCCCAAGGCCTTCTCCTACCCCTCCAAGCTGGCAGCCCACCG
CCTCACGCACAGCGGCGCCCGCCCGCACCCGTGCCCACACTGCCCGAAGTCCTTTGGCCACCGCTCCAAGCTGGC
GGCTCACCTCTGGACCCACGCACCCACCCGCCCCTACCCGTGCCCCGACTGCCCCAAGTCCTTCTGCTACCCTTC
CAAGCTGGCGGCCCACCGCCACACGCACCACGCCACCGACGCCCGCCCCTATCCTTGCCCGCATTGCCCCAAGGC
TTTCTCATTTCCCTCCAAGCTGGCCGCCCATCGCCTATGTCACGACCCCCCAACCGCGCCCGGCAGCCAGGCGAC
TGCCTGGCACCGATGCTCCAGCTGCGGCCAGGCCTTTGGCCAGAGACGCTTACTGCTCCTTCATCAACGCAGCCA
CCACCAGGTGGAGCACAAGGGGGAGAGAGACTGAGCCCTCCCTTGGCTCACTGTCCCCTTCTGCCGCCAGCCCTA
GCCAGTAAGAGGTGGGATTTCTAAGACCGACTGTATGAGCTCGCCTCTTCCAGATAGCTGGCAGAGGGCAGGGCA
AGGGATTGGCCATTTATACTGGGCTCGAGCTCAGAAGCCCGAGGAACTCTTTGCTCCCCTGCTTTGGGGAGATCT
CAAACCATGGACGTGGAGCTGTGGTTTGACAGCGCTGGCTCTGCTTCTCCCCACACACTTACATGGCAAAGGTAA
AAAGTCTGCTACTATCGTGGGTTGATGAGGATTGTGGGCAAACAGGCTCTCTTGTTAAAAGTTTAAACTGGTGTC
TCCACTTTGGCCATATGACGGTATCTAAGAAATTGAAAATACATACATGCTTGTCTCAACTCTTCCACTTGTAGG
AATTTATTCTATAAACTCATGAATGTG

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FIGURE 3785

CCACGCCTGCATCTTGCGGAAAGCGGGGTGGAGGTTTAGGGCTGGACTCTTGGGTCCTTTAAAGGTGAGTGGTCT
GGGGGCCTCTGGGCTTGGGGCCAGACCCCTGGGTCCTCTATGAAAGAACGTGCTGGGGACCCTGATTTTGGGATG
TTAGGAAGTTGGAACTCTTTTGTTCTGATAGGGGAAGGTAGTGGGGCTCCGGACTCCCGACTCCCGGGGAAAGAG
TGGGCTGGGGTTTCTGCTTCTGGATCTTAGGAAGAGGATAGGGTCAGTCTGGACTACTTGGCCTCCAGTGGGTGG
AAGTCCGGTTCTGCGCCCTCACCTGGGTCCCCCGTTCCCAGATGTTCGAGCCTGTGAGCTGCACCTTCACGTACC
TGCTGGGTGACAGAGAGTCCCGGGAGGCCGTTCTGATCGACCCAGTCCTGGAAACAGCGCCTCGGGATGCCCAGC
TGATCAAGGAGCTGGGGCTGCGGCTGCTCTATGCTGTGAATACCCACTGCCACGCGGACCACATTACAGGCTCGG
GGCTGCTCCGTTCCCTCCTCCCTGGCTGCCAGTCTGTCATCTCCCGCCTTAGTGGGGCCCAGGCTGACTTACACA
TTGAGGATGGAGACTCCATCCGCTTCGGGCGCTTCGCGTTGGAGACCAGGGCCAGCCCTGGCCACACCCCAGGCT
GTGTCACCTTCGTCCTGAATGACCACAGCATGGCCTTCACTGGAGATGCCCTGTTGATCCGTGGGTGTGGGCGGA
CAGACTTCCAGCAAGGCTGTGCCAAGACCTTGTACCACTCGGTCCATGAAAAGATCTTCACACTTCCAGGAGACT
GTCTGATCTACCCTGCTCACGATTACCATGGGTTCACAGTGTCCACCGTGGAGGAGGAGAGGACTCTGAACCCTC
GGCTCACCCTCAGCTGTGAGGAGTTTGTCAAAATCATGGGCAACCTGAACTTGCCTAAACCTCAGCAGATAGACT
TTGCTGTTCCAGCCAACATGCGCTGTGGGGTGCAGACACCCACTGCCTGATCTCACTTCTGTCAGATGCTCCCAT
CCACTATTAATGCACTAGGTGGGAGGAGAGGGCGGCAATGACACTGCACCTCTCCTTTCCCACCGCATTCCCTGG
AGCTCCCTAAATAAAACTTTTTTTAACGTG

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FIGURE 3786

GGCAGCCGAGAGCCGGGGGTTGAGCCGGAAGAAGGAGGAGGCCCTTCAGGCCCTGTCACAGGAACGGAGCCGGCT
GCTCGAGCTCAATTGCCTTCAGGGAACACCTGGCGGGGACTTCTCTGAGCCCAACCCGGCCCTCACTAAGCTGCT
GTTCACCCAGAAGACAGACCGCCAGCTGCTGGTGCTCCAGGATGCCGTGGCCCACTCCGCTGCCACCCCTACTTC
TTCCTGCCTCTTTTCTGTCCACAGCTCCCTGCAGAATCCCTGGAGGCCTCAGCTCTCCCGCCAGCAGTGGGGGAC
TCCGGCAGATACCCCCTCTACCAGCTGCTGAACTGTGGCCGTGGGAATAGCTGTGGGGCCATCCATCCAGACATT
GCCCACATGGAGCGGCTCCTGCAGCAGGCCATGGCGGAGAGGGAGCGGCTGCTCAAGGCCCGGGAAGGAACAAGA
AGGGGCACGGAAGGTTCCTCAGGCCCTGCTGTTCCTGCCATCACGGCCCCACCCACCCCACCCCACCCTCCAGGC
CCGCGAATCTTGGATCTCCGGCAGCATCTGGAGGGATGGGGCCACAACCCGGAAAACTGCCCACATGTGCAGGTG
TCTGGGTGCTGCTGCCGTGGACCCCTGGTGAAGATGGGCGGCCGCATCAAGACCTGGAGGAAGCGATGGTTCTGC
TTTGACCGCCAAGCCCGCCGCTTGGCCTACTATGCGGACAAGGAAGAGACCAAGCTCAAAGGTGTCATCTACTTC
CAGGCCATTGAGGAAGTCTATTATGACCACTTACGCTGTGCCTTCAAGAGCCCCAACCCCCGCCTGACCTTCTGC
GTCAAAACCTACGAACGCCTTTTCTACATGGTGGCTCCGAGCCCCGAAGCCATGCGCATTTGGATGGACGTCATC
GTGACCGCCGCTGACGAAAACCACGCCCCCTGAGTGGCCCCGCCCTCTTGGGGGGAAGTCCCTTCGAGGCTCCGC
CGGCGCGGGGCGCGGGGGCGTTCCTAGGCCCCGCCCACTGCCGGAAAACTTGGACGCACCGCTTTGGAACTCTCC
CGGGAATTCCGCAGGCGCGGCAGTTCAGCTGGCCTGAGCTGCTGCGTTCTGGGTTGCAGGTGCCTTGCCCCCGAC
GGGATCGCCGGCCCCTAAGGCCCTGCCCGGGGCAGGAGGAAGATTGCAGGGGCGGGAAGAAACTATTTATTGGTG
CTCCTGTGATACCGAATTAAATACGGAGGA

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FIGURE 3787

GGTTACTCATCCTGGGCTCAGGTAAGAGGGCCCGAGCTCGGAGGCGGCACATCCAGGGGGGACGCCAAGGGAGCA
GGACGGAGCCATGGACCCCGCCAGGAAAGCAGGTGCCCAGGCCATGATCTGGACTGCAGGCTGGCTGCTGCTGCT
GCTGCTTCGCGGAGGAGCGCAGGCCCTGGAGTGCTACAGCTGCGTGCAGAAAGCAGATGACGGATGCTCCCCGAA
CAAGATGAAGACAGTGAAGTGCGCGCCGGGCGTGGACGTCTGCACCGAGGCCGTGGGGGCGGTGGAGACCATCCA
CGGACAATTCTCGCTGGCAGTGCGGGGTTGCGGTTCGGGACTCCCCGGCAAGAATGACCGCGGCCTGGATCTTCA
CGGGCTTCTGGCGTTCATCCAGCTGCAGCAATGCGCTCAGGATCGCTGCAACGCCAAGCTCAACCTCACCTCGCG
GGCGCTCGACCCGGCAGGTAATGAGAGTGCATACCCGCCCAACGGCGTGGAGTGCTACAGCTGTGTGGGCCTGAG
CCGGGAGGCGTGCCAGGGTACATCGCCGCCGGTCGTGAGCTGCTACAACGCCAGCGATCATGTCTACAAGGGCTG
CTTCGACGGCAACGTCACCTTGACGGCAGCTAATGTGACTGTGTCCTTGCCTGTCCGGGGCTGTGTCCAGGATGA
ATTCTGCACTCGGGATGGAGTAACAGGCCCAGGGTTCACGCTCAGTGGCTCCTGTTGCCAGGGGTCCCGCTGTAA
CTCTGACCTCCGCAACAAGACCTACTTCTCCCCTCGAATCCCACCCCTTGTCCGGCTGCCCCCTCCAGAGCCCAC
GACTGTGGCCTCAACCACATCTGTCACCACTTCTACCTCGGCCCCAGTGAGACCCACATCCACCACCAAACCCAT
GCCAGCGCCAACCAGTCAGACTCCGAGACAGGGAGTAGAACACGAGGCCTCCCGGGATGAGGAGCCCAGGTTGAC
TGGAGGCGCCGCTGGCCACCAGGACCGCAGCAATTCAGGGCAGTATCCTGCAAAAGGGGGGCCCCAGCAGCCCCA
TAATAAAGGCTGTGTGGCTCCCACAGCTGGATTGGCAGCCCTTCTGTTGGCCGTGGCTGCTGGTGTCCTACTGTG
AGCTTCTCCACCTGGAAATTTCCCTCTCACCTACTTCTCTGGCCCTGGGTACCCCTCTTCTCATCACTTCCTGTT
CCCACCACTGGACTGGGCTGGCCCAGCCCCTGTTTTTCCAACATTCCCCAGTATCCCCAGCTTCTGCTGCGCTGG
TTTGCGGCTTTGGGAAATAAAATACCGTTGTATATATTCTGCCAGGGGTGTTCTAGCTTTTTGAGGACAGCTCCT
GTATCCTTCTCATCCTTGTCTCTCCGCTTGTCCTCTTGTGATGTTAGGACAGAGTGAGAGAAGTCAGCTGTCACG
GGGAAGGTGAGAGAGAGGATGCTAAGCTTCCTACTCACTTTCTCCTAGCCAGCCTGGACTTTGGAGCGTGGGGTG
GGTGGGACAATGGCTCCCCACTCTAAGCACTGCCTCCCCTACTCCCCGCATCTTTGGGGAATCGGTTCCCCATAT
GTCTTCCTTACTAGACTGTGAGCTCCTCGAGGGCAGGGACCGTGCCTTATGTCTGTGTGTGATCAGTTTCTGGCA
CATAAATGCCTCAATAAAGATTTAATTACTTTGTATAGTG

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FIGURE 3788

CAGGTGGGAGGTTAGTGTGGCCCGGGCGTCCGCTCCTCAGCGGATGTGGCAGCCCCGAGCCATGGCTCTCGCCGT
CCGAGTCGTTTATTGTGGCGCTTGAGGCTACAAGTCCAAGTATCTTCAGCTCAAGAAGAAGTTAGAAGATGAGTT
CCCCGGCCGCCTGGACATCTGCGGCGAGGGAACTCCCCAGGCCACCGGGTTCTTTGAAGTGATGGTAGCCGGGAA
GTTGATTCACTCTAAGAAGAAAGGCGATGGCTACGTGGACACAGAAAGCAAGTTTCTGAAGTTGGTGGCCGCCAT
CAAAGCCGCCTTGGCTCAGGGCTAATGCGCCCTGAAGGCAGAGTCCAGGGACCTTGACCCAGCCCCTCTCAGCAG
ACGCTTCATGATAGGAAGGACTGAAAAGTCTTGTGGACACCTGGTCTTTCCCTGATGTTCTCGTGGCTGCTGTTG
GGGGCAGAGATTGACGCCCCCGGTCTTTGCCTCTGAGCGGGAGAGTCTGTGTGTATGTGTCTTCCCCGGAATCCA
CACCACCCCACCCTCCTCCTGTCCCGTGGTTTCATCATATCTCTTTGCATACCCCATGTCTTCCCCAGTTGTCCC
CTGGAGTTTGGGGGGACATCCCGCCTCAGGCATCCTTCTCAAGGGGAAGCCAAGAGAGGCATCAGGATGGGTGGG
TTTCTGATTGTGGCAACGTTTGCAACCGTTCACGATTCAATAAATATTGGATGAATTTAAC

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FIGURE 3789

TGACAAGATGGCGGCAGGAGGCAGTGGCGTTGGTGGGAAGCGCAGCTCGAAAAGCGATGCCGATTCTGGTTTCCT
GGGGCTGCGGCCCACTTCGGTGGACCCAGCGCTGAGGCGGCGGCGGCGAGGCCCAAGAAATAAGAAGCGGGGCTG
GCGGCGGCTTGCTCAGGAGCCGCTGGGGCTGGAGGTTGACCAGTTCCTGGAAGACGTGCGGCTACAGGAGCGCAC
GAGCGGTGGCTTGTTGTCAGAGGCCCCAAATGAAAAACTCTTCTTCGTGGACACTGGCTCCAAGGAAAAAGGGCT
GACAAAGAAGAGAACCAAAGTCCAGAAGAAGTCACTGCTTCTCAAGAAACCCCTTCGGGTTGACCTCATCCTCGA
GAACACATCCAAAGTCCCTGCCCCCAAAGACGTCCTCGCCCACCAGGTCCCCAACGCCAAGAAGCTCAGGCGGAA
GGAGCAGCTATGGGAGAAGCTGGCCAAGCAGGGCGAGCTGCCCCGGGAGGTGCGCAGGGCCCAGGCCCGGCTCCT
CAACCCTTCTGCAACAAGGGCCAAGCCCGGGCCCCAGGACACCGTAGAGCGGCCCTTCTACGACCTCTGGGCCTC
AGACAACCCCCTGGACAGGCCGTTGGTTGGCCAGGATGAGTTTTTCCTGGAGCAGACCAAGAAGAAAGGAGTGAA
GCGGCCAGCACGCCTGCACACCAAGCCGTCCCAGGCACCCGCCGTGGAGGTGGCGCCTGCCGGAGCTTCCTACAA
TCCATCCTTTGAAGACCACCAGACCCTGCTCTCAGCGGCCCACGAGGTGGAGTTGCAGCGGCAGAAGGAGGCGGA
GAAGCTGGAGCGGCAGCTGGCCCTGCCCGCCACGGAGCAGGCCGCCACCCAGGAGTCCACATTCCAGGAGCTGTG
CGAGGGGCTGCTGGAGGAGTCGGATGGTGAGGGGGAGCCAGGCCAGGGCGAGGGGCCGGAGGCTGGGGATGCCGA
GGTCTGTCCCACGCCCGCCCGCCTGGCCACCACAGAGAAGAAGACGGAGCAGCAGCGGCGGCGGGAGAAGGCTGT
GCACAGGCTGCGGGTACAGCAGGCCGCGTTGCGGGCCGCCCGGCTCCGGCACCAGGAGCTGTTCCGGCTGCGCGG
GATCAAGGCCCAGGTGGCCCTGAGGCTGGCGGAGCTGGCGCGGCGGCAGAGGCGGCGGCAGGCGCGGCGGGAGGC
TGAGGCTGACAAGCCCCGAAGGCTGGGGCGGCTCAAGTACCAGGCACCTGACATCGACGTGCAGCTGAGCTCGGA
GCTGACAGACTCGCTCAGGACCCTGAAGCCCGAGGGCAACATCCTTCGAGACCGGTTCAAGAGCTTCCAGAGGAG
GAATATGATCGAGCCTCGAGAGAGAGCCAAGTTCAAACGCAAGTACAAGGTGAAGCTGGTGGAGAAGCGGGCGTT
CCGTGAGATCCAGTTGTAGCTGCCATCAGATGCCGGAGACTCGCCCTTCAATAAAAAATCTCTTCTAGCTG

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FIGURE 3790

CGTCTCTCCGTGAACCCCGTGAGCGGTGTGCAGCCACCATGTTCAGCTGGCTGAAGCGGGGCGGGGCACGGGGCC
AGCAGCCCGAGGCCATCCGCACGGTGACCTCGGCCCTCAAGGAGCTGTACCGCACGAAGCTGCTGCCGCTGGAGG
AGCACTACCGCTTTGGGGCCTTCCACTCGCCGGCCCTGGAGGACGCAGACTTCGACGGCAAGCCCATGGTGCTGG
TGGCCGGCCAGTACAGCACGGGCAAGACCAGCTTCATCCAGTACCTGCTGGAGCAGGAGGTGCCCGGCTCCCGCG
TGGGGCCTGAGCCCACCACCGACTGCTTTGTGGCCGTCATGCACGGGGACACTGAGGGCACCGTGCCCGGCAACG
CCCTCGTCGTGGACCCGGACAAGCCCTTCCGCAAACTCAACCCTTTCGGAAACACCTTCCTCAACAGGTTCATGT
GTGCCCAGCTCCCTAATCAGGTCCTGGAGAGCATCAGCATCATCGACACCCCGGGTATCCTGTCGGGTGCCAAGC
AGAGAGTGAGCCGCGGCTACGACTTCCCGGCCGTGCTGCGCTGGTTCGCGGAGCGCGTGGACCTCATCATCCTGC
TCTTTGATGCGCACAAGCTGGAGATCTCGGACGAGTTCTCAGAGGCCATCGGCGCGTTGCGGGGCCATGAGGACA
AGATCCGCGTGGTGCTCAACAAGGCCGACATGGTGGAGACGCAGCAGCTGATGCGCGTCTACGGCGCGCTCATGT
GGGCGCTGGGCAAGGTGGTGGGCACGCCCGAGGTGCTGCGCGTCTACATCGGCTCCTTCTGGTCCCAGCCCCTCC
TCGTGCCCGACAACCGGCGCCTCTTCGAGCTGGAGGAGCAGGACCTCTTCCGCGACATCCAGGGCCTGCCCCGGC
ACGCAGCCTTGCGCAAGCTCAACGACCTGGTGAAGAGGGCCCGGCTGGTGCGAGTTCACGCTTACATCATCAGCT
ACCTGAAGAAGGAGATGCCCTCTGTGTTTGGGAAGGAGAACAAGAAGAAGCAGCTGATCCTCAAACTGCCCGTCA
TCTTTGCGAAGATTCAGCTGGAACATCACATCTCCCCTGGGGACTTTCCTGATTGCCAGAAAATGCAGGAGCTGC
TGATGGCGCACGACTTCACCAAGTTTCACTCGCTGAAGCCGAAGCTGCTAGAGGCACTGGACGAGATGCTGACGC
ACGACATCGCCAAGCTCATGCCCCTGCTGCGGCAGGAGGAGCTGGAGAGCACCGAGGTGGGCGTGCAGGGGGGCG
CTTTTGAGGGCACCCACATGGGCCCGTTTGTGGAGCGGGGACCTGACGAGGCCATGGAGGACGGCGAGGAGGGCT
CGGACGACGAGGCCGAGTGGGTGGTGACCAAGGACAAGTCCAAATACGACGAGATCTTCTACAACCTGGCGCCTG
CCGACGGCAAGCTGAGCGGCTCCAAGGCCAAGACCTGGATGGTGGGGACCAAGCTCCCCAACTCAGTGCTGGGGC
GCATCTGGAAGCTCAGCGATGTGGACCGCGACGGCATGCTGGATGATGAGGAGTTCGCGCTGGCCAGCCACCTCA
TCGAGGCCAAGCTGGAAGGCCACGGGCTGCCCGCCAACCTGCCCCGTCGCCTGGTGCCACCCTCCAAGCGACGCC
ACAAGGGCTCCGCCGAGTGAGCCGGCCCCCCTCCCATGGCCCTGCTGTGGCTCCCCAGCTCCAGTCGGCTGCACG
CACACCCCTGCTCCGGCTCACACACGCCCTGCCTGCCCTCCCTGCCCAGCTGTAAGGACCGGGGGTCTCCCTCCT
CACTACCGCCAGACACCCCGGTGGAAGCATTTAGAGGGGACCACGGGAGGGACAAGGCTTCTCTGTCCGCCCTTC
ACACCTCCAGCCTCACGTTCACTTAGGCACATCACACACACACTGGCACACGCAGGCATCCATCCATCCGTCATT
CATTCAAATATTTATTGAGCACCTACTATGTGCCCAGCCCTGTTCTAGGCACTGGGCATTACCATAGAGAACAAA
ATAGACAAATACATCTGCCCTCATGGAAGGTGACGTTCCCAGGAGAGGGCACCTACACAGTCACGCAAACACACA
CTAATTCCTGGCAGGGCCCCCAGCCCCTCCCCTGGCTGAGCAGCCCTGTGGCTGAAATGACTAGCAGATAAACAG

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FIGURE 3791A

CTCGTAGCTCCACTCTGCAGCCTCAAACTCCTGGGCTCCAGTGATCCTCTCACCTCAGCCTCCCAAGTAGCTAAG
ACCACAGGCACATGCTGCCACCCCTGACTAATTTTTCTTTTTTAAAATTTTTTTCTCACTGCGTTGCCCAGGCTG
GTCTCAAACTCTTTGGCTCAAGCCATCCATCCTCCTACCTCAGCCTCCCAAAGTGCTGAGATTACAAGCGTGAAC
CACCATGCCAGGAGGGAATGTTCTTTCTTGAACGTGGCTGCCCTGTCACCTCAGCATTCTTTGCGGCAGCTGTGG
CCTAAGCGTAGCCCCTTGCTAACCTCAGCTCTTTCCTTCCCACCTTTCCCGGCCTGCAGCTCCATGTGCAAGAAG
CTTCCGGCAACCACCTGAACCCAGAGCCCAACCAGCCGGCCCCCAGTGTGGACCTAGACTTCCTGGAAGATGACA
TCCTGGGCTCTCCTGCGACAGGGGGCGGCGGCGGGGGCAGTGGGGGCGCTGACCAGCCCTGTGACATCCTCCAGC
AGAGCCTCCAAGAGGCCAACATCACGGAGCAGACGCTGGAGGCCGAGGCTGAGCTGGACCTGGGTCCCTTCCAGC
TGCCCACCCTGCAGCCTGCGGATGGCGGGGCAGGCCCGACGGGCGCTGGAGGGGCAGCGGCCGTGGCTGCGGGGC
CCCAAGCCCTCTTCCCAGGCAGCACCGACCTGCTGGGGCTGCAGGGCCCGCCTACCGTGCTGACCCACCAGGCCC
TGGTGCCGCCCCAGGACGTGGTCAACAAGGCCCTGAGTGTGCAGCCCTTCCTGCAGCCTGTGGGCCTGGGCAATG
TGACACTGCAGCCCATCCCGGGCCTCCAAGGCCTGCCCAATGGCAGCCCTGGGGGTGCCACGGCGGCCACACTGG
GCCTGGCGCCCATCCAGGTGGTGGGCCAGCCCGTCATGGCGCTCAACACGCCCACCTCCCAGCTCCTGGCCAAGC
AGGTGCCCGTCAGCGGCTACCTGGCCTCGGCGGCTGGCCCCTCGGAGCCCGTGACGCTGGCGTCGGCCGGTGTCT
CGCCACAGGGGGCTGGCCTGGTCATCCAGAAGAACCTCTCGGCCGCTGTGGCCACCACGCTCAATGGGAACTCTG
TGTTCGGAGGCGCGGGGGCCGCCTCGGCTCCCACCGGGACGCCCTCGGGACAGCCGCTGGCGGTGGCCCCAGGCC
TCGGCTCGTCGCCACTGGTCCCGGCGCCCAACGTGATCCTGCATCGCACACCCACGCCCATCCAGCCCAAGCCCG
CGGGGGTGCTGCCGCCCAAGCTCTACCAGCTGACGCCCAAGCCGTTTGCGCCCGCGGGCGCCACGCTCACCATCC
AGGGCGAGCCGGGGGCGCTCCCGCAGCAGCCCAAGGCCCCGCAGAACCTGACGTTCATGGCGGCGGGGAAGGCGG
GCCAGAACGTGGTGCTGTCGGGCTTCCCCGCGCCTGCGCTGCAAGCGAACGTCTTCAAGCAGCCACCGGCCACCA
CCACCGGAGCGGCCCCGCCGCAGCCCCCCGGGGCCCTGAGCAAACCCATGAGCGTCCACCTCCTGAACCAAGGCA
GCAGCATCGTCATCCCCGCCCAGCACATGCTGCCGGGCCAGAACCAGTTCCTACTGCCTGGCGCCCCGGCGGTCC
AGCTCCCGCAGCAGCTCTCAGCCCTGCCGGCCAACGTGGGCGGGCAGATCCTGGCGGCCGCTGCCCCCCACACAG
GTGGACAGCTCATCGCGAACCCCATCCTCACAAACCAGAACCTGGCGGGCCCACTGAGCCTGGGCCCCGTGTTGG
CCCCCCACTCCGGGGCCCACAGCGCGCACATCCTCTCCGCCGCTCCCATCCAGGTGGGCCAGCCTGCGCTCTTCC
AGATGCCCGTGTCGCTGGCGGCGGGCAGCCTGCCCACGCAGAGCCAGCCAGCGCCCGCCGGGCCGGCCGCCACCA
CTGTCCTCCAGGGGGTCACCCTGCCCCCCAGCGCCGTGGCCATGCTCAACACCCCCGACGGCCTGGTGCAGCCGG
CCACCCCTGCCGCTGCCACCGGGGAGGCCGCGCCTGTCCTCACGGTGCAGCCTGCCCCCCAGGCGCCCCCCGCGG
TCAGCACACCCCTGCCCCTGGGCCTCCAGCAGCCGCAGGCGCAGCAGCCCCCGCAGGCCCCCACCCCACAGGCCG
CCGCCCCGCCTCAGGCCACCACCCCCCAGCCCAGCCCTGGCCTGGCGTCTAGCCCGGAGAAGATCGTCCTGGGGC
AGCCGCCCTCTGCCACCCCCACGGCCATCCTCACTCAGGACTCCCTGCAGATGTTCCTGCCCCAGGAGAGGAGCC
AGCAGCCCCTCTCCGCAGAGGGCCCCCACCTCTCCGTGCCTGCCTCGGTCATAGTCAGCGCCCCGCCTCCCGCCC
AAGACCCAGCCCCAGCCACCCCCGTCGCCAAAGGAGCTGGCCTCGGCCCTCAGGCCCCCGACAGCCAGGCTTCCC
CGGCTCCGGCCCCCCAGATCCCGGCAGCGGCTCCGCTGAAGGGCCCAGGCCCCTCTTCGTCCCCGTCACTACCTC
ACCAGGCCCCTCTGGGGGACAGCCCCCACCTGCCCTCCCCACACCCCACCCGGCCCCCTTCCCGCCCACCCTCCC
GGCCACAGAGTGTGTCCCGCCCTCCCTCAGAGCCACCCTTGCACCCTTGCCCCCCACCCCAGGCCCCCCCAACTC
TGCCTGGCATCTTTGTCATCCAAAACCAGCTAGGCGTTCCCCCGCCTGCCAGCAACCCGGCCCCTACTGCCCCAG
GCCCGCCGCAGCCGCCTCTCCGCCCCCAGTCCCAGCCGCCTGAGGGACCGCTGCCCCCAGCCCCCCACCTCCCTC
CATCCTCCACCTCCTCTGCTGTGGCCTCCTCCTCTGAGACGTCCTCCAGGTTGCCAGCCCCTACGCCATCCGACT
TCCAGCTCCAGTTCCCACCCAGCCAGGGGCCCCACAAGTCCCCCACTCCCCCTCCAACCCTCCACCTGGTCCCTG
AGCCGGCAGCACCCCCCCCACCGCCTCCTCGGACCTTCCAGATGGTGACCACCCCCTTCCCAGCGCTGCCCCAGC
CGAAGGCTCTTCTCGAGAGATTTCACCAGGTGCCGTCCGGAATCATCCTCCAGAACAAGGCTGGGGGGGCCCCTG
CCGCCCCGCAGACCTCCACCAGCCTGGGGCCCCTCACCAGCCCCGCTGCGTCTGTGCTGGTCAGTGGGCAGGCCC
CATCTGGGACCCCCACTGCCCCCAGCCACGCCCCCGCCCCGGCACCCATGGCCGCCACAGGCCTCCCTCCTCTGC
TTCCAGCCGAGAACAAGGCTTTTGCCAGCAACCTCCCGACCCTGAATGTGGCCAAGGCCGCTTCCTCCGGGCCAG
GGAAGCCCTCCGGGCTGCAGTATGAGAGCAAACTGAGTGGCCTGAAGAAGCCCCCCACGCTTCAGCCCAGCAAGG
AAGCCTGTTTCCTGGAGCATTTGCACAAACACCAGGGCTCCGTCCTGCACCCCGACTACAAGACGGCCTTCCCCT
CCTTTGAGGACGCCCTGCATCGCCTCCTGCCCTACCATGTCTACCAGGGCGCCCTCCCCTCCCCCAGTGACTACC

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FIGURE 3791B

ACAAAGTGGACGAGGAGTTTGAGACGGTCTCCACGCAGCTGCTGAAACGCACCCAGGCCATGCTCAATAAATATC
GGCTCCTGCTCCTGGAGGAGTCCCGGAGGGTGAGCCCCTCAGCGGAGATGGTAATGATCGACCGAATGTTCATTC
AGGAGGAGAAGACCACCCTTGCCTTGGATAAACAGCTGGCCAAGGAGAAGCCGGACGAGTACGTGTCTTCCTCCC
GCTCGCTCGGCCTCCCCATCGCAGCCTCTTCCGAGGGTCATCGGCTTCCCGGCCACGGCCCCCTGTCGTCTTCAG
CTCCCGGGGCCTCCACCCAGCCCCCTCCACACCTGCCCACCAAGCTTGTGATCCGGCACGGCGGGGCAGGCGGCT
CCCCTTCGGTCACCTGGGCCCGGGCGTCCTCCTCCCTGTCCTCCTCTTCCTCCTCCTCCTCTGCCGCCTCCTCCT
TGGACGCCGACGAGGACGGCCCCATGCCCTCCCGCAACCGCCCGCCCATCAAGACCTACGAGGCCCGGAGCCGCA
TCGGGCTCAAGCTCAAGATCAAGCAGGAAGCCGGGCTCAGCAAGGTCGTGCACAACACGGCCCTGGACCCCGTGC
ACCAGCCCCCGCCACCCCCCGCTACCCTCAAGGTGGCCGAGCCCCCGCCACGGCCGCCACCACCACCGCCGCCCA
CGGGCCAGATGAACGGCACGGTGGACCACCCGCCGCCTGCCGCCCCCGAGCGCAAGCCCCTGGGCACCGCCCCGC
ACTGCCCGCGCCTGCCACTGCGCAAGACCTACCGCGAGAACGTGGGGGGCCCTGGCGCGCCGGAGGGGACGCCCG
CAGGCAGGGCACGGGGAGGCAGCCCGGCGCCGCTGCCCGCCAAAGTGGACGAGGCCACCAGCGGGCTCATCCGCG
AGCTGGCGGCCGTGGAGGACGAGCTGTACCAGCGTATGCTGAAGGGCCCCCCGCCAGAGCCCGCAGCCAGCGCCG
CCCAAGGCACCGGGGACCCCGACTGGGAGGCGCCCGGGCTGCCCCCTGCCAAGCGGCGCAAGTCCGAGTCGCCCG
ACGTGGACCAGGCCAGCTTCTCCAGCGACAGCCCGCAGGATGACACGCTCACCGAGCACCTGCAGAGCGCCATCG
ACAGCATCCTGAACCTGCAGCAGGCCCCCGGCCGGACGCCCGCGCCCTCGTACCCCCACGCTGCCTCGGCCGGCA
CCCCCGCATCCCCGCCGCCCCTGCACAGGCCCGAGGCCTACCCACCCTCCAGTCACAACGGTGGCCTCGGCGCCA
GGACGTTGACCAGA**TAA**CACCGGGCCGCCTCCCCTTCCCCGTCCCCTCCTCCCGAAGACGCCGGGACAGTCGGGT
GTCCGCCCTCAGCCTCCTGGGGACTCGAGCCGGGGATCCCCTGACGGTTTTTCTTGCCTAAGTTATTTGAGTCAC
AAAGGCCTCCTTCCCTGCCGCCTGCTTCAGCTGGGTTGCTGGGGGGTGGGCGTGGATTTAGGGAGGGGGCTGTGA
TGTAAAACGTCTCCCCTGCCAAAGGAGGGGCAAAGTGCTGTGTCAGTTCCTGTTTCTTCCCATTTCCTGGCACAC
TCTGCCCCTCTGTCCGGGGGACACGCGCATGTGTTTGCCAGGGATGGGGCCACCGGGTTGATGCCAACGCTCCGG
GTGCCTGTCTTGTCTGTGTGGCTTCTCAGATGGTGGAGGGTGCTGGGAGCTGGCAGGGTCCTTCCAGACAGTCTC
AGCCTCTCCCCGCCGCCCCCAACAGGCTGTCAAACAAAACCGGAGAGGGGGTGGGGGAGCCAGCCTCCCAGCGTG
CTGTGCCCGCAGGCACCCGTGTGACATCCGCACGTCCAGCTCCGTGACCTGTGTGTGTGTGTGTGTGCACAAGTG
AGTGAGAGATTTCGAACGCCCACCCCTCGACTTTGAAATCTGAGCAAAACAAGAAACTGGGGTCTTCCTCTCCCC
CGAACCTCTCCCCAGCTAGTCTTCCCTCTGTTCTTCCTGCCTCCAGCCGCCCGCGCCAGATTTTGAAATCTCGGA
GACAAAACTAGTACTGTAAGATAAATTTTTTTGTACTGTATTTATTGTGTATAACGATTTTTTTAAAGGAGAAT

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FIGURE 3792

GCGGCTGAGTCTTCCCAGGGTCAGGGTCAGGCGCTTTGCTGAGTCCCTTTGTGGCCGCCATGGACAATTCCGGGA
AGGAAGCGGAGGCGATGGCGCTGTTGGCCGAGGCGGAGCGCAAAGTGAAGAACTCGCAGTCCTTCTTCTCTGGCC
TCTTTGGAGGCTCATCCAAAATAGAGGAAGCATGCGAAATCTACGCCAGAGCAGCAAACATGTTCAAAATGGCCA
AAAACTGGAGTGCTGCTGGAAACGCGTTCTGCCAGGCTGCACAGCTGCACCTGCAGCTCCAGAGCAAGCACGACG
CAGCCACCTGCTTTGTGGACGCTGGCAACGCATTCAAGAAAGCCGACCCCCAAGAGGCCATTAACTGTTTGATGC
GAGCAATCGAGATCTACACAGACATGGGCCGATTCACGATTGCGGCCAAGCACCACATCTCCATTGCTGAGATCT
ATGAGACAGAGTTGGTGGACATCGAGAAGGCCATTGCCCACTACGAGCAGTCTGCAGACTACTACAAAGGCGAGG
AGTCCAACAGCTCAGCCAACAAGTGTCTGCTGAAGGTGGCTGGTTACGCTGCGCTGCTGGAGCAGTATCAGAAGG
CCATTGACATCTACGAACAGGTGGGGACCAATGCCATGGACAGCCCCCTCCTCAAGTACAGCGCCAAAGACTACT
TCTTCAAGGCGGCCCTCTGCCACTTCTGCATCGACATGCTCAACGCCAAGCTGGCTGTCCAAAAGTATGAGGAGC
TGTTCCCAGCTTTCTCTGATTCCCGGGAATGCAAGTTGATGAAAAAATTGCTAGAGGCCCACGAGGAGCAGAATG
TGGACAGCTACACCGAGTCGGTGAAGGAATACGACTCCATCTCCCGGCTGGACCAGTGGCTCACCACCATGCTGC
TGCGCATCAAGAAGACCATCCAGGGCGATGAGGAGGACCTGCGCTAAGCCCCACCCAGCCCCCCAGTGCCCGTCT
TCCTGTCCCATCTGCTCAGAGAGAGCCAAGCTCTAAAGCACATGTAGCCGCTGAGACCTGCTGTTTCTGCTGGGG
GCAGGCTCCTCTTCCCCCAGCCCCGGGAGCCTCCCCCAGCTTCCTGCAGCCCCGACCTCTCAGGTTAGACCCTGG
GCCCTGGAGCTTAGGGGATTCTCCCCACCCCAGCCCCACACCTGCTCCTTCCCTAATGCTTTGAGGTTTTCTTGG
TTGGAAGCTGCAGCTGGCCCAAGAAAGAAAATAAAAAACAACACTTTTGC

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FIGURE 3793

CGGGGGCTGCGGAGAGGGTGCTTAACTGAGGGGCATGATGGGGGAGGCGGCCGTGGCCGCGGGGCCTTGTCCGTT
GCGCGAGGACAGCTTCACGCGCTTCTCGTCGCAGAGCAATGTGTACGGGCTGGCAGGCGGCGCCGGCGGGCGCGG
GGAGCTGCTGGCCGCCACCCTTAAAGGCAAGGTGCTCGGCTTCCGCTACCAAGACCTCCGACAGAAAATCCGGCC
AGTGGCCAAGGAGCTGCAGTTCAACTACATTCCCGTGGATGCGGAGATTGTCTCCATCGACACTTTCAACAAGTC
ACCCCCCAAGCGGGGTCTGGTTGTGGGGATCACGTTCATCAAGGATTCAGGGGACAAGGGCAGCCCCTTCCTGAA
CATTTACTGCGACTACGAGCCCGGCTCTGAGTACAACCTTGACTCTATTGCCCAGAGCTGCCTGAACCTGGAGCT
CCAGTTCACTCCGTTCCAGCTGTGCCATGCGGAGGTCCAGGTCGGGGATCAACTTGAGACTGTGTTTCTCTTGAG
TGGGAACGACCCGGCCATTCATCTCTACAAGGAGAACGAGGGGCTGCATCAGTTTGAGGAACAGCCCGTGGAAAA
CCTCTTCCCAGAGCTGACGAACCTGACCAGTAGCGTCCTCTGGCTGGACGTCCACAACTTCCCCGGCACGTCCCG
GCGCCTCTCAGCTCTGGGCTGTCAGAGTGGTTATGTCCGTGTCGCCCACGTGGACCAGCGGAGTCGAGAGGTTCT
GCAGATGTGGTCGGTCCTGCAGGACGGTCCCATCTCCCGAGTGATTGTGTTCAGCCTCTCGGCCGCCAAGGAGAC
CAAGGACAGGCCACTACAAGATGAGTACAGCGTGCTCGTGGCCAGCATGTTGGAGCCAGCAGTGGTGTATCGGGA
CCTGCTGAACCGGGGTCTTGAAGACCAGCTTCTCCTGCCCGGCAGTGACCAGTTTGACAGCGTCCTCTGCAGCCT
GGTCACCGATGTGGATTTGGATGGGCGGCCAGAAGTCCTGGTGGCCACCTATGGACAGGAACTGCTGTGTTATAA
GTACCGGGGCCCAGAGTCGGGGCTTCCTGAGGCCCAGCACGGGTTCCATCTGCTGTGGCAGCGGAGCTTCTCCAG
TCCCCTGCTGGCCATGGCTCACGTGGACCTGACCGGGGATGGGCTGCAGGAGCTTGCCGTGGTCTCCCTGAAGGG
CGTGCACATCCTGCAGCACAGCCTGATTCAGGCCTCAGAGCTGGTCTTGACCCGGCTTCGACATCAAGTGGAGCA
GAGGAGACGTCGGCTACAGGGGTTGGAGGACGGGGCAGGTGCAGGGCCTGCTGAGAATGCAGCCTCTTAAGCACC
CATGCACCCACTCTTCCCAGACCTGGGGCGACTCATGGCGTGCTCACCTCCAGCCGCTGGTGGGGGGTGTCCTGA
AGGACAGGATGCTCTCCCCAGACCTCCCCAGGGTGGTGAAGCTGTGCCCTGGGGCCCCAGCTAACCCACTCCTCT
CTCTGTACGTCAATGTCCCTATTTGAAAGCAGGGATGATCCCATTCCACCCTGTCCACTCTGGATGAGAATTGGC
CACCTGATGGTTATTTATACGTCCAGAAGAACATC

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FIGURE 3794

GGGGCGGGGGCCGGGGTCCATGCGCGGAGTCCCCACCCGGCCCGGCGCCTGCCGCTGACGGCGGCGGGGGTGGGG
GGGCGCGCGCCTGGCCTCCTGCCCACCCCCTGGCGTCAACACCGCGGGCCGTCAGGGGCTGCGGCCCCGGGCTGC
GCCCTCCCCCGCGGCCAGGCTCTGGAGGGACCCAGGAGCTGCCGCCGGCCTCAGCCCATGGCCCGGAGGTATGAT
GAGCTGCCGCACTACCCAGGCATCGTGGATGGCCCCGCAGCCCTGGCTAGCTTCCCAGAGACAGTGCCCGCAGTA
CCAGGGCCCTATGGCCCGCACCGGCCTCCCCAGCCCCTGCCCCCAGGCTTGGACAGCGACGGCCTGAAGAGGGAG
AAGGATGAGATCTATGGACACCCGCTCTTCCCCCTCTTGGCCCTGGTCTTTGAGAAATGTGAACTGGCTACATGC
TCTCCCCGTGACGGGGCCGGAGCTGGGCTGGGGACACCCCCTGGAGGTGACGTCTGCTCCTCTGATTCCTTCAAC
GAGGACATCGCTGCCTTTGCCAAGCAGGTTCGCTCTGAGAGGCCCCTCTTCTCCTCCAACCCAGAACTGGACAAT
CTGATGATCCAGGCCATCCAGGTGCTGCGGTTCCACCTGCTGGAGCTGGAGAAGGTCCACGACCTGTGCGACAAC
TTCTGTCACCGCTACATCACCTGCCTCAAGGGAAAGATGCCCATCGACCTGGTCATCGAGGATCGGGACGGCGGC
TGCAGGGAGGACTTCGAGGACTACCCAGCCTCCTGCCCCAGCCTCCCAGACCAGAATAATATGTGGATTCGAGAC
CATGAGGATAGTGGGTCTGTACATTTGGGGACCCCAGGTCCATCCAGTGGGGGCCTGGCCTCCCAGAGTGGGGAC
AACTCCAGTGACCAAGGAGACGGGCTGGACACCAGCGTGGCCTCTCCCAGTTCTGGTGGAGAAGATGAGGACTTG
GACCAGGAGCGACGGCGAAACAAGAAGAGGGGGATCTTCCCCAAGGTGGCCACCAACATCATGCGAGCCTGGTTG
TTCCAGCACCTCTCGAGACGCTCAGAAGCGCCGGTTCTCCCAGACGTCTGCCTGGGCCTGGGCTCCCCATCCCCC
GGACCCCGGTGGGCCAGACCTTGGGGTTCAGACTGCGGCCGGCCAGGCAGGCAGAGTGACTCTTGCTGGTGGCTG
CAGCACCCGTACCCCTCGGAGGAGCAGAAGAAACAGCTGGCGCAGGACACGGGGCTCACCATCCTGCAAGTCAAC
AACTGGTTCATTAACGCCCGGAGACGCATCGTGCAACCTATGATCGATCAATCCAACCGCACAGGGCAGGGTGCA
GCCTTCAGCCCAGAGGGCCAGCCCATCGGGGGCTATACCGAGACGCAGCCACACGTGGCCGTCCGGCCTCCGGGA
TCAGTGGGGATGAGTTTGAACTTGGAAGGAGAATGGCATTATCTATAGAGGCTGATGCAGGAGAGACCCAGCCTC
CGGCTGTGACCCCCAGCCTCACACCTGCCTCTGGTTCCCGCCTGGTCCTCCAGCTTCAGGACCCCACCTCCAAAG
GCCCCTCTGCTCAATGCCTACCTCCCTAGGGCCCTGCTGGGACATGGGGGCCTGAGTGCCCATCCAAGGGCTCTC
AAGGACACCGGCAAGGCCTCCAGGCCCTGAGCCCCACTTCTGCCTTCACCTCTGCCTGGGACCCGAGCTGGGCTC
CTGGGCCTTGGTCCCCAGAAGATGGCGGCTAGGGCCTCGCCGCCAGGACAGAGAAGGGACGGGGTGGCTGGGCAG
TCAGGGAAGGAGGGTCGCCCGGATCCGACATTTTGGAGAGATTCCTTCACTCTCCTGTCCCCCCTACCTCCCTTC
TCTAATTTCTTCTTTTTTTTAATGATAAAGTCTTAAAAACACGG

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FIGURE 3795A

GAATCCAGGGCCTGAAAACCCAGAATGAACTTGTGTCCATCCCAGAGATCACTGCAGATGTCATGAGGTACCCTT
TGTGTCACCAGCTCAAGCAGGCCTCTGGCCACTTTATCATCTGTGGTGGTCCTGTGCCGTGACCAGGAGGAAAAA
TTAGCTCTTTGAAGAGAAAGTAGTTCTCTATTGCAGGCACTGGCCTCTTAAATTGTTGCAGGTGGGGAATGGATG
AGAATATTTGTTTTGGGTGATCAGAACTGAGACTCCTATTGTGGATTAGTAACATGCCTCCTCCTAGAACAAGGG
AGGGCAGGGATCGCCGAGACCACCACCGGGCTCCCAGCGAGGAAGAGGCCTTGGAGAAATGGGACTGGAATTGTC
CAGAGACGCGTCGCCTCTTGGAAGATGCCTTCTTCCGTGAAGAGGATTACATCCGTCAGGGTTCTGAGGAATGTC
AGAAGTTTTGGACCTTCTTTGAACGCCTGCAGAGATTCCAGAATCTCAAGACCTCCAGGAAGGAGGAGAAAGACC
CTGGACAGCCCAAGCACAGCATCCCAGCGCTGGCCGACCTACCTCGCACTTACGACCCACGTTACCGCATCAACC
TCTCTGTTCTTGGCCCTGCCACGCGGGGCTCTCAGGGACTGGGCAGGCACTTGCCCGCGGAGAGAGTGGCTGAGT
TCCGCCGAGCCCTGTTGCACTACCTGGACTTTGGCCAGAAGCAGGCATTTGGGCGTCTGGCCAAGCTGCAGCGTG
AGCGGGCAGCCCTCCCCATCGCCCAGTATGGGAACCGCATCCTGCAGACGCTGAAGGAGCACCAGGTGGTGGTAG
TGGCCGGTGACACCGGCTGTGGCAAGTCCACTCAGGTGCCCCAGTACCTGCTGGCTGCTGGCTTCAGTCATGTGG
CGTGCACCCAGCCCCGGCGGATCGCCTGCATCTCACTGGCCAAGCGTGTGGGCTTTGAGAGCCTCAGTCAGTATG
GCTCACAGGTCGGCTACCAGATCCGCTTTGAGAGCACACGTTCGGCGGCCACCAAGATTGTATTCCTGACAGTGG
GGCTGCTCCTGCGACAAATCCAGCGGGAACCCAGCCTGCCCCAGTATGAGGTCCTGATTGTGGATGAAGTCCATG
AGCGGCATCTCCACAACGATTTCCTCCTGGGCGTCCTCCAGCGCCTGTTGCCCACGCGGCCTGACCTCAAGGTCA
TCCTCATGTCGGCCACCATCAACATCTCGCTCTTCTCCAGCTATTTCAGCAATGCCCCTGTGGTACAGGTGCCTG
GGAGGCTGTTCCCCATCACGGTATTTGATGTGGCACCCCCTGGAGTCCGGAAATGCATCCTCTCCACCAACATTG
CTGAGACCTCAGTCACCATTGACGGGATCCGCTTCGTAGTAGATTCCGGAAAGGTGAAGGAGATGAGCTACGATC
CGCAGGCCAAGCTGCAACGGCTGCAGGAGTTCTGGATTAGTCAGGCCAGCGCAGAGCAGCGGAAGGGCCGGGCGG
GCCGCACGGGCCCCGGAGTCTGCTTCCGCCTCTATGCCGAATCGGACTATGATGCCTTCGCCCCCTACCCCGTCC
CAGAAATTCGGAGGGTGGCCCTGGACTCGTTGGTGCTGCAGATGAAGAGCATGAGTGTGGGGGACCCCCGAACCT
TCCCCTTCATCGAGCCCCCACCACCAGCCAGCCTGGAAACCGCCATCCTCTACCTCCGGGACCAGGGGGCCCTGG
ACAGCTCAGAGGCCCTCACACCCATTGGGTCCCTGCTAGCCCAGCTGCCTGTGGACGTTGTGATTGGGAAGATGC
TGATCCTGGGCTCCATGTTCAGCCTGGTGGAGCCTGTGCTCACCATCGCAGCCGCACTTAGCGTCCAGTCGCCCT
TCACCCGCAGCGCCCAGAGCAGCCCAGAGTGCTGCACCCCACCTGCGTCTTCGCTGGCAGCCCCGAGGTGCTGCA
CGCACAGGAGCTGGAGGCCAGCAACTGCGACGGAAGCCGAGACGACAAGGACAAGATGAGCAGCAAACACCAGCT
CCTCAGCTTCGTGTCCCTGCTGGAGACCAACAAGCCGTACCTGGTGAACTGCGTCCGCATCCCTGCCCTCCAGTC
CCTCCTGCTTTTTAGCCGGTCTTTGGACACCAATGGTGACTGCTCCCGCCTGGTGGCCGATGGCTGGCTGGAGCT
GCAGCTAGCAGACAGTGAAAGTGCCATCCGACTCCTGGCGGCTTCCCTGCGGCTCCGTGCCCGCTGGGAAAGTGC
CCTGGACCGGCAGCTGGCGCACCAGGCCCAGCAGCAGCTGGAGGAGGAGGAGGAGGATACGCCAGTCAGCCCCAA
GGAGGTGGCCACCCTGAGCAAGGAACTCCTGCAATTCACGGCATCCAAGATTCCTTACAGCCTCCGGCGGCTCAC
AGGGCTAGAAGTCCAGAACATGTATGTGGGACCCCAGACCATCCCAGCCACCCCCCATCTTCCTGGCCTCTTTGG
CAGCTCCACCCTGTCCCCCCACCCCACAAAGGGGGGCTACGCAGTCACTGACTTCCTCACCTACAACTGCCTCAC
GAATGACACAGACCTGTACAGCGACTGTCTCCGAACCTTCTGGACCTGCCCCCACTGTGGCCTGCATGCGCCCCT
CACGCCCCTGGAGCGCATCGCCCATGAGAACACCTGCCCCCAGGCCCCACAGGATGGGCCCCCAGGGGCTGAGGA
AGCTGCCCTCGAAACCCTCCAGAAGACATCTGTCCTGCAGAGGCCCTACCACTGCGAGGCCTGCGGGAAGGACTT
CCTCTTTACACCCACAGAGGTGCTGCGCCACCGGAAGCAGCACGTGTGAGCTGGGCCAGGAGCCCTGCCCACCTC
CGTGCAGCTGACCTGCCCTCCAGCCCAGGACTAGGGGCAGGACTCTTGCCTGAACCCCCAGCCTGGGCTTAGCCC
TGTGGTCCTGTCCCAGTGCAGAGGGCCTGGAGCACGGATTGTGAATAAAGCCTCACATGCTGATACACACTGTTA
GGCCTGCACCTGCCCATCCAGAAAGCAGCAGCTGCCTTGTTAGTCCTCCCCAGGGTCTAGCTTTCCTTCTTCCTG
CTGCAGGGTGCTGCCTGAGGGGTCCTGGGTAGGAGGGGCGTTAGAGCCAGCAGGGACCTCCCATGTCTCCAGATT
CCAGGTGCAGGTTCTTAGCACCTCCGCAGCCGCTCTCTCTTGAGTCCATCCTCAGTCTCTCCTACCCCTTGAAGT
AGGGGGACCCTGAATTTGCCCATCCACCTGGGTCACTTTGAGAGTTGTGCAGGGGGGCTGGGAGCACTGGTGTTC
ACGTGGGACCACAGGCTGCACCATAAGACCCACTCACAATAAAAAAATAAAAGGCCGAGCCGGGCATGGTTGCTC
ACTCCCGTAATAAAAAAATAAAAGAACAGGCTGGGATTACAGGCGTGAGCCACTGCACCCGGCCGTGACCAACAT
TCTTAATCTGTCCTCTAGTGCTGGCCACTCTAAAACTTCACAAGAATGTGCTGTCTGTGTCTAGCTTCTTTTACC
CAACATGAGGTTGCATGGGCTTGGTTCATTCATTCTGTTCCATGAATTCATCACAATATATCCATTCTTTTGTCC

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FIGURE 3795B

AGGGACATTTGGCTTCCAGAAACCTACCCCTAACACCAGCCCTTCCCTCCCTCTGCAGAACAAAGGCCCCATCAG
AGGGGACGTGCTGGGTGTCAGCGTCAGCTTCTGGGAGGAGGAAGGTCAGAGCTAAGGCCTGAAGGATGATGAGGT
ATCAGGTGGGTGGAGGGGAGACGCTCAGGAGGTGGGAAAGGCGGAGGTGCACAGGCTTGGTTCCAGGTACAAATA
ACGTTACTAGGAGCACACAGTACCTGGATTTTGATGAATACATTGTACATTTCTGTCCTGTATGTATCCAGGGTT
ATAGGACGTGATTATAGGACACGCATATATGTTTGGTTTTAGTGGACTCTTAAAAATTGTTTTCCAGGGGCCGGG
CACAGTGGCTTACGCCTGTAATCCCAGCACTTTGGGAGGCCTAGGCGGGCAGATCACCTGAGGTCAGGAGTTCAA
GATCAGCCTGACCAACATGGAGAAACCCCGTCTCTATTGGGAGGCCGAGGCGGGAGGATCACAAAGTCAGGAGAT
CGAGACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAAAATTAGCTGGGCGTGGTGGCG
GGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGAGTGAACCCGGGAGGCAGAGCTTGCAGTG
AGCCAAGATCGTGCCACTGCACTCCAGCCTGGTTGACAGAGCAAGACTCCGTCTCAAAAAAG

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FIGURE 3796

GACTCCTTCAATTATACCACCCCTGATTATGGGCACTATGATGACAAGGATACCCTGGACCTCAACACCCCTGTG
GATAAAACTTCTAACACGCTGCGTGTTCCAGACATCCTGGCCTTGGTCATCTTTGCAGTCGTCTTCCTGGTGGGA
GTGCTGGGCAATGCCCTGGTGGTCTGGGTGACGGCATTCGAGGCCAAGCGGACCATCAATGCCATCTGGTTCCTC
AACTTGGCGGTAGCCGACTTCCTCTCCTGCCTGGCGCTGCCCATCTTGTTCACGTCCATTGTACAGCATCACCAC
TGGCCCTTTGGCGGGGCCGCCTGCAGCATCCTGCCCTCCCTCATCCTGCTCAACATGTACGCCAGCATCCTGCTC
CTGGCCACCATCAGCGCCGACCGCTTTCTGCTGGTGTTTAAACCCATCTGGTGCCAGAACTTCCGAGGGGCTGGC
TTGGCCTGGATCGCCTGTGCCGTGGCTTGGGGTTTAGCCCTGCTGCTGACCATACCCTCCTTCCTGTACCGGGTG
GTCCGGGAGGAGTACTTTCCACCAAAGGTGTTGTGTGGCGTGGACTACAGCCACGACAAACGGCGGGAGCGAGCC
GTGGCCATCGTCCGGCTGGTCCTGGGCTTCCTGTGGCCTCTACTCACGCTCACGATTTGTTACACTTTCATCCTG
CTCCGGACGTGGAGCCGCAGGGCCACGCGGTCCACCAAGACACTCAAGGTGGTGGTGGCAGTGGTGGCCAGTTTC
TTTATCTTCTGGTTGCCCTACCAGGTGACGGGGATAATGATGTCCTTCCTGGAGCCATCGTCACCCACCTTCCTG
CTGCTGAAGAAGCTGGACTCCCTGTGTGTCTCCTTTGCCTACATCAACTGCTGCATCAACCCCATCATCTACGTG
GTGGCCGGCCAGGGCTTCCAGGGCCGACTGCGGAAATCCCTCCCCAGCCTCCTCCGGAACGTGTTGACTGAAGAG
TCCGTGGTTAGGGAGAGCAAGTCATTCACGCGCTCCACAGTGGACACTATGGCCCAGAAGACCCAGGCAGTGTAG

GCGACAGCCTCATGGGCCACTGTGGCCCGATGTCCCCTTCCTTCCCGGCCATTCTCCCTCTTGTTTTCACTTCAC
TTTTCGTGGGATGGTGTTACCTTAGCTAACTAACTCTCCTCCATGTTGCCTGTCTTTCCCAGACTTGTCCCTCCT
TTTCCAGCGGGACTCTTCTCATCCTTCCTCATTTGCAAGGTGAACACTTCCTTCTAGGGAGCACCCTCCCACCCC
CCACCCCCCCCACACACACCATCTTTCCATCCCAGGCTTTTGAAAAACAAACAGAAACCCGTGTATCTGGGATAT
TTCCATATGGCAATAGGTGTGAACAGGGAACTCAGAATACAGACAAGTAGAAAGATTCTCGCTTAAAAAAAATGT
ATTTATTTTATGGCAAGTTGGAAAATATGTAACTGGAATCTCAAAAGTTCTTTGGGACAAAACAGAAGTCCATGG
AGTTATCTAAGCTCTTGTAAGTGAGTTAATTTAAAAAAGAAAATTAGGCTGAGAGCAGTGGCTCACGCCTGTAAT
CCCAGAACTTTGGGAGGCTAAGGTGGGTGGATCACCTGAGGTCAAGAGTTCCAGACCAGGCTGGCCAGCATGGTG
AAACCCCGTCTGTACTAAAAATACAAAAAATTAACTGGGCATGGTAGTGGGTGCCTGTAATCCCAGCTACTTGGG
AGGCTGAGGTGGGAGAATTGCTCGAACTTGGAGGTGGAGGTTGTGGTGAGCCATGATCGCACCACTGCACTCTAG
CCTGGGTGACCGAGGGAGGCTCTGTCTCAAAAGCAAAGCAAAAACAAAAACAAAAACACCTAAAAAACCTGCAGT
TTTGTTTGTACTTTGTTTTTAAATTATGCTTTCTATTTTGAGATCATTGCAAACTCAACACAATTGTAAGTAATG
ATACAGAGGGATCTTGTGTACCCTTCACCCAGCCTCCCCCAATGGCAACATCTTGCAAAACTACAATGTAGTCTC
ATAACCAGGATATTGACATTGATACAGTGAAGATACAGGACATTCTCATCACCACAGGGATCCCCAGGATGCCCA
CTTCCCTCCACCCCCACACCCCAGCCGTGTCCCTAACCCCTGGCAACCAGGAATCCACTCTCCATTTCTATAATG
TTGTCATTTCAAGAATGTTATTCAATGGAATCATATAGTATGTAACCTGTTTTGAGCTTAAAAAAAAAGTATACA
TGACTTTAATGAGGAAAATAAAAATGAATATTG

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FIGURE 3797

TTGGCTTGAGCGGGACCGGAGCTGAGGCAGGAAGAGCCGGCGCCATGGTGGAGAAGGAGGAGGCTGGCGGCGGCA
TTAGCGAGGAGGAGGCGGCACAGTATGACCGGCAGATCCGCCTGTGGGGACTGGAGGCCCAGAAACGGCTGCGGG
CCTCTCGGGTGCTTCTTGTCGGCTTGAAAGGACTTGGGGCTGAAATTGCCAAGAATCTCATCTTGGCAGGAGTGA
AAGGACTGACCATGCTGGATCACGAACAGGTAACTCCAGAAGATCCCGGAGCTCAGTTCTTGATTCGTACTGGGT
CTGTTGGCCGAAATAGGGCTGAAGCCTCTTTGGAGCGAGCTCAGAATCTCAACCCCATGGTGGATGTGAAGGTGG
ACACTGAGGATATAGAGAAGAAACCAGAGTCATTTTTCACTCAATTCGATGCTGTGTGTCTGACTTGCTGCTCCA
GGGATGTCATAGTTAAAGTTGACCAGATCTGTCACAAAAATAGCATCAAGTTCTTTACAGGAGATGTTTTTGGCT
ACCATGGATACACATTTGCCAATCTAGGAGAGCATGAGTTTGTAGAGGAGAAAACTAAAGTTGCCAAAGTTAGCC
AAGGAGTAGAAGATGGGCCCGACACCAAGAGAGCAAAACTTGATTCTTCTGAGACAACGATGGTCAAAAAGAAGG
TGGTCTTCTGCCCTGTTAAAGAAGCCCTGGAGGTGGACTGGAGCAGTGAGAAAGCAAAGGCTGCTCTGAAGCGCA
CGACCTCCGACTACTTTCTCCTTCAAGTGCTCTTAAAGTTCCGTACAGATAAAGGAAGAGATCCCAGTTCTGATA
CATATGAGGAAGATTCTGAGTTGTTGCTCCAGATACGAAATGATGTGCTTGACTCACTGGGTATTAGTCCTGACC
TGCTTCCTGAGGACTTTGTCAGGTACTGCTTCTCCGAGATGGCCCCAGTGTGTGCGGTGGTTGGAGGGATTTTGG
CACAGGAAATTGTGAAGGCCCTGTCTCAGCGGGACCCTCCTCACAACAACTTCTTCTTCTTCGATGGCATGAAGG
GGAATGGGATTGTGGAGTGCCTTGGCCCCAAGTGAACTCAAGATTTGGCAGCCCCAGAGATGCCAACTGCAGCAT
GCCCACCTGTATTCCCTGTCCCCTTCCTTCATGAAGGCATCTCCAGGCAAGGAAAACTGAAGTCATTGGCCCGAT
ACAAAACATTTCCTGCAACGAAGGAGGTGGTGCCGACGTGCTGCTTCCCATCACCAGCAGCTGCTCGACAAGGGG
CGCAGGGTGGCTGTCTTTGTTCCAGCACTGTTCAGGCTGCCTGTCATCCCGGGCCTGCCAGCTCCCCTGAGTGAT
GAGCACTTCCAAGCACCCCTCTGCCCTTTCTCTGTCCTTATGCTGTCCCGGCCTCGCCAGCCCTCTGGGGCATTG
TGGGAGATGCCTGCCAGGAATGAGCAAGCTCTGTTGCTCGGGAGCCTCTTGTCACCTTCTTGGACTTATTCCCCA
CCTGATACCTTATAGAGAAAAGTGTGAATTCAGGTGGAGAGTAGGCCCAGGCCCCATGAGGCACCAGTGGAAGCA
CAGCTCCAAGTTCAGACAGGTGCCCTTAGAGAGGAAAACCATGACAGGCAAATGCATTTCCTCTGGAGTTTGAGA
CCCTGACAAACAACAGGTGGCATCTGGTGTGCTGTTCTTGAGTTTTCGTTTAGGATTAGTTGAGTTCCAGCTGGG
TTTTGGGAGAAAGGAGATGCTACCAAGTCTTGGATGTTAGGGCGAGACCCTGCAAGTTGAGTATTAGAGAGCTTG
TCTTTCAAGGCAGGTTCCTGGGGCTTCAGGGCTAGGAGGGAGGAGCCTGCCCTTTTAACAGAACCCCAGTCACAT
GCGGCTCAAGTCACTCAGAGGCTGTTGCATTTCAGGGCTATGTTGGTCCTTTGTTTACCTCCTAAACCACAGCTG
TTTGTGTTTCACATATGTTGTGAATTTTCCTTGGTTCTTTTTAAAGGAATGATAATAAAGTTACTTGCTTTAGGA
TTTGCTTGTTTTTCTTCCACTTCAGAAGCTTCTGAGAGGGAATGGGATGATCCTACCAGTTGCCTTTTCAGACCT
GAGGCTCTA

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FIGURE 3798A

CTCTATGGGAGGAGACCACCCGGAGGATGAAGAGGATTTCTACGAGGAAGAGATGGACTATGGAGAGAGTGAGGA
GCCAATGGGAGACGACGACTATGACGAGTACTCCAAGGAGCTGAACCAGTACCGCCGCTCCAAGGACAGCCGAGG
CCGAGGGCTAAGTCGAGGCCGTGGCAGGGGCTCCCGAGGTCGAGGGAAAGGAATGGGTCGGGGCCGAGGCCGAGG
TGGCAGCCGAGGAGGGATGAACAAGGGCGGAATGAACGATGACGAAGACTTCTATGACGAGGACATGGGCGACGG
TGGTGGTGGAAGCTACCGGAGTCGTGACCATGACAAGCCCCACCAGCAGTCGGACAAGAAAGGCAAAGTCATTTG
CAAGTACTTCGTGGAAGGGCGCTGCACCTGGGGAGACCACTGTAATTTTAGCCATGACATCGAACTCCCAAAGAA
GCGAGAACTGTGCAAGTTTTACATCACTGGATTTTGCGCCAGAGCTGAGAACTGCCCTTATATGCACGGTGATTT
CCCGTGTAAGCTGTACCACACCACTGGGAACTGCATCAATGGTGACGACTGCATGTTTTCCCACGACCCTCTGAC
CGAAGAGACGAGGGAGCTCTTGGATAAGATGTTGGCCGATGATGCAGAAGCAGGTGCCGAGGATGAGAAGGAGGT
GGAGGAACTGAAGAAGCAGGGCATCAACCCCCTGCCCAAACCGCCCCCTGGTGTGGGCCTCCTGCCCACCCCTCC
TCGGCCCCCTGGCCCGCAGGCTCCAACCTCTCCCAACGGCAGGCCCATGCAGGGTGGCCCCCCGCCCCCGCCCCC
TCCCCCTCCCCCACCGCCCGGGCCCCCTCAGATGCCCATGCCGGTGCATGAGCCACTGTCCCCGCAGCAGCTGCA
GCAGCAGGACATGTACAACAAGAAGATCCCCTCCTTGTTTGAGATCGTGGTGCGGCCCACGGGACAGCTGGCTGA
GAAGCTGGGTGTGAGGTTCCCTGGACCCGGTGGACCCCCAGGGCCAATGGGCCCTGGGCCCAACATGGGACCCCC
AGGGCCAATGGGCGGTCCAATGCATCCTGACATGCACCCCGACATGCACCCGGACATGCACCCTGACATGCACGC
AGACATGCACGCAGACATGCCGATGGGCCCTGGCATGAATCCTGGCCCACCCATGGGCCCTGGCGGCCCTCCAAT
GATGCCCTACGGCCCTGGAGACTCCCCACATTCTGGAATGATGCCCCCTATCCCGCCAGCCCAGAACTTCTATGA
AAACTTCTACCAGCAGCAGGAGGGCATGGAGATGGAGCCCGGACTCCTGGGGGATGCAGAGGACTACGGGCACTA
CGAAGAGCTGCCAGGGGAGCCTGGGGAGCACCTCTTCCCTGAGCACCCTCTGGAGCCCGACAGCTTCTCTGAGGG
AGGGCCCCCAGGCCGGCCGAAGCCAGGCGCCGGTGTCCCTGACTTCCTGCCCTCAGCCCAGAGGGCCCTGTACCT
GAGGATCCAGCAGAAGCAGCAGGAGGAGGAGGAGAGAGCGAGGAGGCTGGCTGAGAGCAGCAAGCAGGACCGGGA
GAATGAGGAAGGTGACACCGGAAACTGGTACTCAAGTGATGAGGATGAGGGTGGAAGCAGTGTCACCTCCATCCT
GAAGACCTTGAGGCAGCAGACGTCCAGCCGACCCCCGGCTTCAGTTGGGGAGCTGAGCAGCAGTGGGCTGGGGGA
CCCCCGCCTCCAGAAGGGACACCCCACAGGAAGCCGGCTGGCTGACCCTCGCCTCAGCCGGGACCCCAGACTCAC
CCGCCATGTGGAGGCTTCTGGCGGGTCTGGCCCAGGTGATTCGGGACCCTCCGATCCTCGGCTGGCTCGCGCCCT
GCCCACCTCCAAGCCCGAAGGCAGCCTTCATTCCAGCCCTGTGGGCCCCAGCAGTTCCAAGGGGTCTGGGCCGCC
CCCAACGGAGGAGGAGGAAGGGGAGCGGGCCCTGCGGGAGAAGGCCGTGAACATTCCCCTGGACCCACTCCCCGG
GCACCCTCTGCGGGACCCACGGTCACAGCTGCAGCAGTTCAGCCACACATCAAGAAGGACGTGACCCTGAGCAAGCC
CAGCTTCGCCCGCACCGTGCTCTGGAATCCCGAGGACCTGATCCCCCTACCCATCCCCAAGCAGGACGCAGTGCC
CCCCGTGCCCGCGGCCCTGCAATCCATGCCCACCCTGGACCCCCGGCTGCACCGCGCTGCCACGGCAGGGCCCCC
CAACGCCCGGCAGCGCCCGGGCGCCTCCACGGATTCCAGCACACAGGGCGCCAACCTCCCCGACTTTGAACTTCT
GTCTCGCATCCTCAAGACAGTCAATGCCACCGGCTCCTCGGCCGCCCCCGGTTCCAGCGACAAACCCAGTGACCC
CCGGGTGCGGAAGGCCCCCACCGACCCTCGGCTGCAGAAACCCACAGACTCTACGGCCTCCTCCCGGGCTGCCAA
GCCCGGCCCTGCTGAGGCGCCCTCTCCCACCGCCAGCCCGAGTGGGGATGCCTCCCCACCAGCCACCGCTCCCTA
CGACCCCCGCGTGCTGGCGGCCGGTGGACTGGGCCAGGGCGGAGGGGGCGGGCAGAGCAGTGTGCTGAGCGGTAT
CAGCCTCTACGACCCGAGGACTCCCAACGCGGGGGGCAAAGCCACAGAGCCGGCTGCTGACACGGGTGCCCAGCC
CAAGGGTGCTGAGGGCAATGGCAAGAGCTCGGCCTCCAAGGCTAAGGAGCCCCCGTTCGTCCGCAAGTCTGCCCT
GGAACAGCCAGAGACAGGGAAGGCCGGTGCTGATGGGGGCACCCCCACGGACAGATACAACAGCTACAACCGGCC
CCGGCCCAAGGCTGCTGCAGCCCCCGCTGCCACCACCGCCACCCCACCCCCCGAGGGTGCCCCACCCCAGCCCGG
GGTGCACAACCTGCCCGTGCCCACCCTCTTCGGGACGGTGAAGCAGACACCCAAGACGGGCTCAGGAAGCCCATT
TGCTGGGAACAGTCCGGCCCGCGAGGGTGAGCAGGATGCGGCATCCCTGAAGGATGTTTTTAAAGGCTTCGACCC
CACGGCCTCCCCCTTTTGCCAGTAGTGTCCAGCCAGAGCTGCGGCTCCAGCCACCCTTCCTAGGGTGGCATTCAG
GGCAGCACCCAGGGTAGGGAACTTGGGGGCAAGGGGAGGCAGGCTGGGTGTTCCTTTTTTCTTTTCTTTTTCTTT
TGCTTTCCGTCTCTTTTATTTTTTTTTAAAGTAGTACTTTCTTTGAGATTTGTAAATTGTATATAACCATCTTAA
GTTCTGGTCAGTGTGGCGGGCTCAGGGGCTCCTGCTGAGCAAACCGACTCATGCCCGCAAACCTGTGAACTTTCG
CCAGTGCCTGGCCTCAGACTCTGTGGGCTCTGCGTGGCCGGGCCTTGCTGGAGGCCCAGTGGGTTTTCTGGGCAA
AGCATGGCCCCTTTTCCCCAGGACAAAGGGAACAGTTGGTGTCTGGGAAGGTATTGAACGCTCCTCACCCTGTGC
CCGAAGAGACCCGGAACCAAGACCATGGCAGGGCCTGCGTGGAAGCAGGTCCAGGCGTTTCTAGAACCCTAGGGT

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FIGURE 3798B

GCACCATCACTGTCTTTTCAGTGCAGGCTGTAACAACCCACTCAGGAGACAGTGAGAGTGAAAAGGTATTAAGGA
AAAAGCCCCCAGCGGCACTATGGGGGCTCCCTGGCGCATGCCTGCTCCTGTCCCTGGATTACCACACGTGCCCTC
CCTGCCACCCTCCGTCTAGAGCAAGCGGATGCCCCCCAGCCTGCAGCAGAAGCCTCCACAGTGAGAACTGGACCC
AAAGGTAGTGGGGGCCGGTGTGGGGCAGAGTCCTGAAGAGCCACCTCTAGGAGGCAGCCCCTAGGAGCACGCACG
TTCTGTCAGTATTACCCCACCTGTCCTATCAGGTGGGCCACACCCTGCTTGCCCACACCAGGGTCTGTCCTGGTC
CTCAAGCCACGCACCCGCTATGCCTGCACTGCAGCCCAGCCCCGGACAGCTCCAGGATCCGTGCAGTGGCTGCGC
CGCCAGGCCCCAACAATGGGGACCCTGGGGTGGCTCCTGGCCAAGTGTTCTCTGTTTTCCTCGCACCTCCTTACA
CTGTGTGACCTGCAGGGCATGAGGTATTGATGTGTTCGGGTTTCCTTTCCCAAGCCAGCAGATGCAGGTGTTCCA
AGGTGTGTTGCTCTGTGGGATTTGTGGACACTTAAGAAACGGACTGAGTGGGAACCCTGCAGCCAGGGGATGGGG
AGCCTCTGCTCCCCCCATGCTCCCACCCTGGCTGAGGGCCAGCCTCATCTGCAGAGCCCTGGAGGAGGCCCACCT
ATGGACACAGCCCGAGAGATGGGCGCAAGGGGTGCTGGGGGAGGCCTGCTATCCTGCCTCTGGGCCACTTGAGGG
GCCTCAGGAAGTGTGTGCTTGTGGCTGCATCTGCCCGTCTCCCTGGCCCACCATGTGGCTGCAGGCCAAGCTCTT
CATTGCTGACCATGAAGAGACCTAGTTACCTGCCAAGGGATTCCCCTTCCCTCCTCCTCAGGGTGGGGTGAACAA
GGCTCCTATCCCACCCCACCCCAAAAAGAGAAAAATGAAAAACTCATAGTTTGGAGCCAGGAGGCAGGGTGTCCT
ACAGGGCTGCACAGCCCTGAGGGGTCAGTGCTGGGATCTGGTTGGTTGGTTTGTCTTTTTGTCTTTTTTTTTTTT
TTTTTTTTTACACAATCATTAATGAGATTTGTCTTCAGCCACCAGTGTTGGCCTTGAAGCAGAGGGCACAGCCCT
TGGTGTTTGTAAAATAAGTATGAATACACAGTGTGGCAGTGTTGTGGTTTTTGTTGTTGTTTTTCCTCTCCTTTT
GAGAATTTTCTTTTGTAAAAGAAAAATATTTTTTAAACCGAAATCTGTGGATGAAATAGAAGCTGGAGCCCTCCT
CTTGGAATATTCAGCCTAAGAACCTCATAGGACTATGAATTCACCCGAAATTCTCATTTGCCATCAGGCCGAGCT
TTTAAAGAAAAATTGTTCTCTAACCAGGATTGTAACAAAAGTGTAAATACTGTTTCAGAGTTGAGAGTTGGTGGT
GCAAATATGTATATAATGAACTGTATTTTTACAATGATCGCCGCATGACTATTTCACACCCTTTTTATACTCCAT
ATCTGTCTTCCAGAAACGTCACCTGCCTTTCTCCTGTGGTCTCTTAATCCAGTAATTGTATTACTGCCATTAAAG
GATGCAGTTATTTT

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FIGURE 3799

AGTGCGAATCATGGGAGGCGGCTGGTGGTGGGCTCGGGCCGCTCGCCTTGCCCGTCTTCGCTTCCGGAGGTCGCT
ACTGCCGCCTCAGCGGCCCCGGAGCGGGGGCGCCCGGGGGTCCTTCGCCCCCGGCCACGGTCCCCGCGCCGGGGC
TTCGCCGCCCCCAGTGTCCGAGCTGGATCGTGCGGACGCCTGGCTCCTCCGAAAAGCGCACGAGACAGCCTTCCT
CTCCTGGTTCCGCAATGGCCTCCTGGCATCGGGCATCGGGGTCATCTCCTTCATGCAGAGTGACATGGGTCGGGA
AGCAGCATATGGCTTCTTCCTGCTGGGCGGCCTGTGCGTGGTGTGGGGCAGCGCCTCGTACGCCGTGGGCCTGGC
GGCGCTGCGAGGACCCATGCAGCTGACGCTGGGGGGCGCGGCCGTGGGCGCGGGCGCCGTGCTGGCCGCCAGCCT
GCTCTGGGCGTGCGCCGTGGGCCTCTACATGGGGCAGCTGGAGCTGGACGTGGAGCTGGTGCCCGAGGACGACGG
GACGGCCTCCGCGGAAGGCCCTGATGAGGCGGGTCGGCCGCCACCCGAGTGAGCGACACGGCCGTGGGGCCTGGC
AGGCGCTGGACAGCGCCCGAGGACTGGGACATTAAACCTGACCTCCCCTCCTCCAAAAAAAAAAAAAAAAAAACAA
AAAAAAAAAAAAAAAAAAAAAAAAAAACAAACAAACAAAAA

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FIGURE 3800A

GGGGGCCAGGAAGCCCCAGGCACACAGTGCCGCCCTTCAGCGGGGGCCTGGGACACAGAGAAATCAACGACCGGG
AGCAGAAGTTGCATGCCCTTAAGGAGGTATTAAAGAAATTTCCAAAGGAAAACCACGAAGTCTTCAAGTATGTCA
TCTCTCACCTAAACAAGGTCAGCCACAACAACAAGGTGAATCTCATGACCAGCGAGAACCTCTCCATCTGCTTCT
GGCCCACCTTGATGAGACCTGATTTCAGCACTATGGACGCCCTCACAGCCACGCGCACCTACCAGACAATCATTG
AACTCTTTATCCAGCAGTGCCCCTTCTTCTTCTACAATCGGCCCATCACCGAGCCCCCCGGCGCCAGGCCCAGCT
CCCCCTCTGCCGTGGCTTCCACCGTCCCCTTCCTCACTTCCACGCCTGTCACAAGTCAGCCGTCGCCCCCACAGT
CGCCTCCACCCACCCCCCAGTCCCCAATGCAGCCACTGCTTCCCTCCCAGCTTCAAGCCGAACACACGCTGTGAG
CCACCAAGACCTGGGGCGACAGGAGAACCGGTCCTCTCTCTGACGGGGTGGCATTTGGCCTTGAACAAAACCAAG
TCCACTGGGGACAGAGGCAGGGGCAAGTGGCTCTCCCCATTACCTTCTCAAGACCTCAGTGGGAGCACCAGCCAA
TGGTACCATCGGCTGGGCTGCCAGGTACCCTGGGCCTGGCGCTGCAGACCTGAGCTGGCTTGGACCCATTTGAGG
ACTGAACTAGGCAGGCAATGGCTCCAGTGCCCTCCCTCTGTTCCCTGGACCACCACCCCACGTAGCTGCTCACAC
CAGCCTCCGGGTGCCTCCCTCTGCTTGTACAGAGCCCATGGTCGGGACAGTGCCCTGGCCTTTGCCGGGGAGGAG
GATGCTCTGAGATTCAGGGTGGGGCTGGCAACCCCTGAAGAGAACACTTCCTGTTGGTCTGTCTCTTCCCACCTT
CCATCTGCACACACCCCCAAGGTAAGGGTACAGCCCGGCTGGCGGCCTCCTTGGGAACGTGTAGGCCACGGCTCT
GCCACCACTAGGTACCTGCTGAGGGCGCTGGCTCTGCAGATCAGAACAACGGAGGATAGCTTTGTGCCTGGACCC
AGAGAGTGTGGGACTCCCCGCTTCATCCCCACCGTCCCACTCCACAGCCTTCCCGAAACATTCCCTGGCAAACAA
AGGAACACTAGGAGAAAAAATGGAAAAACCCTTCCAGTAATTAAAAAGGAAGAAACCACAGAAAGAAAACTACAG
ACCTCAAGATTCCACTCTGTGCCCGCCTCTGCCGGGAGGGAGGGAGGCACACAGGTGGAGCTGACCCTCGTCTTT
GTGGCAGCAAAACCAGGATGCCTGGAGCTGTGGCCTGAGGGCCTGCTGGGGTCCCACTCACCCACTTAGGTCTAG
TCGCTAGATCCCCCGTTTTCCCAAGAAGAGGGTTCGAGCCCTTGGTGGGGACAGCTGGGGAGATGGCAGTGCAGG
CTGGAACCTGGGCTGCCCCAGAACACAGTCCATTACGATAGAAACACTAGGCACCCCCCAGGCGAGAGCTAGTGG
GGTGCAGAGGGCCCCATGCCAGACAGCCCTTGGGGCTCGTTGCACTTTAAGAAATAGGATCTGTGGTGTATTCCA
GGGGGCCTGATGGACACCTTTCCCGGGCGTCTGCAGCTGCCCTGCCCGTGCCCGCCTGCAGTGGTTGGAGACGGG
AGTGGCCCTTCGGCTCCCGAGCTCCCTCTGGGGACGGCTGGCTCACTGTCTCCAGTTCTCAATGGCCAACGAAGG
TGCTTGGAAACACCTAACCTTGCAAGTTTTACCGCCTTTTGAGGAACACAAATCGGAGAACAAACCCAGGGTTCA
GGCGTGTTTTCTGTGAATGTTGGATGATGAATTTTTGTCTCTTCTGGTGGAGCTGTGCCTGGCCCTGTAGGCCCA
GGGTTGGCTGGAAGGTGACATCTGTGTTTCGTTTTAGCTGAGGTTGGCAGAAACGTTCCCAAACTCCCCCAGCCC
TGGACCCCAGCAGATGAGGAAACGGCCCCATTTACTGACCCCGCCCCCTTTTCGAGGTTATGCTCACCTGGTCAG
CTCCTCACGTAATTGGGGGTGGAGGGAAAGCATGGTGGTGCCCTGGGCCGTCCCTGTGTGAACGCAGGCAAAAGC
AGCCCAGTCCCCCTCACTGCTTGAGCTAACACTGCCACCTCTTTTGTGTGAGCACAAAAGCCACGTCCCAAGCCA
CCTGGCCCGATTCCACAGATGTATGTGCGGCCAGTGACTTCCCCAGGAGTGTGGAGGGGGTGGTGAGGAGGAGCA
CCTGGGCTCTCTACCCCTCTCCTCACAGAAGTACCTGAAACTAGGTCTGGGGCACTCCCAATGCAGCGCCTTGTC
AGCCAAGGTGGGCAGGCAGGGACTGTGGCAGCTTATGTCCAAAGGGAGCCCCCATGCACAGGAAGCCACAGGGTT
CCTCTTGTTTCCCCCGCTAACTTCAGCCTCTCATCTGCTGCTCCGGGCTGAGGGACTAGAGGACATCTCGGTCGT
TTGAGGGGCATGGCCAGTCGTGGCAGGCCGGCCTTCAGCGTCCGGTCAGGGAAGCGTGCAGCCCAAATGGGCACT
TGCATGGGAGCCACAGAGGAGCGTCCCTGGGGATTGTTGGGACCATGCTGCCCCCACTCCCGCTTTTGTTGGGGC
TCTAAGTTCTGGAAGGTGTGTGCACAGAGGGTGCTCATGGGACTCGCATGCAGCTCTCAGCACTGGGTGGGAGGG
CGTTGGCTTGTCCAGAATGGGGACGTGGGGCAGCCACCCCTGCCCAGCGAGAGCGCAGACACCGTGTGAGGGGAC
AGCAGCCCTTGGTGCAAAGCCAGAGACTGATCCTGGCTCTGACGGCTGAAGAGGGAAGACCCAAGGCTGGGTGGC
GTGGCTCGTGAATCCACTTAGAATTCTTGGCTTGTGTCGCATACTGGGTGTCACGGCACACATTTACTCTGCATT
GTCCCCGTCTTTCCCATCGCCTAGCGTTTGGGGAGGAACAGGGAGAGAGCTTCGGGGCGTCTGTCTCCGTGCTCT
CCTGCCTCCACCGCCTTGGTTTTGCTTCCTGCTGGAGGCAGGGCACCTGCTGCGACCCAGATTCTTCTGCAGGAT
GTGTCTGTCTTTGTCACGGTGGACAGAGGGTGACATCATAGGAGCAGCTCGCTGGCCAGAAGGGGATGGGGGCAT
CCCTGTGCCTCACTCAGCTCCTGCTGCTCTTAGGGAAAGGAGGCCTGGGTCAAGCCAGCATCCCCTTGGTAAAGA
CCCCCGCAGGCCACCAGGCATTCTGGACACGCACACACACACACACACACACACACACACACAAAACTTCACAGC
AGGCCAGCTGCAGTGACTTGTCATCAAGAGTCACCTCAGCTGCGCCCCCCTCCCATCCTTTCCTATGAGAAGCCA
CTGCTTTGGGGGCGCCGGCTAGAAAAAGTAGGGTGCGGTGGCCAGGAGGGCCCCTGCCGCGCGGGGGGCTGGGTC
TGGTTGAGTCGCTGCTTTCCCGAGGGCAGCGCAGGGATCCGGGGAAGCTGCGGCAGGGAGCGGGCGCCGGCTTCG

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FIGURE 3800B

TGGCTCTGAGGTGTAACGGGGGTGGGCTCCCTCCCTCGGAGGACATCGTCTGTGTCCAGGTCAGAAAGTGGCCCA
GGAAGGGGGCAGTTTCTGTCGCGGGTCCGGTGGGGGCGCGGCCGC

FIGURE 3801

TGCACCCTGAGCCGGAGCTGCCCAGTCGCCGCGGGACCGGGGCCGCTGGGGTCTGGACGGGGGTCGCCATGATCC
GCTTTATCCTCATCCAGAACCGGGCAGGCAAGACGCGCCTGGCCAAGTGGTACATGCAGTTTGATGATGATGAGA
AACAGAAGCTGATCGAGGAGGTGCATGCCGTGGTCACCGTCCGAGACGCCAAACACACCAACTTTGTGGAGTTCC
GGAACTTTAAGATCATTTACCGCCGCTATGCTGGCCTCTACTTCTGCATCTGTGTGGATGTCAATGACAACAACC
TGGCTTACCTGGAGGCCATTCACAACTTCGTGGAGGTCTTAAACGAATATTTCCACAATGTCTGTGAACTGGACC
TGGTGTTCAACTTCTACAAGGTTTACACGGTCGTGGACGAGATGTTCCTGGCTGGCGAAATCCGAGAGACCAGCC
AGACGAAGGTGCTGAAACAGCTGCTGATGCTACAGTCCCTGGAGTGAGGGCAGGCGAGCCCCACCCCGGCCCCGG
CCCCTCCTGGACTCGCCTGCTCGCTTCCCCTTCCCAGGCCCGTGGCCAACCCAGCAGTCCTTCCCTCAGCTGCCT
AGGAGGAAGGGACCCAGCTGGGTCTGGGCCACAAGGGAGGAGACTGCACCCCACTGCCTCTGGGCCCTGGCTGTG
GGCAGAGGCCACCGTGTGTGTCCCGAGTAACCGTGCCGTTGTCGTGTGATGCCATAAGCGTCTGTGCGTGGAGTC
CCCAATAAACCTGTGGTCCTGCCTGGC

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FIGURE 3802

GGCACGCCCGGGAGGCTTTCTCTGGCTGGTAACCGCTACTCCCGGACACCAGACCACCGCCTTCCGTACACAGGG
GCCCGCATCCCACCCTCCCGGACCTAAGAGCCTGGGTCCCCTGTTTCCGGAGGTCCGCTTCCCGGCCCCCAGATT
CTGGCATCCCAGCCCTCAGTGTCCAAGACCCAGGCAGCCCGGGTCCCCGCCTCCCGGATCCAGGCGTCCGGGATC
TGCGCCACCAGAACCTAGCCTCCTGCAGACCTCCGCCATCTGGGGGCACTCAACCTCCTGGAGCCAAGGGCCCCA
CGTCCCACCCAGAGAAACTCTCGTATTCCCAGCTCCTAGGGCCAAGGAACCCGGGCGCTCCGAACTCCCAGCTTT
CGGACATCTGGCACACGGGGCAGAGCAGAGAAGCCTCAGCGCCCAGCCTGGGGAATTTAAACACTCCAGCTTCCA
AGAGCCAAGGAACTTCAGTGCTGTGAACTCACAACTCTAAGGAGCCCTCCAAAGTTCCAGTCTCCAGGTGCTGTT
ACTCAACTCAGTCCTAGGAACGTCGGGTCCTGGGAAGGAGCCCAAGCGCTCCCAGCCAGCTTCCAGGCGCTAAGA
AACCCCGGTGCTTCCCATC**ATG**GTGGCCGATCCTCCTCGAGACTCCAAGGGGCTCGCAGCGGCGGAGCCCACCGC
CAACGGGGGCCTGGCGCTGGCCTCCATCGAGGACCAAGGCGCGGCAGCAGGCGGCTACTGCGGTTCCCGGGACCA
GGTGCGCCGCTGCCTTCGAGCCAACCTGCTTGTGCTGCTGACAGTGGTGGCCGTGGTGGCCGGCGTGGCGCTGGG
ACTGGGGGTGTCGGGGGCCGGGGGTGCGCTGGCGTTGGGCCCGGAGCGCTTGAGCGCCTTCGTCTTCCCGGGCGA
GCTGCTGCTGCGTCTGCTGCGGATGATCATCTTGCCGCTGGTGGTGTGCAGCTTGATCGGCGGCGCCGCCAGCCT
GGACCCCGGCGCGCTCGGCCGTCTGGGCGCCTGGGCGCTGCTCTTTTTCCTGGTCACCACGCTGCTGGCGTCGGC
GCTCGGAGTGGGCTTGGCGCTGGCTCTGCAGCCGGGCGCCGCCTCCGCCGCCATCAACGCCTCCGTGGGAGCCGC
GGGCAGTGCCGAAAATGCCCCCAGCAAGGAGGTGCTCGATTCGTTCCTGGATCTTGCGAGAAATATCTTCCCTTC
CAACCTGGTGTCAGCAGCCTTTCGCTCATACTCTACCACCTATGAAGAGAGGAATATCACCGGAACCAGGGTGAA
GGTGCCCGTGGGGCAGGAGGTGGAGGGGATGAACATCCTGGGCTTGGTAGTGTTTGCCATCGTCTTTGGTGTGGC
GCTGCGGAAGCTGGGGCCTGAAGGGGAGCTGCTTATCCGCTTCTTCAACTCCTTCAATGAGGCCACCATGGTTCT
GGTCTCCTGGATCATGTGGTACGCCCCTGTGGGCATCATGTTCCTGGTGGCTGGCAAGATCGTGGAGATGGAGGA
TGTGGGTTTACTCTTTGCCCGCCTTGGCAAGTACATTCTGTGCTGCCTGCTGGGTCACGCCATCCATGGGCTCCT
GGTACTGCCCCTCATCTACTTCCTCTTCACCCGCAAAAACCCCTACCGCTTCCTGTGGGGCATCGTGACGCCGCT
GGCCACTGCCTTTGGGACCTCTTCCAGTTCCGCCACGCTGCCGCTGATGATGAAGTGCGTGGAGGAGAATAATGG
CGTGGCCAAGCACATCAGCCGTTTCATCCTGCCCATCGGCGCCACCGTCAACATGGACGGTGCCGCGCTCTTCCA
GTGCGTGGCCGCAGTGTTCATTGCACAGCTCAGCCAGCAGTCCTTGGACTTCGTAAAGATCATCACCATCCTGGT
CACGGCCACAGCGTCCAGCGTGGGGGCAGCGGGCATCCCTGCTGGAGGTGTCCTCACTCTGGCCATCATCCTCGA
AGCAGTCAACCTCCCGGTCGACCATATCTCCTTGATCCTGGCTGTGGACTGGCTAGTCGACCGGTCCTGTACCGT
CCTCAATGTAGAAGGTGACGCTCTGGGGGCAGGACTCCTCCAAAATTACGTGGACCGTACGGAGTCGAGAAGCAC
AGAGCCTGAGTTGATACAAGTGAAGAGTGAGCTGCCCCTGGATCCGCTGCCAGTCCCCACTGAGGAAGGAAACCC
CCTCCTCAAACACTATCGGGGGCCCGCAGGGGATGCCACGGTCGCCTCTGAGAAGGAATCAGTCATG**TAA**ACCCC
GGGAGGGACCTTCCCTGCCCTGCTGGGGGTGCTCTTTGGACACTGGATTATGAGGAATGGATAAATGGATGAGCT
AGGGCTCTGGGGGTCTGCCTGCACACTCTGGGGAGCCAGGGGCCCCAGCACCCTCCAGGACAGGAGATCTGGGAT
GCCTGGCTGCTGGAGTACATGTGTTCACAAGGGTTACTCCTCAAAACCCCCAGTTCTCACTCATGTCCCCAACTC
AAGGCTAGAAAACAGCAAGATGGAGAAATAATGTTCTGCTGCGTCCCCACCGTGACCTGCCTGGCCTCCCCTGTC
TCAGGGAGCAGGTCACAGGTCACCATGGGGAATTCTAGCCCCCACTGGGGGGATGTTACAACACCATGCTGGTTA
TTTTGGCGGCTGTAGTTGTGGGGGGATGTGTGTGTGCACGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
GTTCTGTGACCTCCTGTCCCCATGGTACGTCCCACCCTGTCCCCAGATCCCCTATTCCCTCCACAATAACAGAAA
CACTCCCAGGGACTCTGGGGAGAGGCTGAGGACAAATACCTGCTGTCACTCCAGAGGACATTTTTTTTAGCAATA
AAATTGAGTGTCAACTATTT

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FIGURE 3803

ATGATGGAGGAGCGAGCGGCCGCCGCGGTCGCCGCCGCCGCCTCCTCCTGCCGTCCGCTCGGCTCAGGCGCGGGC
CCTGGCCCCACTGGGGCGGCCCCGGTCTCCGCCCCTGCCCCCGGGCCGGGCCCGGCAGGTAAGGGAGGCGGCGGC
GGAGGCAGCCCCGGGCCCACGGCGGGCCCGGAGCCCCTGAGCCTGCCGGGGATCCTGCACTTTATCCAGCACGAG
TGGGCGCGCTTCGAAGCCGAGAAAGCCCGCTGGGAGGCCGAGCGCGCCGAGTTACAGGCTCAGGTGGCCTTCCTT
CAGGGAGAGAGGAAAGGGCAGGAGAATCTAAAGACGGACCTGGTGCGGCGGATCAAGATGCTAGAGTATGCGCTG
AAGCAGGAAAGGGCCAAATATCATAAACTGAAGTTTGGGACAGACCTGAACCAGGGGGAGAAGAAAGCAGATGTG
TCAGAACAAGTCTCCAATGGCCCCGTGGAATCGGTCACCCTGGAGAACAGCCCGTTGGTGTGGAAGGAGGGGCGG
CAGCTTCTCCGACAGTACCTGGAAGAGGTGGGCTACACAGACACCATCCTCGACATGCGGTCCAAGCGCGTCCGT
TCCCTGCTGGGCCGCTCGCTGGAGCTCAACGGGGCAGTGGAGCCGAGTGAAGGGGCCCCCAGGGCTCCACCAGGC
CCTGCAGGGCTCAGTGGTGGGGAGTCGCTGCTGGTGAAACAGATCGAGGAGCAGATAAAGAGGAACGCGGCAGGC
AAAGATGGCAAAGAGCGCTTGGGCGGCTCAGTGCTGGGGCAGATCCCCTTCCTGCAGAACTGCGAGGACGAAGAC
AGCGACGAGGACGATGAGCTGGACAGCGTGCAGCACAAGAAGCAGCGTGTGAAGCTCCCATCCAAGGCTCTGGTG
CCCGAAATGGAAGACGAGGATGAGGAAGACGACTCTGAGGATGCTATCAATGAGTTTGATTTCCTGGGCTCAGGA
GAGGATGGGGAAGGGGCTCCAGACCCTCGGCGGTGCACTGTGGATGGGAGCCCCCATGAGCTGGAAAGCCGTCGG
GTCAAACTCCAAGGCATTCTGGCTGACCTGCGGGATGTGGATGGGCTGCCCCCAAAAGTGACTGGCCCGCCTCCT
GGCACACCCCAGCCCCGGCCACATGAAGACGTCTTCATCATGGACACTATCGGGGGCGGGGAGGTGAGCCTGGGG
GACTTGGCAGATCTCACCGTCACCAACGACAACGACCTCAGCTGCGATCTGTCTGACAGCAAAGATGCTTTTAAG
AAGACGTGGAACCCCAAGTTCACCCTGCGCTCGCACTACGACGGCATTCGTTCCCTGGCCTTCCACCACAGCCAG
TCGGCTCTGCTCACCGCCTCCGAGGACGGCACGCTCAAGCTCTGGAACCTGCAGAAGGCGGTCACGGCCAAGAAG
AATGCGGCGCTAGATGTGGAACCTATACATGCTTTCCGGGCTCACAGGGGCCCAGTGTTGGCTGTGGCTATGGGC
AGCAACAGTGAATACTGCTACAGTGGCGGGGCAGATGCCTGCATCCATAGTTGGAAGATTCCAGACCTCAGCATG
GATCCCTATGATGGCTACGACCCAAGCGTGCTGAGCCACGTCCTGGAGGGCCACGGGGACGCCGTGTGGGGCCTG
GCCTTCAGTCCCACCTCCCAGCGCCTGGCCTCCTGTTCTGCTGATGGCACCGTCCGCATCTGGGACCCCAGCAGC
AGCAGCCCGGCCTGCCTCTGCACCTTCCCCACAGCCAGCGAGCACGGGGTCCCCACCTCAGTGGCCTTCACCAGC
ACCGAGCCTGCCCACATCGTGGCCTCCTTCCGCTCTGGCGACACCGTCTTGTATGACATGGAGGTTGGCAGTGCC
CTCCTCACGCTGGAGTCCCGGGGCAGCAGCGGTCCAACCCAGATCAACCAAGTGGTGAGTCATCCAAACCAGCCT
CTCACCATCACCGCCCACGACGACAGGGGCATCCGCTTCCTGGACAATCGGACAGGTAAGCCGGTGCACTCCATG
GTTGCACACCTGGACGCAGTCACCTGCCTAGCCGTGGACCCCAACGGCGCATTCCTGATGTCAGGAAGCCATGAC
TGCTCCCTGCGTCTCTGGAGCCTGGACAACAAAACGTGCGTGCAGGAGATCACGGCCCACCGCAAGAAGCACGAG
GAGGCCATCCACGCTGTTGCCTGCCACCCCAGCAAGGCCCTCATTGCCAGTGCTGGCGCTGATGCCCTGGCCAAG
GTCTTCGTATGATGCCCACCTGGCCCTGCCCTGGCCGCCACGCTGGCTGGGGTGTAGGGCCGGGCAGGTGGGGCT
GAGGGGACTCCCAGCCTCGCTGGAGGTGCAGAGGCCTGGCCTCTGTCTGTTTGCCATGGAGCCTGGTGGTGCTAA
CGGCCCTTTCCCCAGGAATCCCTCCCCAACGGCTGCCTTCCCCAAGCATCCAGCCTGGGGATGGGCCCCTTTCAG
GAATCACCCCCGAGGATGGCCTCGGGGTTTCCCCCTGTGCCCTGACAGCCGCTCCTGGTATCAGAGCTGCTTTCC
AGAGGGCAGCACAGCCAGGGCCGGGTGTCTTTAGGGATCAGTTTTTCCAAGACTCCAGAAGGTGCCAGGTTCTCC
CCTTGAGCTCCTGCTCCCCCATCCCCCATCCTCCCAGACCTGGGCAGGAGCTGTGCTGGGAGAAAGGGTGGCAGC
CGGGAGCCTCAGAGCTGAGCCCCGGCCTGGCTGCCCCTCCCCTCCGGCCCTCTCCACTGCTTTCCAGACACTAAC
CAAGGCTTCCAGGCCAGGGATTGCCCAACACTCCTAGGGCAGCCCTCCCAGCGCCCCATGGGGTCGCCCATGGGT
AGAGACGGCTTTCTTGTGCCCCTCCCTGGGGCATGGAGGGTGGAGTGGGCCTCGGGTCCCCCTGAACTCCCTGTA
TATCTGTATAAATAACGGGATTTTCATGGCGCCGCCCCACCCGCATTATCACTGTGTGATGGTCTCAGTCAGTCT
CCTCCCTGTCTCCACTCTTTCCCTCTATTTATTTCACTCTCTTGTTTGGTTCTACCCTGCACCCTCGGTCCCCTT
CCAGGTTCCTGTTTATAAGCCCCAACCCCTCTGTCCCCATCTTGTATGTGAAAACTTGTCTCAATAAACCCTTTG
GAGT

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FIGURE 3804

CCGGGTGGGCTCCAGGCGGCCGGTCCCCGGCCTCCCCCCATGGCCACCGCCCCCTCTTATCCCGCCGGGCTCCCT
GGCTCTCCCGGGCCGGGGTCTCCTCCGCCCCCCGGCGGCCTAGAGCTGCAGTCGCCGCCACCGCTACTGCCCCAG
ATCCCGGCCCCGGGTTCCGGGGTCTCCTTTCACATCCAGATCGGGCTGACCCGCGAGTTCGTGCTGTTGCCCGCC
GCCTCCGAGCTGGCTCATGTGAAGCAGCTGGCCTGTTCCATCGTGGACCAGAAGTTCCCTGAGTGTGGCTTCTAC
GGCCTTTACGACAAGATCCTGCTTTTCAAACATGACCCCACGTCGGCCAACCTCCTGCAGCTGGTGCGCTCGTCC
GGAGACATCCAGGAGGGCGACCTGGTGGAGGTGGTGCTGTCGGCCTCGGCCACCTTCGAGGACTTCCAGATCCGC
CCGCACGCCCTCACGGTGCACTCCTATCGGGCGCCTGCCTTCTGTGATCACTGCGGGGAGATGCTCTTCGGCCTA
GTGCGCCAGGGCCTCAAGTGCGATGGCTGCGGGCTGAACTACCACAAGCGCTGTGCCTTCAGCATCCCCAACAAC
TGTAGTGGGGCCCGCAAACGGCGCCTGTCATCCACGTCTCTGGCCAGTGGCCACTCGGTGCGCCTCGGCACCTCC
GAGTCCCTGCCCTGCACGGCTGAAGAGCTGAGCCGTAGCACCACCGAACTCCTGCCTCGCCGTCCCCCGTCATCC
TCTTCCTCCTCTTCTGCCTCATCGTATACGGGCCGCCCCATTGAGCTGGACAAGATGCTGCTCTCCAAGGTCAAG
GTGCCGCACACCTTCCTCATCCACAGCTATACACGGCCCACCGTTTGCCAGGCTTGCAAGAAACTCCTCAAGGGC
CTCTTCCGGCAGGGCCTGCAATGCAAAGACTGCAAGTTTAACTGTCACAAACGCTGCGCCACCCGCGTCCCTAAT
GACTGCCTGGGGGAGGCCCTTATCAATGGAGATGTGCCGATGGAGGAGGCCACCGATTTCAGCGAGGCTGACAAG
AGCGCCCTCATGGATGAGTCAGAGGACTCCGGTGTCATCCCTGGCTCCCACTCAGAGAATGCGCTCCACGCCAGT
GAGGAGGAGGAAGGCGAGGGAGGCAAGGCCCAGAGCTCCCTGGGGTACATCCCCCTAATGAGGGTGGTGCAATCG
GTGCGACACACGACGCGGAAATCCAGCACCACGCTGCGGGAGGGTTGGGTGGTTCATTACAGCAACAAGGACACG
CTGAGAAAGCGGCACTATTGGCGCCTGGACTGCAAGTGTATCACGCTCTTCCAGAACAACACGACCAACAGATAC
TATAAGGAAATTCCGCTGTCAGAAATCCTCACGGTGGAGTCCGCCCAGAACTTCAGCCTTGTGCCGCCGGGCACC
AACCCACACTGCTTTGAGATCGTCACTGCCAATGCCACCTACTTCGTGGGCGAGATGCCTGGCGGGACTCCGGGT
GGGCCAAGTGGGCAGGGGGCTGAGGCCGCCCGGGGCTGGGAGACAGCCATCCGCCAGGCCCTGATGCCCGTCATC
CTTCAGGACGCACCCAGCGCCCCAGGCCACGCGCCCCACAGACAAGCTTCTCTGAGCATCTCTGTGTCCAACAGT
CAGATCCAAGAGAATGTGGACATTGCCACTGTCTACCAGATCTTCCCTGACGAAGTGCTGGGCTCAGGGCAGTTT
GGAGTGGTCTATGGAGGAAAACACCGGAAGACAGGCCGGGACGTGGCAGTTAAGGTCATTGACAAACTGCGCTTC
CCTACCAAGCAGGAGAGCCAGCTCCGGAATGAAGTGGCCATTCTGCAGAGCCTGCGGCATCCCGGGATCGTGAAC
CTGGAGTGCATGTTCGAGACGCCTGAGAAAGTGTTTGTGGTGATGGAGAAGCTGCATGGGGACATGTTGGAGATG
ATCCTGTCCAGTGAGAAGGGCCGGCTGCCTGAGCGCCTCACCAAGTTCCTCATCACCCAGATCCTGGTGGCTTTG
AGACACCTTCACTTCAAGAACATTGTCCACTGTGACTTGAAACCAGAAAACGTGTTGCTGGCATCAGCAGACCCA
TTTCCTCAGGTGAAGCTGTGTGACTTTGGCTTTGCTCGCATCATCGGCGAGAAGTCGTTCCGCCGCTCAGTGGTG
GGCACGCCGGCCTACCTGGCACCCGAGGTGCTGCTCAACCAGGGCTACAACCGCTCGCTGGACATGTGGTCAGTG
GGCGTGATCATGTACGTCAGCCTCAGCGGCACCTTCCCTTTCAACGAGGATGAGGACATCAATGACCAGATCCAG
AACGCCGCCTTCATGTACCCGGCCAGCCCCTGGAGCCACATCTCAGCTGGAGCCATTGACCTCATCAACAACCTG
CTGCAGGTGAAGATGCGCAAACGCTACAGCGTGGACAAATCTCTCAGCCACCCCTGGTTACAGGAGTACCAGACG
TGGCTGGACCTCCGAGAGCTGGAGGGGAAGATGGGAGAGCGATACATCACGCATGAGAGTGACGACGTGCGCTGG
GAGCAGTTTGCAGCAGAGCATCCGCTGCCTGGGTCTGGGCTGCCCACGGACAGGGATCTCGGTGGGGCCTGTCCA
CCACAGGACCACGACATGCAGGGGCTGGCGGAGCGCATCAGTGTTCTCTGAGGTCCTGTGCCCTCGTCCAGCTGC
TGCCCTCCACAGCGGTTCTTCACAGGATCCCAGCAATGAACTGTTCTAGGGAAAGTGGCTTCCTGCCCAAACTGG
ATGGGACACGTGGGGAGTGGGGTGGGGGGAGCTATTTCCAAGGCCCCTCCCTGTTTCCCCAGCAATTAAAACGGA
CTCATCTCTGGCCCCATGGCCTTGATCTCAGCACACGGCACTCTCGAATCATTACTCTGTTGTACCAACATGGAG
TTCATCTGGAAGGAGGACTGCCTGAAAAGAGGAAGGATGG

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FIGURE 3805

GGGGACGAGAGATTCGCGGGCCCGTAGGTGTGGAGCGGGGCGCGGAGGGATCCGTGGGAGCCGCAGTGCGGCGGC
GCGCGGGCCGGGTGGGGCGGGGCCGAGCGAGGCGGGGCGCGCGCGGCGGCCGTTGAGGGACCGTTGGGGCGGGAG
GCGGCGGCGGCGGCGGCGCGCGCTGCGGGCAGTGAGTGTGGAGGCGCGGACGCGCGGCGGAGCTGGAACTGCTGC
AGCTGCTGCCGCCGCCGGAGGAACCTTGATCCCCGTGCTCCGGACACCCCGGGCCTCGCC**ATG**GCTGACCAGCTG
ACTGAGGAGCAGATTGCAGAGTTCAAGGAGGCCTTCTCCCTCTTTGACAAGGATGGAGATGGCACTATCACCACC
AAGGAGTTGGGGACAGTGATGAGATCCCTGGGACAGAACCCCACTGAAGCAGAGCTGCAGGATATGATCAATGAG
GTGGATGCAGATGGGAACGGGACCATTGACTTCCCGGAGTTCCTGACCATGATGGCCAGAAAGATGAAGGACACA
GACAGTGAGGAGGAGATCCGAGAGGCGTTCCGTGTCTTTGACAAGGATGGGAATGGCTACATCAGCGCCGCAGAG
CTGCGTCACGTAATGACGAACCTGGGGGAGAAGCTGACCGATGAGGAGGTGGATGAGATGATCAGGGAGGCTGAC
ATCGATGGAGATGGCCAGGTCAATTATGAAGAGTTTGTACAGATGATGACTGCAAAG**TGA**AGGCCCCCCGGGCAG
CTGGCGATGCCCGTTCTCTTGATCTCTCTCTTCTCGCGCGCGCACTCTCTCTTCAACACTCCCCTGCGTACCCCG
GTTCTAGCAAACACCAATTGATTGACTGAGAATCTGATAAAGCAACAAAAGATTTGTCCCAAGCTGCATGATTGC
TCTTTCTCCTTCTTCCCTGAGTCTCTCTCCATGCCCCTCATCTCTTCCTTTTGCCCTCGCCTCTTCCATCCATGT
CTTCCAAGGCCTGATGCATTCATAAGTTGAAGCCCTCCCCAGATCCCCTTGGGGAGCCTCTGCCCTCCTCCAGCC
CGGATGGCTCTCCTCCATTTTGGTTTGTTTCCTCTTGTTTGTCATCTTATTTTGGGTGCTGGGGTGGCTGCCAGC
CCTGTCCCGGGACCTGCTGGGAGGGACAAGAGGCCCTCCCCCAGGCAGAAGAGCATGCCCTTTGCCGTTGCATGC
AACCAGCCCTGTGATTCCACGTGCAGATCCCAGCAGCCTGTTGGGGCAGGGGTGCCAAGAGAGGCATTCCAGAAG
GACTGAGGGGGCGTTGAGGAATTGTGGCGTTGACTGGATGTGGCCCAGGAGGGGGTCGAGGGGGCCAACTCACAG
AAGGGGACTGACAGTGGGCAACACTCACATCCCACTGGCTGCTGTTCTGAAACCATCTGATTGGCTTTCTGAGGT
TTGGCTGGGTGGGGACTGCTCATTTGGCCACTCTGCAAATTGGACTTGCCCGCGTTCCTGAAGCGCTCTCGAGCT
GTTCTGTAAATACCTGGTGCTAACATCCCATGCCGCTCCCTCCTCACGATGCACCCACCGCCCTGAGGGCCCGTC
CTAGGAATGGATGTGGGGATGGTCGCTTTGTAATGTGCTGGTTCTCTTTTTTTTTCTTTCCCCTCTATGGCCCTT
AAGACTTTCATTTTGTTCAGAACCATGCTGGGCTAGCTAAAGGGTGGGGAGAGGGAAGATGGGCCCCACCACGCT
CTCAAGAGAACGCACCTGCAATAAAACAGTCTTGTCGGCCAGCTGCCCAGGGGACGGCAGCTACAGCAGCCTCTG
CGTCCTGGTCCGCCAGCACCTCCCGCTTCTCCGTGGTGACTTGGCGCCGCTTCCTCACATCTGTGCTCCGTGCCC
TCTTCCCTGCCTCTTCCCTCGCCCACCTGCCTGCCCCCATACTCCCCCAGCGGAGAGCATGATCCGTGCCCTTGC
TTCTGACTTTCGCCTCTGGGACAAGTAAGTCAATGTGGGCAGTTCAGTCGTCTGGGTTTTTTCCCCTTTTCTGTT
CATTTCATCTGGCTCCCCCCACCACCTCCCCACCCCACCCCCCACCCCCTGCTTCCCCTCACTGCCCAGGTCGAT
CAAGTGGCTTTTCCTGGGACCTGCCCAGCTTTGAGAATCTCTTCTCATCCACCCTCTGGCACCCAGCCTCTGAGG
GAAGGAGGGATGGGGCATAGTGGGAGACCCAGCCAAGAGCTGAGGGTAAGGGCAGGTAGGCGTGAGGCTGTGGAC
ATTTTCGGAATGTTTTGGTTTTGTTTTTTTTAAACCGGGCAATATTGTGTTCAGTTCAAGCTGTGAAGAAAAATA
TATATCAATGTTTTCCAATAAAATACAGTGACTACCTG

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FIGURE 3806

GAGCCTACCAAACCTTTGGTTCGCAGGGCTGGAGCTAAGTCTCGCTCCAGGAGAAAGAAGCAGAAGAAGAACTCC
AGGCAGGAAGCAGTGCCCTGGAAAAAACCCAAAGGCATCAATTCCAACAGCACAGCTAACTTGGAGGATCCTGAG
GTGGGTGATGCTGAAAGCATGGCGATCTCAGAGCCGATCAAGGGCAGCAGAAAGCCCTGTGTGAATAAGGAGGAG
TTGGCTTTGAAGAAGCCCATGGCGAAATGTGCCTGGAAGGGTCCCAGAGAGCCACCTCAGGATGCCCGGGCAGAA
GCCGAGAGCCCAGGAGGCGCCTCTGAGTCAGACCAAGATGGTGGCCATGAAAGCCCACCAAAGAAGAAGGCCGTG
GCCTGGGTGTCTGCCAAGAACCCCGCTCCCATGAGGAAGAAGAAGAAGGTGAGCTTGGGCCCTGTCTCCTACGTC
TTGGTTGACTCAGAAGATGGCAGGAAGAAGCCGGTGATGCCAAAGAAAGGGCCAGGCTCAAGAAGGGAGGCATCA
GATCAGAAGGCCCCTCGGGGCCAGCAGCCTGCCGAGGCAACAGCCTCAACCTCTAGGGGTCCGAAGGCCAAGCCA
GAAGGCTCTCCTCGGCGTGCCACCAATGAATCCAGAAAGGTTTGATCTGGGGGACCACCCATACTGAGGAGTTGA
AAGAACAAGGAAGAAGTACCAAGTCAACCAAGTTCTCTCTTGTCACTGAATAAGACTTTGGACTCTCTTAGGGCC
CCTGTTGATAGAGATCTGGCCCTGAGGTAAACGATAGGTGAGGTCTTGGGTGGGAGGGAGTTGGGGAAGGGAGGT
GGATCTCTATGCCCTTTTCTCTACCAGGCCTGCCGTTTCACCGCCTTCTCTACTCACCTTCTCTTCGGAGGCAGG
AGAGTTGGTAAGAGGATTGGGAAAATTCTAGAACATTCATTCCCCTTTATGCATGAGCAGGGTCACTGTTACACT
CATCCATGTTCAGCTTTTCTCCCCCACGCCTTGCTCCCTCCTCGGAATGGTCAGCGACCTCTGCAGGCCCTGGCA
TTTGGAAGAGCTGGGTGGCCCTGCCATATTCTTCCTCCCGCCTTCCTCTCGTGTAACCAGCGGGGTAAGTTAAGC
CAGGACCTTCGCTGCAAACCTGGTTTTATTGCTCCTTCAGTCTCCAGCTTCCATCCTCCAGTTATCTAGCCAGGA
GGTCCCAAGAGTTAGTTTTAGGGAAAAAGAATGTCTGCCTAGACCTCAAAGTCTTTGAGTTTTAGAGTCTGTTAG
TAAAAATGGCACTTTGATTCCCATTTGGGATGAGCCCTCTCAGGAATCCTGTGGGGAAGGGGGGTGATTATAGGG
AAGGACGCAGGCATTCCTAGGTCCCCAGCTCTAATTCCATCCATCTACCCAACTGTCACCATCTTTGCACCAAAC
TGTCACCATCTTTGCAGCAGAAGGTCACTACTCACATTATAGTAAGAGGGGAAAAAAATCTTTTAAAACTTGGCT
GTTGGCCGGGCACGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGTCGATCACGAGGTCAG
GCGTTTAAGACCAGCTTGACCAACATGGTGAAACCCCATCTCTACAAAAATTAGCTGGGCGTGGTGGCGCGCGCC
TGTAATCCCAGCTACTCAGGAGGCTGAGGCAGATGAATTGCTTGAATCCAGGAGGCAGAGGTTGCAATGAGCCGA
GATTGTGCCACGGCACTCCAGCCTGGGCAGCAGAGTGAGACTCTCTCTCAAAAAAACAAAACTTGGCTGTTAATG
TCTGCCCTCTGAATTCAGACACACTATATTAGACCAGACCACCATGTGTCATTGTGTGTGTGTGTGTGTGTTT
GCGTGCGCATGTGTAGAGGAGAGAGCAGGGTCCCTGAGATAATGGTTTCCAAACTGTATCGTAGCCGTCCACAAA
GATGTAATCCAAATCTATTTTTCTCACGTGTTTAAAAAACTGAAAAGTGACTACTCAGATATGTTGGAAGTCACA
TCGAAGACTATCAGAATATTACCTTGTGTTCATAGGTTAACTTGTTTTTGTACACGTCTTAGTTATTTCAGGCAT
CTCTTTGCTTAAAATTGAGTTTCTTGTAAATGTGACTGATGAGCGAGGTTAGAAGTGGAAGAAATTCCTGTGCAT
GTTCTATAATCTGACACCCTGAAAGCAAGTTTCCTTTCGTCATTCACATGCTCTTGTTCTGCCGTGACTGTTCAG
GTGTATGGTAGTAAGTAAATGTATTAACATGGTGAACAGTAGTAATATTCTATCATAGAGTATTAGCCCTTGCAA
GTTTTCAGGGCGTCTTTTCCGACTTCAGTTTTTGTGATAAAGAATGTGAACAGTTGTTAGATGTTCTCAGTGATT
CAACTTTAAAACAAATTTCTCGTGATGATTCATTTCAAAATCCTGAGTGAGTCTGACTGAAAAATACGAGAGAAA
AGAGAGTGGTTTCCGTTTGCAGCTACACAGCTGTGTGCATCGACGTTCTCCTGGGGTGTGTGCCAAGCGAAACCC
AGGGGTGAATTGGATTCTTGAAGAGACCAAAGCCTGTAACTGTCCAGCTTCTAATTTCAAAACGGGTCCATTAGG
GCTTCGTTGTGTTAACAAGTTGACACCATGACTAGTAAATGTAAACGTGTATGTATAAAATAAAGTTTAGCAAAT
TAAGTGTCCTGTT

FIGURE 3807

AGTCTTCCAGAGTCTGGGAGTGTAAGATGAGACGGGGGAAGGTGGGCCTCATTCTGGCGGAGGGCGAGGAGGAAC
TTCCTGCCCGCGCGCTCCACGGTGCAGAGCTCTAAGCGCGCGGGCTGGCAGGCTGCGGCGCGTCAAGGTCAGCCT
GGAGCTGGGTGGCGGCCTGCCTGGGGGCGGGGGACCCTACTGGAGGCCCGGGCTGGGGCCTCCCAGCGCCTCGGC
CATATTGAATAGCTTCGACTGGACCGTCTTTGTCTGCGAAGTCCTGTCCCAAGTTCCAGCCGCGTCCCTGGGGCC
TGGGGCAGGAAGAGTCGCTGGCAGCCCGCGCGCCCCAACTTGGAGCTGGGACACCACGTTTCCAGCTTGGAGTGG
GCCTTGAGCCTTGGGACTGACCTCGCCCCCGGCTCACGTAGGCATCCTGGAAATTGATTCCCCCAAGTCCTTGGT
GGGGGAGCCGGACTTGGTCAAGACTGTACTTGTTGCAGGCGAAGAGATTGGAGGCGTTTGGCTCGTCCCTGGCTA
GGGAGGTGAGACTCTCCGGTCAGCGTTGCTGGAACTCCCCCCATCCAGTCCCTCCCTCAAGACTAAGGGCTACAG
TAGTTTGTTGGGGCTCATTGCCCCCTCACCCCAGATATCACCCTGGAGATCTTAAAGACTCTCGAGAAAAGCCAC
GTGGGGGGCTGGTTCCCCTGGGGCTTCCTGCCGTCCCCCGACTGCCTCATTCTTTGGAGCGTCCCCGATGTCTGC
AAAGATGTGGATTTGGACGTCCTCGTGGAAGCCCTAAAGCCCGTGGGGACATTTAAGAAGATCGGCAAGGTGTTC
CGCAAGGAGGAGGACTCCACGGTGGGGATGCTGCAGATCGGGGAGGACGTCGACTATTTGCTCATCCCCCGGGAG
GTCAGGCTGGCTGGGGGCGTCTGGAGAGTCATCTCTAAGCCCGCCACCAAGGAAGCAGAATTTCGGGAGCGGCTG
ACCCAGTTCCTGGAAGAAGAGGGCCGCACCCTGGAGGACGTGGCCCGCATCATGGAGAAGAGCACCCCGCACCCG
CCCCAGCCCCCCAAAAAGCCCAAGGAGCCCCGAGTGAGGAGGAGAGTGCAGCAGATGGTGACTCCTCCGCCCCGG
CTGGTCGTGGGCACGTACGACAGCAGCAACGCCAGCGACAGCGAGTTCAGCGACTTCGAGACCTCCAGAGACAAG
AGCCGCCAGGGCCCGCGGCGGGGCAAGAAGGTGCGCAAAATGCCCGTCAGCTACCTGGGCAGCAAGTTCCTGGGA
AGCGACCTGGAGAGTGAGGATGATGAGGAACTGGTCGAGGCCTTCCTCCGGCGACAGGAGAAGCAGCCCAGCGCG
CCGCCTGCCCGCCGCCGCGTCAACCTGCCAGTGCCCATGTTTGAGGACAACCTGGGGCCTCAGCTGTCCAAAGCG
GACAGGTGGCGGGAGTATGTCAGCCAGGTGTCCTGGGGGAAGCTGAAGCGGAGGGTGAAGGGTTGGGCGCCGAGG
GCGGGCCCCGGGGTGGGCGAGGCCCGGCTGGCCTCCACCGCAGTGGAGAGCGCAGGGGTATCATCGGCGCCAGAG
GGCACCAGCCCGGGGGATCGCTTGGGAAACGCGGGAGATGTTTGTGTGCCCCAGGCTTCCCCTAGGCGATGGAGG
CCCAAGATCAACTGGGCCTCCTTTCGGCGCCGCAGGAAGGAGCAGACAGCACCCACAGGTCAGGGGGCAGACATC
GAGGCTGATCAGGGGGGAGAGGCTGCAGATAGTCAAAGGGAAGAGGCCATAGCTGACCAGCGGGAAGGGGCTGCA
GGTAATCAGAGGGCAGGGGCCCCAGCTGACCAGGGGGCAGAGGCTGCAGATAATCAGAGGGAAGAGGCTGCAGAT
AATCAGAGGGCAGGGGCCCCAGCTGAGGAGGGGGCAGAGGCTGCAGATAACCAGAGGGAAGAGGCTGCAGATAAT
CAGAGGGCAGAGGCCCCAGCTGACCAGAGGTCACAGGGCACAGATAACCACAGGGAAGAGGCTGCAGATAATCAG
AGGGCGGAGGCCCCAGCTGACCAGGGGTCAGAGGTTACAGATAATCAAAGGGAAGAGGCCGTACATGACCAGAGG
GAAAGGGCCCCAGCTGTCCAGGGTGCAGATAATCAGAGGGCACAGGCCCGGGCTGGCCAGAGGGCAGAGGCTGCA
CATAATCAGAGGGCAGGGGCCCCAGGTATCCAGGAAGCTGAAGTCTCAGCTGCCCAAGGGACCACAGGAACAGCT
CCAGGAGCCAGGGCCCGGAAACAGGTCAAGACAGTGAGGTTCCAGACCCCTGGACGCTTTTCGTGGTTTTGCAAG
CGCCGGAGAGCCTTCTGGCACACTCCCCGGTTGCCAACCCTGCCCAAGAGAGTCCCCAGGGCAGGAGAGGCCAGG
AACCTCAGGGTGCTGAGGGCCGAGGCCAGAGCAGAAGCTGAGCAGGGAGAGCAAGAAGACCAGCTGTGAGGTGAG
GGCTAGAGACAGCCCACGGGCCCTCCCTCCAAGTGTGGGAGGGAGAGATGCTCTGCCTCTGAACTTCAAAGTGGA
GGTGGAGTGCTGGCCACGTCTCCACCTAACAACCCTCTTTATTCTCTTGTTAAAGTTTTGTTCATGCTTTGATTT
TTTTTTAAATTTTTTAGAGACAGGGTCTCACTCTGTTGCCCAGGCTGGAGTGCAGTGGCATGATCATAACTCACT
GCAGCCTCAAACTTCTGGCCTCAAGTGATCCTCCTGCCTCGGCCTCCCAAAATGCTGGGATTACAGATGTGAGCC
ACCACACACACCATCTGATTAAAAAAAAAAAATACTGATTCCTTGTAGCAACCC

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FIGURE 3808

CGCGACGGTTCGGCCGGGTGCCGCTGGCGGCCGTTGCCAGGGTAGGGGTCGCTTTGCGGCATGGCGATGGCGGAG
GGCGAGAGGACTGAGTGTGCTGAGCCCCCCCGGGACGAACCCCCGGCTGATGGAGCTCTGAAGCGGGCAGAGGAG
CTCAAGACTCAGGCCAATGACTACTTCAAAGCCAAGGACTACGAGAACGCCATCAAGTTCTACAGCCAGGCCATC
GAGCTGAACCCCAGCAATGCCATCTACTATGGCAACCGCAGCCTGGCCTACCTGCGCACTGAGTGCTATGGCTAC
GCGCTGGGAGACGCCACGCGGGCCATTGAGCTGGACAAGAAGTACATCAAGGGTTATTACCGCCGGGCTGCCAGC
AACATGGCACTGGGCAAGTTCCGGGCCGCGCTGCGAGACTACGAGACGGTGGTCAAGGTGAAGCCCCATGACAAG
GATGCCAAAATGAAATACCAGGAGTGCAACAAGATCGTGAAGCAGAAGGCCTTTGAGCGGGCCATCGCGGGCGAC
GAGCACAAGCGCTCCGTGGTGGACTCGCTGGACATCGAGAGCATGACCATTGAGGATGAGTACAGCGGACCCAAG
CTTGAAGACGGCAAAGTGACAATCAGTTTCATGAAGGAGCTCATGCAGTGGTACAAGGACCAGAAGAAACTGCAC
CGGAAATGTGCCTACCAGATTCTGGTACAGGTCAAAGAGGTCCTCTCCAAGCTGAGCACGCTCGTGGAAACCACA
CTCAAAGAGACAGAGAAGATTACAGTATGTGGGGACACCCATGGCCAGTTCTATGACCTCCTCAACATATTCGAG
CTCAACGGTTTACCCTCGGAGACCAACCCCTATATATTTAATGGTGACTTTGTGGACCGAGGCTCCTTCTCTGTA
GAAGTGATCCTCACCCTTTTCGGCTTCAAGCTCCTGTACCCAGATCACTTTCACCTCCTTCGAGGCAACCACGAG
ACAGACAACATGAACCAGATCTACGGTTTCGAGGGTGAGGTGAAGGCCAAGTACACAGCCCAGATGTACGAGCTC
TTTAGCGAGGTGTTCGAGTGGCTCCCGTTGGCCCAGTGCATCAACGGCAAAGTGCTGATCATGCACGGAGGCCTG
TTCAGTGAAGACGGTGTCACCCTGGATGACATCCGGAAAATTGAGCGGAATCGACAACCCCCAGATTCAGGGCCC
ATGTGTGACCTGCTCTGGTCAGATCCACAGCCACAGAACGGGCGCTCGATCAGCAAGCGGGGCGTGAGCTGTCAG
TTTGGGCCTGACGTCACCAAGGCCTTCTTGGAAGAGAACAACCTGGACTATATCATCCGCAGCCACGAAGTCAAG
GCCGAGGGCTACGAGGTGGCTCACGGAGGCCGCTGTGTCACCGTCTTCTCTGCCCCCAACTACTGCGACCAGATG
GGGAACAAAGCCTCCTACATCCACCTCCAGGGCTCTGACCTACGGCCTCAGTTCCACCAGTTCACAGCAGTGCCT
CATCCCAACGTCAAGCCCATGGCCTATGCCAACACGCTGCTGCAGCTAGGAATGATGTGAGGTGACGGGCGGGGC
GGCCTGCATCCCAGGGCCCCTCCAATCCCACCGGACCCAGGCCCTGGGCTAGGGGCAGAGCAGGCCCCGCCCCAG
GGCAATGTTGGACCCCCTTTTACTTTGTAAAGTTTGTATTTATTCCCCTTTAGGTTTGCAGAGGGGGTAGGGGCA
GAGTCAGGGGCTGGCCAGAGGGTCTGCTCCCTGGACAGAGAGGAAGGAGGTGGAGCAGCTGGGGCTGGGGGCACA
GCCTGGGCATTCTGTGGGGAGGCCGTCCTCGGGGTGGGGTGGGGCCGAGTGGCTGCCCTGCCCCCCTCATTTGCA
TGGCTCCTCCCCCACTCAAGCAATAGGGCCCCGCCATAGGAAGACCCCCAGAGAGAGGGTCAGCAGGGGGGCCCC
GCCTGCGCCTCCCCTCCTATAGCCCCATGGTGGGGCTAGGCTGGGGCTCACCCCCCTCCCCAGCTATTTTATGTC
TGTAATTAAATATGTTAAAATAAAGTCATTATCGG

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FIGURE 3809

CCGCCGCAGCCGCCGCAGCAGCAGCAGCCGCCGCCCCAGGCCCCCCCCATGGAGCCCGAGGCCCCGGATTCCCGC
AAGAGGCCCCTCGAAACGCCCCCCGAGGTGGTCTGCACCAAGCGCAGCAACACGGGAGAGGAAGGCGAATACTTC
CTGAAGGTGCTGATCCCCAGCTACGCGGCGGGCTCCATCATTGGCAAGGGCGGGCAGACCATCGTGCAGCTGCAG
AAGGAGACCGGAGCCACCATCAAGCTCTCCAAGTCCAAAGACTTCTACCCCGGAACCACAGAGCGGGTATGCCTA
GTACAGGGCACGGCAGAGGCCTTGAATGCTGTGCACAGCTTTATTGCCGAGAAGGTCCGAGAAATCCCACAAGCG
ATGACCAAGCCTGAGGTGGTCAACATCCTTCAACCCCAAACCACGATGAACCCCGACAGAGCCAAGCAGGCCAAG
CTGATCGTCCCCAACAGCACGGCGGGCCTGATCATCGGCAAGGGAGGCGCCACGGTGAAAGCCGTGATGGAACAG
TCAGGAGCATGGGTGCAGCTGTCCCAGAAGCCGGAGGGCATCAACCTGCAGGAGCGCGTGGTGACGGTCAGCGGC
GAGCCCGAGCAGGTGCACAAGGCCGTGAGCGCCATCGTGCAGAAGGTACAAGAAGACCCCCAGAGCAGCAGCTGC
CTCAACATCAGCTACGCCAACGTGGCAGGCCCCGTGGCCAACTCCAACCCCACCGGCTCTCCGTACGCCAGCCCC
GCGGATGTGCTGCCAGCCGCGGCCGCAGCGTCGGCCGCCGCCGCCTCCGGCCTGCTGGGCCCCGCCGGGCTGGCT
GGCGTGGGGGCCTTTCCCGCCGCGCTGCCCGCCTTCTCAGGCACCGACCTGCTGGCCATCAGCACGGCGCTTAAC
ACGCTGGCAAGTTACGGCTACAACACCAACTCCCTGGGCCTGGGCCTCAACTCGGCCGCAGCTTCCGGCGTCCTG
GCCGCCGTGGCCGCCGGGGCCAACCCAGCAGCCGCCGCCGCCGCCAACCTCCTGGCATCCTACGCGGGCGAGGCC
GGGGCCGGGCCAGCCGGAGGGGCCGCCCCGCCGCCGCCCCCGCCTCCCGGAGCCCTGGGGTCCTTTGCGTTGGCC
GCAGCCGCCAACGGCTACCTCGGGGCCGGGGCGGGCGGCGGGGCGGGCGGAGGGGGCGGCCCGCTGGTGGCCGCT
GCAGCCGCGGCCGGGGCGGCCGGGGGCTTCCTGACGGCGGAGAAGCTGGCGGCTGAGAGTGCCAAGGAGCTGGTG
GAGATTGCGGTGCCTGAGAACCTGGTGGGAGCCATCCTGGGGAAGGGGGGCAAGACGTTGGTGGAGTACCAGGAG
CTGACGGGCGCTCGCATCCAGATCTCCAAGAAGGGCGAGTTCCTGCCAGGCACGCGGAACCGGCGGGTCACCATC
ACGGGCAGCCCCGCGGCCACGCAAGCCGCTCAATACCTCATCAGTCAGCGGGTCACCTACGAGCAGGGAGTGAGG
GCCTCAAACCCCCAGAAAGTGGGATGAGGCCTGTGGTGTGTGCTCCCACCCTTTTCTCTCCTCCCATCTCCTCCT
CTTCCCTCTCCTCCTCCCCCCCAACTCCTGACCTCAGCTTGGTGTAGTCCTGCTCCTCTTGGGATGGGGCTGGGG
TAGGCCCGACTGCACCCTCCCCTTCTGGTAGTCATAGGCAGGATTGAGTGACGGTTGGGAAGGGGGCTCAGAAGC
CCCCTCCCCAGCCCGGAACTGACCCCTCCTTCCTCCCTCCCTGTGCTTGGCTGGGCCTGACCCTTCCTGTCCCAG
GGCCCAGGTCTGTGTGATATCTGTATATATTGCATTTTGTTGATTTTAATAGAAAAC

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FIGURE 3810

ATGAGGATGGCAGTTGGGGCGTCCAGGCTGCTGACTGAGTGCCCGCCTGTCGGTACAGCCAGCCAGGCCTTCGAC
AAGCACCTGCCTGGAAACCGGGCTCGCTGTCCTGAAAGCCTGGACTGGATGTCACGATGGGGAGAACGGGATCGC
GATACCCAAGCTGGGGCACAGGCGAGCCAGGGACACTGGTTTACTGGGGTGATAACACCCAGCCCTGCTATCGCG
ATCCGTTTGCACTGTGAGACGCCGCCCGCCTCCTGCCCACCACCTCCAGAAGCTCCTGGCTGGGGTGCACTGCCG
TCTCCTCCCACTCCCCACATTGCCATGCCTGGGCCACGCCCACCCCACCCACTCACCCACCCCCAGTGTCCGTTG
TGTGACCTACGCTCAGAAAGGGCCGTCCAGGAACCGCTGCTCCTCCTGCGCGATCAGGAAGCCGCCAGCCGGCTC
CACCGCCGCAGCCTCTCGCCGGGATCTGCACTGGCCTTCGGGCTGCCTCTCGCCCAGCTTACTTCGCTGCCACCC
TTCGACATGTGGAAGGACTACTTCAACCTGAGCCAGGTGGTGTGGGCGCTGATCGCAAGTCGGGGTCAAAGGCTG
GAGACCCAAGAGATTGAGGAGCCAAGTCCCGGGCCTCCGCTGGGGCAGGATCAGGGGCTGGGGGCGCCAGGGGCC
AACGGGGGCCTGGGGACCCTGTGCAACTTCTGCAAGCACAACGGGGAGTCCCGCCACGTCTACTCCTCACACCAG
CTGAAGACACCGGATGGCGTGGTGGTGTGTCCCATCCTGAGGCACTACGTGTGTCCCGTGTGCGGGGCCACCGGT
GACCAGGCCCATACGCTCAAGTACTGCCCGCTTAACGGTGGCCAGCAGTCCCTCTACCGCCGCAGCGGGCGCAAC
TCGGCCGGACGCAGGGTCAAGCGCTGA

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FIGURE 3811

GTGGGACTTCAGCGAGGCCGTGTGTCGCGGCTGCGTGAACTTCGAGGGCGCGGACCGCATCGAACTGCTCATCGA
TGCCGCCCGCCAGCTCAAGCGCAGCCACGTGCTCCCCGAGGGCCGCTCGCCCGGGCCCCCGGCCCTTAAGCACCC
GGCCACCAAGGACCTGGCGGCGGCAGCCGCACAGGGGCCCCAGCTGCCGCCCCCGCAGGCCCAGCCCCAGCCGTC
AGGGACCGGCGGCGGCGTGTCGGGCCAGGACCGCTATGACAGGGCCACATCATCAGGCCGCCTCCCCCTGCCCTC
GCCCGCCCTGGAGTACACTCTGGGGTCCCGCCTGGCCAATGGGCTGGGCCGTGAGGAGGCCGTGGCTGAGGGGGC
GCGAAGGGCCTTGCTTGGCTCCATGCCTGGCTTGATGCCCCCTGGGCTGCTGGCAGCTGCAGTGTCTGGCCTGGG
AAGCCGAGGCCTGACGCTGGCACCCGGCTTGAGTCCTGCCCGTCCCCTCTTCGGCTCCGATTTCGAGAAAGAGAA
GCAGCAGAGGAATGCGGACTGTCTGGCAGAACTGAACGAGGCCATGCGAGGCCGGGCAGAGGAATGGCACGGGCG
CCCCAAAGCAGTGCGGGAACAGCTACTGGCGCTGTCCGCCTGCGCCCCGTTCAATGTGCGCTTCAAGAAGGATCA
CGGGCTGGTGGGGCGAGTGTTCGCCTTCGATGCTACTGCCCGTCCTCCAGGATACGAGTTCGAGCTGAAGCTCTT
CACCGAATACCCCTGTGGTTCCGGCAATGTGTACGCCGGCGTCCTGGCAGTGGCTCGCCAGATGTTCCACGATGC
TCTGCGGGAGCCGGGCAAGGCACTGGCTTCTTCGGGCTTCAAGTACCTCGAATATGAACGCCGGCATGGATCAGG
AGAATGGCGGCAGCTGGGCGAGCTGCTTACCGACGGCGTCCGCAGCTTCCGCGAGCCAGCTCCCGCGGAGGCCCT
GCCCCAGCAGTACCCAGAGCCGGCCCCTGCGGCTCTCTGTGGCCCACCCCCGCGAGCCCCATCCCGGAACCTGGC
GCCCACGCCGCGCCGTCGCAAGGCATCCCCCGAGCCGGAGGGCGAGGCGGCTGGGAAGATGACCACCGAGGAGCA
GCAGCAACGGCACTGGGTGGCACCCGGCGGCCCGTACTCCGCTGAGACCCCTGGTGTGCCCTCGCCCATTGCCGC
CCTGAAGAATGTGGCCGAAGCCCTGGGCCACTCACCCAAGGACCCTGGCGGAGGCGGGGGGCCTGTGCGTGCAGG
GGGCGCCAGCCCTGCAGCCTCCTCCACGGCCCAGCCGCCAACCCAGCATCGCCTTGTGGCCCGCAACGGCGAAGC
AGAAGTCAGTCCCACAGCGGGGGCCGAAGCTGTCAGCGGGGGTGGCAGCGGCACTGGGGCGACCCCTGGGGCCCC
CCTGTGCTGTACCCTGTGCAGGGAGCGGCTAGAAGACACCCACTTCGTCCAGTGCCCCTCGGTGCCCGGACACAA
GTTCTGCTTTCCCTGCTCCCGGGAGTTCATCAAGGCGCAGGGCCCGGCCGGGGAGGTGTACTGCCCGAGCGGAGA
CAAGTGCCCGCTGGTCGGCTCCTCCGTGCCCTGGGCCTTCATGCAGGGCGAGATCGCCACCATCCTTGCTGGAGA
CATCAAAGTTAAGAAAGAACGGGACCCCTAGGCTACCACTGCCTCCAGGCTACTGCCCTCTGCCCCTTTGCCACC
CACCGCTGCCGCGGATAAATTATTCCCTCCCCGACCCAGCCCAGTGCCACCTCTATCTGTGTACATACTCCCTTC
TTCCACCCAGATGGGTCCCCTGGGGTAGATGCATTGTGGGTGGGGGGAGAAAGCTTGTGGCTCCTGTCCGAGGGG
GTGTTTGGGGTCCCTTGGCCCCTCCAGTTTCCCTCTGTCCTCCTTGGCTTGGCTTTGCTGCTGCTTGTAGTTGGG
GGAGAGGTGCCCCCCTCCTCCTTGAGAAGGGACCTCCTGAAAACTCGCTCTTTATAAACGAGGCAAAAGCATTTA
ATTCCCACCCCCCCACCCCCCGCTCCCTTCTGCTCCTTCAATAAACCGAAAGATGGGTT

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FIGURE 3812

ATGCTGGGCTCAGTGAAGATGGAGGCCCATGACCTGGCCGAGTGGAGCTACTACCCGGAGGCGGGCGAGGTCTAC
TCGCCGGTGACCCCAGTGCCCACCATGGCCCCCCTCAACTCCTACATGACCCTGAATCCTCTAAGCTCTCCCTAT
CCCCCTGGGGGGCTCCCTGCCTCCCCACTGCCCTCAGGACCCCTGGCACCCCCAGCACCTGCAGCCCCCCTGGGG
CCCACTTTCCCAGGCCTGGGTGTCAGCGGTGGCAGCAGCAGCTCCGGGTACGGGGCCCCGGGTCCTGGGCTGGTG
CACGGGAAGGAGATGCCGAAGGGGTATCGGCGGCCCCTGGCACACGCCAAGCCACCGTATTCCTATATCTCACTC
ATCACCATGGCCATCCAGCAGGCGCCGGGCAAGATGCTGACCTTGAGTGAAATCTACCAGTGGATCATGGACCTC
TTCCCTTACTACCGGGAGAATCAGCAGCGCTGGCAGAACTCCATTCGCCACTCGCTGTCTTTCAACGACTGCTTC
GTCAAGGTGGCGCGTTCCCCAGACAAGCCTGGCAAGGGCTCCTACTGGGCCCTACACCCCAGCTCAGGGAACATG
TTTGAGAATGGCTGCTACCTGCGCCGCCAGAAACGCTTCAAGCTGGAGGAGAAGGTGAAAAAAGGGGGCAGCGGG
GCTGCCACCACCACCAGGAACGGGACAGGGTCTGCTGCCTCGACCACCACCCCCGCGGCCACAGTCACCTCCCCG
CCCCAGCCCCCGCCTCCAGCCCCTGAGCCTGAGGCCCAGGGCGGGGAAGATGTGGGGGCTCTGGACTGTGGCTCA
CCCGCTTCCTCCACACCCTATTTCACTGGCCTGGAGCTCCCAGGGGAGCTGAAGCTGGACGCGCCCTACAACTTC
AACCACCCTTTCTCCATCAACAACCTAATGTCAGAACAGACACCAGCACCTCCCAAACTGGACGTGGGGTTTGGG
GGCTACGGGGCTGAAGGTGGGGAGCCTGGAGTCTACTACCAGGGCCTCTATTCCCGCTCTTTGCTTAATGCATCC
TAG

FIGURE 3813A

TAGGAAGAGGCACTGCTGAGGGGGCGCGAGGGGAACGGAGGCCAGAGCTGCGCTGACAGCAGCCATGGCGAGCGG
CAGTGGAGACAGCGTCACCCGTCGGAGCGTGGCATCACAGTTTTTCACTCAAGAGGAGGGGCCGGGCATCGATGG
CATGACCACCTCAGAGAGGGTGGTGGATCTTCTGAACCAGGCGGCGCTGATCACCAATGACTCAAAGATCACAGT
GCTCAAACAGGTCCAGGAGCTGATCATCAACAAAGACCCCACACTACTGGACAACTTCCTGGATGAGATCATCGC
ATTCCAAGCAGACAAGTCAATCGAAGTGCGAAAATTTGTCATCGGCTTCATCGAGGAGGCATGCAAGCGAGACAT
TGAGTTGCTGCTGAAACTCATTGCAAACCTCAACATGCTCTTGAGGGACGAGAATGTGAACGTGGTGAAGAAGGC
TATCCTCACCATGACCCAGCTCTACAAGGTGGCCCTGCAGTGGATGGTAAAGTCACGGGTCATTAGCGAGCTACA
GGAGGCCTGCTGGGACATGGTATCTGCCATGGCGGGGGACATCATCCTGCTATTGGACTCTGACAATGACGGCAT
CCGCACCCACGCCATCAAGTTTGTGGAGGGCCTCATTGTCACCCTGTCACCCCGCATGGCTGACTCAGAGATACC
CCGACGCCAGGAGCATGATATCAGCCTGGACCGCATCCCTCGTGACCACCCCTACATCCAGTACAACGTGCTATG
GGAAGAGGGCAAGGCAGCCTTGGAGCAGCTGCTTAAGTTCATGGTGCACCCTGCCATCTCCTCCATCAACCTGAC
CACAGCGCTGGGCTCCCTTGCCAATATCGCCCGCCAGAGACCCATGTTCATGTCTGAGGTGATCCAGGCCTATGA
AACTCTGCATGCCAACCTGCCCCCGACGCTGGCCAAATCGCAGGTGAGCAGTGTGCGTAAGAATCTGAAGCTGCA
CCTGTTGAGTGTGCTGAAGCACCCGGCTTCCTTGGAGTTCCAGGCCCAGATCACCACCCTGCTGGTGGACCTGGG
CACACCTCAGGCCGAGATCGCCCGCAACATGCCGAGCAGCAAGGACACCCGCAAGCGGCCCCGCGATGACTCGGA
CTCCACACTCAAGAAGATGAAGCTGGAGCCCAACCTGGGGGAGGACGATGAGGACAAAGACTTGGAGCCAGGCCC
GTCGGGGACCTCGAAGGCCTCAGCGCAGATCTCCGGCCAGTCAGACACGGACATCACAGCTGAGTTCCTGCAGCC
TCTGCTGACGCCTGATAATGTGGCTAATCTGGTCCTCATCAGCATGGTGTACCTACCCGAGGCCATGCCAGCCTC
CTTCCAGGCCATCTACACCCCCGTGGAGTCAGCAGGCACGGAAGCCCAGATCAAGCACCTGGCTCGGCTCATGGC
CACACAGATGACAGCTGCCGGACTGGGACCAGGTGTAGAGCAGACCAAACAGTGCAAGGAGGAGCCCAAGGAGGA
GAAGGTGGTGAAGACAGAGAGCGTCCTGATCAAGCGGCGCCTGTCAGCCCAGGGCCAAGCCATCTCGGTGGTGGG
TTCCCTGAGCTCCATGTCCCCCCTGGAGGAAGAGGCACCGCAGGCCAAGAGGAGGCCAGAGCCCATTATCCCTGT
CACTCAGCCCCGGCTGGCAGGCGCTGGTGGGCGCAAGAAAATTTTCCGTCTCAGCGACGTGCTGAAGCCCCTTAC
CGATGCCCAGGTGGAAGCCATGAAGCTGGGCGCTGTGAAGCGGATCCTGCGGGCTGAGAAGGCTGTGGCCTGCAG
CGGGGCAGCCCAGGTCCGCATAAAGATCCTGGCCAGCCTGGTGACACAGTTCAACTCGGGCCTGAAGGCGGAGGT
CCTGTCCTTCATCCTGGAGGATGTGCGGGCCCGCCTGGACCTGGCCTTCGCCTGGCTCTACCAGGAGTACAACGC
CTACCTGGCCGCAGGTGCCTCGGGCTCCCTGGACAAGTATGAGGACTGCCTCATCCGCCTGTTGTCTGGCCTGCA
GGAGAAACCAGACCAGAAGGATGGGATCTTCACCAAGGTTGTGCTGGAGGCGCCACTCATCACAGAGAGTGCCCT
GGAGGTGGTCCGCAAGTACTGCGAGGATGAGAGTCGCACCTATCTGGGCATGTCCACACTTCGAGACCTGATCTT
CAAGCGCCCGTCCCGCCAGTTCCAGTACCTGCATGTCCTCCTCGACCTCAGCTCCCATGAGAAGGACAAGGTGCG
CTCCCAGGCCCTGCTGTTCATCAAACGCATGTATGAGAAGGAGCAGCTGCGGGAGTATGTGGAGAAATTTGCCCT
CAACTACCTGCAGCTCCTGGTGCACCCCAACCCACCGTCTGTGCTGTTTGGAGCTGACAAGGACACAGAGGTGGC
AGCACCCTGGACGGAGGAGACAGTGAAGCAGTGTCTGTACCTCTACCTGGCCCTCCTGCCTCAGAACCACAAGCT
GATCCACGAACTGGCGGCCGTGTACACTGAAGCCATCGCCGACATCAAGCGGACGGTGCTGAGGGTCATTGAGCA
GCCGATCCGAGGAATGGGCATGAACTCCCCGGAGCTGCTCCTGCTGGTGGAAAATTGTCCCAAGGGAGCAGAGAC
ACTGGTCACGAGATGTCTGCACAGCCTCACAGACAAAGTCCCACCCTCCCCAGAGCTGGTGAAGCGGGTCCGGGA
TCTCTACCACAAGCGACTGCCAGACGTCCGCTTCCTCATCCCGGTGCTCAATGGGCTGGAGAAGAAAGAGGTGAT
CCAGGCCCTGCCTAAACTCATCAAACTCAACCCCATCGTGGTGAAGGAAGTCTTCAACCGCCTGCTGGGCACCCA
GCATGGTGAGGGAAACTCAGCCTTGTCCCCGCTGAACCCTGGAGAGCTCCTGATCGCATTACACAACATTGACTC
CGTGAAGTGCGACATGAAATCCATCATCAAAGCCACCAACCTGTGCTTTGCGGAGCGGAACGTGTACACGTCAGA
GGTGCTGGCCGTGGTGATGCAGCAGCTGATGGAGCAGAGCCCCCTGCCCATGCTGCTCATGAGGACCGTCATCCA
GTCCCTGACCATGTACCCCCGCCTGGGGGGCTTCGTCATGAACATCCTGTCCCGCCTCATCATGAAGCAGGTGTG
GAAGTACCCCAAGGTGTGGGAGGGCTTCATCAAGTGCTGCCAGCGCACAAAGCCCCAGAGCTTCCAGGTCATCCT
GCAGCTGCCGCCCCAGCAGCTGGGAGCCGTCTTTGACAAGTGCCCAGAGCTCCGGGAGCCCCTGCTGGCCCATGT
CCGCTCCTTCACCCCCCACCAGCAAGCTCACATCCCTAACTCCATCATGACCATCTTGGAGGCCAGCGGCAAGCA
GGAGCCAGAGGCCAAGGAGGCGCCTGCGGGGCCCTTGGAGGAGGATGATCTGGAGCCCCTGACCTTGGCCCCGGC
CCCAGCACCCCGGCCCCCTCAGGACCTCATCGGCCTGCGACTGGCCCAGGAGAAGGCCTTAAAGCGGCAGCTGGA
GGAGGAACAGAAGCTGAAGCCGGGAGGAGTGGGAGCCCCCTCCTCTTCCTCCCCCTCTCCCTCTCCGTCGGCCCG

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FIGURE 3813B

GCCAGGCCCGCCCCCGTCTGAGGAAGCCATGGATTTCCGGGAGGAGGGGCCTGAGTGCGAGACCCCGGGCATCTT
CATCAGCATGGATGACGACTCGGGGCTGACCGAGGCCGCGCTGTTGGACTCTAGTCTCGAGGGCCCCCTACCCAA
GGAGACGGCAGCGGGCGGGCTGACCTTGAAGGAGGAGCGGAGCCCCCAGACCCTCGCACCTGTTGGAGAAGATGC
TATGAAGACTCCCAGCCCGGCTGCCGAGGACGCCAGGGAACCCGAGGCCAAGGGGAACAGCTGACGGGGCTCGAG
GGGGAAAGGGGGTGGGACAGGGACTCGGGGCTGGGGGACGGGGCGGGGCTTGACCTGCGGGTGCTTTGCCTTAAA
AAGAAATAAA

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FIGURE 3814

GGAGACCGCGTCTGCTTCAACTTGGGCCGTGAGCTCTATTTCTACCCAGGCTGCTGTCGTCGTGGGAGCCAACGG
TCCATTGACCTCAACAAGCCAATTGACAAGCGGATCTACAAGGGCACCCAGCCCACCTGCCACGATTTCAACCAG
TTCACTGCTGCCACCGAGACCATCTCGCTGCTGGTGGGCTTCTCAGCGGGTCAAGTGCAGTACCTGGATCTCATC
AAAAAGGACACCAGCAAGCTGTTCAATGAGGAGCGGTTGATCGACAAGACCAAGGTGACATATCTGAAGTGGCTG
CCTGAGTCGGAGAGCCTGTTCCTGGCATCACACGCCAGTGGCCACCTGTACCTGTACAACGTCAGCCACCCCTGC
GCCTCGGCCCCGCCCCAGTACAGCCTGCTGAAGCAGGGCGAGGGCTTCTCTGTCTATGCTGCCAAGAGCAAGGCA
CCCCGCAACCCGCTGGCCAAGTGGGCGGTGGGTGAGGGGCCCCTCAACGAGTTCGCCTTCTCGCCCGATGGCCGG
CACCTGGCCTGTGTGAGCCAGGATGGCTGCCTGCGCGTCTTCCACTTCGACTCC**ATG**CTCCTGCGTGGGCTCATG
AAGAGCTACTTTGGGGGCCTGCTGTGTGTGTGCTGGAGCCCTGACGGCCGCTACGTGGTGACGGGTGGCGAAGAT
GACCTGGTCACCGTGTGGTCCTTCACCGAGGGCCGCGTGGTGGCTCGAGGCCATGGCCACAAGTCCTGGGTCAAC
GCTGTGGCCTTTGACCCCTACACCACAAGGGCAGAGGAGGCGGCGACAGCAGCCGGTGCTGATGGGGAGCGGAGC
GGCGAAGAGGAGGAGGAGGAGCCCGAGGCTGCGGGCACAGGCTCGGCCGGGGGCGCCCCGCTCTCTCCACTGCCC
AAGGCTGGCTCCATTACTTACCGCTTTGGCTCGGCGGGCCAGGACACGCAGTTCTGCCTGTGGGACCTCACTGAA
GACGTGCTCTACCCGCACCCCCCCCTGGCCCGCACCCGCACCCTCCCTGGCACACCTGGCACCACGCCACCGGCC
GCCAGCAGCTCGAGGGGTGGCGAGCCTGGCCCAGGCCCCCTGCCTCGCTCGCTGTCCCGCTCCAACAGTCTCCCG
CACCCAGCTGGCGGGGGCAAGGCGGGCGGCCCGGGTGTGGCGGCAGAGCCTGGCACACCATTCAGCATTGGCCGC
TTCGCCACGCTCACACTGCAGGAGCGGCGGGACCGGGGGGCAGAGAAGGAGCACAAGCGCTACCACAGCCTGGGC
AACATCAGCCGGGGTGGCAGTGGCGGCAGTGGCAGTGGTGGGGAGAAGCCCAGCGGCCCTGTTCCCCGCAGCCGC
CTGGACCCCGCCAAGGTGCTGGGCACTGCGCTGTGCCCGCGCATCCACGAGGTGCCCCTGCTGGAGCCCCTTGTG
TGCAAGAAGATCGCCCAGGAGCGGCTCACAGTCCTCCTGTTCCTGGAGGACTGCATCATCACTGCCTGCCAGGAG
GGCCTCATCTGCACCTGGGCCCGGCCGGGCAAGGCGTTCACAGACGAGGAGACCGAGGCCCAGACAGGGGAAGGA
AGTTGGCCCAGGTCACCCAGCAAGTCAGTGGTAGAGGGCATCTCCTCCCAACCAGGCAACTCCCCGAGTGGCACA
GTGGTG**TGA**AGCCATGGATATCGGGCCCCCCCAACCCCATGCCCCCAGCCTCCTAGCCATAACCCTCCCTGCTGA
CCTCACAGATCAACGTATTAACAAGACTAACCATGATGGATGGACTGCTCCAGTCCCCCCACCTGCACAAAATTT
GGGGGCCCCCCAGACTGGCCCGGACACGGGCGATGTAATAGCCCTTGTGGCCTCAGCCTTGTCCCCCACCCACTG
CCAAGTACAATGACCTCTTCCTCTGAAACATCAGTGTTACCCTCATCCCTGTCCCCAGCATGTGACTGGTCACTC
CTGGGGAGAGACTCCCCGCCCCTGCCACAAGAGCCCCAGGTCTGCAGTGTGCCCCTCAGTTGAGTGGGCAGGGCC
GGGGGTGGTCCAGCCCTCGCCCGGCCCCCACCCCAGCTGCCCTTGCTATTGTCTGTGCTTTTGAAGAGTGTTAAA
TTATGGAAGCCCCTCAGGTTCCTCCCTGTCCCGCAGGACCTCTTATTTATACTAAAGTTCCCTGTTTTCTCAGCG
GGTCTGTCCCCTTCGGAGGAGATGATGTAGAGGACCTGTGTGTGTACTCTGTGGTTCTAGGCAGTCCGCTTTCCC
CAGAGGAGGAGTGCAGGCCTGCTCCCAGCCCAGCGCCTCCCACCCCTTTTCATAGCAGGAAAAGCCGGAGCCCAG
GGAGGGAACGGACCTGCGAGTCACACAACTGGTGACCCACACCAGCGGCTGGAGCAGGACCCTCTTGGGGAGAAG
AGCATCCTGCCCGCAGCCAGGGCCCCTCATCAAAGTCCTCGGTGTTTTTTAAATTATCAGAACTGCCCAGGACCA
CGTTTCCCAGGCCCTGCCCAGCTGGGACTCCTCGGTCCTTGCCTCCTAGTTTCTCAGGCCTGGCCCTCTCAAGGC
CCAGGCACCCCAGGCCGGTTGGAGGCCCCGACTTCCACTCTGGAGAACCGTCCACCCTGGAAAGAAGAGCTCAGA
TTCCTCTTGGCTCTCGGAGCCGCAGGGAGTGTGTCTTCCCGCGCCACCCTCCACCCCCCGAAATGTTTCTGTTTC
TAATCCCAGCCTGGGCAGGAATGTGGCTCCCCGGCCAGGGGCCAAGGAGCTATTTTGGGGTCTCGTTTGCCCAGG
GAGGGCTTGGCTCCACCACTTTCCTCCCCCAGCCTTTGGGCAGCAGGTCACCCCTGTTCAGGCTCTGAGGGTGCC
CCCTCCTGGTCCTGTCCTCACCACCCCTTCCCCACCTCCTGGG

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FIGURE 3815

CAGGGAGGGCTTGGCTCCACCACTTTCCTCCCCCAGCCTTTGGGCAGCAGGTCACCCCTGTTCAGGCTCTGAGGG
TGCCCCCTCCTGGTCCTGTCCTCACCACCCCTTCCCCACCTCCTGGGAAAAAAAAAAAAAAAAAAAAAAAAGCT
GGTATAAAGCAGAGAGCCTGAGGGCTAAATTTAACTGTCCGAGTCGGAATCCATCTCTGAGTCACCCAAGAAGCT
GCCCTGGCCTCCCGTCCCCTTCCCAGGCCTCAACCCCTTTCTCCCACCCAGCCCCAACCCCCAGCCCTCACCCCC
TAGCCCCCAGTTCTGGAGCTTGTCGGGAGCAAGGGGGTGGTTGCTACTGGGTCACTCAGCCTCAATTGGCCCTGT
TTCAGCAATGGGCAGGTTCTTCTTGAAATTCATCACACCTGTGGCTTCCTCTGTGCTCTACCTTTTTATTGGGGT
GACAGTGTGACAGCTGAGATTCTCCATGCATTCCCCCTACTCTAGCACTGAAGGGTTCTGAAGGGCCCTGGAAGG
AGGGAGCTTGGGGGGCTGGCTTGTGAGGGGTTAAGGCTGGGAGGCGGGAGGGGGGCTGGACCAAGGGGTGGGGAG
AAGGGGAGGAGGCCTCGGCCGGCCGCAGAGAGAAGTGGCCAGAGAGGCCCAGGGGACAGCCAGGGACAGGCAGAC
ATGCAGCCAGGGCTCCAGGGCCTGGACAGGGGCTGCCAGGCCCTGTGACAGGAGGACCCCGAGCCCCCGGCCCGG
GGAGGGGCCATGGTGCTGCCTGTCCAAC**ATG**TCAGCCGAGGTGCGGCTGAGGCGGCTCCAGCAGCTGGTGTTGGA
CCCGGGCTTCCTGGGGCTGGAGCCCCTGCTCGACCTTCTCCTGGGCGTCCACCAGGAGCTGGGCGCCTCCGAACT
GGCCCAGGACAAGTACGTGGCCGACTTCTTGCAGTGGGCGGAGCCCATCGTGGTGAGGCTTAAGGAGGTCCGACT
GCAGAGGGACGACTTCGAGATTCTGAAGGTGATCGGACGCGGGGCGTTCAGCGAGGTAGCGGTAGTGAAGATGAA
GCAGACGGGCCAGGTGTATGCCATGAAGATCATGAACAAGTGGGACATGCTGAAGAGGGGCGAGGTGTCGTGCTT
CCGTGAGGAGAGGGACGTGTTGGTGAATGGGGACCGGCGGTGGATCACGCAGCTGCACTTCGCCTTCCAGGATGA
GAACTACCTGTACCTGGTCATGGAGTATTACGTGGGCGGGGACCTGCTGACACTGCTGAGCAAGTTTGGGGAGCG
GATTCCGGCCGAGATGGCGCGCTTCTACCTGGCGGAGATTGTCATGGCCATAGACTCGGTGCACCGGCTTGGCTA
CGTGCACAGGGACATCAAACCCGACAACATCCTGCTGGACCGCTGTGGCCACATCCGCCTGGCCGACTTCGGCTC
TTGCCTCAAGCTGCGGGCAGATGGAACGGTGCGGTCGCTGGTGGCTGTGGGCACCCCAGACTACCTGTCCCCCGA
GATCCTGCAGGCTGTGGGCGGTGGGCCTGGGACAGGCAGCTACGGGCCCGAGTGTGACTGGTGGGCGCTGGGTGT
ATTCGCCTATGAAATGTTCTATGGGCAGACGCCCTTCTACGCGGATTCCACGGCGGAGACCTATGGCAAGATCGT
CCACTACAAGGAGCACCTCTCTCTGCCGCTGGTGGACGAAGGGGTCCCTGAGGAGGCTCGAGACTTCATTCAGCG
GTTGCTGTGTCCCCCGGAGACACGGCTGGGCCGGGGTGGAGCAGGCGACTTCCGGACACATCCCTTCTTCTTTGG
CCTCGACTGGGATGGTCTCCGGGACAGCGTGCCCCCCTTTACACCGGATTTCGAAGGTGCCACCGACACATGCAA
CTTCGACTTGGTGGAGGACGGGCTCACTGCCATGGTGAGCGGGGGCGGGGAGACACTGTCGGACATTCGGGAAGG
TGCGCCGCTAGGGGTCCACCTGCCTTTTGTGGGCTACTCCTACTCCTGCATGGCCCTCAGGGACAGTGAGGTCCC
AGGCCCCACACCCATGGAACTGGAGGCCGAGCAGCTGCTTGAGCCACACGTGCAAGCGCCCAGCCTGGAGCCCTC
GGTGTCCCCACAGGATGAAACAGCTGAAGTGGCAGTTCCAGCGGCTGTCCCTGCGGCAGAGGCTGAGGCCGAGGT
GACGCTGCGGGAGCTCCAGGAAGCCCTGGAGGAGGAGGTGCTCACCCGGCAGAGCCTGAGCCGGGAGATGGAGGC
CATCCGCACGGACAACCAGAACTTCGCCAGTCAACTACGCGAGGCAGAGGCTCGGAACCGGGACCTAGAGGCACA
CGTCCGGCAGTTGCAGGAGCGGATGGAGTTGCTGCAGGCAGAGGGAGCCACAGCTGTCACGGGGGTCCCCAGTCC
CCGGGCCACGGATCCACCTTCCCATCTAGATGGCCCCCCGGCCGTGGCTGTGGGCCAGTGCCCGCTGGTGGGGCC
AGGCCCCATGCACCGCCGCCACCTGCTGCTCCCTGCCAGGGTCCCTAGGCCTGGCCTATCGGAGGCGCTTTCCCT
GCTCCTGTTCGCCGTTGTTCTGTCTCGTGCCGCCGCCCTGGGCTGCATTGGGTTGGTGGCCCACGCCGGCCAACT
CACCGCAGTCTGGCGCCGCCCAGGAGCCGCCCGCGCTCCC**TGA**ACCCTAGAACTGTCTTCGACTCCGGGGCCCCG
TTGGAAGACTGAGTGCCCGGGGCACGGCACAGAAGCCGCGCCCACCGCCTGCCAGTTCACAACCGCTCCGAGCGT
GGGTCTCCGCCCAGCTCCAGTCCTGTGATCCGGGCCCGCCCCCTAGCGGCCGGGGAGGGAGGGGCCGGGTCCGCG
GCCGGCGAACGGGGCTCGAAGGGTCCTTGTAGCCGGGAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGC
TGCTGCTGCTGCTGCTGCTGCTGCTGGGGGGGATCACAGACCATTTCTTTCTTTCGGCCAGGCTGAGGCCCTGACG
TGGATGGGCAAACTGCAGGCCTGGGAAGGCAGCAAGCCGGGCCGTCCGTGTTCCATCCTCCACGCACCCCCACCT
ATCGTTGGTTCGCAAAGTGCAAAGCTTTCTTGTGCATGACGCCCTGCTCTGGGGAGCGTCTGGCGCGATCTCTGC
CTGCTTACTCGGGAAATTTGCTTTTGCCAAACCCGCTTTTTCGGGGATCCCGCGCCCCCCTCCTCACTTGCGCTG
CTCTCGGAGCCCCAGCCGGCTCCGCCCGCTTCGGCGGTTTGGATATTTATTGACCTCGTCCTCCGACTCGCTGAC
AGGCTACAGGACCCCCAACAACCCCAATCCACGTTTTGGATGCACTGAGACCCCGACATTCCTCGGTATTTATTG
TCTGTCCCCACCTAGGACCCCCACCCCCGACCCTCGCGAATAAAAGGCCCTCCATCTGCCC

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FIGURE 3816

CGGGAGTGAACGGAGAGCGTAGTGACCATCATGAGCCTCCTCAACAAGCCCAAGAGTGAGATGACCCCAGAGGAG
CTGCAGAAGCGAGAGGAGGAGGAATTTAACACCGGTCCACTCTCTGTGCTCACACAGTCAGTCAAGAACAATACC
CAAGTGCTCATCAACTGCCGCAACAATAAGAAACTCCTGGGCCGCGTGAAGGCCTTCGATAGGCACTGCAACATG
GTGCTGGAGAACGTGAAGGAGATGTGGACTGAGGTACCCAAGAGTGGCAAGGGCAAGAAGAAGTCCAAGCCAGTC
AACAAAGACCGCTACATCTCCAAGATGTTCCTGCGCGGGGACTCAGTCATCGTGGTCCTGCGGAACCCGCTCATC
GCCGGCAAGTAGGGGCCGCCTGTCTGTTGACAGAACTCACTCCTCTGTCCTATGAAGACCGCTGCCATTGGTGTT
GAGAATAATAAAGCTCTGTGTTTTTTTCT

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FIGURE 3817

GGCAGCGGTGGCAGGGGCTGCAGGAGCAAGTGACCAGGAGCAGGACTGGGGACAGGCCTGATCGCCCCTGCACGA
ACCAGACCCTTCGCCGCCCTCACG**ATG**ACTACCTCTCCGATCCTGCAGCTGCTGCTGCGGCTCTCACTGTGCGGG
CTGCTGCTCCAGAGGGCGGAGACAGGCTCTAAGGGGCAGACGGCGGGGGAGCTGTACCAGCGCTGGGAACGGTAC
CGCAGGGAGTGCCAGGAGACCTTGGCAGCCGCGGAACCGCCTTCAGGCCTCGCCTGTAACGGGTCCTTCGATATG
TACGTCTGCTGGGACTATGCTGCACCCAATGCCACTGCCCGTGCGTCCTGCCCCTGGTACCTGCCCTGGCACCAC
CATGTGGCTGCAGGTTTCGTCCTCCGCCAGTGTGGCAGTGATGGCCAATGGGGACTTTGGAGAGACCATACACAA
TGTGAGAACCCAGAGAAGAATGAGGCCTTTCTGGACCAAAGGCTCATCTTGGAGCGGTTGCAGGTCATGTACACT
GTCGGCTACTCCCTGTCTCTCGCCACACTGCTGCTAGCCCTGCTCATCTTGAGTTTGTTCAGGCGGCTACATTGC
ACTAGAAACTATATCCACATCAACCTGTTCACGTCTTTCATGCTGCGAGCTGCGGCCATTCTCAGCCGAGACCGT
CTGCTACCTCGACCTGGCCCCTACCTTGGGGACCAGGCCCTTGCGCTGTGGAACCAGGCCCTCGCTGCCTGCCGC
ACGGCCCAGATCGTGACCCAGTACTGCGTGGGTGCCAACTACACGTGGCTGCTGGTGGAGGGCGTCTACCTGCAC
AGTCTCCTGGTGCTCGTGGGAGGCTCCGAGGAGGGCCACTTCCGCTACTACCTGCTCCTCGGCTGGGGGGCCCCC
GCGCTTTTCGTCATTCCCTGGGTGATCGTCAGGTACCTGTACGAGAACACGCAGTGCTGGGAGCGCAACGAAGTC
AAGGCCATTTGGTGGATTATACGGACCCCCATCCTCATGACCATCTTGATTAATTTCCTCATTTTTATCCGCATT
CTTGGCATTCTCCTGTCCAAGCTGAGGACACGGCAAATGCGCTGCCGGGATTACCGGCTGAGGCTGGCTCGCTCC
ACGCTGACGCTGGTGCCCCTGCTGGGTGTCCACGAGGTGGTGTTTGCTCCCGTGACAGAGGAACAGGCCCGGGGC
GCCCTGCGCTTCGCCAAGCTCGGCTTTGAGATCTTCCTCAGCTCCTTCCAGGGCTTCCTGGTCAGCGTCCTCTAC
TGCTTCATCAACAAGGAGGTGCAGTCGGAGATCCGCCGTGGCTGGCACCACTGCCGCCTGCGCCGCAGCCTGGGC
GAGGAGCAACGCCAGCTCCCGGAGCGCGCCTTCCGGGCCCTGCCCTCCGGCTCCGGCCCGGGCGAGGTCCCCACC
AGCCGCGGCTTGTCCTCGGGGACCCTCCCAGGGCCTGGGAATGAGGCCAGCCGGGAGTTGGAAAGTTACTGC**TAG**

GGGGCGGGATCCCCGTGTCTGTTCAGTTAGCATGGATTTATTGAGTGCCAACTGCGTGCCAGGCCCAGTACGGAG
GACGCTGGGGAAATGGTGAAGGAAACAGAAAAAAGGTCCCTGCCCTTCTGGAGATGACAACTGAGTGGGGAAAAC
AGACCGTGAACACAAAACATCAAGTTCCACACACGCTATGGAATGGTTATGAAGGGAAGCGAGAAGGGGGCCTAG
GGTGGTCTGGGAGGCGTCTCCAAGGAGGTGACACTTAAGCCATCCCCGAAAGAGGTGAAAGAGATCACTTTGGGG
AGAGCTGGAGAACAGGATTCTAGGCGGAAGCGATAGCATAGGCAAAGGCCCTTGGGCAGGAAGGCGCTCAGCCTT
GGCTGGAGTAGAATTAAGTCAGAGCCAACAGGTGGGGAGAGACAGAGAAGTGGGCAGGGGCACCCAAGTTGGGAT
TTCATTTCAGGTGCATTGGAGATTCTTAGGAGTGTCTCTTGGGGGTAATATTTTATTTTTTAAAAAATGAGGAT

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FIGURE 3818

AGACCCAGGAAGGCGGGAGGGACCCCTTGGGCACTGGAGCTCCTGGGTGGCCCTGCAGCCGGCACTCCCCCGTCT
TCCAGATGACAATTTGTCGGGCACGAGCGGTATGGAAGTGGACGACCGCGTGTCGGCGCTGGAGCAGCGGCTGCA
GTTACAGGAAGACGAGCTGGCGGTCCTAAAGGCGGCGCTGGCGGATGCTCTGCGTCGCCTGCGGGCATGCGAAGA
ACAGGGAGCGGCGCTACGCGCGCGGGGCACCCCCAAGGGCCGGGCGCCTCCGCGCTTAGGCACCACTGCCTCGGG
TATCCCCGTTAGACTGGAGGGGTGGGATGGGGAGGACCGGGGCCTGGTCCTTATACTCACCCTCTTCTGTCCCCT
AACCCCATCCCTCCAGTGTGTCAGCTCTTGAAAGGCCTTCCCACCAGGACGCCCCTTA**ATG**GCTCGGGACCCCCG
CGGCGCGTGGGTGGCTATGCCACGTCCCCATCCTCTCCCAAGAAGGAGGCGACCTCCGGGCGCAGGTAAGGCACA
AGGCCGGGACCCCCAGCCTCTTCCAAGACCTCGTGGGAGACAGAGGTGGTTTGTTTGCCTGAGCTCCAGCAGCAG
AGGGTGCAGGGAGAATCTCGCTTGCTCACGGCACTCGCCTGCTGGCCTAGAAGGCTCTGCCCCCACCTGTGTGCT
CTCTTTTAGCAGTGTCCGCCGCTACTTGTCACCAGAGCGCCTCGCCTCGGTGCGCCGTGAGGACCCCCGCAGCCG
GACCACATCCTCCAGCAGCAACTGTAGCGCCAAAAAGGAAGGG**TAA**GGACTGGGGCGGCGTCAAGCCGCAGAAAG
AGATAGGGAGGAAATGGTCGAGAAATGTAGTCATGCCCCAGGCCACGAGGTCGTAACCTAGAGTGGGGCCAGCTA
GTTCAAAAGCGGGGACGGTGCCAGAGCCTTGGAGGGACCAATCTTGAGGTGGCACGGTAACAGTGGAAGGTCTGG
GAGGGCGGAGTCAATATTGAGGGGCGTGGCCAGAGTTTTTAGAAGCTGGACGGTCAGGTCTACTGGGTGAGGAAG
TCAGGGAGGAGCTTGGCTTATGGGCGTGGTTATTAAGGTACAGGAGAGGCCCCGTTGAGTTTCAGGGATGAAGTC
AAGGCAGCAGCCACAGAGTTTCTACAAGGAAAGAGGGAGTCTGAGGAATTTAAGGGTGCAGCCACAGTGTTCGCC
TGGGCGAAATTAAAATCTGGGGTACGGAGTAACAGAGGCTGAGACCAGGTGGAGGCATTCCAGATTCCAGAAGCT
TTGACATCAAAATCGGGGGGCACTGCCAGGTTGAAAAGGGCGTGGCTTAAAGGTTGGGCGGGGCCGTAGGGGCGT
GGTCAAATGCCAAGAGGTGCAGCCAACTTGGAGGCCTCGAAGGTATTCACATAAGGAATACGTGAAAATGGACGT
AATCAGAATGCCTGGCGGGCCGGAGAAGGAGCGTTGGCGGGAGGTAGCAGTCAATTCTCAAGCAACTGAGTCAAC
TCAGGGACAGGGTTAGAAGGGAGGCTCAGAATGACAGGCGTGGTCAACTCCAGAGGCGGGGCCATACTGAAGATC
TGGACAGAGTCAAAAACTAAGGCTATATAATTCTAGCAGTTTGGGAGGCGGAGGCGGGAATCATCGCTTGAGCTC
AGGAGTTCGAGACCAGGCTGGGCAAAATAGCGAGCCCTCGTCTTTACTAAAAATGAAAATAAATTAGGCCTGGCG
CGGTGGCTCACGCCTGTAATCCCAGCACTTCGGGAGGCCTAGGCGGGTGGATCACAAGGTCAAGAGATCGAGACC
ATCCTGGCCAACATGGTGAAACCCCCTGTCTATTAATAATACAAAAATGGGCGTGGTGGCGCGTGCCTGTAGTCC
CAGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTCAACCCGGGAGGCGGAGGTTGCAGTGAGCTGAGATCGCGC
CACTGCACTCCAGCCTGCTGACAGAGCAAGACTCCGTTAAACAAACAAACAAAAAACAAAAAACA

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FIGURE 3819

CCACCCCCGGCCCCGAAGCTCCGCCACCCGCCGCCATGAGTAGCTTTGGAGCTGGCAAAACCAAAGAAGTTATCT
TCAGTGTGGAGGATGGCTCCGTGAAAATGTTCCTGAGGGGCCGCCCTGTGCCCATGATGATCCCAGACGAGCTGG
CACCCACCTACAGCCTGGACACACGCTCGGAGCTGCCTTCTTGCCGGCTCAAGCTGGAGTGGGTCTATGGCTACC
GTGGCCGAGACTGCCGGGCCAACCTTTATTTGCTGCCCACCGGGGAGATAGTGTACTTTGTGGCCTCCGTAGCCG
TGCTATACAGCGTGGAGGAGCAGAGGCAGCGACACTACCTGGGACACAACGATGACATCAAATGCTTGGCCATCC
ACCCAGATATGGTCACCATCGCCACGGGACAGGTGGCGGGAACCACTAAGGAAGGGAAGCCGCTGCCGCCCCACG
TGCGCATCTGGGACTCAGTTTCCCTCTCCACCTTACACGTGCTGGGCTTGGGGGTGTTTGACAGAGCCGTGTGCT
GTGTGGGCTTCTCCAAATCTAATGGAGGCAACCTGCTGTGTGCAGTGGATGAATCCAATGATCACATGCTCTCGG
TGTGGGACTGGGCCAAGGAGACCAAGGTGGTGGATGTCAAGTGCTCCAATGAGGCTGTATTGGTGGCCACCTTCC
ACCCCACGGACCCCACTGTGCTTATCACCTGCGGGAAATCTCACATCTACTTCTGGACCTTGGAGGGGGGCAGCT
TGAGCAAGCGGCAAGGCCTCTTTGAGAAACATGAGAAACCGAAGTATGTGCTGTGTGTGACCTTTTTGGAAGGTG
GCGACGTGGTCACGGGGGACTCTGGGGGGAACCTCTATGTTTGGGGCAAAGGTGGGAACCGTATCACACAGGCGG
TGCTGGGCGCCCACGACGGCGGCGTGTTTGGGCTCTGCGCCCTGCGGGACGGGACGCTGGTGTCTGGAGGGGGCC
GTGATCGGCGGGTGGTCCTCTGGGGTTCTGACTACAGCAAGCTGCAGGAAGTGGAGGTCCCTGAGGACTTTGGCC
CTGTGCGCACCGTGGCAGAGGGCCACGGAGACACACTGTACGTGGGGACCACCCGCAATTCCATCCTGCAGGGCT
CCGTGCACACAGGCTTCTCACTGCTGGTCCAGGGCCATGTGGAAGAGCTGTGGGGCCTGGCCACACACCCCAGTC
GGGCCCAGTTTGTGACCTGCGGGCAGGATAAGCTGGTGCATCTATGGAGCTCAGATTCCCACCAGCCCCTGTGGA
GCAGGATCATCGAGGACCCTGCCCGCTCAGCCGGCTTCCACCCCAGTGGCTCTGTCCTGGCTGTGGGTACAGTGA
CTGGCAGATGGCTGCTGCTGGACACGGAGACCCATGACCTGGTGGCTATCCACACAGACGGCAATGAACAGATCT
CAGTGGTCAGCTTCTCCCCAGACGGGGCGTACCTGGCCGTGGGCTCCCACGACAACTTGGTGTACGTGTACACGG
TGGACCAGGGCGGCCGCAAGGTCAGCCGCCTGGGCAAGTGCTCGGGCCATTCCAGTTTTATCACCCACCTGGATT
GGGCCCAGGACAGCAGCTGCTTTGTCACCAACTCCGGGGACTATGAGATTCTGTACTGGGACCCGGCTACCTGTA
AGCAGATCACCAGTGCGGATGCTGTGAGGAACATGGAATGGGCCACAGCTACTTGTGTCCTAGGGTTTGGGGTGT
TTGGGATCTGGTCTGAGGGGGCGGACGGCACTGATATCAACGCTGTGGCCCGCTCTCATGATGGGAAGTTGCTGG
CTTCAGCTGATGACTTTGGCAAAGTTCACCTGTTTAGCTACCCCTGCTGTCAGCCTCGAGCCCTCAGCCACAAGT
ACGGTGGACACAGCAGCCATGTGACAAATGTGGCCTTCTTGTGGGATGACAGCATGGCCCTGACCACAGGGGGCA
AGGACACCAGTGTGCTACAGTGGCGGGTGGTCTGATGCGGCCAGGGAAGAGTCAGGTGTCAGGGCAGGAATTCTA
TTTTCGGGAGATGTCTATTGCCGAGTAGAGTAATATATACCCAGAGTATGTCTATAGCAGAGGGGGTTATGGGGG
CGGGAGGGTAGACTGACATACAGAAGTCTCTATTTATCCGGGTGGGAAGAGGGAGTCACATCGCTTTGGGGATCC
ATTGGTGTTTGGTTTGGGGTGTTTTTTAAGTTTTTTCTTTTATATCATCCAGAAATAAAGACACGTACACT

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FIGURE 3820

GTTGAGGCGCCCCGCCCAGTCAGCAAGGTTGCGCGTGCCCTGTGAGACCGCCAAGATGGTGGTGGGCGCGTTCCC
TATGGCGAAGCTGCTATACTTGGGCATCCGGCAGGTCAGCAAGCCGCTTGCCAACCGTATTAAGGAGGCCGCCCG
CCGAAGCGAGTTCTTCAAGACCTATATCTGCCTCCCGCCGGCTCAACTGTATCACTGGGTGGAGATGCGGACCAA
GATGCGCATCATGGGCTTCCGGGGCACGGTCATCAAGCCGCTGAACGAGGAGGCGGCAGCTGAGCTGGGCGCAGA
GCTGCTGGGCGAAGCCACCATCTTCATCGTGGGCGGCGGCTGCCTAGTGCTGGAGTACTGGCGCCACCAGGCGCA
GCAGCGCCACAAGGAGGAGGAGCAGCGTGCTGCCTGGAACGCGCTGCGGGACGAGGTGGGCCACCTGGCGCTGGC
GCTGGAAGCGCTGCAGGCGCAGGTGCAGGCGGCGCCGCCACAGGGCGCCCTGGAGGAACTGCGCACAGAGCTGCA
AGAGGTGCGCGCCCAGCTCTGCAATCCCGGCCGGTCCGCTTCCCACGCAGTGCCTGCGTCCAAGAAATAGGAGCT
TGCTGGATGGAACCTGAATTTGGACATGGCCTATGTACCTAACGTGGCCTTCTTCCCGCACCACCCTTGCCTGCG
CTGGCCCAGTGGAAACCACCAGGATCTTGATGCAACTTGGCATTTGGTTACCCCTGCTGATAAGAGCAGCCGTTA
CCTGCCACTGGGACCAGCAGGTGAAGCGTTGCAACATAGCCCCCTCCATCATCCTTCACCTCCTATCCCCCACTC
CAAACCAGGACGACCTGCAAGGTCCCAGCCAGCAGGACACCGTGGGCACTCTGGCAAATGAAAAAATGGAACCTG
GTCTTGAGCTGAATCAATGTGTTATTGTTACCCCCACCCCCGGTTTACCTGATCAGTGTTAACCTTTACTGGGAC
ACTCATCTGTTACACTGGAACACCTTCTTCTTTTTGTCAATCGGCACAGACCACTGTAAGGAAATGCAGTGTGTT
GCAGTGGCCTTTTCTCCCCCTCACCTTCTAAGGTCAGCTCTAGCTGAGCATCAGTGCTCTCTTAAGGAGGAAAAA
AACGGTGCGGCTGGGAGCGGTGGCTCACGCCTGTAATCCTAGCACCTTGGGAGGCCGAGGCGGGCGGATCACTTG
AGGTCAGGAGTTCCAGACCAGCCTGGCCAACATGGTGAAACTCCGTCTCTACTAAAAATACAAAAATTAGCCGGG
TGTGGTGGGGTGCGCTTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATTGCTTGAACCCATGAGGTGGA
GGTTGCGGTGAGCCAAGATGGCACCATTGCACCCTAGCCTGGGCAACAGAGCAAGACACCGTCTTAAAACCAAAA
GTTAACCGGGCGTGGTGGTGGGTGCCTGTAATCCTAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAACTT
GGGAGGTGGAGGCCAAGATTGTACCACTGTATTCCAGCCCGGGTGACAGAGCAAGACTGTGTCTC

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FIGURE 3821

GTGCCCTGTGAGACCGCCAAGATGGTGGTGGGCGCGTTCCCTATGGCGAAGCTGCTATACTTGGGCATCCGGCAG
GTCAGCAAGCCGCTTGCCAACCGTATTAAGGAGGCCGCCCGCCGAAGCGAGTTCTTCAAGACCTATATCTGCCTC
CCGCCGGCTCAACTGTACCACTGGCTGGAGATGCGGACCAAAATGCGCATCATGGGTTTCAATGCCGCTGCCATC
AAGCCGCTGAACGAGGGTGCAGCCGCCGAGCTGGGCGCGGAGCTGCTGGGCGAGGGCATCATCTTCATCACCGCC
TGCAGCTGCCTGATGCTGGAGTATTGGCGCCACCAGTTGCAGCAGCGCCGCAAGGAAAAGGAGCGACGTGTTGCC
AGGGAGGCGCTGCGGGGCGAGGTGGGCCACTTGGGGCTGGCGCTCGAGGAGTTGCAGGCGCAGGTGCAGGCGACG
TCGACGCAGCTCGCCCTGGAGGAGCTGCGCGCTCAGCTGCAGGAGGTGCGAGCCCACCTCTGCCTCCGAGACCCG
CCGCCTGCACCCCCAGTTGCGCCGGCGTCCGAGAAATAGGAGGTCTCGGGGCCCTGGTCTTGGAGGTGACTGCTG
TCTGGACTGCGAAGTCTCTGTCTTGGCCTATTCTCCGCACTGTCCCATCCTGGACCGGCCCAGCTGACACCACCC
AGTCCTTCGGGGGCGCCGGAGAGATCCTGG

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FIGURE 3822

GCATCCCCTTTCTGCTGCAGGAACCTCTCATCAGACCGCCTGAGGGAAGCGGCGCCCGGAGACCCGCCCCGGCCC
GGTCCACATTCTCCCCAGGAAGCCGGACTCTATGGGGCGGGACCCTGGGGGAGCCTGAGCCGAGCCCGGAGCCAG
CCCCGAACCCCTGAACCTCCAGCCAGGGGCGCCCCGGGAGCAGCCAGCCCGTGGGCGAGCCGCCCGCCCGCCGAG
CAGCCATGAGCGAGACGGTCATCTGTTCCAGCCGGGCCACTGTGATGCTTTATGATGATGGCAACAAGCGATGGC
TCCCTGCTGGCACGGGTCCCCAGGCCTTCAGCCGCGTCCAGATCTACCACAACCCCACGGCCAATTCCTTTCGCG
TCGTGGGCCGGAAGATGCAGCCCGACCAGCAGGTGGTCATCAACTGTGCCATCGTCCGGGGTGTCAAGTATAACC
AGGCCACCCCCAACTTCCATCAGTGGCGCGACGCTCGCCAGGTCTGGGGCCTCAACTTCGGCAGCAAGGAGGATG
CGGCCCAGTTTGCCGCCGGCATGGCCAGTGCCCTAGAGGCGTTGGAAGGAGGTGGGCCCCCTCCACCCCCAGCAC
TTCCCACCTGGTCGGTCCCGAACGGCCCCTCCCCGGAGGAGGTGGAGCAGCAGAAAAGGCAGCAGCCCGGCCCGT
CGGAGCACATAGAGCGCCGGGTCTCCAATGCAGGAGGCCCACCTGCTCCCCCCGCTGGGGGTCCACCCCCACCAC
CAGGACCTCCCCCTCCTCCAGGTCCCCCCCCACCCCCAGGTTTGCCCCCTTCGGGGGTCCCAGCTGCAGCGCACG
GAGCAGGGGGAGGACCACCCCCTGCACCCCCTCTCCCGGCAGCACAGGGCCCTGGTGGTGGGGGAGCTGGGGCCC
CAGGCCTGGCCGCAGCTATTGCTGGAGCCAAACTCAGGAAAGTCAGCAAGCAGGAGGAGGCCTCAGGGGGGCCCA
CAGCCCCCAAAGCTGAGAGTGGTCGAAGCGGAGGTGGGGGACTCATGGAAGAGATGAACGCCATGCTGGCCCGGA
GAAGGAAAGCCACGCAAGTTGGGGAGAAAACCCCCAAGGATGAATCTGCCAATCAGGAGGAGCCAGAGGCCAGAG
TCCCGGCCCAGAGTGAATCTGTGCGGAGACCCTGGGAGAAGAACAGCACAACCTTGCCAAGGATGAAGTCGTCTT
CTTCGGTGACCACTTCCGAGACCCAACCCTGCACGCCCAGCTCCAGTGATTACTCGGACCTACAGAGGGTGAAAC
AGGAGCTTCTGGAAGAGGTGAAGAAGGAATTGCAGAAAGTGAAAGAGGAAATCATTGAAGCCTTCGTCCAGGAGC
TGAGGAAGCGGGGTTCTCCCTGACCACAGGGACCCAGAAGACCCGCTTCTCCTTTCCGCACACCCGGCCTGTCAC
CCTGCTTTCCCTGCCTCTACTTGACTTGGAATTGGCTGAAGACTACACAGGAATGCATCGTTCCCACTCCCCATC
CCACTTGGAAAACTCCAAGGGGGTGTGGCTTCCCTGCTCACACCCACACTGGCTGCTGATTGGCTGGGGAGGCCC
CCGCCCTTTTCTCCCTTTGGTCCTTCCCCTCTGCCATCCCCTTGGGGCCGGTCCCTCTGCTGGGGATGCACCAAT
GAACCCCACAGGAAGGGGGAAGGAAGGAGGGAATTTCACATTCCCTTGTTCTAGATTCACTTTAACGCTTAATGC
CTTCAAAGTTTTGGTTTTTTTAAGAAAAAAAAATATATATATATTTGGGTTTTGGGGGAAAAGGGAAATTTTTTT
TTCTCTTTGGTTTTGATAAAATGGGATGTGGGAGTTTTTAAATGCTATAGCCCTGGGCTTGCCCCATTTGGGGCA
GCTATTTAAGGGGAGGGGATGTCTCACCGGGCTGGGGGTGAGATATCCCCCCACCCCAGGGACTCCCCTTCCCTC
TGGCTCCTTCCCCTTTTCTATGAGGAAATAAGATGCTGTAACTTTTTGGAACCTCAGTTTTTTGATTTTTTATTT
GGGTAGGTTTTGGGGTCCAGGCCATTTTTTTTACCCCTTGGAGGAAATAAGATGAGGGAGAAAGGAGAAGGGGAG
GAAACTTCTCCCCTCCCACCTTCACCTTTAGCTTCTTGAAAATGGGCCCCTGCAGAATAAATCTGCCAGTTTTTA
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FIGURE 3823

CGAGCCGAGCACCAGGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCTGGAGCAGCCCGGGAGGAGGAGGCGGC
GAGAATGGCAGCGGCGTCGTGGGCGCGGCGGAGATGAGCGCCCGCGACCCCGGGCCCAGGGCGGCACAGCCGGAG
TGGGCGGGGGTCCCGATGCAGGCCCGAGGGGGGCCATGGGGCAGGTCCTGCCGGTCTTCGCCCACTGCAAAGAAG
CTCCGTCTACAGCCTCCTCAACTCCTGATTCCACAGAAGGAGGGAACGACGACTCTGATTTTCGAGAGCTGCACA
CAGCCCGGGAATTCTCAGAGGAGGACGAGGAGGAGACCACGTCGCAGGACTGGGGCACCCCCCGGGAGCTGACCT
TCTCCTACATCGCCTTTGATGGTGTAGTGGGCTCCGGGGGGCCGCAGGGATTCAACTGCCCGCCGCCCCCGCCCCC
AGGGCCGCTCAGTCTCGGAACCACGAGACCAGCACCCTCAGCCCAGCCTGGGCGACAGCTTGGAGAGCATCCCCA
GCCTGAGCCAATCCCCGGAGCCTGGACGACGGGGTGATCCTGACACCGCGCCTCCATCCGAGCGCCCTCTGGAAG
ACCTGAGGCTTCGGTTGGACCATCTGGGCTGGGTGGCCCGGGGAACGGGATCCGGGGAGGACTCTTCCACCAGCA
GCTCCACCCCGCTGGAAGACGAAGAACCCCAAGAACCCAACAGATTGGAGACAGGAGAAGCTGGGGAAGAACTGG
ACCTACGACTCCGACTTGCTCAGCCCTCATCGCCCGAGGTCTTGACTCCCCAGCTCAGTCCGGGCTCTGGGACAC
CCCAGGCCGGTACTCCGTCCCCATCCCGATCGCGAGATTCGAACTCTGGGCCCGAAGAGCCATTGCTGGAAGAGG
AAGAAAAGCAGTGGGGGCCACTGGAGCGAGAGCCAGTAAGGGGACAGTGCCTCGATAGCACGGACCAATTAGAAT
TCACGGTGGAGCCACGCCTTCTAGGAACAGCTATGGAATGGTTAAAGACATCATTGCTTTTGGCTGTTTACAAGA
CGGTTCCAATTTTGGAATTGTCCCCACCTCTGTGGACAGCCATTGGCTGGGTCCAAAGGGGCCCCACCCCCCCTA
CTCCTGTCCTCCGGGTTCTACTGAAGTGGGCAAAATCCCCGAGAAGCAGCGGTGTCCCCAGCCTCTCACTCGGAG
CCGATATGGGGAGTAAAGTGGCGGACCTGCTGTACTGGAAGGACACGAGGACGTCAGGAGTGGTCTTCACAGGCC
TGATGGTCTCCCTCCTCTGCCTCCTGCACTTTAGCATCGTGTCCGTGGCCGCGCACTTGGCTCTGTTGCTGCTCT
GCGGCACCATCTCTCTCAGGGTTTACCGCAAAGTGCTGCAGGCCGTGCACCGGGGGGATGGAGCCAACCCTTTCC
AGGCCTACCTGGATGTGGACCTCACCCTGACTCGGGAGCAGACGGAACGTTTGTCCCACCAGATCACCTCCCGCG
TGGTCTCGGCGGCCACGCAGCTGCGGCACTTCTTCCTGGTAGAAGACCTCGTGGATTCCCTCAAGCTGGCCCTCC
TCTTCTACATCTTGACCTTCGTGGGTGCCATCTTCAATGGTTTGACTCTTCTCATTCTGGGAGTGATTGGTCTAT
TCACCATCCCCCTGCTGTACCGGCAGCACCAGGCTCAGATCGACCAATATGTGGGGTTGGTGACCAATCAGTTGA
GCCACATCAAAGCTAAGATCCGAGCTAAAATCCCAGGGACCGGAGCCCTGGCCTCTGCAGCAGCCGCAGTCTCCG
GATCCAAAGCCAAAGCCGAATGAGAACGGTGTCTCTGCCCGCAGGACGCCTGCCCCCAGCCCCCGCAGCCCTCTG
GCCCCCTCCATCTCTTGTCCGTTCCCACCCACCCCCCTCCTCGGCCCGAGCCTTTTCCCGGTGGGTGTCAGGATC
ACTCCCACTAGGGACTCTGCGCTAATTACCTGAGCGACCAGGACTACATTTCCCAAGAGGCTCTGCTCCAGGAGT
CCAGGAAAGACGAGGCACCTTGGCCGCGGGGCCTGCTGGGACTTGTAGTTGCCTAGACAGGGCACCACCCTGCAC
TTCCGGACCCGCCGCTGGAGGCGCCGTGAGGCGTTGGTGTCTCCTGGATGCTACTAGCCCCAACGCCGGGGCTTT
GCATGGGGCCCAGGGGAGGCCTGAGCTTGGATTTACACTGTAATAAAGACTCCTGTTGGAAAACCCGAGGCCTCT
TGTGCTTCCAGAACCCTCCAGTTGTTCACCTTTCTGCACTGAAAGGCACTTAAGTGACACTCCAGGAGAACCTTC
CCCATCTCTGGAGAAGGAGCTCCCTCTGCCATCTGTGTAGGTTATGAAATGATTGAGGGGAGGCCGGGCGCAGTG
GCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGAGGGCGGATCACTTGAGACCAGAAGTTCAAGACCAGC
CTGGCCAACATGGTGAAACCTCATCTCTACTAAAAATACAAAATTTAGCCGGGTGTGGTGGTGCATGCCTGTAAT
CACAGCTACTCGGGAGGCTGAGGCATGAGAGTCGCTTGAATCTGGGAGATGGAGGTTGTAGTGAGCCAAGATTGC
GCCACTGCACTCCAGCCTCGGCGACAGAGCGAGATTCTGTCTCAAAAAAAAAAAAAAAGAAAGAAATGATTGAGGG
GAAGATGCTGACAGACCACCCATTCCAGGGTTAGCCAAGCCTTGGCAGCCACTTCCCATGCCTGTGCTCAAGGCA
GACATCACTAATGGATCCCACACCCTGCCTACTGTGCAGCCACCTCAACTGAGCCCAAACCCACGTGTCCAACGG
CCTCTGGATGCCCCTTCCACCCTAAATCTAACCAA

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FIGURE 3824A

CATTCATAAGACTCAGAGCTACGGCCACGGCAGGGACACGCGGAACCAAGACTTGGAAACTTGATTGTTGTGGTT
CTTCTTGGGGGTTATGAAATTTCATTAATCTTTTTTTTTCCGGGGAGAAAGTTTTTGGAAAGATTCTTCCAGATA
TTTCTTCATTTTCTTTTGGAGGACCGACTTACTTTTTTTGGTCTTCTTTATTACTCCCCTCCCCCCGTGGGACCC
GCCGGACGCGTGGAGGAGACCGTAGCTGAAGCTGATTCTGTACAGCGGGACAGCGCTTTCTGCCCCTGGGGGAGC
AACCCCTCCCTCGCCCCTGGGTCCTACGGAGCCTGCACTTTCAAGAGGTACAGCGGCATCCTGTGGGGGCCTGGG
CACCGCAGGAAGACTGCACAGAAACTTTGCCATTGTTGGAACGGGACGTTGCTCCTTCCCCGAGCTTCCCCGGAC
AGCGTACTTTGAGGACTCGCTCAGCTCACCGGGGACTCCCACGGCTCACCCCGGACTTGCACCTTACTTCCCCAA
CCCGGCCATAGCCTTGGCTTCCCGGCGACCTCAGCGTGGTCACAGGGGCCCCCCTGTGCCCAGGGAAATGTTTCA
GGCTTTCCCCGGAGACTACGACTCCGGCTCCCGGTGCAGCTCCTCACCCTCTGCCGAGTCTCAATATCTGTCTTC
GGTGGACTCCTTCGGCAGTCCACCCACCGCCGCCGCCTCCCAGGAGTGCGCCGGTCTCGGGGAAATGCCCGGTTC
CTTCGTGCCCACGGTCACCGCGATCACAACCAGCCAGGACCTCCAGTGGCTTGTGCAACCCACCCTCATCTCTTC
CATGGCCCAGTCCCAGGGGCAGCCACTGGCCTCCCAGCCCCCGGTCGTCGACCCCTACGACATGCCGGGAACCAG
CTACTCCACACCAGGCATGAGTGGCTACAGCAGTGGCGGAGCGAGTGGCAGTGGTGGGCCTTCCACCAGCGGAAC
TACCAGTGGGCCTGGGCCTGCCCGCCCAGCCCGAGCCCGGCCTAGGAGACCCCGAGAGGAGACGCTCACCCCAGA
GGAAGAGGAGAAGCGAAGGGTGCGCCGGGAACGAAATAAACTAGCAGCAGCTAAATGCAGGAACCGGCGGAGGGA
GCTGACCGACCGACTCCAGGCGGAGACAGATCAGTTGGAGGAAGAAAAAGCAGAGCTGGAGTCGGAGATCGCCGA
GCTCCAAAAGGAGAAGGAACGTCTGGAGTTTGTGCTGGTGGCCCACAAACCGGGCTGCAAGATCCCCTACGAAGA
GGGGCCCGGGCCGGGCCCGCTGGCGGAGGTGAGAGATTTGCCGGGCTCAGCACCGGCTAAGGAAGATGGCTTCAG
CTGGCTGCTGCCGCCCCCGCCACCACCGCCCCTGCCCTTCCAGACCAGCCAAGACGCACCCCCCAACCTGACGGC
TTCTCTCTTTACACACAGTGAAGTTCAAGTCCTCGGCGACCCCTTCCCCGTTGTTAACCCTTCGTACACTTCTTC
GTTTGTCCTCACCTGCCCGGAGGTCTCCGCGTTCGCCGGCGCCCAACGCACCAGCGGCAGTGACCAGCCTTCCGA
TCCCCTGAACTCGCCCTCCCTCCTCGCTCTGTGAACTCTTTAGACACACAAAACAAACAAACACATGGGGGAGAG
AGACTTGGAAGAGGAGGAGGAGGAGGAGAAGGAGGAGAGAGAGGGGAAGAGACAAAGTGGGTGTGTGGCCTCCCT
GGCTCCTCCGTCTGACCCTCTGCGGCCACTGCGCCACTGCCATCGGACAGGAGGATTCCTTGTGTTTTGTCCTGC
CTCTTGTTTCTGTGCCCCGGCGAGGCCGGAGAGCTGGTGACTTTGGGGACAGGGGGTGGGAAGGGGATGGACACC
CCCAGCTGACTGTTGGCTCTCTGACGTCAACCCAAGCTCTGGGGATGGGTGGGGAGGGGGGCGGGTGACGCCCAC
CTTCGGGCAGTCCTGTGTGAGGATTAAGGGACGGGGGTGGGAGGTAGGCTGTGGGGTGGGCTGGAGTCCTCTCCA
GAGAGGCTCAACAAGGAAAAATGCCACTCCCTACCCAATGTCTCCCACACCCACCCTTTTTTTGGGGTGCCTAGG
TTGGTTTCCCCTGCACTCCCGACCTTAGCTTATTGATCCCACATTTCCATGGTGTGAGATCCTCTTTACTCTGGG
CAGAAGTGAGCCCCCCCCTTAAAGGGAATTCGATGCCCCCCTAGAATAATCTCATCCCCCCACCCGACTTCTTTT
GAAATGTGAACGTCCTTCCTTGACTGTCTAGCCACTCCCTCCCAGAAAAACTGGCTCTGATTGGAATTTCTGGCC
TCCTAAGGCTCCCCACCCCGAAATCAGCCCCCAGCCTTGTTTCTGATGACAGTGTTATCCCAAGACCCTGCCCCC
TGCCAGCCGACCCTCCTGGCCTTCCTCGTTGGGCCGCTCTGATTTCAGGCAGCAGGGGCTGCTGTGATGCCGTCC
TGCTGGAGTGATTTATACTGTGAAATGAGTTGGCCAGATTGTGGGGTGCAGCTGGGTGGGGCAGCACACCTCTGG
GGGGATAATGTCCCCACTCCCGAAAGCCTTTCCTCGGTCTCCCTTCCGTCCATCCCCCTTCTTCCTCCCCTCAAC
AGTGAGTTAGACTCAAGGGGGTGACAGAACCGAGAAGGGGGTGACAGTCCTCCATCCACGTGGCCTCTCTCTCTC
TCCTCAGGACCCTCAGCCCTGGCCTTTTTCTTTAAGGTCCCCCGACCAATCCCCAGCCTAGGACGCCAACTTCTC
CCACCCCTTGGCCCCTCACATCCTCTCCAGGAAGGGAGTGAGGGGCTGTGACATTTTTCCGGAGAAGATTTCAGA
GCTGAGGCTTTGGTACCCCCAAACCCCCAATATTTTTGGACTGGCAGACTCAAGGGGCTGGAATCTCATGATTCC
ATGCCCGAGTCCGCCCATCCCTGACCATGGTTTTGGCTCTCCCACCCCGCCGTTCCCTGCGCTTCATCTCATGAG
GATTTCTTTATGAGGCAAATTTATATTTTTTAATATCGGGGGGTGGACCACGCCGCCCTCCATCCGTGCTGCATG
AAAAACATTCCACGTGCCCCTTGTCGCGCGTCTCCCATCCTGATCCCAGACCCATTCCTTAGCTATTTATCCCTT
TCCTGGTTTCCGAAAGGCAATTATATCTATTATGTATAAGTAAATATATTATATATGGATGTGTGTGTGTGCGTG
CGCGTGAGTGTGTGAGCGCTTCTGCAGCCTCGGCCTAGGTCACGTTGGCCCTCAAAGCGAGCCGTTGAATTGGAA
ACTGCTTCTAGAAACTCTGGCTCAGCCTGTCTCGGGCTGACCCTTTTCTGATCGTCTCGGCCCCTCTGATTGTTC
CCGATGGTCTCTCTCCCTCTGTCTTTTCTCCTCCGCCTGTGTCCATCTGACCGTTTTCACTTGTCTCCTTTCTGA
CTGTCCCTGCCAATGCTCCAGCTGTCGTCTGACTCTGGGTTCGTTGGGGACATGAGATTTTATTTTTTGTGAGTG
AGACTGAGGGATCGTAGATTTTTACAATCTGTATCTTTGACAATTCTGGGTGCGAGTGTGAGAGTGTGAGCAGGG

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FIGURE 3824B

CTTGCTCCTGCCAACCACAATTCAATGAATCCCCGACCCCCCTACCCCATGCTGTACTTGTGGTTCTCTTTTTGT
ATTTTGCATCTGACCCCGGGGGGGCTGGGACAGATTGGCAATGGGCCGTCCCCTCTCCCCTTGGTTCTGCACTGTT
GCCAATAAAAAGCTCTTAAAAACGC

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FIGURE 3825

AAGTGCTGCGAGCCCTGGGCCACGCTGGCCGTGCTGGCAGTGGGCCGCCTCGATCCCTCTGCAGTCTTTCCCTTG
AGGCTCCAAGACCAGCAGGTGAGGCCTCGCGGCGCTGAAACCGTGAGGCCCGGACCACAGGCTCCAGATGGACCC
TGGGAAGGACAAAGAGGGGGTGCCCCAGCCCTCAGGGCCGCCAGCAAGGAAGAAATTTGTGATACCCCTCGACGA
GGATGAGGTCCCTCCTGGAGTGGCCAAGCCCTTATTCCGATCTACACAGAGCCTTCCCACTGTGGACACCTCGGC
CCAGGCGGCCCCTCAGACCTACGCCGAATATGCCATCTCACAGCCTCTGGAAGGGGCTGGGGCCACGTGCCCCAC
AGGGTCAGAGCCCCTGGCAGGAGAGACGCCCAACCAGGCCCTGAAACCCGGGGCAAAATCCAACAGCATCATTGT
GAGCCCTCGGCAGAGGGGCAATCCCGTACTGAAGTTCGTGCGCAATGTGCCCTGGGAATTTGGCGACGTAATTCC
CGACTATGTGCTGGGCCAGAGCACCTGTGCCCTGTTCCTCAGCCTCCGCTACCACAACCTGCACCCAGACTACAT
CCATGGGCGGCTGCAGAGCCTGGGGAAGAACTTCGCCTTGCGGGTCCTGCTTGTCCAGGTGGATGTGAAAGATCC
CCAGCAGGCCCTCAAGGAGCTGGCTAAGATGTGTATCCTGGCCGACTGCACATTGATCCTCGCCTGGAGCCCCGA
GGAAGCTGGGCGGTACCTGGAGACCTACAAGGCCTATGAGCAGAAACCAGCGGACCTCCTGATGGAGAAGCTAGA
GCAGGACTTCGTCTCCCGGGTGACTGAATGTCTGACCACCGTGAAGTCAGTCAACAAAACGGACAGTCAGACCCT
CCTGACCACATTTGGATCTCTGGAACAGCTCATCGCCGCATCAAGAGAAGATCTGGCCTTATGCCCAGGCCTGGG
CCCTCAGAAAGCCCGGAGGCTGTTTGATGTCCTGCACGAGCCCTTCTTGAAAGTACCCTGATGACCCCAGCTGCC
AAGGAAACCCCCAGTGTAATAATAAATCGTCCTCCCAGGCCAGGCTC

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FIGURE 3826

AAGTTCTGAACTTGTGAGGCATCTGGGCCTCCCCAGAAGACATTTAACACAGAAAGCACAGCCCTACTAACTAGT
ATTCTTACCTGTCTCTTCAAGAATTTCAGACCAATCGACCGTCCTGTCTCTTTAAGGCTTAGGAAGAGCAGTGTG
GCTGCCCCTTTAAGGAGGCGTTGCAACAAACCATATTGGACAGACGATGGGGGCGACCCATCGGGACCCGACGGG
CCTCTGACTCCAGCAATACAGCGAATCAGCGGCTTTCGGGAATACATTTTTCGGAAAAAGACTTCTTCCTCGGTT
TTCTGCTCTGCACACGTTGAAATTTTCCCCAGTTTTTCCTGCAGATCGGGAGTCGAGCAATGCCTACCCCCGCGC
TCCCGCACCAGTTGGGCGCTCCCGGATGATGCCCTACCCCTTTGGATCCACGTGGTCTGCAACCTGGTGCGAGCA
GCCCGGGCTACAGGGTTGCCTGAGGTGTGGGTCCCAGGATGGAGGAGCCCCAGGCCGGCGATGCTGCTCGGTTCT
CTTGTCCCCCCAACTTTACCGCGAAGCCCCCAGCCTCAGAGTCCCCTCGTTTCTCCTTGGAGGCGCTGACGGGTC
CAGATACGGAGCTGTGGCTTATTCAGGCCCCTGCAGACTTTGCCCCAGAATGCTTCAATGGGCGGCATGTGCCTC
TCTCTGGCTCCCAGATCGTCAAGGGCAAATTGGCAGGCAAGCGGCACCGCTATCGAGTCCTCAGCAGCTGTCCCC
AAGCTGGAGAAGCGACCCTGCTGGCCCCCTCAACGGAGGCAGGAGGTGGACTCACCTGTGCCTCAGCCCCCCAGG
GCACCCTAAGGATCCTTGAGGGTCCCCAGCAATCCCTGTCAGGGAGCCCTCTGCAGCCCATCCCAGCAAGTCCCC
CACCACAGATCCCTCCTGGCCTGAGGCCTCGGTTCTGTGCCTTTGGGGGCAACCCACCAGTCACAGGGCCTAGGT
CAGCCTTGGCCCCCAACCTGCTCACCTCAGGGAAGAAGAAAAAGGAGATGCAGGTGACAGAGGCCCCAGTCACTC
AGGAGGCAGTGAATGGGCACGGGGCCCTGGAGGTGGACATGGCTTTGGGGTCGCCAGAAATGGATGTGCGGAAGA
AGAAGAAGAAAAAAAATCAGCAGCTGAAAGAACCAGAGGCAGCAGGGCCTGTGGGGACAGAGCCCACAGTGGAGA
CACTGGAGCCTCTGGGAGTGCTGTTCCCGTCCACCACCAAGAAGAGGAAGAAGCCCAAAGGGAAAGAAACCTTCG
AGCCAGAAGACAAGACAGTGAAGCAGGAACAGATTAACACTGAGCCTCTAGAAGACACAGTCCTGTCCCCGACCA
AAAAGAGAAAGAGGCAAAAGGGGACGGAAGGGATGGAGCCAGAGGAGGGGGTGACAGTTGAGTCTCAGCCACAGG
TGAAGGTGGAGCCACTGGAGGAAGCCATCCCTCTGCCCCCTACGAAGAAGAGGAAAAAAGAAAAGGGACAGATGG
CAATGATGGAGCCAGGGACGGAGGCGATGGAGCCAGTGGAGCCGGAGATGAAGCCTCTGGAGTCCCCAGGGGGGA
CCATGGCGCCTCAACAGCCAGAAGGAGCGAAGCCTCAGGCCCAGGCAGCTCTGGCAGCTCCCAAAAAGAAGACGA
AGAAAGAAAAACAGCAAGATGCCACAGTGGAGCCAGAGACAGAGGTGGTGGGGCCTGAGCTGCCGGATGACCTTG
AGCCTCAGGCAGCTCCCACATCCACCAAGAAGAAGAAGAAGAAGAAAGAGAGAGGTCACACAGTGACTGAGCCAA
TTCAGCCACTAGAGCCTGAACTGCCAGGGGAGGGACAGCCTGAAGCCAGGGCAACTCCGGGATCCACCAAGAAGA
GGAAGAAGCAGAGTCAGGAAAGCCGGATGCCAGAGACAGTGCCCCAAGAGGAGATGCCAGGGCCGCCACTGAATT
CAGAGTCTGGGGAGGAGGCTCCCACAGGCCGGGACAAGAAGCGGAAGCAGCAGCAGCAGCCTGTGTAGTCTG
CCCCCGGGAAACTGAGGAACTAAAGAAAGCTGAAGGTGCCCACCTGGGCCACCAGAAGGTGACACCCCCAGAATC
CCTCCCCAGAGACTGCACCAGCGCAGCCAGCAGGAGCCTGGCCTGGGAGGACGATTTATTATTACACTGGGGGTT
TCCTTGGCAGCTGGGGTCATCAGGGTACTTTCAAGAAGGGCTCGTGCAGGACATCAAACAGCCTCCGGGCCTGGA
TGGGAGGGAGAAAAAAATGAGGAACCAGTCATTAAAGGAGCTGTTTCCTGGGTAAATCTAGAGTGGGGTTTTGGT
TCTTTATTTTCCCCTATACCCTCAAGCATTTATCCATTGAGTTACAAACAATCCAGTTACAATCTTTTTAAGTTA
TTATTATTATTATTATTTTTTTTTTTTTGAGATGGAGTCTCGCTCTGTCGCCCAGGTTGGAGTGCAGTGGCGCA
ATCTCGGCTCACTGCAAGCTCCGCCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACT
ACAGGCCCCTGCCCAGCTAATTTTTTGTATTTTTTTTTAGTAGAGATGGGGTTTCACCACGTTAGCCAGGATGGT
CTCGATCTCCTGACCTCCTGATGCGCCTGCCTCAGCCTCCCAGTGCTGGGATTATAGGTGTGAGCCACTGCGCCT
GGCTAAGTTATTATTATTTTTTTGAGACAGTCTCCTGGTGTCACCCAGGCTGGAGTGCAGTGGTGTGATCTTGGC
TCACTGCAACCTCCGCCTCCTGGGTTCCAACGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGCCTAAAGGTGC
CCACCACTATACCCGGCTAATTTTTGTATTTTTAGTAGAGACAGGGGTTTCACCATATTGGCCAGGCTGGTCTCG
AACTCCTGACCTCGTGATCCACCTGCCTTGACCTCCCAAAGTGCTAGGATAACAGGTGTGAGCCACCGCACCCTG
CCAAGTTATTTTAAAATGTACCATTATTATTGACTATAGTCACCTGGTTGTGTTATCAAATAGTATGTCTTATTC
ATTCTTTCTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGGTACCCATTAACCTTCCCCATCTCCCTGCCAGC
CCCTAACTACCCTCCCCAGCCTCCAGGAACTATCCATCCACTCTTATCTCCATGAGTTCAATTGTTTTGATTTTT
AGATACACAAATAAATAAGAACATGCAATGTTTGTCTTTCTGTGCCTGGCTTATTTCACTT

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FIGURE 3827

GGCTGGAGTGCAGTGGTGCAGTGGTGCAATCTCGGCTCACTGCAACCTCCGCCTCCTGGGTTCAAGCGATTCCTG
TGCCTCAGCCTTCCGAGTAGCTGGGATTACAGGCATGTGCCACCACGCCCAGCTAATTTTTTTTTTTTTTTTTTT
TTTTTTGTATTTTTAGTAGAGACAGGGTTTTACCATGTTGGCCAGGCTGGTCTCAAACTCCTGATCTCAAGAGAT
CTGCCTGCCTCGGCCTCCCAAAGTTCTGGGATTACAGGTGTGAGCCACTCGACTCAGCCAATAATGCATATTTTT
ATTTCCACCTGCTTTACTGTCAGAATGAGTAAGACAGAGAAGAAATCATTAAACACCAGGATTCTACTTCCTGCT
GGAGTTTTCTGCCTGAGATGTTAGGAGAGGAAACTCTCAGGATCTCAGAAAATCACATCTATCACGGTTGGTAGA
AGTAGATTCTAGAGTCAGCCAGAACTGAGTTCAAGTCCCAACTGCATGGCTTTGGGCAACTGACTTGTCCTCTCT
GAGGCCCAGATTCCCTTTCGGTAATGTGGAGATGGCAGTGTATCTACCTCACAAAGCAGTGGTGAGATTACAATA
AGGTAGGCATGTAAAGCGCCAGGCACATACTAACTGCTCAATAAATGGGAGGCATCATAATTGTATATTATTCAC
AGCCCAAGGAAAGTGTAGCCCAGAGAGGGCAAGGAACTTCCCTGAGGTCACACAGAAAATCATGTGCTGGTTGTA
TGCCCTGGAAGTTGTGGAGAGGGAGTGTTGGGTGTCTCCTGGGGACCTGTCCTCTGATGGGCTCTTGTTCCGGCT
AGGACCCCCCAAACCCCCCACCGAGCTGGAGCCTGAGCCGGAGATAGAGGGGCTGCTGACACCAGTGCTGGAGGC
TGGCGATGTGGATGAAGGCCCTGTAGCAAGGCCTCTCAGCCCCACGAGGCTGCAGCCAGCACTGCCACCGGAGGC
ACAGTCGGTGCCCGAGCTGGAGGAGGTGGCACGGGTGTTGGCGGAAATTCCCCGGCCCCTCAAACGCAGGGGCTC
CATGGAGCAGGCCCCTGCTGTGGCCCTGCCCCCTACCCACAAGAAACAGTACCAGCAGATCATCAGCCGCCTCTT
CCATCGTCATGGGGGGCCAGGGCCCGGGGGGCCGGAGCCAGAGCTGTCCCCCATCACTGAGGGATCTGAGGCCAG
GGCAGGGCCCCCTGCTCCTGCCCCACCAGCTCCCATTCCACCCCCGGCCCCGTCCCAGAGCAGCCCACCAGAGCA
GCCGCAGAGCATGGAGATGCGCTCTGTGCTGCGGAAGGCGGGCTCCCCGCGCAAGGCCCGCCGCGCGCGCCTCAA
CCCTCTGGTGCTCCTCCTGGACGCGGCGCTGACCGGGGAGCTGGAGGTGGTGCAGCAGGCGGTGAAGGAGATGAA
CGACCCGAGCCAGCCCAACGAGGAGGGCATCACTGCCTTGCACAACGCCATCTGCGGCGCCAACTACTCTATCGT
GGATTTCCTCATCACCGCGGGTGCCAATGTCAACTCCCCCGACAGCCACGGCTGGACACCCTTGCACTGCGCGGC
GTCGTGCAACGACACAGTCATCTGCATGGCGCTGGTGCAGCACGGCGCTGCAATCTTCGCCACCACGCTCAGCGA
CGGCGCCACCGCCTTCGAGAAGTGCGACCCTTACCGCGAGGGTTATGCTGACTGCGCCACCTACCTGGCAGACGT
CGAGCAGAGTATGGGGCTGATGAACAGCGGGGCAGTGTACGCTCTCTGGGACTACAGCGCCGAGTTCGGGGACGA
GCTGTCCTTCCGCGAGGGCGAGTCGGTCACCGTGCTGCGGAGGGACGGGCCGGAGGAGACCGACTGGTGGTGGGC
CGCGCTGCACGGCCAGGAGGGCTACGTGCCGCGGAACTACTTCGGGCTGTTCCCCAGGGTGAAGCCTCAAAGGAG
TAAAGTCTAGCAGGATAGAAGGAGGTTTCTGAGGCTGACAGAAACAAGCATTCCTGCCTTCCCTCCAGACCTCTC
CCTCTGTTTTTTGCTGCCTTTATCTGCACCCCTCACCCTGCTGGTGGTGGTCCTTGCCACCGGTTCTCTGTTCTC
CTGGAAGTCCAGGGAAGAAGGAGGGCCCCAGCCTTAAATTTAGTAATCTGCCTTAGCCTTGGGAGGTCTGGGAAG
GGCTGGAAATCACTGGGGACAGGAAACCACTTCCTTTTGCCAAATCAGATCCCGTCCAAAGTGCCTCCCATGCCT
ACCACCATCATCACATCCCCCAGCAAGCCAGCCACCTGCCCAGCCGGGCCTGGGATGGGCCACCACACCACTGGA
TATTCCTGGGAGTCACTGCTGACACCATCTCTCCCAGCAGTCTTGGGGTCTGGGTGGGAAACATTGGTCTCTACC
AGGATCCCTGCCCCACCTCTCCCCAATTAAGTGCCTTCACACAGCACTGGTTTAATGTTTATAAACAAAATAGAG
AAACTTTCCTTATAAATAAAAGTAGTTTGCACAGAAA

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FIGURE 3828

GCTCAACGTGGACGGGCTCCTGGTCTACTTCCCGTACGACTACATCTACCCCGAGCAGTTCTCCTACATGCGGGA
GCTCAAACGCACGCTGGACGCCAAGGGTCATGGAGTCCTGGAGATGCCCTCAGGCACCGGGAAGACAGTATCCCT
GTTGGCCCTGATCATGGCATACCAGAGAGCATATCCGCTGGAGGTGACCAAACTCATCTACTGCTCAAGAACTGT
GCCAGAGATTGAGAAGGTGATTGAAGAGCTTCGAAAGTTGCTCAACTTCTATGAGAAGCAGGAGGGCGAGAAGCT
GCCGTTTCTGGGACTGGCTCTGAGCTCCCGCAAAAACTTGTGTATTCACCCTGAGGTGACACCCCTGCGCTTTGG
GAAGGACGTCGATGGGAAATGCCACAGCCTCACAGCCTCCTATGTGCGGGCGCAGTACCAGCATGACACCAGCCT
GCCCCACTGCCGATTCTATGAGGAATTTGATGCCCATGGGCGTGAGGTGCCCCTCCCCGCTGGCATCTACAACCT
GGATGACCTGAAGGCCCTGGGGCGGCGCCAGGGCTGGTGCCCATACTTCCTTGCTCGATACTCAATCCTGCATGC
CAATGTGGTGGTTTATAGCTACCACTACCTCCTGGACCCCAAGATTGCAGACCTGGTGTCCAAGGAACTGGCCCG
CAAGGCCGTCGTGGTCTTCGACGAGGCCCACAACATTGACAACGTCTGCATCGACTCCATGAGCGTCAACCTCAC
CCGCCGGACCCTTGACCGGTGCCAGGGCAACCTGGAGACCCTGCAGAAGACGGTGCTCAGGATCAAAGAGACAGA
CGAGCAGCGCCTGCGGGACGAGTACCGGCGTCTGGTGGAGGGGCTGCGGGAGGCCAGCGCCGCCCGGGAGACGGA
CGCCCACCTGGCCAACCCCGTGCTGCCCGACGAAGTGCTGCAGGAGGCAGTGCCTGGCTCCATCCGCACGGCCGA
GCATTTCCTGGGCTTCCTGAGGCGGCTGCTGGAGTACGTGAAGTGGCGGCTGCGTGTGCAGCATGTGGTGCAGGA
GAGCCCGCCCGCCTTCCTGAGCGGCCTGGCCCAGCGCGTGTGCATCCAGCGCAAGCCCCTCAGATTCTGTGCTGA
ACGCCTCCGGTCCCTGCTGCATACTCTGGAGATCACCGACCTTGCTGACTTCTCCCCGCTCACCCTCCTTGCTAA
CTTTGCCACCCTTGTCAGCACCTACGCCAAAGGCTTCACCATCATCATCGAGCCCTTTGACGACAGAACCCCGAC
CATTGCCAACCCCATCCTGCACTTCAGCTGCATGGACGCCTCGCTGGCCATCAAACCCGTATTTGAGCGTTTCCA
GTCTGTCATCATCACATCTGGGACACTGTCCCCGCTGGACATCTACCCCAAGATCCTGGACTTCCACCCCGTCAC
CATGGCAACCTTCACCATGACGCTGGCACGGGTCTGCCTCTGCCCTATGATCATCGGCCGTGGCAATGACCAGGT
GGCCATCAGCTCCAAATTTGAGACCCGGGAGGATATTGCTGTGATCCGGAACTATGGGAACCTCCTGCTGGAGAT
GTCCGCTGTGGTCCCTGATGGCATCGTGGCCTTCTTCACCAGCTACCAGTACATGGAGAGCACCGTGGCCTCCTG
GTATGAGCAGGGGATCCTTGAGAACATCCAGAGGAACAAGCTGCTCTTTATTGAGACCCAGGATGGTGCCGAAAC
CAGTGTCGCCCTGGAGAAGTACCAGGAGGCCTGCGAGAATGGCCGCGGGGCCATCCTGCTGTCAGTGGCCCGGGG
CAAAGTGTCCGAGGGAATCGACTTTGTGCACCACTACGGGCGGGCCGTCATCATGTTTGGCGTCCCCTACGTCTA
CACACAGAGCCGCATTCTCAAGGCGCGGCTGGAATACCTGCGGGACCAGTTCCAGATTCGTGAGAATGACTTTCT
TACCTTCGATGCCATGCGCCACGCGGCCCAGTGTGTGGGTCGGGCCATCAGGGGCAAGACGGACTACGGCCTCAT
GGTCTTTGCCGACAAGCGGTTTGCCCGTGGGGACAAGCGGGGGAAGCTGCCCCGCTGGATCCAGGAGCACCTCAC
AGATGCCAACCTCAACCTGACCGTGGACGAGGGTGTCCAGGTGGCCAAGTACTTCCTGCGGCAGATGGCACAGCC
CTTCCACCGGGAGGATCAGCTGGGCCTGTCCCTGCTCAGCCTGGAGCAGCTAGAATCAGAGGAGACGCTGAAGAG
GATAGAGCAGATTGCTCAGCAGCTCTGAGTGGGGCGGGTGGGGCCATAAACGGTTCCTGGTGA

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FIGURE 3829

TGTCACCTCCAGGATACAGACAGCCCCCCTTCAGCCCAGCCCAGCCAGGTCTCCTACACCGCCACCATGCCATTC
GGTAACACCCACAACAAGTTCAAGCTGAATTACAAGCCTGAGGAGGAGTACCCCGACCTCAGCAAACATAACAAC
CACATGGCCAAGGTACTGACCCTTGAACTCTACAAGAAGCTGCGGGACAAGGAGACTCCATCTGGCTTCACTGTA
GACGATGTCATCCAGACAGGAGTGGACAACCCAGGTCACCCCTTCATCATGACCGTGGGCTGCGTGGCTGGTGAT
GAGGAGTCCTACGAAGTTTTCAAGGAACTCTTTGACCCCATCATCTCGGATCGCCACGGGGGCTACAAACCCACT
GACAAGCACAAGACTGACCTCAACCATGAAAACCTCAAGGGTGGAGACGACCTGGACCCTAACTACGTGCTCAGC
AGCCGCGTCCGCACTGGCCGCAGCATCAAGGGCTACACGTTGCCCCCACACTGCTCCCGTGGCGAGCGCCGGGCG
GTGGAGAAGCTCTCTGTGGAAGCTCTCAACAGCCTGACGGGCGAGTTCAAAGGGAAGTACTACCCTCTGAAGAGC
ATGACGGAGAAGGAGCAGCAGCAGCTCATCGATGACCACTTCCTGTTCGACAAGCCCGTGTCCCCGCTGCTGCTG
GCCTCAGGCATGGCCCGCGACTGGCCCGACGCCCGTGGCATCTGGCACAATGACAACAAGAGCTTCCTGGTGTGG
GTGAACGAGGAGGATCACCTCCGGGTCATCTCCATGGAGAAGGGGGGCAACATGAAGGAGGTTTTCCGCCGCTTC
TGCGTAGGGCTGCAGAAGATTGAGGAGATCTTTAAGAAAGCTGGCCACCCCTTCATGTGGAACCAGCACCTGGGC
TACGTGCTCACCTGCCCATCCAACCTGGGCACTGGGCTGCGTGGAGGCGTGCATGTGAAGCTGGCGCACCTGAGC
AAGCACCCCAAGTTCGAGGAGATCCTCACCCGCCTGCGTCTGCAGAAGAGGGGTACAGGTGGCGTGGACACAGCT
GCCGTGGGCTCAGTATTTGACGTGTCCAACGCTGATCGGCTGGGCTCGTCCGAAGTAGAACAGGTGCAGCTGGTG
GTGGATGGTGTGAAGCTCATGGTGGAAATGGAGAAGAAGTTGGAGAAAGGCCAGTCCATTGACGACATGATCCCC
GCCCAGAAGTAGGCGCCTGCCCACCTGCCACCGACTGCTGGAACCCAGCCAGTGGGAGGGCCTGGCCCACCAGAG
TCCTGCTCCCTCACTCCTCGCCCCGCCCCCTGTCCCAGAGTCCCACCTGGGGGCTCTCTCCACCCTTCTCAGAGT
TCCAGTTTCAACCAGAGTTCCAACCAATGGGCTCCATCCTCTGGATTCTGGCCAATGAAATATCTCCCTGGCAGG
GTCCTCTTCTTTTCCCAGAGCTCCACCCCAACCAGGAGCTCTAGTTAATGGAGAGCTCCCAGCACACTCGGAGCT
TGTGCTTTGTCTCCACGCAAAGCGATAAATAAAAGCATTGGTGGCCTT

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FIGURE 3830A

CGCCTCCCTCCGCCGCCGCTTGGGCCGGCTCCGCGCCCCCTCCGCGGCCCCCGCCCGCCCGCCTGCCCGCCGCCC
CCATGGCGCCCGGGGTCCCCGCTGCACGGGGCCACTAGGACCCTCGGCGTCCCTTCCCCTCCCCCGCCCTGCCCC
CTCTCCCGCCGCGCGGACCCGGGCGTTCTCGGCGCCCAGCTTTTGAGCTCGCGTCCCCAGGCCGGCGGGGGGGGA
GGGGAAGAGAGGGGACCCTGGGACCCCCGCCCCCCCCACCCGGCCGCCCCTGCCCCCCGGGACCCGGAGAAG**ATG**

TCTTCGCGGACGGTGCTGGCCCCGGGCAACGATCGGAACTCGGACACGCATGGCACCTTGGGCAGTGGCCGCTCC
TCGGACAAAGGCCCGTCCTGGTCCAGCCGCTCACTGGGTGCCCGTTGCCGGAACTCCATCGCCTCCTGTCCCGAG
GAGCAGCCCCACGTGGGCAACTACCGCCTGCTGAGGACCATTGGGAAGGGCAACTTTGCCAAAGTCAAGCTGGCT
CGGCACATCCTCACTGGTCGGGAGGTTGCCATCAAGATTATCGACAAAACCCAGCTGAATCCCAGCAGCCTGCAG
AAGCTGTTCCGAGAAGTCCGCATCATGAAGGGCCTAAACCACCCCAACATCGTGAAGCTCTTTGAGGTGATTGAG
ACTGAGAAGACGCTGTACCTGGTGATGGAGTACGCAAGTGCTGGAGAAGTGTTTGACTACCTCGTGTCGCATGGC
CGCATGAAGGAGAAGGAAGCTCGAGCCAAGTTCCGACAGATTGTTTCGGCTGTGCACTATTGTCACCAGAAAAAT
ATTGTACACAGGGACCTGAAGGCTGAGAACCTCTTGCTGGATGCCGAGGCCAACATCAAGATTGCTGACTTTGGC
TTCAGCAACGAGTTCACGCTGGGATCGAAGCTGGACACGTTCTGCGGGAGCCCCCCATATGCCGCCCCGGAGCTG
TTTCAGGGCAAGAAGTACGACGGGCCGGAGGTGGACATCTGGAGCCTGGGAGTCATCCTGTACACCCTCGTCAGC
GGCTCCCTGCCCTTCGACGGGCACAACCTCAAGGAGCTGCGGGAGCGAGTACTCAGAGGGAAGTACCGGGTCCCT
TTCTACATGTCAACAGACTGTGAGAGCATCCTGCGGAGATTTTTGGTGCTGAACCCAGCTAAACGCTGTACTCTC
GAGCAAATCATGAAAGACAAATGGATCAACATCGGCTATGAGGGTGAGGAGTTGAAGCCATACACAGAGCCCGAG
GAGGACTTCGGGGACACCAAGAGAATTGAGGTGATGGTGGGTATGGGCTACACACGGGAAGAAATCAAAGAGTCC
TTGACCAGCCAGAAGTACAACGAAGTGACCGCCACCTACCTCCTGCTGGGCAGGAAGACTGAGGAGGGTGGGGAC
CGGGGCGCCCCAGGGCTGGCCCTGGCACGGGTGCGGGCGCCCAGCGACACCACCAACGGAACAAGTTCCAGCAAA
GGCACCAGCCACAGCAAAGGGCAGCGGAGTTCCTCTTCCACCTACCACCGCCAGCGCAGGCATAGCGATTTCTGT
GGCCCATCCCCTGCACCCCTGCACCCCAAACGCAGCCCGACGAGCACGGGGGAGGCGGAGCTGAAGGAGGAGCGG
CTGCCAGGCCGGAAGGCGAGCTGCAGCACCGCGGGGAGTGGGAGTCGAGGGCTGCCCCCCTCCAGCCCCATGGTC
AGCAGCGCCCACAACCCCAACAAGGCAGAGATCCCAGAGCGGCGGAAGGACAGCACGAGCACCCCCAACAACCTC
CCTCCTAGCATGATGACCCGCAGAAACACCTACGTTTGCACAGAACGCCCGGGGGCTGAGCGCCCGTCACTGTTG
CCAAATGGGAAAGAAAACAGCTCAGGCACCCCACGGGTGCCCCCTGCCTCCCCCTCCAGTCACAGCCTGGCACCC
CCATCAGGGGAGCGGAGCCGCCTGGCACGTGGTTCCACCATCCGCAGCACCTTCCATGGTGGCCAGGTCCGGGAC
CGGCGGGCAGGGGGTGGGGGTGGTGGGGGTGTGCAGAATGGGCCCCCTGCCTCTCCCACACTGGCCCATGAGGCT
GCACCCCTGCCCGCCGGGCGGCCCCGCCCCACCACCAACCTCTTCACCAAGCTGACCTCCAAACTGACCCGAAGG
GTTACCCTCGATCCCTCTAAACGGCAGAACTCTAACCGCTGTGTTTCGGGCGCCTCTCTGCCCCAGGGATCCAAG
ATCAGGTCGCAGACGAACCTGAGAGAATCGGGGGACCTGAGGTCACAAGTTGCCATCTACCTTGGGATCAAACGG
AAACCGCCCCCCGGCTGCTCCGATTCCCCTGGAGTG**TGA**AGCTGACCAGCTCGCGCCCTCCTGAGGCCCTGATGG
CAGCTCTGCGCCAGGCCACAGCAGCCGCCCGCTGCCGCTGCCGCCAGCCACAGCCGTTCCTGCTGGCCTGCCTGC
ACGGGGGTGCGGGCGGGCCCGAGCCCCTGTCCCACTTCGAAGTGGAGGTCTGCCAGCTGCCCCGGCCAGGCTTGC
GGGGAGTTCTCTTCCGCCGTGTGGCGGGCACCGCCCTGGCCTTCCGCACCCTCGTCACCCGCATCTCCAACGACC
TCGAGCTCTGAGCCACCACGGTCCCAGGGCCCTTACTCTTCCTCTCCCTTGTCGCCTTCACTTCTACAGGAGGGG
AAGGGGCCAGGGAGGGGATTCTCCCTTTATCATCACCTCAGTTTCCCTGAATTATATTTGGGGGCAAAGATTGTC
CCCTCTGCTGTTCTCTGGGGCCGCTCAGCACAGAAGAAGGATGAGGGGGCTCAGCGGGGGGAGCTGGCACCTTCC
TGGAGCCTCCAGCCAGTCCTGTCCTCCCTCGCCCTACCAAGAGGGCACCTGAGGAGACTTTGGGGACAGGGCAGG
GGCAGGGAGGGAAACTGAGGAAATCTTCCATTCCTCCCAACAGCTCAAAATTAGGCCTTGGGCAGGGGCAGGGAG
AGCTGCTGAGCCTAAAGACTGGAGAATCTGGGGGACTGGGAGTGGGGGTCAGAGAGGCAGATTCCTTCCCCTCCC
GTCCCCTCACGCTCAAACCCCCACTTCCTGCCCCAGGCTGGCGCGGGGCACTTTGTACAAATCCTTGTAAATACC
CCACACCCTCCCCCTCTGCAAAGGTCTCTTGAGGAGCTGCCGCTGTCACCTACGGTTTTTAAGTTATTACACCCCG
ACCCTCCTCCTGTCAGCCCCCTCACCTGCAGCCTGTTGCCCAATAAATTTAAGAGAGTCCCCCCCTCCCCAATGC
TGACCCTAGGATTTTCCTTCCCTGCCCTCACCTGCAAATGAGTTAAAGAAGAGGCGTGGGAATCCAGGCAGTGGT
TTTTCCTTTCGGAGCCTCGGTTTTCTCATCTGCAGAATGGGAGCGGTGGGGGTGGGAAGGTAAGGATGGTCGTGG
AAGAAGGCAGGATGGAACTCGGCCTCATCCCCGAGGCCCCAGTTCCTATATCGGGCCCCCCATTCATCCACTCAC
ACTCCCAGCCACCATGTTACACTGGACTCTAAGCCACTTCTTACTCCAGTAGTAAATTTATTCAATAAACAATCA

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FIGURE 3830B

TTGA

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FIGURE 3831

GGAGGGGGC**ATG**GCGGATACTGTGTTGTTTGAGTTTCTTCACACGGAGATGGTGGCTGAGCTGTGGGCTCACGAC
CCCGACCCCGGCCCGGGGGTGAGCGCCGGGCTCCGTGGGGAGGAAGCGGGGGCCACCAAGGGACAGAAGATGAGC
CTGTCGGTCCTGGAGGGTATGGGGTTCCGTGTGGGCCAGGCTCTAGGCGAGAGGCTGCCCCGGGAGACGCTGGCC
TTCAGGGAGGAGCTGGATGTCCTCAAGTTCTTGTGCAAAGACCTGTGGGTGGCGGTGTTCCAGAAGCAGATGGAC
AGCCTGCGCACCAATCACCAGGGGACCTACGTCCTGCAAGACAACAGCTTCCCCCTCCTCCTCCCGATGGCCTCT
GGCCTGCAGTATCTGGAGGAAGCACCCAAGTTCCTGGCCTTCACCTGCGGCCTCCTGCGCGGCGCCCTCTATACC
CTGGGCATTGAGAGCGTGGTCACCGCCTCCGTGGCAGCCCTGCCCGTCTGTAAGTTCCAGGTGGTGATTCCGAAA
TCC**TAA**GCCTGCCTCGCACCTGCTGAGCCGCACTGCTGCCCCTGGCCTCACCGGCCTCAGGAGACGGTGGGGCCG
CTGCATTTCGGGGTGGTCTTGGGAATCCCAGGCCCTAGGGGTCACATTTGCTCAGGAAGTGGGTATCAAATTGAG
GTGGGGGTGTCAGAGGAGGCAAAGGGGTCCCAGCTGCGGTCAGGACTGTGGTGGGATTCCCGCCTCGGCAGCGTC
ACTGCCCAGTAGCTGCTCAATAAAGGCTGTGTGTGTGGAATCTG

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FIGURE 3832

CGCCGTCAGGGCCCCAGCAGGGCGGCTCGGTCCCCTCCCATGAGCCCCGCCCTGGTAGGCGGAGCCACGGGCCCG
GCCAGCACGTGTAAGAGTTCGCGGCGGGTCGCCGCAGTCACTCACCTGAGCGCGCACGGTCCGCGCGTCCTCCGC
TCGTGCGTCCTCCGCCCGCCCGCCTGCCTGCCTGCCCGCCCGCTCGCTCGCCCGGCCCGCGACTCATGTCCCGCC
GCAAGGCCGGCAGCGCGCCCCGCCGAGTAGAGCCCGCGCCCGCCGCCAACCCAGACGACGAGATGGAAATGCAGG
ACCTCGTCATCGAACTCAAGCCCGAGCCAGACGCGCAGCCCCAACAGGCCCCAAGGCTGGGGCCCTTCTCCCCGA
AGGAGGTGTCCTCGGCGGGGCGGTTCGGCGGCGAACCCCACCACTCCCCTGGCCCCATGCCCGCCGGGGCCGCCC
TCCTCGCCCTCGGCCCGCGGAACCCGTGGACCCTGTGGACGCCGTTGACCCCGAACTATCCCGACCGCCAGCCCT
GGACCGACAAACACCCAGATCTGTTGACCTGCGGCCGCTGCCTGCAGACCTTCCCGTTGGAGGCCATCACTGCCT
TCATGGACCACAAGAAGCTGGGCTGTCAGCTCTTCAGAGGCCCCAGCCGCGGCCAGGGCTCAGAACGAGAGGAGC
TGAAGGCCTTGAGCTGCCTGCGCTGTGGCAAACAGTTCACAGTGGCCTGGAAGCTGCTGCGTCACGCCCAGTGGG
ACCACGGACTGTCCATCTACCAGACAGAATCAGAGGCCCCGGAGGCCCCGCTCCTGGGCCTGGCCGAGGTGGCTG
CAGCCGTGTCGGCAGTGGTGGGGCCAGCAGCTGAGGCCAAGAGCCCCCGTGCAAGTGGCAGCGGCCTCACCCGGC
GGAGCCCCACCTGTCCTGTGTGCAAGAAGACCCTCAGCTCCTTCAGCAACCTCAAAGTGCACATGCGCTCACACA
CAGGCGAGCGGCCCTATGCTTGCGACCAGTGTCCCTACGCCTGCGCCCAGAGCAGCAAGCTCAACCGCCACAAGA
AGACCCACCGGCAGGTGCCGCCCCAGAGCCCCCTCATGGCCGACACCAGCCAGGAGCAGGCCTCTGCAGCCCCTC
CGGAGCCGGCTGTCCATGCTGCTGCCCCCACCAGCACCCTTCCATGCAGCGGTGGTGAGGGGGCTGGAGCCGCCG
CCACAGCAGGTGTCCAGGAACCCGGGGCTCCTGGCAGTGGGGCTCAAGCCGGCCCTGGTGGAGACACTTGGGGAG
CCATCACCACGGAACAAAGAACTGACCCTGCAAACAGCCAGAAGGCATCACCCAAAAAGATGCCCAAGTCAGGGG
GCAAGAGCCGCGGGCCCGGGGGCAGCTGTGAGTTCTGCGGGAAGCATTTTACCAACAGCAGCAACCTGACGGTGC
ACCGGCGCTCACACACCGGGGAGCGCCCCTACACCTGTGAGTTCTGCAACTACGCCTGCGCCCAGAGCAGTAAGC
TCAACCGCCACCGCCGCATGCACGGCATGACGCCTGGCAGCACCCGCTTCGAGTGCCCCCACTGCCATGTGCCCT
TCGGCCTGCGAGCCACCCTGGACAAACACCTGCGGCAGAAGCACCCTGAGGCGGCCGGCGAGGCCTGAGCCCAGG
AAAGCCCCCCTCACTGTCCCTGGTACCGCTGCCAACACCCATTGACCTCCTCGTTTTTGCCCGCCTTCTCCAAGT
AAATTTTCCCTTTTATTT

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FIGURE 3833

GCGGCCTTTCATTTCCGCTTCCGGTGCGGGCCGCGCGCGAGCGCAGCGGTGGGAGGCGGCGACCAGCCGGTTGAG
GCCCCAGGCTTGGCCTCACCACAATGTGGCACGAGGCTCGGAAGCATGAGCGGAAGCTTCGAGGCATGATGGTCG
ACTACAAGAAGAGGGCGGAGCGGAGACGGGAGTATTATGAAAAGATCAAGAAGGACCCAGCCCAGTTCCTGCAGG
TACATGGCCGAGCTTGCAAGGTGCACCTGGATTCTGCAGTCGCCCTGGCCGCTGAGAGCCCTGTTAATATGATGC
CCTGGCAGGGGGACACCAACAACATGATTGACCGATTCGATGTCCGTGCCCACCTGGACCACATCCCCGACTACA
CCCCCCCTCTGCTCACCACCATCTCCCCAGAACAGGAGTCGGACGAACGGAAGTGTAACTACGAGCGCTACAGAG
GCCTGGTGCAGAACGACTTTGCCGGCATCTCAGAGGAGCAGTGCCTGTACCAGATCTACATTGATGAGTTGTACG
GAGGCCTCCAGAGACCCAGCGAAGATGAGAAGAAGAAGCTGGCAGAGAAGAAGGCTTCCATCGGTTATACCTACG
AGGACAGCACGGTGGCCAAGGTAGAGAAGGCGGCAGAAAAGCCAGAGGAGGAGGAGTCAGCGGCCGAGGAGGAGA
GCAACTCGGACGAAGATGAGGTCATCCCCGACATCGACGTGGAGGTGGACGTGGATGAATTGAACCAGGAGCAGG
TGGCAGATCTCAACAAACAGGCCACGACTTATGGCATGGCCGACGGTGACTTCGTCAGGATGCTCCGGAAAGACA
AGGAGGAGGCAGAGGCCATCAAGCATGCCAAGGCTCTTGAGGAGGAGAAGGCCATGTACTCGGGACGCCGCTCTC
GACGCCAGCGGAGAGAGTTTCGGGAGAAGCGGCTGAGGGGTCGCAAGATCAGCCCACCCAGCTATGCCCGCCGAG
ACAGCCCCACCTATGACCCCTATAAGCGGTCACCCTCGGAGTCCAGCTCAGAGTCCCGCTCCCGCTCCCGCTCCC
CGACCCCGGGCCGCGAGGAGAAGATCACGTTCATCACCAGTTTTGGGGGCAGCGATGAGGAGGCAGCCGCAGCCG
CTGCTGCCGCAGCAGCATCAGGAGTCACCACAGGGAAGCCCCCCGCACCTCCCCAGCCTGGCGGCCCCGCCCCGG
GACGTAATGCCAGCGCCCGCCGCCGCTCCTCCTCCTCCTCCTCCTCCTCTTCTGCCTCGAGGACCTCCAGCTCCC
GCTCCAGCTCTCGCTCCAGCTCCCGCTCTCGCCGTGGTGGGGGCTACTACCGTTCCGGCCGCCACGCCCGCTCCC
GGTCCCGCTCCTGGTCCCGCTCCCGCTCCCGCTCCCGGCGCTATTCCCGGTCCCGTAGCCGTGGCCGGCGGCACT
CAGGTGGGGGCTCCCGAGACGGACACCGGTACTCCCGCTCGCCCGCCCGGCGTGGTGGTTACGGGCCCCGGCGCA
GAAGCAGGAGCCGCTCCCACTCAGGGGACCGCTACAGGCGGGGCGGCCGGGGCCTCAGGCACCACAGCAGTAGCC
GCAGCCGCAGCAGCTGGTCCCTCAGCCCGTCCCGCAGTCGCAGCCTGACTCGCAGCCGCAGCCATAGCCCCAGCC
CCAGCCAGAGCCGCAGCCGCAGCCGCAGCCGCAGCCAGAGCCCCTCGCCATCACCCGCAAGAGAGAAGCTGACCA
GGCCGGCCGCGTCCCCTGCTGTGGGCGAGAAGCTGAAAAAGACCGAACCTGCCGCTGGTAAAGAGACAGGAGCTG
CCAAACCCAAGCTGACGCCTCAGGAGAAGCTGAAACTGAGGATGCAGAAGGCGCTGAACAGGCAGTTCAAGGCGG
ATAAGAAGGCGGCACAAGAAAAGATGATCCAGCAGGAGCATGAGCGGCAGGAGCGGGAAGACGAGCTTCGAGCCA
TGGCCCGCAAGATCCGCATGAAGGAGCGGGAACGCCGAGAGAAGGAGAGAGAAGAGTGGGAACGCCAGTACAGCC
GGCAGAGCCGCTCACCCTCCCCCCGATACAGTCGAGAATACAGCTCTTCTCGAAGGCGCTCAAGGTCCCGATCCC
GAAGCCCCCATTACCGACATTAGGCAGAAGAGTGGGGGGTGGGGAGGACAAGGGGGTGGGTAAGGGGCTCAAGCT
GTGATGCTGCTGGTTTTATCTCTAGTGAAATAAAGTCAAAAGTTATTTAATTCCCGTCA

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FIGURE 3834

CCCGCCCGGCCCGGCCCCGCGCCCCGCGCAGCCCCGGGCGCCGCGCGTCCTGCCCGGCCTGCGGCCCCAGCCCTT
GCGCCGCTCGTCCGACCCGCGATCGTCCACCAGACCGTGCCTCCCGGCCGCCCGGCCGGCCCGCGTGCATGCTTC
GGTCTGGGCCAGCCTCTGGGCCGTCCGTCCCCACTGGCCGGGCCATGCCGAGTCGCCGCGTCGCCAGACCGCCGG
CTGCGCCGGAGCTGGGGGCCTTAGGGTCCCCCGACCTCTCCTCACTCTCGCTCGCCGTTTCCAGGAGCACAGGTG
AAGAGATCATCGACGAGTACATCAAGGAGAACGGCTTCGGCCTGGACGGGGGACAGCCGGGCCCGGGCGAGGGGC
TGCCACGCCTGGTGTCTCGCGGGGCTGCGTCCCTGAGCACGGTCACCCTGGGCCCTGTGGCGCCCCCAGCCACGC
CGCCGCCTTGGGGCTGCCCCCTGGGCCGACTAGTGTCCCCAGCGCCGGGCCCGGGCCCGCAGCCGCACCTGGTCA
TCACGGAGCAGCCCAAGCAGCGCGGCATGCGCTTCCGCTACGAGTGCGAGGGCCGCTCGGCCGGCAGCATCCTTG
GGGAGAGCAGCACCGAGGCCAGCAAGACGCTGCCCGCCATCGAGCTCCGGGATTGTGGAGGGCTGCGGGAGGTGG
AGGTGACTGCCTGCCTGGTGTGGAAGGACTGGCCTCACCGAGTCCACCCCCACAGCCTCGTGGGGAAAGACTGCA
CCGACGGCATCTGCAGGGTGCGGCTCCGGCCTCACGTCAGCCCCCGGCACAGTTTTAACAACCTGGGCATCCAGT
GTGTGAGGAAGAAGGAGATTGAGGCTGCCATTGAGCGGAAGATTCAACTGGGCATTGACCCCTACAACGCTGGGT
CCCTGAAGAACCATCAGGAAGTAGACATGAATGTGGTGAGGATCTGCTTCCAGGCCTCATATCGGGACCAGCAGG
GACAGATGCGCCGGATGGATCCTGTGCTTTCCGAGCCCGTCTATGACAAGAAATCCACAAACACATCAGAGCTGC
GGATTTGCCGAATTAACAAGGAAAGCGGGCCGTGCACCGGTGGCGAGGAGCTCTACTTGCTCTGCGACAAGGTGC
AGAAAGAGGACATATCAGTGGTGTTCAGCAGGGCCTCCTGGGAAGGTCGGGCTGACTTCTCCCAGGCCGACGTGC
ACCGCCAGATTGCCATTGTGTTCAAGACGCCGCCCTACGAGGACCTGGAGATTGTCGAGCCCGTGACAGTCAACG
TCTTCCTGCAGCGGCTCACCGATGGGGTCTGCAGCGAGCCATTGCCTTTCACGTACCTGCCTCGCGACCATGACA
GCTACGGCGTGGACAAGAAGCGGAAACGGGGGATGCCCGACGTCCTTGGGGAGCTGAACAGCTCTGACCCCCATG
GCATCGAGAGCAAACGGCGGAAGAAAAAGCCGGCCATCCTGGACCACTTCCTGCCCAACCACGGCTCAGGCCCGT
TCCTCCCGCCGTCAGCCCTGCTGCCAGACCCTGACTTCTTCTCTGGCACCGTGTCCCTGCCCGGCCTGGAGCCCC
CTGGCGGGCCTGACCTCCTGGACGATGGCTTTGCCTACGACCCTACGGCCCCCACACTCTTCACCATGCTGGACC
TGCTGCCCCCGGCACCGCCACACGCTAGCGCTGTTGTGTGCAGCGGAGGTGCCGGGGCCGTGGTTGGGGAGACCC
CCGGCCCTGAACCACTGACACTGGACTCGTACCAGGCCCCGGGCCCCGGGGATGGAGGCACCGCCAGCCTTGTGG
GCAGCAACATGTTCCCCAATCATTACCGCGAGGCGGCCTTTGGGGGCGGCCTCCTATCCCCGGGGCCTGAAGCCA
CGTAGCCCCGCGATGCCAGAGGAGGGGCACTGGGTGGGGAGGGAGGTGGAGGAGCCGTGCAATCCCAACCAGGAT
GTCTAGCACCCCCATCCCCTTGGCCCTTCCTCATGCTTCTGAAGTGGACATATTCAGCCTTGGCGAGAAGCTCCG
TTGCACGGGTTTCCCCTTGAGCCCATTTTACAGATGAGGAAACTGAGTCCGGAGAGGAAAAGGGACATGGCTCCC
GTGCACTAGCTTGTTACAGCTGCCTCTGTCCCCACATGTGGGGGCACCTTCTCCAGTAGGATTCGGAAAAGATTG
TACATATGGGAGGAGGGGGCAGATTCCTGGCCCTCCCTCCCCAGACTTGAAGGTGGGGGGTAGGTTGGTTGTTCA
GAGTCTTCCCAATAAAGATGAGTTTTTGAGCCTC

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FIGURE 3835

ACCCGGAGCGGGAAGATGGCGGCGGCGCAGGAGGCGGACGGGGCCCGCAGCGCCGTGGTGGCGGCCGGGGGAGGC
AGCTCCGGTCAGGTGACCAGCAATGGCAGCATCGGGAGGGACCCGCCAGCGGAGACCCAGCCTCAGAACCCACCG
GCCCAGCCGGCACCCAATGCCTGGCAGGTCATCAAAGGTGTGCTGTTTAGGATCTTCATCATCTGGGCCATCAGC
AGTTGGTTCCGCCGAGGGCCGGCCCCTCAGGACCAGGCGGGCCCCGGAGGAGCTCCACGCGTCGCCAGCCGCAAC
CTGTTCCCCAAAGACACTTTAATGAACCTGCATGTGTACATCTCAGAGCACGAGCACTTTACAGACTTCAACGCC
ACGTCGGCACTCTTCTGGGAACAGCACGATCTTGTGTATGGCGACTGGACTAGCGGCGAGAACTCAGACGGCTGC
TACGAGCACTTTGCTGAGCTCGATATCCCACAGAGCGTCCAGCAGAACGGCTCCATCTACATCCACGTTTACTTC
ACCAAGAGTGGCTTCCACCCAGACCCCCGGCAGAAGGCCCTGTACCGCCGGCTTGCCACAGTCCACATGTCCCGG
ATGATCAACAAATACAAGCGCAGACGATTTCAGAAAACCAAGAACCTGCTGACAGGAGAGACAGAAGCGGACCCA
GAAATGATCAAGAGGGCTGAGGACTATGGGCCTGTGGAGGTGATCTCCCATTGGCACCCCAACATCACCATCAAC
ATCGTGGACGACCACACGCCGTGGGTGAAGGGCAGTGTGCCCCCTCCCCTGGATCAATATGTGAAGTTCGACGCC
GTGAGCGGTGACTACTATCCCATCATCTACTTCAATGACTACTGGAACCTGCAGAAGGACTACTACCCCATCAAC
GAGAGCCTGGCCAGCCTGCCGCTCCGCGTCTCCTTCTGCCCACTCTCGCTTTGGCGCTGGCAGCTCTATGCTGCC
CAGAGCACCAAGTCGCCCTGGAACTTCCTGGGTGATGAGTTGTACGAGCAGTCAGATGAGGAGCAGGACTCGGTG
AAGGTGGCCCTGCTGGAGACCAACCCCTACCTGCTGGCGCTCACCATCATCGTGTCTATCGTTCACAGTGTCTTC
GAGTTCCTGGCCTTCAAGAATGATATCCAGTTCTGGAACAGCCGGCAGTCCCTGGAGGGCCTGTCCGTGCGCTCC
GTCTTCTTCGGCGTTTTCCAGTCATTCGTGGTCCTCCTCTACATCCTGGACAACGAGACCAACTTCGTGGTCCAG
GTCAGCGTCTTCATTGGGGTCCTCATCGACCTCTGGAAGATCACCAAGGTCATGGACGTCCGGCTGGACCGAGAG
CACAGGGTGGCAGGAATCTTCCCCCGCCTATCCTTCAAGGACAAGTCCACGTATATCGAGTCCTCGACCAAAGTG
TATGATGATATGGCATTCCGGTACCTGTCCTGGATCCTCTTCCCGCTCCTGGGCTGCTATGCCGTCTACAGTCTT
CTGTACCTGGAGCACAAGGGCTGGTACTCCTGGGTGCTCAGCATGCTCTACGGCTTCCTGCTGACCTTCGGCTTC
ATCACCATGACGCCCCAGCTCTTCATCAACTACAAGCTCAAGTCTGTGGCCCACCTTCCCTGGCGCATGCTCACC
TACAAGGCCCTCAACACATTCATCGACGACCTGTTCGCCTTTGTCATCAAGATGCCCGTTATGTACCGGATCGGC
TGCCTGCGGGACGATGTGGTTTTCTTCATCTACCTCTACCAACGGTGGATCTACCGCGTCGACCCCACCCGAGTC
AACGAGTTTGGCATGAGTGGAGAAGACCCCACAGCTGCCGCCCCCGTGGCCGAGGTTCCCACAGCAGCAGGGGCC
CTCACGCCCACACCTGCACCCACCACGACCACCGCCACCAGGGAGGAGGCCTCCACGTCCCTGCCCACCAAGCCC
ACCCAGGGGGCCAGCTCTGCCAGCGAGCCCCAGGAAGCCCCTCCAAAGCCAGCAGAGGACAAGAAAAAGGATTAG

TCGAGACTGGTCCTCACCTGCTCCGGCTCCTGGCGACCACTACCCCTGCGTCCCGGCCCCCTCGCCTCCCCTCCC
TGTCGCCCTTTCCCTGGACAGATCAGGCCGGGGCGGTGGGAGGCCCGCCTCAGGTCAGGGCCCAGCGTGTGATGT
AGGGGCCGGGGCAGGCCAGGGTTTGTTTGTGGAGGCGCTGTCTGTCCCTCTGTCCCTCTGTGTTTCCAGCCATCT
CGCCCTGCCAGCCCAGCACCACTGGGAATCATGGTGAAGCTGATGCAGCGTTGCCGAGGGGGTGGGTTGGGCGGG
GGTGGGGCCGGGCCCCCCTACGGGATGCCCACGGCCGTTCATCATCTTGTCCCTCGTCCCCCTACCACACTCCCC
CTCCTAGACCGCCGCCCTTTAACACAGTCTGGATTTAATAAATTCATATGGGTGTTTAACTTAAACTC

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FIGURE 3836

CAGCGGAGGTGAAGGACGTCCTTCCCCAGGAGCCGACTGGCCAATCACAGGCAGGAAGATGAAGGTTCTGTGGGC
TGCGTTGCTGGTCACATTCCTGGCAGGATGCCAGGCCAAGGTGGAGCAAGCGGTGGAGACAGAGCCGGAGCCCGA
GCTGCGCCAGCAGACCGAGTGGCAGAGCGGCCAGCGCTGGGAACTGGCACTGGGTCGCTTTTGGGATTACCTGCG
CTGGGTGCAGACACTGTCTGAGCAGGTGCAGGAGGAGCTGCTCAGCTCCCAGGTCACCCAGGAACTGAGGGCGCT
GATGGACGAGACCATGAAGGAGTTGAAGGCCTACAAATCGGAACTGGAGGAACAACTGACCCCGGTGGCGGAGGA
GACGCGGGCACGGCTGTCCAAGGAGCTGCAGGCGGCGCAGGCCCGGCTGGGCGCGGACATGGAGGACGTGTGCGG
CCGCCTGGTGCAGTACCGCGGCGAGGTGCAGGCCATGCTCGGCCAGAGCACCGAGGAGCTGCGGGTGCGCCTCGC
CTCCCACCTGCGCAAGCTGCGTAAGCGGCTCCTCCGCGATGCCGATGACCTGCAGAAGCGCCTGGCAGTGTACCA
GGCCGGGGCCCGCGAGGGCGCCGAGCGCGGCCTCAGCGCCATCCGCGAGCGCCTGGGGCCCCTGGTGGAACAGGG
CCGCGTGCGGGCCGCCACTGTGGGCTCCCTGGCCGGCCAGCCGCTACAGGAGCGGGCCCAGGCCTGGGGCGAGCG
GCTGCGCGCGCGGATGGAGGAGATGGGCAGCCGGACCCGCGACCGCCTGGACGAGGTGAAGGAGCAGGTGGCGGA
GGTGCGCGCCAAGCTGGAGGAGCAGGCCCAGCAGATACGCCTGCAGGCCGAGGCCTTCCAGGCCCGCCTCAAGAG
CTGGTTCGAGCCCCTGGTGGAAGACATGCAGCGCCAGTGGGCCGGGCTGGTGGAGAAGGTGCAGGCTGCCGTGGG
CACCAGCGCCGCCCCTGTGCCCAGCGACAATCACTGAACGCCGAAGCCTGCAGCCATGCGACCCCACGCCACCCC
GTGCCTCCTGCCTCCGCGCAGCCTGCAGCGGGAGACCCTGTCCCCGCCCCAGCCGTCCTCCTGGGGTGGACCCTA
GTTTAATAAAGATTCACCAAGTTTCACGC

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FIGURE 3837

GGCGGCGGCAGCGGGTTCGGTTGCGCGTGGCGCACGGGGTGGGAGCGGAGCCCAGGCCGGGAGCAGGCGCCGCCG
CCAGCGACC**ATG**GGGAACGTGTTGGCTGCCAGCTCGCCGCCCGCAGGGCCGCCACCGCCGCCTGCGCCGGCCCTC
GTGGGGCTGCCGCCACCTCCGCCCTCGCCGCCGGGCTTCACGCTGCCGCCGCTGGGAGGCAGCCTGGGCGCCGGC
ACCAGTACGAGTCGAAGTTCGGAACGGACCCCCGGGGCTGCAACCGCCAGCGCCTCAGGGGCCGCCGAGGATGGG
GCCTGCGGCTGCCTGCCCAACCCGGGCACATTCGAGGAGTGCCACCGGAAGTGCAAGGAGCTGTTTCCCATTCAG
ATGGAGGGTGTCAAGCTCACAGTCAACAAAGGGTTGAGTAACCATTTTCAGGTCAACCACACAGTAGCCCTCAGC
ACAATCGGGGAGTCCAACTACCACTTCGGGGTCACATATGTGGGGACAAAGCAGCTGAGTCCCACAGAGGCGTTC
CCTGTACTGGTGGGTGACATGGACAACAGTGGCAGTCTCAACGCTCAGGTCATTCACCAGCTGGGCCCCGGTCTC
AGGTCCAAGATGGCCATCCAGACCCAGCAGTCGAAGTTTGTGAACTGGCAGGTGGACGGGGAGTATCGGGGCTCT
GACTTCACAGCAGCCGTCACCCTGGGGAACCCAGACGTCCTCGTGGGTTCAGGAATCCTCGTAGCCCACTACCTC
CAGAGCATCACGCCTTGCCTGGCCCTGGGTGGAGAGCTGGTCTACCACCGGCGGCCTGGAGAGGAGGGCACTGTC
ATGTCTCTAGCTGGGAAATACACATTGAACAACTGGTTGGCAACGGTAACGTTGGGCCAGGCGGGCATGCACGCA
ACATACTACCACAAAGCCAGTGACCAGCTGCAGGTGGGTGTGGAGTTTGAGGCCAGCACAAGGATGCAGGACACC
AGCGTCTCCTTCGGGTACCAGCTGGACCTGCCCAAGGCCAACCTCCTCTTCAAAGGCTCTGTGGATAGCAACTGG
ATCGTGGGTGCCACGCTGGAGAAGAAGCTCCCACCCCTGCCCCTGACACTGGCCCTTGGGGCCTTCCTGAATCAC
CGCAAGAACAAGTTTCAGTGTGGCTTTGGCCTCACCATCGGC**TGA**GCCCTCCTGGCCCCCGCCTTCCACGCCCTT
CCGATTCCACCTCCACCTCCACCTCCCCCTGCCACAGAGGGGAGACCTGAGCCCCCCTCCCTTCCCTCCCCCCTT
GGGGGTCGGGGGGGGACATTGGAAAGGAGGGACCCCGCCACCCCAGCAGCTGAGGAGGGGATTCTGGAACTGAATG
GCGCTTCGGGATTCTGAGTAGCAGGGGCAGCATGCCCAGTGGGCCTGGGGTCCCGGGAGGGATTCCGGAATTGAG
GGGCACGCAGGATTCTGAGCACCAGGGGCAGAGGCGGCCAGACAACCTCAGGGAGGAGTGTCCTGGCGTCCCCAT
CCTCCAAAGGGCCTGGGCCCGCCCCGAGGGGGCAGCGAGAGGAGCTTCCCCATCCCCGGTCAGTCCACCCTGCCC
CGTCCACTTTCCCATCTCCTCGGTATAAATCATGTTTATAAGTTATGGAAGAACCGGGACATTTTACAGAAAAAA
AACAAAAAACAACAAAAAATATACGTGGG

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FIGURE 3838

GAGCAGAACAGGGAGGCTAGAGCGCAGCGGGAACCGGCCCGGAGCCGGAGCCGGAGCCCCACAGGCACCTACTAA
ACCGCCCAGCCGATCGGCCCCCACAGAGTGGCCCGCGGGCCTCCGGCCGGGCCCAGTCCCCTCCCGGGCCCTCCA
TGGCCCGGGCCGCTGCCCTCCTGCCGTCGAGATCGCCGCCGACGCCGCTGCTGTGGCCGCTGCTGCTGCTGCTGC
TCCTGGAAACCGGAGCCCAGGATGTGCGAGTTCAAGTGCTACCCGAGGTGCGAGGCCAGCTCGGGGGCACCGTGG
AGCTGCCGTGCCACCTGCTGCCACCTGTTCCTGGACTGTACATCTCCCTGGTGACCTGGCAGCGCCCAGATGCAC
CTGCGAACCACCAGAATGTGGCCGCCTTCCACCCTAAGATGGGTCCCAGCTTCCCCAGCCCGAAGCCTGGCAGCG
AGCGGCTGTCCTTCGTCTCTGCCAAGCAGAGCACTGGGCAAGACACAGAGGCAGAGCTCCAGGACGCCACGCTGG
CCCTCCACGGGCTCACGGTGGAGGACGAGGGCAACTACACTTGCGAGTTTGCCACCTTCCCCAAGGGGTCCGTCC
GAGGGATGACCTGGCTCAGAGTCATAGCCAAGCCCAAGAACCAAGCTGAGGCCCAGAAGGTCACGTTCAGCCAGG
ACCCTACGACAGTGGCCCTCTGCATCTCCAAAGAGGGCCGCCCACCTGCCCGGATCTCCTGGCTCTCATCCCTGG
ACTGGGAAGCCAAAGAGACTCAGGTGTCAGGGACCCTGGCCGGAACTGTCACTGTCACCAGCCGCTTCACCTTGG
TGCCCTCGGGCCGAGCAGATGGTGTCACGGTCACCTGCAAAGTGGAGCATGAGAGCTTCGAGGAACCAGCCCTGA
TACCTGTGACCCTCTCTGTACGCTACCCTCCTGAAGTGTCCATCTCCGGCTATGATGACAACTGGTACCTCGGCC
GTACTGATGCCACCCTGAGCTGTGACGTCCGCAGCAACCCAGAGCCCACGGGCTATGACTGGAGCACGACCTCAG
GCACCTTCCCGACCTCCGCAGTGGCCCAGGGCTCCCAGCTGGTCATCCACGCAGTGGACAGTCTGTTCAATACCA
CCTTCGTCTGCACAGTCACCAATGCCGTGGGCATGGGCCGCGCTGAGCAGGTCATCTTTGTCCGAGAAACCCCCA
GGGCCTCGCCCCGAGATGTGGGCCCGCTGGTGTGGGGGGCCGTGGGGGGGACACTGCTGGTGCTGCTGCTTCTGG
CTGGGGGGTCCTTGGCCTTCATCCTGCTGAGGGTGAGGAGGAGGAGGAAGAGCCCTGGAGGAGCAGGAGGAGGAG
CCAGTGGCGACGGGGGATTCTACGATCCGAAAGCTCAGGTGTTGGGAAATGGGGACCCCGTCTTCTGGACACCAG
TAGTCCCTGGTCCCATGGAACCAGATGGCAAGGATGAGGAGGAGGAGGAGGAAGAGAAGGCAGAGAAAGGCC
TCATGTTGCCTCCACCCCCAGCACTCGAGGATGACATGGAGTCCCAGCTGGACGGCTCCCTCATCTCACGGCGGG
CAGTTTATGTGTGACCTGGACACAGACAGAGACAGAGCCAGGCCCGGCCCTCCCGCCCCCGACCTGACCACGCCG
GCCTAGGGTTCCAGACTGGTTGGACTTGTTCGTCTGGACGACACTGGAGTGGAACACTGCCTCCCACTTTCTTGG
GACTTGGAGGGAGGTGGAACAGCACACTGGACTTCTCCCGTCTCTAGGGCTGCATGGGGAGCCCGGGGAGCTGAG
TAGTGGGGATCCAGAGAGGACCCCCGCCCCCAGAGACTTGGTTTTGGCTCCAGCCTTCCCCTGGCCCCGTGACAC
TCAGGAGTTAATAAATGCCTTGGAGGAAAAC

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FIGURE 3839

AGTCTCCGCCGCCGCCGTGAACATGGAGCCCCCGGACGCACCGGCCCAGGCGCGCGGGGCCCCGCGGCTGCTGTT
GCTCGCAGTCCTGCTGGCGGCGCACCCAGATGCCCAGGCGGAGGTGCGCTTGTCTGTACCCCCGCTGGTGGAGGT
GATGCGAGGAAAGTCTGTCATTCTGGACTGCACCCCTACGGGAACCCACGACCATTATATGCTGGAATGGTTCCT
TACCGACCGCTCGGGAGCTCGCCCCCGCCTAGCCTCGGCTGAGATGCAGGGCTCTGAGCTCCAGGTCACAATGCA
CGACACCCGGGGCCGCAGTCCCCCATACCAGCTGGACTCCCAGGGGCGCCTGGTGCTGGCTGAGGCCCAGGTGGG
CGACGAGCGAGACTACGTGTGCGTGGTGAGGGCAGGGGCGGCAGGCACTGCTGAGGCCACTGCGCGGCTCAACGT
GTTTGCAAAGCCAGAGGCCACTGAGGTCTCCCCCAACAAAGGGACACTGTCTGTGATGGAGGACTCTGCCCAGGA
GATCGCCACCTGCAACAGCCGGAACGGGAACCCGGCCCCCAAGATCACGTGGTATCGCAACGGGCAGCGCCTGGA
GGTGCCCGTAGAGATGAACCCAGAGGGCTACATGACCAGCCGCACGGTCCGGGAGGCCTCGGGCCTGCTCTCCCT
CACCAGCACCCTCTACCTGCGGCTCCGCAAGGATGACCGAGACGCCAGCTTCCACTGCGCCGCCCACTACAGCCT
GCCCGAGGGCCGCCACGGCCGCCTGGACAGCCCCACCTTCCACCTCACCCTGCACTATCCCACGGAGCACGTGCA
GTTCTGGGTGGGCAGCCCGTCCACCCCAGCAGGCTGGGTACGCGAGGGTGACACTGTCCAGCTGCTCTGCCGGGG
GGACGGCAGCCCCAGCCCGGAGTATACGCTTTTCCGCCTTCAGGATGAGCAGGAGGAAGTGCTGAATGTGAATCT
CGAGGGGAACTTGACCCTGGAGGGAGTGACCCGGGGCCAGAGCGGGACCTATGGCTGCAGAGTGGAGGATTACGA
CGCGGCAGATGACGTGCAGCTCTCCAAGACGCTGGAGCTGCGCGTGGCCTATCTGGACCCCCTGGAGCTCAGCGA
GGGGAAGGTGCTTTCCTTACCTCTAAACAGCAGTGCAGTCGTGAACTGCTCCGTGCACGGCCTGCCCACCCCTGC
CCTACGCTGGACCAAGGACTCCACTCCCCTGGGCGATGGCCCCATGCTGTCGCTCAGTTCTATCACCTTCGATTC
CAATGGCACCTACGTATGTGAGGCCTCCCTGCCCACAGTCCCGGTCCTCAGCCGCACCCAGAACTTCACGCTGCT
GGTCCAAGGCTCGCCAGAGCTAAAGACAGCGGAAATAGAGCCCAAGGCAGATGGCAGCTGGAGGGAAGGAGACGA
AGTCACACTCATCTGCTCTGCCCGCGGCCATCCAGACCCCAAACTCAGCTGGAGCCAATTGGGGGGCAGCCCCGC
AGAGCCAATCCCCGGACGGCAGGGTTGGGTGAGCAGCTCTCTGACCCTGAAAGTGACCAGCGCCCTGAGCCGCGA
TGGCATCTCCTGTGAAGCCTCCAACCCCCACGGGAACAAGCGCCATGTCTTCCACTTCGGCACCGGTGACCCCCA
GACCTCCCAGGCTGGAGTGGCCGTCATGGCCGTGGCCGTCAGCGTGGGCCTCCTGCTCCTCGTCGTTGCTGTCTT
CTACTGCGTGAGACGCAAAGGGGGCCCCTGCTGCCGCCAGCGGCGGGAGAAGGGGGCTCCGCCGCCAGGGGAGCC
AGGGCTGAGCCACTCGGGGTCGGAGCAACCAGAGCAGACCGGCCTTCTCATGGGAGGTGCCTCCGGAGGAGCCAG
GGGTGGCAGCGGGGGCTTCGGAGACGAGTGCTGAGCCAAGAACCTCCTAGAGGCTGTCCCTGGACCTGGAGCTGC
AGGCATCAGAGAACCAGCCCTGCTCACGCCATGCCCGCCCCCGCCTTCCCTCTTCCCTCTTCCCTCTCCCTGCCC
AGCCCTCCCTTCCTTCCTCTGCCGGCAAGGCAGGGACCCACAGTGGCTGCCTGCCTCCGGGAGGGAAGGAGAGGG
AGGGTGGGTGGGTGGGAGGGGGCCTTCCTCCAGGGAATGTGACTCTCCCAGGCCCCAGAATAGCTCCTGGACCCA
AGCCCAAGGCCCAGCCTGGGACAAGGCTCCGAGGGTCGGCTGGCCGGAGCTATTTTTACCTCCCGCCTCCCCTGC
TGGTCCCCCCACCTGACGTCTTGCTGCAGAGTCTGACACTGGATTCCCCCCCCTCACCCCGCCCCTGGTCCCACT
CCTGCCCCCGCCCTACCTCCGCCCCACCCCATCATCTGTGGACACTGGAGTCTGGAATAAATGCTGTTTGTCACA
TC

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FIGURE 3840

ACTCTGGGCGAGGCCGCCCCTATCCCAGCCGCACCGGTCCTTCCCGGCACACGCGAGGCTCCCATGGCTCTGGCG
GTGGCCCCGTGGGGGCGACAGTGGGAAGAGGCCCGCGCCCTGGGCCGGGCAGTCAGGATGCTGCAGCGCCTAGAA
GAGCAATGCGTCGACCCCCGGCTGTCCGTGAGTCCCCCTTCGCTGCGGGACCTGCTGCCCCGCACAGCGCAGCTG
CTTCGAGAGGTGGCCCATTCTCGGCGGGCGGCCGGCGGAGGCGGCCCCGGGGGTCCCGGCGGCTCTGGGGACTTT
CTACTCATCTACCTGGCCAATCTGGAGGCCAAGAGCAGGCAGGTGGCCGCGCTGCTGCCTCCCCGGGGCCGAAGG
AGTGCCAACGACGAGCTCTTCCGGGCGGGCTCCAGACTCAGGCGACAGCTGGCCAAGCTGGCCATCATCTTCAGC
CACATGCACGCAGAGCTGCACGCACTCTTCCCCGGGGGAAAGTACTGTGGACACATGTACCAGCTCACCAAGGCC
CCCGCCCACACCTTCTGGAGGGAAAGTTGCGGAGCCCGGTGTGTGCTGCCCTGGGCTGAGTTTGAGTCCCTCCTG
GGCACCTGCCACCCTGTGGAACCAGGCTGCACAGCCCTGGCCTTGCGCACCACCATTGACCTCACCTGCAGCGGG
CACGTGTCCATCTTCGAGTTCGACGTCTTCACCAGGCTCTTTCAGCCATGGCCAACACTCCTCAAGAACTGGCAG
CTCCTGGCAGTCAACCACCCAGGCTACATGGCCTTCCTCACCTATGATGAGGTCCAAGAGCGTCTGCAGGCCTGC
AGGGACAAGCCAGGCAGTTACATCTTCCGGCCCAGCTGTACTCGCCTGGGGCAGTGGGCCATCGGCTATGTGAGC
TCAGATGGCAGCATCCTGCAGACCATCCCTGCCAACAAACCCCTGTCCCAGGTGCTCCTGGAGGGACAGAAGGAC
GGCTTCTACCTCTACCCAGATGGAAAGACCCACAACCCAGACCTGACTGAGCTCGGCCAGGCAGAACCCCAGCAG
CGCATCCACGTGTCAGAGGAGCAGCTGCAGCTCTACTGGGCCATGGACTCCACATTTGAGCTCTGCAAGATCTGT
GCTGAGAGCAACAAGGATGTGAAGATTGAGCCGTGCGGGCACCTGCTCTGCAGCTGCTGCCTGGCTGCCTGGCAG
CACTCGGACAGCCAGACCTGCCCCTTCTGCCGCTGCGAGATCAAGGGCTGGGAGGCCGTGAGTATCTACCAGTTC
CACGGTCAGGCTACTGCTGAGGACTCAGGGAACAGCAGTGACCAGGAAGGCAGGGAGTTGGAGCTGGGGCAGGTG
CCCCTTTCGGCTCCTCCATTGCCCCCACGGCCAGATCTGCCCCCCAGGAAGCCCAGAAATGCCCAGCCGAAAGTG
AGACTCCTAAAGGGGAACTCCCCTCCAGCTGCGCTGGGACCCCAGGACCCTGCCCCGGCCTGAAGGCCAGGGCAC
CCAGATGTGCTGCTCAAGGGAGCCCCAAGGGCTGGAAGGGGGTTGTGAAACCGAAATAAACTGCCAAGCCTGGTC
TGTCCTCCA

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FIGURE 3841

GCCCCGTATGCCCCGCGGGCGCATGTGACGAGGGGCCCGTGGACTGCGCACCCGGCCCAAGGCCACTGGACTCCC
GGGCGCCGCGCTGCCGCTCCGCAAGCGCCCGCTGCGCCGCCCTTCCCCGGAGCCCGCCGCTCCCCGCGGGCGCTG
CGGGCCTTGTCGTCCCCCTGGACCCTCTGCGCGGCGGCTGCGACCTGCCGGCGGTCCCCGGGCCCCCCCACGGCC
TGGCCCGCCGGAGGCGCTTTACTACCCCGGAGCCTTACTGCCTTTGTACCCCACTCGGGCC**ATG**GGCTCCCCGTT
TCCTCTGGTGAACCTGCCTACACCCCTATACCCCATGATGTGCCCCATGGAACACCCCCTTTCTGCTGACATCGC
CATGGCCACCCGTGCAGATGAGGACGGAGACACGCCTCTCCATATTGCTGTGGTGCAGGGTAACCTGCCAGCTGT
GCACCGGCTGGTCAACCTCTTCCAGCAGGGGGGCCGGGAGCTCGACATCTACAACAACCTACGGCAGACACCGCT
CCACCTGGCTGTGATCACCACATTACCGTCTGTGGTCCGGCTCCTGGTGACAGCTGGTGCCAGCCCCATGGCGCT
GGACCGCCATGGCCAGACGGCCGCTCACCTGGCGTGCGAGCACCGCAGCCCGACCTGCCTGCGAGCCCTGCTGGA
CAGCGCAGCTCCGGGCACGTTGGACCTGGAGGCCCGCAATTATGACGGGCTCACCGCCCTGCACGTGGCAGTGAA
CACCGAGTGCCAAGAAACCGTGCAGCTCTTGCTAGAGCGCGGTGCCGACATCGACGCAGTGGACATTAAGAGCGG
CCGCTCCCCGCTCATCCACGCCGTGGAAAACAACAGCCTTAGCATGGTGCAGCTGCTGCTGCAGCACGGCGCCAA
CGTGAACGCGCAAATGTACTCCGGCAGCTCCGCCCTGCACTCAGCGTCCGGCCGCCGGCTCCTCCCGCTGGTGCG
CACGCTGGTCCGCAGCGGCGCTGACAGCAGCCTCAAGAACTGCCACAACGACACGCCGCTCATGGTGGCGCGCAG
CCGCAGGGTCATCGACATCCTGAGGGGGAAGGCCACCCGGCCTGCTTCCACCTCCCAGCCAGACCCCTCCCCTGA
CCGGAGCGCCAACACCTCCCCCGAGAGCAGCAGCCGCCTCAGCTCCAATGGTCTTCTCTCCGCATCACCATCCTC
CTCACCCTCCCAGTCTCCCCCCAGGGACCCCCCTGGATTCCCCATGGCTCCTCCCAATTTCTTCCTTCCTTCCCC
ATCTCCACCCGCCTTCCTGCCCTTTGCTGGGGTCCTCCGAGGCCCTGGCCGGCCGGTGCCCCCCTCCCCAGCTCC
AGGAGGCAGC**TGA**GGGGGATGGGGGGGCAGATCTTGGACTCATGAGGAGGGGCCCCCCTGCCCTGTGGGGTCAAC
CCTTCTGGAAACTGTGAAGATCTCACTCTGCCCCCCCCCATCTTCGGGACCAGGATTTGCACAGAAGCACATGCA
CCTACCCATACACCCCCTCTTCTGAGCACAGATGTTCCCCCATCTCGCTCCCTCCCAGGACTCTGACCCCAGCAT
TCTCAGGCACCAGTCCCTGTCCGGAATGCCACCCACATCTTCCATTTCCATGTCCCCTCCCAGAGCTGGTGGACC
CAGGGAACAGCCACTCCCCTCCACTCTCTACCAGATAACTGAGGAGGGGAGAGGTGGGCCGTAACGGGCACGGAT
CACGATGTAAATTATTAAGCATTTTGGTTGGATTTCTTTTGTAATAAACTATTTTTGTACCAT

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FIGURE 3842

GCCAACTCCCCTCCGCTCCAGTCACTTGTCTGGAGCTTGAAGAAGTGGGTATTCCCCTTCCCACCCCAGGCACTG
GAGGAGCGGCCCCCCGGGGATTCCAGGACCTGAGCTCCGGGAGCTGGACTCGCAGCGACCGCGGCAGAGCGAGCG
GGCGCCGGGAAGCGAGGAGACGCCCGCGGGAGGCCCAGCTGCTCGGAGCAACTGGCATGGCCCGAGCCATGGCCG
CCGCGTGGCCGCTGCTGCTGGTGGCGCTACTGGTGCTGTCCTGGCCACCCCCAGGAACCGGGGACGTCGTCGTGC
AGGCGCCCACCCAGGTGCCCGGCTTCTTGGGCGACTCCGTGACGCTGCCCTGCTACCTACAGGTGCCCAACATGG
AGGTGACGCATGTGTCACAGCTGACTTGGGCGCGGCATGGTGAATCTGGCAGCATGGCCGTCTTCCACCAAACGC
AGGGCCCCAGCTATTCGGAGTCCAAACGGCTGGAATTCGTGGCAGCCAGACTGGGCGCGGAGCTGCGGAATGCCT
CGCTGAGGATGTTCGGGTTGCGCGTAGAGGATGAAGGCAACTACACCTGCCTGTTCGTCACGTTCCCGCAGGGCA
GCAGGAGCGTGGATATCTGGCTCCGAGTGCTTGCCAAGCCCCAGAACACAGCTGAGGTTCAGAAGGTCCAGCTCA
CTGGAGAGCCAGTGCCCATGGCCCGCTGCGTCTCCACAGGGGGTCGCCCGCCAGCCCAAATCACCTGGCACTCAG
ACCTGGGCGGGATGCCCAATACGAGCCAGGTGCCAGGGTTCCTGTCTGGCACAGTCACTGTCACCAGCCTCTGGA
TATTGGTGCCCTCAAGCCAGGTGGACGGCAAGAATGTGACCTGCAAGGTGGAGCACGAGAGCTTTGAGAAGCCTC
AGCTGCTGACTGTGAACCTCACCGTGTACTACCCCCCAGAGGTATCCATCTCTGGCTATGATAACAACTGGTACC
TTGGCCAGAATGAGGCCACCCTGACCTGCGATGCTCGCAGCAACCCAGAGCCCACAGGCTATAATTGGAGCACGA
CCATGGGTCCCCTGCCACCCTTTGCTGTGGCCCAGGGCGCCCAGCTCCTGATCCGTCCTGTGGACAAACCAATCA
ACACAACTTTAATCTGCAACGTCACCAATGCCCTAGGAGCTCGCCAGGCAGAACTGACCGTCCAGGTCAAAGAGG
GACCTCCCAGTGAGCACTCAGGCATATCCCGTAACGCCATCATCTTCCTGGTTCTGGGAATCCTGGTTTTTCTGA
TCCTGCTGGGGATCGGGATTTATTTCTATTGGTCCAAATGTTCCCGTGAGGTCCTTTGGCACTGTCATCTGTGTC
CCTCGAGTACAGAGCATGCCAGCGCCTCAGCTAATGGGCATGTCTCCTATTCAGCTGTGAGCAGAGAGAACAGCT
CTTCCCAGGATCCACAGACAGAGGGCACAAGGTGACAGCGTCGGGACTGAGAGGGGAGAGAGACTGGAGCTGGCA
AGGACGTGGGCCTCCAGAGTTGGACCCGACCCCAATGGATGAAGACCCCCTCCAAAGAGACCAGCCTCCCTCCCT
GTGCCAGACCTCAAAACGACGGGGGCAGGTGCAAGTTCATAGGTCTCCAAGACCACCCTCCTTTCATTTGCTAGA
AGGACTCACTAGACTCAGGAAAGCTGTTAGGCTCACAGTTACAGTTTATTACAGTAAAAGGACAGAGATTAAGAT
CAGCAAAGGGAGGAGGTGCACAGCACACGTTCCACGACAGATGAGGCGACGGCTTCCATCTGCCCTCTCCCAGTG
GAGCCATATAGGCAGCACCTGATTCTCACAGCAACATGTGACAACATGCAAGAAGTACTGCCAATACTGCCAACC
AGAGCAGCTCACTCGAGATCTTTGTGTCCAGAGTTTTTTGTTTGTCTTGAGACAGGGTCTGGCTCTGTTGGCAGA
CTAGAGTACAGTGGTGAGATCACAGTTCATTGCAGCCTTGACTTCTCAACGCCAAGTCATCCTCCCACCTCAGCC
TCCTGAGTAGCTATGACTACAGGTATGTGCCACCACGTCTGGCTAATCTTTTTATTATTTGTAAAGTCGAGGTTT
CCCTGTGTTGCCCAGGCTGGTCTTGAACTCTTGGCTCCAAGTGATACTTCTGCCTTGGCCTCCCAAAGTGCTGAA
TTAAGCAGCTCACCATCCACACGGCTGACCTCATACATCAAGCCAATACCGTGTGGCCCAAGACCCCCACCATAA
ATCACATCATTAGCATGAACCACCCAGAGTGGCCCAAGACTCCCAGATCAGCTACCAGGCAGGATATTCCAAGGG
CTTAGAGATGAATGCCCAGGAGCTGAGGATAAAGGGCCCGATCTTTCTTTGGGCAAGGTTAAGCCTTTACTGCAT
AGCAGACCACACAGAAGGGTGTGGGCCACCAGAGAATTTTGGTAAAAATTTGGCCTCTGGCCTTGAGCTTCTAAA
TCTCTGTATCCGTCAGATCTCTGTGGTTACAAGAAACAGCCACTGACCCTGGTCACCAGAGGCTGCAATTCAGGC
CGCAAGCAGCTGCCTGGGGGGTGTCCAAGGAGCAGAGAAAACTACTAGATGTGAACTTGAAGAAGGTTGTCAGCT
GCAGCCACTTTCTGCCAGCATCTGCAGCCACTTTCTGCCAGCATCTGCAGCCAGCAAGCTGGGACTGGCAGGAAA
TAACCCACAAAAGAAGCAAATGCAATTTCCAACACAAGGGGGAAGGGATGCAGGGGGAGGCAGCGCTGCAGTTGC
TCAGGACACGCTCCTATAGGACCAAGATGGATGCGACCCAAGACCCAGGAGGCCCAGCTGCTCAGTGCAACTGAC
AAGTTAAAAAGGTCTATGATCTTGAGGGCAGACAGCAGAATTCCTCTTATAAAGAAAACTGTTTGGGAAAATACG
TTGAGGGAGAGAAGACCTTGGGCCAAGATGCTAAATGGGAATGCAAAGCTTGAGCTGCTCTGCAAGAGAAAATAA
GCAGGACAGAGGATTTGCTCTGGACAGAGATGGAAGAGCCGGGAACAGAGAAGTGTGGGGAAGAGATAGGAACCA
GCAGGATGGCAGGGGCAAAGGGCTCAAGGGTGAGGAGGCCAGTGGGACCCCACAGAGTTGGGGAGATAAAGGAAC
ATTGGTTGCTTTGGTGGCACGTAAGCTCCTTGTCTGTCTCCAGCACCCAGAATCTCATTAAAGCTTATTTATTGT
ACCTCC

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FIGURE 3843

GGGCAAAGGTGCATGGGAGAAGACCCGGCTGGCCCTGGAGGCCGAGGTGTCCGAGCTGCGGGCAGAACTGAGCAG
CCTGCAGACTGCACGTCAGGAGGGTGAGCAGCGGAGGCGCCGCCTGGAGTTACAGCTGCAGGAGGTGCAGGGCCG
GGCTGGTGATGGGGAGAGGGCACGAGCGGAGGCTGCTGAGAAGCTGCAGCGAGCCCAGGCTGAACTGGAGAATGT
GTCTGGGGCGCTGAACGAGGCTGAGTCCAAAACCATCCGTCTTAGCAAGGAGCTGAGCAGCACAGAAGCCCAGCT
GCACGATGCCCAGGAGCTGCTGCAGGAGGAGACCAGGGCGAAATTGGCCTTGGGGTCCCGGGTGCGAGCCATGGA
GGCTGAGGCAGCCGGGCTGCGTGAGCAGCTGGAGGAGGAGGCAGCTGCCAGGGAACGGGCGGGCCGTGAACTGCA
GACTGCCCAGGCCCAGCTTTCCGAGTGGCGGCGGCGCCAGGAGGAGGAGGCAGGGGCACTGGAGGCAGGGGAGGA
GGCACGGCGCCGGGCAGCCCGGGAGGCCGAGGCCCTGACCCAGCGCCTGGCAGAAAAGACAGAGACCGTGGATCG
GCTGGAGCGGGGCCGCCGCCGGCTGCAGCAGGAGCTGGACGACGCCACCCTGTCCCCAGATGCACTAACAGATGG
GGCCCAGCCCCCTTCCTCCCTGGACCCCACGGGCCCCTGTCCCAGGAACCCCGCCCTCTGACTTCTTGCCCTTTG
GAAATGGTGCAGCACTCTGGCATTTATCACCCCCACCTGGGTCCCCTGCAACCTCCCATCAAAGGATGACCCCTA
AACACAGAGGAGCGGGGCAGGCAGGGAGGCAAGGACTGGAGCTACCTTGCTTGTTGGGGGACTGGGTACAGTTGG
CAAGCTGTGTTTCCATCAGCTCCCTGTCCTCCTTTCTTCCCTCGTTATTGATCTATAGACATTAGGAAGGGAGTG
AGACGGCTCCTCCACCATCCTCAGCCAGTGCAACCCATTCCCTCTGCTTCTCTCTCTCTCTCTCTCCCTCC
CTCTCCTTCCCTACCCTCTCACCATCTTTCTTGGCCTCTCTGAGGGTCTCTCTGTGCATCTTTTTAGGAATCTCG
CTCTCACTCTCTACGTAGCCACTCTCCTTCCCCCATTTCTGCGTCCACCCCTGAACTCCTGAGCGACAGAAGCCC
CAGGCCTCCACCAGCCTTGAACCCTTGCAAAGGGGCAGGACAAGGGGACCCCTCTCACTCCTGCTGCTGCCCATG
CTCTGCCCTCCCTTCTGGTTGCTCTGAGGGTTCGGAGCTTCCCTCTGGGACTAAAGGAGTGTCCTTTACCCTCCC
AGCCTCCAGGCTCTGGCAGAAATAAACTCCAACCCGACTGG

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FIGURE 3844

CCGAGGGTCAGGCTGCAGAAGCCCAGAATCCCACCCCAGTCCCCAAGTACAGAGGTCGCTGTCAAGATGGAGTTT
CCAACCCAGTAAATCCAAGGGCCAGACCGTGACCTCATAAAGCATGATCTCCTTCTGTCCAGACTGTGGCAAAAG
TATCCAAGCGGCATTCAAATTCTGCCCCTACTGTGGAAATTCTTTGCCTGTAGAGGAGCATGTAGGGTCCCAGAC
CTTTGTCAATCCACATGTGTCATCCTTCCAAGGCTCAAAGAGAGGGCTGAACTCCAGTTTTGAAACCTCTCCTAA
GAAAGTGAAATGGTCCAGCACCGTCACCTCTCCCCGATTATCCCTCTTCTCAGATGGTGACAGTTCTGAGTCTGA
AGATACTCTGAGTTCCTCTGAGAGATCCAAAGGCTCCGGGAGCAGACCCCCAACCCCCAAAAGCAGCCCTCAGAA
GACCAGGAAGAGCCCTCAGGTGACCAGGGGTAGCCCTCAGAAGACCAGCTGTAGCCCTCAGAAGACCAGGCAGAG
CCCTCAGACGCTGAAGCGGAGCCGAGTGACCACCTCACTTGAAGCTTTGCCCACAGGGACAGTGCTGACAGACAA
GAGTGGGCGACAGTGGAAGCTGAAGTCCTTCCAGACCAGGGACAACCAGGGCATTCTCTATGAAGCTGCACCCAC
CTCCACCCTCACCTGTGACTCAGGACCACAGAAGCAAAAGTTCTCACTCAAACTGGATGCCAAGGATGGGCGCTT
GTTCAATGAGCAGAACTTCTTCCAGCGGGCCGCCAAGCCTCTGCAAGTCAACAAGTGGAAGAAGCTGTACTCGAC
CCCACTGCTGGCCATCCCTACCTGCATGGGTTTCGGTGTTCACCAGGACAAATACAGGTTCTTGGTGTTACCCAG
CCTGGGGAGGAGCCTTCAGTCGGCCCTGGATGTCAGCCCAAAGCATGTGCTGTCAGAGAGGTCTGTGCTGCAGGT
GGCCTGCCGGCTGCTGGATGCCCTGGAGTTCCTCCATGAGAATGAGTATGTTCATGGAAATGTGACAGCTGAAAA
TATCTTTGTGGATCCAGAGGACCAGAGTCAGGTGACTTTGGCAGGCTATGGCTTCGCCTTCCGCTATTGCCCAAG
TGGCAAACACGTGGCCTACGTGGAAGGCAGCAGGAGCCCTCACGAGGGGGACCTTGAGTTCATTAGCATGGACCT
GCACAAGGGATGCGGGCCCTCCCGCCGCAGCGACCTCCAGAGCCTGGGCTACTGCATGCTGAAGTGGCTCTACGG
GTTTCTGCCATGGACAAATTGCCTTCCCAACACTGAGGACATCATGAAGCAAAAACAGAAGTTTGTTGATAAGCC
GGGGCCCTTCGTGGGACCCTGCGGTCACTGGATCAGGCCCTCAGAGACCCTGCAGAAGTACCTGAAGGTGGTGAT
GGCCCTCACGTATGAGGAGAAGCCGCCCTACGCCATGCTGAGGAACAACCTAGAAGCTTTGCTGCAGGATCTGCG
TGTGTCTCCATATGACCCCATTGGCCTCCCGATGGTGCCCTAGGTGGAATCCAGAACTTTCCATTTGCAGTGTGC
AACAGAAAAAAAAAAAATGAAGTAATGTGACTCAAGGCCTGCTGTTTAATCACAGATAAGCTTCTAGAACAAGCCC
TGGAATGTGCATTCCTGCCACTGGTTTCAGGATACTCATCAGTCCTGATTAGCCTCCCGGAGGGCCCCAGTTTCC
CTCCCGTGAATGTGAAGTTCCCCATCTTGGTGGCCTGCCCTTCAGCCAGTGTCCTAGCAAAGCTGGATGGGGTTG
GGCCGGCCCACAGGGGGGACCCCTCCTACCCTTGACACCTCTGTGCTTTGGTAATAAATTGTTTTACCAGAG

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FIGURE 3845

TCATTCCCTGTCCTCGGATCACAGTCTCTTCTCACTACAGTGTCGCCGCCTCTGCCTGCGTAGCCCCGGCCATGG
CTCTGTAGCCTCGACCCCTTTGTGCCCCCGGCCCGTCTCCGCGCTCACCACGCCTGCGCTCTCCGCTCCCACCTT
CTTTCTTCAGCCGAGGCCGCCGCCGCCTCTCCTTGCTGCAGCCATGGAGTCTTCCACTTTCGCCTTGGTGCCTGT
CTTCGCCCACCTGAGCATCCTCCAGAGCCTCGTGCCAGCTGCTGGTGCAGCCTCTCCTGTTGCCATCAGTGCCCA
GCACCTGTGCTACAGCCATGTCACTCCTGGCGACCCTGGGGCTGGAGCTGGACAGGGCCCTGCTCCCAGCTAGTG
GGCTGGGATGGCTCGTAGACTATGGGAAACTCCCCCCGGCCCCTGCCCCCCTGGCTCCCTATGAGGTCCTTGGGG
GAGCCCTGGAGGGCGGGCTTCCAGTGGGGGGAGAGCCCCTGGCAGGTGATGGCTTCTCTGACTGGATGACTGAGC
GAGTTGATTTCACAGCTCTCCTCCCTCTGGAGCCTCCCTTACCCCCCGGCACCCTCCCCCAACCTTCCCCAACCC
CACCTGACCTGGAAGCTATGGCCTCCCTCCTCAAGAAGGAGCTGGAACAGATGGAAGACTTCTTCCTAGATGCCC
CGCCCCTCCCACCACCCTCCCCGCCGCCACTACCACCACCACCACTACCACCAGCCCCCTCCCTCCCCCTGTCCC
TCCCCTCCTTTGACCTCCCCCAGCCCCCTGTCTTGGATACTCTGGACTTGCTGGCCATCTACTGCCGCAACGAGG
CCGGGCAGGAGGAAGTGGGGATGCCGCCTCTGCCCCCGCCACAGCAGCCCCCTCCTCCTTCTCCACCTCAACCTT
CTCGCCTGGCCCCCTACCCACATCCTGCCACCACCCGAGGGGACCGCAAGCAAAAGAAGAGAGACCAGAACAAGT
CGGCGGCTCTGAGGTACCGCCAGCGGAAGCGGGCAGAGGGTGAGGCCCTGGAGGGCGAGTGCCAGGGGCTGGAGG
CACGGAATCGCGAGCTGAAGGAACGGGCAGAGTCCGTGGAGCGCGAGATCCAGTACGTCAAGGACCTGCTCATCG
AGGTTTACAAGGCCCGGAGCCAGAGGACCCGTAGCTGCTAGAAGGGCAGGGGTGTGGCTTCTGGGGGCTGGTCTT
CAGCTCTGGCGCCTTCATCCCCCTGCCTCTACCTTCATTCCAAACCCCTCTCGGCCGGGTGCAGTGGCTTATGCT
TGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCGTTTGAGGCCAGGAGGTCAATACCAGCCTGGGCAAC
ATAGTAAGACCCTGTCTCTATTAAAAAAAAAAAAATCAACCCTTCTTCCCCACCAAACCACCCAACTCCTCTCTAC
TCTTATCCTTTTATCCTCTGTCTCTGCTTATCACCTCTCTTGCGTATTTCTGGATCTCCTTCCCTCCTTTCTCGT
CCAAATCATGAAATGTTTGGCCTTAGTCAATGTCTATGCCCGTCACATAACAGCCGAGGCACCGAGGCCCACAGG
GAAGCAGCTGGGAGCTTGGAAACCTGGTCTCTTGAATTTCAAACCTGGTTTCTTACAGGTGGTTGTCTGGGGTGG
GTGGAGTGGCGACAGGATAGAGCTGAAGGACTATGCAAATGAGGAAGTAAGTCAGGGCGGGCTTTGAGAAGGGGA
CCCATATCCTACAGGCAAAAAGCAGGCTAGGTGACCTTGGGACACTACGCTAAGGGAGGGAGGCTAAAGGCGGCC
AGGTTTGCAGTGCGGGAAGATGAGCAGGCCAGTGGGAGGAGGGGCAGGGCAGGGCTGTAGTTGGTGACTGGGTGT
TCATTTTAGCTCTAAGAAAAAAAATCAGTGTTTCGTGAAGGTGTTGGAGAGGGGCTGTGTCTGGGTGAGGGATGG
CGGGGTACTGATTTTTTTGGGAGGTTATGAGCAAAAATAAAACGAAACATTTCCTCTG

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FIGURE 3846

GCGACCGTGATTCCCCGCTCGCGACTCCCCACCCCCCAGGGCTCCCTAAAGAGGGCCACGAGCTGCGAAAGGGCG
GGAAAGGCAGTTGGAGAAGAGGTAAGCGGTTACTCACTCCATGGCTGCAGCAAGGAGAGGCGGCGGCGGCCTCGG
CTGAAGAAAGAAGGTGGGAGCGGAGAGCGCAGGCGTGAAACCCACCTTGTCCCATCCACATCAGGACATCCCAGC
TGGAGTTCAACCTTCATCCCTTCTGTGGCAGTTAGGAGACTGAATCAAGGTCCAGAGAAGGTGGAGGAATCCTGA
TACTGAGCGGAAGAAAATACACAGATGTGCTTCCTTCCCAGTCCTGACAAATGGCCTTTCCTTAAGTTCCTCATT
AATTCATATGAAGACAACACATTTGGTGACTAAATTTGGAATCAGAGGCTTTTAAAGCCTCCCAGCTGCTCTGAC
CCCAATATCAGGAACTTGGCATCTCTGATCTAACAAGGGCACCACTAACAAGGACAAAGCCACCATCATTCACCT
TGATTCCGCACATGCCCAACGATGACTTCTGTCCTGGGCTAACCATCAAGGCCATGGGTGCTGAGAGAGCCCCCC
AGAGGCAGCCATGCACCCTGCACCTCCTCGTCCTCGTCCCCATCCTCCTCAGCCTGGTGGCCTCCCAGGACTGGA
AGGCTGAACGCAGCCAAGACCCCTTCGAGAAATGCATGCAGGATCCTGACTATGAGCAGCTGCTCAAGGTGGTGA
CCTGGGGGCTCAATCGGACCCTGAAGCCCCAGAGGGTGATTGTGGTTGGCGCTGGTGTGGCCGGGCTGGTGGCCG
CCAAGGTGCTCAGCGATGCTGGACACAAGGTCACCATCCTGGAGGCAGATAACAGGATCGGGGGCCGCATCTTCA
CCTACCGGGACCAGAACACGGGCTGGATTGGGGAGCTGGGAGCCATGCGCATGCCCAGCTCTCACAGGATCCTCC
ACAAGCTCTGCCAGGGCCTGGGGCTCAACCTGACCAAGTTCACCCAGTACGACAAGAACACGTGGACGGAGGTGC
ACGAAGTGAAGCTGCGCAACTATGTGGTGGAGAAGGTGCCCGAGAAGCTGGGCTACGCCTTGCGTCCCCAGGAAA
AGGGCCACTCGCCCGAAGACATCTACCAGATGGCTCTCAACCAGGCCCTCAAAGACCTCAAGGCACTGGGCTGCA
GAAAGGCGATGAAGAAGTTTGAAAGGCACACGCTCTTGGAATATCTTCTCGGGGAGGGGAACCTGAGCCGGCCGG
CCGTGCAGCTTCTGGGAGACGTGATGTCCGAGGATGGCTTCTTCTATCTCAGCTTCGCCGAGGCCCTCCGCGCAN
CAGCTGCCTCAGCGACAGACTCCAGTACAGCCGCATCGTGGGTGGCTGGGACCTG**ATG**CCGCGCGCGCTGCTGAG
CTCGCTGTCCGGGCTTGTGCTGTTGAACGCGCCCGTGGTGGCGATGACCCAGGGACCGCACGATGTGCACGTGCA
GATCGAGACCTCTCCCCCGGCGCGGAATCTGAAGGTGCTGAAGGCCGACGTGGTGCTGCTGACGGCGAGCGGACC
GGCGGTGAAGCGCATCACCTTCTCGCCGCCGCTGCCCCGCCACATGCAGGAGGCGCTGCGGAGGCTGCACTACGT
GCCGGCCACCAAGGTGTTCCTAAGCTTCCGCAGGCCCTTCTGGCGCGAGGAGCACATTGAAGGCGGCCACTCAAA
CACCGATCGCCCGTCGCGCATGATTTTCTACCCGCCGCCGCGCGAGGGCGCGCTGCTGCTGGCCTCGTACACGTG
GTCGGACGCGGCGGCAGCGTTCGCCGGCTTGAGCCGGGAAGAGGCGTTGCGCTTGGCGCTCGACGACGTGGCGGC
ATTGCACGGGCCTGTCGTGCGCCAGCTCTGGGACGGCACCGGCGTCGTCAAGCGTTGGGCGGAGGACCAGCACAG
CCAGGGTGGCTTTGTGGTACAGCCGCCGGCGCTCTGGCAAACCGAAAAGGATGACTGGACGGTCCCTTATGGCCG
CATCTACTTTGCCGGCGAGCACACCGCCTACCCGCACGGCTGGGTGGAGACGGCGGTCAAGTCGGCGCTGCGCGC
CGCCATCAAGATCAACAGCCGGAAGGGGCCTGCATCGGACACGGCCAGCCCCGAGGGGCACGCATCTGACATGGA
GGGGCAGGGGCATGTGCATGGGGTGGCCAGCAGCCCCTCGCATGACCTGGCAAAGGAAGAAGGCAGCCACCCTCC
AGTCCAAGGCCAGTTATCTCTCCAAAACACGACCCACACGAGGACCTCGCAT**TAA**AGTATTTTCGGAAA

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FIGURE 3847

GAAGAGGTAAGCGGTTACTCACTCCATGGCTGCAGCAAGGAGAGGCGGCGGCGGCCTCGGCTGAAGAAAGAAGAA
ATCTTCCCAAGGCTGCAGACACCGACGGATTTGCTTTGGGAGCCAGAGTAGCTGCCGCCACCAGAGTCCGGAGCC
ATGAGCGGGTTTAATTTTGGAGGCACTGGGGCCCCTACAGGCGGGTTCACGTTTGGCACTGCAAAGACGGCAACA
ACCACACCTGCTACAGGGTTTTCTTTCTCCACCTCTGGCACTGGAGGGTTTAATTTTGGGGCTCCCTTCCAACCA
GCCACAAGTACCCCTTCCACCGGCCTGTTCTCACTTGCCACCCAGACTCCGGCCACACAGACGACAGGCTTCACT
TTTGGAACAGCGACTCTTGCTTCGGGGGGAACTGGATTTTCTTTGGGGATCGGTGCTTCAAAGCTCAACTTGAGC
AACACAGCTGCCACCCCAGCCATGGCAAACCCCAGCGGCTTTGGGCTGGGCAGCAGCAACCTCACTAATGCCATA
TCGAGCACCGTCACCTCCAGCCAGGGCACAGCACCCACCGGCTTTGTGTTTGGCCCCTCCACCACCTCTGTGGCT
CCAGCTACCACATCTGGAGGCTTCTCATTCACTGGTGGAAGCACGGCCCAACCCTCCGGTTTCAACATTGGCTCA
GCAGGGAATTCAGCCCAGCCCACGGCACCTGCCACGTTGCCCTTCACTCCGGCCACGCCAGCAGCCACCACAGCA
GGTGCCACACAGCCAGCTGCTCCCACACCCACAGCCACCATCACCAGCACTGGGCCCAGCCTCTTTGCGTCAATA
GCAACTGCTCCAACCTCATCTGCCACCACTGGACTCTCCCTCTGTACCCCTGTGACCACAGCGGGCGCCCCCACT
GCTGGGACACAGGGCTTCAGCTTAAAGGCACCTGGAGCAGCTTCCGGCACCTCCACAACAACATCCACCGCTGCC
ACCGCCACCGCCACCACCACCAGCAGCAGCAGCACCACCGGCTTTGCCTTGAATTTAAAACCACTGGCGCCAGCC
GGGATCCCCAGCAATACAGCAGCTGCCGTGACCGCTCCACCTGGCCCTGGCGCAGCTGCAGGGGCGGCTGCCAGC
TCCGCCATGACCTACGCGCAGCTGGAGAGCCTGATCAACAAATGGAGCCTGGAGCTAGAGGACCAGGAGCGGCAC
TTCCTCCAGCAGGCCACCCAGGTCAACGCCTGGGACCGCACGCTGATCGAGAATGGAGAAAAGATCACCAGCCTG
CACCGCGAGGTGGAGAAGGTGAAGCTGGACCAGAAGAGGCTGGACCAGGAGCTCGACTTCATCCTGTCCCAGCAG
AAGGAGCTGGAAGACCTGCTGAGCCCACTGGAGGAGTTGGTCAAGGAGCAGAGCGGGACCATCTACCTGCAGCAC
GCGGATGAGGAGCGTGAGAAAACCTACAAGCTGGCTGAGAACATCGATGCACAGCTCAAGCGCATGGCCCAGGAT
CTCAAGGACATCATCGAGCACCTGAACACGTCCGGGGCCCCCGCCGACACCAGTGACCCACTGCAGCAGATCTGC
AAGATCCTCAATGCGCACATGGACTCACTGCAGTGGATCGACCAGAACTCGGCCCTGCTGCAGAGGAAGGTGGAG
GAGGTGACCAAGGTGTGCGAGGGCCGGCGCAAGGAGCAGGAGCGCAGCTTCCGGATCACCTTTGACTGAGCGACA
GCAGCCCTGGGGCCCGCAGGTCCCTAGGGAGTTCATGAGGGGAATGCGCCCTGTTGTCTGTAGTTTGGGGTTGTG
GCAAGATACTTGTTTGTTTGTTTCTTTCTTTCACA

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FIGURE 3848

GTGGAATAACCCCCTTCTGAAAAATGGTTTCACCCGCTCCGTCTCTAGAACGGGTCGGGCCGCTACCACTGTCCG
GCCCGGAGGGGAACTGTTTTCTCCGGAAGTGACAACACGCTGACTAGGAAAAGGAGGAGGCGGGGCAGTGGGGCC
TTCGGCGGCGACTATGGAAGGAGCCGGCTACAGGGTGGTGTTTGAGAAGGGCGGAGTGTACCTGCACACCAGCGC
TAAGAAGTATCAGGACCGAGACTCTCTCATCGCTGGTGTCATCCGTGTCGTGGAAAAGGACAATGACGTCCTCCT
GCACTGGGCTCCTGTAGAGGAGGCTGGAGATTCCACCCAAATCCTCTTCTCCAAGAAGGACTCCAGTGGGGGTGA
CTCATGTGCTTCTGAGGAGGAACCAACCTTTGACCCCGGCTATGAACCTGACTGGGCTGTCATCAGCACTGTGCG
GCCACAGCCCTGCCACTCAGAGCCCACGAGAGGTGCAGAGCCCAGCTGCCCCCAGGGCTCCTGGGCCTTCTCAGT
GAGTCTGGGGGAGCTAAAGTCCATCCGCCGCTCCAAGCCAGGCCTCAGCTGGGCCTACCTGGTTCTGGTGACCCA
GGCTGGAGGTTCCCTGCCCGCACTGCACTTCCACCGCGGGGGCACCCGCGCCCTGCTCCGCGTCCTCAGCCGCTA
CCTGCTGTTGGCCAGCTCCCCGCAGGACTCCCGCCTCTACCTTGTCTTCCCCCACGACTCCTCTGCTCTCTCCAA
CTCCTTCCACCACCTGCAGCTCTTTGACCAGGACAGCTCCAATGTGGTGTCACGCTTCCTCCAGATCCCTACTCC
ACCAACTTCAGCAGCTTCTCCCGAGTGACCAACTTCTTCCGGGGTGCCCTGCAGCCACAGCCTGAGGGAGCCGCC
TCCGACCTTCCCCCGCCACCCGACGATGAGCCCGAGCCTGGATTCGAGGTCATTTCCTGTGTGGAGCTGGGGCCT
CGGCCAACCGTGGAGCGGGGCCCTCCAGTTACAGAGGAGGAGTGGGCACGCCACGTGGGCCCTGAAGGTCGCCTG
CAGCAGGTCCCTGAGCTGAAGAACCGGATCTTCTCGGGGGGTCTGAGCCCCAGCCTGCGGCGCGAGGCCTGGAAG
TTCCTCCTAGGGTACCTCAGCTGGGAAGGCACAGCTGAGGAGCACAAGGCCCACATACGCAAGAAAACGGATGAG
TATTTCCGCATGAAGCTGCAGTGGAAATCTGTGAGCCCTGAGCAGGAGCGGAGAAACTCACTTCTGCATGGATAC
CGCAGCCTCATCG

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FIGURE 3849

CCGGTCAGCTAAGGCCATGTTAATACGGGGCTGTCCCATCTCTCTGCGGGGCGCGACAGCTGGAAGAGCCGAACG
GATAAGAGAAGAGGAGAGCGCGGATGGCGTCGGGGCGCCCCGAGGAGCTATGCTGCCCATGGTCGAGGAGCCCTG
GCGGAGGCAGCGCGCCGTTGCCTCCACGACATCGCACTGGCCCACAGGGCTGCCACTGCTGCTCGGCCTCCTGCG
CCCCCACCAGCACCACAGCCACCCAGTCCCACACCCAGCCCACCCCGGCCTACCCTGGCCAGAGAGGACAACGAG
GAGGACGAGGATGAGCCCACAGAGACAGAGACCTCCGGGGAGCAGCTGGGCATTAGTGATAATGGAGGGCTCTTT
GTGATGGATGAGGACGCCACCCTCCAGGACCTTCCCCCCTTCTGTGAGTCAGACCCCGAGAGTACAGATGATGGC
AGCCTGAGCGAGGAGACCCCCGCCGGCCCCCCCACCTGCTCAGTGCCCCCAGCCTCAGCCCTACCCACACAGCAG
TACGCCAAGTCCCTGCCTGTGTCTGTGCCCGTCTGGGGCTTCAAGGAGAAGAGGACAGAGGCGCGGTCATCAGAT
GAGGAGAATGGGCCGCCCTCTTCGCCCGACCTGGACCGCATCGCGGCGAGCATGCGCGCGCTGGTGCTGCGAGAG
GCCGAGGACACCCAGGTCTTCGGGGACCTGCCACGGCCGCGGCTTAACACCAGCGACTTCCAGAAGCTGAAGCGG
AAATATTGAAGTCCAGGGAGGGAGCGCCCCGGGCCGCGTCCGCCCCGTCCCACACTACGCCCCCGCCCCACTCCC
GGGGCCTGCTAATCTGAGGCCGATCCGGGACCGGCCTCCTTGCGTCTCCCATTCCCAAGATTGTCCCGCCTCTGC
CAATCCCCGCCGTCCTTCCAGCCCACGACCTGCCGCGCCGAGGAGCGGCATCTGTCCCGTTTCCCGATTGGGTCT
GTCGTCTCTCTCCGCCTAGCGACAGATTCCTTCTATTAAGGGATTGGCTCGCTGAGTTCTAAGCTCTAAATGGGT
CAACTCCTTTGTTTTCCGCCTAGCGACAAGGGATTTGCTCGCACGGCATTGGCTCCATCCCCTAGTCGCTGGACA
GCTCTTTTTTTGATTGGCTCAAATCCTGTAAAGGGCTTGACCAGTCTCTACATAGTCACCGTCCGCTTTTCCTGA
GTTCTCCCTCCCAATTGGCTCCAGCTTCCTGGGGGCGTGGCCAAGCCCTCCTCTTCCCAGAATTGGCCCGGGGCC
TTCAATTTACGTTCTTTACACTACGGGGACTGGGGTCGTCTTTGCCCACGTCCCGACAACTTGTTCCCTGACCCC
CTCAGGGATGGCCCCAAACTGTCCCTGCCTCTGGCACCCCCTTTCATTGGTTCCATCCATCCCCACAACAGCCTG
CCAATCGAAGCCCGTCCCTGCATCCAGGATGGTACCAGCTCCCGCCCCTCGCCCCCCACCTCCACAGGTGCCTTA
AAGGGCCCTCGTCCACCCAAGGTGGGGGGCAGGGGCCCTCACTCTCCGGCCCTGGTGTGGGGGAGAGAGTGAGGG
GTTGGGGGATCGGCAGTTGGGAGGGGCGCTCTGAGATTAAAGAGTTTTACCTCTGAGAT

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FIGURE 3850

GCCGGGTTGCAGGCGGGGCACCTCGGGCAGGACCTCCCTGGTCGGAAGTGGCCGTGAGCCCAAGCCGCGGTCCCG
GGCCGGCACCCAGGATGGGCGAGGTGGAGGCCCCGGGCCGCTTGTGGCTCGAGAGCCCCCTGGGGGAGCGCCCCC
CATCTTCCTGCCCTCGGACGGGCAAGCCCTGGTCCTGGGCAGGGGACCCCTGACCCAGGTTACGGACCGGAAGTG
CTCCAGAACTCAAGCCTGAAGCAGGCCACACTCCCCAGAAATGAGGGACCCAATCACACAAGGATGCAAATCCTG
ACTCCACCCCTCCAATCCTCAGTGGAGCTGGTCGCAGATCCTGAGACCCGGACAGTGGCAGTGAAACAGCTGGGA
GTTAACCCCTCAACTACCGGGACCCAGGAGTTGAAGCCGGGGTTGGAGGGCTCTCTGGGGGTGGGGGACACACTG
TATTTGGTCAATGGCCTCCACCCACTGACCCTGCGCTGGGAAGAGACCCGCACACCAGAATCCCAGCCAGATACT
CCGCCTGGCACCCCTCTGGTGTCCCAAGATGAGAAGAGAGATGCTGAGCTGCCGAAGAAGCGTATGCGGAAGTCA
AACCCCGGCTGGGAGAACTTGGAGAAGTTGCTAGTGTTCACCGCAGCTGGGGTGAAACCCCAGGGCAAGGTGGCT
GGCTTTGATCTGGACGGGACGCTCATCACCACACGCTCTGGGAAGGTCTTTCCCACTGGCCCCAGTGACTGGAGG
ATCTTGTACCCAGAGATTCCCCGTAAGCTCCGAGAGCTGGAAGCCGAGGGCTACAAGCTGGTGATCTTCACCAAC
CAGATGAGCATCGGGCGCGGGAAGCTGCCAGCCGAGGAGTTCAAGGCCAAGGTGGAGGCTGTGGTGGAGAAGCTG
GGGGTCCCCTTCCAGGTGCTGGTGGCCACGCACGCAGGCTTGTAGCGGAAGCCGGTGACGGGCATGTGGGACCAT
CTGCAGGAGCAGGCCAACGACGGCACGCCCATATCCATCGGGGACAGCATCTTTGTGGGAGACGCAGCCGGACGC
CCGGCCAACTGGGCCCCGGGGCGGAAGAAGAAAGACTTCTCCTGCGCCGATCGCCTGTTTGCCCTCAACCTTGGC
CTGCCCTTCGCCACGCCTGAGGAGTTCTTTCTCAAGTGGCCAGCAGCCGGCTTCGAGCTCCCAGCCTTTGATCCG
AGGACTGTCTCCCGCTCAGGGCCTCTCTGCCTCCCCGAGTCCAGGGCCCTCCTGAGCGCCAGCCCGGAGGTGGTT
GTCGCAGTGGGATTCCCTGGGGCCGGGAAGTCCACCTTTCTCAAGAAGCACCTCGTGTCGGCCGGATATGTCCAC
GTGAACAGGGACACGCTAGGCTCCTGGCAGCGCTGTGTGACCACGTGTGAGACAGCCCTGAAGCAAGGGAAACGG
GTCGCCATCGACAACACAAACCCAGACGCCGCGAGCCGCGCCAGGTACGTCCAGTGTGCCCGAGCCGCGGGCGTC
CCCTGCCGCTGCTTCCTCTTCACCGCCACTCTGGAGCAGGCGCGCCACAACAACCGGTTTCGAGAGATGACGGAC
TCCTCTCATATCCCCGTGTCAGACATGGTCATGTATGGCTACAGGAAGCAGTTCGAGGCCCCAACGCTGGCTGAA
GGCTTCTCTGCCATCCTGGAGATCCCGTTCCGGCTATGGGTGGAGCCGAGGCTGGGGCGGCTGTACTGCCAGTTC
TCCGAGGGCTGAGCCCCGCCCAGCTCCCCTCCACAATAAACGCTGTTTCTCCTTG

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FIGURE 3851

ATGGTCCGTCCGCGCCGTGCCCCGTACCGCTCCGGCGCCGGGGGCCCCCTCGGGGGTCGCGGCCGCCCTCCGCGG
CCCCTCGTGGTGCGCGCCGTCCGCTCGCGCTCCTGGCCTGCCAGCCCCCGAGGCCCGCAGCCTCCGCGGATCCGG
GCCCGCTCGGCCCCTCCCATGGAAGGTGCTCGGGTCTTCGGGGCACTGGGTCCCATCGGTCCCTCCTCACCTGGG
CTCACCCTCGGGGGTCTGGCCGTGAGCGAGCACCGGCTCAGCAACAAGCTGCTGGCTTGGAGCGGCAAGCGCAGA
CCCTACTCTGACTCCACTGCAAAGCTGAAGCGGACCCTGCCCTGCCAAGCCTACGTGAACCAAGGCGAGAACCTG
GAGACCGACCAGTGGCCGCAGAAGCTGATCATGCAGCTGATCCCTCAGCAGCTGCTGACCACCCTGGGCCCCCTG
TTCCGGAACTCCCAGTTGGCACAGTTCCACTTCACCAACAGAGACTGCGACTCGCTCAAGGGGCTCTGCCGCATC
ATGGGCAACGGCTTCGCGGGCTGCATGCTGTTCCCCCACATCTCCCCCTGTGAGGTGCGCGTGCTCATGCTCCTG
TACTCGTCCAAGAAGAAGATCTTCATGGGCCTCATCCCCTACGACCAGAGCGGCTTCGTCAGTGCCATCCGGCAG
GTCATCACCACCCGCAAGCAGGCAGTGGGACCTGGTGGTGTCAACTCAGGCCCAGTCCAGATCGTCAACAACAAG
TTTCTGGCATGGAGTGGTGTCATGGAGTGGCAGGAGCCCAGGCCTGAGCCCAACAGTCGGTCCAAGAGGTGGCTG
CCATCCCACGTCTACGTGAACCAGGGGGAGATCCTGAGGACCGAGCAGTGGCCAAGGAAGCTGTACATGCAGCTC
ATCCCGCAGCAGCTGCTGACCACCCTAGTGCCGCTGTTCCGGAACTCGCGCCTGGTCCAGTTCCACTTCACCAAG
GACCTGGAGACACTGAAGAGCCTGTGCCGGATCATGGACAATGGCTTCGCCGGCTGCGTGCACTTTTCCTACAAA
GCATCGTGTGAGATCCGCGTGCTTATGCTCCTGTACTCTTCAGAGAAGAAAATCTTCATTGGCCTCATCCCCCAT
GACCAGGGCAACTTTGTCAACGGCATCCGGCGTGTCATTGCCAACCAGCAGCAGGTCCTGCAGCGGAACCTGGAG
CAGGAGCAACAGCAACGAGGGATGGGGGGGTAGTGGTTACCCCGGGCTGGGCCCCTCCAGGAGTCACAGATGAGG
CCCCCGCAGAGACTGGTGACACGCTTCTGAGCAGGGGCCCCTGGGGACTTCAACTGCCCAGCAACATGGAGGATG
GTGTCCTGAGGCCTCCAAGGACGGTCCCCACCCCTCTACGTTTCCCCAATAAAGCCTTTTAAAAACC

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FIGURE 3852

ACAAGCTCCCGGGAAACCAGGAGTGACAAGGGCGCCTGTCCCTGAGGAGTGGAGAGCGCGGAGTTGGTGCTGAGT
CAGCCCTGATGTGGCAGAGGAGGAGCAGGCCCCCGCAGAACCAGGGCTCTTCAGTGTCTCCAGGTCCTTGGTGAA
GTGGAACTGGACCAGGCGCGAGTTCCGGAACAGCGGCACTAGGGTGGTCTGCGGGGAAGCGAGGGGACCCCCAGC
TCTGGCTTCTCCCACCACGGCCTCCCGGCTCCCAGCCCGCTGAGTCCCCCGGGCCCAGGACCAAACTGAGACTCC
CCTGTCCTCCCTACCTCAGGAAACGTCATCTCCACCGCTCAACCAGCCCAACCCTGGAGTGCTGTGGAAGCCGCT
CTCAGATCCCTTGGCAGCCCCCCAGGTGCAGGTCGTGGCTGCCCCTGCCCCGCTCAGTCCCTGCACAGCCACCAG
CTGGCTGCCTGGGACCCCTTGAAGCCAAGCCTGAGGAGCTACCCACCACACCTGCTTCAGCACCCTCAGCTCCGC
TCCCTCACAGCCAGCTCAGGCCACCTGGGGAGGCGCTCTTGCCCCCAGCCCCGCCCTCTGGAAGAGCTACTGCGT
GCAGGCTCCAGCACCCGGCCCCAGCCCCTCACCAGCAGCTGCTGCGGGATGAGCTGCATGTACAGCTTCCTTGGC
CACTGCTCGGTCCTCCTGTGGGGCACAAAGGGACGAGGGTCAGGAAGCCCCAGCTCCCCTGGATGCTGCCTCCAC
CCCCCAGCCCAGCACTCACAGGATCTCCCCCTGGTTCACGTAGACGTGGGATGGCAGCCACCTCTTGGACCGACT
GTTGGGCTCAGGCCTGGGCTTTTGGGGGAGAGGCAAAGAGGAGCCCTCAGGGCTGGAGACCCCCAATGCCAGTGT
CCCCTCCCAGCCACAGTCCGTGAGGATCTGGGGGTCCCAAGTCCCTGGGCTGCCGAGTGCTCACCTCCTGCCACT
CCATGACACCACTCCATGCCAGAAACTTGTTGTTGACGATCTGGACTGGGCCTGAGTTGACACCACCAGGTCCCA
CTGCCTGTTGGAAGGGAACGGGGTGGGAAGAGGGGCCCAGGCTCCTGGGAAACCTGTCTGTCTGTCCTGGGGCCT
GCCATCCCTCCCTCCGAGCCTTGGCCTGTTAGCCCCAGCTGGGTCCATTCTCTAGTCCCAGGGGAACAGGCCCTG
CCCCTCATCTGCTCACAGCCCCCC**ATG**GCTCCCCAGTGGCCTGAGACAGGTCCCGGCCCTCACCTGGTGCACAGG
ACCTGCAGAGTCTGCCTCAACTGGCAAGGCATGACCAGGACACGTGGTTACCAGGCAGGGCCTTCCAGCCGCAGG
ACGATCCCAACCCCTGCCCAGCTCCCCGCTCCGCTGGCTTCCCTGCCGCCGCGCCAAGACCCACCCTCCAGCCCT
GCAGAGCCGCCCAGTGGCCGCTTTTCCATGGAGCCCTGGTGGGAACCCGCCCGGCATCCTCCGGGCTCCCCTGCA
GCTCCTTGCTCCAGCCATCGCATCACACTCCGCCCACACCAAGTCTGGCTGCCCAACCAGGGCAGTGGGGTC**TAA**

TCCCCCTCTGTCCCCAGAGGGGCTGTGCTTGGCTGGCACACCTGCTTGCGGGTGGTGATGACCTGCCGGATGGCA
CTGACGAAGCCGCTCTGGTCGTAGGGGATGAGGCCCATGAAGATCTTCTTCTTGGACGAGTACAGGAGCATGAGC
ACGCGCACCTCACAGGGGGAGATGTGGGGGAACAGCATGCAGCCCGCCTGCGGGGGCCGCGGGTCAGGACCCTGT
GGTCACTGCCCGGGGCCACTGTGCCCCCACCACCCTGGACCGCCCCACCTGTAGGGGATGAAGGGAGATCATCGG
TGGACAGAGGCCCCCACAGTCAAGGCCATGGCCATAGGTGAGGGGCCTCTGAGAGCCCGTGCAGCGCCCATCGGC
ATCCCCCGACCCTGCCATGGCTGAGGTCAGAGTGGCACCCGGCACCCAGGCTGCGGTGAGAATGCCAAGAAGGCA
CTACCTCCCACCCACATCACCCCCTGCCGCCAGCCCTCCTGACTGCCTGATGGGGTGACTTGGCCTGGGGGTTAA
GAGCACAGGCAGCGCCCCACCGTTCTGCTGCCTCCTAGCTGTGTGACCTAACACCAGCCACCTCCTGCTTCTGGG
CCTCCATCATCTGTAAAACCGGGTAATAGTGCACACAGTTGGTGCCACATAAAGGCTCAACAGATAAA

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FIGURE 3853

GGCTGCGGCTGCAGTGGTGGTGGCGGGTACCGCACGGGGTATGGTCCCCGGGTCCGAGGGCCCGGCCCGCGCCGG
GAGCGTGGTGGCCGACGTGGTGTTTGTGATTGAGGGTACGGCCAACCTGGGACCCTACTTCGAGGGGCTCCGCAA
GCACTACCTGCTCCCGGCCATCGAGTATTTTAATGGTGGTCCTCCTGCTGAGACGGACTTCGGGGGAGACTATGG
GGGGACCCAGTACAGCCTCGTGGTGTTCAACACAGTGGACTGCGCTCCCGAGTCCTACGTACAATGTCACGCTCC
CACCAGCAGCGCCTATGAGTTTGTCACCTGGCTCGATGGCATTAAGTTCATGGGCGGGGGTGGTGAGAGCTGCAG
CCTCATCGCGGAAGGACTCAGCACAGCCTTGCAGCTGTTTGATGACTTCAAGAAGATGCGCGAGCAGATTGGCCA
GACGCACCGGGTCTGCCTCCTCATCTGCAACTCACCCCCATACTTGTTGCCTGCTGTTGAGAGCACCACGTACTC
TGGATGCACAACTGAGAATCTTGTGCAGCAGATTGGGGAGCGGGGGATCCACTTCTCCATTGTGTCTCCCCGGAA
GCTGCCTGCGCTTCGGCTTCTGTTTGAGAAGGCAGCCCCCCCGGCCTTGCTGGAGCCGCTGCAGCCTCCGACAGA
TGTGAGCCAGGACCCGAGGCACATGGTGCTGGTTCGGGGACTCGTGCTGCCTGTTGGGGGTGGCTCAGCCCCAGG
CCCCCTCCAGTCAAAGCAGCCAGTCCCCCTGCCTCCCGCCGCACCCTCAGGTGCCACTCTCTCAGCAGCCCCCCA
GCAGCCTCTGCCCCCCGTCCCCCCCGCAGTACCAGGTTCCCGGGAACCTGAGTGCAGCTCAGGTGGCCGCGCAGAA
TGCAGTGGAGGCTGCCAAGAACCAGAAGGCTGGGCTGGGCCCTCGCTTCTCGCCCATCACCCCTCTCCAACAAGC
TGCTCCCGGAGTGGGTCCCCCCTTCAGCCAGGCCCCAGCTCCCCAACTACCCCCAGGACCCCCTGGCGCCCCCAA
GCCACCACCTGCTTCCCAGCCCAGTCTGGTCTCCACTGTGGCCCCTGGCTCCGGCCTGGCTCCCACGGCACAGCC
CGGGGCACCGTCCATGGCAGGCACTGTGGCCCCAGGAGGGGTGAGCGGCCCTTCCCCAGCCCAGCTGGGAGCCCC
AGCCCTCGGTGGGCAGCAGTCAGTCTCCAATAAGCTTCTGGCCTGGAGCGGGGTCCTGGAGTGGCAAGAGAAACC
CAAACCTGCCTCAGTGGATGCCAACACCAAGCTGACGCGGTCACTGCCCTGCCAGGTCTACGTGAATCATGGCGA
GAACCTGAAGACGGAGCAGTGGCCCCAGAAGCTGATCATGCAGCTCATCCCCCAGCAGCTGCTGACCACCCTGGG
CCCTTTGTTCCGGAACTCAAGGATGGTCCAGTTCCATTTCACCAACAAGGACCTGGAGTCTCTCAAAGGCCTCTA
CCGCATCATGGGCAACGGCTTCGCGGGCTGCGTGCACTTCCCCCACACGGCGCCCTGTGAGGTGCGCGTGCTCAT
GCTCCTGTACTCGTCCAAGAAGAAGATCTTCATGGGCCTCATCCCCTACGACCAGAGCGGCTTCGTCAACGGCAT
CCGGCAGGTCATCACCAACCACAAGCAGGTCCAGCAGCAGAAGCTGGAGCAGCAGCAGCGAGGAATGGGGGGACA
GCAGGCACCCCCAGGGCTGGGGCCCATTCTGGAGGACCAAGCCAGGCCCTCACAGAATCTGCTCCAGCTCCGCCC
ACCGCAGCCCCAGCCTCAGGGTACCGTAGGGGCCTCTGGGGCCACGGGGCAGCCCCAGCCCCAAGGTACTGCCCA
GCCCCCGCCAGGTGCCCCTCAAGGCCCTCCTGGAGCAGCTTCTGGCCCACCCCCTCCTGGACCCATCCTTCGGCC
CCAGAACCCTGGGGCCAACCCTCAGCTGCGAAGCCTCCTCCTCAACCCACCACCGCCGCAGACTGGGGTGCCCCC
ACCCCAGGCCTCCCTCCACCACCTGCCCAGTCCTGGCCCGCACAACTTCCCCCTCGGGCTCCACTGCCAGGTAAG
GGGACCCGGGGGAGGGCAGAGGTCTGGACTGAGTGTCCCAGCAGCTCCTGGGCTAGAGCACCAAGACCGAGTGCT
CCTGGGAAGTAAAGACATAGGATCCAAGAATGAGGGTTCCCCCAGCCGGGCCTGCAGCCCAGCGTCATGGAGGAC
GACATCCTCATGGATCTCATCTGAATCCCCAACACCCAATAAAGTTCCTTTTTAACAC

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FIGURE 3854

AGGGTTTGAGGGTCTGTTTGAGTTGGGTGAAGAAGGCGGGAAGTTAATCCTCTTCCAATCAGCTCCCCATCTCGC
CCTCTGGCGGCTCCGGACCACAGGCCGAGTTACTCTGATTACCGCCATGCTCCAAGACCCGCACTGACAGTCCCC
ACGTGAGGGACCGCGGTGGGAGTCCTAA**ATG**GGGGAGGAGGGGACGGGCGGCACTGTGCATCTGCTGTGCCTCGC
GGCCTCCAGCGGGGTCCCCCTATTCTGCAGGAGCAGTCGCGGCGGCGCCCCCGCCCGTCAGCAGCTCCCGTTCTC
TGTCATCGGTTCCCTCAATGGAGTCCACATGTTTGGGCAGAATCTGGAGGTGCAGCTGAGCTCTGCGAGGACCGA
GAACACGACTGTGGTGTGGAAAAGCTTCCATGACAGCATCACCCTCATTGTTCTGTCATCTGAGGTGGGCATCTC
TGAGCTGAGGCTGGAGAGACTACTCCAAATGGTGTTTGGAGCCATGGTCCTTCTTGTGGGACTTGAAGAACTGAC
CAATATCCGCAACGTGGAGAGACTGAAGAAGGACTTGAGGGCCAGTTATTGCCTCATCGACAGCTTCCTGGGGGA
CTCGGAGCTCATCGGGGACCTGACCCAGTGTGTGGACTGCGTGATTCCTCCAGAGGGGTCCCTCTTGCAGGAAGC
CCTCTCCGGGTTCGCTGAGGCCGCGGGCACGACCTTCGTCAGTCTGGTGGTGTCCGGCCGGGTGGTGGCAGCAAC
AGAGGGTTGGTGGCGGCTGGGGACGCCCGAGGCCGTGCTGCTCCCCTGGCTGGTGGGGTCCCTGCCGCCGCAGAC
CGCTCGCGACTACCCGGTGTACCTGCCGCACGGGAGCCCCACGGTCCCACACCGGCTCCTGACCCTGACTCTGCT
GCCGAGCCTGGAGCTGTGTCTACTCTGCGGGCCGAGCCCACCCCTCAGCCAGTTGTATCCACAGCTTCTGGAGCG
CTGGTGGCAGCCACTGCTGGACCCGTTGCGGGCCTGTCTGCCGTTGGGACCCCGGGCGCTGCCCAGTGGCTTCCC
CCTTCACACAGACATCCTCGGGCTGCTGCTCCTCCACCTGGAACTGAAGCGCTGCCTCTTCACCGTGGAGCCCTT
GGGGGATAAAGAGCCTTCACCAGAACAGCGCCGGCGCCTCCTCCGAAACTTCTATACCCTGGTCACCTCCACGCA
CTTCCCACCAGAGCCAGGGCCACCAGAGAAGACAGAAGATGAGGTCTACCAGGCCCAGCTGCCCAGAGCTTGCTA
CCTGGTGTTGGGGACTGAGGAACCAGGCACAGGAGTGCGTCTGGTGGCCTTGCAGCTGGGGCTTCGGCGGCTGCT
GCTGCTGCTGTCTCCCCAGAGTCCCACCCATGGGCTGCGAAGCCTGGCCACCCACACTCTGCATGCCCTCACCCC
ACTTCTT**TGA**CTACCTAGCAGTGGGTGATGGACACAGACATGGGGCTGTTAGCGTCTCTCTGTTTATTCGCTCAC
AATAATACACAGCCCCTGGATGGGGAGGGGGTAGGAGGGGCTACAACAGGGTGGGGTGGGAGGGGAGGAGACATC
CACTTCCCTGGCCCCTCTCCCCTCTGTGCTTGGGGGGGAAAGGGAGGGAGGGGGACTCCCCCTAACCCCCCAGAA
TGTAAACAGCAGCAGATGAACAAAAATAAAAATACAAAAGGCCGGAGGAAAGTCCCAGGCATCCCCC

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FIGURE 3855

CGCCCGGTCCCCGCTTGCCAGCCCCCGCTGCTCTGTGCCCTGTCCGGCCAGGCCTGGAGCCGACACCACCGCCAT
CATGCCGGCCGTGTCCAAGGGCGATGGGATGCGGGGGCTCGCGGTGTTCATCTCCGACATCCGGAACTGTAAGAG
CAAAGAGGCGGAAATTAAGAGAATCAACAAGGAACTGGCCAACATCCGCTCCAAGTTCAAAGGAGACAAAGCCTT
GGATGGCTACAGTAAGAAAAAATATGTGTGTAAACTGCTTTTCATCTTCCTGCTTGGCCATGACATTGACTTTGG
GCACATGGAGGCTGTGAATCTGTTGAGTTCCAATAAATACACAGAGAAGCAAATAGGTTACCTGTTCATTTCTGT
GCTGGTGAACTCGAACTCGGAGCTGATCCGCCTCATCAACAACGCCATCAAGAATGACCTGGCCAGCCGCAACCC
CACCTTCATGTGCCTGGCCCTGCACTGCATCGCCAACGTGGGCAGCCGGGAGATGGGCGAGGCCTTTGCCGCTGA
CATCCCCCGCATCCTGGTGGCCGGGGACAGCATGGACAGTGTCAAGCAGAGTGCGGCCCTGTGCCTCCTTCGACT
GTACAAGGCCTCGCCTGACCTGGTGCCCATGGGCGAGTGGACGGCGCGTGTGGTACACCTGCTCAATGACCAGCA
CATGGGTGTGGTCACGGCCGCCGTCAGCCTCATCACCTGTCTCTGCAAGAAGAACCCAGATGACTTCAAGACGTG
CGTCTCTCTGGCTGTGTCGCGCCTGAGCCGGATCGTCTCCTCTGCCTCCACCGACCTCCAGGACTACACCTACTA
CTTCGTCCCAGCACCCTGGCTCTCGGTGAAGCTCCTGCGGCTGCTGCAGTGCTACCCGCCTCCAGAGGATGCGGC
TGTGAAGGGGCGGCTGGTGGAATGTCTGGAGACTGTGCTCAACAAGGCCCAGGAGCCCCCCAAATCCAAGAAGGT
GCAGCATTCCAACGCCAAGAACGCCATCCTCTTCGAGACCATCAGCCTCATCATCCACTATGACAGTGAGCCCAA
CCTCCTGGTTCGGGCCTGCAACCAGCTGGGCCAGTTCCTGCAGCACCGGGAGACCAACCTGCGCTACCTGGCCCT
GGAGAGCATGTGCACGCTGGCCAGCTCCGAGTTCTCCCATGAAGCCGTCAAGACGCACATTGACACCGTCATCAA
TGCCCTCAAGACGGAGCGGGACGTCAGCGTGCGGCAGCGGGCGGCTGACCTCCTCTACGCCATGTGTGACCGGAG
CAATGCCAAGCAGATCGTGTCGGAGATGCTGCGGTACCTGGAGACGGCAGACTACGCCATCCGCGAGGAGATCGT
CCTGAAGGTGGCCATCCTGGCCGAGAAGTACGCCGTGGACTACAGCTGGTACGTGGACACCATCCTCAACCTCAT
CCGCATTGCGGGCGACTACGTGAGTGAGGAGGTGTGGTACCGTGTGCTACAGATCGTCACCAACCGTGATGACGT
CCAGGGCTATGCCGCCAAGACCGTCTTTGAGGCGCTCCAGGCCCCTGCCTGTCACGAGAACATGGTGAAGGTTGG
CGGCTACATCCTTGGGGAGTTTGGGAACCTGATTGCTGGGGACCCCCGCTCCAGCCCCCCAGTGCAGTTCTCCCT
GCTCCACTCCAAGTTCCATCTGTGCAGCGTGGCCACGCGGGCGCTGCTGCTGTCCACCTACATCAAGTTCATCAA
CCTCTTCCCCGAGACCAAGGCCACCATCCAGGGCGTCCTGCGGGCCGGCTCCCAGCTGCGCAATGCTGACGTGGA
GCTGCAGCAGCGAGCCGTGGAGTACCTCACCCTCAGCTCAGTGGCCAGCACCGACGTCCTGGCCACGGTGCTGGA
GGAGATGCCGCCCTTCCCCGAGCGCGAGTCGTCCATCCTGGCCAAGCTGAAACGCAAGAAGGGGCCAGGGGCCGG
CAGCGCCCTGGACGATGGCCGGAGGGACCCCAGCAGCAACGACATCAACGGGGGCATGGAGCCCACCCCCAGCAC
TGTGTCGACGCCCTCGCCCTCCGCCGACCTCCTGGGGCTGCGGGCAGCCCCTCCCCCGGCAGCACCCCCGGCTTC
TGCAGGAGCAGGGAACCTTCTGGTGGACGTCTTCGATGGCCCGGCCGCCCAGCCCAGCCTGGGGCCCACCCCCGA
GGAGGCCTTCCTCAGCGAGCTGGAGCCGCCTGCCCCCGAGAGCCCCATGGCTTTGCTGGCTGACCCAGCTCCAGC
TGCTGACCCAGGTCCTGAGGACATCGGCCCTCCCATTCCGGAAGCCGATGAGTTGCTGAATAAGTTTGTGTGTAA
GAACAACGGGGTCCTGTTCGAGAACCAGCTGCTGCAGATCGGAGTCAAGTCAGAGTTCCGACAGAACCTGGGCCG
CATGTATCTCTTCTATGGCAACAAGACCTCGGTGCAGTTCCAGAATTTCTCACCCACTGTGGTTCACCCGGGAGA
CCTCCAGACTCAGCTGGCTGTGCAGACCAAGCGCGTGGCGGCGCAGGTGGACGGCGGCGCGCAGGTGCAGCAGGT
GCTCAATATCGAGTGCCTGCGGGACTTCCTGACGCCCCCGCTGCTGTCCGTGCGCTTCCGGTACGGTGGCGCCCC
CCAGGCCCTCACCCTGAAGCTCCCAGTGACCATCAACAAGTTCTTCCAGCCCACCGAGATGGCGGCCCAGGATTT
CTTCCAGCGCTGGAAGCAGCTGAGCCTCCCTCAACAGGAGGCGCAGAAAATCTTCAAAGCCAACCACCCCATGGA
CGCAGAAGTTACTAAGGCCAAGCTTCTGGGGTTTGGCTCTGCTCTCCTGGACAATGTGGACCCCAACCCTGAGAA
CTTCGTGGGGGCGGGGATCATCCAGACTAAAGCCCTGCAGGTGGGCTGTCTGCTTCGGCTGGAGCCCAATGCCCA
GGCCCAGATGTACCGGCTGACCCTGCGCACCAGCAAGGAGCCCGTCTCCCGTCACCTGTGTGAGCTGCTGGCACA
GCAGTTCTGAGCCCTGGACTCTGCCCCGGGGGATGTGGCCGGCACTGGGCAGCCCCTTGGACTGAGGCAGTTTTG
GTGGATGGGGGACCTCCACTGGTGACAGAGAAGACACCAGGGTTTGGGGGATGCCTGGGACTTTCCTCCGGCCTT
TTGTATTTTTATTTTTGTTCATCTGCTGCTGTTTACATTCTGGGGGGTTAGGGGGAGTCCCCCTCCCTCCCTTTC
CCCCCCAAGCACAGAGGGGAGAGGGGCCAGGGAAGTGGATGTCTCCTCCCCTCCCACCCCACCCTGTTGTAGCCC
CTCCTACCCCCTCCCCATCCAGGGGCTGTGTATTATTGTGAGCGAATAAACAGAGAGACGCT

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FIGURE 3856

ACCCCCACACCATGGCGAGCGTGGTGGTGAAGACGATCTGGCAGTCCAAAGAGATCCATGAGGCCGGGGACACCC
CCACGGGGGTGGAGAGCTGCTCCCAGCTAGTCCCAGAGGCTCCCCGGAGGGTGACCAGCCGGGCCAAGGGGATCC
CGAAGAAAAAGAAGGCCGTGTCGTTCCACGGGGTGGAGCCCCAGATGTCCCATCAGCCCATGCACTGGTGCCTGA
ACCTCAAACGGTCCTCGGCCTGCACCAACGTGTCACTGCTCAACCTGGCCGCCATGGAGCCCACTGACTCCACGG
GGACAGACTCCACAGTGGAAGACCTCAGCGGCCAACTCACACTGGCTGGGCCCCCTGCCTCCCCTACCCTACCCT
GGGATCCGGATGACGCAGACATCACGGAAATCCTGAGTGGGGTCAACAGTGGATTGGTCCGCGCCAAAGACTCCA
TCACCAGCTTGAAGGAAAAGACCAACCGGGTTAACCAGCACGTGCAGTCTCTGCAGAGCGAGTGTTCTGTGCTGA
GCGAGAATCTGGAGAGAAGGCGGCAAGAGGCAGAAGAGTTGGAGGGGTACTGCATTCAACTCAAGGAGAACTGCT
GGAAGGTGACCCGGTCTGTGGAAGATGCTGAAATCAAAACCAACGTCTTGAAGCAGAATTCTGCCCTGCTGGAGG
AGAAGCTGCGCTACCTCCAGCAGCAGCTGCAGGATGAGACGCCGCGACGGCAGGAGGCCGAGCTGCAGGAGCCGG
AGGAGAAGCAGGAGCCGGAGGAGAAGCAGGAGCCGGAGGAGAAGCAGAAGCCGGAGGCTGGCCTCTCCTGGAACA
GCCTGGGCCCCGCCGCCACGTCCCAGGGCTGCCCCGGCCCGCCAGGGAGTCCCGACAAACCCTCGCGGCCACACG
GCCTGGTCCCCGCAGGCTGGGGAATGGGGCCTCGGGCTGGCGAGGGCCCCTACGTGAGCGAGCAGGAATTGCAGA
AGCTGTTCACCGGCATCGAAGAGCTGAGGAGAGAGGTGTCCTCACTGACCGCCCGGTGGCATCAGGAGGAGGGGG
CGGTGCAGGAAGCCCTGCGGCTGCTCGGGGGCCTGGGCGGCAGGGTCGACGGCTTCCTAGGCCAGTGGGAGCGGG
CACAGCGCGAACAGGCACAGACGGCGCGGGACTTGCAGGAGCTGCGAGGTCGGGCGGATGAGCTGTGCACCATGG
TGGAGCGGTCAGCAGTGTCTGTGGCTTCACTGAGGAGCGAACTGGAGGGGCTGGGCCCACTGAAACCCATTCTGG
AGGAGTTCGGGCGGCAATTTCAGAACTCTCGAAGAGGGCCTGACCTCTCCATGAACCTGGATCGGTCCCACCAAG
GCAACTGTGCCCGCTGTGCCAGCCAGGGGTCGCAGTTGTCTACGGAGTCCCTGCAGCAGCTGCTGGACCGAGCAC
TGACCTCACTAGTGGACGAGGTGAAGCAGAGGGGCCTGACTCCTGCCTGTCCCAGCTGTCAGAGGCTACACAAGA
AGATTCTGGAGCTGGAGCGCCAGGCCTTAGCCAAACACGTCAGGGCAGAGGCCCTGAGCTCCACCCTTCGGCTGG
CCCAAGACGAGGCCCTGCGGGCCAAGAACCTACTGCTGACAGACAAGATGAAGCCAGAGGAGAAGATGGCCACTC
TGGACCATCTACACTTGAAGATGTGCTCCCTCCACGATCATCTCAGCAACCTGCCACTTGAGGGGTCCACGGGAA
CAATGGGGGGAGGCAGCAGTGCAGGAACCCCCCCAAAACAGGGGGGCTCAGCCCCTGAACAATAAATGGCCTCTC
ATGCTAGCATGA

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FIGURE 3857

AGGCGCAGACGGGGAAGCGGAGCCAACATGCCAGTGGCCCGGAGCTGGGTTTGTCACAAAACTTATGTGACCCCG
CGGAGACCCTTCGAGAAATCTCGTCTCGACCAAGAGCTGAAGCTGATCGGCAACGTCCTGCTGCGGCGGCTGCTC
CGCATTGGGGTGCTGGATGAGGGCAAGACGAAGCTGGATTACATCCTGGGCCTGAAGATAGAGGATTTCTTAGAG
AGACGCCTACAGACCCAGGTCTTCAAGCTGGGCTTGGCCAAGTCCATCCACCACGCTGGCGTACTGATCCGCCAG
CGCCGTGTCAGGGTCCGCAATCAGGTGGCGAACATCCCGTCCTTCATTGTCCGCCTGGATTCCCAGAAGCGCATC
GACTTGTCTCTGCGCTCTCCCTATGGGGTGGCCGCCCCGGCCGCGTGAAGAGGAAGAACGCCAAGAAGGGCCAGG
GTGAGGGTGGGGCTGGAGACGACGAGGAGGAGGATTAAGTCCACCTGTCCCTCCTGGGCTGCTGGATTGTCTCGT
TTTCCTGCCAAATAAACAGGATCAGCACTTTAC

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FIGURE 3858

GGCAGCCGAGGCCGCGAACTGCATCATGGAGAATTTTGTAGCCACCTTGGCTAATGGGATGAGCCTCCAGCCGCC
TCTTGAAGAAGTGTCCTGTGGCCAGGCGGAAAGCAGTGAGAAGCCCAACGCTGAGGACATGACATCCAAAGATTA
CTACTTTGACTCCTACGCACACTTTGGCATCCACGAGGAGATGCTGAAGGACGAGGTGCGCACCCTCACTTACCG
CAACTCCATGTTTCATAACCGGCACCTCTTCAAGGACAAGGTGGTGCTGGACGTCGGCTCGGGCACCGGCATCCT
CTGCATGTTTGCTGCCAAGGCCGGGGCCCGCAAGGTCATCGGGATCGAGTGTTCCAGTATCTCTGATTATGCGGT
GAAGATCGTCAAAGCCAACAAGTTAGACCACGTGGTGACCATCATCAAGGGGAAGGTGGAGGAGGTGGAGCTCCC
AGTGGAGAAGGTGGACATCATCATCAGCGAGTGGATGGGCTACTGCCTCTTCTACGAGTCCATGCTCAACACCGT
GCTCTATGCCCGGGACAAGTGGGCGCCCGATGGCCTCATCTTCCCAGACCGGGCCACGCTGTATGTGACGGCCAT
CGAGGACCGGCAGTACAAAGACTACAAGATCCACTGGTGGGAGAACGTGTATGGCTTCGACATGTCTTGCATCAA
AGATGTGGCCATTAAGGAGCCCCTAGTGGATGTCGTGGACCCCAAACAGCTGGTCACCAACGCCTGCCTCATAAA
GGAGGTGGACATCTATACCGTCAAGGTGGAAGACCTGACCTTCACCTCCCCGTTCTGCCTGCAAGTGAAGCGGAA
TGACTACGTGCACGCCCTGGTGGCCTACTTCAACATCGAGTTCACACGCTGCCACAAGAGGACCGGCTTCTCCAC
CAGCCCCGAGTCCCCGTACACGCACTGGAAGCAGACGGTGTTCTACATGGAGGACTACCTGACCGTGAAGACGGG
CGAGGAGATCTTCGGCACCATCGGCATGCGGCCCAACGCCAAGAACAACCGGGACCTGGACTTCACCATCGACCT
GGACTTCAAGGGCCAGCTGTGCGAGCTGTCCTGCTCCACCGACTACCGGATGCGCTGAGGCCCGGCTCTCCCGCC
CTGCACGAGCCCAGGGGCTGAGCGTTCCTAGGCGGTTTCGGGGCTCCCCCTTCCTCTCCCTCCCTCCCGCAGAAG
GGGGTTTTAGGGGCCTGGGCTGGGGGGATGGGGAGGGCACATCGTGACTGTGTTTTTCATAACTTATGTTTTTAT
ATGGTTGCATTTACGCCAATAAATCCTCAGCTGGG

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FIGURE 3859

AAGTAAGTATCCCCACTTTCAGGGTAGCATCCTCTTTCCCTAGTTATTTCAGTGCAGAATCGATTCACGTGTAAG
CCTCTACCTCCTGCACTTACCCCAATGTAGACCCCCTTCCACAGTCCCCCTACAGAAGATCTCCCAAAACATTTC
CAACACAGAACTTCCATTCAATTCCCCTCCGACTGCCCGCCTCCCTCCTCCAGGACAGAGCACGCCCCAGGTTTC
GAGACTGAACTACCCCCATCTACGGAGTCCACCCCTCCCTCTCTAGAACCCCCTCAGTGTAGACGCCTCCTCTTT
TCCTCTTTCCTCCCTACTTTTTCTAGTTTTTCTGCAGCCGACCTCCAGCGTCGGCCACTGTAGCTCCTTCCTTGC
TCCACTTTCCCCAGAGTACACAGCCTGCCTTTCCACTCTCCGTGCAGACCCATCCTCTTTCCCGCTCCTCGCTCT
CGGACGCCACCAACGCTCTCCCGGGCTCTTCCGCGTTACCTACGATGGAAGGTCGGGGCGTGCGGGCAGCTGGAA
CCCACCCCTGTCTTGGAGCTCCGGGTAGCTCTCAAACTCGAGGCTGCGCACCCCCTTTCCCGTCAGCTGAGCTCT
AGAGCGCTGGGGCTTTCTTTTTGATCGACTTCTTGAAATAAAACCAACTTTATCATTCTTTGGGTAACAGACCCA
AAAGCCG**ATG**GGACGGCCCGCTGGGCTGTTCCCGCCCCTATGCCCTTTTTTGGGTTTCCGGCCAGAGGCATGCTG
GGAGCGTCACATGCAAATTGAGCGTGCACCCAGCGTTCCGCCCTTTCTACGCTGGGCCGGTTATCGACCCGGCCC
AGTGCGCAGGCGCGGGAAAGTTGAACTAATAAAGTTTGTACGAGTTCAGTGGAGGAGACCGCAAGTTGAGTGGAG
GAGGCGGCGGTGGGGCCCCGGACCAGGTGCCTCCATGGCAGGCTCTGAAGAGCTGGGGCTCCGGGAAGACACGCT
GAGGGTCCTAGCTGCCTTCCTTAGGCGTGGTGAGGCTGCCGGGTCTCCTGTTCCAACTCCACCTAGAAGCCCTGC
CCAAGAAGAGCCAACAGACTTCCTGAGCCGCCTTCGAAGATGTCTTCCCTGCTCCCTGGGGCGAGGAGCAGCCCC
CTCTGAGTCCCCTCGGCCTTGCTCTCTGCCCATCCGCCCCTGCTATGGTTTAGAGCCTGGCCCAGCTACTCCAGA
CTTCTATGCTTTGGTGGCCCAGCGGCTGGAACAGCTGGTCCAAGAGCAGCTGAAATCTCCGCCCAGCCCAGAATT
ACAGGGTCCCCCATCGACAGAGAAGGAAGCCATACTGCGGAGGCTGGTGGCCCTGCTGGAGGAGGAGGCAGAAGT
CATTAACCAGAAGCTGGCCTCGGACCCCGCCCTGCGCAGCAAGCTGGTCCGCCTGTCCTCCGACTCTTTCGCCCG
CCTGGTGGAGCTGTTCTGTAGCCGGGATGACAGCTCTCGCCCAAGCCGAGCATGCCCCGGGCCCCCGCCTCCTTC
CCCGGAGCCCCTGGCCCGCCTGGCCCTAGCCATGGAGCTGAGCCGGCGCGTGGCCGGGCTGGGGGGCACCCTGGC
CGGACTCAGCGTGGAGCACGTGCACAGCTTCACGCCCTGGATCCAGGCCCACGGGGGCTGGGAGGGCATCCTGGC
TGTTTCACCCGTGGACTTGAACTTGCCATTGGAC**TGA**

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FIGURE 3860

GGTTCCAGCTGCCCGCACGCCCCGACCTTCCATCGTAGGCCGGACCATGGGAACCCCAAAGCCACGGATCCTGCC
CTGGCTGGTGTCGCAGCTGGACCTGGGGCAACTGGAGGGCGTGGCCTGGGTGAACAAGAGCCGCACGCGCTTCCG
CATCCCTTGGAAGCACGGCCTACGGCAGGATGCACAGCAGGAGGATTTCGGAATCTTCCAGGCCTGGGCCGAGGC
CACTGGTGCATATGTTCCCGGGAGGGATAAGCCAGACCTGCCAACCTGGAAGAGGAATTTCCGCTCTGCCCTCAA
CCGCAAAGAAGGGTTGCGTTTAGCAGAGGACCGGAGCAAGGACCCTCACGACCCACATAAAATCTACGAGTTTGT
GAACTCAGGAGTTGGGGACTTTTCCCAGCCAGACACCTCTCCGGACACCAATGGTGGAGGCAGTACTTCTGATAC
CCAGGAAGACATTCTGGATGAGTTACTGGGTAACATGGTGTTGGCCCCACTCCCAGATCCGGGACCCCCAAGCCT
GGCTGTAGCCCCTGAGCCCTGCCCTCAGCCCCTGCGGAGCCCCAGCTTGGACAATCCCACTCCCTTCCCAAACCT
GGGGCCCTCTGAGAACCCACTGAAGCGGCTGTTGGTGCCGGGGGAAGAGTGGGAGTTCGAGGTGACAGCCTTCTA
CCGGGGCCGCCAAGTCTTCCAGCAGACCATCTCCTGCCCGGAGGGCCTGCGGCTGGTGGGGTCCGAAGTGGGAGA
CAGGACGCTGCCTGGATGGCCAGTCACACTGCCAGACCCTGGCATGTCCCTGACAGACAGGGGAGTGATGAGCTA
CGTGAGGCATGTGCTGAGCTGCCTGGGTGGGGGACTGGCTCTCTGGCGGGCCGGGCAGTGGCTCTGGGCCCAGCG
GCTGGGGCACTGCCACACATACTGGGCAGTGAGCGAGGAGCTGCTCCCCAACAGCGGGCATGGGCCTGATGGCGA
GGTCCCCAAGGACAAGGAAGGAGGCGTGTTTGACCTGGGGCCCTTCATTGTAGATCTGATTACCTTCACGGAAGG
AAGCGGACGCTCACCACGCTATGCCCTCTGGTTCTGTGTGGGGGAGTCATGGCCCCAGGACCAGCCGTGGACCAA
GAGGCTCGTGATGGTCAAGGTTGTGCCCACGTGCCTCAGGGCCTTGGTAGAAATGGCCCGGGTAGGGGGTGCCTC
CTCCCTGGAGAATACTGTGGACCTGCACATTTCCAACAGCCACCCACTCTCCCTCACCTCCGACCAGTACAAGGC
CTACCTGCAGGACTTGGTGGAGGGCATGGATTTCCAGGGCCCTGGGGAGAGCTGAGCCCTCGCTCCTCATGGTGT
GCCTCCAACCCCCCTGTTCCCCACCACCTCAACCAATAAACTGGTTCCTGCTATGA

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FIGURE 3861A

CTGGGGTGTCTGTGCTGGGTCCAGCGCCCACCCAAGCACAGGGTGGAGTGGGAGGAGGTGGAGGAGAGGAGGGGT
GCCAGAGGGGATGCTGAGGGAGATAGTGTGGGGCCCTTGAGGTCTTCATGTCTATCCTCTACTTCCATCCTTTCT
CCCGGGACCTCCACTCCAAACTCTCCCCCCTGGACCCCCAGGTGACCATGGAGGAAGAAGATGAGTCTCGAGGGA
AGACAGAGGAGTCGGGGGAGGATCGGGGCGATGGTCCGCCAGACAGAGACCCCACGCTTTCTCCTTCTGCCTTTA
TCCTGCGAGCCATCCAGCAGGCTGTGGGAAGCTCCCTGCAGGGGGACCTGCCCAATGATAAAGATGGCTCTCGGT
GTCATGGCCTTCGATGGCGGCGCTGCCGGAGTCCACGGTCAGAGCCCCGTTCCCAGGAATCAGGGGGCACTGACA
CGGCTACTGTGTTGGACATGGCCACGGACAGCTTCCTCGCAGGGCTGGTGAGTGTCCTGGATCCCCCGGATACCT
GGGTTCCCAGCCGCCTGGACCTGCGGCCTGGCGAAAGTGAGGACATGCTGGAGCTGGTGGCTGAGGTCCGAATCG
GGGACAGAGATCCCATCCCTCTGCCTGTGCCCAGCCTGCTGCCCCGTCTCAGGGCCTGGAGGACGGGCAAAACGG
TTTCTCCACAGTCGAACTCCTCTAGGCCCACCTGTGCCCGTCACCTCACCTTGGGCACGGGAGACGGGGGCCCTG
CCCCACCCCCTGCCCCCTCCTCTGCATCCTCCTCCCCTTCCCCTTCTCCCTCATCTTCCTCCCCTTCCCCTCCCC
CACCCCCACCGCCCCCTGCACCCCCAGCCCCACCTGCCCCCCGATTCGATATCTATGACCCCTTCCACCCCACCG
ACGAGGCCTACTCTCCACCGCCTGCTCCGGAGCAAAAGTACGACCCTTTTGAGCCCACCGGCTCCAACCCCAGCT
CATCAGCGGGGACCCCCTCACCTGAGGAGGAAGAGGAGGAGGAAGAGGAAGAAGAAGAGGAAGAGGAAGACGAGG
AGGAGGAGGAAGGCCTGTCCCAGAGCATCAGCCGCATCTCGGAGACCCTGGCGGGCATCTACGATGACAACAGCC
TGAGCCAGGACTTCCCAGGTGACGAGAGCCCCCGCCCGGACGCGCAGCCCACACAGCCGACTCCCGCCCCTGGAA
CGCCGCCCCAGGTGGACTCCACCCGGGCTGATGGAGCCATGCGCCGGCGGGTCTTCGTGGTGGGGACCGAGGCAG
AGGCTTGTCGGGAAGGCAAGGTCTCGGTGGAGGTGGTGACCGCTGGTGGAGCCGCCCTCCCGCCGCCCCTGCTGC
CGCCCGGCGACTCGGAGATCGAGGAAGGGGAGATCGTCCAGCCGGAGGAGGAGCCCAGGCTGGCGCTGTCCCTCT
TCCGCCCCGGCGGCCGGGCCGCCCGGCCTACACCGGCCGCCTCGGCCACCCCCACGGCCCAGCCCCTTCCTCAGC
CTCCCGCTCCGCGGGCCCCCGAGGGGGACGACTTCTTGTCCCTGCATGCGGAGTCGGACGGCGAGGGCGCCCTGC
AGGTGGACCTAGGGGAGCCGGCTCCCGCGCCGCCCGCCGCCGACTCGCGCTGGGGCGGCCTGGACCTGCGCCGCA
AGATCCTGACCCAACGGCGGGAGCGCTACCGCCAGCGCTCGCCCTCCCCGGCGCCCGCGCCCGCCCCGGCCGCCG
CTGCTGGTCCGCCCACGCGCAAGAAGTCCAGGCGGGAACGCAAGCGCAGCGGCGAGGCCAAGGAGGCCGCCTCGT
CCTCGTCGGGCACCCAGCCAGCGCCGCCCGCCCCGGCCTCGCCCTGGGACTCCAAGAAGCACCGCTCGCGGGACC
GCAAGCCCGGCTCCCACGCCTCGTCGTCCGCCCGCCGCCGCTCCCGCTCCCGCTCCCGCTCCCGCTCCACCCGCC
GCCGCTCGCGCAGCACCGACCGCCGCCGCGGGGGCAGCCGCAGGTCGCGGTCCCGGGAGAAGCGGCGACGGCGGC
GGCGCTCCGCCTCCCCGCCCCCGGCCACTTCCTCATCGTCGTCCTCGAGGCGCGAGCGGCACCGCGGGAAACACC
GGGACGGTGGCGGCAGCAAGAAGAAGAAGAAGCGGTCGCGGTCCCGGGGTGAGAAGCGGTCTGGGGATGGCAGCG
AGAAGGCCCCGGCGCCCGCCCCGCCGCCCTCTGGCTCCACCTCGTGTGGTGACCGCGACAGCCGCCGCCGGGGGG
CCGTGCCACCCTCCATCCAGGACCTCACGGACCACGACCTCTTCGCCATCAAGCGGACCATCACGGTGGGCCGGC
TTGACAAGTCCGACCCCCGAGGACCCTCTCCTGCTCCGGCCTCCTCACCTAAGCGGGAGGTCCTGTACGACTCCG
AGGGACTGAGCGGCGAGGAGCGGGGCGGCAAGAGCAGCCAGAAGGATCGGCGCCGCTCGGGGGCCGCCTCCTCCT
CCTCCTCTTCCCGGGAGAAGGGGTCTCGTCGGAAGGCGCTGGACGGGGGTGACCGGGATCGGGACAGGGACAGAG
ATAGGGACAGGGACAGGTCATCCAAGAAGGCCCGGCCCCCCAAGGAGTCGGCGCCTTCCTCAGGGCCCCCGCCAA
AGCCACCAGTCAGCAGCGGCTCAGGCTCTTCATCCTCGTCGTCCTCCTGTTCTTCCCGGAAGGTGAAGCTGCAGT
CCAAGGTGGCGGTGCTGATCCGCGAGGGTGTCAGCAGCACCACCCCGGCCAAGGATGCCGCGTCAGCCGGCCTGG
GCTCCATTGGCGTCAAATTCAGCCGTGACCGCGAGAGTCGCTCCCCCTTCCTCAAACCTGACGAGCGGGCCCCCA
CTGAGATGGCCAAAGCAGCTCCGGGCAGCACCAAGCCCAAAAAGACCAAGGTCAAGGCCAAGGCAGGGGCCAAGA
AAACCAAGGGGACCAAGGGAAAGACCAAGCCATCCAAGACCAGGAAAAAGGTCCGCAGTGGAGGTGGCAGCGGGG
GCAGTGGTGGCCAGGTGTCGCTGAAGAAGTCCAAGGCGGATAGCTGCAGCCAGGCGGCAGGCACCAAGGGGGCGG
AGGAGACTTCCTGGTCCGGGGAGGAGCGGGCAGCCAAGGTTCCTAGCACCCCGCCCCCCAAGGCAGCCCCACCAC
CCCCTGCCCTCACTCCGGACTCGCAGACCGTGGACAGCAGCTGCAAGACACCTGAGGTCTCCTTCCTGCCCGAGG
AGGCCACTGAGGAGGCTGGGGTCCGAGGTGGGGCGGAGGAGGAGGAGGAGGAAGAAGAAGAGGAGGAGGAAGAGG
AAGAGGAGGAGGAGCAGCAGCCTGCTACCACCACGGCCACCAGCACTGCTGCAGCCGCCCCAAGCACTGCCCCCA
GCGCGGGGTCCACAGCCGGTGACTCGGGGGCGGAGGACGGGCCAGCTTCCCGTGTCTCCCAGCTGCCCACGTTGC
CCCCGCCCATGCCCTGGAATCTGCCAGCTGGTGTGGACTGCACCACCAGCGGCGTCCTGGCCTTGACTGCACTTC
TCTTCAAGATGGAAGAAGCCAACCTGGCGAGCCGAGCGAAGGCCCAGGAGCTGATCCAGGCCACCAACCAGATCC

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FIGURE 3861B

TCAGCCACAGAAAGCCACCCTCAAGTCTGGGGATGACCCCAGCTCCTGTGCCCACCTCTTTGGGTCTGCCCCCTG
GCCCCTCCAGCTACCTGCTTCCTGGCAGCCTCCCTCTGGGGGGCTGCGGTTCGACCCCCCCCCACCCCCACCGGGC
TGGCTGCCACGTCTGACAAGAGAGAGGGCAGCAGCAGCTCTGAGGGCCGTGGGGACACAGATAAGTATCTGAAGA
AGCTGCACACGCAGGAGCGGGCGGTGGAGGAGGTGAAGCTGGCCATCAAGCCATACTATCAGAAGAAGGACATCA
CCAAGGAGGAGTACAAGGACATCCTGAGGAAGGCCGTCCACAAGATCTGCCACAGCAAAAGTGGGGAAATCAACC
CAGTGAAGGTGAGCAACCTGGTGCGGGCCTACGTCCAGCGCTACCGCTACTTCCGCAAGCACGGTCGCAAGCCAG
GGGACCCCCCAGGGCCCCCACGGCCGCCCAAGGAGCCAGGGCCCCCAGACAAGGGTGGCCCGGGCCTGCCCCTGC
CCCCTCTC**TGA**GAGCCCTGGCCAGCTCTTCGCCCCTCACCTCTTTGAAACTCTGGACGTATTTATGGCTCCACCT
CCCCACCTCCCTCCCCCGTCAGTGGGATGACTGGGGGAGGGTTGCTGCAGGGAAGAGGAGAGCCCCCTGCCCTGC
CCTGCCCCGTGTCCACCTCCCTTGCCCCCAAGCCTGTCCCCAGTGCCCCTCCCTTCTGTTTGTGCCCCTCTCCCC
AATTTCATTAAAGATTTCATGAAACATT

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FIGURE 3862

GGCTCCCCCGCAGGCGGTAGCGAAGGCAGCAGCAGCGGTGGCGACATGAGCAGCGGGGCGGCGTCCGGGACAGGG
CGGGGGCGGCCCCGGGGCGGGGGACCTGGGCCCGGGGACCCCCCGCCCAGCGAGACACACAAGCTGGTGGTCGTG
GGCGGCGGCGGCGTGGGCAAGAGCGCGCTGACCATCCAGTTCATCCAGTCCTACTTCGTGTCTGACTACGACCCC
ACTATTGAGGACTCCTACACGAAGATCTGCAGTGTGGATGGCATCCCAGCCCGGCTGGACATCCTGGACACCGCG
GGCCAGGAAGAGTTCGGGGCCATGAGAGAGCAGTACATGCGTGCTGGCCACGGCTTCCTGCTGGTGTTCGCCATT
AACGACCGGCAGAGTTTCAACGAGGTGGGCAAGCTCTTCACGCAGATTCTGCGGGTCAAGGACCGCGACGACTTC
CCCGTTGTGTTGGTCGGGAACAAGGCAGATCTGGAGTCACAGCGCCAGGTCCCCCGATCAGAAGCCTCTGCCTTC
GGCGCCTCCCACCACGTGGCCTACTTTGAGGCCTCGGCCAAACTGCGTCTCAACGTGGACGAGGCTTTTGAGCAG
CTGGTGCGGGCTGTCCGGAAATACCAGGAACAAGAGCTCCCACCGAGCCCTCCCAGTGCCCCCAGGAAGAAGGGC
GGGGGCTGCCCCTGCGTCCTCCTGTAGCCCAGGCAAGAGAGAAGCAACCACCACAAGCTCTCGGGACTAGCTGCC
TTCGCACCTTGCTGTGTGACCTGAGGCCCTCACTGAGCCTCAATTTCCTCATCTGGGTCTCCCAGGACACATCAC
ATACCCACCCTTACTTCCTGGCCTCTTCTGGGCTACTGCCACTGTGTGCCTTCTGCCAACGCCTCCTGTCCCCAC
CTAAGCCTGGTGGGGGTGAGGGGCTCCGGGTCACTGCTGTATATAACTCCCCTCCCCCAGAAAAATAAATGTCAC
TGCCAACGTC

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FIGURE 3863A

GTGGTTATGGAGCAGCTGCCGGGGGTGCCACCAGGCCCCCCCCACCCCGTTCGACCGCCACCCCCGCCTCCACCA
CCCATGCCCCTGCAGCTCGAGGCCCACCTCCGCAGCCATGGCCTGGAGCCCGCGGCCCCCAGCCCCCGCCTGCGA
CCCGAGGAGAGCCTGGATCCGCCAGGCGCCATGCAGGAATTGCTCGGGGCTCTGGAGCCGCTGCCCCCGGCGCCT
GGGGATACTGGCGTAGGCCCACCAAACTCGGAGGGCAAGGATCCCGCAGGCGCCTACCGCAGCCCCAGCCCGCAA
GGCACCAAGGCGCCGCGTTTCGTGCCGCTCACCTCCATCTGCTTCCCTGACTCCTTGCTCCAAGACGAGGAGCGC
AGCTTCTTCCCCACCATGGAGGAGATGTTCGGTGGAGGGGCCGCGGACGACTACGGCAAGGCCGGGCCACCTGAG
GACGAGGGGGACCCCAAGGCTGGCGCTGGGCCACCCCCCGGCCCCCCTGCTTATGATCCCTATGGGCCCTACTGT
CCTGGCCGGGCGTCGGGAGCCGGGCCCGAGACACCGGGCCTGGGCCTGGACCCCAACAAACCGCCTGAACTGCCC
TCCACGGTCAACGCCGAGCCGCTGGGCCTGATCCAGAGTGGCCCCCACCAGGCGGCGCCACCACCCCCGCCTCCG
CCACCGCCGCCTCCCGCGCCGGCCTCCGAACCCAAGGGTGGCCTCACCTCGCCCATCTTCTGCTCTACCAAGCCA
AAGAAGCTGCTCAAGACATCCTCCTTCCACCTGCTGCGGCGCCGCGACCCACCCTTCCAGACCCCCAAGAAGCTG
TACGCCCAGGAGTACGAGTTCGAGGCGGACGAGGACAAGGCCGATGTTCCCGCCGACATCCGCCTCAACCCCCGG
CGCTTGCCTGACCTGGTCTCCAGCTGCCGCTCCCGTCCGGCCCTCTCGCCACTGGGGGACATCGACTTCTGCCCA
CCCAACCCAGGACCCGATGGCCCCCGGCGCCGTGGCCGCAAGCCCACGAAGGCGAAACGTGATGGGCCACCCCGG
CCACGGGGGAGGCCCCGGATCCGCCCCCTGGAGGTCCCGACCACTGCGGGGCCCGCCTCGGCCTCCACGCCCACC
GATGGCGCCAAGAAACCCCGGGGCCGGGGCCGAGGCCGGGGTCGAAAGGCTGAGGAGGCAGGGGGCACCCGGTTG
GAGCCCCTGAAGCCACTTAAGATCAAGCTGTCTGTGCCCAAGGCTGGCGAGGGTCTGGGAACCTCATCGGGTGAT
GCCATATCAGGCACTGACCACAACAGCCTGGACTCGAGCCTGACTCGGGAGAAGATCGAGGCCAAGATTAAGGAG
GTGGAGGAGAAGCAGCCGGAGATGAAGTCGGGTTTCATGGCCTCCTTCTTGGACTTCCTCAAGTCAGGCAAGCGC
CACCCACCACTCTACCAGGCGGGCCTGACGCCTCCGCTCAGCCCTCCCAAGAGTGTGCCACCCTCTGTGCCAGCC
CGAGGCCTGCAGCCCCAGCCCCCTGCCACCCCTGCTGTGCCACATCCCCCACCTTCCGGAGCCTTTGGGCTTGGG
GGCGCCCTGGAGGCTGCAGAGAGTGAGGGTCTGGGGCTTGGCTGCCCTTCACCCTGCAAGCGGCTTGATGAGGAG
CTGAAGCGGAACCTCGAGACGCTGCCCTCCTTCTCCTCGGATGAGGAAGACTCTGTCGCCAAGAACCGAGACCTG
CAGGAGAGCATCTCCTCCGCCATCTCTGCCCTCGATGACCCACCCCTTGCTGGGCCAAAAGACACTTCCACCCCA
GATGGGCCGCCCTTGGCCCCCGCGGCTGCAGTTCCAGGGCCACCCCCTCTTCCGGGGCTCCCCAGTGCCAACAGC
AATGGCACTCCCGAGCCCCCGCTGCTGGAGGAGAAACCCCCACCCACTCCACCTCCTGCCCCGACTCCTCAGCCT
CAGCCTCCGCCACCCCCTCCGCCGCCACAGCCAGCCCTGCCCTCGCCACCCCCGCTGGTGGCCCCCACGCCCAGC
TCACCACCGCCACCGCCGCTGCCGCCGCCACCTCCACCAGCCATGCCCTCGCCTCCACCACCACCCCCACCAGCC
GCTGCCCCACTGGCTGCTCCTCCTGAGGAGCCCGCCGCCCCGTCTCCCGAAGACCCCGAGCTGCCGGACACCCGG
CCCCTGCATCTGGCCAAAAAGCAGGAGACGGCGGCAGTGTGTGGGGAGACGGACGAGGAGGCCGGCGAGAGTGGC
GGAGAGGGCATCTTCCGGGAACGGGACGAGTTCGTCATCCGTGCTGAGGACATCCCTTCCCTCAAGCTGGCGTTG
CAGACGGGGCGTGAACCCCCACCCATCTGGCGAGTCCAGAAGGCCCTTCTGCAGAAATTCACTCCGGAGATCAAG
GACGGCCAGAGGCAGTTTTGTGCCACCAGTAATTATTTGGGGTATTTTGGGGATGCAAAAAATCGGTACCAGCGC
CTCTATGTAAAGTTCCTGGAAAATGTCAATAAGAAGGACTACGTGAGGGTCTGTGCTCGGAAACCCTGGCATCGG
CCCCCAGTGCCAGTCAGACGCTCTGGGCAGGCCAAGAACCCCGTATCTGCTGGGGGTAGCTCTGCACCTCCCCCT
AAGGCCCCAGCACCACCTCCCAAGCCTGAGACCCCTGAAAAGACGACATCTGAGAAGCCCCCAGAGCAGACTCCT
GAGACGGCCATGCCTGAGCCCCCTGCCCCCGAGAAGCCCTCCCTCCTGCGGCCTGTTGAGAAGGAAAAGGAGAAG
GAGAAGGTGACACGTGGAGAGCGGCCATTGCGGGGTGAGCGGGCCACCAGCGGACGGCAGACACGGCCAGAGCGG
AGTCTCGCCACGGGACAACCTGCCACATCCCGGCTGCCCAAAGCCCGGCCTACCAAGGTGAAGGCTGAACCGCCC
CCTAAGAAGAGGAAGAAATGGCTGAAGGAGGCAGGCGGCAACGCTACAGCAGGCGGGGGCCCACCAGGCAGCTCC
TCGGACTCGGAGTCCTCCCCTGGAGCCCCCAGCGAGGACGAGCGGGCAGTACCTGGGCGTCTGCTCAAAACCAGG
GCGATGCGGGAGATGTACCGGAGCTACGTGGAGATGTTGGTGAGCACAGCACTTGACCCAGACATGATCCAGGCC
CTGGAGGACACGCATGACGAGCTGTACCTGCCCCCCATGCGGAAGATAGACGGCCTGCTGAATGAGCACAAGAAG
AAAGTCCTGAAGCGGCTGTCGCTAAGCCCAGCCCTGCAGGATGCTCTGCACACGTTCCCACAGCTGCAAGTGGAG
CAGAGTGGGGAGGGCTCTCCGGAAGAGGGGGCTGTGCGGCTGCGGCCTGCTGGGGAACCCTACAACCGCAAGACG
CTCAGCAAGCTCAAGAGGAGCGTGGTCAGAGCCCAGGAGTTCAAGGTTGAGCTGGAAAAGTCGGGATACTATACA
CTCTACCATTCGCTCCACCACTATAAATACCACACCTTCCTGCGCTGCCGGGACCAGACCCTGGCCATCGAGGGC
GGCGCCGAGGACCTGGGCCAGGAGGAGGTGGTCCAGCAGTGCATGCGGAACCAGCCGTGGCTGGAACAGCTCTTT

FIGURE 3863B

GACTCCTTCAGTGACCTGCTGGCCCAAGCACAGGCCCACAGCCGCTGCGGGTGACCCCGCCCCAGCTTGTGAGGG
GGGCGCCTCCTCCATGAACCGAGAATTGGGACAGAACCGTGTCCTCAGGAGCTAACACCTGGGCTCCATCGCCGG
GGAAAGGGGGTCATGGGTCAGGGTGTGTCTGTGCTGCCCCCTCCAGGGCAGGGTTCAAAGTCCGACTCCCCCCCT
CTCCCAAGCCCCCTCCACTCCCTCCCCATTCCTCCCACTGTTCGGTGTACAGAGAAATTATTTATATATATGTAT
AAATGTCTATTTAGTAACGGTTTCCCTCTCCCCTTGCCCCGACCCCCCCTCCACAGCCACAGCCCCCGCCCCCTC
CACCTTGTACATAATGTATAGGAAAAGTCTATGTATGGCTGGGGGGGGTGGGGTGGCTTCAGAGAGCTGGGGGAC
CCCTTCCCCCCAAGTCCCCCCTGCAGGCCAAGATCTTTGCTAAAGGCCATTCCCTCCGCAGGGCATTTGGCGTCG
GGTGGGAGGGGAAAACGCATCTTGTTAATTATTTTTAATCTTATTTATTGTACATACCTGGGGCAGGGGCTTGGG
GAGGTGGAGGGGGGAGAAGGGTCCCCTCTCTCTGCCCCTCCCACTCCTTTTCTACGGCGATTTGTCTGTGTCTGG
CCCCCACCCACTGCCCATCCCCCATTGTTGTCTGGATGTGGTTCTATTTTTTATCGGTCTCCTTTCCCCTCCTCC
CCGTTCTCGCCCCCGCCCCACCCCCTGCTCCCACTACCCTTTGTCTCTTGCTCTTTCTTGGGCTTCTGTACAACT
CAACTTGTATACACTGTGTACACACAACCAGCCAAACGAAAACCCAACGGCAAACACTTT

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FIGURE 3864

GAAGCGACCGAGGGACTGGGAGTCGTTAGTGAGAGTTTCACTCTTGTTGCCTAGGCTGGAGTGCAATGGTGCGAT
CTTGGCTCATCACGACCTTCGCCTCCCAGGTTCAAGTGATTGTCCCATTTCAGCCTCCCGAGTAGCTGGGATTAC
AGGATGACGCGGCATGGCAAGAACTGCACCGCAGGGGCCGTCTACACCTACCACGAGAAGAAGAAGGACACAGCG
GCCTCGGGCTATGGGACCCAGAACATTCGACTGAGCCGGGATGCCGTGAAGGACTTCGACTGCTGTTGTCTCTCC
CTGCAGCCTTGCCACGATCCTGTTGTCACCCCAGATGGCTACCTGTATGAGCGTGAGGCCATCCTGGAGTACATT
CTGCACCAGAAGAAGGAGATTGCCCGGCAGATGAAGGCCTACGAGAAGCAGCGGGGCACCCGGCGCGAGGAGCAG
AAGGAGCTTCAGCGGGCGGCCTCGCAGGACCATGTGCGGGGCTTCCTGGAGAAGGAGTCGGCTATCGTGAGCCGG
CCCCTCAACCCTTTCACAGCCAAGGCCCTCTCGGGCACCAGCCCAGATGATGTCCAACCTGGGCCCAGTGTGGGT
CCTCCAAGTAAGGACAAGGACAAAGTGCTGCCCAGCTTCTGGATCCCGTCGCTGACGCCCGAAGCCAAGGCCACC
AAGCTGGAGAAGCCGTCCCGCACGGTGACCTGCCCCATGTCAGGGAAGCCCCTGCGCATGTCGGACCTGACGCCC
GTGCACTTCACACCGCTAGACAGCTCCGTGGACCGCGTGGGGCTCATCACCCGCAGCGAGCGCTACGTGTGTGCC
GTGACCCGCGACAGCCTGAGCAACGCCACCCCCTGCGCTGTGCTGCGGCCCTCTGGGGCTGTGGTCACCCTCGAA
TGCGTGGAGAAGCTGATTCGGAAGGACATGGTGGACCCTGTGACTGGAGACAAACTCACAGACCGCGACATCATC
GTGCTGCAGCGGGGCGGTACCGGCTTCGCGGGCTCCGGAGTGAAGCTGCAAGCGGAGAAATCACGGCCGGTGATG
CAGGCCTGAGTGTGTGCGGGAGACCAAATAAACCGGCTTGGGTGCGC

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FIGURE 3865

GAAGGATATTAAAGAGCACCTGCAGGAATTTTTTAAGGGGATGCCGGGGGAAGGGCTTGAAGGAGGAACTAAGGA
GGCTTCCAGAAGATTTTGATTAACAGCGAGCGCTAGGGAAGGCCACGGGGATACAGAGGGGTAGGAGGAGGATCC
AGAGACCTCCAAGTTGTGGACTCCGGAGGCATCGAGTTCCTTTCCCAGTTTTGTCAAGAATTCCCTGAGCGGCAG
ACACCCTCAAAGTAAAAAACGGGAACCACAGAGAAGGAAAAAGAAGAACCACAAGCGTTTTGAGAAACAAACAGG
CTGGGCCTAGGGCCTGGGGTGTGCCCTGCAACTGGGGGGTGGGGCTGGATGTTCTTGGAGTCAGGGAGCAGCAGC
CTCCCACAGGATGTGAGAGAGGAACTGGGGTCTCCAGTCACGGGAGCCAGGAGCCGGCCAGGGCCGCAGGCAGGA
AGCGGAGCGAGGCTGAAGGGAACTTCGTCCTCTCAGC**ATG**GGGGTCCCGCGGCCTCAGCCCTGGGCGCTGGGGCT
CCTGCTCTTTCTCCTTCCTGGGAGCCTGGGCGCAGAAAGCCACCTCTCCCTCCTGTACCACCTTACCGCGGTGTC
CTCGCCTGCCCCGGGGACTCCTGCCTTCTGGGTGTCCGGCTGGCTGGGCCCGCAGCAGTACCTGAGCTACAATAG
CCTGCGGGGCGAGGCGGAGCCCTGTGGAGCTTGGGTCTGGGAAAACCAGGTGTCCTGGTATTGGGAGAAAGAGAC
CACAGATCTGAGGATCAAGGAGAAGCTCTTTCTGGAAGCTTTCAAAGCTTTGGGGGGAAAAGGTCCCTACACTCT
GCAGGGCCTGCTGGGCTGTGAACTGGGCCCTGACAACACCTCGGTGCCCACCGCCAAGTTCGCCCTGAACGGCGA
GGAGTTCATGAATTTCGACCTCAAGCAGGGCACCTGGGGTGGGGACTGGCCCGAGGCCCTGGCTATCAGTCAGCG
GTGGCAGCAGCAGGACAAGGCGGCCAACAAGGAGCTCACCTTCCTGCTATTCTCCTGCCCGCACCGCCTGCGGGA
GCACCTGGAGAGGGGCCGCGGAAACCTGGAGTGGAAGGAGCCCCCCTCCATGCGCCTGAAGGCCCGACCCAGCAG
CCCTGGCTTTTCCGTGCTTACCTGCAGCGCCTTCTCCTTCTACCCTCCGGAGCTGCAACTTCGGTTCCTGCGGAA
TGGGCTGGCCGCTGGCACCGGCCAGGGTGACTTCGGCCCCAACAGTGACGGATCCTTCCACGCCTCGTCGTCACT
AACAGTCAAAAGTGGCGATGAGCACCACTACTGCTGCATTGTGCAGCACGCGGGGCTGGCGCAGCCCCTCAGGGT
GGAGCTGGAATCTCCAGCCAAGTCCTCCGTGCTCGTGGTGGGAATCGTCATCGGTGTCTTGCTACTCACGGCAGC
GGCTGTAGGAGGAGCTCTGTTGTGGAGAAGGATGAGGAGTGGGCTGCCAGCCCCTTGGATCTCCCTTCGTGGAGA
CGACACCGGGGTCCTCCTGCCCACCCCAGGGGAGGCCCAGGATGCTGATTTGAAGGATGTAAATGTGATTCCAGC
CACCGCC**TGA**CCATCCGCCATTCCGACTGCTAAAAGCGAATGTAGTCAGGCCCCTTTCATGCTGTGAGACCTCCT
GGAACACTGGCATCTCTGAGCCTCCAGAAGGGGTTCTGGGCCTAGTTGTCCTCCCTCTGGAGCCCCGTCCTGTGG
TCTGCCTCAGTTTCCCCTCCTAATACATATGGCTGTTTTCCACCTCGATAATATAACACGAGTTTGGGCCC

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FIGURE 3866

TTTCTTTTTTTCAGGCGGCCGGGAAGATGGCGGACATTCAGACTGAGCGTGCCTACCAAAAGCAGCCGACCATCT
TTCAAAACAAGAAGAGGGTCCTGCTGGGAGAAACTGGCAAGGAGAAGCTCCCGCGGTACTACAAGAACATCGGTC
TGGGCTTCAAGACACCCAAGGAGGCTATTGAGGGCACCTACATTGACAAGAAATGCCCCTTCACTGGTAATGTGT
CCATTCGAGGGCGGATCCTCTCTGGCGTGGTGACCAAGATGAAGATGCAGAGGACCATTGTCATCCGCCGAGACT
ATCTGCACTACATCCGCAAGTACAACCGCTTCGAGAAGCGCCACAAGAACATGTCTGTACACCTGTCCCCCTGCT
TCAGGGACGTCCAGATCGGTGACATCGTCACAGTGGGCGAGTGCCGGCCTCTGAGCAAGACAGTGCGCTTCAACG
TGCTCAAGGTCACCAAGGCTGCCGGCACCAAGAAGCAGTTCCAGAAGTTCTGAGGCTGGACATCGGCCCGCTCCC
CACAATGAAATAAAGTTATTTTCTCATTCCCAGGCCAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3867

CTTTTCCAAGCGGCTGCCGAAGATGGCGGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCCG
CCTGGCGGCCATCGTGGCTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTCGTACGCTGTGAAGGCATCAACAT
TTCTGGCAATTTCTACAGAAACAAGTTGAAGTACCTGGCTTTCCTCCGCAAGCGGATGAACACCAACCCTTCCCG
AGGCCCCTACCACTTCCGGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAAACCAA
GCGAGGCCAGGCCGCTCTGGACCGTCTCAAGGTGTTTGACGGCATCCCACCGCCCTACGACAAGAAAAAGCGGAT
GGTGGTTCCTGCTGCCCTCAAGGTCGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCA
CGAGGTTGGCTGGAAGTACCAGGCAGTGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTA
CCGGAAGAAGAAACAGCTCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACAC
AGAGGTCCTCAAGACCCACGGACTCCTGGTCTGAGCCCAATAAAGACTGTTAATTCCTCATGCGTTGCCTGCCCT
TCCTCCATTGTTGCCCTGGAATGTACGGGACCCAGGGGCAGCAGCAGTCCAGGTGCCACAGGCAGCCCTGGGACA
TAGGAAGCTGGGAGCAAGGAAAGGGTCTTAGTCACTGCCTCCCGAAGTTGCTTGAAAGCACTCGGAGAATTGTGC
AGGTGTCATTTATCTATGACCAATAGGAAGAGCAACCAGTTACTATGAGTGAAAGGGAGCCAGAAGACTGATTGG
AGGGCCCTATCTTGTGAGTGGGGCATCTGTTGGACTTTCCACCTGGTCATATACTCTGCAGCTGTTAGAATGTGC
AAGCACTTGGGGACAGCATGAGCTTGCTGTTGTACACAGGGTATTTCTAGAAGCAGAAATAGACTGGGAAGATGC
ACAACCAAGGGGTTACAGGCATCGCCCATGCTCCTCACCTGTATTTTGTAATCAGAAATAAATTGCTTTTAAAG

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FIGURE 3868

GTCTCTGGCTGTCACCCGGCTTGGCCCCTTCCACACCCAACTGGGGCAAGCCTGACCCGGCGACAGGAGGCATGA
GGGGCCCCCGGCCGAAATGACAGTGCTGGCGCCAGCCTGGAGCCCAACAACCTATCTCCTCCTGCTGCTGCTGCT
GAGCTCGGGACTCAGTGGGACCCAGGACTGCTCCTTCCAACACAGCCCCATCTCCTCCGACTTCGCTGTCAAAAT
CCGTGAGCTGTCTGACTACCTGCTTCAAGATTACCCAGTCACCGTGGCCTCCAACCTGCAGGACGAGGAGCTCTG
CGGGGGCCTCTGGCGGCTGGTCCTGGCACAGCGCTGGATGGAGCGGCTCAAGACTGTCGCTGGGTCCAAGATGCA
AGGCTTGCTGGAGCGCGTGAACACGGAGATACACTTTGTCACCAAATGTGCCTTTCAGCCCCCCCCCAGCTGTCT
TCGCTTCGTCCAGACCAACATCTCCCGCCTCCTGCAGGAGACCTCCGAGCAGCTGGTGGCGCTGAAGCCCTGGAT
CACTCGCCAGAACTTCTCCCGGTGCCTGGAGCTGCAGTGTCAGCCCGACTCCTCAACCCTGCCACCCCCATGGAG
TCCCCGGCCCCTGGAGGCCACAGCCCCGACAGCCCCGCAGCCCCCTCTGCTCCTCCTACTGCTGCTGCCCGTGGG
CCTCCTGCTGCTGGCCGCTGCCTGGTGCCTGCACTGGCAGAGGACGCGGCGGAGGACACCCCGCCCTGGGGAGCA
GGTGCCCCCCGTCCCCAGTCCCCAGGACCTGCTGCTTGTGGAGCACTGACCTGGCCAAGGCCTCATCCTGCGGAG
CCTTAAACAACGCAGTGAGACAGACATCTATCATCCCATTTTACAGGGGAGGATACTGAGGCACACAGAGGGGAG
TCACCAGCCAGAGGATGCATAGCCTGGACACAGAGGAAGTTGGCTAGAGGCCGGTCCCTTCCTTGGGCCCCTCTC
ATTCCCTCCCCAGAATGGAGGCAACGCCAGAATCCAGCACCGGCCCCATTTACCCAACTCTGTACAAAGCCCTTG
TCCCCATGAAATTGTATATAAATCATCCTTTTCTACCA

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FIGURE 3869

CGCAGTCTTCGCGGAAAGCGTTCGGGGTAGGCGATGGCTGCGACGCGTGCAGGGCCCCGCGCCCGCGAGATCTTC
ACCTCGCTGGAGTACGGACCGGTGCCGGAGAGCCACGCATGCGCACTGGCCTGGCTGGACACCCAGGACCGGTGC
TTGGGCCACTATGTGAATGGGAAGTGGTTAAAGCCTGAACACAGAAATTCAGTGCCTTGCCAGGATCCCATCACA
GGCTGGCCGAGGTGATCCAGAAGCACCAGCGGCTGCTGTGGACCCTGGAATCCCTGGTGACTGGGCGGGCTGTTC
GAGAGGTTCGAGACGGGGACGTCCAGCTGGCCCAGCAGCTGCTCCACTACCATGCAATCCAGGCATCCACCCAGG
AGGAGGCACTGGCAGGCTGGGAGCCC**ATG**GGAGTAATTGGCCTCATCCTGCCACCCACATTCTCCTTCCTTGAGA
TGATGTGGAGGATTTGCCCTGCCCTGGCTGTGGGCTGCACCGTGGTGGCCCTCGTGCCCCCGGCCTCCCCGGCGC
CCCTCCTCCTGGCCCAGCTGGCGGGGGAGCTGGGCCCCTTCCCGGGAATCCTGAATGTCCTCAGTGGCCCTGCGT
CCCTGGTGCCCATCCTGGCCTCCCAGCCTGGAATCCGGAAGGTGGCCTTCTGCGGAGCCCCGGAGGAAGGGCGTG
CCCTTCGACGGAGCCTGGCGGGAGAGTGTGCGGAGCTGGGCCTGGCGCTGGGGACGGAGTCGCTGCTGCTGCTGA
CGGACACGGCGGACGTAGACTCGGCCGTGGAGGGTGTCGTGGACGCCGCCTGGTCCGACCGCGGCCCGGGTGGCC
TCAGGCTCCTCATCCAGGAGTCTGTGTGGGATGAAGCCATGAGACGGCTGCAGGAGCGGATGGGGCGGCTTCGGA
GTGGCCGAGGGCTGGATGGGGCCGTGGACATGGGGGCCCGGGGGGCTGCCGCATGTGACCTGGTCCAGCGCTTTG
TGCGTGAGGCCCAGAGCCAGGGTGCACAGGTGTTCCAGGCTGGTGATGTGCCTTCGGAACGCCCATTCTATCCCC
CAACCTTGGTCTCCAACCTGCCCCCAGCCTCCCCATGTGCCCAGGTGGAGGTGCCGTGGCCTGTGGTCGTGGCCT
CCCCCTTCCGCACAGCCAAGGAGGCACTGTTGGTGGCCAACGGGACGCCCCGCGGGGGCAGCGCCAGTGTGTGGA
GCGAGAGGCTGGGGCAGGCGCTGGAGCTGGGCTATGGGCTCCAGGTGGGCACTGTCTGGATCAACGCCCACGGCC
TCAGAGACCCTTCGGTGCCCACAGGCGGCTGCAAGGAGAGTGGGTGTTCCTGGCACGGGGGCCCAGACGGGCTGT
ATGAGTATCTGCGGCCCTCAGGGACCCCTGCCCGGCTGTCCTGCCTCTCCAAGAACCTGAACTATGACACCTTTG
GCCTCGCTGTTCCCTCAACCCTGCCGGCTGGGCCTGAAATAGGGCCCAGCCCAGCACCCCCCTATGGGCTCTTCG
TTGGGGGCCGTTTCCAGGCTCCTGGGGCCCGAAGCTCCAGGCCCATCCGGGATTCGTCTGGCAACCTCCATGGCT
ACGTGGCTGAGGGTGGAGCCAAGGACATCCGAGGTGCTGTGGAGGCCGCTCACCAGGCTTTCCCTGGCTGGGCGG
GCCAGTCCCCAGGAGCCCGGGCAGCCCTGCTGTGGGCCCTGGCGGCTGCACTGGAGCGCCGGAAGTCTACCCTGG
CCTCGAGGCTGGAGAGGCAGGGAGCGGAGCTCAAGGCTGCGGAGGCGGAGGTGGAGCTGAGCGCAAGACGACTTC
GGGCGTGGGGGGCCCGGGTGCAGGCCCAAGGCCACACCCTGCAGGTAGCCGGGCTGAGAGGCCCTGTGCTGCGCC
TGCGGGAGCCGCTGGGTGTGCTGGCTGTGGTGTGTCCGGACGAGTGGCCCCTGCTTGCCTTCGTGTCCCTGCTGG
CTCCCGCCCTGGCCTACGGCAACACTGTGGTCATGGTGCCCAGTGCGGCCTGTCCTCTGCTGGCCCTGGAGGTCT
GCCAGGACATGGCCACCGTGTTCCCAGCAGGCCTGGCCAACGTGGTGACAGGAGACCGGGACCATCTGACCCGCT
GCCTGGCCTTGCACCAAGACGTCCAGGCCATGTGGTATTTCGGATCAGCCCAGGGTTCCCAGTTTGTCGAGTGGG
CCTCGGCAGGAAACCTCAAACCGGTGTGGGCGAGCAGGGGCTGCCCGCGGGCCTGGGACCAGGAGGCCGAGGGGG
CAGGCCCAGAGCTGGGGCTGCGAGTGGCGCGGACCAAGGCCCTGTGGCTGCCTATGGGGGAC**TGA**TGCCTGAGCG
CCACCTACTGCATTTTGGACACCTCACACCAAGGGGAGATGCACCCCACAGACACCTGGGACTTTCCCCTTCTGG
TTCCTGTGTCTCCCAATAAACTCTCTGACCAACCCTAGCTGTGCTTCTGCGAGAAGAAAGGGTGTAGCAACTTCT
GGCAGATATGAGGCTTTTTTCTTTTTTTTTTTTTTTTTTGAGACAACGTCTGGCTCTGTCACCCAGGCTGGAGCG
CAGTGGCACAATCTCGGCCCACTGCAGCCTCGACCTCTGGGGCTCAAGGGATCCTCATGCCTCAGCCTCATATGT
AGCTGGGGCCACAGACATGCACCACCACACCTGGCTCGAGGCCATTTTAGTTCTGAGGTTGAGCAGCTCAGGAGC
CGGCTCCAGCACGGTGCTGTGTTTGTGAAACAGAGAAAGGGGACCCCCGAGGACCCCAGACAGGGCCTTAGGACT
CTCATATCTTCTTGTCTTCTCCATCTGGTGGCTCTTGCTCTCTGGTTTTCTCTACCTTTTCATGGCCCCAGAATC
CATATGCAGTAAAGGAACTCTCTGGAATAAAATTAAAGTCCTCCT

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FIGURE 3870

ACAGTTCGGCACGTAGGACGGAGGGTAGTGCGTCTAGAGACACATATTCCCCACGGATTTGACGATGGTGTTCGG
TCTTGAATGGAAATGTAGTCTTAGGCCAGTCTTAGGTTTTTGAACAGGATAGTAGGTATCCGGAGTCGATTGAGG
GCCAGAGCAGGCACTGGGGTTCGGATCCTGGGCAAAGTTTCCCACGTTGAGGGTCTCGAGGACGCCTAGATCTCT
TTCCCAGGGCCATGGCGAACCCGAAGCTGCTGGGAATGGGGCTAAGCGAGGCGGAGGCGATCGGTGCTGATTCGG
CGCGATTTGAGGAGCTGCTGCTGCAGGCCTCGAAGGAGCTCCAGCAAGCCCAGACAACCAGACCAGAATCGACAC
AAATCCAGCCTCAGCCTGGTTTCTGCATAAAGACCAACTCCTCGGAAGGGAAGGTTTTCATCAACATCTGCCACT
CCCCCTCTATCCCTCCTCCCGCCGACGTGACCGAGGAGGAGCTGCTTCAGATGCTAGAGGAGGACCAAGCTGGGT
TTCGCATCCCCATGAGTCTGGGAGAGCCTCATGCAGAACTGGATGCAAAAGGCCAGGGATGTACCGCCTACGACG
TAGCTGTCAACAGCGACTTCTACCGGAGGATGCAGAACAGCGATTTCTTGCGGGAGCTCGTGATCACCATCGCCA
GGGAGGGCCTTGAGGACAAATACAACTTGCAGCTGAATCCGGAATGGCGCATGATGAAGAACCGGCCATTCATGG
GCTCCATCTCGCAGCAGAACATCCGCTCGGAGCAGCGTCCTCGGATCCAGGAGCTGGGGGACCTGTACACGCCCG
CCCCCGGGAGAGCTGAGTCAGGGCCTGAAAAGCCTCACCTGAACCTGTGGCTGGAAGCCCCCGACCTCCTCTTGG
CCGAAGTTGACCTCCCCAAACTGGATGGAGCCCTGGGGCTGTCGCTGGAGATCGGGGAGAACCGCCTGGTGATGG
GGGGCCCCCAGCAGCTGTATCATCTAGACGCTTATATCCCGCTGCAGATCAACTCTCATGAGAGCAAGGCAGCCT
TCCACCGGAAGAGAAAGCAATTAATGGTGGCCATGCCGCTTCTGCCGGTGCCTTCTTGATCAGGGTGTCTCCTTG
TGCTTCTGAGATGTGGAGAAGAGGCTGCTGGCTTCCCTAAAAGTTGAAATAAAAGATTTTTGCCTTT

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FIGURE 3871

CCCACTTTTCCCAAACAAAGCTCCCGGCAACTTTCTCCCTCGCAGCGCCCCGCCCGCCCGCGGCTCCCCAGCCCC
AGGCCGGGAGGCCCAGATGGGGGAACCCCGGGCTGGGGCCGCCCTGGACGATGGCAGCGGCTGGACGGGCAGTGA
GGAAGGCAGTGAGGAGGGTACCGGCGGCAGTGAGGGGGCTGGGGGTGACGGGGGCCCGGATGCAGAGGGGGTGTG
GAGCCCAGACATTGAGCAGAGCTTCCAGGAGGCCCTGGCCATCTATCCACCCTGCGGCCGCCGGAAAATAATTTT
GTCTGATGAAGGCAAGATGTATGGTCGGAATGAACTGATCGCCCGCTACATCAAGCTGAGAACGGGGAAGACCCG
AACTCGAAAACAGGTTTCTAGTCACATCCAGGTTTTGGCCCGAAGGAAATCAAGGGAAATCCAGTCCAAGTTGAA
GGACCAGGTTTCCAAGGACAAGGCTTTCCAGACAATGGCAACCATGTCCTCTGCCCAGCTCATCTCCGCGCCTTC
TCTGCAGGCCAAACTGGGTCCCACTGGTCCTCAGGCCTCTGAGCTTTTCCAGTTTTGGTCTGGAGGATCTGGGCC
CCCCTGGAATGTTCCAGATGTGAAGCCATTCTCACAGACACCGTTCACCTTGTCACTGACTCCCCCATCTACTGA
CCTCCCAGGGTACGAGCCCCCCCAAGCCCTCTCACCCCTGCCCCCACCTACCCCATCGCCCCCAGCCTGGCAGGC
TCGGGGCCTGGGCACCGCCCGGTTGCAGCTGGTAGAGTTCTCAGCCTTCGTGGAACCGCCAGATGCAGTTGATTC
TTACCAGAGGCACCTGTTCGTGCACATCAGCCAGCACTGCCCCAGCCCCGGAGCGCCGCCGCTCGAGAGTGTGGA
CGTCCGGCAGATCTACGACAAATTCCCTGAGAAAAAGGGTGGCCTCCGAGAGCTATATGATCGTGGCCCCCCCCA
TGCCTTCTTCCTGGTCAAGTTCTGGGCGGACCTGAACTGGGGCCCAAGTGGTGAGGAGGCAGGGGCCGGTGGCAG
CATCAGCAGTGGTGGCTTCTACGGAGTGAGCAGCCAGTATGAGAGCCTGGAACACATGACCCTCACCTGTTCCTC
CAAGGTCTGCTCTTTTGGCAAGCAGGTGGTGGAGAAGGTGGAGACGGAACGGGCCCAGCTGGAGGACGGCAGATT
TGTGTACCGCCTGCTGCGCTCGCCCATGTGCGAGTACCTGGTGAATTTCTTGCACAAGTTGCGGCAGCTGCCTGA
GCGATACATGATGAACAGCGTCCTGGAAAACTTCACCATCCTCCAGGTGGTGACAAACAGAGACACCCAGGAACT
GCTGCTCTGCACCGCCTATGTCTTCGAGGTCTCCACCAGCGAGCGTGGGGCCCAGCATCACATTTACCGCCTGGT
CAGGGACTGAAGGGGGACCCCAAAACTGGCTCACCCCCCAGAACACCCTCCTCCCAGGGAGGGTCCTCCAGCTCA
CCTCATGCTTCTTATTTGGGGAGAGGGCTGTGATGTAAAGGGGTTGACCTCAGAGGCCTAAGCAACTGGGGCCAT
CCCCCCCATTAGAGGGGCCCCCAAAACTTGGTTGGAGAGCTGAACAGGCTGGGACTGAGGAAAGGATAAACCCCG
ATATTGGGACCTCACAGTGGGTGTCTGAAAGGACAGATCACTCCGGAGTATCAGGGATTGTGGGGACAGGAGTGA
GACAACCCCCCAGGTACAGCACTGGCTTTTCTTTTCAGCCCCTGACAGGCCACCCCCACTCCTCTGCATGTCTTG
GAGAGCGCTAGTTACACATTGGCTTGTCCCCTTTACTTTTTCCCAGCCACCCCTCCCCCTGAAATTTCTGCCCCT
CTCTACCACCCTCACTCCATGACCTGTGAGATCACAAAGTGAAGATGAACCCTTTCTGTGCAGGAGCAGAGCCAG
GTGGGCCCTGGACATTTTTTTTTTTTTTAATATAACGAGATATTTATAAGTGGGTGCTAGGGTCTTGACTTTATC
TCCGCTGCACAAGCAGTGTGTTGAACTTTCTAATCTCATCCCTCTCCTAAGTGAGCCCTGAGCTAGACGGTTTCC
TTCCTCCCCTCTCAAAGTTTGTTTGTTTGTGTTCTGACAGAGGATAAAGCTATTTTACC

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FIGURE 3872

GTCTCCCCCACTGTCAGCACCTCTTCTGTGTGGTGAGTGGACCGCTTACCCCACTAGGTGAAGATGTCAGCCCAG
GAGAGCTGCCTCAGCCTCATCAAGTACTTCCTCTTCGTTTTCAACCTCTTCTTCTTCGTCCTCGGCAGCCTGATC
TTCTGCTTCGGCATCTGGATCCTCATTGACAAGACCAGCTTCGTGTCCTTTGTGGGCTTGGCCTTCGTGCCTCTG
CAGATCTGGTCCAAAGTCCTGGCCATCTCAGGAATCTTCACCATGGGCATCGCCCTCCTGGGTTGTGTGGGGGCC
CTCAAGGAGCTCCGCTGCCTCCTGGGCCTGTATTTTGGGATGCTGCTGCTCCTGTTTGCCACACAGATCACCCTG
GGAATCCTCATCTCCACTCAGCGGGCCCAGCTGGAGCGAAGCTTGCGGGACGTCGTAGAGAAAACCATCCAAAAG
TACGGCACCAACCCCGAGGAGACCGCGGCCGAGGAGAGCTGGGACTATGTGCAGTTCCAGCTGCGCTGCTGCGGC
TGGCACTACCCGCAGGACTGGTTCCAAGTCCTCATCCTGAGAGGTAACGGGTCGGAGGCGCACCGCGTGCCCTGC
TCCTGCTACAACTTGTCGGCGACCAACGACTCCACAATCCTAGATAAGGTGATCTTGCCCCAGCTCAGCAGGCTT
GGACACCTGGCGCGGTCCAGACACAGTGCAGACATCTGCGCTGTCCCTGCAGAGAGCCACATCTACCGCGAGGGC
TGCGCGCAGGGCCTCCAGAAGTGGCTGCACAACAACCTTATTTCCATAGTGGGCATTTGCCTGGGCGTCGGCCTA
CTCGAGCTCGGGTTCATGACGCTCTCGATATTCCTGTGCAGAAACCTGGACCACGTCTACAACCGGCTCGCTCGA
TACCGTTAGGCCCCGCCCTCCCCAAAGTCCCGCCCCGCCCCCGTCACGTGCGCTGGGCACTTCCCTGCTGCCTGT
AAATATTTGTTTAATCCCCAGTTCGCCTGGAGCCCTCCGCCTTCACATTCCCCTGGGGACCCACGTGGCTGCGTG
CCCCTGCTGCTGTCACCTCTCCCACGGGACCTGGGGCTTTCGTCCACAGCTTCCTGTCCCCATCTGTCGGCCTAC

FIGURE 3873A

GAGGGAGCGCCGGGGCCCTGGGCTGCAGGAGGTTGCGGCGGCCGCGGCAGCATGGTGGTGCCGGAGAAGGAGCAG
AGCTGGATCCCCAAGATCTTCAAGAAGAAGACCTGCACGACGTTCATAGTTGACTCCACAGATCCGGGGAGCCTG
GATTGTCACTGGGGGTCTGCACACGGGCATCGGCCGGCATGTTGGTGTGGCTGTACGGGACCATCAGATGGCCAG
CACTGGGGGCACCAAGGTGGTGGCCATGGGTGTGGCCCCCTGGGGTGTGGTCCGGAATAGAGACACCCTCATCAA
CCCCAAGGGCTCGTTCCCTGCGAGGTACCGGTGGCGCGGTGACCCGGAGGACGGGGTCCAGTTTCCCCTGGACTA
CAACTACTCGGCCTTCTTCCTGGTGGACGACGGCACACACGGCTGCCTGGGGGGCGAGAACCGCTTCCGCTTGCG
CCTGGAGTCCTACATCTCACAGCAGAAGACGGGCGTGGGAGGGACTGGAATTGACATCCCTGTCCTGCTCCTCCT
GATTGATGGTGATGAGAAGATGTTGACGCGAATAGAGAACGCCACCCAGGCTCAGCTCCCATGTCTCCTCGTGGC
TGGCTCAGGGGGAGCTGCGGACTGCCTGGCGGAGACCCTGGAAGACACTCTGGCCCCAGGGAGTGGGGGAGCCAG
GCAAGGCGAAGCCCGAGATCGAATCAGGCGTTTCTTTCCCAAAGGGGACCTTGAGGTCCTGCAGGCCCAGGTGGA
GAGGATTATGACCCGGAAGGAGCTCCTGACAGTCTATTCTTCTGAGGATGGGTCTGAGGAATTCGAGACCATAGT
TTTGAAGGCCCTTGTGAAGGCCTGTGGGAGCTCGGAGGCCTCAGCCTACCTGGATGAGCTGCGTTTGGCTGTGGC
TTGGAACCGCGTGGACATTGCCCAGAGTGAACTCTTTCGGGGGGACATCCAATGGCGGTCCTTCCATCTCGAAGC
TTCCCTCATGGACGCCCTGCTGAATGACCGGCCTGAGTTCGTGCGCTTGCTCATTTCCCACGGCCTCAGCCTGGG
CCACTTCCTGACCCCGATGCGCCTGGCCCAACTCTACAGCGCGGCGCCCTCCAACTCGCTCATCCGCAACCTTTT
GGACCAGGCGTCCCACAGCGCAGGCACCAAAGCCCCAGCCCTAAAAGGGGGAGCTGCGGAGCTCCGGCCCCCTGA
CGTGGGGCATGTGCTGAGGATGCTGCTGGGGAAGATGTGCGCGCCGAGGTACCCCTCCGGGGGCGCCTGGGACCC
TCACCCAGGCCAGGGCTTCGGGGAGAGCATGTATCTGCTCTCGGACAAGGCCACCTCGCCGCTCTCGCTGGATGC
TGGCCTCGGGCAGGCCCCCTGGAGCGACCTGCTTCTTTGGGCACTGTTGCTGAACAGGGCACAGATGGCCATGTA
CTTCTGGGAGATGGGTTCCAATGCAGTTTCCTCAGCTCTTGGGGCCTGTTTGCTGCTCCGGGTGATGGCACGCCT
GGAGCCTGACGCTGAGGAGGCAGCACGGAGGAAAGACCTGGCGTTCAAGTTTGAGGGGATGGGCGTTGACCTCTT
TGGCGAGTGCTATCGCAGCAGTGAGGTGAGGGCTGCCCGCCTCCTCCTCCGTCGCTGCCCGCTCTGGGGGGATGC
CACTTGCCTCCAGCTGGCCATGCAAGCTGACGCCCGTGCCTTCTTTGCCCAGGATGGGGTACAGTCTCTGCTGAC
ACAGAAGTGGTGGGGAGATATGGCCAGCACTACACCCATCTGGGCCCTGGTTCTCGCCTTCTTTTGCCCTCCACT
CATCTACACCCGCCTCATCACCTTCAGGAAATCAGAAGAGGAGCCCACACGGGAGGAGCTAGAGTTTGACATGGA
TAGTGTCATTAATGGGGAAGGGCCTGTCGGGACGGCGGACCCAGCCGAGAAGACGCCGCTGGGGGTCCCGCGCCA
GTCGGGCCGTCCGGGTTGCTGCGGGGGCCGCTGCGGGGGGCGCCGGTGCCTACGCCGCTGGTTCCACTTCTGGGG
CGCGCCGGTGACCATCTTCATGGGCAACGTGGTCAGCTACCTGCTGTTCCTGCTGCTTTTCTCGCGGGTGCTGCT
CGTGGATTTCCAGCCGGCGCCGCCCGGCTCCCTGGAGCTGCTGCTCTATTTCTGGGCTTTCACGCTGCTGTGCGA
GGAACTGCGCCAGGGCCTGAGCGGAGGCGGGGGCAGCCTCGCCAGCGGGGGCCCCGGGCCTGGCCATGCCTCACT
GAGCCAGCGCCTGCGCCTCTACCTCGCCGACAGCTGGAACCAGTGCGACCTAGTGGCTCTCACCTGCTTCCTCCT
GGGCGTGGGCTGCCGGCTGACCCCGGGTTTGTACCACCTGGGCCGCACTGTCCTCTGCATCGACTTCATGGTTTT
CACGGTGCGGCTGCTTCACATCTTCACGGTCAACAAACAGCTGGGGCCCAAGATCGTCATCGTGAGCAAGATGAT
GAAGGACGTGTTCTTCTTCCTCTTCTTCCTCGGCGTGTGGCTGGTAGCCTATGGCGTGGCCACGGAGGGGCTCCT
GAGGCCACGGGACAGTGACTTCCCAAGTATCCTGCGCCGCGTCTTCTACCGTCCCTACCTGCAGATCTTCGGGCA
GATTCCCCAGGAGGACATGGACGTGGCCCTCATGGAGCACAGCAACTGCTCGTCGGAGCCCGGCTTCTGGGCACA
CCCTCCTGGGGCCCAGGCGGGCACCTGCGTCTCCCAGTATGCCAACTGGCTGGTGGTGCTGCTCCTCGTCATCTT
CCTGCTCGTGGCCAACATCCTGCTGGTCAACTTGCTCATTGCCATGTTCAGTTACACATTCGGCAAAGTACAGGG
CAACAGCGATCTCTACTGGAAGGCGCAGCGTTACCGCCTCATCCGGGAATTCCACTCTCGGCCCGCGCTGGCCCC
GCCCTTTATCGTCATCTCCCACTTGCGCCTCCTGCTCAGGCAATTGTGCAGGCGACCCCGGAGCCCCCAGCCGTC
CTCCCCGGCCCTCGAGCATTTCCGGGTTTACCTTTCTAAGGAAGCCGAGCGGAAGCTGCTAACGTGGGAATCGGT
GCATAAGGAGAACTTTCTGCTGGCACGCGCTAGGGACAAGCGGGAGAGCGACTCCGAGCGTCTGAAGCGCACGTC
CCAGAAGGTGGACTTGGCACTGAAACAGCTGGGACACATCCGCGAGTACGAACAGCGCCTGAAAGTGCTGGAGCG
GGAGGTCCAGCAGTGTAGCCGCGTCCTGGGGTGGGTGGCCGAGGCCCTGAGCCGCTCTGCCTTGCTGCCCCCAGG
TGGGCCGCCACCCCCTGACCTGCCTGGGTCCAAAGACTGAGCCCTGCTGGCGGACTTCAAGGAGAAGCCCCCACA
GGGGATTTTGCTCCTAGAGTAAGGCTCATCTGGGCCTCGGCCCCCGCACCTGGTGGCCTTGTCCTTGAGGTGAGC
CCCATGTCCATCTGGGCCACTGTCAGGACCACCTTTGGGAGTGTCATCCTTACAAACCACAGCATGCCCGGCTCC
TCCCAGAACCAGTCCCAGCCTGGGAGGATCAAGGCCTGGATCCCGGGCCGTTATCCATCTGGAGGCTGCAGGGTC

FIGURE 3873B

CTTGGGGTAACAGGGACCACAGACCCCTCACCACTCACAGATTCCTCACACTGGGGAAATAAAGCCATTTCAGAG
G

FIGURE 3874A

GTGGGATTTGGGGGGCGCTGGTGGGCACCCCTGGATCTGGCGGCTGCGGCCTCGCGGGGGGAGGCTGATCGGTGA
CAGGGGCAGGGGGCTATTTTGGGGGTAGAAGGCAGTGAGAGCGTGAGGGGGAGGGGGGTCCCCAGCGCCCAAGCC
GGAGCCAGAGACGCGGAGCCCGCGCGAGCGTCGGAGACAGGGCTCCAGGGCTCCGAAGCGACAGAGCCGGGCCCC
GGCCGCTGCCAGGGGCCCCGCCCGGCCCCCCCACTCCACCCCACGTCCCTCCTGCAGCCCAGCTCCGCCCGCAGC
CGCCGCGGACCAGGCAGGCCCGCACCGCCGCCATGATGTGCGAGGTGATGCCCACCATCAGCGAGGATGGCCGGC
GGGGCTCGGCGCTGGGCCCGGACGAGGCGGGCGGGGAGCTGGAGCGCCTCATGGTCACGATGCTCACGGAGCGCG
AGCGCCTGCTGGAGACGCTGCGCGAGGCACAGGACGGGTTGGCTACAGCGCAGCTGCGGCTGCGCGAGCTCGGCC
ACGAGAAGGACTCGCTGCAGCGCCAGCTCAGCATCGCGCTGCCCCAGGAGTTTGCAGCTCTGACGAAGGAGCTGA
ACTTATGTCGGGAGCAGCTGCTGGAGAGGGAGGAAGAGATTGCAGAGCTGAAGGCGGAACGGAACAACACGCGGC
TGCTCCTGGAACACCTGGAGTGCCTGGTGTCCAGGCACGAGAGGTCACTGCGCATGACCGTGGTGAAGCGCCAGG
CCCAGTCCCCGGGTGGGGTCTCCTCGGAGGTAGAAGTGCTCAAAGCTCTAAAGTCTCTCTTCGAGCACCACAAGG
CCCTGGATGAGAAGGTCCGGGAGCGGCTGCGGATGGCGCTGGAGCGCGTGGCAGTGCTCGAGGAGGAGCTGGAAC
TGAGCAATCAGGAGACTCTGAACCTTCGAGAACAGCTGTCTAGGCGGCGGTCAGGGCTGGAAGAGCCGGGCAAGG
ATGGGGATGGGCAGACTCTTGCCAATGGCCTGGGTCCTGGCGGGGATTCCAACCGGCGCACAGCAGAGCTGGAGG
AGGCCCTGGAGCGGCAGCGCGCCGAGGTGTGCCAGCTGCGGGAGCGCCTGGCGGTGCTGTGCCGTCAGATGAGCC
AGCTGGAGGAGGAGTTGGGCACCGCGCACCGTGAGCTGGGCAAGGCAGAGGAAGCCAACTCCAAGCTGCAGCGCG
ACCTCAAGGAGGCGCTGGCGCAGCGGGAAGATATGGAGGAGCGGATTACAACACTGGAGAAGCGCTACCTGAGCG
CCCAGCGGGAGGCCACGTCTCTGCACGACGCCAACGACAAACTGGAGAACGAGTTAGCTAGCAAGGAGTCGTTGT
ATCGGCAGAGTGAAGAGAAGAGCCGTCAGCTGGCCGAGTGGTTGGACGACGCCAAGCAGAAGCTGCAGCAGACGC
TGCAGAAAGCGGAGACCTTGCCCGAGATAGAGGCGCAGCTGGCGCAGCGCGTGGCGGCGCTCAACAAGGCCGAGG
AACGTCATGGGAATTTTGAGGAGCGGCTTCGGCAGCTGGAGGCCCAGCTGGAAGAGAAGAATCAAGAGCTGCAGC
GGGCCCGGCAGCGGGAGAAGATGAACGATGACCACAATAAGCGGCTGTCCGAGACGGTGGACAAGCTGCTGAGCG
AGTCCAACGAGCGCTTACAGCTTCACCTCAAGGAGCGCATGGGGGCGCTGGAGGAGAAGAACTCCCTGAGCGAGG
AGATAGCCAACATGAAGAAGCTTCAGGATGAGTTGCTGCTAAACAAGGAGCAGCTCTTGGCCGAAATGGAGCGGA
TGCAGATGGAGATCGACCAGCTGCGGGGGAGGCCACCATCCTCCTACTCCAGGTCTCTCCCTGGCAGTGCCCTGG
AGCTCCGTTACTCTCAGGCACCCACTTTACCTTCTGGTGCCCACCTGGATCCCTATGTGGCTGGCAGTGGTCGGG
CAGGCAAGAGGGGCCGCTGGTCAGGGGTCAAGGAGGAGCCCTCCAAGGATTGGGAGCGGTCTGCCCCTGCGGGCT
CCATACCACCCCCATTCCCTGGGGAACTGGACGGCTCCGATGAGGAGGAGGCAGAGGGGATGTTTGGGGCCGAGC
TGCTGTCCCCCAGTGGGCAGGCTGACGTGCAGACGCTGGCCATCATGCTTCAGGAGCAGCTGGAGGCCATCAACA
AGGAGATCAAGCTGATCCAAGAGGAGAAGGAGACAACAGAACAGAGGGCAGAGGAGCTGGAGAGTCGGGTGTCCA
GCTCTGGCTTGGACTCGTTGGGCCGCTACCGCAGCAGCTGCTCCCTGCCCCCCTCCCTCACCACCTCTACCCTTG
CCAGCCCCTCCCCTCCCAGCTCTGGCCACTCAACACCCCGCCTGGCACCCCCTAGCCCTGCCCGTGAGGGCACCG
ACAAGGCTAATCATGTCCCTAAGGAGGAAGCTGGAGCTCCACGAGGGGAGGGGCCGGCCATCCCAGGAGACACCC
CACCACCCACTCCCCGCTCTGCCCGTCTTGAGAGAATGACCCAGGCCTTGGCACTGCAGGCGGGGTCCCTGGAAG
ATGGGGGACCCCCACGGGGAAGTGAGGGCACCCCAGATTCTCTGCACAAAGCCCCCAAGAAGAAGAGCATCAAGT
CATCCATAGGCCGTCTCTTTGGCAAGAAAGAGAAGGGACGAATGGGACCCCCAGGCCGGGACAGCTCTTCTCTGG
CTGGAACACCCTCAGATGAGACACTGGCCACTGACCCTCTGGGGCTAGCCAAGCTGACAGGCCCAGGAGACAAGG
ACCGAAGGAACAAGAGGAAGCATGAACTCCTGGAGGAGGCCTGCCGCCAGGGCCTACCTTTTGCTGCCTGGGACG
GGCCCACCGTGGTGTCCTGGCTGGAGCTGTGGGTGGGCATGCCTGCCTGGTATGTGGCCGCCTGCCGGGCCAATG
TCAAGAGCGGTGCCATCATGGCCAACCTGTCAGACACGGAGATCCAGCGCGAGATCGGCATCAGCAACCCGCTGC
ACCGACTCAAGCTACGCCTCGCCATCCAGGAGATGGTCTCGCTCACCTCGCCCTCAGCCCCCGCCTCCTCCCGCA
CTTCCACAGGAAACGTGTGGATGACACACGAGGAGATGGAGTCCCTTACGGCCACGACCAAGCCCGAGACCAAGG
AGATCAGCTGGGAGCAGATCCTGGCATATGGCGACATGAACCACGAGTGGGTGGGGAACGACTGGCTGCCCAGCC
TGGGGCTGCCCCAATACCGCAGCTACTTCATGGAGTCGCTGGTGGACGCTCGAATGTTAGATCACCTTAACAAGA
AGGAGCTCCGGGGCCAACTCAAGATGGTGGACAGCTTTCACAGGGTGAGTCTACATTATGGGATTATGTGCCTGA
AACGGCTCAACTATGACCGGAAGGACCTGGAGCGGAGGCGGGAAGAAAGTCAGACCCAGATCCGAGACGTGATGG
TGTGGTCCAATGAGCGGGTCATGGGTTGGGTGTCCGGGCTGGGCCTGAAGGAATTTGCCACGAACCTCACGGAGA
GCGGGGTACACGGGGCACTGCTCGCCCTGGACGAGACCTTCGACTACTCCGACCTGGCCTTGCTCCTGCAGATCC

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FIGURE 3874B

CCACGCAGAATGCACAGGCCCGGCAGCTTCTGGAGAAGGAATTCAGCAACCTTATCTCCTTAGGCACAGACAGGC
GGCTGGACGAGGACAGCGCCAAGTCTTTCAGCCGCTCCCCATCCTGGCGGAAGATGTTCCGGGAGAAGGACCTCC
GAGGCGTAACTCCCGACTCAGCTGAGATGTTGCCCCCCAACTTTCGTTCGGCTGCAGCGGGAGCCCTGGGCTCTC
CGGGGCTCCCTCTCCGCAAGCTGCAGCCAGAAGGCCAGACTTCTGGGAGTTCCCGGGCAGACGGCGTTTCGGTCC
GGACCTATTCCTGC**TAG**TGCAGGCCTCCAGGTGACCTCACTCGGACGGAAGAATCTTCCCGAGGCTGGGCTGTTC
CCTCTCCTGCCCGGACTGTGGCCTCGCCGGGGAGAGCGGGCGGGGGGAGCTCGCGCCGAGGACTGGACCATCTGTA
CAGACCAGCGGGAGTGCGCGCGCCCGCCTCGCACAGGGCCGGGGCCTGGACCAAACCACATGAACTGGACTGAGA
GGGGGAAGAAGCGGGGAGGAAGAAATCCCGCCCCAAACGTCCGCTTTCCTTTTCTCTACTTTGTAATTTATTGAT
CAGTTTCTGTTGGGAGACGGGTGTCCTTTACCCGCGGGAAGGGGGCGGGGCTTCCCTCCCGGGCCGCATGCGGGG
AGAGGCTGCTCCCTCCCCTTTTTCCTGCCCAGTCGCGGGGCCCAAGTCTTCCTTCTTCGTCCGAAAGGAGGGGAG
GGGGGACTCGCTGCTACAAGCCTCGCCCCCTGTGCCACTCAGCTCCGCCCCGCCGCGTCCGGTCGCCGGTCCCCC
GGGTCATCTGCGGGCGGGTTCCCCTCTCCCTCCCCCGTGTCTCGTGTCCCCGGGGCCTCACCGCCCCCCGTGCTG
TGGCCGTGTCCGTGCCCCGGGGGTAGGGGGCGCAGAATGGCGCTTCCCCTTCTCCTCTGGCTCCGGGGTTTGCAT
GGGAGAATCCTCTTTCCACGATGCCGCTGGGCGACGTGGCGTGGGGGCAGGGGGACGGTGGGGGAGCCCTCGCCC
CCGACTCTCGGTCGGCCTCCCCGCCCCAGGCGTCACTCAGTGATCACGGGTAAAGAGAACTGTTTC

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FIGURE 3875

CATGGCTGCGCTGGTGGAGCCGCTGGGGCTGGAGCGGGACGTGTCCCGGGCGGTTGAGCTCCTCGAGCGGCTCCA
GCGCAGCGGGGAGCTGCCGCCGCAGAAGCTGCAGGCCCTCCAGCGAGTTCTGCAGAGCCGCTTCTGCTCCGCTAT
CCGAGAGGTGTATGAGCAGCTTTATGACACGCTGGACATCACCGGCAGCGCCGAGATCCGAGCCCATGCCACAGC
CAAGGCCACAGTGGCTGCCTTCACAGCCAGCGAGGGCCACGCACATCCCAGGGTAGTGGAGCTACCCAAGACGGA
TGAGGGCCTAGGCTTCAACATCATGGGTGGCAAAGAGCAAAACTCGCCCATCTACATCTCCCGGGTCATCCCAGG
GGGTGTGGCTGACCGCCATGGAGGCCTCAAGCGTGGGGATCAACTGTTGTCGGTGAACGGTGTGAGCGTTGAGGG
TGAGCAGCATGAGAAGGCGGTGGAGCTGCTGAAGGCGGCCCAGGGCTCGGTGAAGCTGGTTGTCCGTTACACACC
GCGAGTGCTGGAGGAGATGGAGGCCCGGTTCGAGAAGATGCGCTCTGCCCGCCGGCGCCAACAGCATCAGAGCTA
CTCGTCCTTGGAGTCTCGAGGTTGAAACCACAGATCTGGACGTTCACGTGCACTCTCTTCCTGTACAGTATTTAT
TGTTCCTGGCACTTTATTTAAAGATATTTGACCCTC

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FIGURE 3876

AAGTACCTATTGGATCACCAGCTGTGTGCCGGGCTTCTAGTTGAGCAACACAGAGGCAGCCTCTGCCCTCTGAGC
CTCCTGCATTCGGTCTCCTCATTGTCATTTGCTGTCTCAGGCAAGGTCAGTTTGGCTGCAAGTATCAGAAATAAA
CTTGAGCTTCCTGAAACATAAAGGGCCCTGTTGATGTAGAATCATGGGCATCCTTTGGAGTTCGGAGGTATGTGA
TGTCCGTGGACCTGAGAACCTGGTAGCTGACGCTGTTAAGAGCTGGGGCAACCAGGCCAGGCGTGGTGGCTCGCC
TGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGATCATGAGGTCAGGAGTTCGAGACCAGCCTGGCCAAGAT
GTTGAAACCGCATCTCTACTAAAAATACAAAAATTAACTGGGCGTGGTGGCGGGTGCCTGTAATCCCATCTACTC
GGGAGGCTGAGGCAGAGAATTGCTTAAACCTGGGAGGCAGAGGTTGCAGTGAGCCAAGATAGAGTCACTGCATTC
CATCCAGCCTGGGTGCCAGAGCAAGACTCTGTCTCAAAAAAAAAAACAAAAAACAAAAAAACTGGGGCGACCCAC
CTGTGATGTGTGACAGCCCACAGCTTGCTTCTGCCTCGTTTGCCTCCATGCAGCTAGGTCGGTCCCATGCCTCTT
TGCACTGGCCCAGCGCAGCAGGCCACAGGCCCCAGCTTTACACTCAGTCCTGGATGAGTCTCTTGTTTCGGGGTG
GGCACATTTGATTGACTCAGTGTTGGGCCTGGGGTCCTGTTGCTCAGGCATGCTTATTGAGGACTGAATCCTGCA
AAGCTGAGTGACAGTTGTCAGAGAAGATGATGGTCCCTGGGCAGACACCCAGGCAGTAGTAGCCACTTGGGGCTC
CTGTCCTGCCTCCCAGCCCTGTGTCCTGGCTCTGGACTCGCCTGTGCTAGGGAGACCACGCTCTCAGCTGCTGAG
CCTCGGAGCTTACCAGGCATGTTCTTACCTTACTCTGGTCTCTCTGGGGTGGAGTGGGTTCTTATAGCTCTGCTG
TTTCCTGTTGGGGCGGGAAAATGCTAGAATCTCAGTCTTTCCAGAATCTCAGAATCTTCTAGTTCAATTGCCATT
CAAACTTTTTGTTGGTGTTAGCCAATAACATCTTGACTCGGTGCACCCGCAGAAATACTGTAACCTAAAGTTTGA
GGAAACAGTTTTTTCTATGTAGTAAGTATATAGTTGTATTCTGCTGTTTTGTTTCTTAAGATGTTGGTTGCAACC
CATCAGATTGATGATGGGACTCATTTCTGGGTCATGACCTGAATATAGGAAAGGCTAGTCTAGCTGCCCTGTGCC
TGTGACATGGCAGGTGCCTGGTCCGCTGCCTGCTTCTATAAGAATGTCTCCCTGCAGCCTCTTTTCTATACAGAA
CTCAGCCCTGCCTCACGGAAGCTTTTCCAGGCAGTGCGAGATAGAGGAGCGCTTGAGAAGGCAGGTTTTGCAGCA
GACGGCAGTGACAGCCCAGTTCTGCACCTTCTTTGCTGAGTCACTGTGGGCCAGTGACTTGATCTGAGATTGTTT
CCCCATCAGAACCATGAGGTTATCATCTGTGCCTTGGGGCTGTTCATCTATCTATTCACTTGACACACACACATC
CACCTTTCTATACCAGCTGCAGCGCCACCTGCTGGTACCGTGAGCAAGAGCTGGGCATGCCCACGGTTCCGGTGC
CCTGCAGTCTGGTGGGAGAGGCAGGTAGGGGTCGACTCAGGTAGCAAACCTGAAACTCCAGGGGAAGGAAGCGTT
TCTGCAACTGTGAGTACATAGGACTGTGAGGAGAGACTTCCCGAGAAAGGATGTTCGGGCTAGCGTTAAGGGTGA
GCGTGAGTTCACCAGAGAAGGAAGGGGAGACCAGTCCAGGGCAAGGAGAATGCACAGACACTGGCAGGAAGGTGA
GCGTGGGGACACTGGGAAAGGCCTGGGACACGCAGCCAAGAGCCGCGGCTCAGACGCTAGCAGGGCCCGCTCTTG
CTGCCTCTACCACCAGTTGACGAGGAGTTTGGACCTTAGGCTGGGGGACGCCAGCAAAGGCTTCTAAGCAGATCA
CATTTTTGGGTGGAAAGATCATTGGCTTCGGGTTTCTGTGAGGGCGAGGATGATTGGAAGGGAGGGTTTTGAGGA
GGCTGTGAAGTGCGCTATGGTTAAGATGATGCGCTTTGGGGCCAGACATGGGTTCCAGTAACGGCTGTTGCCTAG
CGAACGCTTTGTGTGAGTTAATTAGAGAAGACGTGGCTGTCTTGTGATGGGAGTGCGCGGGATGAACTGCACGGG
GGGACCCGGCCCTGTGAACACTAAGCCAGGGGCTGCCTTCCTGCCCTTTGCTCTTGGAGTCGGCTCATTTCTGCT
CCTCCGGGCCCTGTCCCTGCCCAGATTCACCCTCTGTCCGTCTGCCCTGCCCCAGGAGGAGGCCTCGGTGGTACC
AGAAGAGGAGGGGCTGATGTGAACATCCGGCATTCAGGCCGCGATGACACCTCCCGCTACGATGAGAGGCCCGGC
CCCTCCCCGCTTCCGCACAGGGACCGGGACCGGGACCGTGAGCGGGAGCGCAGAGAGCGGAGCCGGGAGCGAGAC
AAGGAGCGAGAACGGCGACGCTCCCGCTCCCGGGACCGGCGGAGGCGCTCACGGAGTCGCGACAAGGAGGAGCGG
AGGCGCTCCAGGGAGCGGAGCAAGGACAAGGACCGGGACCGGAAGCGGCGAAGCAGCCGGAGTCGGGAGCGGGCC
CGGCGGGAGCGGGAGCGCAAGGAGGAGCTGCGTGGCGGCGGTGGCGAC**ATG**GCGGAGCCCTCCGAGGCGGGTGAC
GCGCCCCCTGATGATGGGCCTCCAGGGGAGCTCGGGCCTGACGGCCCTGACGGTCCAGAGGAAAAGGGCCGGGAT
CGTGACCGGGAGCGACGGCGGAGCCACCGGAGCGAGCGCGAGCGGCGCCGGGACCGGGATCGTGACCGTGACCGT
GACCGCGAGCACAAACGGGGGGAGCGGGGCAGTGAGCGGGGCAGGGATGAGGCCCGAGGTGGGGGCGGTGGCCAG
GACAACGGGCTGGAGGGTCTGGGCAACGACAGCCGAGACATGTACATGGAGTCTGAGGGCGGCGACGGCTACCTG
GCTCCGGAGAATGGGTATTTGATGGAGGCTGCGCCGGAG**TGA**AGAGGTCGTCCTCTCCATCTGCTGTGTTTGGAC
GCGTTCCTGCCCAGCCCCTTGCTGTCATCCCCTCCCCCAACCTTGGCCACTTGAGTTTGTCCTCCAAGGGTAGGT
GTCTCATTTGTTCTGGCCCCTTGGATTTAAAAATAAAATTAATTTCCTGTT

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FIGURE 3877

GTTGGTGAGCATCATGGCAACCGTTACAGCCACAACCAAAGTCCCGGAGATCCGTGATGTAACAAGGATTGAGCG
AATCGGTGCCCACTCCCACATCCGGGGACTGGGGCTGGACGATGCCTTGGAGCCTCGGCAGGCTTCGCAAGGCAT
GGTGGGTCAGCTGGCGGCACGGCGGGCGGCTGGCGTGGTGCTGGAGATGATCCGGGAAGGGAAGATTGCCGGTCG
GGCAGTCCTTATTGCTGGCCAGCCGGGCACGGGGAAGACGGCCATCGCCATGGGCATGGCGCAGGCCCTGGGCCC
TGACACGCCATTCACAGCCATCGCCGGCAGTGAAATCTTCTCCCTGGAGATGAGCAAGACCGAGGCGCTGACGCA
GGCCTTCCGGCGGTCCATCGGCGTTCGCATCAAGGAGGAGACGGAGATCATCGAAGGGGAGGTGGTGGAGATCCA
GATTGATCGACCAGCAACAGGGACGGGCTCCAAGGTGGGCAAACTGACCCTCAAGACCACAGAGATGGAGACCAT
CTACGACCTGGGCACCAAGATGATTGAGTCCCTGACCAAGGACAAGGTCCAGGCCGGGGACGTGATCACCATCGA
CAAGGCGACGGGCAAGATCTCCAAGCTGGGCCGCTCCTTCACACGCGCCCGCGACTACGACGCTATGGGCTCCCA
GACCAAGTTCGTGCAGTGCCCAGATGGGGAGCTCCAGAAACGCAAGGAGGTGGTGCACACCGTGTCCCTGCACGA
GATCGACGTCATCAACTCTCGCACCCAGGGCTTCCTGGCGCTCTTCTCAGGTGACACAGGGGAGATCAAGTCAGA
AGTCCGTGAGCAGATCAATGCCAAGGTGGCTGAGTGGCGCGAGGAGGGCAAGGCGGAGATCATCCCTGGAGTGCT
GTTCATCGACGAGGTCCACATGCTGGACATCGAGAGCTTCTCCTTCCTCAACCGGGCCCTGGAGAGTGACATGGC
GCCTGTCCTGATCATGGCCACCAACCGTGGCATCACGCGAATCCGGGGCACCAGCTACCAGAGCCCTCACGGCAT
CCCCATAGACCTGCTGGACCGGCTGCTTATCGTCTCCACCACCCCCTACAGCGAGAAAGACACGAAGCAGATCCT
CCGCATCCGGTGCGAGGAAGAAGATGTGGAGATGAGTGAGGACGCCTACACGGTGCTGACCCGCATCGGGCTGGA
GACGTCACTGCGCTACGCCATCCAGCTCATCACAGCTGCCAGCTTGGTGTGCCGGAAACGCAAGGGTACAGAAGT
GCAGGTGGATGACATCAAGCGGGTCTACTCACTCTTCCTGGACGAGTCCCGCTCCACGCAGTACATGAAGGAGTA
CCAGGACGCCTTCCTCTTCAACGAACTCAAAGGCGAGACCATGGACACCTCCTGAGTTGGATGTCATCCCCCGAC
CCCACCCTGTTTTCCACCAGAGTTCTGACACTGTGACTCTGTATAAAATGGTTGGGAAGCTGC

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FIGURE 3878

CGCTTCGGGGCAGGGGTGCGGTCTTGCAATAGGAAGCCGAGCGTCTTGCAAGCTTCCCGTCGGGCACCAGCTACT
CGGCCCCGCACCCTACCTGGTGCATTCCCTAGACACCTCCGGGGTCCCTACCTGGAGATCCCCGGAGCCCCCCTT
CCTGCGCCAGCC**ATG**CCTTTAAACCGCACTTTGTCCATGTCCTCACTGCCAGGACTGGAGGACTGGGAGGATGAA
TTCGACCTGGAGAACGCAGTGCTCTTCGAAGTGGCCTGGGAGGTGGCTAACAAGGTGGGTGGCATCTACACGGTG
CTGCAGACGAAGGCGAAGGTGACAGGGGACGAATGGGGCGACAACTACTTCCTGGTGGGGCCGTACACGGAGCAG
GGCGTGAGGACCCAGGTGGAACTGCTGGAGGCCCCCACCCCGGCCCTGAAGAGGACACTGGATTCCATGAACAGC
AAGGGCTGCAAGGTGTATTTCGGGCGCTGGCTGATCGAGGGAGGCCCTCTGGTGGTGCTCCTGGACGTGGGTGCC
TCAGCTTGGGCCCTGGAGCGCTGGAAGGGAGAGCTCTGGGATACCTGCAACATCGGAGTGCCGTGGTACGACCGC
GAGGCCAACGACGCTGTCCTCTTTGGCTTTCTGACCACCTGGTTCCTGGGTGAGTTCCTGGCACAGAGTGAGGAG
AAGCCACATGTGGTTGCTCACTTCCATGAGTGGTTGGCAGGCGTTGGACTCTGCCTGTGTCGTGCCCGGCGACTG
CCTGTAGCAACCATCTTCACCACCCATGCCACGCTGCTGGGGCGCTACCTGTGTGCCGGTGCCGTGGACTTCTAC
AACAACCTGGAGAACTTCAACGTGGACAAGGAAGCAGGGGAGAGGCAGATCTACCACCGATACTGCATGGAAAGG
GCGGCAGCCCACTGCGCTCACGTCTTCACTACTGTGTCCCAGATCACCGCCATCGAGGCACAGCACTTGCTCAAG
AGGAAACCAGATATTGTGACCCCCAATGGGCTGAATGTGAAGAAGTTTTCTGCCATGCATGAGTTCCAGAACCTC
CATGCTCAGAGCAAGGCTCGAATCCAGGAGTTTGTGCGGGGCCATTTTTATGGGCATCTGGACTTCAACTTGGAC
AAGACCTTATACTTCTTTATCGCCGGCCGCTATGAGTTCTCCAACAAGGGTGCTGACGTCTTCCTGGAGGCATTG
GCTCGGCTCAACTATCTGCTCAGAGTGAACGGCAGCGAGCAGACAGTGGTTGCCTTCTTCATCATGCCAGCGCGG
ACCAACAATTTCAACGTGGAAACCCTCAAAGGCCAAGCTGTGCGCAAACAGCTTTGGGACACGGCCAACACGGTG
AAGGAAAAGTTCGGGAGGAAGCTTTATGAATCCTTACTGGTTGGGAGCCTTCCCGACATGAACAAGATGCTGGAT
AAGGAAGACTTCACTATGATGAAGAGAGCCATCTTTGCAACGCAGCGGCAGTCTTTCCCCCCTGTGTGCACCCAC
AATATGCTGGATGACTCCTCAGACCCCATCCTGACCACCATCCGCCGAATCGGCCTCTTCAATAGCAGTGCCGAC
AGGGTGAAGGTGATTTTCCACCCGGAGTTCCTCTCCTCCACAAGCCCCCTGCTCCCTGTGGACTATGAGGAGTTT
GTCCGTGGCTGTCACCTTGGAGTCTTCCCCTCCTACTATGAGCCTTGGGGCTACACACCGGCTGAGTGCACGGTT
ATGGGAATCCCCAGTATCTCCACCAATCTCTCCGGCTTCGGCTGCTTCATGGAGGAACACATCGCAGACCCCTCA
GCTTACGGTATCTACATTCTTGACCGGCGGTTCCGCAGCCTGGATGATTCCTGCTCGCAGCTCACCTCCTTCCTC
TACAGTTTCTGTCAGCAGAGCCGGCGGCAGCGTATCATCCAGCGGAACCGCACGGAGCGCCTCTCCGACCTTCTG
GACTGGAAATACCTAGGCCGGTACTATATGTCTGCGCGCCACATGGCGCTGTCCAAGGCCTTTCCAGAGCACTTC
ACCTACGAGCCCAACGAGGCGGATGCAGGCCCAGGGGTACCGCTACCCACGGCCAGCCTCGGTGCCACCGTCGCC
CTCGCTGTCACGACACTCCAGCCCGCACCAGAG**TGA**GGACGAGGAGGATCCCCGGAACGGGCCGCTGGAGGAAGA
CGGCGAGCGCTACGATGAGGACGAGGAGGCCGCCAAGGACCGGCGCAACATCCGTGCACCAGAGTGGCCGCGCCG
AGCGTCCTGCACCTCCTCCACCAGCGGCAGCAAGCGCAACTCTGTGGACACGGCCACCTCCAGCTCACTCAGCAC
CCCGAGCGAGCCCCTCAGCCCCACCAGCTCCCTGGGCGAGGAGCGTAACTAAGTCCGCCCCACCACACTCCCCGC
CTGTCCTGCCTCTCTGCTCCAGAGAGAGGATGCAGAGGGGTGCTGCTCCTAAACCCCCGCTCCAGATCTGCACTG
GGTGTGGCCCCGCAGTGCCCCCACCCAGTCCGCCAAACACTCCACCCCCTCCAGCTCCAGTTTCCAAGTTCCTGC
ACTCCAGAATCCACAAAGCCGTGCCTTTCTCTGGCTCCAGAATATGCATAATCAGCGCCCTGGAGTCCCCTGGGC
CTGGACCGCTTCCCAGAGGCCAGGAATCTGCCATTACTCTGCGGTGGTGCCAGAGGTTTTAGGAAACCTGGCATG
GTGCTTTCAGGTCTGGGGCTTTTAGAGCCCCCCGTGTGGCTTACAAATTCTACAGCATACAGAGCAGGCCACGCT
CAGGCCCGGCATGCGGGCCACCAAGTTCTGGAAACCACGTGGTGTCCCTGCGAATGGGGCGATCAAGTCCAGAGC
CGGGGCACTTTCAGAGTTTGAAGGTAACTGAGAGCAGATGGTCCTCCATTTCAACTCCAGAAGTGGGGCTCTGGG
AGGGATGTTCTAGCCCTCCCTGGCATGTCAGAGCCAGGCTCTGCCTGGAGGATCCCTCCATCCGGCTCCTGTCAT
CCCCTACACTTTGGCCAAGCAAGAGGTGGTAGAACCACTTGGCTGCTCATTCCTTCTGGAGGACACACAGTCTCA
GTCCAGATGCCTTCCTGTCTTTCTGGCCCTTTCTGGACCAGATCCTACTCTTCCTTTCTAAATCTGAGATCTCCC
TCCAGGGAATCCGCCTGCAGAGGACAGAGCTGGCTGTCTTCCCCCACCCCTAACCTGGCTTATTCCCAACTGCTC
TGCCCACTGTGAAACCACTAGGTTCTAGGTCCTGGCTTCTAGATCTGGAACCTTACCACGTTACTGCATACTGAT
CCCTTTCCCATGATCCAGAACTGAGGTCACTGGGTTCTAGAACCCCCACATTTACCTCGAGGCTCTTCCATCCCC
AAACTGTGCCCTGCCTTCAGCTTTGGTGAAAGGGAGGGCCCCTCATGTGTGCTGTGCTGTGTCTGCACCGCTTGG
TTTGCAGTTGAGAGGGGAGGGCAGGAGGGGTGTGATTGGAGTGTGTCCGGAGATGAGATGAAAAAAATACATCTA
TATTTAAG

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FIGURE 3879

ACCATAAAAGAAGCCGCCCTAGCCACGTCCCCTCGCAGTTCGGCGGTCCCGCGGGTCTGTCTCTTGCTTCAACAG
TGTTTGGACGGAACAGATCCGGGGACTCTCTTCCAGCCTCCGACCGCCCTCCGATTTCCTCTCCGCTTGCAACCT
CCGGGACCATCTTCTCGGCCATCTCCTGCTTCTGGGACCTGCCAGCACCGTTTTTGTGGTTAGCTCCTTCTTGCC
AACCAACC**ATG**AGCTCCCAGATTCGTCAGAATTATTCCACCGACGTGGAGGCAGCCGTCAACAGCCTGGTCAATT
TGTACCTGCAGGCCTCCTACACCTACCTCTCTCTGGGCTTCTATTTCGACCGCGATGATGTGGCTCTGGAAGGCG
TGAGCCACTTCTTCCGCGAATTGGCCGAGGAGAAGCGCGAGGGCTACGAGCGTCTCCTGAAGATGCAAAACCAGC
GTGGCGGCCGCGCTCTCTTCCAGGACATCAAGAAGCCAGCTGAAGATGAGTGGGGTAAAACCCCAGACGCCATGA
AAGCTGCCATGGCCCTGGAGAAAAAGCTGAACCAGGCCCTTTTGGATCTTCATGCCCTGGGTTCTGCCCGCACGG
ACCCCCATCTCTGTGACTTCCTGGAGACTCACTTCCTAGATGAGGAAGTGAAGCTTATCAAGAAGATGGGTGACC
ACCTGACCAACCTCCACAGGCTGGGTGGCCCGGAGGCTGGGCTGGGCGAGTATCTCTTCGAAAGGCTCACTCTCA
AGCACGAC**TAA**GAGCCTTCTGAGCCCAGCGACTTCTGAAGGGCCCCTTGCAAAGTAATAGGGCTTCTGCCTAAGC
CTCTCCCTCCAGCCAATAGGCAGCTTTCTTAACTATCCTAACAAGCCTTGGACCAAATGGAAATAAAGCTTTTTG
ATGC

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FIGURE 3880

ATGGACGGGTCCGGGGAGCAGCCCAGAGGCGGGGGGCCCACCAGCTCTGAGCAGATCATGAAGACAGGGGCCCTT
TTGCTTCAGGGTTTCATCCAGGATCGAGCAGGGCGAATGGGGGGGGAGGCACCCGAGCTGGCCCTGGACCCGGTG
CCTCAGGATGCGTCCACCAAGAAGCTGAGCGAGTGTCTCAAGCGCATCGGGGACGAACTGGACAGTAACATGGAG
CTGCAGAGGATGATTGCCGCCGTGGACACAGACTCCCCCCGAGAGGTCTTTTTCCGAGTGGCAGCTGACATGTTT
TCTGACGGCAACTTCAACTGGGGCCGGGTTGTCGCCCTTTTCTACTTTGCCAGCAAACTGGTGCTCAAGGCCCTG
TGCACCAAGGTGCCGGAACTGATCAGAACCATCATGGGCTGGACATTGGACTTCCTCCGGGAGCGGCTGTTGGGC
TGGATCCAAGACCAGGGTGGTTGGGTGAGACTCCTCAAGCCTCCTCACCCCCACCACCGCGCCCTCACCACCGCC
CCTGCCCCACCGTCCCTGCCCCCCGCCACTCCTCTGGGACCCTGGGCCTTCTGGAGCAGGTCACAGTGGTGCCCT
CTCCCCATCTTCAGATCATCAGATGTGGTCTATAATGCGTTTTCCTTACGTGTCTGA

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FIGURE 3881

ATAAGTGGGCGTGGTCTAGGGGGGAAGTCACCAAGAACGCACCGGAGGTCCTTGCCCGCCCTGGAAAACGCCCTC
TGCGGTGAAGGAGAGACCACACTGCCATGCCTCCCTCTGGGCCCCGAGGAACCCTCCTTCTGTTGCCGCTGCTGC
TGCTGCTCCTGCTTCGCGCCGTGCTGGCTGTCCCCCTGGAGCGAGGGGCGCCCAACAAGGAGGAGACCCCTGCGA
CTGAGAGTCCCGACACAGGCCTGTACTACCACCGGTACCTCCAGGAGGTCATCGATGTACTGGAGACGGATGGGC
ATTTCCGAGAGAAGCTGCAGGCTGCCAATGCGGAGGACATCAAGAGCGGGAAGCTGAGCCGAGAGCTGGACTTTG
TCAGCCACCACGTCCGCACCAAGCTGGATGAGCTCAAGCGACAGGAGGTGTCACGGCTGCGGATGCTGCTCAAGG
CCAAGATGGACGCCGAGCAGGATCCCAATGTACAGGTGGATCATCTGAATCTCCTGAAACAGTTTGAACACCTGG
ACCCTCAGAACCAGCATACATTCGAGGCCCGCGACCTGGAGCTGCTGATCCAGACGGCCACCCGGGACCTTGCCC
AGTACGACGCAGCCCATCATGAAGAGTTCAAGCGCTACGAGATGCTTAAGGAACACGAGAGACGGCGTTATCTGG
AGTCACTGGGAGAGGAGCAGAGAAAGGAGGCGGAGAGGAAGCTGGAAGAGCAACAGCGCCGGCACCGCGAGCACC
CTAAAGTCAACGTGCCTGGCAGCCAAGCCCAGTTGAAGGAGGTGTGGGAGGAGCTGGATGGACTGGACCCCAACA
GGTTTAACCCCAAGACCTTCTTCATACTGCATGATATCAACAGTGATGGTGTCCTGGATGAGCAGGAGCTGGAGG
CACTCTTCACCAAGGAGCTGGAGAAAGTGTACGACCCAAAGAATGAGGAGGACGACATGCGGGAGATGGAGGAGG
AGCGACTGCGCATGCGGGAGCATGTGATGAAGAATGTGGACACCAACCAGGACCGCCTCGTGACCCTGGAGGAGT
TCCTCGCATCCACTCAGAGGAAGGAGTTTGGGGACACCGGGGAGGGCTGGGAGACAGTGGAGATGCACCCTGCCT
ACACCGAGGAAGAGCTGAGGCGCTTTGAAGAGGAGCTGGCTGCCCGGGAGGCAGAGCTGAATGCCAAGGCCCAGC
GCCTCAGCCAGGAGACAGAGGCTCTAGGGCGGTCCCAGGGCCGCCTGGAGGCCCAGAAGAGAGAGCTGCAGCAGG
CTGTGCTGCACATGGAGCAGCGGAAGCAGCAGCAGCAGCAGCAGCAAGGCCACAAGGCCCCGGCTGCCCACCCTG
AGGGGCAGCTCAAGTTCCACCCAGACACAGACGATGTACCTGTCCCAGCTCCAGCCGGTGACCAGAAGGAGGTGG
ACACTTCAGAAAAGAAACTTCTCGAGCGGCTCCCTGAGGTTGAGGTGCCCCAGCATCTGTGATCCTCCGGGACCC
CAGCCCTCAGGATTCCTGATGCTCCAAGGCGACTGATGGGCGCTGGATGAAGTGGCACAGTCAGCTTCCCTGGGG
GCTGGTGTCATGTTGGGCTCCTGGGGCGGGGGCACGGCCTGGCATTTCACGCATTGCTGCCACCCCAGGTCCACC
TGTCTCCACTTTCACAGCCTCCAAGTCTGTGGCTCTTCCCTTCTGTCCTCCGAGGGGCTTGCCTTCTCTCGTGTC
CAGTGAGGTGCTCAGTGATCGGCTTAACTTAGAGAAGCCCGCCCCCTCCCCTTCTCCGTCTGTCCCAAGAGGGTC
TGCTCTGAGCCTGCGTTCCTAGGTGGCTCGGCCTCAGCTGCCTGGGTTGTGGCCGCCCTAGCATCCTGTATGCCC
ACAGCTACTGGAATCCCCGCTGCTGCTCCGGGCCAAGCTTCTGGTTGATTAATGAGGGCATGGGGTGGTCCCTCA
AGACCTTCCCCTACCTTTTGTGGAACCAGTGATGCCTCAAAGACAGTGTCCCCTCCACAGCTGGGTGCCAGGGGC
AGGGGATCCTCAGTATAGCCGGTGAACCCTGATACCAGGAGCCTGGGCCTCCCTGAACCCCTGGCTTCCAGCCAT
CTCATCGCCAGCCTCCTCCTGGACCTCTTGGCCCCCAGCCCCTTCCCCACACAGCCCCAGAAGGGTCCCAGAGCT
GACCCCACTCCAGGACCTAGGCCCAGCCCCTCAGCCTCATCTGGAGCCCCTGAAGACCAGTCCCACCCACCTTTC
TGGCCTCATCTGACACTGCTCCGCATCCTGCTGTGTGTCCTGTTCCATGTTCCGGTTCCATCCAAATACACTTTC
TGGAAC

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FIGURE 3882

CCCAGTTGTTGATCTTATGCAAGACGCTGCACGACCCCGCGCCCGCTTGTCGCCACGGCACTTGAGGCAGCCGGA
GATACTCTGAGTTACTCGGAGCCCGACGCCTGAGGGTGAGATGAACGCGCTGGCCTCCCTAACCGTCCGGACCTG
TGATCGCTTCTGGCAGACCGAACCGGCGCTCCTGCCCCCGGGGTGACGCGCAGCTCCCAGCCGCCCAGACAC**ATG**

GCCCCAGGCCAAGCACCCCATCAGGCTACCCCGTGGAGGGATGCCCACCCTTTCTTCCTCCTGTCCCCAGTGATG
GGCCTCCTCAGCCGCGCCTGGAGCCGCCTGAGGGGCCTGGGACCTCTAGAGCCCTGGCTGGTGGAAGCAGTAAAA
GGAGCAGCTCTGGTAGAAGCTGGCCTGGAGGGAGAAGCTAGGACTCCTCTGGCAATCCCCCATACCCCTTGGGGC
AGACGCCCTGAAGAGGAGGCTGAAGACAGTGGAGGCCCTGGAGAGGACAGAGAAACACTGGGGCTGAAAACCAGC
AGTTCCCTTCCTGAAGCCTGGGGACTTTTGGATGATGATGATGGCATGTATGGTGAGCGAGAGGCAACCAGTGTC
CCTAGAGGGCAGGGAAGTCAATTTGCAGATGGCCAGCGTGCTCCCCTGTCTCCCAGCCTTCTGATAAGGACACTG
CAAGGTTCTGATAAGAACCCAGGGGAGGAGAAAGCCGAGGAAGAGGGAGTTGCTGAAGAGGAGGGAGTTAACAAG
TTCTCTTATCCACCATCACACCGGGAGTGTTGTCCAGCCGTGGAGGAGGAGGACGATGAAGAAGCTGTAAAGAAA
GAAGCTCACAGAACCTCTACTTCTGCCTTGTCTCCAGGATCCAAGCCCAGCACTTGGGTGTCTTGCCCAGGGGAG
GAAGAGAATCAAGCCACGGAGGATAAAAGAACAGAAAGAAGTAAAGGAGCCAGGAAGACCTCCGTGTCCCCCCGA
TCTTCAGGCTCCGACCCCAGGTCCTGGGAGTATCGTTCAGGAGAGGCGTCCGAGGAGAAGGAGGAAAAGGCACAC
AAAGAAACTGGGAAAGGAGAAGCTGCCCCAGGGCCGCAATCCTCAGCCCCAGCCCAGAGGCCCCAGCTCAAGTCC
TGGTGGTGCCAACCCAGTGATGAAGAGGAGGGTGAGGTCAAGGCTTTGGGGGCAGCTGAGAAGGATGGAGAAGCT
GAGTGTCCTCCCTGCATCCCCCCACCAAGTGCCTTCCTGAAGGCCTGGGTGTATTGGCCAGGAGAGGACACAGAG
GAAGAGGAAGATGAGGAAGAAGATGAGGACAGTGACTCTGGATCAGATGAGGAAGAGGGAGAAGCTGAGGCTTCC
TCTTCCACTCCTGCTACAGGTGTCTTCTTGAAGTCCTGGGTCTATCAGCCAGGAGAGGACACAGAGGAGGAGGAA
GATGAGGACAGTGATACAGGATCAGCCGAGGATGAAAGAGAAGCTGAGACTTCTGCTTCCACACCCCCTGCAAGT
GCTTTCTTGAAGGCCTGGGTGTATCGGCCAGGAGAGGACACGGAGGAGGAGGAAGATGAGGATGTGGATAGTGAG
GATAAGGAAGATGATTCAGAAGCAGCCTTGGGAGAAGCTGAGTCAGACCCACATCCCTCCCACCCGGACCAGAGG
GCCCACTTCAGGGGCTGGGGATATCGACCTGGAAAAGAGACAGAGGAAGAGGAAGCTGCTGAGGACTGGGGAGAA
GCTGAGCCCTGCCCCTTCCGAGTGGCCATCTATGTACCTGGAGAGAAGCCACCGCCTCCCTGGGCTCCTCCTAGG
CTGCCCCTCCGACTGCAAAGGCGGCTCAAGCGCCCAGAAACCCCTACTCATGATCCGGACCCTGAGACTCCCCTA
AAGGCCAGAAAGGTGCGCTTCTCCGAGAAGGTCACTGTCCATTTCCTGGCTGTCTGGGCAGGGCCGGCCCAGGCC
GCCCGCCAGGGCCCCTGGGAGCAGCTTGCTCGGGATCGCAGCCGCTTCGCACGCCGCATCACCCAGGCCCAGGAG
GAGCTGAGCCCCTGCCTCACCCCTGCTGCCCGGGCCAGAGCCTGGGCACGCCTCAGGAACCCACCTTTAGCCCCC
ATCCCTGCCCTCACCCAGACCTTGCCTTCCTCCTCTGTCCCTTCGTCCCCAGTCCAGACCACGCCCTTGAGCCAA
GCTGTGGCCACACCTTCCCGCTCGTCTGCTGCTGCAGCGGCTGCCCTGGACCTCAGTGGGAGGCGTGGC**TGA**GAC
CAACTGGTTTGCCTATAATTTATTAACTATTTATTTTTTCTAAGTGTGGGTTTATATAAGGAATAAAGCCTTTTG
ATTTGT

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FIGURE 3883

AAACTGGGAGAGGGAGGAAGGGAGAAAGTGAGAAGGGAAATCGGAAAGAGAAAAGGGAGGAAACGGCAGAGCCAG
AGAGAAAGAGGAAGAGACTGAGTGTGAAGGAGAGAGGACACAGGGGATGACTGAGAGACAGAGAGAGAGAGAGAG
AGAGAATGAGACAGAGACTTAAGGAAGAGACCCTGTGAGTCTGACAATAAAAGATTTGGACAGAAACAGAAAGAT
TGGAGAGAGAGAGAGAGGGAGAGAATGAGTGAGAGAGAGACTGGAAGAGACAGAGATCAGAGGGAGACACAGAAA
GTGAGAGTGGGGAGAGAGGTAGTGTAAAAGGAAGAGAGAGAGAGAGAGACCGTAAGAGACAGGAGACAAAGAGAC
AAAAAGTGTGAGTGAGCAGGTGAGGAGAGAGATTGAGAACTATGAGAGACAGCAGCTAAGAGACAAAGGAGGCGG
GAGACTGCCTAGGTGCCGCAGCACCCACACCGTCCTCTTGCCCCCCCGTCACTGGGACCCCAGAGCTGGCCCTTG
ATGGAGGGGAGCCGACCTCGCAGCAGCCTGAGCCTGGCCAGCAGCGCCTCCACCATCTCCTCGCTCAGCAGCCTG
AGCCCCAAGAAGCCCACCCGGGCAGTAAACAAGATCCACGCCTTTGGGAAGAGAGGCAATGCGCTCAGGAGGGAT
CCCAACCTTCCCGTGCACATCCGAGGCTGGCTTCATAAGCAGGACAGCTCGGGGCTCCGTCTCTGGAAACGCCGC
TGGTTCGTCCTCTCCGGCCATTGCCTCTTTTATTACAAGGACAGCCGCGAGGAGAGTGTCCTAGGCAGCGTCCTG
CTCCCCAGCTACAATATTAGACCAGATGGGCCGGGAGCCCCCCGAGGGCGGCGCTTCACCTTCACCGCAGAGCAC
CCGGGCATGAGGACCTACGTTTTGGCCGCTGACACCTTAGAAGACCTGCGGGGCTGGCTACGGGCGCTGGGCCGG
GCCTCCCGTGCGGAGGGGGACGACTATGGGCAACCCAGGTCACCTGCACGACCCCAGCCCGGGGAGGGCCCCGGC
GGCCCCGGTGGTCCCCCGGAGGTGAGCAGAGGGGAAGAGGGGCGCATCTCAGAATCACCGGAAGTGACTCGACTC
TCCAGAGGTCGTGGTAGACCCAGGCTGCTCACTCCCAGCCCCACAACCGACCTCCACTCTGGACTCCAGATGCGG
AGGGCGAGGAGCCCCGACCTGTTCACCCCCCTCTCTCGCCCTCCCTCGCCTCTGAGCCTCCCCCGTCCCCGTTCT
GCCCCTGCGCGGCGACCCCCTGCCCCCTCAGGAGACACAGCACCCCCTGCCCGACCTCACACCCCGTTGAGTCGC
ATTGATGTCCGACCTCCTCTGGATTGGGGCCCCCAACGCCAGACCCTCTCCCGACCCCCTACTCCCCGCCGAGGA
CCTCCCTCTGAGGCTGGGGGAGGAAAGCCCCCCAGGAGTCCCCAGCACTGGAGTCAGGAGCCCAGAACACAGGCA
CACTCTGGCTCCCCCACTTATCTCCAGCTCCCCCCGCGGCCCCCTGGGACCCGGGCCTCCATGGTTTTATTGCCG
GGTCCTCCCCTGGAGTCAACTTTCCACCAAAGCTTGGAGACAGATACGCTGCTGACCAAGTTGTGCGGGCAGGAC
CGGCTTCTGCGGAGGCTGCAGGAGGAGATAGACCAGAAGCAGGAGGAGAAGGAGCAACTAGAAGCAGCTCTGGAG
TTGACCCGGCAACAGCTGGGCCAAGCCACCAGGGAGGCTGGGGCTCCCGGGAGGGCCTGGGGTCGCCAGCGCCTC
TTGCAGGACCGGCTGGTCAGTGTGAGGGCCACCCTCTGTCACTTGACTCAGGAGCGAGAGAGGGTTTGGGACACG
TACAGTGGCCTGGAGCAGGAGCTGGGCACCTTAAGAGAGACGCTGGAGTACCTGCTGCACCTTGGTTCTCCCCAG
GACAGAGTGTCTGCTCAGCAGCAGCTGTGGATGGTGGAAGACACGCTGGCAGGTCTGGGTGGCCCCCAGAAACCG
CCCCCACACACTGAGCCTGACTCCCCATCTCCCGTGCTCCAGGGCGAGGAGTCCTCAGAGAGGGAGAGCCTGCCA
GAGTCCTTGGAACTGAGCTCCCCTAGGTCCCCCGAGACTGACTGGGGGCGGCCTCCTGGAGGCGACAAAGACCTC
GCCAGCCCTCACTTAGGTCTTGGGTCTCCGAGGGTCTCCCGGGCTTCCAGCCCTGAGGGTCGCCACCTCCCTTCC
CCACAGCTAGGAACCAAGGCCCCGGTGGCCCGGCCCCGGATGAGTGCCCAGGAGCAGCTGGAGCGGATGCGCAGA
AACCAGGAATGTGGACGGCCCTTCCCTCGCCCGACCTCCCCCCGGCTTCTCACCCTGGGAAGGACACTGTCCCCA
GCCAGACGCCAGCCTGACGTGGAGCAAAGGCCTGTCGTAGGACACTCGGGAGCCCAGAAATGGCTCAGAAGCTCT
GGGTCCTGGAGTAGTCCAAGGAACACCACCCCTTACTTGCCGACTTCCGAAGGTCACCGGGAGCGGGTTCTCAGC
CTCTCCCAAGCCCTGGCTACTGAGGCGTCGCAGTGGCACAGAATGATGACAGGTGGAAATTTGGACTCCCAGGGA
GACCCTCTTCCCGGTGTGCCGCTGCCTCCTTCGGACCCCACGCGCCAGGAGACCCCTCCCCCCAGATCTCCCCCG
GTGGCTAATTCGGGTTCCACGGGGTTCTCTCGCCGAGGGAGTGGGCGTGGAGGAGGTCCCACCCCCTGGGGGCCC
GCGTGGGATGCCGGGATCGCCCCTCCGGTCCTGCCACAAGACGAGGGGGCATGGCCTCTGCGAGTCACTCTGCTA
CAATCCAGCTTCTAATCCGCCCAAAAGCGGCAGCCAATCGGAGCGCGAGGACGTGGTCTGGAGGTACCGCCGGAG
ATCTGGGACCACTCAGGGCATCAGGGGGCGTGGTCTGGTCCCCATTGCGGGCCCGGGAGGGGAATGGTTTCTATG
GCCAAAGTTTGGTTTTCTCAACACTGTCTAAATTTGGATTAAAACTTTGAACTTTT

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FIGURE 3884

ATGGCCGCAGCCGCTCTGGGGCAGATCTGGGCACGAAAGCTTCTCTCTGTCCCTTGGCTTCTGTGTGGTCCCAGA
AGATATGCCTCCTCCAGTTTCAAGGCTGCAGACCTGCAGCTGGAAATGACACAGAAGCCTCATAAGAAGCCTGGC
CCCGGCGAGCCCCTGGTGTTTGGGAAGACATTTACCGACCACATGCTGATGGTGGAATGGAATGACAAGGGCTGG
GGCCAGCCCCGAATCCAGCCCTTCCAGAACCTCACGCTGCACCCAGCCTCCTCCAGCCTCCACTACTCCCTGCAG
CTGTTTGAGGGCATGAAGGCGTTCAAAGGCAAAGACCAGCAGGTGCGCCTCTTCCGCCCCTGGCTCAACATGGAC
CGGATGCTGCGCTCAGCCATGCGCCTGTGCCTGCCGAGTTTCGACAAGCTGGAGTTGCTGGAGTGCATCCGCCGG
CTCATCGAAGTGGACAAGGACTGGGTCCCCGATGCCGCCGGCACCAGCCTCTATGTGCGGCCTGTGCTCATTGGG
AACGAGCCCTCGCTGGGTGTCAGCCAGCCCACGCGCGCGCTCCTGTTCGTCATTCTCTGCCCAGTGGGTGCCTAC
TTCCCTGGAGGCTCCGTGACCCCGGTCTCCCTCCTGGCCGACCCAGCCTTCATCCGGGCCTGGGTGGGCGGGGTC
GGCAACTACAAGTTAGGTGGGAATTATGGGCCCACCGTGTTAGTGCAACAGGAGGCACTCAAGCGGGGCTGTGAA
CAGGTCCTCTGGCTGTATGGGCCCGACCACCAGCTCACCGAGGTGGGAACCATGAACATCTTTGTCTACTGGACC
CACGAAGATGGGGTGCTGGAGCTGGTGACGCCCCCGCTGAATGGTGTTATCCTGCCTGGAGTGGTCAGACAGAGT
CTACTGGACATGGCTCAGACCTGGGGTGAGTTCCGGGTGGTGGAGCGCACGATCACCATGAAGCAGTTGCTGCGG
GCCCTGGAGGAGGGCCGCGTGCGGGAAGTCTTTGGCTCGGGCACCGCTTGCCAGGTCTGCCCAGTGCACCGAATC
CTGTACAAAGACAGGAACCTCCACATTCCCACCATGGAAAATGGGCCTGAGCTGATCCTCCGCTTCCAGAAGGAG
CTGAAGGAGATCCAGTACGGAATCAGAGCCCACGAGTGGATGTTCCCGGTGTGAAGCTGCAGGCTGTGCTCCAGA
TCCACCGACCCGTAGCATCTCGTCACGCCAGCACTCGCCTCCCTACCAATGACTCACCTGAAGTGCAATACGAAA
TAAAAGGCCAGCGGGCGGCGTCTGGGTCTCTGGCGCCCCCATGTGGTTGCGACACTCCCAAAGCCGTAAGGGCCG
ACCCAGGCATCTTGGCCCCCAGCCCCTCGTCGCGGGTTCAGGTCCGCCCATTACTCCTTGTCGTGCGGTCAAGGA
TACACCTTGGCCCCGATTCCGGATCTCTCCGTTCTCAGGCCAGACCCCTGGTGCTGCCGTTGATTTTTTTTTCTC
TGTCTTTGCTGCAATTTTGAAATAAAATGCCAAAGAACACA

FIGURE 3885

CCATCTTTAGGACCGCGGCCCCTTTAAGCGGCGCCCCTTTTCCCCCCATCACCCCCCTCGCCATCAGGCAGCACG
AGCAGAGCCATGTGCTTCCCCCTCCCGCCTGCCTCATTGGCCCAAACTGGGTCACGGTCCCGCCCCCCAGTACCG
CCTCCCATTGGGCAAATGTAGGTCAGTGTCCCGCCTCCCACCGAAAGGCAAGGCAACTTCACGCGCTGAGCCCCT
CACGCGCCCTCCTGGGCCCTGGCGGACCCAGAGGCCCCATTGGCTGTGCGTCTCAAGGTGTCGGAGACGATTGGT
CCGTGTTTGCAGCCGGAGGGAGGCACGCGGCTGGGTTGCATGCCCATAGAGGCTGGCGGGGCTGGACGCGCCGGG
CGGGGACCCGGAGGAGGGGCGCGCGCTGTGGCGTCGGGTGTTTTGGTTTGGATTTTTTTTCCGCGAAAGAAGTT
TGCTTTGGCCACGCCTCAAGGCGGCCGCCTCCTCCTGCCCCCTCCTCCGCCCCTCCGCGCACACCTCTCGGTGCA
GATTGCAAAGCGCCTTCCGTTGCGAGAGCTGCAGATTTTGCAAGAGCCAGGCTCGCCCACCTTGTAGAAGGAGCG
CCTTGAGTCCCCTCTCACCCTCGGTTGCAAAGAGCCGACCGCTTGATCTGGACACCCCCTCGCCCAGATTGCATG
ATCTCCCGGGACCCTCTTGAGTTGCACGTTTCTGCACCGAGGACCTCAAATCCCCGTCGCTCCTAGGATTTGCAG
CGTTCTGGATACTGGAGGGTTGCAGGCTACACTCGCCCGCCCCTGGGCAGACACTCGTCCAAACCACTGGAGTGT
GCTGGTGACTGGCAGGCCAGCCCTTCGCCTCTCCATGAACCCGTGAGCCTGGGGGCAGGTGCCAGGCG**ATG**GCGC
GGCCTGTGAGCGACAGGACCCCGGCCCCTCTGCTGCTGGGCGGCCCGGCCGGGACACCCCCTGGCGGGGGAGCGC
TGCTTGGGTTGCGGAGCCTTCTGCAGGGGACCAGCAAGCCCAAAGAGCCGGCCAGCTGTCTCCTGAAGGAAAAGG
AGCGCAAGGCGGCCCTGCCTGCAGCCACAACCCCTGGGCCAGGCCTGGAGACTGCGGGCCCGGCGGATGCCCCGG
CTGGGGCAGTGGTGGGCGGAGGGTCCCCGCGGGGGCGCCCGGGGCCGGTGCCCGCCCCGGGTCTGTTGGCGCCAC
TGCTGTGGGAGCGCACGCTGCCGTTCGGCGATGTGGAGTACGTAGACCTGGACGCCTTCCTGCTGGAGCACGGGC
TCCCGCCCAGCCCGCCGCCCCCCGGTGGCCCGTCGCCGGAGCCGTCGCCCGCGCGGACGCCCGCACCCTGCCCAG
GGCCGGGTTCGTGCGGCTCGGCTTCCCCCCGCTCCTCTCCTGGGCACGCCCCCGCCCGGGCTGCCCTCGGGACCG
CCAGCGGCCACCGCGCAGGCCTGACCTCTCGGGACACACCCAGCCCTGTGGACCCAGACACCGTGGAGGTGTTGA
TGACCTTTGAACCCGACCCAGCTGATCTTGCCCTATCAAGCATTCCTGGCCACGAGACCTTTGACCCTCGAAGAC
ATCGCTTCTCAGAAGAGGAACTTAAGCCCCAGCCAATCATGAAGAAGGCAAGAAAAATCCAGGTGCCGGAGGAGC
AGAAGGATGAGAAATACTGGAGCCGGCGGTACAAGAACAACGAGGCAGCCAAGCGGTCCCGTGACGCCCGGCGGC
TCAAGGAGAACCAGATATCGGTGCGGGCGGCCTTCCTGGAGAAGGAGAACGCCCTGCTGCGGCAGGAAGTTGTGG
CCGTGCGCCAGGAGCTGTCCCACTACCGCGCCGTGCTGTCCCGATACCAGGCCCAGCACGGGGCCCTG**TGA**GGCT
GCCCCACATCCCCACCTGGCGGAGCTCTCCTCCGCCTTGCTGAGACTTACGCCCTGTTCCCTTCCTGCCCTGTGG
CCCACGGGCCGGCCAGCTGGGTGCCCCAGGGACGTGATAATGCAGATAAATACATTTATATTTTTAAGAAAAAGC
GAGCCTCCCCCCTCCCTTGCGGGGGCGGGGAGGGTTCTCTGTGTGTGTCCCCGGCACGTCAGGGACCCTATCCTC
CCACCGCCTCCGTTAACACGATCCTGAATAAATCTTGAGAACCCCAGAGCCAGCTGTTGTGGAAGAAGAGGGCAG
CTCCCTGGCATACTGGCTGCAGCCCGTGGGCAGCTCCGGGCTGTCGTCCATAGAGGGCAGGCGCTGCTGGAAGTG
CTGGAGTCTGAGTCCTCCCGCGGGCTGTCGGATGGAGGAAGGGCAGAAGGTCTGAGAGGAATGAAGCGACTGCCT
TTATTGCATAGACCTTTTCAATTGCTTTTTAGATTGGGGACGGAGGACGCGCATGAGACGAACAGGGGATATGAA
TTTCCCCGCCCCCACCCGCGGGGAGAGGAACATTAGTGCAAATCCTAGCGCCGGCCCCGGGGAACCTGCCCCTCC
TGGGCTGATTGGCCAGCTAAATGGAGGCACCGGAGTGGATGGGGCGAGGCTGCGGGCCCTGACCGGCCGACTCAC
TGAGGCCTACCCCAGCCAGTACATTCCAGGTCCTGTCATTGGGCGACGCGTAAAATAGACTCCGCCCTCAGCCAT
CCTGGCCGGGTAGGAGCAGGTGGCAAGCGTCAGGACTGAGCCCTGCCCCGTAA

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FIGURE 3886

GGGGAACAAAGGTGAGCGAAAGGAGGAGGCAGAATCCGGGCAGAGGGCAGGGAGAGGGCCTGTGGGGAAGGGACC
TCAGTCCTGCTCCCACCCGCTCCCTGGAGAGCAGGCGGCCAGACACCCAGAGGCCAGACCAGGAGCTGACCGGGA
GCTGGGGCCACGGGCCTAGGAGCACCCTGGTCAGGGCTAAGGCC**ATG**GCCCCGCCCCCACCGCCACTGGCTGCCA
GCACCCCGCTCCTCCATGGCGAGTTTGGCTCCTACCCAGCCCGAGGCCCACGCTTTGCCCTCACCCTTACATCGC
AGGCCCTGCACATACAGCGGCTGCGCCCCAAACCTGAAGCCAGGCCCCGGGGTGGCCTGGTCCCGTTGGCCGAGG
TCTCAGGCTGCTGCACCCTGCGAAGCCGCAGCCCCTCAGACTCAGCGGCCTACTTCTGCATCTACACCTACCCTC
GGGGCCGGCGCGGGGCCCGGCGCAGAGCCACTCGCACCTTCCGGGCAGATGGGGCCGCCACCTACGAAGAGAACC
GTGCCGAGGCCCAGCGCTGGGCCACTGCCCTCACCTGTCTGCTCCGAGGACTGCCACTGCCCGGGGATGGGGAGA
TCACCCCTGACCTGCTACCTCGGCCGCCCCGGTTGCTTCTATTGGTCAATCCCTTTGGGGGTCGGGGCCTGGCCT
GGCAGTGGTGTAAGAACCACGTGCTTCCCATGATCTCTGAAGCTGGGCTGTCCTTCAACCTCATCCAGACAGAAC
GACAGAACCACGCCCGGGAGCTGGTCCAGGGGCTGAGCCTGAGTGAGTGGGATGGCATCGTCACGGTCTCGGGAG
ACGGGCTGCTCCATGAGGTGCTGAACGGGCTCCTAGATCGCCCTGACTGGGAGGAAGCTGTGAAGATGCCTGTGG
GCATCCTCCCCTGCGGCTCGGGCAACGCGCTGGCCGGAGCAGTGAACCAGCACGGGGGATTTGAGCCAGCCCTGG
GCCTCGACCTGTTGCTCAACTGCTCACTGTTGCTGTGCCGGGGTGGTGGCCACCCACTGGACCTGCTCTCCGTGA
CGCTGGCCTCGGGCTCCCGCTGTTTCTCCTTCCTGTCTGTGGCCTGGGGCTTCGTGTCAGATGTGGATATCCAGA
GCGAGCGCTTCAGGGCCTTGGGCAGTGCCCGCTTCACACTGGGCACGGTGCTGGGCCTCGCCACACTGCACACCT
ACCGCGGACGCCTCTCCTACCTCCCCGCCACTGTGGAACCTGCCTCGCCCACCCCTGCCCATAGCCTGCCTCGTG
CCAAGTCGGAGCTGACCCTAACCCCAGACCCAGCCCCGCCCATGGCCCACTCACCCCTGCATCGTTCTGTGTCTG
ACCTGCCTCTTCCCCTGCCCCAGCCTGCCCTGGCCTCTCCTGGCTCGCCAGAACCCCTGCCCATCCTGTCCCTCA
ACGGTGGGGGCCCAGAGCTGGCTGGGGACTGGGGTGGGGCTGGGGATGCTCCGCTGTCCCCGGACCCACTGCTGT
CTTCACCTCCTGGCTCTCCCAAGGCAGCTCTACACTCACCCGTCTCCGAAGGGGCCCCCGTAATTCCCCCATCCT
CTGGGCTCCCACTTCCCACCCCTGATGCCCGGGTAGGGGCCTCCACCTGCGGCCCGCCCGACCACCTGCTGCCTC
CGCTGGGCACCCCGCTGCCCCCAGACTGGGTGACGCTGGAGGGGGA**C**TTTGTGCTCATGTTGGCCATCTCGCCCA
GCCACCTAGGCGCTGACCTGGTGGCAGCTCCGCATGCGCGCTTCGACGACGGCCTGGTGCACCTGTGCTGGGTGC
GTAGCGGCATCTCGCGGGCTGCGCTGCTGCGCCTTTTCTTGGCCATGGAGCGTGGTAGCCACTTCAGCCTGGGCT
GTCCGCAGCTGGGCTACGCCGCGGCCCGTGCCTTCCGCCTAGAGCCGCTCACACCACGCGGCGTGCTCACAGTGG
ACGGGGAGCAGGTGGAGTATGGGCCGCTACAGGCACAGATGCACCCTGGCATCGGTACACTGCTCACTGGGCCTC
CTGGCTGCCCGGGGCGGGAGCCC**TGA**AACTAAACAAGCTTGGTACCCGCCGGGGGCGGGGCCTACATTCCAATGG
GGCGGAGCCTGAGCTAGGGGGTGTGGCCTGGCTGCTAGAGTTGTGGTGGCAGGGGCCCTGGCCCCGTCTCAGGAT
TGCGCTCGCTTTCATGGGACCAGACGTGATGCTGGAAGGTGGGCGTCGTCACGGTTAAAGAGAAATGGGCTCGTC
CCGAGGGTAGTGCCTGATCAATGAGGGCGGGGCCTGGCGTCTGATCTGGGGCCGCCCTTACGGGGCAGGGCTCAG
TCCTGACGCTTGCCACCTGCTCCTACCCGGCCAGGATGGCTGAGGGCGGAGTCTATTTTACGCGTCGCCCAATGA
CAGGACCTGGAATGTACTGGCTGGGGTAGGCCTCAGTGAGTCGGCCGGTCAGGGCCCGCAGCCTCGCCCCATCCA
CTCCGGTGCCTCCATTTAGCTGGCCAATCAGCCCAGGAGGGGCAGGTTCCCCGGGGCCGGCGCTAGGATTTGCAC
TAATGTTCCTCTCCCCGCGGGTGGGGGCGGGGAAATTCATATCCCCTGTTCGTCTCATGCGCGTCCTCCGTCCCC
AATCTAAAAAGCAATTGAAAAGGTCTATGCAATAAAGGCAGTCGCTTCATTCCTCTC

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FIGURE 3888

TGTCAGAACAGTGTGGCAGGGGCTGCTGCAGGGAGCCATTTGGACATCTGCAGGGCCCCGCCGGAGGCCTCGGAT
GGCCACGTAGGGTCTGCCTATCAGGAGAACCCCCAGATGATCACAGTCCCCAGAGACAGCCAGACCCCCGGGGAC
CCAGCCTCTCACAGTCAGTCCTCCCACCCGAGTGACCCCGATGGCGGCCTCCCAGCTGGCGGCGCTGGAAGGAGT
GGACTCCGGTCCCAGGGTGCCCGGGGCCAGCCCCGGCTTTCTATATTCCGAGGGCCAGCGGCTGGCACTGGAGGC
TCTGTTGAGCAAGGGCGCGGAGGCGTTCCAGACCTGCGTGCAGCGCGAGGAGCTGTGGCCCTTCCTCAGTGCGGA
TGAGGTTCAGGGCTTGGCAGCGGCAGCTGAAGACTGGACAGTGGCCAAGCAGGAGCCCAGCGGGATGGCAGAGGG
AGCCACCACCACCGATGTGGACGCGGGCAGCCTGAGCTACTGGCCTGGGCAGTCGGAGCAGCCGGCGCCCGTCCT
GCGGCTGGGCTGGCCAGTGGACTCTGCGTGGAAAGGCATCACCCGGGCGCAGCTGTACACCCAGCCTCCTGGAGA
GGGTCAGCCGCCCCTCAAGGAGCTGGTGCGGCTGGAGATCCAGGCTGCCCACAAGCTGGTGGCCGTGGTCATGGA
CGTCTTCACTGACCCAGACCTGCTTTTGGACTTGGTGGATGCTGCCACGCGCCGCTGGGTACCTGTCTACCTGCT
CCTGGACCGCCAGCAGCTGCCTGCCTTCCTGGAACTGGCCCAGCAGCTGGGGGTGAACCCCTGGAACACGGAGAA
CGTGGATGTCCGTGTCGTGCGGGGCTGCAGCTTCCAGAGCCGCTGGCGACGGCAGGTGAGCGGCACCGTGCGGGA
GAAGTTTGTGCTGCTGGACGGCGAGAGGGTCATCTCAGGATCCTACAGCTTCACGTGGAGTGACGCACGCCTGCA
CCGAGGCCTGGTGACCCTGCTGACTGGTGAAATTGTTGACGCCTTCAGCCTTGAGTTCCGGACGCTGTACGCGGC
CTCCTGCCCGCTCCCACCTGCGCCCCCCCAGAAACCCTCGGTCATAGGTGGCCTGCAGCGGGGCCGCAGCCCGCA
CCGCGTGTCCCGCCGCCGCTCCGTGGCCCCCGCGTCGCCTCCGCCGCCTGACGGCCCGCTGGCCCACCGCCTGGC
CGCCTGCCGCGTCTCCCCTGCTACCCCGGGGCCGGCACTCAGTGACATTCTAAGGAGTGTGCAGCGCGCCCGGAC
CCCCAGCGGCCCCCCGGCCCGGCCCAGCCGCTCCATGTGGGACCTAAGCCGCCTGTCCCAGCTGTCTGGCTCCAG
TGATGGGGACAACGAGCTCAAGAAATCCTGGGGCTCCAAGGACACTCCAGCCAAGGCTCTGATGAGGCAGCGGGG
CACTGGAGGAGGCCCCTGGGGGGAAGTGGACTCCCGACCTCCGTGGGGCGGTGCCCTGCCCCTGCCCCCCGCCCA
CCGCCTCCGCTATCTGTCCCCAGCCCGAAGGCGGTTCGGTGGGGATGCTACATTCAAACTTCAAGAGCCCAGAGG
CGTCAGGCCGTCAGACTGGGCCCCCCGGGCAGGACTTGGGGGGCAACCCTGAACAGGAGCCCAAGCCAAATCTGC
TGGCCCACCCAAGGAGCAGTGCCGGACAACTGTCGGCTCAGAGCCCTCTGCCTCAATGCCCTGCCTTGGACAAGG
CTTCTGGCCTCGGCGTCTGTCAAGCAGAAGGGATGTTTGTCACTTGTTCTGCAACTTGGGCCGGGAGTGGTGGCT
CATGCCTGTAATCCCTGCACTTTGGGAGGCTAAGGTGGGAGGGTTGCTTAAGGCCAGGAGTTGGAGACCAGCCTG
GGCAACATAGTGAGACCCCATCTCTACAATTAAAAAAACAAATTAGTTGGG

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FIGURE 3889

AGACGCTGTCGCTGCGCACACCTGGCCTCTGTGCCGCCTGCTCCCTGCTCGTCCTCCCCTCCCCACCCTCACCCA
CCTGCC**ATG**GACGGGCCCGCCGAGCCCCAGATCCCGGGCTTGTGGGACACCTATGAAGATGACATCTCGGAAATC
AGCCAGAAGTTGCCAGGTGAATACTTCCGGTACAAGGGCGTCCCCTTCCCCGTCGGCCTGTACTCGCTCGAGAGC
ATCAGCTTGGCGGAGAACACCCAAGATGTGCGGGACGACGACATCTTTATCATCACCTACCCCAAGTCAGGCACG
ACCTGGATGATCGAGATCATCTGCTTAATCCTGAAGGAAGGGGATCCATCCTGGATCCGCTCCGTGCCCATCTGG
GAGCGGGCACCCTGGTGTGAGACCATTGTGGGTGCCTTCAGCCTCCCGGACCAGTACAGCCCCCGCCTCATGAGC
TCCCATCTTCCCATCCAGATCTTCACCAAGGCCTTCTTCAGCTCCAAGGCCAAGGTGATCTACATGGGCCGCAAC
CCCCGGGACGTTGTGGTCTCCCTCTATCATTACTCCAAGATCGCCGGGCAGTTAAAGGACCCGGGCACACCCGAC
CAGTTCCTGAGGGACTTCCTCAAAGGCGAAGTGCAGTTTGGCTCCTGGTTCGACCACATTAAGGGCTGGCTTCGG
ATGAAGGGCAAAGACAACTTCCTATTTATCACCTACGAGGAGCTGCAGCAGGACTTACAGGGCTCCGTGGAGCGC
ATCTGTGGGTTCCTGGGCCGTCCGCTGGGCAAGGAGGCACTGGGCTCCGTCGTGGCACACTCAACCTTCAGCGCC
ATGAAGGCCAACACCATGTCCAACTACACGCTGCTGCCTCCCAGCCTGCTGGACCACCGTCGCGGGGCCTTCCTC
CGGAAAGGGGTCTGCGGCGACTGGAAGAACCACTTCACGGTGGCCCAGAGCGAAGCCTTCGATCGTGCCTACCGC
AAGCAGATGCGGGGGATGCCGACCTTCCCCTGGGATGAAGACCCGGAGGAGGACGGCAGCCCAGATCCTGAGCCC
AGCCCTGAGCCTGAGCCCAAGCCCAGCCTTGAGCCCAACACCAGCCTGGAGCGTGAGCCCAGACCCAACTCCAGC
CCCAGCCCCAGCCCCGGCCAGGCCTCTGAGACCCCGCACCCACGACCCTCA**TAA**TAAACACGTCGATTCTGTC

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FIGURE 3890

GCAGAGGTGGCTGTACCGCGTGGCTCCGCCTCCGCGCGACACTTTTCCGGGGCTTCTCATTGGAGAGCAAGCCTG
TCAAGTGCTTTCTGTTGTTTCGGAGGCGGGGCCTGCTGCCCTGCCTGCACTCCGATTGGCCCCGCGGGCCGTCTA
CCTCTGGCCGGACATACCTACACCGGCTTTTTGTACGACTGTTGGCCCTGGAGAACGATCCTTTGGTGGCGAGGG
CGGGGAGGACGAAAGCGCCCACTGTGGATTGGACAGTGTCAAAAAGAGGGGCGGTCCCTACTGAAGGGGCGGTTG
GGCGACGAAGGGAAGAGTCTTTTCAGCGCTGAGGACTGGCGCTGAGGAGGCGGCGGTGGCTCCCGGGGCGTTTGA
GCGGGCTCACCCGAGCCCGCGGGCCAACGCGGATCCAGGCCCGACTGGCGGGACCGCCCCGGATTCCCCGCGGGC
CTTCCTAGCCGCC**ATG**GAGGACGGCGTCTATGAACCCCCAGACCTGACTCCGGAGGAGCGGATGGAGCTGGAGAA
CATCCGGCGGCGGAAGCAGGAGCTGCTGGTGGAGATTCAGCGCCTGCGGGAGGAGCTCAGTGAAGCCATGAGCGA
GGTGGAGGGGCTGGAGGCCAATGAGGGCAGTAAGACCTTGCAACGGAACCGGAAGATGGCAATGGGCAGGAAGAA
GTTCAACATGGACCCCAAGAAGGGGATCCAGTTCTTGGTGGAGAATGAACTGCTGCAGAACACACCCGAGGAGAT
CGCCCGCTTCCTGTACAAGGGCGAGGGGCTGAACAAGACAGCCATCGGGGACTACCTGGGGGAGAGGGAAGAACT
GAACCTGGCAGTGCTCCATGCTTTTGTGGATCTGCATGAGTTCACCGACCTCAATCTGGTGCAGGCCCTCAGGCA
GTTTCTATGGAGCTTTCGCCTACCCGGAGAGGCCCAGAAAATTGACCGGATGATGGAGGCCTTCGCCCAGCGATA
CTGCCTGTGCAACCCTGGGGTTTTCCAGTCCACAGACACGTGCTATGTGCTGTCCTTCGCCGTCATCATGCTCAA
CACCAGTCTCCACAATCCCAATGTCCGGGACAAGCCGGGCCTGGAGCGCTTTGTGGCCATGAACCGGGGCATCAA
CGAGGGCGGGGACCTGCCTGAGGAGCTGCTCAGGAACCTGTACGACAGCATCCGAAATGAGCCCTTCAAGATTCC
TGAGGATGACGGGAATGACCTGACCCACACCTTCTTCAACCCGGACCGGGAGGGCTGGCTCCTGAAGCTGGGAGG
GGGCCGGGTGAAGACGTGGAAGCGGCGCTGGTTTATCCTCACAGACAACTGCCTCTACTACTTTGAGTACACCAC
GGACAAGGAGCCCCGAGGAATCATCCCCCTGGAGAATCTGAGCATCCGAGAGGTGGACGACCCCCGGAAACCGAA
CTGCTTTGAACTTTACATCCCCAACAACAAGGGGCAGCTCATCAAAGCCTGCAAAACTGAGGCGGACGGCCGAGT
GGTGGAGGGAAACCACATGGTGTACCGGATCTCGGCCCCCACGCAGGAGGAGAAGGACGAGTGGATCAAGTCCAT
CCAGGCGGCTGTGAGTGTGGACCCCTTCTATGAGATGCTGGCAGCGAGAAAGAAGCGGATTTCAGTCAAGAAGAA
GCAGGAGCAGCCC**TGA**CCCCCTGCCCCCAACTCCATTATTTATTACGGAGCTGCCCCGCCTGGGTGGCCGGACCC
CTGGGCCTTGGGGCTGTGGATCCTGGTTCCCTGTTTGGAAAATTCACCACCTCTAGCTCCTCACTGTTCTTTGTA
ATTAACACGCTGTTGGTAATCTTATTAATTATTTAACCACTTGG

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FIGURE 3891

GAGGGTTCGAAGATGGCGGCGCGCAAGGGTCGGCGGCGCACGTGTGAAACCGGGGAACCCATGGAAGCCGAGTCC
GGCGACACAAGTTCCGAGGGCCCGGCCCAGGTCTACCTGCCCGGCCGGGGGCCGCCGCTACGCGAAGGGGAGGAG
CTGGTCATGGACGAGGAGGCCTATGTGCTCTACCACCGAGCGCAGACTGGCGCCCCCTGTCTCAGCTTTGACATA
GTCCGGGATCACCTGGGAGACAACCGGACAGAGCTTCCTCTTACACTTTACTTGTGTGCTGGGACCCAGGCTGAG
AGCGCCCAGAGCAACAGACTGATGATGCTTCGGATGCACAATCTGCATGGGACAAAGCCCCCACCCTCAGAGGGC
AGTGATGAAGAAGAAGAGGAGGAAGATGAAGAGGATGAAGAAGAGCGGAAACCTCAGCTGGAGCTGGCCATGGTG
CCCCACTATGGTGGCATCAACCGAGTTCGGGTGTCATGGCTGGGTGAAGAGCCTGTGGCTGGGGTGTGGTCAGAG
AAGGGCCAGGTGGAGGTGTTTGCGCTGCGGCGGCTTCTGCAGGTGGTGGAGGAGCCCCAGGCCCTGGCAGCCTTC
CTCCGGGATGAGCAGGCCCAAATGAAGCCCATCTTCTCCTTCGCTGGACACATGGGCGAGGGCTTTGCCCTTGAC
TGGTCCCCCCGGGTGACCGGTCGCCTGCTGACCGGTGACTGTCAAAAGAACATCCACCTCTGGACACCTACGGAC
GGCGGCTCCTGGCACGTGGACCAGCGGCCATTCGTGGGCCACACACGCTCTGTGGAGGACCTGCAGTGGTCACCG
ACTGAGAACACGGTGTTTGCCTCCTGCTCAGCTGACGCCTCCATCCGCATCTGGGACATCCGGGCAGCCCCCAGC
AAGGCCTGCATGCTCACCACAGCCACCGCCCATGATGGGGACGTCAATGTCATCAGCTGGAGCCGCCGGGAGCCC
TTCCTGCTCAGTGGCGGGGATGATGGGGCCCTCAAGATCTGGGACCTTCGGCAGTTCAAGTCTGGTTCCCCAGTG
GCCACCTTCAAGCAGCACGTGGCCCCCGTGACCTCCGTCGAGTGGCACCCCCAGGACAGCGGGGTCTTTGCAGCC
TCGGGTGCAGACCACCAGATCACACAGTGGGACCTGGCAGTGGAGCGGGACCCTGAGGCGGGCGACGTGGAGGCC
GACCCCGGACTGGCCGACCTCCCGCAGCAGCTGCTGTTCGTGCACCAGGGCGAGACCGAGCTGAAGGAGCTGCAC
TGGCACCCGCAGTGCCCAGGGCTCCTGGTCAGCACGGCGCTGTCAGGCTTCACCATCTTCCGCACCATCAGCGTC
TGAGGCGTCCCACTGGCTCTGATCTTGCTTCCTGCTTGGAAACTGAAGTCGAATTGGGCTCCCCTGGAAGGGGTT
CATTCAGGTCTGTTGACTGAGACTGGCCGGCCTGTGGGCTGCCGTGATGGATTCTGTTTGACGTATTGTTCTCTA
GAAGGCCTGGCTCTGATCCAGTGACCCCTCTCACCAAAGAACTCGGTTTAACCAGGGCTCTGTAAGACCACTCCC
ACCCAGAGACTTGTGTGGCCTGGTGTGGCCTGTGTGTCGGATTCCTTCCTGTCAGCTGTGACCCATTTGACCTGT
GTCCCCAGAACCCAGTTTTTTGTTTGTTTGTTTGAGACGGAGTCTTGGTCTGTCGCCCAGGCTGGAGTGCAGTAG
CACGATCTTGGCTCACTGCAACCTCCGCCTCCTGGGTTAAAGTGATTCTCTCAGCTCAGTCTCCCAGGTAGCTGG
GATTACAGGCATGTGCCACCACACCCCGTTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTGGCCA
GGCTGGTCTCAAATTCTTGATCTCAAGTGATCTGTCCGCCCCGGCCTCCCAGAGTGCTGGGTTGGGATTACAGGC
GTGAGCCACCGCGTCCGGCTCAGGACCCAGTTTTGGCTGCTGGTTCCCAGCAGGGGACTCGGGGGATATACAGTG
GCTGCACCAAATTGGAGGTGTGGGTTCCTCCAACACAATTTGCTTCTGCCCGTTGTCTTCCTGCCAGCTGGGTTT
GGCCAGGATTTCTCCGTGTGGGGGCTACATGCGACCCTCTCCCCTCCTCCCTGACTTTAGAGGCTGGTGCTGTGT
CGGGAGGAAGGTCAGGGCTCCTGAGCAGCAATAAAGGACCAGGAAGAGGCCTGAGGTGTA

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FIGURE 3892

GTCCCCTCCCCGGAGCGGAGCGCACCTAGGGTCCCTCTTCCGTCCCCCCAGCCCAGCTACCCGTTCAGACCAGCA
GCCTCGGGGGGCACCCCCCCCGCCAGCCTGCCTCCCTCCCGCTCAGCCCTGCCAGGGTTCCCCAGCCATGAATCTC
TTCCGATTCCTGGGAGACCTCTCCCACCTCCTCGCCATCATCTTGCTACTGCTCAAAATCTGGAAGTCCCGCTCG
TGCGCCGGAATTTCAGGGAAGAGCCAGGTCCTGTTTGCTGTGGTGTTCACTGCCCGATATCTGGACCTCTTCACC
AACTACATCTCACTCTACAACACGTGTATGAAGGTGGTCTACATAGCCTGCTCCTTCACCACGGTCTGGTTGATT
TATAGCAAGTTCAAAGCTACTTACGATGGGAACCATGACACGTTCAGAGTGGAGTTCCTGGTCGTTCCCACAGCC
ATTCTGGCGTTCCTGGTCAATCATGACTTCACCCCTCTGGAGATCCTCTGGACCTTCTCCATCTACCTGGAGTCA
GTGGCCATCTTGCCGCAGCTGTTCATGGTGAGCAAGACCGGCGAGGCGGAGACCATCACCAGCCACTACTTGTTT
GCGCTAGGCGTTTACCGCACGCTCTATCTCTTCAACTGGATCTGGCGCTACCATTTCGAGGGCTTCTTCGACCTC
ATCGCCATTGTGGCAGGCCTGGTCCAGACAGTCCTCTACTGCGATTTCTTCTACCTCTATATCACCAAAGTCCTA
AAGGGGAAGAAGTTGAGTTTGCCGGCATAGCCCCGGTCCTCTCCATCTCTCTCCTCGGCAGCAGCGGGAGGCAGA
GGAAGGCGGCAGAAGATGAAGAGCTTTCCCATCCAGGGGTGACTTTTTTAAGAACCCACCTCTTGTGCTCCCCAT
CCCGCCTCCTGCCGGGTTTCAGGGGGACAGTGGAGGATCCAGGTCTTGGGGAGCTCAGGACTTGGGCTGTTTGTA
GTTTTTTGCCTTTTAGACAAGAAAAAAAAATCTTTCCACTCTTTAGTTTTTGATTCTGATGACTCGTTTTTCTTC
TACTCTGTGGCCCCAATTTTTATAAAGTG

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FIGURE 3893

GCCGAACCTCGGGAGCCCAGGACGCCCTCCTGCACATGCGCAGGAGGCTCAATGACAGTCGAGCTTTGGCTAAGG
CTCCGGGGAAAGGGTCTAGCCATGCTGCATGTGACCCGGGGGGTCTGGGGGTCCAGGGTCCGAGTATGGCCACTG
TTGCCCGCGCTCCTCGGGCCCCCCCGGGCCCTCTCATCGCTGGCAGCCAAAATGGGGGAGTATCGCAAGATGTGG
AACCCCAGGGAGCCCCGCGACTGGGCCCAGCAGTACCGCGAGCGCTTCATTCCCTTCTCCAAGGAGCAGCTGCTC
CGCCTCCTAATACAGGAATTCCACTCGAGTCCGGCAGAGAAGGCGGCTTTGGAGGCGTTCTCGGCCCACGTGGAC
TTCTGCACCCTGTTCCACTACCACCAAATCCTGGCCCGGCTGCAGGCCTTATATGACCCCATCAACCCTGACAGG
GAGACCCTCGATCAGCCATCACTAACGGATCCCCAGCGTCTGTCTAATGAGCAGGAGGTGCTTCGGGCTCTGGAG
CCCCTGCTGGCCCAGGCCAACTTCTCCCCGCTGTCTGAGGACACCCTGGCCTACGCGCTGGTGGTCCACCACCCT
CAGGATGAGGTCCAGGTGACAGTAAATTTGGATCAGTATGTCTACATTCACTTCTGGGCCCTGGGCCAGCGAGTC
GGGCAGATGCCCCTGAAGTCCAGCGTGGGCTCCAGGCGTGGCTTCTTCACCAAGCTGCCCCCTGCGGAGAGGAGA
TACTTTAAGCGGGTGGTCCTGGCAGCCCGGACCAAACGGGGACACCTGGTACTGAAGAGTTTCAAGGACACGCCG
CTGGAAGGCCTGGAGCAGCTGCTGCCGGAGCTGAAGGTGCGCACGCCCACCCTGCAGCGCGCCCTGCTCAACCTC
ATGCTGGTAGTCTCCGGCGTGGCGATCTTCGTCAACGTGGGCATGGTGGTGCTAACCGACCTCAAGGTGGCCACC
TCCCTGCTGCTGCTGCTCTTCGCCATCTTCATGGGCCTGCGGGCCTCCAAGATGTTCGGGCAGCGGCGCAGCGCG
CAGGCGTTGGAGCTGGCGCACATGCTGTACTATCGCAGTACGTCCAACAACTCGGAGCTGCTCAGCGCCCTGGCC
CTGCGCGCGCAGGACGAGCACACCAAGGAGGCGCTGCTGGCTCACAGCTTCCTGGCCCGGCGGCCAGGGGGCACT
CAAGGCTCGCCCGAAGAGACCTCCAGGTGGCTCCGGTCGGAGGTGGAGAACTGGCTCCTAGCCAAGTCAGGCTGT
GAGGTGACCTTCAACGGAACTCGGGCCCTGGCGCATCTGCAGGCCCTGACCCCCAGCATGGGATTGTACCCACCC
CCGGGTTTCCCCAAACTAGACCCAGTGGCTCCGATCACTTCCGAGCCCCCGCAAGCCACGCCCAGCAGTAACATC
TCCTGAGTAGAACCTACCTCCCTGCCCAGTCAGCAGGCTAGGAACTAAGCCCCGCCTCCTTCACGACAGGCTGTC
AATTACGGTTATTATACTTTTCACTCCAACTTCCAATAACTGACAGGTGATTATTTTTGCTGCACTGTGTGCTTA
AGCAAAGCAGCCAATCAAAGCAGCTAGCAGTTGTTAAGTCTTCCCCGCCCCTTCGATGAACAGCCAATCAAAGCG
ATTTAGCTCTGCTTCTGTTCCATTTCTTAGTCCCACCCTCACCATAAACATCCAAGTGTGGTTTGGCTGAGGAGC
TGAGGGTGTCTGCCAATCACAGCTGCTCAGCTCTGGCTTCTGTAAACCGCCAGGTAGAAGAGTTAAAGCTGCGCC
CTCCCGAGACTATATATCATTGTCTTTTTCAGCCCGCTCCGGGCAAACTGCCCATCATGTGCACCAAGGCCGTTA
GCCCTGCCTCCTGGCAAACGTCCAGTGACAGCTGCTGGGTTCCATCAACTTTGGGCAGCCGGTTGTCGCTGCAGG
GAAGGAACCAATAAGAATTTCTAAAGGAAACCTGATCTTGCTATCAATTGCTGCTGCTTAAATGGCAGGCCAACT
GGTCAGCTGCTGATCAGGGTGTCTAGGCTGAAGGAGTTGGAGACCTTGTGCTAGGTAGGTGAACCAGAAACCACC
CTCGCCACCAAGACTCGCTCCCAACCTGGCTCCCGGCAACCTCAGGTGCCTTCCTCGCCCAGGTCTTTCACCCTT
TCTACAGAAACTACCTCGGTCTGGATCTCCCCACCACCAGCAGCCTGTGCAATATTTATTGGTCTATCAATTTCT
CCCGTCTCCTGTCCCAAAGTAATAAATCATGTTTAATAAGTCTG

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FIGURE 3894

GAAGGAGGCCCAGACAGTGAGGGCAGGAGGGAGAGAAGAGACGCAGAAGGAGAGCGAGCGAGAGAGAAAGGGTTC
TGGATTGGAGGGGAGAGCAAGGGAGGGAGGAAGGCGGTGAGAGAGGCGGGGGCCTCGGGAGGGTGAAAGGAGGGA
GGAGAAGGGCGGGGCACGGAGGCCCGAGCGAGGGACAAGACTCCGACTCCAGCTCTGACTTTTTTCGCGGCTCTC
GGCTTCCACTGCAGCC**ATG**TCACTCCTCTTGCTGGTGGTCTCAGCCCTTCACATCCTCATTCTTATACTGCTTTT
CGTGGCCACTTTGGACAAGTCCTGGTGGACTCTCCCTGGGAAAGAGTCCCTGAATCTCTGGTACGACTGCACGTG
GAACAACGACACCAAAACATGGGCCTGCAGTAATGTCAGCGAGAATGGCTGGCTGAAGGCGGTGCAGGTCCTCAT
GGTGCTCTCCCTCATTCTCTGCTGTCTCTCCTTCATCCTGTTCATGTTCCAGCTCTACACCATGCGACGAGGAGG
TCTCTTCTATGCCACCGGCCTCTGCCAGCTTTGCACCAGCGTGGCGGTGTTTACTGGCGCCTTGATCTATGCCAT
TCACGCCGAGGAGATCCTGGAGAAGCACCCGCGAGGGGGCAGCTTCGGATACTGCTTCGCCCTGGCCTGGGTGGC
CTTCCCCCTCGCCCTGGTCAGCGGCATCATCTACATCCACCTACGGAAGCGGGAG**TGA**GCGCCCCGCCTCGCTCG
GCTGCCCCCGCCCCTTCCCGGCCCCCCTCGCCGCGCGTCCTCCAAAAAATAAAACCTTAACCGCGG

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FIGURE 3895A

GTTCTCAACTTCTTTTGAAATAATGTTCATAGAGAAGGAGGGCTGTCTGAGATTCGAGGGAAACAAGCTCTCAGG
ACTTCCGGTCGCCATGATGGCTGTGGGCGGTAAACGCGGTTAGTGCAAGCATCTGGGCCATCTTCAATGGTAAAA
AAGATACAGTAAAGACATAAATACCACATTTGACAAATGGAAAAAAAGGAGTGTCCAGAAAAGAGTAGCAGCAGT
GAGGAAGAGCTGCCGAGACGGGTATACAGGGAGCTACCCTGTGTTTCTGAGACCCTTTGTGACATCTCACATTTT
TTCCAAGAAGATGATGAGACAGAGGCAGAGCCATTATTGTTCCGTGCTGTTCCTGAGTGTCAACTATCTGGGGGG
GACATTCCCAGGAGACATTTGCTCAGAAGAGAATCAAATAGTTTCCTCTTATGCTTCTAAAGTCTGTTTTGAGAT
CGAAGAAGATTATAAAAATCGTCAGTTTCTGGGGCCTGAAGGAAATGTGGATGTTGAGTTGATTGATAAGAGCAC
AAACAGATACAGCGTTTGGTTCCCCACTGCTGGCTGGTATCTGTGGTCAGCCACAGGCCTCGGCTTCCTGGTAAG
GGATGAGGTCACAGTGACGATTGCGTTTGGTTCCTGGAGTCAGCACCTGGCCCTGGACCTGCAGCACCATGAACA
GTGGCTGGTGGGCGGCCCCTTGTTTGATGTCACTGCAGAGCCAGAGGAGGCTGTCGCCGAAATCCACCTCCCCCA
CTTCATCTCCCTCCAAGGTGAGGTGGACGTCTCCTGGTTTCTCGTTGCCCATTTTAAGAATGAAGGGATGGTCCT
GGAGCATCCAGCCCGGGTGGAGCCTTTCTATGCTGTCCTGGAAAGCCCCAGCTTCTCTCTGATGGGCATCCTGCT
GCGGATCGCCAGTGGGACTCGCCTCTCCATCCCCATCACTTCCAACACATTGATCTATTATCACCCCCACCCCGA
AGATATTAAGTTCCACTTGTACCTTGTCCCCAGCGACGCCTTGCTAACAAAGGCGATAGATGATGAGGAAGATCG
CTTCCATGGTGTGCGCCTGCAGACTTCGCCCCCAATGGAACCCCTGAACTTTGGTTCCAGTTATATTGTGTCTAA
TTCTGCTAACCTGAAAGTAATGCCCAAGGAGTTGAAATTGTCCTACAGGAGCCCTGGAGAAATTCAGCACTTCTC
AAAATTCTATGCTGGGCAGATGAAGGAACCCATTCAACTTGAGATTACTGAAAAAAGACATGGGACTTTGGTGTG
GGATACTGAGGTGAAGCCAGTGGATCTCCAGCTTGTAGCTGCATCAGCCCCTCCTCCTTTCTCAGGTGCAGCCTT
TGTGAAGGAGAACCACCGGCAACTCCAAGCCAGGATGGGGGACCTGAAAGGGGTGCTCGATGATCTCCAAGACAA
TGAGGTTCTTACTGAGAATGAGAAGGAGCTGGTGGAGCAGGAAAAGACACGGCAGAGCAAGAATGAGGCCTTGCT
GAGCATGGTGGAGAAGAAAGGGGACCTGGCCCTGGACGTGCTCTTCAGAAGCATTAGTGAAAGGGACCCTTACCT
CGTGTCCTATCTTAGACAGCAGAATTTGTAAAATGAGTCAGTTAGGTAGTCTGGAAGAGAGAATCCAGCGTTCTC
ATTGGAAATGGATAAACAGAAATGTGATCATTGATTTCAGTGTTCAAGACAGAAGAAGACTGGGTAACATCTATC
ACACAGGCTTTCAGGACAGACTTGTAACCTGGCATGTACCTATTGACTGTATCCTCATGCATTTTCCTCAAGAAT
GTCTGAAGAAGGTAGTAATATTCCTTTTAAATTTTTTCCAACCATTGCTTGATATATCACTATTTTATCCATTGA
CATGATTCTTGAAGACCCAGGATAAAGGACATCCGGATAGGTGTGTTTATGAAGGATGGGGCCTGGAAAGGCAAC
TTTTCCTGATTAATGTGAAAAATAATTCCTATGGACACTCCGTTTGAAGTATCACCTTCTCATAACTAAAAGCAG
AAAAGCTAACAAAAGCTTCTCAGCTGAGGACACTCAAGGCATACATGATGACAGTCTTTTTTTTTTTTGTATGTT
AGGACTTTAACACTTTATCTATGGCTACTGTTATTAGAACAATGTAAATGTATTTGCTGAAAGAGAGCACAAAAA
TGGGAGAAAATGCAAACATGAGCAGAAAATATTTTCCCACTGGTGTGTAGCCTGCTACAAGGAGTTGTTGGGTTA
AATGTTCATGGTCAACTCCAAGGAATACTGAGATGAAATGTGGTAAATCAACTCCACAGAACCACCAAAAAGAAA
ATGAGGGTAATTCAGCTTATTCTGAGACAGACATTCCTGGCAATGTACCATACAAAAAATAAGCCAACTCTGACA
TTTGGATTCTACCATAGACTCTGTCATTTTGTAGCCATTTCAGCTGTCTTTTGATTAATGTTTTCGTGGCACACA
TATTTCCATCCTTTTATGTTTAATCTGTTTAAAACAAGTTCCTAGTAGACACCATCTGGTTGAGTCAGTTTTTTT
TATGGTGTATTTTGAACCCATTCTGATAGTCTCTTTTAACTGGAAGATTTCAATTACTTACGTTAATGTAATTAT
TAATATGTTAGGATTTATCCTCAGTCAGCCAGTTTGTTATGTCTTTTCTATTCTACTGTTATCACATTTGTACCA
CTTAAAGTGGAATCTAGGCACTTTATCACCATTTAGATCCTATTACCTTTTCTCATCTAGGATATAGTTATCTTC
TACATAATCTTTCTGTATCTTAAAACCCATCAATAAATTATTATATATTTTCTACTTTTAATCACTCAGAAGATT
TAAAAAACTCATGAGAAGAGTAATCTGTTATGTTTTTCCAGATATTTACCATTTCTGTTGCTCTTCCTTCATTAT
TTTCCAAATTTCGTTCTGCAAATTTCCACTTCCTCTGATAGACGTTTTTTAGTTCTTTTAGAGTGGTTCTGATAG
GTACAGATTCTCTTATTTTTTGCTTCCTCTGAGGACATCTTTTTCTCACCTTCATTCTCAGTGATGTTTTTTGCT
TGTAGTATTTTTAGTTGACATTGTTTTCTGTTCAGCAGTTTCCTTTTAGCTTCCGTATTTCCTGATGAGAAATCT
GCAGTCATTCAAATTGTTGTTTCCCTGTATGTAGTGTGTCATTTTTCTGTCAGATTTCAAGGTATTTATCTTTAG
TTTTTAGCCATTTCATTATGTTGGGGATGAGTTTCCTTGTTTTATTCCCTTTGGAATTTGCTCCAATTCATAAAT
TTGCAGTTTTATGTCTTTTACCAAACTTAGAGGTTTTCAGCCTAATTTCTAAAAATACTTTTTATTAGCCTGATT
TTCATCTTTATAGGAAATAGTTTAAGTGATGACAAGTTCCAATAGCTTATATGCCCAGAAGGCCTTCAAAATAAG
AATTTTGAAAGAATACAGAAAACAAACTTTTATATCCTTCTCATGTCTTCTACTGTAAAATTCATATGCTTTGCT
ACTCTAAACCTAGTTTGAAATCAACAGTCTTGAGAATAGATGAAAATTTTGATGAATAGTGGAATTCTTTTAAAT

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FIGURE 3895B

GGAAACCTCTTACATGTGATTTTCCTTGCCATCTAGAAATAAACCATAGTATTTATGTTGAATCAATCAATATTA
TATTTTGTTTTTTTCCTCCTCTTCTGAGACTCTTATTGTGGAAATGTTAGACTTTTATGTTTTCCTAAATGTCCC
TGATATTCTACTTATTTAGAACATCTTTTCATTTTTTCCATTATTCTGATTGGGTAATTTTAATTTGTCTATTTT
CAAATTTGCTGGAGTGTTCACCTGTTGTTATCTGTGTCGTCCCACTGAGTGCATTCACCACCTTTTAAATTTTGG
TCACTGTATGTATCAGTTCTAAAATTTCCATTTTGTTCTCTATATTTTAAATTTCTTGCCTTATATTCTATTTTC
CTGCAAATGTGTCAGCATTTGCTTGTTTGAGCTTTTTTTTTTTCAAGACAGGGTCTCAACTCTGTTACCCAGGCT
GGAGTGCAGTGGTGCGATCTCAGCTCACTGCAACCTCTGCCTCCTGGTTCAAGCGATTATTGTGCCTCAGCCTCC
AGAGTAGCTGGGATTACAGGCATGCACCACCACAGCCCAGCTAATTTTTTGTATTTTTAGTAGAGACAGAGTTTT
GCTATGTTGGCCAGGCTGGTTTTGAACTCCTGGCCTCAAGTGATCCACCCACCTCAGCCTCCCAAAGTGCTGGGA
TTACAGGCCACTACACCTGGCACATTTGAGTATTTTTTTTTTTTTTTTTTTTTTTGAGATGGAGTCTCGCTCT
GTCATCTAGGCTGGAGTGCAGTGGTGTGATCTCAGCTCACTGCAGCCTCTGTCTCCCGGGCTCAAGCGATTCTCT
TGCCTCAGCCTCCTGAGTAGCTAGGACTACAGGTGCATGCCAACACGCCCGGCTAATTTTTTTTTAAAAATATTT
TTAGTAGAGACAGGGTTTCACCATTTTGGCCAGGATGGTCTTGATCTCCTGACCTCATGATCCACCCGCCTCGGC
CTTCCAAAGTGCTGGGATTACAGGCATGAGCCACCGTGCCTGGCCTCATTTGAGTATTTTTATAATGTCTCTTTT
AAAGTCTTTGTCAGATAATTTCACTGTACATGTTATTCAGTGTTTGGTGTCCACTGAGTTGTCATTTGCCAGACA
AGTGGAGATTTTTGCAGCTCATCCTTGTATTCTCAGTAGTTCCGATATGTACCCTCGAAATGTGAATGTTATCTT
ATGAGACTCTGTTTTATTTGTATCCAACAGAAGATGTTTATTATTTATTTGGCTTTCTGTGAACTGAGGTCTTAA
TATCAGCTCATTTTAAAAGTCTTTGCAGTGGTATTCGGATCTATCCTGTGTGTGCCTATGAGATTGGGTGCAGTG
TATCCTGTTAGCTCCATTCTCAGGGCGTTTGAATGTGAATTAGGACCAGCGCAATGAATGCTCAAGTTGGGGTTG
GGCGTTAGAATTCATAAAAGTCTTTATATGCTCAG

FIGURE 3896

GACGTCTGCGCGCGAATGCCGTGGCGCGAACTTGGGACTGCAGAGGCGCGCCTGGCGGATCTGAGTGTGTTGCCC
GGGCAGCGGCGCGCGGGACCAACGCAAGGAGCAGCTGACAGACGAAGAAAAGTGCTGGACAGGAAGGGAGAATTC
TGACGCCAACATGCAGCGAAGTATCATGTCATTTTTCCACCCCAAGAAAGAGGGTAAAGCAAAGAAGCCTGAGAA
GGAGGCATCCAATAGCAGCAGAGAGACGGAGCCCCCTCCAAAGGCGGCACTGAAGGAGTGGAATGGAGTGGTGTC
CGAGAGTGACTCTCCGGTGAAGAGGCCAGGGAGGAAGGCGGCCCGGGTCCTGGGCAGCGAAGGGGAAGAGGAGGA
TGAAGCCCTTAGCCCTGCTAAAGGCCAGAAGCCTGCCCTGGACTGCTCACAGGTCTCCCCGCCCCGTCCTGCCAC
ATCTCCTGAGAACAATGCTTCCCTCTCTGACACCTCTCCCATGGACAGTTCCCCATCAGGGATTCCGAAGCGTCG
CACAGCTCGGAAGCAGCTCCCGAAACGGACCATTCAGGAAGTCCTGGAAGAGCAGAGTGAGGACGAGGACAGAGA
AGCCAAGAGGAAGAAGGAGGAGGAAGAAGAGGAGACCCCGAAAGAAAGCCTCACAGAGGCTGAAGTGGCCACAGA
GAAGGAAGGAGAAGACGGGGACCAGCCCACCACGCCTCCCAAGCCCCTAAAGACCTCCAAAGCAGAGACCCCGAC
GGAAAGCGTTTCAGAGCCTGAGGTGGCCACGAAGCAGGAACTGCAGGAGGAGGAAGAGCAGACCAAGCCTCCCCG
CAGAGCTCCCAAGACGCTCAGCAGCTTCTTCACCCCCCGGAAGCCAGCAGTCAAAAAAGAAGTGAAGGAAGAGGA
GCCAGGGGCTCCAGGAAAGGAGGGAGCTGCTGAGGGACCCCTGGATCCATCTGGTTACAATCCTGCCAAGAACAA
CTATCATCCCGTGGAAGATGCCTGCTGGAAACCGGGCCAGAAGGTTCCTTACCTGGCTGTGGCCCGGACGTTTGA
GAAGATCGAGGAGGTGTCTGCTCGGCTCCGGATGGTGGAGACGCTGAGCAACTTGCTGCGCTCCGTGGTGGCCCT
GTCGCCTCCAGACCTCCTCCCTGTCCTCTACCTCAGCCTCAACCACCTTGGGCCACCCCAGCAGGGCCTGGAGCT
TGGCGTGGGTGATGGTGTCCTTCTCAAGGCAGTGGCCCAGGCCACAGGTCGGCAGCTGGAGTCCGTCCGGGCTGA
GGCAGCCGAGAAAGGCGACGTGGGGCTGGTGGCCGAGAACAGCCGCAGCACCCAGAGGCTCATGCTGCCACCACC
TCCGCTCACTGCCTCCGGGGTCTTCAGCAAGTTCCGCGACATCGCCAGGCTCACTGGCAGTGCTTCCACAGCCAA
GAAGATAGACATCATCAAAGGCCTCTTTGTGGCCTGCCGCCACTCAGAAGCCCGGTTCATCGCTAGGTCCCTGAG
CGGACGGCTGCGCCTTGGGCTGGCAGAGCAGTCGGTGCTGGCTGCCCTCTCCCAGGCAGTGAGCCTCACGCCCCC
GGGCCAAGAATTCCCACCAGCCATGGTGGATGCTGGGAAGGGCAAGACAGCAGAGGCCAGAAAGACGTGGCTGGA
GGAGCAAGGCATGATCCTGAAGCAGACGTTCTGCGAGGTTCCCGACCTGGACCGAATTATCCCCGTGCTGCTGGA
GCACGGCCTGGAACGTCTCCCGGAGCACTGCAAGCTGAGCCCAGGGATTCCCCTGAAACCAATGTTGGCCCATCC
CACCCGGGGCATCAGCGAGGTCCTGAAACGCTTTGAGGAGGCAGCTTTCACCTGCGAATACAAATATGACGGGCA
GAGGGCACAGATCCACGCCCTGGAAGGCGGGGAGGTGAAGATCTTCAGCAGGAATCAGGAAGACAACACTGGGAA
GTACCCGGACATCATCAGCCGCATCCCCAAGATTAAACTCCCATCGGTCACATCCTTCATCCTGGACACCGAAGC
CGTGGCTTGGGACCGGGAAAAGAAGCAGATCCAGCCATTCCAAGTGCTCACCACCCGCAAACGCAAGGAGGTGGA
TGCGTCTGAGATCCAGGTGCAGGTGTGTTTGTACGCCTTCGACCTCATCTACCTCAATGGAGAGTCCCTGGTACG
TGAGCCCCTTTCCCGGCGCCGGCAGCTGCTCCGGGAGAACTTTGTGGAGACAGAGGGCGAGTTTGTCTTCGCCAC
CTCCCTGGACACCAAGGACATCGAGCAGATCGCCGAGTTCCTGGAGCAGTCAGTGAAAGACTCCTGCGAGGGGCT
GATGGTGAAGACCCTGGATGTTGATGCCACCTACGAGATCGCCAAGAGATCGCACAACTGGCTCAAGCTGAAGAA
GGACTACCTTGATGGCGTGGGTGACACCCTGGACCTGGTGGTGATCGGCGCCTACCTGGGCCGGGGGAAGCGGGC
CGGCCGGTACGGGGGCTTCCTGCTGGCCTCCTACGACGAGGACAGTGAGGAGCTGCAGGCCATATGCAAGCTTGG
AACTGGCTTCAGTGACGAGGAGCTGGAGGAGCATCACCAGAGCCTCAAGGCCCTGGTGCTGCCCAGCCCACGCCC
TTACGTGCGGATAGATGGCGCTGTGATTCCCGACCACTGGCTGGACCCCAGCGCTGTGTGGGAGGTGAAGTGCGC
TGACCTCTCCCTCTCTCCCATCTACCCTGCTGCGCGGGGCCTGGTGGATAGTGACAAGGGCATCTCCCTTCGCTT
CCCTCGGTTTATTCGAGTCCGTGAAGACAAGCAGCCGGAGCAGGCCACCACCAGTGCTCAGGTGGCCTGTTTGTA
CCGGAAGCAAAGTCAGATTCAGAACCAACAAGGCGAGGACTCAGGCTCTGACCCTGAAGATACCTACTAAGCCCT
CGCCCTCCTAGGGCCTGGGTACAGGGCATGAGTTGGACGGACCCCAGGGTTATTATTGCCTTTGCTTTTTAGCAA
ATCTGCTGTGGCAGGCTGTGGATTTTGAGAGTCAGGGGAGGGGTGTGTGTGTGAGGGGGTGGCTTACTCCGGAGT
CTGGGATTCATCCCGTCATTTCTTTCAATAAATAATTATCGGATAGCT

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FIGURE 3897

CAAGCAGGGCCTACAAGCCGAGGAGGGCTGTTTAAAGGCGCAGGGGCCATTTTACCCTCCAGGTTGGCCCTGCTC
AGGACCAGGAGGAAACACCTCCAGCCCGCGACCTCCTCCCACAGGGGGAAAAGGAAAGCAGGAGGACCACAGAAG
CTTTGGCACCGAGGATCCCCGCAGTCTTCACCCGCGGAGATTCCGGCTGAAGGAGCTGTCCAGCGACTACACCGC
TAAGCGCAGGGAGCCCAAGCCTCCGCACCGGATTCCGGAGCCCAAGCCTCCGCACCGGATTCCGGAGCACAAGCT
CCACCGCGCATGCGCACACGCCCCAGACCCAGGCTCAGGAGGACTGAGAATTTTCTGACCGCAGTGCACCATGGG
AAGCTCTGAAGTTTCCATAATTCCTGGGCTCCAGAAAGAAGAAAAGGCGGCCGTGGAGAGACGAAGACTTCATGT
GCTGAAAGCTCTGAAGAAGCTAAGGATTGAGGCTGATGAGGCCCCAGTTGTTGCTGTGCTGGGCTCAGGCGGAGG
ACTGCGGGCTCACATTGCCTGCCTTGGGGTCCTGAGTGAGATGAAAGAACAGGGCCTGTTGGATGCCGTCACGTA
CCTCGCAGGGGTCTCTGGATCCACTTGGGCAATATCTTCTCTCTACACCAATGATGGTGACATGGAAGCTCTCGA
GGCTGACCTGAAACATCGATTTACCCGACAGGAGTGGGACTTGGCTAAGAGCCTACAGAAAACCATCCAAGCAGC
GAGGTCTGAGAATTACTCTCTGACCGACTTCTGGGCCTACATGGTTATCTCTAAGCAAACCAGAGAACTGCCGGA
GTCTCATTTGTCCAATATGAAGAAGCCCGTGGAAGAAGGGACACTACCCTACCCGATATTTGCAGCCATTGACAA
TGACCTGCAACCTTCCTGGCAGGAGGCAAGAGCACCAGAGACCTGGTTCGAGTTCACCCCTCACCACGCTGGCTT
CCCTGCACTGGGGGCCTTTGTTTCCATAACCCACTTCGGAAGCAAATTCAAGAAGGGAAGACTGGTCAGAACTCA
CCCTGAGAGAGACCTGACTTTCCTGAGAGGTTTATGGGGAAGTGCTCTTGGTAACACTGAAGTCATTAGGGAATA
CATTTTTGACCAGTTAAGGAATCTGACCCTGAAAGGTTTATGGAGAAGGGCTGTTGCTAATGCTAAAAGCATTGG
ACACCTTATTTTTGCCCGATTACTGAGGCTGCAAGAAAGTTCACAAGGGGAACATCCTCCCCCAGAAGATGAAGG
CGGTGAGCCTGAACACACCTGGCTGACTGAGATGCTCGAGAATTGGACCAGGACCTCCCTGGAAAAGCAGGAGCA
GCCCCATGAGGACCCCGAAAGGAAAGGCTCACTCAGTAACTTGATGGATTTTGTGAAGAAAACAGGCATTTGCGC
TTCAAAGTGGGAATGGGGGACCACTCACAACTTCCTGTACAAACACGGTGGCATCCGGGACAAGATAATGAGCAG
CCGGAAGCACCTCCACCTGGTGGATGCTGGTTTAGCCATCAACACTCCCTTCCCACTCGTGCTGCCCCCGACGCG
GGAGGTTCACCTCATCCTCTCCTTCGACTTCAGTGCCGGAGATCCTTTCGAGACCATCCGGGCTACCACTGACTA
CTGCCGCCGCCACAAGATCCCCTTTCCCCAAGTAGAAGAGGCTGAGCTGGATTTGTGGTCCAAGGCCCCCGCCAG
CTGCTACATCCTGAAAGGAGAAACTGGACCAGTGGTGATGCATTTTCCCCTGTTCAACATAGATGCCTGTGGAGG
TGATATTGAGGCATGGAGTGACACATACGACACATTCAAGCTTGCTGACACCTACACTCTAGATGTGGTGGTGCT
ACTCTTGGCATTAGCCAAGAAGAATGTCAGGGAAAACAAGAAGAAGATCCTTAGAGAGTTGATGAACGTGGCCGG
GCTCTACTACCCGAAGGATAGTGCCCGAAGTTGCTGCTTGGCATAGATGAGCCTCAGCTTCCAGGGCACTGTGGG
CCTGTTGGTCTACTAGGGCCCTGATGTCCACCTGGCCTTCCTGTTCTTCACTCCCTTCAGCCACACGCTTCATGG
CCTTGAGTTCACCTTGGCTGTCCTAACAGGGCCAATCACCAGTGACCAGCTAGACTGTGATTTTGATAGCGTCAT
TCAGAAGAAGGCGTCCAAGGAGCTGAAGGTGGTGAAATTTGTCCTGCAGGTCCCTCGGGAGATCCTGGAGCTGGA
GCATGAGTGTCTGACAATCAGAAGCATCATGTCCAATGTCCAGATGGCCAGAATGAATGTGATAGTTCAGACCAA
TGCCTTCCACTGCTCCTTTATGACTGCACTTCTAGCCAGTAGCTCTGCACAAGTTAGCTCTGTAGAAGTAAGAAC
TTGGGCTTAAATCATGGGCTATCTCTCCACAGCCAAGTGGAGCTCTGAGAATACAACAAGTGCTCAATAAATGCT
TGCTGATTGACTGATG

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FIGURE 3898

GACCGTGGATCGGCTGGAGCGGGGCCGCCGCCGGCTGCAGCAGGAGCTGGACGACGCCACCATGGACCTGGAGCA
GCAGCGGCAGCTTGTGAGCACCCTGGAGAAGAAGCAGCGCAAGTTTGACCAGCTTCTGGCAGAGGAGAAGGCAGC
TGTACTTCGGGCAGTGGAGGAACGTGAGCGGGCCGAGGCAGAGGGCCGGGAGCGTGAGGCTCGGGCCCTGTCACT
GACACGGGCACTGGAGGAGGAGCAGGAGGCACGTGAGGAGCTGGAGCGGCAGAACCGGGCCCTGCGGGCTGAGCT
GGAGGCACTGCTGAGCAGCAAGGATGACGTCGGCAAGAGCGTGCATGAGCTGGAACGAGCCTGCCGGGTAGCAGA
ACAGGCAGCCAATGATCTGCGAGCACAGGTGACAGAACTGGAGGATGAGCTGACAGCGGCCGAGGATGCCAAGCT
GCGTCTGGAGGTGACTGTGCAGGCTCTCAAGACTCAGCATGAGCGTGACCTGCAGGGCCGTGATGAGGCTGGTGA
AGAGAGGCGGAGGCAGCTGGCCAAGCAGCTGAGAGATGCAGAGGTGGAGCGGGATGAGGAGCGGAAGCAGCGCAC
TCTGGCCGTGGCTGCCCGCAAGAAGCTGGAGGGAGAGCTGGAGGAGCTGAAGGCTCAGATGGCCTCTGCCGGCCA
GGGCAAGGAGGAGGCGGTGAAGCAGCTTCGCAAGATGCAGGCCCAGATGAAGGAGCTATGGCGGGAGGTGGAGGA
GACACGCACCTCCCGGGAGGAGATCTTCTCCCAGAATCGGGAAAGTGAAAAGCGCCTCAAGGGCCTGGAGGCTGA
GGTGCTGCGGCTGCAGGAGGAACTGGCCGCCTCGGACCGTGCTCGGCGGCAGGCCCAGCAGGACCGGGATGAGAT
GGCAGATGAGGTGGCCAATGGTAACCTTAGCAAGGCAGCCATTCTGGAGGAGAAGCGTCAGCTGGAGGGGCGCCT
GGGGCAGTTGGAGGAAGAGCTGGAGGAGGAGCAGAGCAACTCGGAGCTGCTCAATGACCGCTACCGCAAGCTGCT
CCTGCAGGTAGAGTCACTGACCACAGAGCTGTCAGCTGAGCGCAGTTTCTCAGCCAAGGCAGAGAGCGGGCGGCA
GCAGCTGGAACGGCAGATCCAGGAGCTACGGGGACGCCTGGGTGAGGAGGATGCTGGGGCCCGTGCCCGCCACAA
GATGACCATTGCTGCCCTTGAGTCTAAGTTGGCCCAGGCTGAGGAGCAGCTAGAGCAAGAGACCAGAGAGCGCAT
CCTCTCTGGAAAGCTGGTGCGCAGAGCTGAGAAGCGGCTTAAAGAGGTGGTGCTCCAGGTGGAGGAGGAGCGGAG
GGTGGCTGACCAGCTCCGGGACCAGCTGGAGAAGGGAAACCTTCGAGTCAAGCAGCTGAAGCGGCAGCTGGAGGA
GGCCGAGGAGGAGGCATCCCGGGCTCAGGCCGGCCGCCGGAGGCTGCAGCGTGAGCTGGAAGATGTCACAGAGTC
GGCCGAGTCCATGAACCGTGAAGTGACCACACTGAGGAACCGGCTTCGACGCGGCCCCCTCACCTTCACCACCCG
CACGGTGCGCCAGGTCTTCCGACTAGAGGAGGGCGTGGCATCCGACGAGGAGGCAGAGGAAGCACAGCCTGGGTC
TGGGCCATCCCCGGAGCCTGAGGGGTCCCCACCAGCCCACCCCCAGTGACCCTACCCTGTCCCCAGATGCACTAA
CAGATGGGGCCCAGCCCCCTTCCTCCCTGGACCCCACGGGCCCCTGTCCCAGGAACCCCGCCCTCTGACTTCTTG
CCCTTTGGAAATGGTGCAGCACTCTGGCATTTATCACCCCCACCTGGGTCCCCTGCAACCTCCCATCAAAGGATG
ACCCCTAAACACAGAGGAGCGGGGCAGGCAGGGAGGCAATGACTGGAGCTACCTTGCTTGTTGGGGGACTGGGTA
CAGTTGGCAAGCTGTGTTTCCATCAGCTCCCTGTCCTCCTTTCTTCCCTCGTTATTGATCTATAGACATTAGGAA
GGGAGTGAGACGGCTCCTCCACCATCCTCAGCCAGTGCAACCCATTCCCTCTGCTTCTCTCTCTCTCTCTCTC
TCCCTCCCTCTCCTTCCCTACCCTCTCACCATCTTTCTTGGCCTCTCTGAGGGTCTCTCTGTGCATCTTTTTAGG
AATCTCGCTCTCACTCTCTACGTAGCCACTCTCCTTCCCCCATTTCTGCGTCCACCCCTGAACTCCTGAGCGACA
GAAGCCCCAGGCCTCCACCAGCCTTGAACCCTTGCAAAGGGGCAGGACAAGGGGACCCCTCTCACTCCTGCTGCT
GCCCATGCTCTGCCCTCCCTTCTGGTTGCTCTGAGGGTTCGGAGCTTCCCTCTGGGACTAAAGGAGTGTCCTTTA
CCCTCCCAGCCTCCAGGCTCTGGCAGAAATAAACTCCAACCCGACTGG

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FIGURE 3899

AAGAAGTGGCGAAGTTACTTTTGAGGGTATTTGAGTAGCGGCGGTGTGTCAGGGGCTAAAGAGGAGGACGAAGAA
AAGCAGAGCAAGGGAACCCAGGGCAACAGGAGTAGTTCACTCCGCGAGAGGCCGTCCACGAGACCCCCGCGCGCA
GCCATGAGCCCCGCCCCCCGCTGTTGCTTGGAGAGGGGCGGGACCTGGAGAGAGGCTGCTCCGTGACCCCACCATG
GTCCTCTCCTACCACGAGTTCCCTGGATACCCCCCTGCCTGGAAATGGCCCCCCTCAGCCTGGCGCCCCTTCTTC
TTCACCCACTGTAAAGGAGGAGGGTCCGGAGCCGTGGCCCGGGGGTCCGGACCCTGATGTCCCAGGCACTGATGA
GGCCAGCTCAGCCTGCAGCACAGACTGGGTCATCCCAGATCCCGAAGAGGAACCAGAGCGCAAGCGAAAGAAGGG
CCCAGCCCCGAAGATGCTGGGCCACGAGCTTTGCCGTGTCTGTGGGGACAAGGCCTCCGGCTTCCACTACAACGT
GCTCAGCTGCGAAGGCTGCAAGGGCTTCTTCCGGCGCAGTGTGGTCCGTGGTGGGGCCAGGCGCTATGCCTGCCG
GGGTGGCGGAACCTGCCAGATGGACGCTTTCATGCGGCGCAAGTGCCAGCAGTGCCGGCTGCGCAAGTGCAAGGA
GGCAGGGATGAGGGAGCAGTGCGTCCTTTCTGAAGAACAGATCCGGAAGAAGAAGATTCGGAAACAGCAGCAGGA
GTCACAGTCACAGTCGCAGTCACCTGTGGGGCCGCAGGGCAGCAGCAGCTCAGCCTCTGGGCCTGGGGCTTCCCC
TGGTGGATCTGAGGCAGGCAGCCAGGGCTCCGGGGAAGGCGAGGGTGTCCAGCTAACAGCGGCTCAAGAACTAAT
GATCCAGCAGTTGGTGGCGGCCCAACTGCAGTGCAACAAACGCTCCTTCTCCGACCAGCCCAAAGTCACGCCCTG
GCCCCTGGGCGCAGACCCCCAGTCCCGAGATGCCCGCCAGCAACGCTTTGCCCACTTCACGGAGCTGGCCATCAT
CTCAGTCCAGGAGATCGTGGACTTCGCTAAGCAAGTGCCTGGTTTCCTGCAGCTGGGCCGGGAGGACCAGATCGC
CCTCCTGAAGGCATCCACTATCGAGATCATGCTGCTAGAGACAGCCAGGCGCTACAACCACGAGACAGAGTGTAT
CACCTTCTTGAAGGACTTCACCTACAGCAAGGACGACTTCCACCGTGCAGGCCTGCAGGTGGAGTTCATCAACCC
CATCTTCGAGTTCTCGCGGGCCATGCGGCGGCTGGGCCTGGACGACGCTGAGTACGCCCTGCTCATCGCCATCAA
CATCTTCTCGGCCGACCGGCCCAACGTGCAGGAGCCGGGCCGCGTGGAGGCGTTGCAGCAGCCCTACGTGGAGGC
GCTGCTGTCCTACACGCGCATCAAGAGGCCGCAGGACCAGCTGCGCTTCCCGCGCATGCTCATGAAGCTGGTGAG
CCTGCGCACGCTGAGCTCTGTGCACTCGGAGCAGGTCTTCGCCTTGCGGCTCCAGGACAAGAAGCTGCCGCCTCT
GCTGTCGGAGATCTGGGACGTCCACGAGTGAGGGGCTGGCCACCCAGCCCCACAGCCTTGCCTGACCACCCTCCA
GCAGATAGACGCCGGCACCCCTTCCTCTTCCTAGGGTGGAAGGGGCCCTGGGCCGAGCCTGTAGACCTATCGGCT
CTCATCCCTTGGGATAAGCCCCAGTCCAGGTCCAGGAGGCTCCCTCCCTGCCCAGCGAGTCTTCCAGAAGGGGTG
AAAGGGTTGCAGGTCCCGACCACTGACCCTTCCCGGCTGCCCTCCCTCCCCAGCTTACACCTCAAGCCCAGCACG
CAGTGCACCTTGAACAGAGGGAGGGGAGGACCCATGGCTCTCCCCCCTAGCCCGGGAGACCAGGGCCTTCCTCTT
CCTCTGCTTTTATTTAATAAAAACTAAAAACAGAAA

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FIGURE 3900

AGTCAGGGGTCACGGCGGCGTAGGCTGTGGCGGGAAACGCTGTTTGAAGCGGGATGGATGGCAAGCGGCGGCCAG
GCCCAGGGCCCGGGGTGCCCCCAAAGCGGGCCCGTGGGGGCCTCTGGGATGATGATGATGCACCTCGGCCATCCC
AATTCGAGGAGGACCTGGCACTGATGGAGGAGATGGAGGCAGAACACAGGCTGCAGGAGCAGGAGGAGGAGGAGC
TGCAGTCAGTCCTGGAGGGGGTTGCAGACGGGCAGGTCCCACCATCAGCCATAGATCCTCGCTGGCTTCGGCCCA
CACCACCAGCGCTGGACCCCCAGACAGAGCCCCTCATCTTCCAACAGTTGGAGATTGACCATTATGTGGGCCCAG
CGCAGCCTGTGCCTGGGGGGCCCCCACCATCCCGCGGCTCCGTGCCTGTGCTCCGCGCCTTCGGGGTCACCGATG
AGGGGTTCTCTGTCTGCTGCCACATCCACGGCTTCGCTCCCTACTTCTACACCCCAGCGCCCCCTGGTTTCGGGC
CCGAGCACATGGGTGACCTGCAACGGGAGCTGAACTTGGCCATCAGCCGGGACAGTCGCGGGGGGAGGGAGCTGA
CTGGGCCGGCCGTGCTGGCTGTGGAACTGTGCTCCCGAGAGAGCATGTTTGGGTACCACGGGCACGGCCCCTCCC
CGTTCCTGCGCATCACCGTGGCGCTGCCGCGCCTCGTGGCCCCGGCCCGCCGTCTCCTGGAACAGGGCATCCGTG
TGGCAGGCCTGGGCACGCCCAGCTTCGCGCCCTACGAGGCCAACGTCGACTTTGAGATCCGGTTCATGGTGGACA
CGGACATCGTCGGCTGCAACTGGCTGGAGCTCCCAGCTGGGAAATACGCCCTGAGGCTGAAGGAGAAGGCTACGC
AGTGCCAGCTGGAGGCGGACGTGCTGTGGTCTGACGTGGTCAGTCACCCACCGGAAGGGCCATGGCAGCGCATTG
CGCCCTTGCGCGTGCTCAGCTTCGATATCGAGTGCGCCGGCCGCAAAGGCATCTTCCCTGAGCCTGAGCGGGACC
CTGTCATCCAGATCTGCTCGCTGGGCCTGCGCTGGGGGGAGCCGGAGCCCTTCCTACGCCTGGCGCTCACCCTGC
GGCCCTGTGCCCCCATCCTGGGTGCCAAGGTGCAGAGCTACGAGAAGGAGGAGGACCTGCTGCAGGCCTGGTCCA
CCTTCATCCGTATCATGGACCCCGACGTGATCACCGGTTACAACATCCAGAACTTCGACCTTCCGTACCTCATCT
CTCGGGCCCAGACCCTCAAGGTACAAACATTCCCTTTCCTGGGCCGTGTGGCCGGCCTTTGCTCCAACATCCGGG
ACTCTTCATTCCAGTCCAAGCAGACGGGCCGGCGGGACACCAAGGTTGTCAGCATGGTGGGCCGCGTGCAGATGG
ACATGCTGCAGGTGCTGCTGCGGGAGTACAAGCTCCGCTCCTACACGCTCAATGCCGTGAGCTTCCACTTCCTGG
GCGAGCAGAAGGAGGACGTGCAGCACAGCATCATCACCGACCTGCAGAATGGGAACGACCAGACCCGCCGCCGCC
TGGCTGTGTACTGCCTGAAGGATGCCTACCTGCCACTGCGGCTGCTGGAGCGGCTCATGGTGCTGGTGAACGCCG
TGGAGATGGCGAGGGTCACTGGCGTGCCCCTCAGCTACCTGCTCAGTCGTGGCCAGCAGGTCAAGGTCGTATCCC
AGCTGTTGCGGCAGGCCATGCACGAGGGGCTGCTGATGCCCGTGGTGAAGTCAGAGGGCGGCGAGGACTACACGG
GAGCCACTGTCATCGAGCCCCTCAAAGGGTACTACGACGTCCCCATCGCCACCCTGGACTTCTCCTCGCTGTACC
CGTCCATCATGATGGCCCACAACCTGTGTTACACCACGCTCCTTCGGCCCGGGACTGCACAGAAACTGGGCCTGA
CTGAGGATCAGTTCATCAGGACCCCCACCGGGGACGAGTTTGTGAAGACCTCAGTGCGGAAGGGGCTGCTGCCCC
AGATCCTGGAGAACCTGCTCAGTGCCCGGAAGAGGGCCAAGGCCGAGCTGGCCAAGGAGACAGACCCCCTCCGGC
GCCAGGTCCTGGATGGACGGCAGCTGGCGCTGAAGGTGAGCGCCAACTCCGTATACGGCTTCACTGGCGCCCAGG
TGGGCAAGTTGCCGTGCCTGGAGATCTCACAGAGCGTCACGGGGTTCGGACGTCAGATGATCGAGAAAACCAAGC
AGCTGGTGGAGTCTAAGTACACAGTGGAGAATGGCTACAGCACCAGTGCCAAGGTGGTGTATGGTGACACTGACT
CCGTCATGTGCCGATTCGGCGTGTCCTCGGTGGCTGAGGCGATGGCCCTGGGGCGGGAGGCCGCGGACTGGGTGT
CAGGTCACTTCCCGTCGCCCATCCGGCTGGAGTTTGAGAAGGTCTACTTCCCATACCTGCTTATCAGCAAGAAGC
GCTACGCGGGCCTGCTCTTCTCCTCCCGGCCCGACGCCCACGACCGCATGGACTGCAAGGGCCTGGAGGCCGTGC
GCAGGGACAACTGCCCCCTCGTGGCCAACCTGGTCACTGCCTCACTGCGCCGCCTGCTCATCGACCGAGACCCTG
AGGGCGCGGTGGCTCACGCACAGGACGTCATCTCGGACCTGCTGTGCAACCGCATCGATATCTCCCAGCTGGTCA
TCACCAAGGAGCTGACCCGCGCGGCCTCCGACTATGCCGGCAAGCAGGCCCACGTGGAGCTGGCCGAGAGGATGA
GGAAGCGGGACCCCGGGAGTGCGCCCAGCCTGGGCGACCGCGTCCCCTACGTGATCATCAGTGCCGCCAAGGGTG
TGGCCGCCTACATGAAGTCGGAGGACCCGCTGTTCGTGCTGGAGCACAGCCTGCCCATTGACACGCAGTACTACC
TGGAGCAGCAGCTGGCCAAGCCCCTCCTGCGCATCTTCGAGCCCATCCTGGGCGAGGGCCGTGCCGAGGCTGTGC
TACTGCGGGGGGACCACACGCGCTGCAAGACGGTGCTCACGGGCAAGGTGGGCGGCCTCCTGGCCTTCGCCAAAC
GCCGCAACTGCTGCATTGGCTGCCGCACAGTGCTCAGCCACCAGGGAGCCGTGTGTGAGTTCTGCCAGCCCCGGG
AGTCTGAGCTGTATCAGAAGGAGGTATCCCATCTGAATGCCCTGGAGGAGCGCTTCTCGCGCCTCTGGACGCAGT
GCCAGCGCTGCCAGGGCAGCCTGCACGAGGACGTCATCTGCACCAGCCGGGACTGCCCCATCTTCTACATGCGCA
AGAAGGTGCGGAAGGACCTGGAAGACCAGGAGCAGCTCCTGCGGCGCTTCGGACCCCCTGGACCTGAGGCCTGGT
GACCTTGCAAGCATCCCATGGGGCGGGGGCGGGACCAGGGAGAATTAATAAAGTTCTGGACTTTTGCT

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FIGURE 3901

GCCTCCTTCCGTCTGTAACTCACCTAAAGACCCAAGACCTGCGACATCCGTAGACCGCGCCCGCTATGCACAGCT
AAAGAGCACTCACCCCTCGCGCACCAGTCCCGGCCCGGCAGCCGCTGCCCCGGGCTCGACTGGGCGCTGCTACCG
CCATCAGCAAGAGCAGGAGCAGCCGGGTTGCCCCAGCGCTGGCTGCCGCCATCTCGGCTTCTTCCCACCAGCGAA
GGGACGGCTGTGAGCCAAGAGCCGCGGAGCACGCCGGGAGGAACAGGCCGCATCCTGACGCCCGTGCGCCTGCGC
TGGGCCCCGGCACCTGCGCACTGGCACCCGTCCGCACCTGGGGCCTGACGTCAGCAGGATGGGGCCGCCCCTTTG
GCCTGATCTCCAGGAGCCGCCCCCTCCAGGGACGTCATCACAAATCAGGAGCCCGCTCTTGTGTGACGTCATAAA
GCCCGCTCCGCATCATGACGTCACAGTGCGCGTAGTCCCGCCCCCTCGCTTTCTCCCTCTGCTCCTCCGTCCGCT
CCCGTCGGACGGGGACATTGCAATGAGGCGGGATCGCGGCCCTAAGCCGGCCCTGGGTGGAGCTGGCGAGGTGGA
ACCAGGTGGGATGGCAGCCTCTCCCACGGGCCGTCCCAGACGGCTCCAACGCTACCTCCAGAGCGGCGAATTCGA
CCAGTTTCGGGACTTCCCCATCTTTGAGAGCAACTTCGTACAGTTCTGCCCCGACATCTATCCTGCCCCGACCTC
TGACCTCTGGCCCCAGGTGACTCGGTTGGGAGAAGTTGCCAACGAGGTCACCATGGGGGTGGCAGCCTCCAGTCC
AGCCCTGGAGCTCCCGGACCTATTGCTTCTGGCCGGCCCTGCCAAGGAGAACGGACACCTGCAACTCTTCGGGCT
GTTCCCCTTGAAGTTCGTCCAGCTCTTTGTCCACGACAAAAGCCGGTGTCAGCTCGAGGTCAAGTTGAACACCAG
CCGCACCTTCTACTTGCAGCTGCGGGCCCCACTCAAGACCCGAGACCGAGAGTTCGGCCAGTGGGTGCGGCTGCT
CTACCGCCTGCGCTTCCTCTCTGCTTCTGCTGTGCCCTTCACGCAGGAGTAAGAGCCCCAAGGCGTGGAAGCCAG
ACTTGACCCCAAGACCTCTGAACTCTGGGGACTCTGAGTCTTCCAGCATCCTTCAAGGTCACCGAATGACCAGAG
ATCAAAGTACCTTGCCTCAGGGCCGGGCAGATGAGATATTAAAGTTAATAAAGGTCAGTCCATTAAGAACCAA

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FIGURE 3902

GCCGTCCCTTCGCTGGTGGGAAGAAGCCGAGATGGCGGCAGCCAGCGCTGGGGCAACCCGGCTGCTCCTGCTCTT
GCTGATGGCGGTAGCAGCGCCCAGTCGAGCCCGGGGCAGCGGCTGCCGGGCCGGGACTGGTGCGCGAGGGGCTGG
GGCGGAAGGTCGAGAGGGCGAGGCCTGTGGCACGGTGGGGCTGCTGCTGGAGCACTCATTTGAGATCGATGACAG
TGCCAACTTCCGGAAGCGGGGCTCACTGCTCTGGAACCAGCAGGATGGTACCTTGTCCCTGTCACAGCGGCAGCT
CAGCGAGGAGGAGCGGGGCCGACTCCGGGATGTGGCAGCCCTGAATGGCCTGTACCGGGTCCGGATCCCAAGGCG
ACCCGGGGCCCTGGATGGCCTGGAAGCTGGTGGCTATGTCTCCTCCTTTGTCCCTGCGTGCTCCCTGGTGGAGTC
GCACCTGTCGGACCAGCTGACCCTGCACGTGGATGTGGCCGGCAACGTGGTGGGCGTGTCGGTGGTGACGCACCC
CGGGGGCTGCCGGGGCCATGAGGTGGAGGACGTGGACCTGGAGCTGTTCAACACCTCGGTGCAGCTGCAGCCGCC
CACCACAGCCCCAGCCCTGAGACGGCGGCCTTCATTGAGCGCCTGGAGATGGAACAGGCCCAGAAGGCCAAGAAC
CCCCAGGAGCAGAAGTCCTTCTTCGCCAAATACTGGATGTACATCATTCCCGTCGTCCTGTTCCTCATGATGTCA
GGAGCGCCAGACACCGGGGGCCAGGGTGGGGGTGGGGGTGGGGGTGGTGGTGGGGGTAGTGGCCGGTGAGGGCCC
AGGCTGGTCAGCGTCCCGTCTTGCACACCCAGGGGCCTCCCTTTCTGCTGGAGTCCCCTGTGTCCTCAGCCATCC
CAAGAAGGGTTTGCTGGTCCCTCCTTTCCCCCCGTCCCACGAGGCCACCTGGGCCAGCCCCTTGTCCTCTGCCTT
CTGCTGGCAGAGGAGCAGCTGGACTGGGGCCTTTGGCACAGCAGCCGGTGTCTCCTGCGCCCGCCTCCCCCATGG
CCCCATGCAGCCCCAGGGGCTTCCCCCCTGCCCATGGAGTAGAGCCCGAGATCCTGGCCACTATGCCAGTTCTGA
CCTCGCATCCCCCTACCCCGAGCCCATGCAGTCTGGGAACATGCCGCCTTCTCTCCAGCCTCTGTGCCTTTGTTC
CAGGTGGTCTCACCCTCCTGTCCCTGGCTGGGCTAGGTGGTCCTGTCCAGGCTCCTGCAGCGCCCCCCTCACTTT
GACACTGGACTAGGATGCAGCCTCCCTTCTGTGTCCCCTTGAGGGTACCCTGGGTCCCCTCATCAGGGGCAGAGG
CATGAAAGAGTCGGGGCTGGATGGCCGGGGGCTTCTGGGCCCGACGCCTAGTGCAGCCCCTGGGGTCGTGGTTTG
ACATTTGTCTGCCTGGTGCAAACAAGGAATCCTTGCCTTTAAGGTGACAGGCCCTCCACAGGCTTCCAGACTTGA
AGGAAAAGGTTTAAGAAAGAAAACAAAACCAACAGTTAGTGGAGTCAAAGCCCAGACACTGTAAATAGAACCCCC
TCCACCACCCCCCGCCGCCCAGCATCCTACCTGGACTGCGGTGCTACGAGGGCCTGCGGGCCTTTGCTGTGTGCC
ACCCTCCCTGTAAGTCTATTTAAAAACATCGACGATACATTGAAATGTGTGAACGTTTTGAAAAGCTACAGCTTC
CAGCAGCCAAAAGCAACTGTTGTTTTGGCAAGACGGTCCTGATGTACAAGCTTGATTGAAATTCACTGCTCACTT
GATACGTTATTCAGAAACCCAAGGAATGGCTGTCCCCATCCTCATGTGGCTGTGTGGAGCTCAGCTGTGTTGTGT
GGCAGTTTATTAAACTGTCCCCCAGATCGACACGC

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FIGURE 3903

CTTCAGGGCCACGCGGCCCGGGCGTTCCGTGTGGAGCAGGAGTCCCGCGGGGCCCCACGGGAGTCGTAGTCCGGC
GCGCGGGGATCACCGGGAGCTGTAGTCCGTCCCGCCTGCCCAGTCAGCGCGGTGTTGCCCGCCCCGCACTCGGAG
CCCAGAGCCGCCGCCCAGGAAGGGGATGCGGAAACCCCTGGCTCGGTGGAGCGGAGAGGCAGGCGGGCAGGAGCC
GAGGACGGC**ATG**TCCCAGGCCCCGGGAGCACAGCCGAGCCCACCCACCGTGTACCACGAACGGCAGCGCCTGGAG
CTGTGTGCTGTCCACGCCCTCAACAACGTTCTGCAGCAGCAGCTCTTTAGCCAGGAGGCTGCCGATGAGATCTGC
AAGAGGTTGGCCCCAGACTCCCGGCTGAACCCTCATCGCAGCCTCCTGGGCACCGGCAACTATGATGTCAATGTG
ATCATGGCCGCTCTGCAGGGGCTGGGCCTGGCCGCCGTGTGGTGGGACAGGAGGAGGCCCCTGTCCCAGCTGGCC
CTGCCCCAGGTACTGGGGCTGATCCTGAACCTGCCCTCGCCCGTGTCGCTGGGGCTGCTGTCACTGCCGCTGCGC
CGGCGGCACTGGGTGGCCCTGCGCCAGGTGGACGGTGTCTACTACAACCTGGACTCCAAGCTGCGGGCGCCCGAG
GCCCTGGGGGATGAGGACGGAGTCAGGGCCTTCCTGGCGGCTGCGCTGGCCCAGGGCCTGTGCGAGGTGCTGCTG
GTAGTGACCAAGGAGGTGGAGGAGAAGGGCAGCTGGCTGCGGACAGAC**TGA**CCATGGCTGACCATCGGCGCCCAC
AGCGCAGTCCCTGCGCATCCCCCTCCGGCTGCGCACACTGCATGCCTGGGAAAGGCCAGCACTTCATGGACCCTG
GGGAGGCCCCGCCCCCTCCCCACACCCCTGCTCCCCACTGCCGCTGCTGCCTCAATAAATCTGCTGATTTGC

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FIGURE 3904

ATGGGGGTGGGGGGATGCGGGCTGGCAGCGGGAGAGCTGGGGACAGATGCGGAGCCCTCCCTTCACCTGCCCACA
CCTGTCACCTCCACGGTTGCCTTGTCTGCCACCTTACCTCTCTCTCCCTCAGATTCTCCCATGAGTCTGACTCAA
GTCTCTGAAGCTGCTGTGAGGCCCCCACAGGGCCTGGACAGGCCTCTCCCCCTTCTCTCCCCCACCCACAGCCCC
CCAGCGTCCACGCGGAGCATGAACATTGAGGATGGCGCGTGCCCGCGGCTCCCCGTGCCCCCCGCTGCCGCCCGC
AACCAGGCCAGCCGGGTGATCTGCACACGGAGAGACCTGGCCGAGGTCCCAGCCAGCATCCCGGTCAACACGCGG
TACCTGAACCTGCAAGAGAACGGCATCCAGGGTGGGAGGACTTGGCTGCTCCCATCTGACCATCCTGAGAGCCAG
ATTCAGGGAAGAAAAGGGACCTCTCAGGGGAGCAGTCCCTTCCTGGTGGCTGTGGGGCAAGGGCCAGCGAAGGGG
TCCAGAAACGGGTTCTTGCACCGCCCCCTGCCCCACCCAGAGACATGGATGGAGGGTGTGTTCGTCCAGTCCACG
AGAGTGGATGCTTCTGGGTCACTGCGTGCTGAGCGCCGAGCAGCCTCAGGCTGTCCGCCTGTGGCCACGCTGTTG
TCACGGTCCTCTGTCCAGAGGCACCAAGGAGACTTGGAAAACACTGTGGGCTGGAGCCCCAGGTGCACGCTCCCC
GGGACCGGCAGCCCTGCTGAGTCACTTGACTTCACCGAGCCTTGGTCTCCTGTCTCTGAAATGACGTGTGATGCT
CACCTCCAGGGCTGCCGGGGGAGTCAGCAGGAGCCTGGGGTGCCGCAGAGGCTCCGGGAGCTGCAGGCAGGAGCG
ATCAGTGATGACCGGGACCTCCTCCTCCTGTTACTATTATTGATGTTATTATTATTAATAGAAATAGCAACCGAG
TGCCTGCTTTATCAATCACCAGCATTTCCCAGGGAGGTGATAAGCTGCGTTTGGGCATGGTACAAGTTTCTCAAC
GCCAACGATAACGATAACAATGAGAATGACGACGTGCTGAGCACCCCTGAACACTGGGACCTCATCTCCTCTCCC
TCACCCTCTGAAGTGCTTTTCATCATCCTCCTCGTGGTGATCCGGACGGACACGTTCAAGCACCTGCGGCACCTG
GAGATTCTGCAGCTGAGCAAGAACCTGGTGCGCAAGATCGAGGTGGGCGCCTTCAACGGGCTGCCCAGCCTCAAC
ACGCTGGAGCTTTTTGACAACCGGCTGACCACGGTGCCCACGCAGGCCTTCGAGTACCTGTCCAAGCTGCGGGAG
CTCTGGCTGCGGAACAACCCCATCGAGAGCATCCCCTCCTACGCCTTCAACCGCGTGCCCTCGCTGCGGCGCCTG
GACCTGGGCGAGCTCAAGCGGCTGGAATACATCTCGGAGGCGGCCTTCGAGGGGCTGGTCAACCTGCGCTACCTC
AACCTGGGCATGTGCAACCTCAAGGACATCCCCAACCTGACGGCCCTGGTGCGCCTGGAGGAGCTGGAGCTGTCG
GGCAACCGGCTGGACCTGATCCGCCCGGGCTCCTTCCAGGGTCTCACCAGCCTGCGCAAGCTGTGGCTCATGCAC
GCCCAGGTAGCCACCATCGAGCGCAACGCCTTCGACGACCTCAAGTCGCTGGAGGAGCTCAACCTGTCCCACAAC
AACCTGATGTCGCTGCCCCACGACCTCTTCACGCCCCTGCACCGCCTCGAGCGCGTGCACCTCAACCACAACCCC
TGGCATTGCAACTGCGACGTGCTCTGGCTGAGCTGGTGGCTCAAGGAGACGGTGCCCAGCAACACGACGTGCTGC
GCCCGCTGTCATGCGCCCGCCGGCCTCAAGGGGCGCTACATTGGGGAGCTGGACCAGTCGCATTTCACCTGCTAT
GCGCCCGTCATCGTGGAGCCGCCCACGGACCTCAACGTCACCGAGGGCATGGCTGCCGAGCTCAAATGCCGCACG
GGCACCTCCATGACCTCCGTCAACTGGCTGACGCCCAACGGCACCCTCATGACCCACGGCTCCTACCGCGTGCGC
ATCTCCGTCCTGCATGACGGCACGCTTAACTTCACCAACGTCACCGTGCAGGACACGGGCCAGTACACTGGTGGT
GTTGGAGGGGGCAGTGGCGGCTACACCTACTTCACCACGGTGACCGTGGAGACCCTGGAGACGCAGCCCGGAGAG
GAGGCCCTGCAGCCGCGGGGGACGGAGAAGGAACCGCCAGGGCCCACGACAGACGGTGTCTGGGGTGGGGGCCGG
CCTGGGGACGCGGCCGGCCCTGCCTCGTCTTCTACCACGGCACCCGCCCCGCGCTCCTCGCGGCCCACGGAGAAG
GCGTTCACGGTGCCCATCACGGATGTGACGGAGAACGCCCTCAAGGACCTGGACGACGTCATGAAGACCACCAAA
ATCATCATCGGCTGCTTCGTGGCCATCACGTTCATGGCCGCGGTGATGCTCGTGGCCTTCTACAAGCTGCGCAAG
CAGCACCAGCTCCACAAGCACCACGGGCCCACGCGCACCGTGGAGATCATCAACGTGGAGGACGAGCTGCCCGCC
GCCTCGGCCGTGTCCGTGGCCGCCGCGGCCGCCGTGGCCAGTGGGGGTGGTGTGGGCGGGGACAGCCACCTGGCC
CTGCCCGCCCTGGAGCGAGACCACCTCAACCACCACCACTACGTGGCTGCCGCCTTCAAGGCGCACTACAGCAGC
AACCCCAGCGGCGGGGGCTGCGGGGGCAAAGGCCCGCCTGGCCTCAACTCCATCCACGAACCTCTGCTCTTCAAG
AGCGGCTCCAAGGAGAACGTGCAAGAGACGCAGATCTGA

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FIGURE 3905

GACCAACGGACCGGACAGAGACGAGGAGAGGAACAGGAAGAGAGAAGCTGGGAGAATCGGGAACCTGGGGGCTAG
TGACCTGCACACAGGGCAGGGGCACTCGGCAGTTCCCAGAGGCCACCCCTCCCACCCCAGACATCCAGACATCTG
GAACTTTGGGTGCCAAGAGTCCAGCTTA**ATG**CAGGCAGCCTGGCTTTTGGGGGCTTTGGTGGTCCCCCAGCTCTT
GGGCTTTGGCCATGGGGCTCGGGGAGCAGAGAGGGAGTGGGAGGGAGGCTGGGGAGGTGCCCAGGAGGAGGAGCG
GGAGAGGGAGGCCCTGATGCTGAAGCATCTGCAGGAAGCCCTAGGACTGCCTGCTGGGAGGGGGGATGAGAATCC
TGCCGGAACTGTTGAGGGAAAAGAGGACTGGGAGATGGAGGAGGACCAGGGGGAGGAAGAGGAGGAGGAAGCAAC
GCCAACCCCATCCTCCGGCCCCAGCCCCTCTCCCACCCCTGAGGACATCGTCACTTACATCCTGGGCCGCCTGGC
CGGCCTGGACGCAGGCCTGCACCAGCTGCACGTCCGTCTGCACGCGTTGGACACCCGCGTGGTCGAGCTGACCCA
GGGGCTGCGGCAGCTGCGGAACGCGGCAGGCGACACCCGCGATGCCGTGCAAGCCCTGCAGGAGGCGCAGGGTCG
CGCCGAGCGCGAGCACGGCCGCTTGGAGGGCTGCCTGAAGGGGCTGCGCCTGGGCCACAAGTGCTTCCTGCTCTC
GCGCGACTTCGAAGCTCAGGCGGCGGCGCAGGCGCGGTGCACGGCGCGGGGCGGGAGCCTGGCGCAGCCGGCAGA
CCGCCAGCAGATGGAGGCGCTCACTCGGTACCTGCGCGCGGCGCTCGCTCCCTACAACTGGCCCGTGTGGCTGGG
CGTGCACGATCGGCGCGCCGAGGGCCTCTACCTCTTCGAAAACGGCCAGCGCGTGTCCTTCTTCGCCTGGCATCG
CTCACCCCGCCCCGAGCTCGGCGCCCAGCCCAGCGCCTCGCCGCATCCGCTCAGCCCGGACCAGCCCAACGGTGG
CACGCTCGAGAACTGCGTGGCGCAGGCCTCTGACGACGGCTCCTGGTGGGACCACGACTGCCAGCGGCGTCTCTA
CTACGTCTGCGAGTTCCCCTTC**TAG**CGGGGCCGGTACCCCGCCTCCCTGCCCATCCCACCACCCGGCCTTTCCCT
GCGCCGTGCCCACCCTCCTCCGGAATCTCCCTTCCCTTCCTGGCCACGAATGGCAGCGTCCTCCCCGACCCCCAG
TCTGGGCGCTTCTGGGAGGGCTCTTGCGGTGCCGGCACTCCTCCTTGTTAGTGTCTTTCCTTGAAGGGGCGGGCA
CCAGGCTAGGTCCGGTGCCAATAAATCCTTGTGGAATCTG

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FIGURE 3906

CACTCATTAAGAACAGAGGAGGCTGCCTGTTACTCCTGGTGTTGCATCCCTCCAGACACTCTGCTGTTTCCTGCC
TAGGCGTGGCTGCAGCCATGGCTAGGAAAGCGCTGCCACCCACCCACCTGGGCCAGAGCTGGTTCTGCTCCTGCT
GCAGGGACACTGAGCTGGCTATCTCGGCGCTTCGGGCAAGAACTGCAACAGGCTCTCCTGGGTCCTGCAGGTGTA
CAGCCGGGCCCCTGCCTTGTGCCTCAGCTCTCGAGAGCTGCTGCTGCCGGGTGACCTGATCCAACCTGATAAGGT
GCCATCTTCAGCTACCACTGCAAGGCCCTGAGGGCAACAGCAGCACGGCACTGCCCACCCGGCTGCTGATGGCCT
GGTGCCAGCTGGGAGTCCTCCCGGCACTTCGAGGCCACTGAGCCACCCTTCCAGCCCCAGCCCACCATGGACAGG
GGTATCCAGCTTCCTCCTCAACCTCGTCCTCTGCCCCTGAGCCAGTGACGCCCAAGGACATGCCTGTTACCCAGG
TCCTGTACCAGCACTAGCTGGTCAAGGGC**ATG**ACAGTGCTGGAGGCCGTCTTGGAGATCCAGGCCATCACTGGCA
GCAGGCTGCTCTCCATGGTGCCAGGGCCCGCCAGGCCACCAGGCTCATGCTGGGACCCAACCCAGTGCACAAGGA
CTTGGCTGCTGAGCCACACACCCAGGAGAAGGTGGATAAGTGGGCTACCAAGGGCTTCCTGCAGGCTAGGGGAGG
AGCCACCCCCGCTTCCCTATTGTGACCAGGCCTATGGGGAGGAGCTGTCCATACGCCACCGTGAGACCTGGGCCT
GGCTCTCAAGGACAGACACCGCCTGGCCTGGTGCTCCAGGGGTGAAGCAGGCCAGAATCCTGGGGGAGCTGCTCC
TGGTT**TGA**GCTGCATTCAGGAAGTGCGGGACATGGTAGGGGAGGCAAAAAGCCTTGGGCACTACCCTCCCTGTGG
AGCTGTTCGGTGTCCGTCGAGCTAGCCACACCCTGACACCATGTTCAAGGGTACCGGAAGAGAAGGGTGTCTGCC
CCCAACCTCCCCTGTGGGTGTCACTGGCCAGATGTCATGAGGGAAGCAGGCCTTGTGAGTGGACACTGACCATGA
GTCCCTGGGGGGGAGTGATCCCCCAGGCATCGTGTGCCATGTTGCACTTCTGCCCAGGCAGCAGGGTGGGTGGGTA
CCATGGGTGCCCACCCCTCCACCACATGGGGCCCCAAAGCACTGCAGGCCAAGCAGGGCAACCCCACACCCTTGA
CATAAAAGCATCTTGAAGCTTTT

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FIGURE 3907

TCCTCCACCTGCTGGCCCCTGGACACCTCTGTCACCATGTGGTTCCTGGTTCTGTGCCTCGCCCTGTCCCTGGGG
GGGACTGGTGCTGCGCCCCCGATTCAGTCCCGGATTGTGGGAGGCTGGGAGTGTGAGCAGCATTCCCAGCCCTGG
CAGGCGGCTCTGTACCATTTCAGCACTTTCCAGTGTGGGGGCATCCTGGTGCACCGCCAGTGGGTGCTCACAGCT
GCTCATTGCATCAGCGACAATTACCAGCTCTGGCTGGGTCGCCACAACTTGTTTGACGACGAAAACACAGCCCAG
TTTGTTCATGTCAGTGAGAGCTTCCCACACCCTGGCTTCAACATGAGCCTCCTGGAGAACCACACCCGCCAAGCA
GACGAGGACTACAGCCACGACCTCATGCTGCTCCGCCTGACAGAGCCTGCTGATACCATCACAGATGCTGTGAAG
GTCGTGGAGTTGCCCACCGAGGAACCCGAAGTGGGGAGCACCTGTTTGGCTTCCGGCTGGGGCAGCATCGAACCA
GAGAATTTCTCATTTCCAGATGATCTCCAGTGTGTGGACCTCAAAATCCTGCCTAATGATGAGTGCAAAAAAGCC
CACGTCCAGAAGGTGACAGACTTCATGCTGTGTGTCGGACACCTGGAAGGTGGCAAAGACACCTGTGTGGGTGAT
TCAGGGGGCCCGCTGATGTGTGATGGTGTGCTCCAAGGTGTCACATCATGGGGCTACGTCCCTTGTGGCACCCCC
AATAAGCCTTCTGTCGCCGTCAGAGTGCTGTCTTATGTGAAGTGGATCGAGGACACCATAGCGGAGAACTCCTGA
ACGCCCAGCCCTGTCCCCTACCCCCAGTAAAATCAAATGTGCATCC

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FIGURE 3908

GGGCACCATGGCAAGATCCCTTCTCCTGCCCCTGCAGATCTTACTGCTATCCTTAGCCTTGGAAACTGCAGGAGA
AGAAGCCCAGGGTGACAAGATTATTGATGGCGCCCCATGTGCAAGAGGCTCCCACCCATGGCAGGTGGCCCTGCT
CAGTGGCAATCAGCTCCACTGCGGAGGCGTCCTGGTCAATGAGCGCTGGGTGCTCACTGCCGCCCACTGCAAGAT
GAATGAGTACACCGTGCACCTGGGCAGTGATACGCTGGGCGACAGGAGAGCTCAGAGGATCAAGGCCTCGAAGTC
ATTCCGCCACCCCGGCTACTCCACACAGACCCATGTTAATGACCTCATGCTCGTGAAGCTCAATAGCCAGGCCAG
GCTGTCATCCATGGTGAAGAAAGTCAGGCTGCCCTCCCGCTGCGAACCCCCTGGAACCACCTGTACTGTCTCCGG
CTGGGGCACTACCACGAGCCCAGATGTGACCTTTCCCTCTGACCTCATGTGCGTGGATGTCAAGCTCATCTCCCC
CCAGGACTGCACGAAGGTTTACAAGGACTTACTGGAAAATTCCATGCTGTGCGCTGGCATCCCCGACTCCAAGAA
AAACGCCTGCAATGGTGACTCAGGGGGACCGTTGGTGTGCAGAGGTACCCTGCAAGGTCTGGTGTCCTGGGGAAC
TTTCCCTTGCGGCCAACCCAATGACCCAGGAGTCTACACTCAAGTGTGCAAGTTCACCAAGTGGATAAATGACAC
CATGAAAAAGCATCGCTAACGCCACACTGAGTTAATTAACTGTGTGCTTCCAACAGAAAATGCACAGGAGTGAGG
ACGCCGATGACCTATGAAGTCAAATTTGACTTTACCTTTCCTCAAAGATATATTTAAACCAACCTCATGCCCTGT
TGATAAACCAATCAAATTGGTAAAGACCTAAAACCAAAACAAATAAAGAAACACAAAACCCTCA

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FIGURE 3909

ACCAGCGGCAGACCACAGGCAGGGCAGAGGCACGTCTGGGTCCCCTCCCTCCTTCCTATCGGCGACTCCCAGATC
CTGGCCATGAGAGCTCCGCACCTCCACCTCTCCGCCGCCTCTGGCGCCCGGGCTCTGGCGAAGCTGCTGCCGCTG
CTGATGGCGCAACTCTGGGCCGCAGAGGCGGCGCTGCTCCCCCAAAACGACACGCGCTTGGACCCCGAAGCCTAT
GGCTCCCCGTGCGCGCGCGGCTCGCAGCCCTGGCAGGTCTCGCTCTTCAACGGCCTCTCGTTCCACTGCGCGGGT
GTCCTGGTGGACCAGAGTTGGGTGCTGACGGCCGCGCACTGCGGAAACAAGCCACTGTGGGCTCGAGTAGGGGAT
GACCACCTGCTGCTTCTTCAGGGAGAGCAGCTCCGCCGGACCACTCGCTCTGTTGTCCATCCCAAGTACCACCAG
GGCTCAGGCCCCATCCTGCCAAGGCGAACGGATGAGCACGATCTCATGTTGCTGAAGCTGGCCAGGCCCGTAGTG
CTGGGGCCCCGCGTCCGGGCCCTGCAGCTTCCCTACCGCTGTGCTCAGCCCGGAGACCAGTGCCAGGTTGCTGGC
TGGGGCACCACGGCCGCCCGGAGAGTGAAGTACAACAAGGGCCTGACCTGCTCCAGCATCACTATCCTGAGCCCT
AAAGAGTGTGAGGTCTTCTACCCTGGCGTGGTCACCAACAACATGATATGTGCTGGACTGGACCGGGGCCAGGAC
CCTTGCCAGAGTGACTCTGGAGGCCCCCTGGTCTGTGACGAGACCCTCCAAGGCATCCTCTCGTGGGGTGTTTAC
CCCTGTGGCTCTGCCCAGCATCCAGCTGTCTACACCCAGATCTGCAAATACATGTCCTGGATCAATAAAGTCATA
CGCTCCAACTGATCCAGATGCTACGCTCCAGCTGATCCAGATGTTATGCTCCTGCTGATCCAGATGCCCAGAGGC
TCCATCGTCCATCCTCTTCCTCCCCAGTCGGCTGAACTCTCCCCTTGTCTGCACTGTTCAAACCTCTGCCGCCCT
CCACACCTCTAAACATCTCCCCTCTCACCTCATTCCCCCACCTATCCCCATTCTCTGCCTGTACTGAAGCTGAAA
TGCAGGAAGTGGTGGCAAAGGTTTATTCCAGAGAAGCCAGGAAGCCGGTCATCACCCAGCCTCTGAGAGCAGTTA
CTGGGGTCACCCAACCTGACTTCCTCTGCCACTCCCTGCTGTGTGACTTTGGGCAAGCCAAGTGCCCTCTCTGAA
CCTCAGTTTCCTCATCTGCAAAATGGGAACAATGACGTGCCTACCTCTTAGACATGTTGTGAGGAGACTATGATA
TAACATGTGTATGTAAATCTTCATGGTGATTGTCATGTAAGGCTTAACACAGTGGGTGGTGAGTTCTGACTAAAG
GTTACCTGTTGTCGTG

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FIGURE 3910

ATGCACCGAGCAAGAATATCTCAGGCTGTGACCATCTGGAGAGGGTTACGGTTTGAGAAAAGCAGCATTGAAGTT
GACGCTGATCTTGGTAATACATTTGCAGAGCATGCTTATGGTCAGACGTGGATGATGGCGCTCATTCTGCACGAC
GATGAGGTGACCGTCACGGAGGATAAGATCAATGCTCTCATTAAAGCAGCTGGCCTGGTCAATGTCAACATCGGG
AGCCTCATCTGCAGTGTAGAGGCTGGTGGAGCTGCTCCAGCTGAGGAGAAGAAAGTGGAAGCAAAGAAAGAAGAA
TCCGAGGACGGTGATGATGACATGCGCTTTGGTCTTTTTCACTGA

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FIGURE 3911

CCGGCTCTGGCTGGGCCGCCCGCCTCCACAGCCGCCGCCCAGGGTTCTCCCGCCACTGCCGCCCGCACCCCCGCC
CCCGCGGGGTTAAGATCACACACGCGCCCACGCCGGCCCGCGGGGCGTGCACTTTCGCTGGGTTCCGTCCGCCGC
AGCCCAAACAGTTAACTGAACGGGGAGGGGAGGGGGCGGGGCTTACCCGGGGTCACCGCCAGGGCCCTGCTGGGT
TCCACGCCACGTTCCTGTCTCCGCAGGGCGTTCGATCCCTAGAGGGAGGAGCCTGTCCAAACGGACGCTAACGGC
CTACCTCCCCCTCAGGTGCTCTTACAGCCTGTTCCAAGTGTGGCTTAATCCGTCTCCACCACCAGATCTTTCTCC
GTGGATTCCTCTGCTAAGACCGCTGCC**ATG**CCAGTGACGGTAACCCGCACCACCATCACAACCACCACGACGTCA
TCTTCGGGCCTGGGGTCCCCCATGATCGTGGGGTCCCCTCGGGCCCTGACACAGCCCCTGGGTCTCCTTCGCCTG
CTGCAGCTGGTGTCTACCTGCGTGGCCTTCTCGCTGGTGGCTAGCGTGGGCGCCTGGACGGGGTCCATGGGCAAC
TGGTCCATGTTCACCTGGTGCTTCTGCTTCTCCGTGACCCTGATCATCCTCATCGTGGAGCTGTGCGGGCTCCAG
GCCCGCTTCCCCCTGTCTTGGCGCAACTTCCCCATCACCTTCGCCTGCTATGCGGCCCTCTTCTGCCTCTCGGCC
TCCATCATCTACCCCACCACCTATGTCCAGTTCCTGTCCCACGGCCGTTCGCGGGACCACGCCATCGCCGCCACC
TTCTTCTCCTGCATCGCGTGTGTGGCTTACGCCACCGAAGTGGCCTGGACCCGGGCCCGGCCCGGCGAGATCACT
GGCTATATGGCCACCGTACCCGGGCTGCTGAAGGTGCTGGAGACCTTCGTTGCCTGCATCATCTTCGCGTTCATC
AGCGACCCCAACCTGTACCAGCACCAGCCGGCCCTGGAGTGGTGCGTGGCGGTGTACGCCATCTGCTTCATCCTA
GCGGCCATCGCCATCCTGCTGAACCTGGGGGAGTGCACCAACGTGCTACCCATCCCCTTCCCCAGCTTCCTGTCG
GGGCTGGCCTTGCTGTCTGTCCTCCTCTATGCCACCGCCCTTGTTCTCTGGCCCCTCTACCAGTTCGATGAGAAG
TATGGCGGCCAGCCTCGGCGCTCGAGAGATGTAAGCTGCAGCCGCAGCCATGCCTACTACGTGTGTGCCTGGGAC
CGCCGACTGGCTGTGGCCATCCTGACGGCCATCAACCTACTGGCGTATGTGGCTGACCTGGTGCACTCTGCCCAC
CTGGTTTTTGTCAAGGTC**TAA**GACTCTCCCAAGAGGCTCCCGTTCCCTCTCCAACCTCTTTGTTCTTCTTGCCCG
AGTTTTCTTTATGGAGTACTTCTTTCCTCCGCCTTTCCTCTGTTTTCCTCTTCCTGTCTCCCCTCCC

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FIGURE 3912

GCCGCTGTCGCCGCCGCGGAGACAAAGATGGCTGCGAGAGTCGGCGCCTTCCTCAAGAATGCCTGGGACAAGGAG
CCAGTGCTGGTCGTGTCCTTCGTCGTCGGGGGCCTCGCTGTAATTCTGCCCCCATTGAGCCCCTACTTCAAGTAC
TCCGTCATGATCAACAAGGCCACGCCCTACAACTACCCAGTGCCCGTCCGTGATGATGGGAACATGCCCGACGTG
CCCAGCCACCCCCAGGACCCTCAGGGCCCCAGCCTGGAGTGGCTGAAGAAACTGTGAGCACCTCCACTGACAGAG
GCGGCCCCTCCCACGGCTCCCAATAAAAATGTGAAAACC

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FIGURE 3913

AGAAACAGTGGTGCGCGGAGAGGAGAGGCCTCGGGATGTCTCTGGCAGATGAGCTCTTAGCTGATCTCGAAGAGG
CAGCAGAAGAGGAGGAAGGAGGAAGCTATGGGGAGGAAGAAGAGGAGCCAGCGATCGAGGATGTGCAGGAGGAGA
CACAGCTGGATCTTTCCGGGGATTCAGTCAAGACCATCGCCAAGCTATGGGATAGTAAGATGTTTGCTGAGATTA
TGATGAAGATTGAGGAGTATATCAGCAAGCAAGCCAAAGCTTCAGAAGTGATGGGACCAGTGGAGGCCGCGCCTG
AATACCGCGTCATCGTGGATGCCAACAACCTGACCGTGGAGATCGAAAACGAGCTGAACATCATCCATAAGTTCA
TCCGGGATAAGTACTCAAAGAGATTCCCTGAACTGGAGTCCTTGGTCCCCAATGCACTGGATTACATCCGCACGG
TCAAGGAGCTGGGCAACAGCCTGGACAAGTGCAAGAACAATGAGAACCTGCAGCAGATCCTCACCAATGCCACCA
TCATGGTCGTCAGCGTCACCGCCTCCACCACCCAGGGGCAGCAGCTGTCGGAGGAGGAGCTGGAGCGGCTGGAGG
AGGCCTGCGACATGGCGCTGGAGCTGAACGCCTCCAAGCACCGCATCTACGAGTATGTGGAGTCCCGGATGTCCT
TCATCGCACCCAACCTGTCCATCATTATCGGGGCATCCACGGCCGCCAAGATCATGGGTGTGGCCGGCGGCCTGA
CCAACCTCTCCAAGATGCCCGCCTGCAACATCATGCTGCTCGGGGCCCAGCGCAAGACGCTGTCGGGCTTCTCGT
CTACCTCAGTGCTGCCCCACACCGGCTACATCTACCACAGTGACATCGTGCAGTCCCTGCCACCGGATCTGCGGC
GGAAAGCGGCCCGGCTGGTGGCCGCCAAGTGCACACTGGCAGCCCGTGTGGACAGTTTCCACGAGAGCACAGAAG
GGAAGGTGGGCTACGAACTGAAGGATGAGATCGAGCGCAAATTCGACAAGTGGCAGGAGCCGCCGCCTGTGAAGC
AGGTGAAGCCGCTGCCTGCGCCCCTGGATGGACAGCGGAAGAAGCGAGGCGGCCGCAGGTACCGCAAGATGAAGG
AGCGGCTGGGGCTGACGGAGATCCGGAAGCAGGCCAACCGTATGAGCTTCGGAGAGATCGAGGAGGACGCCTACC
AGGAGGACCTGGGATTCAGCCTGGGCCACCTGGGCAAGTCGGGCAGTGGGCGTGTGCGGCAGACACAGGTAAACG
AGGCCACCAAGGCCAGGATCTCCAAGACGCTGCAGCGGACCCTGCAGAAGCAGAGCGTCGTATATGGCGGGAAGT
CCACCATCCGCGACCGCTCCTCGGGCACGGCCTCCAGCGTGGCCTTCACCCCACTCCAGGGCCTGGAGATTGTGA
ACCCACAGGCGGCAGAGAAGAAGGTGGCTGAGGCCAACCAGAAGTATTTCTCCAGCATGGCTGAGTTCCTCAAGG
TCAAGGGCGAGAAGAGTGGCCTTATGTCCACCTGAATGACTGCGTGTGTCCAAGGTGGCTTCCCACTGAAGGGAC
ACAGAGGTCCAGTCCTTCTGAAGGGCTAGGATCGGGTTCTGGCAGGGAGAACCTGCCCTGCCACTGGCCCCATTG
CTGGGACTGCCCAGGGAGGAGGCCTTGGAAGAGTCCGGCCTGGCCTCCCCCAGGACCGAGATCACCGCCCAGTAT
GGGCTAGAGCAGGTCTTCATCATGCCTTGTCTTTTTTAACTGAGAAAGGAGATTTTTTGAAAAGAGTACAATTAA
AAGGACATTGTCAAG

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FIGURE 3914A

AAATTCTCCCTGGGGGTAAGGTACCAGCCCTGTCCTTTATGGGCTTCTTGTTCTAAAGCATATCCGTCCCATATG
GTTGCTGCTAGTCACATGTGGTGATTAGTAACTAGTTAAAAATGAAAAATTCAGTTCCTCCATTACACTTGCCAC
ATTTCAGATGTTCAGTGGCCAACAGATATGCGCAAATAGAGTGTTTCCAGCATTGCAAAGTTCTGTTGGATAGCA
CTGTTTGCCAGATGTTCCCTTCTTTGTGGGTGAGGACTCTTTTGGTGTGACTTCCCTCTGTATTGAGGCTCTTGT
TCCTCAGTATGGGGCTGTTTCTGTCTTTACAGTAAGTGACTACTCCAGGGTTCCCTGCCCTGCACACGTAGAGTG
GGAGCGGCCCGTGGATCCCAGGGAACTGTGCTTTTCATTGTAGGCCCCCTCCCTGGAGGGGAAGAGGGCAATCTC
CGCTGGTATCTCAGAAGTCTTCTTCTGAGGCATAAGCCTCTCTTCCCAGGGCTCCCCTGGTCTCGCTGTCAGGCC
CTAAGGTATGTCTTCCCTTGGACTAAAGCTCCTTGGAACTCCCTTTTGACCTCAGTCTTCTCTGGGTTCCAGGTA
ACTTCCTTTAAAATAAAGACGCTCCTCTCTTGAAGTTTTGGGTTCCTGCCCTGATGGTCTATGTCTCCCTGACTC
TAAATTACCAATCCACTTGCTATGGGATTCCTCCATGAGTGCAGATCGGCTCCCTCACAGCTGCGGTACCTTTGC
ACCCTCTTATCTTAGTAAGATTTCTGTCTTCTCCCAGGTCTCTCTTGGGTACTGCCTTCTGCCCCCAAATCTCTA
AGCCTTCTTGGTATTAGCTTCTTTGGGTTAGGAGTGTTATTTCCTTTTGGTTTAAGGATCCTGCTCTGGAATAAA
TGTCTTGGTGGTTTGAGTCCCTTCTACTTGGCATTCAGCCCTGTCTGCATGAGCGGGTTCAGCTCTTCACAGCTT
TCGGCATCTCTGCTCGCCGTCGTTTTCCCCCACCCCCAATCTTTCTTCTCCTACCTACAGCTTACACACACACAC
ACACACACACACACACACACACACACGCCCTTCTCTGTGAGCTGCCAGTTTCATTTGTCTCCTGACTTGTCTGAG
GGATGACCTCTCCTAGCCACCTCTGCCCAGCCCCTCTGAGTAGGAAGTGTGATTTCCAGGGCTAATGCCTCCATC
CCAGTCATCAGCTGTGTGCAGCATGACTGTCCTGCTCTGAAAAACCTTTTTGAGTGTATTCTGGGGAGAAGGTAC
TCCATGCTCTAGGAATTTTCCACTTCCTGAGTCAGAGGCACACAAAAAAGTATGTAACTTTTCTTGTTTCAACAA
ACTTATGGGGTCCCCTGTTGGCCAGACACTATGCTGGGCAGTCAAGCGAGCATCAGGAGAACTGGGGCTGGTCTC
TTGTCAGATAGCAAATGCTTCTTCTCTTTACCAGTCCCACCTACCTCACTATGCTGACTAGGTCCATGTCTCTGG
GTTTTTACCAGCCAGGGAATACGTGTTAATTCCTCTCCAATCTCTCCTAGCAGCGTCCGTCTCCAAGAGAGTATG
AAGAGAGTGCGTCTGTAGGGCAGGGAAGATGGCGGACAAGCGCAAACTCCAAGGTGAGATTGATCGCTGCCTCAA
GAAGGTGTCCGAGGGCGTGGAGCAGTTTGAAGATATTTGGCAGAAGCTCCACAATGCAGCCAACGCGAACCAGAA
AGAAAAGTATGAGGCTGACCTAAAGAAGGAGATTAAGAAGCTACAACGGCTGAGGGACCAAATCAAGACATGGGT
AGCGTCCAACGAGATCAAGGACAAGAGGCAGCTTATAGACAACCGCAAGCTCATTGAGACGCAAATGGAACGGTT
CAAAGTTGTGGAACGAGAGACCAAAACCAAAGCTTACAGCAAAGAGGGCCTGGGCCTGGCCCAGAAGGTAGATCC
TGCCCAGAAGGAGAAGGAAGAGGTTGGCCAGTGGCTCACGAATACCATCGACACGCTCAACATGCAGGTGGACCA
GTTTGAGAGTGAAGTGGAGTCACTGTCAGTGCAGACACGCAAGAAGAAGGGCGACAAGGATAAGCAGGACCGGAT
TGAGGGCTTGAAGCGGCACATCGAGAAGCACCGCTACCACGTGCGCATGCTAGAGACCATCCTGCGCATGCTGGA
CAATGACTCCATCCTCGTTGACGCCATCCGCAAGATCAAGGACGACGTTGAGTACTATGTTGACTCATCCCAGGA
CCCCGACTTCGAGGAGAACGAGTTTCTCTACGATGACCTGGACCTCGAGGACATTCCACAGGCGCTGGTCGCCAC
CTCCCCTCCCAGCCACAGCCACATGGAGGATGAGATCTTCAACCAGTCCAGCAGCACGCCCACCTCAACCACCTC
CAGCTCTCCCATCCCGCCCAGCCCAGCCAACTGTACCACGGAAAACTCTGAAGATGATAAGAAGAGGGGACGTTC
CACAGACAGTGAAGTCAGCCAGTCTCCAGCCAAAAACGGCTCCAAGCCTGTCCACAGCAACCAGCACCCTCAGTC
CCCAGCTGTGCCGCCCACCTACCCCTCCGGCCCCCCGCCTGCTGCCTCTGCCTTGAGCACCACTCCTGGCAACAA
TGGGGTCCCCGCCCCCGCAGCACCCCCAAGTGCCCTGGGCCCCAAGGCCAGTCCAGCTCCCAGCCACAACTCGGG
CACCCCTGCTCCCTATGCCCAGGCTGTGGCCCCACCAGCTCCCAGTGGGCCCAGCACGACCCAGCCCCGGCCCCC
CAGCGTCCAGCCTAGCGGAGGCGGAGGCGGCGGCAGCGGAGGTGGAGGGAGCAGCAGCAGTAGTAACAGCAGTGC
CGGTGGAGGGGCTGGCAAGCAGAATGGCGCCACCAGTTACAGCTCAGTTGTGGCAGACAGCCCGGCAGAGGTGGC
TTTGAGCAGCAGTGGGGGCAACAATGCCAGCAGCCAGGCCTTGGGCCCCCCTTCCGGCCCCCACAACCCACCTCC
CAGCACCTCGAAGGAACCCAGTGCGGCAGCCCCAACGGGGGCTGGGGGCGTGGCCCCAGGCTCAGGGAACAACTC
AGGGGGACCCAGCCTCCTGGTGCCACTGCCTGTGAATCCTCCCAGCTCCCCAACGCCCAGCTTCAGTGATGCCAA
GGCAGCCGGTGCCCTGCTCAATGGGCCTCCACAGTTCAGCACCGCCCCAGAAATCAAGGCCCCTGAGCCTCTGAG
CTCCTTGAAGTCCATGGCGGAACGGGCAGCCATCAGCTCTGGCATTGAGGACCCTGTGCCAACGCTGCACCTGAC
CGAGCGAGACATCATCCTGAGCAGTACATCAGCACCTCCGGCCTCAGCCCAGCCGCCCCTGCAGCTGTCAGAGGT
GAACATACCGCTGTCGCTGGGTGTCTGTCCACTGGGCCCTGTGCCCCTCACCAAGGAGCAGCTCTATCAGCAGGC
CATGGAAGAGGCCGCCTGGCACCACATGCCTCACCCCTCTGACTCTGAGCGTATTCGGCAGTACCTCCCCCGGAA
CCCCTGTCCGACGCCCCCCTACCACCACCAGATGCCACCCCCACACTCGGACACTGTGGAATTCTACCAGCGCCT

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FIGURE 3914B

GTCGACCGAGACACTCTTCTTCATCTTCTACTATCTGGAGGGCACTAAGGCACAGTATCTGGCAGCCAAGGCCCT
AAAGAAGCAGTCATGGCGATTCCACACCAAGTACATGATGTGGTTCCAGAGGCACGAGGAGCCCAAGACCATCAC
TGACGAGTTTGAGCAGGGCACCTACATCTACTTTGACTACGAGAAGTGGGGCCAGCGGAAGAAGGAAGGCTTCAC
CTTTGAGTACCGCTACCTGGAGGACCGGGACCTCCAG**TGA**CACCGGCCCCTCCCTCTACCCACCCCCTTCCCCCG
CATGCTGATCCCCCTGCCCAGGTGAGGGCCCCTGCCCTGGAAGACTGGAGGGAGGCCCCAAGCCACGGGGCATCC
CCCTCTCCCAGGAAGCAGGGAGGGGGCCGGGAGGTTTTCCTCTCAGCCCCACCCTGGGGGCCCGGGGGCGAGGGC
TGCCCCCTCCTCCCCTCCCCAGTGAGGGACATTTTTTGGTAAACCTATTTTCATTTTGGAAAATATTTATGAATA
AATAGTTTTATATG

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FIGURE 3915

TGTCTGCCTGGTGGCCACTAGAGACAGCCCAGCCTGGGCCATGGAAGAAAACCCGACCTTGGAATCAGAAGCCTG
GGGCTCCTCTAGGGGGTGGCTGGCCCCCCGGGAGGCCAGAGGAGGCCCATCGCTGTCTTCTGTGCTGAACGAGCT
GCCCAGTGCTGCCACCCTTCGGTACCGAGACCCTGGGGTGCTGCCTTGGGGGGCGCTGGAGGAGGAGGAGGAGGA
TGGAGGAAGGAGCAGAAAGGCCTTCACAGAAGTCACCCAGACAGAGCTGCAGGACCCTCACCCTTCCCGGGAACT
GCCCTGGCCCATGCAGGCCAGACGGGCACACAGGCAAAGAAATGCCAGCAGGGACCAGGTGGTCTATGGCTCTGG
AACTAAGACGGACCGATGGGCGCGGCTACTTCGGAGGTCCAAGGAGAAAACAAAGGAAGGCTTGCGAAGCCTGCA
GCCCTGGGCGTGGACACTGAAGAGGATCGGGGGCCAGTTTGGCGCCGGCACGGAGTCCTACTTCTCCCTGCTGCG
CTTCCTGCTCCTTCTTAACGTGCTGGCCTCTGTGCTCATGGCCTGCATGACGCTGCTGCCCACCTGGTTGGGAGG
CGCTCCCCCAGGCCCTCCCGGCCCCGACATCTCCTCGCCCTGCGGCTCCTATAACCCCCACTCCCAGGGCCTGGT
CACCTTTGCCACCCAGCTCTTCAACTTGCTCTCGGGTGAGGGTTACCTGGAATGGTCCCCTCTCTTCTATGGCTT
CTACCCGCCCCCGCCCACGCCTGGCGGTCACCTACCTGTGCTGGGCCTTTGCCGTTGGCCTCATCTGCCTCCTGCT
CATCCTGCATCGCTCGGTGTCTGGGCTGAAGCAGACACTGCTGGCGGAGTCCGAGGCTCTGACCAGCTACAGCCA
CCGGGTGTTCTCGGCCTGGGACTTCGGTCTCTGCGGGGACGTCCACGTGCGGCTGCGCCAGCGCATCATCTTGTA
CGAATTAAAGGTGGAGCTGGAGGAGACAGTGGTGCGGCGCCAGGCTGCGGTGCGGACGCTGGGCCAGCAAGCCAG
GGTTTGGTTGGTGCGGGTGCTGCTCAACCTGCTGGTGGTCGCGCTCCTGGGGGCAGCCTTCTATGGCGTCTACTG
GGCTACGGGGTGCACCGTGGAGCTGCAGGAGATGCCCCTTGTCCAGGAGTTGCCACTGCTGAAGCTTGGGGTGAA
TTACCTTCCGTCCATCTTCATCGCTGGGGTCAATTTTGTGCTGCCGCCCGTGTTCAAGCTCATTGCTCCACTGGA
GGGCTACACTCGGAGTCGCCAGATCGTTTTTATCCTGCTCAGGACCGTGTTTCTTCGCCTCGCCTCCCTGGTGGT
CCTGCTCTTCTCTCTCTGGAATCAGATCACTTGTGGGGGCGACTCCGAGGCTGAGGACTGCAAAACCTGTGGCTA
CAATTACAAACAACTTCCGTGCTGGGAGACTGTCCTGGGCCAGGAAATGTACAAACTTCTGCTCTTTGATCTGCT
GACTGTCTTGGCAGTCGCGCTGCTCATCCAGTTTCCTAGAAAGCTCCTCTGTGGCCTCTGTCCTGGGGCGCTGGG
TCGTCTGGCGGGGACCCAGGAGTTCCAGGTGCCCGACGAGGTGCTGGGGCTCATCTACGCGCAGACGGTGGTCTG
GGTGGGGAGTTTTTTCTGCCCTTTACTGCCCCTGCTTAACACGGTCAAGTTCCTGCTGCTTTTCTACCTGAAGAA
GCTTACCCTCTTCTCCACCTGCTCCCCGGCTGCCCGCACCTTCCGGGCCTCCGCGGCGAATTTCTTTTTCCCCTT
GGTCCTTCTCCTGGGTCTGGCCATCTCCAGCGTTCCCCTGCTTTACAGCATCTTCCTGATCCCGCCTTCTAAGCT
TTGTGGTCCATTCCGGGGGCAGTCGTCCATCTGGGCCCAGATCCCTGAGTCTATTTCCAGCCTCCCTGAGACCAC
CCAGAATTTCCTCTTCTTCCTGGGGACCCAGGCTTTTGCTGTGCCCCTTCTGCTGATCTCCAGCATCCTGATGGC
GTACACTGTGGCTCTGGCTAACTCCTACGGACGCCTCATCTCTGAGCTCAAACGTCAGAGACAGACGGAGGCGCA
GAATAAAGTCTTCCTGGCACGGCGCGCTGTGGCGCTGACCTCCACCAAACCGGCTCTTTGACCCCCGCAGCCCAC
GTCCCGCTTTCAGACCCCAGGCCCATTGTAAGCCTAGGTCACAACATCTGTAAACTAGGAGAACTGGAGAAGACT
CCACGCCCTTCCAGCTTTGGTATCTGGAGATTTCCAGGGCCCCTCGCCGCCACGTCCTGACTCTCGGGTGATCTT
CCTTGTATCAATAAATACAGCCGAGGTTGCTG

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FIGURE 3916

GTTCTCGACTATTGCCGAAGTGAGCCGAAGTTTGTGGCCCCGCTTCCGGAGAACTCAAGCTCCCGATTGTGCCCG
AAGGAACCCGAAGGGAGACCCCGCCTCATTCCTCACGGCGAGCTCCAGACCCCGCCTCCTTTCCGGAGCCCGTCT
GTTCCCCTTCGGGTCCAAAGCTTTTGGCTCCTCCTTGTTCCGAGCCCGAAGGCCCGCCCCTTCACGTACTCGGAG
CTCGGATCCCAGTGTGGACCTGGACTCGAATCCCGTTGCCGACTCGCGCTCTCGGCTTCTGCTCCGGGGCTTCTT
CCCTGCCCGCCCGGGGCCCTGACCGTGGCTTCTTCCCCGGCCTGATCTGCGCAGCCCGGCGGGCGCCCAGAAGGA
GCAGGCGGCGCGGGGGCGCGCTGGGCGGGGGAGGCGTGGCCGGAGCTGCGGCGGCAAGCGGGCTGGGACTGCTCG
GCCGCCTCCTGCCCGGCGAGCAGCTCAGACCATGTCGCCTGAAGAATGGACGTATCTAGTGGTTCTTCTTATCTC
CATCCCCATCGGCTTCCTCTTTAAGAAAGCCGGTCCTGGGCTGAAGAGATGGGGAGCAGCCGCTGTGGGCCTGGG
GCTCACCCTGTTCACCTGTGGCCCCCACACTTTGCATTCTCTGGTCACCATCCTCGGGACCTGGGCCCTCATTCA
GGCCCAGCCCTGCTCCTGCCACGCCCTGGCTCTGGCCTGGACTTTCTCCTATCTCCTGTTCTTCCGAGCCCTCAG
CCTCCTGGGCCTGCCCACTCCCACGCCCTTCACCAATGCCGTCCAGCTGCTGCTGACGCTGAAGCTGGTGAGCCT
GGCCAGTGAAGTCCAGGACCTGCATCTGGCCCAGAGGAAGGAAATGGCCTCAGGCTTCAGCAAGGGGCCCACCCT
GGGGCTGCTGCCCGACGTGCCCTCCCTGATGGAGACACTCAGCTACAGCTACTGCTACGTGGGAATCATGACAGG
CCCGTTCTTCCGCTACCGCACCTACCTGGACTGGCTGGAGCAGCCCTTCCCCGGGGCAGTGCCCAGCCTGCGGCC
CCTGCTGCGCCGCGCCTGGCCGGCCCCGCTCTTCGGCCTGCTGTTCCTGCTCTCCTCTCACCTCTTCCCGCTGGA
GGCCGTGCGCGAGGACGCCTTCTACGCCCGCCCGCTGCCCGCCCGCCTCTTCTACATGATCCCCGTCTTCTTCGC
CTTCCGCATGCGCTTCTACGTGGCCTGGATTGCCGCCGAGTGCGGCTGCATTGCCGCCGGCTTTGGGGCCTACCC
CGTGGCCGCCAAAGCCCGGGCCGGAGGCGGCCCCACCCTCCAATGCCCACCCCCCAGCAGTCCGGAGAAGGCGGC
TTCCTTGGAGTATGACTATGAGACCATCCGCAACATCGACTGCTACAGCACAGATTTCTGCGTGCGGGTGCGCGA
TGGCATGCGGTACTGGAACATGACGGTGCAGTGGTGGCTGGCGCAGTATATCTACAAGAGCGCACCTGCCCGTTC
CTATGTCCTGCGGAGCGCCTGGACCATGCTGCTGAGCGCCTACTGGCACGGCCTCCACCCGGGCTACTACCTGAG
CTTCCTGACCATCCCGCTGTGCCTGGCTGCCGAGGGCCGGCTGGAGTCAGCCCTGCGGGGGCGGCTGAGCCCAGG
GGGCCAGAAGGCCTGGGACTGGGTGCACTGGTTCCTGAAGATGCGCGCCTATGACTACATGTGCATGGGCTTCGT
GCTGCTCTCCTTGGCCGACACCCTTCGGTACTGGGCCTCCATCTACTTCTGTATCCACTTCCTGGCCCTGGCAGC
CCTGGGGCTGGGGCTGGCTTTAGGTGGGGGCAGCCCCAGCCGGCGGAAGGCAGCATCCCAGCCCACCAGCCTTGC
CCCAGAGAAGCTCCGGGAGGAGTAAGCTGTCACGACGCTCCCTCTGCCAGCTGGTCCCGGGAATTCTGTGAACCA
GGCTGCTGTCTCCTCCCCAGAAAGAGTCCTTACCTTGGAGAGGGTCCTGGAGAGAATTTCCTCTTCCCCAGCTAA
ATACCCTGCCTGCAACTGAAGCAGACCCGGGGGTGTCCTCCCTGCCCTCTGCCCAGAGGCCACCTCCACTCCTAC
AAAATCAAAGTATTGTCCAGACAAGAGTCACTGGCCCCTGCTCCAGCTTCTGGGTATCCAGAGAGCACTGCACTT
CCCCAAAACGGAAGGGGCCCCTGGGCAGTGGGTTTTGGGCAAATTCCCTTTCTTTGCATCCACAATGTGGGGTCG
GAGCTTGGGGGCAGGTCCTGGGAGTGGGAAGCCTCTTCCTTGTGTCTTTCGCTCCACTTTTAGCTCATCGCACCA
ATATTGCAGACTTGGAAGGAAGCATAAGCTTCCCATTTCACAAAGGGGAAACTGAGGTGCGGGTGCGCGGGCCTG
GGGACGGCCGTCCCATGGCTTCCATCTGAGCCACCTCGGGACCCCAGCGCTCCTGGCGCCCTCTTCTCATCGCTT
GGCCTATGACAGGTCACCGTGTGTAAATCTTTCCCAATAAAGTGTTGCACAAAG

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FIGURE 3917

CACCTCGACTGCGAATTACTGTTTATGAGGTGACTCGCTGGTTCTATCGGTGGACAGTGGGACATTCTGAAGGGA
GGCAAGGAGGCGGACTGAGCGCTCCCAATTGGGGAGGATGCTGGTGGTGGAGGTGGCGAACGGCCGCTCCCTGGT
GTGGGGAGCCGAGGCGGTGCAGGCCCTCCGGGAGCGCCTGGGTGTGGGGGGCCGCACGGTAGGCGCCCTGCCCCG
CGGGCCCCGCCAGAACTCGCGCCTGGGCCTCCCGCTGCTGCTGATGCCCGAAGAGGCGCGGCTCTTGGCCGAGAT
CGGCGCCGTGACTCTGGTCAGCGCCCCGCGTCCAGACTCTCGGCACCACAGCCTGGCCCTGACATCCTTCAAGCG
CCAGCAAGAGGAGAGCTTCCAGGAGCAGAGCGCCTTGGCAGCTGAGGCCCGGGAGACCCGTCGTCAGGAGCTCCT
GGAGAAGATTACGGAGGGCCAGGCTGCTAAGAAGCAGAAACTAGAACAGGCTTCAGGGGCCAGCTCAAGCCAGGA
GGCCGGCTCGAGCCAGGCTGCCAAAGAGGATGAGACCAGTGATGGCCAGGCTTCGGGAGAGCAGGAGGAAGCTGG
CCCCTCGTCTTCCCAAGCAGGACCCTCAAATGGGGTAGCCCCCTTGCCCAGATCTGCTCTCCTTGTCCAGCTGGC
CACTGCCAGGCCTCGACCGGTCAAGGCCAGGCCCCTGGACTGGCGTGTCCAGTCTAAAGACTGGCCCCACGCCGG
CCGCCCTGCCCACGAGCTGCGCTACAGTATCTACAGAGACCTGTGGGAGCGAGGCTTCTTCCTCAGTGCGGCTGG
CAAGTTCGGAGGTGACTTCCTGGTCTATCCTGGTGACCCCCTCCGCTTCCACGCCCATTATATCGCTCAGTGCTG
GGCCCCCGAGGACACCATCCCACTCCAAGACCTGGTTGCTGCTGGGCGCCTTGGAACCAGCGTCAGAAAGACCCT
GCTCCTCTGTTCTCCGCAGCCTGATGGTAAGGTGGTCTACACCTCCCTGCAATGGGCCAGCCTGCAGTGAACTCC
AGAGACCTAGGGGATGTGGCTGTGTCGGCAGCAAGAGCCTTTCTGGATGTTCCCCAGCTCTTCTCTGGGAGTCTA
GAACATCCTCCTACCTTTCTCCGCGGTTAGTTTTTGATTCCAGGTTTTCGAACACTACATCTTTTTTATGTTCTT
CCTTGTTTCAAAGCACTTATTGGCTGTGTTTTTGTAGTTACCTATTTTCACACTGTGAGCTTCCCGAGAATGGGG
CCTGGGTTTGATTCATCTGTTTTCTACAGGGTTTAAGTCTCAGGAGGTCTCAATAAACTTGGTATATAAATGTT

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FIGURE 3918

CCCGCGCAGGCGCAGACGGGGAAGCGGAGCCAACATGCCAGTGGCCCGGAGCTGGGTTTGTCGCAAAACTTATGT
GACCCCGCGGAGACCCTTCGAGAAATCTCGTCTCGACCAAGAGCTGAAGCTGATCGGCGAGTATGGGCTCCGGAA
CAAACGTGAGGTCTGGAGGGTCAAATTTACCCTGGCCAAGATCCGCAAGGCCGCCCGGGAACTGCTGACGCTTGA
TGAGAAGGACCCACGGCGTCTGTTCGAAGGCAACGCCCTGCTGCGGCGGCTGGTCCGCATTGGGGTGCTGGATGA
GGGCAAGATGAAGCTGGATTACATCCTGGGCCTGAAGATAGAGGATTTCTTAGAGAGACGCCTGCAGACCCAGGT
CTTCAAGCTGGGCTTGGCCAAGTCCATCCACCACGCTCGCGTGCTGATCCGCCAGCGCCATATCAGGGTCCGCAA
GCAGGTGGTGAACATCCCGTCCTTCATTGTCCGCCTGGATTCCCAGAAGCACATCGACTTCTCTCTGCGCTCTCC
CTACGGGGGTGGCCGCCCGGGCCGCGTGAAGAGGAAGAATGCCAAGAAGGGCCAGGGTGGGGCTGGGGCTGGAGA
CGACGAGGAGGAGGATTAAGTCCACCTGTCCCTCCTGGGCTGCTGGATTGTCTCGTTTTCCTGCCAAATAAACAG
GATCAGCGCTTTA

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FIGURE 3919

CGAGGGTGTCGGCATGAGGGGGTGGAGCAAGGAGCGCGTGGCGCGGTGCGCAGTGGGTGGCTCCACCTCGACTGC
GAATTACTGTTTATGAGGAGGATGCTGGTGGTGGAGGTGGCGAACGGCCGCTCCCTGGTGTGGGGAGCCGAGGCG
GTGCAGGCCCTCCGGGAGCGCCTGGGTGTGGGGGGCCGCACGGTAGGCGCCCTGCCCCGCGGGCCCCGCCAGAAC
TCGCGCCTGGGCCTCCCGCTGCTGCTGATGCCCGAAGAGGCGCGGCTCTTGGCCGAGATCGGCGCCGTGACTCTG
GTCAGCGCCCCGCGTCCAGACTCTCGGCACCACAGCCTGGCCCTGACATCCTTCAAGCGCCAGCAAGAGGAGAGC
TTCCAGGAGCAGAGCGCCTTGGCAGCTGAGGCCCGGGAGACCCGTCGTCAGGAGCTCCTGGAGAAGATTACGGAG
GGCCAGGCTGCTAAGAAGCAGAAACTAGAACAGGCTTCAGGGGCCAGCTCAAGCCAGGAGGCCGGCTCGAGCCAG
GCTGCCAAAGAGGATGAGACCAGTGATGGCCAGGCTTCGGGAGAGCAGGAGGAAGCTGGCCCCTCGTCTTCCCAA
GCAGGACCCTCAAATGGGGTAGCCCCCTTGCCCAGATCTGCTCTCCTTGTCCAGCTGGCCACTGCCAGGCCTCGA
CCGGTCAAGGCCAGGCCCCTGGACTGGCGTGTCCAGTCTAAAGACTGGCCCCACGCCGGCCGCCCTGCCCACGAG
CTGCGCTACAGTATCTACAGAGACCTGTGGGAGCGAGGCTTCTTCCTCAGTGCGGCTGGCAAGTTCGGAGGTGAC
TTCCTGGTCTATCCTGGTGACCCCCTCCGCTTCCACGCCCATTATATCGCTCAGTGCTGGGCCCCCGAGGACACC
ATCCCACTCCAAGACCTGGTTGCTGCTGGGCGCCTTGGAACCAGCGTCAGAAAGACCCTGCTCCTCTGTTCTCCG
CAGCCTGATGGTAAGGTGGTCTACACCTCCCTGCAATGGGCCAGCCTGCAGTGAACTCCAGAGACCTAGGGGATG
TGGCTGTGTCGGCAGCAAGAGCCTTTCTGGATGTTCCCCAGCTCTTCTCTGGGAGTCTAGAACATCCTCCTACCT
TTCTCCGCGGTTAGTTTTTGATTCCAGGTTTTCGAACACTACATCTTTTTTATGTTCTTCCTTGTTTCAAAGCAC
TTATTGGCTGTGTTTTTGTAGTTACCTATTTTCACACTGTGAGCTTCCCGAGAATGGGGCCTGGGTTTGATTCAT
CTGTTTTCTACAGGGTTTAAGTCTCAGGAGGTCTCAATAAACTTGGTATATAAATGTT

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FIGURE 3920

AGGCGCAGACGGGGAAGCGGAGCCAACATGCCAGTGGCCCGGAGCTGGGTTTGTCGCAAAACTTATGTGACCCCG
CGGAGACCCTTCGAGAAATCTCGTCTCGACCAAGAGCTGAAGCTGATCGGCGAGTATGGGCTCCGGAACAAACGT
GAGGTCTGGAGGGTCAAATTTACCCTGGCCAAGATCCGCAAGGCCGCCCGGGAACTGCTGACGCTTGATGAGAAG
GACCCACGGCGTCTGTTCGAAGGCAACGCCCTGCTGCGGCGGCTGGTCCGCATTGGGGTGCTGGATGAGGGCAAG
ATGAAGCTGGATTACATCCTGGGCCTGAAGATAGAGGATTTCTTAGAGAGACGCCTGCAGACCCAGGTCTTCAAG
CTGGGCTTGGCCAAGTCCATCCACCACGCTCGCGTGCTGATCCGCCAGCGCCATATCAGGGTCCGCAAGCAGGTG
GTGAACATCCCGTCCTTCATTGGCCGCGTGAAGAGGAAGAATGCCAAGAAGGGCCAGGGTGGGGCTGGGGCTGGA
GACGACGAGGAGGAGGATTAAGTCCACCTGTCCCTCCTGGGCTGCTGGATTGTCTCG

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FIGURE 3921

CCATGACGCCCGCCCTCACAGCCCTGCTCTGCCTTGGGCTGAGTCTGGGCCCCAGGACCCGCGTGCAGGCAGGGC
CCTTCCCCAAACCCACCCTCTGGGCTGAGCCAGGCTCTGTGATCAGCTGGGGGAGCCCCGTGACCATCTGGTGTC
AGGGGAGCCTGGAGGCCCAGGAGTACCAACTGGATAAAGAGGGAAGCCCAGAGCCCTTGGACAGAAATAACCCAC
TGGAACCCAAGAACAAGGCCAGATTCTCCATCCCATCCATGACACAGCACCATGCAGGGAGATACCGCTGCCACT
ATTACAGCTCTGCAGGCTGGTCAGAGCCCAGCGACCCCCTGGAGCTGGTGATGACAGGAGCCTACAGCAAACCCA
CCCTCTCAGCCCTGCCCAGCCCTGTGGTGGCCTCAGGGGGGAATATGACCCTCCGATGTGGCTCACAGAAGGGAT
ATCACCATTTTGTTCTGATGAAGGAAGGAGAACACCAGCTCCCCCGGACCCTGGACTCACAGCAGCTCCACAGTC
GGGGGTTCCAGGCCCTGTTCCCTGTGGGCCCCGTGACCCCCAGCCACAGGTGGAGGTTCACATGCTATTACTATT
ATACAAACACCCCCTGGGTGTGGTCCCACCCCAGTGACCCCCTGGAGATTCTGCCCTCAGGCGTGTCTAGGAAGC
CCTCCCTCCTGACCCTGCAGGGCCCTGTCCTGGCCCCTGGGCAGAGCCTGACCCTCCAGTGTGGCTCTGATGTCG
GCTACAACAGATTTGTTCTGTATAAGGAGGGGGAACGTGACTTCCTCCAGCGCCCTGGCCAGCAGCCCCAGGCTG
GGCTCTCCCAGGCCAACTTCACCCTGGGCCCTGTGAGCCCCTCCAATGGGGGCCAGTACAGGTGCTACGGTGCAC
ACAACCTCTCCTCCGAGTGGTCGGCCCCCAGCGACCCCCTGAACATCCTGATGGCAGGACAGATCTATGACACCG
TCTCCCTGTCAGCACAGCCGGGCCCCACAGTGGCCTCAGGAGAGAACGTGACCCTGCTGTGTCAGTCATGGTGGC
AGTTTGACACTTTCCTTCTGACCAAAGAAGGGGCAGCCCATCCCCCACTGCGTCTGAGATCAATGTACGGAGCTC
ATAAGTACCAGGCTGAATTCCCCATGAGTCCTGTGACCTCAGCCCACGCGGGGACCTACAGGTGCTACGGCTCAC
GCAGCTCCAACCCCCACCTGCTGTCTCACCCCAGTGAGCCCCTGGAGCTCGTGGTCTCAGGACACTCTGGAGGCT
CCAGCCTCCCACCCACAGGGCCGCCCTCCACACCTGGAGGTCCTGAGGACCAGCCCCTTAACCCCCCAGGGTCAG
GCCCTCAGAATGGTCTGGGAAGATACCTGGAGGTTTTGATTGGGGTCTCGGTGGCCTTCGTCCTGCTGCTCTTCC
TCCTCCTCTTCCTCCTCCTCCGACGTCAGCGTCACAGCAAACACAGGACATCTGACCAGAGAAAGACTGATTTCC
AGCGTCCTGCAGGGGCTGCGGAGACAGAGCCCAAGGACAGGGGCCTGCTGAGGAGGTCCAGCCCAGCTGCTGACG
TCCAGGAAGAAAACCTCTATGCTGCCGTGAAGGACACACAGTCTGAGGACAGGGTGGAGCTGGACAGTCAGAGCC
CACACGATGAAGACCCCCAGGCAGTGACGTATGCCCCGGTGAAACACTCCAGTCCTAGGAGAGAAATGGCCTCTC
CTCCCTCCTCACTGTCTGGGGAATTCCTGGACACAAAGGACAGACAGGTGGAAGAGGACAGGCAGATGGACACTG
AGGCTGCTGCATCTGAAGCCTCCCAGGATGTGACCTACGCCCAGCTGCACAGCTTGACCCTTAGACGGAAGGCAA
CTGAGCCTCCTCCATCCCAGGAAGGGGAACCTCCAGCTGAGCCCAGCATCTACGCCACTCTGGCCATCCACTAGC
CCGGGGGGTACGCAGACCCCACACTCAGCAGAAGGAGACTCAGGACTGCTGAAGGCACGGGAGCTGCCCCCAGTG
GACACCAGTGAACCCCAGTCAGCCTGGACCCCTAACACAGACCATGAGGAGACGCTGGGAACTTGTGGGACTCAC
CTGACTCAAAGATG

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FIGURE 3922

TGCGTCTCTGCTGATCTGAGTCCACCCTGCAGCATGGACCTGCATCTTCCCTGAAGGATCTCCAGGGCTGGAGGG
ACGACTGCCAGCACCGAGGGCTCATCCATCCGCAGAGCAGGGCAGTGGGAGGAGACGCCATGACCCCCATCGTCA
CAGTCCTGATCTGTCTCGGGCTGAGTCTGGGCCCCAGGACCCACGTGCAGACAGGGACCATTCCCAAGCCCACCC
TGTGGGCTGAGCCAGACTCTGTGATCACCCAGGGGAGTCCCGTCACCCTCAGTTGTCAGGGGAGCCTTGAAGCCC
AGGAGTACCGTCTATATAGGGAGAAAAAATCAGCATCTTGGATTACACGGATACGACCAGAGCTTGTGAAGAACG
GCCAGTTCCACATCCCATCCATCACCTGGGAACACACAGGGCGATATGGCTGTCAGTATTACAGCCGCGCTCGGT
GGTCTGAGCTCAGTGACCCCCTGGTGCTGGTGATGACAGGAGCCTACCCAAAACCCACCCTCTCAGCCCAGCCCA
GCCCTGTGGTGACCTCAGGAGGAAGGGTGACCCTCCAGTGTGAGTCACAGGTGGCATTTGGCGGCTTCATTCTGT
GTAAGGAAGGAGAAGAAGAACACCCACAATGCCTGAACTCCCAGCCCCATGCCCGTGGGTCGTCCCGCGCCATCT
TCTCCGTGGGCCCCGTGAGCCCGAATCGCAGGTGGTCGCACAGGTGCTATGGTTATGACTTGAACTCTCCCTATG
TGTGGTCTTCACCCAGTGATCTCCTGGAGCTCCTGGTCCCAGGTGTTTCTAAGAAGCCATCACTCTCAGTGCAGC
CGGGTCCTGTCGTGGCCCCTGGGGAAAGCCTGACCCTCCAGTGTGTCTCTGATGTCGGCTATGACAGATTTGTTC
TGTACAAGGAGGGGGAACGTGACCTTCGCCAGCTCCCTGGCCGGCAGCCCCAGGCTGGGCTCTCCCAGGCCAACT
TCACCCTGGGCCCTGTGAGCCGCTCCTACGGGGGCCAGTACAGATGCTACGGTGCACACAACCTCTCCTCTGAGT
GCTCGGCCCCCAGCGACCCCCTGGACATCCTGATCACAGGACAGATCCGTGGCACACCCTTCATCTCAGTGCAGC
CAGGCCCCACAGTGGCCTCAGGAGAGAACGTGACCCTGCTGTGTCAGTCATGGCGGCAGTTCCACACTTTCCTTC
TGACCAAGGCGGGAGCAGCTGATGCCCCACTCCGTCTAAGATCAATACACGAATATCCTAAGTACCAGGCTGAAT
TCCCCATGAGTCCTGTGACCTCAGCCCACGCGGGGACCTACAGGTGCTACGGCTCACTCAACTCCGACCCCTACC
TGCTGTCTCACCCCAGTGAGCCCCTGGAGCTCGTGGTCTCAGGACCCTCCATGGGTTCCAGCCCCCCACCCACCG
GTCCCATCTCCACACCTGCAGGCCCTGAGGACCAGCCCCTCACCCCCACTGGGTCGGATCCCCAAAGTGGTCTGG
GAAGGCACCTGGGGGTTGTGATCGGCATCTTGGTGGCCGTCGTCCTACTGCTCCTCCTCCTCCTCCTCCTCTTCC
TCATCCTCCGACATCGACGTCAGGGCAAACACTGGACATCGAGTCCAGCCCAGCTGCCGACGCCCAGGAAGAAAA
CCTCTATGCTGCCGTGAAGGACACACAGCCTGAAGATGGGGTGGAGATGGACACTCGGGCTGCTGCATCTGAAGC
CCCCCAGGATGTGACCTACGCCCAGCTGCACAGCTTGACCCTCAGACGGAAGGCAACTGAGCCTCCTCCATCCCA
GGAAAGGGAACCTCCAGCTGAGCCCAGCATCTACGCCACCCTGGCCATCCACTAGCCCGGAGGGTACGCAGACTC
CACACTCAGTAGAAGGAGACTCAGGACTGCTGAAGGCACGGGAGCTGCCCCCAGTGGACACCAATGAACCCCAGT
CAGCCTGGACCCCTAACAAAGACCATGAGGAGATGCTGGGAACTTTGGGACTCACTTGATTCTGCAGTCGAAAT

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FIGURE 3923

CCAGAGCCAGCCGGGTGGCACAGCGGTGTCGTGGCCGTGTTGCTGATCGCCTGGGTGGTTGTTGGCGTGTCCCTG
CAGCGAAGGATCCTGGCAGTGAAAAAGCAGTCTGGCTCCCGAGGTCCACCCCTTATACCCCAAGGTCCAGATGGC
GGCCAACGTGGGTGATCAACGTAGCACAGATTGGTCTTCTCAGTACAGCATGGTGGCTGGGGCAGGCCGAGAGAA
TGGCATGGAGACGCCGATGCACGAGAACCCGGAGTGGGAGAAGGCCCGTCAGGCCCTGGCCAGCATCAGCAAGTC
AGGAGCTGCCGGCGGCTCTGCCAAGTCCAGCAGCAATGGGCCTGTGGCCAGTGCACAGTACGTGTCCCAGGCAGA
AGCCTCAGCTTTGCAGCAGCAGCAGTACTACCAGTGGTACCAGCAGTACAACTATGCCTACCCCTACAGCTACTA
CTATCCCATGCCCCCAGTCCCCGGCATGGATGAGAGCATGTCCTACCAGGCTCCCCCTCAGCAGCTGCCGTCGGC
TCAGCCCCCTCAGCCCTCAAATCCCCCACATGGGGCTCACACGCTGAACAGTGGCCCTCAGCCTGGGACAGCTCC
AGCCACACAGCACAGCCAGGCGGGGCCCGCCACGGGCCAGGCCTATGGGCCACACACCTACACCGAACCTGCCAA
GCCCAAGAAGGGCCAACAGCTGTGGAACCGCATGAACCGCCCCTGGGACTGGAGGTCTCAAGTTCAACATCCAGA
AGCGACCCTTTGCTGTTACCACCCAGAGCTTTGGCTCCAACGCAGAGGGCCAGCACAGTGGTTTTGGCCCCCAGC
CCAACCCTGAGAAAGTTCAGAACCACAGCGGGTCCTCTGCCCGGGGGAACCTGTCTGGGAAGCCCGATGACTGGC
CCCAGGAC**ATG**AAAGAGTATGTGGAGCGCTGCTTCACCGCCTGTGAGTCGGAGGAGGACAAGGACCGCACGGAAA
AGCTGCTCAAGGAGGTGCTGCAGGCGCGGCTGCAGGACGGCTCGGCCTATACCATTGACTGGAGCCGGGAGCCCT
TGCCGGGGCTGACCCGGGAGCCTGTGGCTGAGAGCCCTAAGAAGAAGCGGTGGGAGGCCGCTAGCAGCCTTCACC
CTCCTAGAGGGGCAGGCTCGGCGACAAGGGGCGGGGGTGCCCCGTCCCAGCGAGGGACGCCCGGGGCTGGGGGTG
CCGGTCGAGCCCGGGGCAACAGCTTCACCAAGTTTGGCAACCGCAACGTCTTCATGAAGGACAACAGCTCTTCTT
CCAGCACAGACTCCCGCTCCCGCTCCTCCTCCAGGTCCCCGACGCGCCACTTCCGCAGAAGTGACTCCCACTCAG
ACTCCGACAGCTCCTACTCAGGGAATGAGTGTCACCCTGTGGGCCGCAGGAACCCGCCCCCTAAGGGCCGGGGCG
GTCGAGGGGCCCATATGGATCGGGGCCGAGGCAGGGCGCAGCGTGGGAAGAGGCACGATCTGGCGCCCACCAAGC
GCAGTCGAAAGAAGATGGCGGCGCTGGAGTGTGAGGACCCGGAGCGAGAGCTGAAGAAGCAGAAGCGGGCAGCCC
GCTTCCAGCACGGACACTCCCGCCGCCTGCGCCTCGAGCCCCTGGTGCTGCAGATGAGCAGCCTGGAGAGCAGTG
GGGCTGACCCTGACTGGCAGGAGCTGCAGATCGTGGGCACCTGCCCTGACATCACCAAGCACTACCTGCGCCTCA
CCTGTGCCCCCGACCCGTCCACCGTGCGCCCTGTGGCAGTTTTGAAAAAGTCGCTGTGCATGGTCAAGTGCCACT
GGAAAGAGAAGCAGGACTACGCGTTTGCCTGCGAGCAGATGAAGTCGATCCGGCAGGATCTGACGGTGCAGGGCA
TCCGCACCGAGTTCACGGTGGAGGTGTACGAGACCCATGCCCGGATCGCCTTGGAGAAGGGTGACCATGAAGAGT
TTAACCAGTGCCAGACGCAGCTCAAGTCGCTGTACGCCGAGAACTTGCCTGGCAATGTGGGCGAGTTTACTGCCT
ACCGAATCCTCTACTACATCTTCACCAAGAACTCGGGAGACATCACCACGGAGCTGGCATACCTCACACGAGAAC
TGAAGGCAGATCCTTGCGTGGCCCACGCCTTGGCATTAAGGACAGCCTGGGCCCTGGGCAACTACCACCGCTTTT
TCCGGCTCTACTGCCATGCACCCTGCATGTCTGGCTACCTCGTGGACAAGTTTGCAGATCGGGAGCGCAAGGTCG
CCCTCAAGGCCATGATCAAAACGTATGTGGTGCCAAGCTCCCTTCTGCCTTTGCTCTTCCCATCCTTCCGCCTCG
TCTCAAGTTGTATAAAGTTGTCTCCGTGTCCCCTCCTCCCTCTGCCCCCAGTGTTTCTTCTGATTTTTTTTTCCC
CTTTCCCTCCCTCCCTCTCCGCATTCTTCCCTTGGTTCAGCACAGGTAAAACGGTTCCCCTCCCTCCCTCTTCTG
CCATG**TAA**CTGGAGGATGTGCTATGAGTTTGCAAACAGCTGGACTGTCAGGCTGCTTTTTTTCCAGATGTTCCTC
CTCTGCCTCCCCTTCCCCTCCTCTCCCCTCCTTTTCCTTCCTTCCTTCCTTTCCTTGGAGCACTGAGCACCATTT
GGAAGCTTGAGAGAAACCAAAATTAAAGAGAGAAAGAGAGAG

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FIGURE 3924

CTGGCCAGGTGGCCCTCCATGTGAGGTTGTGGTCACAGCATGGGGGCCTTGAGAGCCTGGCCAGGTGGCCCTCCA
CGTGAGGTCATGGTCACAGCATGGAGGCCTTGAGAGCCTGGCCAGGTGGCCCTCCGTGTGAGGTCATGGTCACAG
CATAGTTTGGAGCTAGGGAGGGACTGTCAGCCTGGAGGTTTGGAGACTCATTCTGGAATCTAGTGTGGGTCAAGC
CAACTTCAGGGAGAGGCTGAGCCAGGGTAGGAGTCACAGGAGCAGACGAGGATGTGGGGTGCCGTGCACAGAGCT
CCATGACCAGCTTGGGAAGTTAGAAGGAAGGGGAGGCAGGAGGCTGCTTAGTCTGCTGCCATGATGGGCCCCATG
AATGGTGGCTCTCAAGCTTCTGTGCTACACAGGGGTGTGTGGTTGGGCGAGTGTCCTTGTTAATTGATACCTAAT
TGGCCTTGGTTGGGAACATAGCCATGAGTGCCCCTCGTGGGTGGGGCGCCAGTCTGTCATTGACCTCATTGTGTC
AGCACCTTCCCCTCAAGGAGGCTGACCCTGCCCTGCCAGCTGAGACTGGGAGACGGAGTGGGCTCTGATCCCAGG
GCTTCCAGGAAAGCTCTGGCTTTGGAGCAGAAGCGGGTTCTAGGACTTAGTGCCCCTCACTCGGTGCCTGGGTTC
CTGTGTGTGTGGAAAGGGTAGGGCTGCACCCTGTGGAAGAGGGTTCAGGGAGCTCTGAGGACCTGGCTCGTGCTA
GATGCTCAGTCAGTAGTGTGTTTTAGCAGCAGCCGGAAGTGACTGCTTTCAGTGTGTAGTGGTGAGTGCTAGCTG
GCACCCCTGCGCCTGGCTTCCCAGACACTGTAACGCAGGGCAGGGGAGGCAGCGAGGGCTGGGTCCCCACGGTGG
CCCTGGCAGCCCCGCCATCCCCATCCCCTGCCACGTGCTGCTCCCTCCATCTGGTCCCTGCCCCTCAGCCAGCGG
AGGAGCCCGCTGGGCCCTTCCCTGCCCGTCCCCGCTCCTCCCTGGCCCCCGCACAGGTAAGTGAGGGTGAGGGGG
GCACAGGGGACTGGGGTCACTAACCCCCCCCCGGGCCCCCCCCGAGCCCCTGAGGTGGGGAGGCTGGGAGGCGGG
TGGGGAGCCAGCAGGCACTGTGCTGAGGAAATCCTGTGGGCACCCGAATGGGGGGGCCTCCCCGCTCGTGGGGCC
CTCCCCTGCCCTCCCGCCCGCCCGCCTCATCACCTTCTCCTCTTGTCTCCATAGCTTCCGCCCTGCGCTGCCAGT
CTCCTACCTGCAGGCCGAGCTGGCCTTCGAGGGCGAGGCCGCCTGCCGGGCCTTCCTAGAGCCCCTGGGCCTGGC
CTACACGGGCCCGGACAACTCCAGCATCGACTGCCGCCTCAGCCTGGCGCAGCTGTCAGCCTTCTGAGCACCCAG
CGAGGAGGGGCGGGGGCAGGGGCTGCAGCCCCCAGCGCTGCCTTTGCGGATTCTGTTTTTGAGCCGTGGACTTGG
GTTGTAAATTTATTTGTGGGGAGTGCGCTCCAGGAAGAGCCACCATCCCTGCCCCCGTTTTCCCACCGGGGAGTC
TGTACAGAGATTTTTCTACGTTTTTATTTTTTGCCTCAGAGGGATGGGATTGGGGAGGAGGGGATGGCAGCGGA
GGGTTGGGGGCATGGTCTGCAGGCTCATCTGTGTCCGCCTTTCACTCCACTAATGCTGTCTCAGTGTTTTCTCTC
TCTCTCTTTCGAGCTTGCACTCCGGTACCCGACCCGGCGCCCTGGCCCATCCCATGCCGGGGGGCCAGTGGAAAG
AAGACAGGCCGTCCAGCCCGTGCCCGCCTGCGGCGGGGGCACCCAGCAAGCCCGCCCACCGCCCGCTGCCTCACC
TGCTTCGCCACAGACTCTTGTTCCCAGCCCCTTGGGGCCTCCGTGTTTGGGGTGGGGGAGCTGCTTAGAGACTGT
GCCCGTCCTCGGCCCCCCACCCTGAAGTGCCAGCACCACCAGCACCAGATCCTCCGCCGCCACACCGCACTGAGG
ACACGCCGGCCGGGCCGCCTCGTCTCAAGTTGTATAAAGTTGTCTCCGTGTCCCCTCCTCCCTCTGCCCCCAGTG
TTTCTTCTGATTTTTTTTTCCCCTTTCCCTCCCTCCCTCTCCGCATTCTTCCCTTGGTTCAGCACAGGTAAAACG
GTTCCCCTCCCTCCCTGCCTTCATGGATCACCAGCTCACGTCATGTTGCCTTCTCTTTTCTTTGTGTGTGTGTTT
ATTTAAGTTATTTTTCTTCCTCCTCTCCCTTTTCTTTTTGGCCCTCCCTCCCTCCCTCTTCTGCCATGTAACTGG
AGGATGTGCTATGAGTTTGCAAACAGCTGGACTGTCAGGCTGCTTTTTTTCCAGATGTTCCTCCTCTGCCTCCCC
TTCCCCTCCTCTCCCCTCCTTTTCCTTCCTTCCTTCCTTTCCTTGGAGCACTGAGCACCATTTGGAAGCTTGAGA
GAAACCAAAATTAAAGAGAGAAAGAGAGAGCGTGCACGCTCCTGCTTTGTC

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FIGURE 3925

GCCTTTACGCAGCTTGCTTTCCTGGCGCTGGGGGAGGGCGCAGCCGGGAAGTCCCAGAGCAGCGGTGTCAGGCTC
TCCACCAAGGAGGGACTGGGCCAGAGTCCTCGCGAGGGCACGCGGCGTGGTCCCCAGAGCTAGGCCGGAGCGCGG
GCCGCTGACGCCACTGTCGGGTGAGGCTCGGTGCATCCATGGGGAGCCGCCCTCCGTGCGGGGCGACCTCGTCTG
CGCGGCGGGCGTGCCAGTTCCCCGCACCC**ATG**GCAGCGGCCAGAGAGCCGGAGTTGCCGCAGGAAGCCCCCGCCA
CGGAACCCGCGCCCCCGCCGGCCTGCCGCTTCTTCCTGGAAGGCCGCTGCCGCTTCGGCGCCCGCTGCCGCCAGC
CCCACCCTGGGGCGCCGGCGCCGCCTGGCCGCGAGGCGCAGCCGGAGGCCGGGGCCAAGAAGCCGCCGCTGCGCA
CAGCCGCGGACGTCATCCAGCGCATCCGCTGGGACCCGCGCCTCGACCCCGCCGACTTCTCGGTGGGCTACGTCG
ACCGCTTTCTGGGTGTGCGCGAGGAGCCCTTCAGCGCCTTTTGCTGGGACCAGCCGCTGGCGGCGCTCGGGCCGG
GCGTGCTGGCAGTGCCCCAGCACCGCGTGCGCTTCTTCCGCTTCCATGGCCGCCTTGTGTGGGACCGCGCCTCGC
GCACCGACCTCGTCTTTGGCTCTGGCTCGGCGGCGGGACGCGGGCCCACCATCCTGGACGCACCGAACACCGAGG
GCGCCCACGGGGCAGAGGGTGCCGAGTGGACACTGGCGGGGACAGGTCAGGAGGCCCAGGCTGCCCCCAAGCGAG
GGAGCACAAGGCCGCTCTGCACAGGGCACCAGGAACCAGGCGTGGAGGAACCCGGAGAGCTGGAGGCGGCCCAGG
AGAGGGCGCTGGGCACAGCTGCTGATTTGGGAACACTGGCCCCAAGAGGACGCCTCGCCGGAGTGACTGAGGAGG
CACTGAAGCCAACAGCAGCCACCAGGACCACATTGCTGGGGGGCAAGGAAGCACAGGCCCTGGGAGTCCCGGGGG
GCTCCGCTGAGACGACAGAAGCCGAGTGGGGTCCTGCGGCCTGGCCCGAGGACAAAAGGGCCCGCCTTAGTGTTG
CAGCCCCTTGCCAACCGCGCCCCACACATTTTGTGGCCCTCATGGTGACCGAGCCTGGGCTACAAGCAGAAGTGA
CCAAGGCCCAGGAATACCTGGTCCACGTGGCCCCACACTGCGCCAACTTCCTAGTGCCCTCTCAGAACCTACACC
TGACCCTGGCCCTGCTGCGACTGGCAGGCGCTGGGGAGGAGGCCGCTGCCATTGGAGCTCTGAGACGGGCCCTCT
TGGCCCCGGGGCTAAATGCACCCCCTCGGCTGAGCTTTAGAAAGCTGGTCCTCCTGGGCCCGCATGTGCTGTGTG
CCCCACCCTCTCCCACACTGGAAAGCATGGCACAAGTGCTGAGCCAGAGGCTGGAAGCCGAGGGGCTGAGTACAC
TACAGTCTCCAGGGCAGCTGCACCCCCACCTCACCGTGGCCAAGGTGCCCCATGGTTCCCAGGTCCACCTCCCCA
AGCTGGAGTTCACCCTCAGCCAGGAAGTGGGGTGCCAGCCCCTGCAGACACTCTGGCTGTGCCGTATAGGGAGGA
CAGGGGGGCCTTTCCAGCCCCTGGCTGAGATCCGCCTGGAG**TGA**CACCCCCAGACCTCTGGAGGAGACAATGGAT
GCAAACAGCCCACACAGGAAAGACAAAGCAGGAGCGTGCACGCTCTCTCTTTCTCTCTTTAATTTTGGTTTCTCT
CAAGCTTCCAAATGGTGCTCAGTGCTCCAAGGAAAGGAAGGAAGGAAGGAAAAGGAGGGGAGAGGAGGGGAAGGG
GAGGCAGAGGAGGAACATCTGGAAAAAAAGCAGCCTGACAGTCCAGCTGTTTGCAAACTCATAGCACATCCTCCA
GTTACATGGCAGAAGAGGGAGGGAGGGAGGGCC

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FIGURE 3926

GTTGATGGTGACAGCAGCAGTGACCGTAGCAGCCTAGAGGTGGCCGAATGCTTACTCTAATGGGCTGGCCCATCC
CTGAGTGTCTAGAGTTCCCAGCCCGCTTAAGGAAGGAAGGAAAACACAGGCAGCTCTAAGTGTACGACGAGGGAG
GTCTCATCGGCGGTGAGGAAGCCCAGGCGGGTCCCCTTCCCAGCTGAAAGGGGTTCGGAATTTCACTCTGTCGCC
AGGCTGGAATGCAGTAGGGCAATCTCGGCTCACTGCAACCTCCACCTCCCGAGTTCAAGTGATGCTCCTGCTTCG
GCCTCCTGAGTAGCTGGGACTACAGGGACTATGTCACCGGTGGGGCTTGCCCCAGCAAGGCCACCATCCCTGGGA
AGACGGTCATCGTGACGGGTGCCAACACAGGCATCGGGAAGCAGACCGCCTTGGAACTGGCCAGGAGAGGAGGCA
ACATCATCCTGGCCTGCCGAGAC**ATG**GAGAAGTGTGAGGCGGCAGCAAAGGACATCCGCGGGGAGACCCTCAATC
ACCATGTCAACGCCCGGCACCTGGACTTGGCTTCCCTCAAGTCTATCCGAGAGTTTGCAGCAAAGATCATTGAAG
AGGAGGAGCGAGTGGACATTCTAATCAACAACGCGGGTGTGATGCGGTGCCCCCACTGGACCACCGAGGACGGCT
TCGAGATGCAGTTTGGCGTTAACCACCTGGGTCACTTTCTCTTGACAAACTTGCTGCTGGACAAGCTGAAAGCCT
CAGCCCCTTCGCGGATCATCAACCTCTCGTCCCTGGCCCATGTTGCTGGGCACATAGACTTTGACGACTTGAACT
GGCAGACGAGGAAGTATAACACCAAAGCCGCCTACTGCCAGAGCAAGCTCGCCATCGTCCTCTTCACCAAGGAGC
TGAGCCGGCGGCTGCAAGGCTCTGGTGTGACTGTCAACGCCCTGCACCCCGGCGTGGCCAGGACAGAGCTGGGCA
GACACACGGGCATCCATGGCTCCACCTTCTCCAGCACCACACTCGGGCCCATCTTCTGGCTGCTGGTCAAGAGCC
CCGAGCTGGCCGCCCAGCCCAGCACATACCTGGCCGTGGCGGAGGAACTGGCGGATGTTTCCGGAAAGTACTTCG
ATGGACTCAAACAGAAGGCCCCGGCCCCCGAGGCTGAGGATGAGGAGGTGGCCCGGAGGCTTTGGGCTGAAAGTG
CCCGCCTGGTGGGCTTAGAGGCTCCCTCTGTGAGGGAGCAGCCCCTCCCCAGA**TAA**CCTCTGGAGCAGATTTGAA
AGCCAGGATGGCGCCTCCAGACCGAGGACAGCTGTCCGCCATGCCCGCAGCTTCCTGGCACTACCTGAGCCGGGA
GACCCAGGACTGGCGGCCGCCATGCCCGCAGTAGGTTCTAGGGGGCGGTGCTGGCCGCAGTGGACTGGCCTGCAG
GTGAGCACTGCCCTGGGCTCTGGCTGGTTCCGTCTGCTCTGCTGCCAGCAGGGGAGAGGGGCCATCTGATGCTTC
CCCTGGGAATCTAAACTGGGAATGGCCGAGGAGGAAGGGGCTCCGTGCACTTGCAGGCCACGTCAGGAGAGCCAG
CGGTGCCTGTCGGGGAGGGTTCCAAGGTGCTCCGTGAAGAGCATGGGCAAGTTGTCTGACACTTGGTGGATTCTT
GGGTCCCTGTGGGACCTTGTGCATGCATGGTCCTCTCTGAGCCTTGGTTTCTTCAGCAGTGAGATGCTCAGAATA
ACTGCTGTCTCCCATGATGGTGTGGTACAGCGAGCTGTTGTCTGGCTATGGCATGGCTGTGCCGGGGGTGTTTGC
TGAGGGCTTCCTGTGCCAGAGCCCAGCCAGAGAGCAGGTGCAGGTGTCATCCTGAGTTCAGGCTCTGCACGGCAT
GGAGTGGGAACCCCACCAGCTGCTGCTACAGGACCTGGGATTGCCTGGGACTCCCACCTTCCTATCAATTCTCAT
GGTAGTCCAAACTGCAGACTCTCAAACTTGCTCATTT

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FIGURE 3927

GATCTCTTCCAA**ATG**TCCCCGCTCTCCCCAGGCTCTCCCCTCCCGCCACTTGCCAGGGCTGACCTCACCGCCATC
TTAACCGGGTGTCCACCTCTCTCTGCCTGCCTGGTGCTGGCCCCGCGTCCCCATCGCCGCGCCCGTCTGCTCCCC
TCAGAGGGCTTGCTGACGCTGCGGGCCAAGCCGCCCTCGGAGGCCGAGTACACCGACGTGCTGCAGAAGATCAAG
TACGCCTTCAGCCTGCTGGCCCGGCTGCGCGGCAACATCGCCGACCCCTCCTCTCCGGAGCTGTTGCACTTCCTT
TTCGGGCCTCTGCAGATGATTGTGAACACGTCGGGGGGGCCGGAGTTCGCGAGCAGTGTGCGGCGGCCGCATCTG
ACATCGGATGCCGTGGCGCTGCTGCGGGACAACGTCACTCCACGTGAAAACGAGCTCTGGACCTCGCTGGGGGAC
TCGTGGACCCGCCCCGGGCTGGAGCTGTCCCCGGAGGAGGGACCCCCATACAGACCCGAGTTCTTCAGCGGCTGG
GAGCCGCCGGTCACTGACCCGCAGAGCCGCGCCTGGGAGGACCCAGTTGAGAAACAGCTACAGCACGAGCGGAGG
CGCCGGCAGGTGACCCAAGCGACACAGCAGGGCCGAGGCTGGGAAGTCCGGGGGCGCGGCCGGTCCGCCTGGCCC
CGCCTGACCCGACTGTCTTACTTCCTACAGCAAAGCGCCCCCCAGGTCGCTGTCAATGGTCACCGAGACTTGGAG
CCAGAATCTGAGCCTCAGCTGGAGTCAGAGACAGCAGGAAAATGGGTCCTGTGTAATTATGACTTCCAGGCCCGC
AACAGCAGTGAGCTGTCGGTCAAGCAGCGGGACGTACTGGAGGTCCTGGATGACAGTCGTAAGTGGTGGAAGGTT
CGGGACCCAGCGGGGCAGGAGGGATATGTGCCCTACAACATCCTGACACCCTACCCCGGACCCCGGCTGCACCAC
AGCCAAAGCCCTGCCCGCAGCCTGAACAGCACTCCTCCTCCACCACCAGCCCCAGCCCCGGCCCCACCTCCAGCT
CTGGCTCGGCCCGCTGGGACAGGCCCCGCTGGGACAGCTGCGATAGCTCAACGGCTTGGACCCCAGCGAGAAGGA
GAAATTCTCCCAGATGCTCATCGTCAACGAGGAACTGCAGGCGCGCCTGGCCCAGGGCCGCTCGGGACCGAGCCG
CGCAGTCCCAGGGCCCCGCGCCCCGGAACCGCAGCTCAGCCCGGGCTCGGACGCCTCCGAGGTCCGCGCCTGGCT
GCAGGCCAAGGGCTT**TAG**CTCCGGGACCGTGGACGCGCTGGGTGTGCTGACCGGGGCGCAGCTTTTCTCGCTGCA
GAGGGAGGAGCTGCGGGCGGTGAGCCCCGAGGAGGGGGCACGTGTGTACAGCCAGGTCACCGTGCAGCGCTCGCT
GCTGGAGGACAAAGAGAAAGTGTCAGAGCTGGAGGCAGTGATGGAGAAGCAAAAGAAGAAGGTGGAAGGCGAGGT
GGAAATGGAGGTCATTTGACCTGCCAGGCGCCCTTCGCAAAGAGTGACGAGGCCCCGTGGGAGAACGGACTCCTC
AGACTCTCCCCAATAGCGGAAGTCGATCTTCTGAAGGATGGCCAATCTGCTCCGGCCCTGGTCTTCCCCCATCCC
GGTGGACAGACTTAACGATCCTTGCTGCAGATCCTCCGGAGAGGATCTGGACTGGCTGGGAGTGGGGAGGGCGTG
GAGACAGTCTACGGAAAGCGCTAGCAGACCCCCGAGAGGGTGCAGTGGAGCCCTGAGCATTGTAATATGCGGCCC
AGCCTATAAACAGCCTCCGTGCTTAGC

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FIGURE 3928

GCGGGCGGGCGGTGCGATGTCCGGAGAGGATGGCCCGGCGGCTGGCCCGGGGGGCGGCGGCGGCGGCTGCCCGGG
AGCGGCGACGGGAGCAGCTGCGGCAGTGGGGGGCGCGGGCGGGCGCCGAGCCTGGCCCCGGAGAGCGCCGCGCCC
GCACCGTCCGCTTCGAGCGCGCCGCCGAGTTCCTGGCGGCCTGTGCGGGCGGCGACCTGGACGAGGCGCGTCTGA
TGCTGCGCGCCGCCGACCCTGGCCCCGGCGCCGAGCTCGACCTCCGCCGCGCCGCCGCCCGCCCGCGCCGTGCTG
GACTCCACCAACGCCGACGGTATCAGCGCCCTGCACCAGGCCTGCATTGATGAGAACCTGGAGGTGGTGCGCTTC
TTGGTGGAGCAGGGCGCCACTGTGAACCAGGCAGACAACGAGGGCTGGACGCCACTGCACGTGGCCGCCTCCTGT
GGCTACCTAGATATCGCCAGGTACCTCCTGAGCCACGGGGCCAACATCGCCGCCGTCAACAGTGACGGGGACCTG
CCCCTGGACCTGGCCGAGTCGGACGCC**ATG**GAGGGGCTGCTGAAGGCGGAGATCGCCCGCCGAGGTGTGGATGTG
GAGGCAGCCAAGCGGGCAGAAGAGGAATTGCTCCTTCATGACACGAGGTGCTGGCTGAATGGGGGCGCCATGCCA
GAGGCCCGGCACCCCCGCACAGGCGCCTCTGCCCTGCACGTGGCTGCTGCCAAGGGCTACATTGAGGTGATGAGG
TTGCTCCTTCAGGCTGGCTACGACCCAGAGCTCCGGGACGGGGACGGCTGGACTCCCCTGCACGCAGCGGCACAC
TGGGGCGTGGAGGATGCCTGCCGCCTGCTGGCCGAGCATGGCGGGGGCATGGACTCACTGACCCATGCGGGGCAG
CGTCCCTGTGACCTGGCCGATGAGGAAGTACTGAGCCTGTTGGAGGAACTGGCCCGGAAACAGGAGGACCTTCGG
AACCAAAAAGAAGCTTCCCAGAGCCGGGGCCAGGAGCCCCAAGCGCCCTCTAGCAGCAAACACAGAAGGAGCTCT
GTGTGTCGTCTGAGCAGTCGCGAGAAGATTTCCCTCCAGGACTTGTCCAAGGAGCGCCGGCCTGGTGGGGCTGGG
GGGCCCCCATCCAGGACGAGGATGAGGGGGAAGAAGGTCCCACCGAACCACCCCCTGCAGAACCCAGAACCCTCA
ATGGCGTCTCCTCCCCGCCGCACCCCAGCCCTAAGAGTCCCGTGCAGCTTGAAGAGGCCCCCTTCTCCAGGCGCT
TTGGCCTCC**TGA**AGACAGGGAGTTCTGGTGCCCTGGGTCCCCCTGAAAGGCGGACAGCGGAGGGAGCCCCTGGGG
CTGGGCTGCAGCGCTCGGCTTCCTCCTCCTGGCTGGAAGGGACCTCCACTCAGGCCAAGGAGCTCCGTCTTGCCA
GAATTACCCCGACCCCCTCCCCGAAGCTGCCGGAGCCCTCTGTCCTGTCTGAGGTCACCAAGCCTCCTCCTTGCT
TGGAGAACTCCTCGCCTCCCTCCAGGATTCCGGAGCCTGAATCCCCAGCGAAGCCAAACGTCCCCACAGCCTCCA
CGGCGCCCCCAGCGGACTCCCGGGACCGACGGAGGTCCTACCAGATGCCTGTGCGGGATGAGGAGTCGGAATCCC
AGAGAAAAGCTCGCTCCCGTCTCATGCGCCAGTCTCGGAGGTCCACACAGGGTGTGACTCTTACAGACCTGAAGG
AGGCAGAGAAGGCTGCAGGGAAGGCCCCAGAGTCAGAGAAGCCGGCGCAGAGCCTGGACCCTTCCCGAAGGCCCC
GCGTCCCTGGAGTGGAGAACTCTGACAGCCCTGCCCAGAGAGCAGAGGCGCCCGACGGGCAGGGTCCGGGACCGC
AGGCGGCCAGGGAGCACCGCAAGGTCGTGAAAGGAGTGGAGGGGGCCTGCGGAGGGGGAGGAGGCGGAGCCGCTG
ACCGCAGCCAGGAGTCCAGCACCCTGGAGGGCGGCCCCTCGGCCGCAGGCAGCGGTGGCAGCGGGACCTCAACCC
AGAACCTGAGCCAGAATCGGAAGAGCCAGACGGAGGCTTTAGGACGCTGTATGCAGAGCTGCGCAGGGAGAACGA
GCGGCTTCGCGAGGCCCTGACCGAGACCACGCTGCGGCTGGCGCAGCTCAAGGTGGAGCTGGAGCGGGCCACGCA
GAGGCAAGAACGCTTCGCTGAGAGGCCAGCCCTCCTGGAACTGGAGAGATTCGAGCGCAGGGCCCTGGAACGCAA
GGCCGCAGAGCTGGAGGAGGAGCTGAAGGCCCTGTCTGACCTCCGCGCTGACAACCAGCGCCTCAAGGATGAGAA
TGCAGCGTTGATCCGCGTCATCAGCAAACTCTCCAAGTGACCCGGAGGGACTTTCCCGCACCCGTATTTATACAG
CTGCTTCTGCCACACGCACCCCTTCCCCCGTGTGAACACGAGTGACAGGGCTCCGGGGGAAGTCTCAGAGAAGCC
ATAGCCCCCCTGGGACCTCCGGACTGGGAGGGGAGCAGAGTCCCCAGGAGCCGAGGGGGCCACCCGAGGCCAGGA
TGGAGGTGGGAGGCCGAGCCAAGCAGGGGGACGTTGCCAGAGGGGACCAGGGCCAGAGACGGGACCAGGAAGGAA
CTGAGGACCAAGAAGTGCAAGGATCAGTAGCCAGGACCAGAGTGGCCGCCTGGAGGTCCCCATCTCACGTGTGAT
GCCACCCCGTCACCCCTCCCCTCCTGAGCAGGGATCCAAGAATGTGCCAAGAGTCCCGCCAGCCTCAGCCAGGTG
GGCCTGTATATAGGGTCCATGTGCAATAGGGAGGGACGTCTTCTATTTTTTGCTGCCCCCTCCCCGCCCACTGTC
TGGGGCAGGGGGAGAAGGTATTTTCGAGATAAAGCACAGGCACCACAAATAAAAGTCGTGAAGTTGCCACTC

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FIGURE 3929

AAGATTCACAGCATCTCAGACACAGCCTAGGCCGCACCAGGATGTCGGACACCGAGGAGCAGGAATATGAGGAGG
AGCAGCCGGAAGAGGAGGCTGCGGAGGAGGAGGAGGAAGAAGAGGAACGCCCCAAACCAAGCCGCCCCGTGGTGC
CTCCTTTGATCCCGCCAAAGATCCCAGAAGGGGAGCGCGTTGACTTCGATGACATCCACCGCAAGCGCATGGAGA
AAGACCTGCTGGAGCTGCAGACACTCATCGATGTACATTTCGAGCAGCGGAAGAAGGAGGAAGAGGAGCTGGTTG
CCTTGAAGGAGCGCATTGAGCGGCGCCGGTCAGAGAGAGCCGAGCAACAGCGCTTCAGAACTGAGAAGGAACGCG
AACGTCAGGCTAAGCTGGCGGAGGAGAAGATGAGGAAGGAAGAGGAAGAGGCCAAGAAGCGGGCAGAGGATGATG
CCAAGAAAAAGAAGGTGCTGTCCAACATGGGGGCCCATTTTGGCGGCTACCTGGTCAAGGCAGAACAGAAGCGTG
GTAAGCGGCAGACGGGGCGGGAGATGAAGGTGCGCATCCTCTCCGAGCGTAAGAAGCCTCTGGACATTGACTACA
TGGGGGAGGAACAGCTCCGGGAGAAAGCCCAGGAGCTGTCGGACTGGATCCACCAGCTGGAGTCTGAGAAGTTCG
ACCTGATGGCGAAGCTGAAACAGCAGAAATATGAGATCAACGTGCTGTACAACCGCATCAGCCACGCCCAGAAGT
TCCGTAAGGGGGCAGGGAAGGGCCGCGTTGGAGGCCGCTGGAAGTGAGGATGCCGCCCCGGACAGTGGCACCTGG
GAAGCCTGGGAGTGTTTGTCCCATCGGTAGCTTGAAATAAACGCTCCCCTCAGACA

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FIGURE 3930

CTGAAGGTCACCCGGGCGGCCCCCTCACTGACCCTCCAAACGCCCCTGTCCTCGCCCTGCCTCCTGCCATTCCCG
GCCTGAGTCTCAGC**ATG**GCGGATGGGAGCAGCGATGCGGCTAGGGAACCTCGCCCTGCACCAGCCCCAATCAGAC
GCCGCTCCTCCAACTACCGCGCTTATGCCACGGAGCCGCACGCCAAGAAAAAATCTAAGATCTCCGCCTCGAGAA
AATTGCAGCTGAAGACTCTGCTGCTGCAGATTGCAAAGCAAGAGCTGGAGCGAGAGGCGGAGGAGCGGCGCGGAG
AGAAGGGGCGCGCTCTGAGCACCCGCTGCCAGCCGCTGGAGTTGGCCGGGCTGGGCTTCGCGGAGCTGCAGGACT
TGTGCCGACAGCTCCACGCCCGTGTGGACAAGGTGGATGAAGAGAGATACGACATAGAGGCAAAAGTCACCAAGA
ACATCACGGAGATTGCAGATCTGACTCAGAAGATCTTTGACCTTCGAGGCAAGTTTAAGCGGCCCACCCTGCGGA
GAGTGAGGATCTCTGCAGATGCCATGATGCAGGCGCTGCTGGGGGCCCGGGCTAAGGAGTCCCTGGACCTGCGGG
CCCACCTCAAGCAGGTGAAGAAGGAGGACACCGAGAAGGAAAACCGGGAGGTGGGAGACTGGCGCAAGAACATCG
ATGCACTGAGTGGAATGGAGGGCCGCAAGAAAAAGTTTGAGAGC**TGA**GCCTTCCTGCCTACTGCCCCTGCCCTGA
GGAGGGCCCTGAGGAATAAAGCTTCTCTCTGAGCTG

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FIGURE 3931

CCCAGGCACCGGTGGGCCCCGGAGCGAGCCTGCCCCGCCGGGACTCCGCGTCTGTGCGTCAGCCCCGCCCGTTGT
CCTGGCAACAACCCGTTGCCCGGGCAACCAGCTTTGCTCTCACCCCGCTTGAGAGGAGCCCGGCTGTTGCTCTGG
GCAACGCGGTCTGCTGGTTCCCACGTCTGCCTTCGCCCGCTTCCGGTTCAGACCCTGCGGAGGGGCGAGGACGAG
GCAGAAGTCAGCGGGATGCCTGTGGGGCCGTGGAGGAAGAGGGTATCCCTTTAGGATGGAACTAGGTCCTGGACA
CCCCCTCTCAAGTGCGGGGAGGCTGATACTACAACTCCCAGCATGACTCGCGGTGGCTGTCCGGTTTCTGCGCGG
CTGTTCGCGCAAAGGCCTCATGGGAGTTGGAGTTCTTTGTTGTGCGTGGGGCTCAAAGGACGTCTGGGGTGGGAA
TGGGGGACTAGGGTGCTTGAGTGTCTCTGCAGAAAAGACTCCAGGACCCCGCCACC**ATG**TTCCCGGAGCCCCCAA
CCCCGGGGCCTCCATCGCCCGACACGCCTCCCGACTCCAGTCGCATCAGCCACGGCCCAGTGCCCCCCTGGGCCC
TGGCCACCATCGTGCTGGTCTCAGGCCTCCTCATCTTCAGCTGCTGTTTCTGTCTCTACCGGAAGAGCTGTCGGA
GGCGGACAGGCAAGAAGAGCCAGGCCCAAGCCCAGGTCCACCTTCAGGAAGTGAAGGGGCTGGGCCAGAGTTACA
TAGACAAGGTGCAGCCAGAAGTAGAGGAGCTGGAGCCAGCACCATCCGGGCCAGGGCAGCAGGTGGCAGACAAGC
ATGAGCTAGGACGACTGCAGTACTCCCTGGATTATGACTTCCAGAGTGGCCAGCTGCTGGTGGGCATTCTGCAAG
CAATGGGATTGGCAGCCTTGGATCTTGGTGGCTCCTCGGACCCCTATGTGCGGGTCTACCTGCTGCCGGACAAAC
GGAGGCGGTACGAGACCAAGGTGCATCGGCAGACGCTGAACCCTCACTTTGGGGAGACCTTCGCCTTCAAGGTCC
CCTACGTGGAGCTGGGGGGCAGGGTGCTGGTCATGGCGGTGTACGACTTCGACCGCTTCTCTCGCAATGACGCCA
TCGGGGAGGTGCGGGTCCCTATGAGCTCCGTGGACCTGGGGCGGCCAGTGCAGGCCTGGCGGGAGCTGCAGGCGG
CTCCGCGGGAGGAGCAGGAGAAGCTTGGGGACATCTGCTTCTCCCTCCGCTATGTCCCCACGGCCGGGAAGCTCA
CCGTCATCGTCCTGGAGGCTAAAAACCTGAAGAAGATGGACGTAGGAGGACTGTCAGATCCATACGTCAAGGTCC
ACCTGCTGCAGGGCGGCAAAAAGGTGCGGAAGAAGAAAACCACCATCAAGAAGAACACTCTGAACCCCTATTACA
ACGAAGCTTTCAGCTTCGAGGTGCCCTGTGACCAAGTCCAGAAGGTGCAGGTGGAGCTGACCGTGCTGGACTACG
ACAAGCTGGGCAAGAACGAGGCCATCGGGAGGGTGGCCGTGGGGGCGGCCGCCGGCGGGGCTGGCCTGCGGCACT
GGGCGGACATGCTGGCCAACCCGCGGCGGCCCATTGCCCAGTGGCACTCGCTGCGGCCCCCGGACCGAGTGAGGC
TGCTGCCTGCGCCC**TGA**CTCCCACCCCAAGCCCCCGGCCAAGCCTGGACTCTAGCCCCTGACCCCAGACTCCCGA
GACCGGCCAAAGCCAAGCCAGCCCCACCCTTAAGCTTCCTCTGACGGTTACCCTCCCCCCACCTTCCACCCCAAC
CATCTGAACCATTCCTGTCTTCTCACCCCCAACGATGCCAATCACGACAACTTTCCAGCACACTCCCCCGACCCT
CGCGGACACACCCAGATGCCCCAGGGACCCCGGGAAGGGAAGGCAGCCTGGTTTCTCCTGCCCCCGGGTCCTGCC
CCCTGCTTTGACAATCAGCCATCCTCGTCTGCTCTCCTCTCTCTTCCAACACAGCCCATCCCTGCACTGCTCCTG
GGGCCAAATAAATATTCAGCAGCTC

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FIGURE 3932A

CGCCCAGCTAATTTTTGTATTTTTGGTAGAGACAGGGTTTCGCCATGTTGCCCAGGCTGGTCTTGAACTTCTGAC
CTCAAGTGATATGCCTGCCTCAGCCTCCCAAGGGGTACCTCCCCACAGTCCTGGAGCAGACTGTGGCCCCTCAGG
GCCTTGAGTGGCACGCTGGTGGGGCAGCTCTTGTCTTGGAGCCGTCAGGCACCGTGTGAAAGTTTGGAGGAGGGA
GGCAGGAGGTGAGGTTGGAAGTTGAGCAAGGTTCCAGGAGTCAGCCGGAGCTGGGGCAGCATACGGGGTTGCAAG
TGAAGCCGCTGAGAGGCAAAAGGGATGAGTGTTAGCTGCTGGGGGATTGGGAAGCGCAGGAGCTTCAGGACCAGC
TTGTCTTGGGGGTGGTAAGGAGCCTAGGATGGGATGGTTGGGTGTTAGCAGGGTGGAGGAGGCCTGGTGTGGGCC
CTTGTTTCTGCGTCACCCTGTCCTCTGCCCTTTCCCCTTCCTGGACAGGGGTCTCTGCAGTTCCCAGAAACCCAG
TGCCCGGTGCAGAGAAGAGGGTGGAGCCTTGCCGCCCCCTGCCCCCGGCCTCCGACCCGAGCCCCCACCCGCCTG
TGCTTGCCTCCCAGGTACCCCAGTGTGGCCTGCGAGATTCTGACCTCAGATGTGCCCCAGATCAATGATGCCCTG
GGTGCTGATGAGTCCCTTCTGAACCGGCTCTACGGCTTCCTGCAGAGCACCGGCAGCCTCAACCCACTGCTGGCC
AGCTTCTTCAGCAAGGTC**ATG**GGCATCCTCATCAACCGCAAGACAGACCAGCTCGTGTCCTTTCTTCGGAAGAAG
GATGACTTCGTGGACCTGCTGCTGCAGCACATTGGCACCTCGGCCATCATGGACCTCCTGCTGCGCCTGCTCACC
TGTGTGGAGCGGCCTCAGCTGAGGCAGGATGTTGTCAATTGGCTCAACGAGGAGAAGATCGTCCAGCGGCTGATT
GAGCAGATCCACCCGTCGAAGGATGAGAATCAACATTCCAACGCATCCCAGTCCCTGTGTGACATCATCCGCCTG
AGCCGGGAGCAGATGATCCAAGTCCAGGACAGCCCAGAGCCTGACCAACTGCTGGCCACCCTGGAGAAGCAGGAG
ACGATTGAGCAGCTCTTAAGCAACATGTTCGAGGGGGAGCAGAGCCAGTCTGTCATCGTCAGTGGGATCCAGGTG
CTGCTGACCCTGCTGGAGCCCAGGAGGCCGAGGTCCGAGTCCGTGACCGTGAACAGCTTCTTCAGCAGTGTGGAT
GGGCAGCTGGAGCTCCTGGCCCAGGGGGCCCTGGAAAGCACTGTGTCCAGTGTGGGCGCCTTGCACGCCCTACGC
CCGCGGCTCAGCTGCTTCCACCAGCTCCTGCTGGAGCCTCCCAAGCTGGAGCCGCTACAGATGACATGGGGCATG
CTGGCTCCGCCTCTGGGCAACACGCGGCTGCACGTGGTCAAGCTCCTGGCCAGTGCCCTGAGCGCCAATGATGCA
GCCCTGACGCACGAGCTCCTGGCACTGGACGTGCCCAACACCATGCTGGACCTCTTCTTCCATTATGTCTTCAAC
AACTTCTTGCATGCCCAAGTAGAGGGATGCGTGAGCACCATGCTGAGCTTGGGGCCACCTCCTGACAGCAGCCCT
GAGACGCCCATCCAAAACCCTGTTGTGAAACATCTGCTGCAGCAGTGCCGCCTGGTGGAGCGGATCCTGACGTCC
TGGGAGGAGAACGACCGTGTACAGTGTGCGGGAGGCCCTCGGAAAGGCTACATGGGTCACCTGACAAGAGTGGCC
GGTGCCCTGGTGCAGAACACGGAGAAGGGGCCCAATGCAGAGCAGCTGCGGCAGCTGCTGAAGGAGCTGCCCAGC
GAGCAGCAGGAGCAGTGGGAAGCCTTCGTATCGGGGCCCCTGGCGGAGACCAACAAGAAGAACATGGTGGACCTG
GTGAACACCCACCACCTACACTCCTCCAGTGACGATGAGGACGACCGGCTCAAGGAGTTCAACTTCCCTGAGGAG
GCTGTGCTGCAGCAGGCCTTCATGGACTTCCAGATGCAGCGCATGACCTCTGCCTTCATTGACCACTTCGGCTTC
AATGATGAGGAGTTTGGGGAGCAGGAGGAGAGTGTGAACGCACCTTTTGACAAGACAGCCAACATCACCTTCTCC
CTCAATGCTGACGATGAGAACCCCAACGCCAACCTACTTGAGATATGCTACAAGGACCGCATCCAGCAGTTTGAT
GATGATGAGGAAGAGGAGGACGAGGAAGAGGCCCAGGGCTCAGGGGAGTCTGATGGAGAAGATGGCGCCTGGCAG
GGCAGCCAGCTGGCCAGGGGGGCCCGTCTGGGCCAGCCACCTGGTGTCCGGAGTGGAGGCAGCACAGACAGTGAG
GACGAAGAAGAGGAGGACGAGGAGGAGGAGGAAGACGAGGAGGGCATTGGCTGTGCAGCCCGTGGAGGGGCCACC
CCTCTGTCCTACCCCAGCCCTGGCCCTCAGCCTCCAGGCCCCAGCTGGACAGCCACCTTTGACCCAGTGCCTACA
GATGCCCCGACCAGCCCCCGAGTCTCCGGGGAGGAAGAGCTGCACACTGGGCCTCCAGCCCCACAGGGGCCCCTC
AGTGTGCCCCAGGGCCTCCCCACTCAGAGCCTGGCCAGCCCTCCTGCCCGTGACGCCCTGCAGCTCAGGTCTCAG
GACCCCACACCCCCCTCAGCACCTCAGGAAGCCACAGAAGGCAGCAAAGTCACGGAGCCCTCAGCCCCTTGCCAG
GCCTTGGTTAGCATCGGGGACCTTCAGGCCACCTTCCACGGGATCCGTTCTGCCCCCAGCTCCTCGGACAGTGCA
ACCAGAGACCCCTCTACCTCTGTCCCAGCCTCCGGGGCCCACCAGCCCCCCCAGACCACAGAAGGGGAGAAGAGC
CCAGAGCCCTTGGGGCTTCCCCAAAGCCAGAGTGCCCAGGCCCTCACGCCTCCTCCGATACCCAATGGCTCTGCC
CCGGAAGGGCCTGCATCCCCAGGCTCCCAA**TAG**CTGCCTGGTGCGGCAGCGGCGGCCAAATCTTCCGTCCTCCCG
TGGATCTCCCGGGGTGGGGGCAGGGCGGGTCCCACGATGGCCCCCATTGCCCTCATCACCCTGACACCCCCACAT
TCTCTCCTCTGGACCCCCAGGAGGCTGGTGCCAGGGAGACAGGCCCAACCCACCCCCATTTGCACTGAGAAGAGA
AGTTTTGGAGCGTTGCCTCCTAGAATAAAGATACAGAGAGTCAAATAGAGAGAATGGAGAGAGAGAAACATATAT
TATATATTATATAGAGAGAGGGAGGAGAGCGAGAGAGAGTGAGGACACCGAACTGGGCTGGCGGCTCCAAAGCAC
AGCCTTCCCTGTTCCGTCCCAGCGGGAGCTGGTGTTAGGGGTCCCAAGGTTGCCACCCACGTGCCCAGCTGTCCC
ACGCTGCAGCGCAGACGGCCACGCCCACACCCGGCCTTTTAGCTCAGGTCCACCATGGGGGACGGCCCAGCGTGG
GTGGGGGTGCCAGAGGGTCCCGAGTGGGGGCCGTGCCTTTGCCCAGACCCTGCACTTTCAACCAGGCCAGTCCGG

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FIGURE 3932B

CTCTGGGGAGCAGGGGCCTCCCCGGCAACAGCCCCAGGGGCCTTGAGGGTCTGAGGTCCCAGCCCTGTTGCCAAG
TGACCTTGTCCCCAGCTCCCTCCTCCCAGGCTGGTGTGAGTGTGCGTGCGTTTGTGCCGAGCTTCTATTTCATAT
TGCAAATATAAATAAAGGAAGGCAGTTTACG

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FIGURE 3933

GCGGCGCCCAGCAGAGTCAGGTGCGGACGACTTTGTCTGTAGGAGCAGCGGCGGCTTGAGGACCCGGGGAGACCC
TCAAGAATCGACCCATCAGGACGCCAGAGCTGCTTCAGCGGTGACCACCTTCTCCCTCTAACACATTCTTCCCTT
CTTCACAAACGGCCC**ATG**TCAGACGAAGGCTCAAGGGGGAGCCGCCTGCCCCTGGCGCTGCCCCCGGCCTCCCAG
GGTTGCTCTTCAGGGGGCGGCGGCGGCGGCGGCGGCGGCTCCTCGGCTGGGGGCTCGGGCAATTCCCGGCCCCCA
CGCAACCTCCAAGGCTTGCTGCAGATGGCCATCACCGCGGGCTCTGAAGAGCCAGACCCTCCTCCAGAACCGATG
AGTGAGGAGAGGCGTCAGTGGCTGCAGGAGGCCATGTCGGCTGCCTTCCGAGGCCAGCGGGAGGAGGTGGAGCAG
ATGAAGAGCTGCCTCCGAGTGCTGTCACAGCCCATGCCCCCCACTGCTGGGGAGGCCGAGCAGGCGGCCGACCAG
CAAGAGCGAGAGGGGGCCCTGGAGCTGCTGGCCGACCTGTGTGAGAACATGGACAATGCCGCAGACTTCTGCCAG
CTGTCTGGCATGCACCTGCTGGTGGGCCGGTACCTGGAGGCGGGGGCTGCGGGACTGCGGTGGCGGGCGGCACAG
CTCATCGGCACGTGCAGTCAGAACGTGGCAGCCATCCAGGAGCAGGTGCTGGGCCTGGGTGCCCTGCGTAAGCTG
CTGCGGCTGCTGGACCGCGACGCCTGCGACACGGTGCGCGTCAAGGCCCTCTTCGCCATCTCCTGTCTGGTCCGA
GAGCAGGAGGCTGGGCTGCTGCAGTTCCTCCGCCTGGACGGCTTCTCTGTGTTGATGAGGGCCATGCAGCAGCAG
GTGCAGAAGCTCAAGGTCAAATCAGCATTCCTGCTGCAGAACCTGCTGGTGGGCCACCCTGAACACAAAGGGACC
CTGTGCTCCATGGGGATGGTCCAGCAGCTGGTGGCCCTGGTGCGGACAGAGCACAGCCCCTTCCACGAGCACGTG
CTTGGAGCCCTGTGCAGCCTGGTGACAGACTTTCCGCAGGGTGTGCGCGAGTGTCGGGAGCCGGAACTGGGCCTG
GAGGAGCTCCTCCGCCACCGCTGTCAGCTGCTGCAGCAGCATGAGGAGTACCAGGAGGAGCTGGAGTTCTGTGAA
AAGCTGCTACAGACCTGTTTCTCCAGCCCAGCGGACGACAGCATGGATCGG**TGA**AACCAGGTGGCTTCTTGCCCC
CTTCTCCGTGGGAACCCCAGGCCTCTTGCCTCCCTCCCCACCTACAAGGCCCTCTCCCAAGGGATCGCAGGGCCT
AGGTGCCTGGACCCAGGGTGTGCCAGCCCGTCTCTGTGCAGTCCCTGGAAGGGGCGCTGAGAAAGGCACCAGCTC
CTTGGACCCCACCTCCCATGCTCTCACTCTCATCCCCGTTCTCTTGTCCACACAGCTCTTCCAATAAAGGTGTTT
CTCTTCCTCCTTCTC

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FIGURE 3934

GCCGAAGGAGGCTGTGGGAGGTGTTGGCGGCGGCGGCGCGGGCGCCTGAGGAGGAGGAGGAGAAGCGGGATGAGA
TCGTGGGGCTCACCAGCGTCCCCCATGGCTTCTGAGTAGCGTGGGAGTGGAGTCAGCACCAAGCCAGGCTCCCCG
CGCCTGCCTTGCCCTCACCTGCTCCTGCTCTCTGCCAGAGGCAGCATGGTCCGCAGGGCACCATGGGGCCCGACA
GAGTGACAGCACGAGAACTGTGCGAGAACGACGACCTGGCCACCAGCCTCGTCCTGGACCCCTACCTCGGTTTCC
GCACCCATAAGATGAACGTCAGGTCTATCGCTACCTCCGTGCCTTCCTGCCGGAAAGTGGCTTTACCATCCTGCC
CTGCACGCGCTACTCC**ATG**GAGACCAACGGGGCCAAGATCGTGTCCACTCGTGCTTGGAAAAAGAATGAGAAGCT
GGAGCTGCTGGTGGGCTGCATTGCAGAGCTGCGGGAGGCAGATGAGGGGCTGCTGAGGGCCGGTGAGAATGACTT
CAGCATCATGTACTCAACCCGCAAGCGGAGTGCTCAGCTGTGGCTGGGCCCAGCCGCCTTCATCAACCATGACTG
CAAACCCAACTGCAAGTTTGTGCCTGCAGATGGGAACGCAGCCTGCGTGAAGGTGCTCCGGGACATTGAGCCTGG
GGACGAGGTGACATGCTTCTACGGCGAGGGCTTCTTCGGCGAGAAGAATGAGCACTGTGAATGCCACACCTGTGA
GAGGAAAGGTGAAGGAGCTTTCCGAACCAGGCCTAGGGAGCCCGCGTTGCCACCACGGCCCCTGGACAAGTACCA
GCTGCGTGAGACCAAGCGGCGGCTGCAGCAAGGCCTGGACAGTGGCAGCCGACAGGGCCTGCTGGGCCCTCGGGC
CTGCGTGCACCCATCCCCGCTGCGCCGGGACCCATTCTGCGCCGCCTGCCAGCCCCTGCGCCTGCCAGCCTGCAG
CGCCCGCCCAGACACCTCACCCCTCTGGCTCCAGTGGCTGCCTCAGCCCCAGCCCCGAGTGCGGCCCCGGAAGCG
CCGACGCCCCCGGCCCCGGAGGGCCCCAGTGCTCTCCACCCACCACGCTGCCCGCGTCTCCCTGCACCGATGGGG
AGGCTGTGGCCCCCACTGCCGCCTGCGAGGAGAGGCCCTGGTGGCCCTGGGCCAGCCCCCCCACGCCCGCTGGGC
CCCTCAGCAGGACTGGCACTGGGCCCGGCGCTATGGGCTGCCTTACGTGGTGCGTGTGGACCTTCGTCGCCTGGC
CCCAGCCCCACCAGCTACCCCAGCCCCTGCTGGGACCCCAGGCCCCATCCTGATCCCGAAGCAGGCCCTCGCCTT
CGCCCCCTTCTCCCCACCCAAGCGCCTACGGCTGGTGGTCAGCCACGGCTCCATCGACCTGGATGTCGGCGGTGA
AGAGCTG**TGA**CAGGCCGGACGGGGAGGCCCAGCAGGGAGAGAGGGTCTCTCTCCTAGCTGCTACCCAGGACCTCC
AGAAGGAGCCCTTGGACCTCTGGGAGGGAGCTGACCCTTGACTCCAGCATAGCTCTGACCCTGGAATGGGGTTGG
TTTGGACACCCCCAGGGATCTGAGCCCTGACCCTTTGTGACTGCTGACCCCTGAGCCACCCCCACTCCCACAGGG
AGCCCCGGCCATTTGCTGCCCTCCCCACCCCTGCCCCAGCCTCAGGACTGCAGGAGCCATCCGCCCCCCTCAGCC
CCTTCCTCCCCAGGGAGCAAAGCCATAAGGGGCAGGGGCCACCCCACGGCATCTCCCCAGAAGTACAGGCCTCAG
GAGGAGGTGGAACTGATGTAGGGGGTGGCACTCCCCAGAGACTGCCCTCACGAGGGGACTGGGTTCGCTCTCAGC
TCTGCAGCTGTCTGCGGTGGGGGGAAGGTTGGGGGGTGTCTGGAGGCATGTTCCCCTCACCACCCCCCGTGGGTC
TCAGGGAGGCCGGGTGTGACCTCATCTTTCTCATGGTGCTATCCTGGTGCTATTGGGGTGGGGAGCTCCCTCCCC
TCCCCCACACCAGAAAGGGGTATGTTGGGGGCTTGGAAGCACTTGAACTTTTTATTTTATTAAAACCTTGTTATA
AGCAGC

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FIGURE 3935

GCGGTGCACGACGGCTCCCATTGGCTGGGGCTCGGGCGTCCTAGCCAATCCGGCCGCGGGGTGCGTTTCTCCTGA
CCCGGGTGGGACCGCACCCCGCGGACTCAGAAGCGAGCGGCACCCCGGGACCATCCCACAGCAGATCCAGTGGCC
GCCAACGTCAGGCTGGAGTTGCCTCCTTCGTGGATGTTGGATGTGGAAGCCCAGGAGCCCCCCAAGGGGAAATGG
TCGACGCCGCCCTTCGACCCGCGCTTCCCCAGCCAGAACCAGATCCGTAACTGCTACCAGAACTTCCTGGACTAC
CACCGCTGCCTCAAGACCAGGACCCGCCGCGGGAAGAGCACGCAGCCCTGCGAGTACTATTTCCGCGTGTACCAC
TCGCTGTGCCCCATCAGCTGGGTGGAGAGCTGGAACGAGCAGATCAAGAACGGGATTTTCGCCGGCAAAATCTGA
CTGCCCCAGCGCGGCTTCCTCTGAAGATGCAGTGATCCTGCATCTTTTTGTCTCGCGGAGCCCCGGGTCTCGGTT
ATCCACCCCTACCTCCCAGTGTCTAAGCCACGAATAATGCCACCAGCCTTCGAGTTCCTTGTTTCCCTTGCTCTG
GTCTCCACGTGTATGATGGGGTTCTCAGGCCCAGGCTTCGACCAGAGGACCCTCTGCCACCACCGTTTCTTCCTG
TCCTTGAGCTACCTTGGTGAACTCATGACCCCAGGCCCCTGCTCCACCAGGATGTCCCCCAGGTCCTGCCAGCTG
GGAAGTGCCAGCATGAACGCCTCCAACTTCGTGGAAGCCAGGGTCCCCTGCAGCTGAGGGACGCCAAGCAGACAC
ACCTGCCCTCCCCAGCCAGCTCCTGTCTGTATGGGCGAGATGACTGAGAGCGCCCACGTCCCTAAGGCTGTCCTG
ACCCTCCATGCTGCGACAAGGACAGGGAATGGTCGGTCACTATGGGCCTGGTGTCTCCCCTCCCCCACCACCCGG
TGCTGCCCAGCTCAAGCCAGAAGCTGACTTTGGCCGCCATGGGGACATCAGGCAAGGTCTGGAGACATTTTTGGT
TGGGGCAGAGGCATGCTCCTGGCATCGAGTGGGTGGAGACCAGAGAAGCCGCTCAACATCCTGCAATGCATGGGA
CAGGCCCTGCCTAGAAACACCAGCTCAGCATGGCAGCAGTGCGGAGGCCAGGAAACCCTGATCGCCAGTTTCTAA
CGCCCTCACCATTTTTATTTTTATTTTTATTTTTTTTGAGACAGAGTTTCGCTCCTGTCACCCAGGCTGGAGTAC
AATGATGCGATCTCAGCTCACTGCAACCTCTGCCTCCCGGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCGAGTA
GCTGGGATTACAGGCATGCACCACCACGCCCAGCTTATTTTGTATTTTTAGTAGAGACGGGGTTTCTCCGTGTTG
GTCAGGCTGGTCTCAAACTCCTGACCTCAGGCAATCTGCCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCG
TGAGCCACTGCACCCGGCTCACCACTAGTTTTTAGCCCTTTTTGTTGGGGGTGGGGTGGGGGCAGAGGAGAGGCG
GATACAGAAACTTGTGAGAATGTGATGAACGCTCTGAACCCCCTATAAAAAATGTGCATGTAAATATATACTCTC
AACATTT

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FIGURE 3936

CTCTTTCCGTCTCAGGTCGCCGCTGCGAAGGGAGCCGCCGCCATGTCTGCGCATCTGCAATGGATGGTCGTGCGG
AACTGCTCCAGTTTCCTGATCAAGAGGAATAAGCAGACCTACAGCACTGAGCCCAATAACTTGAAGGCCCGCAAT
TCCTTCCGCTACAACGGACTGATTCACCGCAAGACTGTGGGCGTGGAGCCGGCAGCCGACGGCAAAGGTGTCGTG
GTGGTCATTAAGCGGAGATCCGGCCAGCGGAAGCCTGCCACCTCCTATGTGCGGACCACCATCAACAAGAATGCT
CGCGCCACGCTCAGCAGCATCAGACACATGATCCGCAAGAACAAGTACCGCCCCGACCTGCGCATGGCAGCCATC
CGCAGGGCCAGCGCCATCCTGCGCAGCCAGAAGCCTGTGATGGTGAAGAGGAAGCGGACCCGCCCCACCAAGAGC
TCCTGAGCCCCCTGCCCCCAGAGCAATAAAGTCAGCTGGCTTTCTCA

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FIGURE 3937

GGCGGACCGAAGAACGCAGGAAGGGGGCCGGGGGGACCCGCCCCCGGCCGGCCGCAGCCATGAACTCCAACGTGG
AGAACCTACCCCCGCACATCATCCGCCTGGTGTACAAGGAGGTGACGACACTGACCGCAGACCCACCCGATGGCA
TCAAGGTCTTTCCCAACGAGGAGGACCTCACCGACCTCCAGGTCACCATCGAGGGCCCTGAGGGGACCCCATATG
CTGGAGGTCTGTTCCGCATGAAACTCCTGCTGGGGAAGGACTTCCCTGCCTCCCCACCCAAGGGCTACTTCCTGA
CCAAGATCTTCCACCCGAACGTGGGCGCCAATGGCGAGATCTGCGTCAACGTGCTCAAGAGGGACTGGACGGCTG
AGCTGGGCATCCGACACGTACTGCTGACCATCAAGTGCCTGCTGATCCACCCTAACCCCGAGTCTGCACTCAACG
AGGAGGCGGGCCGCCTGCTCTTGGAGAACTACGAGGAGTATGCGGCTCGGGCCCGTCTGCTCACAGAGATCCACG
GGGGCGCCGGCGGGCCCAGCGGCAGGGCCGAAGCCGGTCGGGCCCTGGCCAGTGGCACTGAAGCTTCCTCCACCG
ACCCTGGGGCCCCAGGGGGCCCGGGAGGGGCTGAGGGTCCCATGGCCAAGAAGCATGCTGGCGAGCGCGATAAGA
AGCTGGCGGCCAAGAAAAAGACGGACAAGAAGCGGGCGCTGCGGCGGCTGTAGTGGGCTCTCTTCCTCCTTCCAC
CGTGACCCCAACCTCTCCTGTCCCCTCCCTCCAACTCTGTCTCTAAGTTATTTAAATTATGGCTGGGGTCGGGGA
GGGTACAGGGGGCACTGGGACCTGGATTTGTTTTTCTAAATAAAGTTGGAAAAGCA

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FIGURE 3938

AATTCTTTCATTTCAGAGTTGAGCAAACTGTGTCTCAAGGAGGTGTGCGCTGCAGGTAGCTGATGTGGCCAGGAT
TTGAACCCACATTTTATATTCTTTGCCATTAGATTCCATTTTTCTTATCTCTTATTTCTCAGCGCCAGGTCTCTT
TTTGTTTCTGGGCCTCTTTCTTCCTTGGCCTCCTGCCTCCCTGTCTTCCCATGTTCTTGTATCTGCTGCTGCCTG
TGTTTTTCTCATTGTGTCTCTGCCTAGCTCCCTCTGCCCAGGTTTCTATGTGTCTCTTTCTGTCAGAACTGTCTT
CTATTTCTTCTCAGTCCCCTTCTCTGCATTTGTTACATCATCTCTTCATCTTAATGTATTAGGCTGGGGCTGTTT
TGGGACTCCAGAGAGTTACTTTTTAACTAGCTACATCTGTCTTCAGGTGCCTGGCTTTCTGGCCTGAGGTGGAAG
CAGAGGCCAGCCTCTCTCCGTCATCCCTATCTCCCCTGGGCTTACATCATGGCGGGGCTTTGAAAATCTCCCTCT
GTGGCTTCTTGGAGCCGCATAG**ATG**GGTGATCAGAGCTGGCTCTGGAACCAGGCTGCTCCAGGAGTAAGGAGCCC
AGTCTTTGCATGCAGTGTTGAAAAAGGTAATGTCCCTCTTGTGCTGAGCGAGCACCTGGCACACAGCAGGGACCC
AGGCAGTGGGGCTGTTAGGTTCCTTATCTCTCCTGAGCCTTGGGCTTCCGCTATCCTTGGGACGTCTGGTCTTCT
GGCTTCCCCGGTTCTTCCTGCCGCCCTGGATGCGGTGACCTGCCAGCACCTGCCGCAGCCTTCGTCCGGGAGTCG
CCCCATCTCTCCACGCATCGGGGCCCTGTGCCCCTTGCTGCTGCAGCCGGGCACCATGTCGACCTCGTCCTTGAG
GCGCCAGATGAAGAACATCGTCCACAACTACTCAGAGGCGGAGATCAAGGTTCGAGAGGCCACGAGCAATGACCC
CTGGGGCCCATCCAGCTCCCTCATGTCAGAGATTGCCGACCTCACCTACAACGTTGTCGCCTTCTCGGAGATCAT
GAGCATGATCTGGAAGCGGCTCAATGACCATGGCAAGAACTGGCGTCACGTTTACAAGGCCATGACGCTGATGGA
GTACCTCATCAAGACCGGCTCGGAGCGCGTGTCGCAGCAGTGCAAGGAGAACATGTACGCCGTGCAGACGCTGAA
GGACTTCCAGTACGTGGACCGCGACGGCAAGGACCAGGGCGTGAACGTGCGTGAGAAAGCTAAGCAGCTGGTGGC
CCTGCTGCGCGACGAGGACCGGCTGCGGGAAGAGCGGGCGCACGCGCTCAAGACCAAGGAAAAGCTGGCACAGAC
CGCCACGGCCTCATCAGCAGCTGTGGGCTCAGGCCCCCCTCCCGAGGCGGAGCAGGCGTGGCCGCAGAGCAGCGG
GGAGGAGGAGCTGCAGCTCCAGCTGGCCCTGGCCATGAGCAAGGAGGAGGCCGACCAGCCCCCGTCCTGCGGCCC
CGAGGACGACGCCCAGCTCCAGCTGGCCCTTAGTTTGAGCCGAGAAGAGCATGATAAGGAGGAGCGGATCCGTCG
CGGGGATGACCTGCGGCTGCAGATGGCAATCGAGGAGAGCAAGAGGGAGACTGGGGGCAAGGAGGAGTCGTCCCT
CATGGACCTTGCTGACGTCTTCACGGCCCCAGCTCCTGCCCCGACCACAGACCCCTGGGGGGGCCCAGCACCCAT
GGCTGCTGCCGTCCCCACGGCTGCCCCCACCTCGGACCCCTGGGGCGGCCCCCCTGTCCCTCCAGCTGCTGATCC
CTGGGGAGGTCCAGCCCCCACGCCGGCCTCTGGGGACCCCTGGAGGCCTGCTGCCCCTGCAGGACCCTCAGTTGA
CCCTTGGGGTGGGACCCCAGCCCCTGCAGCTGGGGAGGGGCCCACGCCTGATCCATGGGGAAGTTCCGATGGTGG
GGTCCCGGTCAGTGGGCCCTCAGCCTCCGATCCCTGGACACCGGCCCCGGCCTTCTCAGATCCCTGGGGAGGGTC
ACCTGCCAAGCCCAGCACCAATGGCACAACAGCAGCCGGGGGATTCGACACGGAGCCCGACGAGTTCTCTGACTT
TGACCGACTCCGCACGGCACTGCCGACCTCCGGGAGCAGCGCAGGAGAGCTGGAGCTGCTGGCAGGAGAGGTGCC
GGCCCGAAGCCCTGGGGCGTTTGACATGAGTGGGGTCAGGGGATCTCTGGCTGAGGCTGTGGGCAGCCCCCCACC
TGCAGCCACACCAACTCCCACGCCCCCCACCCGGAAGACGCCGGAGTCATTCCTGGGGCCCAATGCAGCCCTCGT
CGACCTGGACTCGCTGGTGAGCCGGCCGGGCCCCACGCCGCCTGGAGCCAAGGCCTCCAACCCCTTCCTGCCAGG
CGGAGGCCCAGCCACTGGCCCTTCCGTCACCAACCCCTTCCAGCCCGCGCCTCCCGCGACGCTCACCCTGAACCA
GCTCCGTCTCAGTCCTGTGCCTCCCGTCCCTGGAGCGCCACCCACGTACATCTCTCCCCTTGGCGGGGGCCCTGG
CCTGCCCCCCATGATGCCCCCGGGCCCCCCGGCCCCCAACACTAATCCCTTCCTCCTA**TAA**TCCAGGGCGGAAGG
GGGCCTGGCTCCATCCGGCTGCCCCATTCCGGCTCCCTGGGAGATCAGTGTTGTGAGTGCATGTGAAATGG

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FIGURE 3939

GAGGCGAAAGCTGCACAGGGCCCTACGCGGCCGCCTCAGCATGTCGGACTTCGACGAGTTCGAGCGGCAGCTCAA
CGAGAATAAACAAGAGCGGGACAAGGAGAACCGGCATCGGAAGCGCAGCCACAGCCGCTCTCGGAGCCGGGACCG
CAAACGCCGGAGCCGGAGCCGCGACCGGCGCAACCGGGACCAGCGGAGCGCCTCCCGGGACAGGCGACGACGCAG
CAAACCTTTGACCAGAGGCGCTAAAGAGGAGCACGGTGGACTGATTCGTTCCCCCCGCCACGAGAAGAAGAAGAA
GGTCCGTAAATACTGGGACGTGCCACCCCCAGGCTTTGAGCACATCACCCCAATGCAGTACAAGGCCATGCAAGC
TGCGGGTCAGATTCCAGCCACTGCTCTTCTCCCCACCATGACCCCTGACGGTCTGGCTGTGACCCCAACGCCGGT
GCCCGTGGTCGGGAGCCAGATGACCAGACAAGCCCGGCGCCTCTACGTGGGCAACATCCCCTTTGGCATCACTGA
GGAGGCCATGATGGATTTCTTCAACGCCCAGATGCGCCTGGGGGGGCTGACCCAGGCCCCTGGCAACCCAGTGTT
GGCTGTGCAGATTAACCAGGACAAGAATTTTGCCTTTTTGGAGTTCCGCTCAGTGGACGAGACTACCCAGGCTAT
GGCCTTTGATGGCATCATCTTCCAGGGCCAGTCACTAAAGATCCGCAGGCCTCACGACTACCAGCCGCTTCCTGG
CATGTCAGAGAACCCCTCCGTCTATGTGCCTGGGGTTGTGTCCACTGTGGTCCCCGACTCTGCCCACAAGCTGTT
CATCGGGGGCTTACCCAACTACCTGAACGATGACCAGGTCAAAGAGCTGCTGACATCCTTTGGGCCCCTCAAGGC
CTTCAACCTGGTCAAGGACAGTGCCACGGGGCTCTCCAAGGGCTACGCCTTCTGTGAGTACGTGGACATCAACGT
CACGGATCAGGCCATTGCGGGGCTGAACGGCATGCAGCTGGGGGATAAGAAGCTGCTGGTCCAGAGGGCGAGTGT
GGGAGCCAAGAATGCCACGCTGGTGAGCCCCCCGAGCACCATCAATCAGACGCCTGTGACCCTGCAAGTGCCGGG
CTTGATGAGCTCCCAGGTGCAGATGGGCGGCCACCCGACTGAGGTCCTGTGCCTCATGAACATGGTGCTGCCTGA
GGAGCTGCTGGACGACGAGGAGTATGAGGAGATCGTGGAGGACGTGCGGGACGAGTGCAGCAAGTACGGGCTTGT
CAAGTCCATCGAGATCCCCCGGCCTGTGGACGGCGTCGAGGTGCCCGGCTGCGGAAAGATCTTTGTGGAGTTCAC
CTCTGTGTTTGACTGCCAGAAAGCCATGCAGGGCCTGACGGGCCGCAAGTTCGCCAACAGAGTGGTTGTCACAAA
ATACTGTGACCCCGACTCTTATCACCGCCGGGACTTCTGGTAGAGGCGGCTGGGGGAGGGTGGGGGCAGGGCTGG
CTGGGGGCTTCTCCCCACTCCCGCCCCCCCCTTATCCCCCTCTGAAGACGATGGGCAGAGGAGTGACAGCCGCAG
ACACACGACAGCCGGCAGCAACTGGAATGGCAGCAATTAAGGGTGGGGGGCGGGGGTTGGGGGGTTGGGGGGTTA
GGGCAGGGAGGGGACTGGGGAAGTGCGCACACAGCCCACACAGACAACACGCAC

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FIGURE 3940

AACGGCGGGCCTCACCTGGACCCGGGGACTCTTCAACGAGGGGCGCTAGCCTGGCCCGACTGGGCGAGTCCCCGC
GTCCCTGCCCGTTCCGTCGCTCAGTTCCACGACACGCTCCCCTGCCGCCCCGCCTGTTCGCGGGTGGGTGGGCGC
TTCCCTCGGCTCCCCGTGACACTTTGCAGACGCTCCCCGGCGCCGGGCATGGGCGCCGCCGCCGTCGGTCCCCGA
GCCGGATTCCGCGAGCGGTGCCCCTGAGGCCCTCGGCTGCTGGGGTCCGTAGGAAGCCGCGCC**ATG**AATGACCGG
AGCAGTCGGAGGCGGACAATGAAGGACGATGAGACCTTCGAGATCTCCATTCCCTTCGATGAGGCACCCCACCTA
GACCCACAGATCTTTTACAGTCTGAGCCCCTCTCGGAGAAACTTCGAGGAGCCTCCGGAGGCTGCGTCCTCCGCC
CTGGCTCTGATGAACAGCGTCAAGACCCAGCTGCACATGGCTCTGGAGAGGAACTCCTGGCTGCAGAAGCGCATC
GAGGACCTGGAGGAAGAGAGGGACTTCCTGCGGTGCCAGCTGGACAAATTCATCTCTTCTGCTCGGATGGAGGCA
GAGGACCACTGCCGGATGAAGCCTGGGCCCAGGCGGATGGAGGGGGACAGCCGTGGTGGGGCTGGGGGCGAGGCC
TCGGACCCTGAGTCAGCAGCCTCCTCCCTCAGCGGAGCGTCCGAAGAAGGCAGCGCCAGTGAGAGGAGGCGGCAG
AAGCAGAAGGGAGGTGCTAGTCGGAGGCGCTTTGGGAAGCCCAAGGCCCGGGAGAGGCAGCGAGTGAAGGACGCC
GACGGGGTCCTCTGCCGGTACAAGAAGATCCTGGGCACCTTCCAGAAGCTCAAGAGCATGTCGCGGGCCTTCGAG
CACCACCGCGTGGACAGGAACACCGTGGCGCTGACCACGCCCATCGCCGAGCTGCTCATTGTGGCCCCCGAGAAG
CTGGCCGAGGTGGGCGAGTTCGACCCCTCCAAGGAGCGCCTGCTCGAGTACTCCCGCCGCTGCTTTCTGGCCCTG
GACGACGAGACGCTCAAGAAGGTGCAGGCGCTCAAGAAGAGCAAGCTGCTGCTGCCCATCACCTACCGCTTCAAG
CGG**TGA**TCGCACCACGCCTCCGCGCCTCCACCCGGGCCTTCCTCCCCCGTGGACCCCGGTGGATGACCTGCCCCT
CTCCCCGCCGCGCCCCTGCCCCTCCTCCTCGCTCCCTGGGTTGGGGGCTCCCTTAGCCGGGCCCCCAAGCGCGAC
GGCCCCGGACCGGCCGCGGCCCCTTCCCGAACGCCGGCACCCCCTTCCGCTTGGGCTGCCCAGCCCTGTCCTCGC
CGGGCCCCTTCCTCCTGGAAAACCAGGCAGGCGGGTGCCCCCCCCTCGAGTGGGGGACTGTACAGACCCCGTCTC
CGCCCTGGCCCCGCGGAGGAGCTGCCCACCTGATTCCCGGACAGACCTCCCCAACTCCGCGTGAGACAGAGAATT
ATTCAGATAATTTAAATTAAAAAACGACGTGAAAATTTGGAATAAA

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FIGURE 3941

GGGCGGCGGGAGGGGCTGGACCGCGTGGAGGGCCTCAGCCAGCCCTCCGGATGCTGGTGCTGCCATCCCCCTGCC
CTCAGCCTCTGGCATTTTCCTCCGTTGAGACCATGGAGGGCCCTCCCCGTCGGACTTGCCGCTCCCCAGAACCTG
GACCTTCCTCCTCCATCGGATCTCCCCAGGCTTCATCTCCTCCAAGGCCCAACCACTACCTGCTTATTGACACTC
AGGGTGTCCCCTACACAGTGCTGGTGGACGAGGAGTCACAGAGGGAGCCAGGGGCCAGTGGGGCTCCAGGCCAGA
AAAAGTGCTACAGCTGCCCCGTGTGCTCAAGGGTCTTCGAGTACATGTCCTACCTTCAGCGACACAGCATCACCC
ACTCGGAGGTAAAGCCCTTCGAGTGTGACATCTGTGGGAAGGCATTCAAGCGCGCCAGCCACTTGGCACGGCACC
ATTCCATTCACCTGGCGGGTGGTGGGCGGCCCCACGGCTGCCCGCTCTGCCCTCGCCGCTTCCGGGATGCGGGTG
AGCTGGCCCAGCACAGCCGGGTGCACTCTGGGGAACGCCCGTTTCAGTGTCCACACTGCCCTCGCCGCTTTATGG
AGCAGAACACACTGCAGAAACACACGCGGTGGAAGCATCCATGAGCCGGGCTGCCGGGTGCCCCAGGTACCACAG
GACTTTGCAGGGAGCCTGGACTCCTGTCCAGA

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FIGURE 3942

GGAAGGCATTTGAGCCATTTTGGGGTGTATAGATGTAGTAAGACGATGGGTTCCGTAGTGGGGAGAGGTGACTAG
ACTTCGAGGTGCTAAGTGTAGGAACAGGATGGAAAAGCCCTAGTGAAATGTGGGGAATTGGGTTAGTGGGGCTCT
GGGGAGGTACCTAGAGAGGAAGTGAGGGAGGCCACGGAATATGAAGATGGGGAGGCCCTGCGGCATGTAGTGGGG
ACGGAGGGCCAGGAGGCCGATACGGGGGCCGGTGGGGGGGTAGGGGGCGGCAAAGGGAGGGGAAGTAAACTGAAC
TGGGGCTGGGCAACAGGAAAAAAGAAGAAACCACAGATTAGAGAAATCTCGGCGGTCAGGAGGCCCGGGGTCTAA
GATGTAAAGAGGTAAACAGATTTAGGGATTGATTGTCTGCTGGGGTGGGTTGAGAGGAGAAAAGGGAAGAAAAGT
CGGGGGACTACGTCCTCAGACCTGACCTGAGTGGTGAGAGGTGGACCCAGGAGGAGTGGCAGGTGGTGGCGGGGT
TTTGCAGAGCTCAGTTGGAGGCCCTCTCCGAGGCAGCTTGATGGAACGTGGGAGAGCCGGGCTGGAGTCACAGTT
TTTATTTTGCTAGGGAGGTAGTCAGTGGCGCACAAAGGGTAACAAGCAGTGATAGTGGGGATGCTTTCCATTTTA
GGAAACTTTTCCTAAAAGGAAGTGGCAATTTTAACTAATCTCCCCTCCGCCGCTCCCAGCTGCCGCTCCAGATGC
TGCTGCTGCCGCCGCGGCCACCCCACCCTCGGTCCTCCTCTCCGGAGGCCATGGACCCACCGCCCCCCAAGGCTC
CCCCTTTCCCCAAGGCGGAAGGCCCCTCCTCCACTCCTTCCTCGGCGGCGGGGCCCCGACCCCCGCGGCTGGGCC
GCCACCTCCTCATCGACGCCAATGGGGTCCCCTACACATACACGGTGCAGCTGGAGGAGGAGCCCCGGGGCCCGC
CCCAGCGCGAGGCGCCCCCAGGAGAGCCCGGCCCTCGCAAGGGCTACAGCTGCCCGGAGTGCGCCCGTGTCTTTG
CCAGCCCTCTGCGGCTGCAGAGCCACCGCGTGTCGCACTCGGACCTCAAGCCCTTCACGTGCGGCGCCTGCGGCA
AGGCCTTCAAGCGCTCCAGCCACCTGTCGCGGCATCGCGCCACGCACCGCGCCCGCGCCGGGCCGCCGCACACCT
GCCCGCTCTGCCCACGCCGCTTCCAGGACGCCGCGGAGCTGGCGCAGCACGTGCGCCTCCACTAAGCTCGAGACC
CGGCCTGTGCTGCCCTGCCCGTCTCAGGGCCACCAAGTCTGACCCACACAGCGTCACTCACTCCCACACACACCC
CCTGGCTCTGCTGAGGTTACTGCCTTACCCTGGGCCTCAGTTTCCCCACCTTCCAAAGGGAGGAGCATCATTCCT
TCCTTACCCCCTTTCTAGCTGTGTGATGTAGACCAAAGTCGTTGCCCCTCCCTGGGCCTGGGAACCAGTCGGAAC
TGGGTTCCAGTCCAGCTGTGCTGTGTGAGCCTGTGCAAGTGACATGACCTCTCTAAACCTTGGTTTTCTGCTCTC
TGGAGCGGTGAACCGGTGGTTGTCTGCGGGGAAGAGATGATAAAGAGCACGGGCACGGTCTGGTTCATTTCTGTA
TCTACCCCCCTTCCGCCCACGCCCCCGACCCTTTGCTCAATAAACATTCCGCACTCC

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FIGURE 3943

ATGGAACTCAAGCTCCCTGCTTCTGTTGCTAGGCTTAGCCCAGGGTCTCCCGTCTCCCACCCGCCGGAGATGGAG
GCGAACCCAGCGGGCAGCGGCGCCGGGGGTGGCGGGAGCAGCGGCATCGGGGGCGAGGACGGGGTGCACTTCCAG
AGCTACCCCTTCGACTTCCTGGAATTCCTCAACCACCAGCGCTTCGAGCCCATGGAACTGTATGGGGAACACGCC
AAGGCGTGGGGCATCGTGGACCTCTCGGGGCACCAGCACTTGTTTGGGAACCTGAAGCGAGGAGGGCCCGCGTCC
GGGCCGGGGACCCCGCCAGGACCCCCCGCGGCGGCGGCCTGCGACCCCACCAAGGACGACAAGGGCTACTTCCGG
AGACTGAAGTACCTGATGGAGCGGCGCTTCCCCTGCGGCGTGTGCCAGAAGTCCTTCAAGCAGTCCTCGCACCTG
GTCCAGCACATGCTGGTGCACTCGGGGGAGAGGCCCTACGAATGCGGCGTCTGCGGCCGCACCTACAACCACGTT
TTCAAGAAGCCCAGTCACCTCCACCAGCACCAGATCATCCACACGGGCGAGAAGCCCTTCTCCTGCTCCGTGTGC
AGCAAAAGCTTCAACCGCAGGGAGAGTCTGAAGCGCCACGTGAAGACGCACTCGGCCGACCTCCTGCGCCTGCCC
TGCGGCATCTGCGGGAAGGCCTTCCGCGACGCCTCCTACCTCCTCAAGCACCAGGCGGCCCACGCGGGGGCGGGC
GCCGGGGGGCCTCGGCCCGTGTACCCCTGCGACCTGTGCGGCAAGTCCTACTCGGCTCCGCAGAGCCTGCTCCGC
CACAAGGCCGCCCACGCCCCGCCCGCTGCCGCTGCGGAGGCGCCCAAGGACGGGGCGGCCTCGGCCCCGCAGCCC
CCGCCCACCTTCCCCCCGGGCCCCGGGGCGGGAGGCTCGGGCGCCAGCGTCCCAGGAAAGACGTTCTGCTGCGGC
ATCTGCGGGCGCGGCTTCGGGCGCCGCGAGACCCTGAAGCGCCATGAGCGCATCCACACGGGCGAGAAGCCCCAC
CAGTGCCCCGTGTGTGGGAAGCGCTTCCGCGAATCCTTCCACTTGAGCAAGCATCACGTGGTGCACACGCGCGAG
CGGCCCTACAAGTGCGAGCTCTGCGGCAAGGTCTTCGGCTACCCGCAGAGCCTCACCCGCCACCGCCAGGTGCAC
CGGCTCCAGCTGCCCTGCGCCCTGGCCGGGGCAGCCGGCCTCCCCTCCACCCAAGGCACACCGGGGGCCTGTGGG
CCCGGGGCCTCGGGCACGTCTGCAGGGCCCACCGATGGGCTGAGCTACGCCTGCTCGGACTGCGGCGAGCACTTC
CCGGATCTCTTTCACGTCATGAGTCACAAGGAGGTCCACATGGCAGAGAAGCCATACGGCTGCGACGCCTGCGGC
AAGACCTTCGGCTTCATCGAGAACCTCATGTGGCACAAGCTGGTCCACCAGGCCGCCCCCGAGCGCCTGCTCCCG
CCCGCACCCGGCGGCCTGCAGCCCCCGGACGGCTCCAGCGGCACGGATGCGGCCAGCAGTTTCAAGCACTTCCTG
GGCCTCGTGACTCACAAGTACGTGCACCTGGTGCGACGGACCCTGGGCTGCGGCCTCTGCGGCCAGAGCTTCGCG
GGCGCCTACGACTTGCTCCTACACCGCCGCAGCCATCGGCAGAAGCGGGGTTTCCGCTGCCCGGTGTGCGGGAAG
CGCTTCTGGGAGGCGGCCCTGCTGATGCGCCACCAGCGCTGCCACACGGAACAGCGGCCGTACCGATGTGGCGTG
TGCGGCCGAGGCTTCCTGCGCTCCTGGTACCTGCGGCAGCACCGCGTGGTGCACACTGGCGAGCGGGCCTTCAAG
TGCGGCGTGTGCGCCAAGCGCTTCGCGCAGTCGTCCAGCCTGGCAGAGCACCGGCGGCTGCACGCTGTGGCCCGG
CCCCAGCGCTGCAGCGCCTGTGGCAAGACCTTCCGCTACCGCTCCAACCTGCTGGAGCACCAGCGGCTGCACCTG
GGCGAGCGCGCCTACCGCTGTGAGCACTGCGGCAAGGGCTTCTTCTACCTGAGCTCCGTGCTGCGCCACCAGCGC
GCCCATGAGCCGCCGCGGCCCGAGCTCCGCTGCCCCGCCTGCCTCAAGGCCTTCAAGGATCCCGGCTACTTCCGT
AAGCACCTGGCTGCCCACCAGGGCGGCCGGCCCTTCCGCTGCTCCTCCTGCGGCGAGGGCTTCGCCAACACCTAC
GGCCTCAAGAAACACCGCCTGGCGCACAAGGCCGAGAACCTCGGGGGGCCTGGAGCAGGGGCGGGCACCTTGGCC
GGGAAGGATGCCTGA

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FIGURE 3944

ATGCGGGGCTGGTCTGCACCGGCCCAGCACCTCGGCTGCGCCTGGCCGATGGCCCCCACGGGTGCGCCGGCCGCC
TGGAGGTCTGGCACGGGGGTCGCTGGGGGTCGGTGTGTGACGACGCCTGGGACCTGCGAGACGCCGCTGTGGCCT
GCCGAGAGCTGGGCTGCGGAGGGGCGCTGGCCGCCCCCGGGGGCGCCTTCTTTGGGGAGGGGTCTGGACCCATCA
TCCTGGACGACCTTCGGTGTCGGGGAAACGAGACGGCCTTACGATTCTGCCCAGCTCGGCCCTGGGGCCAGCATG
ACTGTCACCACCGCGAGGACGCCGGGGCCGTGTGTGACGGCATGCCCCTGGGCTACGTCCCTCCCACGGCCCCCA
CGGACAGCAACAACTCCACGCCCAGGGAGGCTGCCTCCAGGCCCCCGTCCACCATGACGAGCCAGGCTCCAGGGA
CGGCAGGCGTTTCACCTCCTCCAGCCTCCCCTACTGTCCTTTGGGAGCCTGGACCGGAAGCCGGGCCCCCAGGCC
TGGACTCCATCTCAGACCCCTTCAGCTGGAGCTGGATTCCTGGACTGGGGAGAGATCGGGATGCCTGGCTCCCGG
GAGAGCTGGCCACCAAGCCCTCTGCAAGTGTGACTGCCAGTGTTCTGGAGAAAACAACCACGAAGGCCCCA

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FIGURE 3945

CCTTGTCGAAGGACCAAAGGCGACCGGTGCAGGTGCACGACGCCAGCTCCCTTCTGGGGGGCCGGGGCCTGGGGG
TTGCC**ATG**GCCCCCAGCCACCTGTCAGTGCGGGAGATGAGGGAAGATGAGAAGCCCCTGGTGCTGGAGATGCTGA
AGGCCGGCGTGAAGGACACGGAAAACCGCGTGGCCCTCCATGCCTTGACACGGCCGCCGGCCCTGCTCCTCCTGG
CGGCGGCCAGCAGCGGCCTGCGCTTTGTCCTGGCTTCCTTCGCCCTGGCCCTCCTCCTGCCGGTGTTCCTGGCTG
TGGCCGCCGTGAAGCTGGGCCTGCGGGCCCGATGGGGCTCGCTGCCTCCGCCGGGTGGCCTGGGGGGCCCCTGGG
TGGCCGTGCGGGGCTCCGGTGACGTGTGTGGGGTCCTGGCTCTGGCCCCTGGCACAAATGCAGGGGACGGGGCCC
GGGTCACCCGCCTGTCTGTCTCTCGCTGGCACCGCCGCCGGGGCGTGGGCAGGAGGCTGCTGGCCTTCGCGGAGG
CCCGGGCTCGGGCCTGGGCTGGGGGCATGGGGGAGCCCCGGGCCCGGCTCGTGGTCCCCGTGGCTGTGGCCGCCT
GGGGGGTGGGAGGGATGCTGGAGGGCTGTGGCTACCAGGCCGAGGGGGGCTGGGGCTGCCTGGGCTACACGCTGG
TGAGGGAATTCAGCAAAGACCTG**TGA**AGCTACAGACTGACAGCCAGGGCAGGGGAGGAGGGAGGGGCGCCAGCAC
CTGATGATCGCCTACTGTCTGCGGGTTCTTTTACCTGCTCTCCCTCAGTGAGTCCTCAACCACCCTGGGCCCAGA
AACAGAGGCCTGCCGAGGGGAGGAGCCTGGCCTCTGTCCACCCGTCAGCAGTGTGAAGTCTGTTGTGTTTGAGCT
TCTCAGAGTGGAATGACTCCTTTTCCTTCCTGGCCCTCGGGGGCCTCTCGAGGTCAGCCTCTCCAACCCCTACCT
CAGCTCCTGTCTGCACTGAGAAACCTCCCCGGGTGATGTCTGCAAAGTCTGTGCTGTCCGTGCCCCAGGCTGGGA
GAGCTATCTGGGGAGGGGGAGAGGAGGCCGAGCAGAATACACCCCAGAGTTAGGGTTTGCGACTCCGCCTCCCTG
GGACCTGGATTGGGTCAGATGCCTGTCCTTGGAGGGGACAAGGTTGACTGCTTAGGAGGCGCGACGCACAGGGCT
GCCAGGCCTGGCCCCTCTCTGGGAAGGTTGAGAGCTGAGACGGGCAGCCCTGTCCCTTCCTCCAGATCCGTCTGG
TTTTTTACACCGTTTGTTAATAAAGCCTGAAACCGC

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FIGURE 3946

CCTAACGAAACGGTAACCAGCCCTGGGAAGCCCGCAAGAGGCCTCAGCGGTGGCCGTCCGAGAGCCGAGAGGTGA
GGGTGCCCCCGCCTCACCTGCAGAGGGGCCGTTCCGGGCTCGAACCCGGCACCTTCCGGAAAATGGCGGCTGCCA
GGCCCAGCCTGGGCCGAGTCCTCCCAGGATCCTCTGTCCTGTTCCTGTGTGACATGCAGGAGAAGTTCCGCCACA
ACATCGCCTACTTCCCACAGATCGTCTCAGTGGCTGCCCGCATGCTCAAGGTGGCCCGGCTGCTTGAGGTGCCAG
TCATGCTGACGGAGCAGTACCCACAAGGCCTGGGCCCCACGGTGCCCGAGCTGGGGACTGAGGGCCTTCGGCCGC
TGGCCAAGACCTGCTTCAGCATGGTGCCTGCCCTGCAGCAGGAGCTGGACAGTCGGCCCCAGCTGCGCTCTGTGC
TGCTCTGTGGCATTGAGGCACAGGCCTGCATCTTGGACCCCCGTTCTTATCCGGGGTTGGCCCTGACCTCTCTCT
ACCCACAGAACACGACCCTGGACCTCCTAGACCGGGGGCTGCAGGTCCATGTGGTGGTGGACGCCTGCTCCTCAC
GCAGCCAGGTGGACCGGCTGGTGGCTCTGGCCCGCATGAGACAGAGTGGTGCCTTCCTCTCCACCAGCGAAGGGC
TCATTCTGCAGCTTGTGGGCGATGCCGTCCACCCCCAGTTCAAGGAGATCCAGAAACTCATCAAGGAGCCCGCCC
CAGACAGCGGACTGCTGGGCCTCTTCCAAGGCCAGAACTCCCTCCTCCACTGAACTCCAACCCTGCCTTGAGGGA
AGACCACCCTCCTGTCACCCGGACCTCAGTGGAAGCCCGTTCCCCCCATCCCTGGATCCCAAGAGTGGTGCGATC
CACCAGGAGTGCCGCCCCCTTGTGGGGGGGGGCAGGGTGCTGCCTTCCCATTGGACAGCTGCTCCCGGAAATGCA
AATGAGACTCCTGGAAACTGGGTGGGAATTGGCTGAGCCAAGATGGAGGCGGGGCTCGGCCCCGGGCCACTTCAC
GGGGCGGGAAGGGGAGGGGAAGAAGAGTCTCAGACTGTGGGACACGGACTCGCAGAATAAACATATATGTGGC

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FIGURE 3947

GCTGTGGCCCTGGCACCTGCCCCTGGGCTGGGACAGCCCACTGTTCCATGCTGCCCAAGAAGGCTCAGCACAGGC
ACAAACCATTGCCCGGCACTGGCCCGTGCTGCCTGAGAAGGATTGGCACGGGCACAGACCACTGCCCCCACCTGC
CCTGCGCCATCTACCCAAGAAGGCTCGGCACGGGCACCAACCACTGCCTCCAACTGCCCC**ATG**CTGCCTGAGAAG
GCACTGCACGGCCACCCCCAACTGCCCCGCACTGTCCCTACCCGGGCAGCCATGCGAGCGGCTGGAACTCTGCTG
GCCTTCTGCTGCCTGGTCTTGAGCACCACTGGGGGCCCTTCCCCAGATACTTGTTCCCAGGACCTTAACTCACGT
GTGAAGCCAGGATTTCCTAAAACAATAAAGACCAATGACCCAGGAGTCCTCCAAGCAGCCAGATACAGTGTTGAA
AAGTTCAACAACTGCACGAACGACATGTTCTTGTTCAAGGAGTCCCGCATCACAAGGGCCCTAGTTCAGATAGTG
AAAGGCCTGAAATATATGCTGGAGGTGGAAATTGGCAGAACTACCTGCAAGAAAAACCAGCACCTGCGTCTGGAT
GACTGTGACTTCCAAACCAACCACACCTTGAAGCAGACTCTGAGCTGCTACTCTGAAGTCTGGGTCGTGCCCTGG
CTCCAGCACTTCGAGGTGCCTGTTCTCCGTTGTCAC**TGA**CCCCCGCCTCTTCAGCAAGACCACAGCCATGACAAA
CACCAGGATGCATGCTCCTTGTCCCCTCCCACCCGCCTCATGACCCAGCCTCACAGACCCTCTCAGGCCTCTGAC
GAGTGAGCGGGTGAAGTGCCACTGGGTCACCGCAGGGCAGCTGGAATGGCAGCATGGTAGCACCTCCTAACAGAT
TAAATAGATCACATTTGCTTCTAAAATT

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FIGURE 3948

TCGCGTTCTGGGCCCCGGAGTCCGAGACAGGCGGGGACCCCGGCAGCTCCCGGTGCTATCTCTGAGCGGGTTCCG
AGCCCCACTTCCGGGCGGTCAGAATTAGCCTCAGAGCGCCGAGCAACGACGCGCCGGGGACCTCCCGCCCATGAG
GCCGGAAGGGGCGGGGAGAACGCTGCGGAATGGTCCCTGGGCGCAACGTCATTTCCGCGTACGGGGGAGGGCGGG
CCTGGAGTCTGAGCCGGCGCCGCTCAGTGTGAGGTGGTTTCTGCGGGTGAGGCTGGCGCCCGTACC**ATG**AGCGAG
GCGGACGGGCTGCGACAGCGCCGGCCCCTGCGGCCGCAGGTCGTCACAGACGATGATGGCCAGGCCCCGGAGGCT
AAGGACGGCAGCTCCTTTAGCGGCAGAGTTTTCCGAGTGACCTTCTTGATGCTGGCTGTTTCTCTCACCGTTCCC
CTGCTTGGAGCCATGATGCTGCTGGAATCTCCTATAGATCCACAGCCTCTCAGCTTCAAAGAACCCCCGCTCTTG
CTTGGTGTTCTGCATCCAAATACGAAGCTGCGACAGGCAGAAAGGCTGTTTGAAAATCAACTTGTTGGACCGGAG
TCCATAGCACATATTGGGGATGTGATGTTTACTGGGACAGCAGATGGCCGGGTCGTAAAACTTGAAAATGGTGAA
ATAGAGACCATTGCCCGGTTTGGTTCGGGCCCTTGCAAAACCCGAGATGATGAGCCTGTGTGTGGGAGACCCCTG
GGTATCCGTGCAGGGCCCAATGGGACTCTCTTTGTGGCCGATGCATACAAGGGACTATTTGAAGTAAATCCCTGG
AAACGTGAAGTGAAACTGCTGCTGTCCTCCGAGACACCCATTGAGGGGAAGAACATGTCCTTTGTGAATGATCTT
ACAGTCACTCAGGATGGGAGGAAGATTTATTTCACCGATTCTAGCAGCAAATGGCAAAGACGAGACTACCTGCTT
CTGGTGATGGAGGGCACAGATGACGGGCGCCTGCTGGAGTATGATACTGTGACCAGGGAAGTAAAAGTTTTATTG
GACCAGCTGCGGTTCCCGAATGGAGTCCAGCTGTCTCCTGCAGAAGACTTTGTCCTGGTGGCAGAAACAACCATG
GCCAGGATACGAAGAGTCTACGTTTCTGGCCTGATGAAGGGCGGGGCTGATCTGTTTGTGGAGAACATGCCTGGA
TTTCCAGACAACATCCGGCCCAGCAGCTCTGGGGGGTACTGGGTGGGCATGTCGACCATCCGCCCTAACCCTGGG
TTTTCCATGCTGGATTTCTTATCTGAGAGACCCTGGATTAAAAGGATGATTTTTAAGCTCTTTAGTCAAGAGACG
GTGATGAAGTTTGTGCCGCGGTACAGCCTCGTCCTAGAACTCAGCGACAGCGGTGCCTTCCGGAGAAGCCTGCAT
GATCCCGATGGGCTGGTGGCCACCTACATCAGCGAGGTGCACGAACACGATGGGCACCTGTACCTGGGCTCTTTC
AGGTCCCCCTTCCTCTGCAGACTCAGCCTCCAGGCTGTT**TAG**CCCTCCCAGATAGCTGCCCCTGCCACGCAGGCC
AGGAGTCTTCACACTCAGGCACCAGGCCTGGTCCAGGAGGAGCTGTGGACACAGTCGTGGTTCAAGTGTCCACAT
GCACCTGTTAGTCCCTGAGAGGTGGTGGGAATGGCTGCTTCATTCCTCGAGGATGCCCGGGCCCCACCTGGGCTT
GTCTTTCTGTTTAGAGGGAAGTGTAACATATCTGCCATGAGGAACATAAATTCATGTAAAGCCATTTTCTCTTAA
ACAAAACAAAACTTTCTAAGTACAGTCATTCTCTAGGATTTGGGAAGCTCCTTGCACTTGGAACAGGGCTCAGGT
GGGTGGAGCAGTAAGGCACTACCCAGAGAGCTTGCTGCTGCGGCCCTGTCCTGCGGCCTCAAAGTTCTTCTTTAC
TATATATAACGTGCGGTCATACCTTTCTTCGTTGTGGTGGGGATGGAAGAGCAGAGGGAGCATGGCCCAGGGGTG
TTGAGGCCAGCGGTGAGAGCCGTGTTAGCCAAGACATGGAACTGTGTTCTCAAGGGTTATGTGGGGCGTGGGCTC
TCCATAGTGTGTATGAAAAGCTTGTTGACTCTAGCGGCTCAGAGAGGACTTTGCTGGGTTTCTTTCTGTGAATAT
CTCCGTGCTGACCATGCTGGAATTGGATGATTCTGCAATTCGGGACCTACTGCAGGGGTCCGTTTAGTAACGTCT
TGTCTGTGATCTTTGTTCTTGACCTCTAGACCCCAAGATGTGAACAGTGCACGTGTTAATGTCATCTTTGCTCAT
GTGTTATAAGCCCCAAGTTGCTGTATATTTTCACAAGTATGTCTACACACTGGTCATGATTTTGATAATAAATAA
CGATAAATCG

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FIGURE 3949

GAAAATAGTGGATGAGGCTGTGAAGCACTGCCCCACCGTGCAGCATGTCCTGGTGGCTCACAGGACAGACAACAA
GGTCCACATGGGGGATCTGGACGTCCCGCTGGAGCAGGAAATGGCCAAGGAGGACCCTGTTTGCGCCCCAGAGAG
CATGGGCAGTGAGGACATGCTCTTCATGCTGTACACCTCAGGGAGCACCGGAATGCCCAAGGGCATCGTCCATAC
CCAGGCAGGCTACCTGCTCTATGCCGCCCTGACTCACAAGCTTGTGTTTGACCACCAGCCAGGTGACATCTTTGG
CTGTGTGGCCGACATCGGTTGGATTACAGGACACAGCTACGTGGTGTATGGGCCTCTCTGCAATGGTGCCACCAG
CGTCCTTTTTGAGAGCACCCCAGTTTATCCCAATGCTGGTCGGTACTGGGAGACAGTAGAGAGGTTGAAGATCAA
TCAGTTCTATGGCGCCCCAACGGCTGTCCGGCTGTTGCTGAAATACGGTGATGCCTGGGTGAAGAAGTATGATCG
CTCCTCCCTGCGGACCCTGGGGTCAGTGGGAGAGCCCATCAACTGTGAGGCCTGGGAGTGGCTTCACAGGGTGGT
GGGGGACAGCAGGTGCACGCTGGTGGACACCTGGTGGCAGACAGAAACAGGTGGCATCTGCATCGCACCACGGCC
CTCGGAAGAAGGGGCGGAAATCCTCCCTGCCATGGCGATGAGGCCCTTCTTTGGCATCGTCCCCGTCCTCATGGA
TGAGAAGGGCAGCGTCGTGGAGGGCAGCAACGTCTCCGGGGCCCTGTGCATCTCCCAGGCCTGGCCGGGCATGGC
CAGGACCATCTATGGCGACCACCAGCGATTTGTGGACGCCTACTTCAAGGCCTACCCAGGCTATTACTTCACTGG
AGACGGGGCTTACCGAACTGAGGGCGGCTATTACCAGATCACAGGGCGGATGGATGATGTCATCAACATCAGTGG
CCACCGGCTGGGGACCGCAGAGATTGAGGACGCCATCGCCGACCACCCTGCAGTACCAGAAAGTGCTGTCATTGG
CTACCCCCACGACATCAAAGGAGAAGCTGCCTTTGCCTTCATTGTGGTGAAAGATAGTGCGGGTGACTCAGATGT
GGTGGTGCAGGAGCTCAAGTCCATGGTGGCCACCAAGATCGCCAAATATGCTGTGCCTGATGAGATCCTGGTGGT
GAAACGTCTTCCAAAAACCAGGTCTGGGAAGGTCATGCGGCGGCTCCTGAGGAAGATCATCACTAGTGAGGCCCA
GGAGCTGGGAGACACTACCACCTTGGAGGACCCCAGCATCATCGCAGAGATCCTGAGTGTCTACCAGAAGTGCAA
GGACAAGCAGGCTGCTGCTAAGTGAGCTGGCACCTTGTGGGGCTCTTGGGATGGGCGGGCACCCAAGCCCTGGCT
TGTCCTTCCCAGAAGGTACCCCTGAGGTTGGCGTCTTCCTACGTCCCAGAAGCAGCCCCCACCCCACACATGACC
CACACCGCCCTCACGTGAAGCTGGGCTGAGAGCCCTTTCTCCCATCCATTGGAGGTCCCAGGAGTGTCACCCATG
GAGAGGCTATGCGACATGGCTAGGGCTGGTTCTGCCATCTGAGTTTGGTTTCCTGGAATGAAAAGGCATTGCCAT
CTCCATTCCTCTGCCCTCTTGAGCCAGCACAGGAAGGTGAGGCCCTGGGATAGCGCGCCTGCTCAGATAACACAG
AGCTAGTTAGCTAGTAGCAACCGTGTTTTCTCCAGATCTGTCTAGATACAAAGGTCAGAAATCTTATTTTTATAC
TTTTATATTGTGGAAGAACAGCATGCAACACTCACATGTAGTGTGTGGATTTACTTGAACATGTTCTTTTTAACA
TGTAGTTATGAAAATCTCCTTTTTTGCCTCTACTGGTGAGGAAACATGAGGATCAGAGGCCACATTTTTAATTAT
TGTTAGTGTATTTGGAAGTCTGAATTGGAGATGTTTGTACCTCTGTCTAAACAGTTCCCTTGAGAACTTCCAAGC
CTCCGGCATCTTTTCCTGGTGAGTGTTTCTCCTGTGCTTGGTTGTGTATAATGGAGCTAACTCCTAAGCGGTGGG
GTGAATGTGGCCGCCTTAGTTCTGAAGCTACTCCAGTTATGTTCTGTTTCTTCAAGCTGTGATCCAGAAAGATTT
TTGTGCCCCCAGATGCCTCTTGATAGGAGAGGCAACATACTCCAAATAGTTGGGTTCTTCAGGGAAGCTATTAGA
AACTCAGGTGACTTGTTAGAGCACTAACTTGGTCAGAGCCAAATCCTGGCAAACGCTGCCTGACCTTCACTCTGT
GGTTGGGGCGGTGAGAACCACTGAGGTCCAATGATGAGACTTGGAGGTCTGGATCCAGTCTCTCTTTGTTTTAAT
GTGACTTAGGTGCTGTCAACATTAGCAAGATAATGGAAATCACGACGCCAGTGGGTGCTTACCTCCCTGCTAGGC
ATGCAGGGGCTGGCGGTTGGCAGGGGAAGGAGGCCCAGTGAGCCGGGTCCCTTAGGGGAGGGAGAGTTTGTCCTC
TTTGCCCCACAGTCTACCCTTCAGGGCCTTGTGGCAGTGCCAGTGTTCGGGGGGTGTCTGGGCCACTGAGTACCC
ACTCGGTCGTGGTTGTGCTGGCCTCTTGGGTGAGTGAACCTGTGAAGCCCAGGAGGTGGTGTTGGCTGCAGGGTA
CACAAATACTGAGTGGTGGTCTTTTGTTACAGGCTTAGCAACAAAGCTGTGCCCTGGGCATGGGGGGCTGTAGTG
TAGCTACAGTTGTGCGTTTGTGAAATGGCTTAGCTTTCCATGTTGCTGAGAGGAACCTGGACATGGTCCCGGGCA
TCTGAATGATCTGTAGGGGAGGGAGTTCAAATAAAGCTTTATTTTGTTCATTTTC

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FIGURE 3950

GTGGGGTCGTATCCCGCGGGTGGAGGCCGGGGTGGCGCCGGCCGGGGCGGGGGAGCCCAAAAGACCGGCTGCCGC
CTGCTCCCCGGAAAAGGGCACTCGTCTCCGTGGGTGTGGCGGAGCGCGCGGTGCATGGAATGGGCTATGTGA**ATG**

AAAAAAGGTATCCGTTATGAAACTTCCAGAAAAACGAGCTACATTTTTCAGCAGCCGCAGCACGGTCCTTGGCAA
ACAAGGATGAGAAAAATATCCAACCACGGGAGCCTGCGGGTGGCGAAGGTGGCATACCCCCTGGGGCTGTGTGTG
GGCGTGTTCATCTATGTTGCCTACATCAAGTGGCACCGGGCCACCGCCACCCAGGCCTTCTTCAGCATCACCAGG
GCAGCCCCGGGGGCCCGGTGGGGTCAGCAGGCCCACAGCCCCCTGGGGACAGCTGCAGACGGGCACGAGGTCTTC
TACGGGATCATGTTTGATGCAGGAAGCACTGGCACCCGAGTACACGTCTTCCAGTTCACCCGGCCCCCCAGAGAA
ACTCCCACGTTAACCCACGAAACCTTCAAAGCACTGAAGCCAGGTCTTTCTGCCTATGCTGATGATGTTGAAAAG
AGCGCTCAGGGAATCCGGGAACTACTGGATGTTGCTAAACAGGACATTCCGTTCGACTTCTGGAAGGCCACCCCT
CTGGTCCTCAAGGCCACAGCTGGCTTACGCCTGTTACCTGGAGAAAAGGCCCAGAAGTTACTGCAGAAGGTGAAA
AAAGTATTTAAAGCATCGCCTTTCCTTGTAGGGGATGACTGTGTTTCCATCATGAACGGAACAGATGAAGGCGTT
TCGGCGTGGATCACCATCAACTTCCTGACAGGCAGCTTGAAAACTCCAGGAGGGAGCAGCGTGGGCATGCTGGAC
TTGGGCGGAGGATCCACTCAGATCGCCTTCCTGCCACGCGTGGAGGGCACCCTGCAGGCCTCCCCACCCGGCTAC
CTGACGGCACTGCGGATGTTTAACAGGACCTACAAGCTCTATTCCTACAGCTACCTCGGGCTCGGGCTGATGTCG
GCACGCCTGGCGATCCTGGGCGGCGTGGAGGGGCAGCCTGCTAAGGATGGAAAGGAGTTGGTCAGCCCTTGCTTG
TCTCCCAGTTTCAAAGGAGAGTGGGAACACGCAGAAGTCACGTACAGGGTTTCAGGGCAGAAAGCAGCGGCAAGC
CTGCACGAGCTGTGTGCTGCCAGAGTGTCAGAGGTCCTTCAAAACAGAGTGCACAGGACGGAGGAAGTGAAGCAT
GTGGACTTCTATGCTTTCTCCTACTATTACGACCTTGCAGCTGGTGTGGGCCTCATAGATGCGGAGAAGGGAGGC
AGCCTGGTGGTGGGGGACTTCGAGATCGCAGCCAAGTACGTGTGTCGGACCCTGGAGACACAGCCGCAGAGCAGC
CCCTTCTCATGCATGGACCTCACCTACGTCAGCCTGCTACTCCAGGAGTTCGGCTTTCCCAGGAGCAAAGTGCTG
AAGCTCACTCGGAAAATTGACAATGTTGAGACCAGCTGGGCTCTGGGGGCCATTTTTCATTACATCGACTCCCTG
AACAGACAGAAGAGTCCAGCCTCA**TAG**TGGCCGAGCCATCCCTGTCCCCGTCAGCAGTGTCTGTGTGTCTGCATA
AACCCTCCTGTCCTGGACGTGACTTCATCCTGAGGAGCCACAGCACAGGCCGTGCTGGCACTTTCTGCACACTGG
CTCTGGGACTTGCAGAAGGCCTGGTGCTGCCCTGGCATCAGCCTCTTCCAGTCACATCTGGCCAGAGGGCTGTCT
GGACCTGGGCCCTGCTCAATGCCACCTGTCTGCCTGGGCTCCAAGTGGGCAGGACCAGGACAGAACCACAGGCAC
ACACTGAGGGGCAGTGTGGCTCCCTGCCTGTCCCATCCCCATGCCCCGTCCGCGGGGCTGTGGCTGCTGCTGTG
CATGTCCCTGCGATGGGAGTCTTGTCTCCCAGCCTGTCAGTTTCCTCCCCAGGGCAGAGCTCCCCTTCCTGCAAG
AGTCTGGGAGGCGGTGCAGGCTGTCCTGGCTGCTCTGGGGAAGCCGAGGGACAGCCATAACACCCCCGGGACAGT
AGGTCTGGGCGGCACCACTGGGAACTCTGGACTTGAGTGTGTTTGCCTCTTCCTTGGGTATGAATGTGTGAGTTC
ACCCAGAGGCCTGCTCTCCTCACACATTGTGTGGTTTGGGGTTAATGATGGAGGGAGACACCTCCTCATAGACGG
CAGGTGCCCACCTTTCAGGGAGTCTCCCAGCATGGGCGGATGCCGGGCATGAGCTGCTGTAAACTATTTGTGGCT
GTGCTGCTTGAGTGACGTCTCTGTCGTGTGGGTGCCAAGTGCTTGTGTAGAAACTGTGTTCTGAGCCCCCTTTTC
TGGACACCAACTGTGTCCTGTGAATGTATCGCTACTGTGAGCTGTTCCCGCCTAGCCAGGGCCATGTCTTAGGTG
CAGCTGTGCCACGGGTCAGCTGAGCCACAGTCCCAGAACCAAGCTCTCGGTGTCTCGGGCCACCATCCGCCCACC
TCGGGCTGACCCCACCTCCTCCATGGACAGTGTGAGCCCCGGGCCGTGCATCCTGCTCAGTGTGGCGTCAGTGTC
GGGGCTGAGCCCCTTGAGCTGCTTCAGTGAATGTACAGTGCCCGGCACGAGCTGAACCTCATGTGTTCCACTCCC
AATAAAAGGTTGACAGGGGCTTCTCCTTC

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FIGURE 3951A

GAGCAGCTGCACCATCCCGGCGTTCGCGTGTGCCGCCGCTTTCCTCCTCCATCTCTTTTCCTCCGCCTCCGCCGG
CGCGATGGCGAAGCCGCTGACGGACAGCGAGAAGCGGAAGCAGATCAGCGTGCGCGGCCTGGCGGGGCTAGGCGA
CGTGGCCGAGGTGCGGAAGAGCTTCAACCGGCACTTGCACTTCACGCTGGTCAAGGACCGCAATGTGGCCACGCC
CCGCGACTACTTCTTCGCGCTGGCGCACACGGTGCGCGACCACCTCGTGGGCCGCTGGATCCGCACGCAGCAGCA
CTACTACGAGCGCGACCCCAAGCGCATTTATTATCTTTCCCTGGAATTCTACATGGGTCGCACGCTGCAGAACAC
GATGGTGAACCTGGGCCTTCAGAATGCCTGCGATGAAGCCATCTATCAGTTGGGGTTAGACTTGGAGGAACTCGA
GGAGATAGAAGAAGATGCTGGCCTTGGGAATGGAGGCCTGGGGAGGCTGGCAGCGTGTTTCCTTGACTCAATGGC
TACCTTGGGCCTGGCAGCATACGGCTATGGAATCCGCTATGAATTTGGGATTTTTAACCAGAAGATTGTCAATGG
CTGGCAGGTAGAGGAGGCCGATGACTGGCTGCGCTACGGCAACCCCTGGGAGAAAGCGCGGCCTGAGTATATGCT
TCCCGTGCACTTCTACGGACGCGTGGAGCACACCCCCGACGGCGTGAAGTGGCTGGACACACAGGTGGTGCTGGC
CATGCCCTACGACACCCCAGTGCCCGGCTACAAGAACAACACCGTCAACACCATGCGGCTGTGGTCCGCCAAGGC
TCCCAACGACTTCAAGCTGCAGGACTTCAACGTGGGAGACTACATCGAGGCGGTCCTGGACCGGAACTTGGCTGA
GAACATCTCCAGGGTCCTGTATCCAAATGATAACTTCTTTGAGGGGAAGGAGCTGCGGCTGAAGCAGGAGTACTT
CGTGGTGGCCGCCACGCTCCAGGACATCATCCGCCGCTTCAAGTCGTCCAAGTTCGGCTGCCGGGACCCTGTGAG
AACCTGTTTCGAGACGTTCCCAGACAAGGTGGCCATCCAGCTGAACGACACCCACCCCGCCCTCTCCATCCCTGA
GCTCATGCGGATCCTGGTGGACGTGGAGAAGGTGGACTGGGACAAGGCCTGGGAAATCACGAAGAAGACCTGTGC
ATACACCAACCACACTGTGCTGCCTGAGGCCTTGGAGCGCTGGCCCGTGTCCATGTTTGAGAAGCTGCTGCCGCG
GCACCTGGAGATAATCTATGCCATCAACCAGCGGCACCTGGACCACGTGGCCGCGCTGTTTCCCGGCGATGTGGA
CCGCCTGCGCAGGATGTCTGTGATCGAGGAGGGGGACTGCAAGCGGATCAACATGGCCCACCTGTGTGTGATTGG
GTCCCATGCTGTCAATGGTGTGGCGAGGATCCACTCGGAGATCGTGAAACAGTCGGTCTTTAAGGATTTTTATGA
ACTGGAGCCAGAGAAGTTCCAGAATAAGACCAATGGCATCACCCCCCGCCGGTGGCTGCTGCTGTGCAACCCGGG
GCTGGCCGATACCATCGTGGAGAAAATTGGGGAGGAGTTCCTGACTGACCTGAGCCAGCTGAAGAAGCTGCTGCC
GCTGGTCAGTGACGAGGTGTTCATCAGGGACGTGGCCAAGGTCAAACAGGAGAACAAGCTCAAGTTCTCGGCCTT
CCTGGAGAAGGAGTACAAGGTGAAGATCAACCCCTCCTCCATGTTCGATGTGCATGTGAAGAGGATCCACGAGTA
CAAGCGGCAGCTGCTCAACTGCCTGCACGTCGTCACCCTGTACAATCGAATCAAGAGAGACCCGGCCAAGGCTTT
TGTGCCCAGGACTGTTATGATTGGGGGCAAGGCAGCGCCCGGTTACCACATGGCCAAGCTGATCATCAAGTTGGT
CACCTCCATCGGCGACGTCGTCAATCATGACCCAGTTGTGGGTGACAGGTTGAAAGTGATCTTCCTGGAGAACTA
CCGTGTGTCCTTGGCTGAGAAAGTGATCCCGGCCGCTGATCTGTCGCAGCAGATCTCCACTGCAGGCACCGAGGC
CTCAGGCACAGGCAACATGAAGTTCATGCTCAACGGGGCCCTCACCATCGGCACCATGGACGGCGCCAACGTGGA
GATGGCCGAGGAGGCCGGGGCCGAGAACCTCTTCATCTTCGGCCTGCGGGTGGAGGATGTCGAGGCCTTGGACCG
GAAAGGGTACAATGCCAGGGAGTACTACGACCACCTGCCCGAGCTGAAGCAGGCCGTGGACCAGATCAGCAGTGG
CTTTTTTTCTCCCAAGGAGCCAGACTGCTTCAAGGACATCGTGAACATGCTGATGCACCATGACAGGTTCAAGGT
GTTTGCAGACTATGAAGCCTACATGCAGTGCCAGGCACAGGTGGACCAGCTGTACCGGAACCCCAAGGAGTGGAC
CAAGAAGGTCATCAGGAACATCGCCTGCTCGGGCAAGTTCTCCAGTGACCGGACCATCACGGAGTATGCACGGGA
GATCTGGGGTGTGGAGCCCTCCGACCTGCAGCTTCAGCACCTGCCCCACCCAGAGTGGGAGTCAGGTGGAGCCAC
CTGCTGGGCTCCCCCAGAACTTTGCACACATCTTGCTATGTATTAGCCGATGTCTTTAGTGTTGAGCCTCTGGAT
TCTGGGGTCTGGGCCAGTGGCCATAGTGAAGCCTGGGAATGAGTGTTACTGCAGCATCTGGGCTGCCAGCCACAG
GGAAGGGCCAAGCCCCATGTAGCCCCAGTCATCCTGCCCAGCCCTGCCTCCTGGCCATGCCGGGAGGGGTCGGAT
CCTCTAGGCATCGCCTTCACAGCCCCCTGCCCCCTGCCCTCTGTCCTGGCTCTGCACCTGGTATATGGGTCATGG
ACCCAGATGGGGCTTTCCCTTTGTAGCCATCCAATGGGCATTGTGTGGGTGCTTGGAACCCGGGATGACTGAGGG
GGACACTGGAGTGGGTGCTTGTGTCTGCTGTCTCAGAGGCCTTGGTCAGGATGAAGTTGGCTGACACAGCTTAGC
TTGGTTTTGCTTATTCAAAAGAGAAAATAACTACACATGGAAATGAAACTAGCTGAAGCCTTTTCTTGTTTTAGC
AACTGAAAATTGTACTTGGTCACTTTTGTGCTTGAGGAGGCCCATTTTCTGCCTGGCAGGGGGCAGGTCTGTGCC
CTCCCGCTGACTCCTGCTGTGTCCTGAGGTGCATTTCCTGTTGTACACACAAGGGCCAGGCTCCATTCTCCCTCC
CTTTCCACCAGTGCCACAGCCTCGTCTGGAAAAAGGACCAGGGGTCCCGGAGGAACCCATTTGTGCTCTGCTTGG
ACAGCAGGCCTGGCACTGGGAGGTGGGGGTGAGCCCCTCACAGCCTTGCCCCTCCCCAAGGCTGGCAACCTGCCT
CCCATTGCCCAAGAGAGAGGGCAGGGAACAGGCTACTGTCCTTCCCTGTGGAATTGCCGAGAAATCTAGCACCTT
GCATGCTGGATCTGGGCTGCGGGGAGGCTCTTTTTCTCCCTGGCCTCCAGTGCCCACCAGGAGGATCTGCGCACG

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FIGURE 3951B

GTGCACAGCCCACCAGAGCACTACAGCCTTTTATTGAGTGGGGCAAGTGCTGGGCTGTGGTCGTGCCCTGACAGC
ATCTTCCCCAGGCAGCGGCTCTGTGGAGGAGGCCATACTCCCCTAGTTGGCCACTGGGGCCACCACCCTGACCAC
CACTGTGCCCCTCATTGTTACTGCCTTGTGAGATAAAAACTGATTAAACCTTTGTGGCTGTGGTTGGC

FIGURE 3952

GCCAGGGATGCTGGGCGCGCGCTCCTTGGAACTAGAGAGGAGGTGGCCGGGGCGGGGCCGGGGGAGGGGGGTAGG
GCAGAGCCGGCGGGAGCCCGGCGCTGATTGGCCGGCCTGGCTGGCGGGCCCCCGCCGCTGGTTCGTAGCCGGCGC
AGCGGCCTGGGCTGGGATGTGAGGAGCGGCGGGTTCCGGGCTCCGGGCTCTGGGTGGCGGCGGCTGTGAGCGGCG
GCACTGCGGCGCAGGCCAGCGGGCGCCGTCGGCGGCTGGCCCTGTCGGCCGCGGG**ATG**AGGAAGCGGACCGAGCC
CGTCGCCTTGGAGCATGAGCGCTGCGCCGCCGCGGGCTCGTCCTCCTCCGGCTCGGCCGCCGCGGCGCTGGACGC
CGACTGCCGCCTGAAGCAGAACCTACGCCTGACGGGCCCGGCGGCGGCTGAGCCGCGCTGCGCAGCCGACGCGGG
AATGAAGCGGGCGCTGGGCAGGCGAAAGGGCGTGTGGTTGCGCCTGAGGAAGATACTTTTCTGTGTTTTGGGGTT
GTACATTGCCATTCCATTTCTCATCAAACTATGTCCTGGAATACAGGCCAAACTGATTTTCTTGAATTTCGTAAG
AGTTCCCTATTTCATTGATTTGAAAAAACCACAGGATCAAGGTTTGAATCACACGTGTAACTACTACCTGCAGCC
AGAGGAAGACGTGACCATTGGAGTCTGGCACACCGTCCCTGCAGTCTGGTGGAAGAACGCCCAAGGCAAAGACCA
GATGTGGTATGAGGATGCCTTGGCTTCCAGCCACCCTATCATTCTGTACCTGCATGGGAACGCAGGTACCAGAGG
AGGCGACCACCGCGTGGAGCTTTACAAGGTGCTGAGTTCCCTTGGTTACCATGTGGTCACCTTTGACTACAGAGG
TTGGGGTGACTCAGTGGGAACGCCATCTGAGCGGGGCATGACCTATGACGCACTCCACGTTTTTGACTGGATCAA
AGCAAGAAGTGGTGACAACCCCGTGTACATCTGGGGCCACTCTCTGGGCACTGGCGTGGCGACAAATCTGGTGCG
GCGCCTCTGTGAGCGAGAGACGCCTCCAGATGCCCTTATATTGGAATCTCCATTCACTAATATCCGCGAAGAAGC
TAAGAGCCATCCATTTTCAGTGATATATCGATACTTCCCTGGGTTTGACTGGTTCTTCCTTGATCCTATTACAAG
TAGTGGAATTAAATTTGCAAATGATGAAAACGTGAAGCACATCTCCTGTCCCCTGCTCATCCTGCACGCTGAGGA
CGACCCGGTGGTGCCCTTCCAGCTTGGCAGAAAGCTCTATAGCATCGCCGCACCAGCTCGAAGCTTCCGAGATTT
CAAAGTTCAGTTTGTGCCCTTTCATTCAGACCTTGGCTACAGGCACAAATACATTTACAAGAGCCCTGAGCTGCC
ACGGATACTGAGACCTCAGCAGGGCCCAGGTTCCAGCCCAGATCCCAGCATGTGGTCAGAGCTGGTG**TGA**CTGAA
GCCAACAGGTGACACGGTCATCGAAGAGCAGCAGACAAAACTAAAACTAACCCAAAGGCAGCTGAAAGTGGAGGG
CAGGTGAATTCCCAGCCCTCGCCGGATTCAACTTTTGCCAACGGTGAAGAACTGCCCTGAGCTGCAAACCTTACA
AAGTCTGTAACTCTAGATAAACCATACCATGTGCTAACTGCACTGAAATAAAACACTAACTACATTATAATGTC

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FIGURE 3953

ATCCAATGGGCATTGTGTGGGTGCTTGGAACCCGGGATGACTGAGGGGGAACCCATTTGTGCTCTGCTTGGACAG
CAGGCCTGGCACTGGGAGGTGGGGGTGAGCCCCTCACAGCCTTGCCCCTCCCCAAGGCTGGCAACCTGCCTCCCA
TTGCCCAAGAGAGAGGGCAGGGAACAGGCTACTGTCCTTCCCTGTGGAATTGCCGAGAAATCTAGCACCTTGCAT
GCTGGATCTGGGCTGCGGGGAGGCTCTTTTTCTCCCTGGCCTCCAGTGCCCACCAGGAGGATCTGCGCACGGTGC
ACAGCCCACCAGAGCACTACAGCCTTTTATTGAGTGGGGCAAGTGCTGGGCTGTGGTCGTGCCCTGACAGCATCT
TCCCCAGGCAGCGGCTCTGTGGAGGAGGCCATACTCCCCTAGTTGGCCACTGGGGCCACCACCCTGACCACCACT
GTGCCCCTCATTGTTACTGCCTTGTGAGATAAAAACTGATTAAACCTTTGTGGCTGTGGTTGGCTG

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FIGURE 3954A

CCTGCTATGGGATGGATGAAGAAGAGAACCACTATGTCTCGCAGCTCAGGGAAGTCTACAGCAGCTGCGACACCA
CGGGGACTGGCTTTCTGGACCGCCAGGAGCTGACCCAGCTCTGCCTTAAGCTTCACCTGGAGCAGCAGCTGCCCG
TCCTCCTGCAGACGCTTCTCGGAAACGACCATTTCGCCAGGGTTAACTTTGAGGAATTTAAGGAAGGTTTTGTGG
CTGTGTTGTCTTCAAATGCTGGTGTTCGCCCCTCAGATGAAGACAGTAGTTCTTTGGAATCAGCTGCCTCCAGTG
CCATCCCTCCAAAGTATGTGAATGGTTCTAAGTGGTATGGCCGTCGGAGCCGGCCTGAGCTATGTGACGCTGCCA
CAGAAGCCAGACGCGTGCCGGAGCAGCAAACCCAGGCCAGCCTGAAAAGTCACCTCTGGCGCTCAGCGTCTCTGG
AGAGCGTGGAGAGTCCCAAGTCAGATGAAGAGGCCGAGAGCACTAAAGAAGCTCAGAATGAATTATTTGAAGCAC
AAGGACAGCTGCAGACCTGGGATTCTGAGGACTTTGGGAGCCCCCAGAAGTCCTGCAGCCCCTCCTTTGACACCC
CAGAGAGCCAGATCCGGGGCGTGTGGGAAGAGCTGGGGGTGGGCAGCAGCGGACACCTGAGCGAGCAGGAGCTGG
CTGTGGTCTGCCAGAGCGTCGGGCTCCAGGGACTCGAGAAAGAGGAACTCGAAGACCTGTTTAACAAACTGGATC
AAGACGGAGACGGCAAAGTGAGTCTTGAGGAATTCCAGCTTGGCCTCTTCAGTCATGAGCCCGCGCTACTTCTAG
AGTCTTCCACTCGGGTTAAACCGAGCAAGGCTTGGTCTCATTACCAGGTCCCAGAGGAGAGCGGCTGCCACACCA
CCACAACCTCATCCCTCGTGTCCCTGTGCTCCAGCCTGCGCCTCTTCTCCAGCATTGACGATGGTTCTGGCTTCG
CTTTTCCTGATCAGGTCCTGGCCATGTGGACCCAGGAGGGGATTCAGAATGGCAGGGAGATCTTGCAGAGCCTGG
ACTTCAGCGTGGACGAGAAGGTGAACCTTCTGGAGCTGACCTGGGCCCTTGACAACGAGCTCATGACAGTGGACA
GTGCCGTCCAGCAGGCAGCCCTGGCCTGCTACCACCAGGAGCTGAGCTACCAGCAAGGGCAGGTGGAGCAGCTGG
CAAGGGAGCGTGACAAGGCAAGGCAGGACCTGGAGAGGGCCGAGAAGAGGAACCTGGAGTTTGTGAAAGAGATGG
ACGACTGCCACTCCACCCTGGAGCAGCTCACGGAGAAGAAAATCAAGCATCTGGAGCAGGGGTACCGGGAAAGGC
TGAGCCTCCTGCGGTCTGAGGTGGAGGCGGAGCGAGAGCTGTTCTGGGAGCAGGCCCACAGGCAGAGGGCCGCGC
TGGAGTGGGACGTGGGGCGCCTGCAGGCTGAGGAGGCTGGCCTCCGCGAGAAGCTGACCCTGGCCCTGAAGGAAA
ACAGTCGCCTACAGAAGGAGATTGTGGAAGTGGTGGAAAAGCTTTCGGATTCGGAGAGGCTGGCCCTGAAGCTGC
AGAAGGACCTGGAGTTTGTGCTGAAGGACAAGCTGGAGCCACAGAGTGCAGAGCTCCTGGCCCAGGAGGAGCGGT
TCGCAGCAGTCCTGAAGGAATACGAGCTCAAGTGCCGGGACCTGCAGGACCGCAACGATGAGCTGCAAGCTGAGC
TGGAAGGCCTGTGGGCGCGGCTGCCCAAGAACCGGCACAGCCCCTCATGGAGCCCGGATGGGCGCAGACGGCAGC
TCCCTGGACTCGGCCCAGCAGGCATTTCATTCCTGGGTAATTCTGCTCCAGTGAGTATAGAAACGGAGCTGATGA
TGGAGCAGGTAAAGGAGCATTACCAAGACCTCAGGACCCAGCTGGAGACCAAGGTAAATTACTACGAAAGGGAAA
TTGCGGCACTGAAAAGGAACTTTGAGAAGGAGAGGAAGGACATGGAGCAGGCTCGCAGGCGCGAGGTCAGCGTGC
TGGAGGGTCAGAAGGCCGACCTGGAGGAGCTCCACGAGAAGTCTCAGGAGGTCATCTGGGGCCTGCAGGAGCAGC
TGCAGGACACAGCCCGCGGCCCCGAGCCTGAGCAGATGGGCCTGGCACCCTGCTGCACCCAGGCACTGTGTGGCC
TGGCCCTGCGGCATCACAGCCACCTGCAGCAGATCAGGAGAGAGGCTGAGGCGGAGCTGAGTGGAGAGCTGTCGG
GGCTGGGAGCCCTGCCCGCTCGCAGAGACCTGACCTTGGAGCTGGAGGAGCCGCCGCAGGGACCCCTGCCACGCG
GGAGCCAGAGGTCGGAGCAGCTGGAGCTGGAGAGGGCACTGAAGCTGCAGCCCTGTGCGAGCGAGAAGCGCGCCC
AGATGTGCGTATCGTTGGCCCTCGAGGAGGAGGAGTTGGAGCTTGCCCGCGGGAAGCGAGTGGACGGGCCCTCCC
TGGAAGCAGAGATGCAGGCCCTGCCGAAAGATGGGCTGGTGGCAGGAAGTGGCCAGGAGGGCACACGTGGCCTCC
TACCACTGCGTCCGGGCTGTGGGGAGCGGCCACTGGCCTGGCTGGCCCCAGGTGATGGCAGAGAGTCTGAGGAGG
CGGCAGGAGCCGGGCCTCGCCGCAGGCAAGCCCAGGACACAGAAGCTACGCAGAGCCCGGCCCCCGCCCCTGCCC
CGGCATCCCACGGCCCCTCAGAGAGGTGGTCACGCATGCAGCCCTGTGGAGTGGATGGGGATATTGTCCCAAAGG
AGCCAGAGCCTTTCGGCGCGAGCGCAGCGGGGCTGGAGCAGCCTGGAGCCCGGGAGCTGCCTCTGCTGGGAACAG
AGAGAGACGCCTCGCAAACCCAGCCACGGATGTGGGAGCCACCCCTGAGGCCGGCCGCTTCGTGCAGGGGACAGG
CTGAGAGGCTACAGGCCATTCAGGAAGAGCGAGCACGAAGCTGGAGCAGGGGCACCCAGGAGCAGGCCTCGGAGC
AGCAGGCCCGGGCCGAGGGCGCCCTGGAGCCTGGGTGTCACAAGCACAGTGTGGAGGTTGCCAGGAGAGGGTCCT
TGCCATCCCACCTCCAGCTCGCAGACCCGCAGGGTTCCTGGCAGGAGCAGCTTGCTGCCCCAGAAGAGGGGGAGA
CCAAAATAGCGCTGGAGAGAGAGAAGGATGACATGGAAACCAAACTTCTACATCTGGAAGACGTCGTCCGGGCTC
TGGAGAAACATGTAGATTTGAGAGAGAACGACAGACTGGAGTTCCATAGACTTTCTGAAGAAAACACTTTGTTGA
AAAACGATCTGGGAAGGGTTCGGCAAGAGCTTGAAGCTGCAGAAAGTACTCACGATGCACAGAGGAAGGAAATTG
AGGTTTTAAAGAAAGACAAGGAAAAGGCCTGCTCTGAGATGGAGGTGCTCAACAGACAGAATCAGAACTACAAGG
ATCAATTATCCCAGCTCAATGTCAGGGTTCTTCAACTGGGACAGGAGGCTTCTACCCACCAGGCCCAAAACGAGG
AGCATCGTGTGACCATTCAGATGTTAACACAGAGCCTGGAGGAGGTGGTTCGCAGTGGGCAGCAGCAGAGTGACC

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FIGURE 3954B

AAATCCAAAAACTTAGAGTTGAACTTGAATGCCTGAATCAGGAACATCAGAGCCTGCAGCTGCCATGGTCAGAGC
TGACCCAGACCCTTGAGGAAAGTCAAGACCAGGTGCAGGGAGCTCACCTGAGGCTGAGGCAGGCCCAGGCCCAGC
ACTTGCAGGAGGTCCGGCTGGTGCCCCAGGACCGTGTGGCCGAGCTGCATCGCCTGCTCAGCCTTCAGGGAGAGC
AGGCCAGGAGGCGCCTGGATGCACAGCGGGAAGAACATGAGAAACAGCTGAAAGCCACAGAAGAGCGGGTGGAAG
AGGCGGAGATGATTCTGAAGAATATGGAAATGCTCCTCCAAGAGAAAGTGGATAAGCTGAAGGAGCAGTTTGAAA
AGAACACGAAGTCCGACCTGCTGCTGAAGGAGCTGTACGTGGAGAACGCCCACCTGGTGAGAGCACTTCAGGCCA
CCGAGGAGAAGCAGCGAGGCGCCGAGAAACAAAGCCGCCTCTTGGAAGAAAAAGTTCGCGCTCTCAACAAACTCG
TCAGTAGGATTGCCCCCGCAGCCCTCTCTGTGTAAAGACAGATTATTTTCTAGGATTCATTCGAAAGCACATCTT
TTAAATTAAGCCACTGTGCTGCCTTAGATTCCGTGGGTCATGAGCCATGAGTCCTGGGACATCTGAGGATTGGGA
TTCTTTGTTCACCCCGCAGATAGTTAATGAATGGTCTGCCCTGGGCAAGATGGAGGTGGGGGCTGGGGGAATATG
CATGTTGCAGAAGCCGGCGTTTTTATTAGCGGTCCTGAGTAATTTCCCTTGGCAAAATTCCCAGTTTTGCCACTC
TCTGGAGCCAGATCCTGGGAGCTGTCAGCAAGGAGCAGGTAAGTGAGCAGTTATGGACAGCACTTTCCATGTGGT
GCTTCCGACCCTGGCTGTCAGAGTGAAATGTAAAGTCAGGGCTCTGTACAGTTTTGCCATTTCACTGTTCTGCTT
TAAGCTTAGCTTATTAGAACTCTTGGTGGAGGGTGCGTACACACATTCCAGAAAAGGCTTCACTCGCTGGGAACG
TCAACCCAGCGAGAAAGGAGGGGAAGCCCCTTCTCCGGGGACCTTATCTGTGGACTCAGGAATGATGGTGTTTAT
TGCAAATGCACAATCTTTTTCCCATTGAAATGTCATCACACTGGAAATTGTACTATATGT

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FIGURE 3955A

CACACTCCCCATGCTATTAATTTGTTAAAGGCTTTGGTGTTGTACAGTACTGAATAACTGCCAATGCCATCTGCC
TGTGGCCTTCTCAAGTTTGTCTGCACCTGTGGTTATCCTGACTTCAAACCCGGGGAGACAGAGGCTAGAAGAGGC
AGACAGCTCTTGTGTATTCTGTCCAGTGCAAAGAACACCTGGAACTCTGAGCCCTAACCTTAAATGCAAGACCTC
ATCTGCAGGTGTTCCTCATCCTTTTAGCCCCTCAGTGATGTAAGCAACAAACGTCACCCAGCTCCTGGGGCACAC
TTCACTCCCAGATGAGCTTGTCCTGGATTTGCAGGGAGCCTGGCTCCCTAGACCTTTTGGCCAGATCCCCACAGG
GGAATTGTGCAGGTGCGCCCTCCCCAGATCCCCAGTTGGTATTGGAATCACACCAACTGTCACACATGGGGAGGG
CAGCTGCACCCAGCCACCCTCTGACTTCTCTCCTCCCACAGATTGGCCATCTGCAAGCTTCCCTTCTCCGTGGAG
AGCAGGAAGACAGTCATGGGACCTCAGGGAGCCAGGAGACAGGCTTTCTTGGCATTTGGGGATGTCACTGTGGAT
TTCACCCAGAAGGAATGGAGGCTGCTGAGCCCTGCTCAGAGGGCCCTGTACAGGGAGGTGACACTGGAGAACTAC
AGCCACCTGGTCTCACTAGGAATTCTCCATTCTAAACCAGAACTCATCAGGCGGCTAGAGCAAGGGGAAGTGCCC
TGGGGAGAAGAGAGAAGACGCCGGCCAGGCCCCTGTGCAGGAATATATGCAGAACATGTCCTGCGGCCCAAGAAT
CTTGGACTTGCACATCAGAGGCAACAGCAACTACAATTTTCTGATCAAAGCTTCCAGAGTGACACAGCTGAAGGT
CAAGAGAAAGAAAAAAGCACTAAGCCCATGGCATTTTCCAGCCCACCCCTAAGACATGCAGTAAGCTCAAGGAGG
AGGAACAGTGTAGTGGAAATAGAGTCTAGTCAAGGCCAGAGGGAAAATCCTACAGAAATAGACAAAGTATTGAAA
GGAATAGAAAATTCAAGATGGGGAGCATTCAAGTGTGCAGAGCGTGGGCAAGACTTCAGCCGGAAGATGATGGTA
ATCATACACAAAAAAGCACATTCCAGGCAGAAACTTTTTACATGCAGGGAGTGTCACCAGGGCTTTAGAGATGAG
TCAGCATTGCTCTTGCACCAGAACACACACACAGGAGAGAAGTCCTATGTGTGCAGTGTGTGTGGGCGAGGCTTC
AGCCTCAAGGCCAACCTCCTCAGACACCAGAGGACACACTCAGGAGAGAAGCCTTTTCTGTGCAAGGTGTGTGGA
CGAGGCTATACCAGTAAGTCATACCTCACTGTGCATGAGAGAACACACACAGGAGAGAAGCCTTATGAATGCCAG
GAGTGTGGGCGAAGGTTTAACGATAAGTCCTCATACAACAAGCACTTGAAGGCGCATTCAGGGGAGAAGCCTTTT
GTGTGCAAGGAGTGTGGGCGAGGCTATACTAATAAGTCATACTTCGTTGTGCACAAGAGAATACACTCAGGAGAG
AAGCCTTACAGATGCCAGGAGTGTGGCCGAGGCTTTAGCAATAAGTCACACCTTATCACACACCAGAGGACACAC
TCAGGGGAGAAGCCCTTTGCGTGCAGGCAGTGTAAGCAAAGTTTTAGCGTGAAAGGAAGTCTCCTCAGACACCAG
AGAACACACTCAGGGGAGAAGCCTTTTGTGTGCAAGGATTGTGAGCGAAGCTTTAGCCAAAAGTCAACTCTTGTC
TACCACCAGAGAACACACTCAGGGGAGAAACCTTTTGTTTGTAGAGAATGTGGGCAAGGATTTATTCAGAAGTCA
ACCCTTGTGAAACATCAGATCACACACTCAGAGGAGAAGCCTTTTGTGTGCAAGGACTGTGGACGAGGCTTTATC
CAAAAGTCAACCTTCACTTTACACCAGAGGACACACTCAGAGGAGAAGCCTTATGGATGTCGGGAGTGTGGGCGA
AGGTTTCGGGATAAGTCCTCCTATAACAAGCACCTGAGGGCACACTTGGGTGAGAAACGTTTTTTCTGCAGGGAT
TGTGGGCGAGGCTTTACCTTGAAGCCAAATCTCACCATACATCAGAGGACACACTCAGGAGAGAAGCCCTTCATG
TGCAAGCAGTGTGAGAAAAGTTTTAGTTTGAAGGCAAATCTTCTTAGACATCAGTGGACACACTCGGGGGAAAGG
CCATTTAATTGCAAGGATTGCGGGCGAGGCTTCATCCTAAAATCAACTCTCCTCTTCCACCAGAAGACACACTCA
GGGGAGAAGCCTTTCATCTGTAGTGAATGTGGGCAAGGATTTATCTGGAAGTCAAATCTTGTGAAACACCAGCTT
GCACATTCTGGCAAGCAGCCTTTTGTATGCAAGGAGTGTGGGCGAGGCTTCAACTGGAAGGGAAATCTCCTCACA
CACCAGAGGACACACTCAGGGGAGAAGCCCTTCGTGTGTAATGTGTGTGGGCAAGGCTTCAGCTGGAAGAGAAGT
CTCACCAGACACCACTGGCGGATACACTCAAAGGAGAAGCCTTTTGTTTGCCAGGAGTGTAAGCGAGGCTATACC
AGTAAGTCAGACCTCACTGTGCATGAAAGAATACACACAGGAGAGAGGCCTTATGAATGCCAAGAGTGTGGACGA
AAGTTTAGCAATAAGTCATACTACAGTAAGCACTTAAAGAGACACTTACGTGAGAAGCGTTTTTGTACAGGGAGT
GTGGGTGAGGCTTCATCTTGAAGTTATATCTCACCATCCATCAGAGGACACACTCAGGAGAGTAACTTTGCTTTG
TTACAAGCTTTAGTTGAGGCTGCATAACTTGTTCGTGAAGATATAACAGAGGCAGACAGAATCCAGAGGGCTACA
GAGAACCTGAATTCAACCCATGTGTCCCCAAGAGATTCAGAGAAAAGAGGTCAATGTTTAGGGAACAGAGATGCC
AGTTGAGGGGAGGGCATTACCTGGGCTATTGGGGAAATGTGGTCTCTTTCCTACTGAGCACATATTCTTGTTGTA
TTTGTGCCAGGCTGTGCTTTCTAAGGACTGCTCTTAGCCAGTGACTGCAGAGCAGGGATACCAAGGCAGGCCTGT
TACACTCTCCCCAACCTCCTTGGACTGCAAACAATCTAGGACACCTCCACCAAACCTCCTCTTGCACTTTCCCTC
TGGCTTCCCTCCCAGCCTTCCTTGGTTTGGATGTTTTGTCCCCTCCTTAATTTATGTTGAAACTCTACATAAACT
GTTTACTGTTGAAACAGTGTAAGTATTAGGAGGTGGGACCTTTGGGAAGTGATTAAGTCAAGTCACGAAGATAGA
GCTTTGCGAATGGGATCAGGTGCCCTTATGAAAAGGCTTGATAGAGGGAGTTTGTCCTGTGGCCCTTCTATTTTC
TGCTCTGTGAGGACACAATGCTCCTCCCTTCCAAAAGATGCAGCATGAAGGCATCATCTTGGAAACAGACATGAG
CCCTCAACAGACAACTGCACCTACTGATGTTTTGATGTTGAACTTCCCAGCCTCCAGAACTCTGGGAAAATAAAG

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FIGURE 3955B

TCCTCTTTATAC

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FIGURE 3956

GCTTCAGGGTACAGCTCCCCCGCAGCCAGAAGCCGGGCCTGCAGCGCCTCAGCACCGCTCCGGGACACCCCACCC
GCTTCCCAGGCGTGACCTGTCAACAGCAACTTCGCGGTGTGGTGAACTCTCTGAGGAAAAACCATTTTGATTATT
ACTCTCAGACGTGCGTGGCAACAAGTGACTGAGACCTAGAAATCCAAGCGTTGGAGGTCCTGAGGCCAGCCTAAG
TCGCTTCAAAATGGAACGAAGGCGTTTGTGGGGTTCCATTCAGAGCCGATACATCAGCATGAGTGTGTGGACAAG
CCCACGGAGACTTGTGGAGCTGGCAGGGCAGAGCCTGCTGAAGGATGAGGCCCTGGCCATTGCCGCCCTGGAGTT
GCTGCCCAGGGAGCTCTTCCCGCCACTCTTCATGGCAGCCTTTGACGGGAGACACAGCCAGACCCTGAAGGCAAT
GGTGCAGGCCTGGCCCTTCACCTGCCTCCCTCTGGGAGTGCTGATGAAGGGACAACATCTTCACCTGGAGACCTT
CAAAGCTGTGCTTGATGGACTTGATGTGCTCCTTGCCCAGGAGGTTCGCCCCAGGAGGTGGAAACTTCAAGTGCT
GGATTTACGGAAGAACTCTCATCAGGACTTCTGGACTGTATGGTCTGGAAACAGGGCCAGTCTGTACTCATTTCC
AGAGCCAGAAGCAGCTCAGCCCATGACAAAGAAGCGAAAAGTAGATGGTTTGAGCACAGAGGCAGAGCAGCCCTT
CATTCCAGTAGAGGTGCTCGTAGACCTGTTCCTCAAGGAAGGTGCCTGTGATGAATTGTTCTCCTACCTCATTGA
GAAAGTGAAGCGAAAGAAAAATGTACTACGCCTGTGCTGTAAGAAGCTGAAGATTTTTGCAATGCCCATGCAGGA
TATCAAGATGATCCTGAAAATGGTGCAGCTGGACTCTATTGAAGATTTGGAAGTGACTTGTACCTGGAAGCTACC
CACCTTGGCGAAATTTTCTCCTTACCTGGGCCAGATGATTAATCTGCGTAGACTCCTCCTCTCCCACATCCATGC
ATCTTCCTACATTTCCCCGGAGAAGGAAGAGCAGTATATCGCCCAGTTCACCTCTCAGTTCCTCAGTCTGCAGTG
CCTGCAGGCTCTCTATGTGGACTCTTTATTTTTCCTTAGAGGCCGCCTGGATCAGTTGCTCAGGCACGTGATGAA
CCCCTTGGAAACCCTCTCAATAACTAACTGCCGGCTTTCGGAAGGGGATGTGATGCATCTGTCCCAGAGTCCCAG
CGTCAGTCAGCTAAGTGTCCTGAGTCTAAGTGGGGTCATGCTGACCGATGTAAGTCCCGAGCCCCTCCAAGCTCT
GCTGGAGAGAGCCTCTGCCACCCTCCAGGACCTGGTCTTTGATGAGTGTGGGATCACGGATGATCAGCTCCTTGC
CCTCCTGCCTTCCCTGAGCCACTGCTCCCAGCTTACAACCTTAAGCTTCTACGGGAATTCCATCTCCATATCTGC
CTTGCAGAGTCTCCTGCAGCACCTCATCGGGCTGAGCAATCTGACCCACGTGCTGTATCCTGTCCCCCTGGAGAG
TTATGAGGACATCCATGGTACCCTCCACCTGGAGAGGCTTGCCTATCTGCATGCCAGGCTCAGGGAGTTGCTGTG
TGAGTTGGGGCGGCCCAGCATGGTCTGGCTTAGTGCCAACCCCTGTCCTCACTGTGGGGACAGAACCTTCTATGA
CCCGGAGCCCATCCTGTGCCCCTGTTTCATGCCTAACTAGCTGGGTGCACATATCAAATGCTTCATTCTGCATAC
TTGGACACTAAAGCCAGGATGTGCATGCATCTTGAAGCAACAAAGCAGCCACAGTTTCAGACAAATGTTCAGTGT
GAGTGAGGAAAACATGTTCAGTGAGGAAAAAACATTCAGACAAATGTTCAGTGAGGAAAAAAAGGGGAAGTTGGG
GATAGGCAGATGTTGACTTGAGGAGTTAATGTGATCTTTGGGGAGATACATCTTATAGAGTTAGAAATAGAATCT
GAATTTCTAAAGGGAGATTCTGGCTTGGGAAGTACATGTAGGAGTTAATCCCTGTGTAGACTGTTGTAAAGAAAC
TGTTGAAAATAAAGAGAAGCAATGTGAAGCA

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FIGURE 3957

TCTTCTGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACATGCCAAGGAGAC
AGCCTCAGAAGCTATTATGCAAGCTGGTACCAGCAGAAGCCAGGACAGGCCCCTGTACTTGTCATCTATGGTAAA
AACAACCGGCCCTCAGGGATCCCAGACCGATTCTCTGGCTCCAGCTCAGGAAACACAGCTTCCTTGACCATCACT
GGGGCTCAGGCGGAAGATGAGGCTGACTATTACTGTAACTCCCGGGACAGCAGTGGTAACCATCT

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FIGURE 3958

CAGCCCAAGGCCAACCCCACTGTCACTCTGTTCCCGCCCTCCTCTGAGGAGCTCCAAGCCAACAAGGCCACACTA
GTGTGTCTGATCAGTGACTTCTACCCGGGAGCTGTGACAGTGGCCTGGAAGGCAG**ATG**GCAGCCCCGTCAAGGCG
GGAGTGGAGACCACCAAACCCTCCAAACAGAGCAACAACAAGTACGCGGCCAGCAGCTACC**TGA**GCCTGACGCCC
GAGCAGTGGAAGTCCCACAGAAGCTACAGCTGCCAGGTCACGCATGAAGGGAGCACCGTGGAGAAGACAGTGGCC
CCTACAGAATGTTCATAG

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FIGURE 3959

CAGCCCAAGGCTGCCCCCTCGGTCACTCTGTTCCCGCCCTCCTCTGAGGAGCTTCAAGCCAACAAGGCCACACTG
GTGTGTCTCATAAGTGACTTCTACCCGGGAGCCGTGACAGTGGCCTGGAAGGCAGATAGCAGCCCCGTCAAGGCG
GGAGTGGAGACCACCACACCCTCCAAACAAAGCAACAACAAGTACGCGGCCAGCAGCTATCTGAGCCTGACGCCT
GAGCAGTGGAAGTCCCACAGAAGCTACAGCTGCCAGGTCACGC**ATG**AAGGGAGCACCGTGGAGAAGACAGTGGCC
CCTACAGAATGTTCATAG

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FIGURE 3960

CAGCCCAAGGCTGCCCCCTCGGTCACTCTGTTCCCGCCCTCCTCTGAGGAGCTTCAAGCCAACAAGGCCACACTG
GTGTGTCTCATAAGTGACTTCTACCCGGGAGCCGTGACAGTGGCCTGGAAGGCAGATAGCAGCCCCGTCAAGGCG
GGAGTGGAGACCACCACACCCTCCAAACAAAGCAACAACAAGTACGCGGCCAGCAGCTACCTGAGCCTGACGCCT
GAGCAGTGGAAGTCCCACAGAAGCTACAGCTGCCAGGTCACGC**ATG**AAGGGAGCACCGTGGAGAAGACAGTGGCC
CCTACAGAATGTTCATAG

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FIGURE 3961

CAGCCCAAGGCTGCCCCCTCGGTCACTCTGTTCCCACCCTCCTCTGAGGAGCTTCAAGCCAACAAGGCCACACTG
GTGTGTCTCGTAAGTGACTTCTACCCGGGAGCCGTGACAGTGGCCTGGAAGGCAGATGGCAGCCCCGTCAAGGTG
GGAGTGGAGACCACCAAACCCTCCAAACAAAGCAACAACAAGTATGCGGCCAGCAGCTACCTGAGCCTGACGCCC
GAGCAGTGGAAGTCCCACAGAAGCTACAGCTGCCGGGTCACGCATGAAGGGAGCACCGTGGAGAAGACAGTGGCC
CCTGCAGAATGCTCTTAG

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FIGURE 3962A

GAGTGCGGGCCGGGCGGGAGTGCGGCGAGAGCCGGCTGGCTGAGCTTAGCGTCCGAGGAGGCGGCGGCGGCGGCG
GCGGCACGGCGGCGGCGGGGCTGTGGGGCGGTGCGGAAGCGAGAGGCGAGGAGCGCGCGGGCCGTGGCCAGAGTC
TGGCGGCGGCCTGGCGGAGCGGAGAGCAGCGCCCGCGCCTCGCCGTGCGGAGGAGCCCCGCACACAATAGCGGCG
CGCGCAGCCCGCGCCCTTCCCCCCGGCGCGCCCCGCCCCGCGCGCCGAGCGCCCCGCTCCGCCTCACCTGCCACC
AGGGAGTGGGCGGGCATTGTTCGCCGCCGCCGCCGCCGCGCGGGCCATGGGGGCCGCCCGGCGCCCGGGGCCGGG
CTGGCGAGGCGCCGCGCCGCCGCTGAGACGGGCCCCGCGCGCAGCCCGGCGGCGCAGGTAAGGCCGGCCGCGCCA
TGGTGGACCCGGTGGGCTTCGCGGAGGCGTGGAAGGCGCAGTTCCCGGACTCAGAGCCCCCGCGCATGGAGCTGC
GCTCAGTGGGCGACATCGAGCAGGAGCTGGAGCGCTGCAAGGCCTCCATTCGGCGCCTGGAGCAGGAGGTGAACC
AGGAGCGCTTCCGCATGATCTACCTGCAGACGTTGCTGGCCAAGGAAAAGAAGAGCTATGACCGGCAGCGATGGG
GCTTCCGGCGCGCGGCGCAGGCCCCCGACGGCGCCTCCGAGCCCCGAGCGTCCGCGTCGCGCCCGCAGCCAGCGC
CCGCCGACGGAGCCGACCCGCCGCCCGCCGAGGAGCCCGAGGCCCGGCCCGACGGCGAGGGTTCTCCGGGTAAGG
CCAGGCCCGGGACCGCCCGCAGGCCCGGGGCAGCCGCGTCGGGGGAACGGGACGACCGGGGACCCCCCGCCAGCG
TGGCGGCGCTCAGGTCCAACTTCGAGCGGATCCGCAAGGGCCATGGCCAGCCCGGGGCGGACGCCGAGAAGCCCT
TCTACGTGAACGTCGAGTTTCACCACGAGCGCGGCCTGGTGAAGGTCAACGACAAAGAGGTGTCGGACCGCATCA
GCTCCCTGGGCAGCCAGGCCATGCAGATGGAGCGCAAAAAGTCCCAGCACGGCGCGGGCTCGAGCGTGGGGGATG
CATCCAGGCCCCCTTACCGGGGACGCTCCTCGGAGAGCAGCTGCGGCGTCGACGGCGACTACGAGGACGCCGAGT
TGAACCCCCGCTTCCTGAAGGACAACCTGATCGACGCCAATGGCGGTAGCAGGCCCCCTTGGCCGCCCCTGGAGT
ACCAGCCCTACCAGAGCATCTACGTCGGGGGCATGATGGAAGGGGAGGGCAAGGGCCCGCTCCTGCGCAGCCAGA
GCACCTCTGAGCAGGAGAAGCGCCTTACCTGGCCCCGCAGGTCCTACTCCCCCCGGAGTTTTGAGGATTGCGGAG
GCGGCTATACCCCGGACTGCAGCTCCAATGAGAACCTCACCTCCAGCGAGGAGGACTTCTCCTCTGGCCAGTCCA
GCCGCGTGTCCCCAAGCCCCACCACCTACCGCATGTTCCGGGACAAAAGCCGCTCTCCCTCGCAGAACTCGCAAC
AGTCCTTCGACAGCAGCAGTCCCCCCACGCCGCAGTGCCATAAGCGGCACCGGCACTGCCCGGTTGTCGTGTCCG
AGGCCACCATCGTGGGCGTCCGCAAGACCGGGCAGATCTGGCCCAACGATGGCGAGGGCGCCTTCCATGGAGACG
CAGATGGCTCGTTCGGAACACCACCTGGATACGGCTGCGCTGCAGACCGGGCAGAGGAGCAGCGCCGGCACCAAG
ATGGGCTGCCCTACATTGATGACTCGCCCTCCTCATCGCCCCACCTCAGCAGCAAGGGCAGGGGCAGCCGGGATG
CGCTGGTCTCGGGAGCCCTGGAGTCCACTAAAGCGAGTGAGCTGGACTTGGAAAAGGGCTTGGAGATGAGAAAAT
GGGTCCTGTCGGGAATCCTGGCTAGCGAGGAGACTTACCTGAGCCACCTGGAGGCACTGCTGCTGCCCATGAAGC
CTTTGAAAGCCGCTGCCACCACCTCTCAGCCGGTGCTGACGAGTCAGCAGATCGAGACCATCTTCTTCAAAGTGC
CTGAGCTCTACGAGATCCACAAGGAGTTCTATGATGGGCTCTTCCCCCGCGTGCAGCAGTGGAGCCACCAGCAGC
GGGTGGGCGACCTCTTCCAGAAGCTGGCCAGCCAGCTGGGTGTGTACCGGGCCTTCGTGGACAACTACGGAGTTG
CCATGGAAATGGCTGAGAAGTGCTGTCAGGCCAATGCTCAGTTTGCAGAAATCTCCGAGAACCTGAGAGCCAGAA
GCAACAAAGATGCCAAGGATCCAACGACCAAGAACTCTCTGGAAACTCTGCTCTACAAGCCTGTGGACCGTGTGA
CGAGGAGCACGCTGGTCCTCCATGACTTGCTGAAGCACACTCCTGCCAGCCACCCTGACCACCCCTTGCTGCAGG
ACGCCCTCCGCATCTCACAGAACTTCCTGTCCAGCATCAATGAGGAGATCACACCCCGACGGCAGTCCATGACGG
TGAAGAAGGGAGAGCACCGGCAGCTGCTGAAGGACAGCTTCATGGTGGAGCTGGTGGAGGGGGCCCGCAAGCTGC
GCCACGTCTTCCTGTTCACCGACCTGCTTCTCTGCACCAAGCTCAAGAAGCAGAGCGGAGGCAAAACGCAGCAGT
ATGACTGCAAATGGTACATTCCGCTCACGGATCTCAGCTTCCAGATGGTGGATGAACTGGAGGCAGTGCCCAACA
TCCCCCTGGTGCCCGATGAGGAGCTGGACGCTTTGAAGATCAAGATCTCCCAGATCAAGAGTGACATCCAGAGAG
AGAAGAGGGCGAACAAGGGCAGCAAGGCTACGGAGAGGCTGAAGAAGAAGCTGTCGGAGCAGGAGTCACTGCTGC
TGCTTATGTCTCCCAGCATGGCCTTCAGGGTGCACAGCCGCAACGGCAAGAGTTACACGTTCCTGATCTCCTCTG
ACTATGAGCGTGCAGAGTGGAGGGAGAACATCCGGGAGCAGCAGAAGAAGTGTTTCAGAAGCTTCTCCCTGACAT
CCGTGGAGCTGCAGATGCTGACCAACTCGTGTGTGAAACTCCAGACTGTCCACAGCATTCCGCTGACCATCAATA
AGGAAGATGATGAGTCTCCGGGGCTCTATGGGTTTCTGAATGTCATCGTCCACTCAGCCACTGGATTTAAGCAGA
GTTCAAATCTGTACTGCACCCTGGAGGTGGATTCCTTTGGGTATTTTGTGAATAAAGCAAAGACGCGCGTCTACA
GGGACACAGCTGAGCCAAACTGGAACGAGGAATTTGAGATAGAGCTGGAGGGCTCCCAGACCCTGAGGATACTGT
GCTATGAAAAGTGTTACAACAAGACGAAGATCCCCAAGGAGGACGGCGAGAGCACGGACAGACTCATGGGGAAGG
GCCAGGTCCAGCTGGACCCGCAGGCCCTGCAGGACAGAGACTGGCAGCGCACCGTCATCGCCATGAATGGGATCG
AAGTAAAGCTCTCGGTCAAGTTCAACAGCAGGGAGTTCAGCTTGAAGAGGATGCCGTCCCGAAAACAGACAGGGG

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FIGURE 3962B

TCTTCGGAGTCAAGATTGCTGTGGTCACCAAGAGAGAGAGGTCCAAGGTGCCCTACATCGTGCGCCAGTGCGTGG
AGGAGATCGAGCGCCGAGGCATGGAGGAGGTGGGCATCTACCGCGTGTCCGGTGTGGCCACGGACATCCAGGCAC
TGAAGGCAGCCTTCGACGTCAATAACAAGGACGTGTCGGTGATGATGAGCGAGATGGACGTGAACGCCATCGCAG
GCACGCTGAAGCTGTACTTCCGTGAGCTGCCCGAGCCCCTCTTCACTGACGAGTTCTACCCCAACTTCGCAGAGG
GCATCGCTCTTTCAGACCCGGTTGCAAAGGAGAGCTGCATGCTCAACCTGCTGCTGTCCCTGCCGGAGGCCAACC
TGCTCACCTTCCTTTTCCTTCTGGACCACCTGAAAAGGGTGGCAGAGAAGGAGGCAGTCAATAAGATGTCCCTGC
ACAACCTCGCCACGGTCTTTGGCCCCACGCTGCTCCGGCCCTCCGAGAAGGAGAGCAAGCTCCCTGCCAACCCCA
GCCAGCCTATCACCATGACTGACAGCTGGTCCTTGGAGGTCATGTCCCAGGTCCAGGTGCTGCTGTACTTCCTGC
AGCTGGAGGCCATCCCTGCCCCGGACAGCAAGAGACAGAGCATCCTGTTCTCCACCGAAGTC**TAA**AGGTCCCAGT
CCATCTCCTGGAGGCAGACAGATGGCCTGGAAACCTCTGGCTAATCAGGCCATCCGTAGAGCGGGAACCTTCCTG
AGGTGTCCTTGGGCCACCCCCAAGTGTTGGGCCATCTGCCAAGAGACAGCGACCCAAAGCCGAAGGACAGGTGGC
CTGGGCAGATCCCGCCCAGGTCTGGGAGCCCCAGGCTGGCCTCAGACTGTGGTTTTTTATGTGGCCACCCGAGGG
CGCCCCAAGCCAGTTCATCTCAGAGTCCAGGCCTGACCCTGGGAGACAGGGTGAAGGGAGTGATTTTTATGAACT
TAACTTAGAGTCTAAAAGATTTCTACTGGATCACTTGTCAAGAAGCGCCCTCTCTGGGGAGAAGGGAACGTGACT
GGATTCCCTCACTGTTGTATCTTGAATAAACGCTGCTGCTTCATCCTG

FIGURE 3963

AGGGAGGCGGGGCGGAGACGGCGGCGAGGAGGAGGCCGCGGCGCGGGACGCATAGAGCTGCGGCTCGGGCGGCGC
CTCCCTGCGGCGGCCCGGCCCGGCTCCGGCCCCCGCTGGGGCAATGCTCCCCGGGGCCGCGGGATGAGCCAGCGA
TCCTGAACTGTGTTCCTGCCCACAGTGACTCGGCCGGTCCGGGCATGGCAGACCCAGTGGCGGGCATCGCGGGCT
CGGCGGCCAAGAGCGTGCGGCCATTTCGCTCCAGTGAGGCCTACGTGGAGGCCATGAAGGAGGACCTGGCCGAGT
GGCTCAATGCCTTGTACGGCCTGGGTCTCCCGGGTGGTGGCGATGGCTTCCTGACAGGGCTGGCCACGGGCACGA
CCCTGTGCCAACATGCCAACGCCGTGACCGAGGCTGCCCGTGCATTGGCAGCCGCCCGCCCGGCCCGAGGTGTGG
CCTTCCAGGCGCACAGTGTAGTGCCTGGCTCCTTCATGGCGCGCGACAACGTGGCCACCTTCATCGGCTGGTGCC
GCGTGGAGCTGGGTGTGCCGGAGGTGCTCATGTTTGAGACTGAGGACCTGGTGCTGCGCAAGAACGAGAAGAGCG
TGGTGCTGTGCCTGCTGGAGGTGGCGCGGCGTGGGGCACGCCTGGGCCTGCTGGCCCCACGCCTCGTGCAGTTTG
AGCAGGAGATTGAGCGGGAGCTGCGTGCTGCACCCCCAGCCCCCAACGCCCCTGCCGCTGGGGAGGACACCACTG
AAACCGCCCCCCGCACCAGGGACTCCTGCCCGCGGCCCCCGCATGACACCCAGCGACCTGCGCAACCTCGACGAGC
TGGTGAGGGAGATTCTGGGCCGCTGCACCTGCCCTGACCAGTTTCCCATGATCAAGGTCTCAGAGGGGAAGTACC
GTGTGGGGGACTCGAGCCTGCTCATCTTTGTGCGGGTGCTGAGGAGCCACGTGATGGTGCGAGTGGGTGGTGGCT
GGGACACGCTGGAGCATTACCTGGACAAGCACGACCCGTGCCGCTGCTCCTCCACTGCTCATCGCCCACCCCAGC
CGAGGGTCTGCACCTTTTCTCCACAGAGGGTGTCGCCCACCACCAGTCCCCGCCCTGCTAGCCCAGTCCCTGGGA
GTGAGCGCCGGGGCTCCCGGCCTGAGATGACTCCCGTTAGCTTACGAAGCACAAAGGAGGGGCCCGAGACCCCAC
CCAGGCCCCGGGATCAGCTGCCCCCCCATCCCCGCTCCCGCCGCTACTCCGGGGACAGTGACTCCTCAGCCTCCT
CCGCCCAGAGCGGCCCCCTTGGTACCCGCAGTGATGACACAGGCACTGGCCCCCGGAGGGAGCGACCCAGCCGGC
GGCTGACCACAGGCACCCCGGCCTCTCCGAGACGGCCTCCTGCCTGCGCAGCCAGTCCCGAGACCGGCTGGATCG
CGGCCGGCCCCGGGGGGCCCCAGGAGGCAGGGGAGCCCAGCTGTCGGTCCCCAGCCCTGCCCGGCGGGCCCGGAG
CCAGAGCCGCGAGGAGCAGGCTGTGCTGCTTGTGCGCAGGGATCGAGACGGGCAGCACTCATGGGTGCCAAGGGG
CAGGGGCAGTGGGGGCTCGGGCAGGAGCACCCCCCAGACTCCCCGTGCCCGCAGCCCTGCAGCACCCCGGCTTTC
CCGGGTCTCCAGCCCCAGTCCAGAGTTGGGCACCACACCGGCCAGCATCTTCCGCACACCCCTGCAGCTCGACCC
GCAGCAGGAGCAGCAGCTGTTCCGGCGCCTGGAAGAGGAGTTCCTGGCCAATGCCCGGGCCCTTGAGGCTGTTGC
TAGCGTGACCCCCCACTGGACCAGCCCCTGACCCAGCTCGGGCCCCCGACCCTCCAGCTCCTGACTCTGCCTATTG
TTCCTCCAGTTCCTCCTCTTCGTCCCTCAGCGTCCTGGGTGGCAAATGTGGCCAACCTGGGGACTCTGGCCGGAC
GGCCAATGGGCTGCCTGGGCCCCGAAGCCAAGCCCTTTCCAGCTCCTCCGATGAAGGCAGCCCCTGCCCTGGCAT
GGGGGGGCCACTAGATGCACCTGGGAGCCCCCTGGCTTGCACTGAACCCTCGAGGACCTGGGCACGGGGTCGGAT
GGACACACAGCCAGACCGTAAACCCTCACGTATCCCCACGCCTCGGGGCCCCCGCCGCCCCTCCGGACCCGCAGA
GCTGGGGACATGGCATGCCCTGCACTCAGTCACCCCGAGGGCTGAGCCAGATTCCTGGATGTGATGGACCAGCTC
AGCTGTCCCCAGACCCCATCCCTTCTCCTTTTCCTTTGTGGCCTTAACCCTTCTGCATCAGGGAGCCCCCTCTGC
CTCTTGAGTACCAGACCTCATGGGACCAGACCCCTTGGGACCACATGGCACAATGGGACCTCTGTTGTACATTCC
GGTTGGGGGATGAGCGTTGCTATTTAATTACTAATATTATTGAATGCCTTAGAGGAGGCCGGGCGAGCCCGGTGT
TCTGAAGACCTGTGGCCCAGCAGAGCCTCTGACAGTAAAGTTTTGCTCCAGC

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FIGURE 3964A

ACCACTTGAAGAGAGGTTCCTAATACTAGACAGATGGAGAGTGGCTTGGCTGTTTCCCCCTGCATATTGGGGTTG
AAAACTTAAATGTGTAGTTCCAGTCCTTCTATGCAGAGTCTCTCCTGCCCTCCCTCCTTCCTGCAGTCTCACCAC
GCCACCACCTCCCTCGGGGGCCTCCGCGCTGAGCTTCCGGCCTCTACGCCTCGCTTCCGGTCGGCCGCCCCTTCC
TTACTTCCGGTTCTCTATGGTGCGCGGGCAAGCTTTGCTCCGCCTCCGGCAGTGGCTTACTCCCGGTGCCAGGTT
CTTGGAGCTGTGAGGAGGAACAACC**ATG**TCATCAGAATCGAGCAAAAAACGGAAGCCCAAAGTGATCCGAAGCGA
TGGAGCCCCAGCTGAAGGAAAGCGGAATCGATCTGACACCGAGCAGGAAGGTAAATACTACAGTGAGGAGGCCGA
GGTGGATCTGCGGGACCCTGGCAGAGACTATGAGTTATACAAGTACACCTGCCAGGAGCTACAGAGGCTGATGGC
TGAGATCCAAGACCTGAAGAGCAGGGGTGGCAAGGATGTGGCAATAGAAATAGAAGAACGGAGGATCCAGAGCTG
TGTGCATTTCATGACTCTAAAGAAGCTTAACCGATTAGCCCACATCAGGTTGAAGAAAGGAAGAGATCAGACCCA
CGAGGCTAAGCAGAAAGTAGATGCCTATCATCTGCAGCTCCAGAACCTGTTGTATGAGGTGATGCACCTACAGAA
GGAGATCACCAAATGTTTGGAGTTTAAGTCAAAGCATGAAGAAATTGATCTGGTCAGTTTAGAGGAGTTTTATAA
GGAGGCTCCACCAGATATCAGCAAGGCCGAAGTCACCATGGGAGACCCTCACCAGCAAACACTGGCACGTCTGGA
CTGGGAGCTGGAGCAGCGGAAAAGGCTGGCAGAGAAGTACCGAGAGTGCCTATCTAACAAGGAGAAGATTCTCAA
GGAGATTGAGGTGAAGAAGGAGTACCTGAGCAGCCTCCAGCCCCGCCTCAACAGCATCATGCAGGCTTCCCTTCC
GGTGCAGGAGTACCTGTTTATGCCATTCGACCAGGCTCACAAGCAGTATGAGACAGCCAGACACCTGCCGCCTCC
CCTCTATGTCCTCTTTGTTCAGGCCACTGCGTATGGGCAGGCCTGTGATAAGACGTTATCTGTGGCAATCGAAGG
CAGTGTGGATGAAGCCAAGGCTCTGTTCAAACCTCCAGAGGACTCCCAAGATGACGAGAGTGACTCAGATGCCGA
GGAGGAGCAGACTACGAAGCGCCGGAGACCCACACTGGGGGTTCAGTTGGACGACAAACGCAAGGAGATGCTGAA
GAGGCACCCACTGTCTGTCATGCTCGACCTGAAGTGCAAAGATGACAGTGTGCTTCACCTGACTTTCTACTACCT
CATGAACCTCAACATCATGACAGTAAAAGCCAAAGTGACAACTGCCATGGAGCTGATCACCCCCATCAGTGCAGG
TGACTTGCTGTCTCCTGACTCAGTCCTGAGTTGCTTGTATCCTGGGGATCATGGAAAGAAAACTCCGAATCCAGC
CAATCAGTATCAGTTTGATAAAGTTGGCATCCTGACTTTGAGCGACTATGTACTTGAGCTAGGTCACCCCTATTT
GTGGGTGCAGAAGCTGGGTGGCCTCCACTTCCCCAAAGAGCAGCCCCAGCAAACAGTGATTGCTGACCACTCGCT
GAGCGCCAGCCACATGGAGACCACCATGAAACTTCTGAAGACCAGGGTGCAGTCCCGCCTGGCCCTCCACAAACA
GTTTGCATCCCTAGAACATGGCATTGTGCCAGTTACCAGTGATTGCCAGTACCTCTTCCCTGCCAAGGTTGTCTC
TCGCCTGGTGAAATGGGTGACAGTTGCCCATGAGGATTACATGGAGCTGCACTTCACCAAAGACATTGTGGATGC
GGGACTGGCTGGGGACACCAATCTCTACTACATGGCGCTCATCGAAAGGGGCACAGCCAAACTGCAGGCCGCTGT
GGTGTTGAACCCTGGCTACTCCTCCATCCCACCTGTTTTCCAGCTCTGTTTGAACTGGAAAGGGGAGAAAACCAA
CAGCAACGATGACAACATTCGGGCCATGGAGGGCGAAGTCAATGTGTGCTACAAGGAGCTGTGTGGCCCTTGGCC
CAGCCACCAGCTGTTGACCAACCAGCTGCAGCGGCTGTGTGTGCTGCTGGATGTTTACCTGGAGACCGAGAGCCA
TGACGACAGTGTGGAGGGGCCCAAGGAATTTCCCCAGGAGAAGATGTGTCTGCGGCTCTTCAGGGGTCCTAGCAG
GATGAAGCCATTTAAATACAACCATCCTCAGGGATTCTTCAGCCATCGC**TGA**TCTCCCGCGCAGACCGTTGTTTC
CCCCAAGGCCTCACCCTGAGCACTGGGCTTCTGCTTTCTGCTCTGGCCCACATGTGACTCTTGATATTCTCCAAA
GACACCAGCCAATTAAAAAGCGTCACCTGACCAGTGGCCTTTGTCTGTGGTTCCTGGCAAGGTGGCTTTGCAGTC
TGGAAGGGCAGGTGGGAGCTGTGACACAGTGTGAAAAAGCATTTGTAGAGAGACTTTTTCTCAGCAGCCAATAAA
AGCAGAGTGGAAAAAGATTCCAATTCTGCAGAGAGATGCTCACCTCTTGTCTACGCACACCCTATTTGTGCTTTG
CGGGGTGAGGTCCTCATGATCTTGTATTTATTATCCCAAGTTCCTGCTGTTAAGAGGTGGTAGGAGAAGCCAAAG
GCAGCAGAGCACAAAAAGCAAAACTCTTCCCTCCCCACCCGCTCTTCCCATTAGTCCTGTCAGGGTTGCCGATGG
ACAAATTGTCTCTGATCGTTGGATGTTATAAATGTCTGACAGTGCAGTGCAAACAGAAGACAAACTCAGTTGATC
CTTGAACAACTCAGGGGTTAGGGGCACCAACACCCCCTGCCCTGCACAGTTGAAAAATCCGTGTATAACTTTTGA
CTCCCTAAAAACTTAACTAATAGCCTGCTGTTGACCAGTAGTATGCTATTAGTAGTTACTTACTGCTAACATAGT
CAGTACATATTTTCAGTATATATTTTGTATCTTATACACTGTATTCTTACAATACAGTAAACTAGAGAAAAGAAA
ATGTTATAAGGAAAGTCACAAGGGGGCCTGAGTGCAGTGGCTCACGTCTGTAATCCCAGCACTTTGGGAGGCCAA
GGCGGGTGGATCACTTGAGGTCAGGAGTTTGAGACCAGCCTGGCCGACATGGTGAAACCCTGTCTCTACTAAAAA
CATGGAAATTAGCCAAGCGTGGTGGCGCATGCCTGTAGTCCCAGTTACTCAGGAGGCTGAGGCAGAATTACTTGA
ACCCATGAGGCAGAGGTTGCAGTAAGCCAAGATCACGCTCCTGCGCTCCGGCTTGGGCGAGAGTGAGACTCCGTC
TCAAAAATAAATAAATAAGAAAGCCATAAGGAAGAAAATATATATCTACTATTAAGTAGAAGTGGATCACCATAA
AGGTCTTCACATACTGTCTCAGGGTTGAATAGTCTAAGGAAGAGGAGGGGTTGGTCTTGGTGTCTCAGGGATGGC

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FIGURE 3964B

AGAGGCAGAAAAAGTGGGGGAGGTGGAGGGGGAGGCAGGCACCACTGTTATTTTTATTGAACAAAATCTGTGCAG
GGACTCATGACTGTAATCCTAGTACTTTGGAAAGCTAAGGCGGGAGGATCCCTTGAGGCCAGGAGTTCAGGTCCA
GCCTGGGCAACGTAGTGAGAGACCCTGTATCTACAAAAAATTTAAAAATCAGCCAGGTGTGGTGGTATGCACCAA
TAGTCCCAGTTACTCAGAAGGCTGAGGTGGGCGGATGACTGGAGTCCAGGAGTTCAAGGTAGCAGTGAGCTATTC
ATCGTGCCTGTACTGTACTCCAGCCTGGGAAACAATGCGAGTCCCTATCTCTAAAAAATTTTAAAAAAAGAAATC
TGCATATAATAGACCCACAGAGTCCAAACTATTGTTCAGAGATCAACTGTACTTCACAGAGAGTAATTCTAAGTC
TTACAGGATTTCATGGAGATGGCGAGAGTGGTGTTGGAGAATCAATCACATACAGAGATACAGGACAGTGAGACC
AGGTAACATTTGAGGAGAATATTTTTTTTTTATTGAGACAGGGTCTTGCTCTGTTGTCCAGGCTGGAGTGCAGTG
GCACGAACACAGCTCACTGCCGCCTCAACCTCTCCTGGGTTCAAGTGATCCTCCTGCCTCAGCCTCCCAAGTAGC
TGGGACCACAGGTGTGTGCCACCATTTCTGGCTAATTTTTAAATTTTTTGTAGAGGCGGGATCCCACTATTTTTC
CCAGGCTGGTCTCAAACTCCTGGGCTCAAATGATCCTCCCACCTCGGCCTCCCAAAGTGCTAGGATTATAGGCAT
GAGCCACCACACCCGGCCTGAGTAGAGTCTTTAAGGTAATGACAAAAGTGCCTCAAAATATAATTATTTGATTAA
GAGAAGTCTTGGGAAGATAGGTAACAACCTTTAAAATGTTCATAAAATTACATCCTTTGTAATACTCCTGCAAGT
CAAAGTAAAGGATGGCATAGACTATTCTTGGACAGTTTTGTCAAAAAGTGTATCTTGACCCCACCATCAGTACTC
CATTCTTCATTTTAAAAAATAAGATGGGCTGGGCACAGTGGCTTACGCCTTTAATATCAGTACTTTGGGAGGCTG
GTGGGCGGATCACCTGAGATCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAAT
ACAAAAATTAGCTGGGCATGGTGGTGCGCGCCTGTAATCCCAGCCACTCGGGAGGCTGAGGCAGGAGAATTGCTT
GAATCCCCGAGGCGGAGGTTGCACTGAGCCGAGATGGTGCCACTGCACCATCTGGACAACAGAGCAAGACTCCGT
CTTGG

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FIGURE 3965

CCACGCTCCCATTTTACCGAGGTGGATCCTGAGGCCCAGAGTGGGCAAAGGGCTTGCCAAGGTCGCAGAGCGCGC
AGAGGATTAGAACCCTGACTTCCGTCCAGCACCTGCGGAGTTGGAGACGCCCACAGGAAACGCCCACCTGACCGG
GTGAGTGAGGGGGCGGGCGAGCCGGAGGGGTGGAGTTTATTCGCGCCCCGCCTCCGCCACCAGGGCTTGGGGGCG
GGGCCTTCCTGCAACCTTTGCGGCTCCAAC**ATG**GCTCCGCGGCTGTGCAGCATCTCTGTGACGGCGCGGCGGCTG
CTGGGGGGCCCGGGGCCTCGCGCTGGGGACGTTGCGTCTGCAGCTGCGGCGCGTTTCTATTCCAAGGACAATGAA
GGCAGCTGGTTCCGCTCCCTCTTTGTTCACAAAGTGGATCCCCGGAAGGATGCCCACTCCACCCTGCTGTCCAAG
AAGGAAACCAGCAACCTCTATAAGATCCAGTTTCACAATGTAAAGCCTGAATACCTGGATGCCTACAACAGCCTC
ACGGAGGCTGTGCTGCCCAAGCTTCACCTGGATGAGGACTACCCATGCTCACTCGTGGGCAACTGGAACACGTGG
TATGGGGAGCAGGACCAGGCAGTGCACCTGTGGCGATTCTCAGGTGGCTACCCAGCCCTCATGGACTGCATGAAC
AAGCTCAAAAACAATAAGGAGTACCTGGAGTTCCGAAGGGAGCGGAGCCAGATGCTGCTGTCCAGGAGAAACCAG
CTGCTCCTCGAGTTCAGCTTCTGGAATGAGCCACAGCCCAGAATGGGTCCCAACATCTATGAGCTGAGGACATAC
AAGCTCAAGCCAGGAACCATGATCGAGTGGGGGAACAACTGGGCTCGGGCCATCAAGTACCGGCAGGAGAACCAG
GAGGCAGTGGGCGGCTTCTTCTCACAGATAGGAGAGCTCTACGTGGTGCACCATCTCTGGGCCTATAAAGACCTG
CAGTCTCGGGAGGAGACTCGAAACGCTGCCTGGAGGAAGAGAGGCTGGGATGAAAATGTCTACTATACAGTCCCC
CTGGTGCGACACATGGAGTCTAGGATCATGATCCCCTTGAAGATCTCGCCTCTGCAG**TGA**TGCTGCCTACACCTC
CACCTCCTTCCCCTTCTCCCTCAGGCAACCCCGACAGACAGTGGCACTCCTGGTCCTGCTGTCTTGGTTTTGTCT
TGGCTCTGGGAGGACTCTGAGGGGCAGTGCTCAGTTCAGACAAGGGGGAACTGAAGGCTGACAAGTTCTGAGGAT
TACAGCTCTGCCCAGGCCCTTTCTACTTTCCCTGCCTGCCTCCCTCCCCCTGCTAGAAGTAGTTTCTGATTTCCC
TGAATGAAAGATAGTGATCTTTTAGGCCTTCATTTATCTTCTAAAATTCCTCATCTCAAGGCCACCAGTCCCCAG
TTATCACCCTTGGAAATCCTCTGTTTAGCTTAGTTGCACAAAAGGTAGTATGTCCAGTGGCTAGAGGTGGGGTGG
GAAGAGAGGAGGCCAGGCCAGGCCCTCAGGAATTCCCTGGTTTCCACTGGGCCACCCACTTGCTGGACAGTCTGA
GCCAAGTCCCTCCTGCTGGAGAAAAGCCTGGAACTGCCAAAACAAAAAAACAAATACAAACAAACCTCGTCACCA
CGGTCAGGAGGAGGTTCAGACATTCTGCCCAGAGGGGCTGGGGAAAGGGATGGGAGCCAGGAAAGATTTAGGGGC
AGGAGACAGACACGTAACAGGAACTCGGAAGGTAGAACTTAGAATTCAGAACTTGGGTTTCAATTGTAGAATTTG
GAATCTGGAATACAGAATTGGGAAGAAGAACAGAGATGACAAAAGACCACTTGAAGAGAGGTTCCTAATACTAGA
CAGATGGAGAGTGGCTTGGCTGTTTCCCCCTGCATATTGGGGTTGAAAACTTAAATGTGTAGTTCCAGTCCTTCT
ATGCAGAGTCTCTCCTGCCCTCCCTCCTTCCTGCAGGCAAATATACAAGCTAGACCCTGTTCCCTCACCCTGTAT
CCTGTCTCCCCTAATTGACATTCTATCAGCCCAACCCTCATTCTGCAGGGCCACCTGGTGTGTGGAGGTGGCGGG
AGGGGTCAGTGACTCTGGGGGTCTCCTCAGTGACCCCCATACCTCATCATGAACCCTTGGGTAGCTTGATTCTGC
CTACCATCCAGGAAAACTTGTGCTGGAATTGCTGATGGAAACAATTAAATATTTACTAT

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FIGURE 3966

GCAGCCGTCAGGGCCCGTCCCCCAACTCCCCTTTCCGCTCAGGCAGGGTCCTCGCGGCCCATGCTGGCCGCTGGG
GACCCGCGCAGCCCAGACCGTTCCCGGGCCGGGCAGCCGGCCACCATGGTGGCCCTGAGGCCTGTGCAGCAACTC
CAGGGGGGCTAAAGGGCTCAGAGTGCAGGCCGTGGGGCGCGAGGGTCCCGGGCCTGAGCCCCGCGCCATGGCCGG
GGCCATCGCTTCCCGCATGAGCTTCAGCTCTCTCAAGAGGAAGCAACCCAAGACGTTCACCGTGAGGATCGTCAC
CATGGACGCCGAGATGGAGTTCAATTGCGAGATGAAGTGGAAAGGGAAGGACCTCTTTGATTTGGTGTGCCGGAC
TCTGGGGCTCCGAGAAACCTGGTTCTTTGGACTGCAGTACACAATCAAGGACACAGTGGCCTGGCTCAAAATGGA
CAAGAAGGTACTGGATCATGATGTTTCAAAGGAAGAACCAGTCACCTTTCACTTCTTGGCCAAATTTTATCCTGA
GAATGCTGAAGAGGAGCTGGTTCAGGAGATCACACAACATTTATTCTTCTTACAGGTAAAGAAGCAGATTTTAGA
TGAAAAGATCTACTGCCCTCCTGAGGCTTCTGTGCTCCTGGCTTCTTACGCCGTCCAGGCCAAGTATGGTGACTA
CGACCCCAGTGTTCACAAGCGGGGATTTTTGGCCCAAGAGGAATTGCTTCCAAAAAGGGTAATAAATCTGTATCA
GATGACTCCGGAAATGTGGGAGGAGAGAATTACTGCTTGGTACGCAGAGCACCGAGGCCGAGCCAGGGATGAAGC
TGAAATGGAATATCTGAAGATAGCTCAGGACCTGGAGATGTACGGTGTGAACTACTTTGCAATCCGGAATAAAAA
GGGCACAGAGCTGCTGCTTGGAGTGGATGCCCTGGGGCTTCACATTTATGACCCTGAGAACAGACTGACCCCCAA
GATCTCCTTCCCGTGGAATGAAATCCGAAACATCTCGTACAGTGACAAGGAGTTTACTATTAAACCACTGGATAA
GAAAATTGATGTCTTCAAGTTTAACTCCTCAAAGCTTCGTGTTAATAAGCTGATTCTCCAGCTATGTATCGGGAA
CCATGATCTATTTATGAGGAGAAGGAAAGCCGATTCTTTGGAAGTTCAGCAGATGAAAGCCCAGGCCAGGGAGGA
GAAGGCTAGAAAGCAGATGGAGCGGCAGCGCCTCGCTCGAGAGAAGCAGATGAGGGAGGAGGCTGAACGCACGAG
GGATGAGTTGGAGAGGAGGCTGCTGCAGATGAAAGAAGAAGCAACAATGGCCAACGAAGCACTGATGCGGTCTGA
GGAGACAGCTGACCTGTTGGCTGAAAAGGCCCAGATCACCGAGGAGGAGGCAAAACTTCTGGCCCAGAAGGCCGC
AGAGGCTGAGCAGGAAATGCAGCGCATCAAGGCCACAGCGATTCGCACGGAGGAGGAGAAGCGCCTGATGGAGCA
GAAGGTGCTGGAAGCCGAGGTGCTGGCACTGAAGATGGCTGAGGAGTCAGAGAGGAGGGCCAAAGAGGCAGATCA
GCTGAAGCAGGACCTGCAGGAAGCACGCGAGGCGGAGCGAAGAGCCAAGCAGAAGCTCCTGGAGATTGCCACCAA
GCCCACGTACCCGCCCATGAACCCAATTCCAGCACCGTTGCCTCCTGACATACCAAGCTTCAACCTCATTGGTGA
CAGCCTGTCTTTCGACTTCAAAGATACTGACATGAAGCGGCTTTCCATGGAGATAGAGAAAGAAAAAGTGGAATA
CATGGAAAAGAGCAAGCATCTGCAGGAGCAGCTCAATGAACTCAAGACAGAAATCGAGGCCTTGAAACTGAAAGA
GAGGGAGACAGCTCTGGATATTCTGCACAATGAGAACTCCGACAGGGGTGGCAGCAGCAAGCACAATACCATTAA
AAAGCTCACCTTGCAGAGCGCCAAGTCCCGAGTGGCCTTCTTTGAAGAGCTCTAGCAGGTGACCCAGCCACCCCA
GGACCTGCCACTTCTCCTGCTACCGGGACCGCGGGATGGACCAGATATCAAGAGAGCCATCCATAGGGAGCTGGC
TGGGGGTTTCCGTGGGAGCTCCAGAACTTTCCCCAGCTGAGTGAAGAGCCCAGCCCCTCTTATGTGCAATTGCCT
TGAACTACGACCCTGTAGAGATTTCTCTCATGGCGTTCTAGTTCTCTGACCTGAGTCTTTGTTTTAAGAAGTATT
TGTCT

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FIGURE 3967

GGAGCCCGGAGCTGCAGCCACCGGGGAGCCAGGTACCTTCCGCGAGACGTCGAGGGGCGAGTCCTAGTCTCTTTT
CTCCGCACTGGAAGACTTGAACACTTCCTTCTCTGGTCTCTGTCACCCAGGCTGGAGTGTAGTGGCGCAATCTCA
GCTGGCTGGAGCCTTGACCTCCTTGGGCTCAAGCTATCCTCCCACCTCAGCCTCTCAAATAGCTGGGACTACAGG
CAGCAAAGCACCTGCTCTGAGTGGCC**ATG**GGGAAGCGATACTTCTGTGACTACTGCGACCGCTCCTTCCAGGACA
ACCTCCACAACCGCAAGAAGCACCTGAACGGGCTGCAGCACCTCAAGGCCAAGAAGGTCTGGTACGACATGTTCC
GAGATGCAGCTGCCATCTTGCTGGATGAGCAGAACAAGCGGCCCTGCAGGAAGTTTCTACTGACAGGCCAGTGCG
ACTTTGGCTCCAACTGCAGATTTTCCCACATGTCAGAGCGAGACCTGCAGGAGCTGAGCATCCAGGTGGAGGAGG
AGAGGCGAGCCAGGGAGTGGCTACTAGATGCTCCTGAGCTCCCCGAGGGCCATCTGGAGGACTGGCTGGAGAAGA
GAGCCAAGCGGCTGAGCTCAGCCCCAAGTAGCAGGGCTGAACCCATCAGAACCACTGTCTTCCAGTACCCCGTGG
GCTGGCCACCAGTTCAGGAGCTGCCTCCATCCCTGCGGGCACCCCCACCTGGGGGGTGGCCTCTGCAGCCCAGAG
TCCAGTGGGGC**TGA**GCCCCTTGCCCCCGACTGACCCCCACGTGGTCACTTTTCTCATCAGTCACAATAGGAAGCC
AAGCCCGGTTCCTGCTACGCCCCATGGAGGCTCCGAGACCATCTGCCCAGCCTCACTGAGGCTCAGGACACGGCC
ACACCAAGTGCAGCCCTCGTCCTGGGTCTGCACCGGGCAGCTCTCCCCTCACTCTCCTCCACCTGCCCCCCTGCT
TCTTAAGAAGATGGGGGAGAAAACTTCCAAATGTTTATAAAGAAAGTCTGTCACCA

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FIGURE 3968

CTGTGAAGAAACATGGCGGCCGCGACGTTGACTTCGAAATTGTACTCCCTGCTGTTCCGCAGGACCTCCACCTTC
GCCCTCACCATCATCGTGGGCGTCATGTTCTTCGAGCGCGCCTTCGATCAAGGCGCGGACGCTATCTACGACCAC
ATCAACGAGGGGAAGCTGTGGAAACACATCAAGCACAAGT**ATG**AGAACAAGTAGTTCCTTGGAGGCCCCCATCCA
GGCCAGAAGGACCAGGTCCACCCAGCAGCTGTTTGCCCAGAGCTGGAGCCTCAGCTTGAAGATGATGCTCAAGGT
ACTCTTCATGGACCACCATTCGCTGTTGGCAAGAAACGGCTTTACTTACAAAACAGACTCTTTACCTTCTGCTGT
GTTTGAAGTATGTTTAGTCAGCATGCTCAGGAAA**TAA**ATGTGAATTGCCCTTG

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FIGURE 3969

CCGGAAGTGCGGGCGCTCAGGGAGCTGTCACCGTGGTCGGCGGCGGCGGCGGCGGCGGCGGCACAGAGCCGGTGG
TGGAGCCGCCGAGGAGGGTCACGCAGCACA**ATG**CCAGCTCTGCCCCTGGACCAACTCCAGATCACCCACAAGGAC
CCGAAGACAGGAAAGCTGAGGACTTCACCAGCGCTGCACCCCGAGCAGAAGGCAGACCGGTATTTTGTGTTATAC
AAACCGCCCCCTAAAGACAACATTCCCGCCCTAGTGGAGGAGTACCTGGAACGCGCCACCTTCGTAGCCAATGAC
CTCGACTGGCTCCTGGCCTTGCCTCACGATAAATTCTGGTGCCAGGTGATCTTTGACGAGACTCTACAGAAGTGC
CTGGACTCCTACCTGCGCTATGTCCCCCGCAAATTCGACGAGGGGGTGGCCTCAGCCCCTGAGGTTGTTGACATG
CAGAAGCGCCTCCATCGAAGTGTTTTTCTCACCTTCCTCCGCATGTCCACTCACAAGGAATCCAAAGATCACTTC
ATTTCCCCTTCTGCGTTTGGAGAAATCCTCTACAATAACTTCCTCTTTGACATTCCAAAGATCCTGGACCTCTGC
GTGCTCTTTGGAAAAGGCAACTCACCACTGCTCCAGAAGATGATAGGAAACATCTTTACACAGCAGCCAAGTTAC
TACAGTGACCTGGATGAAACCCTGCCTACCATCCTTCAGGTCTTCAGCAATATCCTCCAGCACTGTGGTTTGCAA
GGGGACGGGGCCAATACCACACCCCAGAAGCTTGAGGAGAGGGGCCGATTGACCCCCAGTGACATGCCTCTCCTG
GAATTAAAGGACATTGTTCTCTACCTTTGTGATACCTGCACCACACTTTGGGCCTTTCTGGATATCTTCCCTTTG
GCTTGCCAGACCTTCCAGAAGCACGACTTTTGTTACAGACTAGCTTCCTTCTACGAAGCAGCAATTCCCGAAATG
GAGTCTGCAATTAAGAAGAGGAGGCTTGAAGATAGCAAGCTTCTTGGTGACCTGTGGCAGAGGCTCTCCCATTCC
AGGAAGAAGCTAATGGAGATTTTCCACATCATCCTGAACCAGATCTGCCTCCTTCCCATCCTAGAAAGCAGCTGT
GACAACATTCAGGGCTTCATCGAAGAGTTCCTTCAGATCTTCAGCTCCTTGCTGCAGGAGAAGAGGTTCCTCCGG
GACTATGATGCACTCTTCCCCGTGGCCGAAGACATCAGCTTGCTGCAGCAGGCCTCATCAGTCTTGGACGAGACG
CGGACTGCCTACATCCTCCAGGCAGTCGAGAGTGCATGGGAAGGGGTGGACAGACGGAAAGCCACAGATGCTAAA
GACCCATCGGTGATTGAGGAGCCTAATGGGGAGCCTAACGGGGTCACGGTGACAGCAGAGGCAGTCAGTCAAGCA
TCATCACATCCGGAGAACTCGGAGGAAGAGGAGTGCATGGGAGCAGCCGCGGCTGTGGGCCCTGCCATGTGTGGG
GTGGAACTGGACTCTCTCATCTCCCAAGTGAAGGACCTGCTGCCAGACCTTGGTGAGGGCTTCATCCTGGCCTGC
CTGGAGTACTACCACTACGACCCAGAGCAGGTGATCAACAATATCCTGGAGGAGCGGCTGGCCCCCACCCTCAGC
CAGCTGGACCGCAACCTAGACAGAGAAATGAAACCAGACCCTACACCCCTGCTGACGTCTCGCCACAACGTCTTC
CAGAATGACGAGTTTGATGTGTTCAGCAGGGACTCAGTAGACCTGAGCCGGGTGCACAAGGGCAAGAGCACCAGG
AAGGAGGAAAACACGCGGAGTTTGCTGAACGACAAGCGTGCAGTGGCGGCACAGCGGCAGCGCTACGAGCAGTAC
AGCGTGGTGGTGGAGGAGGTGCCACTGCAGCCAGGCGAGAGCCTGCCCTACCACAGTGTCTACTACGAGGATGAG
TACGATGACACATACGATGGCAACCAGGTGGGCGCCAATGATGCAGACTCTGATGACGAGCTCATCAGCCGCAGG
CCATTCACCATCCCTCAGGTGCTGAGAACCAAAGTGCCTAGAGAAGGGCAGGAGGAGGATGACGACGATGAGGAA
GACGATGCTGACGAGGAGGCTCCCAAGCCCGACCATTTTGTTCAGGACCCTGCAGTGCTGAGAGAGAAGGCAGAA
GCCAGGCGCATGGCCTTTCTCGCCAAGAAAGGGTACCGGCATGACAGCTCAACAGCAGTGGCCGGCAGCCCCCGA
GGCCATGGGCAGAGCCGCGAGACAACCCAGGAACGCAGGAAGAAGGAAGCCAACAAGGCGACAAGAGCCAACCAC
AACCGGAGAACCATGGCCGACCGCAAGAGGAGCAAAGGCATGATCCCATCC**TGA**GACCTGGTGCAGGGCCAGTGG
GGAGGCAGCGGCACCAGACTCACCAGGCCGCGCTCCCATCGCCTGGGGCCTCCTCACTAGGGGCCCCAAGTTCAA
CTCAACCCCTCAACAGCCTCAGCTTTGCAGCCCCTGAGAAGGCCGCCTCTCATCTACCAGCCAGCCATGAGCGCC
TTCCTGCAGAACACACAGTGCCTTATGCCACAGCCGAAGAATCCGTGGGGCCGGCAAGCAGGCACCTTCCCCCAG
CTGCGCTAGCGGGAAAGAGATGGGGATGGAGTCCCAAGGCAAGCGCCCCAAACCTCGGGCCACAAGACACCACTT
CCCCTTTACCCTGGACAGCAGGAAACCTGTATATTCAAAAACACAAAAAGTCCTGCTAATAAAATTTTTGACCCT
TTC

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FIGURE 3970

ATGGCTTGGGGAGTCAGTGCCAAATGGAGTAACGAGGGCATCACAAGTGTGGGTGACCCACAGTGGGAATGCCAG
AGTTGGAGCCTGAGCAGGAAAGATTGGTATGATGTGAAAGCACCTGCTATGTTCAGTATAATAACTATGGGAAAG
ACACTCATCGCCAGGACTCAAGGAATCAAAATTGCATCTGATGGCCTCAAGGGTCATGTGTTTGAAGTCTGCCAA
ATCCAGAAGAAGATGATGGAAATCATGACCCAAGAGGTGCAGACAAATGACTTGAAAGAAGTGGTCAATAAATTG
ATTCCAGACAGCACTGGAAAAGACATAGAAAAGGCTTGCCTATCTGTTTATCCTCTCCATGGTGTCTTCATTAGG
AAAGTAAAAATAAAGAAGCCCAAGTTTGAATTGGGAAAACTCATGTAG

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FIGURE 3971A

ATGAACCTCTGAAAACTGCCGGCATCTGAGGTTTCCTCCAAGGCCCTCTGAAGTGCAGCCCATAATGAAGGTCTT
GGCGGCAGGAGTTGTGCCCCTGCTGTTGGTTCTGCACTGGAAACATGGGGCGGGGAGCCCCCTCCCCATCACCCC
TGTCAACGCCACCTGTGCCATACGCCACCCATGTCACAACAACCTCATGAACCAGATCAGGAGCCAACTGGCACA
GCTCAATGGCAGTGCCAATGCCCTCTTTATTCTCTATTACACAGCCCAGGGGGAGCCGTTCCCCAACAACCTGGA
CAAGCTATGTGGCCCCAACGTGACGGACTTCCCGCCCTTCCACGCCAACGGCACGGAGAAGGCCAAGCTGGTGGA
GCTGTACCGCATAGTCGTGTACCTTGGCACCTCCCTGGGCAACATCACCCGGGACCAGAAGATCCTCAACCCCAG
TGCCCTCAGCCTCCACAGCAAGCTCAACGCCACCGCCGACATCCTGCGAGGCCTCCTTAGCAACGTGCTGTGCCG
CCTGTGCAGCAAGTACCACGTGGGCCATGTGGACGTGACCTACGGCCCTGACACCTCGGGTAAGGATGTCTTCCA
GAAGAAGAAGCTGGGCTGTCAACTCCTGGGGAAGTATAAGCAGATCATCGCCGTGTTGGCCCAGGCCTTCTAGCA
GGAGGTCTTGAAGTGTGCTGTGAACCGAGGGATCTCAGGAGTTGGGTCCAGATGTGGGGGCCTGTCCAAGGGTGG
CTGGGGCCCAGGGCATCGCTAAACCCAAATGGGGGCTGCTGGCAGACCCCGAGGGTGCCTGGCCAGTCCACTCCA
CTCTGGGCTGGGCTGTGATGAAGCTGAGCAGAGTGGAAACTTCCATAGGGAGGGAGCTAGAAGAAGGTGCCCCTT
CCTCTGGGAGATTGTGGACTGGGGAGCGTGGGCTGGACTTCTGCCTCTACTTGTCCCTTTGGCCCCTTGCTCACT
TTGTGCAGTGAACAAACTACACAAGTCATCTACAAGAGCCCTGACCACAGGGTGAGACAGCAGGGCCCAGGGGAG
TGGACCAGCCCCCAGCAAATTATCACCATCTGTGCCTTTGCTGCCCCTTAGGTTGGGACTTAGGTGGGCCAGAGG
GGCTAGGATCCCAAAGGACTCCTTGTCCCCTAGAAGTTTGATGAGTGGAAGATAGAGAGGGGCCTCTGGGATGGA
AGGCTGTCTTCTTTTGAGGATGATCAGAGAACTTGGGCATAGGAACAATCTGGCAGAAGTTTCCAGAAGGAGGTC
ACTTGGCATTCAGGCTCTTGGGGAGGCAGAGAAGCCACCTTCAGGCCTGGGAAGGAAGACACTGGGAGGAGGAGA
GGCCTGGAAAGCTTTGGTAGGTTCTTCGTTCTCTTCCCCGTGATCTTCCCTGCAGCCTGGGATGGCCAGGGTCTG
ATGGCTGGACCTGCAGCAGGGGTTTGTGGAGGTGGGTAGGGCAGGGGCAGGTTGCTAAGTCAGGTGCAGAGGTTC
TGAGGGACCCAGGCTCTTCCTCTGGGTAAAGGTCTGTAAGAAGGGGCTGGGGTAGCTCAGAGTAGCAGCTCACAT
CTGAGGCCCTGGGAGGCCTTGTGAGGTCACACAGAGGTACTTGAGGGGGACTGGAGGCCGTCTCTGGTCCCCAGG
GCAAGGGAACAGCAGAACTTAGGGTCAGGGTCTCAGGGAACCCTGAGCTCCAAGCGTGCTGTGCGTCTGACCTGG
CATGATTTCTATTTATTATGATATCCTATTTATATTAACTTATTGGTGCTTTCAGTGGCCAAGTTAATTCCCCTT
TCCCTGGTCCCTACTCAACAAAATATGATGATGGCTCCCGACACAAGCGCCAGGGCCAGGGCTTAGCAGGGCCTG
GTCTGGAAGTCGACAATGTTACAAGTGGAATAAGCCTTACGGGTGAAGCTCAGAGAAGGGTCGGATCTGAGAGAA
TGGGGAGGCCTGAGTGGGAGTGGGGGGCCTTGCTCCACCCCCCCCCATCCCCTACTGTGACTTGCTTTAGGGTGT
CAGGGTCCAGGCTGCAGGGGCTGGGCCAATTTGTGGAGAGGCCGGGTGCCTTTCTGTCTTGATTCCAGGGGGCTG
GTTCACACTGTTCTTGGGCGCCCCAGCATTGTGTTGTGAGGCGCACTGTTCCTGGCAGATATTGTGCCCCCTGGA
GCAGTGGGCAAGACAGTCCTTGTGGCCCACCCTGTCCTTGTTTCTGTGTCCCCATGCTGCCTCTGAAATAGCGCC
CTGGAACAACCCTGCCCCTGCACCCAGCATGCTCCGACACAGCAGGGAAGCTCCTCCTGTGGCCCGGACACCCAT
AGACGGTGCGGGGGGCCTGGCTGGGCCAGACCCCAGGAAGGTGGGGTAGACTGGGGGGATCAGCTGCCCATTGCT
CCCAAGAGGAGGAGAGGGAGGCTGCAGATGCCTGGGACTCAGACCAGGAAGCTGTGGGCCCTCCTGCTCCACCCC
CATCCCACTCCCACCCATGTCTGGGCTCCCAGGCAGGGAACCCGATCTCTTCCTTTGTGCTGGGGCCAGGCGAGT
GGAGAAACGCCCTCCAGTCTGAGAGCAGGGGAGGGAAGGAGGCAGCAGAGTTGGGGCAGCTGCTCAGAGCAGTGT
TCTGGCTTCTTCTCAAACCCTGAGCGGGCTGCCGGCCTCCAAGTTCCTCCGACAAGATGATGGTACTAATTATGG
TACTTTTCACTCACTTTGCACCTTTCCCTGTCGCTCTCTAAGCACTTTACCTGGATGGCGCGTGGGCAGTGTGCA
GGCAGGTCCTGAGGCCTGGGGTTGGGGTGGAGGGTGCGGCCCGGAGTTGTCCATCTGTCCATCCCAACAGCAAGA
CGAGGATGTGGCTGTTGAGATGTGGGCCACACTCACCCTTGTCCAGGATGCAGGGACTGCCTTCTCCTTCCTGCT
TCATCCGGCTTAGCTTGGGGCTGGCTGCATTCCCCCAGGATGGGCTTCGAGAAAGACAAACTTGTCTGGAAACCA
GAGTTGCTGATTCCACCCGGGGGGCCCGGCTGACTCGCCCATCACCTCATCTCCCTGTGGACTTGGGAGCTCTGT
GCCAGGCCCACCTTGCGGCCCTGGCTCTGAGTCGCTCTCCCACCCAGCCTGGACTTGGCCCCATGGGACCCATCC
TCAGTGCTCCCTCCAGATCCCGTCCGGCAGCTTGGCGTCCACCCTGCACAGCATCACTGAATCACAGAGCCTTTG
CGTGAAACAGCTCTGCCAGGCCGGGAGCTGGGTTTCTCTTCCCTTTTTATCTGCTGGTGTGGACCACACCTGGGC
CTGGCCGGAGGAAGAGAGAGTTTACCAAGAGAGATGTCTCCGGGCCCTTATTTATTATTTAAACATTTTTTTAAA
AAGCACTGCTAGTTTACTTGTCTCTCCTCCCCATCGTCCCCATCGTCCTCCTTGTCCCTGACTTGGGGCACTTCC
ACCCTGACCCAGCCAGTCCAGCTCTGCCTTGCCGGCTCTCCAGAGTAGACATAGTGTGTGGGGTTGGAGCTCTGG
CACCCGGGGAGGTAGCATTTCCCTGCAGATGGTACAGATGTTCCTGCCTTAGAGTCATCTCTAGTTCCCCACCTC

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FIGURE 3971B

AATCCCGGCATCCAGCCTTCAGTCCCGCCCACGTGCTAGCTCCGTGGGCCCACCGTGCGGCCTTAGAGGTTTCCC
TCCTTCCTTTCCACTGAAAAGCACATGGCCTTGGGTGACAAATTCCTCTTTGATGAATGTACCCTGTGGGGATGT
TTCATACTGACAGATTATTTTTATTTATTCAATGTCATATTTAAAATATTTATTTTTTATACCAAATGAATACTT
TTTTTTTTAAGAAAAAAAAAGAGAAATGAATAAAGAATCTACTCTTG

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FIGURE 3972

GCTCAGGCGGCGGGCGCGGCTGGGATGGCGAAGAGCAACGGAGAGAATGGGCCGCGCGCGCCCGCGGCCGGGGAA
AGCCTGTCGGGAACCCGGGAGAGCCTGGCCCAGGGCCCCGACGCCGCAACCACCGACGAACTCAGCTCTCTCGGG
TCTGACTCGGAGGCCAACGGCTTCGCCGAGCGCCGCATCGACAAGTTCGGCTTCATCGTGGGCTCGCAGGGCGCC
GAGGGCGCGCTGGAGGAAGTACCCCTGGAGGTGCTGAGGCAGAGGGAGTCCAAGTGGCTGGACATGCTCAACAAC
TGGGACAAATGGATGGCCAAGAAGCACAAAAAGATTCGTCTGCGGTGCCAAAAGGGCATCCCGCCTTCTCTGCGG
GGCCGTGCTTGGCAGTACCTGTCAGGAGGCAAGGTGAAGTTACAGCAGAACCCTGGAAAGTTTGACGAGCTGGAC
ATGTCCCCTGGGGACCCCAAGTGGCTGGACGTGATTGAGCGTGACCTGCACCGGCAGTTCCCATTCCATGAGATG
TTTGTGTCCCGGGGGGGCCACGGCCAGCAGGACCTATTCCGTGTGCTGAAGGCCTACACGCTGTACCGGCCCGAG
GAGGGCTACTGCCAGGCCCAGGCGCCCATTGCCGCTGTCTTGCTCATGCATATGCCTGCTGAGCAAGCCTTCTGG
TGCCTGGTACAGATCTGTGAGAAGTACCTGCCCGGCTACTACAGCGAGAAACTGGAGGCGATCCAGCTGGACGGG
GAGATCCTTTTCTCGCTGTTGCAGAAGGTGTCGCCGGTGGCCCACAAGCACCTCAGCCGTCAGAAGATCGACCCG
CTCCTCTATATGACAGAATGGTTCATGTGCGCCTTCTCCCGAACCTTGCCCTGGAGCTCTGTGCTGCGTGTCTGG
GACATGTTCTTCTGTGAAGGGGTCAAGATCATCTTCCGGGTGGGGCTGGTGCTGCTGAAGCACGCGCTGGGCTCC
CCTGAGAAGGTCAAAGCCTGCCAGGGCCAGTACGAGACCATCGAGCGACTGCGGAGCCTCAGCCCCAAGATCATG
CAGGAGGCCTTTCTGGTCCAGGAGGTGGTGGAGTTGCCCGTGACAGAGCGCCAGATTGAGCGCGAACACCTCATT
CAGCTGCGGCGCTGGCAGGAGACCCGGGGTGAGCTGCAGTGCCGCTCCCCGCCCAGGCTGCATGGTGCCAAGGCT
ATCTTGGATGCAGAACCTGGTCCCCGGCCTGCCCTACAACCTTCACCATCCATCCGCCTGCCCCTAGATGCCCCC
CTCCCTGGCTCCAAAGCCAAGCCCAAGCCACCCAAGCAGGCCCAGAAGGAGCAGCGGAAACAGATGAAGGGGAGA
GGGCAGCTGGAGAAGCCCCCAGCCCCAAATCAAGCCATGGTGGTGGCCGCTGCAGGAGATGCATGTCCCCCACAG
CATGTGCCCCCGAAGGACTCAGCCCCCAAGGACTCAGCCCCTCAGGATTTGGCTCCCCAGGTCTCAGCCCACCAC
CGCTCCCAGGAGAGCTTGACGTCCCAAGAGAGTGAGGACACCTACTTGTAACCCTGGCAGCTAAGGCCTCCAGGG
CGGGGTCTCCATATAACTACACGGTTCATGAACTGACATTCCACATCCTGCCCACCCTCTGAGGGCCAAGCTGCC
TGGCCACTGGGCTGGGCTGGAGTCTGGCTGGTCCAACACAGATTCTGCCTGGTCCAACACAGATTCTGCCTGAGC
CTCCTTATTTATTTTCTTTACAGTGGCACTCAGGCTGGCCCAGCCAGGGCAGGCAGAAGCTAGGGCCTGGGGGGT
GGGGCCTCCTTCAGCCCCCTCCTCCTGGGGGATGCTCCCCAGGGTTAGGGTGCTGGTGTGAGGGGAAAGGGTGGG
GTGTTCTTTGTGTAAAATAGAAACATGGTTTTGTACAGAAATAAACAGCCTTGTATAGAG

FIGURE 3973A

GGCCGCAACTCGCTCGGCCGCCGCCATCTTGCGAGCTCGTCGTACTGACCGAGCGGGGAGGCTGTCTTGAGGCGG
CACCGCTCACCGACACCGAGGCGGACTGGCAGCCCTGAGCGTCGCAGTCATGCCGGCCGGACCCGTGCAGGCGGT
GCCCCCGCCGCCGCCCGTGCCCACGGAGCCCAAACAGCCCACAGAAGAAGAAGCATCTTCAAAGGAGGATTCTGC
ACCTTCTAAGCCAGTTGTGGGGATTATTTACCCTCCTCCAGAGGTCAGAAATATTGTTGACAAGACTGCCAGCTT
TGTGGCCAGAAACGGGCCTGAATTTGAAGCTAGGATCCGACAGAACGAGATCAACAACCCCAAGTTCAACTTTCT
GAACCCCAATGACCCTTACCATGCCTACTACCGCCACAAGGTCAGCGAGTTCAAGGAAGGGAAGGCTCAGGAGCC
GTCCGCCGCCATCCCCAAGGTCATGCAGCAGCAGCAGCAGACCACCCAGCAGCAGCTGCCCCAGAAGGTCCAAGC
CCAAGTAATCCAAGAGACCATCGTGCCCAAAGAGCCTCCTCCTGAGTTTGAGTTCATTGCTGATCCTCCCTCTAT
CTCAGCCTTCGACTTGGATGTGGTGAAGCTGACGGCTCAGTTTGTGGCCAGGAATGGGCGCCAGTTTCTGACCCA
GCTGATGCAGAAAGAGCAGCGCAACTACCAGTTTGACTTTCTCCGCCCACAGCACAGCCTCTTCAACTACTTCAC
GAAGCTAGTGGAACAGTACACCAAGATCTTGATTCCACCCAAAGGTTTATTTTCAAAGCTCAAGAAAGAGGCTGA
AAACCCCCGAGAAGTTTTGGATCAGGTGTGTTACCGAGTGGAATGGGCCAAATTCCAGGAACGTGAGAGGAAGAA
GGAAGAAGAGGAGAAGGAGAAGGAGCGGGTGGCCTATGCTCAGATCGACTGGCATGATTTTGTGGTGGTGGAAAC
AGTGGACTTCCAACCCAATGAGCAAGGGAACTTCCCTCCCCCCACCACGCCAGAGGAGCTGGGGGCCCGAATCCT
CATTCAGGAGCGCTATGAAAAGTTTGGGGAGAGTGAGGAAGTTGAGATGGAGGTCGAGTCTGATGAGGAGGATGA
CAAACAGGAGAAGGCGGAGGAGCCTCCTTCCCAGCTGGACCAGGACACCCAAGTACAAGATATGGATGAGGGTTC
AGATGATGAAGAAGAAGGGCAGAAAGTGCCCCCACCCCCAGAGACACCCATGCCTCCACCTCTGCCCCCAACTCC
AGACCAAGTCATTGTCCGCAAGGATTATGATCCCAAAGCCTCCAAGCCCTTGCCTCCAGCCCCTGCTCCAGATGA
GTATCTTGTGTCCCCCATTACTGGGGAGAAGATCCCCGCCAGCAAAATGCAGGAACACATGCGCATTGGACTTCT
TGACCCTCGCTGGCTGGAGCAGCGGGATCGCTCCATCCGTGAGAAGCAGAGCGATGATGAGGTGTACGCACCAGG
TCTGGATATTGAGAGCAGCTTGAAGCAGTTGGCTGAGCGGCGTACTGACATCTTCGGTGTAGAGGAAACAGCCAT
TGGTAAGAAGATCGGTGAGGAGGAGATCCAGAAGCCAGAGGAAAAGGTGACCTGGGATGGCCACTCAGGCAGCAT
GGCCCGGACCCAGCAGGCTGCCCAGGCCAACATCACCCTCCAGGAGCAGATTGAGGCCATTCACAAGGCCAAAGG
CCTGGTGCCAGAGGATGACACTAAAGAGAAGATTGGCCCCAGCAAGCCCAATGAAATCCCTCAACAGCCACCGCC
ACCATCTTCAGCCACCAACATCCCCAGCTCGGCTCCACCCATCACTTCAGTGCCCCGACCACCCACAATGCCACC
TCCAGTTCGTACTACAGTTGTCTCCGCAGTACCCGTCATGCCCCGGCCCCCAATGGCATCTGTGGTCCGGCTGCC
CCCAGGCTCAGTGATCGCCCCCATGCCGCCCATCATCCACGCGCCCAGAATCAACGTGGTGCCCATGCCTCCCTC
GGCCCCTCCTATTATGGCCCCCCGCCCACCCCCCATGATTGTGCCAACAGCCTTTGTGCCTGCTCCACCTGTGGC
ACCTGTCCCAGCTCCAGCCCCAATGCCCCCTGTGCATCCCCCACCTCCCATGGAAGATGAGCCCACCTCCAAAAA
ACTGAAGACAGAGGACAGCCTCATGCCAGAGGAGGAGTTCCTGCGCAGAAACAAGGGTCCAGTGTCCATCAAAGT
CCAGGTGCCCAACATGCAGGATAAGACGGAATGGAAACTGAATGGGCAGGTGCTGGTCTTCACCCTCCCACTCAC
GGACCAGGTCTCTGTCATTAAGGTGAAGATTCATGAAGCCACAGGCATGCCTGCAGGGAAACAGAAGCTACAGTA
TGAGGGTATCTTCATCAAAGATTCCAACTCACTGGCTTACTACAACATGGCCAATGGCGCAGTCATCCACCTGGC
CCTCAAGGAGAGAGGCGGGAGGAAGAAGTAGACAAGAGGAACCTGCTGTCAAGTCCCTGCCATTTTGCCTCTCCT
GTCTCCCACCCCCTGCCCCAGACCCAGGAGCCCCCCTGAGGCTTTGCCTTGCCTGCATATTTGTTTCGCTCTTAC
TCAGTTTGGGAATTCAAATTGTCCTGCAGAGGTTCATTCCCCTGACCCTTTCCCCACATTGGTAAGAGTAGCTGG
GTTTTCTAAGCCACTCTCTGGAATCTCTTTGTGTTAGGGTCTCGATTTGAGGACATTCATTTCTTCAGCAGCCCA
TTAGCAACTGAGAGCCCAGGGATGTCCTACAGGATAGTTTCATAGTGACAGGTGGCACTTGGCTAATAGAATATG
GCTGATATTGTCATTAATCATTTTGTACCTTGACATGGGTTGTCTAATAAAACTCGGACCCTTCTTGTGAAATCA
GTTAAATAAGACTTGTCTCGGTCACCTGTGCCCTGTCCAGACTCGAGGCAGTGGTAACACTGCACAGTGCTATGT
GGCTTCTCTTTGAGGATTTTTGGGTTTTGTAACTAAATTCTTGCTGCCCTCATACTTTTTATGTATTAGAATCAT
ATTCGTATTGCCCTTTTAAAACATTGGGATCCTCCAAAGGCCTGCCCCATGTATTTAACAGTAATACAGGAAGCA
TGGCAGGCACCATGCAAACCAAGGATGGATGGTGCAGTCCCTGTGTCAGTGGGCGGTGGTTTCCTGCTGGCCTGG
AATCACTCATCACCTGATTGATTGGCTCTGTGGTCCTGGGCAGGTGCCTCATAGGTGTGTGGATATGATGACGTT
TCTTTAAAATGTATGTATTTAACAAATACTTAATTGTATTAAGGTCATGTACCAAGGATTTGATAAAGTTTAAAT
AATTTACTCTCTACTTTTATCCATTTTATCCATTTTAACTCATGTAATCCTCATGTGAGTATTCCTGTTTAACAC
TTGAGTAAACTGAGGCACAGAGAACATAAGTTGCATGCCATAGTCACACACTGTGAAAGTGAAAAGAGAATGTGT
GCAAAACACGTCACAGTCCTGGTTTCTGAGTAAAGGCAGGCTGTTATCTTTAGAATCAAGCTATCACAGGGAGAT

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FIGURE 3973B

AGGCAATGCTGTGGGTGTTGGAGGAAGGTGAGAGCCTGTTGCTAACAATTTCCTGGTTTTAAAGCTAAGGCTGAT
TTTATTGGGAAGATCTCACATGTGTGTGGCCCCTGAGAGTTCCCAGTGCCTTTTATTTGCAGTCCTTCCATTTGG
ACCTCCTAGCTGCCCCATCAGGTCATCTCCAGGGCTCAGAGGGGTGAGACCATTTCCCAAGGTCACAGAACCAGC
TCTCTAGTCACCACCCTGCCTCTCCCTCTCACCCAGAGTCAGTACCAGTTTTATGGCTTTATTACAAACTGCTGG
GTCCCTCCCATTTTCAACTTGATTGATGGGATGTCATCCCTTATCCTGTCTGACATTTGCCTCTGGCCTGGTTGC
TAGAAGTTTGCCCCAGGGGCAAGAGTTGAAATTTGGCTTCCTGAGGTGGGCTTTGTGGTTTGCGTCCCTAAAGTG
AGCCCACTACTGGTTGCTTGTCCATGGCCAACACCAGAAATCCCCTGAGCACTACCTGGGTCTCATTCCAAGAAG
GAAGAGGGTCAGGAGACCTGGGGAGTCTCATATTCCAAGTTCTTCTTTCTTTCTGGGAGCAGTGGGCAGTTCATG
GTGTTAGGGCACTCACCCCCACAGACTGGCAAACCCTGCAGGACTTCCGTGGCTGAGGCTGTGACCGGAGGCCAG
GAATGCCGTTGGGTGGATTGTGAGTGAATGGGCCCTTTGAGCTGCCCTCTAGAGAGCAAATCCAGTTTCCTGGAG
CTCCTGAATGAATATCTGTACTGGCTCGCTCAGATGCAGAAGCTCCATTGACCATGAGGCCTTGTGAACATCAGT
GGCCACAGGCCCAGTGTGCTGCTTGGCACTGCACTAGTTTAGGACCTGCAGCATGTAGGTAGCGTCCTAGTGTTT
ATAATACAAAGCTGCTCTGCACAGCTTTTCTGATTCTTCTTGCAATCTCCTGAGGATTATCTGCCCCATTTTTAA
AACGAGGTGGAATACCCAAGGTCATGTAGCCAGTGAGTGCTCTGGAAAGCCAAAGCAGCTCATCCCTTCCTGGGG
ACCACACTGCTCTGCTCCACCAGACCACACTATGAAATAGGAATAAGTGCTCCTGTTGCAGGACTGCTGGGAAAA
CAGGTGGTGTGGGACTTAAGTCACCATAATTTTGAAGACTTGCATGCAGAGGGCTCCAGGAATTGTAGACATTAA
GGAATTTCACTTTCAGTTCTACCCACTACTTAAGTACTTGTCATGTACTCTTAGAGGAGGCCAGTAATGATCAGA
ACCATTTTACTTTAAAATTAATAATATTGTATTAGAGAATATATTAAATGGTTATATTGGGTTATGTTAGGATAT
ATACTTGAATGGAAATACATGTACTATTAGCAATCATATTTCATTTATCCCTGTAATTAGACAAGAAAGCATAAT
ATAGCTCTACTCATGGGTACACATACCAGTGTATAAGATTTTTAGAAGTTTACTTTTTAAAAATAAAAGCAAAAT
GT

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FIGURE 3974

CCCTACTCCGCCTCTCGGGATCCTTTAAGAGGCGGGGCTTGGCTGCCAGCTCCGCGGCCCGGGCAAAAGGCTGGG
ACTTTACTCCGGGTGGCGGCGAGGACGAGTCTGTGCTCCATCAGCTGCCGCACCCGCCGCCTCCCGCCCCCAAAC
CCCATCCCCGCGGTTGAGCCACG**ATG**AGCGGCAGAGTCGGCGATCTGAGCCCCAGGCAGAAGGAGGCATTGGCCA
AGTTTCGGGAGAATGTCCAGGATGTGCTGCCGGCCCTGCCGAATCCAGATGACTATTTTCTCCTGCGTTGGCTCC
GAGCCAGAAGCTTCGACCTGCAGAAGTCGGAGGCCATGCTCCGGAAGCATGTGGAGTTCCGAAAGCAAAAGGACA
TTGACAACATCATTAGCTGGCAGCCTCCAGAGGTGATCCAACAGTATCTGTCAGGGGGTATGTGTGGCTATGACC
TGGATGGCTGCCCAGTCTGGTACGACATAATTGGACCTCTGGATGCCAAGGGTCTGCTGTTCTCAGCCTCCAAAC
AGGACCTGCTGAGGACCAAGATGCGGGAGTGTGAGCTGCTTCTGCAAGAGTGTGCCCACCAGACCACAAAGTTGG
GGAGGAAGGTGGAGACCATCACCATAATTTATGACTGCGAGGGGCTTGGCCTCAAGCATCTCTGGAAGCCTGCTG
TGGAGGCCTATGGAGAGTTTCTCTGCATGTTTGAGGAAAATTATCCCGAAACACTGAAGCGTCTTTTTGTTGTTA
AAGCCCCCAAACTGTTTCCTGTGGCCTATAACCTCATCAAACCCTTCCTGAGTGAGGACACTCGTAAGAAGATCA
TGGTCCTGGGAGCAAATTGGAAGGAGGTTTTACTGAAACATATCAGCCCTGACCAGGTGCCTGTGGAGTATGGGG
GCACCATGACTGACCCTGATGGAAACCCCAAGTGCAAATCCAAGATCAACTACGGGGGTGACATCCCCAGGAAGT
ATTATGTGCGAGACCAGGTGAAACAGCAGTATGAACACAGCGTGCAGATTTCCCGTGGCTCCTCCCACCAAGTGG
AGTATGAGATCCTCTTCCCTGGCTGTGTCCTCAGGTGGCAGTTTATGTCAGATGGAGCGGATGTTGGTTTTGGGA
TTTTCCTGAAGACCAAGATGGGAGAGAGGCAGCGGGCAGGGGAGATGACAGAGGTGCTGCCCAACCAGAGGTACA
ACTCCCACCTGGTCCCTGAAGATGGGACCCTCACCTGCAGTGATCCTGGCATCTATGTCCTGCGGTTTGACAACA
CCTACAGCTTCATTCATGCCAAGAAGGTCAATTTCACTGTGGAGGTCCTGCTTCCAGACAAAGCCTCAGAAGAGA
AGATGAAACAGCTGGGGGCAGGCACCCCGAAA**TAA**CACCTTCTCCTATAGCAGGCCTGGCCCCCTCAGTGTCTCC
CTGTCAATTTCTACCCCTTGTAGCAGTCATTTTCGCACAACCCTGAAGCCCAAAGAAACTGGGCTGGAGGACAGA
CCTCAGGAGCTTTCATTTCAGTTAGGCAGAGGAAGAGCGACTGCAGTGGGTCTCCGTGTCTATCAAATACCTAAG
GAGTCCCCAGGAGCTGGCTGGCCATCGTGATAGGATCTGTCTGTCCTGTAAACTGTGCCAACTTCACCTGTCCAG
GGACAGCGAAGCTGGGGGTGGCGGGGGGCATGTACCACAGGGTGGCAGCAGGGAAAAAAATTAGAAAAGGGTGAA
AGATTGGGACTTAACACTTCAGGGAAGTCAGCTGCCGGGGAGAAACTTGCTCCTAAATGAACACATAAGTTTAGA
TCGCAATGAGGAGTAGCAGGGTAGCTGGTTGCTAGAGTTACGGTGGGGATCAGAAACTCTTCCAAACATTTTAGC
ACTGAGGCTGGGGTAGCTTTTGGCTTTTCCCAGGTCTCAGGAGGTGGCCTGAGTCAGCACACATCTTCCCACTCG
GTAGACAGGCTGGCCTCTCCCTCACTTTGAGACTTTGGCAACTCCTGGGCCACACGGCCTGCCTCTTTGATTACT
AATGATTGTCAGTGACTCAGAGCTTCCTGGGACTTCGGGTACCCACCCGCTGTTCTCCATGCAAACAAAGCGCCA
GGGAAATGACCCACAGGGATCGCAGCTGCAGGGAGGGCCAGGGAGGTTGGGGGTGGGAGTGAATGCTAAAAGCAG
ATCGTCCAGTGCCCTTTTCAGTGCTACCGGCCTCTCACCAAGCAGTCCTCCATGTGAGCAACCCCGAGACAAAAA
TGCTAAGTGGGATCAAGAGAGCAGCACTCGGAGAGGGTGTTTGCCAGTCTGAGTGTCCCGCGGTGCCCGCCAACC
CGCTTCCTGACTGACCTGAGCAAGGTCTTACTAAGCAGTCCCATCTCTGTGGGAGGCATGCAACGCGTGCAGGGA
GTTCAGGTGCCGGTCGGCGTAGCCAGGCCTGGAGGCCCCCCAGGCAGGAGGCCGCCCAAAGGCGGGGCCGGCGTC
TCGCAGACTAGGGGCTGGGGGCGGCCACAGACGGCCTCGAAACCACAGCCCTTACCCCAATCCCACGAGCCCCGC
CAACGAACCACAGGTGCTGGGCTTTAGAGAACATGGGAAGGCGGCCCCAGACCTGCGGGAACGCCTTTCCCTCAG
AGCCAGGCCCCGGCCCCGTCTGGGAAGCTCATCTTGCGAAGCTGAGGGAGCTCAGGGCAAAGGCCAGGCTAGCGC
GGACCGGAAGGGGCCGAGGCTGCACGGGCCTCTGCCAGAACGCTCAGGACATCCCGGCCTGGGTTTACAACGCTG
TTAGGAAAATTAACCAATGAATAAAGCAACGTTCAGTGCGCA

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FIGURE 3975

ATGAGGTGGGCGAGGCTTTCCGCTCTCTTGTGCCAGCGGCGGTGGTGTGGCTGAGCTATGGCGTGGCCAGCTCCT
ACGTGCTGGCGGATGCCATTGACAAAGGCAAGAAGGCTGGAGAGGTGCCCAGCCCTGAAGCAGGCCGCAGCGCCA
GGGTGACTGTGGCTGTGGTGGACACCTTTGTATGGCAGGCTCTAGCCTCTGTGGCCATTCCGGGCTTCACCATCA
ACCGCGTGTGTGCTGCCTCTCTCTATGTCCTGGGCACTGCCACCCGCTGGCCCCTGGCTGTCCGCAAGTGGACCA
CCACCGCGCTTGGGCTGTTGACCATCCCCATCATTATCCACCCCATTGACAGGTCGGTGGATTTCCTCCTGGACT
CCAGCCTGCGCAAGCTCTACCCAACAGTGGGGAAGCCCAGCTCCTCCTGATCATACTCTGGTACCTGGCCTGTGC
ATCGGCCTCCTGCTTCATGTCAACCTCCTACTCCTGCCAGGGAATGTGGACACCTGGCTCCCTGGTGTCCAAAGA
CCCTGGCACCTGGGTGGGTTTGAGCTGGACAGAAGCTTAGAGACAAAGGCTTCAAGAAGCAGTGGCTGCAGGGAG
TCACAGAAGGGCAGGACCTGA

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FIGURE 3976

GAGGAAGTGGAGCTCCCTGTACGCGCGGCCCTAGTCGGCTCCTCAACGTGGAGCGATGGGAGGCCTTGAGAAGAA
GAAGTATGAACGAGGCTCGGCCACCAACTACATCACCCGGAACAAAGCCCGGAAGAAGCTCCAGCTGAGCTTGGC
TGACTTTAGGCGGCTGTGCATTCTGAAGGGCATTTATCCCCATGAACCCAAACACAAGAAGAAGGTTAACAAGGG
TTCTACAGCAGCCCGAACGTTTTACCTTATCAAAGACATCAGGTTTCTCCTCCACGAACCCATTGTCAACAAGTT
CCGTGAATACAAGGTGTTCGTCCGGAAGCTCCGGAAGGCTTATGGGAAGAGCGAGTGGAACACTGTAGAGCGTTT
AAAGGACAATAAGCCCAACTACAAACTCGACCACATCATCAAGGAACGGTATCCCACGTTCATCGATGCCCTGCG
GGACCTGGACGATGCCCTCTCCATGTGCTTCCTGTTTTCCACCTTCCCGCGGACTGGCAAGTGCCACGTGCAGAC
CATTCAGCTGTGCCGCCGGCTCACTGTGGAGTTCATGCACTACATTATCGCTGCCCGTGCCCTGCGCAAGGTCTT
CCTGTCCATCAAAGGCATTTACTACCAGGCCGAGGTACTGGGGCAGCCCATCGTGTGGATCACTCCCTATGCCTT
CTCCCATGACCACCCGACAGACGTGGACTACAGGGTCATGGCCACCTTCACCGAGTTCTACACCACGCTGCTGGG
CTTTGTCAACTTCCGCCTTTACCAGTTGCTCAACCTCCACTATCCCCCGAAGCTCGAGGGTCAGGCCCAAGCAGA
GGCAAAGGCCGGTGAGGGCACCTACGCGTTGGACTCCGAGAGTTGTATGGAGAAACTGGCAGCCCTCAGTGCCAG
CCTGGCCCGCGTGGTGGTGCCTGCCACAGAGGAGGAGGCCGAGGTGGATGAGTTTCCCACCGATGGGGAGATGTC
AGCGCAGGAGGAAGACCGCAGGAAGGAGCTGGAGGCGCAGGAGAAGCACAAGAAGCTTTTTGAGGGCCTGAAGTT
CTTCCTGAACCGAGAGGTGCCCCGTGAGGCCCTGGCCTTCATCATCAGGAGTTTTGGTGGGGAAGTGTCCTGGGA
CAAATCTTTGTGCATTGGGGCCACCTATGACGTCACAGACTCCCGCATCACCCATCAGATTGTCGACCGGCCTGG
GCAGCAGACCTCAGTCATTGGCAGGTGCTACGTGCAGCCCCAGTGGGTGTTTGACTCAGTGAACGCCAGGCTCCT
TCTCCCCGTGGCAGAGTACTTCTCTGGGGTGCAGCTGCCCCCACACCTTTCACCCTTTGTGACCGAGAAGGAAGG
AGATTACGTTCCACCTGAGAAGCTGAAGCTGCTGGCTCTGCAGCGGGGAGAGGACCCAGGAAACCTGAATGAGTC
AGAAGAGGAGGAGGAAGAGGACGACAACAACGAAGGTGATGGTGATGAAGAGGGAGAAAATGAGGAGGAGGAGGA
AGATGCAGAGGCTGGTTCAGAAAAGGAGGAAGAGGCCCGGCTGGCAGCCCTGGAAGAGCAGAGGATGGAGGGGAA
GAAGCCCAGGGTGATGGCAGGCACCTTGAAGCTGGAGGATAAGCAGCGGCTGGCCCAGGAGGAGGAGAGTGAGGC
CAAGCGCCTGGCCATTATGATGATGAAGAAGCGGGAGAAGTACCTGTACCAGAAGATCATGTTTGGCAAGAGGCG
AAAAATCCGAGAGGCCAACAAGCTGGCGGAGAAGCGGAAAGCCCACGATGAGGCGGTGAGGTCTGAGAAGAAGGC
CAAGAAGGCAAGGCCGGAGTGAGTGCCTGCGGCCCCTCACAGGGCTGAGGCCAGCCCCTAGCAGCTGGATGTGGC
AGAGGCAGGCCAGAGGACCTAAGTGTGATGGACCAGAGTCACTTCTCCTCCTCCTTTCTCCAGCCAGCCCTGACC
CCTCATGCTCTCTGGCTGGGCCAGTGGGCAGCCCTCGCTTCCCTTGGATGGAGCTGCCCTGCTGGTGCCTGGTCA
GAGAAGAGGCCTCTGTGCCCAGCCTGATTCTCTGCTCCCAGGAGCCAGTGACATGAGGTGCAGAGGCCCACCCAG
CCCCCTACCTACTGCCCCCATTCATCCTGGCTTTCCACAGCCCCCTCCCACACAGTTGGACCCGTGATTCTCAGG
GTGCTGTGATGGGGTGAGGGTAGGGGGAGCATTTGTTATTAAATGACTGGACTTTTG

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FIGURE 3977

CCGATTCTTGCTCACTGCTCACCCACCTGCTGCTGCCATGAGGCACCTTGGGGCCTTCCTCTTCCTTCTGGGGGT
CCTGGGGGCCCTCACTGAGATGTGTGAAATACCAGAGATGGACAGCCATCTGGTAGAGAAGTTGGGCCAGCACCT
CTTACCTTGGATGGACCGGCTTTCCCTGGAGCACTTGAACCCCAGCATCTATGTGGGCCTACGCCTCTCCAGTCT
GCAGGCTGGGACCAAGGAAGACCTCTACCTGCACAGCCTCAAGCTTGGTTACCAGCAGTGCCTCCTAGGGTCTGC
CTTCAGCGAGGATGACGGTGACTGCCAGGGCAAGCCTTCCATGGGCCAGCTGGCCCTCTACCTGCTCGCTCTCAG
AGCCAACTGTGAGTTTGTCAGGGGCCACAAGGGGGACAGGCTGGTCTCACAGCTCAAATGGTTCCTGGAGGATGA
GAAGAGAGCCATTGGGCATGATCACAAGGGCCACCCCCACACTAGCTACTACCAGTATGGCCTGGGCATTCTGGC
CCTGTGTCTCCACCAGAAGCGGGTCCATGACAGCGTGGTGGACAAACTTCTGTATGCTGTGGAACCTTTCCACCA
GGGCCACCATTCTGTGGACACAGCAGCCATGGCAGGCTTGGCATTCACCTGTCTGAAGCGCTCAAACTTCAACCC
TGGTCGGAGACAACGGATCACCATGGCCATCAGAACAGTGCGAGAGGAGATCTTGAAGGCCCAGACCCCCGAGGG
CCACTTTGGGAATGTCTACAGCACCCCATTGGCATTACAGTTCCTCATGACTTCCCCCATGCGTGGGGCAGAACT
GGGAACAGCATGTCTCAAGGCGAGGGTTGCTTTGCTGGCCAGTCTGCAGGATGGAGCCTTCCAGAATGCTCTCAT
GATTTCCCAGCTGCTGCCCGTTCTGAACCACAAGACCTACATTGATCTGATCTTCCCAGACTGTCTGGCACCACG
AGTCATGTTGGAACCAGCTGCTGAGACCATTCCTCAGACCCAAGAGATCATCAGTGTCACGCTGCAGGTGCTTAG
TCTCTTGCCGCCGTACAGACAGTCCATCTCTGTTCTGGCCGGGTCCACCGTGGAAGATGTCCTGAAGAAGGCCCA
TGAGTTAGGAGGATTCACATATGAAACACAGGCCTCCTTGTCAGGCCCCTACTTAACCTCCGTGATGGGGAAAGC
GGCCGGAGAAAGGGAGTTCTGGCAGCTTCTCCGAGACCCCAACACCCCACTGTTGCAAGGTATTGCTGACTACAG
ACCCAAGGATGGAGAAACCATTGAGCTGAGGCTGGTTAGCTGGTAGCCCCTGAGCTCCCTCATCCCAGCAGCCTC
GCACACTCCCTAGGCTTCTACCCTCCCTCCTGATGTCCCTGGAACAGGAACTCGCCTGACCCTGCTGCCACCTCC
TGTGCACTTTGAGCAATGCCCCCTGGGATCACCCCAGCCACAAGCCCTTCGAGGGCCCTATACCATGGCCCACCT
TGGAGCAGAGAGCCAAGCATCTTCCCTGGGAAGTCTTTCTGGCCAAGTCTGGCCAGCCTGGCCCTGCAGGTCTCC
CATGAAGGCCACCCCATGGTCTGATGGGCATGAAGCATCTCAGACTCCTTGGCAAAAAACGGAGTCCGCAGGCCG
CAGGTGTTGTGAAGACCACTCGTTCTGTGGTTGGGGTCCTGCAAGAAGGCCTCCTCAGCCCGGGGGCTATGGCCC
TGACCCCAGCTCTCCACTCTGCTGTTAGAGTGGCAGCTCCGAGCTGGTTGTGGCACAGTAGCTGGGGAGACCTCA
GCAGGGCTGCTCAGTGCCTGCCTCTGACAAAATTAAAGCATTGATGGCCTGTGGACCTGC

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FIGURE 3978

GCTGTCTAGCAACCAGATCACCATGGTCATCAATGTCTCAGTGGAGGTAGTGAACACCTTGTATGAGGATATCCA
GTACATGCAGGTACCTGTGGCTGACTCCCCTAACTCACGTCTCTGTGACTTCTTTGACCCTATTGCTGACCATAT
CCACAGCGTGGAGATGAAGCAGGGCCGTACTTTGCTGCACTGTGCTGCTGGTGTGAGCCGCTCAGCTGCCCTGTG
CCTCGCCTACCTCATGAAGTACCACGCCATGTCCCTGCTGGACGCCCACACGTGGACCAAGTCATGCCGGCCCAT
CATCCGACCCAACAGCGGCTTTTGGGAGCAGCTCATCCACTATGAGTTCCAATTGTTTGGCAAGAACACTGTGCA
CATGGTCAGTTCCCCAGTGGGAATGATCCCTGACATCTATGAGAAGGAAGTCCGTTTGATGATTCCACTGTGAGC
CATCCCACGAGCCCCTGCATTGGAGTCAGAGGTACAGATCTATTGTTGATCTTACACCAAGATCCAAACTTGAAC
ATTCTACTTTTGTTGATACAGAAAAAAACAGATGATGCCTTTTATGAGCACAAAAAAGAGTTGCTGTAGCTTTTA
ACTTTATAATCCATTTTTTTTAAGATTAAACTAATTGTGAGATGGTGAAGATAAATTTTCTGCCCTGTGAGTGAC
ACTGGCCAGGGGATAGGTTGAGGCAGATGGTGCCCAGAAGAAAGAGGGCAGCACCCATTGCACATGGCAGGCCTG
GAATCCTGCAGCCCTCCCCAAAAACAGATTGACCCAGGAATGAATCTGCTACAATTCCACCTCATTCTTTCACAC
CCAGAGCCAGAGCCTTAAGCATCATGGTACCTCTTGCGCTTCTTACAGTGAGTGCCAATCTACTAGATAAATGGC
CTTCAGGCAGTGCTCCAGGAATCCTGGGGGGTCCCAGGCCACCTCTGCTTCCACCTTCACTATAAGTGGCCCAGT
TCTGGTTTTCTAGATTGTACTTATGCATAAGATAGTTTTTAAAGAAAGCATTCCACTGTGTAAATTTTTTTTTGT
CTTTTTTTGAAACTGTCCTGCTCTGTCACCCATCCTAGAGTGCAGTAGTGTGATCATGGCTCACTGTAGCCACAA
CCTCTCAGGCTCAAGTGATCCTCTTACCTTAGCCTCCTGCGTGGCTGGGACTACAGATGTTTGCCACCATGCCCG
CCTCATTTTTTTTCTTTTTTTATAGAGATGAGATTTTACTATGTCGCCCAGACTGGTCTCAAACTCCTGGCCTCA
AGCAATCCTCACGCCTCAGCCTCCCAAAGTGTTGATGAGCCACTGTACCCCGATACCACTGTATAAAAAATTTAA
AAAAAATTGTGAGTGCTATTGTACATGGCAAAGTTTCAAAGAGCTCTTGGCCATCCCTCACCAAACTTTGGCAAA
AGATGGTGTTAGTCCCCTTCTCCAGGGCACATGAGAAAAACAGGCCTAACATCAGGTCTCAGCGGTTCCTCTCAC
AGGCCTTGGCTTGGAAGGCTGGAGCTTCGGACCAAGGCCCAGCCCTGTCACCTCCTCTTCATGTGATGTGGACCC
CTGGGAGCATCAGTGTCCTCATCTGTCCAATGACAGCCCTTTTCTCACAGAGTTATTGTGAAGATTCAACAATTT
CTTGGCATAGTGCCTGGCACATGGTGTGTGCTTAGCGCAAATGGCAGCTCTCATCATGAATGATAGACTCTTTCA
CCCTGCTGGTCCCAGGTCGGCACACACATCCCCATAATGGCATTTCTCCTTTCTGTGCACAGCACTTTATTGTTA
CAAAGTACTCTTCCAAAAAGTTACCCTGTGTGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3979A

CGAGACTCAGATTGTCTGAATTGAGCTATCGCAACTTAATGCTAAAAGCTCCTTAAAGCTACAGATTTATGACAT
AGTTCCTTCCAAAATATTACATCATAAATCATTGAGAAGATTAAAAAAAAAACACTTGAAGAAATTGTAGTTTTAA
ACATCTCTGCATATATTTTGGATAGCTACTAGGTTACTTTAACTGTCATTAAGGAGCACAGACTTACTGAAGCTT
TACTGGACAGAATCCTGGGAAATCGATATCATTATAAGGTTATATTTCCCAGTTAGCGGGTGAAGGGCTGGAGAC
CTTATTGCAGTCATGGCTTTCACAAATTACAGCAGTCTGAATCGAGCTCAGCTAACCTTTGAATATCTGCACACA
AATTCGTAAGTATCCTCTAGGTGCCACTGAGGTAACCAGTAACTCGTTCCTTGATATTATATGGAAATCGTTTCC
CCAGAAAATTTTGCTTTTTCACTTTTTGAGATGTATCCCACTGGAGTGAAATGTGTCACTGGATATCTTGAGCTC
TGTATTGAAGAACTGAGATCAGTGAAATACTTGTTGCTAATCCAGAAGAATCTGATTTTTGTTTATTGGATCAAA
ATTTTCTAAATGCAAACTTTAGTTATTTGAAGTCAATATGTTGAGTTGTTTCATTCAAGTGTTTATAGGAATCCA
ACAAATACTGCTCTATTGGATCGCCAAATGTTGGACTATTTTAGTATCAACCGTTTCCCCTCTGTAGTGACAACG
TCCTAAACAGTTAGGTTTATAACAAGTGTTTACTTTCTAACAAGAAAACAGAAGACATTTAAATGACAACTTTCA
AGAAGAAAATTTTTATTTTTTCAGAAGTTGGCATTATCTTCCTGGCAGATTGCTCACATCCAATATTATTTGTAT
ATGCTAAACAGGAAACGGCAACTTGTTTATATCTCTATTTAGATAGTCTTTCCCCAAAATTTCCACAGAAACATA
CAGTGTTCATGGTTCTTGAGTTCATGAAGGAGTAATCTAATCACTCCAACATGGTCTGGAATGTTTCAGGTTTAA
TCCATATGCCCACTCTCTTGGAGGCTGTCCAGTAGCGTCAAAACTTTAGTGTTTTAATACATTCACCTGTTACTT
TTGAGATGAAGTTCACCTTTCTTGGATCACATGCAAAGGATGTTTAGGTCTGTGAAGAAAAGAATTTCTAGGCCG
GGTGCTGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGAACCACTCACGAATTCTTGTTTGGTGCCC
TTGCTGAACTGGTTGATAATGCAAGAGATGCTGATGCCACCAGAATAGATATTTATGCAGAAAGACGAGAGGACC
TTCGAGGAGGATTTATGCTTTGCTTTTTGGATGATGGAGCAGGAATGGATCCAAGTGATGCTGCCAGTGTGATCC
AGTTTGGGAAGTCGGCCAAGCGAACACCTGAGTCTACTCAGATTGGGCAGTACGGGAATGGGTTAAAATCGGGCT
CAATGCGCATTGGGAAGGATTTTATCCTGTTCACCAAGAAGGAAGACACCATGACCTGCCTCTTCCTGTCTCGCA
CGTTTCATGAGGAAGAAGGCATTGATGAAGTGATAGTCCCACTGCCCACCTGGAATGCTCGGACCCGGGAACCTG
TCACAGACAATGTAGAGAAATTTGCCATTGAGACAGAACTCATCTATAAGTACTCTCCATTCCGCACTGAGGAGG
AAGTGATGACCCAGTTTATGAAGATTCCTGGGGACAGCGGAACATTGGTGATCATCTTCAATCTCAAACTCATGG
ATAATGGAGAGCCAGAACTAGACATAATCTCAAATCCAAGAGATATCCAGATGGCAGAGACGTCCCCAGAGGGCA
CGAAGCCAGAGCGGCGCTCGTTCCGTGCCTATGCCGCTGTGCTCTATATTGATCCCCGGATGAGGATCTTCATCC
ATGGGCACAAGGTGCAGACCAAGAGGCTCTCCTGCTGCCTGTACAAGCCCAGGATGTACAAGTACACGTCAAGCC
GTTTCAAGACCCGTGCGGAGCAGGAGGTGAAGAAAGCAGAGCACGTAGCAAGGATTGCTGAAGAGAAGGCGCGGG
AGGCAGAGAGCAAAGCTCGGACATTAGAAGTACGCCTAGGTGGAGACCTCACGCGGGACTCCAGGGTGATGTTGC
GACAGGTCCAGAACAGAGCCATCACTCTGCGCAGAGAAGCCGATGTCAAGAAGAGGATCAAGGAGGCCAAGCAGC
GAGCACTTAAAGAACCTAAGGAACTGAATTTTGTTTTTGGTGTCAACATTGAACACCGGGATCTGGATGGCATGT
TCATCTACAACTGTAGCCGACTGATCAAAATGTATGAGAAAGTGGGCCCACAGCTGGAAGGGGGCATGGCATGTG
GCGGGGTTGTTGGGGTTGTTGATGTGCCCTACCTGGTCCTGGAGCCTACACACAACAAACAGGACTTTGCTGATG
CCAAGGAGTACCGGCACCTGCTCCGAGCAATGGGGGAGCACCTGGCGCAGTATTGGAAGGATATTGCCATCGCCC
AGAGGGGAATCATCAAGTTCTGGGATGAGTTTGGCTACCTCTCTGCCAACTGGAACCAGCCCCCATCCAGTGAGC
TGCGTTACAAACGCCGGAGAGCTATGGAAATCCCCACCACCATCCAGTGCGATTTGTGTCTGAAATGGAGAACCC
TCCCCTTCCAGCTGAGTTCTGTGGAAAAAGATTACCCTGACACCTGGGTTTGCTCCATGAACCCTGATCCTGAAC
AGGACCGGTGTGAGGCTTCTGAACAAAAGCAGAAGGTTCCCCTGGGAACATTCAGAAAGGACATGAAGACGCAGG
AAGAGAAGCAGAAACAACTGACAGAGAAAATTCGCCAGCAGCAGGAGAAGCTGGAGGCCCTTCAGAAAACCACAC
CCATCCGCTCCCAAGCAGACCTGAAGAAATTGCCCTTGGAAGTGACCACCAGACCTTCCACTGAGGAACCTGTGC
GTAGACCTCAGCGTCCTCGGTCGCCCCCTTTACCTGCTGTGATCAGGAACGCCCCCAGCAGACCCCCTTCTTTGC
CAACTCCTAGACCAGCCAGCCAGCCCCGAAAGGCTCCTGTCATCAGCAGTACCCCAAAGCTCCCTGCTTTGGCAG
CCCGGGAGGAGGCCAGCACATCTAGGCTGCTCCAGCCACCTGAGGCACCCCGAAAGCCTGCCAACACTCTCGTCA
AGACTGCATCCCGACCTGCCCCTCTGGTGCAGCAACTGTCACCATCTTTACTGCCCAACTCCAAGAGCCCTCGGG
AGGTTCCTTCTCCCAAAGTCATCAAGACTCCAGTGGTGAAGAAGACAGAGTCACCCATCAAACTCTCCCCGGCTA
CCCCTAGTCGGAAGCGGAGTGTCGCAGTTTCTGATGAGGAAGAAGTTGAGGAGGAAGCTGAGAGGAGGAAGGAGA
GGTGCAAGCGGGGCAGATTTGTTGTGAAGGAGGAAAAGAAGGACTCGAATGAGCTCTCAGACAGTGCTGGGGAAG
AGGACTCGGCTGACCTCAAGAGAGCTCAGAAAGATAAAGGGCTGCACGTGGAGGTGCGTGTGAACAGGGAGTGGT

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FIGURE 3979B

ACACGGGCCGTGTCACAGCCGTGGAGGTGGGCAAGCATGTGGTGCGGTGGAAGGTGAAGTTTGACTACGTGCCCA
CAGACACGACACCAAGAGACCGCTGGGTGGAGAAAGGCAGTGAGGATGTGCGGCTGATGAAACCCCCTTCTCCGG
AACATCAGAGCCTTGATACACAACAGGAGGGCGGGGAGGAGGAGGTGGGCCCTGTGGCCCAGCAGGCCATAGCTG
TCGCAGAGCCCTCCACTTCCGAATGCCTCCGCATTGAGCCTGACACCACTGCCCTGAGCACCAATCACGAGACCA
TCGACCTGCTTGTCCAGATCCTCCGGAATTGTTTACGGTACTTCCTGCCTCCAAGTTTCCCCATCTCCAAGAAGC
AGCTGAGTGCTATGAATTCAGATGAGCTAATATCTTTTCCTCTGAAGGAGTACTTCAAGCAATATGAAGTAGGGC
TCCAAAAACCTGTGCAATTCCTACCAGAGCCGTGCTGACTCCCGGGCCAAGGCCTCCGAGGAAAGCCTGCGCACCT
CCGAGAGGAAGCTCCGCGAGACGGAGGAGAAGCTGCAGAAGCTGAGGACCAACATCGTGGCACTCCTGCAAAAGG
TGCAGGAGGACATAGACATCAACACAGATGATGAGCTGGACGCCTACATTGAGGACCTCATCACCAAGGGGGACT
GAAGGCAGGAGAGAGAGCAGCTCCCCTGCCCACCTGCCCCTCAACCCTGTAGCTGCAGGGGGAGGGGACTTCATT
CATGGGTTGGTGGTCGCACCTTGGTTTGACTTACACGGGACATTTGTGTTTTTGGAGGAAAAGATACCCTGATTC
TTTGAATCTTCCTTAAGTTTATAAATATTTATTTTTTAAAAG

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FIGURE 3980

TGTCTGAAAAAATCAATTGACTATTCCCTTTTCCTAAAGGGCAGAGACAGATAATCTCACTTCCAGAGAAATGAC
TTGGAGAAAAAAAAAGTGTTGGTCTTTTTGCTCTTTTGTAATTAAATCCGGATGTACCTCAAAAGACTTAAGACTG
TGGTGATAAGATGCTTTCCTCAGCAGAAAGGAGGGAAAAAAAACAACTGGAACTCAAAGCTTGAAATTCTGTGGC
AAAACATGAGATGTCCAGGATTGGAGGTTGAAAAGATTTCACTACAGTGTTCTGCAATAGTTGGAGCAGATAACT
TTCAGTGTAGCCACAGCC**ATG**GACTCCAGATTTCCAGATTTTCAAGACCTGGACCTGGAACCCGAAAGAGCTTGT
CACGATGCGGCAGGAACACTGGAGGTAGATTTTTTTTTATTTTTGAATTTTGGGACTGTTGACCTTGCTGTGAGA
AAAGAGACAACGACTGAGCAAGCACTACCACCAGCACTGTTACTGGGAATTAGAAGACCTGAGTTTCTGTCCAGA
CCCTCAGTGCAAACTGAGGATGCTCCATCCAAAGTGAATTATGTCCTGTGCCTCCTGATTGCTGAGTGTTCACCT
GGACCTTCTGACTACCTTCCCTGTGCTATTCCATCAGCCTACAGACCTGGTACCTGGATTTTTGCCCGAGATGAT
TCCTACCACCTTACTACTGACGAAGACACCCATTCCAGTGGACCACTG**TGA**CCCAGGAGGCATTCAGCCATCATG
ATGTGGCCTTTACCTCCACTCCTGTCTTGTTCTACCCAGATTCAGCACAGCCCTTTATAGTGAAGTCAGAGTCCT
CAAGCCAAATAGCTAAAGCTGTTTTATCACAACAAAGGCCTAGTTTGTTCCATGAGTGTGCATTTCATTTCTTCA
GTTAAAGCCTTCAGAGACACACAATAAATTTGGACCAGGGGATTTTTTAGTTATTAATGCTCTCTGAAGAAAGGC
AACATCTTTTTGAGAGCAGCATTGGACCACACCCCACAATCTCAAATGATTGAAATTCATGAACATCTAGGATCC
CGTGAAGGTCACTGGACCCTGTTTTTTCTACTTCAAATCCTGTAGTAGCCTACTGAATGAGAAAACATATTCTGA
CCCATTGGGATCAAATCAAAGGCACAGTGAACTCCTCATAGCATCTTCTTTGGAATTACTCAGGAACCAGAACTT
TTTACACAAATGTAAGAAATTCTACCAAGGAGTCCCCTTACCTAACAGCATCTCACAAGGCTGCACCAGATTCCA
GAAAAGGCTTCTCTTGATACATCAAGCATTTTGTGACCGACTTATTCTTAGATCATTGGTTTTCCAAAGGCTTTG
TGGCCATGAAGCCCTTTGAGTGAAAACTGTGCAGAAGCCCAGAGTAAAAGTGAAGCTGCTCTGGATGAAGTAGTG
AAGCAAGAGTAGGGGCCTGAATCCTGCTACAACTATCTTCCTTTACCACCGTGGTGACACCTAAGGGGACTTCCT
TACAACACCTTGAACTCTTCCGAACACAGTTTGAAAACCACTGCCCCAGACAGCAATATGTTTGACCTGAATGGC
ATTCCAATCTTTTCTGTACCTCCACTCAGCACAGTTCATGTTCAGTAGATGCTGAACATTCTTAGAAATACTGTG
TGTGAACTTAGAAAAGTGCAAGAAGACAGGCATGTCTTTGACCCCAGGAATGATCATTTGCTGAAGATGGTGTCA
AGTGAACCTAGATTAACAGCCCTCCACTCCAGATGGATATCCAGTGATTCCTAGAATGGGATATAGCCAGAGAAC
AATTCTATGCACCCTACACTGACAGACTCCCTTAAGCAACACCAGATGCTCTACTGGTACTTGAAGTACATGACT
TTGAAGTCTTGACCCTCCATGAATACCTGAATTATCAGCAAGCGGGTTTTGAAGCTGGTGCCTCATTGAGGCCAT
ATTAGAGCAACTTGTACATTTGACCTCTTGTTATCAGCCATGGTACTCTACTTCGTGTGCAAGAGATAACTATGA
AAGCCAAATTCAAATACTGGCAACATTTCCTAAAGGGGCTCAATATCTATCATTCGTCTTCTTTTCCAAACTACA
CATCACTGTATGACTCAACCAGTAGCAGTTATATTGCCCCTTGGTTTTTATTCAGTTTAACTACTGTTTCCAAGA
TAAATGAGCTAATAAGCTTT

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FIGURE 3981

CAGAATCCAGGGGACGGTTGCTGAGCGGGCCTGGGACAGCGGGTCGCGGCACCTCCGGCCTGCGCGTGTCTAATC
CGTCTGTCGGGTCCCGAAAGAGCTAAGCCGAGCCTGCGCCGGACGGGTGGGCTGGACTGAGAGAATTCTCTGAGC
TGGTGACAGGTGCCACAGGCACTGGGGATCTCACCAGAAAGGAACCGACGGAGCTAGGGGCCAGCGAGATGGCGG
ACGAGGCCTTAGCTGGGCTGGATGAGGGAGCCCTTCGGAAGCTGCTGGAGGTCACAGCAGATCTGGCAGAGCGGC
GGCGCATCCGCTCAGCCATCCGGGAACTGCAGCGGCAGGAGCTGGAGCGCGAGGAGGAGGCCCTGGCATCCAAGC
GTTTCCGTGCCGAGCGGCAGGACAACAAGGAGAACTGGCTGCAGCTCTCAGCAGCGGGAAGCTGAGCAGCGGGCT
GCCCTGGCACGGCTGGCAGGGCAGCTGGAGTCCATGAACGATGTGGAGGAATTGACTGCACTGTTGCGAAGCGCT
GGTGAGTATGAGGAGCGCAAGCTGATCCGAGCTGCCATCCGCCGTGTACGGGCTCAGGAGATTGAGGCTGCCACC
TTGGCTGGGAGGTTGTACAGCGGGCGTCCCAACAGTGGCTCAAGAGAGGACAGCAAGGGGCTAGCGGCACACAGG
CTGGAACAGTGTGAGGTGCCAGAGCGAGAGGAACAGGAACAGCAGGCAGAGGTTTCAAAGCCAACCCCCACCCCT
GAAGGCACCAGCCAGGATGTGACCACAGTGACACTCCTGCTGCGAGCCCCACCTGGGAGCACATCCAGCTCACCT
GCCTCACCCAGCAGTTCACCCACCCCTGCCTCTCCTGAGCCTCCATTGGAGCCTGCCGAGGCCCAGTGCCTTACA
GCTGAGGTTCCAGGCAGCCCAGAGCCACCCCCCAGCCCACCCAAGACCACCAGCCCTGAGCCTCAGGAGTCTCCA
ACGCTCCCCAGCACTGAGGGCCAGGTGGTCAACAAGCTTCTGTCTGGCCCCAAAGAGACCCCTGCTGCCCAGAGC
CCCACCAGAGGCCCCTCTGACACCAAGAGAGCAGACGTGGCTGGACCCCGACCCTGCCAACGCTCCCTGTCGGTG
CTCAGCCCCCGCCAACCAGCCCAGAACCGAGAGTCCACCCCCCTTGCCAGCGGACCTTCCTCATTCCAGCGGGCT
GGCTCTGTGCGGGATCGTGTCCACAAGTTCACATCTGATTCTCCTATGGCTGCTAGGCTCCAGGATGGCACACCC
CAGGCTGCCCTAAGTCCCCTGACCCCCGCAAGGCTCCTGGGCCCCTCCCTCACCAGCACCACCCCTGCCTCCTCC
TCCAGCGGCTCCTCCTCTCGGGGCCCCAGTGATACCTCCTCCCGGTTCAGCAAGGAGCAACGAGGAGTAGCCCAG
CCCCTGGCCCAGCTTCGAAGCTGCCCCCAGGAGGAGGGCCCCAGGGGGCGGGGCTTGGCTGCTAGGCCCCTTGAA
AACAGAGCAGGGGGGCCTGTGGCACGTTCAGAGGAGCCTGGTGCCCCGCTGCCCGTGGCCGTCGGCACTGCCGAG
CCAGGGGGCAGTATGAAGACCACATTCACCATCGAGATCAAGGACGGCCGTGGCCAGGCCTCCACAGGCCGGGTG
CTGCTGCCCACAGGCAACCAGAGGGCAGAACTGACACTGGGGCTGCGGGCGCCCCCGACCCTACTCAGCACCAGT
AGTGGGGGCAAGAGCACCATCACCCGTGTCAACAGCCCTGGGACCCTGGCTCGGCTGGGCAGTGTCACTCATGTC
ACCAGCTTCAGCCATGCCCCCCCCAGTAGCCGAGGAGGCTGCAGCATCAAGATGGAAGCAGAGCCAGCAGAGCCT
CTCGCTGCAGCAGTGGAAGCGGCCAATGGGGCTGAGCAGACCCGAGTGAACAAAGCACCAGAAGGGCGGAGCCCT
CTGAGCGCTGAGGAGCTGATGACTATTGAGGATGAAGGAGTCTTGGACAAGATGCTGGATCAGAGCACGGACTTT
GAAGAGCGGAAGCTCATCCGGGCTGCACTTCGTGAGCTCCGACAAAGGAAGAGAGACCAGCGGGACAAGGAGCGG
GAACGGCGGCTGCAGGAGGCACGGGGCCGGCCAGGGGAGGGGCGCGGCAACACAGCCACTGAGACCACCACGAGG
CACAGCCAGCGGGCAGCTGATGGCTCTGCTGTCAGCACTGTTACCAAGACTGAGCGGCTCGTCCACTCCAATGAT
GGCACACGGACGGCCCGCACCACCACAGTGGAGTCGAGTTTCGTGAGGCGCTCGGAGAATGGCAGTGGCAGCACC
ATGATGCAAACCAAGACCTTCTCCTCTTCCTCCTCATCCAAGAAGATGGGCAGCATCTTCGACCGCGAGGACCAG
GCCAGCCCACGGGCCGGCAGCCTGGCGGCGCTCGAGAAACGGCAGGCCGAGAAGAAGAAAGAGCTGATGAAGGCG
CAGAGTCTGCCCAAGACCTCAGCCTCCCAGGCGCGCAAGGCCATGATTGAGAAGCTGGAGAAGGAGGGCGCGGCC
GGCAGCCCTGGCGGACCCCGCGCAGCCGTGCAGCGATCCACCAGCTTCGGGGTCCCCAACGCCAACAGCATCAAG
CAGATGCTGCTGGACTGGTGTCGAGCCAAGACTCGCGGCTACGAGCACGTCGACATCCAGAACTTCTCCTCCAGC
TGGAGTGATGGGATGGCCTTCTGTGCCCTGGTGCACAACTTCTTCCCTGAGGCCTTCGACTATGGGCAGCTTAGC
CCTCAGAACCGACGCCAGAACTTCGAGGTGGCCTTCTCATCTGCGGAGACCCATGCGGACTGCCCGCAGCTCCTG
GATACAGAGGACATGGTGCGGCTTCGAGAGCCTGACTGGAAGTGCGTGTACACGTACATCCAGGAATTCTACCGC
TGTCTGGTCCAGAAGGGGCTGGTAAAAACCAAAAAGTCCTAACCCCTGCTCGGGGCCCCACGGATGCTGGTGGAC
TGTGTGCCCCTGGTGGAGGTGGACGACATGATGATCATGGGCAAGAAGCCTGACCCCAAGTGTGTCTTCACCTAT
GTGCAGTCGCTCTACAACCACCTGCGACGCCACGAACTGCGCCTGCGCGGCAAGAATGTCTAGCCTGCCCGCCCG
CATGGCCAGCCAGTGGCAAGCTGCCGCCCCCACTCTCCGGGCACCGTCTCCTGCCTGTGCGTCCGCCCACCGCTG
CCCTGTCTGTTGCGACACCCTCCCCCCCACATACACACGCAGCGTTTTGATAAATTATTGGTTTTCAACG

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FIGURE 3982

CGTGGCGCAGCGACTCGGAGGTTCGCCTCCAGCTTGCGCATCATCTGCGGCCGGGTCCCGATGAGCCTCCTGTTG
CCTCCGCTGGCGCTGCTGCTGCTTCTCGCGGCGCTTGTGGCCCCAGCCACAGCCGCCACTGCCTACCGGCCGGAC
TGGAACCGTCTGAGCGGCCTAACCCGCGCCCGGGTAGAGACCTGCGGGGGATGACAGCTGAACCGCCTAAAGGAG
GTGAAGGCTTTCGTCACGCAGGACATTCCATTCTATCACAACCTGGTGATGAAACACCTCCCTGGGGCCGACCCT
GAGCTCGTGCTGCTGGGCCGCCGCTACGAGGAACTAGAGCGCATCCCACTCAGTGAAATGACCCGCGAAGAGATC
AATGCGCTAGTGCAGGAGCTCGGCTTCTACCGCAAGGCGGCGCCCGACGCGCAGGTGCCCCCCGAGTACGTGTGG
GCGCCCGCGAAGCCCCCAGAGGAAACTTCGGACCACGCTGACCTGTAGGTCCGGGGGCGCGGCGGAGCTGGGACC
TACCTGCCTGAGTCCTGGAGACAGAATGAAGCGCTCAGCATCCCGGGAATACTTCTCTTGCTGAGAGCCGATGCC
CGTCCCCGGGCCAGCAGGGATGGGGTTGGGGAGGTTCTCCCAACCCCACTTTCTTCCTTCCCCAGCTCCACTAAA
TTCCCTCCTGCCTT

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FIGURE 3983

GAGAGGGGCGGCTCCGCGTCATGTGACTGGAGTCCGCGTAGGAGGGGTCGGAGGTCTTACCCAACAGATTGACGC
GGCGTTAGTATTGGCCGTGTACCCGAAAAACTGATTGACTGGGCTGGCGTTAACTGTGCGGAGGCAGGATTTCCC
TGGGGAAAGTCTTCACTCAGAGCTTCGCTGACAGCCAAGGATGGCAAGCAAGGGGCCCTCGGCCTCTGCATCTCC
TGAGAACTCCAGTGCAGGGGGGCCCAGTGGGAGCAGCAATGGCGCTGGCGAGAGCGGAGGGCAGGACAGCACTTT
CGAGTGCAACATCTGCTTGGACACAGCCAAGGATGCCGTCATCAGCCTGTGTGGCCACCTCTTCTGTTGGCCGTG
TTTACATCAGTGGTTGGAGACCAGACCTAACAGACAGGTGTGTCCTGTTTGCAAAGCTGGCATCAGCCGAGACAA
GGTCATCCCCCTCTATGGAAGGGGCAGCACTGGGCAACAGGACCCCAGAGAGAAGACCCCTCCTCGTCCTCAAGG
ACAGAGGCCAGAGCCGGAGAATAGAGGGGGATTTCAAGGATTTGGATTTGGAGATGGTGGCTTCCAGATGTCTTT
TGGAATTGGGGCATTTCCCTTTGGGATATTTGCCACAGCATTTAATATAAATGATGGGCGGCCTCCTCCAGCTGT
CCCTGGGACACCCCAGTATGTGGACGAGCAGTTCCTGTCACGCCTCTTCCTATTTGTGGCCCTGGTGATCATGTT
CTGGCTCCTGATTGCCTAATGCTGGGCTCCTGCCTACATCCGTGGCAGGGCTCTGGACTGGTGACGTGCCACCCC
AACTCCTGGTGTTTGGCTTCCTGGCTAATCTTGACTCCTGGAATCAGTGGGATCAGTAACACATCAAGGAGTCTT
GTTTCTTCATCAGAGCTTTGGAACTCGAGACCAGTTGGCGATGACCCCTGAATATCGCCACCGCTGTAAACACTC
TATAACTTCAGGCCTTGGCATTGAGTCATCTCTCATGGGTGACACCATGAAATCTTGTTTCAGCCAGTTCTGCAG
GTCCTGACTCTGCAGAGGGAAGAGGCAGAAAGAGAGAAACTGTCAGAGTATAATTTCACCTGAGTTTAATATTAC
AGAAACAAAGGGATGCACCAAATGGTATTTCTGGAAATTTTCATGTCTTTAAATACCCCTTGGTAAGTTGCTTCT
GAAGCCAGTGGGGGCTCCTCAGATAGAGAGGTTCCCCTTTCAAATCCCAGTGCCGCTCTGTTCTCTTTCCTTCCC
CTCCCACTCCCCCTCTTCTTCCTCTGTAGAGATGCAAGAAATTGCTGTCCCATAAAAATCATAATTGCAGTAGCT
AAAGCTGGGGTCACTTCGTGAATTCACCAGAGACTCAAAGATCTTTTATTGGCTCTGGGCTGTGCTCAGTGTCTT
TGGCCTCAGAGAACAACTTGAATGACTTCCTGGTTTCCTGGCATAAATTATTCCTGGTGAGACATGTGGCTTAAC
TCACAGGTTTCCCATCAGCTTTCTCCCTAAAACTATGTTCATCTGCCTCTCTCTGCCAGAGAACATACAGCCGAG
AATACTGCCGAAGCTGAGACTGACTACTGTGCATTAGGAAAGACCTGGAGTCAGGACTTTGGTGGGATTTGGAGC
TCCGAGGCAGTAATAACTGAACAAGCAGCCCTGTCCCCTAGGCTGCAGAAGCTTGAATGCATCCTCTCCCAGAAC
CTGCCACAGGAAACTGGGGGCTTTGTCAGGTCAGCCCAACTGCATGCAAAAGACCACCATCCTCAGAAGCCAAGT
TGTCTTTTATGAAGAGGCAAGGAAAGGGGAAACCCACATGTGACCCTGATTTTGGTATGGCTTGATAGAGTTCCC
TGAAAACTCCTTGTATGTGTGCTAAAACCAGGGAAGCATGTGACTGCCAAGCAGGCAACCCCTGATGATTTGTAA
AGCCAGGTGGCAGGGCCTTGGGGAGCCCCAGCACAATGATATTGTGTGGTCTTCCCTCCTGTGGAATCGAGGGGA
AATTATTCTTCCCAATACCTTGATTTGATTTTCAGTTTCATAAGCTTCTTCCTCTGAATCTTATTGAGGGACTAT
GGTACCAAGCAGGTAGGACTGTTCACCTGGTGGAACAGTTCTTGCTCTGCCTTCTAGGCTTCATCCCAGAAATCC
AGCCTCTTTCTGGAGACCCCAAAGCTGGAGGGAGATGGGCTTTCCTCTGGGCCTCTCTCCTACTTTGCCATCCAC
ACTGCTCCTGGCTAACCCCAGCAATAACCAACAAATGGTAGGAAGCCCCATCTATTGCTTTTTCTCAATTATGAC
TGCATAGTTTATGGAAACAAAGATCTTGAGGAAGATGAGGGAAGCCCTCCCCTCTTCACAGTCCCCATCTCTTCT
CCTTTGTACCTGTCAACACCAGAGTTCAGTGTTTAAACAGACAAAATATAAAGTATTGAGTAGGTGGTTCATATG
CCGAATCCACTTGGTAGGAAGAAACCACCAGCTTTATAGTGTGCCTGATAGATTTTAAACATTCCTGGGCACCCA
CTCAAGAGTGCTCTTTTTATCACCTTCTGGAAATCCGCAAAGTTGCAGGGGCCTCTGGAGTGTCTCTTCTCTAGA
GAGAATTGGTGGGACCCCCCTCAGTGCAGTGGCCCCAACTAGTGGAGGGAGAGAGGACTTAAGTCAGATGGACTC
AACAGAAATGGGTTTCCAGAAGAATAATGAAAAGTTGTGGGTAGGAAAATGAATCATTTGGACTCTTCAATGAAA
TGGAGTGAGCCCAGGAGAGCTCAGCCAACAGAGGCACTCTGGGAACCTGTTAGTAAAGCCAGGCTGGCCAAATGC
CATTTGATTTTGAACCTCGTAGGTCCCCACTCACCCTCTGCCAGGAGCTAAGTAAGGCAGGAGAGCTGACTTGGG
ACTCCTGGCTCGGCCCCAACAGGGAGCCCCCTTCCCACCATCCCTCGGCAAGCTCACCACCTCATCCTTCTGCCA
AGGCAGCTTTCCTTTCTTTTGTGTGTTTTCTGTGTTCTTAGCCTCCACCCTCCTCCTGCCACCCTTGTGGACTAG
GACCAGGTCCTGACCCCAGTCAGAAAATGATGATATGTACAGTGGCACACCTTAACCAGTCACTAATTTTCACTG
TTGTGAAAGTGATTTGATTTAGAATTAAACAAATGGTTTTACATTA

FIGURE 3984A

CTCAAGAATGCCAGTGTGTGTGTAGCCTCCACAGAGAGGTCGTTTTCTCGGAGTCCAGAGGGGCCGCCTGAGCTT
CTGAGAACTAGGGAGGAGCCATCCCAGCCATGAGCCCCTGTGGGAATCTGCTGGGGGCCAAGTGGCCTGGAGTCC
TCAGGCTCCCGCAGCTGCTCCGGAGGGAGAGGTGAGCTCAGGGCAGCCTGCCTGCAGCCAGAGGTGCCGGGAGCC
CCGGGCCTGTCATGGTGGCCATCTACAGCCGGCCTGAGGCAGTCACAGACGGATTTGCAGCTGAGCCTGTCTATC
TGGTGTGGGAAGAAG**ATG**GGGAGTTACTTGTCAGTCCCGGCTTACTTCACCTCCAGAGACCTGTTTCGGTGTTCA
GAATGCCAGGATTCCCTCACCAACTGGTACTATGAGAAGGATGGGAAGCTCTACTGCCCCAAGGACTACTGGGGG
AAGTTTGGGGAGTTCTGTCATGGGTGCTCCCTGCTGATGACAGGGCCTTTTATGGTGGCTGGGGAGTTCAAGTAC
CACCCAGAGTGCTTTGCCTGTATGAGCTGCAAGGTGATCATTGAGGATGGGGATGCATATGCACTGGTGCAGCAT
GCCACCCTCTACTGTGGGAAGTGCCACAATGAGGTGGTGCTGGCACCCATGTTTGAGAGACTCTCCACAGAGTCT
GTTCAGGAGCAGCTGCCCTACTCTGTCACGCTCATCTCCATGCCGGCCACCACTGAAGGCAGGCGGGGCTTCTCC
GTGTCCGTGGAGAGTGCCTGCTCCAACTACGCCACCACTGTGCAAGTGAAAGAGGTCAACCGGATGCACATCAGT
CCCAACAATCGAAACGCCATCCACCCTGGGGACCGCATCCTGGAGATCAATGGGACCCCCGTCCGCACACTTCGA
GTGGAGGAGGTGGAGGATGCAATTAGCCAGACGAGCCAGACACTTCAGCTGTTGATTGAACATGACCCCGTCTCC
CAACGCCTGGACCAGCTGCGGCTGGAGGCCCGGCTCGCTCCTCACATGCAGAATGCCGGACACCCCCACGCCCTC
AGCACCCTGGACACCAAGGAGAATCTGGAGGGGACACTGAGGAGACGTTCCCTAAGGCGCAGTAACAGTATCTCC
AAGTCCCCTGGCCCCAGCTCCCCAAAGGAGCCCCTGCTGTTCAGCCGTGACATCAGCCGCTCAGAATCCCTTCGT
TGTTCCAGCAGCTATTCACAGCAGATCTTCCGGCCCTGTGACCTAATCCATGGGGAGGTCCTGGGGAAGGGCTTC
TTTGGGCAGGCTATCAAGGTGACACACAAAGCCACGGGCAAAGTGATGGTCATGAAAGAGTTAATTCGATGTGAT
GAGGAGACCCAGAAAACTTTTCTGACTGAGGTGAAAGTGATGCGCAGCCTGGACCACCCCAATGTGCTCAAGTTC
ATTGGTGTGCTGTACAAGGATAAGAAGCTGAACCTCCTGACAGAGTACATTGAGGGGGGCACACTGAAGGACTTT
CTGCGCAGTATGGATCCGTTCCCCTGGCAGCAGAAGGTCAGGTTTGCCAAAGGAATCGCCTCCGGAATGGCCTAT
TTGCACTCTATGTGCATCATCCACCGGGATCTGAACTCGCACAACTGCCTCATCAAGTTGGACAAGACTGTGGTG
GTGGCAGACTTTGGGCTGTCACGGCTCATAGTGGAAGAGAGGAAAAGGGCCCCCATGGAGAAGGCCACCACCAAG
AAACGCACCTTGCGCAAGAACGACCGCAAGAAGCGCTACACGGTGGTGGGAAACCCCTACTGGATGGCCCCTGAG
ATGCTGAACGGAAAGAGCTATGATGAGACGGTGGATATCTTCTCCTTTGGGATCGTTCTCTGTGAGATCATTGGG
CAGGTGTATGCAGATCCTGACTGCCTTCCCCGAACACTGGACTTTGGCCTCAACGTGAAGCTTTTCTGGGAGAAG
TTTGTTCCCACAGATTGTCCCCCGGCCTTCTTCCCGCTGGCCGCCATCTGCTGCAGACTGGAGCCTGAGAGCAGA
CCAGCATTCTCGAAATTGGAGGACTCCTTTGAGGCCCTCTCCCTGTACCTGGGGGAGCTGGGCATCCCGCTGCCT
GCAGAGCTGGAGGAGTTGGACCACACTGTGAGCATGCAGTACGGCCTGACCCGGGACTCACCTCCC**TAG**CCCTGG
CCCAGCCCCCTGCAGGGGGGTGTTCTACAGCCAGCATTGCCCCTCTGTGCCCCATTCCTGCTGTGAGCAGGGCCG
TCCGGGCTTCCTGTGGATTGGCGGAATGTTTAGAAGCAGAACAAGCCATTCCTATTACCTCCCCAGGAGGCAAGT
GGGCGCAGCACCAGGGAAATGTATCTCCACAGGTTCTGGGGCCTAGTTACTGTCTGTAAATCCAATACTTGCCTG
AAAGCTGTGAAGAAGAAAAAAACCCCTGGCCTTTGGGCCAGGAGGAATCTGTTACTCGAATCCACCCAGGAACTC
CCTGGCAGTGGATTGTGGGAGGCTCTTGCTTACACTAATCAGCGTGACCTGGACCTGCTGGGCAGGATCCCAGGG
TGAACCTGCCTGTGAACTCTGAAGTCACTAGTCCAGCTGGGTGCAGGAGGACTTCAAGTGTGTGGACGAAAGAAA
GACTGATGGCTCAAAGGGTGTGAAAAAGTCAGTGATGCTCCCCCTTTCTACTCCAGATCCTGTCCTTCCTGGAGC
AAGGTTGAGGGAGTAGGTTTTGAAGAGTCCCTTAATATGTGGTGGAACAGGCCAGGAGTTAGAGAAAGGGCTGGC
TTCTGTTTACCTGCTCACTGGCTCTAGCCAGCCCAGGGACCACATCAATGTGAGAGGAAGCCTCCACCTCATGTT
TTCAAACTTAATACTGGAGACTGGCTGAGAACTTACGGACAACATCCTTTCTGTCTGAAACAAACAGTCACAAGC
AAAGGAAGAGGCTGGGGGACTAGAAAGAGGCCCTGCCCTCTAGAAAGCTCAGATCTTGGCTTCTGTTACTCATAC
TCGGGTGGGCTCCTTAGTCAGATGCCTAAAACATTTTGCCTAAAGCTCGATGGGTTCTGGAGGACAGTGTGGCTT
GTCACAGGCCTAGAGTCTGAGGGAGGGGAGTGGGAGTCTCAGCAATCTCTTGGTCTTGGCTTCATGGCAACCACT
GCTCACCCTTCAACATGCCTGGTTTAGGCAGCAGCTTGGGCTGGGAAGAGGTGGTGGCAGAGTCTCAAAGCTGAG
ATGCTGAGAGAGATAGCTCCCTGAGCTGGGCCATCTGACTTCTACCTCCCATGTTTGCTCTCCCAACTCATTAGC
TCCTGGGCAGCATCCTCCTGAGCCACATGTGCAGGTACTGGAAAACCTCCATCTTGGCTCCCAGAGCTCTAGGAA
CTCTTCATCACAACTAGATTTGCCTCTTCTAAGTGTCTATGAGCTTGCACCATATTTAATAAATTGGGAATGGGT
TTGGGGTATTAATGCAATGTGTGGTGGTTGTATTGGAGCAGGGGGAATTGATAAAGGAGAGTGGTTGCTGTTAAT
ATTATCTTATCTATTGGGTGGTATGTGAAATATTGTACATAGACCTGATGAGTTGTGGGACCAGATGTCATCTCT

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FIGURE 3984B

GGTCAGAGTTTACTTGCTATATAGACTGTACTTATGTGTGAAGTTTGCAAGCTTGCTTTAGGGCTGAGCCCTGGA
CTCCCAGCAGCAGCACAGTTCAGCATTGTGTGGCTGGTTGTTTCCTGGCTGTCCCCAGCAAGTGTAGGAGTGGTG
GGCCTGAACTGGGCCATTGATCAGACTAAATAAATTAAGCAGTTAACATAACTGGC

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FIGURE 3985

GAGAGGCTGTTTACCAGAACAGCATAACAAGGGCAGGTCTGACTGCAAGGCTGGGACTGGGAGGCAGAGCCGCCG
CCAAGGGGGCCTCGGTTAAACACTGGTCGTTCAATCACCTGCAAGACGAAGGAGGCAAGGATGCTGTTGGCCTGG
GTACAAGCATTCCTCGTCAGCAACATGCTCCTAGCAGAAGCCTATGGATCTGGAGGCTGTTTCTGGGACAACGGC
CACCTGTACCGGGAGGACCAGACCTCCCCCGCGCCGGGCCTCCGCTGCCTCAACTGGCTGGACGCGCAGAGCGGG
CTGGCCTCGGCCCCCGTGTCGGGGGCCGGCAATCACAGTTACTGCCGAAACCCGGACGAGGACCCGCGCGGGCCC
TGGTGCTACGTCAGTGGCGAGGCCGGCGTCCCTGAGAAACGGCCTTGCGAGGACCTGCGCTGTCCAGAGACCACC
TCCCAGGCCCTGCCAGCCTTCACGACAGAAATCCAGGAAGCGTCTGAAGGGCCAGGTGCAGATGAGGTGCAGGTG
TTCGCTCCTGCCAACGCCCTGCCCGCTCGGAGTGAGGCGGCAGCTGTGCAGCCAGTGATTGGGATCAGCCAGCGG
GTGCGGATGAACTCCAAGGAGAAAAAGGACCTGGGAACTCTGGGCTACGTGCTGGGCATTACCATGATGGTGATC
ATCATTGCCATCGGAGCTGGCATCATCTTGGGCTACTCCTACAAGAGGGGGAAGGATTTGAAAGAACAGCATGAT
CAGAAAGTATGTGAGAGGGAGATGCAGCGAATCACTCTGCCCTTGTCTGCCTTCACCAACCCCACCTGTGAGATT
GTGGATGAGAAGACTGTCGTGGTCCACACCAGCCAGACTCCAGTTGACCCTCAGGAGGGCACCACCCCCCTTATG
GGCCAGGCCGGGACTCCTGGGGCCTGAGCCCCCCCAGTGGGCAGGAGCCCATGCAGACACTGGTGCAGGACAGCC
CACCCTCCTACAGCTAGGAGGAACTACCACTTTGTGTTCTGGTTAAAACCCTACCACTCCCCCGCTTTTTTGGCG
AATCCTAGTAAGAGTGACAGAAGCAGGTGGCCCTGTGGGCTGAGGGTAAGGCTGGGTAGGGTCCTAACAGTGCTC
CTTGTCCATCCCTTGGAGCAGATTTTGTCTGTGGATGGAGACAGTGGCAGCTCCCACAGTGATGCTGCTGCTAAG
GGCTTCCAAACATTGCCTGCACCCCTGGAACTGAACCAGGGATAGACGGGGAGCTCCCCCAGGCTCCTCTGTGCT
TTACTAAGATGGCCTCAGTCTCCACTGTGGGCTTGAGTGGCATACACTGTTATTCATGGTTAAGGTAAAGCAGGT
CAAGGGATGGCATTGAAAAAATATATTTAGTTTTTAAAATATTTGGGATGGAACTCCCTACTGACCTCTGAGAAC
TGGAAACGAGTTTGTACAGAAGTCAGAACTTTGGGTTGGGAATGAGATCTAGGTTGTGGCTGCTGGTATGCTTCA
GCTTGCTGGCAATGATGTGCCTTGACAACCGTGGGCCAGGCCTGGGCCCAGGGACTCTTCCTGTTTCATAAGGAA
AGGAAGAATTGCACTGAGCATTCCACTTAGGAAGAGGATAGAGAAGGATCTGCTCCGCCTTTGGCCACAGGAGCA
GAGGCAGACCTGGGATGCCCCAGTTTCTCTTCAGGGATGGATAGTGACCTGTCTTCATTTTGCACAGGTAAGAGA
GTAGTTAGCTAACCTATGGGAATTATACTGTGGGGCCTTGTGAGCTGCTTCTAAGAGGCTAACCTGGAAACTAAG
CTCAGAGGCAAGGTAATAAAGCACTTCAGGGCTTGCTCCCCAAGTGGGCCTGATTTAGCAGGTGGTCCTGCGGGC
GTCCAGGTCAGCACCTTCCTGTAGGGCACTGGGGCTAGGGTCACAGCCCCTAACTCATAAAGCAATCAAAGAACC
ATTAGAAAGGGCTCATTAAGCCTTTTGGACACAGGACCCCAGAGAGGAAAAAGTGACTTGCCCAAGGTCGTAAGC
AAGCTACTGGCATGGCAAGAGCCCAGCTTCCTGACGGAGCGCAACATTTCTCCACTGCACTGTGCTAGCAGCTCA
GCAGGGCCTCTAACCTGTGATGTCACACTCAAGAGGCCTTGGCAGCTCCTAGCCATAGAGCTTCCTTTCCAGAAC
CCTTCCACTGCCCAATGTGGAGACGGGTTAGTGGGGCTTTCTATGGAGCCATCTGCTTTGGGGACCTAGACCTCA
GGTGGTCTCTTGGTGTTAGTGATGCTGGAGAAGAGAATATTACTGGTTTCTACTTTTCTATAAAGGCATTTCTCT
ATATACATGTTTTATATACCTCATTCTGACACCTGCATATAGTGTGGGAAATTGCTCTGCATTTGACTTAATT

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FIGURE 3986A

GCTCGCGCTTTTCTCTCCTTCTCCAAGATGGCGGCGATCGGCGGCGTTGAGGCGGGATCCGGGCGAGCCGAGTGA
AGACCTGGTCCTGTAGACGGGAAGGAGCCTGGACACAGTGACACATTCTCAAAGGCCCTGCAGGACCACCATGGC
TTATGATGACTCCGTGAAGAAAGAAGATTGTTTTGATGGTGATCATACCTTTGAGGACATAGGACTTGCAGCTGG
CCGAAGCCAACGAGAGAAAAAACGTTCTTACAAAGATTTTTTAAGGGAAGAGGAAGAAATTGCTGCTCAGGTCAG
GAATTCTTCCAAGAAGAAGTTGAAGGATAGTGAACTTTACTTCTTGGGGACGGACACACACAAGAAGAAGAGGAA
GCACTCCTCTGATGATTACTACTATGGAGATATTTCGTCTTTGGAATCGTCACAGAAGAAAAAGAAAAAGTCCAG
CCCACAGTCTACTGATACAGCTATGGACCTGTTGAAAGCTATCACTTCCCCACTGGCAGCAGGCTCCAAGCCCTC
CAAAAAGACTGGGGAGAAATCCTCTGGCTCTTCAAGCCATTCGGAGAGTAAAAAGGAGCACCACAGGAAGAAAGT
CAGTGGAAGCAGTGGGGAACTACCCCTAGAGGATGGTGGCTCCCACAAATCGAAAAAAATGAAACCTCTCTATGT
GAACACAGAGACACTGACCCTTCGGGAGCCTGATGGTTTAAAAATGAAACTTATTCTGTCACCAAAGGAGAAGGG
AAGCAGCTCTGTTGATGAGGAGTCTTTTCAATATCCCTCCCAACAAGCGACTGTGAAAAAATCCTCAAAGAAATC
AGCTCGGGATGAGCAGGGTGCTTTACTCCTAGGACATGAGTTACAGAGCTTTCTGAAAACAGCCCGGAAAAAGCA
CAAGTCATCCTCAGACGCACATTCATCTCCTGGCCCTGAAGGCTGTGGGTCTGACGCCTCCCAGTTCGCAGAGTC
CCACAGTGCTAACCTTGATCTTTCAGGGCTTGAACCTATTCTGGTAGAATCAGACTCATCCTCTGGTGGGGAACT
AGAGGCTGGGGAGTTAGTGATAGATGATTCTTACCGAGAAATCAAGAAGAAAAAGAAGTCAAAGAAGAGCAAAAA
GAAGAAAGACAAGGAGAAGCATAAAGAGAAGCGACACTCCAAGTCCAAGAGAAGTTTAGGACTTTCTGCCGTGCC
AGTGGGAGAGGTCACAGTGACATCTGGCCCTCCTCCCAGCATCCCATACGCTGGAGCAGCAGCACCTCCCCTGCC
ACTTCCTGGCCTCCACACAGATGGGCATAGTGAAAAAAAAAAGAAAAAAGAAGAGAAGGACAAAGAGAGAGAGAG
AGGAGAAAAGCCAAAAAAGAAGAACATGTCGGCCTACCAGGTGTTCTGTAAAGAGTATCGCGTGACCATTGTGGC
TGACCATCCAGGTATAGATTTTGGGGAACTTAGTAAAAAACTGGCTGAGGTGTGGAAGCAATTACCAGAAAAAGA
CAAACTGATTTGGAAGCAAAAAGCTCAGTATCTGCAGCACAAACAGAACAAAGCAGAAGCCACAACTGTGAAAAG
GAAAGCATCCAGCTCAGAAGGTTCCATGAAAGTCAAAGCCTCTTCTGTAGGAGTACTGTCACCCCAGAAGAAGTC
CCCACCCACCACCATGCTGTTACCAGCCTCACCAGCCAAAGCCCCTGAGACAGAGCCCATTGATGTTGCTGCTCA
TCTTCAGCTGTTGGGAGAGTCCCTAAGCCTCATTGGACACCGTCTGCAGGAAACTGAGGGTATGGTGGCTGTGTC
TGGCAGTTTGTCAGTGCTTCTGGATTCCATTATCTGTGCCCTTGGCCCCTTGGCATGTCTCACCACACAACTACC
TGAATTGAATGGCTGTCCCAAACAGGTCTTGTCAAACACATTAGACAACATTGCTTACATCATGCCGGGACTGTG
ACAGCAAAGAATCCTGGGACAGAAACCTTATCCTACACCATTGCTGGTTTGTGTATATATGACTGTTGCAGATTC
CTTCAGTGGCCTCTGGCTGTAGGTTTTAAATTTTTATATCTATACATACATATATACATATATATATAATGTACA
ATATATACATAGACTGTAACTACTTTGCTTTTAATAATTTTATGAAATGGCAAAGGTTTAGCCAAGAGGAAATTT
TGGCATGAATACAGGCTTGGGATTCTTTTTTCTCCTGTGGTGGATAAATCTGCCTTAAAAATCAATGTAACTTGG
GGGCTGGGGGCTTGTTCTGGGTGCCAAGCGCATCTCTTTATGGACAGCTAAAATGTGATTATTTTCCAAGCTCAG
TTGGACCTCCAGACCCATCACTGACCATTTGCCTTACCTGTCTTAGTCTGAAATGTAATAGGAAAGATAACGGGA
AGATGCCAGTTGACTGAAAATTCAAAGCCTTTCAATTTGAAGTGACCTAGGTGGGAGGTGATAAAATTTGTTCCC
TTTATAGTTATGGAAGTGGCTTAGGTGAATTGAGTAGAGGGTTCATTCCAATTCCTACTGTATAGGTGTCTGTGT
CTCAAAATTTATTGTAATCATTGGTACCATTGGTGGCCTCAACAGAGGCCAAGGAGTTCTGTGAGCCCTGGCAGC
AAAAAACACCTTGGGGGGTGAAGCTGTCAATGCCACCAGTTGGACCTCCATACATTCTGAGCTAACCCAGAATCT
TTAGTCGGCAGAATTAAGTGCTGGTGTCTTTCACTGGCAGCATGAAGTTAGCCACCAAGTCCTCACAAGCCGTGC
TGCTTAGTTGCTCGGTGGTTATGGATAAACTTTGCCCAGCATGATTTTTGGGTTCATCTTATCAGTTCCCCTGGT
GGGCAGATACACAGTGTTCTGCATTCCACATGTAAGTGAATTGCAAAAACAAAACAAAACTCACTCTCTTGTAGG
TTTATTTATGTGTGTGTGAATGTGTATTTTAATTATGTGTATTTAACTCTTTAAAATCTCTTAGATTTTAATTTA
TCCTGTAAATTTCTGTATATATAATTTAATAACAGAAGCCTCCACCAGCAACAGCATGTGGAAGATACAGATTTG
TCATTTCTCCCTTCCGCCCTCCCTTCTTTCCTTCCTTCCTTCCCTGTTTCCTTCCCTCTTTCCTTCCTTCCTCCT
GGTCTGTTCCAAAAACTCTGAATCATCTACATTTTAAGGTATTTTACCTCAAAAATGAATCATTGTGTTAGGATT
CTAATTCTTTATAAAGAACTTCATGGGCTTCAATAATGTCTAGAAAGTAAAATAAAGAGGAATGTTACCATCCCC
AGCTGCCCTTATTTCCAGAGAACCAGACGTTTGTTTCCCAGTTGGAAAGAAGACAGTTGAGCACTTCAGGATGGT
TTTTAAATTTGGTATGAGATTCTCTGCCAACACCAAGCTCTGAGTTAACTGTGCTTTCTTCTCCTGGCCCTGACA
GAGCACTACAGCATCAAAGTAAATCTTTGGGGACAGTGTAGCCCATCTGCATCCTATTTAATTTCTTCCCTTCTC
CCCACCAGTGTTGTCACAGGGCTATGTTGCTTAAAGGTAGTCTGGCTGCTGAATCCCTTTCTCAGCTCAGAGCAG

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FIGURE 3986B

TTTTAAGATTTAATTGGGAATACAGAGAAACAGGATTGTTTGAGAACCAAAATCAAGAGGAACAGAAATCTTAAC
TTGATTTCATGTGTTAGAACATTGTACCATGCCTCTTCTGTATCTGTGGAAGTTTCCTGTTTGACACAGGGTATC
TAGGAGGGGCGGGGAAGACATGGATAGTATAGGAAGACATTAATCCTAGCATTGTCATTTATATACATTAATGAA
ATCCTGATGAGGACCTGCTTTTTGTTTGTTTTCCTTTGAAACCCAGCCCTATTGTATTTGTATTTAAAATTTGTA
CACATTTGTATAATAATCTGTACCTTGTGGTATTTGGTACTATTAGAGGAAAAACTTTGGATTCAGACCTTCTTG
CAGTTTTTATATCATTGTTTTATTTTGTTTTTTAAATAAATTCTAGTGGTTTGATCCAAATCCCATTACAGTTGT
ATAAAGAAATAAAATTTTGTACTTATATTATTAAAAATCACATTTTTAATATTTGT

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FIGURE 3987

GGTGGCGCTGGCGGTTGCTGTCAGCTGATTCCCGGGGTTGGTGGCAGCGGCGGTAGCAGCAATGGACTTTCTCCT
GGGGAACCCGTTCAGCTCTCCAGTGGGACAGCGCATCGAGAAAGCCACAGATGGCTCCCTGCAGAGCGAGGACTG
GGCCCTCAACATGGAGATCTGCGACATCATCAACGAGACGGAGGAAGGTCCCAAAGATGCCCTCCGAGCAGTAAA
GAAGAGAATCGTGGGGAATAAGAACTTCCACGAGGTGATGCTGGCTCTCACAGTCTTAGAAACCTGTGTCAAGAA
CTGCGGGCACCGCTTCCACGTGCTGGTGGCCAGCCAGGACTTCGTGGAGAGTGTGCTGGTGAGGACCATCCTGCC
CAAGAACAACCCACCCACCATCGTGCATGACAAAGTGCTCAACCTCATCCAGTCCTGGGCTGACGCGTTCCGCAG
CTCGCCCGATCTGACAGGTGTGGTCACCATCTATGAGGACCTGCGGAGGAAAGGCCTGGAGTTCCCCATGACTGA
CCTGGACATGCTGTCACCCATCCACACACCCCAGAGGACCGTGTTCAACTCAGAGACACAATCAGGACAGGATTC
TGTGGGCACTGACTCCAGCCAGCAAGAGGACTCTGGCCAGCATGCTGCCCCTCTGCCCGCCCCGCCCATACTCTC
CGGTGACACGCCCATAGCACCAACCCCGGAACAGATTGGGAAGCTGCGCAGTGAGCTGGAGATGGTGAGTGGGAA
CGTGAGGGTGATGTCGGAGATGCTGACGGAGCTGGTGCCCACCCAGGCCGAGCCCGCAGACCTGGAGCTGCTGCA
GGAGCTCAACCGCACGTGCCGAGCCATGCAGCAGCGGGTCCTGGAGCTCATCCCTCAGATCGCCAATGAGCAGCT
GACAGAGGAGCTGCTCATCGTCAATGACAATCTCAACAATGTGTTCCTGCGCCATGAACGGTTTGAACGGTTCCG
AACAGGCCAGACCACCAAGGCCCCAAGTGAGGCCGAGCCGGCAGCTGACCTGATCGACATGGGCCCTGACCCAGC
AGCCACCGGCAACCTCTCATCCCAGCTGGCAGGAATGAACCTGGGCTCCAGCAGTGTGAGAGCTGGCCTGCAGTC
TCTGGAGGCCTCTGGTCGACTGGAAGATGAGTTTGACATGTTTGCGCTGACACGGGGCAGCTCACTGGCTGACCA
ACGGAAAGAGGTAAAATACGAAGCCCCCCAAGCAACAGACGGCCTGGCTGGAGCCCTGGACGCCCGGCAGCAGAG
CACTGGCGCGATCCCAGTCACCCAGGCCTGCCTCATGGAGGACATCGAGCAGTGGCTGTCCACTGACGTGGGTAA
TGATGCGGAAGAGCCTAAGGGGGTCACCAGCGAAGAATTTGACAAATTCCTGGAAGAACGGGCCAAAGCCGCGGA
CCGATTGCCCAACCTCTCCAGCCCCTCAGCTGAGGGGCCCCCGGGTCCCCCATCTGGCCCAGCGCCCCGGAAGAA
GACCCAGGAGAAAGATGATGACATGCTGTTTGCCTTATGAGTGTGGGGTCTGGCACCCTGCAGCCCAGGTCCCCA
CTGCTCTCACACCCTTAGGCTGGGACCTCCCTCCCTCCTCTGGTGTTAAGGCTGCTTTGGGGGTGGCTTGTTACC
CCCTTTTCCTCCTCTTTGAAGACGGAGCTGCCCCAGCTGTGGCTGGGGGTGTGGAGGCAGTGGGATGAACTGGGG
GACAGGTCTGCGCTGCAGTGGGATCTGGCTGCTCTGCCTCCTTTCCCACCCCAGCTGACCATGAGACTTTGCTGA
GAAGTGGAGGCCCCAGGACAGGCTGGCTGGCTGGCTGGCTGCTTGACCCAGTGTGACTCTCCTTCACTGAGTGAT
ACCCTGCTCCGGGCCCATGCCCCAAGGAGCCCTTCAGAGCCCACACTGCCAGTCGAGGCCTGGCTGGAGGCTGGC
CACAGTGGAAATTCTGCCGAGCCTCTTGTCCCTTCCCTGCTCTGCTGCATGGGGCCCCATGGCTTTGGCTGGCCA
CTGAGGGTAGGGTGTGGAGGTGTGGAGGCCCCCTGAGGAGCTGCGGCGGCCCAGGTACGAAGCTGCAACTCTGCG
CGCAGTGGGCGAGATCTCATCAGCCCCAGGCTGCAGGTGAGGCTTCAGGGGATGCTGGGGCCCCACTGCCCCTCC
GCTGCCTTGCCCTCCATCCTTCCTCTGTTCCTTCTGGCCGGGCACCACAGCACTGGGGCTCACCTCTTGGTTGAT
CCTCTTGTACTGGGAGAGGTGCCTTTTGTATCCCCAATTAAAGGTAGAAAACCACCCTGCT

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FIGURE 3988

TCAACGCCTGCCTCCTCTCGAGCGTCCTCAGCGCAGCCGCCGCCCGCGGAGCCAGCACGAACGAGCCCAGCACCG
GCCGGATGGAGCGTCCGCAACCCGACAGCATGCCCCAGGATTTGTCAGAGGCCCTGAAGGAGGCCACCAAGGAGG
TGCACACCCAGGCAGAGAATGCTGAGTTCATGAGGAACTTTCAGAAGGGCCAGGTGACCCGAGACGGCTTCAAGC
TGGTGATGGCCTCCCTGTACCACATCTATGTGGCCCTGGAGGAGGAGATTGAGCGCAACAAGGAGAGCCCAGTCT
TCGCCCCTGTCTACTTCCCAGAAGAGCTGCACCGCAAGGCTGCCCTGGAGCAGGACCTGGCCTTCTGGTACGGGC
CCCGCTGGCAGGAGGTCATCCCCTACACACCAGCCATGCAGCGCTATGTGAAGCGGCTCCACGAGGTGGGGCGCA
CAGAGCCCGAGCTGCTGGTGGCCCACGCCTACACCCGCTACCTGGGTGACCTGTCTGGGGGCCAGGTGCTCAAAA
AGATTGCCCAGAAAGCCCTGGACCTGCCCAGCTCTGGCGAGGGCCTGGCCTTCTTCACCTTCCCCAACATTGCCA
GTGCCACCAAGTTCAAGCAGCTCTACCGCTCCCGCATGAACTCCCTGGAGATGACTCCCGCAGTCAGGCAGAGGG
TGATAGAAGAGGCCAAGACTGCGTTCCTGCTCAACATCCAGCTCTTTGAGGAGTTGCAGGAGCTGCTGACCCATG
ACACCAAGGACCAGAGCCCCTCACGGGCACCAGGGCTTCGCCAGCGGGCCAGCAACAAAGTGCAAGATTCTGCCC
CCGTGGAGACTCCCAGAGGGAAGCCCCCACTCAACACCCGCTCCCAGGCTCCGCTTCTCCGATGGGTCCTTACAC
TCAGCTTTCTGGTGGCGACAGTTGCTGTAGGGCTTTATGCCATGTGAATGCAGGCATGCTGGCTCCCAGGGCCAT
GAACTTTGTCCGGTGGAAGGCCTTCTTTCTAGAGAGGGAATTCTCTTGGCTGGCTTCCTTACCGTGGGCACTGAA
GGCTTTCAGGGCCTCCAGCCCTCTCACTGTGTCCCTCTCTCTGGAAAGGAGGAAGGAGCCTATGGCATCTTCCCC
AACGAAAAGCACATCCAGGCAATGGCCTAAACTTCAGAGGGGGCGAAGGGATCAGCCCTGCCCTTCAGCATCCTC
AGTTCCTGCAGCAGAGCCTGGAAGACACCCTAATGTGGCAGCTGTCTCAAACCTCCAAAAGCCCTGAGTTTCAAG
TATCCTTGTTGACACGGCCATGACCACTTTCCCCGTGGGCCATGGCAATTTTTACACAAACCTGAAAAGATGTTG
TGTCTTGTGTTTTTGTCTTATTTTTGTTGGAGCCACTCTGTTCCTGGCTCAGCCTCAAATGCAGTATTTTTGTTG
TGTTCTGTTGTTTTTATAGCAGGGTTGGGGTGGTTTTTGAGCCATGCGTGGGTGGGGAGGGAGGTGTTTAACGGC
ACTGTGGCCTTGGTCTAACTTTTGTGTGAAATAATAAACAACATTGTCTG

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FIGURE 3989

TTTTCCCGCGAAACTCGGCGGCTGAGCGTGGAGGTTCTTGTCTCCCCTGGTTTGTGAAGTGCGGAAAACCAGAGG
CGCAGTCATGTCGGGATTCGACGATCCTGGCATTTTCTACAGCGACAGCTTCGGGGGCGACGCCCAGGCCGACGA
GGGGCAGGCCCGCAAATCGCAGCTGCAGAGGCGCTTCAAGGAGTTCCTGCGGCAGTACCGAGTGGGCACCGACCG
CACGGGCTTCACCTTCAAATACAGGGATGAACTCAAGCGGCATTACAACCTGGGGGAGTACTGGATTGAGGTGGA
GATGGAGGATCTGGCCAGCTTTGATGAGGACCTGGCCGACTACTTGTACAAGCAGCCAGCCGAGCACCTGCAGCT
GCTGGAGGAAGCTGCCAAGGAGGTAGCTGATGAGGTGACCCGGCCCCGGCCTTCTGGGGAGGAGGTGCTCCAGGA
CATCCAGGTCATGCTCAAGTCGGACGCCAGCCCTTCCAGCATTCGTAGCCTGAAGTCGGACATGATGTCACACCT
GGTGAAGATCCCTGGCATCATCATCGCGGCCTCTGCGGTCCGTGCCAAGGCCACCCGCATCTCTATCCAGTGCCG
CAGCTGCCGCAACACCCTCACCAACATTGCCATGCGCCCTGGCCTCGAGGGCTATGCCCTGCCCAGGAAGTGCAA
CACAGATCAGGCTGGGCGCCCCAAATGCCCATTGGACCCGTACTTCATCATGCCCGACAAATGCAAATGCGTGGA
CTTCCAGACCCTGAAGCTGCAGGAGCTGCCTGATGCAGTCCCCCACGGGGAGATGCCCAGACACATGCAGCTCTA
CTGCGACAGGTACCTGTGTGACAAGGTCGTCCCTGGGAACAGGGTTACCATCATGGGCATCTACTCCATCAAGAA
GTTTGGCCTGACTACCAGCAGGGGCCGTGACAGGGTGGGCGTGGGCATCCGAAGCTCCTACATCCGTGTCCTGGG
CATCCAGGTGGACACAGATGGCTCTGGCCGCAGCTTTGCTGGGGCCGTGAGCCCCCAGGAGGAGGAGGAGTTCCG
TCGCCTGGCTGCCCTCCCAAATGTCTATGAGGTCATCTCCAAGAGCATCGCCCCCTCCATCTTTGGGGGCACAGA
CATGAAGAAGGCCATTGCCTGCCTGCTCTTTGGGGGCTCCCGAAAGAGGCTCCCTGATGGACTTACTCGCCGAGG
AGACATCAACCTGCTGATGCTAGGGGACCCTGGGACAGCCAAGTCCCAGCTTCTGAAGTTTGTGGAGAAGTGTTC
TCCCATTGGGGTATACACGTCTGGGAAAGGCAGCAGCGCAGCTGGACTGACAGCCTCGGTGATGAGGGACCCTTC
GTCCCGGAATTTCATCATGGAGGGCGGAGCCATGGTCCTGGCCGATGGTGGGGTCGTCTGTATTGACGAGTTTGA
CAAGATGCGAGAAGATGACCGTGTGGCAATCCACGAAGCCATGGAGCAGCAGACCATCTCTATCGCCAAGGCTGG
GATCACCACCACCCTGAACTCCCGCTGCTCCGTCCTGGCTGCTGCCAACTCAGTGTTCGGCCGCTGGGATGAGAC
GAAGGGGGAGGACAACATTGACTTCATGCCCACCATCTTGTCGCGCTTCGACATGATCTTCATCGTCAAGGATGA
GCACAATGAGGAGAGGGATGTGATGCTGGCCAAGCATGTCATCACTCTGCACGTGAGCGCACTGACACAGACACA
GGCTGTGGAGGGCGAGATTGACCTGGCCAAGCTGAAGAAGTTTATTGCCTACTGCCGAGTGAAGTGTGGCCCCCG
GCTGTCAGCAGAGGCTGCAGAGAAACTGAAGAACCGCTACATCATCATGCGGAGCGGGGCCCGTCAGCACGAGAG
GGACAGTGACCGCCGCTCCAGCATCCCCATCACTGTGCGGCAGCTGGAGGCCATTGTGCGCATCGCGGAAGCCCT
CAGCAAGATGAAGCTGCAGCCCTTCGCCACAGAGGCAGATGTGGAGGAGGCCCTGCGGCTCTTCCAAGTGTCCAC
GTTGGATGCTGCCTTGTCCGGTACCCTGTCAGGGGTGGAGGGCTTCACCAGCCAGGAGGACCAGGAGATGCTGAG
CCGCATCGAGAAGCAGCTCAAGCGCCGCTTTGCCATTGGCTCCCAGGTGTCTGAGCACAGCATCATCAAGGACTT
CACCAAACAGAAATACCCGGAGCACGCCATCCACAAGGTGCTGCAGCTCATGCTGCGGCGCGGCGAGATCCAGCA
TCGCATGCAGCGCAAGGTTCTCTACCGCCTCAAGTGAGTCGCGCCGCCTCACTGGACTCATGGACTCGCCCACGC
CTCGCCCCTCCTGCCGCTGCCTGCCATTGACAATGTTGCTGGGACCTCTGCCTCCCCACTGCAGCCCTCGAACTT
CCCAGGCACCCTCCTTTCTGCCCCAGAGGAAGGAGCTGTAGTGTCCTGCTGCCTCTGGGCGCCCGCCTCTAGCGC
GGTTCTGGGAAGTGTGCTTTTGGCATCCGTTAATAATAAAGCCACGGTGTGTTCAGGT

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FIGURE 3990

GGAGCCCATGATTTCCTGGAAGAGCCCTAGAGCTTTGCTTTTTCTCTCCTGCAGCACTTAACCGAAACCAGTTTT
GCAATCAATTCCTGTTCAAAGGCCACCCTACTCTTCCTATCCGTCTTTCTCCAGCCCAGACACTCACAGCCCCCT
GCCAGACCAGGGGACCTCGGAGAGGCAAGGACAGAGGTTCAGGATCTTCCTCTCCCTCGGGACCCAAGGCCACAA
AGGAGAGCTCCGTGGAGAGAAGAAAATCATTTGACTCCTGGGGACACAGATTTGCTGCCACAGAGGCTG**ATG**GAC
AACCAGGCGGAGAGAGAAAGTGAGGCTGGTGTTGGTTTGCAAAGGGATGAGGATGACGCTCCTCTGTGTGAAGAC
GTGGAGCTACAAGACGGAGATCTGTCCCCCGAAGAAAAAATATTTTTGAGAGAATTTCCCAGATTGAAAGAAGAT
CTGAAAGGGAACATTGACAAGCTCCGTGCCCTCGCAGACGATATTGACAAAACCCACAAGAAATTCACCAAGGCT
AACATGGTGGCCACCTCTACTGCTGTCATCTCTGGAGTGATGAGCCTCCTGGGTTTAGCCCTTGCCCCAGCAACA
GGAGGAGGAAGCCTGCTGCTCTCCACCGCTGGTCAAGGTTTGGCAACAGCAGCTGGGGTCACCAGCATCGTGAGT
GGTACGTTGGAACGCTCCAAAAATAAAGAAGCCCAAGCACGGGCGGAAGACATACTGCCCACCTACGACCAAGAG
GACAGGGAGGATGAGGAAGAGAAGGCAGACTATGTCACAGCTGCTGGAAAGATTATCTATAATCTTAGAAACACC
TTGAAGTATGCCAAGAAAAACGTCCGTGCATTTTGGAAACTCAGAGCCAACCCACGCTTGGCCAATGCTACCAAG
CGTCTTCTGACCACTGGCCAAGTCTCCTCCCGGAGCCGCGTGCAGGTGCAAAAGGCCTTTGCGGGAACAACACTG
GCGATGACCAAAAATGCTCGCGTGCTGGGAGGTGTGATGTCCGCCTTCTCCCTTGGCTATGACTTGGCCACTCTC
TCAAAGGAATGGAAGCACCTGAAGGAAGGAGCAAGGACAAAGTTTGCGGAAGAGTTGAGAGCCAAGGCCTTGGAG
CTGGAGAGGAAACTCACAGAACTCACCCAGCTCTACAAGAGCTTGCAGCAGAAAGTGAGGTCAAGGGCCAGAGGG
GTGGGGAAGGATTTAACTGGGACCTGCGAAACCGAGGCTTACTGGAAGGAGTTAAGGGAGCATGTGTGGATGTGG
CTGTGGCTGTGTGTGTGTCTGTGTGTCTGTGTGTATGTACAGTTTACA**TGA**ATGTTCCTCAGGACATGGCATACA
ATGGCCTTGGAGGTCCAAATAATATCAAGTACATCTTGGAGATGAGGGTGCCTGTCCTGGACAGACCTCGGCATG
CCTTCTGTTTCTCCTTCAATGCTCCTTAAGGCCTATGTGCTGGGAAAAGGGTCTTCCCTGTTTGTTTGTTTGTTT
GTTTGTTTGTTTGTTTTGAGACTCCAGTCTGGGTGTCAGAATGAGACCCCATCTCAAAAAAAAAAAAAAAAAAAA
AAAAGAAGAAGAATACAGTCATGTATCTCTTGGTGACAGGGACGCATTCTGATAAATGTGTCATTAGGCAATTGC
ATTGTAGTGTGATTATCACAGATTGTACTTATACAAAACTTAGATGGCATAGCCTACTGCATACCTAGGCTATAT
GGGAGAGCCTATTGCTCCCAGGCTACGCACCTGTACAGCATGTGACTACTGAATACTATAGGCAATTGCAGCACA
ATGGGAAATATTTGTGTATCTAAACATATGTAAACAGAGAAAAAGGAAAGTAAAAATATGGCATAAAAGATAAGA
ATTGGCTCTCCTGTACAGGGCACTTACTACGAATGGAGCTTGCAGGGCTGAGAGTTGCTCCAGATGAGTCAGTGA
GTGGTGAATGAATGTGAAGGCCTAGGGCATTACTGTATACTACTGTAGGCTTTATAAACACAGCACACTTAGGGT
ACACAAAATGCATATTAAAACATTTTCTTCCTTCAGTATATTAGGCAATAGGAATTTTTCAAGTCCACTATAAAT
CTTATCAAACCATGGTTGTATATGCAGTTGACCGAAACATTGTTATTGGACACATAACTATAGTTGAAAGAATAA
GCAAAAAGTCTATCTAGGTGTGCTGTCTTGAGCAACTTTTAATTATTCTCCTGTCCTGCAATATGAGTTAATCTT
CTCTGATCGATGTAGATTCCAGGAAGGGGTGTCCAGGACAATTACCTTCCTTCTGGAGAAACTTCCCTTAATCAA
ATAAGAGAACTTCAAAGAAAATCCCTCCCTGTGCTTTGGAAGGGAAGGGAGGTGGGCAGCAGTGGGTCAGAGATA
GACCTTTGTTCTCTTATTTCTGAGGCCCTTCAGTCTCCTTTATTCAAAGCACTCAGCATGCCAAAGCACCCTATT
TTAGGGTATCTTTTTCTGAGCCCTAAACACTGTGTTGGGGATGTCAACTGTGACAGGAAAATATCTTGGGGCCCC
AGAATCACTAAGGAAAACTCAAGCTTAGGGAAACTTCTTAGGGCAAACCCACCTCCCACTCTATTCAAAGTTATC
TCTCTGCTCACTGAGATAGATACATATCTGATTGCCTCCTTTGGAAAGGCTAATCAGAAACTCAAAAGAATGCAA
CTGTTTGTGTCTCACCTATCTGTGACCTGGAAGCTCCCTCCCCACTGAACCAATGTTCTTCTTACATATATTGAT
TAATGTCTTATGTCTCCCTAAAATGTATAAAACCAAGGTATGCCCCAACCATCTTGGCCACATGTCATCAGGACT
TCCTGAGTCTGTGTCACAGTGTGTCCTCAACCTTGGCAAAATAAACTTTCTAAATTAACTGAGAC

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FIGURE 3991

GGGCAGGGAGGATTTTGCTTTTGCTTTTGCTTTGAGGGAGAACTTTAGCTGACTAAAAAAACAGAAGTTTGGGGT
CATGATCACAAAGGGGCCATTCCCAAAAGATGGCAAGCCACGTATTCAGTGGAGACTAGGCCAAATTCTAAATGG
TTTTATCCATAGCAGGGGAGAATAGGAGAATGAGTTTAAGAGTTTTTCTCTTCTTTTTTCCTAGAAAGAGGTAAG
GATAATGGGAAAGGTAGAGAAGGCGGCTCCCACAGACCTTTTAAGAGAGGCAGAATCTTGAGCTTGAGGCACCTT
GAGTGCATCTCAGTTCAGCTGGTTCTGGCTGAGGCCTCCAAAGGCAAGCTCTGTGCTTTCCAGTGGTTTCTGCTG
CATTTCCAGGGATGGTGTTTAACACCGCTTCCTCCAGCTCCCTTTTCTAAGAAAGAATAAATGGAGTTCTGCTTT
TTATGAAAGGGTCTTTGGTTTTCAGTGTCAACACTGAGAATTGGGGCTCTTGCAAGCATCTGGATTTCACAGTAT
CAACCTCCCCGTCACCTTTTGAACTTTGAGACTCCGTACGGTCAACTTCACCAGAGGCAGGTTGCTCGAAGCAGC
ACTGCTTGTCTGTTCCTGACTCTGGTTCTCACTGTATTAAAAAAGAGAGTCAGAGGAGTCTGGCATTTCGTGAGT
TTGTTAGAGGATGCTGGCTGATAATTCCAGAAAACTTACTGATGCTAAATCACAGTACATGCATGATTCTTTTTC
AGCTTTACTATAGTTCATGACCTGGACTTTCTGTACTCTTGGAAGCTGGGCTCCTTAAAGGAGGCCTCTAGTGAA
CACCTTTATCTCCATGTCCCTCTTAGAGCCCAGAGAGCTGCCCATAGGCATTTTCCAGAATTCCTCATGTCACCT
AGTTCAATTTCCATTAACTCAGATCAGCCATTGTGATTCACCATTTGTCAGGCTCTCAGGTTTAACAAAACCTAC
TATCACCATCATCCTTCAACAGCCACAGTCTGAATTGAGCCAACATTTTTTTTCTTTGAGAAAGAAGTGGACTG
GGGCACAACTTTTAGTCTGAGGGGAGCTAGTGGAAATCTAGACAATAGAAGTCATCGATAGCAGCTTTTCCTCAA
ATGTGTGACTCCTCAGGGGCTAAACTGCTCTTAGCTTAGAATTATGCTTTACTAGAGATCTAGCAGATAAGTGGG
TTAATCACTACCATCCTGTAACTAGTTATATAGCTTCCAGACATGAGGGAGACATCAAACAGGGATGGAAGCAAC
CCCAAGGATATGCAAGAAGGGCATGATGAACCCCCTTCCCTCTGGCAGGAGAACAAGGCCAACCAAGGGACAGAC
TGGAAAGCACTTAGATGTTTAAGGAGGAGAAAGGGGAAGCTTTGACCAGTCCTTGCCTTTTGCCAAGTTCAGCCA
GTTCTCCGCTGCTTGCAACCTCTAGCGCAGTAACATTTGCAGAATTGCAGATTTTCCCCCAGATACTAGGAGGAA
AGGGACTTTGGGGGGTGGGGAAGGGGTCGTGGTGTTTTAAAAGCATAAGTTACCTGTTTGCACTGTTTTAAGATA
GGAAAAAAAAAATAGTGGGCAAGGTGAACATCAGACGTAAATTTGTGTGTTTTTATTTTGTCATGCTCTTGAAAAT
GTTTGACCATTTGTAGTATACACAGTGAAACTTGATTCTCTGTTGCATAAAACACTATATTTTTTTGGAAATGTT
ACTGTCCAAAAGCCTCTTCCCTCCCTTTCCTTTTCCTATGTACTTCCTTCATACTTGCTTTACTGATCAGCCAGG
CAATAGCCATCCAAGAGCTAGAGCATGAAACAGGGCCCTTTCCAAGTAGGCTCTGGGTGTCCTAAGCCAGCGTGT
GCCCTCTGGTTTAGTGAGTGTAATAGAGTCCCTGGCACCTTTCTTTGCAAATGAGGCTAACAGACCAGACTGCAG
CAAGTTATCAGATTCCTCAATCAGATGCACTAGGAGTGAGGAGCCCAGGGATGGAGGGGGTTCCTGAAGTATTGC
AGTTGGCTGTAGTAGCTGAGTTCTTTTCCATGTTACCGAAACTGTAGCCAGTTACAGTTTACTCAGGAAAACGGT
AGATCAATTCAGCCATGGTAGTGCTGGTTGGCAGGGATTGGTAACGGAGAGAACTGCTCATCAGCCAAAACTCAA
GCCTTGCCTTTTAGGAGGCCACCAGCAGAGGGACTTGGTCCTCCTTGTCTGGTACTTGTGTACATGCCGGTGACC
TGAGGACTCCACTCACACTGGCGAGCAAAAAGGGAGCAGTGATTCTCTTTTCTCTCCCCACCCCCTGCCCTTTGT
TACCAACACCAGTTTCCCAGGGGGTACATGAGTTTCTGAATTTTTAAAAAATGTTTTTGGTTTGGTTTTTCTGGG
GACTGATAAGTGCTTTAAGCAATGTCCATACCCCGTCAAGACTCCCAGCTTAGTCATTTTCTTGTATTTTTCTGT
TCACAGTATTTGTGTGTGTGCTTGTTTTGGCAGCTCATTTTGGCTGTATTATATATTGAGTGATGAATTGATCCT
CTTTTTTCCCTAAGGGATATGAATTGTTTTTCTTGTGTTATATTCTGCTTGTGAATAGCTGGAGCAAACCTGGGG
CTGACACGCGTAAGCTAGGGCTGCAAAGCGAGAAGAGAGCCGGTGGAGTGTACTTGTCCCTGACAGGCTGACCTA
CCTGAGTCTCTGAGCTTTTCAGTCCAAATCTTTGCAAGGCTCAAA**ATG**CCACAGAACCTCTCCTCTTCTCCCCAC
TCCCCATGGCAGGGACCGGACCATCCCTACATGCAACATGCTGTTCCTCCAGCCCCTCCCATTGCCATGGCAAAA
CAGGTACCTTTGGGGCATGGGGGCATTACATGGGATGCTTGTGTAATCGACCACCTAGCCTTCTCTCTCCCCTCC
CGTCCTCCCCCAGAATCACTTCCTAGGACACCCGAGCTGCTTGCCCAGGGTCCTGTTTCCCTGCTAACTCCAGAG
AAGCATCCCAGGGCTTTG**TGA**CAGTCTCTAATTCCCTTCCCTTCTCGTTAAGAATCATATTGTATAGTAGCTTTC
AGACCATACAGTATTCATTGGGTTACTCCTATTATTATCAAGTAGCTGGAATTGTGAAGGTCGGAGTAGTTAGAT
CTTTAGCTTTTATTCCTTATTTTTTTGTATTACTCTCCATGTGTATAAATTATTGATCATGTTGCTGGCTTTTAT
AAACTCTAAGCGAAGGAGGAGCACTGCCTCAGCCTTTGCACATGGTAATGAAGCACTGTTTTTAAATAAAAGAGA
GAAACACC

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FIGURE 3992

GAAGAAACATTAGAAAGAAAAAGGAAGGAAAACGGTATAAAGAGAGATCAATTACCCACCCTTAAATAGCTAGAT
TGGGGGGGGAGGGGGGTGGAAAAGAAAGCTGTGGAGGTGTGCCCCAGCACGGCTGCTTTGAAAGGTTTATCATCT
ATCCGTTTGGTTTATGGAGAAAAAGAAAATGGTAACTCAGGGTAACCAGGAGCCGACAACAACTCCTGACGCAAT
GGTTCAGCCTTTTACTACCATCCCATTTCCACCACCTCCGCAGAATGGAATTCCCACAGAGTATGGGGTGCCACA
CACTCAAGACTATGCCGGCCAGACCGGTGAGCATAACCTGACACTCTACGGAAGTACGCAAGCCCACGGGGAGCA
GAGCAGCAACTCACCCAGCACACAAAATGGATCTCTTACGCAGACAGAAGGTGGAGCACAGACAGACGGCCAGCA
GTCACAGACACAAAGTAGTGAAAATTCAGAGAGTAAATCTACCCCGAAACGGCTGCATGTCTCTAATATTCCTTT
CCGCTTCCGGGACCCTGACCTCCGGCAGATGTTTGGGCAGTTTGGCAAAATCCTAGATGTAGAAATAATCTTTAA
TGAACGTGGCTCTAAGGGATTCGGGTTCGTAACTTTCGAGAATAGTGCTGATGCAGACAGGGCCAGGGAGAAATT
ACACGGCACCGTGGTAGAGGGCCGTAAAATCGAGGTGAATAATGCTACAGCACGTGTAATGACCAATAAGAAGAT
GGTCACACCATATGCAAATGGTTGGAAATTAAGCCCAGTAGTTGGAGCTGTATATGGTCCGGAGTTATATGCAGC
ATCCAGCTTTCAAGCAGATGTGTCCCTAGGCAATGATGCAGCAGTGCCCCTATCAGGAAGAGGGGGTATCAACAC
TTACATTCCTTTAATCATTCCTGGCTTCCCTTACCCTACTGCAGCCACCACGGCAGCCGCTTTCAGAGGAGCCCA
TTTGAGGGGCAGAGGGCGGACAGTATATGGTGCAGTCCGAGCGGTACCTCCAACAGCCATCCCCGCCTATCCAGG
GGTGGATATGCAGCCTACAGATATGCACAGCCTGCTACTGCAACCGCAGCCACCGCTGCTGCAGCCGCTGCAGCC
GCTTACAGTGACGGTTATGGCAGGGTGTACACAGCCGACCCCTACCATGCCCTTGCCCCTGCCGCTAGCTATGGA
GTTGGCGCTGTGGCGAGTTTATACCGAGGTGGCTACAGCCGATTTGCCCCCTACTGAAGTGACGTGAGACCCCTG
CAAATGGGACAGCCCCCCAGTTCATGAGGCCTGGCTATTGCAATATTTACTAGTAGAGGAACTCTATAGCAAGAT
GAAGAGGAAAAACAAACAAACAAACAAAAAAAAAACACAAAAAAAGAAAGAATACTTTTTTATACCTCACTATGTT
CTTTGAATATGTATTTTTCCTTTAAATTTCTGCCTTTAATTCTTTTGTTCCAAAGATTGTGCATTTTTTTCTTTT
TTTTTTTAAACTGTGGTAAAAAAAAAAAAAATAATGCATTTCCATGTCTGTATGTCCGTGCTTAGCTTATTCTAT
CAATCACGGAAGAGGCAGTCAAGGAGGAAGGAGAGACATTAGGAGCCGATAAATGCATCTGATCAGAAATCAGCA
GACAGAATTACCAAAGTGTATCTGGTGCTGAATGACTGGGGGACAAGCAGAAGTGGAAGAGATCTTTCTGCAACA
GGATATTCTTCTAGTCTTCTGAGTTTCTGGTCTTTGACAGGCAATTCTGGTTGGCTGTGGCTGGAATCCACATGC
TGATAGATAGGAATTTGTGCTTACAAAGCAGGAGAATTAAAAAGACGCTTTCCTCTCCTC

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FIGURE 3993

ATCAGACAGTAAAACAGGGGCAGAGCCTGGAATTGCACTGAGGCTTGAGTCTGACTTCTCTCCCCCACCTGCTGT
GCCCTTAAACTGCAGAGATCGGGGCGGGGGTTGGGGGGCAAGCGGCTCAGATGGGTTCAAAAAACTCCCCAGGCT
CAACTCTGGTTCTGACTGCCTGAGACATGGGCAGCTGACACAGCAGACCTTGAATCCTGAGGATGTGAGGCAGGG
TATATCTGGGAGGCCGGAGGACGTGTCTGGTTATTACACAGATGCACAGCTGGACGTGGGATCCACACAGCTCAG
AACAGTTGGATCTTGCTCAGTCTCTGTCAGAGGAAGATCCCTTGGACAAGAGGACCCTGCCTTGGTGTGAGAGTG
AGGGAAGAGGAAGCTGGAACGAGGGTTAAGGAAAACCTTCCAGTCTGGACAGTGACTGGAGAGCTCCAAGGAAAG
CCCCTCGGTAACCCAGCCGCTGGCACC**ATG**AACCCAGAGAGCAGTATCTTTATTGAGGATTACCTTAAGTATTTC
CAGGACCAAGTGAGCAGAGAGAATCTGCTACAACTGCTGACTGATGATGAAGCCTGGAATGGATTCGTGGCTGCT
GCTGAACTGCCCAGGGATGAGGCAGATGAGCTCCGTAAAGCTCTGAACAAGCTTGCAAGTCACATGGTCATGAAG
GACAAAAACCGCCACGATAAAGACCAGCAGCACAGGCAGTGGTTTTTGAAAGAGTTTCCTCGGTTGAAAAGGGAG
CTTGAGGATCACATAAGGAAGCTCCGTGCCCTTGCAGAGGAGGTTGAGCAGGTCCACAGAGGCACCACCATTGCC
AATGTGGTGTCCAACTCTGTTGGCACTACCTCTGGCATCCTGACCCTCCTCGGCCTGGGTCTGGCACCCTTCACA
GAAGGAATCAGTTTTGTGCTCTTGGACACTGGCATGGGTCTGGGAGCAGCAGCTGCTGTGGCTGGGATTACCTGC
AGTGTGGTAGAACTAGTAAACAAATTGCGGGCACGAGCCCAAGCCCGCAACTTGGACCAAAGCGGCACCAATGTA
GCAAAGGTGATGAAGGAGTTTGTGGGTGGGAACACACCCAATGTTCTTACCTTAGTTGACAATTGGTACCAAGTC
ACACAAGGGATTGGGAGGAACATCCGTGCCATCAGACGAGCCAGAGCCAACCCTCAGTTAGGAGCGTATGCCCCA
CCCCCGCATATCATTGGGCGAATCTCAGCTGAAGGCGGTGAACAGGTTGAGAGGGTTGTTGAAGGCCCCGCCCAG
GCAATGAGCAGAGGAACCATGATCGTGGGTGCAGCCACTGGAGGCATCTTGCTTCTGCTGGATGTGGTCAGCCTT
GCATATGAGTCAAAGCACTTGCTTGAGGGGGCAAAGTCAGAGTCAGCTGAGGAGCTGAAGAAGCGGGCTCAGGAG
CTGGAGGGGAAGCTCAACTTTCTCACCAAGATCCATGAGATGCTGCAGCCAGGCCAAGACCAA**TGA**CCCCAGAGC
AGTGCAGCCACCAGGGCAGAAATGCCGGGCACAGGCCAGGACAAAATGCAGACTTTTTTTTTTTTTTTTTTTT
TTTTGAGATGGAGTCTCGCTCTATCGCCCAGGATGGAGTGCAGTGGCTCAATCTCGGCTCACTGCAAACTCCGCC
TCCCGGGTTCACACCATTCTCCGGCCTCAGTCTCCCGAGTAGCTGGGACTACAGGCACCTGCCACCACGCCCGGC
TAATTTTTTTGTATTTTCACTGGAGACGGGGTTTCACTGTGTTAGCCACGATGGTCTCCATCTCCTGACCTCGTG
ATCTGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCGCCTGGCCAAAATGCAGACATT
TTATTAGGGGGATAAGGAGGGCAAGGTAAAGCTTATGGAACTGAGTGTTAGTGACTTTGGCATTTGTGTAGCTGA
GCACAGCAAGGGAGGGGTTAATGCAGATGGCAAGTGCACCAAGGAGAAGGCAGGAACACTGGAGCCTGCAATAAG
GGAGGAGAGAGGACTGGAGAGTGTGGGGAATGGGAAGAAGTAGTTTACTTTGGACTAAAGAATATATTGGGCGAA
GAATAGAGGGGGAGCTTGCAGGAACCAGCAATGAGAAGGCCAGGAAAAGAAAGAGCTGAAAATGGAGAAAACCAG
AGTTAGAACTGTTGGATACAGGAGAAGAAACAGCAGCTCCACTACCGACCCCCCCCCAGGTTTGATGTCCTTCCA
AGAATAAAGTCTTTCCCTGGTGATGGTCTCTCGCTCTGTCTTTCCAGCATCCACTCTCCCTTGTCCTTCTGGGGG
TGTATCACAGTCAGCCAGTGGCTTCTTCATGATGGTGGTTGGGGTGGTTGTCATGTGACGGGTCCCCTCCAGGTT
ACTAAAGGGTGCATGTCCCCTGCTTGAACCCTGAGAGGCAGGTGGTAGGCCATGGCCACAATCCCCAGCTGAGGA
GCAGGTGTCCCTGAGAACCCAAACTTCCCAGAGAGTATCTGAGAACCAACCAATGAAAACAGTCCCATCGCTCTT
AGCCGGTAAGTAAACAGTCAGAAGATTAGCATGAAAGCAGTTTAGCATTGGGAGGAAGCACAGATCTCTAGAGCT
GTCCTGTCGCTGCCCAGGATTGACCTGTGTGTAAGTCCCAATAAACTCACCTACTCACCA

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FIGURE 3994

ATGAGTGCACTTTTCCTTGGTGTGGGAGTGAGGGCAGAGGAAGCTGGAGCGAGGGTGCAACAAAACGTTCCAAGT
GGGACAGATACTGGAGATCCTCAAAGTAAGCCCCTCGGTGACTGGGCTGCTGGCACCATGGACCCAGAGAGCAGT
ATCTTTATTGAGGATGCCATTAAGTATTTCAAGGAAAAAGTGAGCACACAGAATCTGCTACTCCTGCTGACTGAT
AATGAGGCCTGGAACGGATTCGTGGCTGCTGCTGAACTGCCCAGGAATGAGGCAGATGAGCTCCGTAAAGCTCTG
GACAACCTTGCAAGACAAATGATCATGAAAGACAAAAACTGGCACGATAAAGGCCAGCAGTACAGAAACTGGTTT
CTGAAAGAGTTTCCTCGGTTGAAAAGTGAGCTTGAGGATAACATAAGAAGGCTCCGTGCCCTTGCAGATGGGGTT
CAGAAGGTCCACAAAGGCACCACCATCGCCAATGTGGTGTCTGGCTCTCTCAGCATTTCCTCTGGCATCCTGACC
CTCGTCGGCATGGGTCTGGCACCCTTCACAGAGGGAGGCAGCCTTGTACTCTTGGAACCTGGGATGGAGTTGGGA
ATCACAGCCGCTTTGACCGGGATTACCAGCAGTACCATGGACTACGGAAAGAAGTGGTGGACACAAGCCCAAGCC
CACGACCTGGTCATCAAAAGCCTTGACAAATTGAAGGAGGTGAGGGAGTTTTTGGGTGAGAACATATCCAACTTT
CTTTCCTTAGCTGGCAATACTTACCAACTCACACGAGGCATTGGGAAGGACATCCGTGCCCTCAGACGAGCCAGA
GCCAATCTTCAGTCAGTACCGCATGCCTCAGCCTCACGCCCCCGGGTCACTGAGCCAATCTCAGCTGAAAGCGGT
GAACAGGTGGAGAGGGTTAATGAACCCAGCATCCTGGAAATGAGCAGAGGAGTCAAGCTCACGGATGTGGCCCCT
GTAAGCTTCTTTCTTGTGCTGGATGTAGTCTACCTCGTGTACGAATCAAAGCACTTACATGAGGGGGCAAAGTCA
GAGACAGCTGAGGAGCTGAAGAAGGTGGCTCAGGAGCTGGAGGAGAAGCTAAACATTCTCAACAATAATTATAAG
ATTCTGCAGGCGGACCAAGAACTGTGA

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FIGURE 3995A

ATGGCACAGCAAGCTGCCGATAAGTATCTCTATGTGGATAAAAACTTCATCAACAATCCGCTGGCCCAGGCCGAC
TGGGCTGCCAAGAAGCTGGTATGGGTGCCTTCCGACAAGAGTGGCTTTGAGCCAGCCAGCCTCAAGGAGGAGGTG
GGCGAAGAGGCCATCGTGGAGCTGGTGGAGAATGGGAAGAAGGTGAAGGTGAACAAGGATGACATCCAGAAGATG
AACCCGCCCAAGTTCTCCAAGGTGGAGGACATGGCAGAGCTCACGTGCCTCAACGAAGCCTCGGTGCTGCACAAC
CTCAAGGAGCGTTACTACTCAGGGCTCATCTACACCTATTCAGGCCTGTTCTGTGTGGTCATCAATCCTTACAAG
AACCTGCCCATCTACTCTGAAGAGATTGTGGAAATGTACAAGGGCAAGAAGAGGCACGAGATGCCCCCTCACATC
TATGCCATCACAGACACCGCCTACAGGAGTATGATGCAAGACCGAGAAGATCAATCCATCTTGTGCACTGGTGAA
TCTGGAGCTGGCAAGACGGAGAACACCAAGAAGGTCATCCAGTATCTGGCGTACGTGGCGTCCTCGCACAAGAGC
AAGAAGGACCAGGGCGAGCTGGAGCGGCAGCTGCTGCAGGCCAACCCCATCCTGGAGGCCTTCGGGAACGCCAAG
ACCGTGAAGAATGACAACTCCTCCCGCTTCGGCAAATTCATTCGCATCAACTTTGATGTCAATGGCTACATTGTT
GGAGCCAACATTGAGACTTATCTTTTGGAGAAATCTCGTGCTATCCGCCAAGCCAAGGAAGAACGGACCTTCCAC
ATCTTCTATTATCTCCTGTCTGGGGCTGGAGAGCACCTGAAGACCGATCTCCTGTTGGAGCCGTACAACAAATAC
CGCTTCCTGTCCAATGGACACGTCACCATCCCCGGGCAGCAGGACAAGGACATGTTCCAGGAGACCATGGAGGCC
ATGAGGATTATGGGCATCCCAGAAGAGGAGCAAATGGGCCTGCTGCGGGTCATCTCAGGGGTTCTTCAGCTCGGC
AACATCGTCTTCAAGAAGGAGCGGAACACTGACCAGGCGTCCATGCCCGACAACACAGCTGCCCAAAAGGTGTCC
CATCTCTTGGGTATCAATGTGACCGATTTCACCAGAGGAATCCTCACCCCGCGCATCAAGGTGGGACGGGATTAC
GTCCAGAAGGCGCAGACTAAAGAGCAGGCTGACTTTGCCATCGAGGCCTTGGCCAAGGCGACCTATGAGCGGATG
TTCCGCTGGCTGGTGCTGCGCATCAACAAGGCTCTGGACAAGACCAAGAGGCAGGGCGCCTCCTTCATCGGGATC
CTGGACATTGCCGGCTTCGAGATCTTTGATCTGAACTCGTTTGAGCAGCTGTGCATCAATTACACCAATGAGAAG
CTGCAGCAGCTCTTCAACCACACCATGTTCATCCTGGAGCAGGAGGAGTACCAGCGCGAGGGCATCGAGTGGAAC
TTCATCGACTTTGGCCTCGACCTGCAGCCCTGCATCGACCTCATTGAGAAGCCAGCAGGCCCCCCGGGCATTCTG
GCCCTGCTGGACGAGGAGTGCTGGTTCCCCAAAGCCACCGACAAGAGCTTCGTGGAGAAGGTGATGCAGGAGCAG
GGCACCCACCCCAAGTTCCAGAAGCCCAAGCAGCTGAAGGACAAAGCTGATTTCTGCATTATCCACTATGCCGGC
AAGGTGGATTACAAAGCTGACGAGTGGCTGATGAAGAACATGGATCCCCTGAATGACAACATCGCCACACTGCTC
CACCAGTCCTCTGACAAGTTTGTCTCGGAGCTGTGGAAGGATGTGGACCGCATCATCGGCCTGGACCAGGTGGCC
GGCATGTCGGAGACCGCACTGCCCGGGGCCTTCAAGACGCGGAAGGGCATGTTCCGCACTGTGGGGCAGCTTTAC
AAGGAGCAGCTGGCCAAGCTGATGGCTACGCTGAGGAACACGAACCCCAACTTTGTCCGCTGCATCATCCCCAAC
CACGAGAAGAAGGCCGGCAAGCTGGACCCGCATCTCGTGCTGGACCAGCTGCGCTGCAACGGTGTTCTCGAGGGC
ATCCGTATCTGCCGCCAGGGCTTCCCCAACAGGGTGGTCTTCCAGGAGTTTCGGCAGAGATATGAGATCCTGACT
CCAAACTCCATTCCCAAGGGTTTCATGGACGGGAAGCAGGCGTGCGTGCTCATGATAAAAGCCCTGGAGCTCGAC
AGCAATCTGTACCGCATTGGCCAGAGCAAAGTCTTCTTCCGTGCCGGTGTGCTGGCCCACCTGGAGGAGGAGCGA
GACCTGAAGATCACCGACGTCATCATAGGGTTCCAGGCCTGCTGCAGGGGCTACCTGGCCAGGAAAGCATTTGCC
AAGCGGCAGCAGCAGCTTACCGCCATGAAGGTCCTCCAGCGGAACTGCGCTGCCTACCTGAAGCTGCGGAACTGG
CAGTGGTGGCGGCTCTTCACCAAGGTCAAGCCGCTGCTGCAGGTGAGCCGGCAGGAGGAGGAGATGATGGCCAAG
GAGGAGGAGCTGGTGAAGGTCAGAGAGAAGCAGCTGGCTGCGGAGAACAGGCTCACGGAGATGGAGACGCTGCAG
TCTCAGCTCATGGCAGAGAAATTGCAGCTGCAGGAGCAGCTCCAGGCAGAAACCGAGCTGTGTGCCGAGGCTGAG
GAGCTCCGGGCCCGCCTGACCGCCAAGAAGCAGGAATTAGAAGAGATCTGCCATGACCTAGAGGCCAGGGTGGAG
GAGGAGGAGGAGCGCTGCCAGCACCTGCAGGCGGAGAAGAAGAAGATGCAGCAGAACATCCAGGAGCTTGAGGAG
CAGCTGGAGGAGGAGGAGAGCGCCCGGCAGAAGCTGCAGCTGGAGAAGGTGACCACCGAGGCGAAGCTGAAAAAG
CTGGAGGAGGAGCAGATCATCCTGGAGGACCAGAACTGCAAGCTGGCCAAGGAAAAGAAACTGCTGGAAGACAGA
ATAGCTGAGTTCACCACCAACCTCACAGAAGAGGAGGAGAAATCTAAGAGCCTCGCCAAGCTCAAGAACAAGCAT
GAGGCAATGATCACTGACTTGGAAGAGCGCCTCCGCAGGGAGGAGAAGCAGCGACAGGAGCTGGAGAAGACCCGC
CGGAAGCTGGAGGGAGACTCCACAGACCTCAGCGACCAGATCGCCGAGCTCCAGGCCCAGATCGCGGAGCTCAAG
ATGCAGCTGGCCAAGAAAGAGGAGGAGCTCCAGGCCGCCCTGGCCAGAGTGGAAGAGGAAGCTGCCCAGAAGAAC
ATGGCCCTCAAGAAGATCCGGGAGCTGGAATCTCAGATCTCTGAACTCCAGGAAGACCTGGAGTCTGAGCGTGCT
TCCAGGAATAAAGCTGAGAAGCAGAAACGGGACCTTGGGGAAGAGCTAGAGGCTCTGAAAACAGAGTTGGAGGAC
ACGCTGGATTCCACAGCTGCCCAGCAGGAGCTCAGGTCAAAACGTGAGCAGGAGGTGAACATCCTGAAGAAGACC
CTGGAGGAGGAGGCCAAGACCCACGAGGCCCAGATCCAGGAGATGAGGCAGAAGCACTCACAGGCCGTGGAGGAG

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FIGURE 3995B

CTGGCGGAGCAGCTGGAGCAGACGAAGCGGGTGAAAGCAAACCTCGAGAAGGCAAAGCAGACTCTGGAGAACGAG
CGGGGGGAGCTGGCCAACGAGGTGAAGGTGCTGCTGCAGGGCAAAGGGGACTCGGAGCACAAGCGCAAGAAAGTG
GAGGCGCAGCTGCAGGAGCTGCAGGTCAAGTTCAACGAGGGAGAGCGCGTGCGCACAGAGCTGGCCGACAAGGTC
ACCAAGCTGCAGGTGGAGCTGGACAACGTGACCGGGCTTCTCAGCCAGTCCGACAGCAAGTCCAGCAAGCTCACC
AAGGACTTCTCCGCGCTGGAGTCCCAGCTGCAGGACACTCAGGAGCTGCTGCAGGAGGAGAACCGGCAGAAGCTG
AGCCTGAGCACCAAGCTCAAGCAGGTGGAGGACGAGAAGAATTCCTTCCGGGAGCAGCTGGAGGAGGAGGAGGAG
GCCAAGCACAACCTGGAGAAGCAGATCGCCACCCTCCATGCCCAGGTGGCCGACATGAAAAAGAAGATGGAGGAC
AGTGTGGGGTGCCTGGAAACTGCTGAGGAGGTGAAGAGGAAGCTCCAGAAGGACCTGGAGGGCCTGAGCCAGCGG
CACGAGGAGAAGGTGGCCGCCTACGACAAGCTGGAGAAGACCAAGACGCGGCTGCAGCAGGAGCTGGACGACCTG
CTGGTGGACCTGGACCACCAGCGCCAGAGCGCGTGCAACCTGGAGAAGAAGCAGAAGAAGTTTGACCAGCTCCTG
GCGGAGGAGAAGACCATCTCTGCCAAGTATGCAGAGGAGCGCGACCGGGCTGAGGCGGAGGCCCGAGAGAAGGAG
ACCAAGGCTCTGTCGCTGGCCCGGGCCCTGGAGGAAGCCATGGAGCAGAAGGCGGAGCTGGAGCGGCTCAACAAG
CAGTTCCGCACGGAGATGGAGGACCTTATGAGCTCCAAGGATGATGTGGGCAAGAGTGTCCACGAGCTGGAGAAG
TCCAAGCGGGCCCTAGAGCAGCAGGTGGAGGAGATGAAGACGCAGCTGGAAGAGCTGGAGGACGAGCTGCAGGCC
ACCGAAGATGCCAAGCTGCGGTTGGAGGTCAACCTGCAGGCCATGAAGGCCCAGTTCGAGCGGGACCTGCAGGGC
CGGGACGAGCAGAGCGAGGAGAAGAAGAAGCAGCTGGTCAGACAGGTGCGGGAGATGGAGGCAGAGCTGGAGGAC
GAGAGGAAGCAGCGCTCGATGGCAGTGGCCGCCCGGAAGAAGCTGGAGATGGACCTGAAGGACCTGGAGGCGCAC
ATCGACTCGGCCAACAAGAACCGGGACGAAGCCATCAAACAGCTGCGGAAGCTGCAGGCCCAGATGAAGGACTGC
ATGCGCGAGCTGGATGACACCCGCGCCTCTCGTGAGGAGATCCTGGCCCAGGCCAAAGAGAACGAGAAGAAGCTG
AAGAGCATGGAGGCCGAGATGATCCAGTTGCAGGAGGAACTGGCAGCCGCGGAGCGTGCCAAGCGCCAGGCCCAG
CAGGAGCGGGATGAGCTGGCTGACGAGATCGCCAACAGCAGCGGCAAAGGAGCCCTGGCGTTAGAGGAGAAGCGG
CGTCTGGAGGCCCGCATCGCCCAGCTGGAGGAGGAGCTGGAGGAGGAGCAGGGCAACACGGAGCTGATCAACGAC
CGGCTGAAGAAGGCCAACCTGCAGATCGACCAGATCAACACCGACCTGAACCTGGAGCGCAGCCACGCCCAGAAG
AACGAGAATGCTCGGCAGCAGCTGGAACGCCAGAACAAGGAGCTTAAGGTCAAGCTGCAGGAGATGGAGGGCACT
GTCAAGTCCAAGTACAAGGCCTCCATCACCGCCCTCGAGGCCAAGATTGCACAGCTGGAGGAGCAGCTGGACAAC
GAGACCAAGGAGCGCCAGGCAGCCTGCAAACAGGTGCGTCGGACCGAGAAGAAGCTGAAGGATGTGCTGCTGCAG
GTGGATGACGAGCGGAGGAACGCCGAGCAGTACAAGGACCAGGCCGACAAGGCATCTACCCGCCTGAAGCAGCTC
AAGCGGCAGCTGGAGGAGGCCGAAGAGGAGGCCCAGCGGGCCAACGCCTCCCGCCGGAAACTGCAGCGCGAGCTG
GAGGACGCCACTGAGACGGCCGATGCCATGAACCGCGAAGTCAGCTCCCTAAAGAACAAGCTCAGGCGCGGGGAC
CTGCCGTTTGTCGTGCCCCGCCGAATGGCCCGGAAAGGCGCCGGGGATGGCTCCGACGAAGAGGTAGATGGCAAA
GCGGATGGGGCTGAGGCCAAACCTGCCGAA**TAA**

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FIGURE 3996

ATGGCTCAGCGACTTCTTCTGAGGAGGTTCCTGGCCTCTGTCATCTCCAGGAAGCCCTCTCAGGGTCAGTGGCCA
CCCCTCACTTCCAGAGCCCTGCAGACCCCACAATGCAGTCCTGGTGGCCTGACTGTAACACCCAACCCAGCCCGG
ACAATATACACCACGAGGATCTCCTTGACAACCTTTAATATCCAGGATGGACCTGACTTTCAAGACCGAGTGGTC
AACAGTGAGACACCAGTGGTTGTGGATTTCCACGCACAGTGGTGTGGACCCTGCAAGATCCTGGGGCCGAGGTTA
GAGAAGATGGTGGCCAAGCAGCACGGGAAGGTGGTGATGGCCAAGGTGGATATTGATGACCACACAGACCTCGCC
ATTGAGTATGAGGTGTCAGCGGTGCCCACTGTGCTGGCCATGAAGAATGGGGACGTGGTGGACAAGTTTGTGGGC
ATCAAGGATGAGGATCAGTTGGAGGCCTTCCTGAAGAAGCTGATTGGCTGACAAGCAGGGATGAGTCCTGGTTCC
CTTGCCCGCGTGGGACCCCAATAGAACTCAGCCCTTCCATGCCAGCCCTTCCTGCTGCCTCCCTCCTGTCTGGCT
CCTGGGGCCCATGCTTAGAGCCCAGGCTCCAGCCCTGAGTGCTTCCGAGCTGGCGGACTGCCCAGGGGCCATCAG
AGGATGGTGGTGCTGCTGCTGATCCGGGGACCGCTGTCTTCCCTCCCATACGCCTTTCATCCCTCCTTCTAGGGC
CTATGG

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FIGURE 3997

CCGGAGCGGCTGGGAGGATGGGCCTCTCCGCTGCGGCCCCGTTGTGGGGTCCCCCGGGGCTGCTCCTGGCCATCG
CCCTGCACCCAGCGCTGTCGGTGCCCCCGCGCCGGGACTACTGCGTGCTGGGCGCTGGGCCCGCGGGCCTGCAGA
TGGCCTACTTCCTGCAGCGCGCTGGACGCGACTACGCAGTGTTCGAGCGGGCCCCGCGGCCCGGCAGCTTCTTCA
CACGCTACCCGCGGCACCGCAAGCTCATCAGCATCAACAAGCGGTACACGGGCAAGGCTAACGCCGAGTTCAACC
TCCGCCACGACTGGAACTCTCTGCTCAGCCACGACCCCCGGCTGCTCTTCAGACACTACTCGCGTGCCTACTTCC
CCGACGCCCGCGACATGGTGCGCTACCTGGGTGACTTCGCGGACACGCTGGGGCTCCGTGTCCAGTACAACACCA
CCATCGCCCACGTCACTCTGGACAAGGACCGACAGGCCTGGAATGGCCACTACTTCATCCTAACTGACCAGAAGG
GCCAGGTGCATCAGTGCAGCGTCCTCTTTGTAGCCACTGGTTTATCAGTCCCCAACCAGGTTGACTTCCCTGGCT
CCGAATATGCAGAGGGTTACGAGTCCGTGTCCGTGGACCCTGAGGACTTTGTAGGCCAGAATGTGCTGATCCTGG
GTCGTGGGAACTCGGCCTTTGAGACAGCAGAGAACATCTTGGGTGTCACAAACTTTATCCATATGCTCAGCCGCT
CCCGGGTCCGTCTGTCCTGGGCCACCCACTACGTTGGAGACCTCAGAGCCATCAACAATGGCCTGCTGGATACCT
ACCAGCTCAAGTCCCTGGACGGGCTGCTCGAGTCTGACCTGACGGATCTGGCCATCCTGAAGGACAGCAAAGGCA
AGTTCCATGTCACCCCGAAATTCTTCCTGGAAGAAGCCAACACCAACCAGAGTGCCGACTCCATCACCCTCCCCC
AGGACGACAATGACAACTTTGCCATGCGCGTGCCCTATGACCGGGTAATCCGCTGCCTGGGCTGGAACTTTGACT
TCTCCATTTTCAATAAGTCCCTCAGACTTAACTCGGGAAATGCATTCGGCAAGAAGTACCCGCTGATTCGAGCTA
GCTACGAATCCAAAGGAAGCCGGGGTCTGTTTATCCTGGGTACTGCCAGCCACTCGGTGGACTACCGGAAATCTG
CTGGGGGCTTCATCCACGGATTCCGATACACAGTGCGTGCTGTTCACCGGCTCCTGGAGCACCGCCACCACAGCG
TCACCTGGCCCGCCACTGAGCTCCCCATCACACAGCTGACCAGCTCCATCGTGCGGCGCGTGAATGAGGCTTCTG
GGCTCTACCAGATGTTCGGTGTGCTGGCCGATGTCATCCTGTTGAAGGAGAATTCCACGGCCTTTGAGTACCTGG
AGGAGTTCCCCATACAGATGCTGGCCCAGCTGGAGACACTCACAGGGAGGAAGGCAAAGCACGGGCTCTTCGTCA
TCAACATGGAATATGGCAGAAATTTCTCTGGCCCCGACAAGGACGTCTTCTTTGATGACCGGTCTGTGGGGCACA
CAGAAGATGCCTGGCAGTCTAACTTTCTTCATCCTGTCATCTACTACTATAGATACCTCCCCACCGAACAGGAGG
TGAGGTTCCGCCCTGCACACTGGCCCCTGCCTCGGCCCACGGCCATCCATCACATCGTGGAAGACTTCTTAACAG
ACTGGACTGCCCCGATCGGGCACATCCTACCTCTGAGGCGCTTCCTGGAGAACTGTTTGGACACCGATTTGCGAA
GCTTCTATGCAGAGTCCTGCTTCCTGTTCGCCCTCACGCGCCAGAAGTTGCCACCCTTTTGCCAGCAGGGGTACC
TGAGGATGCAGGGACTCGTGAGTACCGAGAGCCTTTGGCAGCACAGAGTGGAGAGCAGGCTCCTGCGGGACTATG
CCCCCACAGGCAGGCGCCTGGAGGACAGCAGCCAGCAGCTTGGCGACCAAGAGCCACTAGGTTCCCCCCTGGCTC
CAGGGCCTCTGGCTCAGTCCGTCGATAGCAACAAAGAGGAGCTCTGACTGTCCCTTCCTAAGCTGTGGGCACAGT
GGCCAGGCCTCCCCACCTAGGCCCATGGTCAGTCCCTCTTTCCCCGCAACCTCACACTCCCGCCAATGCGTGATT
GCCAAAGACCACTCAGATCATGGCAGTGTCTGCAGCAAAGCCACCAGATGGCACGTGAGGGCTGAAAGTCGGGGA
TGCGGTGGTCTCCTCCCTCCTGTCAGGGGGCAGAAGGGCATCCTCTGCCAGGTGGGAGCTGCCTTCCCCAGCCCA
GTTTGTCTGCAATGGAGCTGTCGCTGAGCCCCAGGCCAGCCCAGTTCTGCCCCGTCTCAAGTGCTCCTCTTCCTT
CCAAGCCCCTCCTCAGATGGGCCTGCATCCCGCCTGTGGAGTGCTTCACAGGGGAAACCCATCCGCATCTTAAGA
GTTTGTGGCAAGCGCTTTAAAACAAAAGCTCTGATATCCTCAACAACCACAATGGGCAGGTGGGATTGTTGCCCC
AGATGACTGCTGAAGACACCAGCTGTGGGATGTCAAGTAATTCCAGGGACCCCCAGCTGGGAGTCCCCGTCTGTG
TCACTTGCCACACACTGCCTCAACCTCCCCGCCCCATTTTCAGCAGGGTTTGGGCTTAGCTACAGAGCCCAAGAG
GGTCAGCCCTGCTTATCATCATAGGCCCAGCAGGCTGATCTCGAGCAGCGATAGGACAGCTCCCTGCAAAGCCAT
CTTAGCAACTTTCTCACTGAGAAGCAGGATTCAGAGCTGCTCTCCCCAGTTGCACCCCCTGACTCATCTTCCAGC
TGGCTCTTCTCTCCCATCCTACTCCCTTCTGTCTCCCTGCCCTCTGCCATCCTGAACCATGCCTTGCTTCTAACC
TGCCTGGTCAAGTTTTGTGAAACTTATCCTGCTGTCTCGGGCTGGCACCCATATGTGCTCACCATGTGTAAGGTG
ACATTTCCAAATGCCTTTGTGTGATAATGATGATGAATTTGGTTCCTAGTCTCTTCTTCATTGCCCTTCCTCACC
AGCAATCTGCACTTTCCCATCAGGCGTCTTAGTCTCATTTGTAAGTGCATAAGATAATCACAGTGATTTTTCAAA
GCCCAGG

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FIGURE 3998

GCTAACGCGGTCCCCGGCACGCACCATCTGTTGCCATCCCGGCCGGCCGAGGCCATTGCAGATTTTGGAAGATGG
CAAAGTTCATGACACCCGTGATCCAGGACAACCCCTCAGGCTGGGGTCCCTGTGCGGTTCCCGAGCAGTTTCGGG
ATATGCCCTACCAGCCGTTCAGCAAAGGAGATCGGCTAGGAAAGGTTGCAGACTGGACAGGAGCCACATACCAAG
ATAAGAGGTACACAAATAAGTACTCCTCTCAGTTTGGTGGTGGAAGTCAATATGCTTATTTCCATGAGGAGGATG
AAAGTAGCTTCCAGCTGGTGGATACAGCGCGCACACAGAAGACGGCCTACCAGCGGAATCGAATGAGATTTGCCC
AGAGGAACCTCCGCAGAGACAAAGATCGTCGGAACATGTTGCAGTTCAACCTGCAGATCCTGCCTAAGAGTGCCA
AACAGAAAGAGAGAGAACGCATTCGACTGCAGAAAAAGTTCCAGAAACAATTTGGGGTTAGGCAGAAATGGGATC
AGAAATCACAGAAACCCCGAGACTCTTCAGTTGAAGTTCGTAGTGATTGGGAAGTGAAAGAGGAAATGGATTTTC
CTCAGTTGATGAAGATGCGCTACTTGGAAGTATCAGAGCCACAGGACATTGAGTGTTGTGGGGCCCTAGAATACT
ACGACAAAGCCTTTGACCGCATCACCACGAGGAGTGAGAAGCCACTGCGGAGCATCAAGCGCATCTTCCACACTG
TCACCACCACAGACGACCCTGTCATCCGCAAGCTGGCAAAAACTCAGGGGAATGTGTTTGCCACTGATGCCATCC
TGGCCACGCTGATGAGCTGTACCCGCTCAGTGTATTCCTGGGATATTGTCGTCCAGAGAGTTGGGTCCAAACTCT
TCTTTGACAAGAGAGACAACTCTGACTTTGACCTCCTGACAGTGAGTGAGACTGCCAATGAGCCCCCTCAAGATG
AAGGTAATTCCTTCAATTCACCCCGCAACCTGGCCATGGAGGCAACCTACATCAACCACAATTTCTCCCAGCAGT
GCTTGAGAATGGGGAAGGAAAGATACAACTTCCCCAACCCAAACCCGTTTGTGGAGGACGACATGGATAAGAATG
AAATCGCCTCTGTTGCGTACCGTTACCGCAGGTGGAAGCTTGGAGATGATATTGACCTTATTGTCCGTTGTGAGC
ACGATGGCGTCATGACTGGAGCCAACGGGGAAGTGTCCTTCATCAACATCAAGACACTCAATGAGTGGGATTCCA
GGCACTGTAATGGCGTTGACTGGCGTCAGAAGCTGGACTCTCAGCGAGGGGCTGTCATTGCCACGGAGCTGAAGA
ACAACAGCTACAAGTTGGCCCGGTGGACCTGCTGTGCTTTGCTGGCTGGATCTGAGTACCTCAAGCTTGGTTATG
TGTCTCGGTACCACGTGAAAGACTCCTCACGCCACGTCATCCTAGGCACCCAGCAGTTCAAGCCTAATGAGTTTG
CCAGCCAGATCAACCTGAGCGTGGAGAATGCCTGGGGCATTTTACGCTGCGTCATTGACATCTGCATGAAGCTGG
AGGAGGGCAAATACCTCATCCTCAAGGACCCCAACAAGCAGGTCATCCGTGTCTACAGCCTCCCTGATGGCACCT
TCAGCTCTGATGAAGATGAGGAGGAAGAGGAGGAGGAAGAAGAGGAAGAAGAAGAGGAAGAAACTTAAACCAGTG
ATGTGGAGCTGGAGTTTGTCCTTCCACCGAGACTACGAGGGCCTTTGATGCTTAGTGGAATGTGTGTCTAACTTG
CTCTCTGACATTTAGCAGATGAAATAAAATATATATCTGTTTAGTCTTT

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FIGURE 3999

ATCGGAGGAGAGCCGGATCGTCCTTCCTTGAACCCTCTGGGTAGGGCTGTGCTGAGGGGCTGGGCGGGGAGCACA
GGCCGTGTCCGCTCGCTTGCACCTTTTCAGACTGCCGTGTCAGGCCTCGAGCCGGGCCCACCTGGAGCCCTCCCC
TGCCCACCCGCCCCCAGCGCCCGATATCCGCCCCCGGCCCAGAAGGGCCGGGCTCGGTCATCCCCAGTCCCGTCG
CGGCCACTGACCCTTGAGATCAGCCCTCCCCTCCCCACCTTCCCGTCCCAGGCCAGCCCAGGGCCCGAAGCCCAC
CCACTCGCGTCTCTAGCAGCCGCTCTTGTCCTCTGGGTACGGCTCGCGGGAGTGTTGGTTACCATGGTGAAGCTG
GCAGCCAAATGCATCCTGGCAGACCCAGCAGTGGGCAAGACCGCCCTGGCACAGATCTTCCGCAGTGATGGAGCC
CATTTCCAGAAAAGCTACACCCTGACAACAGGAATGGATTTGGTGGTGAAGACAGTGCCAGTTCCTGACACGGGA
GACAGTGTGGAACTCTTCATTTTTGACTCTGCTGGCAAGGAGCTGTTTTCGGAAATGCTGGATAAATTGTGGGAG
AGTCCCAATGTCTTATGTCTCGTCTATGATGTGACCAATGAAGAATCCTTCAACAACTGCAGCAAGTGGCTGGAG
AAGGCTCGGTCACAGGCTCCAGGCATCTCTCTCCCAGGTGTTTTAGTTGGGAACAAGACAGACCTGGCCGGCAGA
CGAGCAGTGGACTCAGCTGAGGCCCGGGCATGGGCGCTGGGCCAGGGCCTGGAATGTTTTGAAACATCCGTGAAA
GAGATGGAAAACTTCGAAGCCCCTTTCCACTGCCTTGCCAAGCAGTTCCACCAGCTGTACCGGGAGAAGGTGGAG
GTTTTCCGGGCCCTGGCATGACGAGCTGGAGCAGATCGTGCTGCACAACCGGAGAAGACAGAATTACCTCTGCTC
TTTTAATATATAATGATGGCTTTAAATAAAATTAGGAGAAAATGTC

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FIGURE 4000

GGGGCGAGCGCCAGCGCGGCGTCCGGGGCGAGTGACACGCAGAGCTGAAGCCATGGTTCATCAGGTGCTCTACCG
GGCGCTGGTCTCCACCAAGTGGCTGGCGGAGTCCATCAGGACTGGCAAGCTGGGGCCCGGCCTGCGGGTGCTGGA
CGCGTCCTGGTACTCACCAGGCACCCGAGAGGCCCGCAAGGAGTACCTCGAGCGCCACGTACCCGGCGCCTCTTT
CTTTGACATAGAAGAGTGCCGGGACACGGCGTCGCCCTACGAGATGATGCTGCCCAGCGAGGCTGGCTTCGCCGA
GTATGTGGGCCGCCTGGGCATCAGCAACCACACGCACGTGGTGGTGTATGATGGTGAACACCTGGGCAGCTTCTA
TGCTCCCCGGGTCTGGTGGATGTTCCGTGTGTTTGGCCACCGCACCGTATCAGTGCTCAATGGTGGCTTCCGGAA
CTGGCTGAAGGAGGGCCACCCGGTGACATCCGAGCCCTCACGCCCAGAACCGGCCGTCTTCAAAGCCACACTGGA
CCGCTCCCTGCTCAAGACCTACGAGCAGGTGCTGGAGAACCTTGAATCTAAGAGGTTCCAGCTGGTGGATTCAAG
GTCTCAAGGGCGGTTCCTGGGCACCGAGCCGGAGCCGGATGCAGTAGGACTGGACTCGGGCCATATCCGTGGTGC
CGTCAACATGCCTTTCATGGACTTCCTGACTGAGGATGGCTTCGAGAAGGGCCCAGAAGAGCTCCGTGCTCTGTT
CCAGACCAAGAAGGTGGATCTCTCGCAGCCTCTCATTGCCACGTGCCGCAAGGGAGTCACCGCCTGCCACGTGGC
CTTGGCTGCCTACCTCTGCGGCAAGCCTGATGTGGCCGTGTACGATGGCTCCTGGTCCGAGTGGTTTCGCCGGGC
CCCCCCAGAGAGCCGTGTGTCCCAGGGAAAGTCTGAGAAGGCCTGAGCCGTGACCTCTTCTGCTTACTGTAACTG
CGGCCGGTTTAGTGACCCCATGACTTACAGCCGGTTCTTACCTCTTAGGTGAAGGAGATGACATGTTTTTAGAAT
TGCTGTGCAAGGCTCACCCTCTCTCTGTCAACACTGGAATAAACTTTGCCTTTTCTG

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FIGURE 4001

GGCGGGAGGAGGGGACAGCTGCGGGCGCGGGGAGGGGGCGCCGCGCCGCGGGGGCCATGGCGGAGCCAGGAAGCC
GGGAGTCCGAGACCCGGGCCCGCAGCCCGAGTGTCGCCGCCATGGCTTCGCCGCAGCTCTGCCGCGCGCTGGTGT
CGGCGCAATGGGTGGCGGAGGCGCTGCGGGCCCCGCGCGCTGGGCAGCCTCTGCAGCTGCTGGACGCCTCCTGGT
ACCTGCCGAAGCTGGGGCGCGACGCGCGACGCGAGTTCGAGGAGCGCCACATCCCGGGCGCCGCTTTCTTCGACA
TCGACCAGTGCAGCGACCGCACCTCGCCCTACGACCACATGCTGCCCGGGGCCGAGCATTTCGCGGAGTACGCAG
GCCGCCTGGGCGTGGGCGCGGCCACCCACGTCGTGATCTACGACGCCAGCGACCAGGGCCTCTACTCCGCCCCGC
GCGTCTGGTGGATGTTCCGCGCCTTCGGCCACCACGCCGTGTCACTGCTTGATGGCGGCCTCCGCCACTGGCTGC
GCCAGAACCTCCCGCTCAGCTCCGGCAAGAGCCAACCTGCTCCCGCCGAGTTCCGCGCTCAGCTCGACCCCGCCT
TCATCAAGACCTACGAGGACATCAAGGAGAACCTGGAATCCCGGCGCTTCCAGGTGGTGGACTCCCGAGCCACTG
GCAGGTTCCGCGGCACCGAGCCCGAGCCCCGAGACGGCATTGAACCTGGCCACATCCCAGGTACCGTGAACATCC
CCTTCACAGACTTCCTGAGCCAGGAGGGGCTGGAGAAGAGCCCTGAGGAGATCCGCCATCTGTTCCAGGAGAAGA
AAGTGGACCTGTCTAAGCCACTGGTGGCCACGTGTGGCTCTGGCGTCACAGCCTGCCACGTGGCACTAGGGGCCT
ACCTCTGCGGCAAGCCAGACGTGCCCATCTACGATGGCTCCTGGGTGGAGTGGTACATGCGCGCCCGGCCCGAGG
ATGTCATCTCAGAGGGCCGGGGGAAGACCCACTGAAGCTGGGCAGGACACAGGCGAGCTCAGGTGATGCCGGCCA
CCAGCAATGCCTGGCCTGGTAGCTCCGCTTCTGCTTTCACCAAGAGAGTGTTTCTTCACTCAACTCAGGTGGCAT
TTGGGGTGACATCTCAAAGGCCAGGAATTCCGTTGACTTGTTGGCTGCCAGTAGGGGCGGGAGGAAAGGCGGAGG
CGAGCCCTGGAGGAGGGAGGCCACAACTCCGAGCTGCCCACCTGGTGCTGAGCTGGGGCCCCGCCTCCTTTCTGT
TTTATTTTTGAGGAAATAAAATAACCAAGTGCTAAATCTTGT

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FIGURE 4002

TGGCTCACTGCAGCCTCAACCTCCTGGGCTCAGGTGACCCTCCCCGCTCAGCCTGACCTTGCCTTTAAAGGCCAC
TGCATGAGGTGGGGAAGGAGATTTGACTTCCACTTGCCTCGGTGACTTTGTCTGTTAAGCAGAACCATAATACTG
GCCCTTCCCCTCCTGTGCTTTGGGCAGTGACTCTCCCTAGCTCATTGGGAACCCTGGTTGCCCAAACAGCTCTCA
ATCCAACACTAGAGGTGTGGGGGGTCACTGTGGAATGTTGGGGGGCAGGCCCCAGTATGAGAGAAAAACCCAGAG
GGATGGTCCTGATCAGGGCTACCCATGCCCCTGAGGATGGTGGAATGAAGGCAGAGTCGGGGGCTGCATAAAGGA
AAGTCTCTTCCAGGGACCAAAGCTTGGAGAACTGAGGGTGGAAGGGGGATTAAACAGAAGTGGGTAGGGCAGAGC
CTTCTGCCTGTGGGCTGGATTTCCTCAGGCAAGAAGCCTGTGGGTAAGCTCTGTATAATGCGAGGAGGAGTCCCC
ACAAAGCAGGCTGGTCAGTGGTCACGCTAGTGTGAGTCTTTCAAACATCCCGTGTAAGTAGATACTGTCATTGCA
CAGAGGAGGAAATGGAACCTGGCCCAAGGTCTCAAGAAACAACCCAGCCGGGATTCAGACTCGGCAGCCTGCGCA
CTTAACAGCCGTGAGCAACCAGGAACTCCCCAGCCCTTTCTCTTGTGCCTTCAAGAGTGCAAGAAACTGACCACT
GCCCCTAGAGAGCTCTCTGAAGAGCATTCCCATGGCTACAGATTGGGTTTGGAGCCGCTTGGGCTCACCATGGGC
CAGCATTGTTTTGGATGGCCTGAGGGCAAGGACTGTCCCTGCTCTTCATGCATCCTGAAGATTAGCTCAGTACCT
GGCACAGAGTCGATGTTCCAGAGAGGTTTGGTGAATACAGAAGGTCCCTGTTGCATGGAATCCTGCAAAGCAATG
TTGGTGTTACCGGAACCATAGGAAACAGCTGATATCCAACCATTTTTGAACCTACACAGGTGTCAGTTTCATGTG
GTTCAGCCTAATGAGAGCACCACCTTAATCCTGTTGGGTTCTCCATCTCAGCCCCAGGGGAATGAGCAACACAGG
GGAGCTAGCTGGTGGTGCCAGACTGGGGTTCAGATCCCTGCCACATTTACATGGGCTTTGTGACACACGACGGGT
CATCTAATGTCTCTGAACTGCAGCTTCTGCCTATGTAGAATGGGAGCAGTAACACAGAGCATAAAGACATGATAG
GGGCAAGGAGAGCAAGTGTGTAAAGCACTCAGCTCCGGGTTTTCATGCACAAGTGTGCTGCACACTTGTGCCTGA
CACTTATTCAGTCGCACTAGCTCATCTATAGAATGGGAGGTGATACACGCCTAGCAGGCTTGTTGTCAAAACAAA
CTAAGCTCACTGCAGCTGGATCAGTGATGAATGTCACTGTCGTCATCATTCCCACTCCACAGCCTGAGGCCTGGC
CAAGTGCTCCTGTGATGTGCCACACCAGTCCAGCAGGCAGGGGAAACATGCTTTGCTTGGTGGGATTCAAGGTGT
AGGGATGGCCCTCCCTTTACAGTCACCACCCTGGGTTGAGAGTTTGTTCCTCCTCCTTGCTCTGGGCTGGTCTCT
ATGTGATATCTGACCAAGCCCGGTAACTGTGTCTGTTAGGTGGGATGC**ATG**ACCCATTCCAGCCTCTCCACAGAC
TCGGGAGTGCTGTCTCTATGCCAGGGTCTGAGAATAGATACCGATACATGGGTCAGCAGCTCCTGTGGGGGTGTC
ACTCCACTGCGGAGGGAAACCAAGGCAGAAGCTGGACAAGAGTCTGAATGGCTCAGATTTGAATCATTCGTTTTT
GGGGGGTTTTTTGTTTGTGTTTGTTTCTGTTGTTGTTGTTGTTATTGTTTTGAGACGGAGTTTTGCTCTTGTTTC
CCAGCTGGAGTACAGTGGCGCAATCTCGGCTCACCACAACCTCCGCCTCCCGGGTTCAAG**TGA**TTCTCCTGCCTT
AGCCTCCCGAGTAGCTGGGATTACAGGCATGTGCCACCACGCCCGGCTAATGTTTGTATTATTAGTAGAGACGGG
GTTTCTCCATGTTGGTCAGGCTGGTCTCGAACTCCCAACCTCAGGTAATCTGCCCCCCTCGGCCTCCCAAAGTGC
TGGGATTACAGGCGTGAGCCACCGTGCCCAGCCCAAGCGTTAGTTGTGAAGGTTTATTTTGTTGCAAATCCCAGT
CCTGCATGAAAATGGGAATGTTAGTAACCCCTGCCTCAAGGTGGGGCAGTGAAAACAAAAAACACCCTGGGAGTC
TGCAGAGGTGTGGGCCTTTCCCATCCCATTCTTTCTGCTACAATCAAAATGATCGTTTAAAAATGGAAATCTAGG
TTGGGCAAGGTAACTCCTACCTATAATCCTCACACTTTGGAAGGCTGAGGTGGGAGGATCCCTTGAGCCCAGGAG
TTCAAGACCATCCTGGACATGATGGCAAGCCCCTTCTCAAT

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FIGURE 4003

AGACTGCGGGCCTGCGGGGAAGGGCGAAGCGGGGCGGGACCGGGGGCGGGAGCAGCGCGGGGCGGGACCCTACCC
GCGGCCCACGCGGAGCCAGGAGGCGCGGACTACAGCTCCCGGCCTGCCCCGCGTGCGGTCCCCGCCCGCCCCCAG
CGCCCGGGAGGAGGATGCAGACGCCGCGGCCGGCGATGAGGATGGAGGCCGGGGAGGCAGCGCCGCCGGCGGGGG
CGGGCGGCCGCGCCGCAGGCGGCTGGGGCAAGTGGGTGCGGCTCAACGTGGGGGGCACGGTGTTCCTGACCACCC
GGCAGACGCTGTGCCGCGAGCAGAAGTCCTTCCTCAGCCGCCTGTGCCAGGGGGAAGAGCTGCAGTCGGACCGGG
ATGAGACCGGGGCCTACCTCATTGACCGTGACCCCACCTACTTCGGGCCCATCCTGAACTTCCTCCGGCATGGCA
AGCTGGTGCTGGACAAGGACATGGCTGAGGAGGGGGTCCTGGAGGAAGCCGAGTTCTACAACATCGGCCCGCTGA
TCCGCATCATCAAAGACCGGATGGAAGAGAAGGACTACACGGTCACCCAGGTCCCACCCAAGCACGTGTACCGCG
TGCTGCAGTGCCAGGAGGAGGAGCTCACGCAAATGGTCTCCACCATGTCTGATGGCTGGCGCTTCGAGCAGCTGG
TGAACATCGGCTCCTCCTACAACTACGGCAGCGAGGACCAGGCAGAGTTCCTGTGTGTGGTGTCCAAGGAGCTCC
ACAGCACCCCAAACGGGCTGAGCTCAGAGTCCAGCCGCAAAACCAAGAGCACGGAGGAGCAGCTGGAGGAGCAGC
AGCAGCAGGAGGAGGAGGTGGAGGAGGTGGAGGTGGAACAGGTGCAGGTGGAGGCAGATGCACAGGAGAAAGGTT
CCCGTCCGCACCCTCTCAGACCTGAGGCTGAGCTTGCAGTGAGGGCTTCTCCTCGGCCCCTCGCCCGCCCCCAGA
GCTGCCATCCCTGCTGTTACAAGCCAGAGGCACCCGGATGTGAGGCCCCAGATCACCTCCAGGGACTTGGGGTTC
CCATCTGAAATCCTTTATTTTTGTACCATGGGGTGGGCCCCGGGCCTGAGAAGGAAGAAGCACCCTCTCCCCGGC
CTCCTCTGTCTGCACCCGTGGGGCTGTGACTTACTCCTGCCTCCAGGGGCGGGGCGGGGCCCCCCTGGGACCTCT
TAAGGCCCAAGGTGGGCCCCAGGACCTCTGGGCAGAGTGGACTGCTCATGGCAGATGTGTGGCAATGTCTGGCTG
TGTCTCTCCGGCACCTGCGTCCCCTCTCCCGGGCTCCCCTGCTGCATGGTGGATGTGCTCCTTCCTGGCCCGGTC
ACATTGCCTCCTTGAGCCTTAGTCCAGGGGGTCACTCCTCCCACCCCACCTACCTCACAGGGTTGTTGTGAGGGT
GCACAGAGGAGCAAAGTCCCTGAAGGCCCTCAGGCAGTATATAGGGGCCGCCCACCTTCAGCTGCCCTGGGATGG
GAAGGACCCAGCCCGACCCCTGGGCATAACACTGTGTTTGCAAATGGAGATTCAGGTATTGGGGATGCAGGTTGT
GGGGAGCTGGCCTGGCAGAGTAGGGGTAGTTGGCTTGGCCTTCTCTTTGGTGATCCCACCCCCAGCCATTTGCAT
TGCTGGCCCAGCGCCTGGCCTGGGGGGCGGGGAGAGGCAGCAGAAGGGGCTGGGCAGGGGCGGTGGAGGACTCAG
GAACTGCCCGGGGAGAGTGGGTATGGCGGCTGAGCCAGGGGCCCTCCTGTGTTTGACTTCCCGGGATGGGTCCTT
GCTTCTCAGCTGTGTCCGACCCCACCATGTAATAAAACCCAAAGGAACAGCCCA

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FIGURE 4004

CCCTCCTCTGCTGGGCCTGGGGGTCTGGGCCAGCAACAAGTTAGTATTGCAGACATGGGCCAAGGAGCCAGAGGC
CATGCAGTGGCTCAGGGTCCGTGAGTCGCCTGGGGAGGCCACAGGACACAGGGTCACCATGGGGACAGCCGCCCT
GGGTCCCGTCTGGGCAGCGCTCCTGCTCTTTCTCCTGATGTGTGAGATCCCTATGGTGGAGCTCACCTTTGACAG
AGCTGTGGCCAGCGGCTGCCAACGGTGCTGTGACTCTGAGGACCCCCTGGATCCTGCCCATGTATCCTCAGCCTC
TTCCTCCGGCCGCCCCCACGCCCTGCCTGAGATCAGACCCTACATTAATATCACCATCCTGAAGGGTGACAAAGG
GGACCCAGGCCCAATGGGCCTGCCAGGGTACATGGGCAGGGAGGGTCCCCAAGGGGAGCCTGGCCCTCAGGGCAG
CAAGGGTGACAAGGGGGAGATGGGCAGCCCCGGCGCCCCGTGCCAGAAGCGCTTCTTCGCCTTCTCAGTGGGCCG
CAAGACGGCCCTGCACAGCGGCGAGGACTTCCAGACGCTGCTCTTCGAAAGGGTCTTTGTGAACCTTGATGGGTG
CTTTGACATGGCGACCGGCCAGTTTGCTGCTCCCCTGCGTGGCATCTACTTCTTCAGCCTCAATGTGCACAGCTG
GAATTACAAGGAGACGTACGTGCACATTATGCATAACCAGAAAGAGGCTGTCATCCTGTACGCGCAGCCCAGCGA
GCGCAGCATCATGCAGAGCCAGAGTGTGATGCTGGACCTGGCCTACGGGGACCGCGTCTGGGTGCGGCTCTTCAA
GCGCCAGCGCGAGAACGCCATCTACAGCAACGACTTCGACACCTACATCACCTTCAGCGGCCACCTCATCAAGGC
CGAGGACGACTGAGGGCCTCTGGGCCACCCTCCCGGCTGGAGAGCTCAGGTGCTGGTCCCGTCCCCTGCAGGGCT
CAGTTTGCACTGCTGTGAAGCAGGAAGGCCAGGGAGGTCCCCGGGGACCTGGCATTCTGGGGAGACCCTGCTTCT
ATCTTGGCTGCCATCATCCCTCCCAGCCTATTTCTGCTCCTCTCTTCTCTCTTGGACCTATTTTAAGAAGCTTGC
TAACCTAAATATTCTAGAACTTTCCCAGCCTCGTAGCCCAGCACTTCTCAAACTTGGAAATGCATGCGAATCACC
CGGGGTTCGTGTTAAATGCAGATTCTGACTCAGCAGGTCTGAGTGGGTCCAGGATTCTGTGTTTCTCATATGTTC
CTGGGTGATGCTGATGGGGTCAGTCTATGAACCACACTGGAGCAACCAGGTTCTAGGACTTTCTCAATATTCTAG
TACTTTCTGAACATTCTGGAATCCTCCCCACATTCTAGAATTCTCCCAACATTTTTTTTCTTGAGACAGAGTCT
TGCTCTGTTGCCCAGGCTAGAGTGCAGTGGTGCAATCTCAGTTCACTGCAACCTCTGCCTCCCGGGTTCAAGCGA
TTCTTCTGCCTCAGCCTCCCTAGTGGCTGGGATTACAGGCGCCTGCTACCATGCCTGGCTAATTTTTGTATTTTT
AGTAGAGATGGGGTTTCACCATATTGGCCAGGCTGGTCTTGAACTCCTGACTTCAGGTGACCCACCCGCCTCGGC
CTCTCAAAATGCTGGGATTACAGGTGTGAGCCACCGTGCCTGGCCAATTCCAACATTCTTAAATTCTCTCATCCC
TCCAGGGCTCCCCGTGCTATGTTCTCTTTACCCCTTCCCCCTCTTCTCTTGCTCAGGCCTGCACCACTGCAGCCA
CCGTTCATTTATTCATTCATTAAACACTGAGCACTCACTCTGTGCTGGGTCCCGGGAAGGGTGAGGGGGTCAGAC
ACAGGCCCTGCCCCTGCCCTCAGTGACTGGCCAGTCCAGCCCAGGCGGGGAGAGATGTGTACATAGGTTTTAAAG
CAGACCCAGAGCTCATGGGGGCCTGTGTTCTGGGTGTTCAGGTGCTGCTGGTCCTCCATTACCCACTGCTCCCCA
AGGCTGGTGGGACGGGGTCCCGGTGGCAGGGGCAGGTATCTCCTTCCCGTTCCTCATCCACCTGCCCAGTGCTCA
TCGTTACAGCAAACCCCAGGGGGCCTTGGCCAGGTCAAGGGTTCTGTGAGGAGAGGACCCAGGAGTGTGGGGGCA
TTTGGGGGGTGAAGTGGCCCCCGAAGAATGGAACCCACACCCATAGCTCTCCCCACAGCTGATACGGCATCCTGC
GAGAAGACCTGCCCTCCTCACTGGGATCCCCTTCCTGCCTCCTCCCAGGGCTCTGCCAGGGCCTTGCTCAGTCCC
TTCCACCAAAGTCATCTGAACTTCCGTTTCCCCAGGGCCTCCAGCTGCCCTCAGACACTGATGTCTGTCCCCAGG
TGCTCTCTGCCCCTCATGCCCCTCTCACCGGCCCAGTGCCCCGACTCTCCAGGCTTTATCAAGGTGCTAAGGCCC
GGGTGGGCAGCTCCTCGTCTCAGAGCCCTCCTCCGGCCTGGTGCTGCCTTTACAAACACCTGCAGGAGAAGGGCC
ACGGAAGCCCCAGGCTTTAGAGCCCTCAGCAGGTCTGGGGAGCTAGAGCAAAGGAGGGACCTCAGGCCTTCCGTT
TCTTCTTCCAGGGTGGGGTGGCCTGGTGTTCCCCTAGCCTTCCAAACCCAGGTGGCCTGCCCTTCTCCCCAGAGG
GAGGCGGCCTCCGCCCATTGGTGCTCATGCAGACTCTGGGGCTGAGGTGCCCCGGGGGGTGATCTCTGGTGCTCA
CAGCCGAGGAGCCGTGGCTCCATGGCCAGATGACGGAAACAGGGTCTGACCAAGTGCCAGGAAGACCTGTGCTAT
AAACCACCCTGCCTGATCCTGCCCCTGCCTGACCCCGCCACGCCCTGCCGTCCAGCATGATTAAAGAATGCTGTC
TCCTC

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FIGURE 4005

ATCCCCACCCAAAGCCTGATGGCACCCCGGCTGGCCATGCTGTCCCCTCCCTGTGGCGTTTCTTAGCAGATGGCT
GCAGAGCTTCGTTGATGGTCTTTTCTGTACTGGAGGCCTCCTGAGGCCAGGAACGTGCAAATTTGCAGGTGCTGC
ATCCCAAGCCCCTCATGCTCCTGCCTTCCTGAGGGCCAGAGGGGAGCCCCAGGACCCATTAAGCCACCCCCGTGT
TCCTGCCGTCAGTGCCAACTGCCGC**ATG**TGGAAGCATCTACCCGTTCACTCCAGTCCCACCCCACGCCTGACTCC
CCTCTGGAAACTGCAGGCCAGATGGTTGCTGCCACAACTTGTGTACCTTCAGGGATGGGGCTCTTACTCCCTCCT
GAGGCCAGCTGCTCTAATATCGATGGTCCTGCTTGCCAGAGAGTTCCTCTACCCAGCAAAAATGAGTGTCTCAGA
AGTGTGCTCCTCTGGCCTCAGTTCTCCTCTTTTGGAACAACATAAAACAAATTTAATTTTCTACGCCTCTGGGGA
TATCTGCTCAGCCAATGGAAAATCTGGGTTCAACCAGCCCCTGCCATTTCTTAAGACTTTCTGCTGCACTCACAG
GATCCTGAGCTGCACTTACCTG**TGA**GAGTCTTCAAACTTTTAAACCTTGCCAGTCAGGACTTTTGCTATTGCAAA
TAGAAAACCCAACTCAACCTGCTTAAGCAGAAAATAAATTTATTGATTCAAGTTTGGAG

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FIGURE 4006

CCATGGCTCAGCCTCTGGGTCCAGAGCCTCAGCTCCTACCTCTTCCCTCCTTGCCAGCCCCTGATGCCTGCCAGA
CTTTTGCCTCTGCTGGAGCCCCTGCCTGACCAGCTTCCCCTCCCTGTCTGGTTGGGATTTGGGGGCTGAGCTGTC
TGGGGTCCCAGGGCCAACCA**ATG**CAGTGCCGGCTCCCGCGGGGCCTGGCTGGAGCCCTCCTCACCCTCCTGTGCA
TGGGGCTCCTGTGTCTGCGGTACCACTTGAACCTGTCCCCGCAGCGGGTACAAGGGACCCCCGAGCTGAGCCAGC
CGAACCCGGGGCCCCCTAAGCTACAGCTACACGATGTCTTCATTGCAGTGAAGACGACCCGGGCTTTCCACCGCT
TGCGCCTGGAGCTGCTGCTTGACACGTGGGTTTCCAGGACCAGGGAACAGACATTTGTCTTCACCGACAGCCCAG
ACAAAGGCCTCCAGGAGAGACTGGGGTCCCACCTTGTGGTCACCAACTGCTCCGCGGAACACAGCCACCCAGCTC
TGTCCTGCAAGATGGCTGCTGAGTTCGACACCTTCTTGGCCAGTGGGCTTAGGTGGTTCTGCCATGTGGACGATG
ACAACTATGTGAACCCAAGGGCGCTGCTGCAGCTTCTGAGAGCCTTCCCGCTGGCCCGCGACGTCTATGTGGGAA
GGCCCAGCCTGAACCGGCCCATCCATGCCTCAGAGCCACAGCCCCACAACCGCACGAGGCTGGTACAGTTCTGGT
TTGCCACTGGGGGTGCTGGCTTCTGCATCAATCGCAAACTGGCTTTGAAGATGGCTCCGTGGGCCAGTGGCTCCC
GTTTCATGGACACATCTGCTCTCATCCGGCTGCCTGATGACTGCACCATGGGCTATATCATTGAGTGCAAGCTGG
GCGGCCGCCTGCAGCCCAGCCCCCTCTTTCACTCCCACCTGGAGACCCTGCAGCTGCTGAGGACTGCACAGCTCC
CAGAACAGGTCACCCTCAGCTACGGTGTCTTTGAGGGGAAACTCAACGTCATTAAGCTACAGGGCCCCTTCTCCC
CGGAGGAGGACCCCTCCAGATTTCGCTCCCTCCATTGTCTGCTCTATCCAGATACACCCTGGTGTCCCCAGCTGG
GTGCCCGA**TGA**ATCCTGAACTGCTGGGCAAAGGTTGGGCAGAGACTTCTGGGTGTGCCTTGGCTCCCAAGGTGGC
ACTGTGGGTCCCTGGCAAGTGTCTTGTGATAGGCAGTCCCTGGCAGGGCCTTCGGGTGGTTGGCAAGCCCAGGAT
CTGAGTGGCAATTGGCACTGAAGGCACCCCAGGCCCCTGGGAGGTGAGTTAGACAGCCCAGGGGACCAGGTGGAC
CAGGTGGTGGCCAGAGAGGCTCCAGGGGCTAGACTCCCTCAGGAGGCTGAATTGAAAAAGGGCAGGGGGCACTTG
AGCTGGGCTGGGGCTCAGGGGTCCTAACCCTTTAGGCAGTGACATGGCCTCTGGGTGGGGTCTGGCCGTTGGCCC
TGGCTAATGTCTCTCAGTCATTCCCCTGGGGCTCAAGCGCTGGGCCGCCCACTCCTGCCTCCCTCATCTGTGTCC
CGAGTTCCTGAAGGGACATGGGTGGAATGATGGCAGAATCCAGGGTCTGCAGCACCTGCTGTTGTTGCCAACCAG
TCTCCCAAAGCTCCTTGCTCCCCACCCCTTGCGAACAGGACCAGATTTTGTTTGGAGCCTCAGCATGCCGGGGCC
CAGATGATGGAGCATAACGGGTCCCAGCCAATTGTGATGATCCTTTTTGCTCATTTCCCAGCCTTTCTTGCTGTT
AGGGGCTACCATGGGACCAGCTCTGGCCAGAGGGAACTAAGCAAATCCAATAGAGATGTTTCTGGGGAAGGTTTT
GCAGCCCACTCCCCATCTTCCTGCTATAAATGTGGGTGTGATGGCTGGATCTGGGGCAGCCACCTTGCTACCATG
AAGGAAAGGCCAAGACAATCATCCACAGCTATTCCCTCCAGCATCTGGTTCTGTACAAAAATTAAATGCTTATTT
GTTTAAGTC

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FIGURE 4007A

CCCCGTGCGCCTCTTGCCCGCAGACCCTGAGGACACGGCCATGCCGGGCCGGGCGGAGGCGGGGGAGGCCGAGGA
GGAGGCCGGGGCCGGCTCGGGGTCTGAGGCGGAGGAGGACGCGCTGTGGGAGCGAATCGAGGGCGTCCGGCATCG
GCTGGCTCGCGCCCTGAACCCGGCCAAGCTCACGCCGTATCTGCGCCAGTGCCGGGTCATCGACGAGCAGGACGA
GGAGGAGGTGCTGAGCACCTACCGCTTCCCGTGCCGCGTCAACCGCACCGGGCGCCTGATGGACATCTTGCGCTG
CCGTGGCAAGAGGGGCTATGAGGCCTTCCTGGAAGCCCTGGAGTTCTACTACCCCGAACACTTCACGCTGCTCAC
GGGCCAGGAACCCGCCCAGCGCTGCTCCATGATCCTCGATGAGGAGGGGCCTGAGGGCCTGACCCAATTCTTGAT
GACAGAGGTGCGACGGCTGCGGGAAGCTCGCAAGAGCCAGCTGCAGCGGGAGCAGCAACTGCAGGCCCGGGGCCG
GGTGCTCGAGGAGGAGCGGGCAGGGCTGGAGCAGCGGCTGCGGGACCAGCAGCAGGCTCAGGAGCGCTGTCAACG
GCTGCGGGAGGACTGGGAGGCGGGCAGCCTGGAGCTGCTGCGGCTCAAGGATGAGAACTACATGATCGCCATGCG
CCTGGCACAGCTCAGTGAGGAGAAGAACTCGGCTGTACTTCGCAGCCGTGACCTGCAGCTGGCGGTGGATCAGCT
CAAGCTCAAAGTGAGTCGGCTGGAGGAAGAGTGTGCACTGCTTCGAAGGGCCAGGGGCCCGCCCCCTGGGGCAGA
GGAGAAGGAGAAGGAGAAGGAGAAGGAGAAGGAGCCAGACAATGTGGACCTTGTCTCTGAGCTGCGTGCTGAGAA
CCAGCGGCTGACGGCGTCACTGCGGGAGTTGCAGGAGGGCCTGCAGCAGGAGGCGAGCCGGCCGGGGGCCCCGGG
CTCCGAGCGCATCCTGCTGGACATCCTAGAGCATGACTGGCGGGAGGCGCAGGACAGCAGGCAGGAGCTGTGCCA
GAAGCTGCATGCCGTGCAGGGGGAGCTGCAGTGGGCCGAGGAGCTGCGCGACCAGTACCTGCAGGAGATGGAAGA
CCTGCGGCTCAAGCACCGCACGCTGCAGAAGGACTGTGACCTGTACAAGCACCGCATGGCCACTGTCCTGGCCCA
ACTGGAGGAGATTGAGAAGGAGCGAGACCAGGCCATCCAGAGCCGTGACCGGATCCAGTTGCAGTACTCACAGAG
CCTCATCGAGAAGGACCAGTACCGCAAGCAGGTGCGGGGCCTGGAGGCGGAGCGGGATGAGCTGCTGACAACGCT
CACCAGCCTGGAGGGCACCAAGGCTCTGCTGGAGGTTCAGCTGCAGCGGGCCCAGGGTGGCACCTGCCTCAAGGC
CTGTGCCTCCTCCCATTCCCTGTGCTCCAACCTCAGCAGCACTTGGAGCCTGAGCGAGTTCCCCTCCCCTCTGGG
AGGCCCAGAAGCAACTGGGGAGGCAGCTGTCATGGGGGGACCTGAGCCTCACAACTCGGAGGAAGCCACAGACAG
TGAAAAGGAGATCAATCGGCTCTCCATCCTGCCCTTCCCCCCCAGTGCCGGCTCCATCCTCCGCCGGCAGCGTGA
GGAAGACCCCGCACCCCCTAAGAGATCCTTCAGCAGCATGTCAGACATCACAGGGAGTGTGACACTTAAGCCCTG
GTCCCCTGGCCTCTCTTCGTCCTCATCCTCTGACAGCGTGTGGCCTTTGGGAAAGCCGGAAGGCCTCCTGGCTCG
GGGCTGTGGCCTGGACTTCCTCAACAGGTCTCTGGCTATTCGGGTGTCTGGCCGGAGCCCCCCAGGGGGCCCAGA
GCCGCAGGACAAGGGACCAGATGGACTGTCGTTTTATGGGGACAGATGGTCTGGGGCTGTGGTGCGCAGGGTGCT
GTCTGGGCCTGGGTCCGCCAGGATGGAACCAAGAGAGCAAAGGGTGGAAGCTGCTGGTCTGGAGGGGGCGTGCCT
GGAAGCCGAGGCCCAGCAGAGAACCTTGCTCTGGAATCAGGGGTCCACACTCCCCTCCCTGATGGACTCGAAGGC
CTGCCAGTCCTTCCACGAGGCCCTAGAAGCCTGGGCAAAGGGACCAGGTGCCGAGCCCTTCTACATTCGTGCCAA
CCTCACCTTGCCTGAGAGGGCAGATCCCCATGCCCTTTGCGTGAAAGCCCAAGAGATCCTTCGACTGGTGGACTC
GGCATACAAGCGGAGGCAGGAATGGTTCTGCACCCGGGTTGACCCCCTCACTCTGCGGGACCTGGACCGGGGCAC
CGTGCCCAATTATCAGAGAGCCCAGCAGCTCCTAGAAGTTCAGGAGAAATGCCTGCCCTCCAGCCGGCACCGAGG
CCCCCGCAGTAATCTGAAGAAGAGAGCCCTGGACCAGCTGCGGCTGGTGAGGCCCAAGCCCGTGGGGGCGCCTGC
AGGGGACTCCCCGGATCAGCTGCTGCTGGAGCCCTGTGCAGAGCCGGAGCGGAGCCTCAGACCCTACAGTTTGGT
GCGGCCGCTACTGGTGTCTGCCCTGCGGCCCGTGGTGCTGTTGCCTGAGTGCCTGGCGCCCCGGCTCATCCGTAA
CCTGCTAGACCTGCCCAGCTCCCGGCTGGACTTCCAAGTGTGCCCAGCGGAAAGCCTCTCTGGGGAGGAACTGTG
CCCATCCTCAGCGCCTGGAGCCCCCAAGGCTCAGCCTGCCACCCCTGGGCTAGGCAGCAGGATCCGGGCCATCCA
GGAGTCTGTTGGGAAGAAGCACTGCCTGCTGGAGCTGGGTGCTCGGGGTGTGCGGGAGCTGGTGCAGAACGAGAT
CTACCCCATCGTCATCCACGTGGAGGTGACTGAGAAGAATGTCCGGGAAGTCAGGGGTCTGCTGGGCCGGCCGGG
CTGGCGGGACTCAGAGCTGCTGCGGCAGTGCCGTGGCTCAGAGCAGGTGCTCTGGGGGCTGCCCTGCTCCTGGGT
GCAGGTGCCCGCCCATGAGTGGGGACACGCAGAGGAGCTGGCCAAGGTGGTGCGCGGCCGCATCCTGCAGGAGCA
GGCCCGCCTCGTGTGGGTGGAGTGCGGCAGCAGCAGAGGCTGCCCCAGCAGCAGTGAGGCCTGAGGCTCATCTGA
TACCTGCACCTTCTCCCCAAGCCAGCGTGGACCCTGGTGTCTATGGTGAAGCTGGGCCCTCCCACCCTGAGCCTT
CCTAGACCCTTGGACTCTCAGATGCAGGGCCCTTGGCTCTGGCCTCTCACCCCCAAGGCTGTCTCTGGCCCTGCC
GAGCCTATGGGAGTCCCGGGACAGAGTGCCCACTCCCCTCTACTTGCTGCTCTGGGCCTCCCCACCTTTCCTGGG
GTCTCCACATTCCCACTAGTGGGTCTTATGTGTGTCTGTGTCTTCTCCTTAAACACTCGCCCTGGAGTCTGTTCT
CACACCTGTGCGCAGGTTTGCACACTCAAGTTCTCATGGGCAGGCTCAGGTCTGTCCCGCTGCCCTGGGCACGAG
GTCTCCTGAGGACCTGGGCCTGTTCTGCTCCTAGGAGACCTGAGCCCGTTACCGCGTGACTCCCACCATCCAGCT

FIGURE 4007B

CGCGCTCCTCGTGGATTCAGCCATGCATGGACTGGGGTGTTCCCTGGCCCATGGTCACCTGTGCCCCTCGTGTCT
CCTCACATGGGTGTCTGTGGTTCTCTCCTGTGTAAATGTCACGCCCCACCCCTGTTTCATGTGGGCACTAACACG
TGTGCGTTCCTGGCGGGCACACTCAGGACCGTGCCTCACAGGGCCCACTCCCTGCCTATGCCTCCCTCTTGGGGG
GCCGAGGAGGGCGGCTGCTCTGTCATGAGAATGTACGGCCCGTGGATGATTAACGGGCCTTTTTCACTTAGAAGC
TGCACATTATGGAGCATTAAACACTTTTGTCAT

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FIGURE 4008

GCGACTCTCCCGGGCTGCCAGCCGGGACGCGCGGCCGCCGCCGCTGCAGACGACGAGTCCGCCCTCGTCCCGCGC
CCCCGGGGCTCGCGGAGCCAGGTCTCCACCTCTGGGCAGGAGAGTTGCCGACCACCTCGGGGGTGCTTTCTCTGC
GCTTGAACATCTATAGCTGCTTCTGAGGGGCTGGGAGCCGGGCCCCTGGGAGAGACGAGCCATGAACCCCCCACA
GCCTCTGCATTTGGGGACCTCACCTTAGGAGAGTGCCATTTACAGCTTCCGCCAGGGCAAAGGAGCTGAGCAGCC
ATCCCAAGCCCAGCCCACCTCCCTCCCCCGGCCCCTGGTAGGCATGGACTAGCAGCTGTGAGCAGCCAGAGCTGA
TGCCCGGCCCCCAGGGGGGCAGAGGCGCCGCCACCATGAGCCTGGGCAAGCTCTCGCCTGTGGGCTGGGTGTCCA
GTTCACAGGGAAAGAGGCGGCTGACTGCAGACATGATCAGCCACCCACTCGGGGACTTCCGCCACACCATGCATG
TGGGCCGTGGCGGGGATGTCTTCGGGGACACGTCCTTCCTCAGCAACCACGGTGGCAGCTCCGGGAGCACCCATC
GCTCACCCCGCAGCTTCCTGGCCAAGAAGCTGCAGCTGGTGCGGAGGGTGGGGGCGCCCCCCCGGAGGATGGCAT
CTCCCCCTGCACCCTCCCCGGCTCCACCGGCCATCTCCCCCATCATCAAGAACGCCATCTCCCTGCCCCAGCTCA
ACCAGGCCGCCTACGACAGCCTCGTGGTTGGCAAGCTCAGCTTCGACAGCAGCCCCACCAGCTCCACGGACGGCC
ACTCCAGCTACGGCCTGGACTCTGGGTTCTGCACCATCTCCCGCCTGCCCCGCTCGGAAAAGCCGCATGACCGAG
ACCGGGATGGTTCCTTCCCCTCTGAGCCCGGGCTTCGCCGCTCTGACTCTCTCTTGTCCTTCCGCCTGGACCTCG
ACCTTGGGCCCTCACTCCTCAGCGAGCTGCTAGGGGTCATGAGCCTCCCAGAAGCCCCTGCAGCTGAGACTCCAG
CCCCCGCTGCAAACCCCCCAGCCCCTACTGCAAACCCCACGGGTCCTGCTGCAAACCCCCCAGCCACTACTGCAA
ACCCCCCAGCGCCTGCTGCAAACCCCTCAGCACCTGCCGCAACCCCCACGGGTCCTGCTGCAAATCCCCCAGCCC
CTGCCGCAAGCTCCACACCCCATGGACACTGTCCCAATGGGGTAACAGCTGGGTTGGGCCCAGTGGCTGAGGTGA
AGTCCAGCCCAGTGGGAGGGGGTCCCCGAGGACCTGCTGGCCCTGCCCTCGGCAGGCACTGGGGAGCAGGCTGGG
ATGGCGGCCACCACTACCCAGAGATGGATGCGCGGCAGGAGCGGGTGGAGGTGCTGCCCCAAGCCCGGGCCTCCT
GGGAGAGCCTGGACGAAGAGTGGAGGGCGCCCCAGGCAGGCAGCAGGACCCCAGTGCCCAGCACAGTGCAAGCAA
ACACCTTTGAATTTGCGGATGCTGAGGAGGATGATGAGGTCAAGGTGTGAGGGGCTGGGGCACGGTCCCAGGGCC
CCACCTAGGTGCAGAGCCGGCCCCTCACCTAACAGCTGGTTCCTACCAGACCGGAGAGGGGAGAAGTCATGTTGC
CCCTAAACCCCTCCCCACCTCTGCAGGACAGACATGGGAGGGAGGACAGGGAAGGCCAGGCTTGCTCTGGGACTT
TTATGCTCCCAGAGGCCCTGCCAAACTGACCACCTCCCCCGACTGCCACTCTGGACCTAATAGCTGTTCCTTAGG
CCCCACTCCATGCCACCCCCACCAGCTGGAGGACCCAGCCTCACAGTGTGTCCTTTGTGCCAGACCAAGCGGCCC
GTGGGGGGTGGGGGGCAGGGAGTGTACCACACAGGGCCATTGTCTCACCTCCCAAAGGGACCGCCTGCCCCCAGC
TCATCCCAGAGCGTCCCTGCTGCAACCCTGACAGCCGTCTCCCAGGCCGCTTCCCCAACATCCCCGCCCCAGCCT
CCCTCTTACCCCAGAAAGGTCAGGTATGACCTCCCGGGGAGGAATCCCACCTGCCTGTATACCCCAGACTTGCCT
CTGGGGCCTGATTAAATAAGGCTGTTTTGAT

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FIGURE 4009

GGGGGCCGGTGGCGGATGGAGCCCGCGATGGAGCCGGAGACTCTGGAGGCGCGAATCAATAGAGCCACGAACCCC
CTGAACAAGGAGCTCGACTGGGCCAGCATCAACGGCTTCTGCGAGCAGCTCAACGAGGACTTTGAGGGGCCTCCA
CTCGCCACCCGGCTGCTGGCCCACAAGATCCAGTCCCCACAGGAGTGGGAGGCGATCCAGGCCTTGACGGTGCTG
GAAACATGCATGAAGAGCTGCGGCAAGCGGTTCCACGACGAAGTGGGCAAGTTCCGCTTTCTCAACGAGCTCATC
AAGGTCGTGTCTCCCAAGTATCTGGGCTCTCGGACATCGGAGAAGGTGAAGAACAAGATCTTGGAGCTCCTCTAC
AGCTGGACAGTGGGCCTGCCCGAGGAGGTGAAAATCGCAGAGGCCTACCAGATGCTAAAGAAGCAGGGGATTGTA
AAGTCCGACCCCAAGCTTCCAGATGACACTACCTTTCCCCTTCCTCCTCCACGGCCGAAGAATGTGATCTTTGAA
GATGAGGAGAAATCCAAGATGCTGGCCCGCCTGCTGAAGAGCTCCCATCCCGAAGACCTCCGCGCAGCCAATAAG
CTCATCAAAGAGATGGTGCAGGAGGACCAGAAGCGGATGGAGAAGATCTCGAAGAGGGTGAATGCCATCGAGGAG
GTGAACAACAATGTGAAACTGCTCACGGAGATGGTGATGAGCCACAGCCAGGGCGGCGCAGCAGCTGGCAGCAGC
GAGGACCTCATGAAGGAACTGTACCAGCGCTGTGAGCGGATGCGGCCCACGCTCTTCCGACTGGCGAGTGACACA
GAGGACAATGATGAGGCCTTAGCGGAGATCCTGCAGGCCAATGACAACCTCACCCAGGTGATCAACCTGTATAAG
CAGCTGGTGCGGGGTGAGGAGGTCAACGGTGATGCCACAGCCGGCTCCATCCCTGGGAGCACCTCGGCCCTGCTG
GATCTCTCAGGCCTGGATCTCCCGCCTGCGGGCACCACCTACCCAGCTATGCCCACCCGCCCTGGCGAGCAGGCC
AGCCCTGAGCAGCCCAGTGCCTCAGTTTCCCTGCTTGACGACGAGCTCATGTCTCTGGGCCTCAGTGACCCCACA
CCCCCTTCAGGCCCAAGCCTGGATGGTACCGGATGGAACAGCTTCCAGTCGTCGGATGCCACTGAGCCCCCAGCC
CCTGCTCTGGCCCAGGCCCCCAGTATGGAAAGCCGACCCCCAGCGCAGACATCCCTGCCAGCAAGCAGCGGTCTG
GACGACCTAGACCTCCTGGGGAAGACCCTCCTGCAGCAGTCGCTGCCCCCGGAATCCCAGCAAGTGCGGTGGGAG
AAGCAGCAGCCAACCCCCCGGCTCACACTCCGGGACCTGCAGAATAAGAGCAGCAGCTGCAGCTCCCCCAGCTCC
AGCGCCACCAGCCTTCTCCACACCGTGTCCCCAGAGCCCCCCAGGCCTCCGCAGCAGCCCGTACCAACCGAGCTC
TCACTGGCCAGCATCACTGTGCCCCTGGAGTCCATCAAACCCAGCAACATCCTGCCCGTGACTGTGTATGACCAG
CACGGCTTCCGCATCCTCTTCCATTTTGCCCGGGACCCACTGCCAGGGCGCTCCGACGTGCTGGTGGTGGTGGTT
TCCATGCTGAGCACCGCCCCCCAGCCCATCCGCAACATCGTGTTCCAGTCAGCTGTCCCCAAGGTTATGAAGGTG
AAGCTGCAGCCACCCTCGGGCACGGAGCTGCCAGCTTTTAACCCCATCGTCCACCCCTCAGCAATCACCCAGGTC
CTGCTGCTTGCCAACCCCCAGAAGGAGAAGGTTCGCCTCCGCTACAAGCTCACCTTCACCATGGGTGACCAGACC
TACAACGAGATGGGGGATGTGGACCAGTTCCCCCCACCTGAAACCTGGGGTAGCCTCTAGAACAGAGGGGCTGGG
GAGAGGAAGGGGCAGAGGGACCGGTCACTGTCCAGCCTGGAGGGAGGCATTGGTGGCCAAGGACACCCTTTGTTG
CCCATGGCCATTCACCCCCAGGCCTGGTGCTTCTCCCCACACCCCTGTAGGCCTCAAGTGACTCTTCCCCCTCCT
GCTCCGGCCCCGCCCCTGCTGAGCCAAACCCAGTAGGAGGCTGGGCCTGGGTTTGTGCCGCTGGGGTCTCCATCA
CCGGGACCTGGAGAGGGAGGGGCTGTGTAGCCTTGGAAGAACTTGGGTCATGGGGAGGAAGCACAGCTGTTGGGG
AAGGGCCAGGACCTCAGGCCCAGCCCCAACCCCAGCTGGGGTGGGGTCTTCCCCACCTGTCTCTTATGCCTTATG
GGAAGGCCCAGCCATAACTCGGGGGCCATGCTGGAGCTGGGGACCAGCTTAGGCCTCCTCCATAGGAACCCAGTG
ACTGGGGGGTGACGCCTACACCCCCAGCTATTTGCACTCTGGTGTGTGGTTTGACTCTGCTTTTCTTCCGGATTG
GCCCTGTGGTCACAGCCTCAGGGGGCCAGGCTGGGGGAACCTCACCTGGCCCGTACTCCTGGGGGTTTCCCTTTG
CCATTGGGCCCCCTGAGGGACTGTGGGGGCTCAAGGGTAATGCCAGAGGCCCATGGCCCCAGCGAGGGGCTGTGG
GGCACCTAGAGTTCTCGGTGTGTCTCCTTCATTCATTGGCCTCTGCTGGGGCCTCCTATGGGTGTCTTACGTCTG
TCCATCCATCTGTCCGTGGTCAGAAGTGGGGTCAGTGTGTGAGTGAGAGCAGGAGTATTTATGAAAATAAAACGT
CGTTTTTCCTGG

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FIGURE 4010

CAGGTAGAACAGCGGCTGGAGCCGGCCAAGCGGGCAGCCCACAACATCCACAAGCGGCTGCAGGCCTGTCTGCAG
GGCCAGAGCGGGGCAGACATGGACAAGCGGGTGAAGAAGCTTCCCCTCATGGCTCTGTCCACCACG**ATG**GCTGAG
AGCTTCAAGGAGCTGGACCCTGATTCCAGCATGGGGAAGGCCTTGGAGATGAGCTGTGCCATCCAGAATCAGCTG
GCCCGCATCCTGGCCGAGTTTGAGATGACCCTGGAGAGGGACGTCCTGCAGCCACTCAGCAGGCTGAGTGAGGAG
GAGCTGCCAGCCATCCTCAAACACAAGAAAAGCCTCCAGAAGCTCGTGTCCGACTGGAACACACTCAAGAGCAGG
CTCAGTCAGGCAACCAAGAATTCAGGCAGCAGTCAAGGCCTAGGAGGCAGCCCGGGTAGTCACAGCCATACGACC
ATGGCCAACAAGGTGGAGACGCTGAAGGAGGAGGAGGAGGAGCTGAAGAGGAAAGTGGAGCAATGCAGGGACGAG
TACTTGGCTGACCTGTACCACTTTGTTACCAAGGAGGACTCCTATGCCAACTACTTCATTCGTCTCCTGGAGATT
CAGGCCGATTACCATCGCAGGTCACTGAGCTCGCTGGACACAGCCCTGGCTGAGCTGAGGGAGAACCACGGCCAA
GCAGACCACTCCCCTTCGATGACAGCCACCCACTTCCCCAGGGTGTATGGGGTGTCGCTGGCAACCCACCTGCAA
GAGCTGGGCCGGGAGATTGCCCTGCCCATCGAGGCCTGCGTCATGATGCTGCTTTCTGAGGGCATGAAGGAAGAG
GGTCTCTTCCGTCTGGCTGCTGGGGCCTCGGTGCTGAAGCGTCTCAAGCAGACAATGGCCTCGGACCCCCACAGC
CTGGAGGAGTTCTGCTCCGACCCGCACGCTGTGGCAGGTGCCCTCAAGTCCTATCTGCGGGAGCTGCCAGAGCCT
CTGATGACCTTCGACCTCTATGATGACTGGATGAGGGCAGCCAGCCTGAAGGAGCCAGGGGCCCGGCTGCAGGCC
CTCCAAGAGGTGTGCAGCCGCCTACCCCCCGAGAACCTCAGCAACCTCAGGTACCTGATGAAGTTCCTGGCACGG
CTGGCCGAGGAGCAGGAGGTGAACAAGATGACACCCAGCAACATCGCCATAGTCCTGGGACCCAACTTGCTGTGG
CCACCTGAGAAAGAAGGGGACCAGGCCCAGCTGGATGCAGCCTCCGTGTCTTCCATCCAGGTGGTGGGCGTCGTC
GAGGCGCTGATCCAGAGCGCAGACACCCTCTTCCCTGGAGACATCAACTTCAACGTGTCAGGCCTCTTCTCAGCT
GTTACCCTCCAGGACACAGTCAGTGACAGGCTGGCCTCTGAGGAACTTCCGTCCACTGCCGTGCCCACCCCAGCC
ACCACCCCGGCTCCGGCTCCGGCTCCAGCTCCAGCTCCGGCCCCAGCCTTGGCTTCAGCAGCTACCAAGGAAAGG
ACAGAGTCTGAGGTGCCTCCCAGACCAGCCTCCCCCAAGGTCACCAGGAGTCCCCCGGAGACAGCTGCCCCAGTG
GAGGACATGGCTCGGAGGACCAAGCGCCCGGCGCCAGCCCGGCCCACCATGCCGCCCCCCCCAGGTCTCCGGCTCC
CGCTCCTCCCCTCCAGCCCCGCCCTTGCCCCCTGGCTCTGGCAGCCCTGGGACCCCCCAAGCCCTGCCCCGACGT
CTGGTTGGCAGCAGCCTCCGAGCCCCCACAGTGCCACCCCCGTTACCCCCCACACCCCCTCAGCCTGCCCGGCGC
CAAAGCCGGCGTTCACCAGCCTCCCCCAGCCCGGCCTCCCCAGGTCCAGCCTCCCCCAGCCCAGTCTCTTTGAGT
AACCCTGCACAGGTGGACCTGGGGGCTGCCACAGCAGAGGGAGGAGCCCCTGAGGCTATCAGTGGGGTCCCCACT
CCCCCAGCTATCCCCCCTCAGCCCCGCCCCAGGAGCCTTGCCTCAGAGACCAAC**TGA**GTGGCTGGTTTCTCCCTA
AGCAGCCCTCAGCACCCCCTCCCTCCCCACCTGGCCCTCCCAGGACAGCTCTCGCCCCCCACAAAGGGGCATGGG
CCTCCAGCCTTTGCCCACAAGTGCCTCAGTGCCCACTGGGTCGGCCCCCATGGCCAGGAGGGCTCAGGACAATCC
TCTATTTCCTGACCTTTTCCTCGTCCACCCTGGGCTTGGGGACCCCCCCACCGGACTCTCCACTCTCCGGCAGGT
CCTAGGGGAGCCACCGGAAGGAAGGAGAGGTTTGCCTGCTCCTACGGGACTGATTCTTCTCTTGCCGACATGTTT
TTTGTAAGGCTGGTAAATAAATTATTTTGGAC

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FIGURE 4011

GCCGTGCCCGCGGAGAGAGCGCGGCGCGGGAGGCCGGCGGCCGGCCGGCTGCATGGCGCGCTGCGAGAGGCTGCG
CGGAGCGGCCCTGCGCGACGTGCTGGGCCGGGCGCAGGGGGTCCTGTTCGACTGTGACGGGGTGCTGTGGAACGG
CGAGCGCGCCGTGCCGGGCGCCCCGGAGCTGCTGGAGCGGCTGGCGCGGGCCGGCAAGGCGGCTCTGTTTGTGAG
CAACAACAGCCGGCGCGCGCGGCCCGAGCTGGCCCTGCGCTTCGCGCGCCTCGGCTTCGGGGGGCTGCGCGCCGA
GCAGCTCTTCAGCTCCGCGCTGTGCGCCGCGCGCCTGCTGCGCCAGCGCCTGCCCGGGCCTCCGGACGCGCCGGG
CGCCGTGTTCGTGCTGGGCGGCGAGGGGCTGCGCGCCGAGCTGCGCGCCGCGGGGCTGCGCCTGGCCGGGGACCC
GAGCGCGGGGGACGGCGCGGCCCCGCGCGTGCGCGCCGTGCTTGTGGGCTACGACGAGCACTTCTCCTTCGCCAA
GCTGAGGGAGGCGTGCGCGCACCTGCGCGACCCCGAGTGCCTACTCGTGGCCACCGACCGTGACCCATGGCACCC
GCTGAGCGACGGCAGCCGGACCCCTGGCACCGGGAGCCTGGCCGCTGCAGTGGAGACAGCCTCGGGACGCCAGGC
CCTGGTGGTGGGCAAGCCCAGCCCCTACATGTTCGAGTGCATCACGGAGAACTTCAGCATCGACCCCGCACGCAC
GCTTATGGTGGGTGACCGCCTGGAGACCGACATCCTCTTTGGCCACCGCTGCGGCATGACCACTGTGCTCACGCT
CACAGGAGTCTCCCGCCTAGAAGAGGCCCAGGCCTACCTAGCGGCCGGCCAGCACGACCTCGTGCCCCATTACTA
TGTGGAGAGCATCGCAGACTTGACAGAGGGGTTGGAGGACTGAGCCCACTGCACCTGCAGCCACAGGCCCACCCC
TCCCCACTCCCTGATCCCGTAGGTGGAGGCGATGGGTCACGAGCCATGTTAAGCACAACCGGCTCCTTGGTCCAG
TTCTGCACCGGGGTGGGGCTGGGACCCGGGGAAGGTTTGAGGGCCCTTGCAACCCCCTCCCAGCAGTGGCTGGGC
ACTCTTTGCTGCCCCAGAAGCTGGTCCCCTATGGATTCATCTTGGCCTGACCCAGCCAGGTGGCCTTATTTCTTC
CCTGTCACCTCCCCTCCTTGAAATCTGGGCCCTGGTGCCTGCTGAAGATTCCCTCTATCCCTGAGTACTTAGTCT
TCTCCCCCTTCCCTGGGGCTTCTAGAGCTCTCTCTGCCCCTCAGGTCCTGGCCCTTGGGTCCTTGTCAACCAGAG
GTCTAGGGAACCACAACCCTTATTGTCCTGGGTGGACCAATCCAAAGGCTAAGTGATAGTGACTCATCAATGTTG
GGTCCTGTGGGGTACCAGTTTAGGTTCCTAAGTAATAGTGACCCTTTCACGTCCTGGAGCCCGAGTGGACCAATC
GGAAGCCTAAGTGACGATGACCCTCGCATGTCCTAGGTCCCTGGGTGGACCCATCAGGACCCCAAGTGATAGTGA
CCCAGTGGTCTTTTAGATCCTCAGTAGAACAGTCCAGAAGCCTGAGAGACAGTGGCCCCTTGATAATCTGGGTCT
CACGGGACCAGCTAGGGGTCCAGGTTTCAGTCAGTAAATAAGAGTGGTCCACGTCCTAAAGACACCTCTCCTTTA
CAAAGACTTGTGATGCTCTGGGGCTTCTGTGGCCAAGCCCCACCCTTTCCTGGTCATGGTACCCGTACAGCGTTG
ATGGCCACAGCTCGAAGGGGGGCTTTCGTGTCCCCCTGTGCGGTCAGTGTTTTCAGTACCACCTCTCTCCCGTGC
CCACTTGGCTATTTACTTATTTATTTATTGTGTGCCAGTGATGGTGGGTGGGGGCTGGGCCTTCCCCGCCACCTC
CACCCCTGTTGTGACCTGTCCTTCCGTACTTAATAAAGTGCGCGTGGGAGTGTT

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FIGURE 4012

ATCTCTCTCGGGTGGAGTCTTCTGACAGCTGGTGCGCCTGCCCGGGAACATCCTCCTGGACTCAATCATGGCTTG
TGGTCTGGTCGCCAGCAACCTGAATCTCAAACCTGGAGAGTGCCTTCGAGTGCGAGGCGAGGTGGCTCCTGACGC
TAAGAGCTTCGTGCTGAACCTGGGCAAAGACAGCAACAACCTGTGCCTGCACTTCAACCCTCGCTTCAACGCCCA
CGGCGACGCCAACACCATCGTGTGCAACAGCAAGGACGGCGGGGCCTGGGGGACCGAGCAGCGGGAGGCTGTCTT
TCCCTTCCAGCCTGGAAGTGTTGCAGAGGTGTGCATCACCTTCGACCAGGCCAACCTGACCGTCAAGCTGCCAGA
TGGATACGAATTCAAGTTCCCCAACCGCCTCAACCTGGAGGCCATCAACTACATGGCAGCTGACGGTGACTTCAA
GATCAAATGTGTGGCCTTTGACTGAAATCAGCCAGCCCATGGCCCCCAATAAAGGCAGCTGCCTCTGCTCCC

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FIGURE 4013

CTTCAGGGAGAGGAAGCCGGCGGCCTCACTGCT**ATG**GGCCGCAACAAGAAGAAGAAGCGAGATGGTGACGACCGG
CGGCCGAGGCTCGTTCTTAGCTTCGACGAGGAGAAGAGGCGGGAGTACCTGACAGGCTTCCACAAGCGGAAGGTC
GAGCGAAAGAAGGCAGCCATTGAGGAGATTAAGCAGCGGCTGAAAGAGGAGCAGAGGAAGCTTCGGGAGGAGCGC
CACCAGGAATACTTGAAGATGCTGGCAGAGAGAGAAGAGGCTCTGGAGGAGGCAGATGAGCTGGACCGGTTGGTG
ACAGCAAAGACGGAGTCGGTGCAGTATGACCACCCCAACCACACAGTCACCGTGACCACCATCAGTGACCTGGAC
CTCTCGGGGGCCCGGCTGCTCGGGCTGACCCCACCTGAGGGAGGGGCTGGAGACAGGTCTGAGGAGGAGGCGTCA
TCCACGGAGAAACCAACCAAAGCCTTGCCCAGGAAGTCCAGAGACCCCCTGCTCTCTCAGCGGATCTCCTCCCTC
ACAGCATCACTACATGCACACAGCCGCAAAAAGGTCAAGAGGAAACATCCCCGACGGGCCCAGGACTCCAAAAAG
CCCCCAAGGGCCCCTCGTACCAGCAAGGCCCAGCGCCGCCGTCTCACAGGCAAAGCACGGCACAGCGGGGAG**TGA**

GACCGAGAACGAAGCGGTGCCCCAGTCTAGGCTGCGGGGACCTGTCCTTGCTCAGCTTGGCTGTCCCTGTAGCCC
AGCCTGCACCTAGGTGTGCCTACCGCATGTTGCCGCTGCTGTTTCTGCTGGGACGTCTGACTCCAGTTCCTTCTC
CCCTCTCCAGTGACAAGGTCATTTACAACTTACATTTACAATTTATAGTGTTTACCAGTATTAAATTCTCAGCCA
CTC

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FIGURE 4014

AAGGGGCCGGGGCAGCGTCGGGGAAAGGAAGGGCCGGAGGCGCGGCGGCGGGCGGCCGAGAGGGGCGGCGGCGGC
GGCGGCGGCGGGGTTCCCGCGCCGCGGAGCCCGGCCCGAGAGCCGCGTCCACGTTCCTGCCTCCTGCTCCCGCCG
CCCTGGGGCGCCGCCATGACGCCCGATCTGCTCAACTTCAAGAAGGGATGGATGTCGATCTTGGACGAGCCTGGA
GAGCCTCCCTCCCCCTCGCTCACCACCACCTCTACTTCGCAGTGGAAGAAACATTGGTTTGTGCTGACAGATTCA
AGTCTCAAATATTACAGAGACTCCACTGCTGAGGAGGCAGATGAGCTGGATGGTGAGATCGACCTGCGTTCCTGC
ACGGATGTCACTGAGTACGCGGTGCAGCGCAACTATGGCTTCCAGATCCACACCAAGGATGCTGTCTATACCTTG
TCGGCCATGACCTCAGGCATCCGGCGGAACTGGATCGAGGCTCTGAGAAAGACCGTACGTCCAACTTCAGCCCCA
GATGTCACCAAGCTCTCGGACTCTAACAAGGAGAACGCGCTGCACAGCTACAGCACCCAGAAGGGCCCCCTGAAG
GCAGGGGAGCAGCGGGCGGGCTCTGAGGTCATCAGCCGGGGTGGCCCTCGGAAGGCGGACGGGCAGCGTCAGGCC
TTGGACTACGTGGAGCTCTCGCCGCTGACCCAGGCTTCCCCGCAGCGGGCCCGCACCCCAGCCCGCACTCCTGAC
CGCCTGGCCAAGCAGGAGGAGCTGGAGCGGGACCTGGCCCAGCGCTCCGAGGAGCGGCGCAAGTGGTTTGAGGCC
ACAGACAGCAGGACCCCAGAGGTGCCTGCTGGTGAGGGGCCGCGCCGGGGCCTGGGTGCCCCCCTGACTGAGGAC
CAGCAAAACCGGCTTAGTGAGGAGATCGAGAAGAAGTGGCAGGAGCTGGAGAAGCTGCCCCTGCGGGAGAATAAG
CGGGTGCCCCTCACTGCCCTGCTCAACCAAAGCCGCGGAGAGCGCCGAGGGCCCCCAAGTGACGGCCACGAGGCA
CTGGAGAAGGAGGAGGCATGTGAGCGCAGCCTGGCAGAGATGGAGTCCTCGCACCAGCAGGTGATGGAGGAGCTG
CAGCGGCACCACGAGCGGGAGCTGCAGCGCCTGCAGCAGGAGAAGGAGTGGCTCCTGGCTGAGGAGACGGCAGCC
ACGGCCTCAGCCATTGAAGCCATGAAGAAGGCCTACCAGGAAGAGCTGAGCCGAGAGCTGAGCAAAACACGGAGT
CTCCAGCAGGGCCCGGATGGCCTCCGGAAGCAGCACCAGTCAGATGTGGAGGCACTGAAGCGAGAGCTGCAGGTG
CTATCGGAGCAGTACTCGCAGAAGTGCCTGGAGATTGGGGCACTCATGCGGCAGGCTGAGGAGCGCGAGCACACG
CTGCGCCGCTGCCAGCAGGAGGGCCAGGAGCTGCTGCGCCACAACCAGGAGCTGCATGGCCGCCTGTCAGAGGAG
ATAGACCAGCTGCGCGGCTTCATTGCCTCGCAGGGCATGGGCAATGGCTGCGGGCGCAGCAACGAGCGGAGTTCC
TGCGAGCTAGAGGTGCTGCTTCGCGTAAAAGAAAACGAACTCCAGTACCTAAAGAAGGAGGTGCAGTGCCTCCGG
GACGAGCTCCAGATGATGCAGAAGGACAAGCGCTTCACCTCGGGAAAGTACCAGGACGTCTATGTGGAGCTGAGC
CACATCAAGACACGGTCTGAGCGGGAGATCGAGCAGCTGAAGGAGCACCTGCGTCTTGCCATGGCCGCCCTCCAG
GAGAAGGAGTCGATGCGCAACAGCCTGGCTGAGTAGAGGTCCCGCCCAGCTGCAGACCCTCCAGGCTGGAGGACC
AGCCGCCCTCCTTCCCTCCTGGATGGAAGTAAAAAGCCAAGCTTTCTCCCCACCCTCTGTGGGCCACACGTGCAC
TTGCACCCACCACACACACACACACACACACACACACACACACACACAGACACACAGACACATACGCACACACGTGCAC
ACATGTACACACGGATACACACACACACACACACACTGCATATCTGAGCGCGCCCCTCGCACTGGGTCTCACCTT
GCACCTTCTTCAGGATTTTATATGTGAAGAGATTTTTATATAGATTTTTTTCCTTTTTTTTCCAAAACACTTTATA
CTTTAAAAAAAAAAAAAAAAAAGCAATTCCTGGTGGCTGTGTGCCTCCAACCCTGGTCCCCCTCTGTCTCCAGCCA
CCCTCTGCTTGGGCTTCTGAGCTGGTGGCCCTGGCCCAGAGGTCTGGCGGAGGCCCAGGCAGCAGCCATGGCGGG
GTGTCTCTACAGGGGAGAGGCGGGAGCCTGCCACCCTCTTCCTGCCCTACCTCCTACTAACACTTCCTGCCCCAT
TTGGACCCGTACCATGGGGCTCAGGACAGAGGGAGCTAGCAGCTGGCCTCCATGGCCCCACAGCCTCCTTCGAGG
CTGTGCTGGGTGCAGAACCGCCAGAGCCACCCAAAAGGTGTTTCTCTTCTGCTCCCTGAACCTCTTAACTTAATA
AAACGTTCCAGCAGCT

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FIGURE 4015

GGGAGGCAGAGGAGGCGGAGGCAGAGGCAGAGGCAGAGGCAGAGCCCGAGCCCGGTGCCGAGACCAAGCGACAGA
CCGGCGGGGCTGGGCCTCGCAAAGCCGGCTCGGCGAGCTCTCCCGACACCCGAGCCGGGGAGGAAAAGCAGCGAC
TCCTCGCTCGCATCCCCGGGAGCCGCACTCCAGACTGGCCCGGTAGTCAGGGGCTCAGGAGCAGATCCCGAGGCA
GGCTTTGCTCAGCCTCCGACGAGGGCTGGCCCTTTGGAAGGCGCCTTCAACAGCCGGACCAGACAGGCCACC**ATG**

ACCGAGAATTCCACGTCCGCCCCTGCGGCCAAGCCCAAGCGGGCCAAGGCCTCCAAGAAGTCCACAGACCACCCC
AAGTATTCAGACATGATCGTGGCTGCCATCCAGGCCGAGAAGAACCGCGCTGGCTCCTCGCGCCAGTCCATTCAG
AAGTATATCAAGAGCCACTACAAGGTGGGTGAGAACGCTGACTCGCAGATCAAGTTGTCCATCAAGCGCCTGGTC
ACCACCGGTGTCCTCAAGCAGACCAAAGGGGTGGGGGCCTCGGGGTCCTTCCGGCTAGCCAAGAGCGACGAACCC
AAGAAGTCAGTGGCCTTCAAGAAGACCAAGAAGGAAATCAAGAAGGTAGCCACGCCAAAGAAGGCATCCAAGCCC
AAGAAGGCTGCCTCCAAAGCCCCAACCAAGAAACCCAAAGCCACCCCGGTCAAGAAGGCCAAGAAGAAGCTGGCT
GCCACGCCCAAGAAAGCCAAAAAACCCAAGACTGTCAAAGCCAAGCCGGTCAAGGCATCCAAGCCCAAAAAGGCC
AAACCAGTGAAACCCAAAGCAAAGTCCAGTGCCAAGAGGGCCGGCAAGAAGAAG**TGA**CAATGAAGTCTTTTCTTG
CGGACACTCCCTCCTGTCTCCTATTTTCTGTAAATAATTTTCTCCTTTTTTCTCTCTTGATGCTCACCACCACCT
TTTGCCCCCTTCTGTTCTGACTTTATAAGAGACAGGATTTGGATTCTTCAGAAATTACAGAATAATTCATTTTTC
CTTAACCAGTTGTGCAAGGACAGCAACAACCAATCTAATGATGAGAATGTACTTATATTTTGTTTTGCTATTAAC
CTACTTACGGGGTTAGGGATTTGCGGGGGGGGCTTGTGTGTTTTGTTGGCTTGTTTGCCATGAAGGTAGATGTGG
GTGGGGAGAAGACACAAGGCAGTTTGTTCTGGCTAGATGAGAGGGAACCCAGGAATTGTGAGGTTAGCAGGAATA
TCTTTAGGGTGAGTGAGTTTTCTTTGAGTTGGGCACCCGTTGTGAGAGTTTCAGAACCTTTGGCCAGCAGGAGAG
AGGTGGTAGGGAGCAGCCAGCCGGCAAAGGAAGGAGGGGGAAAAAAACCGCCACCGGGCTGACTTCCACCTCCCA
GTGGTGAGCAGTGGGGGCCCAAACCCAGTTTCCTTCTCATTTTTGTTAGTTTGCGCTTTCGGCCTCCCTATTTTC
TTAGGGAAGGGGAGTGGGGTCCAAGTGACAGCTGGATGGGAGAAGCCATAGTTTCTCCCAGTCAGCTAGGATGTA
GCCATTGGGGGATCTTTGTGGCTTCAGCAAATTCTCTTGTTAAACCGGAGTGAAAACTTCAGGGGAAGGGTGGGG
AGTCAGCCAAGTGCCTCAGTGTGCCCTGTTGAAACTTAGGTTTTTCCACGCAATCGATGGATTGTGTCCTAGGAA
GACTTTTCTTTTCCTCTGGATTTTTGTTCCTCCTGTACAAGAGGTGTCTTTGCTTGGTTTGGTGGGGCTGCGGCC
ACTTAAAACCTCCCGATCTCTTTTTGAGTCCTTTATTATAAGTAGTTGTAGCTGCGGGAGGGGGAGGGGGAGTGG
GCGGGCAGTGGATAGTAAGACTTACTGCAGTCGATTTGGGATTTGCTAAGTAGTTTTACAGAGCTAGATCTGTGT
GCATGTGTGTGTTTGTGTATATATACATATCTAGGGCTAGTACTTAGTTTCACACCCGGGAGCTGGGAGAAAAAA
CCTGTACAGTTGTCTTTCTCTTATTTTTAATAAAATAGAAAAATCGCGCACTTGCGCGTCCCCCCCCCACCCCCT
TTTTTAAACAAGTGTTACTTGTGCCGGGAAAATTTTGCTGTCTTTGTAATTTTAAAACTTTAAAATAAATTGGAA
AAGGGAG

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FIGURE 4016

GGTTTAAGCTGGAAGGGTAGTCATTGGTTCGCCGCTCTGTCTCGGCCTGAGCCCGCCCCCGCTCGGTTGCCGTGG
TTGCGGGCCCTGCCCGCCCGCCAGCTCGCTGACAGCACGACTCAGGGCGGAGGGAAGTAGGTCCGTTGGTCGGTC
GGGAACGAGGCTCAGGCGGCCAGGCCCGCGCGGAGCCGTTGCCATGGCAGCCGCCGCCGGGGACGCGGACGACGA
GCCGCGCTCAGGCCACTCGAGCTCGGAGGGCGAGTGCGCGGTGGCGCCGGAGCCGCTGACTGACGCTGAGGGCCT
CTTCTCCTTCGCTGACTTCGGGTCTGCGCTGGGCGGCGGCGGCGCGGGCCTCTCGGGCCGGGCGTCCGGCGGGGC
CCAGTCGCCGCTGCGCTACTTGCACGTCCTGTGGCAGCAGGATGCGGAGCCGCGCGACGAGCTGCGCTGCAAGAT
ACCCGCTGGCCGGCTGAGGCGCGCTGCCAGGCCCCACCGGCGGCTCGGGCCCACGGGCAAGGAGGTGCACGCTCT
GAAGAGACTGAGGGACTCGGCCAATGCCAATGATGTGGAAACAGTGCAGCAGCTGCTGGAAGATGGCGCGGATCC
CTGTGCAGCTGATGACAAGGGCCGCACAGCTCTACACTTTGCCTCATGCAATGGCAATGACCAGATTGTGCAGCT
GCTCCTGGACCATGGTGCTGATCCTAACCAGCGAGATGGGCTGGGGAACACGCCACTGCACCTGGCGGCCTGCAC
CAACCACGTTCCTGTCATCACCACACTGCTACGAGGAGGGGCCCGTGTAGATGCCCTGGACCGAGCTGGTCGCAC
ACCCCTGCACCTGGCCAAGTCAAAGCTGAATATCCTGCAGGAGGGCCATGCCCAGTGCCTAGAGGCTGTGCGTCT
GGAGGTGAAGCAGATCATCCATATGCTGAGGGAGTATCTGGAGCGCCTAGGGCAACATGAGCAGCGAGAACGCCT
GGATGACCTCTGCACCCGCCTGCAGATGACCAGTACCAAAGAGCAGGTGGATGAAGTGACTGACCTCCTGGCCAG
CTTCACCTCCCTCAGTCTGCAGATGCAGAGCATGGAGAAGAGGTAGCAAGAGAGGCTCCCTGCCTTCCTGCCACT
GCCCCACCCTGCCCCACTGCTGTCTCAGTACCAAGAAAAAGCCCAACATCTGGGACTTGGAGCTGCACTTGTCTG
GTGAGGACCTTGCCCTCACCCGCAGATGCCGTGGGGCAGAGATGCTCTCTCTCCACGGCCTCAGAGCCACTCCCA
GCCACAGTTTCCAGCATCTCTGTGGACAGGGACCACAGCTCCCAGCTTCTTCCAGTTCTCGCAGCACCAGACCAG
CCTCTGCAGCTGCACTTCAGCTCCGCAGACCTGCGCTATCTCAGCAGACCTCACTTGCCCCATGGCCTTCATGGC
GCGCTCCAGGCCTCAGACCCTTCTCTGTGTTCCGTCCTGGCCATGGGCTTGTTGCAGTCAGCAGGTGTGGGCTTA
GGCGGGCACCCTGTGGCCAGGGGTACTGCGTGAGGCCCTCAGTTGGTCCTGTGCCTCTCACCAGCACTTAGACAG
ACACGTCACCAGACTTTCAAGGAGATACTGCAGTGAGTTTCTCTGGTTGGAAGGGGAGGGTTGGTGAGTCCCAGA
CCTTAAAAATACAAGGTTAAGAGGGACCCCAAAGCAAAAAATTCCAACCCTTTTCCTCCCAGTCATTGAAACACC
AAAACTATTATACCGGAGGGTGTAATAGTTTTGCTGCCCAGTTGTGGTAGGCCAGTAGTGGCCTCCCAAGATGCC
CATGTCCTAATCCCAGGAACCTGTCAAAATTACCTTGTATGGCCAAAGGGGCTTTGCAGATGTAATGAAGTTAAG
GATCTTTCGCCAGGAAGATTATCCCAGCTTGTTCAGGAGGGCTTGATGTCCTCACCCGGGTCTGTATAACAGAAG
AGCAGGTGACGGGAGAGGAGGTTGGAGGTGTAGCGATGGAGCAGGAAACTGGAGTTGAGGAGGGCAGCTCAAGCC
ACAGAGTCCAGGCCACCTCAGAGCCAGGAAATGCATCCTCCCACAGAGCCCTGGAAGGCCCCAGCCCTGCTCCCA
CCTGGACTGGCTCAGTGAGGCTAATTTTATAATTCTGGCTGATTTTAGAACTCTAAGGGAATAAATTTGTGTTGT
TTTAAGTC

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FIGURE 4017

TCTTTCCGGCGGTGCTCGCAAGCGAGGCAGCCATGTCTTATCCCGCTGATGATTATGAGTCTGAGGCGGCTTATG
ACCCCTACGCTTATCCCAGCGACTATGATATGCACACAGGAGATCCAAAGCAGGACCTTGCTTATGAACGTCAGT
ATGAACAGCAAACCTATCAGGTGATCCCTGAGGTGATCAAAAACTTCATCCAGTATTTCCACAAAACTGTCTCAG
ATTTGATTGACCAGAAAGTGTATGAGCTACAGGCCAGTCGTGTCTCCAGTGATGTCATTGACCAGAAGGTGTATG
AGATCCAGGACATCTATGAGAACAGCTGGACCAAGCTGACTGAAAGATTCTTCAAGAATACACCTTGGCCCGAGG
CTGAAGCCATTGCTCCACAGGTTGGCAATGATGCTGTCTTCCTGATTTTATACAAAGAATTATACTACAGGCACA
TATATGCCAAAGTCAGTGGGGGACCTTCCTTGGAGCAGAGGTTTGAATCCTATTACAACTACTGCAATCTCTTCA
ACTACATTCTTAATGCCGATGGTCCTGCTCCCCTTGAACTACCCAACCAGTGGCTCTGGGATATTATCGATGAGT
TCATCTACCAGTTTCAGTCATTCAGTCAGTACCGCTGTAAGACTGCCAAGAAGTCAGAGGAGGAGATTGACTTTC
TTCGTTCCAATCCCAAAATCTGGAATGTTCATAGTGTCCTCAATGTCCTTCATTCCCTGGTAGACAAATCCAACA
TCAACCGACAGTTGGAGGTATACACAAGCGGAGGTGACCCTGAGAGTGTGGCTGGGGAGTATGGGCGGCACTCCC
TCTACAAAATGCTTGGTTACTTCAGCCTGGTCGGGCTTCTCCGCCTGCACTCCCTGTTAGGAGATTACTACCAGG
CCATCAAGGTGCTGGAGAACATCGAACTGAACAAGAAGAGTATGTATTCCCGTGTGCCAGAGTGCCAGGTCACCA
CATACTATTATGTTGGGTTTGCATATTTGATGATGCGTCGTTACCAGGATGCCATCCGGGTCTTCGCCAACATCC
TCCTCTACATCCAGAGGACCAAGAGCATGTTCCAGAGGACCACGTACAAGTATGAGATGATTAACAAGCAGAATG
AGCAGATGCATGCGCTGCTGGCCATTGCCCTCACGATGTACCCCATGCGTATTGATGAGAGCATTCACCTCCAGC
TGCGGGAGAAATATGGGGACAAGATGTTGCGCATGCAGAAAGGTGACCCACAAGTCTATGAAGAACTTTTCAGTT
ACTCCTGCCCCAAGTTCCTGTCGCCTGTAGTGCCCAACTATGATAATGTGCACCCCAACTACCACAAAGAGCCCT
TCCTGCAGCAGCTGAAGGTGTTTTCTGATGAAGTACAGCAGCAGGCCCAGCTTTCAACCATCCGCAGCTTCCTGA
AGCTCTACACCACCATGCCTGTGGCCAAGCTGGCTGGCTTCCTGGACCTCACAGAGCAGGAGTTCCGGATCCAGC
TTCTTGTCTTCAAACACAAGATGAAGAACCTCGTGTGGACCAGCGGTATCTCAGCCCTGGATGGTGAATTTCAGT
CAGCCTCAGAGGTTGACTTCTACATTGATAAGGACATGATCCACATCGCGGACACCAAGGTCGCCAGGCGTTATG
GGGATTTCTTCATCCGTCAGATCCACAAATTTGAGGAGCTTAATCGAACCCTGAAGAAGATGGGACAGAGACCTTG
ATGATATTCACACACATTCAGGAACCTGTTTTGATGTATTATAGGCAGGAAGTGTTTTTGCTACCGTGAAACCT
TTACCTAGATCAGCCATCAGCCTGTCAACTCAGTTAACAAGTTAAGGACCGAAGTGTTTCAAGTGGATCTCAGTA
AAGGATCTTTGGAGCCAGA

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FIGURE 4018A

GGCCAAGCCGGGGCCCCGAAGCCAGAGCCGGAGCCGGGCGGGCCGCGGGGTCATGGCTGGGCCGCGGGGCGCGCT
GCTGGCCTGGTGCCGCCGCCAGTGCGAGGGCTACCGCGGCGTGGAGATCCGCGACCTGAGCAGCTCCTTCCGGGA
CGGCCTGGCCTTCTGCGCCATCCTGCACCGGCACCGGCCCGACCTGCTAGATTTTGATTCGCTTTCCAAGGACAA
TGTCTTCGAGAATAACCGTTTGGCCTTTGAAGTGGCTGAGAAGGAGCTGGGGATCCCCGCTCTCCTGGACCCCAA
TGACATGGTCTCCATGAGCGTCCCTGACTGCCTCAGCATCATGACCTATGTGTCCCAGTATTACAACCACTTCTG
CAGTCCTGGCCAAGCTGGTGTCTCGCCACCCAGAAAGGGCCTTGCACCCTGTTCCCCGCCGTCTGTAGCACCCAC
TCCAGTGGAACCAGAAGATGTGGCTCAGGGCGAGGAGCTCTCCTCAGGCAGCCTGTCAGAGCAGGGCACCGGCCA
GACCCCCAGCAGCACGTGCGCAGCCTGCCAGCAGCATGTGCACTTGGTGCAGCGCTACCTGGCTGACGGCAGGCT
GTACCATCGCCACTGCTTCCGGTGTCGGCGGTGCTCCAGCACCCTGCTCCCTGGGGCTTATGAGAATGGGCCTGA
GGAGGGCACCTTTGTGTGTGCAGAACACTGTGCCAGGCTGGGCCCGGGGACACGGTCGGGGACCAGGCCTGGGCC
CTTCTCACAGCCAAAGCAGCAGCACCAGCAGCAACTCGCAGAAGATGCCAAGGATGTTCCAGGAGGCGGCCCCAG
CTCCAGTGCTCCTGCAGGGGCTGAGGCCGATGGACCCAAGGCCAGCCCTGAGGCCCGGCCGCAGATCCCTACCAA
GCCCCGGGTTCCTGGCAAACTACAGGAGCTGGCCAGCCCCCCTGCGGGCCGCCCCACCCCTGCCCCCAGGAAGGC
CTCTGAGAGCACCACCCCAGCACCCCCCACGCCCCGGCCCCGCTCCAGTCTGCAGCAGGAGAACCTGGTGGAGCA
GGCTGGCAGCAGCAGCCTGGTGAACGGGAGACTGCACGAACTGCCTGTCCCCAAGCCGAGGGGGACACCGAAGCC
GTCCGAGGGGACACCAGCCCCCAGGAAGGACCCCCCATGGATCACGCTGGTGCAGGCAGAACCAAAGAAGAAGCC
AGCCCCACTTCCCCCAAGCAGCAGCCCGGGGCCACCAAGCCAGGACAGCAGGCAGGTGGAGAATGGAGGCACCGA
GGAGGTGGCCCAGCCGAGCCCAACGGCCAGCCTGGAGTCCAAACCCTATAACCCCTTTGAGGAGGAGGAGGAGGA
CAAGGAGGAAGAGGCTCCAGCTGCACCCAGCCTGGCCACCAGCCCTGCCCTGGGCCACCCGGAGTCCACACCCAA
GTCCCTGCACCCCTGGTACGGCATCACCCCTACCAGCAGCCCCAAGACAAAGAAGCGCCCTGCCCCGCGCGCACC
CAGCGCGTCCCCACTGGCTCTCCACGCCTCCCGCCTCTCGCACTCGGAGCCGCCCTCGGCCACACCATCGCCAGC
GCTCAGCGTGGAGAGCCTGTCGTCTGAGAGCGCCAGCCAGACTGCAGGTGCAGAGCTTCTGGAGCCGCCAGCTGT
GCCCAAGAGCTCCTCAGAGCCTGCTGTCCATGCCCCTGGTACCCCTGGAAACCCTGTCAGCCTCTCTACCAACTC
CTCCCTGGCCTCCTCTGGGGAACTAGTGGAGCCTAGAGTGGAACAAATGCCTCAAGCCAGCCCTGGCCTTGCCCC
CAGGACCAGGGGCAGCTCAGGTCCCCAGCCAGCCAAGCCCTGCAGTGGCGCCACCCCAACGCCTCTCTTGTTGGT
TGGAGACAGGAGCCCGGTGCCTTCCCCTGGAAGCTCGTCCCCACAGCTGCAGGTAAAGTCCTCCTGCAAGGAGAA
TCCTTTTAACCGGAAGCCATCACCTGCAGCGTCCCCAGCCACAAAGAAGGCCACCAAGGGATCCAAGCCAGTGAG
GCCACCTGCCCCTGGACACGGCTTTCCACTCATCAAACGCAAGGTCCAGGCTGACCAGTACATCCCTGAGGAGGA
CATCCATGGAGAGATGGATACCATTGAGCGCCGGCTGGATGCCCTGGAGCACCGTGGGGTGCTGCTGGAGGAGAA
GCTGCGTGGCGGCCTGAATGAGGGCCGTGAGGATGACATGCTGGTGGACTGGTTCAAGCTCATCCACGAGAAGCA
CCTACTGGTGCGGCGAGAGTCCGAGCTCATCTATGTCTTCAAGCAGCAGAACCTGGAGCAGCGCCAGGCTGATGT
CGAGTATGAGCTCCGGTGCCTCCTCAATAAGCCAGAAAAGGACTGGACGGAGGAGGACCGGGCCCGGGAGAAGGT
GCTGATGCAGGAGCTTGTGACCCTCATTGAGCAGCGCAACGCTATCATCAACTGCCTGGATGAGGACCGGCAGAG
GGAGGAAGAGGAAGACAAGATGTTGGAAGCCATGATCAAGAAGAAAGAGTTCCAGAGGGAGGCTGAACCTGAGGG
CAAGAAGAAGGGGAAGTTCAAGACCATGAAGATGTTGAAACTGCTAGGAAACAAACGTGATGCCAAGAGCAAGTC
CCCCAGAGACAAGAGCTAACAGCACGAGAAGCCAGTTGGGGACTGCCCCCTCCTGGAGCAGCTCCTGGGCTGTGC
TCTGTTTGAAGGGGGCGCCCTGCTCCCCTCAGATCAGTCAGGAGGAAGATGACTAAGGGGAGGGATCCTCTGGGT
GATGGCCTCTTCCTCCTCAGGGACCTCTGACTGCTCTGGGCCAAAGAATCTCTTGTTTCTTCTCCGAGCCCCAGG
CAGCGGTGATTCAGCCCTGCCCAACCTGATTCTGATGACTGCGGATGCTGTGACGGACCCAAGGGGCAAATAGGG
TCCCAGGGTCCAGGGAGGGGCGCCTGCTGAGCACTTCCGCCCCTCACCCTGCCCAGCCCCTGCCATGAGCTCTGG
GCTGGGTCTCCGCCTCCAGGGTTCTGCTCTTCCAGGCAGGCCAGCAAGTGGCGCTGGGCCACACTGGCTTCTTCC
TGCCCCATCCCTGGCTCTGAGTCTCTGTCTTCCTGTCCTGTGCAGGCGCCCTTGGATCTCAGTTTCCCTCACTCA
GGAACTCTGTTTCTGAAGTCTTCAGTTAAGTTTGAGTTTATGACTGAGTGGCCTGTACTGTCAGACGTGAATGGG
CCTGACGGGCAAATCCATCCCTCTCTCCCTCACAGTTCCAGGAGCGGCTTCCCTCGTCTCCCCTTACTCCACAGG
GAGCCTCCCTTGCCAGGACCAGGGCTGCGACGGCCATGCTGGGGCAGGTGAGTGCTCTGTTAGCTGCTCCCAGTG
CTGTCCCCAGGCTGCAGTTCTGGTCCCTGGTTGTCAGGTAGGAAGGGTGCACTTGAAGCAGGTGCTCATCTCGGT
TCCTTAACGTTTATAGTCTGACCCCTCACTTAGGCTTTCCTCTGCCACCCCGGTCCAGGGAAGAGGCTCGCTCCC
GCCCATGGTCATCACTGGTCTGTCTGCTCTGTTGTCTGTTCTTTCCCTGACTCCCTCCCACCGAAGGCCTGATGG

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FIGURE 4018B

CTACTCACCCCTCTGGGATGGCTATGGGAGAGGAGGAGTGATGGGGACCGCCACCTTTTCTGCAGGAAATGTGCC
CAGCAGCTCTTGGTCAAAGCACTGTTGCTATAAGCTATCTCTGGGATGCCTCTAGGCCCCCTTCCCTCTACACAC
CTCTGGGAAAAGATTACACTGTATTAACTCTCGAGGAGTTTCCTCACCAATAAACAGACAACCTCAACTGCCAGT
GCCCTGCAGCCTCGGGCCACAGCGGCAGCCTTGTTTGCCTTCCCACCTGCCTCTGCCACACCTGGTGGCTGAACA
TCTCTGGTCGCCCAGAGGCCATGTTGGGGCCATCCTCCAAGAGGGATCTCTGCCCTCACCGCCTGCCACTGGGCA
GGATCCCTTTCCTCTGCAGGGAGAGGTGGCTCCTCGGCCATGCAGCCCCTGGCAGGCTCCTTCTAAACATGCCTG
TTGACCTGGAGCTGGCGCCACCAACTCCAGGGCCTTTCCAGGGCCAGACAGGTAACACGCATGAACCCGAGTGAC
AGCTCTGACGGGCTGTTTCGGTGTCAGGAGACAAAGCTGGCAGGGGCAGGGGTGAACTGGAGGCAAGTCAAGTCA
CCTGTGGCCTGTGGGGCTGAATGTGGGCCCGGTGTTGCCAGATCCTTTGTCATAAGAAGCTAGAAATCCAGATTT
TATGTGTGTGTAATTTGTAAATGCTGAAAGCTAGCCTGAATTTTTTTTTTTTTTTTTGAGACAGAGTCTCGCTC
TGTCGCCCAGGCTGGAGTGCAGTGGCGCGATCTCAGCTCACTGCAAGCTCCGCCTCCTGGGTTCACGCCATCCTC
CTGCCTCGGCCTCCTGAGCAGCTGGGACTACAGGCGCATGCTACGACGCCTGGCTAATTTTTTGTATTTTTAGTA
GAGACGGGGTTTCACCGTGTTAACCAGGATGGTCTCGATCTCCTGACCTTGTGATCCACCCACCTTGGCCTCCCA
AAGTGCTGGGATTACAGGCGTGAGCCACCACGCCCGGCCACTAGCCTGAATTTCAATCAAGGGTTGGCTGATACT
GTGTGTCCAGGGTGGACTGGATTTGTCCTGGGGGGTTCTCTGGTTTGCTGCCTCCTGACCACATGATGGGGCCTT
CGAGGTCGAGGACAACTGTTCCCATTAGATTGCACCCTCTGCCCTCAGGTTCTTGAGGGTGTGTGGACACAGAGG
CTTTCCATGGGATGTCCCTGAGCCGGCCTTGATTGGGGCCTCACCATTTACAGGGCCGTTTTATTCTGCAAACC
GAAACTTGGGTCATGTGACCTGATGGGATTATGGGACTCCCTCCAGGTGCCCGAGACAAGGTTGATATTTCCAAA
ATATTTTGGTGATTTAGTGGGACAAGCAAATGACAGAATACCGGAGAAGGCAGGGATCGTGGGTGTCAGGAGCCA
GAGGGGAGGGGGACAGATGTGCTGTGTACAGGACAAGGTGTCAGGTGACTCCTTCCCAGCAGGGCCTCGCAGATG
CACAAGCACGGAGCTGGTGGGTTTTGCCCAAGAAAGGTCACGCGGCACATGCAGGGATTGGAACTCCCAGGCCAG
GGCTCTAGGTCGCTCCCACCTTTTCATGTTTCTTTCTGTGGCCATGGGTATAGTGGAAAGACATAAAGCTAAAGC
CAACTTTTAATCCTGAATGCACTGCTTGCCAGGTAAATGCCCTTGGTTGTGGTATCTTGTTGAGACTTAGTTTTC
ACAGAGGGATAATGAACCGTTGCAGAGGTTTATTGAGATCATTAACAGAGTGGAATTCAGCACCCGCCACAGCAG
CCAGCCATGGG

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FIGURE 4019

AGTCCTCCCATGGCTTCACAGAAGCAGATGGAGGTAGTGACCAAAGGAACTGGGTTCCGGCGCCGCCCCAAGACC
ATCACTTACACCCCGGGGACCTGCGAGCTGCTCAGAGTGATGATGAAGGAATCCAAACTGACGAACATCCAGCAG
CGCCACATCATGGACATCATGAAAAGAGGAGATGCTTTGCCCCTACAGTGCAGCCCAACATCCAGCCAGAGAGTC
TTACCTTCCAAGCAAATAGCCTCGCCCATCTACCTGCCTCCCATCCTCGCAGCCCGTCCCCACCTCCGGCCTGCC
AACATGTGTCAAGCCAATGGGGCCTACAGCCGGGAGCAGTTCAAGCCTCAAGCCACCAGGGATTTGGAGAAGGAG
AAACAAAGACTCCAAAATATCTTTGCCACAGGGAAGGACATGGAGGAACGGAAAAGAAAGGCCCCTCCTGCACGA
CAGAAGGCTCCAGCCCCTGAGCTAGACCGATTTGAAGAGCTGGTGAAGGAAATCCAGGAGAGGAAAGAATTCCTG
GCTGACATGGAGGCCCTGGGACAGGGCAAACAGTACCGAGGAATCATCCTTGCTGAAATCTCCCAGAAACTCCGG
GAAATGGAAGACATTGACCACAGAAGGAGTGAGGAACTTAGGAAGGGTCTTGCCACCACTTAATCTGTCTCCAGA
GACGGGCAGGGTAGCCCAAGCTCGACCACTGGAGTCCACTCCTCTGCCAGGCAGGGCCATCCTCAGGCCAGCCCA
TCCTACCAGCCTTCTGCCACGTCAGGTGGTGGCATAGCACTGCCCTGCAGTACCCCAAGGCATACTCAGCAGCCT
AGCCCCTGCCCCGGAATGCAGATGGAGCCTCTGAGACTCACAGCCCCGTCCGCAGAGAAGCAAAGCCCGAGCATC
CCTACTAGGACATGTGTCTAAAGGTATCCACTGGGCCTGCTTCCCACCACTTCTGACCTGTGGCCTGTTCATTTA
GTTTTCTGAATTCAGGAATGAATATGATTCCTTTCTTCCTGTTTTAGGATTTACTTATTTGATTTCTTACCGCCT
TAGGCAAGTATTCAACCACAATGATTAACTGGCCAATAAAACATATTTAACGTGGGTCATTACAAGCACCATTTT
GTTTTCAGAGGGATAAGCTTATTTGTTCAAGGCATTAGACTTTGTCAAGCCCAGATGGTTTCTAGCTACCTGTTT
GCATATTTCAAGTGGCAACGGGAACCAACCTCTTGGGCACCCCATGGCTGGCTGCTGTGGCGGGTGCTGAATTCC
ACTCTGTTAATGATCTCAATAAACCTCTGCAACGGTT

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FIGURE 4020

GCGCGAGTCGTAGTGTCGCTGTTTGCGGGTCTCCGCGCGGGACCGGGGCGCAGCGGGGTCGCTGAGGCGAGGGTG
TCATGTCAGACAACGAGGACAATTTTGATGGCGACGACTTTGATGATGTGGAGGAGGATGAAGGGCTAGATGACT
TGGAGAATGCCGAAGAGGAAGGCCAGGAGAATGTCGAGATCCTCCCCTCTGGGGAGCGACCGCAGGCCAACCAGA
AGCGAATCACCACACCATACATGACCAAGTACGAGCGAGCCCGCGTGCTGGGCACCCGAGCGCTCCAGATTGCGA
TGTGTGCCCCTGTGATGGTGGAGCTGGAGGGGGAGACAGATCCTCTGCTCATTGCCATGAAGGAACTCAAGGCCC
GAAAGATCCCCATCATCATTCGCCGTTACCTGCCAGATGGGAGCTATGAAGACTGGGGGGTGGACGAGCTCATCA
TCACCGACTGAGCTGGAGTCATCTTCCTGCCCTTGCCCCATGCCCAATTTTCATTCTCACTTTATATGTGTAAAT
AATAAAATATTCAACTTTCC

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FIGURE 4021

CCGCCAGGTGGAACGGCAGGTGGGTTCAGGTACCAGCCTGGCCGGGACCCGGCTGTGGGACCAACGCTTCCGGTG
AGCGACAGAGGCAGCTCCCCAGGGCCTGGAGACCCGTGGGGCGGACTCTGGGATCTGAGCCTATCGCCCTGGCCT
GGAGCCCCCCTTTGTACCTATTCCCCATTCCCCTACCGAGCTGGGCAGTTAGCCAGCCCACTCCAACTCTCGGAA
CC**ATG**TTTGCAGACTTGGATTATGACATCGAAGAGGATAAACTCGGAATCCCGACTGTGCCTGGGAAGGTGACCC
TGCAGAAGGATGCTCAGAACCTGATCGGGATCAGCATTGGAGGAGGGGCCCAGTACTGTCCCTGCCTCTATATCG
TCCAGGTATTTGACAACACCCCAGCAGCCTTGGACGGCACAGTGGCAGCTGGCGATGAGATCACCGGTGTCAATG
GCAGGTCAATCAAAGGGAAAACTAAGGTGGAGGTGGCGAAGATGATTCAGGAGGTGAAGGGGGAGGTGACCATCC
ACTACAACAAGCTGCAGGCGGACCCCAAGCAGGGCATGTCCCTGGACATTGTGTTGAAGAAAGTCAAGCACCGGC
TGGTGGAGAACATGAGTTCAGGGACCGCAGATGCTCTGGGCCTGAGCCGGGCCATCCTGTGCAATGATGGGCTTG
TCAAGAGGCTAGAGGAGCTGGAGCGGACCGCTGAGCTATACAAAGGGATGACGGAACACACCAAGAACCTCCTAC
GGGCCTTTTATGAGCTGTCGCAGACTCACCGGGCCTTTGGGGACGTGTTCTCCGTGATCGGGGTGCGGGAGCCCC
AGCCAGCTGCGAGCGAGGCTTTTGTGAAGTTCGCCGATGCCCACCGCAGCATCGAGAAGTTCGGCATTCGGCTTC
TGAAAACCATCAAGCCGATGCTGACGGATCTGAACACGTACCTCAACAAAGCCATCCCGGACACTCGCCTCACCA
TCAAGAAGTACCTGGACGTGAAGTTTGAGTACCTGTCGTACTGCCTGAAGGTGAAGGAGATGGATGACGAGGAAT
ACAGCTGCATTGCCCTAGGCGAGCCCCTTTACCGGGTGAGCACCGGCAACTATGAGTACCGCCTGATCCTGCGCT
GCCGCCAGGAGGCGCGCGCCCGCTTCTCCCAGATGCGCAAGGATGTGCTGGAGAAGATGGAGCTGCTGGACCAGA
AGCACGTCCAGGACATCGTGTTCCAGCTGCAGCGCCTCGTGTCCACCATGTCCAAGTACTACAACGACTGCTACG
CAGTGCTGCGGGATGCCGACGTCTTCCCCATCGAGGTAGACCTGGCGCACACCACATTGGCCTATGGCCTCAACC
AGGAGGAGTTCACAGATGGGGAGGAGGAGGAGGAGGAGGAAGACACGGCAGCTGGGGAGCCGTCCAGGGATACAC
GAGGGGCTGCTGGGCCCTTGGACAAGGGTGGAAGCTGGTGTGACTCC**TGA**GTGCCCCGCGGCTGTGGTGCCGGGG
GCAGGGTGCGTGGGAGGACGGAGCCTGGGAGCGGGGCGGGGCCGCCGCGCAAGGGGGCGACGCATAAAGGCCTGC
TGGCTTGGGGCGCCTGCCTCCCTGCTCCTCTGTCCTCGCACAGCGAACCTGGGCTCCTGCCCAGGACAGGCACCA
GGGTCATGGCCTGGGACCTGGACACTGGCCCCTCCACCCTCCCTCCCCTCCCGGCTCCCCGGCCAGAGGGAGAGC
TTGGTCTCTGGACCTGCCTTAGGAAGGAGAGGGAGGGCAGGAAGGAAAAGAAAGGACTTGGAGGTGGCAGGAGTC
CGAGCCCTGCTCCTTGTGGGCGCTCACACTGCCCCCGGAGCCTGCTGGGAGTGGGGCCAGCCGTGGACAGCTGAG
GTTGGGGTCAATGCCTCCTGGGCACCCTTGCCTCGCCCCAGACCGGCCCGTCCAGTCCCCATCACACCTCGGCGG
CCTTTATTTATTCTGTTCCCCCAGCTCGGCCACTTCTCTGAAGGAGGGCTGGGTTCTGGGCCTGTATCGAATAAA
CACAAACCTGGATGGCGCA

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FIGURE 4022

CTTACAACTCCGCGCGGCCTCGGCCCCCTGCGCCGCCCGCCCCACAACAAAACTCAGCGCAGCGCTCCCGGGCGC
CCGGTTCAGAGCGACCTGCGGCTCAGAGCGGAGGGGAGACTGACCGGAGCGCGGATCGGGACAGCGGCCGGGACA
GCGGCGAGACGCGCGTGTGTGAGCGCGCCGGACCAAGCGGGCCCAGAAGCGGGTCTGCAGCCCAGAGGGCACCTT
CTGCAAACATGTCTGTGGATCCCCTATCCAGCAAAGCTCTAAAGATCAAGCGAGAGCTGAGCGAGAACACGCCGC
ACCTGTCGGACGAGGCGCTGATGGGGCTGTCGGTGCGCGAGCTGAACCGGCATCTGCGCGGGCTCTCCGCCGAGG
AGGTGACACGGCTCAAGCAGCGGCGCCGCACACTCAAAAACCGTGGCTACGCCGCCAGCTGCCGCGTGAAGCGCG
TGTGCCAGAAGGAGGAGCTGCAGAAGCAGAAGTCGGAGCTGGAGCGCGAGGTGGACAAGCTGGCGCGCGAGAACG
CCGCCATGCGCCTGGAGCTCGACGCGCTGCGCGGCAAGTGCGAGGCGCTGCAGGGCTTCGCGCGCTCCGTGGCCG
CCGCCCGCGGGCCCGCCACGCTCGTGGCGCCGGCCAGCGTCATCACCATCGTCAAGTCCACCCCGGGCTCGGGGT
CTGGCCCCGCCCACGGCCCGGACCCCGCCCACGGCCCGGCCTCCTGCTCCTAGTGCCCGCCCCCGCCATGCCTCA
GCCACGCCCCTCCGGCCTCAGCTCCCTCCCCAAAGTGCCTGAGCGCCGCCTCTGTGCCCAGGTCCCATTTCTCTG
CAGCACTGGCCCCTTGGTGCACACACATTCCCTTCGTGGGCCCTGTCTTCCTCTTGCAGCCCCCCAAACTGGGAC
CGAATGACCCTGGGAAGGGGAACTTGGGTAGGTTGGGGATGGGGCAGAGGTCTGGATCTGGGATCGCCCTTGGCT
GAAAGTTTAGCCTTTTTAGATTGAGAGATACAGAGCCGGCTTAGAGAACAGCTGTTGGGGGAGAAGAGGGCACCC
CTCATCTTGGAAACTGCTCTTATTGTGCCAATATGCCCTCCAAACCCTCCCAGGATTCAAAGCTAGGTTTGGCTG
TCTGTGACTTACGGGACCGTCCTGCTGAGAAATTGCACTGAAGAGATGCCCCCACCTCTGGTTGGGCCTGGGGGT
GCCTGGCCTTCCGAAACTAAAAGAGTGGGTGGGAAGACTAGTGAAACCCAGTTCACGGATGGGGAAACAGGCCTG
AGGTCACATTTCACTTAGTGGTTGTGTTGGGACCAAAACCTGGGTGTCCTCACTGCTGCCCTGAGTCCAGCCATG
GTTTTCAGGGGGACAGTGGACAGGGACTCAGAAATGTGGTGGGAGGGCCTCCCTGGCTTGGGAGACCGCTCTCTG
CAAGGGAGGGGGAGAGAAGCAGAGGGAGAGAGAAGGTGACACGGATGGAAGAGTGGGAAGGAGCTGGCCTGGCTC
AGCCCTAGGCTGTCCCTGCAGCCAGGGTGTCCGGGGGCTGGCCAGTCAGAGAAAGGGGGCCATGGACTGCTGTGG
CAAATAGGGAGACAAGGAGACAGACCCTGCAGTCCTACTACAGTCTGGAGTGGGGTCCTAAGAAGAAGGGTCCCA
CCTCAACCCCTGTCAGTGTCCACTGTGGGGTGGGGGCTGACCCCTGCCTTTGATTGTCATTCTCCTGGGAAGCCC
AGTCTCAGTCCCTCCCCCAACACTGTCCACACTGCCCCTCCCCACTGTTTATTTATTGCACGGATCTAAGTTATT
CTCCCCAGCCAGAGCCCGAGCTCCTGCTCCCTGGGAAAAGTGGCGTATGGCCCTGAGCTGGGCTTTATATTTTAT
ATCTGCAAATAAATCACATTTTATCTTATATTTAGGGAAAGCCGGAGAGCAACAACAAAAAATGTTTAAGCCGGG
CGCGGTGGCTCACATCTGTAATCCCAGCACTTTGGGAGTCCAAGGAGGGGGATCGCTTGAGTCCAGGAGTTTGAG
ACCAGCCTGGACAACATGGTGAAACCCCATCTCTACAAAAAATACAAAAATTAGCCATGCATGGTGGCTCATGCC
TGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGGATCACTTAAGCCCAGAAGGCAGAGGTTGTAGTGAGCTGA
GATCGCACCACTGCACTCCAGCCTGGGCAACATAGCAAAATCCTGTCTCAAAAAAAAAAGTTAAAAAATATTGCCC
GGCTCCTAGAATTTATTTATTTCCTGACTTACAGCAAGCGAGTTATCGTCTTCTGTATTTTGTAGACTTTCTAAA
TAAAGTCAAATTCTTTCTTTTTCCACAGAG

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FIGURE 4023

CGGGACGCGCCGGCGGCGGCGGAGACTCCGGGGCTGCGGCGCCGCCCGCCCCGCCCGCAGAGTCCGGCTGCCGCG
CATCGTCCGCAGACGCCGCCACCGCCATGGGCTCCTGAGGCTAGCTTGTCACTTTCTGCAAAGGTTTCCCTCAGG
GAGCCTCCTGCTGCCAGGCACCATGACAGTGAGGGGGGATGTGCTGGCCCCGGATCCAGCGTCGCCCACGACCGC
AGCAGCCTCGCCCAGCGTCTCCGTGATCCCCGAGGGCAGCCCCACTGCC**ATG**GAGCAGCCTGTGTTCCTGATGAC
AACTGCCGCTCAGGCCATCTCTGGCTTCTTCGTGTGGACGGCCCTGCTCATCACATGCCACCAGATCTACATGCA
CCTGCGCTGCTACAGCTGCCCCAACGAGCAGCGCTACATCGTGCGCATCCTCTTCATCGTGCCCATCTACGCCTT
TGACTCCTGGCTCAGCCTCCTCTTCTTCACCAACGACCAGTACTACGTGTACTTCGGCACCGTCCGCGACTGCTA
TGAGGCCTTGGTCATCTATAATTTCCTGAGCCTGTGCTATGAGTACCTAGGAGGAGAAAGTTCCATCATGTCGGA
GATCAGAGGAAAACCCATTGAGTCCAGCTGTATGTATGGCACCTGCTGCCTCTGGGGAAAGACTTATTCCATCGG
ATTTCTGAGGTTCTGCAAACAGGCCACCCTGCAGTTCTGTGTGGTGAAGCCACTCATGGCGGTCAGCACTGTGGT
CCTCCAGGCCTTCGGCAAGTACCGGGATGGGGACTTTGACGTCACCAGTGGCTACCTCTACGTGACCATCATCTA
CAACATCTCCGTCAGCCTGGCCCTCTACGCCCTCTTCCTCTTCTACTTCGCCACCCGGGAGCTGCTCAGCCCCTA
CAGCCCCGTCCTCAAGTTCTTCATGGTCAAGTCCGTCATCTTTCTTTCCTTCTGGCAAGGCATGCTCCTGGCCAT
CCTGGAGAAGTGTGGGGCCATCCCCAAAATCCACTCGGCCCGCGTGTCGGTGGGCGAGGGCACCGTGGCTGCCGG
CTACCAGGACTTCATCATCTGTGTGGAGATGTTCTTTGCAGCCCTGGCCCTGCGGCACGCCTTCACCTACAAGGT
CTATGCTGACAAGAGGCTGGACGCACAAGGCCGCTGTGCCCCCATGAAGAGCATCTCCAGCAGCCTCAAGGAGAC
CATGAACCCGCACGACATCGTGCAGGACGCCATCCACAACTTCTCACCTGCCTACCAGCAGTACACGCAGCAGTC
CACCCTGGAGCCTGGGCCCACCTGGCGTGGTGGCGCCCACGGCCTCTCCCGCTCCCACAGCCTCAGTGGCGCCCG
CGACAACGAGAAGACTCTCCTGCTCAGCTCTGATGATGAATTC**TAG**GTGCGGGCTGCAGTGGCGGAAGTGCTGGC
GCCATAGCCACGGTCAGGCTGTGCCCCACCTCCAGCCTCACCACCAGGCCAGGAGGCAGCTGGCACAGTGCTCAC
GCCGCCTTTATTTATTGGACCAGAAACACTCACATGTCACTTCCAGAGGAACGGGGGACAGCCAGGCTCGCCCAT
GGGCCTTCAGGAATATTTATACATGGCCCAGCCTGCACTGCCCGGGCGAGGGCAGAGGACACTGGGAGCAAGGCT
TATGCCCCTGCTGCCCGTCCTGTGCTGGGGGCATGCTGGGACCAGCCGCACCCAGGCCCCAATGCTTGTGTGTGG
ACCAGCGGCTGCAGCCTTCTAGCCCCTCCTCCCCGCGAGACTCTCAGGCTGAGGTCGGCAAGCCGTGGCTCCCCC
ACACACCGTGCAATACCCTGTCTGACCTGGGCTCTTCCCGCCTGCATCCCTCCCCTGTCCACCTTTGTCCAGTGC
TAGATTCACCTCACCCCGGGCAGGAGTGGGGATGTGGGCGCTCTGTGGTCCTCCCCTCCTGACCCAGGCCTCTGT
GGCATGCTGCAAGGATCAGAGCCAGACACCAGGAGTCACAGGCCCCACCCAGGAAGGGCATTCAGGGCCCCTGGG
CACCGCTTCTGTTGAAGCAGGGGCTTCTGGGCCCCTGGGTATCCCCACCTGTCGTGGCCACACCTCTGCCTGCCT
CATGCCCCTTCCCCCTGGCCTACCAAGGACAGCCCACAGCCCGCACTGCCGGCTCACTTGGGTCCTTCCTCGATA
GCTTTGGGCAGAGCCCTTGCTTCCTGGCTGCTTCAGGGCTCAGGGGCTCCCAGCCCTCCTTCCCAGGCTGATGCT
GGGTCCTCTCTCTCTTTGGGGCTTCTCCCTCCCGTTTCAGGGGAAAGGTCTGAGTCTCCACGTTTCAGACCAGCT
TCTGGGGGAAGGCAGTCCGGCAGGGAGACCGGGAGGGGTGGCCACACAGTGGGGAGCTGGGAGGTGGGGGGAATG
GTCCCAGACTCCTCTCGGGGCCCCTATCCACACAGGGCCTGGTGTTCTACCCCATCTGGCCCCTGGCCCATCTCT
TCTGTGCCTTAGTCACATATGAAAGCGCCCCTCCCTGGCTCCCCATCTGTCCCACACGCTCCCTGGGGCTCTTAG
TTCAGCTGCTGGCACTCGCAGGATCCTGCAGTGCTGGGCCCAGAGCCCTTGGACAGGCCTCAGGAGTGGTCAGGA
CCACCAAGCCCCTCCTCTCCCCCTCCACACCTCTAGACCTGGGGCCTCCGGAACCCCCAGCAGGCTGGGCTTATA
CTAGCTCCTGACTTAGGAAGAGCCTCGTGTCACAACACGTGTCCCTACAGGCAAAGTGTCCTGGCATTTAAAACC
CAGATTATCCCTGGGTTTGGGCTGCAGTCACCTGGAGAAGCTGGTAGGGTAAGGGAGAGGGACCCTGCCGGTGTT
CACTGGGGATTCTTTCTTTTGGTCCTTCCTGGAATGAACAGGTTCCCTCCCTGCCACCTGTGAGGAGAGTTGGGG
CCCAGCCGTCTTCCTGGCCTCCTTCCTTTCCTCGTGGCAGAGGCCTGCATGTGGGTGCCAGAGGCCAGCTCTCCC
CCTCCATCTTGGGGGGGCGGAGCAGTTGGGCCCAAGCTGCCCGGGAGGGTGGGTGCAGACACAGGCTGAGGACCA
GCCCTGGCCCTGCCCCGCCATCTGCTTTCACCAAGCTGTCTCTCCACCGTGGCTTCCCTTCTCCCTCCAGGCCAA
AGTGCTGCTGATTCCCACTCCCTTGGTTTTCGCCTGCCCAGCGTTGCTGTTTGCGTGGAGGGTGGGGGGAGCTCA
GTGGCAGGGAATCAGCGGTCCGTGGGGTCGTGGGGACGGGAACATGTGCCCGACCGCTCCATCCCCTCCTCCTCC
TTAGGATGCATAACCTACCTTGTCTTTTTTTTTTTTAATTTTCTTTCCAGGTAGAGTAGCTCTTTGTACATAAAG
AATACTTGAAAAATTAATTGTATGATGTATGAGAAGACAGAGTCTCCTAGTTTTGTATCTTGTTGTATGACTGCC
ATGAGTTCCACCAGAAAGCCACTCTATTTTGGTCTCTGTGACATTTTAAATGCGTGACAGAAGTGAGCAAATAAA
GTGAGGAAGAAATCTATATATGAGATAATATAGATTGTATTG

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FIGURE 4024

AGGCCGGGAGGAGGGAGGCGGCGGCGGCGGCGGCGGCGGCGAGAGCCCAGAGCCAGAGCCCGGCCGGGGCCG
AGCGGAGCGCGGCGGCGGCGGCGGCGGCGGCGGCTGGGCCGGGAGAGGCTGGCGCGCCGGGCGGCTCCGCGAATC
CTCCGGCATCCGCCCCGGCGGGCCGCCCCCGCCCGCGGCAGCCCCCCGAGCAGTGGCCCGGCATCGGCGCCTTCC
CGGCGGGCAAGAGTGAGCC**ATG**GAGCTACGTGTGGGGAACAAGTACCGCCTGGGACGGAAGATCGGGAGCGGGTC
CTTCGGAGATATCTACCTGGGTGCCAACATCGCCTCTGGTGAGGAAGTCGCCATCAAGCTGGAGTGTGTGAAGAC
AAAGCACCCCCAGCTGCACATCGAGAGCAAGTTCTACAAGATGATGCAGGGTGGCGTGGGGATCCCGTCCATCAA
GTGGTGCGGAGCTGAGGGCGACTACAACGTGATGGTCATGGAGCTGCTGGGGCCTAGCCTCGAGGACCTGTTCAA
CTTCTGTTCCCGCAAATTCAGCCTCAAGACGGTGCTGCTCTTGGCCGACCAGATGATCAGCCGCATCGAGTATAT
CCACTCCAAGAACTTCATCCACCGGGACGTCAAGCCCGACAACTTCCTCATGGGGCTGGGGAAGAAGGGCAACCT
GGTCTACATCATCGACTTCGGCCTGGCCAAGAAGTACCGGGACGCCCGCACCCACCAGCACATTCCCTACCGGGA
AAACAAGAACCTGACCGGCACGGCCCGCTACGCTTCCATCAACACGCACCTGGGCATTGAGCAAAGCCGTCGAGA
TGACCTGGAGAGCCTGGGCTACGTGCTCATGTACTTCAACCTGGGCTCCCTGCCCTGGCAGGGGCTCAAAGCAGC
CACCAAGCGCCAGAAGTATGAACGGATCAGCGAGAAGAAGATGTCAACGCCCATCGAGGTCCTCTGCAAAGGCTA
TCCCTCCGAATTCTCAACATACCTCAACTTCTGCCGCTCCCTGCGGTTTGACGACAAGCCCGACTACTCTTACCT
ACGTCAGCTCTTCCGCAACCTCTTCCACCGGCAGGGCTTCTCCTATGACTACGTCTTTGACTGGAACATGCTGAA
ATTCGGTGCAGCCCGGAATCCCGAGGATGTGGACCGGGAGCGGCGAGAACACGAACGCGAGGAGAGGATGGGGCA
GCTACGGGGGTCCGCGACCCGAGCCCTGCCCCCTGGCCCACCCACGGGGGCCACTGCCAACCGGCTCCGCAGTGC
CGCCGAGCCCGTGGCTTCCACGCCAGCCTCCCGCATCCAGCCGGCTGGCAATACTTCTCCCAGAGCGATCTCGCG
GGTCGACCGGGAGAGGAAGGTGAGTATGAGGCTGCACAGGGGTGCGCCCGCCAACGTCTCCTCCTCAGACCTCAC
TGGGCGGCAAGAGGTCTCCCGGATCCCAGCCTCACAGACAAGTGTGCCATTTGACCATCTCGGGAAG**TGA**GGAGA
GCCCCCATTGGACCAGTGTTTGCTTAGTGTCTTCACTGTATTTTCTTTAAAAAAAAAAAAAAAAAAAAAAAGGCA
AAAATAAACCACTCAAAAGAACAACAAAAAAACCCAGCAC

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FIGURE 4025

GCTGACAGCTTGTGCCACCATGGGCAGCAGGGCCAGGCAGGGCGCTGTCTCCCGTCGGAACAAGGAGGATCTGGC
TTCACCTGGGGTCCCTCCTGGGTGCCCGCAGCAGGGCATGGGTGGTGCTGGCGGCGCCCCCTGCTGCCCTGATTG
CTGCCTACACCGTCCTGCTGCTCCTGTTCTGCACATCCCAGGTGGCTACCTGCACCATGGCCCCTCGGGCCAGCC
TGGACCCAGTCATGGTGCTTGCTTTCTTCTTGGTCATGGGCCCCTGGGTCTGGCTAGGCAGTTGTTCTGTTTCCC
TCTTTTAAGAGTCCCAGGGGTGGGGTTGGGTGGGGAGCAGCATTGGCCGGCCGTACCCAGAGCTCTGGAATCTGT
GAAATTGTATGTCTTGTTTCACATCTCTTCTGGAAAAGGGGGCTTCCTCGAGCCAGGCTCAGCCCCGTGACAGCC
CCATGACAGCGAAGGGACCTTTCTGTCCCCGCCCCTGTCCCTGTGCTGGGCCCACGTACTCACCCACGTACTGGT
AAGGATCCTCTGAGGTCTGGCTTTTCCAAAATTTGCCACTTGACCAGTGAGCGCAAGAGGCTGAGCCTCAGCTGT
GCTTTTTGTCCCTTTCAGGTGCCCGGCTCCCCTGGGCACCCAGAGCCCCCCAGATAGGCCGGTGGAGGAGGTGGA
GGAGCTGTCCCCCCAAAACTACTGGCCTGTGGTCTGGACTCCAGGGCCCCATTTCTGATGTCGCCAGGTGTGCCT
GAGCCCATCGGGGCCAGGCCTGAGGAAGTGTTTCTTGGGAGGATGGGATGACCCCCTGTTCCCAAGAGATGGCAG
CACAGTGGAGGCCATGGTGGAAAAGGCCCTGCCATGGGGTCCTTGAGGGCCAGGACAGCCTGAGGGAGGGATGGT
GGCCACTGCCCACAAGGGGCCTGGTGGGAACGGGTCCCAGGACAGACTCATAGCTAGACCCCGTTGGCGGCCTCT
GTGTTGAACCAGAACTCATTAAACACCTCCTCTTGCTTCATCCTGGTGTGCCTCTTTCATGGCAGGGCCCTCAGC
CACCCTGCTAGATGGTTAGGACCAAGGCTCTGTTCTCCTGGAAGCCAAGGTCGGCACATTGGTCTTGGGCTTCTC
TTCTCTCTGGGTTTCTTGTTCACTAAGGAGTAACACAGAGGTCAGGCAGAGAATGGGGGTCTCGCAGGCTAGGGA
CCTCAGGGAGAGGCCTCTGTTGCCCTTTTCAGCAAGGCTGGAAATGGGATATGGGCAGGGGACGTCTTCTCTGAC
TTCACCCTAGACCTTCTGGCTCCAAATGGGGCCCATGGCCTTGAGCACCTGGGACCAGCTCTTTCCACCACAGGG
CATTGGGCACTGGGCACTTTCTTATCGAGATAGTCACTCCCACGTCTGGTTCGTGATGGGCTTGGCCCTCCAGCT
CAGCACAACTGCAAGAATGGATTTTGTATTCTCTAGACGGACACTGTCCAAGATGGTAGCCATTGGCCACATGCG
ACACATTTTTAATGAATTAAAATTAATCAAGACTGGAAATGTCGGCCAGGCCTGGTGGCTCATGCCTGTAATCCC
AGCACTTTGGGAGGCCATAGAGGGCGGATGACTTGAGGTCAGGAGTTTAAGACCAGCCTGGCCAACATGGTGAAA
CCCATTTCTACTAAAAACACAAAAATTAGCTGGGCATGGTGGTGTGTTCCTGTAATCCCAGCTGCTTGGGAGGCT
GAGGCAGGAGAATCGCTTGAACCCAGGAGGCAGAGATTGGAGTGAGCTGAGATCATGCCACTGCCCTCCAGTGGC
CACCACATCCGGCAAGGCAGATGGGACCATTTCCTTCATCCAGAACGTTCTGTGGACATCACTGCTCTAGGTTCC
TCCCTTATGGAGTCTCACAAGACTGTCTAGCCAGCAAGATCTCTTTTCCAACCAGGCCAGGAGCACCTCTCCACC
CACTGCTGCTGGTCTGACCGCCTTCCTGGAAGTCCCTCTTGAGGCAGGCCCTGGAGTTAGAAGCTGGGCAGAGGC
ACCCACAGCCTTATCCTTTGCCAATCTCTGACTCAATGCCACGGCCACTGTAGTGAGCTGAACCACCTCCAGCAG
TCCCCTGGCAGAAGCACCTGGAAAACATGCAATGGGAACCTTCACCCTGAGGCCAGGCCCTTCCCATGCTACCCA
ACAGTAGACAGGACACCCTGTGTTGTTGGCTGCACCGGGGTGCTGGGATCTGTGGATCCCTGGGGCCTGGAAGCC
ACTCTCAGCACATACAGCCACTGTGTTCCGAGGTCCAGTCAGCTGGCCGGGAAGGAATTCAACACAGCCAAGGAC
AGAGGTCCATATGATGACGGGTGGATGCTCGTGTGACTTTGCTGACCTTTTATGTTTTCTATGGGCAATAAAGGC
CAAGAGAGCTC

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FIGURE 4026

GGGCGGCGGCGCGCGGGTGCGATCGCGGAGCTGTGAGGCGCAGGCAGGGCTCTGGGGCACCTAGAGACCGGGGCC
GGAGACGTGGCAGCCGCCCTGCCCGCCAGAAAGTTTCCTAGAAGTTTGCTGGGCGCGGGCGCACGACTGACTGGC
TGGACCATGAACGTGTTCCGAATCCTCGGCGACCTGAGCCACCTCCTGGCCATGATCTTGCTGCTGGGGAAGATC
TGGAGGTCCAAGTGCTGCAAGGGCATCTCTGGGAAGAGCCAGATCCTGTTTGCTCTCGTCTTCACCACCAGGTAC
CTGGACCTGTTCACCAACTTCATCTCCATCTACAACACAGTAATGAAGGTGGTTTTTCTCCTCTGTGCCTATGTT
ACAGTGTACATGATATATGGGAAATTCCGTAAAACTTTTGACAGTGAGAATGACACATTCCGCCTGGAGTTTCTT
CTGGTCCCAGTCATTGGCCTTTCCTTCCTTGAAAACTACAGTTTCACTCTGCTGGAGATCCTCTGGACTTTCTCT
ATCTATCTGGAATCAGTGGCTATCCTGCCCCAGCTCTTCATGATCAGCAAGACTGGAGAGGCTGAGACCATAACT
ACTCACTACCTGTTCTTTCTGGGTCTGTACCGGGCACTCTACCTGGCTAACTGGATCAGGCGGTACCAGACTGAG
AATTTCTATGACCAAATTGCAGTCGTGTCTGGAGTAGTACAAACCATCTTCTACTGTGACTTCTTCTACTTGTAT
GTGACCAAAGTCCTTAAGGGAAAGAAGTTAAGTCTTCCAATGCCAATCTGAGGACCTTCAGAGACAGTCTACGCC
TTAACAAGCACATGAAGGAAACTATTTTGAATGTTCTCTTTGGCAACTTATCCATAATTTGGGATCAAATGTTAA
AACCAGAAAAGTGTTTAGTGTGGATTTCAGCAAAACCTGATCATCCCACCCAGAAGACCTTCTCATCAATAGATC
GCCCTTAAAGACCCATTGTAAGGTCATAAAAAACCTCGGCCACCTGCACAAAGATGGTGCCTCACTGCAACAAGA
AACCTTAAGGTGTCTTACCGACGAAATAAAAAACATAAATGATTGTTCTCCAAGGCCTGAGGGCAAGACTCATGA
TGAGCAAGTCAACCCCAATCTGGAACAATGTCCCTCCTCTTAGAATGTCCCAACTAAAGACCAGTTAAAATATTA
GGGTACGTTCTTGTGAATTTCCACTTTCCAGGTAGATGACCAAATTTAGGTGGTCAAGATATAAAGGTGTCAGCT
AGTTTTAAGTGTGAAACTTATTTCACTTTCACACTGCCTTCAGGCCAGAAGCAAACCAAATTTACCAGGTTTGGC
TGGAGGAGTTTTGTGACTCATCTTTTACTGGTTTGAATTTTTTCAAACCAGTGGCTGATACCTGCCTTGTACTTA
GTACCTTAATACCAATAACCTAATGGTACTTAGGCGAGTACCATTTGCACAATCACTGTTTTACTTATGAGCAGA
TACAGATATATCCAAACCCTTACCTACTAGGTATCCTGCTAGGGTTTTCAATTCCAATTCTTGTATTAAGTTTTT
TCCTTTCAGTTTTAGGTGCGAAAGTAATCAGTCAATCCAATATCCCCCATCTTTGTCTTGAAACAAAAACTGTTT
TAAGACGTCTACGTTGAATTATTCAGAGAATTAAGCAATAAAAGCTCACACCTTA

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FIGURE 4027

TTTCCGCTTCCGCTCTTCCCTGGTCCAGTCCACCCTGGCGGGGTCGCAGGGTTGGGATGGCGGCTGGAGGCGATC
ATGGTTCGCCCGACAGCTACCGCTCACCTCTTGCCTCCCGCTATGCCAGCCCGGAGATGTGCTTCGTGTTTAGCG
ACAGGTATAAATTCCGGACATGGCGGCAGCTGTGGCTGTGGCTGGCGGAGGCCGAGCAGACATTGGGTTTGCCTA
TCACAGATGAACAAATCCAGGAGATGAAATCAAACCTGGAGAACATCGACTTCAAGATGGCAGCTGAGGAAGAGA
AACGTTTACGACATGATGTGATGGCTCACGTGCACACATTTGGCCACTGCTGTCCAAAAGCTGCAGGCATTATTC
ACCTTGGTGCTACTTCTTGCTATGTTGGAGACAATACTGACTTGATTATTCTTAGAAATGCACTTGACCTGCTTT
TGCCAAAGCTTGCCAGAGTGATCTCTCGGCTTGCCGACTTTGCTAAGGAACGAGCCAGTCTACCCACATTAGGTT
TCACACATTTCCAGCCTGCACAGCTGACCACAGTTGGGAAACGTTGCTGTCTTTGGATTCAGGATCTTTGCATGG
ATCTCCAGAACTTGAAGCGTGTCCGAGATGACCTGCGCTTCCGGGGAGTAAAGGGTACCACTGGCACTCAGGCCA
GTTTCCTGCAGCTCTTTGAGGGAGATGACCATAAGGTAGAGCAGCTTGACAAGATGGTGACAGAAAAGGCAGGAT
TTAAGAGAGCTTTCATCATCACAGGGCAGACATATACACGAAAAGTGGATATTGAAGTACTGTCTGTGCTGGCTA
GCTTGGGGGCATCAGTGCACAAGATTTGCACCGACATACGCCTCCTGGCAAACCTCAAGGAGATGGAGGAACCCT
TTGAAAAACAGCAGATTGGCTCAAGTGCGATGCCATATAAGCGGAATCCCATGCGTTCAGAACGTTGCTGCAGTC
TTGCCCGCCACCTGATGACCCTTGTCATGGACCCGCTACAGACAGCATCTGTCCAGTGGTTTGAACGCACACTGG
ATGATAGTGCCAACCGACGGATCTGTTTGGCCGAGGCATTTCTTACCGCAGATACTATATTGAATACGCTGCAGA
ACATTTCTGAAGGATTGGTCGTGTACCCCAAAGTAATTGAACGGCGCATTCGGCAAGAGCTGCCTTTCATGGCCA
CAGAGAACATCATCATGGCCATGGTCAAAGCTGGAGGTAGCCGCCAGGATTGCCATGAGAAAATCAGAGTGCTTT
CTCAGCAGGCAGCTTCTGTGGTTAAGCAGGAAGGGGGTGACAATGACCTCATAGAGCGTATCCAGGTTGATGCCT
ACTTCAGTCCCATTCACTCCCAGTTGGATCATTTACTGGATCCTTCTTCTTTCACTGGTCGTGCCTCCCAGCAGG
TGCAGAGATTCTTAGAAGAGGAGGTGTATCCCCTGTTAAAACCATATGAAAGCGTGATGAAGGTGAAAGCAGAAT
TATGTCTGTAGAGTTGGAAGAGAATTAAACGAAAATCATTGTTAATTGCTGAGGCATGAAAATTGTGTTACTATA
ATGCCTTATTTTACCTCGAGAATTGTTACCTTAAATTAGTACAGCACTTTCTTCTTCCCATGGTGCTTTCCTGTT
TCTCAGTCTCACATTTCTCAACAAGGCAAAAACAAAGAGCGTTGAAGTTGACTCTGCTCTTGCATAGTAAATGTA
GTTCATACTTGATCTCTGTTCTTTCAAGGCATATTTTCCAGCTGCCTCAAGTTTAGTCCTTTTCACGTGTTCATT
TGCTTGTAAAGTAGCAAGAAATTTCTGGTCCTGTCTTCTAAAAGTGAATTTGATCTAGGTCTAGCAAAATAACCT
GGACTCAGTGATTGAGTCAATGGTCAGATACCTTTTATTTCGGTTATTTTTGGCTAGTATAAGTGATGAAGTTTG
GAACTACAGTAAATACTTAAAAAA

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FIGURE 4028

GGCAGATGATTCTGGACCAGATGAAGCCTGAGGAGCCTTCCAGCTCTAAGATAGCAGGATAGGAGACTTCTAAGA
TTGGAGCTGCAGAAGACTTGCCAGCCCACCAGCACAATGTCAGGAAGCCATACACCTGCCTGTGGCCCTTTCTCA
GCCCTGACTCCGAGCATATGGCCCCAGGAGATCTTGGCCAAGTACACGCAGAAGGAAGAGTCAGCAGAGCAACCA
GAGTTCTACTACGATGAGTTTGGTTTCCGTGTGTACAAGGAAGAAGGTGATGAGCCTGGCTCCAGTCTGCTGGCG
AACTCCCCTCTGATGGAGGATGCTCCACAGAGGCTGCGGTGGCAGGCCCACCTGGAGTTCACCCATAACCACGAT
GTGGGGGATCTCACCTGGGACAAGATTGCCGTCTCCCTACCCCGCTCTGAGAAGCTCCGCTCCCTGGTGCTGGCC
GGCATCCCACATGGCATGAGGCCACAGCTGTGGATGCGGCTCTCTGGGGCCCTGCAGAAGAAGAGGAACTCTGAG
CTGTCCTACCGCGAGATTGTGAAGAACAGCTCCAACGATGAGACCATCGCTGCCAAGCAGATCGAGAAGGACCTG
CTCCGCACCATGCCCAGCAACGCCTGCTTCGCCAGCATGGGTAGCATCGGGGTGCCCCGCCTGCGCAGGGTGCTC
CGGGCCCTGGCCTGGCTCTACCCAGAGATCGGCTACTGCCAGGGCACCGGCATGGTGGCCGCCTGCCTCCTGCTG
TTCCTGGAGGAGGAGGACGCCTTCTGGATGATGTCTGCCATCATCGAGGACCTGCTCCCCGCCTCCTACTTCAGC
ACCACCCTGCTGGGTGTCCAGACTGACCAGCGGGTCCTGCGCCACCTCATTGTCCAGTACCTGCCTCGCCTGGAC
AAGCTGCTCCAGGAGCATGACATTGAGCTGTCCCTGATCACACTGCACTGGTTCCTCACGGCCTTCGCCAGCGTG
GTGGACATCAAGCTGCTCCTGCGCATCTGGGACCTGTTTTTCTACGAGGGCTCCCGGGTGCTGTTCCAGCTCACG
CTGGGCATGCTGCACCTCAAGGAGGAAGAGCTGATCCAGTCAGAGAACTCGGCCTCCATCTTCAACACGCTATCG
GATATCCCGTCGCAGATGGAGGACGCGGAGCTGCTTCTGGGGGTGGCCATGCGGCTGGCCGGCTCCCTCACCGAT
GTGGCCGTGGAGACTCAGCGCCGCAAGCACCTGGCCTATCTCATTGCAGACCAGGGCCAGCTCCTGGGGGCCGGC
ACCCTCACCAACCTCTCTCAGGTTGTTCGCCGCAGGACCCAGCGGAGGAAGTCCACCATCACTGCTCTGCTCTTC
GGGGAGGATGACCTGGAGGCACTCAAGGCCAAGAACATCAAGCAGACGGAACTGGTGGCTGACCTCCGGGAAGCC
ATCCTGCGCGTGGCACGCCACTTCCAGTGCACAGACCCCAAAAACTGCAGCGTGGTGAGTCGCCAGCTCCCTGGG
CTGCTACCAAACACGGCCCTAACTCCTCCAACCCCCTTGGTGGGCCTGTGTTCACTGTGGCAGGAGCTGACTCCA
GACTATAGCATGGAGAGCCACCAGCGGGACCACGAGAACTACGTGGCGTGCTCACGCAGCCACCGGCGCCGAGCC
AAGGCCCTGCTGGACTTTGAGCGGCACGACGACGACGAGCTGGGCTTCCGCAAGAACGACATCATCACAATCGTG
TCTCAGAAGGACGAGCACTGCTGGGTGGGGGAGCTCAACGGCCTGCGAGGCTGGTTTCCAGCCAAGTTCGTGGAA
GTCCTGGATGAGCGCAGCAAAGAGTACTCCATCGCGGGGGATGACTCGGTGACGGAGGGGGTCACAGACCTCGTG
CGAGGGACCCTCTGCCCGGCCCTTAAGGCCCTGTTCGAACATGGACTGAAGAAGCCATCCCTGCTTGGGGGCGCC
TGCCACCCCTGGCTGTTTATCGAGGAGGCTGCAGGCCGGGAGGTCGAGAGAGACTTTGCCTCCGTGTATTCCCGT
CTGGTGCTCTGTAAGACCTTCAGGTTGGATGAAGATGGCAAAGTCCTGACCCCGGAGGAGCTGCTCTACCGGGCT
GTGCAGTCTGTGAACGTGACCCACGATGCAGTGCATGCACAAATGGATGTGAAGCTCCGCTCACTGATCTGCGTG
GGGCTCAAGTGACAGGTGCTGCACCTGTGGCTGGAGGTGCTCTGCTCCAGCCTGCCCACCGTGGAGAAGTGGTAC
CAGCCCTGGTCCTTCCTGCGCAGCCCGGGCTGGGTCCAGATCAAGTGTGAGCTCCGAGTCCTCTGCTGCTTTGCC
TTCAGCCTCTCCCAGGACTGGGAGCTCCCTGCGAAGAGAGAGGCGCAGCAGCCCCTGAAGGAGGGCGTCCGGGAC
ATGCTGGTGAAGCACCACCTCTTCAGCTGGGATGTGGACGGGTGACCCCCTCCTCCCCAGCCCAACCTCGGGCCT
GCGTCTGAGGTGGCCCAGGACCCCAAGCTGCAGAGCCCAGGGAAGAGCAGCTCCAGAGCCCTGGCCGGGGCCGCG
GGATATCAATATCAGGCTGCCCCACTCCACGTTCCCCAGCACATCCCAGGTGGTGGGAGCAGAGGGTACCCTGCC
CCACCAGGGTCCTTAGGGATGCTCTAGGCCAAACCACAGTTTGTACCAAAAACCTTGTGAGGAGGTGGGGGAGCC
ATGTCTGTGCTCAGGAAGAGGGAAGGGGATGGGGGTGGCTAGTAGGCTCCTGGCCTCTTTGGTTTATAAATAAAC
TGTGTCTGTCTTTGAGAAAGCA

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FIGURE 4029A

ACTTCTGCAATTACAGACAGTTGCACTTCAAGGGGACCCTTCTTTCACACTACATCCTTCTGTTTTTAGACTTTT
TTTGCGTTTGAAAATGTGTTTTTTGAGGTGGAATACCCAACTGACCCCTCATCTCTCCTCTCTCTCTGCTGCCCT
GCAGTGCTACAGTTGAAACTCCAGCAGCGCCGGACCCGGGAAGAACTGGTGAGCCAAGGGATC**ATG**CCGCCTTTG
AAAAGTCCAGCCGCATTTCATGAGCAGAGAAGGAGCTTGGAGCGGGCCAGGACAGAGGACTATCTCAAACGGAAG
ATTCGTTCCCGGCCGGAGAGATCGGAGCTGGTCAGGATGCACATTTTGGAAGAGACCTCGGCTGAGCCATCCCTC
CAGGCCAAGCAGCTGAAGCTGAAGAGAGCCAGACTAGCCGATGACCTCAATGAGAAGATTGCACAGAGGCCTGGC
CCCATGGAGCTGGTGGAGAAGAACATCCTTCCTGTTGAGTCCAGCCTGAAGGAAGCCATCATTGTGGGCCAGGTG
AACTATCCCAAAGTAGCAGACAGCTCTTCCTTCGATGAGGACAGCAGCGATGCCTTATCCCCCGAGCAGCCTGCC
AGCCATGAGTCCCAGGGTTCTGTGCCGTCACCCCTGGAGGCCCGAGTCAGCGAACCACTGCTCAGTGCCACCTCT
GCATCCCCCACCCAGGTTGTGTCTCAACTTCCGATGGGCCGGGATTCCAGAGAAATGCTTTTCCTGGCAGAGCAG
CCTCCTCTGCCTCCCCCACCTCTGCTGCCTCCCAGCCTCACCAATGGAACCACTATCCCCACTGCCAAGTCCACC
CCCACACTCATTAAGCAAAGCCAACCCAAGTCTGCCAGTGAGAAGTCACAGCGCAGCAAGAAGGCCAAGGAGCTG
AAGCCAAAGGTGAAGAAGCTCAAGTACCACCAGTACATCCCCCCGGACCAGAAGCAGGACAGGGGGGCACCCCCC
ATGGACTCATCCTACGCCAAGATCCTGCAGCAGCAGCAGCTCTTCCTCCAGCTGCAGATCCTCAACCAGCAGCAG
CAGCAGCACCACAACTACCAGGCCATCCTGCCTGCCCCGCCAAAGTCAGCAGGCGAGGCCCTGGGAAGCAGCGGG
ACCCCCCCAGTACGCAGCCTCTCCACTACCAATAGCAGCTCCAGCTCGGGCGCCCCTGGGCCCTGTGGGCTGGCA
CGTCAGAACAGCACCTCACTGACTGGCAAGCCGGGAGCCCTGCCGGCCAACCTGGACGACATGAAGGTGGCAGAG
CTGAAGCAGGAGCTGAAGTTGCGATCACTGCCTGTCTCGGGCACCAAAACTGAGCTGATTGAGCGCCTTCGAGCC
TATCAAGACCAAATCAGCCCTGTGCCAGGAGCCCCCAAGGCCCCTGCCGCCACCTCTATCCTGCACAAGGCTGGC
GAGGTGGTGGTAGCCTTCCCAGCGGCCCGGCTGAGCACGGGGCCAGCCCTGGTGGCAGCAGGCCTGGCTCCAGCT
GAGGTGGTGGTGGCCACGGTGGCCAGCAGTGGGGTGGTGAAGTTTGGCAGCACGGGCTCCACGCCCCCCGTGTCT
CCCACCCCCTCGGAGCGCTCACTGCTCAGCACGGGCGATGAAAACTCCACCCCCGGGGACACCTTTGGTGAGATG
GTGACATCACCTCTGACGCAGCTGACCCTGCAGGCCTCGCCACTGCAGATCCTCGTGAAGGAGGAGGGCCCCCGG
GCCGGGTCCTGTTGCCTGAGCCCTGGGGGGCGGGCGGAGCTAGAGGGGCGCGACAAGGACCAGATGCTGCAGGAG
AAAGACAAGCAGATCGAGGCGCTGACGCGCATGCTCCGGCAGAAGCAGCAGCTGGTGGAGCGGCTCAAGCTGCAG
CTGGAGCAGGAGAAGCGAGCCCAGCAGCCCGCCCCCGCCCCCGCCCCCCTCGGCACCCCCGTGAAGCAGGAGAAC
AGCTTCTCCAGCTGCCAGCTGAGCCAGCAGCCCCTGGGCCCCGCTCACCCATTCAACCCCAGCCTGGCGGCCCCA
GCCACCAACCACATAGACCCTTGTGCTGTGGCCCCGGGGCCCCCGTCCGTGGTGGTGAAGCAGGAAGCCTTGCAG
CCTGAGCCCGAGCCGGTCCCCGCCCCCCAGTTGCTTCTGGGGCCTCAGGGCCCCAGCCTCATCAAGGGGGTTGCA
CCTCCCACCCTCATCACCGACTCCACAGGGACCCACCTTGTCCTCACCGTGACCAATAAGAATGCAGACAGCCCT
GGCCTGTCCAGTGGGAGCCCCCAGCAGCCCTCGTCCCAGCCTGGCTCTCCAGCGCCTGCCCCCTCTGCCCAGATG
GACCTGGAGCACCCACTGCAGCCCCTCTTTGGGACCCCCACTTCTCTGCTGAAGAAGGAACCACCTGGCTATGAG
GAAGCCATGAGCCAGCAGCCCAAACAGCAGGAAAATGGTTCCTCAAGCCAGCAGATGGACGACCTGTTTGACATT
CTCATTCAGAGCGGAGAAATTTCAGCAGATTTCAAGGAGCCGCCATCCCTGCCAGGGAAGGAGAAGCCATCCCCG
AAGACAGTCTGTGGGTCCCCCCTGGCAGCACAGCCATCACCTTCTGCTGAGCTCCCCCAGGCTGCCCCACCTCCT
CCAGGCTCACCCTCCCTCCCTGGACGCCTGGAGGACTTCCTGGAGAGCAGCACGGGGCTGCCCCTGCTGACCAGT
GGGCATGACGGGCCAGAGCCCCTTTCCCTCATTGACGACCTCCATAGCCAGATGCTGAGCAGCACTGCCATCCTG
GACCACCCCCCGTCACCCATGGACACCTCGGAATTGCACTTTGTTCCTGAGCCCAGCAGCACCATGGGCCTGGAC
CTGGCTGATGGCCACCTGGACAGCATGGACTGGCTGGAGCTGTCGTCAGGTGGTCCCGTGCTGAGCCTAGCCCCC
CTCAGCACCACAGCCCCCAGCCTCTTCTCCACAGACTTCCTCGATGGCCATGATTTGCAGCTGCACTGGGATTCC
TGCTTG**TAG**CTCTCTGGCTCAAGACGGGGTGGGGAAGGGGCTGGGAGCCAGGGTACTCCAATGCGTGGCTCTCCT
GCGTGATTCGGCCTCTCCACATGGTTGTGAGTCTTGACAATCACAGCCCCTGCTTTTTCCCTTCCCTGGGAGGCT
AGAACAGAGAAGCCCTTACTCCTGGTTCAGTGCCACGCAGGGCAGAGGAGAGCAGCTGTCAAGAAGCAGCCCTGG
CTCTCACGCTGGGGTTTTGGACACACGGTCAGGGTCAGGGCCATTTCAGCTTGACCTCCTTTTTTGAGGTCAGGG
GGCACTGTCTGTCTGGCTACAATTTGGCTAAGGTAGGTGAAGCCTGGCCAGGCGGGAGGCTTCTCTTCTGACCCA
GGGCTGAGACAGGTTAAGGGGTGAATCTCCTTCCTTTCTCTCCCTGCTTTGCTGTGAAGGGAGAAATTAGCCTGG
GCCTCTACCCCCTATTCCCTGTGTCTGCCAACCCCAGGATCCCAGGGCTCCCTGCCATTTTAGTGTCTTGGTGTA
GTGTAACCATTTAGTGGTTGGTGGCAACAATTTTATGTACAGGTGTATATACCTCTATATTATATATCGACATAC

FIGURE 4029B

ATATATATTTTTGGGGGGGGGCGGACAGGAGATGGGTGCAACTCCCTCCCATCCTACTCTCACAGAAGGGCCTGG
ATGCAAGGTTACCCTTGAGCTGTGTGCCACAGTCTGGTGCCCAGTCTGGCATGCAGCTACCCAGGCCCACCCATC
ACGTGTGATTGACATGTAGGTACCCTGCCACGGCCTATGCCCCACCTGCCCTGCTTCCTGGCTCCTTATCAGTGC
CATGAGGGCAGAGGTGCTACCTGGCCTTCCTGCCAGGAGCTCTCCACCCACTCACATTCCGTCCCCGCCGCCTCA
CTGCAGCCAGCGTGGCCCTAGGACAGGAGGAGCTTCGGGCCCAGCTTCACCCTGCGGTGGGGCTGAGGGGTGGCC
ATCTCCTGCCCTGGGGCCACTGGCTTCACATTCTGGGCTGACTCATAGGGGAGTAGGGGTGGAGTCACCAAAACC
AGTGCTGGGACAAAGATGGGGAAGGTGTGTGAACTTTTTAAAATAAACACAAAAACACAG

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FIGURE 4030

GGGTGGGAGGAGCCAGCGGCCGGGGAGGTTCTAGTCTGTTCTGTCTTGCGGCAGCCGCCCCCTTCTGCGCGGTCA
CGCCGAGCCAGCGCCTGGGCCTGGAACCGGGCCGTAGCCCCCCCAGTTTCGCCCACCACCTCCCTACCATGGACC
CCCGCAAAGTGAACGAGCTTCGGGCCTTTGTGAAAATGTGTAAGCAGGATCCGAGCGTTCTGCACACCGAGGAAA
TGCGCTTCCTGAGGGAGTGGGTGGAGAGCATGGGTGGTAAAGTACCACCTGCTACTCAGAAAGCTAAATCAGAAG
AAAATACCAAGGAAGAAAAACCTGATAGTAAGAAGGTGGAGGAAGACTTAAAGGCAGACGAACCATCAAGTGAGG
AAAGTGATCTAGAAATTGATAAAGAAGGTGTGATTGAACCAGACACTGATGCTCCTCAAGAAATGGGAGATGAAA
ATGCGGAGATAACGGAGGAGATGATGGATCAGGCAAATGATAAAAAAGTGGCTGCTATTGAAGCCCTAAATGATG
GTGAACTCCAGAAAGCCATTGACTTATTCACAGATGCCATCAAGCTGAATCCTCGCTTGGCCATTTTGTATGCCA
AGAGGGCCAGTGTCTTCGTCAAATTACAGAAGCCAAATGCTGCCATCCGAGACTGTGACAGAGCCATTGAAATAA
ATCCTGATTCAGCTCAGCCTTACAAGTGGCGGGGGAAAGCACACAGACTTCTAGGCCACTGGGAAGAAGCAGCCC
ATGATCTTGCCCTTGCCTGTAAATTGGATTATGATGAAGATGCTAGTGCAATGCTGAAAGAAGTTCAACCTAGGG
CACAGAAAATTGCAGAACATCGGAGAAAGTATGAGCGAAAACGTGAAGAGCGAGAGATCAAAGAAAGAATAGAAC
GAGTTAAGAAGGCTCGAGAAGAGCATGAGAGAGCCCAGAGGGAGGAAGAAGCCAGACGACAGTCAGGAGCTCAGT
ATGGCTCTTTTCCAGGTGGCTTTCCTGGGGGAATGCCTGGTAATTTTCCCGGAGGAATGCCTGGAATGGGAGGGG
GCATGCCTGGAATGGCTGGAATGCCTGGACTCAATGAAATTCTTAGTGATCCAGAGGTTCTTGCAGCCATGCAGG
ATCCAGAAGTTATGGTGGCTTTCCAGGATGTGGCTCAGAACCCAGCAAATATGTCAAAATACCAGAGCAACCCAA
AGGTTATGAATCTCATCAGTAAATTGTCAGCCAAATTTGGAGGTCAAGCGTAATGTCCTTCTGATAAATAAAGCC
CTTGCTGAAGGAAAAGCAACCTAGATCACCTTATGGATGTCGCAATAATACAAACCAGTGTACCTCTGACCTTCT
CATCAAGAGAGCTGGGGTGCTTTGAAGATAATCCCTACCCCTCTCCCCCAAATGCAGCTGAAGCATTTTACAGTG
GTTTGCCATTAGGGTATTCATTCAGATAATGTTTTCCTACTAGGAATTACAAACTTTAAACACTTTTTAAATCTT
CAAAATATTTAAAACAAATTTAAAGGGCCTGTTAATTCTTATATTTTTCTTTACTAATCATTTTGGATTTTTTTC
TTTGAATTATTGGCAGGGAATATACTTATGTATGGAAGATTACTGCTCTGAGTGAAATAAAAGTTATTAGTGCGA
GGCAAACATAACTCATTTGAGGATAAAGTTTGTGTTGGATATGTGGTTCCTGATGCATTTTGACTTGTCTTTTTA
AATGCTTTATCTTTTTCTTTAAAGATTTATTTCAATAAAACTAATTGGGACCACCCGTATTTCAGTAGGACCTGG
GTAGGGATTGGAAGTACTTGGCAGGGCAGCAGCAATCTTGCTGTGTTTGATATAACATGCATCCTTGGGCAGGTT
GCCCTTAAATCTTACACTGTGGTGAAGGGATGTTTTTTTTGTAATGCTGCAGTAGAGTTGGAGTACTTAGTTCTC
TTGTTGTCCAGTATATCTAATAAGTGTTTTTCATATTATTTCCACGTAAGGGAAATAAGGTAGTACTTTTCTTTT
TATATTTCTATGCTTAAAATTCTCTTTCCTAGTCAAAAATTGCCCAAATCTGTGTTTGCTTTCTGCTTGCTACAT
TTGTCTCCCTTACTTTTCTTGAGCTAAAGACAGGCTTTTTCCACCGGCATCATCACTGCTATCATCATTAACAGC
GTAATTATACAAGCATATTTAATGCTGAGTTTAATTTAATATGTAATACATATGGTAATTGTAGGGTAATACCCA
CAACAACTGTAGTTTCTTACTTGGCCAAGAGAATGCTTATTTAAGTGTTAGACTTCCATTCTGGCAAAATCTTGC
CTTATCAGAAGACATTGGAAAGAGGGATTCCCTTTGGTGTTTGGTCTTCTACTTAGAAAAACCTATTGCAGTTAG
TTTATCTTGTAGTATTCATCTTTGTATTCTGAAGATAAGGTTTGAATTAAATTGATACACACAGAGGGGAACCGA
TTTTTTTTATCCAATGTGAATTATAAATGAGATAATCCACAGTTATTCATTGTGGAGTTGTTGAGACTATGAAAG
ACTCATTGTCTTTGTATTCAGCTCTTAAATAGTGTAACTATATCCCCACCTCTGCTTGCTTTCTTTCCCTCCCCT
CCAATGATAAAGAAAATGATAAATTTTCTGTTGTGCATTCAATTCTTATTTTAAATAAGACTAAGTATAGGCATT
GTACCTGACATTGCTACGTTTCTACCAGTGTTTCAATTTAAAGTGCTAGTGTTTAAAAACATTTTCAAGGGATAA
GGCCTTCTGTACTTTGCTTATTTGAAGAATCAGTGGTAGGAGCAGTGAAGTAAATTCTATGGAGTACATTTCTAA
AATACCACATTTCTGAAATCATAAATAAGTTTATTCAGGTTCTAACCCTTTGCTGTACACAAGCAGACAGAAATG
CATCTGTTACATAAATGAGAAAAAGCTATTATGCTGATGGAGCATGCTTTTTAAATCCTTTAAAAACACTCACCA
TATAAACTTGCATTTGAGCTTGTGTGTTCTTTTGTTAATGTGTAGAGTTCTCCTTTCTCGAAATTGCCAGTGTGT
ACTTGGCTTAACTCAAGAACAGTTTCTTCTGGATTCCTTATTTGATTTATTTAACCTAATTATATTCTAATATTG
CAAATATTACCATAAGTGGGTAAAAGTAAAATTCCTCTTCTG

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FIGURE 4031

GGTTTCCTGGCGACGCGGCCCTGCAGGCGGTTGCGTTCCCCGTCGTTACCCTCTTTCTCTTCCCGACGCGTGAGT
TAGGCCGTAATGCCTTGGCTGCTCTCAGCCCCCAAGCTGGTTCCCGCTGTAGCAAACGTCCGCGGCCTCTCAGGA
TGTATGTTGTGTTCACAGCGAAGGTACTCCCTTCAGCCTGTCCCAGAAAGGAGGATTCCAAACCGATACTTAGGC
CAGCCCAGCCCCTTTACACACCCACACCTCCTCAGACCAGGGGAGGTAACTCCAGGACTATCTCAGGTGGAATAT
GCACTTCGCAGACACAAACTAATGTCTCTGATCCAGAAGGAAGCTCAAGGGCAGAGTGGGACAGACCAGACAGTG
GTTGTGCTCTCCAACCCTACATACTACATGAGCAACGATATTCCCTATACTTTCCACCAAGACAACAATTTCCTG
TACCTATGTGGATTCCAAGAGCCTGATAGCATTCTTGTCCTTCAGAGCCTCCCTGGCAAACAATTACCATCACAC
AAAGCCATACTTTTTGTGCCTCGGCGAGATCCCAGTCGAGAACTTTGGGATGGTCCGCGATCTGGCACTGATGGA
GCAATAGCTCTAACTGGAGTAGACGAAGCCTATACGCTAGAAGAATTTCAACATCTTCTACCAAAAATGAAAGCT
GAGACGAACATGGTTTGGTATGACTGGATGAGGCCCTCACATGCACAGCTTCACTCTGACTATATGCAGCCCCTG
ACTGAGGCCAAAGCCAAGAGCAAGAACAAGGTTCGGGGTGTTCAGCAGCTGATACAGCGCCTCCGGCTGATCAAG
TCTCCTGCAGAAATTGAACGAATGCAGATTGCTGGGAAGCTGACATCACAGGCTTTCATAGAAACCATGTTCACC
AGTAAAGCCCCTGTGGAAGAAGCCTTTCTTTATGCTAAGTTTGAATTTGAATGCCGGGCTCGTGGCGCAGACATT
TTAGCCTATCCACCTGTGGTGGCTGGTGGTAATCGGTCAAACACTTTGCACTATGTGAAAAATAATCAACTCATC
AAGGATGGGGAAATGGTGCTTCTGGATGGAGGTTGTGAGTCTTCCTGCTATGTGAGTGACATCACACGTACGTGG
CCAGTCAATGGCAGGTTCACCGCACCTCAGGCAGAACTCTATGAAGCCGTTCTAGAGATCCAAAGAGATTGTTTG
GCCCTCTGCTTCCCTGGGACAAGCTTGGAGAACATCTACAGCATGATGCTGACCCTGATAGGACAGAAGCTTAAA
GACTTGGGGATCATGAAGAACATTAAGGAAAATAATGCCTTCAAGGCTGCTCGAAAATACTGTCCTCATCATGTT
GGCCACTACCTCGGGATGGATGTCCATGACACTCCAGACATGCCCCGTTCCCTCCCTCTGCAGCCTGGGATGGTA
ATCACAATTGAGCCCGGCATTTATATTCCAGAGGATGACAAAGATGCCCCAGAGAAGTTTCGGGGTCTTGGTGTA
CGAATTGAGGATGATGTAGTGGTGACTCAGGACTCACCTCTCATCCTTTCTGCAGACTGTCCCAAAGAGATGAAT
GACATTGAACAGATATGCAGCCAGGCTTCTTGACCTTCACTGCGGCCCACATGCACCTCAGGTTCAAAATGGGTG
TCTTCTGGCAGCCCTGCACGTGTGCTTTCTGAGTGTCTCTGTGTGTGCATTAATATATGCATTCCATTTGGGAGC
ATAGCAGCTGTGTGAATGTATGTAATTGTGTGTGGGGGGTTTTTTGTTTTAAGTAGTTAGAAGTCTGGGAAAATG
AATTTTTGAATAGTATGTTACTGCAGCTTTGGTAACATTAATTCTATAGAATTAATGATCAGAGCAAGTTTAATT
TTTAAACATAAAGGTCTTGGTTACACATGTCCATGCATTCCAGTTAACACATTTAAACATATAGAAAATTCACTT
CTTCTTTCAAGTCCTTCCCTTTCTATACTTTTGCTGAGATCAACCCAATATCATAAGAAGTTTGTGTGATGCCTG
TATTTTTAGCTAATTACCAAGGTCTCTGCCTATGCAAAAATTCATCTTTCGGTGATTGTGGGCGGCCAATACATA
CCTTCTGTAACTCCTCCCTACCTATTCTAGATCCTGCATATCTACTGGAGCCATATGAGCCCTCAGGGGCACTGG
TGTCCTGCAGTCTTACTAGTCAGCCACAGTCCAGGTTCCAGCAACACTAGCTACCTACCAAACAAAACACTTCTG
AGCTTTTCTTGCCATTTGGTTGCCTGGGACCTGGAAAGTGTTTAGATTCTTGATAAAGATGGAAATGGAAGAGAA
AGAAAATTATATATGTATATACTAAAGATCCAGACATCAGGGCTGGGCACAGCGGTTCCGCCTGTAATCCCAGCA
CTTTGGGAGGTCCAGGCAGGTGGATCTCTTGAGACCAGGAGGTCAAGACCAGCCTGGCCAACGTGGTGAAACACT
GTCTCTACTAAAAATACAAAAATGAGCTGGGTGTGATGATACATGCCTGTAATCCTGGCTACTTGGGAGGCTGAG
GCATGAGAATTGCTTGAACCTGGGAGGTGGAGGTTGCAGTGAGCTGAGCTCATGCGACTGCACTCCAGCCTGGGT
GACTGAGCAAGACTCTGCCTCAAAAAAACAAATAAATAAATAAAATCCTGACATCCTGCCATCTTTTCTCTTCAA
TTTAAAGTTGATTTCTTAATGATGACTTCAAAAATTAATAAAAAGAAAAGAAAAAAATGATTTCT

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FIGURE 4032

CCAAAATGGCGGCAGCGATGGATGTGGATACCCCGAGCGGCACCAACAGCGGCGCGGGCAAGAAGCGCTTTGAAG
TGAAAAAGTGGAATGCAGTAGCCCTCTGGGCCTGGGATATTGTGGTTGATAACTGTGCCATCTGCAGGAACCACA
TTATGGATCTTTGCATAGAATGTCAAGCTAACCAGGCGTCCGCTACTTCAGAAGAGTGTACTGTCGCATGGGGAG
TCTGTAACCATGCTTTTCACTTCCACTGCATCTCTCGCTGGCTCAAAACACGACAGGTGTGTCCATTGGACAACA
GAGAGTGGGAATTCCAAAAGTATGGGCACTAGGAAAAGACTTCTTCCATCAAGCTTAATTGTTTTGTTATTCATT
TAATGACTTTCCCTGCTGTTACCTAATTACAAATTGGATGGAACTGTGTTTTTTTCTGCTTTGTTTTTTCAGTTT
GCTGTTTCTGTAGCCATATTGTATTCTGTGTCAAATAAAGTCCAGTTGGATTCTGG

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FIGURE 4033

GCTCTTTCTCAGTGACCGGGTTCTAGGCTTAGGCGCAGACGGGTTAGGGGAGCCAACATGCCAGTGGCCCGGAGC
TGGGTTTGTCGCAAAACTTACGTGACCCCGCGGAGATCCTTTGAGAAATCTCGTCTCGACCAAGAGCTGAAGCTG
ATCGAAGAGTATGGGCTCCGGAATAAACGTGAGGTCTGGAGGGTCAAATTTACCCTGGCCAAGATAGAGGATTTC
TTAGAGAGACGCCTACAGACCCAGGTCTTCAAGCTGGGCTTGGCCAAGTCCATCCACCACGCTCGCGTGCTGATC
CGCCAGCGCCATTTCAGGGTCCGCAAGCAGGTGGTGAACATCCCGTCCTTCATTGTCCGCCTGGATTCCCAGAAG
CACATCGACTTCTCTCTGTGCTCTCCCTATGGGGGTGGCCGCCCGGGCCGCGTGAAGAGGAAGAATGCCAAGAAG
GGCCAGGGTGGGGCTGGGGCTGGAGACCACAAGGAGGAGGATTAAGCCCACCTGTCCCTCCTGGGCTGCTGCATT
GTCTAGTTTTCCTGCCAAATAAACAGGATCAGCGCTTTAAAAAAAAAAAAA

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FIGURE 4034A

CTTGTTTGTGTGCTAGGCTGGGGGGGAGAGAGGGCGAGAGAGAGCGGGCGAGAGTGGGCAAGCAGGACGCCGGGC
TGAGTGCTAACTGCGGGAGCCAGAGAGTGCGGAGGGGAGTCGGGTCGGAGAGAGGCGGCAGGGGCCGAGACAGTG
GCAGGGGGCCCGGGGCGCACGGGCTGAGGCGACCCCCAGCCCCCTCCCGTCCGCACACACCCCCACCGCGGTCCA
GCAGCCGGGCCGGCGTCGACGCCTAGGGGGGACCATTACATAACCCCGCGCCCCGCGGCGTCTTCTCCCGCCGCC
GCGGGCGGCCCCGAACGGAGCCCCGGGGGGCGGGCGCTCCCAGCACCTGGCCGCCGGCGGTGGGGGCCGTAGCAG
CGGCCGTATTTATTTATTTTCCGCGGGAAAGGAAGGCGAAGGAGGGGAGCGCGGCGCGAGGAGGGGCCGCCTGCG
CCGCCGCCGGAGCGGGGCCTCCTCGGTGGGCTCCGCGTCGGCGCGGGCGTGCGGGCGGCGCTGCTCGGCCCGGCC
CCCTCGGCCCTCTGGTCCGGCCAGCTCCGCTCCCGGCGTCCTTGCCGCGCCTCCGCCGGCCGCCGCGCGATGTGA
GGCGGCGGCGCCAGCCTGGCTCTCGGCTCGGGCGAGTTCTCTGCGGCCATTAGGGGCCGGTGCGGCGGCGGCGGC
GCGGAGCGCGGCGGCAGGAGGAGGGTTCGGAGGGTGGGGGCGCAGGCCCGGGAGGGGGCACCGGGAGGAGGTGAG
TGTCTCTTGTCGCCTCCTCCTCTCCCCCCTTTTCGCCCCCGCCTCCTTGTGGCGATGAGAAGGAGGAGGACAGCG
CCGAGGAGGAAGAGGTTGATGGCGGCGGCGGAGCTCCGAGAGACCTCGGCTGGGCAGGGGCCGGCCGTGGCGGGC
CGGGGACTGCGCCTCTAGAGCCGCGAGTTCTCGGGAATTCGCCGCAGCGGACGCGCTCGGCGAATTTGTGCTCTT
GTGCCCTCCTCCGGGCTTGGGCCCAGGCCCGGCCCCTCGCACTTGCCCTTACCTTTTCTATCGAGTCCGCATCCC
TCTCCAGCCACTGCGACCCGGCGAAGAGAAAAAGGAACTTCCCCCACCCCCTCGGGTGCCGTCGGAGCCCCCCAG
CCCACCCCTGGGTGCGGCGCGGGGACCCCGGGCCGAAGAAGAGATTTCCTGAGGATTCTGGTTTTCCTCGCTTGT
ATCTCCGAAAGAATTAAAA**ATG**GCCGAGAATGTGGTGGAACCGGGGCCGCCTTCAGCCAAGCGGCCTAAACTCTC
ATCTCCGGCCCTCTCGGCGTCCGCCAGCGATGGCACAGATTTTGGCTCTCTATTTGACTTGGAGCACGACTTACC
AGATGAATTAATCAACTCTACAGAATTGGGACTAACCAATGGTGGTGATATTAATCAGCTTCAGACAAGTCTTGG
CATGGTACAAGATGCAGCTTCTAAACATAAACAGCTGTCAGAATTGCTGCGATCTGGTAGTTCCCCTAACCTCAA
TATGGGAGTTGGTGGCCCAGGTCAAGTCATGGCCAGCCAGGCCCAACAGAGCAGTCCTGGATTAGGTTTGATAAA
TAGCATGGTCAAAAGCCCAATGACACAGGCAGGCTTGACTTCTCCCAACATGGGGATGGGCACTAGTGGACCAAA
TCAGGGTCCTACGCAGTCAACAGGTATGATGAACAGTCCAGTAAATCAGCCTGCCATGGGAATGAACACAGGGAT
GAATGCGGGCATGAATCCTGGAATGTTGGCTGCAGGCAATGGACAAGGGATAATGCCTAATCAAGTCATGAACGG
TTCAATTGGAGCAGGCCGAGGGCGACAGAATATGCAGTACCCAAACCCAGGCATGGGAAGTGCTGGCAACTTACT
GACTGAGCCTCTTCAGCAGGGCTCTCCCCAGATGGGAGGACAAACAGGATTGAGAGGCCCCCAGCCTCTTAAGAT
GGGAATGATGAACAACCCCAATCCTTATGGTTCACCATATACTCAGAATCCTGGACAGCAGATTGGAGCCAGTGG
CCTTGGTCTCCAGATTCAGACAAAAACTGTACTATCAAATAACTTATCTCCATTTGCTATGGACAAAAAGGCAGT
TCCTGGTGGAGGAATGCCCAACATGGGTCAACAGCCAGCCCCGCAGGTCCAGCAGCCAGGCCTGGTGACTCCAGT
TGCCCAAGGGATGGGTTCTGGAGCACATACAGCTGATCCAGAGAAGCGCAAGCTCATCCAGCAGCAGCTTGTTCT
CCTTTTGCATGCTCACAAGTGCCAGCGCCGGGAACAGGCCAATGGGGAAGTGAGGCAGTGCAACCTTCCCCACTG
TCGCACAATGAAGAATGTCCTAAACCACATGACACACTGCCAGTCAGGCAAGTCTTGCCAAGTGGCACACTGTGC
ATCTTCTCGACAAATCATTTCACACTGGAAGAATTGTACAAGACATGATTGTCCTGTGTGTCTCCCCCTCAAAAA
TGCTGGTGATAAGAGAAATCAACAGCCAATTTTGACTGGAGCACCCGTTGGACTTGGAAATCCTAGCTCTCTAGG
GGTGGGTCAACAGTCTGCCCCCAACCTAAGCACTGTTAGTCAGATTGATCCCAGCTCCATAGAAAGAGCCTATGC
AGCTCTTGGACTACCCTATCAAGTAAATCAGATGCCGACACAACCCCAGGTGCAAGCAAAGAACCAGCAGAATCA
GCAGCCTGGGCAGTCTCCCCAAGGCATGCGGCCCATGAGCAACATGAGTGCTAGTCCTATGGGAGTAAATGGAGG
TGTAGGAGTTCAAACGCCGAGTCTTCTTTCTGACTCAATGTTGCATTCAGCCATAAATTCTCAAAACCCAATGAT
GAGTGAAAATGCCAGTGTGCCCTCCCTGGGTCCTATGCCAACAGCAGCTCAACCATCCACTACTGGAATTCGGAA
ACAGTGGCACGAAGATATTACTCAGGATCTTCGAAATCATCTTGTTCACAAACTCGTCCAAGCCATATTTCCTAC
GCCGGATCCTGCTGCTTTAAAAGACAGACGGATGGAAAACCTAGTTGCATATGCTCGGAAAGTTGAAGGGGACAT
GTATGAATCTGCAAACAATCGAGCGGAATACTACCACCTTCTAGCTGAGAAAATCTATAAGATCCAGAAAGAACT
AGAAGAAAAACGAAGGACCAGACTACAGAAGCAGAACATGCTACCAAATGCTGCAGGCATGGTTCCAGTTTCCAT
GAATCCAGGGCCTAACATGGGACAGCCGCAACCAGGAATGACTTCTAATGGCCCTCTACCTGACCCAAGTATGAT
CCGTGGCAGTGTGCCAAACCAGATGATGCCTCGAATAACTCCACAATCTGGTTTGAATCAATTTGGCCAGATGAG
CATGGCCCAGCCCCCTATTGTACCCCGGCAAACCCCTCCTCTTCAGCACCATGGACAGTTGGCTCAACCTGGAGC
TCTCAACCCGCCTATGGGCTATGGGCCTCGTATGCAACAGCCTTCCAACCAGGGCCAGTTCCTTCCTCAGACTCA
GTTCCCATCACAGGGAATGAATGTAACAAATATCCCTTTGGCTCCGTCCAGCGGTCAAGCTCCAGTGTCTCAAGC

FIGURE 4034B

ACAAATGTCTAGTTCTTCCTGCCCGGTGAACTCTCCTATAATGCCTCCAGGGTCTCAGGGGAGCCACATTCACTG
TCCCCAGCTTCCTCAACCAGCTCTTCATCAGAATTCACCCTCGCCTGTACCTAGTCGTACCCCCACCCCTCACCA
TACTCCCCCAAGCATAGGGGCTCAGCAGCCACCAGCAACAACAATTCCAGCCCCTGTTCCTACACCTCCTGCCAT
GCCACCTGGGCCACAGTCCCAGGCTCTACATCCCCCTCCAAGGCAGACACCTACACCACCAACAACACAACTTCC
CCAACAAGTGCAGCCTTCACTTCCTGCTGCACCTTCTGCTGACCAGCCCCAGCAGCAGCCTCGCTCACAGCAGAG
CACAGCAGCGTCTGTTCCTACCCCAACAGCACCGCTGCTTCCTCCGCAGCCTGCAACTCCACTTTCCCAGCCAGC
TGTAAGCATTGAAGGACAGGTATCAAATCCTCCATCTACTAGTAGCACAGAAGTGAATTCTCAGGCCATTGCTGA
GAAGCAGCCTTCCCAGGAAGTGAAGATGGAGGCCAAAATGGAAGTGGATCAACCAGAACCAGCAGATACTCAGCC
GGAGGATATTTCAGAGTCTAAAGTGGAAGACTGTAAAATGGAATCTACCGAAACAGAAGAGAGAAGCACTGAGTT
AAAAACTGAAATAAAAGAGGAGGAAGACCAGCCAAGTACTTCAGCTACCCAGTCATCTCCGGCTCCAGGACAGTC
AAAGAAAAAGATTTTCAAACCAGAAGAACTACGACAGGCACTGATGCCAACTTTGGAGGCACTTTACCGTCAGGA
TCCAGAATCCCTTCCCTTTCGTCAACCTGTGGACCCTCAGCTTTTAGGAATCCCTGATTACTTTGATATTGTGAA
GAGCCCCATGGATCTTTCTACCATTAAGAGGAAGTTAGACACTGGACAGTATCAGGAGCCCTGGCAGTATGTCGA
TGATATTTGGCTTATGTTCAATAATGCCTGGTTATATAACCGGAAAACATCACGGGTATACAAATACTGCTCCAA
GCTCTCTGAGGTCTTTGAACAAGAAATTGACCCAGTGATGCAAAGCCTTGGATACTGTTGTGGCAGAAAGTTGGA
GTTCTCTCCACAGACACTGTGTTGCTACGGCAAACAGTTGTGCACAATACCTCGTGATGCCACTTATTACAGTTA
CCAGAACAGGTATCATTTCTGTGAGAAGTGTTTCAATGAGATCCAAGGGGAGAGCGTTTCTTTGGGGGATGACCC
TTCCCAGCCTCAAACTACAATAAATAAAGAACAATTTTCCAAGAGAAAAAATGACACACTGGATCCTGAACTGTT
TGTTGAATGTACAGAGTGCGGAAGAAAGATGCATCAGATCTGTGTCCTTCACCATGAGATCATCTGGCCTGCTGG
ATTCGTCTGTGATGGCTGTTTAAAGAAAAGTGCACGAACTAGGAAAGAAAATAAGTTTTCTGCTAAAAGGTTGCC
ATCTACCAGACTTGGCACCTTTCTAGAGAATCGTGTGAATGACTTTCTGAGGCGACAGAATCACCCTGAGTCAGG
AGAGGTCACTGTTAGAGTAGTTCATGCTTCTGACAAAACCGTGGAAGTAAAACCAGGCATGAAAGCAAGGTTTGT
GGACAGTGGAGAGATGGCAGAATCCTTTCCATACCGAACCAAAGCCCTCTTTGCCTTTGAAGAAATTGATGGTGT
TGACCTGTGCTTCTTTGGCATGCATGTTCAAGAGTATGGCTCTGACTGCCCTCCACCCAACCAGAGGAGAGTATA
CATATCTTACCTCGATAGTGTTCATTTCTTCCGTCCTAAATGCTTGAGGACTGCAGTCTATCATGAAATCCTAAT
TGGATATTTAGAATATGTCAAGAAATTAGGTTACACAACAGGGCATATTTGGGCATGTCCACCAAGTGAGGGAGA
TGATTATATCTTCCATTGCCATCCTCCTGACCAGAAGATACCCAAGCCCAAGCGACTGCAGGAATGGTACAAAAA
AATGCTTGACAAGGCTGTATCAGAGCGTATTGTCCATGACTACAAGGATATTTTTAAACAAGCTACTGAAGATAG
ATTAACAAGTGCAAAGGAATTGCCTTATTTCGAGGGTGATTTCTGGCCCAATGTTCTGGAAGAAAGCATTAAGGA
ACTGGAACAGGAGGAAGAAGAGAGAAAACGAGAGGAAAACACCAGCAATGAAAGCACAGATGTGACCAAGGGAGA
CAGCAAAAATGCTAAAAAGAAGAATAATAAGAAAACCAGCAAAAATAAGAGCAGCCTGAGTAGGGGCAACAAGAA
GAAACCCGGGATGCCCAATGTATCTAACGACCTCTCACAGAAACTATATGCCACCATGGAGAAGCATAAAGAGGT
CTTCTTTGTGATCCGCCTCATTGCTGGCCCTGCTGCCAACTCCCTGCCTCCCATTGTTGATCCTGATCCTCTCAT
CCCCTGCGATCTGATGGATGGTCGGGATGCGTTTCTCACGCTGGCAAGGGACAAGCACCTGGAGTTCTCTTCACT
CCGAAGAGCCCAGTGGTCCACCATGTGCATGCTGGTGGAGCTGCACACGCAGAGCCAGGACCGCTTTGTCTACAC
CTGCAATGAATGCAAGCACCATGTGGAGACACGCTGGCACTGTACTGTCTGTGAGGATTATGACTTGTGTATCAC
CTGCTATAACACTAAAAACCATGACCACAAAATGGAGAAACTAGGCCTTGGCTTAGATGATGAGAGCAACAACCA
GCAGGCTGCAGCCACCCAGAGCCCAGGCGATTCTCGCCGCCTGAGTATCCAGCGCTGCATCCAGTCTCTGGTCCA
TGCTTGCCAGTGTCGGAATGCCAATTGCTCACTGCCATCCTGCCAGAAGATGAAGCGGGTTGTGCAGCATACCAA
GGGTTGCAAACGGAAAACCAATGGCGGGTGCCCCATCTGCAAGCAGCTCATTGCCCTCTGCTGCTACCATGCCAA
GCACTGCCAGGAGAACAAATGCCCGGTGCCGTTCTGCCTAAACATCAAGCAGAAGCTCCGGCAGCAACAGCTGCA
GCACCGACTACAGCAGGCCCAAATGCTTCGCAGGAGGATGGCCAGCATGCAGCGGACTGGTGTGGTTGGGCAGCA
ACAGGGCCTCCCTTCCCCCACTCCTGCCACTCCAACGACACCAACTGGCCAACAGCCAACCACCCCGCAGACGCC
CCAGCCCACTTCTCAGCCTCAGCCTACCCCTCCCAATAGCATGCCACCCTACTTGCCCAGGACTCAAGCTGCTGG
CCCTGTGTCCCAGGGTAAGGCAGCAGGCCAGGTGACCCCTCCAACCCCTCCTCAGACTGCTCAGCCACCCCTTCC
AGGGCCCCCACCTGCAGCAGTGGAAATGGCAATGCAGATTCAGAGAGCAGCGGAGACGCAGCGCCAGATGGCCCA
CGTGCAAATTTTTCAAAGGCCAATCCAACACCAGATGCCCCCGATGACTCCCATGGCCCCCATGGGTATGAACCC
ACCTCCCATGACCAGAGGTCCCAGTGGGCATTTGGAGCCAGGGATGGGACCGACAGGGATGCAGCAACAGCCACC

FIGURE 4034C

CTGGAGCCAAGGAGGATTGCCTCAGCCCCAGCAACTACAGTCTGGGATGCCAAGGCCAGCCATGATGTCAGTGGC
CCAGCATGGTCAACCTTTGAACATGGCTCCACAACCAGGATTGGGCCAGGTAGGTATCAGCCCACTCAAACCAGG
CACTGTGTCTCAACAAGCCTTACAAAACCTTTTGCGGACTCTCAGGTCTCCCAGCTCTCCCCTGCAGCAGCAACA
GGTGCTTAGTATCCTTCACGCCAACCCCCAGCTGTTGGCTGCATTCATCAAGCAGCGGGCTGCCAAGTATGCCAA
CTCTAATCCACAACCCATCCCTGGGCAGCCTGGCATGCCCCAGGGGCAGCCAGGGCTACAGCCACCTACCATGCC
AGGTCAGCAGGGGGTCCACTCCAATCCAGCCATGCAGAACATGAATCCAATGCAGGCGGGCGTTCAGAGGGCTGG
CCTGCCCCAGCAGCAACCACAGCAGCAACTCCAGCCACCCATGGGAGGGATGAGCCCCCAGGCTCAGCAGATGAA
CATGAACCACAACACCATGCCTTCACAATTCCGAGACATCTTGAGACGACAGCAAATGATGCAACAGCAGCAGCA
ACAGGGAGCAGGGCCAGGAATAGGCCCTGGAATGGCCAACCATAACCAGTTCCAGCAACCCCAAGGAGTTGGCTA
CCCACCACAGCAGCAGCAGCGGATGCAGCATCACATGCAACAGATGCAACAAGGAAATATGGGACAGATAGGCCA
GCTTCCCCAGGCCTTGGGAGCAGAGGCAGGTGCCAGTCTACAGGCCTATCAGCAGCGACTCCTTCAGCAACAGAT
GGGGTCCCCTGTTCAGCCCAACCCCATGAGCCCCCAGCAGCATATGCTCCCAAATCAGGCCCAGTCCCCACACCT
ACAAGGCCAGCAGATCCCTAATTCTCTCTCCAATCAAGTGCGCTCTCCCCAGCCTGTCCCTTCTCCACGGCCACA
GTCCCAGCCCCCCCACTCCAGTCCTTCCCCAAGGATGCAGCCTCAGCCTTCTCCACACCACGTTTCCCCACAGAC
AAGTTCCCCACATCCTGGACTGGTAGCTGCCCAGGCCAACCCCATGGAACAAGGGCATTTTGCCAGCCCGGACCA
GAATTCAATGCTTTCTCAGCTTGCTAGCAATCCAGGCATGGCAAACCTCCATGGTGCAAGCGCCACGGACCTGGG
ACTCAGCACCGATAACTCAGACTTGAATTCAAACCTCTCACAGAGTACACTAGACATACAC**TAG**AGACACCTTGT
AGTATTTTGGGAGCAAAAAAATTATTTTCTCTTAACAAGACTTTTTGTACTGAAAACAATTTTTTTGAATCTTTC
GTAGCCTAAAAGACAATTTTCCTTGGAACACATAAGAACTGTGCAGTAGCCGTTTGTGGTTTAAAGCAAACATGC
AAGATGAACCTGAGGGATGATAGAATACAAAGAATATATTTTTGTTATGGCTGGTTACCACCAGCCTTTCTTCCC
CTTTGTGTGTGTGGTTCAAGTGTGCACTGGGAGGAGGCTGAGGCCTGTGAAGCCAAACAATATGCTCCTGCCTTG
CACCTCCAATAGGTTTTATTATTTTTTTTAAATTAATGAACATATGTAATATTAATAGTTATTATTTACTGGTGC
AGATGGTTGACATTTTTCCCTATTTTCCTCACTTTATGGAAGAGTTAAAACATTTCTAAACCAGAGGACAAAAGG
GGTTAATGTTACTTTAAAATTACATTCTATATATATATAAATATATATAAATATATATTAAAATACCAGTTTTTT
TTCTCTGGGTGCAAAGATGTTCATTCTTTTAAAAAATGTTTAAAAAAAA

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FIGURE 4035

GGCAGGCCAATATGGCTTCCTGCACCTGGTGACGCTTGGCGAAACTGAGGTCTCATGGAGAAGCCCCGGAGTATT
GAGGAGACCCCATCTTCAGAACCAATGGAGGAAGAGGAAGATGACGACTTGGAGCTGTTTGGTGGCTATGATAGT
TTCCGGAGTTATAACAGCAGTGTGGGCAGTGAGAGCAGCTCCTATCTGGAGGAGTCAAGTGAAGCAGAAAATGAG
GATCGGGAAGCAGGGGAACTGCCGACCTCCCCGCTGCATTTGCTCAGCCCTGGGACTCCTCGCTCCTTGGATGGC
AGTGGTTCTGAGCCAGCTGTCTGTGAGATGTGTGGTATCGTGGGTACAAGGGAAGCCTTCTTCTCCAAGACCAAG
AGGTTCTGCAGCGTCTCCTGCTCCAGGAGCTACTCCTCCAACTCCAAGAAAGCCAGTATCTTGGCTAGGTTACAG
GGAAAACCACCGACCAAAAAAGCCAAAGTCCTGCACAAGGCTGCCTGGTCTGCCAAAATTGGAGCCTTCCTCCAC
TCTCAAGGGACAGGACAGCTGGCAGATGGGACACCAACAGGACAAGACGCTCTGGTCTTGGGCTTCGACTGGGGG
AAGTTCCTGAAGGATCACAGTTACAAGGCTGCTCCCGTCAGCTGTTTCAAGCACGGTATCGGGTGCTGCTTCGGT
ATGAAGGCTTTGAAAATGACGCCAGCCATGACTTCTGGTGCAACCTGGGAACAGTGGATGTCCACCCCATTGGCT
GGTGTGCCATCAACAGCAAGATCCTAGTGCCTCCACAGCCATCCATGCCAAGTTCACCGACTGGAAGGGCTACCT
CATGAAACGGCTGGTGGGCTCCAGGACGCTTCCCGTGGATTTCCACATCAAGATGGTGGAGAGCATGAAGTACCC
CTTTAGGCAGGGCATGCGGCTGGAAGTGGTGGACAAGTCCCAGGTGTCACGCACTCGCATGGCTGTGGTGGACAC
AGTAATCGGGGGTCGCCTACGGCTCCTCTACGAGGATGGTGACAGTGACGACGACTTCTGGTGCCACATGTGGAG
CCCCCTGATCCACCCAGTGGGTTGGTCACGACGTGTGGGCCACGGCATCAAGATGTCAGAGAGGCGAAGTGACAT
GGCCCATCACCCCACCTTCCGGAAGATCTACTGTGATGCCGTTCCTTACCTCTTCAAGAAGGTACGAGCAGTCTA
CACAGAAGGCGGTTGGTTTGAGGAAGGGATGAAGCTGGAGGCCATTGACCCCCTGAATCTGGGCAACATCTGCGT
GGCAACTGTCTGTAAGGTTCTCCTGGATGGATACCTGATGATCTGTGTGGACGGGGGGCCCTCCACAGATGGCTT
GGACTGGTTCTGCTACCATGCCTCTTCCCACGCCATCTTCCCGGCCACCTTCTGTCAGAAGAATGACATTGAGCT
CACACCGCCAAAAGGTTATGAGGCACAGACTTTCAACTGGGAGAACTACTTGGAGAAGACCAAGTCGAAAGCCGC
TCCATCGAGACTCTTTAACATGGATTGCCCAAACCATGGCTTCAAGGTGGGCATGAAGCTGGAGGCCGTGGACCT
GATGGAGCCCCGGCTCATCTGTGTGGCCACGGTGAAACGAGTGGTGCATCGGCTCCTCAGCATCCACTTTGACGG
CTGGGACAGCGAGTACGACCAGTGGGTGGACTGCGAGTCCCCAGACATCTACCCCGTCGGCTGGTGTGAGCTCAC
CGGCTACCAGCTCCAGCCTCCTGTGGCCGCAGAACCGGCCACACCGCTGAAGGCCAAAGAGGCCACAAAGAAGAA
AAAGAAACAGTTTGGGAAGAAAAGGAAAAGAATCCCGCCCACTAAGACGCGACCCCTCAGACAGGGGTCCAAGAA
GCCCCTGCTGGAGGACGACCCTCAGGGTGCCAGGAAGATCTCGTCGGAGCCTGTTCCTGGCGAGATCATTGCTGT
GCGTGTGAAGGAAGAGCATCTAGACGTGGCCTCGCCCGACAAGGCTTCAAGTCCAGAGCTGCCTGTCTCCGTCGA
GAACATCAAGCAGGAAACAGACGACTGAGCCTTCCTGCCTCCAGCCTGGCTTCTAGCTGGAAGCCAGCCCAGCGT
TTCTCTACCACCACCACCATGCCTCCACCTGACTTTGGCTTGGAGACTGATCCTCTCTGTGTAAATTCTGCCCGG
TGCTGTGAAGGCTGGACGGTGGAGGACCTGCTGGGGTCTCCTGGGACCCGCCTGTTGCTTCTGCCCTCCCCTGTG
GAAAGGTCTATATGACGGGCCGCCTGAGGCCCCAGAACTCGTCTGTGAACCACCTTTTCCAGCCAGAGTTCCCAA
AGCTGGAACGCTAGCTGCCTGCTCTTCCTTAAGATGGCCTCCCCCCGACCCGCCACGGCCCTCAGTTGCCAGGGA
TGGGGCCACCACTGTCACACTGTGGAATACAAGACAGTGAACTCTGTCTGCCTGAACGAGCCATGTAAATTAAGT
TCTAGAGCAGCTCTCTGAGCAGGATAAGGTCCCCTGACAGTGAGTTGTGTGGTGGGGGCAGCCTCTGCCTCAAAA
ATTCACCAAGCAGAATGCCTCTCAGCCTCATGTGTTGGTCCTCTGCTCCTCCTAGCTCCCCAGGGATGTTGGGGA
CCCAGCTTGTCTCGGCAGCTAAGAAGCAGTGACCAGGATGTGGATTTTGGCGACCTGTGTGGTGGCCTTGAGCTG
CTTTCTGTGTTTGTGAGGACTGACTCCCATTTCCTAAAGGAAATGCCCCCGGGGAGGACATTGGGAGGAAGATGG
CCTGAGTGTGCACTTTGGCTCTGCTACCTGCTCCTGAAGCCCCGCTAAAAATAATTCATCCAAGATTCCTTTGTA
GTTAAAGGGTCCAGTTCTGACTGGAGCCTCTAGAGAGCTGGGCTTGTATGTTCTTTTGGCCTTTTGTTCCTACCT
AAATGAAGAAACCATGCCTGGAGGGGCCGTGAACACAGAACCCTCAAGACAAGGATGACAGAGCTGGAGGACACA
TCTAGCTGCCATTGCAACCTCACTGGGCTCCCCAGACTCTGTGTGTGAGAAATTAAACCCCCTGCTTGCTTG

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FIGURE 4036

ATGGCCTCGGAAGACATTGCCAAGCTGGCAGAGACACTTGCCAAGACTCAGGTGGCCGGGGGACAGCTGAGTTTC
AAAGGCAAGAGCCTCAAACTCAACACTGCAGAAGATGCTAAAGATGTGATTAAAGAGATTGAAGACTTTGACAGC
TTGGAGGCTCTGCGTCTGGAAGGCAACACAGTGGGCGTGGAAGCAGCCAGGGTCATCGCCAAGGCCTTAGAGAAG
AAGTCGGAGTTGAAGCGCTGCCACTGGAGTGACATGTTCACGGGAAGGCTGCGGACCGAGATCCCACCAGCCCTG
ATCTCACTAGGGGAAGGACTCATCACAGCTGGGGCTCAGCTGGTGGAGCTGGACTTAAGCGACAACGCATTCGGG
CCCGACGGTGTGCAAGGCTTCGAGGCCCTGCTCAAGAGCTCAGCCTGCTTCACCCTGCAGGAACTCAAGCTCAAC
AACTGTGGCATGGGCATTGGCGGCGGCAAGATCCTGGCTGCAGCTCTGACCGAATGTCACCGGAAATCCAGTGCC
CAAGGCAAGCCTCTGGCCCTGAAGGTCTTTGTGGCTGGCAGAAACCGTCTGGAGAATGATGGCGCCACTGCCTTG
GCAGAAGCTTTTAGGGTCATCGGGACCCTGGAGGAGGTCCACATGCCACAGAATGGGATCAACCACCCTGGCATC
ACTGCCCTGGCCCAGGCTTTCGCTGTCAACCCCCTGCTGCGGGTCATCAACCTGAATGACAACACCTTCACTGAG
AAGGGCGCCGTGGCCATGGCCGAGACCTTGAAGACCTTGCGGCAGGTGGAGGTGATTAATTTTGGGGACTGCCTG
GTGCGCTCCAAGGGTGCAGTTGCCATTGCAGATGCCATCCGCGGCGGCCTGCCCAAGCTAAAGGAGCTGAACTTG
TCATTCTGTGAAATCAAGAGGGATGCTGCCCTGGCTGTTGCTGAGGCCATGGCAGACAAAGCTGAGCTGGAGAAG
CTGGACCTGAATGGCAACACCCTGGGAGAAGAAGGCTGTGAACAGCTTCAGGAGGTGCTGGAGGGCTTCAACATG
GCCAAGGTGCTGGCGTCCCTCAGTGATGACGAGGACGAGGAGGAGGAGGAGGAAGGAGAAGAGGAAGAAGAGGAA
GCAGAAGAAGAGGAGGAGGAAGATGAGGAAGAGGAGGAAGAAGAGGAGGAGGAGGAGGAAGAAGAGCCTCAGCAG
CGAGGGCAGGGAGAGAAGTCAGCCACGCCCTCACGGAAGATTCTGGACCCTAACACTGGGGAGCCAGCTCCCGTG
CTGTCCTCCCCACCTCCTGCAGACGTCTCCACCTTCCTGGCTTTTCCCTCTCCAGAGAAGCTGCTGCGCCTAGGG
CCCAAGAGCTCCGTGCTGATAGCCCAGCAGACTGACACGTCTGACCCCGAGAAGGTGGTCTCTGCCTTCCTAAAG
GTGTCATCTGTGTTCAAGGACGAAGCTACTGTGAGGATGGCAGTGCAGGATGCAGTAGATGCCCTGATGCAGAAG
GCTTTCAACTCCTCGTCCTTCAACTCCAACACCTTCCTCACCAGGCTGCTCGTGCACATGGGTCTGCTCAAGAGT
GAAGACAAGGTCAAGGCCATTGCCAACCTGTACGGCCCCCTGATGGCGCTGAACCACATGGTGCAGCAGGACTAT
TTCCCCAAGGCCCTTGCACCCCTGCTGCTGGCGTTCGTGACCAAGCCCAACAGCGCCCTGGAATCCTGCTCCTTC
GCCCGCCACAGTCTGCTGCAGACGCTGTACAAGGTCTAG

FIGURE 4037

AGCAGAGGTCACCTCCTGACATGCGCTCTGGGAAAGGTGGCAGAGGGCAGGACACCATGAGCTCAGGATCTGTGT
GAGGTGTGGGAGGTGGGAAGGGTGAGGGTCTGGGGGGAATGCGGAGAAAAGGGAGGCTTGACCCCGGGCACCATGG
GCCACTCCAGGATGGGACACGGCCCCTCTTTCTTGGGGACCCAGTATGTCCTCTCCTCTAGACCCAGACATACAG
TTATAACCGTCTGTCCTAGCCCCTCCCTAATCCCTGGCCCTCCCAGCTGTCTGGGACTTCAGTGGACCCCCAGCC
CCTGCCCCCACTCACCAAGGCCTCGCTCGTCCCTCTCGTCTGACATGTCTGTGTGCACCCCCCTCCTCTCCACCC
TACCTTCCATCAACCAGGGCAGATCCACCGTGCCCTGGTTCCCCAGACATTCCAGAATGCCCCACATCATTGGCA
CAGGAGTGGGGCAGCCCCGGAAGGAACCAGGGATTAGGCTGTAGGGGGGTGAGAAGGAGAGAAGGGACCACCCCA
TTCTTCTCAAGCAAGGATTGCCAGCGCGCGCTGACACAGTGATGGGCTGCCCAGGGCTGGAGGGGACGCTGTTCC
TCCCGCCGCCACTGCCCAACCTTTCCTGATAATCGTGGCATGCGCCCTTTCCTCTTCCCTGCCCCACCCCCTGGC
CGCAGCAGGCCAGCACTGCAGAGTTTGGGTGCTGGTGGTGTGGCTGTAGGGGAGGGGAGACCACACCCAAGGTGG
GGGCTGTGGCCATGTGTGGCCGTGATGTCGATGATACTCGTTTTCCCTGATCCGTGGTGTTGCAGTCCGTTGTCA
CCAGCCTTGTTTCTAGTGTGTATATATGTCGCCCCCGTGATGCATATATACACAGGTATTAAATATATCGCTCTA
TATAATATTATATATGTGTGTGGTATCCAAGGAATCACTTTTATGAGGGCTAAAGATAAAGAATTTGGCCAGAAA
ATGCAGCCATCCTTGTGTGATTAGGAGGGTTTCAGGGGCCACTGGACTATTTGCAAGGTGACAGGGACTGGAGCC
ATGGCTCAGAGGTGATTCGGGCAGCCAGGGACAGGAGCCACCCTCCCCAGGCCCAACTCTGCTAGCTTCCCAGAC
CACCCCCATCGAGTGCGGAGAGAGTGGGAGTGCTCAGGGAAAGAAGGTGATTTGTATTTGTCTCCCCGCTGAAAA
GAACAGGATTCAAGTCCAGAGTTTTCATCTTCAGCCTGTGATCTGTCCAGGGACCCTTGGGATCTGGGGCTTCCT
GGCCTGGCCAGAGCTGGAGCCCCCACAGGGTAAGGAAGAGAGAGTGGGAGGCAGAGTGTGATGGGGAGGAGGGAC
AGGAAGACCCTTTTAATGATGAGGGTAACTATTTCAGTTGTGAGCCTTCTAGGGCCCCAGGCTGGGAGGCTCAGA
GGACTGAATCTGGGACCTGTGTTCCCCCCGGCAGGCAGGGACAAGATGGCATGGCAAGCATGGGGGCGGGGTGGG
TGGGGAGGGATGCTGCATTTCTCAGCTGGGCAGTAATCAATTTAATGGTCCTTTAAAATGTCTGTGTATTAAAAA
TTTAAGAATACCACACTTTAATATTAAATATTCATAAGGTCTAGTATCTTGATAATAATGTAGATGTTTTAATAA
CAATTTTTGTCCTTCTTAAAATAAAATGAAAGAAACTTG

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FIGURE 4038

GGGAGGCGAGGTGCGCGAGCCGAGTCCGGGGCACGATGTCCGACGCGGGCGGCGGAAAGAAGCCGCCTGTGGACC
CGCAGGCAGGACCCGGTCCGGGGCCGGGGCGCGCAGCTGGGGAAAGGGGCCTGTCGGGGTCCTTCCCCCTGGTCC
TGAAGAAGCTGATGGAGAACCCCCCGCGCGAGGCGCGCCTCGATAAGGAAAAGGGGAAGGAAAAGCTGGAGGAGG
ACGAGGCCGCAGCCGCCAGCACCATGGCTGTCTCAGCCTCCCTCATGCCACCCATCTGGGACAAGACCATCCCAT
ATGATGGCGAATCTTTCCACCTGGAGTACATGGACCTGGATGAGTTCCTGCTGGAGAATGGCATCCCCGCCAGCC
CCACCCACCTGGCCCACAACCTGCTGCTGCCTGTAGCAGAGCTAGAAGGGAAGGAGTCTGCCAGCTCTTCCACAG
CATCCCCACCATCCTCCTCCACTGCCATCTTTCAGCCCTCTGAAACCGTGTCCAGCACAGAATCTTCCCTGGAGA
AGGAGAGGGAGACTCCCAGTCCCATCGACCCCAATTGTGTGGAAGTGGATGTGAACTTCAATCCGGACCCCGCCG
ACCTGGTGCTCTCCAGTGTGCCAGGCGGGGAGCTCTTCAACCCTCGGAAGCACAAGTTTGCTGAGGAGGACCTGA
AGCCCCAGCCTATGATCAAAAAGGCCAAGAAGGTCTTTGTCCCCGACGAGCAGAAGGATGAAAAGTACTGGACAA
GACGCAAGAAGAACAACGTGGCAGCTAAACGGTCACGGGATGCCCGGCGCCTGAAAGAGAATCAGATCACCATCC
GGGCAGCCTTCCTGGAGAAGGAGAACACAGCCCTGCGGACGGAGGTGGCCGAGCTACGCAAGGAGGTGGGCAAGT
GCAAGACCATCGTGTCCAAGTATGAGACCAAATACGGGCCCTTGTAACCCGTGCCCCCCGCCCGGGCGGGGTACT
GCCTGCACCTCAGACCTCTGCCTG

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FIGURE 4039

AAAGCTCTGGGTGTGCGGCAGTACCATGTGGCCTCAGTCCTGTGCCAACGGGCCAAGGTGGCGATGAGCCACTTT
GAGCCCAACGAGTACATCCATTATGACCTGCTAGAGAAGAACATTAACATTGTTCGCAAACGACTGAACCGGCCG
CTGACACTCTCGGAGAAGATTGTGTATGGACACCTGGATGACCCCGCCAGCCAGGAAATTGAGCGAGGCAAGTCG
TACCTGCGGCTGCGGCCGGACCGTGTGGCCATGCAGGATGCGACGGCCCAGATGGCCATGCTCCAGTTCATCAGC
AGCGGGCTGTCCAAGGTGGCTGTGCCATCCACCATCCACTGTGACCATCTGATTGAAGCCCAGGTTGGGGGCGAG
AAAGACCTGCGCCGGGCCAAGGACATCAACCAGGAAGTTTATAATTTCCTGGCAACTGCAGGTGCCAAATATGGC
GTGGGCTTCTGGAAGCCTGGATCTGGAATCATTCACCAGATTATTCTGGAAAACTATGCGTACCCTGGTGTTCTT
CTGATTGGCACTGACTCCCACACCCCCAATGGTGGCGGCCTTGGGGGCATCTGCATTGGAGTTGGGGGTGCCGAT
GCTGTGGATGTCATGGCTGGGATCCCCTGGGAGCTGAAGTGCCCCAAGGTGATTGGCGTGAAGCTGACGGGCTCT
CTCTCCGGTTGGTCCTCACCCAAAGATGTGATCCTGAAGGTGGCAGGCATCCTCACGGTGAAAGGTGGCACAGGT
GCAATCGTGGAATACCACGGGCCTGGTGTAGACTCCATCTCCTGCACTGGCATGGCGACAATCTGCAACATGGGT
GCAGAAATTGGGGCCACCACTTCCGTGTTCCCTTACAACCACAGGATGAAGAAGTACCTGAGCAAGACCGGCCGG
GAAGACATTGCCAATCTAGCTGATGAATTCAAGGATCACTTGGTGCCTGACCCTGGCTGCCATTATGACCAACTA
ATTGAAATTAACCTCAGTGAGCTGAAGCCACACATCAATGGGCCCTTCACCCCTGACCTGGCTCACCCTGTGGCA
GAAGTGGGCAAGGTGGCAGAGAAGGAAGGATGGCCTCTGGACATCCGAGTGGGTCTAATTGGTAGCTGCACCAAT
TCAAGCTATGAAGATATGGGGCGCTCAGCAGCTGTGGCCAAGCAGGCACTGGCCCATGGCCTCAAGTGCAAGTCC
CAGTTCACCATCACTCCAGGTTCCGAGCAGATCCGCGCCACCATTGAGCGGGACGGCTATGCACAGATCTTGAGG
GATCTGGGTGGCATTGTCCTGGCCAATGCTTGTGGCCCCTGCATTGGCCAGTGGGACAGGAAGGACATCAAGAAG
GGGGAGAAGAACACAATCGTCACCTCCTACAACAGGAACTTCACGGGCCGCAACGACGCAAACCCCGAGACCCAT
GCCTTTGTCACGTCCCCAGAGATTGTCACAGCCCTGGCCATTGCGGGAACCCTCAAGTTCAACCCAGAGACCGAC
TACCTGACGGGCACGGATGGCAAGAAGTTCAGGCTGGAGGCTCCGGATGCAGATGAGCTTCCCAAAGGGGAGTTT
GACCCAGGGCAGGACACCTACCAGCACCCACCCAAGGACAGCAGCGGGCAGCATGTGGACGTGAGCCCCACCAGC
CAGCGCCTGCAGCTCCTGGAGCCTTTTGACAAGTGGGATGGCAAGGACCTGGAGGACCTGCAGATCCTCATCAAG
GTCAAAGGGAAGTGTACCACTGACCACATCTCAGCTGCTGGCCCCTGGCTCAAGTTCCGTGGGCACTTGGATAAC
ATCTCCAACAACCTGCTCATTGGTGCCATCAACATTGAAAACGGCAAGGCCAACTCCGTGCGCAATGCCGTCACT
CAGGAGTTTGGCCCCGTCCCTGACACTGCCCGCTACTACAAGAAACATGGCATCAGGTGGGTGGTGATCGGAGAC
GAGAACTACGGCGAGGGCTCGAGCCGGGAGCATGCAGCTCTGGAGCCTCGCCACCTTGGGGGCCGGGCCATCATC
ACCAAGAGCTTTGCCAGGATCCACGAGACCAACCTGAAGAAACAGGGCCTGCTGCCTCTGACCTTCGCTGACCCG
GCTGACTACAACAAGATTCACCCTGTGGACAAGCTGACCATTCAGGGCCTGAAGGACTTCACCCCTGGCAAGCCC
CTGAAGTGCATCATCAAGCACCCCAACGGGACCCAGGAGACCATCCTCCTGAACCACACCTTCAACGAGACGCAG
ATTGAGTGGTTCCGCGCTGGCAGTGCCCTCAACAGAATGAAGGAACTGCAACAGTGAGGGCAGTGCCTCCCCGCC
CCGCCGCTGGCGTCAAGTTCAGCTCCACGTGTGCCATCAGTGGATCCGATCCGTCCAGCCATGGCTTCCTATTCC
AAG

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FIGURE 4040A

GTGATACGAGCGGCGGCACGTGGCGCGGGTGCGGGGCGTGGAGTGGCGTGGCGTGGAGTGGCGTGGCGTGGCGGG
GTCTCGCGGCGCGGGCGCGCACCCGGAGCTGTGGACGGAGAGTGCCTCCCTCTGGCCTCAGTTTCCTCATGTTGT
AGTAGCGGAGCATGGCCCGGACCGGGCCCCCGAGACCGCCCCGTGCAACCTCACCGCCAGCCTGGGGGCCTCAGC
GACTGGGACGGGACCAAGGGGCTCGGGGATTCTCCCTGCCCCCGGCCCTGGTGCGTGACTGACCCTCCTGTTCCC
AGAGCCCCCAGCGCAGGCCGGGATGTTCGTCCTGGTGGAAATGGTGGACACCGTCCGGATCCCCCCTTGGCAGTT
TGAGAGGAAGCTCAACGACTCCATTGCCGAGGAGCTGAACAAGAAGTTGGCCAACAAGGTCGTGTACAACGTGGG
ACTCTGCATTTGTCTGTTTGATATCACCAAACTGGAGGATGCCTATGTATTCCCTGGGGATGGCGCATCACACAC
CAAAGTCCATTTTCGCTGCGTGGTGTTTCATCCATTCCTAGATGAGATTCTCATTGGGAAGATCAAAGGCTGCAG
CCCAGAAGGAGTGCACGTCTCTCTAGGCTTCTTCGATGACATTCTCATCCCCCCAGAGTCACTGCAGCAGCCAGC
CAAGTTCGACGAAGCGGAGCAGGTGTGGGTGTGGGAGTACGAGACGGAGGAAGGAGCACACGACCTCTACATGGA
CACCGGCGAGGAGATCCGCTTCCGGGTGGTGGACGAGAGCTTTGTTGACACGTCCCCCACAGGGCCCAGCTCAGC
AGATGCCACCACTTCCAGTGAGGAGCTGCCAAAGAAGGAGGCTCCGTACACGCTTGTGGGATCCATCAGTGAGCC
AGGCCTGGGCCTTCTCTCCTGGTGGACCAGCAACTAGCCCTGGGGCTGGACAGTGGACCCTACCAGCCTGCGGGA
AGGTGGTATGGCCGGCTGTGAAGACAACAGCAGCTGAGGCCGATGCTAAGGAGATAGTGTCTCGAGCTGGACAGT
GAGGCAAGGCCAGGAGTGCCCACCAGCTTGCCCCGCTCCTCCACCATCTAGGCCCTGCTCCTCCTTCACTGCAGT
GATGGATCCATCTGTGGCTGTGGCTGTTGGGCCTCCACTGACCTTGACTGAAAAGACCCTTCCTGGACCCTGGAC
TTGACAACAAACGGCACAGACACCAATCACTCACAGAACAGTCACTGGTTTTGGATTCTTGTTTTCCTTGCAAGA
ACAAAAGGTTCTCTAGAATCCTTCAGCCACCAATGAAATGATCAGGCAGGAGAAAAACTTTAGATGGGAGTCTTG
TCATCAAAAATAAATACAGTTGCATGGAGCTGCTTAAGATCTGAACCAAACTCAAAATAGGAAGACGGGGGCTAA
AAAGTTATTTTAAGAACCCCCCCACCACAACCACAGTCACTCCGTGGGCTAAGCGGGGAGCAGGAAGCATGTCTG
GTCACACCATCTTGGAATAGGAAGCC**ATG**GCTGGACGGATCGGATCCACTGATGGCACACGTGGAGCTGAACTTG
ACGCCAGCGGCGGGGCGGGGAGGCACTGCCCTCACTGTTGCAGTTCCTTCATTCTGTTGAGGGCACTGCCAGCGC
GGAACCACTCAATCTGCGTCTCGTTGAAGGTGTGGTTCAGGAGGATGGTCTCCTGGGTCCCGTTGGGGTGCTTGA
TGATGCACTTCAGGGGCTGCAAGGAGAAGGTGGGTGTGGGTGGAAGTGGTGGGTACTGTGTGCCCTTGGCCCCGC
AGGGGGGTCAGGGAGACAGGGCACTGCCTGGGGACCTAAGAGGTCAGCAGGCAAACCAAATCCTAGGCCAGTCTG
TGCCTGATGGCCCAGGTCAGACCCAGGTGGCACCTACAGGGGATTCCTGGGGCCCAGAGGGTCCTGCAGTGGGTG
GGCTGTCCCCTGAGTGCCAGGTCCTGGTGAGTAAAGGGAGGTTGGGGAGGTGTGAGGGCCCCGGGTTGACTCCAA
CCCCCAACTCTGAGAAGCCACTTTGCTTTCTCTGTGGGGCCACCTGGAGAACTGGGGGCCTTTCCAGCTGGAATG
AAGCCTCCTGGGAGAAGCTACCCTGGGGCCAGTGCAGGAGGGGAAACAAGGTGGCTGCCCCTCACCCCACCACCT
CAGGGGGACCCGGGCCCCTAACCTTGCCAGGGGTGAAGTCCTTCAGGCCC**TGA**ATGGTCAGCTTGTCCACAGGGT
GAATCTTGTTGTAGTCAGCCGGGTCAGCGAAGGTCAGAGGCAGCAGGCCCTGTTTCTTCAGGTTGGTCTCTGGAA
AGCAGGCGGCATTCGGTCATCGGGGGCCTGACTAGCCTGGAGAGCTTCATTTTCTGAACCCATCTGGGGCTCTGG
GAGATGCCCCTAATCCTGCTGCCTGGGACAATGCCCGGGCAGTGACTATGGGGCCCTGGTCTGCTCCCTTTCACT
AGGGGTGCCCCTAGCAAGTGTGCGCTGGTGCTGAGGTCTGCGAGGCCTTCCTGCTGCACATTCATGATCAGAAAG
AACCCCCTGGCACATGTCCTAGATCTCAGCGGCTCAGATCTACAAGCCTGGAAGCAGGGCCTGCGGGAAGCCGGG
AAGCTGAGCGTCGGATGTGCACTGTGTGAGCCTAAGAAGGGGCAAGAGGCTGACGGGCCTGTGGGCTGCAGTGGA
CACAGCCTAGAACCAGGCCCAACTCAGCCACGGGCAGGGAGAGTGACCTTGATCACTAGGGATGGGATGAGGATG
GCCTGGGTACAGACTCCAGCTCACCGTGGATCCTGGCAAAGCTCTTGGTGATGATGGCCCGGCCCCCAAGGTGGC
GAGGCTCCAGAGCTGCATGCTCCCGGCTCGAGCCCTCGCCGTAGTTCTCGTCTCCGATCACCACCCACCTGATGC
CATGTTTCTGTCAGGCAAGCGGGGGTAAGGTTATAAGGCAGAGGAGGGCACCGTCCTCACCTGTCTGGCCCTACC
TGCCTGGCCTCACCCACCTGGCGCCTGGGCATCCTGAGGCTCCCGGTAAAGGGGCTGGAGGGGCCCTTCCTCGCC
TGCTGCCTAAGGGCAAGTGAAGCCTGCGTGAATGAGACCCAAACGAGGCCCCGAGGGGACAGAGGCACGTGGTTG
TTTGCAGTGGCAAAGAAGACAGAAGCCACCCATTGGTGCTTGGCAGAGGCAGGTGTGTGTGGAGGGAGGTTGGGT
GAGACAGGGACGGCCTCCGGGCCCCACACAAGATGCATCTGTGAAGCTCAAGGCGCCCCCTTCCTGGGAGCACCC
TCTGCCCCACCCAGCCACCAGGGGGTGCCAGAGTCCTTTCACCCGGCTGGGCCAGGACTTGGGTTCAGCCCTGGT
TCTGTTTGTTTCTCAAAGCAGAAAAAGTCCAATCACCTCAGACCCTCTCTGCCTGCTCACTGTGAGGCCCCGTGT
AGCCCCCTCTCTGAGCTTTTGGCCTCTGACTTCCTGAGTCGGCCCCCTTCCTTGTCTTTGTCTAGGGCCAGATAT
CCTAAGATATCTCTCACTAACTCCTCCTGGTGCAGGGACCCGGCTGTACCACCGGACCTGGGCCTCATGCCTTCT

FIGURE 4040B

CAGCCACAGGGAGGGGCTGCAGGCCTCTCCTCCCTTCCACAGCAGTCCCCTTTGGGCTTGGTCGGCCTCCTTCCC
AGTTTCCACTCCCCTAATGTCCTCCCTGCACCTGCCTTGCAGGCCCCTTCAGGAGTGACCACTGGCATTGCCCCT
ATCAACTCTGACCCACCTTGTAGTAGCGGGCAGTGTCAGGGACGGGGCCAAACTCCTGAGTGACGGCATTGCGCA
CGGAGTTGGCCTTGCCGTTTTCAATGTTGATGGCACCAATGAGCAGGTTGTTGGAGATGTTATCCAAGTGCCCAC
GGAACTTGAGCCAGGGGCCAGCAGCTGAGATGTGGTCAGTGGTACACTTCCCTTTGACCTTGGGTGGTAAGTAGA
GAGGACAGAGGTCAGGGCATGGCCCTGGAGGGGTGGATGACAAGCCCTCCAGAGGCAGGCAGCAGGCCCCGGGGC
CCAGGAGGGGTGACAGAGGGGTGAGAGGCAGGCAAGTCTTCAGACACGTGTTCTGTGGTCCTGGTGCTTCCACCC
TAAGGCCACATGGGCTCAGGCCAGGCCTTCATCCCCTCAAAGGCCTCTGGCTGCTCAGTCTCCCTTATGGGGCAG
AGGCCGCCCAAAGTTGGGACAGGTCAATGTTCGCTCACCCTTCAGGCCTCAGCTGCAAGATCAGCCACAGACCTC
ATGCTGGACACAGGAGCCCAGGACATGCCTGGGTCCTGGCTGATGACTGATTAGTCTCTTCTGTCACAGGGGTGC
CTGGAGACCCCTTAATAAGCAGCATAAATAAATATCTGACACAGATTGGAGGCCTCTGGCCACACC

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FIGURE 4041

AGCCATGGCAGTCACCGCCCAGGCAGCCCGCAGGAAGGAGCGCGTCCTCTGCCTGTTTGACGTGGACGGGACCCT
CACGCCGGCTCGCCAGAAAATTGACCCTGAGGTGGCCGCCTTCCTGCAGAAGCTACGAAGTAGAGTGCAGATCGG
TGTGGTGGGCGGCTCTGACTACTGTAAGATCGCTGAGCAGCTGGGTGACGGGGATGAAGTCATTGAGAAGTTTGA
TTATGTGTTTGCCGAGAACGGGACGGTGCAGTATAAGCACGGACGACTGCTCTCCAAGCAGACCATCCAGAACCA
CCTGGGGGAGGAGCTGCTGCAGGACTTGATCAACTTCTGCCTCAGCTACATGGCCCTGCTCAGGCTGCCCAAGAA
GCGTGGAACCTTCATCGAGTTCCGGAATGGCATGCTGAACATCTCGCCCATCGGCCGGAGCTGCACCCTGGAGGA
GAGGATCGAGTTCTCCGAACTGGACAAGAAAGAGAAGATCCGGGAGAAGTTCGTGGAAGCCCTGAAAACAGAGTT
TGCTGGCAAAGGGCTGAGGTTCTCTCGAGGAGGCATGATCAGCTTTGACGTCTTCCCCGAGGGCTGGGACAAGCG
CTACTGCCTGGATAGCCTGGACCAGGACAGCTTCGACACCATCCACTTCTTTGGGAACGAGACTAGCCCTGGTGG
GAACGACTTTGAGATCTTTGCCGACCCCCGGACTGTTGGCCACAGCGTGGTGTCTCCTCAGGACACGGTGCAGCG
ATGCCGGGAGATTTTCTTCCCAGAGACAGCTCATGAGGCGTGACCGGGGCCCACATCTGTGTGTCGTGACTTCTG
AAGAGTTTGGCCTAGGCCTAAAGAGAGGTCCTGGTGTTGGATAGATGCCAGGGCCCCTCCTCTGGCCCAGGACGC
CTGCTGCAAGCCCACCCAGATGGGGCCAGAGTCTGTGTGGACAACCGTCCCCAGCCAGTCTGCTCCTAGTGGCAC
TGGCTTCGTCCTCCCAGGGCCCAGAGTGTTCCCCATGCTCCACCTGGTGGCCCAGGCCACAGCTGCTGCTTGTAT
TTCGGTACAGAAGAGGTTTCTTTCTGCACCAGGAGGAGGCGTGCTCAAGTATCGGTACGAGATCTAGCCTGCCCT
GCCTGCCTGCCCTGGGCGATGAGGTACGGTGGGGAAGGTGCCTATTTTAGAGAACTTTGTCACAGTATTAAAGTT
CCC

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FIGURE 4042

CCGGTAGCGGGTGTGGGGGCGCGAGCAGCGCAGGGCGGCCTCTCCCCCACCCCTCAGCCCGGGCCCGGGCTCGGT
CCCCCCCTCTCCCTCCGCTTCGCACTCCCGTCGGGTACGGGAAGGTCCAAGCCGCTGCCGGGTGCCCGAGGGCCG
TCGTGGCCGCCGTCGCCACGGGTCCCA**ATG**GAGCCGCCGAATCTCTATCCGGTGAAGCTCTACGTGTACGACCTG
TCCAAAGGCCTGGCCCGGCGGCTCAGCCCCATCATGCTGGGGAAACAACTGGAAGGCATCTGGCACACATCCATA
GTTGTGCACAAGGATGAGTTCTTCTTCGGCAGTGGTGGTATCTCCAGCTGCCCCCCGGGAGGGACATTGCTTGGG
CCTCCAGACTCTGTGGTTGATGTGGGGAGTACAGAAGTCACAGAAGAAATCTTTCTGGAGTACCTCTCCTCCCTG
GGGGAGTCCCTGTTCCGAGGTGAGGCCTACAACCTCTTTGAACACAATTGTAACACCTTCAGCAACGAAGTGGCA
CAGTTCCTGACTGGGCGGAAGATTCCTTCTTACATCACAGACCTGCCCTCTGAAGTTCTCTCCACGCCCTTTGGA
CAGGCACTTCGGCCCCTCCTGGACTCCATTCAGATCCAGCCTCCAGGAGGGAGCTCCGTGGGCAGACCCAACGGC
CAGAGC**TAA**CAGGACTGCCTGGGACCGCCCTGCCTCACCAGGGCTTTTCCTTTTTAAACAAAACAAACCCTACCA
GATTTCTATTTTATAATTTTACATCAGAGCTAACAACCAGGGGACGGCTTTTTAAATTTCCCAGGGAAGGAGACC
GTCAGGCCGCATGTAGACAATGCTGCTAAGAAACAGAACAAAATGCCACCCCTTCTAATAGTATTATACTAATTT
ATTAAGGCTGTCTTGTCTGTGCGTTCACTTCGGATGCTGTTTCCTAAGCGTCCTCCACACTGGAGAAAGGGAGGG
GCTTTGTTTAAACAGAAAGCGAGTCACAGTTTGCGGGAGCCCCAACCTAGAACTCTTTCCAGAGAACACTCACGC
TCTACCCAAGTTGCCAACACCTGTGGGACCCAGGTGAGTTTTAGAACATCCGTGACCCAGAAAGTTACTCTAGTG
TTAAATGAACCAAAGGATTTGGTGTACATGGGACCGGTTTCAGGATGACTAACCTAACCTAAGTGAACTCTTTAG
CCACAACCCTCACCTTCCCTCCCTTACCCCAAGCAAGGCCAGTGCTGGAGCAGCCATTGCCTCCGGATCAAGGGA
GTAACAGCAAGTATCAGGCCGGAGAAAACAGGATAAAGCCATTCCTCCTTCCACCTAGATGGATTGCCAATCTTC
TGCCATCAATTTTGGGAAACCTGCCTTTGTGCCCCCGAGGCTGCCTTTCCTCAGCATAGCTGACTTGTCATAGTG
GATGAGGTCTGGGCTGGAGCAGTAGAAGCCAAGGCCTTTTTTCTGCAAGTAATGATGTAGGTTATTTGCAGTCTC
TGTAACCACCATCCAGGCCAGTACGCAGTATTTAGCTGGGGACCAAGGGATGGGATTCCCTACTCTAAGAAAATA
CCTTTATTTTAATTATTATTATTTTTTGAGACGGAGTCTCGCTCTACCACCCAGGCTGGTGTGCAGTGGCATGAT
CTCGGCTCACAGAATCGCTTGAACCCGGGAGGCAGAGATTGCGATGAGCCGAGATCGTACCAGTGCACTCCAGCC
TGGGCGACAGAGTGAGACTCCATCTCAAAAAAATAAAATAATGAAGTGGAATCAAGGTGGCAAGAAAATTTAGAA
TCGTTTCTGATAGGGACTTTCCCTTATCCTAAATGTGTTTTGAAGGCACACGTTATTTCCATTGTCATTCTGACT
TTAGAAAGGCAGGTTGGGGCATGAGTGGGCATTTTCCTAATGACTTGCTGCTAGGAGGTTATAGGCAGGGAACAG
TCTGGGAGTC

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FIGURE 4043

GCGGGCCGTTATCCATTTGTGTTGTTCGCCAGCTAGGCCTGGCCTCGTCCCGCTTCGCTCGGTCGGTCTCGCGCG
CCCCCATAGCCTTGCTAGAGGGTTAGCGTTAGCCTTAAGTGTGCGAATCCGAGGAGCAGCGACAGACTCGAGACC
ACGCTCCTTCCTCGGGAAGGAGGCGGCACCTCGCGTTTGAGGCCCGCCTGCGTTTGAGGCCCGCCTGCGCTTGCG
GCCCGCCTGCGCTTGAGGCCTGTCTGCGTTTGAGATCTCATTGGGCGTGATTGAGGAATTTGGGGAGGTTTTTGG
GCGGTATTGAGGACGAGGGGGTCCGTTAGTCAGCATAGAATCCTGGAGCGGGAATCCCTCACCGTCTAAATGGCG
TCGGGGGCGGGACCTCCGGGATCTGGCTTCCGCGGGCCGCCGCCGGCCCTGAAACGTGAGGGATAGCTGAGATGA
GGCAGCTACTGGGATGGCCCCCATGCGCATTTACATGCAGTCCGACTGCCGAGCTTTCGAGGCAGCAGGATTTAC
CGTCCACATTCCTCACTACTAACCAAGCTTTTAGAACAGATCTCACAAGAACCTAGAGGTCGGTATTTTTTCGAT
TTAAATTTGCCTGTTACTGACGTTAACGTCTTTCGCCTAGTGAGCAGTAGCCAAC**ATG**TCAGGGTGGGAGTCATA
TTACAAAACCGAGGGCGATGAAGAAGCAGAGGAAGAACAAGAAGAGAACCTTGAAGCAAGTGGAGACTATAAATA
TTCAGGAAGAGATAGTTTGATTTTTTTGGTTGATGCCTCCAAGGCTATGTTTGAATCTCAGAGTGAAGATGAGTT
GACACCTTTTGACATGAGCATCCAGTGTATCCAAAGTGTGTACATCAGTAAGATCATAAGCAGTGATCGAGATCT
CTTGGCTGTGGTGTTCTATGGTACCGAGAAAGACAAAAATTCAGTGAATTTTAAAAATATTTACGTCTTACAGGA
GCTGGATAATCCAGGTGCAAAACGAATTCTAGAGCTTGACCAGTTTAAGGGGCAGCAGGGACAAAAACGTTTCCA
AGACATGATGGGCCACGGATCTGACTACTCACTCAGTGAAGTGCTGTGGGTCTGTGCCAACCTCTTTAGTGATGT
CCAATTCAAGATGAGTCATAAGAGGATCATGCTGTTCACCAATGAAGACAACCCCCATGGCAATGACAGTGCCAA
AGCCAGCCGGGCCAGGACCAAAGCCGGTGATCTCCGAGATACAGGCATCTTCCTTGACTTGATGCACCTGAAGAA
ACCTGGGGGCTTTGACATATCCTTGTTCTACAGAGATATCATCAGCATAGCAGAGGATGAGGACCTCAGGGTTCA
CTTTGAGGAATCCAGCAAGCTAGAAGACCTGTTGCGGAAGGTTCGCGCCAAGGAGACCAGGAAGCGAGCACTCAG
CAGGTTAAAGCTGAAGCTCAACAAAGATATAGTGATCTCTGTGGGCATTTATAATCTGGTCCAGAAGGCTCTCAA
GCCTCCTCCAATAAAGCTCTATCGGGAAACAAATGAACCAGTGAAAACCAAGACCCGGACCTTTAATACAAGTAC
AGGCGGTTTGCTTCTGCCTAGCGATACCAAGAGGTCTCAGATCTATGGGAGTCGTCAGATTATACTGGAGAAAGA
GGAAACAGAAGAGCTAAAACGGTTTGATGATCCAGGTTTGATGCTCATGGGTTTCAAGCCGTTGGTACTGCTGAA
GAAACACCATTACCTGAGGCCCTCCCTGTTCGTGTACCCAGAGGAGTCGCTGGTGATTGGGAGCTCAACCCTGTT
CAGTGCTCTGCTCATCAAGTGTCTGGAGAAGGAGGTTGCAGCATTGTGCAGATACACACCCCGCAGGAACATCCC
TCCTTATTTTGTGGCTTTGGTGCCACAGGAAGAAGAGTTGGATGACCAGAAAATTCAGGTGACTCCTCCAGGCTT
CCAGCTGGTCTTTTTACCCTTTGCTGATGATAAAAGGAAGATGCCCTTTACTGAAAAAATCATGGCAACTCCAGA
GCAGGTGGGCAAGATGAAGGCTATCGTTGAGAAGCTTCGCTTCACATACAGAAGTGACAGCTTTGAGAACCCCGT
GCTGCAGCAGCACTTCAGGAACCTGGAGGCCTTGGCCTTGGATTTGATGGAGCCGGAACAAGCAGTGGACCTGAC
ATTGCCCAAGGTTGAAGCAATGAATAAAAGACTGGGCTCCTTGGTGGATGAGTTTAAGGAGCTTGTTTACCCACC
AGATTACAATCCTGAAGGGAAAGTTACCAAGAGAAAACACGATAATGAAGGTTCTGGAAGCAAAAGGCCCAAGGT
GGAGTATTCAGAAGAGGAGCTGAAGACCCACATCAGCAAGGGTACGCTGGGCAAGTTCACTGTGCCCATGCTGAA
AGAGGCCTGCCGGGCTTACGGGCTGAAGAGTGGGCTGAAGAAGCAGGAGCTGCTGGAAGCCCTCACCAAGCACTT
CCAGGAC**TGA**CCAGAGGCCGCGCGTCCAGCTGCCCTTCCGCAGTGTGGCCAGGCTGCCTGGCCTTGTCCTCAGCC
AGTTAAAATGTGTTTCTCCTGAGCTAGGAAGAGTCTACCCGACATAAGTCGAGGGACTTTATGTTTTTGAGGCTT
TCTGTTGCCATGGTGATGGTGTAGCCCTCCCACTTTGCTGTTCCTTACTTTACTGCCTGAATAAAGAGCCCTAAG
TTTGTACT

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FIGURE 4044

ATCCGTGTCCTTGCGGTGCTGGGCAGCAGACCGTCCAAACCGACACGCGTGGTATCCTCGCGGTGTCCGGCAAGA
GACTACCAAGACAGACGCTATGACTGAGGCTGATGTGAATCCAAAGGCCTATCCCCTTGCCGATGCCCACCTCAC
CAAGAAGCTACTGGACCTCGTTCAGCAGTCATGTAACTATAAGCAGCTTCGGAAAGGAGCCAATGAGGCCACCAA
AACCCTCAACAGGGGCATCTCTGAGTTCATCGTGATGGCTGCAGACGCCGAGCCACTGGAGATCATTCTGCACCT
GCCGCTGCTGTGTGAAGACAAGAATGTGCCCTACGTGTTTGTGCGCTCCAAGCAGGCCCTGGGGAGAGCCTGTGG
GGTCTCCAGGCCTGTCATCGCCTGTTCTGTCACCATCAAAGAAGGCTCGCAGCTGAAACAGCAGATCCAATCCAT
TCAGCAGTCCATTGAAAGGCTCTTAGTCTAAACCTGTGGCCTCTGCCACGTGCTCCCTGCCAGCTTCCCCCCTGA
GGTTGTGTATCATATTATCTGTGTTAGCATGTAGTATTTTCAGCTACTCTCTATTGTTATAAAATGTAGTACTAA
ATCTGGTTTCTGGATTTTTGTGTTGTTTTTGTTCTGTTTTACAGGGTTGCTATCCCCCTTCCTTTCCTCCTCCC
TCTGCCATCCTTCATCCTTTTATCCTCCCTTTTTGGAACAAGTGTTCAGAGCAGACAGAAGCAGGGTGGTGGCAC
CGTTGAAAGGCAGAAAGAGCCAGGAGAAAGCTGATGGAGCCAGGACAGAGATCTGGTTCCAGCTTTCAGCCACTA
GCTTCCTGTTGTGTGCGGGGTGTGGTGGAATTAAACAGCATTCATTGTGTGTCCCTGTGCCTGGCACACAGAATC
ATTCATACGTGTTCAAGTGATCAAGGGGTTTCATTTGCTCTTGGGGGATTAGGTATCATTTGGGGAGGAAGCATG
TGTTCTGTGAGGTTGTTCGGCTATGTCCAAGTGTCGTTTACTAATGTACCCCTGCTGTTTGCTTTTGGTAATGTG
ATGTTGATGTTCTCCCCCTACCCACAACCATGCCCTTGAGGGTAGCAGGGCAGCAGCATACCAAAGAGATGTGCT
GCAGGACTCCGGAGGCAGCCTGGGTGGGTGAGCCATGGGGCAGTTGACCTGGGTCTTGAAAGAGTCGGGAGTGAC
AAGCTCAGAGAGCATGAACTGATGCTGGCATGAAGGATTCCAGGAAGATCATGGAGACCTGGCTGGTAGCTGTAA
CAGAGATGGTGGAGTCCAAGGAAACAGCCTGTCTCTGGTGAATGGGACTTTCTTTGGTGGACACTTGGCACCAGC
TCTGAGAGCCCTTCCCCTGTGTCCTGCCACCATGTGGGTCAGATGTACTCTCTGTCACATGAGGAGAGTGCTAGT
TCATGTGTTCTCCATTCTTGTGAGCATCCTAATAAATCTGTTCCATTTTG

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FIGURE 4045

AGTTGCTTTGCTGTTAGCCTGTTGGACCTTCGAGCCTAGCTGCTCGCACAGGACTCGGCCACCTGCCCTTCCTGC
ACCGACTGGCCAGCTCAAGAGGTTTGGATATGGACCTTCTTCAATTCCTGGCCTTCCTCTTTGTCCTGCTTTTGT
CTGGGATGGGAGCCACAGGCACCTTGAGGACCTCCCTGGACCCAAGCCTGGAGATCTACAAGAAGATGTTTGAGG
TGAAGCGGCGGGAGCAGCTGTTGGCACTGAAGAACCTGGCACAGCTGAACGACATCCACCAGCAGTACAAGATCC
TTGATGTCATGCTCAAGGGGCTCTTTAAGGTGCTGGAGGACTCCCGGACAGTGCTCACCGCTGCTGATGTGCTCC
CAGATGGGCCCTTCCCCCAGGACGAGAAGCTGAAGGATGCTTTCTCCCACGTGGTGGAGAACACGGCCTTCTTCG
GCGATGTGGTGCTGCGCTTCCCGAGGATTGTGCACTATTACTTTGACCACAACTCCAACTGGAACCTCCTCATCC
GCTGGGGTATCAGTTTCTGCAACCAGACAGGCGTCTTCAACCAGGGGCCCCACTCGCCCATCCTCAGCCTGATGG
CCCAGGAGCTGGGGATCAGTGAGAAAGACTCCAACTTCCAGAACCCATTTAAAATCGACCGCACAGAGTTCATTC
CCAGCACTGACCCTTTCCAGAAGGCCCTGAGAGAAGAAGAGAAACGCCGAAAGAAAGAGGAGAAGCGGAAGGAGA
TCCGAAAAGGCCCAAGGATCTCCAGATCCCAGTCTGAGTTATAGCCCTGGAGCAGCTCAGGGCTCAGGGGGCCAC
AAGGAGGCAGGTCGGGAGGAAGAAGAGGTGGAGGTGTGGTTGTGGTGGAGAGCACCAGCTAGCCCCTTCCAGAAG
GGGAGGCCACATTTGCCCGGCCCCCTGGAGCTGGGTCTGAGCCCCAGCTGAAGGGACTGAGCCTCAGATGGCTGG
ATTTTCTCTCAGGGGCCTCCTGCTGAAGGGGCCTTCAGAGGATTTTATGCTGGAAATATGACCCTGTGCAGACTG
CTGGGGGAGGCAGGAGGATGCCTGCCTGGACCCTGTTGGTGGCTGAAGACCTCTGGCCAGCTGGCTTCCGCCCTT
GGTGGGGAAGCAGCAGAACTAGGTTCTGAGCCACGGGTCAGGGTGCCACCCTGCTGCTGGCCCCACTGTGTCACA
GAGCTGCCTGGCACAGGTCCCAGCCCCTCTGCAGAGACACAATAAAAGCCAGCAGACCCTTTG

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FIGURE 4046A

CCGTCGGTGAGGCGGTGCCGGGCGGGGGTTGTCGGGTGTCATGGGCGGTGGCGACGGCACCGCCCCCGCGTCTCC
CTGAGCGGGACGGCAGGGGGGGCTTCTGCGCTGAGCCGGGCGATGGACGACAGCGGCGAGCTGGGTGGTCTGGAG
ACCATGGAGACCCTCACGGAGCTGGGCGACGAGCTGACCCTGGGAGACATCGACGAGATGCTGCAATTTGTCAGT
AATCAAGTGGGAGAGTTCCCTGACTTGTTTTCAGAACAGCTGTGTAGCTCCTTTCCTGGCAGTGGTGGTAGTGGT
AGCAGCAGCGGCAGCAGTGGCAGCAGCAGCAGCAGCAATGGCAGGGGCAGCAGCAGCGGAGCTGTGGACCCT
TCAGTGCAACGGTCATTCACCCAGGTCACATTACCTTCCTTCTCTCCCTCGGCGGCCTCCCCACAGGCTCCAACT
CTGCAAGTCAAGGTTTCTCCCACCTCAGTTCCCACCACACCCAGGGCAACTCCTATTCTTCAGCCCCGCCCCCAG
CCCCAGCCTCAACCTCAAACTCAGCTGCAACAACAGACGGTAATGATCACGCCAACATTCAGCACCACTCCGCAG
ACGAGGATCATCCAGCAGCCTTTGATATACCAGAATGCAGCTACTAGCTTTCAAGTCCTTCAGCCTCAAGTCCAA
AGCCTGGTGACATCCTCCCAGGTACAGCCGGTCACCATTCAGCAGCAGGTGCAGACAGTACAGGCCCAGCGGGTG
CTGACACAAACGGCCAATGGCACGCTGCAGACCCTTGCCCCGGCTACGGTGCAGACAGTTGCTGCGCCACAGGTG
CAGCAGGTCCCGGTCCTGGTCCAGCCTCAGATCATCAAGACAGATTCCCTTGTTTTGACCACACTGAAGACAGAT
GGCAGCCCTGTTATGGCTGCGGTCCAGAACCCGGCCCTCACCGCCCTCACCACCCCTATCCAGACGGCTGCCCTT
CAAGTACCAACCCTGGTGGGCAGCAGTGGGACCATTCTGACCACAATGCCTGTAATGATGGGGCAAGAGAAAGTG
CCCATTAAGCAGGTACCTGGGGGAGTCAAGCAGCTTGAGCCCCCCAAAGAAGGAGAAAGGCGGACAACCCATAAT
ATCATTGAGAAACGATATCGCTCCTCCATCAATGACAAAATCATCGAATTGAAAGACCTGGTCATGGGGACAGAC
GCCAAGATGCACAAGTCTGGCGTTCTGAGGAAGGCCATTGATTACATCAAATACTTGCAGCAGGTCAATCATAAA
CTGCGCCAGGAGAACATGGTGCTGAAGCTGGCAAATCAAAAGAACAAGCTTCTAAAGGGCATCGACCTAGGCAGT
CTGGTGGACAATGAGGTGGACCTGAAGATCGAGGACTTTAATCAGAATGTCCTTCTGATGTCCCCCCCAGCCTCT
GACTCAGGGTCCCAGGCTGGCTTCTCTCCCTACTCCATTGACTCTGAGCCAGGAAGCCCTCTATTGGATGATGCA
AAGGTCAAAGATGAGCCAGACTCTCCTCCTGTGGCGCTGGGCATGGTAGACCGCTCACGGATTCTTCTGTGTGTC
CTCACCTTCCTGTGCCTCTCCTTTAACCCCCTGACTTCCCTGCTGCAGTGGGGAGGGGCCCACGACTCTGACCAG
CACCCACACTCAGGCTCTGGCCGCAGTGTCCTGTCATTCGAGTCAGGTTCTGGGGGCTGGTTTGACTGGATGATG
CCTACTCTTCTCTTATGGCTGGTAAATGGTGTGATTGTCCTGAGCGTCTTTGTGAAGCTGCTGGTTCATGGGGAG
CCAGTGATCCGGCCACACTCGCGCTCCTCGGTCACCTTCTGGAGGCACCGGAAACAGGCAGATCTGGATCTCGCC
AGAGGAGATTTTGCAGCTGCTGCCGGCAACCTACAAACCTGCCTGGCAGTTTTGGGCCGGGCACTGCCCACCTCC
CGCCTGGACCTGGCCTGCAGCCTCTCCTGGAACGTGATCCGCTACAGCCTGCAGAAGCTACGCCTGGTGCGCTGG
CTGCTCAAGAAAGTCTTCCAGTGCCGGCGGGCCACGCCAGCCACTGAGGCAGGCTTTGAAGACGAAGCTAAGACC
AGCGCCCGGGATGCGGCTCTGGCCTATCACCGGCTGCACCAGCTGCACATCACAGGGAAGCTTCCTGCAGGATCC
GCCTGTTCCGATGTACACATGGCGTTGTGTGCCGTGAACCTGGCTGAATGTGCAGAGGAGAAGATCCCACCGAGC
ACACTGGTTGAGATCCATCTGACTGCTGCCATGGGGCTCAAGACCCGGTGTGGAGGCAAGCTGGGCTTCCTGGCC
AGCTACTTCCTCAGCCGAGCCCAGAGCCTGTGTGGCCCCGAGCACAGTGCTGTTCCTGACTCCCTGCGCTGGCTC
TGCCACCCCCTGGGCCAGAAGTTTTTCATGGAGCGGAGCTGGTCTGTGAAGTCAGCTGCCAAGGAGAGTCTATAC
TGTGCCCAGAGGAACCCAGCTGACCCCATTGCGCAGGTCCACCAGGCCTTCTGCAAGAACCTGCTGGAGCGAGCT
ATAGAGTCCTTGGTGAAACCTCAGGCCAAGAAGAAGGCTGGAGACCAGGAAGAAGAGAGCTGTGAATTCTCCAGT
GCTCTGGAGTACTTGAAATTACTTCATTCTTTTGTGGACTCTGTGGGGGTTATGAGCCCCCCACTCTCCAGGAGC
TCCGTGCTCAAGTCCGCCCTGGGTCCAGACATCATCTGTCGGTGGTGGACGTCTGCAATCACTGTGGCCATCAGC
TGGCTCCAGGGAGACGATGCAGCTGTGCGCTCTCATTTTACCAAAGTGGAACGCATCCCCAAGGCCCTGGAAGTG
ACAGAGAGCCCCCTGGTGAAGGCCATCTTCCATGCCTGCAGAGCCATGCATGCCTCACTCCCTGGGAAAGCAGAT
GGGCAGCAGAGTTCCTTCTGCCATTGCGAGAGGGCCAGTGGCCACCTATGGAGCAGCCTCAACGTCAGTGGGGCC
ACCTCTGACCCTGCCCTCAACCACGTGGTCCAGCTGCTCACCTGTGACCTGCTACTGTCGCTACGGACAGCGCTC
TGGCAAAAACAGGCCAGTGCCAGCCAGGCTGTGGGGGAGACCTACCACGCGTCAGGCGCTGAACTGGCGGGCTTC
CAACGGGACCTGGGCAGCCTGCGCAGGCTGGCACACAGCTTCCGCCCAGCATACCGCAAGGTGTTCCTGCATGAA
GCCACCGTGCGCCTGATGGCAGGAGCCAGCCCCACCCGCACCCACCAGCTGCTGGAACACAGCCTGCGGCGGCGC
ACCACGCAGAGCACCAAGCACGGAGAGGTGGATGCCTGGCCCGGCCAGCGAGAGCGGGCCACCGCCATCCTGCTG
GCCTGCCGCCACCTGCCCCTCTCCTTCCTCTCCTCCCCGGGCCAGCGGGCAGTGCTGCTGGCCGAAGCTGCCCGC
ACCCTGGAGAAGGTGGGCGACCGGCGCTCCTGCAACGACTGCCAGCAGATGATTGTTAAGCTGGGTGGTGGCACT
GCCATTGCCGCCTCCTGACCACCAGGCTCAGCCCACCCCTCCACCTCTCTCTCGATTTCTCTCTCTCCCCCTCAG

FIGURE 4046B

CATCTTCCCGCTGAGAGTGGTGGGGAAGAGCCTTGTCTTCTTAGCTGTCACCTGCCGAGGCTTCTGGGCCACTCA
GGCCAGTGCACCCCTGGGCAGAGCCCCTTAAAGCTGCTGTCACTAGATGCCCATGGTCCAGGGCCTGGTGGGCGT
GAGAGGATAGGTGGCAGGGCAGAAACTGGGCAGCCCTGACTTGATAGCAGCAGGGGGAGCTCCCAAGCTGCCAAG
CCCCTGCCTCCAGCCTTCCTGAGTTTCTCTCTCCTGAACCCTACTCTCTCCTTTTTGCTTCCTCAGTTTTTATCA
GGCTTTCTCTGGGGGACAGCAGTCTCTGAGCACCAGGGAGCAGTTGCCCTCAGGCCTGTGCCCAGCATGCCCTCC
CCTTTTTATACGAATGTTTTCTACCAGTGTGCTTGGGTTTGCCATGATGCGAGGCTGAGTTGCTGTAGCGTCTTG
ATTCTCTCCCTGGGTCTGCGTTCCCTCCCCTGGGCCTGACTGAGCCTGCTCATTGTTTTTCCCTTTATTACACAG
GACAGCCAGGGGAGGAGGGGGGCCCAGCCCTGGGAGGCTGGTGGGAGGCAGGGGGCAGGCCTGCGGATGCATGAA
ATAATGTTGGCATTATTTTTTAATTTTTTAAAAAATAAATGGTATCTTA

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FIGURE 4047

GCACCGCAGGAGCAACGGTTGGTCCTGCGGCTGTGATGTCGGTGTTGAGGCCCCTGGACAAGCTGCCCGGCCTGA
ACACGGCCACCATCTTGCTGGTGGGCACGGAGGATGCTCTTCTGCAGCAGCTGGCGGACTCGATGCTCAAAGAGG
ACTGCGCCTCCGAGCTGAAGGTCCACTTGGCAAAGTCCCTCCCTTTGCCCTCCAGTGTGAATCGGCCCCGAATTG
ACCTGATCGTGTTTGTGGTTAATCTTCACAGCAAATACAGTCTCCAGAACACAGAGGAGTCCCTGCGCCATGTGG
ATGCCAGCTTCTTCTTGGGGAAGGTGTGTTTCCTCGCCACAGGTGCTGGGCGGGAGAGCCACTGCAGCATTCACC
GGCACACCGTGGTGAAGCTGGCCCACACCTATCAAAGCCCCCTGCTCTACTGTGACCTGGAGGTGGAAGGCTTTA
GGGCCACCATGGCGCAGCGCCTGGTGCGCGTGCTGCAGATCTGTGCTGGCCACGTGCCCGGTGTCTCAGCTCTGA
ACCTGCTGTCCCTGCTGAGAAGCTCTGAGGGCCCCTCCCTGGAGGACCTGTGAGGGTGGCTGGCCCCTGGGCTGC
CCCTTCTCATGGCTTCGTGCTGACTCCATAAACATTCTCTGTTGAGGATGTCCAGTCAGGGCTTGACAGGCCCAG
GCTCAGCCCGCCGTGGCTGGGAAGGTTCCCTGCAGTGCCAGTGCTGCAGCAGGGAGAGCTGGGCAGAAGCAGCGA
GGGGGCCCAGCTGGCGAGACTGTAGCCCCCTCCCACTCCCACACTCACTCTTGCAGAGCCTGTGTCTTTAAGCAG
CTGGCGTGTTACATCTCCATTTAAGGTTTCCTTTGAACAAAAGGTCTGTGGCTAAAAAAAGTTTAAAAATC

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FIGURE 4048A

GATTCGAGTCAGAAGCGGCGGCAGGTCTGAACGCTTCGGTAGGATAAGTGCGGTGGGAGGGGGCTCTGCGGTTTT
GGGGAGCCCAGGGCGGGAACCCGGACCCGGCTGGAAGTCCGGAGCCTGGCCGCAGCCCCGCCCCTCCGCTCTTTC
TTGGTGACCTTAAGCCAGTGGCTGCCTTTTTCTGAGCCCGGGCGGGGCCGAAGGCGGCCCGTAGGCCCTCGGGAC
TCCCAGCACTGCAGAGGGTGTGAGGTCTGACATCCAAGACACGTTGTTTCGTATTTCTGAAGGAAGAACTGAAGC
TCCGGGAAGTGATGGCTGGGGATGGGGCGGGCAACTTGGGGACCGAGTGTACGATCCACGCCTAAGGTTGAGGGC
GGCCGAGCTAGCCAGGCAGCCGTGACCCCAGTGCTTTTCAGACGTTTCTTAGCTTCCAGAGCCCAACACATACAG
CTGATACACGCAGACCAGATCTGGTCAGGTCCTCGGAAGCTGAGTCCAGAGCG**ATG**CTGCTGAAGACAGTGCTCT
TGCTGGGACATGTGGCCCAGGTGCTGATGCTGGACAATGGGCTCCTGCAGACACCACCCATGGGCTGGCTGGCCT
GGGAACGCTTCCGCTGCAACATTAACTGTGATGAGGACCCAAAGAACTGCATAAGTGAACAGCTCTTCATGGAGA
TGGCTGACCGGATGGCACAGGATGGATGGCGGGACATGGGCTACACATACCTCAACATTGATGACTGCTGGATCG
GTGGTCGCGATGCCAGTGGCCGCCTGATGCCGGATCCCAAGCGCTTCCCTCATGGCATTCCTTTCCTGGCTGACT
ACGTTCACTCCCTGGGCCTGAAGTTGGGTATCTACGCGGACATGGGCAACTTCACCTGCATGGGTTACCCAGGCA
CCACACTGGACAAGGTGGTCCAGGATGCTCAGACCTTCGCCGAGTGGAAGGTAGACATGCTCAAGCTGGATGGCT
GCTTCTCCACCCCCGAGGAGCGGGCCCAGGGGTACCCCAAGATGGCTGCTGCCCTGAATGCCACAGGCCGCCCCA
TCGCCTTCTCCTGCAGCTGGCCAGCCTATGAAGGCGGCCTCCCCCCAAGGGTGAACTACAGTCTGCTGGCGGACA
TCTGCAACCTCTGGCGTAACTATGATGACATCCAGGACTCCTGGTGGAGCGTGCTCTCCATCCTGAATTGGTTCG
TGGAGCACCAGGACATACTGCAGCCAGTGGCCGGCCCTGGGCACTGGAATGACCCTGACATGCTGCTCATTGGGA
ACTTTGGTCTCAGCTTAGAGCAATCCCGGGCCCAGATGGCCCTGTGGACGGTGCTGGCAGCCCCCCTCTTGATGT
CCACAGACCTGCGTACCATCTCCGCCCAGAACATGGACATTCTGCAGAATCCACTCATGATCAAAATCAACCAGG
ATCCCTTAGGCATCCAGGGACGCAGGATTCACAAGGAAAAATCTCTCATCGAAGTGTACATGCGGCCTCTGTCCA
ACAAGGCTAGCGCCTTAGTCTTCTTCAGCTGCAGGACCGATATGCCTTATCGCTACCACTCCTCCCTTGGCCAGC
TGAACTTCACCGGGTCTGTGATATATGAGGCCCAGGACGTCTACTCAGGTGACATCATCAGTGGCCTCCGAGATG
AAACCAACTTCACAGTGATCATCAACCCTTCAGGGGTAGTGATGTGGTACCTGTATCCCATCAAGAACCTGGAGA
TGTCCCAGCAG**TGA**GGAGCTGGGACATGTGACAGGCTGTGGTGGCACCACTGAGCCTAGACCATGGAGCCTTGGC
ATGCCCAGGGCAAGTGGGGAGGTTCTCTGCTCCCCAGGCCTGCTCGGTGACTGACCCCATCATACCCAAAGTGCA
ATCTCACGGCCAGGTTCTATGCCCTGTCCAAGCGTAAACCCTCTTGGAAACTTCTTTTGGGGCAATTTTCCTGTG
GCCTTCCTGGCCTCTACTTCCATGTGCGCAGCCCCACAGACGTTGCTGAGCAACTCGCCAGCCTCCTGAGCTCCA
TGCCCATCAGGACTCTAGCCTCTGACCTTGCTGTTGACTCTGAAATCAGGATTTGGAAGTTTTCGAATTAGGAGT
AGAGAGATCTGACCTCTTGCCAGGAATGCCCATGGATCATGTGATTGGCTTTTCTACCCATAGAGGGCCTTGCAG
CCTGATACCACCTGGGAGTGAGGGTCACAAAGGAGACCTTGGCTCCCTCAGGTCACCAATAAACCTGTTCTTTAA
TCAAGTAGTTGTAATATGGACCTGGGGTACCTTTAGTTAGGGACTCTGGTGGCACTACACGGGGTGCTGGATTCA
AATCTCACCTCTATGGATGATGTCTGGCATCGTCTGGCCCCTCCTTTTCCAAAGTGACCAGAAGATTGTACTTCC
TAGAGATGCCAGACTTGCCTCACACCCAGGAGCTGCCCCTGCTGTGCCTGGTATGCTGGCAGTGGTGATGGTGAC
AACACAATGAGGCCAAGTAGCAATGCTCCCAGGTCCTGCAGCTTGTGCTCTGCCCAGCAGTGCCCCTGGCCCAGC
ACCTCAGCCTGCTCTTCTCTCTGGTGGCTCCACCCCAACCCCTACTTCTTTTCCTTTATTTCTCTCCCAACCTGG
CTGCAAAGGAGGTTCATATTCCCCAGATGTGTCCACAAACCTGTCCAGGAGTTGTGTCTTAAAATTGATTTCCTG
TCCCTCTTCCTAAGGACAGGGGTAACAGTCAAAGTGAAGGAATGATGGGTTCTTGCCTGTCTTGCTTTGGTCCGT
ATTTCCCAAGCCCTCCTCTTTTAGCCAAGGCTACAGGGCACTTGTCTTCCCTGGTGGCTCTCCCCTTTGGAGAGA
GCTAGTGGCAGAGCAACCTAGCTAGGTCCTCCTTGGGCTTTGAATGCAGGAGCACCCAGTGCCCCAGGCCTTGCA
CTGTGCTGCCCAAGGAGTATTTTCTGGGTGGATCTCCCATACTCCTCAGGGTTCTGAGGTCCTTGTATTTAGGGT
ATGGTGTAAAAACTTACATATGCACATTTTGTTACATCATTTAAGATGATTGAAGCTTTACTGGTTAAGTATAGG
GTCACCAGAGAAAGTTCCTTTCCCCAGTTGATGTCTTGAGGCTGTTGAGAAACTTAGGACAGAAGCCTACCTCAT
CCCAGGCCTGCCCCTCCGTGCATAGCTCTGCCTTTGGGTCTTGTTCATAGTGCTGTTCAGGCAAAATGGAATAGT
CTCAGGTGGGAACACCTTCTCTTGCTAGCTCCAGGAAGGCTTTGTGGGAAATGAGTTGAGACCATGGACTTGGGA
GTTGGGGGCCAGAGTTGAGCCTGGACTTGACCAATTAATTCCCTTACCTTTCAGCCCAAGATAGCTACATGTCTT
TACTTGCTGTATAAGTTTTCCTTTTGTCCTGGGGGTGCCTGATTGATCCTATCTCTTCACCCTTCATTCTTTCAA
CAAACATGCCATCTATCTCCCAGGACATTTATTCCCTTCTATTCAAGGCCAGTTAGGAATGCAATTATTTTTTTT
TTTCAGTTAAATACAGACTTGTTTGGACGCAAGGTACCCTTTCTCTTTTTAAAAACTTTTTATCATGAAAACTTT

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FIGURE 4048B

CAAATACAAAAATAAAATGGTAGAGTGAACCTCCATG

FIGURE 4049A

CACCGCCGCCGCGCCCCATTGGGCCGGGTGCTGGGGCATCCCGGGCGCTGGGTGCCCCGAGCGGCTACGACGAGT
CCCAGGTGGGGCCGGGCTCCAGGCCCGCGGGGGAGCGGAGCCGTGCGCCGCAGGCGGGCTCCGTGACGCCGGGTG
GGGAACGCCGGGCCGGTGGCGGGACTTCCGCCACGGGACTCGGAAGGGGCCGCGCCGCCGCTGCTGGGAGTTGTA
GTCCGGCCGTGGTTGGGGGAGCCGCGGCTCATGCGCGGTGCACAGAGGCTTGTTTCACATCTGTAACAACAGGAG
GAGGCCCAGCCTCGTGATGAGGAATAGCAAGGAGAGAATTCAGCTCCAGTTCAAAAGCCTACAAAATCTGAGACT
GTCATTGCTTTTATAAGGATTCCAGCTTTCCCTCCTGGCCAGAAATGTTCAGCCTGGACTCATTCAGAAAAGATC
GGGCCCAGCACAGGCAGCGTCAGTGCAAACTTCCCCCACCCCGCCTTCCACCCATGTGTGTCAACCCTACCCCAG
GAGGGACCATCTCTCGAGGCTGAACGTTAACATTTCCAACATGGCAGCTTCTAGGGACCTATTAAAAGAGTTCCC
ACAGCCCAAAAATCTTCTCAACAGTGTGATTGGAAGAGCCCTCGGCATCTCACATGCAAAAGACAAACTAGTCTA
CGTGCACACAAATGGACCGAAGAAAAAGAAAGTCACACTGCACATAAAATGGCCCAAGAGCGTGGAGGTAGAAGG
CTATGGCAGCAAGAAGATCGATGCTGAGCGGCAGGCTGCAGCTGCAGCCTGCCAGCTGTTCAAGGGTTGGGGTCT
GCTAGGTCCCCGGAATGAGTTGTTTGACGCAGCCAAATACCGAGTGCTAGCTGATCGCTTTGGCTCCCCTGCCGA
CAGCTGGTGGCGTCCGGAACCCACCATGCCCCCTACTTCCTGGCGGCAGCTGAATCCAGAGAGTATTCGACCAGG
GGGACCTGGGGGCCTATCCCGCTCTTTAGGCCGGGAAGAAGAGGAGGACGAGGAGGAAGAGCTAGAAGAAGGGAC
CATAGATGTTACCGACTTCTTGTCCATGACCCAGCAGGATTCCCACGCTCCACTCAGGGACTCAAGGGGGAGTTC
CTTTGAGATGACAGATGACGACAGTGCCATTAGGGCTCTGACCCAGTTTCCACTTCCCAAGAACCTTCTGGCCAA
GGTGATTCAGATTGCAACGTCATCCTCCACAGCTAAGAACCTCATGCAGTTCCATACTGTGGGCACCAAGACCAA
GCTGTCTACACTCACCCTGCTCTGGCCCTGCCCCATGACCTTTGTTGCCAAAGGGCGCCGCAAAGCAGAGGCTGA
GAATAAGGCGGCAGCCTTGGCCTGCAAGAAACTGAAGAGCCTGGGCCTGGTGGACAGGAACAACGAACCGCTTAC
ACACGCCATGTATAACCTGGCCTCTTTGCGTGAGCTGGGTGAGACCCAGCGCCGACCATGCACCATCCAGGTGCC
CGAGCCCATCCTCCGCAAGATAGAGACCTTCCTGAACCATTACCCTGTGGAGAGTTCATGGATCGCCCCAGAACT
CCGGCTGCAGAGTGATGACATCTTGCCCTTGGGCAAGGACTCAGGGCCTCTGAGTGACCCTATCACAGGCAAGCC
CTATGTGCCCCTGTTGGAAGCAGAGGAGGTACGTCTCAGCCAGAGTCTGCTAGAACTGTGGCGGCGGCGAGGGCC
GGTCTGGCAGGAGGCCCCCCAGCTACCTGTGGACCCACATCGGGACACCATCCTCAACGCCATTGAGCAGCACCC
GGTGGTGGTCATCTCTGGGGACACGGGCTGTGGGAAGACCACGCGCATCCCCCAGCTGTTGCTGGAGCGCTATGT
GACCGAGGGCCGAGGTGCCCGCTGCAATGTTATCATCACCCAACCTCGCCGCATCTCTGCTGTGTCTGTGGCACA
GCGGGTCAGCCACGAACTGGGCCCCTCCCTGCGCCGGAATGTGGGCTTCCAGGTGCGGTTGGAAAGTAAGCCCCC
ATCCCGAGGCGGGGCCCTGCTCTTCTGCACTGTGGGTATCCTGCTGCGTAAGCTGCAGAGCAACCCCAGCCTGGA
GGGCGTGAGCCACGTCATCGTGGATGAGGTGCATGAGCGGGACGTGAACACAGACTTTCTGCTGATCCTGCTCAA
GGGCCTGCAGCGGCTCAACCCGGCCCTGCGGCTGGTGCTCATGAGTGCCACAGGGGACAATGAGCGCTTCTCCCG
ATACTTTGGTGGCTGCCCCGTCATCAAGGTGCCTGGCTTCATGTACCCAGTCAAGGAGCACTACCTAGAGGACAT
CCTGGCCAAGTTGGGCAAGCACCAGTACCTGCACCGGCACCGGCACCATGAGTCTGAGGATGAATGCGCACTCGA
TTTGGACCTTGTGACTGATCTGGTTCTGCACATCGATGCTCGCGGGGAACCAGGTGGGATCCTGTGCTTCCTGCC
TGGGTGGCAGGAGATCAAAGGAGTGCAGCAGCGCCTCCAGGAGGCCCTGGGCATGCACGAGAGCAAGTACCTCAT
CCTGCCAGTGCACTCCAACATCCCCATGATGGATCAGAAGGCCATATTCCAGCAGCCTCCAGTTGGGGTGCGCAA
GATTGTCTTGGCCACCAACATTGCTGAGACTTCCATCACAATCAATGACATCGTGCATGTGGTGGACAGTGGGCT
GCACAAGGAAGAACGCTATGACCTGAAGACCAAGGTGTCCTGCCTGGAGACAGTGTGGGTATCAAGAGCCAATGT
GATCCAGCGCCGGGGCCGGGCGGGCCGCTGCCAGTCCGGCTTTGCCTACCACTTGTTCCCTCGAAGCCGGCTGGA
GAAAATGGTCCCTTTCCAAGTGCCAGAGATCCTGCGCACACCTCTTGAGAACCTGGTGCTGCAAGCGAAAATCCA
CATGCCTGAGAAGACGGCGGTGGAGTTCCTGTCCAAGGCTGTGGACAGTCCAAACATCAAGGCAGTGGACGAGGC
TGTGATCTTGCTCCAGGAGATCGGGGTGCTGGACCAGCGGGAGTACCTGACTACCCTGGGGCAGCGCCTGGCTCA
CATCTCCACCGACCCCCGGTTGGCCAAGGCCATTGTGTTGGCTGCCATCTTCCGTTGCCTGCACCCACTACTGGT
GGTCGTTTCCTGCCTCACCCGGGACCCCTTCAGCAGCAGCCTACAGAACCGGGCAGAGGTGGACAAGGTGAAAGC
ACTGTTGAGCCATGACAGCGGCAGTGACCACCTGGCCTTTGTGCGGGCTGTCGCCGGCTGGGAGGAGGTGCTGCG
TTGGCAGGACCGCAGCTCCCGGGAGAATTACCTGGAGGAAAACCTGCTGTACGCACCCAGCCTGCGCTTCATCCA
CGGACTCATCAAGCAGTTCTCAGAGAACATTTATGAGGCCTTCCTGGTGGGGAAGCCCTCGGACTGCACCCTGGC
CTCCGCCCAGTGCAACGAGTACAGTGAGGAGGAGGAGCTGGTGAAGGGCGTGCTGATGGCCGGCCTCTACCCCAA
CCTCATCCAGGTGAGGCAGGGCAAGGTCACCCGGCAGGGGAAGTTCAAGCCCAACAGCGTCACATATAGGACCAA

FIGURE 4049B

ATCAGGCAACATCCTGCTGCACAAGTCGACCATTAACAGGGAGGCCACACGGTTACGGAGCCGATGGCTGACGTA
TTTCATGGCAGTCAAGTCCAATGGCAGCGTCTTCGTCCGGGACTCCTCTCAGGTGCACCCGCTAGCTGTGCTGCT
GCTGACCGACGGGGACGTGCACATCCGTGATGACGGGCGCCGGGCCACCATCTCACTGAGCGACAGTGACCTGCT
GCGGCTGGAGGGTGACTCGCGTACCGTGCGGCTGCTGAAGGAGCTGCGGCGGGCCCTGGGCCGCATGGTGGAGCG
GAGCCTGCGCAGCGAGCTGGCTGCACTTCCCCCCAGCGTACAGGAGGAGCACGGGCAGCTGCTTGCGCTACTGGC
AGAGCTGCTGCGAGGACCCTGTGGCAGCTTTGATGTGCGCAAGACAGCTGACGACTGAGCCCTGCTTCTGCTGGG
GCTGTGTACAGAGTGCAAATGTTTATTTAAAATAAAGTTCTATTTATCCCTTGTG

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FIGURE 4050

CGTGCGTGCGCGCGCAGATGTGGGCCCCGCGGGAGCAGCTACTGGGCTGGACTGCGGAAGCTCTGCCTGCCAAGG
ATTCTGCCTGGCCCTGGGAAGAGAAGCCTAGATATCTGGTTCCAGTGGCAGATGGGGCACTGGCCAGAGGGGTTA
GGAGGATTTGGACTCTCCTTGGGAGTCGCTGTGATACGGCCTTCAATTATAGTTGTCTTTCCTTCTTGGATTTCC
ACCACTTCCCTGAAACCACGAGCTGGAAGCTGAGACCAGCTGGTCACTGCTGGGCCTGCTAGGAGCCCACACGGA
AGCTGCCCACAGCCAGACACCAGAGCCTCAAAGGCCGCCATCTTGAAAAACCAACCCTGACCTCCACA**ATG**ATTG
ATTTTCAAATGTTGAACCAGCTTTGCAGAACTATAATAAACCCAAGTGTGATACCCTGTCTCAAGTATTGTGGTG
ATCAAATAGGACCAGTGACTTTCGAGGATGTGGCTGTGCTTTTCACTGAGGCAGAGTGGAAGAGACTGAGCCTTG
AGCAGAGGAACCTATACAAAGAAGTGATGCTGGAAAATCTCAGGAATCTGGTCTCATTGGAATCAAAGCCAGAAG
TCCATACCTGCCCTTCTTGCCCTCTGGCCTTTGGCAGTCAGCAGTTCCTCAGCCAAGATGAGCTACACAATCATC
CTATTCCAGGTTTCCATGCAGGAAATCAACTCCACCCAGGAAATCCCTGCCCAGAGGATCAGCCACAGTCACAAC
ATCCTTCTGATAAAAATCACAGGGGGGCTGAAGCAGAAGATCAACGAGTGGAAGGAGGCGTCAGACCCTTGTTTT
GGAGTACAAATGAAAGGGGGGCTTTAGTGGGTTTCTCTAGCCTGTTCCAGAGACCACCAATAAGCTCTTGGGGAG
GCAACAGAATATTAGAGATACAGCTCAGTCCAGCCCAGAATGCAAGCTCTGAGGAAGTAGACAGAATTTCCAAGA
GGGCAGAAACCCCAGGGTTTGGAGCAGTCACGTTTGGGGAGTGTGCACTAGCTTTTAACCAGAAGTCAAACCTGT
TCAGACAGAAGGCAGTCACAGCAGAAAAATCTTCAGACAAAAGGCAGTCACAGGTGTGCAGGGAGTGTGGGCGAG
GCTTTAGCAGGAAGTCACAGCTCATCATACACCAGAGGACACACACAGGAGAAAAGCCTTATGTCTGCGGAGAGT
GTGGGCGAGGCTTTATAGTTGAGTCAGTCCTCCGCAACCACCTGAGTACACACTCCGGGGAGAAACCTTATGTGT
GCAGCCATTGTGGGCGAGGCTTTAGCTGCAAGCCATACCTCATCAGACATCAGAGGACACACACAAGGGAGAAAT
CGTTTATGTGCACAGTGTGTGGGCGAGGCTTTCGTGAAAAGTCAGAGCTCATTAAGCACCAGAGGTGTCAAGTGA
CGGTCCCCTTGGAGGAATGGTCTTTGCATCTGACTACTTCCTTCTGCAACTGTGTTCTTCCATTAGCTTCCATGA
CACTCTCCTGCTTTATTTTTTTCTACATCTCTAGCCTTTGCTGTTTCCTCTCCTACCCCACCTTTAGATTTTACT
CAGAGTTCAGTCTCCAGCCCTACAATCTGAGGGACACCTTTACCAGGTCCCCTTCC**TAA**CCCTCCAGTCCCAAAT
CCAAGATTCTTTAACCACACTCTAAAAGTTCTTCAGACTCAGGACTTAAACATAGCCACGCCACCTTGGCCTTCA
ATGACAGGGATCTAGCAATGCTGCATCATCAGCCTTCCAATACCAGGTTTAAGGGTATTTTAAACACAGCTCCTC
TTAAATCCTCCAATCTCAGTACCCAGTGTTTTAGCCATGCTCGGGTGGCTAAATTACATCCAGGAATGGTGCCAG
GGCCTTTAGCCATTTGTCTCTCCTCACACTCCAGGGCCCATATGGCCCAGGTTCTGACAGTTTGCCTTACTCCCT
TGGGCTGGGGCTAGCCCTACCTGATACCCTGTGTCAATGAGTGTACCTTGGAGAGCTATCCACTCAGGCCCCAGT
GCCTCTATTTGCTAAGGGACTCTGCCACAGAAAAGAAGGGGAGAGATGTTCATGTAACCTCAAAATACTTAGGCT
TGGTTTTGATGCTAGAGAGGAAAAAGGACTTGGAGAGAGAGAAGGAATGGCTGGTCCAGAGGCTTTTGTCCACTC
CCTCTCACTGGAAGTGGTTGATCTCCAGGGAATCCCCAAGGTTAGCCTGCTTAGGGGAAGGGCTAGGGGTACCTG
GAATGTAGGATCTCCCCCATGCCTGGCCTACCACCCTAATGTGTCTGGAATTGGTGGGTTCTTGGTCTTGCTGAC
TTCAAGAATGAAGCCGTGGACCCTCACGGTGAGTGTTACAATTCTTAAA

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FIGURE 4051

AAGGTGAACCCGCAGCCGGACTTCTGCTGCACTGGGGCTCCGAATGACCCAGAATCTGGGGAGTGAGATGGCCTC
AATCTTGCGAAGCCCTCAGGCTCTCCAGCTCACTCTAGCCCTGATCAAGCCTGACGCAGTCGCCCATCCACTGAT
TCTGGAGGCTGTTCATCAGCAGATTCTAAGCAACAAGTTCCTGATTGTACGAATGAGAGAACTACTGTGGAGAAA
GGAAGATTGCCAGAGGTTTTACCGAGAGCATGAAGGGCGTTTTTTCTATCAGAGGCTGGTGGAGTTCATGGCCAG
CGGGCCAATCCGAGCCTACATCCTTGCCCACAAGGATGCCATCCAGCTCTGGAGGACGCTCATGGGACCCACCAG
AGTGTTCCGAGCACGCCATGTGGCCCCAGATTCTATCCGTGGGAGTTTCGGCCTCACTGACACCCGCAACACCAC
CCATGGTTCGGACTCTGTGGTTTCAGCCAGCAGAGAGATTGCAGCCTTCTTCCCTGACTTCAGTGAACAGCGCTG
GTATGAGGAGGAAGAGCCCCAGTTGCGCTGTGGCCCTGTGTGCTATAGCCCAGAGGGAGGTGTCCACTATGTAGC
TGGAACAGGAGGCCTAGGACCAGCCTGATGCAGGTCTATGAAGACCAGTGGTAGTGCCCAGACTTCTCCTAGACA
TCTAGTCTAAAACATTCTCCTA

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FIGURE 4052A

ATGCCTGCTCTGGGCCCAGCTCTTCTCCAGGCTCTCTGGGCCGGGTGGGTCCTCACCCTCCAGCCCCTTCCACCA
ACTGCATTCACTCCCAATGGCACGTATCTGCAGCACCTGGCAAGGGACCCCACCTCAGGCACCCTCTACCTGGGG
GCTACCAACTTCCTGTTCCAGCTGAGCCCTGGGCTGCAGCTGGAGGCCACAGTGTCCACCGGCCCTGTGCTAGAC
AGCAGGGACTGCCTGCCACCTGTGATGCCTGATGAGTGCCCCCAGGCCCAGCCTACCAACAACCCGAATCAGCTG
CTCCTGGTGAGCCCAGGGGCCCTGGTGGTATGCGGGAGCGTGCACCAGGGGGTCTGTGAACAGCGGCGCCTGGGG
CAGCTCGAGCAGCTGCTGCTGCGGCCAGAGCGGCCTGGGGACACACAATATGTGGCTGCCAATGATCCTGCGGTC
AGCACGGTGGGGCTGGTAGCCCAGGGCTTGGCAGGGGAGCCCCTCCTGTTTGTGGGGCGAGGATACACCAGCAGG
GGTGTGGGGGGTGGCATTCCACCCATCACAACCCGGGCCCTGTGGCCGCCCGACCCCCAAGCTGCCTTCTCCTAT
GAGGAGACAGCCAAGCTGGCAGTGGGCCGCCTCTCCGAGTACAGCCACCACTTCGTGAGTGCCTTTGCACGTGGG
GCCAGCGCCTACTTCCTGTTCCTGCGGCGGGACCTGCAGGCTCAGTCTAGAGCTTTTCGTGCCTATGTATCTCGA
GTGTGTCTCCGGGACCAGCACTACTACTCCTATGTGGAGTTGCCTCTGGCCTGCGAAGGTGGCCGCTACGGGCTG
ATCCAGGCTGCAGCTGTGGCCACGTCCAGGGAGGTGGCGCATGGGGAGGTGCTCTTTGCAGCTTTCTCCTCGGCT
GCACCCCCCACTGTGGGCCGGCCCCCATCGGCGGCTGCTGGGGCATCTGGAGCCTCTGCCCTCTGTGCCTTCCCC
CTGGATGAGGTGGACCGGCTTGCTAATCGCACGCGAGATGCCTGCTACACCCGGGAGGGTCGTGCTGAGGATGGG
ACCGAGGTGGCCTACATCGAGTATGATGTCAATTCTGACTGTGCACAGCTGCCAGTGGACACCCTGGATGCTTAT
CCCTGTGGCTCAGACCACACGCCCAGCCCCATGGCCAGCCGGGTCCCGCTGGAAGCCACACCAATTCTGGAGTGG
CCAGGGATTCAGCTAACAGCTGTGGCAGTCACCATGGAAGATGGACACACCATCGCTTTCCTGGGTGATAGTCAA
GGGCAGCTGCACAGGGTCTACTTGGGCCCAGGGAGCGATGGCCACCCATACTCCACACAGAGCATCCAGCAGGGG
TCTGCAGTGAGCAGAGACCTCACCTTTGATGGGACCTTTGAGCACCTGTATGTCATGACCCAGAGCACACTTCTG
AAGGTTCCTGTGGCTTCCTGTGCTCAGCACCTGGACTGTGCATCTTGCCTTGCTCACAGGGACCCATACTGTGGG
TGGTGCGTGCTCCTTGGCAGGTGCAGTCGCCGTTCTGAGTGCTCGAGGGGCCAGGGCCCAGAGCAGTGGCTATGG
AGCTTCCAGCCTGAGCTGGGCTGTCTGCAAGTGGCAGCCATGAGTCCTGCCAACATCAGCCGAGAGGAGACGAGG
GAGGTTTTCCTATCAGTGCCAGACCTGCCACCCCTGTGGCCAGGGGAGTCATATTCCTGCCACTTTGGGGAACAT
CAGAGTCCTGCCCTGCTGACTGGTTCTGGTGTGATGTGCCCCTCCCCAGACCCTAGTGAGGCCCCAGTGCTGCCG
AGAGGAGCCGACTACGTATCCGTGAGCGTGGAGCTCAGATTTGGCGCTGTTGTGATCGCCAAAACTTCCCTCTCT
TTCTATGACTGTGTGGCGGTCACTGAACTCCGCCCATCTGCGCAGTGCCAGGCCTGTGTGAGCAGCCGCTGGGGG
TGTAACTGGTGTGTCTGGCAGCACCTGTGCACCCACAAGGCCTCGTGTGATGCTGGGCCCATGGTTGCAAGCCAT
CAGAGCCCGCTTGTCTCCCCAGACCCTCCTGCAAGAGGTGGACCCAGCCCCTCCCCACCCACAGCCCCCAAAGCC
CTGGCCACCCCTGCTCCTGACACCCTTCCCGTGGAGCCTGGGGCTCCCTCCACAGCCACAGCTTCGGACATCTCA
CCTGGGGCTAGTCCTTCCCTGCTCAGCCCCTGGGGGCCATGGGCAGGTTCTGGCTCCATATCTTCCCCTGGCTCC
ACAGGGTCGCCTCTCCATGAGGAGCCCTCCCCTCCCAGCCCCCAAAATGGACCTGGAACCGCTGTCCCTGCCCCC
ACTGACTTCAGACCCTCAGCCACACCTGAGGACCTCTTGGCCTCCCCGCTGTCACCGTCAGAGGTAGCAGCAGTG
CCCCCTGCAGACCCTGGCCCCGAGGCTCTTCATCCCACAGTGCCCCTGGACCTGCCCCCTGCCACTGTTCCTGCC
ACCACTTTCCCAGGGGCCATGGGCTCCGTGAAGCCCGCCCTGGACTGGCTCACGAGAGAAGGCGGCGAGCTGCCC
GAGGCGGACGAGTGGACGGGGGGTGACGCACCCGCCTTCTCCACTTCCACCCTCCTCTCAGGTGATGGAGACTCA
GCAGAGCTTGAGGGCCCTCCCGCCCCCCTCATCCTCCCGTCCAGCCTCGACTACCAGTATGACACCCCCGGGCTC
TGGGAGCTGGAAGAGGCGACCTTGGGGGCAAGCTCCTGCCCCTGTGTGGAGAGCGTTCAGGGCTCCACGTTGATG
CCGGTCCATGTGGAGCGGGAAATCCGGCTGCTAGGCAGGAACCTGCACCTTTTCCAGGATGGCCCAGGAGACAAT
GAGTGTGTGATGGAGCTGGAGGGCCTCGAGGTGGTGGTTGAGGCCCGGGTCGAGTGTGAGCCACCTCCAGATACC
CAGTGCCATGTCACCTGCCAGCAGCACCAGCTCAGCTATGAGGCTCTGCAGCCGGAGCTCCGTGTGGGGCTGTTT
CTGCGTCGGGCCGGCCGTCTGCGTGTGGACAGTGCTGAGGGGCTGCATGTGGTACTGTATGACTGTTCCGTGGGA
CATGGAGACTGCAGCCGCTGCCAAACTGCCATGCCCCAGTATGGCTGTGTGTGGTGTGAGGGGGAGCGTCCACGT
TGTGTGACCCGGGAGGCCTGTGGTGAGGCTGAGGCTGTGGCCACCCAGTGCCCAGCGCCCCTCATCCACTCGGTG
GAGCCACTGACTGGGCCTGTAGACGGAGGCACCCGTGTCACCATCAGGGGCTCCAACCTGGGCCAGCATGTGCAG
GATGTGCTGGGCATGGTCACGGTGGCTGGAGTGCCCTGTGCTGTGGATGCCCAGGAGTACGAGGTCTCCAGCAGC
CTCGTGTGCATCACCGGGGCCAGTGGGGAGGAGGTGGCCGGCGCCACAGCGGTGGAGGTGCCGGGAAGAGGACGT
GGTGTCTCAGAACACGACTTTGCCTACCAGGATCCGAAGGTCCATTCCATCTTCCCGGCCCGCGGCCCCAGAGCT
GGGGGCACCCGTCTCACCCTGAATGGCTCCAAGCTCCTGACTGGGCGGCTGGAGGACATCCGAGTGGTGGTTGGA

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FIGURE 4052B

GACCAGCCTTGTCACTTGCTGCCGGAGCAGCAGTCAGAACAACTGCGGTGTGAGACCAGCCCACGCCCCACGCCT
GCCACGCTCCCTGTGGCTGTGTGGTTTGGGGCCACGGAGCGGAGGCTTCAACGCGGACAGTTCAAGTATACCTTG
GACCCCAACATCACCTCTGCTGGCCCCACCAAGAGCTTCCTCAGTGGAGGACGTGAGATATGCGTCCGTGGCCAG
AATCTGGACGTGGTACAGACGCCAAGAATCCGGGTGACCGTGGTCTCGAGAATGCTGCAGCCCAGCCAGGGGCTT
GGACGGAGGCGTCGCGTGGTCCCGGAGACGGCATGTTCCCTTGGACCCTCCTGCAGTAGCCAGCAATTTGAGGAG
CCGTGCCATGTCAACTCCTCCCAGCTCATCACGTGCCGCACACCTGCCCTCCCAGGCCTGCCTGAGGACCCCTGG
GTCCGGGTGGAATTTATCCTTGACAACCTGGTCTTTGACTTTGCAACACTGAACCCCACACCTTTCTCCTATGAG
GCCGACCCCACCCTGCAGCCACTCAACCCTGAGGACCCCACCATGCCATTCCGGCACAAGCCTGGGAGTGTGTTC
TCCGTGGAGGGGGAGAACCTGGACCTTGCAATGTCCAAGGAGGAGGTGGTGGCTATGATAGGGGATGGCCCCTGT
GTGGTGAAGACGCTGACGCGGCACCACCTGTACTGCGAGCCCCCCGTGGAGCAGCCCCTGCCACGGCACCATGCC
CTCCGAGAGGCACCTGACTCTTTGCCTGAGTTCACGGTGCAGATGGGGAACTTGCGCTTCTCCCTGGGTCACGTG
CAGTATGACGGCGAGAGCCCTGGGGCTTTTCCTGTGGCAGCCCAGGTGGGCTTGGGGGTGGGCACCTCTCTTCTG
GCTCTGGGTGTCATCATCATTGTCCTCATGTACAGGAGGAAGAGCAAGCAGGCCCTGAGGGACTATAAGAAGGTT
CAGATCCAGCTGGAGAATCTGGAGAGCAGTGTGCGGGACCGCTGCAAGAAGGAATTCACAGACCTCATGACTGAG
ATGACCGATCTCACCAGTGACCTCCTGGGCAGCGGCATCCCCTTCCTCGACTACAAGGTGTATGCGGAGAGGATC
TTCTTCCCTGGGCACCGCGAGTCGCCCTTGCACCGGGACCTGGGTGTGCCTGAGAGCAGACGGCCCACTGTGGAG
CAAGGGCTGGGGCAGCTCTCTAACCTGCTCAACAGCAAGCTCTTCCTCACCAAGTTCATCCACACGCTGGAGAGC
CAGCGCACCTTTTCAGCTCGGGACCGTGCCTACGTGGCATCTCTGCTCACCGTGGCACTGCATGGGAAGCTTGAG
TATTTCACTGACATCCTCCGCACTCTGCTCAGTGACCTGGTTGCCCAGTATGTGGCCAAGAACCCCAAGCTGATG
CTGCGCAGGACAGAGACTGTGGTGGAGAAGCTGCTCACCAACTGGATGTCCATCTGTCTGTATACCTTCGTGAGG
GACTCCGTAGGGGAGCCTCTGTACATGCTCTTTCGAGGGATTAAGCACCAAGTGGATAAGGGGCCAGTGGACAGT
GTGACAGGCAAGGCCAAATACACCTTGAACGACAACCGCCTGCTCAGAGAGGATGTGGAGTACCGTCCCCTGACC
TTGAATGCACTATTGGCTGTGGGGCCTGGGGCAGGAGAGGCCCAGGGCGTGCCCGTGAAGGTCCTAGACTGTGAC
ACCATCTCCCAGGCAAAGGAGAAGATGCTGGACCAGCTTTATAAAGGAGTGCCTCTCACCCAGCGGCCAGACCCT
CGCACCCTTGATGTTGAGTGGCGGTCTGGGGTGGCCGGGCACCTCATTCTTTCTGACGAGGATGTCACTTCTGAG
GTCCAGGGTCTGTGGAGGCGCCTGAACACACTGCAGCATTACAAGGTCCCAGATGGAGCAACTGTGGCCCTCGTC
CCCTGCCTCACCAAGCATGTGCTCCGGGAAAACCAGGATTATGTCCCTGGAGAGCGGACCCCAATGCTGGAGGAT
GTAGATGAGGGGGGCATCCGGCCCTGGCACCTGGTGAAGCCAAGTGATGAGCCGGAGCCGCCCAGGCCTCGGAGG
GGCAGCCTTCGGGGCGGGGAGCGTGAGCGCGCCAAGGCCATCCCTGAGATCTACCTGACCCGCCTGCTGTCCATG
AAGGGCACCCTGCAGAAGTTCGTGGATGACCTGTTCCAGGTGATTCTCAGCACCAGCCGCCCCGTGCCGCTCGCT
GTGAAGTACTTCTTTGACCTGCTGGATGAGCAGGCCCAGCAGCATGGCATCTCCGACCAGGACACCATCCACATC
TGGAAGACCAACAGCTTGCCTCTGAGGTTCTGGATCAATATAATAAAAAACCCGCAGTTTGTGTTCGACGTGCAA
ACATCTGATAACATGGATGCGGTGCTCCTTGTCATTGCACAGACCTTCATGGACGCCTGCACCCTGGCCGACCAC
AAGCTGGGCCGGGACTCCCCGATCAACAAACTTCTGTATGCACGGGACATTCCCCGGTACAAGCGGATGGTGGAA
AGGTACTATGCAGACATCAGACAGACTGTCCCAGCCAGCGACCAAGAGATGAACTCTGTCCTGGCTGAACTGTCC
TGGAACTACTCCGGAGACCTCGGGGCGCGAGTGGCCCTGCATGAACTCTACAAGTACATCAACAAGTACTATGAC
CAGATCATCACTGCCCTGGAGGAGGATGGCACGGCCCAGAAGATGCAGCTGGGCTATCGGCTCCAGCAGATTGCA
GCTGCTGTGGAAAACAAGGTCACAGATCTA**TAG**GAACCCAGGAGCCACGGCCTGCTGTTGCTTCAGCCTGGCCTG
GGCAGCCCTGGAAGCTCGGAGGAGAGGCCACCTTCTTAGGTGCCTGTAGTGACTGACAAGCAGAGTTAGTGGAAG
GTGACTCCCAGTCTCCTGGTGGCTCTGGCCTCGGCCCTGCTGGATCCACCTCCTAGACCCGGGGCCTCAAGGCTC
ATGGGGTAGTACCCAGCCTGCTCCCCGAGTCCAGCGACCCTGT

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FIGURE 4053

AGACGATTGGTCGGGCCACGCCAGCCCAGGCCCAAGCCAGCCCGGAGAGAAAAGACCTGAGGAGGTGGCCCTGGG
GCTGCACCACCGCCTCCCAGCACTGGGAAGAGCCCTGGGGCACAGCATTCAGCAACGAGCGACCTCCACAGCCAA
GACTTGGTGGGACAGATATGAAGAGTTTGTTGGACTCAACGAGGTTCGAGAGGCCCAGGGAAAGGTGACAGAGGC
TGAGAAAGTGTTC**ATG**GTGGCTCGAGGGCTTGTCCGAGAGGCTCGGGAGGACTTGGAAGTTCACCAGGCCAAGCT
GAAGGAGGTGAGGGACCGCTTGGACCGTGTCTCCAGGGAGGACAGTCAGTACTTGGAACTGGCTACTCTCGAGCA
CAGGATGCTGCAGGAGGAGAAGAGGCTTCGCACAGCCTATCTGCGTGCAGAAGACTCTGAGCGAGAGAAGTTCTC
CCTCTTCTCTGCAGCTGTGCGGGAAAGTCATGAGAAGGAGCGCACAAGGGCTGAGAGGACCAAGAACTGGTCCCT
CATTGGCTCAGTCCTGGGGGCCCTGATTGGTGTGGCTGGCTCCACCTATGTGAACCGTGTGCGACTACAGGAGCT
GAAGGCTTTACTCCTGGAGGCGCAGAAGGGGCCTGTGAGTCTCCAAGAGGCCATTCGAGAACAGGCGTCTAGCTA
CTCCCGCCAGCAGAGGGACCTCCACAATCTCATGGTGGACTTGAGGGGCCTGGTACATGCTGCTGGGCCAGGGCA
GGACTCTGGGTCACAGGCAGGTAGTCCCCCGACCAGAGACAGAGATGTAGATGTCCTTTCAGCTGCCTTGAAAGA
GCAGCTTAGTCATTCCAGGCAAGTCCATTCATGTCTAGAAGGCTTACGAGAGCAGCTTGATGGCCTAGAAAAGAC
TTGTAGCCAAATGGCTGGGGTGGTTCAGCTTGTAAAGTCTGCAGCACACCCAGGCCTGGTGGAACCAGCAGACGG
GGCTATGCCCAGCTTCTTGCTGGAGCAGGGGAGCATGATCTTGGCACTGTCAGACACGGAGCAGAGACTAGAAGC
CCAAGTCAACAGGAACACCATCTATAGCACCCTGGTCACCTGTGTGACATTTGTGGCCACACTGCCTGTGCTCTA
CATGCTATTCAAAGCCAGC**TAA**CCCCTGGCCCCTCCTCCAGAGGGTCTGAGGCAATAGCTGTGAATGTGGATTTA
AGTAGAGAATCGTAGCAATGAAGCGAGCCTTTGGGGGCATGTACAACCTCAATCTGAAGGAGCAGTATCTGTGTG
GCTCACCAGCAGGCATGCTTCGCTTTGTAGACAAGGTTCATTTACATTAATTATCAAAACTTTGTGCTAATGTCC
AATTAAAATATCCTGAGTTTTATTATTT

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FIGURE 4054

TCCGGTGGCAGGGTCTGGGGAAGCGGCGGCAGGCGCCATGTCCGGCCGCGAAGGTGGCAAGAAGAAGCCACTGAA
ACAGCCCAAGAAGCAGGCCAAGGAGATGGACGAGGAAGATAAGGCTTTCAAGCAGAAACAAAAAGAGGAGCAGAA
GAAACTCGAGGAGCTAAAAGCGAAGGCCGCGGGGAAGGGGCCCTTGGCCACAGGTGGAATTAAGAAATCTGGCAA
AAAGTAAGCTGTTCCTTGTGCCTGAGGAGATGGTGACCCTTTATTTCATCTGTATTTAAACCTCTCTATTCCCTG
CCATAACATCTTTTGCCACGTATAGCTGGAATTAAGTGTTGTCTTGGAGCTGTTGTACATTTAAGAATAAACTTT
TGTAAAAA

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FIGURE 4055

GCGCTGTCGGATACTTGGGGTGAGCGGAAAGCATGGCGGGGACCTCCGCGCCAGGCAGCAAGAGGCGGAGCGAGC
CCCCGGCGCCTCGCCCCGGCCCGCCGCCGGGCACCGGGCACCCCCCGAGCAAGCGGGCCCGGGGCTTCTCCGCAG
CCGCTGCCCCGGACCCTGACGACCCGTTCGGCGCGCATGGGGACTTCACTGCCGACGACCTGGAGGAGCTTGACA
CCCTCGCGTCACAGGCCCTGAGCCAATGTCCGGCCGCGGCTCGGGACGTGTCCAGTGATCATAAGGTCCACAGAT
TATTAGATGGCATGTCAAAAAATCCTTCAGGGAAAAACAGAGAAACTGTTCCAATTAAAGATAATTTCGAATTAG
AGGTACTTCAGGCACAATACAAAGAACTTAAAGAAAAGATGAAAGTAATGGAAGAAGAAGTTCTCATTAAGAATG
GAGAAATTAAAATTTTGCGAGACTCACTACATCAGACGGAATCCGTTCTAGAGGAACAGAGAAGATCACATTTTC
TTCTTGAGCAAGAGAAAACCCAAGCACTCAGTGACAAGGAAAAGGAATTCTCCAAAAAGCTCCAATCATTGCAGT
CTGAACTCCAGTTTAAAGATGCAGAGATGAATGAATTAAGGACAAAGCTCCAGACCAGTGAACGAGCAAATAAAC
TGGCTGCTCCCTCTGTTTCCCATGTCAGTCCTAGGAAAAACCCTTCTGTGGTTATAAAGCCAGAAGCATGTTCTC
CACAATTTGGAAAAACATCTTTTCCTACAAAGGAGTCTTTTAGTGCTAACATGTCCCTTCCCCACCCCTGCCAGA
CGGAGTCAGGATACAAGCCTCTGGTGGGCAGAGAGGATAGTAAGCCCCACAGTCTGAGAGGTGACTCCATAAAAC
AAGAAGAGGCCCAGAAAAGCTTTGTTGACAGCTGGAGACAGAGATCAAACACTCAAGGTTCCATTTTGATAAACC
TGCTCCTGAAGCAGCCTTTGATCCCAGGGTCATCCCTAAGCCTTTGCCACCTCCTGAGTAGTAGTTCTGAGTCTC
CTGCTGGCACCCCCCTGCAGCCACCAGGGTTTGGCAGTACCTTGGCTGGAATGTCAGGCCTCAGGACCACAGGTT
CTTATGATGGGTCATTTTCCCTCTCAGCCCTGAGAGAAGCACAGAACCTGGCATTCACTGGACTGAATCTGGTTG
CCCGGAATGAGTGCTCACGTGATGGAGACCCAGCAGAGGGAGGCAGAAGGGCCTTCCCACTCTGCCAGCTTCCTG
GAGCCGTGCATTTCCTCCCCCTTGTACAGTTCTTCATCGGCTTACACTGCCAGGCCCTGCAGGACTTGGCAGCTG
CTAAGAGAAGCGGAGCACCTGGGGACTCACCGACACATTCCTCCTGCGTGAGCTCTGGGGTAGAGACCAACCCTG
AGGACTCAGTGTGCATCCTGGAAGGCTTCTCTGTGACTGCACTTAGCATTCTTCAGCACCTGGTGTGCCACAGCG
GAGCAGTCGTCTCCCTATTACTGTCAGGAGTGGGGGCAGATTCTGCTGCTGGGGAAGGAAACAGGAGCCTGGTTC
ACAGGCTTAGTGATGGAGATATGACCTCAGCCCTAAGGGGGGTTGCTGATGACCAAGGACAGCACCCACTGTTGA
AGATGCTTCTTCACCTGTTGGCTTTCTCTTCTGCAGCAACAGGTCACCTTCAAGCCAGTGTCCTGACCCAGTGCC
TTAAGGTTTTGGTGAAATTAGCCGAAAACACTTCCTGTGATTTCTTGCCCAGGTTCCAGTGTGTGTTCCAAGTGC
TGCCAAAGTGCCTCAGCCCAGAGACACCCCTGCCTAGCGTGCTGCTGGCTGTTGAGCTCCTCTCCCTGCTGGCGG
ACCACGACCAGCTGGCACCTCAGCTCTGTTCCCACTCAGAAGGCTGCCTCCTGCTGCTGCTGTACATGTACATCA
CATCACGGCCTGACAGAGTGGCCTTGGAGACACAATGGCTCCAGCTGGAACAAGAGGTGGTGTGGCTCCTGGCTA
AGCTTGGTGTGCAGAGCCCCTTGCCCCCAGTCACTGGCTCCAACTGCCAGTGTAATGTGGAGGTGGTCAGAGCGC
TCACGGTGATGTTGCACAGACAGTGGCTGACAGTGCGGAGGGCAGGGGGACCCCCAAGGACCGACCAGCAGAGGC
GGACAGTGCGCTGTCTGCGGGACACGGTGCTGCTGCTGCACGGCCTATCGCAGAAGGACAAGCTCTTCATGATGC
ACTGCGTGGAGGTCCTGCATCAGTTTGACCAGGTGATGCCGGGGGTCAGCATGCTCATCCGAGGGCTTCCTGATG
TGACGGACTGTGAAGAGGCAGCCCTGGATGACCTCTGTGCCGCGGAAACCGATGTGGAAGACCCCGAGGTGGAGT
GTGGCTGAGGCCCTGAGTGTCCAGCCACATGGTGGCACCAGCACCACTCCTTTCCTTACCACATCAACTGATTAA
AGCAGTGACCAGCAGGAACTGCCCAGAGAACTGG

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FIGURE 4056

TGAAAGGGCCGCAGCAGGGGCTCCCAGCAGTGTGTAAGACCGGGAGCTGGTCTGGCACCACTGCCCTGGTCCTTC
CAGCTGCCTGTCACTGGTATGATGGCCCCGGTGCATTGTGCCACCAGCAGGCCACAGCTGTGGATCTTGGAAGGC
CTCTGGGGTCCCCCGGGAGCAGGGGAGTGGGTGTGGGGGGGAACGGATGGTGGTGAGAGGGACAGACCAGGCAGG
CCCTGCCCCCGGGGCCC**ATG**CAGACCCTCATCTTTTTCGACATGGAGGCCACTGGCTTGCCCTTCTCCCAGCCCA
AGGTCACGGAGCTGTGCCTGCTGGCTGTCCACAGATGTGCCCTGGAGAGCCCCCCCCACCTCTCAGGGGCCACCTC
CCACAGTTCCTCCACCACCGCGTGTGGTAGACAAGCTCTCCCTGTGTGTGGCTCCGGGGAAGGCCTGCAGCCCTG
CAGCCAGCGAGATCACAGGTCTGAGCACAGCTGTGCTGGCAGCGCATGGGCGTCAATGTTTTGATGACAACCTGG
CCAACCTGCTCCTAGCCTTCCTGCGGCGCCAGCCACAGCCCTGGTGCCTGGTGGCACACAATGGTGACCGCTACG
ACTTCCCCCTGCTCCAAGCAGAGCTGGCTATGCTGGGCCTCACCAGTGCTCTGGATGGTGCCTTCTGTGTGGATA
GCATCACTGCGCTGAAGGCCCTGGAGCGAGCAAGCAGCCCCTCAGAACACGGCCCAAGGAAGAGCTACAGCCTAG
GCAGCATCTACACTCGCCTGTATGGGCAGTCCCCTCCAGACTCGCACACGGCTGAGGGTGATGTCCTGGCCCTGC
TCAGCATCTGTCAGTGGAGACCACAGGCCCTGCTGCGGTGGGTGGATGCTCACGCCAGGCCTTTCGGCACCATCA
GGCCCATGTATGGGGTCACAGCCTCTGCTAGGACCAAGCCAAGACCATCTGCTGTCACAACCACTGCACACCTGG
CCACAACCAGGAACACTAGTCCCAGCCTTGGAGAGAGCAGGGGTACCAAGGATCTTCCTCCAGTGAAGGACCCTG
GAGCCCTATCCAGGGAGGGGCTGCTGGCCCCACTGGGTCTGCTGGCCATCCTGACCTTGGCAGTAGCCACACTGT
ATGGACTATCCCTGGCCACACCTGGGGAG**TAG**GCCAAGAAGGAAAATCTGACGAATAAAGACCCCCGCTGCCCCA
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FIGURE 4057

CAGCGTGCCTGCCAGTGTAGAGCCGGTGGAGCAGCTGGGCTCGGCGCTGAGGTTTCGCCCTGGCTACAACGACCC
CATGTCAGGGTTCGGAGCGACCTTGGCCGTTGGCCTGACCATCTTTGTGCTGTCTGTCGTCACTATCATCATCTG
CTTCACCTGCTCCTGCTGCTGCCTTTACAAGACGTGCCGCCGACCACGTCCCTCCAAGTGTGCCGCCCAGCTACC
CTGGACCAAGCTACCAGGGCTACCACACCATGCCGCCTCAGCCAGGGATGCCAGCAGCACCCTACCCAATGCAGT
ACCCACCACCTTACCCAGCCCAGCCCATGGGCCCACCGGCCTACCACGAGACCCTGGCTGGAGGAGCAGCCGCGC
CCTACCCCGCCAGCCAGCCTCCTTACAACCCGGCCTACATGGATGCCCCGAAGGCGGCCCTCTGAGCATTCCCTG
GCCTCTCTGGCTGCCACTTGGTTATGTTGTGTGTGTGCGTGAGTGGTGTGCAGGCGCGGTTCCTTACGCCCCATG
TGTGCTGTGTGTGTCCAGGCACGGTTCCTTACGCCCCATGTGTGCTGTGTGTGTCCTGCCTGTATATGTGGCTTC
CTCTGATGCTGACAAGGTGGGGAACAATCCTTGCCAGAGTGGGCTGGGACCAGACTTTGTTCTCTTCCTCACCTG
AAATTATGCTTCCTAAAATCTCAAGCCAAACTCAAAGAATGGGGTGGTGGGGGGCACCCTGTGAGGTGGCCCCTG
AGAGGTGGGGGCCTCTCCAGGGCACATCTGGAGTTCTTCTCCAGCTTACCCTAGGGTGACCAAGTAGGGCCTGTC
ACACCAGGGTGGCGCAGCTTTCTGTGTGATGCAGATGTGTCCTGGTTTCGGCAGCGTAGCCAGCTGCTGCTTGAG
GCCATGGCTCGTCCCCGGAGTTGGGGGTACCCGTTGCAGAGCCAGGGACATGATGCAGGCGAAGCTTGGGATCTG
GCCAAGTTGGACTTTGATCCTTTGGGCAGATGTCCCATTGCTCCCTGGAGCCTGTCATGCCTGTTGGGGATCAGG
CAGCCTCCTGATGCCAGAACACCTCAGGCAGAGCCCTACTCAGCTGTACCTGTCTGCCTGGACTGTCCCCTGTCC
CCGCATCTCCCCTGGGACCAGCTGGAGGGCCACATGCACACACAGCCTAGCTGCCCCCAGGGAGCTCTGCTGCCC
TTGCTGGCCCTGCCCTTCCCACAGGTGAGCAGGGCTCCTGTCCACCAGCACACTCAGTTCTCTTCCCTGCAGTGT
TTTCATTTTATTTTAGCCAAACATTTTGCCTGTTTTCTGTTTCAAACATGATAGTTGATATGAGACTGAAACCCC
TGGGTTGTGGAGGGAAATTGGCTCAGAGATGGACAACCTGGCAACTGTGAGTCCCTGCTTCCCGACACCAGCCTC
ATGGAATATGCAACAACTCCTGTACCCCAGTCCACGGTGTTCTGGCAGCAGGGACACCTGGGCCAATGGGCCATC
TGGACCAAAGGTGGGGTGTGGGGCCCTGGATGGCAGCTCTGGCCCAGACATGAATACCTCGTGTTCCTCCTCCCT
CTATTACTGTTTCACCAGAGCTGTCTTAGCTCAAATCTGTTGTGTTTCTGAGTCTAGGGTCTGTACACTTGTTTA
TAATAAATGCAATCGTTTGG

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FIGURE 4058

CTCTAGCTCGAGCAGCAGGAGCAGCCCGCACCGGACAACTTGCGAGCCATGGGGCTGGCGGATGCGTCGGGACCG
AGGGACACACAGGCACTGCTGTCTGCAACACAAGCAATGGACCTGCGGAGGCGAGACTACCACATGGAACGGCCG
CTGCTGAACCAGGAGCATTTGGAGGAGCTGGGGCGCTGGGGCTCAGCACCTAGGACCCACCAGTGGCGGACCTGG
TTGCAGTGCTCCCGTGCTCGGGCCTATGCCCTTCTGCTCCAACACCTCCCGGTTTTGGTCTGGTTACCCCGGTAT
CCTGTGCGTGACTGGCTCCTGGGTGACCTGTTATCCGGCCTGAGTGTGGCCATCATGCAGCTTCCGCAGGGCTTG
GCCTACGCCCTCCTGGCTGGATTGCCCCCCGTGTTTGGCCTCTATAGCTCCTTCTACCCTGTCTTCATCTACTTC
CTGTTTGGCACTTCCCGGCACATCTCCGTGGGGACCTTTGCTGTCATGTCTGTGATGGTGGGCAGTGTGACAGAA
TCCCTGGCCCCGCAGGCCTTGAACGACTCCATGATCAATGAGACAGCCAGAGATGCTGCCCGGGTACAGGTGGCC
TCCACACTCAGTGTCCTGGTTGGCCTCTTCCAGGTGGGGCTGGGCCTGATCCACTTCGGCTTCGTGGTCACCTAC
CTGTCAGAACCTCTTGTCCGAGGCTATACCACAGCTGCAGCTGTGCAGGTCTTCGTCTCACAGCTCAAGTATGTG
TTTGGCCTCCATCTGAGCAGCCACTCTGGGCCACTGTCCCTCATCTATACAGTGCTGGAGGTCTGCTGGAAGCTG
CCCCAGAGCAAGGTTGGCACCGTGGTCACTGCAGCTGTGGCTGGGGTGGTGCTCGTGGTGGTGAAGCTGTTGAAT
GACAAGCTGCAGCAGCAGCTGCCCATGCCGATACCCGGGGAGCTGCTCACGCTCATCGGGGCCACAGGCATCTCC
TATGGCATGGGTCTAAAGCACAGATTTGAGGTAGATGTCGTGGGCAACATCCCTGCAGGGCTGGTGCCCCCAGTG
GCCCCCAACACCCAGCTGTTCTCAAAGCTCGTGGGCAGCGCCTTCACCATCGCTGTGGTTGGGTTTGCCATTGCC
ATCTCACTGGGGAAGATCTTCGCCCTGAGGCACGGCTACCGGGTGGACAGCAACCAGGAGCTGGTGGCCCTGGGC
CTCAGTAACCTTATCGGAGGCATCTTCCAGTGCTTCCCCGTGAGTTGCTCTATGTCTCGGAGCCTGGTACAGGAG
AGCACCGGGGGCAACTCGCAGGTTGCTGGAGCCATCTCTTCCCTTTTCATCCTCCTCATCATTGTCAAACTTGGG
GAACTCTTCCATGACCTGCCCAAGGCGGTCCTGGCAGCCATCATCATTGTGAACCTGAAGGGCATGCTGAGGCAG
CTCAGCGACATGCGCTCCCTCTGGAAGGCCAATCGGGCGGATCTGCTTATCTGGCTGGTGACCTTCACGGCCACC
ATCTTGCTGAACCTGGACCTTGGCTTGGTGGTTGCGGTCATCTTCTCCCTGCTGCTCGTGGTGGTCCGGACACAG
ATGCCCCACTACTCTGTCCTGGGGCAGGTGCCAGACACGGATATTTACAGAGATGTGGCAGAGTACTCAGAGGCC
AAGGAAGTCCGGGGGGGTGAAGGTCTTCCGCTCCTCGGCCACCGTGTACTTTGCCAATGCTGAGTTCTACAGTGAT
GCGCTGAAGCAGAGGTGTGGTGTGGATGTCGACTTCCTCATCTCCCAGAAGAAGAAACTGCTCAAGAAGCAGGAG
CAGCTGAAGCTGAAGCAACTGCAGAAAGAGGAGAAGCTTCGGAAACAGGCTGCCTCCCCCAAGGGCGCCTCAGTT
TCCATTAATGTCAACACCAGCCTTGAAGACATGAGGAGCAACAACGTTGAGGACTGCAAGATGATGCAGGTGAGC
TCAGGAGATAAGATGGAAGATGCAACAGCCAATGGTCAAGAAGACTCCAAGGCCCCAGATGGGTCCACACTGAAG
GCCCTGGGCCTGCCTCAGCCAGACTTCCACAGCCTCATCCTGGACCTGGGTGCCCTCTCCTTTGTGGACACTGTG
TGCCTCAAGAGCCTGAAGAATATTTTCCATGACTTCCGGGAGATTGAGGTGGAGGTGTACATGGCGGCCTGCCAC
AGCCCTGTGGTCAGCCAGCTTGAGGCTGGGCACTTCTTCGATGCATCCATCACCAAGAAGCATCTCTTTGCCTCT
GTCCATGATGCTGTCACCTTTGCCCTCCAACACCCGAGGCCTGTCCCCGACAGCCCTGTTTCGGTCACCAGACTC
TGAACATGCTACATCCTGCCCAAGACTGCACCTCTGGAGGTGCAGGGCACCCTTGAGAAGCCCCTCACCCCTAGG
CCGCCTCCAGGTGCTACCCAGGAGTCCCCTCCATGTACACACACACAACTCAGGGAAGGAGGTCCTGGGACTCCA
AGTTCAGCGCTCCAGGTCTGGGACAGGGCCTGCATGCAGTCAGGCTGGCAGTGGCGCGGTACAGGGAGGGAACTG
GTGCATATTTTAGCCTCAGGAATAAAGATTTGTCTGCTC

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FIGURE 4059

TACTGACTTTCAGCACCAACTTGTGGTCCCAGGTAAGTTTCCACGCTGGTACTTTAGCCCTGGGCTCGAACCTGC
GGACACGCTGTGGCTGCAACTCCCCGCCCGCCAGACCTCAGTACGCAGCGCGGCTGGTGAGAAACATAATGCACT
CTGACTTCCACGCGTGGAATGGGGAGATGGACTGCACGGCGGGCGGACCTGCTCGGGCTGATGGACGGCAGGTGG
ACTGATGTGCGCAGGGACTGGCGGCAGCGCGGTCAGAGCCAGTCAGCCAAAGCCAGGCCAGCACAATAGACTGTC
CCGGTTCCCGCCAGGAGGCGGCCGAGCACCAACTGTACGGTACTGCGCCTGCGCCGCGACCGCCAACGCGCCCAG
TCTACGCTTGCGCGGCGCAACAGGGCCGACTGCAGCTGGAAG**ATG**GCGGCGTCCGTGGTCTGTCGGGCCGCTACC
GCCGGGGCACAAGTGCTATTGCGCGCCCGCCGCTCGCCGGCCCTGCTGCGGACGCCAGCCTTGCGGAGTACGGCA
ACCTTCGCTCAGGCGCTCCAGTTCGTGCCGGAGACGCAGGTTAGCCTGCTGGACAACGGCCTGCGTGTGGCCTCC
GAGCAGTCCTCTCAGCCCACTTGCACGGTGGGAGTGTGGATTGATGTTGGCAGCCGTTTTGAGACTGAGAAGAAT
AATGGGGCAGGCTACTTTTTGGAGCATCTGGCTTTCAAGGGAACAAAGAATCGGCCTGGCAGTGCCCTGGAGAAG
GAGGTGGAGAGCATGGGGGCCCATCTTAATGCCTACAGCACCCGGGAGCACACAGCTTACTACATCAAGGCGCTG
TCCAAGGATCTGCCGAAAGCTGTGGAGCTCCTGGGTGACATTGTGCAGAACTGTAGTCTGGAAGACTCACAGATT
GAGAAGGAACGTGATGTGATCCTGCGGGAGATGCAGGAGAATGATGCATCTATGCGAGATGTGGTCTTTAACTAC
CTGCATGCCACAGCATTCCAGGGCACACCTCTAGCCCAGGCTGTGGAGGGGCCCAGTGAGAATGTCAGGAAGCTG
TCTCGTGCAGACTTGACCGAGTACCTCAGCACACATTACAAGGCCCCTCGAATGGTGCTGGCAGCAGCTGGAGGA
GTGGAGCACCAGCAACTGTTAGACCTCGCCCAGAAGCACCTCGGTGGCATCCCATGGACATATGCAGAGGACGCT
GTGCCCACTCTTACTCCATGCCGCTTCACTGGCAGTGAGATCCGCCACCGTGATGATGCTCTACCTTTTGCCCAC
GTGGCCATTGCAGTAGAGGGTCCTGGCTGGGCCAGCCCGGACAATGTGGCCTTGCAAGTGGCCAATGCCATCATC
GGCCACTATGACTGCACTTATGGTGGTGGCGTGCACCTGTCCAGCCCACTGGCTTCAGGTGCTGTGGCCAACAAG
CTATGCCAGAGTTTCCAGACCTTCAGCATCTGCTATGCAGAGACGGGCTTGCTGGGTGCACACTTTGTCTGTGAC
CGAATGAAAATCGATGACATGATGTTCGTCCTGCAAGGGCAGTGGATGCGCCTGTGTACCAGTGCCACGGAGAGT
GAGGTGGCCCGGGGCAAAAACATCCTCAGAAATGCCCTGGTATCTCATCTAGATGGCACTACTCCTGTGTGTGAG
GACATCGGACGCAGCCTCCTGACCTATGGCCGCCGCATCCCCCTGGCTGAATGGGAAAGCCGGATTGCGGAGGTG
GATGCCAGTGTGGTACGTGAGATCTGCTCCAAGTACATCTATGACCAGTGCCCAGCAGTGGCTGGATATGGCCCC
ATTGAGCAGCTCCCAGACTACAACCGGATCCGTAGCGGCATGTTCTGGCTGCGCTTC**TAG**GCGGGAAGCCTATGT
AAGCAAGAGGGCAGGGCCGGGGTTTGTGGTCCCCCCCCCACCACAAACACAGCACTTCGGCTCCTCTAACCTGTG
CCACAGGTGACCACCAATAAAATCCTCTGCTGAGA

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FIGURE 4060A

GGGCTGGAGGGGCGCTGGGCTCGGACCTGCCAAGGCCACGGGGGAGCAAGGGACAGAGGCGGGGGTCCTAGCTGA
CGGCTTTTACTGCCTAGGATGACGCTGCGGCTTCTGGTGGCCGCGCTCTGCGCCGGGATCCTGGCAGAGGCGCCC
CGAGTGCGAGCCCAGCACAGGGAGAGAGTGACCTGCACGCGCCTTTACGCCGCTGACATTGTGTTCTTACTGGAT
GGCTCCTCATCCATTGGCCGCAGCAATTTCCGCGAGGTCCGCAGCTTTCTCGAAGGGCTGGTGCTGCCTTTCTCT
GGAGCAGCCAGTGCACAGGGTGTGCGCTTTGCCACAGTGCAGTACAGCGATGACCCACGGACAGAGTTCGGCCTG
GATGCACTTGGCTCTGGGGGTGATGTGATCCGCGCCATCCGTGAGCTTAGCTACAAGGGGGGCAACACTCGCACA
GGGGCTGCAATTCTCCATGTGGCTGACCATGTCTTCCTGCCCCAGCTGGCCCGACCTGGTGTCCCCAAGGTCTGC
ATCCTGATCACAGACGGGAAGTCCCAGGACCTGGTGGACACAGCTGCCCAAAGGCTGAAGGGGCAGGGGGTCAAG
CTATTTGCTGTGGGGATCAAGAATGCTGACCCTGAGGAGCTGAAGCGAGTTGCCTCACAGCCCACCAGTGACTTC
TTCTTCTTCGTCAATGACTTCAGCATCTTGAGGACACTACTGCCCCTCGTTTCCCGGAGAGTGTGCACGACTGCT
GGTGGCGTGCCTGTGACCCGACCTCCGGATGACTCGACCTCTGCTCCACGAGACCTGGTGCTGTCTGAGCCAAGC
AGCCAATCCTTGAGAGTACAGTGGACAGCGGCCAGTGGCCCTGTGACTGGCTACAAGGTCCAGTACACTCCTCTG
ACGGGGCTGGGACAGCCACTGCCGAGTGAGCGGCAGGAGGTGAACGTCCCAGCTGGTGAGACCAGTGTGCGGCTG
CGGGGTCTCCGGCCACTGACCGAGTACCAAGTGACTGTGATTGCCCTCTACGCCAACAGCATCGGGGAGGCTGTG
AGCGGGACAGCTCGGACCACTGCCCTAGAAGGGCCGGAACTGACCATCCAGAATACCACAGCCCACAGCCTCCTG
GTGGCCTGGCGGAGTGTGCCAGGTGCCACTGGCTACCGTGTGACATGGCGGGTCCTCAGTGGTGGGCCCACACAG
CAGCAGGAGCTGGGCCCTGGGCAGGGTTCAGTGTTGCTGCGTGACTTGGAGCCTGGCACGGACTATGAGGTGACC
GTGAGCACCCTATTTGGCCGCAGTGTGGGGCCCGCCACTTCCCTGATGGCTCGCACTGACGCTTCTGTTGAGCAG
ACCCTGCGCCCGGTCATCCTGGGCCCCACATCCATCCTCCTTTCCTGGAACTTGGTGCCTGAGGCCCGTGGCTAC
CGGTTGGAATGGCGGCGTGAGACTGGCTTGGAGCCACCGCAGAAGGTGGTACTGCCCTCTGATGTGACCCGCTAC
CAGTTGGATGGGCTGCAGCCGGGCACTGAGTACCGCCTCACACTCTACACTCTGCTGGAGGGCCACGAGGTGGCC
ACCCCTGCAACCGTGGTTCCCACTGGACCAGAGCTGCCTGTGAGCCCTGTAACAGACCTGCAAGCCACCGAGCTG
CCCGGGCAGCGGGTGCGAGTGTCCTGGAGCCCAGTCCCTGGTGCCACCCAGTACCGCATCATTGTGCGCAGCACC
CAGGGGGTTGAGCGGACCCTGGTGCTTCCTGGGAGTCAGACAGCATTCGACTTGGATGACGTTCAGGCTGGGCTT
AGCTACACTGTGCGGGTGTCTGCTCGAGTGGGTCCCCGTGAGGGCAGTGCCAGTGTCCTCACTGTCCGCCGGGAG
CCGGAAACTCCACTTGCTGTTCCAGGGCTGCGGGTTGTGGTGTCAGATGCAACGCGAGTGAGGGTGGCCTGGGGA
CCCGTCCCTGGAGCCAGTGGATTTCGGATTAGCTGGAGCACAGGCAGTGGTCCGGAGTCCAGCCAGACACTGCCC
CCAGACTCTACTGCCACAGACATCACAGGGCTGCAGCCTGGAACCACCTACCAGGTGGCTGTGTCGGTACTGCGA
GGCAGAGAGGAGGGCCCTGCTGCAGTCATCGTGGCTCGAACGGACCCACTGGGCCCAGTGAGGACGGTCCATGTG
ACTCAGGCCAGCAGCTCATCTGTCACCATTACCTGGACCAGGGTTCCTGGCGCCACAGGATACAGGGTTTCCTGG
CACTCAGCCCACGGCCCAGAGAAATCCCAGTTGGTTTCTGGGGAGGCCACGGTGGCTGAGCTGGATGGACTGGAG
CCAGATACTGAGTATACGGTGCATGTGAGGGCCCATGTGGCTGGCGTGGATGGGCCCCCTGCCTCTGTGGTTGTG
AGGACTGCCCCTGAGCCTGTGGGTCGTGTGTCGAGGCTGCAGATCCTCAATGCTTCCAGCGACGTTCTACGGATC
ACCTGGGTAGGGGTCACTGGAGCCACAGCTTACAGACTGGCCTGGGGCCGGAGTGAAGGCGGCCCCATGAGGCAC
CAGATACTCCCAGGAAACACAGACTCTGCAGAGATCCGGGGTCTCGAAGGTGGAGTCAGCTACTCAGTGCGAGTG
ACTGCACTTGTCGGGGACCGCGAGGGCACACCTGTCTCCATTGTTGTCACTACGCCGCCTGAGGCTCCGCCAGCC
CTGGGGACGCTTCACGTGGTGCAGCGCGGGGAGCACTCGCTGAGGCTGCGCTGGGAGCCGGTGCCCAGAGCGCAG
GGCTTCCTTCTGCACTGGCAACCTGAGGGTGGCCAGGAACAGTCCCGGGTCCTGGGGCCCGAGCTCAGCAGCTAT
CACCTGGACGGGCTGGAGCCAGCGACACAGTACCGCGTGAGGCTGAGTGTCCTAGGGCCGGCTGGAGAAGGGCCC
TCTGCAGAGGTGACTGCGCGCACTGAGTCACCTCGTGTTCCAAGCATTGAACTACGTGTGGTGGACACCTCGATC
GACTCGGTGACTTTGGCCTGGACTCCAGTGTCCAGGGCATCCAGCTACATCCTATCCTGGCGGCCACTCAGAGGC
CCTGGCCAGGAAGTGCCTGGGTCCCCGCAGACACTTCCAGGGATCTCAAGCTCCCAGCGGGTGACAGGGCTAGAG
CCTGGCGTCTCTTACATCTTCTCCCTGACGCCTGTCCTGGATGGTGTGCGGGGTCCTGAGGCATCTGTCACACAG
ACGCCAGTGTGCCCCCGTGGCCTGGCGGATGTGGTGTTCCTACCACATGCCACTCAAGACAATGCTCACCGTGCG
GAGGCTACGAGGAGGGTCCTGGAGCGTCTGGTGTTGGCACTTGGGCCTCTTGGGCCACAGGCAGTTCAGGTTGGC
CTGCTGTCTTACAGTCATCGGCCCTCCCCACTGTTCCCACTGAATGGCTCCCATGACCTTGGCATTATCTTGCAA
AGGATCCGTGACATGCCCTACATGGACCCAAGTGGGAACAACCTGGGCACAGCCGTGGTCACAGCTCACAGATAC
ATGTTGGCACCAGATGCTCCTGGGCGCCGCCAGCACGTACCAGGGGTGATGGTTCTGCTAGTGGATGAACCCTTG

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FIGURE 4060B

AGAGGTGACATATTCAGCCCCATCCGTGAGGCCCAGGCTTCTGGGCTTAATGTGGTGATGTTGGGAATGGCTGGA
GCGGACCCAGAGCAGCTGCGTCGCTTGGCGCCGGGTATGGACTCTGTCCAGACCTTCTTCGCCGTGGATGATGGG
CCAAGCCTGGACCAGGCAGTCAGTGGTCTGGCCACAGCCCTGTGTCAGGCATCCTTCACTACTCAGCCCCGGCCA
GAGCCCTGCCCAGTGTATTGTCCAAAGGGCCAGAAGGGGGAACCTGGAGAGATGGGCCTGAGAGGACAAGTTGGG
CCTCCTGGCGACCCTGGCCTCCCGGGCAGGACCGGTGCTCCCGGCCCCCAGGGGCCCCCTGGAAGTGCCACTGCC
AAGGGCGAGAGGGGCTTCCCTGGAGCAGATGGGCGTCCAGGCAGCCCTGGCCGCGCCGGGAATCCTGGGACCCCT
GGAGCCCCTGGCCTAAAGGGCTCTCCAGGGTTGCCTGGCCCTCGTGGGGACCCGGGAGAGCGAGGACCTCGAGGC
CCAAAGGGGGAGCCGGGGGCTCCCGGACAAGTCATCGGAGGTGAAGGACCTGGGCTTCCTGGGCGGAAAGGGGAC
CCTGGACCATCGGGCCCCCCTGGACCTCGTGGACCACTGGGGGACCCAGGACCCCGTGGCCCCCCAGGGCTTCCT
GGAACAGCCATGAAGGTGACAAAGGCGATCGTGGGGAGCGGGGTCCCCCTGGACCAGGTGAAGGTGGCATTGCTC
CTGGGGAGCCTGGGCTGCCGGGTCTTCCCGGAAGCCCTGGACCCCAAGGCCCCGTTGGCCCCCCTGGAAAGAAAG
GAGAAAAAGGTGACTCTGAGGATGGAGCTCCAGGCCTCCCAGGACAACCTGGGTCTCCGGGTGAGCAGGGCCCAC
GGGGACCTCCTGGAGCTATTGGCCCCAAAGGTGACCGGGGCTTTCCAGGGCCCCTGGGTGAGGCTGGAGAGAAGG
GCGAACGTGGACCCCCAGGCCCAGCGGGATCCCGGGGGCTGCCAGGGGTTGCTGGACGTCCTGGAGCCAAGGGTC
CTGAAGGGCCACCAGGACCCACTGGCCGCCAAGGAGAGAAGGGGGAGCCTGGTCGCCCTGGGGACCCTGCAGTGG
TGGGACCTGCTGTTGCTGGACCCAAAGGAGAAAAGGGAGATGTGGGGCCCGCTGGGCCCAGAGGAGCTACCGGAG
TCCAAGGGGAACGGGGCCCACCCGGCTTGGTTCTTCCTGGAGACCCTGGCCCCAAGGGAGACCCTGGAGACCGGG
GTCCCATTGGCCTTACTGGCAGAGCAGGACCCCCAGGTGACTCAGGGCCTCCTGGAGAGAAGGGAGACCCTGGGC
GGCCTGGCCCCCCAGGACCTGTTGGCCCCCGAGGACGAGATGGTGAAGTTGGAGAGAAAGGTGACGAGGGTCCTC
CGGGTGACCCGGGTTTGCCTGGAAAAGCAGGCGAGCGTGGCCTTCGGGGGGCACCTGGAGTTCGGGGGCCTGTGG
GTGAAAAGGGAGACCAGGGAGATCCTGGAGAGGATGGACGAAATGGCAGCCCTGGATCATCTGGACCCAAGGGTG
ACCGTGGGGAGCCGGGTCCCCCAGGACCCCCGGGACGGCTGGTAGACACAGGACCTGGAGCCAGAGAGAAGGGAG
AGCCTGGGGACCGCGGACAAGAGGGTCCTCGAGGGCCCAAGGGTGATCCTGGCCTCCCTGGAGCCCCTGGGGAAA
GGGGCATTGAAGGGTTTCGGGGACCCCCAGGCCCACAGGGGGACCCAGGTGTCCGAGGCCCAGCAGGAGAAAAGG
GTGACCGGGGTCCCCCTGGGCTGGATGGCCGGAGCGGACTGGATGGGAAACCAGGAGCCGCTGGGCCCTCTGGGC
CGAATGGTGCTGCAGGCAAAGCTGGGGACCCAGGGAGAGACGGGCTTCCAGGCCTCCGTGGAGAACAGGGCCTCC
CTGGCCCCTCTGGTCCCCCTGGATTACCGGGAAAGCCAGGCGAGGATGGCAAACCTGGCCTGAATGGAAAAAACG
GAGAACCTGGGGACCCTGGAGAAGACGGGAGGAAGGGAGAGAAAGGAGATTCAGGCGCCTCTGGGAGAGAAGGTC
GTGATGGCCCCAAGGGTGAGCGTGGAGCTCCTGGTATCCTTGGACCCCAGGGGCCTCCAGGCCTCCCAGGGCCAG
TGGGCCCTCCTGGCCAGGGTTTTCCTGGTGTCCCAGGAGGCACGGGCCCCAAGGGTGACCGTGGGGAGACTGGAT
CCAAAGGGGAGCAGGGCCTCCCTGGAGAGCGTGGCCTGCGAGGAGAGCCTGGAAGTGTGCCGAATGTGGATCGGT
TGCTGGAAACTGCTGGCATCAAGGCATCTGCCCTGCGGGAGATCGTGGAGACCTGGGATGAGAGCTCTGGTAGCT
TCCTGCCTGTGCCCGAACGGCGTCGAGGCCCCAAGGGGGACTCAGGCGAACAGGGCCCCCCAGGCAAGGAGGGCC
CCATCGGCTTTCCTGGAGAACGCGGGCTGAAGGGCGACCGTGGAGACCCTGGCCCTCAGGGGCCACCTGGTCTGG
CCCTTGGGGAGAGGGGCCCCCCCGGGCCTTCCGGCCTTGCCGGGGAGCCTGGAAAGCCTGGTATTCCCGGGCTCC
CAGGCAGGGCTGGGGGTGTGGGAGAGGCAGGAAGGCCAGGAGAGAGGGGAGAACGGGGAGAGAAAGGAGAACGTG
GAGAACAGGGCAGAGATGGCCCTCCTGGACTCCCTGGAACCCCTGGGCCCCCCGGACCCCCTGGCCCCAAGGTGT
CTGTGGATGAGCCAGGTCCTGGACTCTCTGGAGAACAGGGACCCCCTGGACTCAAGGGTGCTAAGGGGGAGCCGG
GCAGCAATGGTGACCAAGGTCCCAAAGGAGACAGGGGTGTGCCAGGCATCAAAGGAGACCGGGGAGAGCCTGGAC
CGAGGGGTCAGGACGGCAACCCGGGTCTACCAGGAGAGCGTGGTATGGCTGGGCCTGAAGGGAAGCCGGGTCTGC
AGGGTCCAAGAGGCCCCCCTGGCCCAGTGGGTGGTCATGGAGACCCTGGACCACCTGGTGCCCCGGGTCTTGCTG
GCCCTGCAGGACCCCAAGGACCTTCTGGCCTGAAGGGGGAGCCTGGAGAGACAGGACCTCCAGGACGGGGCCTGA
CTGGACCTACTGGAGCTGTGGGACTTCCTGGACCCCCCGGCCCTTCAGGCCTTGTGGGTCCACAGGGGTCTCCAG
GTTTGCCTGGACAAGTGGGGGAGACAGGGAAGCCGGGAGCCCCAGGTCGAGATGGTGCCAGTGGAAAAGATGGAG
ACAGAGGGAGCCCTGGTGTGCCAGGGTCACCAGGTCTGCCTGGCCCTGTCGGACCTAAAGGAGAACCTGGCCCCA
CGGGGGCCCCTGGACAGGCTGTGGTCGGGCTCCCTGGAGCAAAGGGAGAGAAGGGAGCCCCTGGAGGCCTTGCTG
GAGACCTGGTGGGTGAGCCGGGAGCCAAAGGTGACCGAGGACTGCCAGGGCCGCGAGGCGAGAAGGGTGAAGCTG
GCCGTGCAGGGGAGCCCGGAGACCCTGGGGAAGATGGTCAGAAAGGGGCTCCAGGACCCAAAGGTTTCAAGGGTG

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FIGURE 4060C

ACCCAGGAGTCGGGGTCCCGGGCTCCCCTGGGCCTCCTGGCCCTCCAGGTGTGAAGGGAGATCTGGGCCTCCCTG
GCCTGCCCGGTGCTCCTGGTGTTGTTGGGTTCCCGGGTCAGACAGGCCCTCGAGGAGAGATGGGTCAGCCAGGCC
CTAGTGGAGAGCGGGGTCTGGCAGGCCCCCCAGGGAGAGAAGGAATCCCAGGACCCCTGGGGCCACCTGGACCAC
CGGGGTCAGTGGGACCACCTGGGGCCTCTGGACTCAAAGGAGACAAGGGAGACCCTGGAGTAGGGCTGCCTGGGC
CCCGAGGCGAGCGTGGGGAGCCAGGCATCCGGGGTGAAGATGGCCGCCCCGGCCAGGAGGGACCCCGAGGACTCA
CGGGGCCCCCTGGCAGCAGGGGAGAGCGTGGGGAGAAGGGTGATGTTGGGAGTGCAGGACTAAAGGGTGACAAGG
GAGACTCAGCTGTGATCCTGGGGCCTCCAGGCCCACGGGGTGCCAAGGGGGACATGGGTGAACGAGGGCCTCGGG
GCTTGGATGGTGACAAAGGACCTCGGGGAGACAATGGGGACCCTGGTGACAAGGGCAGCAAGGGAGAGCCTGGTG
ACAAGGGCTCAGCCGGGTTGCCAGGACTGCGTGGACTCCTGGGACCCCAGGGTCAACCTGGTGCAGCAGGGATCC
CTGGTGACCCGGGATCCCCAGGAAAGGATGGAGTGCCTGGTATCCGAGGAGAAAAAGGAGATGTTGGCTTCATGG
GTCCCCGGGGCCTCAAGGGTGAACGGGGAGTGAAGGGAGCCTGTGGCCTTGATGGAGAGAAGGGAGACAAGGGAG
AAGCTGGTCCCCCAGGCCGCCCCGGGCTGGCAGGACACAAAGGAGAGATGGGGGAGCCTGGTGTGCCGGGCCAGT
CGGGGGCCCCTGGCAAGGAGGGCCTGATCGGTCCCAAGGGTGACCGAGGCTTTGACGGGCAGCCAGGCCCCAAGG
GTGACCAGGGCGAGAAAGGGGAGCGGGGAACCCCAGGAATTGGGGGCTTCCCAGGCCCCAGTGGAAATGATGGCT
CTGCTGGTCCCCCAGGGCCACCTGGCAGTGTTGGTCCCAGAGGCCCCGAAGGACTTCAGGGCCAGAAGGGTGAGC
GAGGTCCCCCCGGAGAGAGAGTGGTGGGGGCTCCTGGGGTCCCTGGAGCTCCTGGCGAGAGAGGGGAGCAGGGGC
GGCCAGGGCCTGCCGGTCCTCGAGGCGAGAAGGGAGAAGCTGCACTGACGGAGGATGACATCCGGGGCTTTGTGC
GCCAAGAGATGAGTCAGCACTGTGCCTGCCAGGGCCAGTTCATCGCATCTGGATCACGACCCCTCCCTAGTTATG
CTGCAGACACTGCCGGCTCCCAGCTCCATGCTGTGCCTGTGCTCCGCGTCTCTCATGCAGAGGAGGAAGAGCGGG
TACCCCCTGAGGATGATGAGTACTCTGAATACTCCGAGTATTCTGTGGAGGAGTACCAGGACCCTGAAGCTCCTT
GGGATAGTGATGACCCCTGTTCCCTGCCACTGGATGAGGGCTCCTGCACTGCCTACACCCTGCGCTGGTACCATC
GGGCTGTGACAGGCAGCACAGAGGCCTGTCACCCTTTTGTCTATGGTGGCTGTGGAGGGAATGCCAACCGTTTTG
GGACCCGTGAGGCCTGCGAGCGCCGCTGCCCACCCCGGGTGGTCCAGAGCCAGGGGACAGGTACTGCCCAGGACT
GAGGCCCAGATAATGAGCTGAGATTCAGCATCCCCTGGAGGAGTCGGGGTCTCAGCAGAACCCCACTGTCCCTCC
CCTTGGTGCTAGAGGCTTGTGTGCACGTGAGCGTGCGTGTGCACGTCCGTTATTTCAGTGACTTGGTCCCGTGGG
TCTAGCCTTCCCCCCTGTGGACAAACCCCCATTGTGGCTCCTGCCACCCTGGCAGATGACTCACTGTGGGGGGGT
GGCTGTGGGCAGTGAGCGGATGTGACTGGCGTCTGACCCGCCCCTTGACCCAAGCCTGTGATGACATGGTGCTGA
TTCTGGGGGGCATTAAAGCTGCTGTTTTAAAAGGC

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FIGURE 4061

CAGCAGAGCATCCTGGCCAGAACAAGCCAAGGAGCCAAGACGAGAGGGACACACGGACAAACAACAGACAGAAGA
CGTACTGGCCGCTGGACTCCGCTGCCTCCCCCATCTCCCCGCCATCTGCGCCCGGAGGATGAGCCCAGCCTTCAG
GGCCATGGATGTGGAGCCCCGCGCCAAAGGCGTCCTTCTGGAGCCCTTTGTCCACCAGGTCGGGGGGCACTCATG
CGTGCTCCGCTTCAATGAGACAACCCTGTGCAAGCCCCTGGTCCCAAGGGAACATCAGTTCTACGAGACCCTCCC
TGCTGAGATGCGCAAATTCACTCCCCAGTACAAAGGTGTGGTATCTGTGCGCTTTGAAGAAGATGAAGACAGGAA
CTTGTGTCTAATAGCATATCCATTGAAAGGGGACCATGGAATTGTGGACATTGTAGATAATTCAGACTGTGAACC
AAAAAGTAAGCTCCTAAGGTGGACAACAAACAAAAAACATCATGTCTTAGAAACAGAAAAGACCCCTAAGGACTG
GGTGCGTCAGCACCGTAAAGAGGAGAAAATGAAGAGCCATAAGTTAGAAGAAGAATTTGAGTGGCTAAAGAAATC
TGAAGTCTTGTACTACACTGTAGAGAAGAAGGGGAATATAAGTTCCCAGCTTAAACACTATAACCCTTGGAGCAT
GAAATGTCACCAGCAACAGTTACAGAGAATGAAGGAGAATGCAAAGCATCGGAACCAGTACAAATTTATCTTACT
GGAAAACCTGACTTCCCGCTACGAGGTGCCTTGTGTCCTTGACCTCAAGATGGGCACACGACAACATGGTGATGA
TGCTTCAGAGGAGAAGGCAGCCAACCAGATCCGAAAATGTCAGCAGAGCACATCTGCAGTCATTGGTGTGCGTGT
GTGTGGCATGCAGGTGTACCAAGCAGGCAGTGGGCAGCTCATGTTCATGAACAAGTACCATGGACGGAAGCTATC
GGTGCAGGGCTTCAAGGAGGCACTTTTCCAGTTCTTCCACAATGGGCGGTACCTGCGCCGTGAACTCCTGGGCCC
TGTGCTCAAGAAGCTGACTGAGCTCAAGGCAGTGTTGGAGCGACAGGAGTCCTACCGCTTCTACTCAAGCTCCCT
GCTGGTCATTTATGATGGCAAGGAGCGGCCCGAAGTGGTCCTGGACTCAGATGCTGAGGATTTGGAGGACCTGTC
AGAGGAATCAGCTGATGAGTCTGCTGGTGCCTATGCCTACAAACCCATCGGCGCCAGCTCTGTAGATGTGCGCAT
GATCGACTTTGCACACACCACCTGCAGGCTGTATGGCGAGGACACCGTGGTGCATGAGGGCCAGGATGCTGGCTA
TATCTTCGGGCTCCAGAGCCTGATAGACATTGTCACAGAGATAAGTGAGGAGAGTGGGGAGTGAGCTTGCTAGCT
GCTCCAGTACTTGAGAGCGACTCTGTGTCCCAGGCACAGCTGTGCTGCGTCAGGGAGGAAGCCAGTATGCGCAGG
TGGTGGCTCCTGCAGCCTGGAGCTGATGTGCAGTGGCCTCTGTGAGCCCCAGCCTGAGCCAGTCCCAGCTGTGCT
TGGAGTCTTTATTTATTTTAACTATTTCTTCAACATTCCACATTTGATGATGATACCTCTTTCTTCCCTGAGTGT
ATATGTTCTAATACAAATCTTTTTGTT

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FIGURE 4062

GGACCGGGTGACTTTTAGAAGAATCATAGTGAAAAATAATGCAAAGAAGAGGAAGATGTTTGAATCATTTATTGA
GTCTGTGCCCCTCCTTAAATCACTAGAGGTGTCAGAACGAATGAAGATTGTGGATGTAATAGGAGAGAAGATCTA
TAAGGATGGAGAACGCATAATCACTCAGGGTGAAAAGGCTGATAGCTTTTACATCATAGAGTCTGGCGAAGTGAG
CATCTTGATTAGAAGCAGGACTAAATCAAACAAGGATGGTGGGAACCAGGAGGTCGAGATTGCCCGCTGCCATAA
GGGGCAGTACTTTGGAGAGCTTGCCCTGGTCACCAACAAACCCAGAGCTGCCTCAGCTTATGCAGTTGGAGATGT
CAAATGCTTAGTTATGGATGTACAAGCATTCGAGAGGCTTCTGGGGCCCTGCATGGACATCATGAAGAGGAACAT
CTCACACTATGAGGAACAGCTGGTGAAGATGTTTGGCTCCAGCGTGGATCTGGGCAACCTCGGGCAGTAGGTGTG
CCACACCCCAGAGCCTTCTTAGTGTGACACCAAAACCTTCTGGTCAGCCACAGAACACATACAGAAAACAGACAT
GACAGAACTGTTCCTGCCGTTGCCGCCACTGCTGCCATTGCTGTGGTTATGGGCATTTAGAAAACTTGAAAGTCA
GCACTAAAGGATGGGCAGAGGTTCAACCCACACCTCCACTTTGCTTCTGAAGGCCCATTCATTAGACCACTTGTA
AAGATTACTCCAACCCAGTTTTTATATCTTTGGTTCAAAACGGCATGTCTCTCCAACAATTTAAGTGCCTGATAC
AAAGTCCAAAGTATAAACATGCTCCTTTCCTCTCTTGCTGCTACTCTTGCTTTTGGAAGTTACCACAGGGTCTGC
AGAAACCTGTTGTATAACTGTAGACACTCTCTAATGGTTCTCAAAGGAGGAAATGTAGCCTTCAGTCTCCTCATT
TGTCCTTTGAGGAAGTCCACATTTGTTCACAGTTGCAGCCTTTGGTTTTACAGTGGGAAATGGTGGTGGATGATA
TGGACATATGTAGCCCAGTGGCATTGTACTTTCTGCTGACAGCTGCACACATTACAGCTGTCTCCAAACCCACAG
TGATGCTTAGGGAAAGACCCTGCTCAGGACCCAGCAGGTCAGCACCCCAGAGCAGACTGATAGGTCCGTGGGACC
CATGTTAGAGCAGAAAATTTGGGCTCAGCACATTTTACTGTTAGTAGAGAGCCAGGAAACGTTTTCTGGGTTGGG
GATTTTGTGGGATTTTTTAATTTTTTTAGTAGGTTTTGTTTAACCTCTGTGCAGTTTGTATGAATGAATTGCTAT
ACATTTATAAGGAGCCAGGGTCTGGAGGGTTGCTATCACTTTGTCCAGCCCAAATACCTTCCTGGGCAACTCCTA
CCATTTGTTTGCAGTTGCCTCTACTAGCTGATGGCAGTATGCTGGAAAGAGGTTGTACTATAAAGAGAGTTCTTT
CCTTCTACTCCAGAGTTGTTGTGTAGCTTTGCCATTGAACCGATCAATTTTTAAACTCTTTAAAGAAGCAGCAGC
TATTTTTTTGAAATTAAAGAAAATTCTCAGGCCAGGCTCAATGGCTCATGCCTATAATTGTAGTGCTTTGGGAGG
CTGAGCTGGGAGGATCGCTTAAGACCAGCCTAGGCAACAGAGTGAGATCCTGTCTCTACAAAAACAAAAATTTTT
TTTTTGTTTTCTTTTTGAGACGGAGTTTCGCTCTTGTTGCCCAGGCTGGAGTGCAATGGTGCGGTCTTGGCTCAC
CGCAACCTCCGCCTCCCAGATTAAAGTGATTCTCCTGCCTCAACCTCCTGAGTAGCTGGGATTAGCAGATGCGCC
ACCATGCCGGGCGAATTTTGTATTTTTAATAGAGACAGGGTTTCTCTGTGTTGGTCAGGCTGGTCTCAAACTCCC
AACCTCAGGTGATCCGCCCACCTCAGCCTCTCAGAGTGCTGGGATTACAGATGTGAGCCACTGCACCTGGCAAAA
AAAAAATTTTTTTTTAATTTGTCAGGTGTGGTGATGCATGCATGTAGTCCCAAATACTTAGGAGGCTGAGGTGGA
AGGATCACTTGAGCCCAGGAGGTCAAGGCAACAGTGAGCTGTGATCATGCCACTGCACTCCAGTCTGGGTGACAC
AGTGAGACCCTGTCTCTTAAAAAAAAAAAAAGAAAGAAAAAAAATTATTCTTTAGGTAATTTCACTTGGACATAT
TCATGTATATGGAGTTTGTCAGCTGACTCAGGCATTTACCCTAAAGATCAAATCTGTTTTCAAAAATTGGCATTG
GCCAGGCACGGTGACCCACACCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGCGGATCACGAGGTCAGGGGT
TCAAGACCAGCCTGGCCAACATAGTGAAACCCCGTCTCTACTAAAAATACAAAAAA

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FIGURE 4063

GAGATGGCGGAAGGTGGAGGCTGCCGTGAGCGACCGGATGCGGAGACTCAGAAGTCCGAGCTTGGACCCTTAATG
AGGACCACACTCCAACGCGGGGCGCAGTGGTATCTTATTGACAGCCGGTGGTTCAAGCAGTGGAAGAAGTATGTG
GGCTTTGACAGCTGGGACATGTACAATGTGGGTGAACATAACCTATTTCCTGGCCCAATAGACAACTCTGGGCTA
TTTTCAGATCCTGAGAGTCAGACCTTGAAAGAACACTTAATTGATGAATTGGACTATGTATTGGTCCCTACCGAG
GCGTGGAATAAACTACTAAACTGGTACGGCTGTGTAGAAGGCCAGCAACCCATCGTCAGAAAAGTTGTGGAGCAT
GGCCTGTTTGTCAAGCACTGCAAAGTCGAGGTGTATTTGCTGGAACTGAAGCTCTGTGAGAACAGTGACCCCACC
AATGTGCTGAGTTGCCATTTCAGCAAGGCAGACACCATTGCAACCATCGAGAAAGAGATGCGGAAGCTATTCAAC
ATCCCTGCGGAGCGTGAAACACGGCTCTGGAACAAATACATGAGCAACACCTACGAGCAGTTGAGCAAGCTAGAC
AACACTGTCCAGGATGCTGGGCTATACCAGGGTCAGGTGCTAGTAATTGAGCCTCAAAATGAAGATGGCACATGG
CCCAGGCAGACCTTGCAGTCAAAATCAAGCACTGCGCCTAGCAGAAATTTTACTACCTCTCCAAAATCATCAGCA
AGTCCCTATTCCTCAGTGTCTGCCTCTCTCATTGCAAATGGTGATAGCACTAGCACCTGTGGGATGCACAGTTCC
GGTGTCAGCAGGGGTGGATCTGGCTTTTCTGCTTCGTATAATTGTCAGGAGCCACCATCCTCTCATATACAACCT
GGGCTCTGTGGACTTGGAAACCTGGGAAACACCTGCTTCATGAACTCCGCTTTGCAGTGTTTGAGCAACACTGCA
CCACTGACTGACTACTTTCTCAAAGATGAGTATGAAGCCGAAATCAACAGAGACAACCCTCTGGGGATGAAAGGG
GAAATTGCAGAAGCCTATGCTGAACTCATTAAGCAGATGTGGTCTGGAAGGGACGCCCATGTGGCACCTCGCATG
TTCAAAACTCAAGTAGGACGTTTTGCTCCTCAATTTTCTGGCTACCAGCAACAAGATTCTCAGGAGCTGCTGGCC
TTTCTTCTAGATGGATTGCATGAAGATCTGAACCGGGTAAAGAAAAAGCCCTACTTGGAGCTGAAGGATGCCAAT
GGGCGGCCAGATGCGGTGGTGGCAAAGGAAGCCTGGGAGAATCACAGGTTGAGGAATGATTCTGTGATTGTGGAT
ACTTTCCATGGCCTCTTCAAATCTACTTTGGTTTGCCCAGAATGTGCTAAGGTTTCTGTGACCTTTGACCCATTT
TGCTATCTAACGCTGCCACTGCCCTTGAAGAAAGATCGAGTTATGGAGGTTTTCCTGGTTCCTGCTGACCCTCAC
TGCAGACCTACTCAGTACCGTGTGACTGTGCCGCTGATGGGGGCTGTGTCCGACCTGTGCGAGGCTCTCTCCAGG
CTGTCTGGCATTGCTGCAGAAAATATGGTGGTCGCAGATGTGTATAATCACCGATTCCACAAAATTTTCCAAATG
GATGAAGGTTTAAACCACATCATGCCTCGGGATGACATTTTCGTGTACGAGGTCTGCAGCACTTCCGTGGATGGC
TCGGAATGTGTCACGCTTCCAGTCTACTTCAGGGAGAGGAAGTCCAGGCCATCAAGCACTTCCTCCGCATCAGCG
CTATATGGGCAGCCACTATTGCTTTCTGTCCCCAAGCACAAGTTAACCCTTGAGTCTTTGTACCAGGCTGTTTGT
GATCGTATCAGCCGCTATGTGAAACAGCCTTTGCCTGATGAGTTTGGCAGCTCACCATTGGAGCCAGGGGCCTGC
AATGGCTCCAGGAACAGCTGTGAAGGAGAAGATGAGGAAGAAATGGAGCATCAGGAAGAAGGCAAAGAGCAGCTT
TCAGAAACAGAAGGCAGTGGGGAAGATGAGCCAGGAAATGACCCCAGTGAGACCACCCAAAAGAAGATCAAAGGC
CAGCCCTGCCCAAAAAGGCTTTTTACCTTCAGTCTTGTGAACTCCTATGGAACAGCTGACATAAATTCACTTGCA
GCTGATGGAAAACTACTTAAACTCAACTCTCGATCTACACTGGCCATGGATTGGGACAGTGAAACTCGGAGACTT
TACTATGATGAGCAAGAATCTGAGGCCTACGAGAAGCATGTGAGCATGTTGCAGCCTCAGAAGAAGAAGAAGACC
ACAGTGGCCCTGAGAGACTGCATCGAGCTCTTCACCACCATGGAGACCCTTGGGGAGCATGACCCCTGGTACTGT
CCCAACTGTAAGAAGCATCAACAGGCCACAAAAAAGTTTGACCTATGGTCCTTGCCCAAGATCCTGGTGGTCCAC
CTCAAACGTTTCTCCTACAACAGATACTGGAGGGATAAGCTCGACACAGTCGTAGAATTCCCAATCAGAGGGCTG
AACATGTCCGAGTTTGTCTGTAACCTGTCAGCAAGGCCTTATGTGTACGACCTCATTGCCGTGTCCAATCATTAT
GGAGCCATGGGGGTTGGCCACTACACTGCATATGCGAAGAACAAACTGAATGGTAAATGGTATTACTTTGATGAT
AGCAACGTGTCCCTGGCCTCTGAGGATCAGATAGTGACTAAAGCAGCTTATGTGCTATTTTACCAACGTCGAGAT
GATGAATTTTATAAGACACCTTCACTTAGCAGTTCTGGTTCCTCTGATGGAGGGACACGACCAAGCAGCTCTCAG
CAGGGCTTTGGGGATGATGAGGCTTGCAGCATGGACACCAACTAATGCTGACTCCACGATCCTGCCACCCTGTAG
CGCCAGTGTAATCCCCCAAGAGAACATCTTTGACACTCTGCAGACTGCTAGTGTTCTGTCTAAAAACCAGACAAG
GAAATACCCTTCTTTTATGAGCAGAAGGAAACAAAAAAAAAAAAAAGAAGACCGTTTACCTAGAA

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FIGURE 4064

CCCTCGAGGGCCCCAGCCCTTGGAAGGGTAACCTGGACCGCTGCCGCCTGGTTGCCTGGGCCAGACCAGACATGC
CTGCTGCTCCTTCCGGCTTAGGAGGAGCACGCGTCCCGCTCGGGCGCACTCTCCAGCCTTTTCCTGGCTGAGGAG
GGGCCGAGCCCTCCGGGTAGGGCGGGGGCCGGATGAGGCGGGACCCTCAGGCCCGGAAAACTGCCTGTGCCACGT
GACCCGCCGCCGGCCAGTTAAAAGGAGGCGCCTGCTGGCCTCCCCTTACAGTGCTTGTTCGGGGCGCTCCGCTGG
CTTCTTGGACAATTGCGCCATGTGTGCTGCTCGGCTAGCGGCGGCGGCGGCGGCGGCCCAGTCGGTGTATGCCTT
CTCGGCGCGCCCGCTGGCCGGCGGGGAGCCTGTGAGCCTGGGCTCCCTGCGGGGCAAGGTACTACTTATCGAGAA
TGTGGCGTCCCTCTGAGGCACCACGGTCCGGGACTACACCCAGATGAACGAGCTGCAGCGGCGCCTCGGACCCCG
GGGCCTGGTGGTGCTCGGCTTCCCGTGCAACCAGTTTGGGCATCAGGAGAACGCCAAGAACGAAGAGATTCTGAA
TTCCCTCAAGTACGTCCGGCCTGGTGGTGGGTTCGAGCCCAACTTCATGCTCTTCGAGAAGTGCGAGGTGAACGG
TGCGGGGGCGCACCCTCTCTTCGCCTTCCTGCGGGAGGCCCTGCCAGCTCCCAGCGACGACGCCACCGCGCTTAT
GACCGACCCCAAGCTCATCACCTGGTCTCCGGTGTGTCGCAACGATGTTGCCTGGAACTTTGAGAAGTTCCTGGT
GGGCCCTGACGGTGTGCCCCTACGCAGGTACAGCCGCCGCTTCCAGACCATTGACATCGAGCCTGACATCGAAGC
CCTGCTGTCTCAAGGGCCCAGCTGTGCCTAGGGCGCCCCTCCTACCCCGGCTGCTTGGCAGTTGCAGTGCTGCTG
TCTCGGGGGGGTTTTCATCTATGAGGGTGTTTCCTCTAAACCTACGAGGGAGGAACACCTGATCTTACAGAAAAT
ACCACCTCGAGATGGGTGCTGGTCCTGTTGATCCCAGTCTCTGCCAGACCAAGGCGAGTTTCCCCACTAATAAAG
TGCCGGGTGTCAGCA

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FIGURE 4065

AGCAATGGCTGCCATCCGGAAGAAACTGGTGATTGTTGGTGATGGAGCCTGTGGAAAGACATGCTTGCTCATAGT
CTTCAGCAAGGACCAGTTCCCAGAGGTGTATGTGCCCACAGTGTTTGAGAACTATGTGGCAGATATCGAGGTGGA
TGGAAAGCAGGTAGAGTTGGCTTTGTGGGACACAGCTGGGCAGGAAGATTATGATCGCCTGAGGCCCCTCTCCTA
CCCAGATACCGATGTTATACTGATGTGTTTTTCCATCGACAGCCCTGATAGTTTAGAAAACATCCCAGAAAAGTG
GACCCCAGAAGTCAAGCATTTCTGTCCCAACGTGCCCATCATCCTGGTTGGGAATAAGAAGGATCTTCGGAATGA
TGAGCACACAAGGCGGGAGCTAGCCAAGATGAAGCAGGAGCCGGTGAAACCTGAAGAAGGCAGAGATATGGCAAA
CAGGATTGGCGCTTTTGGGTACATGGAGTGTTCAGCAAAGACCAAAGATGGAGTGAGAGAGGTTTTTGAAATGGC
TACGAGAGCTGCTCTGCAAGCTAGACGTGGGAAGAAAAAATCTGGGTGCCTTGTCTTGTGAACCTTGCTGCAAG
CACAGCCCTTATGCGGTTAATTTTGAAGTGCTGTTTATTAATCTTAGTGTATGATTACTGGCCTTTTTCATTTAT
CTATAATTTACCTAAGATTACAAATCAGAAGTCATCTTGCTACCAGTATTTAGAAGCCAACTATGATTATTAACG
ATGTCCAACCCGTCTGGCCCACCAGGGTCCTTTTGACACTGCTCTAACAGCCCTCCTCTGCACTCCCACCTGACA
CACCAGGCGCTAATTCAAGGAATTTCTTAACTTCTTGCTTCTTTCTAGAAAGAGAAACAGTTGGTAACTTTTGTG
AATTAGGCTGTAACTACTTTATAACTAACATGTCCTGCCTATTATCTGTCAGCTGCAAGGTACTCTGGTGAGTCA
CCACTTCAGGGCTTTACTCCGTAACAGATTTTGTTGGCATAGCTCTGGGGTGGGCAGTTTTTTGAAAATGGGCTC
AACCAGAAAAGCCCAAGTTCATGCAGCTGTGGCAGAGTTACAGTTCTGTGGTTTCATGTTAGTTACCTTATAGTT
ACTGTGTAATTAGTGCCACTTAATGTATGTTACCAAAAATAAATATATCTACCCCAGACTAGATGTAGTATTTTT
TGTATAATTGGATTTCCTAATACTGTCATCCTCAAAGAAAGTGTATTGGTTTTTTAAAAAAGAAAGTGTATTTGG
AAATAAAGTCAGATGGAAAATTCATTTTTTAAATTCCCGTTTTGTCACTTTTTCTGATAAAAGATGGCCATATTA
CCCCTTTTCGGCCCCATGTATCTCAGTACCCCATGGAGCTGGGCTAAGTAAATAGGAATTGGTTTCACGCCTGAG
GCAATTAGACACTTTGGAAGATGGCATAACCTGTCTCACCTGGACTTAAGCATCTGGCTCTAATTCACAGTGCTC
TTTTCTCCTCACTGTATCCAGGTTCCCTCCCAGAGGAGCCACCAGTTCTCATGGGTGGCACTCAGTCTCTCTTCT
CTCCAGCTGACTAAACTTTTTTTCTGTACCAGTTAATTTTTCCAACTACTAATAGAATAAAGGCAGTTTTCT

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FIGURE 4066

TGAGCCCCAGCTAAGCGCTGCCCTTGAGTATGTGCGGAGTCACCCCTTGGACCCCATCGACACTGTGGACTTCGA
GCGGGAATGTGGCGTGGGTGTCATTGTGACCCCAGAGCAGATTGAGGAGGCTGTGGAGGCTGCTATTAACAGGCA
CCGGCCCCAGCTCCTGGTGGAACGTTACCATTTCAACATGGGGCTGCTGATGGGAGAGGCTCGGGCTGTGCTGAA
GTGGGCAGATGGCAAAATGATCAAGAATGAAGTGGACATGCAGGTCCTCCACCTTCTGGGCCCCAAGTTGGAGGC
TGATCTGGAGAAGAAGTTCAAGGTGGCAAAAGCTCGGCTAGAAGAAACAGACCGGAGGACGGCAAAGGATGTGGT
GGAGAATGGCGAGACTGCTGACCAGACCCTGTCTCTGATGGAGCAGCTCCGGGGGGGAGGCCCTTAAGTTCCACAA
GCCTGGTGAGAACTACAAGACCCCAGGCTATGTGGTCACTCCACACACCATGAATCTACTAAAGCAGCACCTGGA
GATTACTGGTGGGCAGGTACGTACCCGGTTCCCGCCAGAACCCAATGGAATCCTGCATATTGGACATGCCAAAGC
CATCAATTTCAACTTTGGCTATGCCAAGGCCAACAATGGCATCTGTTTTCTGCGTTTTGATGACACCAACCCTGA
GAAGGAGGAAGCAAAGTTCTTCACGGCCATCTGTGACATGGTAGCCTGGCTAGGCTACACACCTTACAAAGTCAC
ATATGCGTCTGACTATTTTGACCAGCTATATGCGTGGGCTGTGGAGCTCATCCGCAGGGGTCTGGCTTATGTGTG
CCACCAGCGAGGAGAGGAGCTCAAAGGCCATAATACTCTGCCTTCACCCTGGAGAGACCGTCCCATGGAGGAGTC
ACTGCTGCTCTTTGAGGCAATGCGCAAGGGCAAGTTTTCAGAGGGCGAGGCCACACTACGGATGAAGCTGGTGAT
GGAGGATGGCAAGATGGACCCTGTAGCCTATCGAGTCAAGTATACACCACACCACCGCACAGGGGACAAATGGTG
CATCTATCCCACCTACGACTACACACACTGCCTCTGTGACTCCATCGAGCACATCACTCACTCACTCTGCACCAA
GGAATTCCAGGCCCG

FIGURE 4067A

TAAGGCGGTGGCGGCGGCGCCGGGACGGGGGAGGGGCGCGCCGGAACCGGAACCGACCTGCGCCGGAACCGGAAC
GGAGAGCGGGTTGCCAGGGCCCGAAGAGGGCTGGCTGCGGCGGTCTCGCTCGGCTGTCCGTTCCTTGCTGGAGAA
TTTGGCCACAAAGAGTTGCCAAGATAGCTGGGCCAGGAAGAAAGCGCCGCAGCCCTGACCCAGACGCTGTTGCCG
ACCCCGGGGCACTCTGGCTGTCGACCAAGCGGCTCAAGATGTCTGGCGGGGCCAGTGCCACAGGCCCAAGGAGAG
GGCCCCCAGGACTGGAGGACACCACTAGTAAGAAGAAGCAGAAGGATCGAGCAAACCAGGAGAGCAAGGATGGAG
ATCCTAGGAAAGAGACAGGGTCTCGATATGTTGCCCAGGCTGGTCTTGAACCTCTGGCCTCAGGTGATCCTTCTG
CCTCAGCCTCCCATGCAGCTGGGATCACAGGCTCACGCCACCGTACCCGGCTGTTCTTTCCTTCATCGTCAGGGT
CAGCATCCACTCCTCAAGAGGAGCAGACCAAAGAGGGAGCTTGTGAAGACCCTCATGATCTCTTGGCTACTCCCA
CTCCAGAGTTGTTGCTCGATTGGAGGCAGAGTGCAGAAGAGGTGATTGTCAAGCTTCGTGTGGGAGTAGGTCCCC
TGCAGCTGGAGGATGTAGATGCTGCTTTCACAGATACAGACTGTGTGGTGCGGTTTGCAGGTGGTCAGCAGTGGG
GTGGTGTCTTCTATGCTGAGATAAAAAGCTCTTGTGCTAAAGTGCAAACCCGCAAGGGCAGTCTCCTGCACCTGA
CACTGCCCAAAAAGGTGCCTATGCTCACGTGGCCCTCCCTCCTGGTTGAGGCTGATGAACAGCTTTGCATACCAC
CGCTGAACTCCCAAACCTGTCTCCTGGGCTCAGAGGAGAATTTAGCCCCTTTGGCAGGAGAGAAAGCAGTGCCTC
CCGGGAATGACCCAGTCTCTCCAGCCATGGTCCGGAGCAGAAACCCTGGGAAAGATGACTGTGCCAAGGAGGAGA
TGGCAGTGGCAGCAGATGCTGCAACCTTGGTGGATGAGCCCGAGTCGATGGTGAACCTGGCGTTTGTCAAGAATG
ACTCGTATGAGAAGGGCCCGGATTCAGTGGTGGTGCACGTGTACGTGAAGGAGATCTGCAGGGACACCTCAAGAG
TACTTTTCCGTGAGCAGGACTTCACGCTCATCTTCCAGACCAGGGATGGAAACTTCCTGAGGCTGCACCCGGGCT
GTGGGCCCCACACCACCTTCCGTTGGCAGGTGAAGCTCAGGAATCTGATTGAGCCAGAGCAGTGCACCTTCTGTT
TCACGGCTTCTCGCATCGACATCTGCCTTCGTAAGAGGCAGAGTCAGCGCTGGGGGGGCCTGGAGGCCCCGGCTG
CACGAGGTGCAGTGGGTGGTGCAAAGGTTGCCGTGCCGACAGGTCCAACCCCTCTGGATTCAACCCCACCAGGAG
GTGCTCCCCACCCCCTGACAGGCCAGGAGGAGGCCCGGGCTGTGGAGAAGGATAAATCCAAGGCACGATCTGAGG
ACACAGGGCTAGACAGTGTGGCAACCCGCACACCCATGGAGCATGTAACCCCAAAGCCAGAGACACACCTGGCCT
CGCCCAAGCCTACATGCATGGTGCCTCCCATGCCCCACAGCCCAGTTAGTGGAGACAGCGTGGAGGAGGAGGAAG
AGGAAGAGAAGAAGGTGTGTCTGCCAGGCTTCACTGGCCTTGTCAATTTAGGCAACACCTGCTTCATGAACAGCG
TCATTCAGTCTCTGTCCAACACTCGGGAACTCCGGGACTTCTTCCATGACCGCTCCTTTGAGGCTGAGATCAACT
ACAACAACCCACTAGGGACTGGTGGGCGTCTGGCCATTGGCTTTGCCGTGCTGCTTCGGGCGCTGTGGAAGGGCA
CCCACCATGCCTTCCAGCCTTCCAAGTTGAAGGCCATTGTGGCGAGTAAGGCCAGCCAGTTCACAGGCTATGCAC
AGCATGATGCCCAGGAGTTCATGGCTTTCCTGCTGGATGGGCTGCACGAGGACCTGAATCGCATTCAGAACAAGC
CCTACACAGAGACCGTGGATTCAGATGGGCGGCCCGATGAGGTGGTAGCTGAGGAAGCATGGCAGCGGCACAAGA
TGAGGAATGACTCTTTCATCGTGGACCTATTTCAGGGGCAGTACAAGTCGAAGCTGGTGTGCCCTGTGTGTGCCA
AGGTCTCCATCACTTTTGACCCGTTTCTTTATCTGCCGGTGCCCTTGCCACAAAAGCAAAAGGTTCTCCCTGTCT
TTTATTTTGCCCGAGAGCCCCACAGCAAGCCCATCAAGTTCCTGGTGAGCGTCAGCAAGGAGAACTCCACTGCGA
GCGAAGTATTGGACTCCCTCTCTCAGAGTGTTCATGTGAAGCCTGAGAACCTGCGTTTGGCAGAGGTAATTAAGA
ATCGTTTTCATCGTGTGTTCCTACCCTCCCACTCACTGGACACTGTGTCCCCATCTGATACGCTCCTCTGCTTTG
AGCTGCTATCCTCAGAGTTGGCTAAGGAGCGGGTAGTGGTGCTAGAGGTGCAACAGCGCCCCCAGGTGCCCAGCG
TCCCCATCTCCAAGTGTGCAGCCTGCCAGCGGAAGCAACAGTCGGAGGATGAAAAGCTGAAGCGCTGTACCCGGT
GCTACCGTGTGGGCTACTGCAACCAGCTCTGCCAGAAAACCCACTGGCCTGACCACAAGGGCCTCTGCCGACCTG
AGAACATTGGCTACCCCTTCCTGGTCAGTGTACCTGCCTCACGCCTCACTTATGCCCGCCTCGCTCAGTTGCTAG
AGGGCTATGCCCGGTACTCTGTGAGTGTATTCCAGCCACCCTTTCAGCCAGGCCGCATGGCCTTGGAGTCTCAGA
GCCCTGGCTGCACCACACTGCTCTCCACAGGTTCCCTGGAGGCTGGGGACAGCGAGAGAGACCCCATTCAGCCAC
CTGAGCTCCAGCTGGTGACCCCTATGGCTGAGGGGGACACAGGGCTTCCCCGGGTGTGGGCAGCCCCTGACCGGG
GTCCTGTGCCCAGCACCAGTGGAATTTCTTCTGAGATGCTGGCCAGTGGGCCCATTGAGGTTGGCTCCTTGCCAG
CTGGCGAGAGGGTGTCCCGACCCGAAGCTGCTGTGCCTGGGTACCAGCATCCAAGTGAAGCTATGAATGCCCACA
CACCCCAGTTCTTCATCTATAAAATTGATTCATCCAACCGAGAGCAGCGGCTAGAGGACAAAGGAGACACCCCAC
TGGAGCTGGGTGACGACTGTAGCCTGGCTCTCGTCTGGCGGAACAATGAGCGCTTGCAGGAGTTTGTGTTGGTAG
CCTCCAAGGAGCTGGAATGTGCTGAGGATCCAGGCTCTGCCGGTGAGGCTGCCCGGGCCGGCCACTTCACCCTGG
ACCAGTGCCTCAACCTCTTCACACGGCCTGAGGTGCTGGCACCCGAGGAGGCCTGGTACTGCCCACAGTGCAAAC
AGCACCGTGAGGCCTCCAAGCAGCTGTTGCTATGGCGCCTGCCAAATGTTCTCATCGTGCAGCTCAAGCGCTTCT

FIGURE 4067B

CCTTTCGTAGTTTTATCTGGCGTGACAAGATCAATGACTTGGTGGAGTTCCCTGTTAGGAACCTGGACCTGAGCA
AGTTCTGCATTGGTCAGAAAGAGGAGCAGCTGCCCAGCTACGATCTATATGCTGTCATCAACCACTATGGAGGCA
TGATTGGTGGCCACTACACTGCCTGTGCACGCCTGCCCAATGATCGTAGCAGTCAGCGCAGTGACGTGGGCTGGC
GCTTGTTTGATGACAGCACAGTGACAACGGTAGACGAGAGCCAGGTTGTGACGCGTTATGCCTATGTACTCTTCT
ACCGCCGGCGGAACTCTCCTGTGGAGAGGCCCCCCAGGGCAGGTCACTCTGAGCACCACCCAGACCTAGGCCCTG
CAGCTGAGGCTGCTGCCAGCCAGGCTTCCCGGATTTGGCAGGAGCTGGAGGCTGAGGAGGAGCCGGTGCCTGAGG
GGTCTGGGCCCCTGGGTCCCTGGGGGCCCCAAGACTGGGTGGGCCCCCTACCACGTGGCCCTACCACACCAGATG
AGGGCTGCCTCCGGTACTTTGTCCTGGGCACCGTGGCGGCTTTGGTGGCCCTCGTGCTCAACGTGTTCTATCCTC
TGGTATCCCAGAGTCGCTGGAGA**TGA**GCTCGCCTGCAGGCAGCTGCTGTGAGCTGGCCTACCTGCCTGCCCCAGG
CCATGCCTGCCTTTGTTGTGGGGAACACCTCTGGGCTTTGGGCCTCAGCTTATGCATCTGGTGGGAGAGGGTGGG
GAGGTTGTGGCCCCTGCAGGGGCAGAGTATCCTAGGGTGTGTATCCATCTGGCTGTCTGTCCATTCATCCTGCTG
CTCTGACCCTTGGCCTCAGGCTTGGCCCTGCCCAAGCTACTTCCTGTACTTAAAAGTGTTAATAAAACCAGACTA
TTCAGGCCC

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FIGURE 4068A

GAAGGCAGTTTCCGGAGGGAAGGGGTAGGGTTGGGGTGGGGGCGCTCTCCGCCCGGTGTTGCGCTCCTTCCCAGA
ATCCGCTCCGGCCTTTCCTTCCTGCCGCGATTCCCAACTTTGCTCAAAGTCGCTGGACTCTAAGCTGTCGGAGGG
ACCGCTGGACAGACCTGGGAACTGACAGAGGGCCTGGAGGGAAACAGGCCAAAGACCCACAGGCAGAGTTGACAC
GGAACCCCAAAGCAAGGAGGAGGGCTCGGGCCCGAGACCGTTCACCTCCCCTTATCCCTGTTCCCCTCTTCAGGA
TGGAGCTGACCTCAAGGGAAAGAGGGAGGGGACAGCCTCTGCCCTGGGAACTTCGACTGGGCCTACTGCTAAGCG
GTGAGAGGGCCTGGTGGGGGCTGGGGGTTGTGGAATGTGATGGTAGTCCCTGGGAGTTGCCCTTGGGGCACATGA
GGTGGAGCCACTGGATAGGAACTCCACGGAACTGACTGAGCTACTGTCCCCAGTGCTGGCTGCCACACTGGCACA
GGCCCCTGCCCCCGATGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCACCACAGCGGCGGGCAGCCTGGTGGCAGTCAG
AGAATGGTATCCCTGCGGTCACCATCCAGCTGGACCTGGAGGCTGAGTTTCATTTCACACACCTCATTATGACCT
TCAAGACATTTCGCCCTGCTGCCATGCTGGTGGAACGCTCAGCAGACTTTGGCCGCACCTGGCATGTGTACCGAT
ATTTCTCCTATGACTGTGGGGCTGACTTCCCAGGAGTCCCACTAGCACCCCCACGGCACTGGGATGATGTAGTCT
GTGAGTCCCGCTACTCAGAGATTGAGCCATCCACTGAAGGCGAGGTCATCTATCGTGTGCTGGACCCTGCCATCC
CTATCCCAGACCCCTACAGCTCACGGATTCAGAACCTGTTGAAGATCACCAACCTACGGGTGAACCTGACTCGTC
TACACACGTTGGGAGACAACCTACTCGACCCACGGAGGGAGATCCGAGAGAAGTACTACTATGCCCTCTATGAGC
TGGTTGTACGTGGCAACTGCTTCTGCTACGGACACGCCTCAGAGTGTGCACCCGCCCCAGGGGCACCAGCCCATG
CTGAGGGCATGGTGCACGGAGCTTGCATCTGCAAACACAACACACGTGGCCTCAACTGCGAGCAGTGTCAGGATT
TCTATCGTGACCTGCCCTGGCGTCCGGCTGAGGACGGCCATAGTCATGCCTGTAGGAAGTGTGAGTGCCATGGGC
ACACCCACAGCTGCCACTTCGACATGGCCGTATACCTGGCATCTGGCAATGTGAGTGGAGGTGTGTGTGATGGAT
GTCAGCATAACACAGCTGGGCGCCACTGTGAGCTCTGTCGGCCCTTCTTCTACCGTGACCCAACCAAGGACCTGC
GGGATCCGGCTGTGTGCCGCTCCTGTGATTGTGACCCCATGGGTTCTCAAGACGGTGGTCGCTGTGATTCCCATG
ATGACCCTGCACTGGGACTGGTCTCCGGCCAGTGTCGCTGCAAAGAACATGTGGTGGGCACTCGCTGCCAGCAAT
GCCGTGATGGCTTCTTTGGGCTCAGCATCAGTGACCGTCTGGGCTGCCGGCGTATGTCAATGTAATGCACGGGGC
ACAGTGCCTGGGAGCACTCCTTGTGACCCCAACAGTGGATCCTGTTACTGCAAACGTCTAGTGACTGGACGTGGA
TGTGACCGCTGCCTGCCTGGCCACTGGGGCCTGAGCCACGACCTGCTCGGCTGCCGCCCCTGTGACTGCGACGTG
GGTGGTGCTTTGGATCCCCAGTGTGATGAGGGCACAGGTCAATGCCACTGCCGCCAGCACATGGTTGGGCGACGC
TGTGAGCAGGTGCAACCTGGCTACTTCCGGCCCTTCCTGGACCACCTAATTTGGGAGGCTGAGGACACCCGAGGG
CAGGTGCTCGATGTGGTGGAGCGCCTGGTGACCCCCGGGGAAACTCCATCCTGGACTGGCTCAGGCTTCGTGCGG
CTACAGGAAGGTCAGACCCTGGAGTTCCTGGTGGCCTCTGTGCCGAAGGCTATGGACTATGACCTGCTGCTGCGC
TTAGAGCCCCAGGTCCCTGAGCAATGGGCAGAGTTGGAACTGATTGTGCAGCGTCCAGGGCCTGTGCCTGCCCAC
AGCCTGTGTGGGCATTTGGTGCCCAAGGATGATCGCATCCAAGGGACTCTGCAACCACATGCCAGGTACTTGATA
TTTCCTAATCCTGTCTGCCTTGAGCCTGGTATCTCCTACAAGCTGCATCTGAAGCTGGTACGGACAGGGGGAAGT
GCCCAGCCTGAGACTCCCTACTCTGGACCTGGCCTGCTCATTGACTCGCTGGTGCTGCTGCCCCGTGTCCTGGTG
CTAGAGATGTTTAGTGGGGGTGATGCTGCTGCCCTGGAGCGCCAGGCCACCTTTGAACGCTACCAATGCCATGAG
GAGGGTCTGGTGCCCAGCAAGACTTCTCCCTCTGAGGCCTGCGCACCCCTCCTCATCAGCCTGTCCACCCTCATC
TACAATGGTGCCCTGCCATGTCAGTGCAACCCTCAAGGTTCACTGAGTTCTGAGTGCAACCCTCATGGTGGTCAG
TGCCTGTGCAAGCCTGGAGTGGTTGGGCGCCGCTGTGACCTCTGTGCCCCTGGCTACTATGGCTTTGGCCCCACA
GGCTGTCAAGCCTGCCAGTGCAGCCACGAGGGGGCACTCAGCAGTCTCTGTGAAAAGACCAGTGGGCAATGTCTC
TGTCGAACTGGTGCCTTTGGGCTTCGCTGTGACCGCTGCCAGCGTGGCCAGTGGGGATTCCCTAGCTGCCGGCCA
TGTGTCTGCAATGGGCATGCAGATGAGTGCAACACCCACACAGGCGCTTGCCTGGGCTGCCGTGATCACACAGGG
GGTGAGCACTGTGAAAGGTGCATTGCTGGTTTCCACGGGGACCCACGGCTGCCATATGGGGGCCAGTGCCGGCCC
TGTCCCTGTCCTGAAGGCCCTGGGAGCCAACGGCACTTTGCTACTTCTTGCCACCAGGATGAATATTCCCAGCAG
ATTGTGTGCCACTGCCGGGCAGGCTATACGGGGCTGCGATGTGAAGCTTGTGCCCCTGGGCACTTTGGGGACCCA
TCAAGGCCAGGTGGCCGGTGCCAACTGTGTGAGTGCAGTGGGAACATTGACCCAATGGATCCTGATGCCTGTGAC
CCCCACACGGGGCAATGCCTGCGCTGTTTACACCACACAGAGGGTCCACACTGTGCCCACTGCAAGCCTGGCTTC
CATGGGCAGGCTGCCCGACAGAGCTGTCACCGCTGCACATGCAACCTGCTGGGCACAAATCCGCAGCAGTGCCCA
TCTCCTGACCAGTGCCACTGTGATCCAAGCAGTGGGCAGTGCCCATGCCTCCCCAATGTCCAGGGCCCTAGCTGT
GACCGCTGTGCCCCCAACTTCTGGAACCTCACCAGTGGCCATGGTTGCCAGCCTTGTGCCTGCCACCCAAGCCGG

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FIGURE 4068B

GCCAGAGGCCCCACCTGCAACGAGTTCACAGGGCAGTGCCACTGCCGTGCCGGCTTTGGAGGGCGGACTTGTTCT
GAGTGCCAAGAGCTCCACTGGGGAGACCCTGGGTTGCAGTGCCATGCCTGTGATTGTGACTCTCGTGGAATAGAT
ACACCTCAGTGTCACCGCTTCACAGGTCACTGCAGCTGCCGCCCAGGGGTGTCTGGTGTGCGCTGTGACCAGTGT
GCCCGTGGCTTCTCAGGAATCTTTCCTGCCTGCCATCCCTGCCATGCATGCTTCGGGGATTGGGACCGAGTGGTG
CAGGACTTGGCAGCCCGTACACAGCGCCTAGAGCAGCGGGCGCAGGAGTTGCAACAGACGGGTGTGCTGGGTGCC
TTTGAGAGCAGCTTCTGGCACATGCAGGAGAAGCTGGGCATTGTGCAGGGCATCGTAGGTGCCCGCAACACCTCA
GCCGCCTCCACTGCACAGCTTGTGGAGGCCACAGAGGAGCTGCGGCGTGAAATTGGGGAGGCCACTGAGCACCTG
ACTCAGCTCGAGGCAGACCTGACAGATGTGCAAGATGAGAACTTCAATGCCAACCATGCACTAAGTGGTCTGGAG
CGAGATAGGCTTGCACTTAATCTCACACTGCGGCAGCTCGACCAGCATCTTGACTTGCTCAAACATTCAAACTTC
CTGGGTGCCTATGACAGCATCCGGCATGCCCATAGCCAGTCTGCAGAGGCAGAACGTCGTGCCAATACCTCAGCC
CTGGCAGTACCTAGCCCTGTGAGCAACTCGGCAAGTGCTCGGCATCGGACAGAGGCACTGATGGATGCTCAGAAG
GAGGACTTCAACAGCAAACACATGGCCAACCAGCGGGCACTTGGCAAGCTCTCTGCCCATACCCACACCCTGAGC
CTGACAGACATAAATGAGCTGGTGTGTGGGGCACCAGGGGATGCACCCTGTGCTACAAGCCCTTGTGGGGGTGCC
GGCTGTCGAGATGAGGATGGGCAGCCGCGCTGTGGGGGCCTCAGCTGCAATGGGGCAGCGGCTACAGCAGACCTA
GCACTGGGCCGGGCCCGGCACACACAGGCAGAGCTGCAGCGGGCACTGGCAGAAGGTGGTAGCATCCTCAGCAGA
GTGGCTGAGACTCGTCGGCAGGCAAGCGAGGCACAGCAGCGGGCCCAGGCAGCCCTGGACAAGGCTAATGCTTCC
AGGGGACAGGTGGAACAGGCCAACCAGGAACTTCAAGAACTTATCCAGAGTGTGAAGGACTTCCTCAACCAGGAG
GGGGCTGATCCTGATAGCATTGAAATGGTGGCCACACGGGTGCTAGAGCTCTCCATCCCAGCTTCAGCTGAGCAG
ATCCAGCACCTGGCGGGTGCGATTGCAGAGCGAGTCCGGAGCCTGGCAGATGTGGATGCGATCCTGGCACGTACT
GTAGGAGATGTGCGTCGTGCCGAGCAGCTACTGCAGGATGCACGGCGGGCAAGGAGCTGGGCTGAGGATGAGAAA
CAGAAGGCAGAGACAGTACAGGCAGCACTGGAGGAGGCCCAGCGGGCACAGGGTATTGCCCAGGGTGCCATCCGG
GGGGCAGTGGCTGACACACGGGACACAGAGCAGACCCTGTACCAGGTACAGGAGAGGATGGCAGGTGCAGAGCGG
GCACTGAGCTCTGCAGGTGAAAGGGCTCGGCAGTTGGATGCTCTCCTGGAGGCTCTGAAATTGAAACGGGCAGGA
AATAGTCTGGCAGCCTCTACAGCAGAAGAAACGGCAGGCAGTGCCCAGGGTCGTGCCCAGGAGGCTGAGCAGCTG
CTACGCGGTCCTCTGGGTGATCAGTACCAGACGGTGAAGGCCCTAGCTGAGCGCAAGGCCCAAGGTGTGCTGGCT
GCACAGGCAAGGGCAGAACAACTGCGGGATGAGGCTCGGGACCTGTTGCAAGCCGCTCAGGACAAGCTGCAGCGG
CTACAGGAATTGGAAGGCACCTATGAGGAAAATGAGCGGGCACTGGAGAGTAAGGCAGCCCAGTTGGACGGGTTG
GAGGCCAGGATGCGCAGCGTGCTTCAAGCCATCAACTTGCAGGTGCAGATCTACAACACCTGCCAG**TGA**CCCCTG
CCCAAGGCCTACCCCAGTTCCTAGCACTGCCCCACATGCATGTCTGCCTATGCACTGAAGAGCTCTTGGCCCGGC
AGGGCCCCCAATAAACCAGTGTGAACCCCC

FIGURE 4069A

AGCTCACAGGAGGCAAAGAGTCCGAAGGTGGAGCTGCACAGCCACTCAGAGGTCCCTTTCCAGATGCTAGATGGC
AACAGTGGCTTGAGTTCTGAGAAGATCAGCCACAACCCCTGGAGCCTGCGTTGTCACAAGCAGCAGCTGAGCCGC
ATGCGCTCCGAGTCCAAGGACCGAAAGCTCTACAAGTTCCTCCTGCTTGAGAACGTGGTGCACCACTTCAAGTAC
CCCTGCGTGTTGGACCTGAAGATGGGCACGCGGCAGCATGGCGATGACGCGTCAGCTGAGAAGGCAGCCCGGCAG
ATGCGGAAATGCGAGCAGAGCACATCAGCCACGCTGGGCGTCAGGGTCTGCGGCATGCAGGTGTACCAGCTGGAC
ACAGGGCATTACCTCTGCAGGAACAAGTACTATGGCCGTGGGCTCTCCATTGAAGGCTTCCGCAATGCCCTCTAT
CAATATCTGCACAATGGCCTGGACCTGCGACGTGACCTGTTTGAGCCTATCCTGAGCAAACTGCGGGGCCTGAAA
GCTGTGCTGGAGCGGCAGGCCTCTTACCGCTTCTACTCCAGTTCCCTGCTTGTCATCTATGATGGCAAGGAGTGC
CGGGCTGAGTCCTGCCTGGACCGCCGGTCTGAGATGCGTCTCAAGCACCTGGACATGGTGCTCCCTGAGGTGGCG
TCATCCTGTGGCCCCAGCACCAGCCCCAGCAACACCAGCCCCGAGGCGGGTCCCTCCTCTCAGCCCAAGGTGGAT
GTCCGCATGATTGACTTTGCACACAGCACATTCAAGGGCTTCCGGGATGACCCCACCGTGCATGATGGGCCAGAC
AGAGGCTACGTGTTTGGCCTGGAGAACCTCATCAGCATCATGGAACAGATGCGGGACGAGAACCAGTAGGCCCTG
TTCTGGGCCCCCAGAACCCCTTCCTCTCCACTGCAGGCAGGGACCATTGTTCTGAACTTGCCGTGAGGACACACA
GACTTGCTTTTAAAGGGTTATATTTCTCTTTGGTGTAAACTAAAAGAAATGTTTTTAGCTGTAGCCTGGAATCCA
TATATATAAAGTGAAGGAGGGCAGACCACACGCCCTCTCAGCCAGGCTCCTCAGCTTTGTGGCTCTGACTGGTGT
GTCCAGGCTGCCTTAGGAAGGAAGAGGTGCCCCTGGTGGGCTTGGCAGCAGGGACAGGGTGCCCTTGGACATTGG
TTTCTCTTGTCTAGATCTTTGAGATCTGTGGCTGCAGGGCCCTGCTGATTGTAAGGTAAAGCCCTGGGCTGGTGC
AGGGCCCCTCCACGCCCACTCTTCCCTTGTTCCCCAGAAGTAGAGGGCTCTGGGTGCCCATTTCTTGGGGGCTTT
CCAGTCTTATGCTGTGGGTGTCAGCTAGCTCTTTAATAGGTGCCCTCAGGGCACCACAGGGCTGACTGCACAAAG
CTGGACCCATCCTTCGGTCTGACCTTAGCATGGGGCTAGATTAATGAAGCTGGGCTGAGGCCAACTTATGGCAGA
GGGCGGCGCCTGGGTTCCCCAGGCACCTGTTGGCACGTGACAGGTTGGCACCTGTCCTATTCCTGAAACAGCCTC
TCTCACCAAGTTCCCTTGCCTAAGAAGGCCACTCCCTCCCACCCCACTGAAGTGGGGGATAGTCGGTGTCCTAGC
AGGCCTCAGGGCCTCTGGTGGCTCTGGCCCAGACAGTATTTGCAGTTCTTGTGCTATGGGTGGGAGTCTTCTTCC
TCAAGTTTCGGCAGCTGTGCTGCTGCTGGATGGGCTGCTCCTCCCAGGGCTCAAGGGCTGTGGTCCGCTCAGGGT
CTCATTTCCCCAGGCCAAGTTCAAGGCAGCAGCCCTTTGTGAGGCGCTCTTGGCCCTGGGCCTGGAGGGAGAACT
TTAAGCTTTTTTGCTCACAGGGACGTGGTATGGGCCCTGGGTGCAGGTGCCCACATTCTGCTAATGAGAGCTTTG
TCTGATCAGTCCTGGGTCCATCAGTTTGTCCATGTGTCCGGCTGCCAGCCCGTCCCTTGGGATCCTTCCCCTGGG
GTGTAGCCTTGTTCATTAGTATATACTCATTCCTTCATGCTTTCCTCAGCAGAACACTTCCACTTCTGAGGTGAG
CTTTTGCCCCATGCCCTTCCTCCACAGGTGTTGCCTTTTTATAAAGACCTGATAGCAGAATAAATTGGTGTTTCC
CTGTTGACCCAGCACCATTTCTGTGGGCCTAGAATATGGCCCTCAACCCTTAGAGTGGGGCAGTGAGGGCTTGAG
GAGTGACCCTTCCTTTCTCATGGTTTTAGTCATTTTGGCTGCCAGCCCTTAATGGCACAGATCTGCTGCTTCTAA
CAGATGGCCAGGAGGTGACACCGATTTCAGCCATTGCCAAGGTTAGCACCCTCTCCTTTGAGCCTAGGGCCACAC
TGTTCATTGTCACTTTAGGCAAGTGCCTGTTTGGCTTTAAAGGTAAGCCTGCCAGCTGTGAGAAGCCTTGGTAAC
TGATGGACTCATTTCCTGGTCCTTAAAGATGCAGCCTCTTAAGGGCTCCTTGATGGATGCCATCTCTCCTAGCCC
CCAGCCCTGGTGCCACTGGTGGGCAGGTTCCCATTCTTTGGGGCTGGGAGGGACAGCTTGCCTGTTTCTGGTCAC
AAATTACAGTCTTCTCTCCTGTACCATTCTGTGGCTTCAGCCATGGGGGCAGTAGCCCTTCATTAGTGTAGATAG
TCATTCCCTGGTAGGGTGGAGGGTAAGACATAGGGTCTGGAACTGTTTGGGACCTTTTGGGGATGTCCTGTGCCT
CCCAGATTCCTCGATTCTGGGAGGAGAGGCTGCCGCATTCTGCTGCTCCTCACAGCGAGCAAAGCTGCACCCACT
TACATTCAGTATTTTCCTGGCACTACAAAGAGTGGGAAGGCCTGGGATTTGCTGCTGCTCCCTTAGAGCAGGGCC
CCTCTTTTCAGCACTTTGGACACCTGGAGACCCAGCCCTGTTATTTAATGGTAGTGGGCAAGTGTGTGTGCATAC
TGTCTGCCACTGCTTTCTCCCTGCCCCATGCCAGAGAGCCCTGTCCCTGCCAGGCCCAGCCTTCTTAGCCCCAAC
TTGGGAACAAAGTGCAACATGGGATCATGGGTTGGGGTGCTCAGGTGAGCCCTCTCTATAGTGCTTCCCTGGGCC
AAGCTGACACCAGCCCCTGAGGGTGGGGTGGGACGGGTGGTGCTTAAAAGAGGAAGGGGACCAGTGTAGCAACTT
GCCAGGGACCCCACCCCTCCCTCTCTGGGCCTGTGCAGTGAGCATGGGGATTCCCATCAAGGGGCCTGGCACCTG
TGCTAGTTACGTAGCCGCTGCTCACGCGCTCACTCCTGACCACATGCACGTTCCCTAGATGCAGACTGCTTTGAA
CTTTAAAGCTGTACAATTTGGTTATGTTTGTGCTGACTTAAAATATATTTTAATGAGGAAAAAATAATGGAGAAC
CCTGGGAAGGACCTGGTTCTTTTGCTTCTCGGGGAACTGTAAGCCCTCGCGTTCTGGGAATCGCTCTCTGCTGCT
CTTTCCTGGAAGCTAAGCCTGTCTCCACCGCCCGAGGCCTGCGCCGGTGGCTCCCGCCGCAGTTGCGTTTGCTTT

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FIGURE 4069B

GGACCTTGCGTGCGGGGGAGGGGGTGCTCGGTCCGAGCCCGCTCCTTTCTGTACACCTAGCGCTGCCCGCCCCGC
TTGTGTCTGAGGTCGTGTATGTCAAAAATAAAGCCGCTAGAAACGG

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FIGURE 4070

GGCGGCAGAGAGGAGACTATGGAACGTCAGGTGCTGCTGAGCGAGCCCGAGGAGGCGGCGGCTCTGTATCGGGGC
CTTAGCCGCCAGCCCGCGCTGAGCGCCGCCTGCCTGGGCCCGGAGGTCACCACGCAGTACGGCGGCCAATACCGG
ACGGTGCACACTGAGTGGACCCAGAGGGACCTGGAACGCATGGAGAACATTCGATTCTGCCGCCAATACCTGGTG
TTCCATGACGGGGACTCAGTGGTGTTTGCAGGACCTGCAGGCAACAGTGTGGAGACCCGGGGGGAACTGCTGAGC
AGAGAGTCTCCTTCAGGCACCATGAAAGCTGTGCTGCGCAAGGCTGGAGGCACGGGCCCTGGGGAAGAGAAGCAG
TTCCTGGAGGTCTGGGAGAAGAACCGGAAGCTCAAGAGCTTCAACCTGTCAGCGCTGGAGAAACATGGGCCTGTT
TATGAGGATGACTGCTTTGGCTGCCTGTCCTGGTCGCACTCGGAGACACACTTGTTGTATGTGGCAGAGAAGAAG
CGCCCCAAGGCCGAGTCCTTCTTTCAGACCAAAGCCTTGGACGTCAGTGCCAGCGATGATGAGATAGCCAGGCTG
AAGAAGCCAGACCAAGCCATCAAGGGGGATCAGTTTGTGTTTTATGAAGACTGGGGAGAAAACATGGTTTCCAAA
AGCATCCCTGTGCTCTGCGTGCTGGATGTCGAGAGTGGCAACATCTCTGTGCTTGAGGGGGTCCCTGAGAATGTG
TCCCCTGGACAGGCATTTTGGGCCCCTGGAGATGCTGGTGTGGTGTTTGTGGGCTGGTGGCATGAGCCCTTCCGG
TTGGGCATCCGCTTTTGCACCAATCGCAGGTCAGCCCTGTATTATGTGGACCTCATCGGGGGGGAAGTGTGAGCTC
CTCTCGGATGACTCCCTGGCTGTCTCTTCTCCCCGGCTGAGCCCAGACCAATGTCGCATTGTCTACCTGCAGTAC
CCATCTCTGATCCCCCATCACCAATGCAGCCAGCTGTGCCTGTATGACTGGTATACCAAGGTTACCTCAGTGGTG
GTAGATGTTGTGCCTCGGCAGCTGGGAGAGAACTTCTCTGGGATCTACTGCAGCCTTCTGCCTTTGGGATGCTGG
TCAGCTGACAGCCAGAGAGTGGTCTTTGACTCGGCTCAGCGCAGCCGGCAGGACCTGTTTGCTGTGGACACCCAA
GTGGGCACTGTGACCTCCCTCACAGCTGGAGGGTCAGGTGGGAGCTGGAAGTTGCTCACAATTGACCAGGACCTC
ATGGTGGCACAGTTTTCCACACCCAGCCTACCTCCAACCCTGAAAGTTGGGTTCCTGCCTTCTGCAGGGAAGGAG
CAGTCAGTGTTGTGGGTGTCCCTGGAGGAGGCCGAGCCCATTCCCGACATCCACTGGGGCATCCGGGTGCTACAG
CCACCCCCAGAGCAAGAGAATGTGCAGTATGCTGGCCTTGACTTTGAAGCAATCCTGCTGCAGCCTGGCAGCCCT
CCAGATAAGACCCAAGTGCCCATGGTGGTCATGCCCCACGGGGGGCCCCATTCATCCTTTGTCACTGCCTGGATG
CTGTTCCCAGCCATGCTTTGCAAGATGGGCTTTGCGGTACTACTAGTGAACTATCGTGGCTCCACGGGCTTTGGC
CAGGACAGCATCCTCTCCCTCCCAGGCAATGTGGGCCACCAGGATGTGAAGGATGTCCAGTTTGCAGTGGAACAG
GTGCTCCAGGAGGAACACTTTGATGCAAGCCATGTGGCCCTTATGGGTGGTTCCCATGGTGGCTTCATTTCCTGC
CACTTGATTGGTCAGTACCCAGAGACCTACAGGGCCTGCGTGGCCCGGAACCCCGTGATCAACATCGCCTCCATG
TTGGGCTCCACTGACATCCCTGACTGGTGCGTGGTGGAGGCTGGCTTTCCTTTCAGCAGTGACTGCCTGCCAGAC
CTCAGCGTGTGGGCTGAGATGCTGGACAAATCGCCCATCAGATACATCCCTCAGGTGAAGACACCACTGTTACTG
ATGTTGGGCCAGGAGGACCGGCGTGTGCCCTTCAAGCAGGGCATGGAGTATTACCGTGCCCTCAAGACCCGGAAT
GTGCCTGTTCGGCTCCTGCTCTATCCCAAAAGCACCCACGCATTATCAGAGGTGGAGGTGGAGTCAGACAGCTTC
ATGAATGCTGTGCTCTGGCTACGCACACACTTGGGCAGCTGAAGCCCTGCCATTCTGCATGAGCTGATCAGCCTG
TGCCACACTTCGCTCTTGAGGAGCTCAACGGTCTGGCAGGGCAGCAGGAGGCTTTCTGGGCTCTGGACTCCACGG
ATGCGTGGGCAGAGGAATGTGGGCTATGTAGTCATAATAAATTAGGAC

FIGURE 4071A

GAGCCGAGCTGGGAGATGGCGGCGGCAGCGGCGGCGCCGAGAGTGTGAGCACCGCCCGGGAGCCGCCGGCCCGGG
CGCAGCGCGACCCCGACCCCGCCCGCCCGCCTGCCCGCCATGGGCAACGAGGTCAGCCTGGAGGGCGGCGCTGGC
GACGGGCCGCTGCCGCCCGGCGGCGCCGGCCCCGGCCCGGGCCCCGGCCCCGGCCCCGGCGCAGGAAAGCCGCCT
TCAGCACCGGCCGGTGGCGGACAGCTCCCCGCGGCGGGAGCAGCGCGGTCGACCGCGGTACCACCGGTCCCTGGC
CCCGGCCCCGGCCCCGGTCCCGGCCCTGGCCCGGGCAGCACTTCCCGGAGACTGGACCCCAAGGAACCCCTGGGT
AACCAGAGAGCAGCTTCCCCAACTCCGAAGCAGGCTTCTGCTACCACTCCTGGCCATGAGAGCCCCCGAGAGACA
AGGGCACAGGGACCAGCAGGCCAGGAGGCTGATGGTCCCCGCAGGACGCTGCAGGTAGACAGCAGGACACAGAGA
TCAGGGCGGTCCCCCTCAGTGTCACCGGACAGAGGCAGCACCCCCACATCACCCTACTCCGTCCCTCAGATCGCC
CCCCTTCCCAGCAGCACGCTGTGTCCCATATGCAAGACTTCGGACCTCACGTCGACCCCCAGCCAGCCAAACTTC
AACACCTGCACCCAGTGTCACAACAAGGTCTGCAACCAGTGTGGGTTCAACCCCAACCCTCATCTCACCCAGGTG
AAGGAGTGGCTCTGTCTGAACTGTCAGATGCAGAGGGCTCTGGGAATGGACATGACCACTGCACCTCGCTCCAAG
AGCCAGCAGCAGCTGCACTCCCCAGCCCTGTCTCCTGCCCACTCCCCGGCCAAACAGCCCCTGGGGAAGCCAGAC
CAAGAGAGATCTCGGGGCCCAGGAGGACCACAGCCTGGGTCCCGCCAGGCTGAGACAGCCAGGGCCACCTCAGTG
CCGGGGCCTGCCCAAGCAGCTGCCCCTCCAGAGGTGGGGAGGGTGTCTCCTCAGCCCCCTCAACCCACCAAGCCT
TCCACAGCTGAGCCCAGGCCACCTGCAGGAGAGGCCCCGGCCAAAAGTGCCACCGCAGTGCCCGCTGGGCTTGGT
GCCACTGAGCAGACCCAGGAGGGCCTCACTGGTAAGCTCTTCGGCCTTGGCGCGTCACTGCTAACCCAGGCGAGC
ACCCTCATGTCTGTGCAGCCCGAGGCTGACACCCAGGGCCAGCCTGCCCCCAGCAAGGGGACACCTAAGATCGTC
TTCAATGATGCCAGCAAGGAGGCTGGCCCAAAACCCTTGGGCTCAGGGCCCGGGCCTGGGCCAGCACCTGGAGCC
AAAACTGAGCCTGGGGCTAGAATGGGTCCTGGATCTGGACCTGGAGCCCTGCCGAAAACTGGGGGAACAACCAGT
CCAAAGCATGGCAGAGCAGAACATCAGGCAGCATCGAAGGCTGCTGCCAAGCCAAAGACCATGCCGAAGGAAAGG
GCCATCTGCCCACTGTGCCAAGCCGAGCTCAACGTGGGCAGCAAGAGCCCAGCCAACTATAACACATGCACCACC
TGCAGGCTCCAGGTGTGCAACCTGTGTGGCTTCAACCCAACACCCCACCTGGTGGAGAAAACAGAGTGGCTCTGT
CTGAACTGCCAAACCAAGCGGCTACTGGAGGGCAGCCTAGGAGAGCCGACCCCCCTGCCGCCGCCCACCTCACAG
CAGCCCCCTGTAGGGGCCCCTCACCGTGCATCTGGAACATCCCCTCTGAAGCAGAAAGGGCCACAGGGGCTGGGC
CAGCCTTCAGGCCCCCTGCCTGCCAAGGCCAGCCCTCTATCCACCAAGGCCAGCCCTCTGCCCAGCAAGGCCAGC
CCCCAGGCCAAGCCCCTCAGGGCTTCTGAACCCAGCAAGACCCCAAGCAGTGTCCAGGAAAAGAAGACCCGAGTC
CCCACTAAAGCTGAGCCCATGCCGAAGCCACCTCCAGAGACTACCCCAACCCCTGCGACTCCTAAAGTAAAGAGT
GGGGTGAGGAGGGCTGAACCTGCCACCCCTGTCGTCAAGGCTGTTCCAGAAGCCCCCAAGGGTGGGGAGGCGGAG
GACCTGGTGGGCAAGCCTTACTCTCAGGATGCGTCTCGGAGCCCACAGAGCCTCAGTGACACAGGCTATTCCTCT
GACGGCATCTCTAGCTCCCAGAGTGAGATCACAGGAGTCGTGCAGCAGGAGGTGGAACAGCTGGACAGTGCAGGG
GTGACAGGGCCACATCCACCCAGCCCCTCCGAGATCCACAAGGTGGGGAGCAGCATGCGGCCTTTGCTGCAGGCC
CAGGGCCTGGCCCCAAGTGAGCGGAGCAAGCCACTCTCCAGCGGTACTGGCGAGGAGCAGAAGCAGCGGCCCCAC
TCCTTGTCCATCACGCCTGAGGCCTTTGACTCTGATGAGGAGCTGGAGGATATCCTGGAGGAAGACGAAGACTCT
GCTGAGTGGAGGCGCCGGAGAGAGCAGCAGGACACTGCCGAGTCCTCAGACGACTTTGGCAGCCAATTGAGGCAC
GACTATGTGGAGGACAGCAGTGAGGGTGGCCTGTCCCCTCTTCCACCCCAGCCCCCAGCCCGGGCAGCAGAACTG
ACTGATGAGGATTTCATGCGACGGCAGATTCTCGAGATGAGCGCCGAGGAAGACAACCTGGAGGAGGATGACACT
GCCACCTCCGGGCGTGGCCTGGCCAAACATGGCACCCAGAAAGGTGGCCCCAGACCCAGGCCTGAGCCTAGCCAA
GAACCAGCAGCACTGCCCAAGAGGCGCCTGCCCCACAATGCCACCACGGGCTATGAGGAGCTGCTCCCTGAGGGA
GGCTCAGCAGAGGCTACCGATGGCAGTGGGACCCTGCAGGGTGGGCTCCGTCGCTTCAAGACCATTGAGCTCAAC
AGCACGGGAAGTTATGGTCATGAGTTGGACCTGGGCCAAGGCCCAGACCCCAGTCTGGACCGGGAGCCTGAGCTG
GAGATGGAGAGCCTAACGGGCTCCCCTGAGGACCGCTCCCGTGGTGAGCACTCCTCTACATTGCCTGCCTCCACA
CCCAGCTACACCTCGGGCACCTCTCCCACCTCTCTGTCCTCCCTAGAGGAGGACAGTGACAGCAGCCCCAGCCGC
AGGCAGCGTCTAGAAGAAGCAAAGCAGCAGCGCAAGGCCCGGCACCGCTCCCACGGGCCCCTGCTACCCACCATC
GAGGACTCCTCAGAGGAGGAGGAGCTGCGGGAGGAAGAGGAGCTGCTTCGTGAGCAAGAGAAGATGCGGGAGGTG
GAGCAGCAGCGCATCCGCAGCACGGCCCGCAAGACCCGGCGGGACAAGGAAGAACTGCGGGCCCAGCGGAGGCGA
GAGCGCTCCAAGACACCACCCAGTAACTTGTCACCCATCGAGGATGCCTCCCCGACGGAGGAGCTGAGGCAGGCG
GCCGAGATGGAGGAGCTACACCGCTCCTCCTGCTCTGAGTACTCACCCTCACCCTCCCTTGACTCTGAGGCTGAG
GCCTTGGATGGTGGCCCTAGCCGGCTTTACAAGTCAGGCAGTGAGTACAACCTGCCCACCTTCATGTCCCTCTAC

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FIGURE 4071B

TCACCAACCGAGACACCCTCCGGCAGCTCCACCACTCCCAGTTCCGGACGGCCGCTCAAGAGCGCTGAGGAGGCT
TATGAGGAGATGATGCGCAAAGCTGAGCTGCTCCAGAGGCAGCAAGGCCAGGCAGCAGGGGCCCGGGGACCCCAT
GGCGGCCCCTCTCAGCCCACAGGCCCCCGGGGCCTGGGCTCCTTCGAATATCAAGACACTACAGACCGTGAGTAT
GGCCAGGCTGCTCAGCCTGCCGCAGAGGGCACGCCAGCCAGCCTGGGAGCAGCCGTGTACGAAGAAATCCTTCAG
ACATCACAGAGCATAGTCCGCATGCGGCAGGCCTCCTCACGAGACCTGGCTTTTGCTGAGGACAAAAAGAAGGAG
AAGCAGTTTCTAAATGCTGAGAGTGCATACATGGACCCAATGAAGCAAAATGGTGGCCCCCTTACCCCTGGTACC
AGTCCCACCCAGCTCGCTGCCCCTGTGTCCTTCTCTACCCCCACCTCCTCAGACAGCAGCGGGGGCCGAGTTATT
CCCGATGTCCGTGTCACTCAGCATTTTGCAAAGGAGACTCAGGACCCCCTCAAGCTGCACAGCTCTCCTGCCTCC
CCCAGCTCAGCCTCCAAGGAGATAGGCATGCCCTTTTCCCAGGGCCCTGGGACCCCAGCCACCACAGCTGTGGCT
CCTTGTCCAGCTGGGCTGCCACGAGGATATATGACTCCAGCCTCCCCAGCAGGCTCCGAGCGTAGTCCTTCACCA
TCTTCCACAGCCCACAGCTATGGACACAGCCCAACCACTGCAAACTATGGGTCCCAAACTGAGGATCTACCCCAG
GCCCCCAGTGGCCTTGCTGCAGCTGGACGAGCTGCTAGAGAGAAGCCCTTGAGTGCGAGTGACGGTGAGGGTGGC
ACTCCTCAGCCTTCCCGGGCATATTCCTACTTTGCAAGCTCCAGCCCACCTCTCTCCCCGTCTTCCCCCTCAGAG
AGTCCCACATTCTCCCCTGGCAAGATGGGCCCAAGGGCCACAGCAGAGTTCTCTACACAGACGCCAAGTCCAGCC
CCTGCCTCAGACATGCCACGGAGCCCTGGTGCCCCCACTCCATCACCTATGGTAGCCCAGGGTACACAAACACCA
CATCGACCCAGCACGCCTCGCCTGGTGTGGCAGGAGTCCTCTCAAGAGGCTCCCTTTATGGTCATCACGCTGGCA
TCTGACGCCTCCAGCCAGACCAGGATGGTACATGCCAGTGCCTCCACCTCCCCGCTCTGCTCACCTACTGAAACC
CAGCCCACCACCCATGGCTACAGCCAGACAACACCTCCGAGTGTGTCTCAGCTGCCCCCAGAGCCACCTGGGCCA
CCTGGCTTTCCACGGGTGCCCAGTGCTGGTGCAGATGGGCCCCTGGCACTATATGGCTGGGGTGCCCTCCCTGCT
GAGAACATCTCCCTGTGCCGGATCTCCTCTGTCCCTGGGACGTCTAGGGTTGAGCCAGGCCCCAGGACCCCTGGC
ACTGCAGTGGTAGACCTCCGTACAGCTGTCAAGCCCACTCCCATCATCCTCACTGACCAGGGCATGGACCTCACC
TCTCTTGCTGTGGAAGCGAGGAAGTATGGTCTTGCCCTGGATCCAATCCCAGGACGGCAGTCGACCGCCGTGCAG
CCCTTGGTTATCAACCTCAATGCCCAGGAGCATACCTTCCTTGCTACTGCCACCACCGTGAGCATCACCATGGCC
TCGTCTGTGTTCATGGCTCAACAAAAGCAGCCTGTGGTCTATGGAGACCCCTACCAGAGCCGCCTTGACTTTGGC
CAGGGTGGGGGTAGCCCTGTGTGCCTGGCCCAGGTCAAACAAGTAGAGCAGGCTGTCCAGACAGCCCCATACCGA
AGTGGGCCCCGGGGAAGACCCAGGGAGGCCAAGTTTGCCAGATATAACCTACCCAACCAAGTAGCTCCTCTGGCC
AGAAGAGACGTTTTGATCACTCAGATGGGCACCGCCCAGAGCATTGGCCTCAAGCCAGGCCCAGTGCCAGAGCCA
GGTGCCGAGCCCCACCGGGCCACCCCTGCAGAGCTGCGGTCACATGCTCTGCCAGGTGCCAGGAAGCCACACACA
GTGGTGGTGCAGATGGGAGAGGGCACAGCAGGCACTGTGACCACACTGCTCCCAGAGGAGCCTGCGGGTGCCCTG
GACCTTACCGGGATGAGGCCTGAGAGCCAGCTGGCATGCTGTGACATGGTCTACAAGCTCCCCTTTGGCAGCAGC
TGCACTGGCACCTTCCACCCGGCCCCCAGTGTGCCTGAGAAGAGCATGGCAGATGCTGCCCCACCTGGCCAAAGC
AGCAGCCCCTTCTATGGTCCCCGGGACCCTGAGCCTCCTGAGCCCCCAACCTACCGGGCACAGGGGGTGGTGGGG
CCTGGGCCCCATGAGGAGCAGAGGCCCTACCCACAAGGCCTGCCTGGTAGGCTGTACTCCTCCATGTCTGACACC
AATTTGGCTGAGGCTGGCCTCAACTACCATGCCCAGAGGATCGGGCAGCTCTTCCAGGGTCCTGGACGAGACTCG
GCTATGGACCTCAGCTCACTGAAGCACTCCTACAGCCTGGGCTTTGCGGATGGACGCTACCTAGGGCAGGGCTTG
CAGTATGGCTCAGTCACGGACCTGCGTCATCCTACAGACCTTTTGGCTCACCCGCTTCCCATGCGGCGCTATAGC
TCAGTGTCGAACATCTACTCAGACCACAGGTACGGCCCACGGGGAGATGCAGTTGGCTTCCAGGAGGCCAGCCTG
GCCCAGTACAGTGCCACCACAGCCCGTGAAATCAGTCGCATGTGCGCTGCCCTCAACTCCATGGACCAGTATGGT
GGGCGGCATGGCAGTGGTGGTGGTGGCCCTGACCTTGTGCAGTACCAGCCCCAGCACGGGCCCGGGCTCAGTGCT
CCACAGAGTCTGGTTCCCCTCAGACCTGGACTCCTTGGTAACCCCACCTTTCCAGAGGGCCACCCAAGTCCTGGG
AACTTGGCCCAGTATGGGCCTGCAGCAGGCCAAGGAACAGCAGTCAGACAGCTGCTGCCGTCCACAGCCACTGTA
CGTGCAGCTGATGGCATGATCTACTCGACTATCAATACCCCAATTGCTGCAACACTGCCCATCACCACCCAGCCT
GCCTCAGTCCTGCGGCCCATGGTGCGTGGTGGCATGTACAGGCCTTACGCATCTGGTGGAATCACAGCCGTGCCA
CTCACCAGTCTGACACGTGTGCCCATGATTGCCCCCCGGGTACCTCTTGGACCCACAGGGCTGTACCGCTATCCT
GCACCAAGTAGATTTCCCATTGCTTCCAGTGTTCCACCTGCAGAAGGGCCTGTCTATCTGGGGAAACCTGCTGCT
GCCAAGGCCCCTGGGGCTGGGGGCCCTTCAAGGCCAGAGATGCCAGTAGGGGCTGCACGGGAAGAGCCTCTTCCC
ACAACCACCCCTGCTGCCATCAAGGAGGCTGCAGGAGCCCCAGCTCCTGCCCCACTAGCTGGCCAGAAGCCACCA
GCAGATGCTGCTCCTGGGGGTGGCAGTGGGGCCCTCAGCCGGCCAGGGTTCGAGAAAGAGGAAGCATCACAGGAG

FIGURE 4071C

GAGAGGCAGCGGAAGCAACAGGAGCAGCTGCTCCAGCTAGAGCGGGAGCGGGTGGAGTTGGAGAAGCTGCGACAA
CTTCGGCTGCAAGAGGAGCTAGAGCGGGAACGTGTGGAGCTGCAGAGGCACCGTGAGGAGGAGCAGCTGCTGGTG
CAGCGGGAGTTGCAGGAGCTGCAGACCATCAAGCACCATGTGCTGCAGCAGCAGCAAGAGGAACGCCAGGCTCAA
TTTGCACTGCAGCGGGAACAGCTAGCGCAGCAGCGTCTGCAGCTGGAGCAGATCCAGCAGCTGCAGCAGCAGCTG
CAGCAGCAGCTAGAGGAGCAGAAGCAGCGGCAGAAGGCTCCCTTTCCTGCAGCCTGTGAGGCACCTGGCCGAGGG
CCTCCCCTAGCGGCTGCTGAGTTGGCCCAGAATGGCCAGTATTGGCCCCCCCTTACACATGCAGCCTTCATTGCC
ATGGCAGGGCCTGAAGGACTTGGGCAGCCTCGTGAGCCTGTGCTGCACCGGGGTCTCCCCAGCTCTGCCTCAGAC
ATGTCACTGCAAACGGAGGAGCAGTGGGAGGCCAGCCGTAGTGGCATCAAGAAGCGGCACTCCATGCCACGCCTG
CGGGATGCCTGTGAGCTAGAGTCTGGGACTGAGCCCTGTGTGGTCAGGAGGATTGCCGACAGCAGCGTGCAGACA
GACGATGAGGATGGGGAGAGCCGCTACCTCTTGAGTCGGCGACGCCGGGCACGGCGGAGTGCTGACTGCAGTGTG
CAGACGGACGACGAAGACAGTGCTGAGTGGGAGCAGCCAGTGCGCCGCCGCAGGTCTCGTCTTCCCCGCCACTCA
GACTCAGGCTCTGACAGCAAGCACGATGCCACTGCCTCATCATCCAGTGCTGCTGCCACTGTGAGGGCCATGAGC
AGCGTGGGCATCCAGACCATCAGTGACTGCTCCGTGCAGACGGAGCCTGACCAGCTGCCCAGGGTCTCTCCAGCC
ATCCACATCACAGCTGCCACCGATCCCAAGGTGGAGATCGTCAGGTACATATCGGCGCCAGAGAAGACTGGGCGT
GGGGAGAGCCTGGCCTGCCAGACGGAGCCAGATGGGCAGGCCCAGGGTGTAGCCGGGCCGCAGCTTGTAGGGCCA
ACTGCCATCAGCCCCTACCTGCCTGGCATCCAGATCGTCACCCCAGGGCCTCTGGGCAGATTTGAAAAAAAGAAG
CCAGATCCCCTGGAGATTGGGTACCAGGCCCACCTGCCTCCGGAGTCTCTCTCACAGCTTGTGAGCCGCCAGCCT
CCCAAGTCCCCTCAGGTCCTCTACTCACCAGTCTCACCCCTGTCCCCTCACCGGCTCCTGGACACCTCCTTTGCT
TCCAGTGAGAGGCTGAACAAAGCTCACGTGAGTCCCCAGAAGCACTTCACGGCTGACAGCGCTCTCCGCCAGCAG
ACGCTGCCTCGCCCCATGAAGACCCTGCAGCGGTCCCTGTCTGACCCTAAGCCCCTCAGCCCCACCGCCGAAGAG
TCTGCCAAAGAGAGATTCTCCCTCTACCAGCACCAGGGGGGACTGGGTAGCCAGGTGTCGGCGTTGCCACCCAAC
AGCCTGGTCCGCAAGGTGAAGCGGACACTGCCCAGCCCCCCTCCAGAGGAGGCTCACCTTCCCCTGGCTGGCCAG
GCCTCCCCACAGCTGTATGCAGCCAGCCTGCTGCAGCGAGGGCTGACGGGGCCCACCACTGTCCCTGCTACCAAG
GCCAGCCTGCTCCGGGAGCTGGACCGGGACCTGCGGCTGGTGGAGCATGAGTCCACCAAACTGCGCAAGAAGCAG
GCAGAGCTGGATGAGGAGGAGAAGGAGATTGACGCCAAGCTCAAGTACCTGGAGTTGGGTATCACACAACGCAAA
GAGTCTTTGGCCAAAGACCGGGGTGGCCGTGACTACCCACCCTTGCGTGGTCTTGGCGAGCATCGTGACTACCTA
TCGGACAGTGAGCTCAACCAGCTGCGGCTCCAGGGCTGCACCACTCCCGCTGGCCAGTTTGTGGACTTCCCTGCC
ACTGCCGCTGCTCCTGCCACCCCCTCTGGTCCCACTGCCTTCCAGCAGCCCCGCTTCCAGCCTCCAGCCCCACAG
TATTCTGCAGGCAGTGGTGGGCCAACTCAGAACGGATTCCCAGCCCACCAGGCCCCCACCTACCCTGGCCCCAGC
ACGTACCCAGCTCCTGCCTTTCCTCCTGGTGCCAGTTACCCAGCTGAGCCTGGCCTGCCAAACCAGCAGGCTTTC
CGCCCCACAGGCCACTATGCAGGCCAAACACCCATGCCAACCACACAGAGCACCCTTTTTCCAGTCCCCGCTGAT
AGCCGTGCCCCACTGCAGAAGCCACGCCAGACATCGCTAGCCGACTTGGAGCAGAAGGTGCCCACCAACTATGAG
GTGATCGCCAGCCCCGTTGTGCCCATGTCTTCAGCCCCATCTGAAACCAGCTACAGTGGCCCAGCAGTGAGCAGC
GGCTATGAGCAGGGCAAGGTCCCTGAGGTGCCCCGGGCTGGTGACCGTGGCAGTGTGAGCCAGAGCCCAGCCCCC
ACCTACCCCTCTGACTCACACTATACCAGTCTGGAGCAGAACGTTCCTCGAAACTACGTAATGATTGATGACATC
AGTGAACTGACCAAGGACAGCACCTCTACTGCTCCTGATAGCCAACGGCTGGAGCCCCTGGGGCCAGGCAGCAGT
GGGCGTCCAGGGAAGGAGCCTGGAGAACCAGGTGTCCTTGACGGGCCCACACTGCCCTGCTGCTATGCCAGAGGA
GAAGAGGAATCTGAGGAGGACTCATACGATCCCCGCGGGAAGGGTGGCCACCTCCGGAGCATGGAGAGCAATGGT
CGACCAGCCAGTACCCACTACTATGGTGACAGTGACTACAGGCATGGGGCTCGAGTAGAGAAGTATGGTCCAGGG
CCCATGGGGCCCAAGCATCCCTCCAAGAGCCTGGCTCCAGCTGCCATCTCCTCAAAGCGCAGCAAGCACCGGAAG
CAGGGCATGGAGCAAAAGATATCCAAGTTCTCGCCTATTGAAGAGGCCAAAGACGTAGAGTCAGACCTGGCGTCC
TACCCCCCACCTGCAGTCAGCAGCAGCCTGGTCTCTCGGGGCAGGAAGTTCCAGGATGAAATCACCTATGGGCTC
AAGAAGAACGTGTATGAGCAGCAAAAATACTATGGGATGTCCAGCCGGGACGCAGTGGAGGACGACCGCATTTAT
GGCGGGAGCAGCCGGTCCCGGGCACCTTCTGCATACAGTGGGGAGAAGCTGTCCAGCCACGACTTCAGTGGCTGG
GGCAAGGGGTACGAAAGGGAACGGGAGGCTGTGGAGCGACTTCAAAAAGCGGGCCCCAAGCCCTCATCCCTAAGT
ATGGCCCACAGCCGGGTACGACCCCCCATGCGGAGCCAGGCCTCTGAAGAGGAGAGCCCCGTCAGTCCTTTGGGG
AGGCCCCGCCCTGCCGGAGGGCCCCTCCCTCCCGGCGGGGATACCTGCCCACAGTTCTGCTCCAGCCACTCCATG
CCTGATGTCCAGGAACATGTCAAGGACGGACCTCGGGCCCACGCATATAAGCGTGAGGAGGGCTACATCCTGGAT

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FIGURE 4071D

GATTCCCATTGCGTGGTTTCCGACAGCGAAGCGTATCACCTGGGCCAGGAGGAGACGGACTGGTTTGATAAGCCC
CGGGATGCCCGCTCTGACCGGTTCAGGCACCACGGGGGCCATGCAGTTTCCTCCTCCTCCCAGAAGCGAGGCCCT
GCCAGGCACAGCTACCATGACTACGATGAACCCCCTGAGGAGGGCCTGTGGCCTCATGATGAGGGTGGCCCAGGC
CGCCATGCCTCAGCCAAGGAACACCGGCACGGTGACCACGGGCGGCACTCAGGCCGCCACACTGGTGAGGAGCCG
GGACGGCGTGCTGCCAAACCACACGCTCGGGACCTGGGTCGCCATGAGGCCCGGCCCCACTCTCAGCCCAGCTCT
GCTCCAGCTATGCCGAAGAAGGGTCAGCCTGGGTATCCCAGCTCTGCTGAGTACTCACAGCCATCCCGTGCTTCA
TCCGCATACCATCATGCCTCTGACAGCAAGAAGGGCTCCCGGCAAGCCCACTCCGGGCCCGCTGCACTGCAGTCA
AAGGCAGAACCCCAGGCGCAGCCGCAGCTGCAAGGTCGGCAGGCAGCTCCAGGACCACAGCAGTCACAGTCACCA
TCATCCAGGCAAATACCCTCTGGGGCAGCATCACGCCAGCCACAGACACAGCAGCAGCAGCAAGGTCTTGGGCTG
CAGCCCCCACAGCAGGCTCTGACACAGGCTCGGCTGCAGCAACAGAGCCAGCCAACCACCCGGGGCTCAGCCCCT
GCTGCCAGCCAGCCTGCAGGGAAGCCTCAGCCAGGCCCCAGCACAGCCACAGGTCCTCAACCAGCAGGACCGCCA
CGGGCAGAACAGACAAATGGCTCTAAAGGGACAGCCAAAGCACCGCAACAGGGGAGGGCTCCTCAGGCCCAGCCA
GCACCAGGACCTGGACCTGCAGGTGTGAAGGCTGGAGCCAGGCCTGGAGGAACCCCAGGGGCTCCCGCCGGCCAG
CCAGGTGCCGATGGGGAGAGCGTGTTCTCCAAGATCCTCCCTGGCGGGGCAGCCGAGCAAGCTGGCAAACTGACG
GAAGCTGTCTCTGCTTTTGGCAAAAAATTTTCCTCATTCTGGTGACCATGCCCAGCATGGCTCTTGAAGAAATGA
AGAGAGGTATCATTGCTGTGGAAAAATCTCTGGAGTCAGAGGCCTGGGCGCAGCTCTGGACTCTGCGTATAACAC
ATCTACAATCTGGCAAACCCTTGGCCCAAAGACTCACCAGGTGGGACGTGGCAGGCAGGCCTCAGTTGAGGACGT
GATGTTTTCTCACAGCAGCTGCCTGGGTGAAGCATCTGCTGGACAAGTCGGACCACTGGCCAGGGGACCTTTGAT
TGTCTTTCCAGAGATGCTGCTCTCTGCAGGGCACCACCTTCAAGGCACAGCCCTTGTTGGGAGGGAGAACCCTCT
CCAGAAACCCTGCCACCATGGTGTCTTGCCGTACTTCCCACAGCCGCCTTTTTGCGGCCTGGCCGGCCAGGCTTC
CCGTGCGTTATACACAGAGTTTGGGCACACACTGCCCTCCCTCCGAGATGCCAGAAGTTTTTCCACAGCCTTGGA
GAGGGGCTTTGACTGAGGGCTGGGGGCCCTGGGCTCCGTTTCCTTCACATTCCAGCTGGCCCGGATCCCTCTGTG
GCACAGGGCCCTGCCCGTCACATGCCCTCTGGGTGACATCGGAGCAGACCTCCATGTGGCCAGGGGTTGGGAGAA
CTTTACAAACATTAGGACCTAACACTGTCTCATCGCTGAAATAAGAGGCCATAGCACCGAAAAGCAGCGTGGGCG
CCGGCTGAGGCTTCTCCCAGCCCGTGGGTGGCAGCGTGCTAGCACACTGCCACCATCTCAAAGCCATCCCCCTAG
CCATCGTGAGCATCCCAGCGGCACCGCCATTGTCTCAACCAGCCGGCTCCTCGTCTGTACACCTGGGGATTTCTT
TTGATTTCAAGAACAGCCTTAATCATTCCAGTTTGATTTACGTGTATACCTCATAAACATTTTTCTTTTGTTTCT
CTCTCCCCCTTTCTCTCTTCTCTTGGCTCACTCCCTTGCCTCTCCCCCTCCACCACCACCTTGTGACTGATGGTT
TGGTTTCCTCTCTGCTCTGCCCCTGCTCAGCACAGGGAGAATGTTGACTTAGAAGCAATAGGGGGCAGCAGGCCA
CCAAGAGCACAACCCCAGGGCGAGGTCTGGGGAGGCCTCCCAGCCCGCCTCTGTTTACTGTGCAATTCCAGTCGT
TCTTAAGCCATCACCAGTGGGTGTACTCAGAGCAGAGGGGCCAGGACTTCTGCCAGCCAAGGGAAAGGCCCAGAG
CCCTGTGCGGGGGAATGTGGCACTGTCTATCCATCCGGTGGACTGGGCAGCATTCCTCCCCAGGGCTCTTCCCTT
GGGGGCCTCCTTTCATCTGGGGCACAGCCACAAGTCTCATCTCTAACGTTCTATGCAATGAAATATAAACCCTCA
ATGACAACTGTTAATATTTAATAAATTCCATGTTATGTATAAGGAGTTAATTGCAAACATGCAATTGAGAAACTG
GATAGATACACTCATAAAACCCCCACCCCTCCCCACCCCACCCCTGCTCCCATTGTGTGTGTGAAATTCTCAGTC
TGTGGCATGTTTGACCTGTGGCAGGACTCGCTGCTGCCAGGTGAGTCACCGCCTGTCCTGCAGTGGAGCATGCAC
AGCTCGCAGCCTCTTTGCACGATTTCATCCATTTTAAATGCTTGACCCTCTTGCTTGGAGTTCTTTTTGCCTCAG
AACCTCTCCTTCAGGAGCACTTCTAGCTGACTTCTGCACAAGCTAGTGAGGACCTGCCAGAATTGTTGCCTGAGC
GTGCCAGGCTGCAGGGCAGGCAGTAAAAGGCCCCCACATACCCTGCAGTTTTCTCTGTCCAGGACAGCAGGTAAA
AAGGAATCCCCAGAGCAGACGCAATGGTAGGAGCCTGCACAGGATGTGTGTGTATGGACATTCTGAAGGTTTGCT
GTAGGATATCTGTCTGTCTGTCATTTTCCCTTCCTACCCCAACCCTGAGCCAGAGGCATCTGACAGCCCTTTCCC
AGAGGGCACCACGCAAGGGCAGAGCTGGGCGGCATCCACAGCCAGAGAGGCAGAGGCAAGAGCAGAGCCAGGCTG
TGCCCGAGGGACCCCAGCTCTTGACTGCACCTGTTTCATGCCTCTCCTCTGTGGCTAGGAGGCTCAAAGGACTGT
GAGCCAGGAGATCTGGGCTGGAGCTAGGGGGTCAATGGATGCTCAGGAAGAGCTGGGCCTTTGGCACTTGTGGTG
AGAACAGTTGACAGTGGTCATCTGGAACTGTTCATATAAACAGTGGCTTCAAGCTAAGTTTCTTGTGAAGTTTCT
CAATAGCAAATCTTACAGAAGGTCCTGTGTGACCCTCTCTGCATCTGTCCCCAGGACCTATGCTCCCTGCTCACC
CCCTTCTCCAAAGCCCAAGCGTCCCGCTGCTCATCAGCTTTTTTACCATTGAGCCAGGAGTGCGGCAGGCAGTAC
CTGCCTGACCCTTCAAGGCCTGACCTTCGTCCAGAGTGCTCTGGTTTGCACCATGCATTTCTCAGGGGTCCGCAT

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FIGURE 4071E

TTCTCATGCTTTTCTATAAGATCTACACACCCCTTCAGAGAGGGCTCCTCGCTCACCTCTGGTAGCTATGGATGG
GACAGGAAGCTGCCAACCTTTGTGTTGGACTTAACACCCTTGCCTTTCTGGGACTTGGCCTCACCCCACCCATGG
AATACCTGCCTCATCCCAAAGATCAGGTATGGGCTGAATGCAGCCATCTGAGCAAGGGCTGAGGGAAGCCATCAC
CTAACACCTCTGGCCACCCAGGACCAGGTCTGTGTGGGGATGTGCCTTGGAGACCAAGGCAATAGTCCTTTCCAC
TACAGGCCAGGGGATGGGACAAGAAGTAGGGAACAGGCAGGGAAATGTTAGGAGGTCAGCCTCCAGCAGGCCTAG
TCTCAGGCTCTAAAGTACTGACTTTTCAGCAAATTTCCTTTCTGGCCAAGCCCTCTGAGTTTGAAATTCTGACAT
CTGCCACTCCTCATCCCCCACTGTACCCACAGGATACATCATCGCCCCTCTGTGAAGGTGGCTGGAGCAGGCCTC
TGGTCCATGGACTGTCCTTCCTGGCCCTTGCATGGATGCAGTTGTGACTCTGGGGACAATGCAGCCAGAAGCTGA
GGGACCAGCACTTGGTGCCTTGGAAAGTAGAGAGCAACAGACACATCTCCAAATGGGCAAGGAGTCTCTAGCATG
CAGCCCAGGCCTTCTCCATACCCCTCTCCCCAGCATCATGAGCAAGGGCATTGCCTCCTCTCTCTGCTCACTTCA
GGGCCCAGTGCACTCACTTCACAGTGACAGCCCTCCCCTACAATCCTTGGGCAGAGCATGTGGTCTGAGGGCCCA
CAGTGAAAGAACAGCAGTGGTGGCAACTATGCCTTGCCTTCTGGAGCCTGTAGGGAGTTTTCCAGGCAGGTCCTT
TGCCAGGACAGCATGGTCCTGCCCTGTTGTCCCGTCTGCTCTCCTCTTACCCACCCCCATGCTGTAAATACTTGT
CATCATGGACTCCAACAGGGTTAGAGGGACAGGCCTAATCAACTGAAACTCCTCGGAGATGCCATCTCTGTCTCC
CTGGGTGCCAGCAGCCCTGCTGCCATGTGCACTGGGGTGGCACTGGAGAGCCATGGCAGTCGTGAGATATTGTAT
GTGTATGCACATGATCATGTGTGTATGTGCGTGCGTGCGTGCGTGTGTGTGTGTGTGTGTTTCTGCCTCATTC
AGTTTCTGGGGTCAAATCAGCTCCTTCTCTCCAAGTGCACTACCCTGGAGAGTGGTGGCCACTCAATACCTTTTC
CTCTAGCTTTCATGTCTTGTTTTTGCTTTCCCCTTCCTCCTCCCTCTCTCCCTTTCTTTCCTTCTCTCCTTCTTT
ATTTGAGGGGGGAAGAGTGCTGTACAAAGTCAAACAAACAAGTTTACAGTTGTAAGTGCAATGACCCGAGTCCTC
CACATGACCTTGTGAATTGTGTGCTGTCCTTCTGTGCTCTGTGAGAACTCGTGGTACTTCAGTGTCCCTCCCCCT
GTATTGTGACAAGGTAATTCTGTGGTATCAGAATAAAAGGACTTGATATAAAC

FIGURE 4072A

GCCAGTCGGCGCCGCGCGGAGCTGGCCGCTGGATTGGCTGCAACACTCGCGTGTCAGGCGGTTGCTAGGCTCCGG
CCGCGCGCCCCGCCCTTGCGCTCAGCGCCCTCTCACCGCCCGGTACGTGCTCGCGCGAAGGCTGCGGCGCGGCGC
TCGCGCCTCTTAGGCTTGGCGGTGGCGGCGGCGGCAGCTTCGCGCCGAATCCCCGGGGAGCGGCGGTGGCGGCGT
CCTGGGGCCAGGAGGAGCGAACACCTGCCGCGGTCCTCCCGCCGGCGCTGGGCTCTGTGTGCTCCGGGATGGAGC
AGGTGTGCAGAGGGTGAGAACCCAGCTCTGGGACCAAGTCACTTGCTTCCTTACTTAGCAAGACTATCGACTTGA
GCAAACTTGGACCTGGGATGAGGATGTCTGTGGGCCTCTCGCTGCTGCTGCCCCTCTCGGGGAGGACCTTTCTCC
TCCTGCTCTCTGTGGTTATGGCTCAGTCCCACTGGCCCAGTGAACCCTCAGAGGCTGTCAGGGACTGGGAAAACC
AGCTTGAGGCATCCATGCACTCAGTGCTCTCAGACCTCCACGAGGCTGTTCCCACAGTGGTTGGCATTCCTGATG
GCACGGCTGTCGTCGGGCGCTCATTTCGAGTGACCATTCCAACAGATTTGATTGCCTCCAGTGGAGATATCATCA
AGGTATCAGCGGCAGGGAAGGAGGCTTTGCCATCTTGGCTGCACTGGGACTCACAGAGCCACACCCTGGAGGGCC
TCCCCCTTGACACTGATAAGGGTGTGCATTACATTTCAGTGAGCGCTACACGGCTGGGGGCCAACGGGAGCCACA
TCCCCCAGACCTCCAGTGTGTTCTCCATCGAGGTCTACCCTGAAGACCACAGTGAGCTGCAGTCGGTGAGGACAG
CCTCCCCAGACCCTGGTGAGGTGGTATCATCTGCCTGTGCTGCGGATGAACCTGTGACTGTTTTGACGGTGATTT
TGGATGCCGACCTCACCAAGATGACCCCAAAGCAAAGGATTGACCTCCTGCACAGGATGCGGAGCTTCTCAGAAG
TAGAGCTTCACAACATGAAATTAGTGCCGGTGGTGAATAACAGACTATTTGACATGTCGGCCTTCATGGCTGGCC
CGGGAAATGCAAAAAAGGTGGTGGAGAATGGGGCCCTTCTCTCCTGGAAGCTGGGCTGCTCCCTGAACCAGAACA
GTGTGCCTGACATTCATGGTGTAGAGGCCCCTGCCAGGGAGGGCGCAATGTCTGCTCAGCTTGGCTACCCTGTGG
TGGGTTGGCACATCGCCAATAAGAAGCCCCCTCTTCCCAAACGCGTCCGGAGGCAGATCCATGCTACACCCACAC
CTGTCACTGCCATTGGGCCCCCAACCACGGCTATCCAGGAGCCCCCATCCAGGATCGTGCCAACCCCCACATCTC
CAGCCATTGCTCCTCCAACAGAGACCATGGCTCCTCCAGTCAGGGATCCTGTTCCTGGGAAACCCACGGTCACCA
TCCGGACTCGAGGCGCCATTATTCAAACCCCAACCCTAGGCCCCATCCAGCCTACTCGGGTGTCAGAAGCTGGCA
CCACAGTTCCTGGCCAGATTCGCCCAACGATGACCATTCCTGGCTATGTGGAGCCTACTGCAGTTGCTACCCCTC
CCACAACCACCACCAAGAAGCCACGAGTATCCACACCAAAACCAGCAACGCCTTCAACTGACTCCACCACCACCA
CGACTCGCAGGCCAACCAAGAAACCACGGACACCCCGGCCAGTGCCCCGGGTCACCACCAAAGTTTCCATCACCA
GATTGGAAACTGCCTCACCGCCTACTCGTATTCGCACCACCACCAGTGGAGTGCCCCGTGGCGGAGAACCCAACC
AGCGCCCAGAGCTCAAGAACCATATTGACAGGGTAGATGCCTGGGTTGGCACCTACTTTGAGGTGAAGATCCCGT
CAGACACTTTCTATGACCATGAGGACACCACCACTGACAAGCTGAAGCTGACCCTGAAACTGCGGGAGCAGCAGC
TGGTGGGCGAGAAGTCCTGGGTACAGTTCAACAGCAACAGCCAGCTCATGTATGGCCTTCCCGACAGCAGCCACG
TGGGCAAACACGAGTATTTCATGCATGCCACAGACAAGGGGGGCCTGTCGGCTGTGGATGCCTTCGAGATCCACG
TCCACAGGCGCCCCCAAGGGGATAGGGCTCCTGCAAGGTTCAAGGCCAAGTTTGTGGGTGACCCGGCACTGGTGT
TGAATGACATCCACAAGAAGATTGCCTTGGTAAAGAAACTGGCCTTCGCCTTTGGAGACCGAAACTGTAGCACCA
TCACCCTGCAGAATATCACCCGGGGCTCCATCGTGGTGGAATGGACCAACAACACACTGCCCTTGGAGCCCTGCC
CCAAGGAGCAGATCGCTGGGCTGAGCCGCCGGATCGCTGAGGATGATGGAAAACCTCGGCCTGCCTTCTCCAACG
CCCTAGAGCCTGACTTTAAGGCCACAAGCATCACTGTGACGGGCTCTGGCAGTTGTCGGCACCTACAGTTTATCC
CTGTGGTACCACCCAGGAGAGTGCCCTCAGAGGCGCCGCCCACAGAAGTGCCTGACAGGGACCCTGAGAAGAGCA
GTGAGGATGATGTCTACCTGCACACAGTCATTCCGGCCGTGGTGGTCGCAGCCATCCTGCTCATTGCTGGCATCA
TTGCCATGATCTGCTACCGCAAGAAGCGGAAGGGCAAGCTTACCCTTGAGGACCAGGCCACCTTCATCAAGAAGG
GGGTGCCTATCATCTTTGCAGACGAACTGGACGACTCCAAGCCCCCACCCTCCTCCAGCATGCCACTCATTCTGC
AGGAGGAGAAGGCTCCCCTACCCCCTCCTGAGTACCCCAACCAGAGTGTGCCCGAGACCACTCCTCTGAACCAGG
ACACCATGGGAGAGTACACGCCCCTGCGGGATGAGGATCCCAATGCGCCTCCCTACCAGCCCCCACCGCCCTTCA
CAGCACCCATGGAGGGCAAGGGCTCCCGTCCCAAGAACATGACCCCATACCGGTCACCTCCTCCCTATGTCCCAC
CTTAACCCGCAAGCGCCTGGGTGGAGGCAGGGTAGGGCAGGGGCCTGGAGACGACATGGTGTTGTCTGTGGAGAC
CGGTGGCCTGCAGACCATTGCCCACCGGGAGCCGACACCTGACCTAGCACACACTGACACAGGGGCCTGGACAAG
CCCGCCCTCTCTGGTCCTCCCAAACCCCAAAGCAGCTGGAGAGACTTTGGGGACTTTTTTATTTTTATTTTTTGC
CTAACAGCTTTTGGTTTGTTCATAGAGAATTCTTCGCTTCATTTTTGATGGCTGGCTCTGAAAGCACCATGTGGA
GTGGAGGTGGAGGGAGCGAGGAACCATGAATGAACTCGCAGGCAGTGCCGGGCGGCCCCCTGGCTCTCTGCGTTT
TGCCTTTAACACTAACTGTACTGTTTTTTCTATTCACGTGTGTCTAGCTGCAGGATGTAACATGGAAAACAGTAA
CTAAAGATTAAATTCAAAGGACTTTCAGAAGTTAAGGTTAAGTTTTTACGTTTAATCTGCTGTTTACCTAAACTT

FIGURE 4072B

GTATGTATAATTTTTGGGTGGGTATGGGGAATTGCTTTGCTAAAAATAAGCTCCCAGGGTGTTTCAAACTTAGAG
AAGACCAAGGGACAGTATTTTTTATCAAAGGAATACTATTTTTTCACACTACGTCAACTTGGTTGCTCTGATACC
CCAGAGCCTGATTGGGGGCCTCCCGGCCCTGGCTCACGCCAAGTCCCTGGTGCTGGGTTTGCTCTCCCGCTGTTG
CCAGGGGCTGGAAGCTGGAGGGGTCTCTTGGGCCATGGACATCCCCACTTCCAGCCCATGTACACTAGTGGCCCA
CGACCAAGGGGTCTTCATTTCCATGAAAAAGGGACTCCAAGAGGCAGTGGTGGCTGTGGCCCCCAACTTTGGTGC
TCCAGGGTGGGCCAGCTGCTTGTGGGGGCACCTGGGAGGTCAAAGGTCTCCACCACATCAACCTATTTTGTTTTA
CCCTTTTTCTGTGCATTGTTTTTTTTTTCCTCCTAAAAGGAATATCACGGTTTTTTGAAACACTCAGTGGGGGA
CATTTTGGTGAAGATGCAATATTTTTATGTCATGTGATGCTCTTTCCTCACTTGACCTTGGCCGCTTTGTCCTAA
CAGTCCACAGTCCTGCCCCGACCCACCCCATCCCTTTTCTCTGGCACTCCAGTCCCAGGCCTTGGGCCTGAACTA
CTGGAAAAGGTCTGGCGGCTGGGGAGGAGTGCCAGCAATAGTTCATAATAAAAATCTGTTAGCTCTCAAAGCTAA
TTTTTTACTAAAGTTTTTATACAGCCTCAAATTGTTTTATTAAAAAAAAAGATTTAAAATGGTGATGCTTACAGCA
GTTTGTACGAGCTCTTAAGTGTTGATTCCATGGAACTGACGGCTTTGCTTGTTTTGATTCTTTTCCCCCTACTTT
TCCTAATGGTTTAAATTCTGGAATTACACTGGGGTTCTTTTGCCTTTTTTAGCAGAACATCCGTCCGTCCATCTG
CATCTCTGTCCCATGACTCAGGGGCGCCCACTCTGCTTCGATTCTCCTCCTGTGGAAGAAACCATTTTGAGCATG
ACTTTTCTTGATGTCTGAAGCGTTATTTTGGGTACTTTTTAGGGAGGAATGCCTTTCGCAATAATGTATCCATTC
CCTGATTGAGGGTGGGTGGGTGGACCCAGGCTCCCTTTGCACACAGAGCAGCTACTTCTAAGCCATATCGACTGT
TTTGCAGAGGATTTGTGTGTGCTGCCTCAGGAGGGGAGGGCTGGTAGGAGGGGGGGAGAGGTCTCTGTCCTACTG
CTCTCCAGAGGGCATTTCCCCTTGCGCCTTCTCCCACAGGGCCCAGCCCCTCTCCCCTGCCCCAGTCCCCAGGGG
GTACTCTGGAGTGAGCAGTGCCCCTGTGGGGGAGCCTGTAAATGCGGGCTCAGTGGACCACTGGTGACTGGGCTC
ATGCCTCCAAGTCAGAGTTTCCCTGGTGCCCCAGAGACAGGAGCACAAGTGGGATCTGACCTGGTGAGATTATTT
CTGATGACCTCATCAAAAAATAAACAATTCCCAATGTTCCAGGTGAGGGCTTTGAAAGGCCTTCCAAACAGCTCC
GTCGCCCCTAGCAACTCCACCATTGGGCACTGCCATGCAGAGACGTGGCTGGCCCAGAATGGCCTGTTGCCATAG
CAACTGGAGGCGATGGGGCAGTGAACAGAATAACAACAGCAACAATGCCTTTGCAGGCAGCCTGCTCCCCTGAGC
GCTGGGCTGGTGATGGTCGTTGGACTCTGTGAGATGGAGAGCCAATCTCACATTCAAGTGTTCACCAACCACTGA
TGTGTTTTTATTTCCTTCTATATGATTTTAAGATGTGTTTTCTGCATTCTGTAAAGAAACATATCAAACTAAATA
AAAGCAGTGTCTTTATT

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FIGURE 4073

TACTCCCGGAGTCACTCATCCCTTAAGCAAGCAGGGTGGGGTTAGGTGCGCGTGCGCGGTTTTAATACTCCTCCC
CGAACTGCCAACTCTTCACGCACGCGAAGTAGGCCCCACCCTGGCTGGGTTTACGCGTGCGCACTAACGGGCCTG
GTCCCGGAAGACCACACGCGTGCGTGGTGGGGACTACGGTGACAGTACCCCGGGTGGGGCGAGGGCCAGTCATGG
CGGAGTCCTGGTCTGGGCAGGCCTTGCAGGCTCTGCCGGCCACGGTGCTGGGCGCGCTGGGCAGCGAGTTCTTGC
GGGAGTGGGAGGCGCAGGACATGCGCGTGACCCTCTTCAAGCTGCTGCTGCTGTGGTTGGTGTTAAGTCTCCTGG
GCATCCAGCTGGCGTGGGGGTTCTACGGGAATACAGTGACCGGGTTGTATCACCGTCCAGGTCTGGGTGGTCAGA
ATGGATCCACGCCTGATGGCTCCACGCATTTCCCTTCGTGGGAAATGGCAGCAAACGAACCTCTCAAAACCCACA
GAGAATAAGGGAAGGCAGCAGAGGGTCTCCAAGGGCATCACTGGGTCTGCTGGCTTCTACACTGGGTTCTGCTAC
TCCCCAGACCTCAGGGACAACTGCCGGGGGTTCAGGGTTGGTAGCAGGGAGTACCCAGTGCCTACAGGGCTGGGC
CTCTTCTGCCTCTTAAGCCTGCTCCCTCACCCAGGCACTGGGCAAGTGAAGAGTTTGCCTGTACTCTTATCTGGG
TGCCTTAAGGAGAGAGATTGTGTTCTTCCTCTCTCAGGGGTGATAACTCAGGAAGCCTCTGGGTTGGGAAGACCA
TCAGTTCTTTTGTCTTAGGTTTCTTTTCCTGTCCCTCTTCCATCCCCAAGATGTGACCCCATAAAAATTTTTCCT
GAGTTGGCCAGGCATGGTGGCTCACGCCTGTAATCCCAACACTTTGGGAGGCTGAGGCAGGCAGATCACGAGGTC
AGGAGTTCGAGACCAGCCTGACCAACATGGTGAAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGTGTG
GTGGCACACACCAGTAATCCCAGCTACTCAGGAGGCTGAAGCAGGAGATTTGCTTGAACCTGGGAGGCAGAGGTT
GCAGTGAGCCAAGATTGCGCCGTTGTACTCCAGCCTGGGCAACAGAGCAAGACCCATCTCAAAAAAAAAATTTTT
TTCCTGAGAGGAAGCCTGAGGTTGACCAGCTCTGGGGGTTTGTAAGGCAGGTCTGTTTTCTCCTAGGCCCTGAGTT
TTCTGAATCTCTGGTTTTGCTTTGTTGGCAAGGAGCCAGGGAATCCTGACCTGAGCCAGACCTTAAGCTCTATGG
TTATTTAGCTGGCCATTCAGGTATAAGGCAGGGTGGTGTACCTGCTGGCACTATCCAGATGGAGGCACCAAACAC
CCACATACCTGGCCCAACCAGACTTCTCCCGTGAGCCAGGCAAAGGAAATTGTCATCTGCCAACTGTCCTACTCA
TATTCCTCTCAGTCCTTCTTGGGGGTAAGCTGATTACCTGAAGGACAGCTGAACCCCTGGGGTAGCCTCCTATCC
ACCACTGCTTAAGTGCCTATGGGAATGTGGGTCTGCACCTTGTCCCCTCATAGGATGGTACCAAGCATTTAGTGC
ACAGTGGCCCCATCATAGCCTGCAGCCTCATCATTTCCCATCTGGACCTGGTACAAATGCACGTCACAGGCTCAG
CTCCTCCCCACTAGCATTTTCTCTACCTTCAAGAACCAGGCAGCCCTGCCATGTCACAATAGGCCAGGGGAGTTT
CCAAAGATGTGGGTGGCAAATGCCCCTATAGAAACACCAGTACCTGAAAGCACTGTAGCCCTGGACCTGCCTCCT
TCCCTCGGGGCCATACTTCTGTTTCCATCTGCTGGGCCACCAGCCACTTTAGTGACCCCTGCCTACTTCCTTCCT
GTTGGATATCATACTTCCATCTGGCTGCCTTTGCTTAAGCCATCTTTGTGGTAGAGGGGCCCTGGAATTGCAGCT
GTACTGAGGATGATGTTATTCACAGCCCCTGGCCCACCCACTAATACTACTGCACAGAGTCAGGATCTCACATTT
CACCCCAGGCTCAACTGAGGATGTGGCTTATTAAACACGGAAGTGC

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FIGURE 4074

AGCCTGCCCTTGGGGCTGCCCACGCCCCCTTCAGATCCTTTGCTCCGGAGAGAGACCTGTCCGAGCAGAGGCCTG
GACTACATCTCCCGGCGTGCCTGGCAGTGTGGTGGCCTCTGTGCGCCGTCTGCACTCGTTGCAGGCGACGATGCA
GAGGGCTGTAAGTGTGGTGGCCCGTCTGGGCTTTCGCCTGCAGGCATTCCCCCCGGCCTTGTGTCGTCCACTTAG
TTGCGCACAGGAGGTGCTCCGCAGGACACCGCTCTATGACTTCCACCTGGCCCACGGCGGGAAAATGGTGGCGTT
TGCGGGTTGGAGTCTGCCAGTGCAGTACCGGGACAGTCACACTGACTCGCACCTGCACACACGCCAGCACTGCTC
GCTCTTTGACGTGTCTCATATGCTGCAGACCAAGATACTTGGTAGTGACCGGGTGAAGCTGATGGAGAGTCTAGT
GGTTGGAGACATTGCAGAGCTAAGACCAAACCAGGGGACACTGTCGCTGTTTACCAACGAGGCTGGAGGCATCTT
AGATGACTTGATTGTAACCAATACTTCTGAGGGCCACCTGTATGTGGTGTCCAACGCTGGCTGCTGGGAGAAAGA
TTTGGCCCTCATGCAGGACAAGGTCAGGGAGCTTCAGAACCAGGGCAGAGATGTGGGCCTGGAGGTGTTGGATAA
TGCCCTGCTAGCTCTGCAAGGCCCCACTGCAGCCCAGGTACTACAGGCCGGCGTGGCAGATGACCTGAGGAAACT
GCCCTTCATGACCAGTGCTGTGATGGAGGTGTTTGGCGTGTCTGGCTGCCGCGTGACCCGCTGTGGCTACACAGG
AGAGGATGGTGTGGAGATCTCGGTGCCGGTAGCGGGGGCAGTTCACCTGGCAACAGCTATTCTGAAAAACCCAGA
GGTGAAGCTGGCAGGGCTGGCAGCCAGGGACAGCCTGCGCCTGGAGGCAGGCCTCTGCCTGTATGGGAATGACAT
TGATGAACACACTACACCTGTGGAGGGCAGCCTCAGTTGGACACTGGGGAAGCGCCGCCGAGCTGCTATGGACTT
CCCTGGAGCCAAGGTCATTGTTCCCCAGCTGAAGGGCAGGGTGCAGCGGAGGCGTGTGGGGTTGATGTGTGAGGG
GGCCCCCATGCGGGCACACAGTCCCATCCTGAACATGGAGGGTACCAAGATTGGTACTGTGACTAGTGGCTGCCC
CTCCCCCTCTCTGAAGAAGAATGTGGCGATGGGTTATGTGCCCTGCGAGTACAGTCGTCCAGGGACAATGCTGCT
GGTAGAGGTGCGGCGGAAGCAGCAGATGGCTGTAGTCAGCAAGATGCCCTTTGTGCCCACAAACTACTATACCCT
CAAGTGAAGCTGGCTCAGGGTGGGGCTGTCCCTTCCAGGAGTTTTGCCCCTACAAGGGGTTAGTCAAGAAGCTGA
GGCAGAACTCACTGGGGGTGGGCAGTTAAGGTGGAGGCTGATTCTAATTGTCTGGTTGAGGGGCCACACCACCTA
TTCCCCCCACCTAACTCATGCCATTCCAGCTTCCTTCAGGACCCTGCTTCTGAGTGACGGACCAGCTCACACAAT
GTCTTGTTTCAGTCCATGATCCCACTGACCTACTCTTGCCTGCTGGAGGGTAATGAGAAGCTTTGGTTCTGCCAT
CTCTCCCACTCTGCCAGGTGCTGGCTGTGGAGCAAAGGCTCACCTTTGTGGAGAGGATAAAACCTGCCCAACCTA
CCTCACCATGGTTTTTCACATTGCAAAGGGTAATAACATGGGCAGTGCGGACTTAGGCTACCCCCTCCAGTTTGC
TTTCCGTAAATGCAAATTGTCCTTACTGCAAGTCAGGAATGATTGCTGACTCACAGTAGGGCTGCTATGCCTGTG
TGTAAACTTGGGGATGGCTGAGGGAACATAGACTCACTCTTCCACATTCCCAAGTTGGTCTAGTGTGCTGCCCAG
TAGCAAACCATGGCAGACTCACCACCTATTCTGAGTTCCAGGGCTGCTGTAGGGCAGGGTGGGCTTCCTCCCAGA
CTTGCCTTACCCTGGGCTGATCTTTGCCCCTGGTATGCATTAATGGACTCCACTGAATCCTGAAAAAAAAATTAA
ACTTCCTTCTTACTTGCCA

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FIGURE 4075A

GGATCCTCTAGGGTCCCAGCTCGCCTCGATGGAGCTCCTCCCGCCGCTGCCTCAGTCCTTCCTGTTGCTGCTGCT
GTTGCCTGCCAAGCCCGCGGCGGGCGAGGACTGGCAGTGCCCGCGCACCCCCTACGCGGCCTCTCGCGACTTTGA
CGTGAAGTACGTGGTGCCCAGCTTCTCCGCCGGAGGCCTGGTACAGGCCATGGTGACCTACGAGGGCGACAGAAA
TGAGAGTGCTGTGTTTGTAGCCATACGCAATCGCCTGCATGTGCTTGGGCCTGACCTGAAGTCTGTCCAGAGCCT
GGCCACGGGCCCTGCTGGAGACCCTGGCTGCCAGACGTGTGCAGCCTGTGGCCCAGGACCCCACGGCCCTCCCGG
TGACACAGACACAAAGGTGCTGGTGCTGGATCCCGCGCTGCCTGCGCTGGTCAGTTGTGGCTCCAGCCTGCAGGG
CCGCTGCTTCCTGCATGACCTAGAGCCCCAAGGGACAGCCGTGCATCTGGCAGCGCCAGCCTGCCTCTTCTCAGC
CCACCATAACCGGCCCGATGACTGCCCCGACTGTGTGGCCAGCCCATTGGGCACCCGTGTAACTGTGGTTGAGCA
AGGCCAGGCCTCCTATTTCTACGTGGCATCCTCACTGGACGCAGCCGTGGCTGCCAGCTTCAGCCCACGCTCAGT
GTCTATCAGGCGTCTCAAGGCTGACGCCTCGGGATTCGCACCGGGCTTTGTGGCGTTGTCAGTGCTGCCCAAGCA
TCTTGTCTCCTACAGTATTGAATACGTGCACAGCTTCCACACGGGAGCCTTCGTATACTTCCTGACTGTACAGCC
GGCCAGCGTGACAGATGATCCTAGTGCCCTGCACACACGCCTGGCACGGCTTAGCGCCACTGAGCCAGAGTTGGG
TGACTATCGGGAGCTGGTCCTCGACTGCAGATTTGCTCCAAAACGCAGGCGCCGGGGGGCCCCAGAAGGCGGACA
GCCCTACCCTGTGCTGCGGGTGGCCCACTCCGCTCCAGTGGGTGCCCAACTTGCCACTGAGCTGAGCATCGCCGA
GGGCCAGGAAGTACTATTTGGGGTCTTTGTGACTGGCAAGGATGGTGGTCCTGGCGTGGGCCCCAACTCTGTCGT
CTGTGCCTTCCCCATTGACCTGCTGGACACACTAATTGATGAGGGTGTGGAGCGCTGTTGTGAATCCCCAGTCCA
TCCAGGCCTCCGGCGAGGCCTCGACTTCTTCCAGTCGCCCAGTTTTTGCCCCAACCCGCCTGGCCTGGAAGCCCT
CAGCCCCAACACCAGCTGCCGCCACTTCCCTCTGCTGGTCAGTAGCAGCTTCTCACGTGTGGACCTATTCAATGG
GCTGTTGGGACCAGTACAGGTCACTGCATTGTATGTGACACGCCTTGACAACGTCACAGTGGCACACATGGGCAC
AATGGATGGGCGTATCCTGCAGGTGGAGCTGGTCAGGTCACTAAACTACTTGCTGTATGTGTCCAACTTCTCACT
GGGTGACAGTGGGCAGCCCGTGCAGCGGGATGTCAGTCGTCTTGGGGACCACCTACTCTTTGCCTCTGGGGACCA
GGTTTTCCAGGTACCTATCCAAGGCCCTGGCTGCCGCCACTTCCTGACCTGTGGGCGTTGCCTAAGGGCATGGCA
TTTCATGGGCTGTGGCTGGTGTGGGAACATGTGCGGCCAGCAGAAGGAGTGTCCTGGCTCCTGGCAACAGGACCA
CTGCCCACCTAAGCTTACTGAGTTCCACCCCCACAGTGGACCTCTAAGGGGCAGTACAAGGCTGACCCTGTGTGG
CTCCAACTTCTACCTTCACCCTTCTGGTCTGGTGCCTGAGGGAACCCATCAGGTCACTGTGGGCCAAAGTCCCTG
CCGGCCACTGCCCAAGGACAGCTCAAAACTCAGACCAGTGCCCCGGAAAGACTTTGTAGAGGAGTTTGAGTGTGA
ACTGGAGCCCTTGGGCACCCAGGCAGTGGGGCCTACCAACGTCAGCCTCACCGTGACTAACATGCCACCGGGCAA
GCACTTCCGGGTAGACGGCACCTCCGTGCTGAGAGGCTTCTCTTTCATGGAGCCAGTGCTGATAGCAGTGCAACC
CCTCTTTGGCCCACGGGCAGGAGGCACCTGTCTCACTCTTGAAGGCCAGAGTCTGTCTGTAGGCACCAGCCGGGC
TGTGCTGGTCAATGGGACTGAGTGTCTGCTAGCACGGGTCAGTGAGGGGCAGCTTTTATGTGCCACACCCCCTGG
GGCCACGGTGGCCAGTGTCCCCCTTAGCCTGCAGGTGGGGGGTGCCCAGGTACCTGGTTCCTGGACCTTCCAGTA
CAGAGAAGACCCTGTCGTGCTAAGCATCAGCCCCAACTGTGGCTACATCAACTCCCACATCACCATCTGTGGCCA
GCATCTAACTTCAGCATGGCACTTAGTGCTGTCATTCCATGACGGGCTTAGGGCAGTGGAAAGCAGGTGTGAGAG
GCAGCTTCCAGAGCAGCAGCTGTGCCGCCTTCCTGAATATGTGGTCCGAGACCCCCAGGGATGGGTGGCAGGGAA
TCTGAGTGCCCGAGGGGATGGAGCTGCTGGCTTTACACTGCCTGGCTTTCGCTTCCTACCCCCACCCCATCCACC
CAGTGCCAACCTAGTTCCACTGAAGCCTGAGGAGCATGCCATTAAGTTTGAGTATATTGGGCTGGGCGCTGTGGC
TGACTGTGTGGGTATCAACGTGACCGTGGGTGGTGAGAGCTGCCAGCACGAGTTCCGGGGGGACATGGTTGTCTG
CCCCCTGCCCCCATCCCTGCAGCTTGGCCAGGATGGTGCCCCATTGCAGGTCTGCGTAGATGGTGAATGTCATAT
CCTGGGTAGAGTGGTGCGGCCAGGGCCAGATGGGGTCCCACAGAGCACGCTCCTTGGTATCCTGCTGCCTTTGCT
GCTGCTTGTGGCTGCACTGGCGACTGCACTGGTCTTCAGCTACTGGTGGCGGAGGAAGCAGCTAGTTCTTCCTCC
CAACCTGAATGACCTGGCATCCCTGGACCAGACTGCTGGAGCCACACCCCTGCCTATTCTGTACTCGGGCTCTGA
CTACAGAAGTGGCCTTGCACTCCCTGCCATTGATGGTCTGGATTCCACCACTTGTGTCCATGGAGCATCCTTCTC
CGATAGTGAAGATGAATCCTGTGTGCCACTGCTGCGGAAAGAGTCCATCCAGCTAAGGGACCTGGACTCTGCGCT
CTTGGCTGAGGTCAAGGATGTGCTGATTCCCCATGAGCGGGTGGTCACCCACAGTGACCGAGTCATTGGCAAAGG
CCACTTTGGAGTTGTCTACCACGGAGAATACATAGACCAGGCCCAGAATCGAATCCAATGTGCCATCAAGTCACT
AAGTCGCATCACAGAGATGCAGCAGGTGGAGGCCTTCCTGCGAGAGGGGCTGCTCATGCGTGGCCTGAACCACCC
GAATGTGCTGGCTCTCATTGGTATCATGTTGCCACCTGAGGGCCTGCCCCATGTGCTGCTGCCCTATATGTGCCA
CGGTGACCTGCTCCAGTTCATCCGCTCACCTCAGCGGAACCCCACCGTGAAGGACCTCATCAGCTTTGGCCTGCA

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FIGURE 4075B

GGTAGCCCGCAGCATGGAGTACCTGGCAGAGCAGAAGTTTGTGCACAGGGACCTGGCTGCGCGGAACTGCATGCT
GGACGAGTCATTCACAGTCAAGGTGGCTGACTTTGGTTTGGCCCGCGACATCCTGGACAGGGAGTACTATAGTGT
TCAACAGCATCGCCACGCTCGCCTACCTGTGAAGTGGATGGCGCTGGAGAGCCTGCAGACCTATAGATTTACCAC
CAAGTCTGATGTGTGGTCATTTGGTGTGCTGCTGTGGGAACTGCTGACACGGGGTGCCCCACCATACCGCCACAT
TGACCCTTTTGACCTTACCCACTTCCTGGCCCAGGGTCGGCGCCTGCCCCAGCCTGAGTATTGCCCTGATTCTCT
GTACCAAGTGATGCAGCAATGCTGGGAGGCAGACCCAGCAGTGCGACCCACCTTCAGAGTACTAGTGGGGGAGGT
GGAGCAGATAGTGTCTGCACTGCTTGGGGACCATTATGTGCAGCTGCCAGCAACCTACATGAACTTGGGCCCCAG
CACCTCGCATGAGATGAATGTGCGTCCAGAACAGCCGCAGTTCTCACCCATGCCAGGGAATGTACGCCGGCCCCG
GCCACTCTCAGAGCCTCCTCGGCCCACTTGACTTAGTTCTTGGGCTGGACCTGCTTAGCTGCCTTGAGCTAACCC
CAAGCTGCCTCTGGGCCATGCCAGGCCAGAGGGCAGTGGCCCTCCACCTTGTTCCTGCCCTTTAACTTTCAGAGG
CAATAGGTAAATGGGGCCCATTAGGTCCCTCACTCCACAGAGTGAGCCAGTGAGGGCAGTCCTGCAACATGTATT
TATGGAGTGCCTGCTGTGGACCCTGTCTTCTGGGCACAGTGGACTCAGCAGTGACCACACCAACACTGACCCTTG
AACCAATAAAGGAACAAATGACTATTAAAGCAC

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FIGURE 4076

GGCCGGCGAAAGCTATCTTCCTGCACCGGCGGCCGGGTGAGGGCGGTGGGAGGGAGCGGTGCCTGCGCTGTGGCC
ATGTCTGTGTACGCAGGGGGCCGGGGCCCCGCGAAGCTGTGCCCTCAGGCCGGCCCCGGCCGGACACCCTTACCC
CTCCATGGGTCCGGCAGAGGGCAGTGACCGGCACCTTCTGTGCGTCCTGGACTCCTCTGAGAAACAGGAGAGCTC
AAAGGATGGCTACTGACATGCAGAGGAAGAGAAGCAGCGAATGCCTTGATGGCACATTGACTCCTTCTGATGGAC
AGAGTATGGAGAGAGCTGAGAGCCCCACACCAGGAATGGCCCAGGGAATGGAGCCAGGTGCGGGCCAGGAGGGTG
CCATGTTCGTCCATGCCCGTTCCTACGAGGACCTGACTGAGTCAGAGGATGGGGCAGCTTCTGGGGACAGCCACA
AGGAGGGTACCAGGGGTCCCCCGCCGCTGCCTACAGACATGCGCCAGATCAGCCAGGACTTTAGCGAGCTAAGCA
CCCAGCTGACGGGTGTGGCCCGGGACCTGCAGGAGGAGATGCTGCCAGGAAGCTCTGAGGATTGGCTGGAACCCC
CAGGGGCAGTTGGGCGACCAGCCACAGAGCCCCCCAGGGAGGGCACAACCGAGGGGGATGAGGAGGATGCCACGG
AGGCATGGCGCCTGCACCAGAAGCATGTCTTTGTGCTGAGTGAGGCAGGGAAGCCTGTGTACTCCCGCTATGGGT
CTGAGGAGGCACTTTCCAGCACTATGGGTGTTATGGTGGCCCTGGTGTCCTTCCTGGAGGCAGACAAGAACGCCA
TCCGCTCCATCCATGCAGATGGCTACAAGGTAGTATTCGTGCGCCGGAGCCCGCTGGTGCTAGTGGCGGTGGCTC
GTACGCGGCAGTCGGCACAAGAGCTGGCGCAGGAGCTGCTCTACATCTACTACCAGATCCTAAGCCTTCTTACCG
GTGCGCAGCTGAGCCACATCTTCCAGCAGAAGCAGAACTATGATTTGCGGCGCCTACTCTCGGGCTCAGAGCGCA
TCACCGACAACCTGCTGCAGCTCATGGCACGAGACCCCAGCTTCCTGATGGGGGCGGCACGGTGCCTGCCCCTGG
CGGCGGCCGTGCGCGACACTGTGAGCGCCAGCCTGCAGCAGGCGCGTGCGCGCAGCCTGGTCTTCTCCATCCTGC
TGGCCCGCAACCAGCTCGTGGCACTCGTGCGCCGAAAGGACCAATTTCTGCACCCCATCGACCTGCACCTGCTCT
TCAACCTCATTAGTTCCTCCTCGTCCTTTCGCGAGGGCGAGGCCTGGACGCCCGTGTGCCTGCCCAAATTCAACG
CAGCCGGCTTCTTCCACGCACACATCTCTTACCTAGAGCCTGACACTGACCTCTGCCTGCTGCTTGTCTCCACTG
ACCGTGAGGACTTCTTTGCAGTCTCTGACTGCCGCCGCCGCTTCCAGGAGCGCCTTCGCAAGCGCGGAGCCCACC
TGGCCCTGCGAGAGGCACTGCGCACACCCTACTACAGCGTTGCCCAAGTGGGCATCCCTGACCTGCGTCACTTCC
TCTATAAGTCAAAGAGCTCGGGACTCTTCACCAGCCCTGAGATTGAGGCCCCATACACCAGTGAAGAGGAGCAGG
AGCGGCTGCTGGGCCTCTACCAGTACTTGCACAGTCGTGCCCACAATGCCTCTCGCCCACTCAAGACCATTTACT
ACACGGGCCCCAACGAGAACCTCCTGGCCTGGGTGACAGGCGCCTTTGAGCTCTACATGTGTTACAGCCCCCTGG
GGACCAAGGCGTCAGCCGTCAGTGCCATCCATAAGCTGATGCGCTGGATCCGCAAAGAGGAAGACCGCCTCTTCA
TTCTCACGCCCCTCACCTATTGAATGGGAATGTGTGCGGGCTCAGCCTTCCTGGACACACTAGGTGTGGGAAGCCA
TAGGAGCCTCCAGATGGGGGCTGGCCTCTCTTGCCCAGCCAGCGGGCAGGGACTGTGGGTTGGTGAATGCATTAA
AGTGCTTTGGGG

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FIGURE 4077A

AGTAAGAGTCTGCGGGACCGGCAGCTGTACTTCATCTCCCAGCGGGCCGAGCGCTGAAGGCAGCGGCGCGGCGCC
TTTGTGGTAGCAGTGGCCCCGCGCGGAGGAAGTTCCGGTGTCCGCGGCGCTGGGTCGGTGGCGGAGGCTGAGGAG
AAGGAGGAGCGGGCCGTGGAGGCTTCGCCGCCTAGGTACTGCTATAACCAGAATTTGGTAGAAAAAGGATTTACT
TGTTGGGGCCCTCTTGATAAAAAGAGATGTGGGGGGATTCTCGACCTGCTAACAGAACTGGACCTTTTCGTGGGA
GCCAAGAAGAAAGGTTTGCTCCCGGGTGGAACAGGGATTATCCTCCTCCTCCCCTTAAGAGTCATGCTCAAGAGA
GACACTCTGGCAACTTTCCTGGCAGAGATTCACTTCCCTTTGATTTCCAGGGGCATTCGGGGCCTCCTTTTGCAA
ATGTAGAGGAGCATTCTTTCAGCTATGGAGCTAGAGACGGACCGCATGGTGACTATCGAGGAGGGGAGGGACCTG
GACATGATTTCAGGGGGGGAGATTTTTCGTCTTCTGATTTCCAGAGCAGAGATTCATCACAGTTGGACTTCAGGG
GTAGGGACATACATTCTGGGGATTTTCGGGATAGAGAAGGACCACCTATGGACTATAGGGGTGGAGATGGTACTT
CTATGGATTATAGAGGTAGGGAGGCACCTCATATGAACTACAGAGACAGGGATGCTCACGCTGTTGACTTCAGAG
GTAGGGATGCTCCTCCATCTGACTTCAGGGGCCGGGGCACTTATGATTTAGATTTTAGAGGCCGGGATGGATCCC
ATGCAGATTTTAGGGGAAGGGATTTATCAGATTTGGATTTTAGGGCCAGAGAACAGTCCCGTTCTGATTTTAGGA
ATAGAGATGTATCTGATTTGGACTTTAGAGACAAAGACGGAACACAAGTAGACTTTAGAGGCCGAGGTTCAGGTA
CTACTGATCTAGACTTTAGGGACAGGGATACGCCACATTCAGATTTCAGAGGTAGACACCGATCTAGGACTGATC
AGGATTTTAGGGGCAGAGAGATGGGATCTTGTATGGAATTTAAAGATAGGGAGATGCCCCCTGTGGATCCAAATA
TTTTGGATTACATTCAGCCCTCTACACAAGATAGAGAACATTCTGGTATGAATGTGAACAGGAGAGAAGAATCCA
CACATGACCATACGATAGAAAGGCCTGCTTTTGGCATTCAGAAGGGAGAATTTGAGCATTCAGAAACAAGAGAAG
GAGAAACACAAGGTGTAGCCTTTGAACATGAGTCTCCAGCAGACTTTCAGAACAGCCAAAGTCCAGTTCAAGACC
AAGATAAGTCACAGCTTTCTGGACGTGAAGAGCAGAGTTCAGATGCTGGTCTGTTTAAAGAAGAAGGCGGTCTGG
ACTTTCTTGGGCGGCAAGACACCGATTACAGAAGCATGGAGTACCGTGATGTGGATCATAGGCTGCCAGGAAGCC
AGATGTTTGGCTATGGCCAGAGCAAGTCTTTTCCAGAGGGCAAAACTGCCCGAGATGCCCAACGGGACCTTCAGG
ATCAAGATTATAGGACCGGCCCAAGTGAGGAGAAACCCAGCAGGCTTATTCGATTAAGTGGGGTACCTGAAGATG
CCACAAAAGAAGAGATTCTTAATGCTTTTCGGACTCCTGATGGCATGCCTGTAAAGAACTTGCAGTTGAAGGAGT
ATAACACAGGTTACGACTATGGCTATGTCTGCGTGGAGTTTTCACTCTTGGAAGATGCCATCGGATGCATGGAGG
CCAACCAGGGAACTCTAATGATCCAGGACAAAGAAGTTACCCTGGAGTATGTATCAAGCCTGGATTTTTGGTACT
GCAAACGATGTAAGGCAAACATTGGTGGGCACCGATCTTCCTGTTCATTCTGCAAGAACCCAAGAGAAGTGACAG
AGGCCAAGCAAGAATTAATAACCTACCCTCAGCCTCAGAAAACATCCATACCAGCACCATTGGAAAAACAGCCCA
ACCAGCCCCTAAGACCAGCTGATAAGGAACCTGAACCCAGGAAGAGGGAAGAAGGCCAAGAGTCACGCTTAGGAC
ATCAAAAGAGAGAAGCAGAAAGGTATCTGCCTCCTTCTCGAAGGGAAGGGCCAACTTTCCGAAGAGACCGAGAGA
GGGAGTCATGGTCTGGAGAGACACGCCAGGATGGAGAGAGCAAAACTATCATGCTAAAGCGTATCTATCGTTCCA
CACCACCTGAGGTGATAGTGGAAGTGCTGGAGCCCTATGTCCGCCTTACTACTGCCAACGTCCGTATCATCAAGA
ACAGAACAGGCCCTATGGGGCATACCTATGGCTTTATTGACCTCGACTCCCATGCGGAAGCTCTTCGTGTGGTGA
AGATCTTACAGAACCTTGATCCGCCATTTAGCATTGATGGGAAGATGGTAGCTGTAAACCTGGCCACTGGAAAAC
GAAGAAATGATTCTGGGGACCATTCTGACCACATGCATTACTATCAGGGTAAAAAATATTTCCGAGATAGGAGGG
GAGGTGGCAGAAATTCAGACTGGTCTTCAGATACAAATCGACAAGGACAACAGTCATCATCTGACTGCTACATAT
ATGATTCTGCTACTGGCTACTATTATGACCCCTTGGCAGGAACTTATTATGACCCCAATACCCAGCAAGAAGTCT
ATGTGCCCCAGGATCCTGGATTACCTGAGGAAGAAGAGATCAAGGAAAAAAAACCCACCAGTCAAGGAAAGTCAA
GTAGCAAGAAGGAAATGTCTAAAAGAGATGGCAAGGAGAAAAAAGACAGAGGAGTGACGAGGTTTCAGGAAAATG
CCAGTGAAGGGAAGGCCCCTGCAGAAGACGTCTTTAAGAAGCCCCTGCCTCCTACTGTGAAGAAGGAAGAGAGTC
CCCCTCCACCTAAAGTGGTAAACCCACTGATCGGCCTCTTGGGTGAATATGGAGGAGACAGTGACTATGAGGAGG
AAGAAGAGGAGGAACAGACCCCTCCCCCACAGCCCCGCACAGCACAGCCCCAGAAGCGAGAGGAGCAAACCAAGA
AGGAGAATGAAGAAGACAAACTCACTGACTGGAATAAACTGGCTTGTCTGCTTTGCAGAAGGCAGTTTCCCAATA
AAGAAGTTCTGATCAAACACCAGCAACTGTCAGACCTGCACAAGCAAAACCTGGAAATCCACCGGAAGATAAAAC
AGTCTGAGCAGGAGCTAGCCTATCTGGAAAGGAGAGAACGAGAGGGAAAGTTTAAAGGAAGAGGAAATGATCGCA
GGGAAAAGCTCCAGTCTTTTGACTCTCCAGAAAGGAAACGGATTAAGTACTCCAGGGAAACTGACAGTGATCGTA
AACTTGTTGATAAAGAAGATATCGACACTAGCAGCAAAGGAGGCTGTGTCCAACAGGCTACTGGCTGGAGGAAAG
GGACAGGCCTGGGATATGGCCATCCTGGATTGGCTTCATCAGAGGAGGCTGAAGGCCGGATGAGGGGCCCCAGTG
TTGGAGCCTCAGGAAGAACCAGCAAAAGACAGTCCAACGAGACTTATCGAGATGCTGTTCGAAGAGTCATGTTTG

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FIGURE 4077B

CTCGATATAAAGAACTCGATTAAGAAAGGAGACAAGTTCCATGGGATACAACCTCCCTCTTGTTTTGTTTGTCTC
TCCTTTTCTTTTGTTACTGTTCTTGCTGCTAGAACTTTTTTAAATAAACTTTTTTTCAATGTG

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FIGURE 4078

ACTGTGGGTAGGAGACGGCCGTCGGCGGAGGCGCCATTTTGTGTAGCCGCCGAACCTTGTTGGAGGTTCTGGGGC
GCAGAACCGCTACTGCTGCTTCGGTCTCTCCTTGGGAAAAAATAAAATTTGAACCTTTTGGAGCTGTGTGCTAAA
TCTTCAGTGGGACAATGGGTTCAGACAAAAGAGTGAGTAGAACAGAGCGTAGTGGAAGATACGGTTCCATCATAG
ACAGGGATGACCGTGATGAGCGTGAATCCCGAAGCAGGCGGAGGGACTCAGATTACAAAAGATCTAGTGATGATC
GGAGGGGTGATAGATATGATGACTACCGAGACTATGACAGTCCAGAGAGAGAGCGTGAAAGAAGGAACAGTGACC
GATCCGAAGATGGCTACCATTCAGATGGTGACTATGGTGAGCACGACTATAGGCATGACATCAGTGACGAGAGGG
AGAGCAAGACCATCATGCTGCGCGGCCTTCCCATCACCATCACAGAGAGCGATATTCGAGAAATGATGGAGTCCT
TCGAAGGCCCTCAGCCTGCGGATGTGAGGCTGATGAAGAGGAAAACAGGTGTAAGCCGTGGTTTCGCCTTCGTGG
AGTTTTATCACTTGCAAGATGCTACCAGCTGGATGGAAGCCAATCAGAAAAAGTTGGTGATTCAAGGAAAGCACA
TTGCAATGCATTATAGCAATCCCAGACCTAAGTTTGAAGATTGGCTTTGTAACAAGTGCTGCCTTAACAATTTCA
GGAAAAGACTAAAATGCTTCCGATGTGGAGCAGACAAGTTTGACTCTGAACAGGAAGTGCCTCCTGGAACCACAG
AGTCGGTTCAGTCTGTGGATTACTACTGTGATACGATCATTCTTCGGAACATAGCTCCGCACACTGTGGTGGATT
CCATCATGACAGCACTGTCTCCTTACGCGTCTTTAGCTGTCAATAACATCCGCCTCATAAAAGACAAACAGACCC
AGCAGAACAGAGGCTTCGCATTTGTGCAGCTGTCCTCTGCAATGGATGCTTCTCAGCTGCTTCAGATATTACAGA
GTCTCCATCCTCCTTTGAAAATTGATGGCAAAACTATTGGGGTTGATTTTGCAAAAAGTGCCAGAAAAGACTTGG
TCCTCTCAGATGGTAACCGCGTCAGCGCCTTCTCTGTAGCTAGTACGGCTATTGCTGCTGCTCAGTGGTCATCCA
CCCAGTCTCAAAGTGGTGAAGGAGGCAGTGTTGACTACAGTTATCTGCAACCAGGTCAAGATGGCTATGCCCAAT
ATGCTCAGTATTCACAGGATTATCAGCAGTTTTATCAACAACAAGCTGGAGGATTGGAATCTGATGCATCATCTG
CATCAGGCACAGCAGTGACCACCACCTCAGCGGCTGTAGTGTCCCAGAGTCCTCAGCTGTATAATCAAACCTCCA
ATCCACCTGGCTCTCCGACTGAGGAAGCACAGCCTAGCACTAGCACAAGTACACAGGCCCCAGCCGCTTCCCCTA
CTGGTGTAGTTCCTGGTACCAAATATGCAGTACCTGACACGTCCACTTACCAGTATGATGAATCTTCAGGATATT
ACTATGATCCGACAACAGGGCTCTATTATGACCCCAACTCGCAATACTACTATAATTCCTTGACCCAGCAGTACC
TTTACTGGGATGGGGAAAAAGAGACCTACGTGCCAGCTGCAGAGTCTAGCTCCCACCAGCAGTCGGGCCTGCCTC
CTGCAAAAGAGGGGAAAGAGAAGAAGGAGAAACCCAAGAGCAAAACAGCCCAGCAGATTGCCAAAGACATGGAAC
GCTGGGCTAAGAGTTTGAATAAGCAGAAAGAAAACTTTAAAAATAGCTTTCAGCCTGTCAATTCCTTGAGGGAAG
AAGAAAGGAGAGAATCTGCTGCAGCAGACGCTGGCTTTGCTCTCTTTGAGAAGAAGGGAGCCTTAGCTGAAAGGC
AGCAGCTCATCCCAGAATTGGTGCGAAATGGAGATGAGGAGAATCCCCTCAAAAGGGGTCTGGTTGCTGCTTACA
GTGGTGACAGTGACAATGAGGAGGAGCTGGTGGAGAGACTTGAGAGTGAGGAAGAGAAGCTAGCTGACTGGAAGA
AGATGGCCTGTCTGCTCTGCCGGCGCCAGTTCCCGAACAAAGATGCCCTAGTCAGGCACCAGCAACTCTCAGACC
TTCACAAGCAAAACATGGACATCTACCGACGATCCAGGCTGAGCGAGCAGGAGCTGGAAGCCTTGGAGCTAAGGG
AGAGAGAGATGAAATACCGAGACCGAGCTGCAGAAAGACGGGAGAAGTACGGCATTCCAGAACCTCCAGAGCCCA
AGCGCAAGAAGCAGTTTGATGCCGGCACTGTGTATGTGATGTGCACATTTTCCAGTTCGTAAGCTGGGGCCCTGG
CTGTTTTAAGTAACTGTGTGTTTGCCACTGGCAGGAATTACGAGCAACCCACCAAAGATGGCATTGACCACAGTA
ACATTGGCAACAAGATGCTGCAGGCCATGGGCTGGCGGGAAGGCTCTGGCTTGGGACGAAAGTGTCAAGGCATTA
CGGCTCCCATTGAGGCTCAAGTTCGGCTAAAGGGAGCTGGCCTAGGAGCCAAAGCGAGCGCATATGGTTTGTCGG
GCGCCGATTCCTACAAAGATGCTGTCCGGAAAGCCATGTTTGCCCGGTTCACTGAGATGGAGTGAGAGAGAGAGA
GAGAGAGAGATGACAAGGAGCACAAGAAGTGGTCCATCTCCCGAATTCGCTGTTACCGCCTGTCTCTTTAAGGGC
ATGCCTTGTGCTGTTAATAGATCTTAGGGTGAACCACTTCATTCTGCAGGGTTCTCCCTCCCACCTTAAAGAAGT
TCCCCTTATGTGGGTTGCCTGGTGAATGGCCTTCCTTCCCGCCAGAGGGCTTGTGAACAGACCGGAGAGGACAGT
GGATTGTTTATACTCCAGTGTACATAGTGTAATGTAGCGTGTTTACATGTGTAGCCTATGTTGTGGTCCATCAGC
CCCTCACATTCCTAGGGGTTTGAGATGCTGTAGGTGGTATGTGACACCAAAGCCACCTCTGTCATTTGTTGTGAT
GTCTTTTCTTGGCAAAAGCCTTGTGTATATTTGTATATTACACATTTGTACAGAATTTTGGAAGATTTTCAGTCT
AGTTGCCAAATCTGGCTCCTTTACAAAAGAAATACCTTGAG

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FIGURE 4079

GCCCAGGCCCCGCCGCTGCGGAAGAGGTTTCTAGAGAGTGGAGCCTGCTTCCTGGGCCCTAGGCCCCTCCCACAA
TGCTTGTCGCCGGTCTTCTTCTCTGGGCTTCCCTACTGACCGGGGCCTGGCCATCCTTCCCCACCCAGGACCACC
TCCCGGCCACGCCCCGGGTCCGGCTCTCATTCAAAGAGCTGAAGGCCACAGGCACCGCCCACTTCTTCAACTTCC
TGCTCAACACAACCGACTACCGAATCTTGCTCAAGGACGAGGACCACGACCGCATGTACGTGGGCAGCAAGGACT
ACGTGCTGTCCCTGGACCTGCACGACATCAACCGCGAGCCCCTCATTATACACTGGGCAGCCTCCCCACAGCGCA
TCGAGGAATGCGTGCTCTCAGGCAAGGATGTCAACGGCGAGTGTGGGAACTTCGTCAGGCTCATCCAGCCCTGGA
ACCGAACACACCTGTATGTGTGCGGGACAGGTGCCTACAACCCCATGTGCACCTATGTGAACCGCGGACGCCGCG
CCCAGGCCACACCATGGACCCAGACTCAGGCGGTCAGAGGCCGCGGCAGCAGAGCCACGGATGGTGCCCTCCGCC
CGATGCCCACAGCCCCACGCCAGGATTACATCTTCTACCTGGAGCCTGAGCGACTCGAGTCAGGGAAGGGCAAGT
GTCCGTACGATCCCAAGCTGGACACAGCATCGGCCCTCATCAATGAGGAGCTCTATGCTGGTGTGTACATCGATT
TTATGGGCACTGATGCAGCCATCTTCCGCACACTTGGAAAGCAGACAGCCATGCGCACGGATCAGTACAACTCCC
GGTGGCTGAACGACCCGTCGTTCATCCATGCTGAGCTCATTCCTGACAGTGCGGAGCGCAATGATGATAAGCTTT
ACTTCTTCTTCCGTGAGCGGTCGGCAGAGGCGCCGCAGAGCCCCGCGGTGTACGCCCGCATCGGGCGCATTTGCC
TGAACGATGACGGTGGTCACTGTTGCCTGGTCAACAAGTGGAGCACATTCCTGAAGGCGCGGCTCGTCTGCTCTG
TCCCGGGCGAGGATGGCATTGAGACTCACTTTGATGAGCTCCAGGACGTGTTTGTCCAGCAGACCCAGGACGTGA
GGAACCCTGTCATTTACGCTGTCTTTACCTCCTCTGGCTCCGTGTTCCGAGGCTCTGCCGTGTGTGTCTACTCCA
TGGCTGATATTCGCATGGTCTTCAACGGGCCCTTTGCCCACAAAGAGGGGCCCAACTACCAGTGGATGCCCTTCT
CAGGGAAGATGCCCTACCCACGGCCGGGCACGTGCCCTGGTGGAACCTTCACGCCATCTATGAAGTCCACCAAGG
ATTATCCTGATGAGGTGATCAACTTCATGCGCAGCCACCCACTCATGTACCAGGCCGTGTACCCTCTGCAGCGGC
GGCCCCTGGTAGTCCGCACAGGTGCTCCCTACCGCCTTACCACTATTGCCGTGGACCAGGTGGATGCAGCCGACG
GGCGCTATGAGGTGCTTTTCCTGGGCACAGACCGCGGGACAGTGCAGAAGGTCATTGTGCTGCCCAAGGATGACC
AGGAGTTGGAGGAGCTCATGCTGGAGGAGGTGGAGGTCTTCAAGGATCCAGCACCCGTCAAGACCATGACCATCT
CTTCTAAGAGGCAACAACTCTACGTGGCGTCAGCCGTGGGTGTCACACACCTGAGCCTGCACCGCTGCCAGGCGT
ATGGGGCTGCCTGTGCTGACTGCTGCCTTGCCCGGGACCCTTACTGTGCCTGGGATGGCCAGGCCTGCTCCCGCT
ATACAGCATCCTCCAAGAGGCGGAGCCGCCGGCAGGACGTCCGGCACGGAAACCCCATCAGGCAGTGCCGTGGGT
TCAACTCCAATGCCAACAAGAATGCCGTGGAGTCTGTGCAGTATGGCGTGGCCGGCAGCGCAGCCTTCCTTGAGT
GCCAGCCCCGCTCGCCCCAAGCCACTGTTAAGTGGCTGTTCCAGCGAGATCCTGGTGACCGGCGCCGAGAGATTC
GTGCAGAGGACCGCTTCCTGCGCACAGAGCAGGGCTTGTTGCTCCGTGCACTGCAGCTCAGCGATCGTGGCCTCT
ACTCCTGCACAGCCACTGAGAACAACTTTAAGCACGTCGTCACACGAGTGCAGCTGCATGTACTGGGCCGGGACG
CCGTCCATGCTGCCCTCTTCCCACCACTGTCCATGAGCGCCCCGCCACCCCCAGGCGCAGGCCCCCCAACGCCTC
CTTACCAGGAGTTAGCCCAGCTGCTGGCCCAGCCAGAAGTGGGCCTCATCCACCAGTACTGCCAGGGTTACTGGC
GCCATGTGCCCCCCAGCCCCAGGGAGGCTCCAGGGGCACCCCGGTCTCCTGAGCCCCAGGACCAGAAAAAGCCCC
GGAACCGCCGGCACCACCCTCCGGACACATGAGGCCAGCTGCCTGTGCCTGCCATGGGCCAGCCTAGCCCTTGTC
CCTTTTAATATAAAAGATATATATATATATATATATATATA

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FIGURE 4080

CCCGAGTGCTTCCCGCAGAGGGCTGGTGGTGGGAGCGGAGTGGGTCGGGCGGGGCCGAGCCGGGCCGTGGGCCGT
GTGGGGGCCGGGCGGCGGCCGGGCCGGCGGACGGCGGGATGGCTGCACCGTGAGCGCCGAGGACAAGGCGGCGG
CCGAGCGCTCTAAGATGATCGACAAGAACCTGCGGGAGGACGGAGAGAAGGCGGCGCGGGAGGTGAAGTTGCTGC
TGTTGGGTGCTGGGGAGTCAGGGAAGAGCACCATCGTCAAGCAGATGAAGATCATCCACGAGGATGGCTACTCCG
AGGAGGAATGCCGGCAGTACCGGGCGGTTGTCTACAGCAACACCATCCAGTCCATCATGGCCATTGTCAAAGCCA
TGGGCAACCTGCAGATCGACTTTGCCGACCCCTCCAGAGCGGACGACGCCAGGCAGCTATTTGCACTGTCCTGCA
CCGCCGAGGAGCAAGGCGTGCTCCCTGATGACCTGTCCGGCGTCATCCGGAGGCTCTGGGCTGACCATGGTGTGC
AGGCCTGCTTTGGCCGCTCAAGGGAATACCAGCTCAACGACTCAGCTGCCTACTACCTGAACGACCTGGAGCGTA
TTGCACAGAGTGACTACATCCCCACACAGCAAGATGTGCTACGGACCCGCGTAAAGACCACGGGGATCGTGGAGA
CACACTTCACCTTCAAGGACCTACACTTCAAGATGTTTGATGTGGGTGGTCAGCGGTCTGAGCGGAAGAAGTGGA
TCCACTGCTTTGAGGGCGTCACAGCCATCATCTTCTGCGTAGCCTTGAGCGCCTATGACTTGGTGCTAGCTGAGG
ACGAGGAGATGAACCGCATGCATGAGAGCATGAAGCTATTCGATAGCATCTGCAACAACAAGTGGTTCACAGACA
CGTCCATCATCCTCTTCCTCAACAAGAAGGACCTGTTTGAGGAGAAGATCACACACAGTCCCCTGACCATCTGCT
TCCCTGAGTACACAGGGGCCAACAAATATGATGAGGCAGCCAGCTACATCCAGAGTAAGTTTGAGGACCTGAATA
AGCGCAAAGACACCAAGGAGATCTACACGCACTTCACGTGCGCCACCGACACCAAGAACGTGCAGTTCGTGTTTG
ACGCCGTCACCGATGTCATCATCAAGAACAACCTGAAGGACTGCGGCCTCTTCTGAGGGGCAGCGGGGCCTGGCG
GGATGGGCCACCGCCGACTTTGTACCCCCCAACCCCTGAGGAAGATGGGGGCAAGAAGATCACGCTCCCCGCCTG
TTCCCCCGCCGCTTTTCTCCTCTTTCCTCTCTTTGTTCTCAGCTCCCCCTGTCCCCTCAGCTCCAGACGTAGGGG
AGGGGTTGCCACAGGCCTCCCTGTTTGAAGCCTGCCCTTGTCTGAGATGCTGGTAATGGCCATGGTACCCCCTTC
TGGGCATCTGTTCTGGTTTTTAACCATTGTCTTGTTCTGTGATGAGGGGAGGGGGGCACATGCTGAGTCTCCCAA
GGCTGCGTCTGGAGGGGCCCCTGCTTCTCCAGCCTGGACCCCCAGCTTTGCCCAACACCAGCCCCTGCCCCAGCC
CAAGTCCAAATGTTTACAGGGAGCCTCCTGCCCAGTCCCCCAACCCCAGCCGCTCGGAGGCCCCAAAGGAAAAAG
CACAAGAAGCGTGAGACGCCACCATTCCTGGAAACCACAGTCC

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FIGURE 4081

TCTGTGATTGTGGCCAGGCGGGGCACCCTCGGAGGGGAGGGTTCGGAAGTGGAATGCGACCCCCCAGCCTCTTTC
CCCTAGGGGCTGTAATCTGATCCCTGGGGACTCCCCCCCTAGCCTCCCGCCCTCGCCCTCACTGCTGACTCCTCT
TCCAGATCCTGGGGCAGAGTCCAGGGCAGCTCAAGGCTCCTCCACACACACACCCGCTGAACCCTGAGCACCCTG
AGCTGCTGAGATGGGGCGGGCCGGGGCTGCCGCCGTGATCCCGGGCCTGGCCCTGCTCTGGGCAGTGGGGCTGGG
GAGTGCCGCCCCCAGCCCCCACGCCTTCGGCTCTCCTTCCAAGAGCTCCAGGCCTGGCATGGTCTCCAGACTTTC
AGCCTGGAGCGAACCTGCTGCTACCAGGCCTTGCTGGTGGATGAGGAGCGTGGACGCCTGTTTGTGGGTGCCGAG
AACCATGTGGCCTCCCTCAACCTGGACAACATCAGCAAGCGGGCCAAGAAGCTGGCCTGGCCGGCCCCTGTGGAA
TGGCGAGAGGAGTGCAACTGGGCAGGGAAGGACATTGGTACTGAGTGCATGAACTTCGTGAAGTTGCTGCATGCC
TACAACCGCACCCATTTGCTGGCCTGTGGCACGGGAGCCTTCCACCCAACCTGTGCCTTTGTGGAAGTGGGCCAC
CGGGCAGAGGAGCCCGTCCTCCGGCTGGACCCAGGAAGGATAGAGGATGGCAAGGGGAAGAGTCCTTATGACCCC
AGGCATCGGGCTGCCTCCGTGCTGGTGGGGGAGGAGCTATACTCAGGGGTGGCAGCAGACCTCATGGGACGAGAC
TTTACCATCTTTCGCAGCCTAGGGCAACGTCCAAGTCTCCGAACAGAGCCACACGACTCCCGCTGGCTCAATGAG
CCCAAGTTTGTCAAGGTATTTTGGATCCCGGAGAGCGAGAACCCAGACGACGACAAAATCTACTTCTTCTTTCGT
GAGACGGCGGTAGAGGCGGCGCCGGCACTGGGACGCCTGTCCGTGTCCCGCGTTGGCCAGATCTGCCGGAACGAC
GTGGGCGGCCAGCGCAGCCTGGTCAACAAGTGGACGACGTTCCTGAAGGCGCGGCTGGTGTGCTCGGTGCCCGGC
GTCGAGGGCGACACCCACTTCGATCAGCTCCAGGATGTGTTTCTGTTGTCCTCGCGGGACCACCGGACCCCGCTG
CTCTATGCCGTCTTCTCCACGTCCAGCAGCATCTTCCAGGGCTCTGCGGTGTGCGTGTACAGCATGAACGACGTG
CGCCGGGCCTTCTTGGGACCCTTTGCACACAAGGAGGGGCCCATGCACCAGTGGGTGTCATACCAGGGTCGCGTC
CCCTACCCGCGGCCAGGCATGTGCCCCAGCAAGACCTTTGGCACCTTCAGTTCCACCAAGGACTTCCCAGACGAT
GTCATCCAGTTTGCGCGGAACCACCCCCTCATGTACAACTCTGTCCTGCCCACTGGGGGGCGCCCTCTTTTCCTA
CAAGTTGGAGCCAATTACACCTTCACTCAAATTGCCGCGGACCGGGTTGCAGCCGCTGACGGACACTATGACGTC
CTCTTCATTGGCACAGACGTTGGCACGGTGCTGAAGGTGATCTCGGTCCCCAAGGGCAGTAGGCCCAGCGCAGAG
GGGCTGCTCCTGGAGGAGCTGCACGTGTTTGAGGACTCGGCCGCTGTCACCAGCATGCAAATTTCTTCCAAGAGG
CACCAGCTGTACGTAGCCTCGCGGAGCGCGGTGGCCCAGATCGCGTTGCACCGCTGCGCTGCCCACGGCCGCGTC
TGCACCGAATGCTGTCTGGCGCGTGACCCCTACTGCGCCTGGGACGGGGTCGCGTGCACGCGCTTCCAGCCCAGT
GCCAAGAGGCGGTTCCGGCGGCAAGACGTAAGGAATGGCGACCCCAGCACGTTGTGCTCCGGAGACTCGTCTCGT
CCCGCGCTGCTGGAACACAAGGTGTTCGGCGTGGAGGGCAGCAGCGCCTTTCTGGAGTGTGAGCCCCGCTCGCTG
CAGGCGCGCGTGGAGTGGACTTTCCAGCGCGCAGGGGTGACAGCCCACACCCAGGTGCTGGCAGAGGAGCGCACC
GAGCGCACCGCCCGGGGACTACTGCTGCGCAGGCTGCGGCGCCGGGACTCGGGCGTGTACTTGTGCGCCGCCGTC
GAGCAGGGCTTTACGCAACCGCTGCGTCGCCTGTCGCTGCACGTGTTGAGTGCTACGCAGGCCGAACGACTGGCG
CGGGCCGAGGAGGCTGCGCCCGCCGCGCCGCCGGGCCCCAAACTCTGGTACCGGGACTTTCTGCAGCTGGTGGAG
CCGGGCGGAGGTGGCAGCGCGAACTCCCTGCGCATGTGCCGCCCGCAGCCTGCGCTGCAGTCACTGCCCCTGGAG
TCGCGGAGAAAGGGCCGTAACCGGAGGACCCACGCCCCTGAGCCTCGCGCTGAGCGGGGGCCGCGCAGCGCAACG
CACTGGTGACCAGACTGTCCCCACGCCGGGAACCAAGCAGGAGACGACAGGCGAGAGAGGAGCCAGACAGACCCT
GAAAAGAAGGACGGGTTGGGGCCGGGCACATTGGGGGTCACCGGCCGATGGAGACACCAACCGACAGGCCCTGGC
TGAGGGCAGCTGCGCGGGCTTATTTATTAACAGGATAACCCTTGAATGTAGCAGCCCCGGGAGGGCGGCACAGGT
CGGGCGCAGGATTCAGCCGGAGGGAAGGGACGGGGAAGCCGAGCTCCAGAGCAACGACCAGGGCCGAGGAGGTGC
CTGGAGTGCCCACCCTGGGAGACAGACCCCACCTCCTTGGGTAGTGAGCAGTGAGCAGAAAGCTGTGAACAGGCT
GGGCTGCTGGAGGTGGGGCGAGGCAGGCCGACTGTACTAAAGTAACGCAATAAACGCATTATCAGCCA

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FIGURE 4082

ATGCCTCGCGCCCGTAAGGGCAACACGCTCCGGAAGGGTGGTCAGCGCCGTGGAGGAGGTGCCCGGAGCAGTGCC
CAAGCTGACTCGGGTTCCAGTGACGATGAGGCAGCCAGTGAGGCCCGCAGCACCGCCAGTGAATGCCCCAGCCTT
CTCAGCACCACTGCAGAGGACAGCCTTGGGGGGGATGTCGTGGATGAGCAGGGCCAGCAGGAAGACCTTGAGGAA
AAGCTGAAGGAGTATGTGGACTGTCTCACAGACAAGAGTGCCAAGACCCGGCAGGGTGCTCTTGAGAGCCTGCGC
CTGGCCCTAGCGTCCCGCCTACTCCCCGACTTCTTGCTGGAGCGCCGCCTCACGCTAGCCGATGCCCTGGAAAAG
TGCCTCAAGAAAGGGAAGGGCGAGGAACAAGCCCTGGCTGCTGCTGTGCTAGGCCTGCTCTGCGTGCAGCTGGGC
CCTGGACCTAAGGGTGAGGAGCTGTTTCACAGCCTGCAGCCTCTGCTGGTCTCTGTGCTCAGTGACAGCACAGCT
AGCCCTGCTGCCCGGCTCCACTGTGCTTCTGCCCTTGGCCTGGGCTGCTACGTGGCTGCCGCTGACATCCAGGAC
CTGGTCTCTTGCCTTGCCTGCTTAGAAAGTGTTTTCAGCCGGTTCTATGGCTTGGGGGGCAGCTCCACAAGTCCT
GTGGTTCCTGCCAGCCTGCACGGCCTGCTCTCTGCTGCCCTGCAGGCCTGGGCATTGCTGCTCACCATCTGCCCT
AGCACCCAAATCAGCCACATCCTTGACAGGCAGCTGCCCCGGCTGCCCCAGCTCTTGTCCAGTGAAAGTGTGAAC
CTGCGGATCGCTGCCGGTGAAACCATTGCACTGCTCTTTGAGCTTGCCCGGGACCTTGAGGAGGAGTTTGTTTAC
GAGGACATGGAGGCCCTCTGCAGTGTCCTGCGCACTCTGGCCACTGACAGTAACAAGTACCGTGCCAAGGCTGAT
CGTCGGCGCCAGCGCTCTACTTTCCGCGCCGTGCTGCACTCCGTGGAGGGCGGTGAATGCGAAGAAGAGATAGTG
CGCTTCGGCTTTGAGGTGCTCTACATGGACAGCTGGGCTCGGCACCGGATCTACGCTGCCTTCAAGGAAGTGCTG
GGTTCGGGCATGCACCACCACCTCCAGAACAATGAGGTACTCCGTGACATCTTTGGCCTGGGCCCTGTGCTGTTG
CTGGATGCCACTGCCCTGAAGGCCTGCAAGGTTCCACGCTTTGAGAAGCACCTGTACAATGCTGCTGCCTTCAAA
GCCCGGACCAAGGCTCGAAGCCGTGTGCGGGACAAGCGGGCAGACATCCTGTGA

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FIGURE 4083

AGCCAGGGTAGAGACTGAGTCGGCGCCTGGCGGGTGTTGTGACGCGCAAACCAGGGGCGGGTTCTAAGCGGCGAC
GCGCGGGTGCTGGGAGGCCTTAGAACGCCGTGGCGTGCCGCAGGACGCGACGGCTGCAGAACATCCGCCGCACCG
CTGGGGGCCAACGTTGTCGGACCGAGGAGTCCGAGGTGGCGACTGAGTGAGATACCCAGCTGTGCGGAGCTAGGA.
CGCGGAACATCCCAGAGGCCAGCATCAACATGTTTCCATCCTTGGGGAATGACCACGCAACTGGGCCCAGCCCTG
GTGCTGGGGGTGGCCCTGTGCCTGGGTTGTGGCCAGCCCCTACCACAGGTCCCTGAACGCCCCTTCTCTGTGCTG
TGGAATGTACCCTCAGCACACTGTGAGGCCCGCTTTGGTGTGCACCTGCCACTCAATGCTCTGGGCATCATAGCC
AACCGTGGCCAGCATTTTCACGGTCAGAACATGACCATTTTCTACAAGAACCAACTCGGCCTCTATCCCTACTTT
GGACCCAGGGGCACAGCTCACAATGGGGGCATCCCCCAGGCTTTGCCCCTTGACCGCCACCTGGCACTGGCTGCC
TACCAGATCCACCACAGCCTGAGACCTGGCTTTGCTGGCCCAGCAGTGCTGGATTGGGAGGAGTGGTGTCCACTC
TGGGCTGGGAACTGGGGCCGCCGCCGAGCTTATCAGGCAGCCTCTTGGGCTTGGGCACAGCAGGTATTCCCTGAC
CTGGACCCTCAGGAGCAGCTCTACAAGGCCTATACTGGCTTTGAGCAGGCGGCCCGTGCACTGATGGAGGATACG
CTGCGGGTGGCCCAGGCACTACGGCCCCATGGACTCTGGGGCTTCTATCACTACCCAGCCTGTGGCAATGGCTGG
CATAGTATGGCTTCCAACTATACCGGCCGCTGCCATGCAGCCACCCTTGCCCGCAACACTCAACTGCATTGGCTC
TGGGCCGCCTCCAGTGCCCTCTTCCCCAGCATCTACCTCCCACCCAGGCTGCCACCTGCCCACCACCAGGCCTTT
GTCCGACATCGCCTGGAGGAGGCCTTCCGTGTGGCCCTTGTTGGGCACCGACATCCCCTGCCTGTCCTGGCCTAT
GTCCGCCTCACACACCGGAGATCTGGGAGGTTCCTGTCCCAGGATGACCTTGTGCAGTCCATTGGTGTGAGTGCA
GCACTAGGGGCAGCCGGCGTGGTGCTCTGGGGGGACCTGAGCCTCTCCAGCTCTGAGGAGGAGTGCTGGCATCTC
CATGACTACCTGGTGGACACCTTGGGCCCCTATGTGATCAATGTGACCAGGGCAGCGATGGCCTGCAGTCACCAG
CGGTGCCATGGCCACGGGCGCTGTGCCCGGCGAGATCCAGGACAGATGGAAGCCTTTCTACACCTGTGGCCAGAC
GGCAGCCTTGGAGATTGGAAGTCCTTCAGCTGCCACTGTTACTGGGGCTGGGCTGGCCCCACCTGCCAGGAGCCC
AGGCCTGGGCCTAAAGAAGCAGTATAAAGCCAGGGCCCCTGCCACTGCCTCTTCTTTTCCCTGCTGCCACTTTTC
CAGTCCTGGAACTACTCTGTCCCACTCTTGCTCTATTCAGTTTACAGTCAACCCTCCCAAGCACACACCCCGCTT
CCCTTGGAATCCCTGAGGGGTAGAAGGGGCCAGAAAAAACGCTTATAAAACCAGAGGCCCTCTGAGATCATGTGA
GTCCTCCATGGCAAGGAAGCAGTTCCAGGGAGAGTCAGGTTCCAGCTAGTTAGGGCTGCCAGCCTAGGGCTTTGT
GCCTACACCTCACTAAGCCCATGGAGAGGTCACAGATGGGCCGTGCACGGGCAGATGGGCCCCAAAAAATCTTGG
CGAAGGTCGGTAAAGTGCTAAGCTGTTGTCTGCACTCTTTCATCATAAAGTCACTTTTTTCCACTGC

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FIGURE 4084

CTGGGAGGCCTTAGAACGCCGTGGCGTGCCGCAGGACGCGACGGCTGCAGAACATCCGCCGCACCGCTGGGGGCC
AACGTTGTCGGACCGAGGAGTCCGAGGTGGCGACTGAGTGAGATACCCAGCTGTGCGGAGCTAGGACGCGGAACA
TCCCAGAGGCCAGCATCAACATTGGTGGACTAGGAGGACTACTGGAAGACAGAAGGCCAGCAAGTAGATTGGGTC
GGCTGTTTTATAGACCTGGTGGTTACAGACCCCCTGTGAGGGGAGGTCCTGAGGAGGACAAATTTGTAGCCAGAG
CAGGCTGGGGCCAGGACTCCTAGGTTCTGCCCCAGCCTTAAGCAGCTCATCCATCACTCCCAGCCTCCCTCCAAT
GTGGGGTAGACACCTGGATCTATCTGCCCTGCTCTATAGGGGATGGGTCTCTTCCAGGTCACCTGTGCTATCAGG
TGAGTGTGGGACAAAGTGCAGCCCACCACTCCCCAGTTCCAGTATGCATGGTCCCCCCTGCACTCTGTCAGCCCT
TCCCTGCTCCAACCCCACCCTCCCTCCTGGCACAGCCCAGCATGGCTGTTATCTACAGGAGGAGAGCCACTGTGG
TCTGAAGAGATGCTACTGCCTGGAGACTGGGGTCTTAACCTCCAGCCTGGCACTGAGCCACCTGCAACCTAGCAG
CAGGTGACCTTGGCTCCCAGCCTGACTCAGCTGAACCTGGATCCTGTGCATAGGCAAGAGCTGACTCTGAGCCCT
GGCCCAGCCAAGCTGACCCCTACACTAGACCCTACACACCGGATGGAGCTGATCCTGAGTACCAGCCCAGCTGAG
CTGACTCTGGATCCTGCGTGCCAGCCAAAGCTGCCCCTGGATTCCACATGCCAACCAGAGATGACCTTCAATCCT
GGTCCAACTGAGCTTACCCTGGATCCTGAACACCAGCCAGAGGAGACCCCAGCTCCTAGCCTGGCTGAGTTGACC
CTGGAGCCTGTGCACCGCCGACCCGAGCTCCTGGATGCTTGTGCTGACCTCATCAATGATCAGTGGCCCCGCAGC
CGCACCTCCCGCCTGCACTCCCTGGGCCAGTCCTCAGATGCCTTCCCCCTCTGCCTGATGCTGCTAAGCCCCCAC
CCCACACTTGAAGCAGCACCCGTTGTGGTGGGCCATGCCCGCCTGTCACGGGTGCTGAACCAGCCCCAGAGCCTC
TTAGTGGAGACAGTGGTGGTGGCCCGGGCCCTGAGGGGCCGTGGCTTTGGCCGCCGCCTCATGGAGGGCCTGGAG
GTCTTTGCTCGGGCCCGGGGCTTCCGCAAGCTGCATCTCACCACCCATGACCAGGTGCACTTCTATACCCACCTG
GGCTACCAGCTGGGTGAGCCTGTGCAGGGCCTGGTCTTCACCAGCAGACGGCTGCCTGCCACCCTGCTTAATGCC
TTCCCCACAGCCCCCTCTCCCCGGCCACCCAGGAAGGCCCCAAACCTGACTGCCCAAGCTGCCCCAAGGGGTCCC
AAGGGACCTCCATTGCCACCACCCCCTCCCCTACCTGAGTGCCTGACCATCTCACCCCCAGTTCCATCAGGGCCC
CCTTCAAAAAGCCTGCTGGAGACACAATATCAAAATGTGAGGGGGCGCCCCATATTCTGGATGGAAAAAGACATC
TGAGGCCATCCAGGGCAAGGAACTGTCTTTCTGGTTCAATAGACTGCCCCGACAGTCTACAAGCCTCAGCCCACT
GACCATACCTCAGCCCCTAGCCCCTGGGGGGCAGCTTTAACCTGGGCATGTTTCCTGGGTACCAGTGGGGCCAGG
AGGTGGCTCTGGCTCAGAGCCGTCAGTGTGGCTGAATAAAGGCTCTCTTGGGT

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FIGURE 4085

TTCCTCCAGGAGTCTCTGGTGCAGCTGGGGTGGAATCTGGCCAGGCCCTGCTTAGGCCCCCATCCTGGGGTCAGG
AAATTTGGAGGATAAGGCCCTTCAGCCCCAAGGTCAGCAGGGACGAGCGGGCAGACTGGCGGGTGTACAGGAGGG
CTGGGTTGACCTGTCCTTGGTCACTGAGGCCATTGGATCTTCCTCCAGTGGCTGCCAGGATTTCTGGTGGAAGAG
ACAGGAAGGCCTCCCCCCCTTGGTCGGGTCAGCCTGGGGGCTGAGGGCCTGGCTGTCAGCCACTCTTCCCAGAAC
ATATGTCATGGCCTCAGTGGCTCATGGGGAAGCAGGGGTGGGCGAGCTTAGGCTAGAGCAAGTCCTGTGGGAGAT
GGCAGAGGCCTGGTCTGAGAGGCAACTCGGATGTGCCCTCCAGTGGCCATGCTCCCCTCCATGCGTCTCCCCTGC
CCTCCTGGAGCCCTGCAGGTCAATGTTTAACAGAAACCAGAGCAGCGGTGGATTAATGCGCAAGGGCTCAGCCCC
CCAGCCCTGAGCAGTGGGGGAATCGGAGACTTTGCAACCTGTTCTCAGCTCTGCCTCCCCTGGCCAGGTTGTCCT
CGACCAGTCCCGTGCC**ATG**GCAGCCCACCTGCTTCCCATCTGCGCCCTCTTCCTGACCTTACTCGATATGGCCCA
AGGCTTTAGGGGCCCCTTGCTACCCAACCGGCCCTTCACCACCGTCTGGAATGCAAACACCCAGTGGTGCCTGGA
GAGGCACGGTGTGGACGTGGATGTCAGTGTCTTCGATGTGGTAGCCAACCCAGGGCAGACCTTCCGCGGCCCTGA
CATGACAATTTTCTATAGCTCCCAGCTGGGCACCTACCCCTACTACACGCCCACTGGGGAGCCTGTGTTTGGTGG
TCTGCCCCAGAATGCCAGCCTGATTGCCCACCTGGCCCGCACATTCCAGGACATCCTGGCTGCCATACCTGCTCC
TGACTTCTCAGGGCTGGCAGTCATCGACTGGGAGGCATGGCGCCCACGCTGGGCCTTCAACTGGGACACCAAGGA
CATTTACCGGCAGCGCTCACGGGCACTGGTACAGGCACAGCACCCTGATTGGCCAGCTCCTCAGGTGGAGGCAGT
AGCCCAGGACCAGTTCCAGGGAGCTGCACGGGCCTGGATGGCAGGCACCCTCCAGCTGGGGCGGGCACTGCGTCC
TCGCGGCCTCTGGGGCTTCTATGGCTTCCCTGACTGCTACAACTATGACTTTCTAAGCCCCAACTACACCGGCCA
GTGCCCATCAGGCATCCGTGCCCAAAATGACCAGCTAGGGTGGCTGTGGGGCCAGAGCCGTGCCCTCTATCCCAG
CATCTACATGCCCGCAGTGCTGGAGGGCACAGGGAAGTCACAGATGTATGTGCAACACCGTGTGGCCGAGGCATT
CCGTGTGGCTGTGGCTGCTGGTGACCCCAATCTGCCGGTGCTGCCCTATGTCCAGATCTTCTATGACACGACAAA
CCACTTTCTGCCCCTGGATGAGCTGGAGCACAGCCTGGGGGAGAGTGCGGCCCAGGGGGCAGCTGGAGTGGTGCT
CTGGGTGAGCTGGGAAAATACAAGAACCAAGGAATCATGTCAGGCCATCAAGGAGTATATGGACACTACACTGGG
GCCCTTCATCCTGAACGTGACCAGTGGGGCCCTTCTCTGCAGTCAAGCCCTGTGCTCCGGCCATGGCCGCTGTGT
CCGCCGCACCAGCCACCCCAAAGCCCTCCTCCTCCTTAACCCTGCCAGTTTCTCCATCCAGCTCACGCCTGGTGG
TGGGCCCCTGAGCCTGCGGGGTGCCCTCTCACTTGAAGATCAGGCACAGATGGCTGTGGAGTTCAAATGTCGATG
CTACCCTGGCTGGCAGGCACCGTGGTGTGAGCGGAAGAGCATGTGG**TGA**TTGGCCACACACTGAGTTGCACATAT
TGAGAACCTAATGCACTCTGGGTCTGGCCAGGGCTTCCTCAAATACATGCACAGTCATACAAGTCATGGTCACAG
TAAAGAGTACACTCAGCCACTGTCACAGGCATATTCCCTGCACACACATGCATACTTACAGACTGGAATAGTGGC
ATAAGGAGTTAGAACCACAGCAGACACCATTCATTCCATGTCCATATGCATCTACTTGGCAAGGTCATAGACAAT
TCCTCCAGAGACACTGAGCCAGTCTTTGAACTGCAGCAATCACAAAGGCTGACATTCACTGAGTGCCTACTCTTT
GCCAATCCCCGTGCTAAGCGTTTTATGTGGACTTATTCATTCCTCACAATGAGGCTATGAGGAAACTGAGTCACT
CACATTGAGAGTAAGCACGTTGCCCAAGGTTGCACAGCAAGAAAAGGGAGAAGTTGAGATTCAAACCCAGGCTGT
CTAGCTCCGGGGGTACAGCCCTTGCACTCCTACTGAGTTTGTGGTAACCAGCCCTGCACGACCCCTGAATCTGCT
GAGAGGCACCAGTCCAGCAAATAAAGCAGTCATGATTTACTT

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FIGURE 4086

GAGGCGCTGAGCCGGGCCGCGCCTGGGCGAACGGCCGGAGCGGGCTGGGCTGGGCCCGGGATGGCGGTGGCCCTG
GCGCCGGTCCCGGTGGCGCCCCGCGCGAGTTCCTGAGCTGGTGCCAGGCAGGTGACACCTCCTGCAGCCCCCAGC
ATGCGGGCAGGCCCAGGCCCCACCGTTACATTGGCCCTGGTGCTGGCGGTGTCATGGGCCATGGAGCTCAAGCCC
ACAGCACCACCCATCTTCACTGGCCGGCCCTTTGTGGTAGCGTGGGACGTGCCCACACAGGACTGTGGCCCACGC
CTCAAGGTGCCACTGGACCTGAATGCCTTTGATGTGCAGGCCTCACCTAATGAGGGTTTTGTGAACCAGAATATT
ACCATCTTCTACCGCGACCGTCTAGGCCTGTATCCACGCTTCGATTCTGCCGGAAGGTCTGTGCATGGTGGTGTG
CCACAGAATGTCAGCCTTTGGGCACACCGGAAGATGCTGCAGAAACGTGTGGAGCACTACATTCGGACACAGGAG
TCTGCGGGGCTGGCGGTCATCGACTGGGAGGACTGGCGACCTGTGTGGGTGCGCAACTGGCAGGACAAAGATGTG
TATCGCCGGTTATCACGCCAGCTAGTGGCCAGTCGTCACCCTGACTGGCCTCCAGACCGCATAGTCAAACAGGCA
CAATATGAGTTTGAGTTCGCAGCACAGCAGTTCATGCTGGAGACACTGCGTTATGTCAAGGCAGTGCGGCCCCGG
CACCTCTGGGGCTTCTACCTCTTTCCTGACTGCTACAATCATGATTATGTGCAGAACTGGGAGAGCTACACAGGC
CGCTGCCCTGATGTTGAGGTGGCCCGCAATGACCAGCTGGCCTGGCTGTGGGCTGAGAGCACGGCCCTCTTCCCG
TCTGTCTACCTGGACGAGACACTTGCTTCCTCCCGCCATGGCCGCAACTTTGTGAGCTTCCGTGTTCAGGAGGCC
CTTCGTGTGGCTCGCACCCACCATGCCAACCATGCACTCCCAGTCTACGTCTTCACACGACCCACCTACAGCCGC
AGGCTCACGGGGCTTAGTGAGATGGACCTCATCTCTACCATTGGCGAGAGTGCGGCCCTGGGCGCAGCTGGTGTC
ATCCTCTGGGGTGACGCGGGGTACACCACAAGCACGGAGACCTGCCAGTACCTCAAAGATTACCTGACACGGCTG
CTGGTCCCCTACGTGGTCAATGTGTCCTGGGCCACCCAATATTGCAGCCGGGCCCAGTGCCATGGCCATGGGCGC
TGTGTGCGCCGCAACCCCAGTGCCAGTACCTTCCTGCATCTCAGCACCAACAGTTTCCGCCTAGTGCCTGGCCAT
GCACCTGGTGAACCCCAGCTGCGACCTGTGGGGGAGCTCAGTTGGGCCGACATTGACCACCTGCAGACACACTTC
CGCTGCCAGTGCTACTTGGGCTGGAGTGGTGAGCAATGCCAGTGGGACCATAGGCAGGCAGCTGGAGGTGCCAGC
GAGGCCTGGGCTGGGTCCCACCTCACCAGTCTGCTGGCTCTGGCAGCCCTGGCCTTTACCTGGACCTTG**TAG**GGG
TCTCCTGCCTAGCTGCCTAGCAAGCTGGCCTCTACCACAAGGGCTCTCTTAGGCATGTAGGACCCTGCAGGGGGT
GGACAAACTGGAGTCTGGAGTGGGCAGAGCCCCCAGGAAGCCCAGGAGGGCATCCATACCAGCTCGCACCCCCCT
GTTCTAAGGGGGAGGGGAAGTCCCTGGGAGGCCCCTTCTCTCCCTGCCAGAGGGGAAGGAGGGTACAGCTGGGCT
GGGGAGGACCTGACCCTACTCCCTTGCCCTAGATAGTTTATTATTATTATTATTTTGGGGTCTCTTTTGTAAATT
AAACATAAAACAATTGC

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FIGURE 4087

GTTTCCGTGGAGACAGCCGAGCCTGCGGAAGGCGGCGGCGGCGGCACCTGCGATCAGCGGCTGGGGCAGGTTATG
GTAGTGCGGACTGCGGTGTGAGCAGAGCGGCCACGGGGCCCGCCATGCGCCGGCGGCCCTGACATGGGCGCCAGC
GGGTCCAAAGCTCGGGGCCTGTGGCCCTTCGCCTCGGCGGCCGGAGGCGGCGGCTCAGAGGCAGCAGGAGCTGAG
CAAGCTTTGGTGCGGCCTCGGGGCCGAGCTGTGCCCCCCTTCGTATTCACGCGCCGCGGCTCTATGTTCTATGAT
GAGGATGGGGATCTGGCTCACGAGTTCTATGAGGAGACAATCGTCACCAAGAACGGGCAGAAGCGGGCCAAGCTG
AGGCGAGTGCATAAGAATCTGATTCCTCAGGGCATCGTGAAGCTGGATCACCCCCGCATCCACGTGGATTTCCCT
GTGATCCTCTATGAGGTGTGACCCTGGGAGGTGGCAGACAGAAGCACCCCCTGCCCCGGCAAGAAACTCCCAGGC
TCAATCAAGGTGTGGCTTCCATTGAGGAGCCCAGGCTGGGGCCACAACCCTGAATAAACTCTGTTGGCCCATAAC
CTTCAGCTGTGAGCGGGTCGGTCCCACAGTATTGGTTGGGTGTTGGTTTGTGTGTGGACAAGAGGTGGTTGGTGG
GTGGTGAAGGCTAATGGCAGAGTTAGCACCCCACTCTCCCAAGCCACCCCTGCAAGCAGCACAGCAGGGCATATA
CCAGTCAGGAATGCCCGTTACCTGGTTCCTTGCCTGGTCTGCTTTCTTCCAAGTTTGCCTGGGGCCTAGCCCTGC
TAGAGGCTACAGCACTTTACAAGCAAGGTATGCTTTCTTCCAGCCCCTAGGCTGTGGGCACTGTATACAAGTAGG
AACTTCCTTTCCTTCACTTCCCTTTTAACCCCTAGTCAGAGCATTTCAGCCGTTTGCTACCTCGATTCCTCCTGT
GTTGGACAGAGGCTGGGGGCAGTGCCAGCCTGATTCTTCCGACCTACCTGCCATTTGTTCCCGCCTTCAGATGGA
TGGACAGTTTGCTGGCTATTGATAGGAGTGGGGACTGGGTGGGGGCTTCTCCCTCTACCCAGGGCTGGGCTGATC
CCCCTACTGCAACTAACTGTTGCCCCCCAACCCCGAACCCCCAGTTGAGGAGTTGAGAGAGTGCAGGCTGGGGTC
AGGACAGGCTGCGGATGCTTGTGCCTATGGGGAGTTACTCCAACCCACCTATTCTGTCTAATCTCCATGGCTTTG
CACCAAATCCTCCACCCCTCCAATTGGGAGGGGACTGTTCACCACCTTGTGGTAAGGGACAACACCCTAAGGCTG
GTGCCAGTAGTTATGAGTAGCCTACCACCCCCTCCCTTACAGTAACCCCCACCCCTTCAGGATCAGTCAAGGGAA
AGCACTAGAACCCCTGGGTAGGGAAAGAAAGGAGGGAAAAACCATAAAAGGAATACTTATAATGTGAAGGTTTGT
AAATAGTCCATGATGATGTCGTGGCAGAGTCTGATTTCTATATAGAGGTGACTTTTTTTTTAAGTACTGTGCAAG
CTCTGTGCTTCTATAATGTGGGAAATGGCTTGGGGAGGATGGCCCCTAGCTTAGGAAGACTGTTGTGTTATTTGT
TCAATTTCAATAAAATGATTTGTAGATCCTGC

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FIGURE 4088

TCTCCTCAGCTCCTTCCCGCCGCCCAGTCTGGATCCTGGGGGAGGCGCTGAAGTCGGGGCCCGCCCTGTGGCCCC
GCCCGGCCCGCGCTTGCTAGCGCCCAAAGCCAGCGAAGCACGGGCCCAACCGGGCCATGTCGGGGGAGCCTGAGC
TCATTGAGCTGCGGGAGCTGGCACCCGCTGGGCGCGCTGGGAAGGGCCGCACCCGGCTGGAGCGTGCCAACGCGC
TGCGCATCGCGCGGGGCACCGCGTGCAACCCCACACGGCAGCTGGTCCCTGGCCGTGGCCACCGCTTCCAGCCCG
CGGGGCCCGCCACGCACACGTGGTGCGACCTCTGTGGCGACTTCATCTGGGGCGTCGTGCGCAAAGGCCTGCAGT
GCGCGCATTGCAAGTTCACCTGCCACTACCGCTGCCGCGCGCTCGTCTGCCTGGACTGTTGCGGGCCCCGGGACC
TGGGCTGGGAACCCGCGGTGGAGCGGGACACGAACGTGGACGAGCCTGTGGAGTGGGAGACACCTGACCTTTCTC
AAGCTGAGATTGAGCAGAAGATCAAGGAGTACAATGCCCAGATCAACAGCAACCTCTTCATGAGCTTGAACAAGG
ACGGTTCTTACACAGGCTTCATCAAGGTTCAGCTGAAGCTGGTGCGCCCTGTCTCTGTGCCCTCCAGCAAGAAGC
CACCCTCCTTGCAGGATGCCCGGCGGGGCCCAGGACGGGGCACAAGTGTCAGGCGCCGCACTTCCTTTTACCTGC
CCAAGGATGCTGTCAAGCACCTGCATGTGCTGTCACGCACAAGGGCACGTGAAGTCATTGAGGCCCTGCTGCGAA
AGTTCTTGGTGGTGGATGACCCCCGCAAGTTTGCACTCTTTGAGCGCGCTGAGCGTCACGGCCAAGTGTACTTGC
GGAAGCTGTTGGATGATGAGCAGCCCCTGCGGCTGCGGCTCCTGGCAGGGCCCAGTGACAAGGCCCTGAGCTTTG
TCCTGAAGGAAAATGACTCTGGGGAGGTGAACTGGGACGCCTTCAGCATGCCTGAACTACATAACTTCCTACGTA
TCCTGCAGCGGGAGGAGGAGGAGCACCTCCGCCAGATCCTGCAGAAGTACTCCTATTGCCGCCAGAAGATCCAAG
AGGCCCTGCACGCCTGCCCCCTTGGGTGACCTCTTGTACCCCCAGGTGGAAGGCAGACAGCAGGCAGCGCCAAGT
GCGTGCCGTGTGAGTGTGACAGGGCCAGTGGGGCCTGTGGAATGAGTGTGCATGGAGGCCCTCCTGTGCTGGGGG
AATGAGCCCAGAGAACAGCGAAGTAGCTTGCTCCCTGTGTCCACCTGTGGGTGTAGCCAGGTATGGCTCTGCACC
CCTCTGCCCTCATTACTGGGCCTTAGTGGGCCAGGGCTGCCCTGAGAAGCTGCTCCAGGCCTGCAGCAGGAGTGG
TGCAGACAGAAGTCTCCTCAATTTTTGTCTCAGAAGTGAAAATCTTGGAGACCCTGCAAACAGAACAGGGTCATG
TTTGCAGGGGTGACGGCCCTCATCTATGAGGAAAGGTTTTGGATCTTGAATGTGGTCTCAGGATATCCTTATCAG
AGCTAAGGGTGGGTGCTCAGAATAAGGCAGGCATTGAGGAAGAGTCTTGGTTTCTCTCTACAGTGCCAACTCCTC
ACACACCCTGAGGTCAGGGAGTGCTGGCTCACAGTACAGCATGTGCCTTAATGCTTCATATGAGGAGGATGTCCC
TGGGCCAGGGTCTGTGTGAATGTGGGCACTGGCCCAGGTTCATACCTTATTTGCTAATCAAAGCCAGGGTCTCTC
CCTCAGGTGTTTTTTATGAAGTGCGTGAATGTATGTAATGTGTGGTGGCCTCAGCTGAATGCCTCCTGTGGGGAA
AGGGGTTGGGGTGACAGTCATCATCAGGGCCTGGGGCCTGAGAGAATTGGCTCAATAAAGATTTCAAGATCC

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FIGURE 4089

ATGGCCCTTTCTGCGGAGACCGAGTCACACATCTACCGAGCTCTGCGTACTGCTTCTGGCGCTGCCGCCCACCTT
GTGGCCCTGGGCTTTACCATCTTTGTGGCTGTGCTTGCCAGGCCTGGCTCCAGCCTGTTCTCCTGGCACCCGGTG
CTTATGTCTTTGGCTTTCTCCTTCCTGATGACCGAGGCACTACTGGTGTTTTCTCCTGAGAGTTCGCTGCTGCAC
TCCCTCTCACGGAAAGGCCGAGCACGCTGCCACTGGGTGCTGCAGCTGCTGGCCCTGCTGTGTGCACTGCTGGGC
CTCGGCCTTGTCATCCTCCACAAAGAGCAGCTTGGCAAAGCCCACCTGGTTACGCGGCATGGGCAGGCAGGGCTG
CTGGCTGTGCTGTGGGCAGGGCTGCAGTGCTCAGGTGGGGTGGGGCTGCTCTACCCCAAGCTGCTGCCCCGATGG
CCCCTGGCGAAGCTCAAGCTATACCATGCTACTTCTGGGCTGGTGGGCTACCTGCTGGGTAGTGCCAGCCTCTTG
CTGGGCATGTGCTCACTCTGGTTCACTGCCTCTGTCACTGGTGCAGCCTGGTACCTGGCTGTATTATGCCCTGTC
CTCACCAGCTTGGTCATTATGAACCAGGTGAGCAATGCCTACCTATACCGCAAGAGGATCCAACCATGA

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FIGURE 4090

CGCTTAGAGGACAGCCCGCTGCCGCCGGGGACGCGCAGGCGCAGCACCCCTGTTTGTCGGCCCCCCGAGAGAAGA
GGTACGGTCGAAGCCAGGAGCCAGGCCGAGCGGGAGCTGACCAGGCTTGACTCGGGTACAGAACGAGGCACCAGT
CCCCTTGCGAACCGAAGGGCCTCGCAGTGGATGGAGGAGGCCCAGCCCTGAGGTCAACGCCAACCAGGCTAGCCT
GGCACGGGGCCTACAGGGTGGGTAGGCGGGCGTGCCGCAGCCGTCCAGGGCCTTCCCTCAGGTCCCGGGCGAGGG
GCCTACGCTGCGGCCCGGCAACAAGGCCCGACTCGGCCCCTCGGGACCAGAGCCCCACCCGATCGGAAGCGGATC
CTTTACCAGGGCCATAGGCCAGTGACTAGGCCGGGCCTGGGCCTCCCATCGGGGCCGGACTAGGACGAGGCCCCG
GGGAGGCCCCTGGCCTACCAGACCCTTTTCTCAGGCCGACAGCCGCCAGGAAG**ATG**CAACGTGCCCTGCCAGGCG
CCCGCCAGCACTTGGGGGCCATTCTGGCCAGCGCCAGCGTGGTGGTGAAGGCTCTGTGTGCGGCGGTACTATTCC
TCTACCTGCTCTCCTTCGCCGTGGACACAGGCTGCCTGGCGGTCACCCCGGGCTACCTCTTTCCTCCCAACTTCT
GGATCTGGACCCTGGCCACCCATGGGCTGATGGAGCAGCATGTGTGGGACGTGGCCATCAGCCTGACAACGGTGG
TGGTGGCCGGGCGTTTGCTGGAGCCCCTCTGGGGGGCCTTGGAGCTGCTCATCTTCTTCTCAGTGGTGAATGTGT
CTGTAGGGCTGCTGGGGGCCTTCGCCTACCTCCTCACCTACATGGCTTCCTTCAACCTGGTCTACCTGTTCACTG
TCCGTATCCACGGCGCCTTGGGCTTCCTAGGTGGCGTCCTGGTGGCACTCAAGCAAACCATGGGGGACTGTGTGG
TCCTGCGAGTGCCCCAGGTGCGCGTCAGTGTGATGCCCATGCTGCTGCTGGCGCTGCTGCTCCTGCTGCGGCTCG
CCACGCTGCTCCAGAGCCCGGCGCTGGCTTCCTATGGCTTCGGGCTGCTCTCCAGTTGGGTATATCTTCGCTTCT
ACCAGCGCCATAGCCGGGGCCGAGGGGACATGGCTGACCACTTTGCTTTCGCCACTTTCTTCCCTGAGATCCTGC
AGCCTGTGGTGGGTTTGCTGGCGAACTTGGTGCACAGCCTCCTGGTGAAGGTAAAGATATGCCAGAAGACGGTGA
AGCGCTACGATGTGGGTGCCCCATCCTCCATCACCATCAGCCTGCCAGGCACAGACCCTCAAGACGCCGAGCGGA
GAAGGCAACTGGCCCTGAAGGCACTCAATGAGCGGCTGAAGAGAGTGGAAGACCAGTCCATCTGGCCCAGCATGG
ATGATGATGAAGAGGAGTCTGGGGCCAAGGTGGACAGCCCCCTGCCCTCAGACAAAGCTCCCACACCCCCAGGGA
AGGGGGCTGCCCCAGAATCCAGTCTAATCACCTTCGAGGCAGCTCCCCCGACGCTG**TAA**CTCCAGACCACCTTGA
GTGTGGCACCTCCCCTCCCAAGCCCCCCTTGACATCCTCTCAGCTACTCCAGGGCACCTGACTGCTCTGAGGAGA
GGGAAGAAGGCCTGCTGGGGCTTTCCATGGCCTTCTGCTGTTTCTCGCCAACACTACCCAGGACTCTTGCTACCT
GGTTCCAACTCCAGACAACCACTATGCCAGGCCCGGAGCCTCTGAGGCATCGGCCAGTCCAGGCCCTCATCTGAG
GTAAGAATGTACATCAGCTGGCAGCCCCAAGCAAGTGGCTGCAGGGACACTGATGCCACAGCTCCTGGGCCGGCC
CTCACATCTGAAACTGGTTGCCGAGAGCCCTGAGCCAAGGCAAGGATTTGCCAAAAATGTTCTGGGGGCCCAGCA
AATGCAGGAGCCGACCTGGGGCTGCACATCCCTGCCCATCCCCAGAAAGACTGTTCCTGTCAGGATTTGTTTCCC
TCTGCTGTGGCGGTGACTGCTTCTGGACCAGAACAGCTCCAGCTCCCAGGTATTTTCTACAGGACCACTTGAGTG
GGCAGCCAAGCCCAGGCTCGCAGTATCAATAAAGCAGTTCTCTG

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FIGURE 4091

GAGGTCACAAGCTCTGGTGCCCCAAAATGGCTCTGGTCCTCAGATATAGTTGGTTGCCACCCTGGGAGTGAGAGG
AACCAGGAAAGCAGCACCCAGGAAGGCAGGGGGCTCCCTTTATCCAAGGAGGTGGCTGTGCAGGTGGCCACCACA
GGTGGCAGGAACCACAGGCTGGGGCACTCCGGAGTCAGGAGTGAGTGGGCAGGTTGACTGGCATCAGGCAGCCTC
TCAGCCAGGGCCCTCTCCGCATCAGCATGAACTCCAGGACCGCATCTGCTAGGGGCTGGTTCAGCAGCCGCCCAC
CCACCTCTGAGTCTGACCTGGAACCTGCCACAGATGGGCCAGCCTCCGAGACCACTACCCTCAGCCCAGAGGCCA
CCACCTTTAATGACACCAGAATCCCTGATGCAGCTGGTGGCACGGCCGGCGTGGGTACCATGCTTCTGTCCTTTG
GGATCATCACGGTGATAGGCCTGGCTGTGGCCTTGGTTTTGTACATCAGGAAGAAGAAGAGGCTGGAGAAGCTAC
GCCACCAGCTCATGCCCATGTACAACTTCGACCCCACGGAGGAACAAGATGAGTTGGAGCAGGAGCTGCTGGAGC
ATGGGCGGGACGCCGCCTCTGTACAGGCTGCTACTTCTGTGCAGGCCATGCAGGGCAAGACTACTCTGCCCTCCC
AGGGCCCACTGCAGAGACCCAGCCGGCTGGTGTTTACCGATGTGGCCAATGCCATCCATGTGTGAGTGGCCTGGG
ACAAGCCTGGACTTCTGATAGAGACCCATCACGGTGCCTACAGAGCTCCCCACTCCCTGATTGTCAAGACCTACT
CTGAAGATCTTCCCTGCCAAGACACAAGAGGGCTGAGCCAGGTCCTAGCTGTTCTCCAGACCCACCTGCTGACTT
TAGACTCTAAGAGAGGGCCCTAGCCAGGCTGGACTTCTGACCACTGACTTCTCCTGACCTGAGGGCCCTGGCACA
GAGGGCATCCCTCATGCTGAGAAGGTCAAGAGCCTCTGCTGGCTTCCTCATCCCCTGTCCAGATCCCTCACATCA
GGGTCTGCCCCGCTAATGTGGAGGAAATGAGGGAGATACGGAGTGGGAGGGATTGGGGGAGGAAAGGGGAGGTTT
CCCTCTGTTAGGGAGAGACCTGTTTTTTGGAATCTGGAGCCTCCTCTGGGGTGGGGAGAGGAAACCACCCAAGTT
ATAGGGACAGGGTAGGGCAGCATCTGTTATGGGCCCTGAGAAGCCCAGAGATGGAGCTGAAACTGTCCAGTATGC
AAGGATGCCAGGAGAAGGGCAATTCACACCCAGGGTCCATCCATACTACGGAGGGTCCAGGAGGTCTCCCAGCCA
CCCATCCTTGGCAACCAGATGTTACTGGGGCCAAGCTAGGATGGGAGCTGAGGGGGAAGGAAGTAGGGGAATGGA
AGTGGAAGGATGCAGCCCCCCCAGACCTGCCGAGAGGCCTCATGCATGTGCATGAGTGTGCCCATGGGCAGACAT
GTGCCTGTCCCAGCACAGCGGGCAGAATGAGATTGTCCACACTGGCCCCACCCTCCAAGTCGACCTCTACCCCAT
GGTATGTAGTGGAGCATCAGGGTAGGCTATCTTCTCTGCCTTCAATCTTCAGGGACTGCAGGGAAGAGGGAAGCA
CGCACAGCACGGTTCCTCTCTCCACTGCATTGTTTCACTGGGCTCACCTGCTTCTGAAAACGGCTCCCTGTCTTG
GGCTCTAATGAGGATCTGGGGTTGGGAGAGGCTGTTGGTCTGAGGGCAGTAATCACAGGCTGCAGGCTAGAGGGG
GCAGTTATGACTGCCTGAAAGTGGGTGAGGGATTGCACTTCAGAAAAACATCTAAAAAACTTAGTCTATGTTTGA
ATTCCCCACCTCCATCCCATCTATGGGAAGAGCCGTTCAGTGTTTAGAGAGTGGGGAGATGGGTCCCTGCACTTG
GCCTCTCCATAAGCCTTGGAGGGTCAGGGCTGATACCAGGGGTCCTGGCAAGCCATTGGGCAGAGACAGACCACA
AGAGCAGGGCATTTTTTTACGCTGGGCATACATATGCACACAAGCATGCACAGAGGCATGTCCCGTGCCCAGCCT
CTCCACCGTCACTGTCCGCTGCTGGCTGGAGGGGATGCAGGGGTAGTGTATGCAGACCTTCCACTGGGCAAATGC
CATGTGTCAGGAGGGAAAGGCCTAGGAAGCCCCCATGGGGAAGGTTCTGGATTTATTCCCTCCTCTAAATGCTAT
AAATACGTTAGCACTTGAGTCGACTGGAGGCTGCCAGGAATTCAGGATGCATACAGCTGTAATTTAACCCAGAGC
AGCTCCACGTGAGAGCATTAAAGATGTAATGAAGATGTTT

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FIGURE 4092A

GCAGCCTTTCAGGCAGGGTGGCAACCAACTATATCTGAGGACCAGAGCCATTTTGGGGCACCAGAGCTTGTGACC
TCTCCATCTCCACCCAGCTGGGTCCAGGGGCCACTCTCAGCACTCACCTCAGCAGCTGACATCATAAAGCAGACT
TGGGAACCTGGAAGCACTCTGGAGAACCTTTCCCTGAGAC**ATG**GAGCTTTGGGGCCGAATGCTGTGGGCCCTCCT
GTCTGGCCCAGGGAGGAGGGGAAGTACCCGGGGCTGGGCCTTCAGCTCATGGCAACCCCAACCACCTCTGGCTGG
GTTATCCAGTGCCATAGAACTGGTCAGCCACTGGACTGGGGTCTTTGAGAAGAGGGGTATCCCTGAGGCCCGGGA
ATCCAGTGAGTACATCGTGGCTCATGTCCTTGGAGCCAAAACATTTCAGAGCCTGAGGCCGGCACTTTGGACCCA
GCCCTTGACCTCTCAGCAACTACAGTGTATCCGGGAGCTGAGTAGCCGTCGATTGCAGAGGATGCCGGTGCAGTA
CATCCTTGGAGAGTGGGACTTCCAGGGGCTCAGCCTAAGGATGGTGCCCCCAGTGTTTATTCCGCGGCCAGAAAC
AGAGGAACTGGTTGAGTGGGTGCTGGAAGAGGTGGCCCAGAGGTCCCATGCTGTGGGATCCCCAGGCAGCCCCCT
CATTCTGGAGGTGGGCTGCGGATCAGGAGCCATCTCCCTCAGCCTGCTGAGCCAGCTCCCCCAGAGCCGAGTCAT
TGCTGTGGATAAGCGGGAAGCTGCTATCTCTCTGACCCATGAGAATGCTCAGAGGCTTCGGTTGCAGGACAGGAT
TTGGATCATCCACCTCGACATGACCTCAGAAAGGAGCTGGACACACCTGCCCTGGGGCCCCATGGACCTGATTGT
CAGCAACCCTCCCTACGTCTTCCACCAGGACATGGAGCAGCTGGCCCCTGAGATCCGCAGCTATGAAGACCCCGC
GGCCCTGGATGGTGGGGAGGAGGGCATGGACATCATTACCCACATTCTGGCCTTGGCACCCCGGCTCCTGAAAGA
CTCTGGTAGTATCTTCTTAGAAGTGGACCCAAGGCACCCGGAGCTTGTCAGCAGCTGGCTTCAGAGCCGGCCTGA
CCTGTACCTTAATCTTGTGGCTGTGCGCAGGGACTTCTGTGGGAGGCCCCGGTTCCTGCATATCCGGAGGTCTGG
GCCA**TAG**CATGGCTGCCCTGTGGATGCCTTGTCAGTGCCGCCAGCCTGACCAGAGGGGAGGTGGATGGCACTTTC
CAGAGCCCAGGTTCTTATGGCATTTCCCAGGGTTCTGTGATTTCCCCATGCTCTGCATTTCTAGGATATTTCTAG
GACACCTGGATTGGCTCCATCACATCAGAGTGGCTGAGGGCAGTTGCTCTGTGTTGGTGAAATTGCTGTGGGGGT
ATCGGGGGATATGGCCAGTAAAGTATTGAGAGACTAACAAATGGTGACCTAATGTTTTGTCCATGACTTGCAGGT
CCCCTGACCCCCTTACTCCCAGGTAGCACTGGGGCAAGGGTTTCCTTCTGCCCCAGCAGGGCTGGCCGTCAGTCC
CCTGCTTGGTAGTGGTGTGGGGGTGCAGTGTGGAGGAAGGCACGTGAGTCCTCACTCCTGGCCTTGGATACCATG
GGTCCTGGCATAGAGCAGCTCACTCCCAGGGATTGATTAGTCCTCCACTGCCCTGGGTGCATGCGTACACAATTC
CCTGGCCAAGCCTGGCTCGAGCACAGGAAGCTCATCTGCGTTTTGGCTCAAGGATGACTGCCTGCTTTCTGGAGG
GGAGGGTCTGGAGGTCTTTGCTGCACAGTTCCTGGGTCGCACATCCACGTTCATTTAACTGAAGGCTTGAGCCAG
TGAGGGGTGTTTCCTTTTTATCCCCATAGCTTTTAGCTAAAACATCCCTCCCGAGTTGACCCCCTGGGGTTTCAA
ATAACCCATGTGTCCCTGGTTGGGGCTGGGGAGAGTGAGAAGCTGAGATACTGGGCACAGGGTTGTGGCCTCCAC
CCCAGCTCTGGTCTGTGCAGACTCATGGCCACCAGGAGGCCTGCAGATCCAGCCTTCCTGTCAACAGCGACAGGA
AATCTCTAGGTTGGTGAGTGCTGGTGATGTGAGCCTACATCAGGGTGGGTCCTAAGAAACATGGCAAACCAGGCT
GTCTCATTCCACTAGACTGCCCCCTGCCACCCTGGCACTTCCCAGGGCCTGGCAGTATGGTCTGATGGGCAGTAT
GGTCCAATAGGCAGCATCCTCTGCTGCAGCTGGGAGAGCTGAGTTCCAGGGCTGTGTCCTGCAGTGGGACCTTGG
GCAACTCCTTTCCCTATGAGAAGCTGGCTCTTCTGAGTCCAGGGCCAACGCCAACTGGCAACCTCTTTACTCTTA
GTCAAGTGGAATGTGCATGCTGGCATCTGAATGTCCATTCGCCAGGCATGGAGAGCAAGAGAAGGTATGTACTGC
CTGAGGTCACATGACAGTGACCAAGTGGAGACAGTAAGTTAGATCCCTCCCTTTGGGGAGCCTATATTGCTGGAG
TCATACCCAGCCTAAGTGTTGCCCTGCACTATGGCTGGAGGACACATTTGGTAGAGGTCACACTGCAGCTCCCAG
TGCCCCAGTGTCCTGCCCTGTGCCCAGCCCCAGCTGCATGGACTCTGAGCTGCCCCTGGCTTCCTTTAAGGAGGC
TGCTCCAGAAGGAACCTGGGTGGGGAGGGCGAAGGGGGTGCACAACCAGGGCAAGGCTCCCCACTTCCTTAGTCC
CCCATGCTCACAGACCTTTGCCTGCTAAGGTCCTCACCAGTATTGCCCTTTCTGTCTTTCTCCTTGTGCCCTTTG
GCTCTTGCTGTCTTCAGCAGCATCTCAGGGTAGCTGCCCTGACCTCGGAGCAGTCTGTCGCCCCCCTACACCTCA
GCCAGTCCTGGCTTCCCTGATGGTCTCTCCCTCCTGGCCTCAGGCCCATTCCTGAGGAAGGGCCTTGGCGAGCTT
GTGGATGTTGCACCAGAAGAGAGTGCAGTGTTGGAGAGTGACACTGTCGGGGCAGCTGGGGCCACAAGCAGGAGC
CGGCCTCGGGCACAACTTTCTGCCCAGAAAAATGTGCAGCTTGACTCTGCTGAGGAAAAGGTCCAAGCCAAGAGG
ACTGGCAGGCGGGGCCTCAAGCCTGCAGCCACTGGCTTGATTGGGCCCTGGACGTTGAGCCCAGATGTTGGAGCC
ACACCAGCCTGGATTTCAATCCCAGAATCTGCCCCTCACCAGGATGTGACCTTGGGCAGATGACTTCACCTCACT
CAGCCTTGGCTTCTAAGGCTGAGAAATGGGACTTAATGCTTTATTTTATAGGATGCATGTGAGGAGCCCATGGAA
TGTGCCTGGCTTGGCACATTGTGGCATTTTTCCTTGCCTTCCTCGGAGGGCAGACACAGGGAGGAAGGACCCAGT
GCCCTCAGGCGTCCATCTGATGCATGGGACCAACATAAGGCAGGCAGGGATACAAGGCAGTCTGGAAAGAAGGGA
AGGCAGGAGTTTCAGTCTTGGGCTCTTGACTCCTCACTGTTGTCTAGAGATGGAGCCAGCAGGCTGGTAGCCTGG

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FIGURE 4092B

CAGCCTACATCTCCCCTCAGCCTCTCCTCACTATGGCCCCAGTGCCTTGAGGCCCAGGCCAGGGCAGCCAGTGGC
TCTAGCTCAGGGAAAGCCAGGCCCACCTGCCCTATCCCCTCCCTTGCTCCTGAGGCCAAAGCCAGAGACTCGAAC
AGCCTCCCCACCACCACCAGCATATGTCAAGGAGCACTTGCAGGCAGAATGGGAGGAGGACATGGAGCTGATGGA
GTCCAGGCTGTGCAAGCCCCTGAGGTCTTGAGAGATGTGCCCACTGCCCGTGCAGCCTCCTTCAGCCAGAGCCCA
GAGCATAGACAGGAGTGTAGGAGTCCCTGTTTGATGTACTCTGGGAGAGTAATTCTATCTCCTCTTCTGATAGTT
GGGGAAACTGAGGCCTTGTCTCACAGTTGGATGCTTTTCCCAGTTGTCAGTGGGTTTCTCCATGGGTCTCATACA
GCTGCCTTATTGAAATAGGCCCCGAACCCCCTAAATGCAAAAAATACTCTTTTTTGCTCCTTTACCCCCACCTGG
ACCCTGGGCTATTGGCTGCTCCCAATCCTTGCCCCAAACACTTAGCTGGCTCCCCATGACTTAAGTGTGTTCTCT
TGTGTCCTATGGAATCCAGTTCTGAAGAGGTGGGGGAGGACAACTGTGGGAAAAGCCCTGGGGGCCCCTCCCAAG
GCCCCATCAGTGCTCTGAGTAGGCTGTCATCAGAACAAAGGGCTCCACTGCTGACAAGGTTTGAGAACTGCTGGC
TTGAGGTGAGAACCCCTTTAACCTCTGCGGGACAGCATGTCTTTCCCTATCCACCTTCGATTCTTTTCTCTTTTT
TTTCTTCATTGGCTCCTTCTTAGTGGATTCTCTTCTCTACTGCCCTGGGCTTCAGCCTTTGTGCAGTACTCTCGA
TGCCCTGAACACACACCTTCCCTTTGCCCAGGCGGTGCAAACAATCCACTTCTTCAAGCTCCAACACAAATGCTG
CCTCCTTTAGGATGCCTGCTCTGTGCTCTCCCTGCCTCCCCTAGCCCATACCTCTGCTGGCACCTTCTGTACCAT
GCCTTCAGAAACCTTCTTATCCCCCTCATCTCTGGGGCCCCCTGTGGATCTGGCATACCCAAGTTCAGTAAATGT
CTATCAGTAAGCTGATGGTACATGCATTTTCTAGAATAGAGCTGGGACTTCCCATGTGGCCCACATCTGACCTGG
CAGCCCATGTATTCCGGTCATTAGGGATGGGAAGCCATGAGGACCTGGCCTTCTGCCCGACCCAGGCAGCCATTC
AAGTTGAGCAATGGCCACTTCGAAGACTCAAGTGCACCTGATCCCTGCGCAACAGCCACACCAGGAGAACAGGCT
GTCCTTGGCGGCAGTAGGAGCAGGCGCCAGGTTTCCTGGAGCTCTTGGCTTCAGCCAGCCCCCAGCCAGAGTCCT
GGCTAGGACAGTGACCTGATCTCCTCCTCATGACCTTCTGCCCTGGACAAGCCCCCTGAACTGGATTTGGGACTG
TCAAAGCAACTCTACCCCTGCTCTGGTAGGCTGAACAGTGACCCCCCAAAATGGCAGTGTCTTAATCACCTAAAC
CTTAACATGTGACTATATTACCTTCACATAGCAAAATGGACTTTGCAGATGTGATTAAGGATCTTGAGATGGAAG
GAGTATCCTGGATTTTTCAGGTAAACTGAGTATAATCACAAGGGCCTCTGTAAAGGAGGCAGGAGTGTCAGAGTG
ACGGAAGAAAATGTATGTAACAATGGAAGCAGAGGTCAGAGTGATGCAATTGCTGGAGGAAGAGCCATGAGCCGA
GGAATGCAGACAGCCTCTTCTCCTCTGGGGCCTCAAGAAGAATGCAGTCCTGCCAATACCTTGATTTTAAGCCCT
GTGAAACTGATTTCAGATTGCTGACCTCCAGAACAGTAAGATCATAAATTTGTGTTGTTTTCACATGTGTGAAAA
CACATGTGTGATAATTTGTTACAGCAGCCACGGGAAACGAATATAGATTGTGGTGCCCAAATTAGAGTGCTGCTG
TAACACACGCCTACTGATTGAAGTGGCTTTGGAATTGCAACGTGGAAATGGGCAGAGGCTGGAAGAATTTTGAGA
GTCATGATAAATTGCCTTAACCACC

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FIGURE 4093

CTGCGGCCGCCAGCTCCCGCGACCGCCTCTCCTGCCCCTCGCCGGTACCTCAGCAAGGTGCCACTAGAAGCGCCA
GGCTGGGGCCGCCTCTGAGCGCCCCGCGGGGGCCATGGATGGTGAAACAGCAGAGGAGCAGGGGGGCCCTGTGCC
CCCGCCAGTTGCACCCGGCGGACCCGGCTTGGGCGGTGCTCCGGGGGGGCGGCGGGAGCCCAAGAAGTACGCAGT
GACCGACGACTACCAGTTGTCCAAGCAGGTGOTGGGCCTGGGTGTGAACGGCAAAGTGCTGGAGTGCTTCCATCG
GCGCACTGGACAGAAGTGTGCCCTGAAGCTCCTGTATGACAGCCCCAAGGCCCGGCAGGAGGTAGACCATCACTG
GCAGGCTTCTGGCGGCCCCCATATTGTCTGCATCCTGGATGTGTATGAGAACATGCACCATGGCAAGCGCTGTCT
CCTCATCATCATGGAATGCATGGAAGGTGGTGAGTTGTTCAGCAGGATTCAGGAGCGTGGCGACCAGGCTTTCAC
TGAGAGAGAAGCTGCAGAGATAATGCGGGATATTGGCACTGCCATCCAGTTTCTGCACAGCCATAACATTGCCCA
CCGAGATGTCAAGCCTGAAAACCTACTCTACACATCTAAGGAGAAAGACGCAGTGCTTAAGCTCACCGATTTTGG
CTTTGCTAAGGAGACCACCCAAAATGCCCTGCAGACACCCTGCTATACTCCCTATTATGTGGCCCCTGAGGTCCT
GGGTCCAGAGAAGTATGACAAGTCATGTGACATGTGGTCCCTGGGTGTCATCATGTACATCCTCCTTTGTGGCTT
CCCACCCTTCTACTCCAACACGGGCCAGGCCATCTCCCCGGGGATGAAGAGGAGGATTCGCCTGGGCCAGTACGG
CTTCCCCAATCCTGAGTGGTCAGAAGTCTCTGAGGATGCCAAGCAGCTGATCCGCCTCCTGTTGAAGACAGACCC
CACAGAGAGGCTGACCATCACTCAGTTCATGAACCACCCCTGGATCAACCAATCGATGGTAGTGCCACAGACCCC
ACTCCACACGGCCCGAGTGCTGCAGGAGGACAAAGACCACTGGGACGAAGTCAAGGAGGAGATGACCAGTGCCTT
GGCCACTATGCGGGTAGACTACGACCAGGTGAAGATCAAGGACCTGAAGACCTCTAACAACCGGCTCCTCAACAA
GAGGAGAAAAAAGCAGGCAGGCAGCTCCTCTGCCTCACAGGGCTGCAACAACCAGTAGCTCATGGGGCCTTGGAG
GAGCCTGGCCTCTCAGCCTGCATAACAGACTGAAATGTGCTCAGGCCCTGGCCAGGAGGGCCCAGGGTCATTCTT
TTAACAAAAGGATTATTTTGTTGTGTTTTAATTTGTCACTCGGAACTTCAGGATGGAGGACCCTGACCCTAAACC
TCCTTCAGATCTCTGGCCCAGGCTCAAGCCCTAGAGATGGGCAGGGCCTAGGGGCTGGGAGCTGCCTGCTGCCAT
AGCAGCACCTTTAGCTAGGTTGGCCCGAGTGAGGCCTCTGTGCTGTCCTGCCCTGGTGCATGGCCTTAGCTTTCT
AGGCCACTGGGAGTTGTGGCTGGGCTTCCCATCTTCCACAGAGACATCTCCCTGTGGGATGGGCAGATGGGCCTG
GCCTTGAGAAAGGCATTGGCCATTGGTTGCCATGGTGACCAGGGACCACGTTGCTGCCTGTGAATGCTGAGTGAG
CGAGTAAGGGAGGAGGGGCGATTGAGGGTTCACCTCTGCCTTGGGGAGGCTGATTTCTCACACACTGGCTGGCCC
TCTCATTCTCACTCCTCCTTGGGCCCTGAGGCTGCTGGATCCGGTCTGCCTGCCTCCCTGTGCAGTCCAGCCCTG
CCTTGCTGCAGCCCCAGCCCAGATGGCACTCAGCGCTCTCCCCTGAGGGAGTCCCTGGGCCTAGCCATCCCCTCA
CTATTCCCGACCCAAAGGGTGACTTTTCATCTGAACTTAAGGTGGGAGATATTTTTAACTTTTTTCCACTTTGGA
AAATGTCACTGTGACAAAAGCCAGCATACTTTCCCTGCACCCATCTGCTCACCAGATCTCAGGCAGGAAAGCCCC
TCTCTGTTGAAGTCAGGGGCTATCTTTTGGTATACTTGTGTGAAAGTGGCTGGTTGGGAGCAGAGCTAAGTGGCT
TCCCATTAACCTGAGGTCTCTTTCTTTACTCTGGGTCAGACCTGAGGTTGGGGAAGGCGACTGAGCCATGCTCAG
AATGTCTGGTCCTGGCTTGGGCCTGAGTAGGGCAGAGAGGGCCTTTCCTGGCTGATCAGAGCTTACCAGCCCCAC
CCCACCATGGTAGCCTTAGGGTGCTGAGTGCCTGATACTGCCTGACAAGTGCCTGACACGCAGCCTAGTTCCTTC
CTGGCCCCTCTCTCACTGGCTGGGAAACCCTAGACCATGTCAGATAGGACAACACTGCTGGGTTTTACATCCAGA
TAGTAATAAACACCATTTCATCATT

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FIGURE 4094

ATGCCTTCAAAGGAAAAGCAAGGGACACTCACCTTGCAAAACCATCAAAACTATTCCCACAGACGCCACATGAGC
CCCCATTTATCTGACTTAAAAGAAGCAGGGTCTGCTGGGATTCGAATCCTCTGGTTCCAGAGAGAGAAGCTCTTT
CAAAGACTGGATTCTGGCCCACAAAAGAAGGTTCCTGCTTACTGGAATCAAGAGGTCAAAGATTTTTCTGAATCA
TGCATCCACGGAGAAGAGCCCATTAGGGCTATTCCAGCAGACAGCAGTAAGGATGTCCATGAGCTTTATGTTGTT
GTTGGGAGCTGGGATTCTACTCTTCCAGAAGAATATGACCTCAAAAGGAGCCACCACAGAACGAGCTCGGCACCC
ATCTACGAATGTATTGCTAAGGATCATTGGGGATGGGGTGACCCAGAAGTGAACTGGCTCCATGATCCATTAAAC
AATCACCCTGAAATCCACAGTGCCAGTCAACTAATGGGGCTTGGAGCCATCATTAGGTCACTGGAAAATGATATC
TTCCTGGAGGTTGATACTGGCTTCACCATCCTGAGAGCAGAAGGCTTGAGGGAGGAACAGCCTCCTGGGCATGGA
GGCACCTGCCATCCCACATCAAATCACAGAGCCATGCTTAAAAGGGCCAGGTGGATGACTTATGTGGAAGAAGTG
AGCCGGGTGAGGATTTCTACTTCGAGAAACCTTGCTCGAAGCGCTTTCATCATTCTCTCCTACACAACAAACCCT
GAACTCTTAGAAGCAGCTCTTGGCACAGGAGCCTCCAACCCGTTTTTCAGCCGGCTTTCTCTACTTGTTTCTCAT
TCCATGATCACAGAAAACAGCTCCATTAAGACTCTTTTCAGGTCTACCAAAGAGCTAGTGATTGCACTCAATCGA
TGTTTCTTCGGCATTACTCAAAGTGCAGCTACACTCAGCCCACAGCTTCACATCAGATTTATCAGCAGAGAACAA
AAGAAGTACTTGAAATTGCCACTTACAACGTTTATGAGTAAACTGGAATCCAAAGTCTGGCCTCTAGCCAAGCGG
TTACGCCAGTGGCCTGACTCATATACAAAGAAGTTTGAGCACAGAATCTACCCCATCACATTTTCTGTTGGAAAC
CCTCAGGAGTGGAAGAAATTGTTCAAACCCTGTGCTGCCCAGAGACTCTTTCTTCCGATCAACCTGGAGCTCTAC
GCCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATAC
TTTCTTCACCAATCTCATGAGGAGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAACGAGGTGGCCGA
ATCTTCCTTCAGGATATCAAGAAACCAGACTGTGACGACTGGGAGAGCGGGCTGAATGCGATGGATGACAAAAAT
GACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATTGGGTGGC
CACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAATATCTCTTTGACAAGCACACGCTG
GGAGACAGTGATAACGAAAGCTAA

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FIGURE 4095

ATGATCTTTAATTTTGCCCTGAATACCTTGGTTGCAATCACTGTGCTTGTTTATCCAAACGGCATTCAGGAATAC
ATACGACAACTGCCTCCGAATTTTCCCTACAGAGATGATGTCATGAGGCCTGGAGAACCCAGGAGTTTCCAAGCT
GTGCTGCCACCCGAGCTCTGGATCCACCTGGCTGTGGTGGCCTGTGGCAATCGGCTGGAGGAGACGCTGGTCATG
CTCAAATCAGCTGTGCTTTTTAGCCACAGGAAGATCCAATTCCACATCTTCACTGAAGACTCTCTGAAGCCCGAG
TTTGATAAGCAGTTACGCCAGTGGCCTGACTCATATACAAAGAAGTTTGAGCACAGAATCTACCCCATCACATTT
TCTGTTGGAAACCCTCAGGAGTGGAAGAAATTGTTCAAACCCTGTGCTGCCCAGAGACTCTTTCTTCCGATCAAC
CTGGAGCTCTACGCCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAAC
TTTGCCAAATACTTTCTTCACCAATCTCATGAGGAGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAA
CGAGGTGGCCGAATCTTCCTTCAGGATATCAAGAAACCAGACTGTGACGACTGGGAGAGCGGGCTGAATGCGATG
GATGACAAAAATGACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAA
GAATTGGGTGGCCACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAATATCTCTTTGAC
AAGCACACGCTGGGAGACAGTGATAACGAAAGCTAA

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FIGURE 4096

GTCCCTCACACCGAGAGTTCCTGCGCGTGGGGAGTTGGAGAGTTTGCGTGGCGGGAACGCGGCGGCAGTGAGAGC
GAGCGGCGCCGGCCCTTGCGTCCGGTGCGGCGATGCTGACCCCGGCGTTCGACCTCAGCCAGGATCCGGACTTCC
TGACTATCGCCATCCGCGTGCCCTACGCCCGGGTCTCCGAGTTCGACGTCTACTTCGAGGGGTCTGACTTCAAGT
TCTACGCCAAGCCATACTTTCTCAGATTAACCCTTCCTGGAAGAATTGTAGAAAATGGAAGTGAGCAAGGGTCCT
ATGATGCAGATAAAGGAATTTTTACCATTCGCCTGCCCAAAGAAACCCCTGGCCAGCATTTTGAGGGGCTGAACA
TGTTAACTGCTCTTCTGGCACCAAGAAAATCCAGGACAGCAAAACCACTTGTGGAAGAAATAGGTGCTTCTGAGA
TTCCTGAGGAAGTAGTTGACGATGAAGAGTTTGATTGGGAAATTGAGCAGACACCCTGTGAAGAGGTATCAGAAA
GTGCTTTGAATCCGCAGTGCCACTATGGATTTGGAAACTTACGATCAGGAGTGTTGCAACGGTTACAGGATGAAC
TGAGTGATGTTATTGATATTAAGGATCCAGATTTCACCCCTGCAGCTGAACGAAGACAGAAGCGCCTGGCCGCTG
AGCTGGCCAAGTTTGATCCTGATCATTATCTAGCTGACTTTTTTGAAGATGAGGCGATTGAACAGATTTTGAAGT
ATAATCCTTGGTGGACTGACAAATATTCAAAAATGATGGCCTTTTTGGAAAAGAGTCAGGAACAAGAAAATCATG
CTACATTAGTGTCTTTTTCTGAAGAAGAGAAGTATCAGCTACGAAAATTTGTCAATAAATCTTATCTGCTGGACA
AGAGAGCCTGTCGTCAAGTGTGCTACAGTTTGATTGATATCCTTCTGGCATATTGCTATGAAACCCGTGTCACTG
AAGGAGAGAAGAATGTTGAATCTGCATGGAATATCAGGAAACTGAGTCCAACACTATGCTGGTTTGAGACTTGGA
CTAACGTTCATGATATCATGGTGTCTTTTGGAAGAAGGGTGTTGTGTTACCCACTCTATCGCCATTTCAAGCTGG
TGATGAAGGCCTACAGGGACACTATAAAGATATTGCAACTGGGTAAAAGTGCAGTTTTAAAGTGTCTCCTGGATA
TTCACAAAATTTTTCAGGAAAATGACCCAGCGTACATACTGAATGATCTCTACATCTCAGACTACTGTGTGTGGA
TTCAGAAAGTCAAATCCAAAAAGTTGGCAGCTCTTGCAGAAGCCTTAAAGGAAGTCTCCCTTACAAAGGCCCAGC
TGGGGTTAGAACTGGAAGAACTAGAAGCAGCAGCACTGCTTGTCCAGGAGGAAGAAACTGCATTAAAAGCAGCCC
ATTCAGTTTCTGGGCAGCAGACACTTTGCTCCAGCTCTGAGGCAAGTGATTCGGAGGACTCAGACAGCAGCGTGT
CATCTGGAAACGAAGACTCAGGCTCAGATTCAGAACAAGATGAACTCAAAGATAGTCCATCTGAGACAGTCAGTT
CTTTGCAAGGTCCCTTTCTTGAAGAAAGCAGTGCCTTTCTTATTGTTGATGGTGGAGTACGCAGAAACACAGCCA
TCCAGGAGTCTGATGCCAGTCAGGGAAAGCCACTTGCCTCTTCCTGGCCTCTTGGAGTGTCTGGGCCTCTGATAG
AGGAGCTTGGGGAACAACTGAAGACTACAGTTCAGGTTTCTGAACCCAAGGGCACCACTGCTGTAAACCGCAGCA
ATATTCAGGAGAGAGACGGCTGTCAGACACCAAATAATTGACTCTTAGGTGGTTTTATTCATTGTTGAGAAATAT
GGTAGATTGGGTTTCATTTACCGAATGAGAATTCTTCATTTTCACTTTGTAATTTTTCTTAGTATATAGTCAGCC
CACTGTATTTGTGTGTTCCACATCTGTGGATTCAACCAACTGCAGATCAAAAATATTGAAGAAAAAATCGCATCT
GTACCAAACATGTACAGACTTTTTTCTTGTTATTATTCTCTAAATAATACAGTATGACAACTATTTCCACAGCAT
TTACATTGTATTGGGTAATATAAGTAATCTAGTGATGATTTAAACTGTGCAGGAGGATGTGGGTAGGTTATATGC
AAATACTGCACCATTTTTTATCAGGGGCTTGAGCATCTGAGGATTTTAGTATCCTCAGGAGTCCTGGAACCAACC
CCCCACAGATACGGGGACAACTTTATGACATTGTTTTTCAACCAATGAATGTTTATACCTTTTGTTTTCCTTGCC
GCGACTGTGAAGATAAAGTTCAAAAGTATTTTTACCAAAGTGTAGCTAATATTTCAAGCTGAAAATAATAGTTCT
ACTGCCCGTGTCTCCAGAATGTAGAGCCCATCAATATTTTTATTTTAGGAGGTGTACTTGACACCCAATAAACTG
CACGTATCAAAAGTGTACAATGTGTTGGCGTATGTATACCCTGCGTAAAACTATCACCACAACTGAAGTGAGGAA
CGGACCCATCATTCCCAAGTGCCCTTGTGCCCTGTTATTAGTTTGCATGTCCTAGAATTCTATGTAAATTGAATC
ATACAATATGTATCCCTTTTTTGGTCAGGCATATTTTACTCAGTATAGTTATTTTGAGATTCATCCATGTGGTAG
CATGTGTCACGAGTTTTTGTTTTTATGTTTTTCATTGCTGAGTACTGCTTCATTGAATAGATTTGTTCATTGACC
TATCGATGGACACCTGGGTTGTTT

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FIGURE 4097A

AGCGATCCGAGGCCCGGCCCCGGCCCCGCCCCGCGCCGCGCCGCGCCGCTTGCCGCCGGGCTAGCACTGACGTGT
CTCTCGGCGGAGCTGCTGTGCAGTGGAACGCGCTGGGCCGCGGGCAGCGTCGCCTCACGCGGAGCAGAGCTGAGC
TGAAGCGGGACCCGGAGCCCGAGCAGCCGCCGCC**ATG**GCAATCAAATTTCTGGAAGTCATCAAGCCCTTCTGTGT
CATCCTGCCGGAAATTCAGAAGCCAGAGAGGAAGATTCAGTTTAAGGAGAAAGTGCTGTGGACCGCTATCACCCT
CTTTATCTTCTTAGTGTGCTGCCAGATTCCCCTGTTTGGGATCATGTCTTCAGATTCAGCTGACCCTTTCTATTG
GATGAGAGTGATTCTAGCCTCTAACAGAGGCACATTGATGGAGCTAGGGATCTCTCCTATTGTCACGTCTGGCCT
TATAATGCAACTCTTGGCTGGCGCCAAGATAATTGAAGTTGGTGACACCCCAAAAGACCGAGCTCTCTTCAACGG
AGCCCAAAAGTTATTTGGCATGATCATTACTATCGGCCAGTCTATCGTGTATGTGATGACCGGGATGTATGGGGA
CCCTTCTGAAATGGGTGCTGGAATTTGCCTGCTAATCACCATTCAGCTCTTTGTTGCTGGCTTAATTGTCCTACT
TTTGGATGAACTCCTGCAAAAAGGATATGGCCTTGGCTCTGGTATTTCTCTCTTCATTGCAACTAACATCTGTGA
AACCATCGTATGGAAGGCATTCAGCCCCACTACTGTCAACACTGGCCGAGGAATGGAATTTGAAGGTGCTATCAT
CGCACTTTTCCATCTGCTGGCCACACGCACAGACAAGGTCCGAGCCCTTCGGGAGGCGTTCTACCGCCAGAATCT
TCCCAACCTCATGAATCTCATCGCCACCATCTTTGTCTTTGCAGTGGTCATCTATTTCCAGGGCTTCCGAGTGGA
CCTGCCAATCAAGTCGGCCCGCTACCGTGGCCAGTACAACACCTATCCCATCAAGCTCTTCTATACGTCCAACAT
CCCCATCATCCTGCAGTCTGCCCTGGTGTCCAACCTTTATGTCATCTCCCAAATGCTCTCAGCTCGCTTCAGTGG
CAACTTGCTGGTCAGCCTGCTGGGCACCTGGTCGGACACGTCTTCTGGGGGCCCAGCACGTGCTTATCCAGTTGG
TGGCCTTTGCTATTACCTGTCCCCTCCAGAATCTTTTGGCTCCGTGTTAGAAGACCCGGTCCATGCAGTTGTATA
CATAGTGTTCATGCTGGGCTCCTGTGCATTCTTCTCCAAAACGTGGATTGAGGTCTCAGGTTCCTCTGCCAAAGA
TGTTGCAAAGCAGCTGAAGGAGCAGCAGATGGTGATGAGAGGCCACCGAGAGACCTCCATGGTCCATGAACTCAA
CCGGTACATCCCCACAGCCGCGGCCTTTGGTGGGCTGTGCATCGGGGCCCTCTCGGTCCTGGCTGACTTCCTAGG
CGCCATTGGGTCTGGAACCGGGATCCTGCTCGCAGTCACAATCATCTACCAGTACTTTGAGATCTTCGTTAAGGA
GCAAAGCGAGGTTGGCAGCATGGGGGCCCTGCTCTTC**TGA**GCCCGTCTCCCGGACAGGTTGAGGAAGCTGCTCCA
GAAGCGCCTCGGAAGGGGAGCTCTCATCATGGCGCGTGCTGCTGCGGCATATGGACTTTTAATAATGTTTTTGAA
TTTCGTATTCTTTCATTCCACTGTGTAAAGTGCTAGACATTTTCCAATTTAAAATTTTGCTTTTTATCCTGGCAC
TGGCAAAAAGAACTGTGAAAGTGAAATTTTATTCAGCCGACTGCCAGAGAAGTGGGAATGGTATAGGATTGTCCC
CAAGTGTCCATGTAACTTTTGTTTTAACCTTTGCACCTTCTCAGTGCTGTATGCGGCTGCAGCCGTCTCACCTGT
TTCCCCACAAAGGGAATTTCTCACTCTGGTTGGAAGCACAAACACTGAAATGTCTACGTTTCATTTTGGCAGTAG
GGTGTGAAGCTGGGAGCAGATCATGTATTTCCCGGAGACGTGGGACCTTGCTGGCATGTCTCCTTCACAATCAGG
CGTGGGAATATCTGGCTTAGGACTGTTTCTCTCTAAGACACCATTGTTTTCCCTTATTTTAAAAGTGATTTTTTT
AAGGACAGAACTTCTTCCAAAAGAGAGGGATGGCTTTCCCAGAAGACACTCCTGGCCATCTGTGGATTTGTCTGT
GCACCTATTGGCTCTTCTAGCTGACTCTTCTGGTTGGGCTTAGAGTCTGCCTGTTTCTGCTAGCTCCGTGTTTAG
TCCACTTGGGTCATCAGCTCTGCCAAGCTGAGCCTGGCCAAGCTAGGTGGACAGACCCTTGCAGTGATGTCCGTT
TGTCCAGATTCTGCCAGTCATCACTGGACACGTCTCCTCGCAGCTGCCCTAGCAAGGGGAGACATTGTGGTAGCT
ATCAGACATGGACAGAAACTGACTTAGTGCTCACAAGCCCCTACACCTTCTGGGCTGAAGATCACCCAGCTGTGT
TCAGAATTTTCTTACTGTGCTTAGGACTGCACGCAAGTGAGCAGACACCACCGACTTCCTTTCTGCGTCACCAGT
GTCGTCAGCAGAGAGAGGACAGCACAGGCTCAAGGTTGGTAGTGAAGTCAGGTTCGGGGTGCATGGGCTGTGGTG
GTGTTGATCAGTTGCTCCAGTGTTTGAAATAAGAAGACTCATGTTTATGTCTGGAATAAGTTCTGTTTGTGCTGA
CAGGTGGCCTAGGTCCTGGAGATGAGCACCCTCTCTCTGGCCTTTAGGGAGTCCCCTCTTAGGACAGGCACTGCC
CAGCAGCAAGGGCAGCAGAGTTGGGTGCTAAGATCCTGAGGAGCTCGAGGTTTCGAGCTGGCTTTAGACATTGGT
GGGACCAAGGATGTTTTGCAGGATGCCCTGATCCTAAGAAGGGGGCCTGGGGGTGCGTGCAGCCTGTCGGGGAGA
CCCCACTCTGACAGTGGGCACACGGCAGCCTGCAAAGCACAGGGCCACCGCCACAGCCCGGCAGAGGGGCACACT
CTGGAGACCTTGCTGGCAGTGCTAGCCAGGAAACAGAGTGACCAAGGGACAAGAAGGGACTTGCCTAAAGCCACC
CAGCAACTCAGCAGCAGAACCAAGATGGGCCCCAGGCTCCTCCATATGGCCCAGGGCTTACCACCCTATCACACG
TGGCCTTGTCTAGACCCAGTCCTGAGCAGGGGAGAGGCTCTTGAGACCTGATGCCCTCCTACCCACATGGTTCTC
CCACTGCCCTGTCTGCTCTGCTGCTACAGAGGGGCAGGGCCTCCCCCAGCCCACGCTTAGGAATGCTTGGCCTCT
GGCAGGCAGGCAGCTGTACCCAAGCTGGTGGGCAGGGGGCTGGAAGGCACCAGGCCTCAGGAGGAGCCCCATAGT
CCCGCCTGCAGCCTGTAACCATCGGCTGGGCCCTGCAAGGCCCACACTCACGCCCTGTGGGTGATGGTCACGGTG
GGTGGGTGGGGGCTGACCCCAGCTTCCAGGGGACTGTCACTGTGGACGCCAAAATGGCATAACTGAGATAAGGTG

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FIGURE 4097B

AATAAGTGACAAATAAAGCCAGTTTTTTACAAGGT

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FIGURE 4098

ATGAAGATTGAGGAGGTGAAGAGCACTACGAAGACGCAGCGCATCGCCTCCCACAGCCACGTGAAAGGGCTGGGG
CTGGACGAGAGCGGCTTGGCCAAGCAGGCGGCCTCAGGGCTTGTGGGCCAGGAGAACGCGCGAGAGGTGTGGCCA
GTGGACCAGGGAGTTGGGGGCTGCAAGCAGGGCTGCTGCGGCGAGAGAGCTGCTGAAGTCGGGCCTGCAGGTGCT
CCAGGTCAGCGGGCGACTTTGGCCGCTGCAGAGACCGAGATACGCGGGGTAACAGCCCGTTCCGGAGCCGGTCAT
CAGGCGCCAAGCCCCGCTGGGCTCCTCGCAGCCGCGGGACCTTTCTCCGCCCTTCCCGAGGCTGAGTTTCCTGAA
CGGGAAGCTGCCGGCCCGCGGGGCAGCCGGGAGCAGCCAGGGCGTGAGGACGTGGGTTCCCGTCACCCCCGGCTT
GGAACAGCAGCGCCGCAACAACCGCTGGCGTTCATCGAGCCTCTCAGCAGCCCTGCGAGGCGATCCCGGGGAGAA
TCCCACGCCACAGCCGAGGAAACTGAGGCAGGCAGGGTGACACACAGCCCAGTAGTGGCGGGCGGGCGCCCAGGC
TGCCACCGCGCTGAGGACCGGCCCCTCTGCCAGCCGGGAGGCGTGGGGCAGGACAGCCGCGCTCTCGCCAGGGCC
CAGAGCCCCACTTTGCCAAGGAGCTGTCGCTGGAGCGGTGACTTTGTTCAGGGCCGAGAACCGGAGGAGGAGGCC
AGACTTGCTGCTGGGCAGCTGGCACATGGGACATGGGGTGTTATGACTCCAGCATTTATGGAGCGCCTGCTGTGT
GCTCTGCAGGTGAGCAATGTGAGGCTCAGAGAAGAGAAACAGAAAGCCCGGAGGCTTGAGTGGGTCAGACACCCA
TCAGGAGCTTGGCATGAGTATGACAGCTCCTTGACGCAAAGTCCAGGGGGCATGAGTGCTGGGGCCATTGCAGGC
ACCAGGACCCAAGCCTAG

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FIGURE 4099

AGGTAAAGGGAGAAGATGAGGAAGAGAACAATTTGGAAGTACGTGAAACCAAAATTAAGGGTAAAAGTGGGAGAT
TCTTCACAGTCAAGCTCCCAGTTGCTCTTGATCCTGGGGCCAAGATTTCAGTCATTGTGGAAACAGTCTACACCC
ATGTGCTTCATCCATATCCAACCCAGATCACCCAGTCAGAGAAACAGTTTGTGGTGTTTGAGGGGAACCATTATT
TCTACTCTCCCTATCCAACGAAGACACAAACCATGCGTGTGAAGCTTGCCTCTCGAAATGTGGAGAGCTACACCA
AGCTGGGGAACCCCACGCGCTCTGAGGACCTACTGGATTATGGGCCTTTCAGAGATGTGCCTGCCTATAGTCAGG
ATACTTTTAAAGTACATTATGAGAACAACAGCCCTTTCCTGACCATCACCAGCATGACCCGAGTCATTGAAGTCT
CTCACTGGGGTAATATTGCTGTGGAAGAAAATGTGGACTTAAAGCACACAGGAGCTGTGCTTAAGGGGCCTTTCT
CACGCTATGATTACCAGAGACAGCCAGATAGTGGAATATCCTCCATCCGTTCTTTTAAGACCATCCTTCCTGCTG
CTGCCCAGGATGTTTATTACCGGGATGAGATTGGCAATGTTTCTACCAGCCACCTCCTTATTTTGGATGACTCTG
TAGAGATGGAAATCCGGCCTCGCTTCCCTCTCTTTGGCGGGTGGAAGACCCATTACATCGTTGGCTACAACCTCC
CAAGCTATGAGTACCTCTATAATTTGGGTGACCAGTATGCACTGAAGATGAGGTTTGTGGACCATGTGTTTGATG
AACAAGTGATAGATTCTCTGACTGTGAAGATCATCCTGCCTGAAGGAGCCAAGAACATTGAAATTGATAGTCCCT
ATGAAATCAGCCGTGCCCCAGATGAGCTGCACTACACCTATCTGGATACATTTGGCCGCCCTGTGATTGTTGCCT
ACAAGAAAAATCTGGTAGAACAGCACATTCAGGACATTGTGGTCCACTACACGTTCAACAAGGTGCTCATGCTGC
AGGAGCCCCTGCTGGTGGTGGCGGCCTTCTACATCCTGTTCTTCACCGTTATCATCTATGTTCGGCTGGACTTCT
CCATCACCAAGGATCCAGCCGCAGAAGCCAGGATGAAGGTAGCCTGCATCACAGAGCAGGTCTTGACCCTGGTCA
ACAAGAGAATAGGCCTTTACCGTCACTTTGACGAGACCGTCAATAGGTACAAGCAATCCCGGGACATCTCCACCC
TCAACAGTGGCAAGAAGAGCCTGGAGACTGAACACAAGGCCTTGACCAGTGAGATTGCACTGCTGCAGTCCAGGC
TGAAGACAGAGGGCTCTGATCTGTGCGACAGAGTGAGCGAAATGCAGAAGCTGGATGCACAGGTCAAGGAGCTGG
TGCTGAAGTCGGCGGTGGAGGCTGAGCGCCTGGTGGCTGGCAAGCTCAAGAAAGACACGTACATTGAGAATGAGA
AGCTCATCTCAGGAAAGCGCCAGGAGCTGGTCACCAAGATCGACCACATCCTGGATGCCCTGTAGCCCCTGCCCG
CATCCTCCAGGGGGCCCAGGGTGCCTGCACTTTGCTGTGGCAGGCAGATTGGGTGGTAGTGGGAGGTTGTGCATG
GAGGCCAGTGAAAGCTGACATCTGTAAAAGGCCTTCAAGGAAGAGAAACCAGGCCCTGCGTCAGGCAGTGTGAGT
TTGCCGTTTGTCCTTAACTTTCTTTTTTTTTTTTTTTAAAAAAAGAAAACTTTAAAAAAACTCCCATTAAAAACA
AAACATCTTTGTGTTTTGAACAAAGGAATTTTCAATATTTGATTGGTATTCTGTTCTGAAGTCTAGGATATTTTT
CAGCCTATAAAGCCCCCTGTTTTATGCCCTTCTAATTCTGATGTTTGGGTATTGTGTGAGTGCATGTGTTTTTTT
TTTTTTTTTTTTAAAGCGTGTGTGAACAAATGGAAATAAAGCAGGGACTGTG

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FIGURE 4100

CTGCTCTTCCCGGTCATGGAGGCGCCAGCCGCCGGCTTGTTTCTGCTCCTGTTGCTTGGGACTTGGGCCCCGGCG
CCGGGCAGCGCCTCCTCCGAGGCACCGCCGCTGATCAATGAGGACGTGAAGCGCACAGTGGACCTAAGCAGCCAC
CTGGCTAAGGTGACGGCCGAGGTGGTCCTGGCGCACCTGGGCGGCGGCTCCACGTCCCGAGCTACCTCTTTCCTG
CTGGCTTTGGAGCCTGAGCTCGAGGCCCGGCTGGCGCACCTGGGCGTGCAGGTAAAGGGAGAAGATGAGGAAGAG
AACAATTTGGAAGTACGTGAAACCAAAATTAAGGGTAAAAGTGGGAGATTCTTCACAGTCAAGCTCCCAGTTGCT
CTTGATCCTGGGGCCAAGATTTCAGTCATTGTGGAAACAGTCTACACCCATGTGCTTCATCCGTATCCAACCCAG
ATCACCCAGTCAGAGAAACAGTTTGTGGTGTTTGAGGGGAACCATTATTTCTACTCTCCCTATCCAACGAAGACA
CAAACCATGCGTGTGAAGCTTGCCTCTCGAAATGTGGAGAGCTACACCAAGCTGGGGAACCCCACGCGCTCTGAG
GACCTACTGGATTATGGGCCTTTCAGAGATGTGCCTGCCTATAGTCAGGATACTTTTAAAGTACATTATGAGAAC
AACAGCCCTTTCCTGACCATCACCAGCATGACCCGAGTCATTGAAGTCTCTCACTGGGGTAATATTGCTGTGGAA
GAAAATGTGGACTTAAAGCACACAGGAGCTGTGCTTAAGGGGCCTTTCTCACGCTATGATTACCAGAGACAGCCA
GATAGTGGAATATCCTCCATCCGTTCTTTTAAGACCATCCTTCCTGCTGCTGCCCAGGATGTTTATTACCGGGAT
GAGATTGGCAATGTTTCTACCAGCCACCTCCTTATTTTGGATGACTCTGTAGAGATGGAAATCCGGCCTCGCTTC
CCTCTCTTTGGCGGGTGGAAGACCCATTACATCGTTGGCTACAACCTCCCAAGCTATGAGTACCTCTATAATTTG
GGTGACCAGTATGCACTGAAGATGAGGTTTGTGGACCATGTGTTTGATGAACAAGTGATAGATTCTCTGACTGTG
AAGATCATCCTGCCTGAAGGAGCCAAGAACATTGAAATTGATAGTCCCTATGAAATCAGCCGTGCCCCAGATGAG
CTGCACTACACCTATCTGGACACATTTGGCCGCCCTGTGATTGTTGCCTACAAGAAAAATCTGGTAGAACAGCAC
ATTCAGGACATTGTGGTCCACTACACGTTCAACAAGGTGCTCATGCTGCAGGAGCCCCTGCTGGTGGTGGCGGCC
TTCTACATCCTGTTCTTCACCGTTATCATCTATGTTCGGCTGGACTTCTCCATCACCAAGGATCCAGCCGCAGAA
GCCAGGATGAAGGTAGCCTGCATCACAGAGCAGGTCTTGACCCTGGTCAACAAGAGAATAGGCCTTTACCGTCAC
TTTGACGAGACCGTCAATAGGTACAAGCAATCCCGGGACATCTCCACCCTCAACAGTGGCAAGAAGAGCCTGGAG
ACTGAACACAAGGCCTTGACCAGTGAGATTGCACTGCTGCAGTCCAGGCTGAAGACAGAGGGCTCTGATCTGTGC
GACAGAGTGAGCGAAATGCAGAAGCTGGATGCACAGGTCAAGGAGCTGGTGCTGAAGTCGGCGGTGGAGGCTGAG
CGCCTGGTGGCTGGCAAGCTCAAGAAAGACACGTACATTGAGAATGAGAAGCTCATCTCAGGAAAGCGCCAGGAG
CTGGTCACCAAGATCGACCACATCCTGGATGCCCTGTAGCCCCTGCCCGCATCCTCCAGGGGGCCCAGGGTGCCT
GCACTTTGCTGTGGCAGGCAGATTGGGTGGTAGTGGGAGGTTGTGCATGGAGGCCAGTGAAAGCTGACATCTGTA
AAAGGCCTTCAAGGAAGAGAAACCAGGCCCTGCGTCAGGCAGTGTGAGTTTGCCGTTTGTCCTTAACTTTCTTTT
TTTTTTTTTTTAAAAAAAGAAAACTTTAAAAAAACTCCCATTAAAAACAAAACATCTTTGTGTTTTGAACAAAGG
AATTTTCAATATTTGATTGGTATTCTGTTCTGAAGTCTAAGATATTTTTCAGCCTATAAAGCCCCCTGTTTTATG
CCCTTCTAATTCTGATGTTTGGGTATTGTGTGAGTGCATGTGTTTTTTTTTTTTTTTTAAAGCGTGTGTGAACA
AATGGAAATAAAGCAGGGACTGTG

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FIGURE 4101

TGGCAGGGCGGCGGGTGAACGTGAACGTGGGCGTGCTGGGCCACATCGACAGCGGCAAGACGGCGCTGGCGCGGG
CGCTAAGCACCACAGCCTCCACCGCCGCCTTTGACAAGCAGCCGCAGAGCCGCGAGCGCGGCATCACGCTCGATC
TGGGCTTCTCGTGCTTCTCGGTGCCGCTGCCCGCGCGCCTGCGGTCGTCTTTGCCCGAGTTCCAGGCAGCGCCCG
AGGCCGAGCCCGAGCCCGGCGAGCCACTGCTTCAGGTCACGCTGGTCGACTGCCCCGGGCACGCCTCCCTCATCC
GGACCATCATCGGCGGGGCCCAGATCATTGATCTGATGATGCTGGTCATCGATGTGACCAAGGGGATGCAGACCC
AGTCAGCGGAATGCCTTGTGATCGGCCAGATTGCCTGCCAGAAGCTGGTCGTGGTGCTGAACAAAATAGACCTCT
TACCTGAAGGAAAGAGACAGGCAGCAATTGATAAAATGACCAAGAAAATGCAGAAGACCCTAGAGAACACCAAGT
TCCGAGGTGCACCGATTATACCCGTGGCGGCCAAGCCGGGGGGACCAGAGGCCCCCGAAACTGAAGCTCCACAGG
GCATTCCAGAGCTCATTGAGCTCCTGACGTCCCAGATTTCCATCCCAACGAGAGACCCCTCGGGACCGTTCCTCA
TGTCTGTGGACCACTGTTTCTCCATCAAAGGCCAAGGCACTGTGATGACAGGGACCATCCTTTCAGGCTCCATCA
GCCTCGGTGACAGTGTGGAGATCCCTGCCCTCAAGGTGGTGAAGAAGGTGAAGTCCATGCAGATGTTCCACATGC
CCATCACTTCAGCCATGCAAGGAGACCGGCTGGGCATCTGCGTCACCCAGTTTGACCCTAAGCTGCTGGAGCGCG
GGTTGGTGTGTGCCCCCGAGTCCCTGCACACTGTCCATGCGGCCCTCATCTCTGTGGAAAAGATACCGTATTTCC
GGGGGCCCCTGCAAACCAAGGCCAAGTTCCACATTACAGTGGGCCATGAAACAGTCATGGGCCGGTTGATGTTCT
TCAGTCCTGCTCCAGATAACTTTGACCAGGAGCCTATACTGGACTCTTTCAACTTCTCTCAAGAATACCTTTTCC
AGGAGCAGTACCTGTCCAAGGATTTGACACCAGCAGTGACAGACAATGATGAGGCCGACAAGAAGGCCGGCCAGG
CCACAGAGGGCCATTGTCCTCGGCAGCAGTGGGCCCTGGTGGAGTTTGAGAAGCCCGTCACCTGCCCTCGGCTGT
GCCTGGTGATTGGCTCCAGGCTAGATGCGGACATTCACACCAACACGTGCCGGCTAGCCTTCCATGGCATCCTGC
TCCACGGGCTAGAGGACAGGAACTACGCCGACAGCTTCCTGCCCAGGCTGAAGGTGTACAAGCTGAAGCACAAGC
ATGGCCTTGTGGAGCGGGCGATGGATGACTACAGTGTGATCGGCCGCTCCCTGTTCAAAAAGGAAACCAACATCC
AGCTCTTCGTGGGGCTCAAGGTGCACTTGTCCACTGGGGAACTGGGCATCATCGACAGTGCCTTCGGCCAGAGCG
GCAAGTTCAAGATCCACATCCCAGGTGGCCTCAGCCCCGAGTCCAAGAAGATCCTGACACCCGCCCTCAAGAAGC
GGGCCCGGGCTGGCCGTGGGGAGGCCACCAGGCAGGAGGAGAGCGCCGAGCGGAGCGAGCCCTCACAGCATGTGG
TGCTCAGCCTGACTTTCAAGCGTTATGTCTTCGACACCCACAAGCGCATGGTTCAGTCTCCCTGAGTGTCCGGTG
ACCTCCCCCAGGGCCTCCTTGCCCAGCCCAGTCCAGGCTGCTGTGCCAAATCCCAACCAGCCACGCCTCAGCCTC
TCCCAGTCTCTCCCTGCAGTCCTGCAGCAGCAGCCCCCACCCCCAAGCTTGGTGCTGAGCCCTGGTGAGGAGCTG
AGGGGGATGGGTTGCTGGGGCCAGGAGGGTCTCTCCTCCAGCCCCTGCACACTCCCACCCAGGACAGCCCCCAGC
CCAACTAGGAAAGGGCCATGGGCAGAGGGCTGGTAGCCAGTATCTTCCACTGCCCCATCTGTTGGCCACCTGCAG
GCCAGTCTCAACCCTCCCCCAGGTGGGCAGGCACTTGATGGCTACAAATAAATGTCCCGTGGCCCCAGCCCACTC
T

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FIGURE 4102

GTGAGCGCCAGGAAGGTAGCGAGGCCAGCGTCGCCCCGGGACTCGCTGCTCAAGTCTGTCTATTGCCTGCCGCCA
CATCCATCCTAGCAGGGCCCCGTCGCCCACCAGGCGGACAAAAGCGGTCCGCTGAACACCATGCGGCCGCTCGGC
GTGCCGCCCAGGCTCTGCTGGTGAGCGCCGCCACCCCGCGCCCAGGTCCCGCGAGCCCGCCTGCCGCGCACCTCG
CCCTGCTCCCAGCTCTACTCCAGGCCCCGTCCGCCCGGGGGCGCCGCCCACCGCGCCTCGCTCGGGCCGTTGCCG
TCTGCACCCAGACCCTGAGCCGCCGCCGCCGGCCATGGAGGTGGCGCCCGAGCAGCCGCGCTGGATGGCGCACCC
GGCCGTGCTGAATGCGCAGCACCCCGACTCACACCACCCGGGCCTGGCGCACAACTACATGGAACCCGCGCAGCT
GCTGCCTCCAGACGAGGTGGACGTCTTCTTCAATCACCTCGACTCGCAGGGCAACCCCTACTATGCCAACCCCGC
TCACGCGCGGGCGCGCGTCTCCTACAGCCCCGCGCAGCCCGCCTGACCGGAGGCCAGATGTGCCGCCCACACTTG
TTGCACAGCCCGGGTTTGCCCTGGCTGGACGGGGGCAAAGCAGCCCTCTCTGCCGCTGCGGCCCACCACCACAAC
CCCTGGACCGTGAGCCCCTTCTCCAAGACGCCACTGCACCCCTCAGCTGCTGGAGGCCCTGGAGGCCCACTCTCT
GTGTACCCAGGGGCTGGGGGTGGGAGCGGGGGAGGCAGCGGGAGCTCAGTGGCCTCCCTCACCCCTACAGCAGCC
CACTCTGGCTCCCACCTTTTCGGCTTCCCACCCACGCCACCCAAAGAAGTGTCTCCTGACCCTAGCACCACGGGG
GCTGCGTCTCCAGCCTCATCTTCCGCGGGGGGTAGTGCAGCCCGAGGAGAGGACAAGGACGGCGTCAAGTACCAG
GTGTCACTGACGGAGAGCATGAAGATGGAAAGTGGCAGTCCCCTGCGCCCAGGCCTAGCTACTATGGGCACCCAG
CCTGCTACACACCACCCCATCCCCACCTACCCCTCCTATGTGCCGGCGGCTGCCCACGACTACAGCAGCGGACTC
TTCCACCCCGGAGGCTTCCTGGGGGGACCGGCCTCCAGCTTCACCCCTAAGCAGCGCAGCAAGGCTCGTTCCTGT
TCAGAAGGCCGGGAGTGTGTCAACTGTGGGGCCACAGCCACCCCTCTCTGGCGGCGGGACGGCACCGGCCACTAC
CTGTGCAATGCCTGTGGCCTCTACCACAAGATGAATGGGCAGAACCGACCACTCATCAAGCCCAAGCGAAGACTG
TCGGCCGCCAGAAGAGCCGGCACCTGTTGTGCAAATTGTCAGACGACAACCACCACCTTATGGCGCCGAAACGCC
AACGGGGACCCTGTCTGCAACGCCTGTGGCCTCTACTACAAGCTGCACAATGTTAACAGGCCACTGACCATGAAG
AAGGAAGGGATCCAGACTCGGAACCGGAAGATGTCCAACAAGTCCAAGAAGAGCAAGAAAGGGGCGGAGTGCTTC
GAGGAGCTGTCAAAGTGCATGCAGGAGAAGTCATCCCCCTTCAGTGCAGCTGCCCTGGCTGGACACATGGCACCT
GTGGGCCACCTCCCGCCCTTCAGCCACTCCGGACACATCCTGCCCACTCCGACGCCCATCCACCCCTCCTCCAGC
CTCTCCTTCGGCCACCCCCACCCGTCCAGCATGGTGACCGCCATGGGCTAGGGAACAGATGGACGTCGAGGACCG
GGCACTCCCGGGATGGGTGGACCAAACCCTTAGCAGCCCAGCATTTCCCGAAGGCCGACACCACTCCTGCCAGCC
CGGCTCGGCCCAGCACCCCCTCTCCTGGAGGGCGCCCAGCAGCCTGCCAGCAGTTACTGTGAATGTTCCCCACCG
CTGAGAGGCTGCCTCCGCACCTGACCGCTGCCCAGGTGGGGTTTCCTGCATGGACAGTTGTTTGGAGAACAACAA
GGACAACTTTATGTAGAGAAAAGGAGGGGACGGGACAGACGAAGGCAACCATTTTTAGAAGGAAAAAGGATTAGG
CAAAAATAATTTATTTTGCTCTTGTTTCTAACAAGGACTTGGAGACTTGGTGGTCTGAGCTGTCCCAAGTCCTCC
GGTTCTTCCTCGGGATTGGCGGGTCCACTTGCCAGGGCTCTGGGGGCAGATTTGTGGGGACCTCAGCCTGCACCC
TCTTCTCCTCTGGCTTCCCTCTCTGAAATAGCCGAACTCCAGGCTGGGCTGAGCCAAAGCCAGAGTGGCCACGGC
CCAGGGAGGGTGAGCTGGTGCCTGCTTTGACGGGCCAGGCCCTGGAGGGCAGAGACAATCACGGGCGGTCCTGCA
CAGATTCCCAGGCCAGGGCTGGGTCACAGGAAGGAAACAACATTTTCTTGAAAGGGGAAACGTCTCCCAGATCGC
TCCCTTGGCTTTGAGGCCGAAGCTGCTGTGACTGTGTCCCCTTACTGAGCGCAAGCCACAGCCTGTCTTGTCAGG
TGGACCCTGTAAATACATCCTTTTTCTGTTAACCCTTCAACCCCCTCGCCTACTACTCTGAGAC

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FIGURE 4103

CTCCAGCACAGCGTTGGTGCTGCCTGGGTATCAGAAAGCAAGCTCACATTGCTCTCCAGTACGTGTAAGCCTTTT
CTTTTCAAGATGCCTGAGGAAGTGCACCATGGAGAGGAGGAGGTGGAGACTTTTGCCTTTCAGGCAGAAATTGCC
CAACTCATATCCCTCATCATCAATACCTTCTATTCCAACGAGGAGATTTTCCTTCAGGAGTTGATCTCTAATGCT
TCTGATGCCTTGGACAAGATTCGCTATGAGAGCCTGACAGACCCTTCAAAGTTGGACAGTGGTAAAGAGCTGAAA
ATTGACATCATCCCCAACCCTCAGGAACGTACCCTGGCTTTGGTAGACACAGGCATTGGCATGACCAAAGCTGAT
CTCATAAATAATTTGAGAACCATTGCCAAGTCTGGTACTAAAGCATGCATGGAGGCTCTTCAGGCTGGTGCAGAC
ATCTCCATGATTGGGCAGTTTGGTGTTGGCTTTTTTCTGCCTACCTGGTGGCAGAGAAACTGGTTGTGATCACAA
AGCACAACGATGATGAACAGTATGCTTGGGAGTCTTCTGCTGGAGGTTCCTTCACTGTGCATGCTGATCATGGTG
AGCCCATTGGCAGGGGTACCAAAGTGATCCTCCATCTTAAAGAAGATCAGACAGAGTACTTAGAAGAGAGGCGGG
TCAAAGAAGTAGTGAAGAAGCATTCTCAGTTCATAGGCTATCCCATCACCCTTTATTTGGAGAAGGAACAAGACA
AGGAAATTAGTGATGATGAGGCAGAAGAAGAGAAAGGTGAGAAAGAAGAGGAAGATAAAGATGACGAAGAAAAGC
CCAAGATCAAAGATGTGGGTTCAGATGAGGAGGATGACAGCAGTAAGGATAAGAAGAAGAAAACTAAGAAGATCA
AAGAGAAATACATTGACTAGGAAGAACTAAACAAGACCAAGCCTATTTGGACCAGAAACCATGATGACATCACCC
AAGAGGAGTATGGAGAATTCTATAAGAGCCTCACCAGTGACTGGGAAGACCACTTGGCAGTCAAGCACTTTTCTG
TAGAAGGTCAGTTGGAATTCAGGGCATTGCTATTCAGTCCTCGTCGGGCTCCCTTTGACCTTTTTGAGAACAAGA
AGAAAAAGAACAACATCAAACTGTATGTCCGCCGTGTGTTCATCATGGACAGCTGTGATGAGTTGATACCAGAGT
ATCTCAATTTTATCCATGGTGTGGTTGACTCTGAGGATCTGCCCCTGAACATCTCCCGAGAAATGCTCCAGCAGA
GCAAAATCTTGAAAGTCATTCGCAAAAACATTGTTAAGAAGTGCCTTGAGCTCTTCTCTGAGCTGGCAGAAGACA
AGGAGATTATAAGAAATTCTATGAGGCATTTTCTAAAAATCTCAAGCTTGGAATCCACGAAGACTCCACTAACCG
CCACCGCCTGTCTGAGCTGCTGCGCTGTCACACCTCCCAGTCTGGAGATGAGATGACATCTCTGTCGTAGTATGT
TTCTCAC**ATG**AAGGAGACACAGAAGTCCACCTATTACATCACTGGTGAGAGCAAAGAGCAGGTGGCCAACTCTGC
TTTTGTGGAGCGAGTGCGGAAACAGGGCTTCGAGGTGGTATATATGACTGAGCCCATTGACGAGTACTGTGTGCA
GCAGCTCAAGGAGTTTGATGGGAAAAGCCTGGTCTCAGTTACCAAGGAGGGTCTGGAGCTACCTGAGGATGAGGA
GGAGAAGAAGAAGATGGAAGAAAGCAAGGAAAAGTTTGAGAACCTCTGCAAGCTCATGAAAGAAATCTTAGATAA
GAAGGTTGAGAAGGTGACAATCTCCAATAGACTTGTGTCTTCACCCTGCTGCATTGTGACCAGCACCTACGGCTG
GACAGCCAATATGGAGCAGATCATGAAAGCCCAGGCACTTCGGGACAACTCCACCATGGGCTATATGATGGCCAA
AAAGCACCTGGAGATCAACCCCGACCACCCCATCATGGAGACGCTGCGGCAGAAGGCTGAGGCCGACAAGAATGA
TAAGGCAGTTAAGGACCTGGTGGTGCTGCTGTTTGAAACCGCCCTGCTATCTTCGGGCTTTTCCCTTGAGGATCC
CCAGACCCACTCCAACCACATCTACCACATGATCAAGCTAGGTCTAGGTACTGATGAAGATGAAGTGGCAGCAGA
GGAACCCAGTGATGCAGTTCCTGATGAGATCCCCCCTCTTGAGGGTGATGAGGATGCGTCTCGCATGGAAGAAGT
CGAT**TAG**GAGTTCATAGTTGGAAAACTTGTGCCCTTGTATAGTGTCCCCATGGCTCCCACTGCAGCCTCGAGTGC
CCCTGTCCCACCTGGCTGCTGGTGTCTAGTGTTTTTTTCCCTCTCCTGTCCTTGTGTTGAAGGCAGGAAACCAAG
GGTGTCAAGCCCCATTCCCTCTCTACTCTTGACAGCAGGATTGGATGTTGTGTATTGTGGTTTATTTTATTTTCT
TCATTTTGTTCTGAAATTAAAGAATGTAAAATAAAGAATATGCCGTTTTTATAC

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FIGURE 4104

GAGCAGCAGAATTTCAACTCCAGTAGACTTGAATATGCCTCTGGGCAAAGAAGCAGAGCTAACGAGGAAAGGGAT
TTAAAGAGTTTTTCTTGGGTGTTTGTCAAACTTTTATTCCCTGTCTGTGTGCAGAGGGGATTCAACTTCAATTTT
TCTGCAGTGGCTCTGGGTCCAGCCCCTTACTTAAAGATCTGGAAAGC**ATG**AAGACTGGGCTTTTTTTCCTATGTC
TCTTGGGAACTGCAGCTGCAATCCCGACAAATGCAAGATTATTATCTGATCATTCCAAACCAACTGCTGAAACGG
TAGCACCTGACAACACTGCAATCCCCAGTTTAAGGGCTGAAGCTGAAGAAAATGAAAAAGAAACAGCAGTATCCA
CAGAAGACGATTCCCACCATAAGGCTGAAAAATCATCAGTACTAAAGTCAAAAGAGGAAAGCCATGAACAGTCAG
CAGAACAGGGCAAGAGTTCTAGCCAAGAGCTGGGATTGAAGGATCAAGAGGACAGTGATGGTCACTTAAGTGTGA
ATTTGGAGTATGCACCAACTGAAGGTACATTGGACATAAAAGAAGATATGAGTGAGCCTCAGGAGAAAAAACTCT
CAGAGAACACTGATTTTTTGGCTCCTGGTGTTAGTTCCTTCACAGATTCTAACCAACAAGAAAGTATCACAAAGA
GAGAGGAAAACCAAGAACAACCTAGAAATTATTCACATCATCAGTTGAACAGGAGCAGTAAACATAGCCAAGGCC
TAAGGGATCAAGGAAACCAAGAGCAGGATCCAAATATTTCCAATGGAGAAGAGGAAGAAGAAAAAGAGCCAGGTG
AAGTTGGTACCCACAATGATAACCAAGAAAGAAAGACAGAATTGCCCAGGGAGCATGCTAACAGCAAGCAGGAGG
AAGACAATACCCAATCTGATGATATTTTGGAAGAGTCTGATCAACCAACTCAAGTAAGCAAGATGCAGGAGGATG
AATTTGATCAGGGTAACCAAGAACAAGAAGATAACTCCAATGCAGAAATGGAAGAGGAAAATGCATCGAACGTCA
ATAAGCACATTCAAGAAACTGAATGGCAGAGTCAAGAGGGTAAAACTGGCCTAGAAGCTATCAGCAACCACAAAG
AGACAGAAGAAAAGACTGTTTCTGAGGCTCTGCTCATGGAACCTACTGATGATGGTAATACCACGCCCAGAAATC
ATGGAGTTGATGATGATGGCGATGATGATGGCGATGATGGCGGCACTGATGGCCCCAGGCACAGTGCAAGTGATG
ACTACTTCATCCCAAGCCAGGCCTTTCTGGAGGCCGAGAGAGCTCAATCCATTGCCTATCACCTCAAAATTGAGG
AGCAAAGAGAAAAAGTACATGAAAATGAAAATATAGGTACCACTGAGCCTGGAGAGCACCAAGAGGCCAAGAAAG
CAGAGAACTCATCAAATGAGGAGGAAACGTCAAGTGAAGGCAACATGAGGGTGCATGCTGTGGATTCTTGCATGA
GCTTCCAGTGTAAAAGAGGCCACATCTGTAAGGCAGACCAACAGGGAAAACCTCACTGTGTCTGCCAGGATCCAG
TGACTTGTCCTCCAACAAAACCCCTTGATCAAGTTTGTGGCACTGACAATCAGACCTATGCTAGTTCCTGTCATC
TATTCGCTACTAAATGCAGACTGGAGGGGACCAAAAAGGGGCATCAACTCCAGCTGGATTATTTTGGAGCCTGCA
AATCTATTCCTACTTGTACGGACTTTGAAGTGATTCAGTTTCCTCTACGGATGAGAGACTGGCTCAAGAATATCC
TCATGCAGCTTTATGAAGCCAACTCTGAACACGCTGGTTATCTAAATGAGAAGCAGAGAAATAAAGTCAAGAAAA
TTTACCTGGATGAAAAGAGGCTTTTGGCTGGGGACCATCCCATTGATCTTCTCTTAAGGGACTTTAAGAAAAACT
ACCACATGTATGTGTATCCTGTGCACTGGCAGTTTAGTGAACTTGACCAACACCCTATGGATAGAGTCTTGACAC
ATTCTGAACTTGCTCCTCTGCGAGCATCTCTGGTGCCCATGGAACACTGCATAACCCGTTTCTTTGAGGAGTGTG
ACCCCAACAAGGATAAGCACATCACCCTGAAGGAGTGGGGCCACTGCTTTGGAATTAAAGAAGAGGACATAGATG
AAAATCTCTTGTTT**TGA**ACGAAGATTTTAAAGAACTCAACTTTCCAGCATCCTCCTCTGTTCTAACCACTTCAGA
AATATATGCAGCTGTGATACTTGTAGATTTATATTTAGCAAAATGTTAGCATGTATGACAAGACAATGAGAGTAA
TTGCTTGACAACAACCTATGCACCAGGTATTTAACATTAACTTTGGAAACAAAAATGTACAATTAAGTAAAGTCA
ACATATGCAAAATACTGTACATTGTGAACAGAAGTTTAATTCATAGTAATTTCACTCTCTGCATTGACTTATGAG
ATAATTAATGATTAAACTATTAATGATAAAAATAATGCATTTGTATTGTTCATAATATCATGTGCACTTCAAGAA
AATGGAATGCTACTCTTTTGTGGTTTACGTGTATTATTTTCAATATCTTAATACCCTAATAAAGAGTCCATAAAA
ATCC

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FIGURE 4105

AAAGCGCCATTACGCAGAGAGAAAGTTACGAGGTTCGTGGCCGCGGTTTCCCCAGGCAGCTGGCGCTGGAGGCTT
CGGCGTCACGTGCTGGTCTGGATTTTTCTCGATGCACTGGGGAAAGCGGTGGACTCTTATCGTGGGAGGGCTCTT
GATCTGTGATTTATAGATAGGCACAGCTACTCCCGTTCGGGAACCCAACGGCAGACAGGTCCTAGTGCCCATCAG
ATACCCGCGGCCGGGACTCGGAGCTGTGGGGTGTGGGGAGGCGGAGGCACCAACTAAGAGCGACCTAGCATCGCA
AAGCCGCCCTCGGGGCGCTC**ATG**GCGGGACGCCTCCTGGGAAAGGCTTTAGCCGCGGTGTCTCTCTCTCTGGCCT
TGGCCTCTGTGACTATCAGGTCCTCGCGCTGCCGCGGCATCCAGGCGTTCAGAAACTCGTTTTCATCTTCTTGGT
TTCATCTTAATACCAACGTCATGTCTGGTTCTAATGGTTCCAAAGAAAATTCTCACAATAAGGCTCGGACGTCTC
CTTACCCAGGTTCAAAAGTTGAACGAAGCCAGGTTCCTAATGAGAAAGTGGGCTGGCTTGTTGAGTGGCAAGACT
ATAAGCCTGTGGAATACACTGCAGTCTCTGTCTTGGCTGGACCCAGGTGGGCAGATCCTCAGATCAGTGAAAGTA
ATTTTTCTCCCAAGTTTAACGAAAAGGATGGGCATGTTGAGAGAAAGAGCAAGAATGGCCTGTATGAGATTGAAA
ATGGAAGACCGAGAAATCCTGCAGGACGGACTGGACTGGTGGGCCGGGGGCTTTTGGGGCGATGGGGCCCAAATC
ACGCTGCAGATCCCATTATAACCAGATGGAAAAGGGATAGCAGTGGAAATAAAATCATGCATCCTGTTTCTGGGA
AGCATATCTTACAATTTGTTGCAATAAAAAGGAAAGACTGTGGAGAATGGGCAATCCCAGGGGGGATGGTGGATC
CAGGAGAGAAGATTAGTGCCACACTGAAAAGAGAATTTGGTGAGGAAGCTCTCAACTCCTTACAGAAAACCAGTG
CTGAGAAGAGAGAAATAGAGGAAAAGTTGCACAAACTCTTCAGCCAAGACCACCTAGTGATATATAAGGGATATG
TTGATGATCCTCGAAACACTGATAATGCATGGATGGAGACAGAAGCTGTGAACTACCATGACGAAACAGGTGAGA
TAATGGATAATCTTATGCTAGAAGCTGGAGATGATGCTGGAAAAGTGAAATGGGTGGACATCAATGATAAACTGA
AGCTTTATGCCAGTCACTCTCAATTCATCAAACTTGTGGCTGAGAAACGAGATGCACACTGGAGCGAGGACTCTG
AAGCTGACTGCCATGCGTTG**TAG**CTGATGGTCTCCGTGTAAGCCAAAGGCCCACAGAGGAGCATATACTGAAAAG
AAGGCAGTATCACAGAATTTATACTATAAAAAGGGCAGGGTAGGCCACTTGGCCTATTTACTTTCAAAACAATTT
GCATTTAGAGTGTTTCGCATCAGAATAACATGAGTAAGATGAACTGGAACACAAAATTTTCAGCTCTTTGGTCAA
AAGGAATATAAGTAATCATATTTTGTATGTATTCGATTTAAGCATGGCTTAAATTAAATTTAAACAACTAATGCT
CTTTGAAGAATCATAATCAGAATAAAGATAAATTCTTGATCAGCTAT

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FIGURE 4106

CCTTGCTCTCGCCCCTACTCTTTCTGGTGTTAGATCGAGCTACCCTCTAAAAGCAGTTTAGAGTGGTAAAAAAAA
AAAAAAACACACCAAACGCTCGCAGCCACAAAAGGGATGAAATTTCTTCTGGACATCCTCCTGCTTCTCCCGTTA
CTGATCGTCTGCTCCCTAGAGTCCTTCGTGAAGCTTTTTATTCCTAAGAGGAGAAAATCAGTCACCGGCGAAATC
GTGCTGATTACAGGAGCTGGGCATGGAATTGGGAGACTGACTGCCTATGAATTTGCTAAACTTAAAAGCAAGCTG
GTTCTCTGGGATATAAATAAGCATGGACTGGAGGAAACAGCTGCCAAATGCAAGGGACTGGGTGCCAAGGTTCAT
ACCTTTGTGGTAGACTGCAGCAACCGAGAAGATATTTACAGCTCTGCAAAGAAGGTGAAGGCAGAAATTGGAGAT
GTTAGTATTTTAGTAAATAATGCTGGTGTAGTCTATACATCAGATTTGTTTGCTACACAAGATCCTCAGATTGAA
AAGACTTTTGAAGTTAATGTACTTGCACATTTCTGGACTACAAAGGCATTTCTTCCTGCAATGACGAAGAATAAC
CATGGCCATATTGTCACTGTGGCTTCGGCAGCTGGACATGTCTCGGTCCCCTTCTTACTGGCTTACTGTTCAAGC
AAGTTTGCTGCTGTTGGATTTCATAAAACTTTGACAGATGAACTGGCTGCCTTACAAATAACTGGAGTCAAAACA
ACATGTCTGTGTCCTAATTTCGTAAACACTGGCTTCATCAAAAATCCAAGTACAAGTTTGGGACCCACTCTGGAA
CCTGAGGAAGTGGTAAACAGGCTGATGCATGGGATTCTGACTGAGCAGAAGATGATTTTTATTCCATCTTCTATA
GCTTTTTTAACAACATTGGAAAGGATCCTTCCTGAGCGTTTCCTGGCAGTTTTAAAACAAAAAATCAGTGTTAAG
TTTGATGCAGTTATTGGATATAAAATGAAAGCGCAATAAGCACCTAGTTTTCTGAAAACTGATTTACCAGGTTTA
GGTTGATGTCATCTAATAGTGCCAGAATTTTAATGTTTGAACTTCTGTTTTTTCTAATTATCCCCATTTCTTCAA
TATCATTTTTGAGGCTTTGGCAGTCTTCATTTACTACCACTTGTTCTTTAGCCAAAAGCTGATTACATATGATAT
AAACAGAGAAATACCTTTAGAGGTGACTTTAAGGAAAATGAAGAAAAAGAACCAAAATGACTTTATTAAAATAAT
TTCCAAGATTATTTGTGGCTCACCTGAAGGCTTTGCAAAATTTGTACCATAACCGTTTATTTAACATATATTTTT
ATTTTTGATTGCACTTAAATTTTGTATAATTTGTGTTTCTTTTTCTGTTCTACATAAAATCAGAAACTTCAAGCT
CTCTAAATAAAATGAAGGACTATATCTAGTGGTATTTCACAATGAATATCATGAACTCTCAATGGGTAGGTTTCA
TCCTACCCATTGCCACTCTGTTTCCTGAGAGATACCTCACATTCCAATGCCAAACATTTCTGCACAGGGAAGCTA
GAGGTGGATACACGTGTTGCAAGTATAAAAGCATCACTGGGATTTAAGGAGAATTGAGAGAATGTACCCACAAAT
GGCAGCAATAATAAATGGATCACACTTAA

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FIGURE 4107A

GGCAATTTCTTTTCCTTTCTAACTGTGGCCCGCGTTGTGCTGTTGCTGGGCAGGCGTTGGGCGCCGGCGGTCTTC
GAGCGTGGGGGCCCGCTGGCTTTCCCTTCTCAGAAACTGCGCCGGGGGCGCTCGCTTGCCCCGGATTCGGACGCG
GCGCTCCCCGGGCTCGTCTGAAGTGCAGATCGCCGCAGAGGCCCCAGTGCCCGGATGTCCATCAGGATTAGCGCG
AGCCAATACGGGCCGAGCCCGGGGCTGCGCCGAGGACGCCCGGGGCTCGAGAGCAGGTAGTCCCGTAACATCGGG
GCGCCGCGCCGGGACGCGTCCCCGCCCGGCTCCGCCAAATGGTGAGCGCGGCGCTGGCAGCAGGGCCCGCGGGGT
GAAGGCGCTCATGGACGGAAGACCCCTGGCTCTATAAGCTGAATTATGGCAGCCCAGTCAAGTTTGTACAATGAC
GACAGAAACCTGCTTCGAATTAGAGAGAAGGAAAGACGCAACCAGGAAGCCCACCAAGAGAAAGAGGCATTTCCT
GAAAAGATTCCCCTTTTTGGAGAGCCCTACAAGACAGCAAAAGGTGATGAGCTGTCTAGTCGAATACAGAACATG
TTGGGAAACTACGAAGAAGTGAAGGAGTTCCTTAGTACTAAGTCTCACACTCATCGCCTGGATGCTTCTGAAAAT
AGGTTGGGAAAGCCGAAATATCCTTTAATTCCTGACAAAGGGAGCAGCATTCCATCCAGCTCCTTCCACACTAGT
GTCCACCACCAGTCCATTCACACTCCTGCGTCTGGACCACTTTCTGTTGGCAACATTAGCCACAATCCAAAGATG
GCGCAGCCAAGAACTGAACCAATGCCAAGTCTCCATGCCAAAAGCTGCGGCCCACCGGACAGCCAGCACCTGACC
CAGGATCGCCTTGGTCAGGAGGGGTTCGGCTCTAGTCATCACAAGAAAGGTGACCGAAGAGCTGACGGAGACCAC
TGTGCTTCGGTGACAGATTCGGCTCCAGAGAGGGAGCTTTCTCCCTTAATCTCTTTGCCTTCCCCAGTTCCCCCT
TTGTCACCTATACATTCCAACCAGCAAACTCTTCCCCGGACGCAAGGAAGCAGCAAGGTTCATGGCAGCAGCAAT
AACAGTAAAGGCTATTGCCCAGCCAAATCTCCCAAGGACCTAGCAGTGAAAGTCCATGATAAAGAGACCCCTCAA
GACAGTTTGGTGGCCCCTGCCCAGCCGCCTTCTCAGACATTTCCACCTCCCTCCCTCCCCTCAAAAAGTGTTGCA
ATGCAGCAGAAGCCCACGGCTTATGTCCGGCCCATGGATGGTCAAGATCAGGCCCCTAGTGAATCCCCTGAACTG
AAACCACTGCCGGAGGACTATCGACAGCAGACCTTTGAAAAAACAGACTTGAAAGTGCCTGCCAAAGCCAAGCTC
ACCAAACTGAAGATGCCTTCTCAGTCAGTTGAGCAGACCTACTCCAATGAAGTCCATTGTGTTGAAGAGATTCTG
AAGGAAATGACCCATTCATGGCCGCCTCCTTTGACAGCAATACATACGCCTAGTACAGCTGAGCCATCCAAGTTT
CCTTTCCCTACAAAGGACTCTCAGCATGTCAGTTCTGTAACCCAAAACCAAAAACAATATGATACATCTTCAAAA
ACTCACTCAAATTCTCAGCAAGGAACGTCATCCATGCTCGAAGACGACCTTCAGCTCAGTGACAGTGAGGACAGT
GACAGTGAACAAACCCCAGAGAAGCCTCCCTCCTCATCTGCACCTCCAAGTGCTCCACAGTCCCTTCCAGAACCA
GTGGCATCAGCACATTCCAGCAGTGCAGAGTCAGAAAGCACCAGTGACTCAGACAGTTCCTCAGACTCAGAGAGC
GAGAGCAGTTCAAGTGACAGCGAAGAAAATGAGCCCCTAGAAACCCCAGCTCCGGAGCCTGAGCCTCCAACAACA
AACAAATGGCAGCTGGACAACTGGCTGACCAAAGTCAGCCAGCCAGCTGCGCCACCAGAGGGCCCCAGGAGCACA
GAGCCCCCACGGCGGCACCCAGAGAGTAAGGGCAGCAGCGACAGTGCCACGAGTCAGGAGCATTCTGAATCCAAA
GATCCTCCCCCTAAAAGCTCCAGCAAAGCCCCCCGGGCCCCACCCGAAGCCCCCCACCCCGGAAAGAGGAGCTGT
CAGAAGTCTCCGGCACAGCAGGAGCCCCCACAAAGGCAAACCGTTGGAACCAAACAACCCAAAAAACCTGTCAAG
GCCTCTGCCCGGGCAGGTTCACGGACCAGCCTGCAGGGGGAAAGGGAGCCAGGGCTTCTTCCCTATGGCTCCCGA
GACCAGACTTCCAAAGACAAGCCCAAGGTGAAGACGAAAGGACGGCCCCGGGCCGCAGCAAGCAACGAACCCAAG
CCAGCAGTGCCCCCCTCCAGTGAGAAGAAGAAGCACAAGAGCTCCCTCCCTGCCCCCTCTAAGGCTCTCTCAGGC
CCAGAACCCGCGAAGGACAATGTGGAGGACAGGACCCCTGAGCACTTTGCTCTTGTTCCCCTGACTGAGAGCCAG
GGCCCACCCCACAGTGGCAGCGGCAGCAGGACTAGTGGCTGCCGCCAAGCCGTGGTGGTCCAGGAGGACAGCCGC
AAAGACAGACTCCCATTGCCTTTGAGAGACACCAAGCTGCTCTCACCGCTCAGGGACACTCCTCCCCCACAAAGC
TTGATGGTGAAGATCACCCTAGACCTGCTCTCTCGGATACCCCAGCCTCCCGGGAAGGGGAGCCGCCAGAGGAAA
GCAGAAGATAAACAGCCGCCCGCAGGGAAGAAGCACAGCTCTGAGAAGAGGAGCTCAGACAGCTCAAGCAAGTTG
GCCAAAAAGAGAAAGGGTGAAGCAGAAAGAGACTGTGATAACAAGAAAATCAGACTGGAGAAGGAAATCAAATCA
CAGTCATCTTCATCTTCATCCTCCCACAAAGAATCTTCTAAAACAAAGCCCTCCAGGCCCTCCTCACAGTCCTCA
AAGAAGGAAATGCTCCCCCCGCCACCCGTGTCCTCGTCCTCCCAGAAGCCAGCCAAGCCTGCACTTAAGAGGTCA
AGGCGGGAAGCAGACACCTGTGGCCAGGACCCTCCCAAAAGTGCCAGCAGTACCAAGAGCAACCACAAAGACTCT
TCCATTCCCAAGCAGAGAAGAGTAGAGGGGAAGGGCTCCAGAAGCTCCTCGGAGCACAAGGGTTCTTCCGGAGAT
ACTGCAAATCCTTTTCCAGTGCCTTCTTTGCCAAATGGTAACTCTAAACCAGGGAAGCCTCAAGTGAAGTTTGAC
AAACAACAAGCAGACCTTCACATGAGGGAGGCAAAAAAGATGAAGCAGAAAGCAGAGTTAATGACGGACAGGGTT
GGAAAGGCTTTTAAGTACCTGGAAGCCGTCTTGTCCTTCATTGAGTGCGGAATTGCCACAGAGTCTGAAAGCCAG
TCATCCAAGTCAGCTTACTCTGTCTACTCAGAAACTGTAGATCTCATTAAATTCATAATGTCATTAAAATCCTTC
TCAGATGCCACAGCGCCAACACAAGAGAAAATATTTGCTGTTTTATGCATGCGTTGCCAGTCCATTTTGAACATG

FIGURE 4107B

GCGATGTTTCGTTGTAAAAAAGACATAGCAATAAAGTATTCTCGTACTCTTAATAAACACTTCGAGAGTTCTTCC
AAAGTCGCCCAGGCACCTTCTCCATGCATTGCAAGCACAGGCACACCATCCCCTCTTTCCCCAATGCCTTCTCCT
GCCAGCTCCGTAGGGTCCCAGTCAAGTGCTGGCAGTGTGGGGAGCAGTGGGGTGGCTGCCACTATCAGCACCCCA
GTCACCATCCAGAATATGACATCTTCCTATGTCACCATCACATCCCATGTTCTTACCGCCTTTGACCTTTGGGAA
CAGGCCGAGGCCCTCACGAGGAAGAATAAAGAATTCTTTGCTCGGCTCAGCACAAATGTGTGCACCTTGGCCCTC
AACAGCAGTTTGGTGGACCTGGTGCACTATACACGACAGGGTTTTCAGCAGCTACAAGAATTAACCAAAACACCT
TAATGGAGCCCCAGGTTGATTCAATGCCTTGGGAACTATTTTTGCACATTGGAAGCCTCAAAAACAGTCCAGACA
TTTGTTTCATCAGGACACCAAACTCTAAAAAAGAAGCACCACGAGATGGCCAGGACATTTGTCCACTTAAACTCT
CAACAACAGTGTGATCATTGGTTGGACACTGTGGTTATGCAGAAGCAGAGATGAGGAGGCTGGCCCCAGAGATGA
TCTTGCCCTTCCTAACTAAAGGACAGAAGTGCAATTTAGCTTAAATGGGTGTATGAATGGTCTAGAAACATTTCT
ATTTTTTTTTTAAACCAGCAGGATACAAGTTGCAAATGAAATGAGGAGAAACAGTTTCAACTCTGAAAGTGAATT
TCACGTCATCTCAGTAGCCACGCTAGTCCATTCCCAGAAGGAAATTTTTTTTTTTAACAATGACTTTTGGTAAAG
GGTTTTGTGGATGATTTTTTTTCTTTTGAGTTTTGGGAGAAATATTTGTTTAGTAACTTCTAATGGCCATCTGTA
AACCATAAGTAATGAAGGACTCCACTGTGCCCCACTTTCTGCCAATGAACAGTGGCTTGATAATACCAAGTATTG
TTGTAATTTATAAAATTGAAGGCAACCCCCGCTCCTGCCGCCCCCAATCTCCCCATTGCCTAGAGCGCTGCACAT
TGACCCCAGCTCTGACTTCTCATTACTGTGCTGAAAGTCAGCCCACGTCGGAGCGGTGAGGAGGAGCCACAGCAC
ATGGGGTGCCACCTCGAGGTCTGCACAGGAGGACTTGGCGCTGCCATTTCCTACCCCTGCCATTTCCCACCCCTG
CTTCAGCGAAAGGGACTCTCTAACAGGGCAGTCACTGTTGACTCTATTCTGAATTTCCTCCCTTGGGGAAGAAGG
GAACCAACATTTATACCTGACCAGATGGCTAAAGTGCTTTTAAAGTTTTGTTTAAGTAGAGCTGGAATTTGAGGT
GCTGATCTGTGGTCTACAGTTATGTGGTAACTCATGTTGTCCAGCCAACTCAGAGTTTCGTCAGTGAACAAGAAA
CATGAAATCTGCTTCTTAGAGAGGCTATATTTTTCTGCTACAAATATTTTATATTTATAGCAAAACTAGACTTTC
AGAGTCCTTGATTGTCTAGGGGAAGTTAACTCCCTGAGAGGATGTAGAGATTTGGGGTGGTTGATTAGACTTTTG
AAAAACTCATCACCACATGCCTTCACTCCAGAGTGTTCTCAGCTAGATTTGATTTGGTTGAGGAGGAACTGTGGC
CCTCCGTAAGTTATTGCCATAGTGTATGCATTAAACCAAGTCCATTTTGAATGACCTAAAATGAAGTAACACAAT
CAGAAATCCCATGTGCCCATAAGCACAGATTTTTCTTTTTCATTGAAACTTTAAAGGTTATTATTGGAAACATTA
CTTTGAGTGCAGTGTTTTTAAAAGCCAATTCTTTTTTATCCCTTTTAGAAGTAGAATTTGCACACTTACTACAAT
TGAGGAGTGTCATCTCTATAACTTTTTCTCCGCCTTTGTCCCATTCTGCCCCTGTACATGTTTCCTACCAAGCAT
GTTTCACATTTTCCTATTAGTGGAGGAGGGAGAACCATATTTATTTATAATGAAGACATCTAAGATCCCTATGAT
GAATGCAGGAACTCTCTTGGTAGTTTGTAAATACACAAAGGGATGTGTCGAGGGATGGGAGCGATGCTTATCTCT
CACAGTGTGAGTGGTCTGTGTGAGGCTGTTCCTTCAGTTTCTTCTCCAGACTGTTCTTTGGTTGTCACTAAGTCA
GAGGTCTGGTCCCTCATGTTTAGGTGAAAGCCAGAGAATGACAGCTGTAGTCATATCTGAGCATAAGACCTTGAT
GTGTGATTCCTGATGACCGGTTTCATTTATTCATGTTATAAAGCAAAGCCCTGGTCCTTTTTAAACTACTAGTTT
TAAAAACCTGTGTTAAATGAACAGTAATTGCCTGGTAGGTTTGGTGTGTGTGTAGCATTGTGTGTCCATCTGTTA
TATGTAAAGGACAAGGCACCAGAATCAGGCTTTATTTCGATATTGAAGATGTTATTTAACATCTTTCTTTTTTCC
TTACTCCCTTAGCCATCCCCTCCCCTTTTGTCCTATCATTCCCTAGAACAAGCCACCTGTCAATTGTGAAGGGTT
GTGTTCTTTATGGCAGGTTCTATGCAGATTGTGCCAGAGCATGTGCGTGTTCTGTTGGCAAGCCACAGTGCTCCC
TTGACTGAAGACATTTCCAGGTAGATTTCTCAGCCAGCTCTAAAACAGATTGCTTTTTCAGTGGCCTTACTCTTT
GTGGGTTTTTTTTTTTTTCTCTGAACTTGATATAAAGATTTTATTTGTCCCTTGAAAAAGTAACAAATGTGCATA
GATCAATTTGTACTACTTTGGTCATTGGATATTTCTGATCCTTATTGCATTGTACCTAAAGGAGAGTAACTAATG
GTAACCTTTTTAATAGAGTATGTGAAAGGTAGTGGCTGATGAATCCTTAACGTTCATAGGGTCTTTTTGCTGTTA
CGGTTGTATATAGAGGTCTGAAGGATTTTTAAAATGATTTGCACTTTTTCACTGCATGCTTACAATTCCCAAAGG
CAAAATCTGTACTGAGGTAGATCATTTGAAAGGGCTAGATTATAAAATTAAGCCTTAGAGTATGGAAAGTTCTTA
TAACAATAATAGTACACACTTCAGAGTAAGACAAATGCAAAGCATCTTAAGGAGTGAAAATAGAGTGTAAATCTT
GCCTTTGGCACTACAAGGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTTTAGTAGGAAATGGAAGAACACTG
TTTTATTTTTTAAAGTGTTTAATGTTTCTGTCCTTTCTGTGAATTATTGAATTTAAGAGCCCTGCTAAATAATGA
AAAAACACTTTACTAAAATTTATCAAATTATACTGGGTTCGGATTGTGAAAACATTGGCCACCTAGTAGCAGTGG
TGAGGAGTGGGAGGGCCCAGCAAGCATTTATCAGAAATAGAATCACAATAGGAGGAGAATTTGACTGTCTGATAT
TATGATTTGATTACAATACTGAATGGGAAAAGTATCTAATATTTTGTAACAAAAAGACCTTCATATTATCTGTTT

FIGURE 4107C

TGACCAAAATATGTAGCTATTTCCCTTACACAGATTGGACCGCACTTATCTCCCTTGTCCTGTATCCTTTAATTT
CAGGTCTCAGGATGTTTAGAAAGCTAAAACCCCCTACCCCTTTCTGGCTGAAAACTTGCCTTATTTGGTATCTTA
CACATTAATGTTACTAGCATCAGGAGCTTACTGTTTTATTATGATTCATCTTCAGTAATTTTTAGAAGCAAGAAG
AAAGCCATTGTGTCCTCTACAATTAACAAAACTTATCTCTGATATACAAAGGGATATAAATATATACACTTAAAT
AGAGAAAAAGAGGTTGATTGAATTGTGCCTTTGAGTGAACCCAGTTTTTAAATACCGCTGTGTTTGTTTCGCCAT
GGCTTCAGGGATGCTACATGGCTCTTGCACCTTTTACTCCTCTGCTTTATGAAGTTTGAGTTGTATTTGTGCATC
TTAAAGTAGGTTGAGGCTTGAGGCTGGGCTTTCGGGTTTTTTTGTTTTTTGTTTTGTTTTGTTTTGTTTTGTTTT
CTTGTACTTAAACCTGCTTGCTTCCTACCACAGATTCTTTATTTTCCCAAACACTACAAAAAAACTTTTAAAACT
TTGCCATTTCATCTGTTTACACTCTTTGCCACTGATTAGCAGTATTTAAATCTTGCAAGAATATTTTGTGCTTTC
TTTAGAAACACAAGAGTATAGATTTTTCTCACTGAAAAGTGAGAGTTACGCATTGCAGCCATGAAGGGATGCTAG
GATCAATTATGGCAGTACCTTTTTTCCCCTCCTGTTCTTGAGCCAGTTGTCTCTTTTGTTTTGGGTCCCACTTAG
GATTAATGGATGTAAGGTATTTTCCTGTGCCTTTATTTTGTGTCATTCTATTGGAAGGAGGTGTAACGGCAGAAT
AGCATCGTGTTGGGGGTTTTCCTTCAAACACTGCAAGTGATATTGCCACCATGTGAACCTCAAATATGCAATCCA
GTTGTGTTGGTTTCTCGGTGACTTGGAGTGTTCATCTCTTCATGAATTGTGAGCACTGACCATGTTCTTCAGTTC
TTAATTATGGTGAGTTGACAAATACCAACTACTGCTTTTCTTTAGGTGGCTATAAATTTCTTACTGTCAGGAGGA
AATGACATTATATTCTGTTCCACTGAACGTCAGAGATCAGCAGGCACTGTACTGGGTAGAGAAGTGCCTATACTT
CTCTACCTAAGAGGGCAGGAGGGAAACCCTACAGCTCCTTGTGAGCCTATATATTAGTATATCGGCCTGGAGAGG
ACAAGGGAATAAGACCACTCATAGTGAGGCTGGCCAAGCTGCACTGGTCGGACCAGGCAGTGGCTGACCTAAGGA
AGACAACTTGCTTTGCTTAAAAGTAGATTTTTTAAGCAATGCTTAACACAGGCAGCATTCACCTTTGTTCAGGCC
ATCGACATGTATTGTTAAAATTACTGCATATCCCCCTCAGATATCAAGTATACACTGTTCATGTTGGGGTTGTGT
GTGTGTATGTGTGTATGTACGCACGCATGTGTCCCAAATCTTGTTTTAATTTTTTTTTTCTGAATGTGATCATGT
TTTGGATGATACCTGAGCAGGGTTGCCTTTTTTTTATTTATTACCATTATATATTATATTATATTATATTATATA
TTTTTTGCTTTCTTATAACTTTGGAGGAAAGTCAAATCTTGGTATTATTAAAATTGTTTTAAAAAGGAGTAAATT
TTCCAGTTGATAAATGAAAATCACTGGCCTATGTTTAATAAGTTTTTCTTTAATTACTGTGGAATAACGTGCCAG
CTATCATCAACACAATGATTTTGTACATAGGGTAGGGAAGCAGTGATGCTCTCAATGGGAAGATGTGCAACACAA
ATTAAGGGGAACTCCATGTATTTTACCTACTTCAGCAATGGAACTGCAACTTGGGGCTTTGTGAATAAAATTTAG
CTGCCTTGTATAGTCGTTTGAAAGAATATGTGATCTGTGAGAGAATTATAGTTTTTTTTTAGAAGAAAAATCTGC
AAAAGATCTTTCCAAAGACAATGTGCCACAGATCTTTTGTTCTCTGTAATGAGGATTAATTGCTGTTTAAACAAA
AATGTAATTGTTCATCTTTAAATTCTTTCCTTTTCATAAGAGGATCAAGCTGTAAAAAAACAAAAAAATTAATAA
AAATTTCGAGAAATC

FIGURE 4108

CTTCGCCGCGTGGATGGCCTATTACATCAATCACCCTCTCTACACTCCCCCTACCTACGGAGCTCAGCAGGTGAA
ACTGGCGCTCGCCATCTTTGTGATCTGCCAGCTCGGCAACTTCTCCATCCACATGGCCCTGCGGGACCTGCGGCC
CGCTGGGTCCAAGACGCGGAAGATCCCATACCCCACCAAGAACCCCTTCACGTGGCTCTTCCTGCTGGTGTCCTG
CCCCAACTACACCTACGAGGTGGGGTCCTGGATCGGTTTCGCCATCATGACGCAGTGTCTCCCAGTGGCCCTGTT
CTCCCTGGTGGGCTTCACCCAGATGACCATCTGGGCCAAGGGCAAGCACCGCAGCTACCTGAAGGAGTTCCGGGA
CTACCCGCCCCCTGCGCATGCCCATCATCCCCTTCCTGCTCTGAGCGCTCACCCCTGCTGAGGCTCAGCCCCTCAA
CCCGGTGGCATTCTGGGGGAGGAGTGGGGCCCACAGCTCTCCAGCACCCGGAATAAAGCCCGCCTGCCCCAGTCG
GGA

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FIGURE 4109A

GTAATATGCACGTGTCACTAGCTGAGGCCCTGGAGGTTCGGGGTGGACCACTTCAGGAGGAAGAAATATGGGCTG
TATTAAATCAAAGTGCTGAAAGTCTCCAAGAATTATTCAGAAAAGTAAGCCTAGCTGATCCTGCTGCCCTTGGCT
TCATCATTTCTCCATGGTCTCTGCTGTTGCTGCCATCTGGTAGTGTGTCATTTACAGATGAAAATATTTCCAATC
AGGATCTTCGAGCATTCACTGCACCAGAGGTTCTTCAAAATCAGTCACTAACTTCTCTCTCAGATGTTGAAAAGA
TCCACATTTATTCTCTTGGAATGACACTGTATTGGGGGGCTGATTATGAAGTGCCTCAGAGCCAACCTATTAAGC
TTGGAGATCATCTCAACAGCATACTGCTTGGAATGTGTGAGGATGTTATTTACGCTCGAGTTTCTGTTCGGACTG
TGCTGGATGCTTGCAGTGCCCACATTAGGAATAGCAATTGTGCACCCTCATTTTCCTACGTGAAACACTTGGTAA
AACTGGTTCTGGGAAATCTTTCTGGGACAGATCAGCTTTCCTGTAACAGTGAACAAAAGCCTGATCGAAGCCAGG
CTATTCGAGATCGATTGCGAGGAAAAGGATTACCAACAGGAAGAAGCTCTACTTCTGATGTACTAGACATACAAA
AGCCTCCACTCTCTCATCAGACCTTTCTTAACAAAGGGCTTAGTAAATCTATGGGATTTCTGTCCATCAAAGATA
CACAAGATGAGAATTATTTCAAGGACATTTTATCAGATAATTCTGGACGTGAAGATTCTGAAAATACATTCTCCC
CTTACCAGTTCAAAACTAGTGGCCCAGAAAAAAAACCCATCCCTGGCATTGATGTGCTTTCTAAGAAGAAGATCT
GGGCTTCATCCATGGACTTGCTTTGTACAGCTGACAGAGACTTCTCTTCAGGAGAGACTGCCACATATCGTCGTT
GTCACCCTGAGGCAGTAACAGTGCGGACTTCAACTACTCCTAGAAAAAAGGAGGCAAGATACTCAGATGGAAGTA
TAGCCTTGGATATCTTTGGCCCTCAGAAAATGGATCCAATATATCACACTCGAGAATTGCCCACCTCCTCAGCAA
TATCAAGTGCTTTGGACCGAATCCGAGAGAGACAAAAGAAACTTCAGGTTCTGAGGGAAGCCATGAATGTAGAAG
AACCAGTTCGAAGATACAAAACTTATCATGGTGATGTCTTTAGTACCTCCAGTGAAAGTCCATCTATTATTTCCT
CTGAATCAGATTTCAGACAAGTGAGAAGAAGTGAAGCCTCAAAGAGGTTTGAATCCAGCAGTGGTCTCCCAGGGG
TAGATGAAACCTTAAGTCAAGGCCAGTCACAGAGACCGAGCAGACAATATGAAACACCCTTTGAAGGCAACTTAA
TTAATCAAGAGATCATGCTAAAACGGCAAGAGGAAGAACTGATGCAGCTACAAGCCAAAATGGCCCTTAGACAGT
CTCGGTTGAGCCTATATCCAGGAGACACAATCAAAGCGTCCATGCTTGACATCACCAGGGATCCGTTAAGAGAAA
TTGCCCTAGAAACAGCCATGACTCAAAGAAAACTGAGGAATTTCTTTGGCCCTGAGTTTGTGAAAATGACAATTG
AACCATTTATATCTTTGGATTTGCCACGGTCTATTCTTACTAAGAAAGGGAAGAATGAGGATAACCGAAGGAAAG
TAAACATAATGCTTCTGAACGGGCAAAGACTGGAACTGACCTGTGATACCAAAACTATATGTAAAGATGTGTTTG
ATATGGTTGTGGCACATATTGGCTTAGTAGAGCATCATTTGTTTGCTTTAGCTACCCTCAAAGATAATGAATATT
TCTTTGTTGATCCTGACTTAAAATTAACCAAAGTGGCCCCAGAGGGATGGAAAGAAGAACCAAAGAAAAAGACCA
AAGCCACTGTTAATTTTACTTTGTTTTTCAGAATTAAATTTTTTATGGATGATGTTAGTCTAATACAACATACTC
TGACGTGTCATCAGTATTACCTTCAGCTTCGAAAAGATATTTTGGAGGAAAGGATGCACTGTGATGATGAGACTT
CCTTATTGCTGGCATCCTTGGCTCTCCAGGCTGAGTATGGAGATTATCAACCAGAGGTTCATGGTGTGTCTTACT
TTAGAATGGAGCACTATTTGCCCGCCAGAGTGATGGAGAAACTTGATTTATCCTATATCAAAGAAGAGTTACCCA
AATTGCATAATACCTATGTGGGAGCTTCTGAAAAAGAGACAGAGTTAGAATTTTTAAAGGTCTGCCAAAGACTGA
CAGAATATGGAGTTCATTTTCACCGAGTGCACCCTGAGAAGAAGTCACAAACAGGAATATTGCTTGGAGTCTGTT
CTAAAGGTGTCCTTGTGTTTGAAGTTCACAATGGAGTGCGCACATTGGTCCTTCGCTTTCCATGGAGGGAAACCA
AGAAAATATCTTTTTCTAAAAAGAAAATCACATTGCAAAATACATCAGATGGAATAAAACATGGCTTCCAGACAG
ACAACAGTAAGATATGCCAGTACCTGCTGCACCTCTGCTCTTACCAGCATAAGTTCCAGCTACAGATGAGAGCAA
GACAGAGCAACCAAGATGCCCAAGATATTGAGAGAGCTTCGTTTAGGAGCCTGAATCTCCAAGCAGAGTCTGTTA
GAGGATTTAATATGGGACGAGCAATCAGCACTGGCAGTCTGGCCAGCAGCACCCTCAACAAACTTGCTGTTCGAC
CTTTATCAGTTCAAGCTGAGATTCTGAAGAGGCTATCCTGCTCAGAGCTGTCGCTTTACCAGCCATTGCAAAACA
GTTCAAAAGAGAAGAATGACAAAGCTTCATGGGAGGAAAAGCCTAGAGAGATGAGTAAATCATACCATGATCTCA
GTCAGGCCTCTCTCTATCCACATCGGAAAAATGTCATTGTTAACATGGAACCCCCACCACAAACCGTTGCAGAGT
TGGTGGGAAAACCTTCTCACCAGATGTCAAGATCTGATGCAGAATCTTTGGCAGGAGTGACAAAACTTAATAATT
CAAAGTCTGTTGCGAGTTTAAATAGAAGTCCTGAAAGGAGGAAACATGAATCAGACTCCTCATCCATTGAAGACC
CTGGGCAAGCATATGTTCTAGGAATGACTATGCATAGTTCTGGAAACTCTTCATCCCAAGTACCCTTAAAAGAAA
ATGATGTGCTACACAAAAGATGGAGCATAGTATCTTCACCAGAAAGGGAGATCACCTTAGTGAACCTGAAAAAAG
ATGCAAAGTATGGCTTGGGATTTCAAATTATTGGTGGGGAGAAGATGGGAAGACTGGACCTAGGCATATTTATCA
GTTCAGTTGCCCCTGGAGGACCAGCTGACTTGGATGGATGCTTGAAGCCAGGAGACCGTTTGATATCTGTGAATA
GTGTGAGTCTGGAGGGAGTCAGCCACCATGCTGCAATTGAAATTTTGCAAAATGCACCTGAAGATGTGACACTTG
TTATCTCTCAGCCAAAAGAAAAGATATCCAAAGTGCCTTCTACTCCTGTGCATCTCACCAATGAGATGAAAAACT

FIGURE 4109B

ACATGAAGAAATCTTCCTACATGCAAGACAGTGCTATAGATTCTTCTTCCAAGGATCACCACTGGTCACGTGGTA
CCCTGAGGCACATCTCGGAGAACTCCTTTGGGCCATCTGGGGGCCTGCGGGAAGGAAGCCTGAGTTCTCAAGATT
CCAGGACTGAGAGTGCCAGCTTGTCTCAAAGCCAGGTCAATGGTTTCTTTGCCAGCCATTTAGGTGACCAAACCT
GGCAGGAATCACAGCATGGCAGCCCTTCCCCATCTGTAATATCCAAAGCCACCGAGAAAGAGACTTTCACTGATA
GTAACCAAAGCAAAACTAAAAAGCCAGGCATTTCTGATGTAACTGATTACTCAGACCGTGGAGATTCAGACATGG
ATGAAGCCACTTACTCCAGCAGTCAGGATCATCAAACACCAAAACAGGAATCTTCCTCTTCAGTGAATACATCCA
ACAAGATGAATTTTAAAACTTTTTCTTCATCACCTCCTAAGCCTGGAGATATCTTTGAGGTTGAACTGGCTAAAA
ATGATAACAGCTTGGGGATAAGTGTCACGGTACTGTTTGACAAGGGAGGTGTGAATACGAGTGTCAGACATGGTG
GCATTTATGTGAAAGCTGTTATTCCCCAGGGAGCAGCAGAGTCTGATGGTAGAATTCACAAAGGTGATCGCGTCC
TAGCTGTCAATGGAGTTAGTCTAGAAGGAGCCACCCATAAGCAAGCTGTGGAAACACTGAGAAATACAGGACAGG
TGGTTCATCTGTTATTAGAAAAGGGACAATCTCCAACATCTAAAGAACATGTCCCGGTAACCCCACAGTGTACCC
TTTCAGATCAGAATGCCCAAGGTCAAGGCCCAGAAAAAGTGAAGAAAACAACTCAGGTCAAAGACTACAGCTTTG
TCACTGAAGAAAATACATTTGAGGTAAAATTATTTAAAAATAGCTCAGGTCTAGGATTCAGTTTTTCTCGAGAAG
ATAATCTTATACCGGAGCAAATTAATGCCAGCATAGTAAGGGTTAAAAAGCTCTTTCCTGGACAGCCAGCAGCAG
AAAGTGGAAAAATTGATGTAGGAGATGTTATCTTGAAAGTGAATGGAGCCTCTTTGAAAGGACTATCTCAGCAGG
AAGTCATATCTGCTCTCAGGGGAACTGCTCCAGAAGTATTCTTGCTTCTCTGCAGACCTCCACCTGGTGTGCTAC
CGGAAATTGATACTGCGCTTTTGACCCCACTTCAGTCTCCAGCACAAGTACTTCCAAACAGCAGTAAAGACTCTT
CTCAGCCATCATGTGTGGAGCAAAGCACCAGCTCAGATGAAAATGAAATGTCAGACAAAAGCAAAAAACAGTGCA
AGTCCCCATCCAGAAGAGACAGTTACAGTGACAGCAGTGGGAGTGGAGAAGATGACTTAGTGACAGCTCCAGCAA
ACATATCAAATTCGACCTGGAGTTCAGCTTTGCATCAGACTCTAAGCAACATGGTATCACAGGCACAGAGTCATC
ATGAAGCACCCAAGAGTCAAGAAGATACCATTTGTACCATGTTTTACTATCCTCAGAAAATTCCCAATAAACCAG
AGTTTGAGGACAGTAATCCTTCCCCTCTACCACCGGATATGGCTCCTGGGCAGAGTTATCAACCCCAATCAGAAT
CTGCTTCCTCTAGTTCGATGGATAAGTATCATATACATCACATTTCTGAACCAACTAGACAAGAAAACTGGACAC
CTTTGAAAAATGACTTGGAAAATCACCTTGAAGACTTTGAACTGGAAGTAGAACTCCTCATTACCCTAATTAAAT
CAGAAAAAGGAAGCCTGGGTTTTACAGTAACCAAAGGCAATCAGAGAATTGGTTGTTATGTTCATGATGTCATAC
AGGATCCAGCCAAAAGTGATGGAAGGCTAAAACCTGGGGACCGGCTCATAAAGGTTAATGATACAGATGTTACTA
ATATGACTCATACAGATGCAGTTAATCTGCTCCGGGCTGCATCCAAAACAGTCAGATTAGTTATTGGACGAGTTC
TAGAATTACCCAGAATACCAATGTTGCCTCATTTGCTACCGGACATAACACTAACGTGCAACAAAGAGGAGTTGG
GTTTTTCCTTATGTGGAGGTCATGACAGCCTTTATCAAGTGGTATATATTAGTGATATTAATCCAAGGTCCGTCG
CAGCCATTGAGGGTAATCTCCAGCTATTAGATGTCATCCATTATGTGAACGGAGTCAGCACACAAGGAATGACCT
TGGAGGAAGTTAACAGAGCATTAGACATGTCACTTCCTTCATTGGTATTGAAAGCAACAAGA**TGA**TCTTCCAGTG
GTCCCCAGCTCAAAGAGGTCTGCTGTTTCAGCTCCAAAGTCAACCAAAGGCAATGGTTCCTACAGTGTGGGGTCT
TGCAGCCAGCCTGCCCTCACTCCTAATGATTCATTCTCCACGGTTGCTGGGGAAGAAATAAATGAAATATCGTAC
CCCAAAGGAAAATGTTCTACTTATCAGATAAAGGGATCACCAAACTTGACTCTGCCCAAAGAATCTTATATACAA
GAAGATGACATTTATGATGATTCCCAAGAAGCTGAAGTTATCCAGTCTCTGCTGGATGTTGTGGATGAGGAAGCC
CAGAATCTTTTAAACGAAAATAATGCAGCAGGATACTCCTGTGGTCCAGGTACATTAAAGATGAATGGGAAGTTA
TCAGAAGAGAGAACAGAAGATACAGACTGCGATGGTTCACCTTTACCTGAGTATTTTACTGAGGCCACCAAAATG
AATGGCTGTGAAGAATATTGTGAAGAAAAAGTAAAAAGTGAAAGCTTAATTCAGAAGCCACAAGAAAAGAAGACT
GATGATGATGAAATAACATGGGGAAATGATGAGTTGCCAATAGAGAGAACAAACCATGAAGATTCTGATAAAGAT
CATTCCTTTCTGACAAACGATGAGCTCGCTGTACTCCCTGTCGTCAAAGTGCTTCCCTCTGGTAAATACACGGGT
GCCAACTTAAAATCAGTCATTCGAGTCCTGCGGGGTTTGCTAGATCAAGGAATTCCTTCTAAGGAGCTGGAGAAT
CTTCAAGAATTAAAACCTTTGGATCAGTGTCTAATTGGGCAAACTAAGGAAAACAGAAGGAAGAACAGATATAAA
AATATACTTCCCTATGATGCTACAAGAGTGCCTCTTGGAGATGAAGGTGGCTATATCAATGCCAGCTTCATTAAG
ATACCAGTTGGGAAAGAAGAGTTCGTTTACATTGCCTGCCAAGGACCACTGCCTACAACTGTTGGAGACTTCTGG
CAGATGATTTGGGAGCAAAAATCCACAGTGATAGCCATGATGACTCAAGAAGTAGAAGGAGAAAAAATCAAATGC
CAGCGCTATTGGCCCAACATCCTAGGCAAAACAACAATGGTCAGCAACAGACTTCGACTGGCTCTTGTGAGAATG
CAGCAGCTGAAGGGCTTTGTGGTGAGGGCAATGACCCTTGAAGATATTCAGACCAGAGAGGTGCGCCATATTTCT
CATCTGAATTTCACTGCCTGGCCAGACCATGATACACCTTCTCAACCAGATGATCTGCTTACTTTTATCTCCTAC

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FIGURE 4109C

ATGAGACACATCCACAGATCAGGCCCAATCATTACGCACTGCAGTGCTGGCATTGGACGTTCAGGGACCCTGATT
TGCATAGATGTGGTTCTGGGATTAATCAGTCAGGATCTTGATTTTGACATCTCTGATTTGGTGCGCTGCATGAGA
CTACAAAGACACGGAATGGTTCAGACAGAGGATCAATATATTTTCTGCTATCAAGTCATCCTTTATGTCCTGACA
CGTCTTCAAGCAGAAGAAGAGCAAAAACAGCAGCCTCAGCTTCTGAAGTGACATGAAAAGAGCCTCTGGATGCAT
TTCCATTTCTCTCCTTAACCTCCAGCAGACTCCTGCTCTCTATCCAAAATAAAGATCACAGAGCAGCAAGTTCAT
ACAACATGCATGTTCTCCTCTATCTTAGAGGGGTATTCTTCTTGAAAATAAAAAATATTGAAATGCTGTATTTTT
ACAGCTACTTTAACCTATGATAATTATTTACAAAATTTTAACACTAACCAAACAATGCAGATCTTAGGGATGATT
AAAGGCAGCATTTGATGATAGCAGACATTGTTACAAGGACATGGTGAGTCTATTTTTAATGCACCAATCTTGTTT
ATAGCAAAAATGTTTTCCAATATTTTAATAAAGTAGTTATTTTATAGGGGATACTTGAAACCAGTATTTAAGCTT
TAAATGACAGTAATATTGGCATAGAAAAAAGTAGCAAATGTTTACTGTATCAATTTCTAATGTTTACTATATAGA
ATTTCCTGTAATATATTTATATACTTTTTCATGAAAATGGAGTTATCAGTTATCTGTTTGTTACTGCATCATCTG
TTTGTAATCATTATCTCACTTTGTAAATAAAAACACACCTTAAAACATG

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FIGURE 4110

GGAGAGCGCGCTCTGCCTGCCGCCTGCCTGCCTGCCACTGAGGGTTCCCAGCACC**ATG**AGGGCCTGGATCTTCTT
TCTCCTTTGCCTGGCCGGGAGGGCCTTGGCAGCCCCTCAGCAAGAAGCCCTGCCTGATGAGACAGAGGTGGTGGA
AGAAACTGTGGCAGAGGTGACTGAGGTATCTGTGGGAGCTAATCCTGTCCAGGTGGAAGTAGGAGAATTTGATGA
TGGTGCAGAGGAAACCGAAGAGGAGGTGGTGGCGGAAAATCCCTGCCAGAACCACCACTGCAAACACGGCAAGGT
GTGCGAGCTGGATGAGAACAACACCCCCATGTGCGTGTGCCAGGACCCCACCAGCTGCCCAGCCCCCATTGGCGA
GTTTGAGAAGGTGTGCAGCAATGACAACAAGACCTTCGACTCTTCCTGCCACTTCTTTGCCACAAAGTGCACCCT
GGAGGGCACCAAGAAGGGCCACAAGCTCCACCTGGACTACATCGGGCCTTGCAAATACATCCCCCCTTGCCTGGA
CTCTGAGCTGACCGAATTCCCCCTGCGCATGCGGGACTGGCTCAAGAACGTCCTGGTCACCCTGTATGAGAGGGA
TGAGGACAACAACCTTCTGACTGAGAAGCAGAAGCTGCGGGTGAAGAAGATCCATGAGAATGAGAAGCGCCTGGA
GGCAGGAGACCACCCCGTGGAGCTGCTGGCCCGGGACTTCGAGAAGAACTATAACATGTACATCTTCCCTGTACA
CTGGCAGTTCGGCCAGCTGGACCAGCACCCCATTGACGGGTACCTCTCCCACACCGAGCTGGCTCCACTGCGTGC
TCCCCTCATCCCCATGGAGCATTGCACCACCCGCTTTTTCGAGACCTGTGACCTGGACAATGACAAGTACATCGC
CCTGGATGAGTGGGCCGGCTGCTTCGGCATCAAGCAGAAGGATATCGACAAGGATCTTGTGATC**TAA**ATCCACTC
CTTCCACAGTACCGGATTCTCTCTTTAACCCTCCCCTTCGTGTTTCCCCCAATGTTTAAAATGTTTGGATGGTTT
GTTGTTCTGCCTGGAGACAAGGTGCTAACATAGATTTAAGTGAATACATTAACGGTGCTAAAAATGAAAATTCTA
ACCCAAGACATGACATTCTTAGCTGTAACTTAACTATTAAGGCCTTTTCCACACGCATTAATAGTCCCATTTTTC
TCTTGCCATTTGTAGCTTTGCCCATTGTCTTATTGGCACATGGGTGGACACGGATCTGCTGGGCTCTGCCTTAAA
CACACATTGCAGCTTCAACTTTTCTCTTTAGTGTTCTGTTTGAAACTAATACTTACCGAGTCAGACTTTGTGTTC
ATTTCATTTCAGGGTCTTGGCTGCCTGTGGGCTTCCCCAGGTGGCCTGGAGGTGGGCAAAGGGAAGTAACAGACA
CACGATGTTGTCAAGGATGGTTTTGGGACTAGAGGCTCAGTGGTGGGAGAGATCCCTGCAGAACCCACCAACCAG
AACGTGGTTTGCCTGAGGCTGTAACTGAGAGAAAGATTCTGGGGCTGTGTTATGAAAATATAGACATTCTCACAT
AAGCCCAGTTCATCACCATTTCCTCCTTTACCTTTCAGTGCAGTTTCTTTTCACATTAGGCTGTTGGTTCAAACT
TTTGGGAGCACGGACTGTCAGTTCTCTGGGAAGTGGTCAGCGCATCCTGCAGGGCTTCTCCTCCTCTGTCTTTTG
GAGAACCAGGGCTCTTCTCAGGGGCTCTAGGGACTGCCAGGCTGTTTCAGCCAGGAAGGCCAAAATCAAGAGTGA
GATGTAGAAAGTTGTAAAATAGAAAAAGTGGAGTTGGTGAATCGGTTGTTCTTTCCTCACATTTGGATGATTGTC
ATAAGGTTTTTAGCATGTTCCTCCTTTTCTTCACCCTCCCCTTTTTTCTTCTATTAATCAAGAGAAACTTCAAAG
TTAATGGGATGGTCGGATCTCACAGGCTGAGAACTCGTTCACCTCCAAGCATTTCATGAAAAAGCTGCTTCTTAT
TAATCATACAAACTCTCACCATGATGTGAAGAGTTTCACAAATCCTTCAAAATAAAAAGTAATGACTTAGAAACT
G

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FIGURE 4111A

GGAGTTTTCCACCATGACTATTGCCCTGCTGGGTTTTGCCATATTCTTGCTCCATTGTGCGACCTGTGAGAAGCC
TCTAGAAGGGATTCTCTCCTCCTCTGCTTGGCACTTCACACACTCCCATTACAATGCCACCATCTATGAAAATTC
TTCTCCCAAGACCTATGTGGAGAGCTTCGAGAAAATGGGCATCTACCTCGCGGAGCCACAGTGGGCAGTGAGGTA
CCGGATCATCTCTGGGGATGTGGCCAATGTATTTAAAACTGAGGAGTATGTGGTGGGCAACTTCTGCTTCCTAAG
AATAAGGACAAAGAGCAGCAACACAGCTCTTCTGAACAGAGAGGTGCGAGACAGCTACACCCTCATCATCCAAGC
CACAGAGAAGACCTTGGAGTTGGAAGCTTTGACCCGTGTGGTGGTCCACATCCTGGACCAGAATGACCTGAAGCC
TCTCTTCTCTCCACCTTCGTACAGAGTCACCATCTCTGAGGACATGCCCCTGAAGAGCCCCATCTGCAAGGTGAC
TGCCACAGATGCTGATCTAGGCCAGAATGCTGAGTTCTATTATGCCTTTAACACAAGGTCAGAGATGTTTGCCAT
CCATCCCACCAGCGGTGTGGTCACTGTGGCTGGGAAGCTTAACGTCACCTGGCGAGGAAAGCATGAGCTCCAGGT
GCTAGCTGTGGACCGCATGCGGAAAATCTCTGAGGGCAATGGGTTTGGCAGCCTGGCTGCACTTGTGGTTCATGT
GGAGCCTGCCCTCAGGAAGCCCCCAGCCATTGCTTCGGTGGTGGTGACTCCACCAGACAGCAATGATGGTACCAC
CTATGCCACTGTACTGGTCGATGCAAATAGCTCAGGAGCTGAAGTGGAGTCAGTGGAAGTTGTTGGTGGTGACCC
TGGAAAGCACTTCAAAGCCATCAAGTCTTATGCCCGGAGCAATGAGTTCAGTTTGGTGTCTGTCAAAGACATCAA
CTGGATGGAGTACCTTCATGGGTTCAACCTCAGCCTCCAGGCCAGGAGTGGGAGCGGCCCTTATTTTTATTCCCA
GATCAGGGGCTTTCACCTACCACCTTCCAAACTGTCTTCCCTCAAATTCGAGAAGGCTGTTTACAGAGTGCAGCT
TAGTGAGTTTTCCCCTCCTGGCAGCCGCGTGGTGATGGTGAGAGTCACCCCAGCCTTCCCCAACCTGCAGTATGT
TCTAAAGCCATCTTCAGAGAATGTAGGATTTAAACTTAATGCTCGAACTGGGTTGATCACCACCACAAAGCTCAT
GGACTTCCACGACAGAGCCCACTATCAGCTACACATCAGAACCTCACCGGGCCAGGCCTCCACCGTGGTGGTCAT
TGACATTGTGGACTGCAACAACCATGCCCCCCTCTTCAACAGGTCTTCCTATGATGGTACCTTGGATGAGAACAT
CCCTCCAGGCACCAGTGTTTTGGCTGTGACTGCCACTGACCGGGATCATGGGGAAAATGGATATGTCACCTATTC
CATTGCTGGACCAAAAGCTTTGCCATTTTCTATTGACCCCTACCTGGGGATCATCTCCACCTCCAAACCCATGGA
CTATGAACTCATGAAAAGAATTTATACCTTCCGGGTAAGAGCATCAGACTGGGGATCCCCTTTTCGCCGGGAGAA
GGAAGTGTCCATTTTTCTTCAGCTCAGGAACTTGAATGACAACCAGCCTATGTTTGAAGAAGTCAACTGTACAGG
GTCTATCCGCCAAGACTGGCCAGTAGGGAAATCGATAATGACTATGTCAGCCATAGATGTGGATGAGCTTCAGAA
CCTAAAAATACGAGATTGTATCAGGCAATGAACTAGAGTATTTTGATCTAAATCATTTCTCCGGAGTGATATCCCT
CAAACGCCCTTTTATCAATCTTACTGCTGGTCAACCCACCAGTTATTCCCTGAAGATTACAGCCTCAGATGGCAA
AAACTATGCCTCACCCACAACTTTGAATATTACTGTGGTGAAGGACCCTCATTTTGAAGTTCCTGTAACATGTGA
TAAAACAGGGGTATTGACACAATTCACAAAGACTATCCTCCACTTTATTGGGCTTCAGAACCAGGAGTCCAGTGA
TGAGGAATTCACTTCTTTAAGCACATATCAGATTAATCATTACACCCCACAGTTTGAGGACCACTTCCCCCAATC
CATTGATGTCCTTGAGAGTGTCCCTATCAACACCCCCTTGGCCCGCCTAGCAGCCACTGACCCTGATGCTGGTTT
TAATGGCAAACTGGTCTATGTGATTGCAGATGGCAATGAGGAGGGCTGCTTTGACATAGAGCTGGAGACAGGGCT
GCTCACTGTAGCTGCTCCCTTGGACTATGAAGCCACCAATTTCTACATCCTCAATGTAACAGTATATGACCTGGG
CACACCCCAGAAGTCCTCCTGGAAGCTGCTGACAGTGAATGTGAAAGACTGGAATGACAACGCACCCAGATTTCC
TCCCGGTGGGTACCAGTTAACCATCTCGGAGGACACAGAAGTTGGAACCACAATTGCAGAGCTGACAACCAAAGA
TGCTGACTCGGAAGACAATGGCAGGGTTCGCTACACCCTGCTAAGTCCCACAGAGAAGTTCTCCCTCCACCCTCT
CACTGGGGAACTGGTTGTTACAGGACACCTGGACCGCGAATCAGAGCCTCGGTACATACTCAAGGTGGAGGCCAG
GGATCAGCCCAGCAAAGGCCACCAGCTCTTCTCTGTCACTGACCTGATAATCACATTGGAGGATGTCAACGACAA
CTCTCCCCAGTGCATCACAGAACACAACAGGCTGAAGGTTCCAGAGGACCTGCCCCCCGGGACTGTCTTGACATT
TCTGGATGCCTCTGATCCTGACCTGGGCCCCGCAGGTGAAGTGCGATATGTTCTGATGGATGGCGCCCATGGGAC
CTTCCGGGTGGACCTGATGACAGGGGCGCTCATTCTGGAGAGAGAGCTGGACTTTGAGAGGCGAGCTGGGTACAA
TCTGAGCCTGTGGGCCAGTGATGGTGGGAGGCCCCTAGCCCGCAGGACTCTCTGCCATGTGGAGGTGATCGTCCT
GGATGTGAATGAGAATCTCCACCCTCCCCACTTTGCCTCCTTCGTGCACCAGGGCCAGGTGCAGGAGAACAGCCC
CTCGGGAACTCAGGTGATTGTAGTGGCTGCCCAGGACGATGACAGTGGCTTGGATGGGGAGCTCCAGTACTTCCT
GCGTGCTGGCACTGGACTCGCAGCCTTCAGCATCAACCAAGATACAGGAATGATTCAGACTCTGGCACCCCTGGA
CCGAGAATTTGCATCTTACTACTGGTTGACGGTATTAGCAGTGGACAGGGGTTCTGTGCCCCTCTCTTCTGTAAC
TGAAGTCTACATCGAGGTTACGGATGCCAATGACAACCCACCCCAGATGTCCCAAGCTGTGTTCTACCCCTCCAT
CCAGGAGGATGCTCCCGTGGGCACCTCTGTGCTTCAACTGGATGCCTGGGACCCAGACTCCAGCTCCAAAGGGAA
GCTGACCTTCAACATCACCAGTGGGAACTACATGGGATTCTTTATGATTCACCCTGTTACAGGTCTCCTATCTAC

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FIGURE 4111B

AGCCCAGCAGCTGGACAGAGAGAACAAGGATGAACACATCCTGGAGGTGACTGTGCTGGACAATGGGGAACCCTC
ACTGAAGTCCACCTCCAGGGTGGTGGTAGGCATCTTGGACGTCAATGACAATCCACCTATATTCTCCCACAAGCT
CTTCAATGTCCGCCTTCCAGAGAGGCTGAGCCCTGTGTCCCCTGGGCCTGTGTACAGGCTGGTGGCTTCAGACCT
GGATGAGGGTCTTAATGGCAGAGTCACCTACAGTATCGAGGACAGCGATGAGGAGGCCTTCAGTATCGACCTGGT
CACAGGTGTGGTTTCATCCAGCAGCACTTTTACAGCTGGAGAGTACAACATCCTAACGATCAAGGCAACAGACAG
TGGGCAGCCACCACTCTCAGCCAGTGTCCGGCTACACATTGAGTGGATCCCTTGGCCCCGGCCGTCCTCCATCCC
TCTGGCCTTTGATGAGACCTACTACAGCTTTACGGTCATGGAGACGGACCCTGTGAACCACATGGTGGGGGTCAT
CAGCGTAGAGGGCAGACCCGGACTCTTCTGGTTCAACATCTCAGGTGGGGATAAGGACATGGACTTTGACATTGA
GAAGACCACAGGCAGCATCGTCATTGCCAGGCCTCTTGATACCAGGAGAAGGTCGAACTATAACTTGACTGTTGA
GGTGACAGATGGGTCCCGCACCATTGCCACACAGGTCCACATCTTCATGATTGCCAACATTAACCACCATCGGCC
CCAGTTTCTGGAAACTCGTTATGAAGTCAGAGTTCCCCAGGACACCGTGCCAGGGGTAGAGCTCCTGCGAGTCCA
GGCCATAGATCAAGACAAGGGCAAAAGCCTCATCTATACCATACATGGCAGCCAAGACCCAGGAAGTGCCAGCCT
CTTCCAGCTGGACCCAAGCAGTGGTGTCCTGGTAACGGTGGGAAAATTGGACCTCGGCTCGGGGCCCTCCCAGCA
CACACTGACAGTCATGGTCCGAGACCAGGAAATACCTATCAAGAGGAACTTCGTGTGGGTGACCATTCATGTGGA
GGATGGAAACCTCCACCCACCCCGCTTCACTCAGCTCCATTATGAGGCAAGTGTTCCTGACACCATAGCCCCCGG
CACAGAGCTGCTGCAGGTCCGAGCCATGGATGCTGACCGGGGAGTCAATGCTGAGGTCCACTACTCCCTCCTGAA
AGGGAACAGCGAAGGTTTCTTCAACATCAATGCCCTGCTAGGCATCATTACTCTAGCTCAAAAGCTTGATCAGGC
AAATCATGCCCCACATACTCTGACAGTGAAGGCAGAAGATCAAGGCTCCCCACAATGGCATGACCTGGCTACAGT
GATCATTCATGTCTATCCCTCAGATAGGAGTGCCCCCATCTTTTCAAAATCTGAGTACTTTGTAGAGATCCCTGA
ATCAATCCCTGTTGGTTCCCCAATCCTCCTTGTCTCTGCTATGAGCCCCTCTGAAGTTACCTATGAGTTAAGAGA
GGGAAATAAGGATGGAGTCTTCTCTATGAACTCATATTCTGGCCTTATTTCCACCCAGAAGAAATTGGACCATGA
GAAAATCTCGTCTTACCAGCTGAAAATCCGAGGCAGCAATATGGCAGGTGCATTTACTGATGTCATGGTGGTGGT
TGACATAATTGATGAAAATGACAATGCTCCTATGTTCTTAAAGTCAACTTTTGTGGGCCAAATTAGTGAAGCAGC
TCCACTGTATAGCATGATCATGGATAAAAACAACAACCCCTTTGTGATTCATGCCTCTGACAGTGACAAAGAAGC
TAATTCCTTGTTGGTCTATAAAATTTTGGAGCCGGAGGCCTTGAAGTTTTTCAAAATTGATCCCAGCATGGGAAC
CCTAACCATTGTATCAGAGATGGATTATGAGAGCATGCCCTCTTTCCAATTCTGTGTCTATGTCCATGACCAAGG
AAGCCCTGTATTATTTGCACCCAGACCTGCCCAAGTCATCATTCATGTCAGAGATGTGAATGATTCCCCTCCCAG
ATTCTCAGAACAGATATATGAGGTAGCAATAGTCGGGCCTATCCATCCAGGCATGGAGCTTCTCATGGTGCGGGC
CAGCGATGAAGACTCAGAAGTCAATTATAGCATCAAAACTGGCAATGCTGATGAAGCTGTTACCATCCATCCTGT
CACTGGTAGCATATCTGTGCTGAATCCTGCTTTCCTGGGACTCTCTCGGAAGCTCACCATCAGGGCTTCTGATGG
CTTGTATCAAGACACTGCGCTGGTAAAAATTTCTTTGACCCAAGTGCTTGACAAAAGCTTGCAGTTTGATCAGGA
TGTCTACTGGGCAGCTGTGAAGGAGAACTTGCAGGACAGAAAGGCACTGGTGATTCTTGGTGCCCAGGGCAATCA
TTTGAATGACACCCTTTCCTACTTTCTCTTGAATGGCACAGATATGTTTCATATGGTCCAGTCAGCAGGTGTGTT
GCAGACAAGAGGTGTGGCGTTTGACCGGGAGCAGCAGGACACTCATGAGTTGGCAGTGGAAGTGAGGGACAATCG
GACACCTCAGCGGGTGGCTCAGGGTTTGGTCAGAGTCTCTATTGAGGATGTCAATGACAATCCCCCCAAATTTAA
GCATCTGCCCTATTACACAATCATCCAAGATGGCACAGAGCCAGGGGATGTCCTCTTTCAGGTATCTGCCACTGA
TGAGGACTTGGGGACAAATGGGGCTGTTACATATGAATTTGCAGAAGATTACACATATTTCCGAATTGACCCCTA
TCTTGGGGACATATCACTCAAGAAACCCTTTGATTATCAAGCTTTAAATAAATATCACCTCAAAGTCATTGCTCG
GGATGGAGGAACGCCATCCCTCCAGAGTGAGGAAGAGGTACTTGTCACTGTGAGAAATAAATCCAACCCACTGTT
TCAGAGTCCTTATTACAAAGTCAGAGTACCTGAAAATATCACCCTCTATACCCCAATTCTCCACACCCAGGCCCG
GAGTCCAGAGGGACTCCGGCTCATCTACAACATTGTGGAGGAAGAACCCTTGATGCTGTTCACCACTGACTTCAA
GACTGGTGTCCTAACAGTAACAGGGCCTTTGGACTATGAGTCCAAGACCAAACATGTGTTCACAGTCAGAGCCAC
GGATACAGCTCTGGGGTCATTTTCTGAAGCCACAGTGGAAGTCCTAGTGGAGGATGTCAATGATAACCCTCCCAC
TTTTTCCCAATTGGTCTATACCACTTCCATCTCAGAAGGCTTGCCTGCTCAGACCCCTGTGATCCAACTGTTGGC
TTCTGACCAGGACTCAGGGCGGAACCGTGACGTCTCTTATCAGATTGTGGAGGATGGCTCAGATGTTTCCAAGTT
CTTCCAGATCAATGGGAGCACAGGGGAGATGTCCACAGTTCAAGAACTGGATTATGAAGCCCAACAACACTTTCA
TGTGAAAGTCAGGGCCATGGATAAAGGAGATCCCCCACTCACTGGTGAAACCCTTGTGGTTGTCAATGTGTCTGA
TATCAATGACAACCCCCCAGAGTTCAGACAACCTCAATATGAAGCCAATGTCAGTGAACTGGCAACCTGTGGACA

FIGURE 4111C

CCTGGTTCTTAAAGTCCAGGCTATTGACCCTGACAGCAGAGACACCTCCCGCCTGGAGTACCTGATTCTTTCTGG
CAATCAGGACAGGCACTTCTTCATTAACAGCTCATCGGGAATAATTTCTATGTTCAACCTTTGCAAAAAGCACCT
GGACTCTTCTTACAATTTGAGGGTAGGTGCTTCTGATGGAGTCTTCCGAGCAACTGTGCCTGTGTACATCAACAC
TACAAATGCCAACAAGTACAGCCCAGAGTTCCAGCAGCACCTTTATGAGGCAGAATTAGCAGAGAATGCAATGGT
TGGAACCAAGGTGATTGATTTGCTAGCCATAGACAAAGATAGTGGTCCCTATGGCACTATAGATTATACTATCAT
CAATAAACTAGCAAGTGAGAAGTTCTCCATAAACCCCAATGGCCAGATTGCCACTCTGCAGAAACTGGATCGGGA
AAATTCAACAGAGAGAGTCATTGCTATTAAGGTCATGGCTCGGGATGGAGGAGGAAGAGTAGCCTTCTGCACGGT
GAAGATCATCCTCACAGATGAAAATGACAACCCCCCACAGTTCAAAGCATCTGAGTACACAGTATCCATTCAATC
CAATGTCAGTAAAGACTCTCCGGTTATCCAGGTGTTGGCCTATGATGCAGATGAAGGTCAGAACGCAGATGTCAC
CTACTCAGTGAACCCAGAGGACCTAGTTAAAGATGTCATTGAAATTAACCCAGTCACTGGTGTGGTCAAGGTGAA
AGACAGCCTGGTGGGATTGGAAAATCAGACCCTTGACTTCTTCATCAAAGCCCAAGATGGAGGCCCTCCTCACTG
GAACTCTCTGGTGCCAGTACGACTTCAGGTGGTTCCTAAAAAAGTATCCTTACCGAAATTTTCTGAACCTTTGTA
TACTTTCTCTGCACCTGAAGACCTTCCAGAGGGGTCTGAAATTGGGATTGTTAAAGCAGTGGCAGCTCAAGATCC
AGTCATCTACAGTCTAGTGCGGGGCACTACACCTGAGAGCAACAAGGATGGTGTCTTCTCCCTAGACCCAGACAC
AGGGGTCATAAAGGTGAGGAAGCCCATGGACCACGAATCCACCAAATTGTACCAGATTGATGTGATGGCACATTG
CCTTCAGAACACTGATGTGGTGTCCTTGGTCTCTGTCAACATCCAAGTGGGAGACGTCAATGACAATAGGCCTGT
ATTTGAGGCTGATCCATATAAGGCTGTCCTCACTGAGAATATGCCAGTGGGGACCTCAGTCATTCAAGTGACTGC
CATTGACAAGGACACTGGGAGAGATGGCCAGGTGAGCTACAGGCTGTCTGCAGACCCTGGTAGCAATGTCCATGA
GCTCTTTGCCATTGACAGTGAGAGTGGTTGGATCACCACACTCCAGGAACTTGACTGTGAGACCTGCCAGACTTA
TCATTTTCATGTGGTGGCCTATGACCACGGACAGACCATCCAGCTATCCTCTCAGGCCCTGGTTCAGGTCTCCAT
TACAGATGAGAATGACAATGCTCCCCGATTTGCTTCTGAAGAGTACAGAGGATCTGTGGTTGAGAACAGTGAGCC
TGGCGAACTGGTGGCGACTCTAAAGACCCTGGATGCTGACATTTCTGAGCAGAACAGGCAGGTCACCTGCTACAT
CACAGAGGGAGACCCCCTGGGCCAGTTTGGCATCAGCCAAGTTGGAGATGAGTGGAGGATTTCCTCAAGGAAGAC
CCTGGACCGCGAGCATACAGCCAAGTACTTGCTCAGAGTCACAGCATCTGATGGCAAGTTCCAGGCTTCGGTCAC
TGTGGAGATCTTTGTCCTGGACGTCAATGATAACAGCCCACAGTGTTCACAGCTTCTCTATACTGGCAAGGTTCA
TGAAGATGTATTTCCAGGACACTTCATTTTGAAGGTTTCTGCCACAGACTTGGACACTGATACCAATGCTCAGAT
CACATATTCTCTGCATGGCCCTGGGGCGCATGAATTCAAGCTGGATCCTCATACAGGGGAGCTGACCACACTCAC
TGCCCTAGACCGAGAAAGGAAGGATGTGTTCAACCTTGTTGCCAAGGCGACGGATGGAGGTGGCCGATCGTGCCA
GGCAGACATCACCCTCCATGTGGAGGATGTGAATGACAATGCCCCGCGGTTCTTCCCCAGCCACTGTGCTGTGGC
TGTCTTCGACAACACCACAGTGAAGACCCCTGTGGCTGTAGTATTTGCCCGGGATCCCGACCAAGGCGCCAATGC
CCAGGTGGTTTACTCTCTGCCGGATTCAGCCGAAGGCCACTTTTCCATCGACGCCACCACGGGGGTGATCCGCCT
GGAAAAGCCGCTGCAGGTCAGGCCCCAGGCACCACTGGAGCTCACGGTCCGTGCCTCTGACCTGGGCACCCCAAT
ACCGCTGTCCACGCTGGGCACCGTCACAGTCTCGGTGGTGGGCCTAGAAGACTACCTGCCCGTGTTCCTGAACAC
CGAGCACAGCGTGCAGGTGCCCGAGGACGCCCCACCTGGCACGGAGGTGCTGCAGCTGGCCACCCTCACTCGCCC
GGGCGCAGAGAAGACCGGCTACCGCGTGGTCAGCGGGAACGAGCAAGGCAGGTTCCGCCTGGATGCTCGCACAGG
GATCCTGTATGTCAACGCAAGCCTGGACTTTGAGACAAGCCCCAAGTACTTCCTGTCCATTGAGTGCAGCCGGAA
GAGCTCCTCTTCCCTCAGTGACGTGACCACAGTCATGGTCAACATCACTGATGTCAATGAACACCGGCCCCAATT
CCCCCAAGATCCATATAGCACAAGGGTCTTAGAGAATGCCCTTGTGGGTGACGTCATCCTCACGGTATCAGCGAC
TGATGAAGATGGACCCCTAAATAGTGACATTACCTATAGCCTCATAGGAGGGAACCAGCTTGGGCACTTCACCAT
TCACCCCAAAAAGGGGGAGCTACAGGTGGCCAAGGCCCTGGACCGGGAACAGGCCTCTAGTTATTCCCTGAAGCT
CCGAGCCACAGACAGTGGGCAGCCTCCACTGCATGAGGACACAGACATCGCTATCCAAGTGGCTGATGTCAATGA
TAACCCACCGAGATTCTTCCAGCTCAACTACAGCACCACTGTCCAGGAGAACTCCCCCATTGGCAGCAAAGTCCT
GCAGCTGATCCTGAGTGACCCAGATTCTCCAGAGAATGGCCCCCCCTACTCGTTTCGAATCACCAAGGGGAACAA
CGGCTCTGCCTTCCGAGTGACCCCGGATGGATGGCTGGTGACTGCTGAGGGCCTAAGCAGGAGGGCTCAGGAATG
GTATCAGCTTCAGATCCAGGCGTCAGACAGTGGCATCCCTCCCCTCTCGTCTTTGACGTCTGTCCGTGTCCATGT
CACAGAGCAGAGCCACTATGCACCTTCTGCTCTCCCACTGGAGATCTTCATCACTGTTGGAGAGGATGAGTTCCA
GGGTGGCATGGTGGGTAAGATCCATGCCACAGACCGAGACCCCCAGGACACGCTGACCTATAGCCTGGCAGAAGA
GGAGACCCTGGGCAGGCACTTCTCAGTGGGTGCGCCTGATGGCAAGATTATCGCCGCCCAGGGCCTGCCTCGTGG

FIGURE 4111D

CCACTACTCGTTCAACGTCACGGTCAGCGATGGGACCTTCACCACGACTGCTGGGGTCCATGTGTACGTGTGGCA
TGTGGGGCAGGAGGCTCTGCAGCAGGCCATGTGGATGGGCTTCTACCAGCTCACCCCCGAGGAGCTGGTGAGTGA
CCACTGGCGGAACCTGCAGAGGTTCCTCAGCCATAAGCTGGACATCAAACGGGCTAACATTCACTTGGCCAGCCT
CCAGCCTGCAGAGGCCGTGGCTGGTGTGGATGTGCTCCTGGTCTTTGAGGGGCATTCTGGAACCTTCTACGAGTT
TCAGGAGCTAGCATCCATCATCACTCACTCAGCCAAGGAGATGGAGCATTCAGTGGGGGTTCAGATGCGGTCAGC
TATGCCCATGGTGCCCTGCCAGGGGCCAACCTGCCAGGGTCAAATCTGCCATAACACAGTGCATCTGGACCCCAA
GGTTGGGCCCACGTACAGCACCGCCAGGCTCAGCATCCTAACCCCGCGGCACCACCTGCAGAGGAGCTGCTCCTG
CAATGGTACTGCTACAAGGTTCAGTGGTCAGAGCTATGTGCGGTACAGGGCCCCAGCGGCTCGGAACTGGCACAT
CCATTTCTATCTGAAAACACTCCAGCCACAGGCCATTCTTCTATTCACCAATGAAACAGCGTCCGTCTCCCTGAA
GCTGGCCAGTGGAGTGCCCCAGCTGGAATACCACTGTCTGGGTGGTTTCTATGGAAACCTTTCCTCCCAGCGCCA
TGTGAATGACCACGAGTGGCACTCCATCCTGGTGGAGGAGATGGACGCTTCCATTCGCCTGATGGTTGACAGCAT
GGGCAACACCTCCCTTGTGGTCCCAGAGAACTGCCGTGGTCTGAGGCCCGAAAGGCACCTCTTGCTGGGCGGCCT
CATTCTGTTGCATTCTTCCTCGAATGTCTCCCAGGGCTTTGAAGGCTGCCTGGATGCTGTCGTGGTCAACGAAGA
GGCTCTAGATCTGCTGGCCCCTGGCAAGACGGTGGCAGGCTTGCTGGAGACACAAGCCCTCACCCAGTGCTGCCT
CCACAGTGACTACTGCAGCCAGAACACATGCCTCAATGGTGGGAAGTGCTCATGGACCCATGGGGCAGGCTATGT
CTGCAAATGTCCCCCACAGTTCTCTGGGAAGCACTGTGAACAAGGAAGGGAGAACTGTACTTTTGCACCCTGCCT
GGAAGGTGGAACTTGCATCCTCTCCCCCAAAGGAGCTTCCTGTAACTGCCCTCATCCTTACACAGGAGACAGGTG
TGAAATGGAGGCGAGGGGTTGTTCAGAAGGACACTGCCTAGTCACTCCCGAGATCCAAAGGGGGGACTGGGGGCA
GCAGGAGTTACTGATCATCACAGTGGCCGTGGCGTTCATTATCATAAGCACTGTCGGGCTTCTCTTCTACTGCCG
CCGTTGCAAGTCTCACAAGCCTGTGGCCATGGAGGACCCAGACCTCCTGGCCAGGAGTGTTGGTGTTGACACCCA
AGCCATGCCTGCCATCGAGCTCAACCCATTGAGTGCCAGCTCCTGCAACAACCTCAACCAACCGGAACCCAGCAA
GGCCTCTGTTCCAAATGAACTCGTCACATTTGGACCCAATTCTAAGCAACGGCCAGTGGTCTGCAGTGTGCCCCC
CAGACTCCCGCCAGCTGCGGTCCCTTCCCACTCTGACAATGAGCCTGTCATTAAGAGAACCTGGTCCAGCGAGGA
GATGGTGTACCCTGGCGGAGCCATGGTCTGGCCCCCTACTTACTCCAGGAACGAACGCTGGGAATACCCCCACTC
CGAAGTGACTCAGGGCCCTCTGCCGCCCTCGGCTCACCGCCACTCAACCCCAGTCGTGATGCCAGAGCCTAATGG
CCTCTATGGGGGCTTCCCCTTCCCCCTGGAGATGGAAAACAAGCGGGCACCTCTCCCACCCCGTTACAGCAACCA
GAACCTGGAAGATCTGATGCCCTCTCGGCCCCCTAGTCCCCGGGAGCGCCTGGTTGCCCCCTGTCTCAATGAGTA
CACGGCCATCAGCTACTACCACTCGCAGTTCCGGCAGGGAGGGGGAGGGCCCTGCCTGGCAGACGGGGGCTACAA
GGGGGTGGGTATGCGCCTCAGCCGAGCTGGGCCCTCTTATGCTGTCTGTGAGGTGGAGGGGGCACCTCTTGCAGG
CCAGGGCCAGCCCCGGGTGCCCCCCAACTATGAGGGCTCTGACATGGTGGAGAGTGATTATGGCAGCTGTGAGGA
GGTCATGTTCTAGCTTCCCATTCCCAGAGCAAGGCAGGCGGGAGGCCAAGGACTGGACTTGGCTTATTTCTTCCT
GTCTCGTAGGGGGTGAGTTGAGTGTGGCTGGGAGAGTGGGAGGGAAGCCCTCAGCCCAGGCTGTTGTCCCTTGAA
ATGTGCTCTTCCAATCCCCCACCTAGTCCCTGAGGGTGGAGGGAAGCTGAGGATAGAGCTCCAGAAACAGCACTA
GGGTCCCAGGAGAGGGGCATTTCTAGAGCAGTGACCCTGGAAAACCAGGAACAATTGACTCCCGGGGTGGGCGAG
AGACAGGAGGGCTCCCTGATCTGCCGGCTCTCAGTCCCCGGGGCAGAGCCTGATTGACTGTGCTGGCTCAACTTC
ACCAAGATGCATTCTCATACCTGCCCACAGCTCCATTTTGGAGGCAGGCAGGTTGGTGCCTGACAGACAACCACT
ACGCGGGCCGTACAGAGGAGCTCTAGAGGGCTGCGTGGCATCCTCCTAGGGGCTGAGAGGTGAGCAGCAGGGGAG
CGGGCACAGTCCCCTCTGCCCCTGCCTCAGTCGAGCACTCACTGTGTCTTTGTCAAGTGTCTGCTCCACGTCAGG
CACTGTGCTTTGCACCGGGGAGAAAATGGTGATGGAGGGCAACAAGGACTCCGAGGAGCACCACCAGGCCTCGGG
CCCCAGAGGTCCCACTCCTCAGCCTACACGCAGAGGAACGGGCCCACCTCAGAGTCACACCACTGGCTGCCAGTC
AGGGCCTGCCAGGAGTCTACACAGCTCTGAACCTTCTTTGTTAAAGAATTCAGACCTCATGGAACTCTGGGTTCT
TCATCCCAAGTTTCCCAGGCACTTTTGGCCAAAGGAAGGAAGGAACTAATTCTTCATTTTAAAAATTCTTAGGCA
CTTTTTGACCTTGCTGTCTGGATGAGTTTCCTCAATGGGATTTTTCTTCCCTAGACACAAGGAAGTCTGAACTCC
TATTTAGGGCCGGTTGGAAGCAGGGAGCTGGACCGCAGTGTCCAGGCTGGACACCTGCCATTGCCTCCTCTCCAT
TGCAGACGCCTGCCCATCAAGTATTACCTGCGGCGACTCAACCCTATGCATGGAGGGTCAATGTGGGCACATGTC
TACACATGTGGGTGCCCATGGATAGTACGTGTGTACACATGTGTAGAGTGTATGTAGCCAGGAGTGGTGGGGACC
AGAAGCCTCTGTGGCCTTTGGTGACCTCACCACTCCCTCCCACCCAGTCCCTCCCTCTGGTCCACTGCCTTTTCA
TATGTGTTGTTTCTGGAGACAGAAGTCAAAAGGAAGAGCAGTGGAGCCTTGCCCACAGGGCTGCTGCTTCATGCG

FIGURE 4111E

AGAGGGAGATGTGTGGGCGAGAGCCAATTTGTGTGAGTGGTTTGTGGCTGTGTGTGTGACTGTGAGTGTGAGTGA
CAGATACATAGTTTCATTGGTCATTTTTTTTTTAACAATAAAGTATCTTTTTTTACTGTT

FIGURE 4112

AACTTTGACTCAACTTCTCCTGCTGAAAAGAAGCTCGCTCCAGATGTCTGCATGGGTCCTCGGCACTCTTGGCTG
AGGACTCAAAGGTTTTAATCAGGATCGTCTAAAAATGTACCTCGGTGAGGAGGCACAGATTTTGCCTCCTGTTGA
CCAGCCTGGTTTCATACCGAAAAGACATTGAAGGACTGCAGAAATGTATGGGTGCACCGGGCCGAGGGAAGGGTG
GCTGAGTGAGAGGCGTATAAAATGGGGCTGTGTGCATGCAGGCCCATGTTTCAGCCTCAGCCCACGCCAGGTGAA
AGGATCAGCAATGCTCTGTTGCCATCGTGCTGGGACGACACCAGCTCTATTGCCACCGATGAGTAGCTGAGGTCA
GTGTGCACAGAGTTTGAAATTAAGTTAATAGACTTTACAGCAGCTGGTCTGACACTACGCGCAGTGCTCGGTTGT
TTACAATCAGTGGGGAAAAGGGCAGAACCAGTGCCCGGCCCCACACTGCCTCTGTGGCCTGGACTTTGAAAGGAA
CCCACTGAACACTAATTATGAGCCCTGTCTTTCCCCCAGAATGCCTCCCTGGGTTTCACAAACAGCCTTGAGGTT
GGCCCTCCTCAAGGTCAGCCTTCAGATTTGGGAGCAAACTTCAGAGAAGGCAGAGGAAGATACATTGCCTTGCTG
TGGGCTGCCTCTTCTTTCCTCTTGGTGTGCGAAGTATTTCAGAAGGCCATTGATGAATTCCCCCTCTTTAGCTGT
GTATTTGTGCACGTGTGTGTGTACGTGCGTGTGTGTGTGTGTTCCTGTGTAAGTAACAGACCAGACTCCTTTTCT
CTTCTGTCCCGTCACCAGGCTCTTGCTTCACTGCAGATACAGTTCACTCTGAAAGCTGGTTGAAGGAGAGCAGCA
AAAATGTATCAGGGGTTTTGCTTCTGTGTTTCGCCAAAGCTCATAAGGGCTGTGACCCACCCATATGGCCCCAGT
TTTTTCTGTCTCTTCTGTTCCAAAGCCAGGAGAGCTGACTTCCAGGTGAAGGGATGGGAAAAGTGGACTCTCATT
GTAGTGACTCCCAACCTACCTAATAATTTGTTAACTTAGGAATATGCTATCATTGTTGACTTGTTCTTCCTTAGG
AGAAGGACGATTTTCACCCACCCTTTCTGTTCTATGGTGGACTCTTAACAGGTGCTATGTGACCAGGAATCTAGC
CGGGAGTAGCAGAGGCCCTGTCTTCTGAAGTCTCAGGCTTAGAAGTTACCAAAGTGGGCTCAGAAACTGTCATCT
CCTGGTTCCAAGTTCGGGCTCTGGCAGCCCAGCCGCTATCTTAGCTGTCTTTCCCAGCGGTGCTAAGAGTGGTCT
CAGTGAGAAGGTAGATGCCAACTGGAGGGCCAGACCTGTGTCCTGCCCATGTCCTCCTTGGTGGACGTTTCTGTT
TACTCAGAGCTGCTAGAGACCATCCTGCCCATCCGAGTTCTGAGATTGGGACTGTGATGTTGGGACCTGAGGACT
GGATGGTAGAATACTGGGGTCCCCCAGCTCTTAGCAGGATGCAGGCTATTGCTTCCACACCCCTGGCCGTGAGAA
CGTGGTATGTAGGAGAGTTGGCTGTAGCTTTAGGATTTCTGGAAGCCAATTTGGCATGGCCTATTTGATCTCTGG
CTTGTGCTCCTGCTACACTGACAGACTGATTGCGTGGCTCTTTCAGAAGACCCAGGAAGGGCAGCTCCAGCCAGA
GGACCTTCCTGGCTATGCAGGTGCACAGCTCTTAGGCATCAAGCAAAGGGTCAGCCAGTCAGTAGTAGTGGGAGG
AAGCCCTTCCTCCTCTTATGCAAGCAGCTCGCAGCCAGCCCAGAATCTCTTATGCAGCCCAAAGGGCTTCTTGAG
GTAGAGAGCCCTCCCCAGTGTCTTCCCAGGATAAGTAGAAATATGATCACAGAGCAACGGAGCAAAGGCTTTCGG
GAGTGTGAGGCTGCATCTGCTGGAGCAAAGGGAAACCGTGGGCTTTTCCGGCCAGATACTCTTGAGCTCTGTGAC
CCTGCTCCTGTCACCCCAATTTCTCCAAGCCAGAGGTAGCTTTCTCAGAGCCCCTTGGTGGTTCTGTCCTCCAAA
TGCTGCTGTTGGGAGCGGGCTTCCAGCTCTCAGTGGGCAGTGCACCTCCTCCTAAATGCAGGCACTTGCTAGGAA
GAGTGTGAGCTGGCGTCTTCTGTTCACCCTGCCTAGCAGTTGTCACCATTCACAAGTGGCATTATTTATGTTGTG
CTGCTGTCCAGCTGCTAAGATCCCTTCATCTGCACAAGCCCTGGCTAGATATGTGTGA**ATG**TGTGGCATCATTTC
ACTTCAGCCGCCCAATTCCATCTCTCCTCTGCAGCCAGATTCACTGGCTGATGCTCACTGCTCACTGTCTATCCC
CACGAAATTTAGTTTTATCAGTAGTCTTAAAGTGTTGATCTCAAACAAGTACATTAGAAAAATCATGTTTCTTCT
CTCTCATCTTACTTTTTCTTCTCAGATTTCTCCCTTCCTAGAACATTCTCTCTGTTTAGCACTAATGTTCACCTC
GTATTTTTTGGAAGTGCAAAAATCTCAATTTGTGTCTGTTTACAGCTCTCTCTCCTCACTGCTCACAGCAAGGGG
TTCTGTATCAGTGGATTTCATTTTG**TAG**CTGCTGAGATGTTAAGGCAAGCCTCAGCATCTGCCCCTGCTGGGTGC
ACAATGCTGCTTCCTCGAAGAGAAGACACAGAGTCCAAGTGGCAGGACTTGAGGTTGGCTTCCACTCTGCCTTAG
AAGTTAATTTTCCAAAGTACATTACAAATCTCTGAGGCCATTAGGGGAAAAGGAAGGGGTGTGGTTTGTCTTTGA
AATTACGGTTAATACTTTTAGACAGTAAGTCCGGCTGGTTGCAGGGCTATTTGCCCCGACAGCATCAGCCTGTAA
CATTTCTTCTCTTTCCTTTGTGCCACTGAGTCGTTCCCTGGCCAGAGGACATAAATGGTGCTGGTAGGAGGTTAT
CAGAGTAAGGAAGGTAGCAGATATAGGTGCAGGGTGCCTGTCATTCACTGTGTTATTTGGTTTAAATCAAAGTGA
TTCTGGGGGAAGCTATGCTCTTTCAGTGGATAATAAAATTGGTAACTCTATTGTAAAACATGTCAATGGTGTGTG
AAGAAAAATCAACCAATCTGTAGGTGTTGATAACTAGACAGTACTGTGTATGTTACGTGCCTGTGTGGATGTGCA
CTTCCAGCATGGTATGTGTAGCGATGTGGATCATGCCAGAGTTCGTAGATCCTGTTTTGGGGTTTGCACATGGAT
CGTATGTTAAGCTTTTTCTTTTCAATAAATGAATTTTATTTTTATTTTTG

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FIGURE 4113

CTCAGCTTCTTTGCGTAACCAATACTGGAAGGCATTTAAAGGCACCTCTGCCGCCACAGACCTTGCAGTTAACTC
CGCCCTGACCCACCCTTCCCGATGCAGTCCCTGATGCAGGCTCCCCTCCTGATCGCCCTGGGCTTGCTTCTCGCG
GCCCCTGCGCAAGCCCACCTGAAAAAGCCATCCCAGCTCAGTAGCTTTTCCTGGGATAACTGTGATGAAGGGAAG
GACCCTGCGGTGATCAGAAGCCTGACTCTGGAGCCTGACCCCATCGTCGTTCCTGGAAATGTGACCCTCAGTGTC
GTGGGCAGCACCAGTGTCCCCCTGAGTTCTCCTCTGAAGGTGGATTTAGTTTTGGAGAAGGAGGTGGCTGGCCTC
TGGATCAAGATCCCATGCACAGACTACATTGGCAGCTGTACCTTTGAACACTTCTGTGATGTGCTTGACATGTTA
ATTCCTACTGGGGAGCCCTGCCCAGAGCCCCTGCGTACCTATGGGCTTCCTTGCCACTGTCCCTTCAAAGAAGGA
ACCTACTCACTGCCCAAGAGCGAATTCGTTGTGCCTGACCTGGAGCTGCCCAGTTGGCTCACCACCGGGAACTAC
CGCATAGAGAGCGTCCTGAGCAGCAGTGGGAAGCGTCTGGGCTGCATCAAGATCGCTGCCTCTCTAAAGGGCATA
TAACATGGCATCTGCCACAGCAGAATGGAGCGGTGTGAGGAAGGTCCCTTTTCCTCTGTTTTGTGTTTGCCAAGG
CCAAACTCCCACTCTCTGCCCCCCTTTAATCCCCTTTCTACAGTGAGTCCACTACCCTCACTGAAAATCATTTTG
TACCACTTACATTTTAGGCTGGGGCAAGCAGCCCTGACCTAAGGGAGAATGAGTTGGACAGTTCTTGATAGCCCA
GGGCGTCTGCTGGGCTGACCACGTTACTCATCCCCGTTAACATTCTCTCTAAAGAGCCTCGTTCATTTCCAAAGC
AGTTAAGGAATGGGAACCAGAGTGTTTTAGGACCTGAAGAATCTTTATGACTCTCTCTCTTTCACTCTTTTTTTT
TTTGTCACTAAGTTAAAAGCGAAGTGAGAGTATTAACGTTTTTGTTCTCCTCCGGCCCCCTGTTACAATGAAGGG
GCAAAAGTATTTGCTCTTAGTCTATTCCTCCCTTAACTTCTGTGACTAATTTTTATTTCCTTTCTAGATTTGCCC
AATTAATACTAGGGTGCAGTGTATCCTGGAGAGGTAGGGTGTGTGGGGGAGGAATCCCTTGGGGGAGATATTAGG
AGTGCTCTGTTGTTTACAAACTCAGGTACCCGCAGGGCCTAGCAAGAGACTTAAATGACTGATAAGAACCGTGAG
AAACATGTTGCTTCCAGGCTTGATTTCGATTTTTCGCTTTTTTTTTTTTTTTGAGACAGAATCTCACTTTGTCACC
AGGCTGGAGTGCAGTGGTGCAATCTCACCTCACTGCAACCTCCGCCTCCTGGGTTCAAGCAATTCTCCTGCCTCA
GCCTCCCAAGTAGCTTGGACTACAGGCCCTGCCACCACGCCCGGCTAATTTGTGTATTTTTAGTAGAGATGGGGT
TTCACCATGTTGGCCAGGATGGTCTCGATCTCTTGACCTCGTGATCCGTCCACCTTGGCCTTGCAAAGCGCTGGA
TTACAGGCATGAGCCACTACACCCAGCCGATTTTTCCTTTTTGATTAAAGATGCTATTACAATGTAAATATTTCT
TACACAGAAAGTCACAGCACATGTGCCCATTGATACAAGGCTGCTGAGGCCTGGTCTCCAGTTGGAAATATAATT
AAGGGTGGCAAGGACTGGAGTCAGTTGGAGAGTGCATAGCCAGTCTGTGAAGACAACTGCCAGATACTGGCAATA
CTCCAGCCTGGTGACAGAGTGAGACTCTGTCTCAAAAAAAAAAAGTTTCAATGTTTACTCCTAGAGAAGCCAAAAA
TCCCAGATTTGTATATGAAATCTTACCATTTTAAAAGATTGGCAGCTAATTATTTTTTTAAAAAGCTGTGCAGTG
TGATGTGTCCCAAACGGACTGGCTCATGGGTGGCCACGTCACAACCTCTGATCTCAGACCGTGCATGCCTTGTCC
TCTTAAGACAACTCCTGTGGCACCATTTCTCCCTCCACAGGGCCAAAGCCATAGTGTCCGGTCCCAAGGACAAGG
CTCTTCCAGTGCTAGGAGAGGTATGAGCAGCCTCTCACCTGTGAGCTGTGGGGATCACAAGGCTGCCTGCCTCAG
TCTTGGAGTCCTGTTGGGTGAATGAGGCAGATGGGAAAGAGCCTCACCAGCAGCTGCTTTTGGAGCAGGGGTCCA
AGGAAGAGAGGGTGGCCTCGACATCAAACTGCCTGGATTTTTCTACCACCCTGTTACATCATAACAACTTCTGAA
ACACACACCAGCCCTGAGTTCTGGGCTCATTTGAAGCCTGGAATAGCAATAAATCTTTTTAACTTGC

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FIGURE 4114

TTAGGTCCCCTCAATGGGGACACAGCTATAACTGTCCAGCTCTGTGCATCAGAGGAGGCTGAGCGGCACCAGAAG
GATATAACCAGAATTCTCCAGCAACATGAGGAGGAAAAGAAGAAATGGGCACAACAGGTGGAGAAGGAAAGGGAG
CTAGAGCTTCGAGACAGACTGGATGAGCAGCAAAGGGTCCTGGAAGGAAAGAATGAAGAGGCCCTGCAAGTCCTC
CGGGCCTCATATGAACAGGAGAAAGAAGCGCTTACCCACTCTTTCCGGGAGGCCAGTTCTACCCAGCAGGAGACC
ATAGACAGACTGACCTCACAGCTGGAGGCTTTCCAGGCCAAAATGAAGAGGGTGGAGGAGTCCATTCTGAGCCGA
AACTATAAGAAACATATCCAGGATTATGGGAGCCCCAGCCAGTTCTGGGAGCAGGAGCTGGAGAGCTTACACTTT
GTCATCGAGATGAAGAATGAGCGTATTCATGAGCTGGACAGGCGGCTGATCCTCATGGAAACAGTGAAAGAGAAA
AATCTGATATTGGAGGAAAAAATTACGACCCTGCAACAGGAAA**ATG**AGGACCTCCATGTCCGAAGCCGCAACCAG
GTGGTCCTGTCAAGGCAGCTGTCAGAAGACCTGCTTCTCACGCGTGAGGCCCTGGAGAAGGAGGTGCAGCTGCGG
CGACAGCTCCAGCAGGAGAAGGAGGAGCTGTTGTACCGGGTCCTTGGGGCCAATGCCTCGCCTGCCTTCCCTCTG
GCCCCTGTCACTCCCACTGAGGTCTCTTTCCTCGCCACATAGGGTGCAGGGCCTGGGCCCACCACGACGCCTGAA
GTCACAGCTCCTTCCAAGGTTTTTCTGGAGAAGACAGCAGGAGCCTCTCAGTTCTTTTCCAGGAAGGAACGAGGG
TGGGAGCGAGATGGAGATCCTGGGTGTGTGCCCAGTGAGCCCTGGGGCCTTGAGTTACATGGAATCACCCACAGG
GTTTTGGAGGCCCCGAGAAGCGTCTTCCCTTGAGTTGGCCAAGGGAATAAGCAAGAGGAGACATTTCCTCCCTGC
CCCAGCACTCTGTCCCAATCCGAGAAGTTCCGAGGCTTTCCCAGGGGCAGTCTGTGTCACGCTGGCCATT**TGA**CA
TAAAGGAGACAGCCCCTGGTCCCAGCTTGTCAGCTCTGCTGCCGACTTGCTGACTTATCAACTTCCTCTAGGTGT
TTCCACTCCACCCTGGCCTGCTCAGAGCCTCAGTTTACCCCTGCATTAAAATGGTGGGGGGACTGGTCAAAGGAC
TCTTATGTCACTGCAGTGTCCCATTCTAGGATTGTCTGAAGGCCAGAGTAGGGGTTGGGGGGAGTGTGGACAAAC
CCCGCAAATCAGAGTGGGGAAGGTGAGTGGTAGAGAGGGGGTCTCTGAAGGCCCTTGGGGCTGACAGGGCCAGGC
AGCCTCCCCAGCTGAGGCATCATTCCTGGGCCAGAGTCGTGTCCACCAAGGGACAGTAGCCAGAGCTCCTCTTCC
TTTACCAGGCAAGGTGCATCCCCTCAGCCCTCCTGGCCCTTCAGTCTTGGTGCCACCTGGGCACAGGGGCAAGCT
TGGTGGTTGTGAGTCCATTCATCTATCAGAGCTGGAACCTCATCCCTGCACAGATGAGGAAACCAAGGCATGGAG
CAGTTCCCAGAGTCGAATCTAGATCTCATCTGTCATCCGGGTCTTATCCTTTGCTCTGTTTTTCTCTTCAGGCTC
TGGAAAATCAGATCTGTGACTTAATCTTCCTCTCCCTGGCCCTCACCCACTTAGTTTCTTTTTCATTCCTGCTCC
CTGCCTTAACTCCTCCTCCCACTGCCCCTGATCCCAGGCCCAGGCTTTTACAACCTGGTGCTCAGCTTCCCCATC
AGTGAAAAGGGGTGGCTAGAGTAACTAACCTCAGCAGGCCGTCCAGTCCTGATAGTCTGTGGATTTCGGATCCTT
CTCAGGAAGCTTCATGTCTAATGGAGACTATAATTATAACTCCTGTTCTGCATAGAGCATTTGCATCAAAGGCTT
TCCATACCCCTCCCTCCCCTGGTCCTCATAAGATCCTTGAAGCAGGTTCCTATTCCTCATTGGCAACATGGCAAA
CAGATCACAGGAGTCAAAGGGCCTTGCTCAAGGTCCCCAGCTTCAGCCCCAGGCCCTAAGCCAGCGTCAGAACAG
TCAATCTGCATTTTTCATCAGTCATTCTATAGTGACATCATCCCAGACTGCCTTCTGTATTCCCCTGTGTACAGT
CTCCTTCTGTTTCTAGGTTTAGAAGTTCAGAGGTGACTGTGTTTCTCCATTTCCACAGCCAAATGGGGGAAGAGG
TGAGGCTAGGGGAGTGCTGTGCTGATTCTCCAGCCATGGTCAGACAGGTCACCCAGGAGCCTCGAGGAAAGCCCT
GGAGGGAATCACATGTGTACTTTTTCATGAAGCTTTTTGCAAAGCACATCTGCGATACACTAGTTTATTGAACTA
ATGTCCAGGAGTAGACGTGATTGGTGGCCAAGTTATTTGGGGACACCTAAACAGATCAGTGACCTGAATGACTTC
TCAGAACCTTTAATATGCCAATGTGTGTGGCAAACTTACAAGAAGGGAGCTAAGTATCCAGCCTCTCCCAAACCT
CTTTGAACAAAGCTTCTGTCCCTCCCACACCTCTCACCTCACAGGCACATCAGGCTGCAGAATGCGCTTTAGAAA
GCATTGTTTTAGTCCAGGCACAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGTGGATCAC
AAGGTTGGGAGATTGAGACCATCCTGGCTAACACAGTGAAACCCTGTCTCTACTAAAAAAATACAAAAAATTAGC
TTGGCGTGGTGGTGGGCGCCTGTAGTCCCAGCAGCTTGGGAGGCTGAGGCTGGAGAATGGTGTGAACCCAGGAGG
CGGAGCTTGCAGTGAGCCAAGATCGCGCCACTGCACTCCAGCCCGGGTGACAGAGCAAGACTCCGTCTC

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FIGURE 4115

GCCACGTGTCCGGCTCGGAGCCCACGGCTGTCCTCCCGGTCCGCCCCGCGCTGCGGTTGCTGCTGGGCTAACGGG
CTCCGATCCAGCGAGCGCTGCGTCCTCGAGTCCCTGCGCCCGTGCGTCCGTCTGCGACCCGAGGCCTCCGCTGCG
CGTGGATTCTGCTGCGAACCGGAGACCATGGCCAAACCAGCACAGGGTGCCAAGTACCGGGGCTCCATCCATGAC
TTCCCAGGCTTTGACCCCAACCAGGATGCCGAGGCTCTGTACACTGCCATGAAGGGCTTTGGCAGTGACAAGGAG
GCCATACTGGACATAATCACCTCACGGAGCAACAGGCAGAGGCAGGAGGTCTGCCAGAGCTACAAGTCCCTCTAC
GGCAAGGACCTCATTGCTGATTTAAAGTATGAATTGACGGGCAAGTTTGAACGGTTGATTGTGGGCCTGATGAGG
CCACCTGCCTATTGTGATGCCAAAGAAATTAAAGATGCCATCTCGGGCATTGGCACTGATGAGAAGTGCCTCATT
GAGATCTTGGCTTCCCGGACCAATGAGCAGATGCACCAGCTGGTGGCAGCATACAAAGATGCCTACGAGCGGGAC
CTGGAGGCTGACATCATCGGCGACACCTCTGGCCACTTCCAGAAGATGCTTGTGGTCCTGCTCCAGGGAACCAGG
GAGGAGGATGACGTAGTGAGCGAGGACCTGGTACAACAGGATGTCCAGGACCTATACGAGGCAGGGGAACTGAAA
TGGGGAACAGATGAAGCCCAGTTCATTTACATCTTGGGAAATCGCAGCAAGCAGCATCTTCGGTTGGTGTTCGAT
GAGTATCTGAAGACCACAGGGAAGCCGATTGAAGCCAGCATCCGAGGGGAGCTGTCTGGGGACTTTGAGAAGCTA
ATGCTGGCCGTAGTGAAGTGTATCCGGAGCACCCCGGAATATTTTGCTGAAAGGCTCTTCAAGGCTATGAAGGGC
CTGGGGACTCGGGACAACACCCTGATCCGCATCATGGTCTCCCGTAGTGAGTTGGACATGCTCGACATTCGGGAG
ATCTTCCGGACCAAGTATGAGAAGTCCCTCTACAGCATGATCAAGAATGACACCTCTGGCGAGTACAAGAAGACT
CTGCTGAAGCTGTCTGGGGGAGATGATGATGCTGCTGGCCAGTTCTTCCCGGAGGCAGCGCAGGTGGCCTATCAG
ATGTGGGAACTTAGTGCAGTGGCCCGAGTAGAGCTGAAGGGAACTGTGCGCCCAGCCAATGACTTCAACCCTGAC
GCAGATGCCAAAGCGCTGCGGAAAGCCATGAAGGGACTCGGGACTGACGAAGACACAATCATCGATATCATCACG
CACCGCAGCAATGTCCAGCGGCAGCAGATCCGGCAGACCTTCAAGTCTCACTTTGGCCGGGACTTAATGACTGAC
CTGAAGTCTGAGATCTCTGGAGACCTGGCAAGGCTGATTCTGGGGCTCATGATGCCACCGGCCCATTACGATGCC
AAGCAGTTGAAGAAGGCCATGGAGGGAGCCGGCACAGATGAAAAGGCTCTTATTGAAATCCTGGCCACTCGGACC
AATGCTGAAATCCGGGCCATCAATGAGGCCTATAAGGAGGACTATCACAAGTCCCTGGAGGATGCTCTGAGCTCA
GACACATCTGGCCACTTCAGGAGGATCCTCATTTCTCTGGCCACGGGGCATCGTGAGGAGGGAGGAGAAAACCTG
GACCAGGCACGGGAAGATGCCCAGGTGGCTGCTGAGATCTTGGAAATAGCAGACACACCTAGTGGAGACAAAACT
TCCTTGGAGACACGTTTCATGACGATCCTGTGTACCCGGAGCTATCCGCACCTCCGGAGAGTCTTCCAGGAGTTC
ATCAAGATGACCAACTATGACGTGGAGCACACCATCAAGAAGGAGATGTCTGGGGATGTCAGGGATGCATTTGTG
GCCATTGTTCAAAGTGTCAAGAACAAGCCTCTCTTCTTTGCCGACAAACTTTACAAATCCATGAAGGGTGCTGGC
ACAGATGAGAAGACTCTGACCAGGATCATGGTATCCCGCAGTGAGATTGACCTGCTCAACATCCGGAGGGAATTC
ATTGAGAAATATGACAAGTCTCTCCACCAAGCCATTGAGGGTGACACCTCCGGAGACTTCCTGAAGGCCTTGCTG
GCTCTCTGTGGTGGTGAGGACTAGGGCCACAGCTTTGGCGGGCACTTCTGCCAAGAAATGGTTATCAGCACCAGC
CGCCATGGCCAAGCCTGATTGTTCCAGCTCCAGAGACTAAGGAAGGGGCAGGGGTGGGGGGAGGGGTTGGGTTGG
GCTCTTATCTTCAGTGGAGCTTAGGAAACGCTCCCACTCCCACGGGCCATCGAGGGCCCAGCACGGCTGAGCGGC
TGAAAAACCGTAGCCATAGATCCTGTCCACCTCCACTCCCCTCTGACCCTCAGGCTTTCCCAGCTTCCTCCCCTT
GCTACAGCCTCTGCCCTGGTTTGGGCTATGTCAGATCCAAAAACATCCTGAACCTCTGTCTGT

FIGURE 4116

AGTGAGCCGAGGAGCCTTCATAGGGACAGCCGCCCCTGGTGCACACACCCTCGTATTCTCCTGCCCTTCCCCAGC
CAGGCGGGCACCACGGCAGGGGCTGAGCTACCCTCATGGAAGGGAGAGGACCGTACCGGATCTACGACCCTGGGG
GCAGCGTGCCCTCAGGAGAGGCATCCGCAGCTTTTGAGCGCCTAGTGAAGGAGAATTCCCGGCTGAAGGAAAAAA
TGCAAGGGATAAAGATGTTAGGGGAGCTTTTGGAAGAGTCCCAGATGGAAGCGACCAGGCTCCGGCAGAAGGCAG
AGGAGCTAGTGAAGGACAACGAGCTGCTCCCACCACCTTCTCCCTCCTTGGGCTCCTTCGACCCCCTGGCTGAGC
TCACAGGAAAGGACTCAAATGTCACAGCATCTCCCACAGCCCCTGCATGCCCCAGTGACAAGCCAGCACCAGTCC
AGAAGCCTCCATCCAGTGGCACCTCCTCTGAATTTGAAGTGGTCACTCCTGAGGAGCAGAATTCACCAGAGAGCA
GCAGCCATGCCAATGCGATGGCGCTGGGCCCCCTGCCCCGTGAGGACGGCAACCTGATGCTGCACCTGCAGCGCC
TGGAGACCACGCTGAGTGTGTGTGCCGAGGAGCCGGACCACGGCCAGCTCTTCACCCACCTGGGCCGCATGGCCC
TGGAGTTCAACCGACTGGCATCCAAGGTGCACAAGAATGAGCAGCGCACCTCCATTCTGCAGACCCTGTGTGAGC
AGCTTCGGAAGGAGAACGAGGCTCTGAAGGCCAAGTTGGATAAGGGCCTGGAACAGCGGGATCAGGCTGCCGAGA
GGCTGCGGGAGGAAAATTTGGAGCTCAAGAAGTTGTTGATGAGCAATGGCAACAAAGAGGGTGCGTCTGGGCGGC
CAGGCTCACCGAAGATGGAAGGGACAGGCAAGAAGGCAGTGGCTGGACAGCAGCAGGCTAGTGTGACGGCAGGTA
AGGTCCCAGAGGTGGTGGCCTTGGGCGCAGCCGAGAAGAAGGTGAAGATGCTGGAGCAGCAGCGCAGTGAGCTGC
TGGAAGTGAACAAGCAGTGGGACCAGCATTTCCGGTCCATGAAGCAGCAGTATGAGCAGAAGATCACTGAGCTGC
GTCAGAAGCTGGCTGATTTGCAGAAGCAGGTGACTGACCTGGAGGCCGAGCGGGAGCAGAAGCAGCGTGACTTTG
ACCGCAAGCTCCTCCTGGCCAAGTCCAAGATTGAAATGGAGGAGACCGACAAGGAGCAGCTGACAGCAGAGGCCA
AGGAGCTGCGCCAAAAGGTCAAGTACCTGCAGGATCAGCTGAGCCCACTCACCCGACAGCGTGAGTACCAGGAAA
AGGAGATCCAGCGGCTCAACAAGGCCCTGGAGGAAGCACTGAGCATCCAAACCCCGCCATCATCTCCACCAACAG
CATTTGGGAGCCCAGAAGGAGCAGGGGCCCTCCTAAGGAAACAGGAGCTGGTCACGCAGAATGAGTTGCTGAAAC
AGCAGGTGAAGATCTTCGAGGAGGACTTCCAGAGGGAGCGCAGTGATCGTGAGCGCATGAATGAGGAGAAGGAAG
AGCTGAAGAAGCAAGTGGAGAAGCTGCAGGCCCAGGTCACCCTGTCAAATGCCCAGCTAAAAGCATTCAAAGATG
AGGAGAAGGCAAGAGAAGCCCTCAGACAGCAGAAGAGGAAAGCAAAGGCCTCAGGAGAGCGTTACCATGTGGAGC
CCCACCCAGAACATCTCTGCGGGGCCTACCCCTACGCCTACCCGCCCATGCCAGCCATGGTGCCACACCATGGCT
TCGAGGACTGGTCCCAGATCCGCTACCCCCCTCCCCCCATGGCCATGGAGCACCCGCCCCCACTCCCCAACTCGC
GCCTCTTCCATCTGCCGGAATACACCTGGCGTCTACCCTGTGGAGGGGTTCGAAATCCAAATCAGAGCTCCCAAG
TGATGGACCCTCCCACAGCCAGGCCTACAGAACCAGAGTCTCCAAAAAATGACCGTGAGGGGCCTCAGTGAGACC
AGATTGTGTCATTTGGCTCCACCTTCATCTTGCAGAGCCAGCTGATCTCAGATTGCCAAGAAACTAGAAGCCACT
TGCACGGTGTGGCCAGAGCCTCAGCTGGATGAGAGGCTGAGATGGGTGGCCAGCTTGTACACCAGTCCCTGAACT
GAGCTGTTTACAGGACTGGGGAGGCTCCACCCAGAAGGCTTTCATTTGTACTCTGCTGGGAGTGACTGGGAAAAA
CTCCTTCCCTGCTGCTGAGTGGAGAGAGGCCTCATCCGGCTTTGACCCACCATCCGTTGCAGAAGCCTCCAGGAG
CAGCAATCCTAAGAGTGGGAGGCAGCCAAGACCCCCTTCCTTCAAAACCTCCCGGAAGTGGTTTCAGGCCCTCTA
GTTGCCATGACCAATTTGTGTGTGTGTTTAATTTTTGCTTCAAGCTCTGTAGCAGGACCTGCCCCACGCACACCC
CTACCCCTCTGTGAGGAGCTGTGGGAAGTGTGGGTTTGTCTCCAGAACAGAAGAGAATGATGGATATTCTGGCTC
TGGGGCCCTCTCCACCACCACTCACAGTAGCCTTGCTGAAGCCATCACAGATGGGAGAAGGCCATGCCAGCCACG
TCCGCCGAGGGGCGCCAGCCTGAAGCTGCCAGGCCCTGAGGTTCAGACCCTGGACCCCATAGCTGGAGGCCTGTG
GTGCCAGAAGCCCAGATTAGGGTGGCTGTCCATCCCTGGATAGCTATTTGCACGAATCATGGACATAAATCCAAG
TTGAAGAAG

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FIGURE 4117

AGCCAAAAGAGGAAGGGACCGCCTCCCACGTCCACAGGGACCTGACTTCCACCTCTCTGCCCAGATTTGCTTATG
TCACTGTCGCCCCGGGACGGGGAGGTGGGGAGCTGAGGGCAAGTCGCGCCCGCCCCTGAAATCCCAGCCGCCTAG
CGATTGGCTGCAAGGGTCTCGGCTTGGCCGCGGATTGGTCACACCCGAGGGCTTGAAAGGTGGCTGGGAGCGCCG
GACACCTCAGACGGACGGTGGCCAGGGATCAGGCAGCGGCTCAGGCGACCCTGAGTGTGCCCCCACCCCGCC**ATG**

GCCCGGCTGCTGCAGGCGTCCTGCCTGCTTTCCCTGCTCCTGGCCGGCTTCGTCTCGCAGAGCCGGGGACAAGAG
AAGTCGAAGATGGACTGCCATGGTGGCATAAGTGGCACCATTTACGAGTACGGAGCCCTCACCATTGATGGGGAG
GAGTACATCCCCTTCAAGCAGTATGCTGGCAAATACGTCCTCTTTGTCAACGTGGCCAGCTACTGAGGCCTGACG
GGCCAGTACATTGAACTGAATGCACTACAGGAAGAGCTTGCACCATTCGGTCTGGTCATTCTGGGCTTTCCCTGC
AACCAATTTGGAAAACAGGAACCAGGAGAGAACTCAGAGATCCTTCCTACCCTCAAGTATGTCCGACCAGGTGGA
GGCTTTGTCCCTAATTTCCAGCTCTTTGAGAAAGGGGATGTCAATGGAGAGAAAGAGCAGAAATTCTACACTTTC
CTAAAGAACTCCTGTCCTCCCACCTCGGAGCTCCTGGGTACATCTGACCGCCTCTTCTGGGAACCCATGAAGGTT
CACGACATCCGCTGGAACTTTGAGAAGTTCCTGGTGGGGCCAGATGGTATACCCATCATGCGCTGGCACCACCGG
ACCACGGTCAGCAACGTCAAGATGGACATCCTGTCCTACATGAGGCGGCAGGCAGCCCTGGGGGTCAAGAGGAAG
TAACTGAAGGCCGTCTCATCCCATGTCCACCATGTAGGGGAGGGACTTTGTTCAGGAAGAAATCCGTGTCTCCAA
CCACACTATCTACCCATCACAGACCCCTTTCCTATCACTCAAGGCCCCAGCCTGGCACAAATGGATGCATACAGT
TCTGTGTACTGCCAGGCATGTGGGTGTGGGTGCATGTGGGTGTTTACACACATGCCTACAGGTATGCGTGATTGT
GTGTGTGTGCATGGGTGTACAGCCACGTGTCTACCTATGTGTCTTTCTGGGAATGTGTACCATCTGTGTGCCTGC
AGCTGTGTAGTGCTGGACAGTGACAACCCTTTCTCTCCAGTTCTCCACTCCAATGATAATAGTTCACTTACACCT
AAACCCAAAGGAAAAACCAGCTCTAGGTCCAATTGTTCTGCTCTAACTGATACCTCAACCTTGGGGCCAGCATCT
CCCACTGCCTCCAAATATTAGTAACTATGACTGACGTCCCCAGAAGTTTCTGGGTCTACCACACTCCCCAACCCC
CCACTCCTACTTCCTGAAGGGCCCTCCCAAGGCTACATCCCCACCCCACAGTTCTCCCTGAGAGAGATCAACCTC
CCTGAGATCAACCAAGGCAGATGTGACAGCAAGGGCCACGGACCCCATGGCAGGGGTGGCGTCTTCATGAGGGAG
GGGCCCAAAGCCCTTGTGGGCGGACCTCCCCTGAGCCTGTCTGAGGGGCCAGCCCTTAGTGCATTCAGGCTAAGG
CCCCTGGGCAGGGATGCCACCCCTGCTCCTTCGGAGGACGTGCCCTCACCCCTCACTGGTCCACTGGCTTGAGAC
TCACCCCGTCTGCCCAGTAAAAGCCTTTCTGCAGC

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FIGURE 4118

AACCAATCCTCACAACAGGACTGGGAGACAGGTGTTACCTTTCCCACTTTACAGAGAATGAAACAGAGTGGCAAA
GCCTCCGAAGGACCCTACACTTCGGACATCGCAAAGCAGGATCTGAGTCCCGGCTCCTCTGTCCAAACCTACTTG
CTAGGCTTTCTTTCCCATGTCTACTCTATAGCTGGAAAGGTCGTGGAGGACACATTTTAGGCCAACCCTCTCGGT
TTACAATCCAGAGAGGGGAGACCCTCAGAAGCCAAGCGAC**ATG**TCCACGGCTACGCGGCGAGTGTGTGGCAACGT
GGAAGGGGAGCCCGAGACGCCCTGGTCTCTCCCTTCTCTCGCAGGTTCCTTTCTCCCCGAACGCAGCCCGCAGGG
GACGCTGGAGGAGGAGCTGAGCTGGAGTTGCCGGGGCCCCGGGACCGGGCGTTCCGGGGGCGGTCCCCAGCAGCC
GCGCATTCCAGAGCCAGCAGCGCGTCCTGGCCGCTCCTGCGCTCTCCCGCCTCCCGGGGCTCGGAGGAGCCGGGG
CACGTTCCAGGAGCTGCCTAGGGCTGAGGTTCCAGGCCTGGGGGTCGCTTCCAGCTGCCAGATCCCGTGCAGTCC
TGGGGACCCTGAGAAGCACCGAGCCATCCCTGACCCAGGAACTTTCCGCAGACTCGCCGCCATCTGGGAG**TGA**AG
CAACATGGATGCAGTCAGCCAAGTCCCCATGGAAGTCGTGCTTCCCAAGCACATCCTGGATATCTGGGTTATTGT
CCTCATCATCCTGGCCACCATTGTCATCATGACCTCGTTGTTGCTGTGCCCAGCCACTGCAGTAATCATCTATCG
CATGCGGACTCATCCGATCCTTAGTGGGGCTGTTTGAGAGCCTCCCAAGAGGGCCGGGTGAGGGATGAGGACAGG
CATCCTATCCCCAGCCTCTTCCTGTCTTCAGAAAAGCAGCAGGAGGGACTTTGGGGCATGGACCTGAGTTCTGGT
TTTGATTCTGCCACGAGCCAGCTGTGTGAATTTGGTCAAGGGACCTAACTCTCTGAGTTCCAGGTTCCTTATCTT
TCAAATGGGGATGGTGATCCCTGCCCTTTCTACCTCATAGGGATGTGAGAACCACCTGACTTAGTGGATGTGAAA
GCTGTTTGTGATCAGTAAAGCTACCACAGATATAAGGGTGTTATGCTGAATCCTGAGAAGCTTTCAAGAACCAGA
GAACCTGATTGCTGATGATGGCCTTAAAGGTGGTGAGGGAGATACTGGGGGCAGAGCAGACTTTGCCAGTGCCCC
TCAGGTCAAACCAAGCCAAGAGCACCCTGTCCCCATTCCAAGGGGCCAGCAGCACTTTGGCCCAAAGTATTTTCT
TTAAGGTGCCATTCCTTCATGTTTTCTCAGTTTGGAGGGTGATGGGTAGAGCTTTCCAGAACCTTCTCCATTCCA
GAATCTCTGCCCCTGTGTAATCTGAAGGAAGGCTGTGCCATCTTTGGGCACTGCCAAGGGAGTTGGGGTGATGGG
CTTCTTTCTGCACTGGAGTCTCACATCTGTTAGCTTTGACACTCAAGCAATGTTGGAAAATGCAGGGTGACTGAG
TTCCCTGCCCAGCTTTCGGGATCTCTGGCCCCCATCCCCTTGTGTGTGTCCCTCTGCCCAGCTCCTGCTGTAATT
AGCTCCACGTGTACCCCCTTCACTCCCTCCCACCAGCTCTGCAGCCAGCCTATGGCAATTATATTTTAAGAGGTG
TTCCCAGGACTTTTGGGACCTACTAAAACAATGATGGTTATTTTAGATGTGATGATTTATATTTATGTAGAGATA
TTTCTGGACCACTCAAGCTCTTCGATACCAAAATCAGGAGCATCTTGGGATTTATTAAATTATGTAAGAAGATAG
CACAGATATCGGGATATTATTGTGTGAAAATGCTGCTTTTACTTTGATGTGATCTCATTGATGTACACAACCAAG
TTCCAATAAAGTGCTAGAATGTG

FIGURE 4119

CTCCTCCCTCCCCAAGATGGCGTCCTTGCTGCAGTCGGACCGGGTTCTCTATCTAGTCCAGGGAGAAAAGAAGGT
TCGGGCCCCGCTCTCGCAACTCTACTTCTGCCGCTATTGTAGCGAACTGCGGTCGCTGGAATGTGTGTCTCACGA
GGTGGACTCCCATTATTGTCCCAGTTGTTTAGAAAATATGCCATCGGCTGAAGCCAAACTAAAAAAGAATAGATG
TGCCAATTGTTTTGACTGTCCTGGCTGCATGCACACCCTCTCTACTCGGGCCACGAGCATCTCCACACAGCTTCC
AGATGACCCAGCCAAGACCACCATGAAGAAAGCCTATTACCTGGCATGTGGATTTTGTCGCTGGACGTCTAGAGA
TGTGGGCATGGCAGACAAATCTGTAGCTAGTGGCGGTTGGCAGGAACCTGAAAATCCTCACACACAACGGATGAA
CAAATTGATTGAATATTACCAGCAGCTTGCTCAGAAAGAGAAGGTTGAGCGAGATCGCAAGAAACTGGCACGACG
TAGAAACTATATGCCTCTGGCTTTTTCGGACAAATATGGTCTTGGAACCAGGCTTCAGCGACCACGAGCTGGTGC
ATCCATCAGTACCCTTGCCGGACTTTCCCTTAAAGAAGGAGAGGATCAGAAAGAGATAAAGATTGAGCCAGCTCA
GGCTGTGGATGAAGTGGAACCTCTACCTGAAGACTATTATACAAGACCAGTAAATTTAACAGAGGTAACAACCCT
TCAGCAGCGTCTGTTACAGCCTGACTTCCAGCCAGTCTGTGCTTCACAGCTCTATCCTCGCCACAAACATCTTCT
GATCAAACGGTCCCTGCGCTGCCGTAAATGTGAACATAATTTGAGCAAGCCAGAATTTAACCCAACGTCAATCAA
ATTCAAAATCCAGCTGGTCGCTGTCAATTATATTCCAGAAGTGAGAATCATGTCAATTCCCAACCTTCGCTACAT
GAAGGAGAGCCAGGTCCTCCTGACTCTTACAAATCCAGTTGAGAACCTCACCCATGTGACTCTCTTCGAGTGTGA
GGAGGGGGACCCTGATGATATCAACAGCACTGCTAAGGTGGTGGTGCCTCCCAAAGAGCTCGTTTTAGCTGGCAA
GGATGCAGCAGCAGAGTACGATGAGTTGGCAGAACCTCAAGACTTTCAGGACGATCCTGACATTATAGCCTTCAG
AAAGGCCAACAAAGTGGGTATTTTCATCAAAGTTACACCACAGCGTGAGGAGGGTGAAGTGACCGTGTGCTTCAA
GATGAAGCATGATTTTAAAAACCTGGCAGCCCCCATTCGCCCCATTGAAGAAAGTGACCAGGGAACAGAAGTCAT
CTGGCTCACCCAGCATGTGGAACTTAGCTTGGGCCCACTTCTTCCTTAAAAGGTTCCACTGGAGGGCAGATCCCA
AAGGACAGTATCACCGTAAACCTGCGTTAAAATGTGGAAGCTGCTGCTTCATTAGGCCTTGTTTATAACGATGTA
CCCATGCACTACGGAATTCTATTGCTAAGAAAGTGGGAGCATAGGCAAGGCATTGGGAACACAGGGTAGCTGCTG
TTGCTCTTGCTCTCACCCCTGTTGACACCAGTAAGTCTGTGTCTCCCTCACTGAACCCTGCACGTTGAGTAACAG
CAGCATAATTCCATCCTAGGAAAGGGGATGGGTGTTCCTTGGAATGGCATTGTATTTACCACCTGAGAAACTCTG
TACTGTCTCTTGATCTGATCTCACTAAGGATCACAATGTCACAGATGAAACTTAAATGATAACCCAAAGGTAGAC
CTGCTGTTAATGATCCAGCATTGGTCACAATGTACCAACTGCTTTCTGCATTCCGTTAAATATCATCTAACAGTC
TAAAACATATCCCTTCATTGCCATAATGGCTGCCATTTTGCCATAGATTTCCATATAACTGAAAAACTGAATTGT
CACTTTATCTTTAGTATCATGATGATTGGAAAAACCTGTGAAGTTGTTAAGGCACTCTCATTTGCCCTCTTTTTC
TAAGTGAATACAGGACACGTATTAGTTGTTCTTAATTTTTTTCCCAGTAAAATATGGATCTTTTAAGAAGAATTT
GAGAAGCAAACAATTACATGTCATGTCAAGGGGGTAGCAGATTCCATTCGTTTTCAATATTGCCACAATACCCAG
GGATTAATGCTGCCACAGGGGGGCAATCTTTATTTGTCTTACTTCCTACCCCTTCCCTGTTCTGCCTCTTTAACT
CAGTTAAGTTGTTCTGTTTGGGACCTGGAAAAGAACCCAAAGAAAACCTGAGTGGACAGGTTCATTTCTGGAATG
CAGAAAACATTTTAAAGGCTAGATTTTTAGAATATTCTCAACTAGCATTCTTTCCATTGATTTGAAGGGGAAATT
AACTATTATAATCTCTTGAATCCAAAACTGGATATTAAGAACTTTCCCCCTTACTAAGTTTAAGACTTTTGTCAT
GTGGTGAGTCAAATAAGACCATTTTGATTGTAAACCATAAAATAGTTCAGCAAGTAGCCCACAGTTCTGGCCTAA
CAGCAGACTTGCTGTTTTCACTTGGTATCCTGGAGTTGGGTTGCTAACCTTAATTTCTATGATGTTTTCTAAAAT
GAAACTTGATAAAGTAGACCACCAGCTGCACCGTGTTTTCTGTAAAAGTATTGTTAGTAAGTGGCCAAGAGACTT
GAGGAAAATACAGATTTTTTGTTT

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FIGURE 4120

AGCCTCGGGGCTTGACGGGATTGTGGCGGTCCTCTCTCCCAATTCGGAAGCTACAGCTACCTCCGGACGCTCTCA
AGATGGCGACCTCTCTGGGTTCCAACACCTACAACAGGCAGAACTGGGAGGATGCGGACTTCCCCATTCTGTGCC
AGACATGTCTTGGAGAAAACCCATATATCCGAATGACCAAAGAAAAGTATGGGAAGGAATGCAAAATCTGTGCCA
GGCCATTCACAGTGTTTCGCTGGTGCCCTGGAGTCCGCATGCGTTTCAAGAAGACTGAAGTGTGCCAAACCTGCA
GTAAATTGAAGAATGTCTGTCAGACCTGCCTCTTAGACCTAGAGTATGGCCTGCCCATCCAGGTTCGTGACGCAG
GATTGTCTTTTAAAGATGACATGCCAAAGTCAGATGTCAACAAAGAGTACTATACACAGAATATGGAGAGAGAGA
TTTCTAACTCTGATGGAACACGGCCAGTTGGCATGCTGGGGAAAGCCACATCTACCAGTGACATGCTGCTCAAAC
TGGCCCGGACCACACCCTACTACAAAAGGAATCGACCCCACATTTGCTCCTTCTGGGTGAAAGGAGAGTGTAAGA
GAGGAGAGGAATGTCCATACAGACATGAGAAGCCTACAGATCCAGATGACCCCCTTGCTGATCAGAATATTAAAG
ACCGTTATTACGGAATCAATGATCCTGTAGCTGACAAGCTTCTAAAGCGGGCTTCAACAATGCCTCGGCTGGACC
CACCAGAGGATAAAACTATCACCACACTATATGTTGGTGGTCTAGGTGATACCATTACTGAGACAGATTTAAGAA
ATCATTTCTACCAGTTCGGAGAGATCCGGACGATCACTGTTGTGCAGAGACAGCAGTGTGCTTTCATCCAGTTTG
CCACACGGCAGGCTGCAGAAGTGGCTGCTGAGAAGTCCTTTAATAAGTTGATTGTAAATGGCCGCAGACTGAATG
TGAAATGGGGAAGATCCCAGGCAGCCAGAGGAAAAGAAAAAGAGAAAGATGGAACTACAGACTCTGGGATCAAAC
TAGAACCTGTTCCAGGATTGCCAGGAGCTCTTCCTCCTCCTCCTGCAGCAGAAGAAGAAGCCTCTGCCAACTACT
TCAACTTGCCCCCAAGTGGTCCTCCAGCTGTGGTGAACATTGCTCTGCCACCGCCCCCTGGCATTGCTCCACCCC
CACCCCCAGGTTTTGGGCCACACATGTTCCACCCAATGGGACCACCCCCTCCTTTCATGCGGGCTCCAGGACCAA
TCCACTATCCTTCTCAGGACCCTCAGAGGATGGGAGCTCATGCTGGAAAACACAGCAGCCCCTAGCACCTTGTCA
CCACTCTGGGGCTCTGTGGAAGAAAGGGCACTTAAAACTCCCAGTAAATCTTGGAATAAATATATTTTTCCTTCC
CTTGTAGTTTCCATGGTAGCTGAATGTGCTCAGATGTGAGCAGTCAGAGACTGACAGCCATGCTTTCCTATACTT
GTTCAAAGGATCGATGGACCGTAAATAAGCTGCCATTAACACATCTGGTTACTGCTGTAACATGACTAATAAAAC
CGAACGCCTGTTCCCCTTACCCGTGTGGGGGACACGCAGATGAGTGAATTGGAATGTCCAGCAGAGTTACCCTCC
CAATTATATGTTCATTTTGTATATTTTTTGGTCGGGGGAAAAATTGACCTGCAGTAAAAAAACCTTTGACCATTT
TTATGTCCATTGGATACTTTCCTTTTTATCATCTTAAAAAAAGATAACTAGTACTAATCATTGTAGTGGCCTAAG
TGTGATTTAACTCTTGAAGTCACACCCTCCGAAAGATGAGTAGAAACCAGCACCAGCACAGCCCAGATCTTCTCT
TTCCTCTCCTTTTCCTCATTTATTCCTAAAGGAATCTGACCATTTTACGTCTCTACGGCCCAAAAAAAGACAAAA
ATAAAAATTCCTTTTTATTCCTGTCAACTGGATGGAAACACAAATTTCATGGAGCTGTGTACCATCGAAGAAACC
TGGTGTCTGGCATGAAATTACTGTAAAGAACTTCCTGTAAAACACGTTCTTTAACAAACTGAAATGAAAAGCATT
GGAGCGTCTGAATGAAAGACGTGACCTCCTGCTGGGACTCTGATGGTCTTCAGCATTCACCTTCGTGTGTCTTCA
GTGTCTCATTGTCATCCCTGCTTCTGTTTGGTCTTAGAGTGTTTGGATATAACTGAATTGTAGATGGTAAAGGAA
ATTTGATGTGTTTTTTGTTTTTAAATAATTAAAACGGGTCAATTTTT

FIGURE 4121A

GAGAAAAGTCACATCCAGCTCCTTCATGTTGCTGCCGATGTGGGATTTTCCTGGCTTCGTCAGCCAAGCAATTGG
CTGCCTTTGCCGGAGGCTTTGAGAACCAAGGCTTGAAGGCCGGCAGGAGCATCCAGGGGGAAGCTTGGCTTCAGG
GAGGACCTAGCAGACGTTGGGCCGGAGCACTAGCCTCACGGAGAAGGATCTGAAAGAAGCCAAGGCGCGGAGCCA
GCAGATTGCAGCCCAGCTGACCACCCCTCCCAGCTCCAATTCCCGTGGCGTCCAGCTCTTCAACAGGCGCCGGCA
GAGGGTGAACGAGTTCACCTTGGAGAGCCACGGCCAGAGGGGACAGAAGCCCAGCCAGGAGTCCCTCAGAGTGCT
CCCTTCAAGCCTCCCAGGCCATGCACCGGGGCTCAGCCTGAGTTCCACCTCGCTGCCGGAGCCAGGCCCTCCACG
GCACCCCAGTCCCCAGAGCCCCGACAGAGGGGTCCCTGGCCACAGC**ATG**GAGGGGTACTCAGAGGAGGCTAGCTT
GCTGCGGCACCTGGAGAAGGTGGCCAGTGAGGAGGAAGAGGTACCACTGGTGGTTTATCTAAAGGAGAATGCAGC
ACTGCTGACAGCCAATGGGCTGCACCTGTCCCAAAACCGAGAGGCCCAGCAGTCCTCACCGGCCCCACCTCCAGC
TGAGGTCCACAGCCCAGCTGCAGATGTCAACCAAAACCTTGCCTCGCCCAGTGCCACGCTCACCACACCAACTTC
TAACAGCAGCCACAATCCGCCAGCCACCGATGTCAATCAGAACCCACCGGCAACTGTTGTCCCACAGAGCCTGCC
ACTTTCTAGCATCCAACAGAATTCCTCAGAGGCCCAACTCCCATCTAATGGCACAGGGCCTGCTTCCAAACCCAG
CACCCTGTGTGCTGATGGGCAACCCCAGGCACCGGCTGAGGAGGTGAGATGCAGCACACTCCTAATTGACAAGGT
ATCAACTCCAGCTACCACCACCAGCACCTTCTCCAGAGAAGCTACGCTCATCCCCAGCTCCAGGCCCCCAGCCTC
AGATTTCATGTCCAGCTCCCTGCTCATTGACATCCAGCCCAACACCCTAGTGGTGTCAGCAGATCAAGAGATGTC
TGGGCGAGCAGCTGCCACCACGCCCACCAAGGTCTACAGTGAGGTCCACTTCACACTGGCCAAGCCCCCATCAGT
GGTCAACAGGACGGCCAGGCCTTTTGGGATCCAGGCGCCAGGGGGCACCAGCCAGATGGAGAGGAGCCCCATGCT
AGAGAGACGACATTTTGGGGAGAAGGCCCCGGCTCCCCAGCCCCCCAGTTTGCCAGACAGGAGCCCCCGGCCACA
GAGACACATAATGTCCCGCAGCCCCATGGTGGAAAGGAGGATGATGGGGCAGCGAAGCCCGGCCTCAGAGAGACG
CCCCTTGGGGAACTTCACTGCACCCCCCACCTACACTGAGACCTTGTCCACAGCCCCTCTGGCTTCCTGGGTGAG
GTCTCCTCCCTCATATTCTGTCCTGTATCCCAGCTCCGACCCCAAGTCTTCTCATCTGAAGGGCCAGGCGGTTCC
TGCCAGCAAGACGGGCATTCTGGAGGAGTCGATGGCCCGCCGGGGCAGCCGCAAATCCATGTTTACTTTCGTGGA
GAAGCCCAAGGTGACCCCGAATCCAGACTTGCTGGATCTGGTACAGACAGCGGATGAGAAGCGGCGGCAGAGGGA
CCAGGGGGAGGTAGGCGTGGAGGAGGAGCCCTTCGCACTGGGGGCCGAGGCCTCCAACTTCCAGCAGGAGCCAGC
ACCTCGTGACAGGGCCAGCCCCGCGGCGGCGGAGGAGGTGGTACCAGAGTGGGCCTCCTGCCTCAAGTCACCCCG
CATCCAGGCCAAGCCGAAGCCCAAACCCAACCAGAACCTCTCCGAGGCCTCTGGGAAGGGAGCTGAGCTCTACGC
CCGCCGCCAGTCACGGATGGAGAAATATGTCATCGAGTCTTCAAGCCACACGCCAGAGCTGGCCCGCTGCCCATC
ACCTACCATGTCCCTGCCTTCCTCCTGGAAATACCCCACTAACGCCCCCGGGGCCTTCCGAGTGGCATCCCGAAG
CCCAGCCCGGACCCCGCCTGCCTCCCTCTACCATGGCTACCTGCCTGAGAACGGGGTCCTGCGCCCAGAGCCCAC
CAAGCAGCCGCCATACCAGCTGCGCCCCTCGCTCTTTGTCCTCTCACCTATCAAGGAGCCTGCCAAGGTCTCACC
AAGAGCTGCCTCGCCCGCCAAGCCCAGCTCCTTGGACCTGGTGCCCAACCTGCCCAAGGGGGCTCTCCCTCCATC
TCCTGCCCTGCCTCGGCCCTCGCGCTCCTCACCGGGCCTCTACACCTCCCCCGGCCAGGACAGCCTGCAGCCCAC
TGCCGTGAGCCCTCCTTACGGCGGTGACATCTCCCCCGTGTCTCCCTCCAGGGCGTGGTCTCCCCGAGCCAAGCA
GGCCCCCAGGCCCTCCTTCTCTACCCGGAACGCCGGGATCGAGGCTCAGGACCGCCGGGAGAGCCTGCCCACCTC
CCCACCCTGGACGCCGGGCGCGTCCCGGCCCCCCAGCAGCCTAGACGGCTGGGTGAGCCCGGGCCCGTGGGAGCC
AGGTCGCGGGAGCAGCATGAGCAGCCCCCCGCCGCTGCCGCCGCCACCGCCCATGTCTCCCTCGTGGAGCGAGCG
CTCGGTGTCCCCGCTGCGACCTGAGACCGAGGCGCGGCCCCCCAGCCGCCAGCTGCAGGCGCTTCTGGCGCGAAA
CATCATCAATGCGGCCCGGCGCAAGAGCGCCTCCCCGCGGTCGGCGGGCGCCGAGAACCCGCGGCCCTTCTCCCC
GCCGAGGGCGCCACCGCCCCCGCCCCCGCCCCCGCCCCCGCCCCCGCGCATGCGCTCGCCACAGCCCGCCCGCCC
CGGCTCGGCTGCTGTGCCGGGGGCAGCCTTCGCGCCCATCCCGCGGAGCCCGTTGCCCGCCGGTCCTTCGTCCTG
CACCAGTCCCCGGAGCCCGCTGCCCGCGCCTCCCAGGCCCTTCCTCTACCGCCGCTCGCCCACGGACTCCGACGT
GTCCCTCGACTCCGAGGACTCCGGGGCTAAGTCTCCAGGCATCCTGGGCTACAATATCTGTCCCCGCGGGTGGAA
TGGCAGCCTTCGGCTCAAGCGTGGCAGCCTCCCCGCCGAGGCCTCCTGCACCACC**TAG**AGCCCCACCCCCGACCC
CACCCCGGGAGGGCAGAGCCAGAAGAAGGCTCATTAGACCTGGGGGACCCAAAGGGTCTGGCCTCTTTGGGCAGC
CCCAGAGATGAGGGGTCAGCAGAGGAGAGCTCTGGGGTTGGGGATGGGTTAGGGACGCAAGCTTGAGTTCTAGCC
CTTGCTCTCATTCAGCTGTTGTGTGACCCTGGGTAAGACCCTTCCTTGTTTGACCCTCAGCTTTCCCATCTGTTT
AATGGTGGCTTTGGCCAAGGCAATCCACAAACGTCAAAATTCCCCTTCCCATCAGTACACACACCGATGCACACA
CACTCTCTCTTTCTCTCTCTCTCTCTCACACACACACACACACACACACACACACACACACACACACACACACTA

FIGURE 4121B

GTTAGTGCCTTGGATGAGGCGGGGCAGTGTGTATATGGACCCCTGGACTTGCTACCTTCAGGGTTCCATACTCGT
CCCTCCCCTCCTGGCTCTGCTGTCTGGAGTCTGGCAAGCGGGGTGTGTTCAGAAGGTCCTAGGCCTGTGTCGCAT
GTCCAGGCACTGGCCTGACCATCCGGCTCCCTGGCACCAAGTCCCAGGCAGGAGCAGCTGTTTTCCATCCCTTCC
CAGACAAGCTCTATTTTTATCACAATGACCTTTAGAGAGGTCTCCCAGGCCAGCTCAAGGTGTCCCACTATCCCC
TCTGGAGGGAAGAGGCAGGAAAATTCTCCCCGGGTCCCTGTCATGCTACTTTCTCCATCCCAGTTCAGACTGTCC
AGGACATCTTATCTGCAGCCATAAGAGAATTATAAGGCAGTGATTTCCCTTAGGCCCAGGACTTGGGCCTCCAGC
TCATCTGTTCCTTCTGGGCCCATTCATGGCAGGTTCTGGGCTCAAAGCTGAACTGGGGAGAGAAGAGATACAGAG
CTACCATGTGACTTTACCTGATTGCCCTCAGTTTGGGGTTGCTTATTGGGAAAGAGAGAGACAAAGAGTTACTTG
TTACGGGAAATATGAAAAGCATGGCCAGGATGCATAGAGGAGATTCTAGCAGGGGACAGGATTGGCTCAGATGAC
CCCTGAGGGCTCTTCCAGTCTTGAAATGCATTCCATGATATTAGGAAGTCGGGGGTGGGTGGTGGTGGTGGGCTA
GTTGGGCTTGAATTTAGGGGCCGATGAGCTTGGGTACGTGAGCAGGGTGTTAAGTTAGGGTCTGCCTGTATTTCT
GGTCCCCTTGGAAATGTCCCCTTCTTCAGTGTCAGACCTCAGTCCCAGTGTCCATATCGTGCCCAGAAAAGTAGA
CATTATCCTGCCCCATCCCTTCCCCAGTGCACTCTGACCTAGCTAGTGCCTGGTGCCCAGTGACCTGGGGGAGCC
TGGCTGCAGGCCCTCACTGGTTCCCTAAACCTTGGTGGCTGTGATTCAGGTCCCCAGGGGGGACTCAGGGAGGAA
TATGGCTGAGTTCTGTAGTTTCCAGAGTTGGCTGGTAGAGCCTTCTAGAGGTTCAGAATATTAGCTTCAGGATCA
GCTGGGGGTATGGAATTGGCTGAGGATCAAACGTATGTAGGTGAAAGGATACCAGGATGTTGCTAAAGGTGAGGG
ACAGTTTGGGTTTGGGACTTACCGGGGTGATGTTAGATCTGGAACCCCCAAGTGAGGCTGGAGGGAGTTAAGGTC
AGTATGGAAGATAGGGTTGGGACAGGGTGCTTTGGAATGAAAGAGTGACCTTAGAGGGCTCCTTGGGCCTCAGGA
ATGCTCCTGCTGCTGTGAAGATGAGAAGGTGCTCTTACTCAGTTAATGATGAGTGACTATATTTACCAAAGCCCC
TACCTGCTGCTGGGTCCCTTGTAGCACAGGAGACTGGGGCTAAGGGCCCCTCCCAGGGAAGGGACACCATCAGGC
CTCTGGCTGAGGCAGTAGCATAGAGGATCCATTTCTACCTGCATTTCCCAGAGGACTAGCAGGAGGCAGCCTTGA
GAAACCGGCAGTTCCCAAGCCAGCGCCTGGCTGTTCTCTCATTGTCACTGCCCTCTCCCCAACCTCTCCTCTAAC
CCACTAGAGATTGCCTGTGTCCTGCCTCTTGCCTCTTGTAGAATGCAGCTCTGGCCCTCAATAAATGCTTCCTGC
ATT

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FIGURE 4122

CTCCGCCCCCTCCCACTCTCTCTTTCCGGTGTGGAGTCTGGAGACGACGTGCAGAAATGGCACCTCGAAAGGGGA
AGGAAAAGAAGGAAGAACAGGTCATCAGCCTCGGACCTCAGGTGGCTGAAGGAGAGAATGTATTTGGTGTCTGCC
ATATCTTTGCATCCTTCAATGACACTTTTGTCCATGTCACTGATCTTTCTGGCAAGGAAACCATCTGCCGTGTGA
CTGGTGGGATGAAGGTAAAGGCAGACCGAGATGAATCCTCACCATATGCTGCTATGTTGGCTGCCCAGGATGTGG
CCCAGAGGTGCAAGGAGCTGGGTATCACCGCCCTACACATCAAACTCCGGGCCACAGGAGGAAATAGGACCAAGA
CCCCTGGACCTGGGGCCCAGTCGGCCCTCAGAGCCCTTGCCCGCTCGGGTATGAAGATCGGGCGGATTGAGGATG
TCACCCCCATCCCCTCTGACAGCACTCGCAGGAAGGGGGGTCGCCGTGGTCGCCGTCTGTGAACAAGATTCCTCA
AAATATTTTCTGTTAATAAATTGCCTTCATGTAAACTGTTTCAACTCCAGCCTTCTCTCCTTCATCAGGGGCTAC
TCAGGCATTTGATTTCTTCCTCCTATTTGGCTTCTTGGGAGAAAGGAGCCTGAGGAGAGCTGAGATCCTGGTGCT
GCATTTGGGGTCTTTTCCATGCTACTTGCGGCATTAAGTTGCCTTGGTCATCTAAAGCAGACCAAGGCGTTGGAG
ACCTCGTTTTGAGTGGAGATGCTGGTTCTAAATATGGACCAATTCTTAAAGAGCCAGAGTGGGAACTGTTGATCC
AAGTGTAGCCTGAAGCGAAAGAGGAGCCTTCCAGACCCATGCCATATATAAACACACGTGGGTGTGCATTCTCCC
CCCACACCTTCTGTGCAAAGCTGGGAGCTCACTCCACTGCGTCTTGCTTTTTTTCACTTGGCAGATCTTGGAGAT
TGTTCCACATCAGTACATAAAGTACATAAAGATTGTCACCCCACAAATACACACCAAGTCCTATTTTCATCAGCG
ATAAAAAAAGAAAAGTTCTTGCTTTCCGGAAGCTTGCATGCGGCTCTGAGTACCCAGTGACACCAGATGGTACTCA
GCGTTTTGCAAGGGATTACCACAAGGCCCCGTGATGGTGCCTGCCATGGTTAGGACAGGCTGGTGGCTGGGTAGG
GTTAGTGAGACCCAGTGGAGAGGATGCTGTGTGTCACAGGCTGGAGAGGTGAGACCATTGAGGTAGTCAGTTGTA
GAGGAAAGAAACCAGCAAGAGGGGAAAATCTGTTGGGATGCTGCTTTTAGCCTTTGATGGCGTGTTCCAGGCAGA
GGGAATAAGCAAATAAATGGGTCCTGAGACAAGGGGTTACTGTGATGAGGCGGCGTTGGTTACATGCCAAACCTT
GCTAGGGATTTTAATAACAACATTGAATCTTAACCTGATGAAATAACAGTACTCCTGGGGAGGCGGGAGGGATAG
CATTAGGAGATATACCTAATGCTAAATGACGAGTTAATGGGTGCAGCACACCAACATGGCACATGTATACATATG
TAACAAACCTGCACGTTGTGCACATGTACCCTAAAACTTAAAGTATAATAAAAAAAAAAAAGCTTGCAAAAAAAAT
ATAACAGTACTCCTTAAATTGTTAAAAGTCATGAAAGTCAAGGACAGGAGATTAAGGAGGCGTGAAAACTAAATG
CCCATTGTGG

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FIGURE 4123

ACCAAGTGGGCGGAGTGGCCTTCTGTGGACGAATCAGATTCCTCTCCAGCACCGACTTTAAGAGGCGAGCCGGGG
GGTCAGGGTCCCAGATGCACAGGAGGAGAAGCAGGAGCTGTCGGGAAGATCAGAAGCCAGTCATGGATGACCAGC
GCGACCTTATCTCCAACAATGAGCAACTGCCCATGCTGGGCCGGCGCCCTGGGGCCCCGGAGAGCAAGTGCAGCC
GCGGAGCCCTGTACACAGGCTTTTCCATCCTGGTGACTCTGCTCCTCGCTGGCCAGGCCACCACCGCCTACTTCC
TGTACCAGCAGCAGGGCCGGCTGGACAAACTGACAGTCACCTCCCAGAACCTGCAGCTGGAGAACCTGCGCATGA
AGCTTCCCAAGCCTCCCAAGCCTGTGAGCAAGATGCGCATGGCCACCCCGCTGCTGATGCAGGCGCTGCCCATGG
GAGCCCTGCCCCAGGGGCCCATGCAGAATGCCACCAAGTATGGCAACATGACAGAGGACCATGTGATGCACCTGC
TCCAGAATGCTGACCCCCTGAAGGTGTACCCGCCACTGAAGGGGAGCTTCCCGGAGAACCTGAGACACCTTAAGA
ACACCATGGAGACCATAGACTGGAAGGTCTTTGAGAGCTGGATGCACCATTGGCTCCTGTTTGAAATGAGCAGGC
ACTCCTTGGAGCAAAAGCCCACTGACGCTCCACCGAAAGTACTGACCAAGTGCCAGGAAGAGGTCAGCCACATCC
CTGCTGTCCACCCGGGTTCATTCAGGCCCAAGTGCGACGAGAACGGCAACTATCTGCCACTCCAGTGCTATGGGA
GCATCGGCTACTGCTGGTGTGTCTTCCCCAACGGCACGGAGGTCCCCAACACCAGAAGCCGCGGGCACCATAACT
GCAGTGAGTCACTGGAACTGGAGGACCCGTCTTCTGGGCTGGGTGTGACCAAGCAGGATCTGGGCCCAGTCCCCA
TGTGAGCAGCAGAGGCGGTCTTCAACATCCTGCCAGCCCCACACAGCTACAGCTTTCTTGCTCCCTTCAGCCC
CCAGCCCCTCCCCCATCTCCCACCCTGTACCTCATCCCATGAGACCCTGGTGCCTGGCTCTTTCGTCACCCTTGG
ACAAGACAAACCAAGTCGGAACAGCAGATAACAATGCAGCAAGGCCCTGCTGCCCAATCTCCATCTGTCAACAGG
GGCGTGAGGTCCCAGGAAGTGGCCAAAAGCTAGACAGATCCCCGTTCCTGACATCACAGCAGCCTCCAACACAAG
GCTCCAAGACCTAGGCTCATGGACGAGATGGGAAGGCACAGGGAGAAGGGATAACCCTACACCCAGACCCCAGGC
TGGACATGCTGACTGTCCTCTCCCCTCCAGCCTTTGGCCTTGGCTTTTCTAGCCTATTTACCTGCAGGCTGAGCC
ACTCTCTTCCCTTTCCCCAGCATCACTCCCCAAGGAAGAGCCAATGTTTTCCACCCATAATCCTTTCTGCCGACC
CCTAGTTCCCTCTGCTCAGCCAAGCTTGTTATCAGCTTTCAGGGCCATGGTTCACATTAGAATAAAAGGTAGTAA
TTAG

FIGURE 4124A

TTTTTAGAAAAAAAAAATATATTTCCCTCCTGCTCCTTCTGCGTTCACAAGCTAAGTTGTTTATCTCGGCTGCGG
CGGGAACTGCGGACGGTGGCGGGCGAGCGGCTCCTCTGCCAGAGTTGATATTCACTGATGGACTCCAAAGAATCA
TTAACTCCTGGTAGAGAAGAAAACCCCAGCAGTGTGCTTGCTCAGGAGAGGGGAGATGTGATGGACTTCTATAAA
ACCCTAAGAGGAGGAGCTACTGTGAAGGTTTCTGCGTCTTCACCCTCACTGGCTGTCGCTTCTCAATCAGACTCC
AAGCAGCGAAGACTTTTGGTTGATTTTCCAAAAGGCTCAGTAAGCAATGCGCAGCAGCCAGATCTGTCCAAAGCA
GTTTCACTCTCAATGGGACTGTATATGGGAGAGACAGAAACAAAAGTGATGGGAAATGACCTGGGATTCCCACAG
CAGGGCCAAATCAGCCTTTCCTCGGGGGAAACAGACTTAAAGCTTTTGGAAGAAAGCATTGCAAACCTCAATAGG
TCGACCAGTGTTCCAGAGAACCCCAAGAGTTCAGCATCCACTGCTGTGTCTGCTGCCCCCACAGAGAAGGAGTTT
CCAAAAACTCACTCTGATGTATCTTCAGAACAGCAACATTTGAAGGGCCAGACTGGCACCAACGGTGGCAATGTG
AAATTGTATACCACAGACCAAAGCACCTTTGACATTTTGCAGGATTTGGAGTTTTCTTCTGGGTCCCCAGGTAAA
GAGACGAATGAGAGTCCTTGGAGATCAGACCTGTTGATAGATGAAAACTGTTTGCTTTCTCCTCTGGCGGGAGAA
GACGATTCATTCCTTTTGGAAGGAAACTCGAATGAGGACTGCAAGCCTCTCATTTTACCGGACACTAAACCCAAA
ATTAAGGATAATGGAGATCTGGTTTTGTCAAGCCCCAGTAATGTAACACTGCCCCAAGTGAAAACAGAAAAAGAA
GATTTCATCGAACTCTGCACCCCTGGGGTAATTAAGCAAGAGAAACTGGGCACAGTTTACTGTCAGGCAAGCTTT
CCTGGAGCAAATATAATTGGTAATAAAATGTCTGCCATTTCTGTTCATGGTGTGAGTACCTCTGGAGGACAGATG
TACCACTATGACATGAATACAGCATCCCTTTCTCAACAGCAGGATCAGAAGCCTATTTTTAATGTCATTCCACCA
ATTCCCGTTGGTTCCGAAAATTGGAATAGGTGCCAAGGATCTGGAGATGACAACTTGACTTCTCTGGGGACTCTG
AACTTCCCTGGTCGAACAGTTTTTTCTAATGGCTATTCAAGCCCCAGCATGAGACCAGATGTAAGCTCTCCTCCA
TCCAGCTCCTCAACAGCAACAACAGGACCACCTCCCAAACTCTGCCTGGTGTGCTCTGATGAAGCTTCAGGATGT
CATTATGGAGTCTTAACTTGTGGAAGCTGTAAAGTTTTCTTCAAAAGAGCAGTGGAAGGACAGCACAATTACCTA
TGTGCTGGAAGGAATGATTGCATCATCGATAAAATTCGAAGAAAAAACTGCCCAGCATGCCGCTATCGAAAATGT
CTTCAGGCTGGAATGAACCTGGAAGCTCGAAAAACAAAGAAAAAAATAAAAGGAATTCAGCAGGCCACTACAGGA
GTCTCACAAGAAACCTCTGAAAATCCTGGTAACAAAACAATAGTTCCTGCAACGTTACCACAACTCACCCCTACC
CTGGTGTCACTGTTGGAGGTTATTGAACCTGAAGTGTTATATGCAGGATATGATAGCTCTGTTCCAGACTCAACT
TGGAGGATCATGACTACGCTCAACATGTTAGGAGGGCGGCAAGTGATTGCAGCAGTGAAATGGGCAAAGGCAATA
CCAGGTTTCAGGAACTTACACCTGGATGACCAAATGACCCTACTGCAGTACTCCTGGATGTTTCTTATGGCATTT
GCTCTGGGGTGGAGATCATATAGACAATCAAGTGCAAACCTGCTGTGTTTTGCTCCTGATCTGATTATTAATGAG
CAGAGAATGACTCTACCCTGCATGTACGACCAATGTAAACACATGCTGTATGTTTCCTCTGAGTTACACAGGCTT
CAGGTATCTTATGAAGAGTATCTCTGTATGAAAACCTTACTGCTTCTCTCTTCAGTTCCTAAGGACGGTCTGAAG
AGCCAAGAGCTATTTGATGAAATTAGAATGACCTACATCAAAGAGCTAGGAAAAGCCATTGTCAAGAGGGAAGGA
AACTCCAGCCAGAACTGGCAGCGGTTTTATCAACTGACAAAACTCTTGGATTCTATGCATGAAGTGGTTGAAAAT
CTCCTTAACTATTGCTTCCAAACATTTTTGGATAAGACCATGAGTATTGAATTCCCCGAGATGTTAGCTGAAATC
ATCACCAATCAGATACCAAAATATTCAAATGGAAATATCAAAAAACTTCTGTTTCATCAAAAGTGACTGCCTTAA
TAAGAATGGTTGCCTTAAAGAAAGTCGAATTAATAGCTTTTATTGTATAAACTATCAGTTTGTCCTGTAGAGGTT
TTGTTGTTTTATTTTTATTGTTTTCATCTGTTGTTTTGTTTTAAATACGCACTACATGTGGTTTATAGAGGGCC
AAGACTTGGCAACAGAAGCAGTTGAGTCGTCATCACTTTTCAGTGATGGGAGAGTAGATGGTGAAATTTATTAGT
TAATATATCCCAGAAATTAGAAACCTTAATATGTGGACGTAATCTCCACAGTCAAAGAAGGATGGCACCTAAACC
ACCAGTGCCCAAAGTCTGTGTGATGAACTTTCTCTTCATACTTTTTTTCACAGTTGGCTGGATGAAATTTTCTAG
ACTTTCTGTTGGTGTATCCCCCCCCTGTATAGTTAGGATAGCATTTTTGATTTATGCATGGAAACCTGAAAAAAA
GTTTACAAGTGTATATCAGAAAAGGGAAGTTGTGCCTTTTATAGCTATTACTGTCTGGTTTTAACAATTTCCTTT
ATATTTAGTGAACTACGCTTGCTCATTTTTTCTTACATAATTTTTTATTCAAGTTATTGTACAGCTGTTTAAGAT
GGGCAGCTAGTTCGTAGCTTTCCCAAATAAACTCTAAACATTAATCAATCATCTGTGTGAAAATGGGTTGGTGCT
TCTAACCTGATGGCACTTAGCTATCAGAAGACCACAAAAATTGACTCAAATCTCCAGTATTCTTGTCAAAAAAAA
AAAAAAAAAAGCTCATATTTTGTATATATCTGCTTCAGTGGAGAATTATATAGGTTGTGCAAATTAACAGTCCTA
ACTGGTATAGAGCACCTAGTCCAGTGACCTGCTGGGTAAACTGTGGATGATGGTTGCAAAAGACTAATTTAAAAA
ATAACTACCAAGAGGCCCTGTCTGTACCTAACGCCCTATTTTTGCAATGGCTATATGGCAAGAAAGCTGGTAAAC
TATTTGTCTTTCAGGACCTTTTGAAGTAGTTTGTATAACTTCTTAAAAGTTGTGATTCCAGATAACCAGCTGTAA
CACAGCTGAGAGACTTTTAATCAGACAAAGTAATTCCTCTCACTAAACTTTACCCAAAAACTAAATCTCTAATAT

FIGURE 4124B

GGCAAAAATGGCTAGACACCCATTTTCACATTCCCATCTGTCACCAATTGGTTAATCTTTCCTGATGGTACAGGA
AAGCTCAGCTACTGATTTTTGTGATTTAGAACTGTATGTCAGACATCCATGTTTGTAAAACTACACATCCCTAAT
GTGTGCCATAGAGTTTAACACAAGTCCTGTGAATTTCTTCACTGTTGAAAATTATTTTAAACAAAATAGAAGCTG
TAGTAGCCCTTTCTGTGTGCACCTTACCAACTTTCTGTAAACTCAAAACTTAACATATTTACTAAGCCACAAGAA
ATTTGATTTCTATTCAAGGTGGCCAAATTATTTGTGTAATAGAAAACTGAAAATCTAATATTAAAAATATGGAAC
TTCTAATATATTTTTATATTTAGTTATAGTTTCAGATATATATCATATTGGTATTCACTAATCTGGGAAGGGAAG
GGCTACTGCAGCTTTACATGCAATTTATTAAAATGATTGTAAAATAGCTTGTATAGTGTAAAATAAGAATGATTT
TTAGATGAGATTGTTTTATCATGACATGTTATATATTTTTTGTAGGGGTCAAAGAAATGCTGATGGATAACCTAT
ATGATTTATAGTTTGTACATGCATTCATACAGGCAGCGATGGTCTCAGAAACCAAACAGTTTGCTCTAGGGGAAG
AGGGAGATGGAGACTGGTCCTGTGTGCAGTGAAGGTTGCTGAGGCTCTGACCCAGTGAGATTACAGAGGAAGTTA
TCCTCTGCCTCCCATTCTGACCACCCTTCTCATTCCAACAGTGAGTCTGTCAGCGCAGGTTTAGTTTACTCAATC
TCCCCTTGCACTAAAGTATGTAAAGTATGTAAACAGGAGACAGGAAGGTGGTGCTTACATCCTTAAAGGCACCAT
CTAATAGCGGGTTACTTTCACATACAGCCCTCCCCCAGCAGTTGAATGACAACAGAAGCTTCAGAAGTTTGGCAA
TAGTTTGCATAGAGGTACCAGCAATATGTAAATAGTGCAGAATCTCATAGGTTGCCAATAATACACTAATTCCTT
TCTATCCTACAACAAGAGTTTATTTCCAAATAAAATGAGGACATGTTTTTGTTTTCTTTGAATGCTTTTTGAATG
TTATTTGTTATTTTCAGTATTTTGGAGAAATTATTTAATAAAAAAACAATCATTTGCTTTTTG

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FIGURE 4125

ACTAGAAAGATGGCAGAGCAAGACAGAAGAAAGGAAAAGGGCTCAGGTTTAAGCGACTGGAATCATTCCTACATG
ATTCCTGGCGGCAGAAACGTGACAAGGTGCGTCTCAGACGACTAGAAGTGAAACCTCATGCCTTGGAATTGCCAG
ATAAACATTCCTTGGCCTTTGTTGTACGCATCGAAAGGATTGATGGCGTGAGTTTACGGGTGCAGAGAACCACTG
CAAGACTTCGCCTAAAGAAAATTTTTAGTGGTATCTTTGTAAAAGTTACCCCCTAGAATCTAAAA**ATG**CTGCATA
TAGTGGAACCTTATGTGACCTGGGGATTTCCAAATCTGAAGTCTGTCCGAGAACTCATTTTGAAACGTGGACAAG
CCAAGGTCAAGAATAAGACCATCCCTCTGACAGACAACACAGTGATTGAGGAGCACCTGGGGAAGTTTGGCTTCA
TTTGCTTGGAAGACCTCATTCATGAAATTGCCTTCCCAGGGAAGCATTTCCAGGAGATCTCATGGTTCTTGCGCC
CTTTCCACCTCTCAGTGGCCCATCATGCTACCAAAAATAAGAGTGGGCTTCCTCAAGGAGATGGGCACACCTGGC
TATCGGGG**TGA**ACGCATCAATCAGCTCATCCGTCAGCTGAACTAGACCCAGGTGACAAACTGCGGTAAATTTTTT
ATCAGTGAAGTGGAAGCATGCGTTTTGTTGTTTTGGGAATTTTTATCAAGTATCTTCAGAGAAGATTATTTCCTG
CTTTATCTTCAAAAACTGGAAAGGAAGGGTCAAAGAAAAGACAGTAGCTGGCCGGTCGTGGTGGCTCATGCCTGT
AATCCCAACACTTTGGGAGGCTGAGGCAGGCAGATCACCTGAGGTTGGGAGTTCGAGACCAGCCTGACCAACATG
GAGAAATGCCATCTCTACTAAAAATACAAAAAAAAAAAAAAAGAAAAGACAGTAGCTTATGTTCATGTCAAGCACC
TCTCATCACAGTCTAGTTCCAAGGAAAAATTCCAGCGTTTTCTACATTGGGTGCTGTGTCATCTGAAATCGGCAC
ATTCCATGGAGGAAGGAGTCCTGCTTTGTTGCATGTATCCTAGGGTTTAATGTTGGTAAATGAGTCACTCTAGCA
TTTGTAGAAGGCTCCCTGAGACTCCTACAGCAGTCGACCAAGCCCAAGGACATAATTGAATCTGGAGAGTCCTGG
GGCCTTGTTTTGATAAAGACTTGAAATACACATAGGAAGAAAGGCATAAAAATAAATGTTCACTTGTCTCTGC

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FIGURE 4126

ATGGCAGCAGCGGAGGAGGAGGACGGGGGCCCCGAAGGGCCAAATCGCGAGCGGGGCGGGGCGGGCGCGACCTTC
GAATGTAATATATGTTTGGAGACTGCTCGGGAAGCTGTGGTCAGTGTGTGTGGCCACCTGTACTGTTGGCCATGT
CTTCATCAGTGGCTGGAGACACGGCCAGAACGGCAAGAGTGTCCAGTATGTAAAGCTGGGATCAGCAGAGAGAAG
GTTGTCCCGCTTTATGGGCGAGGGAGCCAGAAGCCCCAGGATCCCAGATTAAAAACTCCACCCCGCCCCCAGGGC
CAGAGACCAGCTCCGGAGAGCAGAGGGGGATTCCAGCCATTTGGTGATACCGGGGGCTTCCACTTCTCATTTGGT
GTTGGTGCTTTTCCCTTTGGCTTTTTCACCACCGTCTTCAATGCCCATGAGCCTTTCCGCCGGGGTACAGGTGTG
GATCTGGGACAGGGTCACCCAGCCTCCAGCTGGCAGGATTCCCTCTTCCTGTTTCTCGCCATCTTCTTCTTTTTT
TGGCTGCTCAGTATTTGA

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FIGURE 4127

ATCTTTCCCAGTTGTTCCGCCCCCTACCCCCGCCTCCCGCACCGCGCCCCTCTCCGGCTGCCCTCTCCGCGTGGG
GCAAGGCTCCGAGGGCAGCATTCAGTAGCCATTTAGCTTTGGAAGGAGAGGTGATTCGAATGGCCCGGCTCCTCC
TGTCACCATGCCAGGCACTTTGGCCGCGCAGGTGCTGACCTGAACCTGGTTCATCCCTTTCTGACCAAAACTGTT
CACTCACCGTGGAAGGGACTAAGCATCCATATGGAGACGCCACCAGTCAATACAATTGGAGAAAAGGACACCTCT
CAGCCGCAACAAGAGTGGGAAAAGAACCTTCGGGAGAACCTTGATTCAGTTATTCAGATTAGGCAGCAGCCCCGA
GACCCTCCTACCGAAACGCTTGAGCTGGAAGTAAGCCCAGATCCAGCCAGCCAAATTCTAGAGCATACTCAAGGA
GCTGAAAAACTGGTTGCTGAACTTGAAGGAGACTCTCATAAGTCTCATGGATCAACCAGTCAGATGCCAGAGGCC
CTTCAAGCTTCTGATCTCTGGTACTGCCCCGATGGGAGCTTTGTCAAGAAGATCGTAATCCGTGGCCATGGCTTG
GACAAACCCAAACTAGGCTCCTGCTGCCGGGTACTGGCTTTGGGGTTTCCTTTCGGATCAGGGCCGCCAGAGGGC
TGGACAGAGCTAACTATGGGCGTAGGGCCATGGAGGGAGGAAACTTGGGGGGAGCTCATAGAGAAATGCTTGGAG
TCCATGTGTCAAGGTGAGGAAGCAGAGCTTCAGCTGCCTGGGCACTCTGGACCTCCTGTCAGGCTCACACTGGCA
TCCTTCACTCAAGGCCGAGACTCCTGGGAGCTGGAGACTAGCGAGAAGGAAGCCCTGGCCAGGGAAGAACGTGCA
AGGGGCACAGAACTATTTCGAGCTGGGAACCCTGAAGGAGCTGCCCGATGCTATGGACGGGCTCTTCGGCTGCTC
CTGACTTTACCCCCACCTGGCCCTCCAGAACGAACTGTCCTTCATGCCAATCTGGCTGCCTGTCAGTTGTTGCTA
GGGCAGCCTCAGTTGGCAGCCCAGAGCTGTGACCGGGTGTTGGAGCGGGAGCCTGGCCATTTAAAGGCCTTATAC
CGAAGGGGGGTTGCCCAGGCTGCCCTTGGGAACCTGGAAAAAGCAACTGCTGACCTCAAGAAGGTGCTGGCGATA
GATCCCAAAAACCGGGCAGCCCAGGAGGAACTGGGGAAGGTGGTCATTCAGGGGAAGAACCAGGATGCAGGGCTG
GCTCAGGGTCTGCGCAAGATGTTTGGCTGATTAAAAGTTAAACCTTAAAAGAG

FIGURE 4128A

AGAAGGTAGCAGACAGACAGACGGATCTAACCTCTCTTGGATCCTCCAGCCATGAGGCTGCTCTGGGGGCTGATC
TGGGCATCCAGCTTCTTCACCTTATCTCTGCAGAAGCCCAGGTTGCTCTTGTTCTCTCCTTCTGTGGTTCATCTG
GGGGTCCCCCTATCGGTGGGGGTGCAGCTCCAGGATGTGCCCCGAGGACAGGTAGTGAAAGGATCAGTGTTCCTG
AGAAACCCATCTCGTAATAATGTCCCCTGCTCCCCAAAGGTGGACTTCACCCTTAGCTCAGAAAGAGACTTCGCA
CTCCTCAGTCTCCAGGTGCCCTTGAAAGATGCGAAGAGCTGTGGCCTCCATCAACTCCTCAGAGGCCCTGAGGTC
CAGCTGGTGGCCCATTCGCCATGGCTAAAGGACTCTCTGTCCAGAACGACAAACATCCAGGGTATCAACCTGCTC
TTCTCCTCTCGCCGGGGGCACCTCTTTTTGCAGACGGACCAGCCCATTTACAACCCTGGCCAGCGGGTTCGGTAC
CGGGTCTTTGCTCTGGATCAGAAGATGCGCCCGAGCACTGACACCATCACAGTCATGGTGGAGAACTCTCACGGC
CTCCGCGTGCGGAAGAAGGAGGTGTACATGCCCTCGTCCATCTTCCAGGATGACTTTGTGATCCCAGACATCTCA
GAGCCAGGGACCTGGAAGATCTCAGCCCGATTCTCAGATGGCCTGGAATCCAACAGCAGCACCCAGTTTGAGGTG
AAGAAATATGTCCTTCCCAACTTTGAGGTGAAGATCACCCCTGGAAAGCCCTACATCCTGACGGTGCCAGGCCAT
CTTGATGAAATGCAGTTAGACATCCAGGCCAGGTACATCTATGGGAAGCCAGTGCAGGGGGTGGCATATGTGCGC
TTTGGGCTCCTAGATGAGGATGGTAAGAAGACTTTCTTTCGGGGGCTGGAGAGTCAGACCAAGCTGGTGAATGGA
CAGAGCCACATTTCCCTCTCAAAGGCAGAGTTCCAGGACGCCCTGGAGAAGCTGAATATGGGCATTACTGACCTC
CAGGGGCTGCGCCTCTACGTTGCTGCAGCCATCATTGAGTATCCAGGTGGGGAGATGGAGGAGGCAGAGCTCACA
TCCTGGTATTTTGTGTCATCTCCCTTCTCCTTGGATCTTAGCAAGACCAAGCGACACCTTGTGCCTGGGGCCCCC
TTCCTGCTGCAGGCCTTGGTCCGTGAGATGTCAGGCTCCCCAGCTTCTGGCATTCCTGTCAAAGTTTCTGCCACG
GTGTCTTCTCCTGGGTCTGTTCCTGAAGTCCAGGACATTCAGCAAAACACAGACGGGAGCGGCCAAGTCAGCATT
CCAATAATTATCCCTCAGACCATCTCAGAGCTGCAGCTCTCAGTATCTGCAGGCTCCCCACATCCAGCGATAGCC
AGGCTCACTGTGGCAGCCCCACCTTCAGGAGGCCCCGGGTTTCTGTCTATTGAGCGGCCGGATTCTCGACCTCCT
CGTGTTGGGGACACTCTGAACCTGAACTTGCGAGCCGTGGGCAGTGGGGCCACCTTTTCTCATTACTACTACATG
ATCCTATCCCGAGGGCAGATCGTGTTCATGAATCGAGAGCCCAAGAGGACCCTGACCTCGGTCTCGGTGTTTGTG
GACCATCACCTGGCACCCTCCTTCTACTTTGTGGCCTTCTACTACCATGGAGACCACCCAGTGGCCAACTCCCTG
CGAGTGGATGTCCAGGCTGGGGCCTGCGAGGGCAAGCTGGAGCTCAGCGTGGACGGTGCCAAGCAGTACCGGAAC
GGGGAGTCCGTGAAGCTCCACTTAGAAACCGACTCCCTAGCCCTGGTGGCGCTGGGAGCCTTGGACACAGCTCTG
TATGCTGCAGGCAGCAAGTCCCACAAGCCCCTCAACATGGGCAAGGTCTTTGAAGCTATGAACAGCTATGACCTC
GGCTGTGGTCCTGGGGGTGGGGACAGTGCCCTTCAGGTGTTCCAGGCAGCGGGCCTGGCCTTTTCTGATGGAGAC
CAGTGGACCTTATCCAGAAAGAGACTAAGCTGTCCCAAGGAGAAGACAACCCGGAAAAAGAGAAACGTGAACTTC
CAAAAGGCGATTAATGAGAAATTGGGTCAGTATGCTTCCCCGACAGCCAAGCGCTGCTGCCAGGATGGGGTGACA
CGTCTGCCCATGATGCGTTCCTGCGAGCAGCGGGCAGCCCGCGTGCAGCAGCCGGACTGCCGGGAGCCCTTCCTG
TCCTGCTGCCAATTTGCTGAGAGTCTGCGCAAGAAGAGCAGGGACAAGGGCCAGGCGGGCCTCCAACGAGCCCTG
GAGATCCTGCAGGAGGAGGACCTGATTGATGAGGATGACATTCCCGTGCGCAGCTTCTTCCCAGAGAACTGGCTC
TGGAGAGTGGAAACAGTGGACCGCTTTCAAATATTGACACTGTGGCTCCCCGACTCTCTGACCACGTGGGAGATC
CATGGCCTGAGCCTGTCCAAAACCAAAGGCCTATGTGTGGCCACCCCAGTCCAGCTCCGGGTGTTCCGCGAGTTC
CACCTGCACCTCCGCCTGCCCATGTCTGTCCGCCGCTTTGAGCAGCTGGAGCTGCGGCCTGTCCTCTATAACTAC
CTGGATAAAAACCTGACTGTGAGCGTCCACGTGTCCCCAGTGGAGGGGCTGTGCCTGGCTGGGGGCGGAGGGCTG
GCCCAGCAGGTGCTGGTGCCTGCGGGCTCTGCCCGGCCTGTTGCCTTCTCTGTGGTGCCCACGGCAGCCGCCGCT
GTGTCTCTGAAGGTGGTGGCTCGAGGGTCCTTCGAATTCCCTGTGGGAGATGCGGTGTCCAAGGTTCTGCAGATT
GAGAAGGAAGGGGCCATCCATAGAGAGGAGCTGGTCTATGAACTCAACCCCTTGGACCACCGAGGCCGGACCTTG
GAAATACCTGGCAACTCTGATCCCAATATGATCCCTGATGGGGACTTTAACAGCTACGTCAGGGTTACAGCCTCA
GATCCATTGGACACTTTAGGCTCTGAGGGGGCCTTGTCACCAGGAGGCGTGGCCTCCCTCTTGAGGCTTCCTCGA
GGCTGTGGGGAGCAAACCATGATCTACTTGGCTCCGACACTGGCTGCTTCCCGCTACCTGGACAAGACAGAGCAG
TGGAGCACACTGCCTCCCGAGACCAAGGACCACGCCGTGGATCTGATCCAGAAAGGCTACATGCGGATCCAGCAG
TTTCGGAAGGCGGATGGTTCCTATGCGGCTTGGTTGTCACGGGGCAGCAGCACCTGGCTCACAGCCTTTGTGTTG
AAGGTCCTGAGTTTGGCCCAGGAGCAGGTAGGAGGATCGCCTGAGAAACTGCAGGAGACATCTAACTGGCTTCTG
TCCCAGCAGCAGGCTGACGGCTCGTTCCAGGACCTCTCTCCAGTGATACATAGGAGCATGCAGGGGGGTTTGGTG
GGCAATGATGAGACTGTGGCACTCACAGCCTTTGTGACCATCGCCCTTCATCATGGGCTGGCCGTCTTCCAGGAT
GAGGGTGCAGAGCCATTGAAGCAGAGAGTGGAAGCCTCCATCTCAAAGGCAAGCTCATTTTTGGGGGAGAAAGCA

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FIGURE 4128B

AGTGCTGGGCTCCTGGGTGCCCACGCAGCTGCCATCACGGCCTATGCCCTGACACTGACCAAGGCCCCTGCGGAC
CTGCGGGGTGTTGCCCACAACAACCTCATGGCAATGGCCCAGGAGACTGGAGATAACCTGTACTGGGGCTCAGTC
ACTGGTTCTCAGAGCAATGCCGTGTCGCCCACCCCGGCTCCTCGCAACCCATCCGACCCCATGCCCCAGGCCCCA
GCCCTGTGGATTGAAACCACAGCCTACGCCCTGCTGCACCTCCTGCTTCACGAGGGCAAAGCAGAGATGGCAGAC
CAGGCTGCGGCCTGGCTCACCCGTCAGGGCAGCTTCCAAGGGGGATTCCGCAGTACCCAAGACACGGTGATTGCC
CTGGATGCCCTGTCTGCCTACTGGATTGCCTCCCACACCACTGAGGAGAGGGGTCTCAATGTGACTCTCAGCTCC
ACAGGCCGGAATGGGTTCAAGTCCCACGCGCTGCAGCTGAACAACCGCCAGATTCGCGGCCTGGAGGAGGAGCTG
CAGTTTTCCTTGGGCAGCAAGATCAATGTGAAGGTGGGAGGAAACAGCAAAGGAACCCTGAAGGTCCTTCGTACC
TACAATGTCCTGGACATGAAGAACACGACCTGCCAGGACCTACAGATAGAAGTGACAGTCAAAGGCCACGTCGAG
TACACGATGGAAGCAAACGAGGACTATGAGGACTATGAGTACGATGAGCTTCCAGCCAAGGATGACCCAGATGCC
CCTCTGCAGCCCGTGACACCCCTGCAGCTGTTTGAGGGTCGGAGGAACCGCCGCAGGAGGGAGGCGCCCAAGGTG
GTGGAGGAGCAGGAGTCCAGGGTGCACTACACCGTGTGCATCTGGCGGAACGGCAAGGTGGGGCTGTCTGGCATG
GCCATCGCGGACGTCACCCTCCTGAGTGGATTCCACGCCCTGCGTGCTGACCTGGAGAAGCTGACCTCCCTCTCT
GACCGTTACGTGAGTCACTTTGAGACCGAGGGGCCCCACGTCCTGCTGTATTTTGACTCGGTCCCCACCTCCCGG
GAGTGCGTGGGCTTTGAGGCTGTGCAGGAAGTGCCGGTGGGGCTGGTGCAGCCGGCCAGCGCAACCCTGTACGAC
TACTACAACCCCGAGCGCAGATGTTCTGTGTTTTACGGGGCACCAAGTAAGAGCAGACTCTTGGCCACCTTGTGT
TCTGCTGAAGTCTGCCAGTGTGCTGAGGGGAAGTGCCCTCGCCAGCGTCGCGCCCTGGAGCGGGGTCTGCAGGAC
GAGGATGGCTACAGGATGAAGTTTGCCTGCTACTACCCCCGTGTGGAGTACGGCTTCCAGGTTAAGGTTCTCCGA
GAAGACAGCAGAGCTGCTTTCCGCCTCTTTGAGACCAAGATCACCCAAGTCCTGCACTTCACCAAGGATGTCAAG
GCCGCTGCTAATCAGATGCGCAACTTCCTGGTTCGAGCCTCCTGCCGCCTTCGCTTGGAACCTGGGAAAGAATAT
TTGATCATGGGTCTGGATGGGGCCACCTATGACCTCGAGGGACACCCCCAGTACCTGCTGGACTCGAATAGCTGG
ATCGAGGAGATGCCCTCTGAACGCCTGTGCCGGAGCACCCGCCAGCGGGCAGCCTGTGCCCAGCTCAACGACTTC
CTCCAGGAGTATGGCACTCAGGGGTGCCAGGTG**TGA**GGGCTGCCCTCCCACCTCCGCTGGGAGGAACCTGAACCT
GGGAACCATGAAGCTGGAAGCACTGCTGTGTCCGCTTTCATGAACACAGCCTGGGACCAGGGCATATTAAAGGCT
TTTGGCAGCAAAGTGTCAGTGTTGGC

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FIGURE 4129

GTCCTCCAAATGCAGTGAGGTTAGGAAGGACGTCTGCGCTCAGATCAAGAATCCAGTTACCTCAAAGCTCCCCAA
CTTCCACCTCCGCAGAGCTATGACGTCATGGCAGGCACGCCAGAGGCCGAAGGATGCAAAAGTGGTTTTCTGCTT
TCGATGATGCAATCATTCAGCGACAGTGGCGGGCAAACCCCTCCCGGGGCGGGGGAGGTGTGAGCTTCACGAAGG
AGGTTGACACCAACGTGGCCACCGGCGCCCCTCCACGCCGCCAACGAGTCCCCGGGCGTGCGTGCCCTTGGAGGG
AGCCAATCCGCGGCCGGCGTGGGGCCCGGCCTGGCGGAGGTGATGCTGGAGGGACGCCCGGGGAGACCGTACGTC
ACTGCTCTGCGCCGGAAGACCCTATTTTCAGGTTCTCTTCCCTCCATTCCTACCCCTTCCCCGGTACCATAAAAT
CCCGGGATATGAGCTGGAAGAGGCATCACCTGATCCCGGAGACCTTTGGAGTTAAGAGGCGGCGGAAGCGAGGGC
CTGTGGAGTCGGATCCTCTTCGGGGTGAGCCAGGGTCGGCGCGCGCGGCTGTCTCAGAACTCATGCAGCTGTTCC
CGCGAGGCCTGTTTGAGGACGCGCTGCCGCCCATCGTGCTGAGGAGCCAGGTGTACAGCCTTGTGCCTGACAGGA
CCGTGGCCGACCGGCAGCTGAAGGAGCTTCAAGAGCAGGGGGAGATCAGAATCGTCCAGCTGGGCTTCGACTTGG
ATGCCCATGGAATTATCTTCACTGAGGACTACAGGACCAGAGTATGTGACTGTGTCCTCAAGGCCTGTGATGGCC
GACCGTATGCTGGGGCAGTGCAGAAATTTCTAGCTTCAGTACTTCCAGCCTGTGGGGACCTTAGTTTCCAGCAGG
ACCAAATGACACAGACCTTTGGCTTCAGGGACTCAGAAATCACGCATCTGGTGAATGCTGGAGTCCTCACCGTCC
GAGATGCTGGGAGCTGGTGGCTAGCTGTGCCTGGAGCTGGGAGATTCATCAAGTACTTTGTTAAAGGGCGCCAGG
CTGTCCTTAGCATGGTCCGGAAGGCAAAGTACCGGGAACTGCTCCTATCAGAGCTCCTGGGCCGGCGGGCGCCTG
TCGTGGTGCGGCTTGGCCTCACCTACCATGTGCACGACCTCATTGGGGCCCAGCTAGTGGACTGCATCTCTACCA
CTTCAGGAACCCTCCTCCGCCTGCCAGAGACATGAAGATTCTGCTCATCATTGCTCAGCTCCTCAGAGTGGGCCG
GGAGGGGACTAGAAGAGCTGCATGATGGTGGCTGAGACAGGGTCACCTTGGGAAGGCTTGGGAGCCAGGATGAGT
GTCGGGCTCTCGTGTGTGCAAAAGGTCAGATGTGACTGCTGCTGTTTGCCTGGTTTCTGACCCAGTGGTGGGGTT
TGAGCAATGCTTCTCTGCCCTTCCATGGAAAGTGGAACCAGAAATGGTGCCAAGGCTGTGGCTGTTCCCTTTCGT
GTAAAATGGTGCTGTTATTACTCTGTCTTGAAATAGGAAGGTGGGATTTCTGGGGAGGCTGGTGAAGGAGGGCAG
GGTTCTTTTCTCTACGTGTCATGTTAAAATTGCCAAATAAAGTACCTCTGCCTGTGA

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FIGURE 4130

CCCGCCACTGTCGCTGAATGATTGCATCATCGAAAGCAGAAAACCACTTTTGCATCCTTCGGCCTCTGGCGTGCC
TGCCATGACGTCATAGCTCTGCGGAGGTGGAAGTTGGGGAGCTTTGAGGACCTCATGGATCCCAGGGGGACCAAG
AGAGGAGCTGAGAAGACAGAGGTAGCTGAGCCTCGGAACAAACTACCTCGTCCAGCACCTTCTCTGCCCACAGAC
CCTGCCCTCTACTCTGGGCCCTTTCCTTTCTACCGGCGCCCTTCGGAACTGGGCTGCTTCTCCCTGGATGCTCAA
CGCCAGTACCATGGAGATGCCCGAGCCCTGCGCTACTATAGCCCACCCCCCACTAACGGTCCAGGCCCCAACTTT
GACCTCAGAGACGGATACCCGGATCGATACCAGCCCCGGGACGAGGAGGTCCAGGAAAGGCTGGACCACCTGCTG
TGCTGGCTCCTGGAACACCGAGGCCGGTTGGAGGGGGGTCCAGGCTGGCTGGCAGAGGCCATAGTGACGTGGCGG
GGGCACCTGACAAAACTGCTGACGACACCGTATGAGCGGCAGGAGGGCTGGCAGCTGGCAGCCTCCCGGTTCCAG
GGAACACTATACCTGAGTGAAGTGGAGACACCGAACGCTCGGGCCCAGAGGCTTGCTCGGCCACCGCTCCTCCGG
GAGCTTATGTACATGGGATACAAATTTGAGCAGTACATGTGTGCAGACAAACCTGGAAGCTCCCCAGACCCCTCT
GGGGAGGTTAACACCAACGTGGCCTTCTGCTCTGTGCTACGCAGCCGCCTGGGAAGCCACCCTCTGCTCTTCTCA
GGGGAGGTAGACTGCACAGACCCCCAAGCCCCATCCACACAGCCCCCAACCTGCTATGTGGAGCTCAAGACCTCC
AAGGAGATGCACAGCCCTGGCCAATGGAGGAGTTTCTACAGACACAAGCTCCTGAAATGGTGGGCTCAGTCATTC
CTCCCAGGGGTCCCGAATGTTGTTGCTGGCTTCCGTAACCCAGACGGTTTTGTCTCTTCCCTCAAGACCTTTCCT
ACCATGAAGATGTTTGAATATGTCAGGAATGACCGTGACGGCTGGAATCCCTCTGTGTGCATGAACTTCTGTGCC
GCCTTCCTTAGCTTTGCCCAGAGCACGGTTGTCCAGGATGACCCCAGGCTCGTTCATCTCTTCTCTTGGGAGCCT
GGCGGCCCAGTCACCGTGTCTGTACACCAAGATGCACCTTACGCCTTCCTGCCCATATGGTATGTGGAAGCTATG
ACTCAGGACCTCCCATCACCCCCCAAGACTCCCTCTCCCAAATAGTAATGCTTTAGAGGGAGGCAGTCATATCTC
TGTGTGCAGATAATAAAAGCATATTTCTAAGAGGTT

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FIGURE 4131A

CGTAGCGCCCGCAGAGCAACGCAAAGAGGAAGAACAGAGAAACGGCTATGAGAAAAAGGGCCGAAGAGTGAGAAG
CAGAGGGCCTTACCCGAGGGGGCGGCAACCGGGGGCCCCACGGTCTCCGGCCGCGCCCGCGCTGGCCGCTGATAG
CGGGCTCACAACGATGACGTAGCGAGGAGCGGAAAACGCGGTAACCAAGGCGGCCCCAGGCGCGCACTTCCGCCC
GGCCTTCCACCGGTCCAGGTCTGCCCCTCCGCAGCGATAGTTCACGCTCTCGGCGGGGCTGTACCGGAAGTTGCC
TCTACTTCCGCCCGTTCCGGGGCGGGGCTTACTTCGCAGCGACTACTTGCCGCACTTCCGGGCTGCCAGGCAGCT
GCTGTGGCTCCAGGATGATGGAGACAGAGCGACTTGTGCTACCCCCTCCAGATCCCCTGGACCTACCCCTTCGGG
CCGTGGAGCTCGGATGCACGGGGCACTGGGAGCTGCTGAACTTGCCTGGAGCTCCAGAGAGTAGCCTTCCCCATG
GCCTCCCTCCTTGTGCCCCAGATCTGCAGCAAGAAGCAGAACAGTTGTTTCTGTCATCCCCAGCCTGGCTGCCTC
TGCATGGTGTGGAGCACTCAGCCCGAAAATGGCAGAGGAAGACGGATCCCTGGTCTCTTTTGGCTGTCCTGGGAG
CCCCAGTCCCATCCGACCTACAGGCCCAAAGACACCCAACCACAGGCCAGATACTGGGTTACAAAGAGGTCTTGC
TGGAGAACACAAATCTCTCGGCTACAACCTCCTTGTCTCTTCGCCGGCCTCCAGGGCCAGCCTCCCAGTCCTTAT
GGGGAAATCCAACTCGGTATCCCTTCTGGCCAGGGGGGATGGATGAACCCACCATAACAGATCTGAACACACGGG
AGGAGGCTGAGGAGGAGATAGACTTTGAGAAAGATCTTCTTACTATTCCACCTGGTTTCAAGAAAGGCATGGACT
TTGCACCAAAAGATTGTCCAACTCCAGCTCCTGGACTACTAAGCCTTAGCTGTCTGTTGGAGCCTCTGGATTTGG
GTGGGGGTGACGAGGATGAGAATGAGGCAGTGGGACAGCCAGGAGGTCCCAGAGGGGACACTGTTTCAGCCTCTC
CCTGCAGTGCTCCCCTGGCCCGAGCAAGCAGCTTGGAAGACCTAGTGTTGAAGGAAGCGTCCACAGCTGTATCCA
CCCCAGAGGCCCCAGAGCCTCCATCTCAGGAGCAGTGGGCCATCCCTGTGGACGCCACCTCCCCTGTTGGTGATT
TCTATCGCCTCATTCCCCAGCCAGCCTTCCAGTGGGCATTTGAGCCAGATGTGTTTCAGAAACAGGCCATCCTGC
ACTTGGAACGGCATGACTCTGTCTTTGTCGCAGCTCACACATCTGCAGGAAAAACAGTTGTGGCTGAATATGCCA
TTGCCCTGGCCCAGAAACACATGACACGCACCATCTACACTTCGCCCATCAAGGCCCTGAGCAACCAGAAGTTCC
GGGACTTCCGAAACACATTCGGGGATGTGGGGCTGCTCACCGGGGATGTACAGCTGCATCCGGAGGCCTCCTGCC
TCATCATGACCACAGAGATCCTTCGCTCCATGCTGTACAGTGGCTCAGATGTTATTCGGGACCTGGAGTGGGTCA
TCTTTGATGAGGTTCACTATATCAACGATGTCGAGCGTGGGGTCGTGTGGGAGGAGGTGCTTATCATGCTACCTG
ACCACGTTTCTATCATCCTTCTGAGTGCCACCGTCCCCAACGCCCTTGAGTTTGCTGACTGGATTGGGCGGCTGA
AGCGTCGTCAGATCTATGTGATTAGCACTGTAACCCGCCCCGTGCCCCTGGAGCACTATCTTTTCACAGGGAACA
GCTCCAAGACCCAGGGGGAGCTCTTTTTGTTGCTGGACTCCCGAGGAGCCTTCCATACAAAAGGGTACTATGCAG
CTGTGGAGGCCAAGAAGGAGAGAATGAGCAAACACGCCCAGACCTTTGGGGCCAAGCAGCCCACACATCAGGGGG
GCCCTGCACAGGACCGCGGAGTGTACCTGTCCCTCCTGGCCTCCCTCCGCACACGTGCCCAGTTGCCCGTGGTGG
TGTTCACCTTCTCCCGGGGCCGCTGTGATGAGCAGGCCTCAGGCCTCACCTCCCTTGACCTCACCACCAGTTCGG
AGAAGAGCGAGATCCACCTCTTCCTGCAGCGCTGCCTTGCTCGCCTCCGTGGCTCTGACCGCCAGCTGCCCCAGG
TCCTGCACATGTCAGAGCTCCTGAATCGCGGCCTGGGTGTGCACCATAGCGGCATCCTGCCCATCCTCAAGGAGA
TCGTGGAGATGCTCTTCAGCCGTGGCCTGGTCAAGGTCTTGTTTGCCACAGAGACCTTTGCCATGGGAGTAAACA
TGCCTGCTCGTACAGTAGTGTTTGACTCCATGCGCAAACACGATGGCTCCACCTTCCGGGACCTGCTCCCTGGGG
AGTATGTGCAGATGGCAGGCCGGGCAGGGCGGAGGGGCCTGGACCCCACAGGCACCGTTATCCTGCTCTGCAAGG
GCCGAGTGCCCGAGATGGCAGACCTGCACCGCATGATGATGGGGAAGCCGTCCCAGCTGCAGTCCCAGTTCCGCC
TCACGTACACTATGATCCTCAACTTGCTGCGAGTGGATGCCCTCAGGGTGGAGGACATGATGAAGAGGAGCTTCT
CTGAGTTTCCCTCCCGCAAAGACAGCAAGGCCCATGAACAGGCCCTGGCTGAACTGACCAAGAGGCTGGGAGCTT
TGGAGGAGCCTGACATGACTGGCCAACTGGTCGACCTGCCTGAATATTACAGCTGGGGGGAGGAACTGACAGAGA
CCCAGCACATGATCCAGCGACGCATCATGGAGTCTGTGAACGGGCTGAAGTCTCTCTCAGCAGGAAGGGTGGTGG
TTGTGAAGAATCAGGAGCATCACAACGCATTGGGAGTGATCCTACAGGTCTCCTCGAACTCCACCAGCAGAGTAT
TCACAACCCTGGTCTTGTGTGATAAGCCCTTGTCCCAGGACCCACAGGACAGGGGGCCAGCCACTGCAGAGGTGC
CCTATCCAGATGACCTCGTGGGATTCAAGCTGTTCCTGCCTGAAGGGCCTTGTGACCACACCATGGTCAAGCTCC
AGCCAGGAGATATGGCTGCCATCACCACCAAGGTGCTCCGGGTGAATGGGGAGAAGATCTTGGAGGACTTCAGCA
AGAGGCAGCAGCCAAAATTCAAGAAGGATCCTCCCCTTGCAGCCGTGACCACTGCTGTCCAGGAACTGCTGCGTC
TGGCTCAGGCCCACCCAGCCGGACCTCCCACCCTCGACCCTGTCAATGACCTGCAGCTCAAAGATATGTCAGTTG
TAGAGGGTGGGCTCCGGGCCCGGAAGCTGGAGGAGCTGATCCAGGGGGCTCAGTGTGTACACAGCCCCCGTTTTC
CTGCCCAGTACCTGAAGCTGCGGGAGCGAATGCAGATACAGAAGGAGATGGAGCGGCTGCGCTTCCTACTGTCGG
ATCAGTCATTGCTGCTGCTTCCTGAGTACCATCAGCGAGTAGAGGTGCTCCGAACCCTGGGTTACGTGGACGAGG

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FIGURE 4131B

TGGGCACTGTGAAGCTGGCAGGGCGGGTGGCTTGTGCCATGAGCAGCCATGAGTTGCTCCTCACTGAGCTCATGT
TTGACAATGCACTGAGCACCCTGCGGCCTGAGGAGATTGCTGCCTTGCTCTCTGGCCTGGTCTGCCAGAGCCCTG
GGGACGCTGGGGATCAGCTCCCAAACACCCTCAAGCAGGGAATAGAACGTGTCCGGGCTGTGGCCAAGCGGATTG
GTGAGGTCCAGGTGGCTTGTGGCCTGAACCAGACGGTGGAGGAATTTGTGGGGGAGCTGAATTTTGGGCTGGTTG
AGGTTGTATATGAGTGGGCCCGGGGCATGCCCTTCTCCGAGTTGGCAGGGCTCTCAGGGACCCCTGAGGGCCTGG
TGGTCCGCTGCATTCAGCGCCTGGCTGAGATGTGTCGCTCACTGCGGGGGGCAGCCCGCCTGGTAGGAGAGCCTG
TGCTGGGTGCCAAGATGGAGACAGCGGCTACCTTGCTACGGCGGGACATCGTATTTGCGGCCAGCCTCTACACCC
AGTGAATGCCCCATGTAAAAACATGATGATAAAACAGCAAAGCAC

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FIGURE 4132

CGTTTTCCGCTCCTCGCTACGTCATCGTTGTGAGCCCGCTATCAGCGGCCAGCGCGGGCGCGGCCGGAGACCGTG
GGGCCCCCGGTTGCCGCCCCCTCGGGAGCCACC**ATG**TTGGTGATACCCCCCGGACTGAGCGAGGAAGAGGAGGCT
CTGCAGAAGAAATTCAACAAGCTCAAGAAAAAGAAAAAGGCATTGCTGGCTCTGAAGAAGCAAAGTAGCAGCAGC
ACAACCAGCCAAGGTGGTGTCAAACGCTCACTATCAGAGCAGCCTGTCATGGACACAGCCACAGCAACAGAGCAG
GCAAAGCAGCTGGTGAAGTCAGGAGCCATCAGTGCCATCAAGGCTGAGACCAAGAACTCAGGCTTCAAGCGTTCT
CGAACCCTTGAGGGGAAGTTAAAGGACCCCGAGAAGGGACCAGTCCCCACTTTCCAGCCGTTCCAGAGGAGCATA
TCTGCTGATGATGACCTGCAAGAGTCATCCAGACGTCCCCAGAGGAAATCTCTGTATGAGAGCTTTGTGTCTTCT
AGTGATCGACTTCGAGAACTAGGACCAGATGGAGAAGAGGCAGAGGGCCCAGGGGCTGGTGATGGTCCCCCTCGA
AGCTTTGACTGGGGCTATGAAGAACGCAGTGGTGCCCACTCCTCAGCCTCCCCTCCCCGAAGCCGCAGCCGGGAC
CGCAGCCATGAGAGGAACCGGGACAGAGACCGAGATCGGGAGCGGGATCGAGACCGGGATCGAGACAGAGACAGA
GAGCGGGACAGGGATCGGGATCGGGATCGAGATCGAGACCGGGAACGGGACAGGGATCGGGAGCGGGATCGAGAC
CGAGACCGAGAGGGTCCTTTCCGCAGGTCGGATTCATTCCCTGAACGGCGAGCCCCTAGGAAAGGGAATACTCTC
TATGTATATGGAGAAGACATGACACCCACCCTTCTCCGTGGGGCCTTCTCTCCTTTTGGAAACATCATTGACCTC
TCCATGGACCCACCCAGAAACTGTGCCTTCGTCACCTATGAAAAGATGGAGTCAGCAGATCAGGCCGTTGCTGAG
CTCAACGGGACCCAGGTGGAGTCTGTACAGCTCAAAGTCAACATAGCCCGAAAACAGCCCATGCTGGATGCCGCT
ACTGGCAAGTCTGTCTGGGGCTCCCTCGCTGTCCAGAACAGCCCTAAGGGTTGCCACCGGGACAAGAGGACCCAG
ATTGTCTACAGTGATGACGTCTACAAGGAAAACCTTGTGGATGGCTTC**TAG**GGAACAGAGCTGGATTCCTTGTGC
CTCATATGCCCCAATGCTGGTCTCAGTAAAACACTGAGGTGGAAGCTTACACATCTCCCTCAGCCTCTGGTTTTT
CAGCACTTGGGATTGGGGTTAAGCCTTTAAAAACGGCTGTCAGGTTTGATCTCAGTGTAACGACATGGCCAGTGC
CTGTTCCCCACTCCCTTGCCCCAAAAGGATCTGGAACAC

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FIGURE 4133

AGGGGAAGGGAATGTGACCAGGTCTAGGTCTGGAGTTTCAGCTTGGACACTGAGCCAAGCAGACAAGCAAAGCAA
GCCAGGACACACCATCCTGCCCCAGGCCCAGCTTCTCTCCTGCCTTCCAACGCCATGGGGAGCAATCTCAGCCCC
CAACTCTGCCTGATGCCCTTTATCTTGGGCCTCTTGTCTGGAGGTGTGACCACCACTCCATGGTCTTTGGCCCAG
CCCCAGGGATCCTGCTCTCTGGAGGGGGTAGAGATCAAAGGCGGCTCCTTCCGACTTCTCCAAGAGGGCCAGGCA
CTGGAGTACGTGTGTCCTTCTGGCTTCTACCCGTACCCTGTGCAGACACGTACCTGCAGATCTACGGGGTCCTGG
AGCACCCTGAAGACTCAAGACCAAAAGACTGTCAGGAAGGCAGAGTGCAGAGCAATCCACTGTCCAAGACCACAC
GACTTCGAGAACGGGGAATACTGGCCCCGGTCTCCCTACTACAATGTGAGTGATGAGATCTCTTTCCACTGCTAT
GACGGTTACACTCTCCGGGGCTCTGCCAATCGCACCTGCCAAGTGAATGGCCGGTGGAGTGGGCAGACAGCGATC
TGTGACAACGGAGCGGGGTACTGCTCCAACCCGGGCATCCCCATTGGCACAAGGAAGGTGGGCAGCCAGTACCGC
CTTGAAGACAGCGTCACCTACCACTGCAGCCGGGGGCTTACCCTGCGTGGCTCCCAGCGGCGAACGTGTCAGGAA
GGTGGCTCTTGGAGCGGGACGGAGCCTTCCTGCCAAGACTCCTTCATGTACGACACCCCTCAAGAGGTGGCCGAA
GCTTTCCTGTCTTCCCTGACAGAGACCATAGAAGGAGTCGATGCTGAGGATGGGCACGGCCCAGGGGAACAACAG
AAGCGGAAGATCGTCCTGGACCCTTCAGGCTCCATGAACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGG
GCCAGCAACTTCACAGGAGCCAAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGTTATGGTGTGAAGCCA
AGATATGGTCTAGTGACATATGCCACATACCCCAAAATTTGGGTCAAAGTGTCTGAAGCAGACAGCAGTAATGCA
GACTGGGTCACGAAGCAGCTCAATGAAATCAATTATGAAGACCACAAGTTGAAGTCAGGGACTAACACCAAGAAG
GCCCTCCAGGCAGTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTCCTGAAGGCTGGAACCGCACCCGCCAT
GTCATCATCCTCATGACTGATGGATTGCACAACATGGGCGGGGACCCAATTACTGTCATTGATGAGATCCGGGAC
TTGCTATACATTGGCAAGGATCGCAAAAACCCAAGGGAGGATTATCTGGATGTCTATGTGTTTGGGGTCGGGCCT
TTGGTGAACCAAGTGAACATCAATGCTTTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAAGTCAAGGAT
ATGGAAAACCTGGAAGATGTTTTCTACCAAATGATCGATGAAAGCCAGTCTCTGAGTCTCTGTGGCATGGTTTGG
GAACACAGGAAGGGTACCGATTACCACAAGCAACCATGGCAGGCCAAGATCTCAGTCATTCGCCCTTCAAAGGGA
CACGAGAGCTGTATGGGGGCTGTGGTGTCTGAGTACTTTGTGCTGACAGCAGCACATTGTTTCACTGTGGATGAC
AAGGAACACTCAATCAAGGTCAGCGTAGGAGGGGAGAAGCGGGACCTGGAGATAGAAGTAGTCCTATTTCACCCC
AACTACAACATTAATGGGAAAAAAGAAGCAGGAATTCCTGAATTTTATGACTATGACGTTGCCCTGATCAAGCTC
AAGAATAAGCTGAAATATGGCCAGACTATCAGGCCCATTTGTCTCCCCTGCACCGAGGGAACAACTCGAGCTTTG
AGGCTTCCTCCAACTACCACTTGCCAGCAACAAAAGGAAGAGCTGCTCCCTGCACAGGATATCAAAGCTCTGTTT
GTGTCTGAGGAGGAGAAAAAGCTGACTCGGAAGGAGGTCTACATCAAGAATGGGGATAAGAAAGGCAGCTGTGAG
AGAGATGCTCAATATGCCCCAGGCTATGACAAAGTCAAGGACATCTCAGAGGTGGTCACCCCTCGGTTCCTTTGT
ACTGGAGGAGTGAGTCCCTATGCTGACCCCAATACTTGCAGAGGTGATTCTGGCGGCCCCTTGATAGTTCACAAG
AGAAGTCGTTTCATTCAAGTTGGTGTAATCAGCTGGGGAGTAGTGGATGTCTGCAAAAACCAGAAGCGGCAAAAG
CAGGTACCTGCTCACGCCCGAGACTTTCACATCAACCTCTTTCAAGTGCTGCCCTGGCTGAAGGAGAAACTCCAA
GATGAGGATTTGGGTTTTCTATAAGGGGTTTCCTGCTGGACAGGGGCGTGGGATTGAATTAAAACAGCTGCGACA
AC

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FIGURE 4134A

GCAAGCGGCGATGGCGGCGGCGGCGGGAGCTGCAGCGGCGGCGGCCGCCGAGGGGGAGGCCCCCGCTGAGATGGG
GGCGCTGCTGCTGGAGAAGGAAACCAGAGGAGCCACCGAGAGAGTTCATGGCTCTTTGGGGGACACCCCTCGTAG
TGAAGAAACCCTGCCCAAGGCCACCCCCGACTCCCTGGAGCCTGCTGGCCCCTCATCTCCAGCCTCTGTCACTGT
CACTGTTGGTGATGAGGGGGCTGACACCCCTGTAGGGGCTACACCACTCATTGGGGATGAATCTGAGAATCTTGA
GGGAGATGGGGACCTCCGTGGGGGCCGGATCCTGCTGGGCCATGCCACAAAGTCATTCCCCTCTTCCCCCAGCAA
GGGGGGTTCCTGTCCTAGCCGGGCCAAGATGTCAATGACAGGGGCGGGAAAATCACCTCCATCTGTCCAGAGTTT
GGCTATGAGGCTACTGAGTATGCCAGGAGCCCAGGGAGCTGCAGCAGCAGGGTCTGAACCCCCTCCAGCCACCAC
GAGCCCAGAGGGACAGCCCAAGGTCCACCGAGCCCGCAAAACCATGTCCAAACCAGGAAATGGACAGCCCCCGGT
CCCTGAGAAGCGGCCCCCTGAAATACAGCATTTCCGCATGAGTGATGATGTCCACTCACTGGGAAAGGTGACCTC
AGATCTGGCCAAAAGGAGGAAGCTGAACTCAGGAGGTGGCCTGTCGGAGGAGTTAGGTTCTGCCCGGCGTTCAGG
AGAAGTGACCCTGACGAAAGGGGACCCCGGGTCCCTGGAGGAGTGGGAGACGGTGGTGGGTGATGACTTCAGTCT
CTACTATGATTCCTACTCTGTGGATGAGCGCGTGGACTCCGACAGCAAGTCTGAAGTTGAAGCTCTAACTGAACA
ACTAAGTGAAGAGGAGGAGGAGGAAGAGGAGGAAGAAGAAGAAGAGGAAGAGGAGGAGGAAGAGGAAGAAGAAGA
GGAAGATGAGGAGTCAGGGAATCAGTCAGATAGGAGTGGTTCCAGTGGCCGGCGCAAGGCCAAGAAGAAATGGCG
AAAAGACAGCCCATGGGTGAAGCCGTCTCGGAAACGGCGCAAGCGGGAGCCTCCGCGGGCCAAGGAGCCACGAGG
AGTGAATGGTGTGGGCTCCTCAGGCCCCAGTGAGTACATGGAGGTCCCTCTGGGGTCCCTGGAGCTGCCCAGCGA
GGGGACCCTCTCCCCCAACCACGCTGGGGTGTCCAATGACACATCTTCGCTGGAGACAGAGCGAGGGTTTGAGGA
GTTGCCCCCTGTGCAGCTGCCGCATGGAGGCACCCAAGATTGACCGCATCAGCGAGAGGGCGGGGCACAAGTGCAT
GGCCACTGAGAGTGTGGACGGAGAGCTGTCAGGCTGCAATGCCGCCATCCTCAAGCGGGAGACCATGAGGCCATC
CAGCCGTGTGGCCCTGATGGTGCTCTGTGAGACCCACCGCGCCCGCATGGTCAAACACCACTGCTGCCCGGGCTG
CGGCTACTTCTGCACGGCGGGCACCTTCCTGGAGTGCCACCCTGACTTCCGTGTGGCCCACCGCTTCCACAAGGC
CTGTGTGTCTCAGCTGAATGGGATGGTCTTCTGTCCCCACTGTGGGGAGGATGCTTCTGAAGCTCAAGAGGTGAC
CATCCCCCGGGGTGACGGGGTGACCCCACCGGCCGGCACTGCAGCTCCTGCACCCCCACCCCTGTCCCAGGATGT
CCCCGGGAGAGCAGACACTTCTCAGCCCAGTGCCCGGATGCGAGGGCATGGGGAACCCCGGCGCCCGCCCTGCGA
TCCCCTGGCTGACACCATTGACAGCTCAGGGCCCTCCCTGACCCTGCCCAATGGGGGCTGCCTTTCAGCCGTGGG
GCTGCCACTGGGGCCAGGCCGGGAGGCCCTGGAAAAGGCCCTGGTCATCCAGGAGTCAGAGAGGCGGAAGAAGCT
CCGTTTCCACCCTCGGCAGTTGTACCTGTCCGTGAAGCAGGGCGAGCTGCAGAAGGTGATCCTGATGCTGTTGGA
CAACCTGGACCCCAACTTCCAGAGCGACCAGCAGAGCAAGCGCACGCCCCTGCATGCAGCCGCCCAGAAGGGCTC
CGTGGAGATCTGCCATGTGCTGCTGCAGGCTGGAGCCAACATAAATGCAGTGGACAAACAGCAGCGGACGCCACT
GATGGAGGCCGTGGTGAACAACCACCTGGAGGTAGCCCGTTACATGGTGCAGCGTGGTGGCTGTGTCTATAGCAA
GGAGGAGGACGGTTCCACCTGCCTCCACCACGCAGCCAAAATCGGGAACTTGGAGATGGTCAGCCTGCTGCTGAG
CACAGGACAGGTGGACGTCAATGCCCAGGACAGTGGGGGGTGGACGCCCATCATCTGGGCTGCAGAGCACAAGCA
CATCGAGGTGATCCGCATGCTACTGACGCGGGGCGCCGACGTCACCCTCACTGACAACGAGGAGAACATCTGCCT
GCACTGGGCCTCCTTCACGGGCAGCGCCGCCATCGCCGAAGTCCTTCTGAATGCGCGCTGTGACCTCCATGCTGT
CAACTACCATGGGGACACCCCCCTGCACATCGCAGCTCGGGAGAGCTACCATGACTGCGTGCTGTTATTCCTGTC
ACGTGGGGCCAACCCTGAGCTGCGGAACAAAGAGGGGGACACAGCATGGGACCTGACTCCCGAGCGCTCCGACGT
GTGGTTTGCGCTTCAACTCAACCGCAAGCTCCGACTTGGGGTGGGAAATCGGGCCATCCGCACAGAGAAGATCAT
CTGCCGGGACGTGGCTCGGGGCTATGAGAACGTGCCCATTCCCTGTGTCAACGGTGTGGATGGGGAGCCCTGCCC
TGAGGATTACAAGTACATCTCAGAGAACTGCGAGACGTCCACCATGAACATCGATCGCAACATCACCCACCTGCA
GCACTGCACGTGTGTGGACGACTGCTCTAGCTCCAACTGCCTGTGCGGCCAGCTCAGCATCCGGTGCTGGTATGA
CAAGGATGGGCGATTGCTCCAGGAATTTAACAAGATTGAGCCTCCGCTGATTTTCGAGTGTAACCAGGCGTGCTC
ATGCTGGAGAAACTGCAAGAACCGGGTCGTACAGAGTGGCATCAAGGTGCGGCTACAGCTCTACCGAACAGCCAA
GATGGGCTGGGGGGTCCGCGCCCTGCAGACCATCCCACAGGGGACCTTCATCTGCGAGTATGTCGGGGAGCTGAT
CTCTGATGCTGAGGCTGATGTGAGAGAGGATGATTCTTACCTCTTCGACTTAGACAACAAGGATGGAGAGGTGTA
CTGCATAGATGCCCGTTACTATGGCAACATCAGCCGCTTCATCAACCACCTGTGTGACCCCAACATCATTCCCGT
CCGGGTCTTCATGCTGCACCAAGACCTGCGATTTCCACGCATCGCCTTCTTCAGTTCCCGAGACATCCGGACTGG
GGAGGAGCTAGGGTTTGACTATGGCGACCGCTTCTGGGACATCAAAAGCAAATATTTCACCTGCCAATGTGGCTC
TGAGAAGTGCAAGCACTCAGCCGAAGCCATTGCCCTGGAGCAGAGCCGTCTGGCCCGCCTGGACCCACACCCTGA

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FIGURE 4134B

GCTGCTGCCCGAGCTCGGCTCCCTGCCCCCTGTCAACACA**TGA**GAACGGACCACACCCTCTCTCCCCAGCATGGA
TGGCCACAGCTCAGCCGCCTCCTCTGCCACCAGCTGCTCGCAGCCCATGCCTGGGGGTGCTGCCATCTTCTCTCC
CCACCACCCTTTCACACATTCCTGACCAGAGATCCCAGCCAGGCCCTGGAGGTCTGACAGCCCCTCCCTCCCAGA
GCTGGTTCCTCCCTGGGAGGGCAACTTCAGGGCTGGCCACCCCCCGTGTTCCCCATCCTCAGTTGAAGTTTGATG
AATTGAAGTCGGGCCTCTATGCCAACTGGTTCCTTTTGTTCTCAATAAATGTTGGGTTTGGTAATAAA

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FIGURE 4135

ATGGGGGGAAAGCAGCGGGACGAGGATGACGAGGCCTACGGGAAGCCAGTCAAATACGACCCCTCCTTTCGAGGC
CCCATCAAGAACAGAAGCTGCACAGATGTCATCTGCTGCGTCCTCTTCCTGCTCTTCATTCTAGGTTACATCGTG
GTGGGGATTGTGGCCTGGTTGTATGGAGACCCCCGGCAAGTCCTCTACCCCAGGAACTCTACTGGGGCCTACTGT
GGCATGGGGGAGAACAAAGATAAGCCGTATCTCCTGTACTTCAACATCTTCAGCTGCATCCTGTCCAGCAACATC
ATCTCAGTTGCTGAGAACGGCCTACAGTGCCCCACACCCCAGGTGTGTGTGTCCTCCTGCCCGGAGGACCCATGG
ACTGTGGGAAAAAACGAGTTCTCACAGACTGTTGGGGAAGTCTTCTATACAAAAAACAGGAACTTTTGTCTGCCA
GGGGTACCCTGGAATATGACGGTGATCACAAGCCTGCAACAGGAACTCTGCCCCAGTTTCCTCCTCCCCTCTGCT
CCAGCTCTGGGACGCTGCTTTCCATGGACCAACATTACTCCACCGGCGCTCCCAGGGATCACCAATGACACCACC
ATACAGCAGGGGATCAGCGGTCTTATTGACAGCCTCAATGCCCGAGACATCAGTGTTAAGATCTTTGAAGATTTT
GCCCAGTCCTGGTATTGGATTCTTGTTGCCCTGGGGGTGGCTCTGGTCTTGAGCCTACTGTTTATCTTGCTTCTG
CGCCTGGTGGCTGGGCCCCTGGTGCTGGTGCTGATCCTGGGAGTGCTGGGCGTGCTGGCATATGGCATCTACTAC
TGCTGGGAGGAGTACCGAGTGCTGCGGGACAAGGGCGCCTCCATCTCCCAGCTGGGTTTCACCACCAACCTCAGT
GCCTACCAGAGCGTGCAGGAGACCTGGCTGGCCGCCCTGATCGTGTTGGCGGTGCTTGAAGCCATCCTGCTGCTG
GTGCTCATCTTCCTGCGGCAGCGGATTCGTATTGCCATCGCCCTCCTGAAGGAGGCCAGCAAGGCTGTGGGACAG
ATGATGTCTACCATGTTCTACCCACTGGTCACCTTTGTCCTCCTCCTCATCTGCATTGCCTACTGGGCCATGACT
GCTCTGTATCCTCTGCCCACGCAGCCAGCCACTCTTGGATATGTGCTCTGGGCATCCAACATCAGCTCCCCCGGC
TGTGAGAAAGTGCCAATAAATACATCATGCAACCCCACGGCCCACCTTGTGAACTCCTCGTGCCCAGGGCTGATG
TGCGTCTTCCAGGGCTACTCATCCAAAGGCCTAATCCAACGTTCTGTCTTCAATCTGCAAATCTATGGGGTCCTG
GGGCTCTTCTGGACCCTTAACTGGGTACTGGCCCTGGGCCAATGCGTCCTCGCTGGAGCCTTTGCCTCCTTCTAC
TGGGCCTTCCACAAGCCCCAGGACATCCCTACCTTCCCCTTAATCTCTGCCTTCATCCGCACACTCCGTTACCAC
ACTGGGTCATTGGCATTTGGAGCCCTCATCCTGACCCTTGTGCAGATAGCCCGGGTCATCTTGGAGTATATTGAC
CACAAGCTCAGAGGAGTGCAGAACCCTGTAGCCCGCTGCATCATGTGCTGTTTCAAGTGCTGCCTCTGGTGTCTG
GAAAAATTTATCAAGTTCCTAAACCGCAATGCATACATCATGATCGCCATCTACGGGAAGAATTTCTGTGTCTCA
GCCAAAAATGCGTTCATGCTACTCATGCGAAACATTGTCAGGGTGGTCGTCCTGGACAAAGTCACAGACCTGCTG
CTGTTCTTTGGGAAGCTGCTGGTGGTCGGAGGCGTGGGGGTCCTGTCCTTCTTTTTTTCTCCGGTCGCATCCCG
GGGCTGGGTAAAGACTTTAAGAGCCCCCACCTCAACTATTACTGGCTGCCCATCATGACCTCCATCCTGGGGGCC
TATGTCATCGCCAGCGGCTTCTTCAGCGTTTTCGGCATGTGTGTGGACACGCTCTTCCTCTGCTTCCTGGAAGAC
CTGGAGCGGAACAACGGCTCCCTGGACCGGCCCTACTACATGTCCAAGAGCCTTCTAAAGATTCTGGGCAAGAAG
AACGAGGCGCCCCCGGACAACAAGAAGAGGAAGAAGTGACAGCTCCGGCCCTGATCCAGGACTGCACCCCACCCC
CACCGTCCAGCCATCCAACCTCACTTCGCCTTACAGGTCTCCATTTTGTGGTAAAAAAAGGTTTTAGGCCAGGCG
CCGTGGCTCACGCCTGTAATCCAACACTTTGAGAGGCTGAGGCGGGCGGATCACCTGAGTCAGGAGTTCGAGACC
AGCCTGGCCAACATGGTGAAAC

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FIGURE 4136

CGGGAAGCGCGGCGGGGCCTCCAGACCGGGGCGGGCTTAAGGGTGACATCTGCGCTTTAAAGGGTCCGGGTCAGC
TGACTCCCGACTCTGTGGAGTCTAGCTGCCAGGGTCGCGGCAGCTGCGGGGAGAGATGACTGGGGAGCGACCCAG
CACGGCGCTCCCGGACAGACGCTGGGGGCCGCGGATTCTGGGCTTCTGGGGAGGCTGTAGGGTTTGGGTGTTTGC
CGCGATCTTCCTGCTGCTGTCTCTGGCAGCCTCCTGGTCCAAGGCTGAGAACGACTTCGGTCTGGTGCAGCCGCT
GGTGACCATGGAGCAACTGCTGTGGGTGAGCGGGAGACAGATCGGCTCAGTGGACACCTTCCGCATCCCGCTCAT
CACAGCCACTCCGCGGGGCACTCTTCTCGCCTTTGCTGAGGCGAGGAAAATGTCCTCATCCGATGAGGGGGCCAA
GTTCATCGCCCTGCGGAGGTCCATGGACCAGGGCAGCACATGGTCTCCTACAGCGTTCATTGTCAATGATGGGGA
TGTCCCCGATGGGCTGAACCTTGGGGCAGTAGTGAGCGATGTTGAGACAGGAGTAGTATTTCTTTTCTACTCCCT
TTGTGCTCACAAGGCCGGCTGCCAGGTGGCCTCTACCATGTTGGTATGGAGCAAGGATGATGGTGTTTCCTGGAG
CACACCCCGGAATCTCTCCCTGGATATTGGCACTGAAGTGTTTGCCCCTGGACCGGGCTCTGGTATTCAGAAACA
GCGGGAGCCACGGAAGGGCCGCCTCATCGTGTGTGGCCATGGGACGCTGGAGCGGGACGGAGTCTTCTGTCTCCT
CAGCGATGATCATGGTGCCTCCTGGCGCTACGGAAGTGGGGTCAGCGGCATCCCCTACGGTCAGCCCAAGCAGGA
AAATGATTTCAATCCTGATGAATGCCAGCCCTATGAGCTCCCAGATGGCTCAGTCGTCATCAATGCCCGAAACCA
GAACAACTACCACTGCCACTGCCGAATTGTCCTCCGCAGCTATGATGCCTGTGATACACTAAGGCCCCGTGATGT
GACCTTCGACCCTGAGCTCGTGGACCCTGTGGTAGCTGCAGGAGCTGTAGTCACCAGCTCCGGCATTGTCTTCTT
CTCCAACCCAGCACATCCAGAGTTCCGAGTGAACCTGACCCTGCGATGGAGCTTCAGCAATGGTACCTCATGGCG
GAAAGAGACAGTCCAGCTATGGCCAGGCCCCAGTGGCTATTCATCCCTGGCAACCCTGGAGGGCAGCATGGATGG
AGAGGAGCAGGCCCCCCAGCTCTACGTCCTGTATGAGAAAGGCCGGAACCACTACACAGAGAGCATCTCCGTGGC
CAAAATCAGTGTCTATGGGACACTCTGAGCTGTGCCACTGCCACAGGGGTATTCTGCCTTCAGGACTCTGCCTTC
AGGAACACGGGTCTGTAGAGGGTCTGCTGGAGACGCCTGAAAGACAGTTCCATCTTCCTTTAGACTCCAGCCTTG
GCAAAATCACCTTCCCTTTACCAGGGAAATCACTTCCTTTAGGACTGAAAGCTAGGCGTCCTCTCCCACAAAAAA
GTCCTGCCCTCATCTGAGAATACTGTCTTTCCATATGGCTAAGTGTGGCCCCACCACCCTCTCTGCCCTCCCGGG
ACATTGATTGGTCCTGTCTTGGGCAGGTCTAGTGAGCTGTAGAATTGAATCAATGTGAACTCAGGGAACTGGGGA
AGGCTGAGCCTCCTCTTTGGTGTTGCGGTAAGATAACCGACAGGGCTGGTGAAAGTCCCCAGATGGCAGGATATT
TGGTTTCAGAGTAAGGACTAGGTGCACCACCATGACTGACTATCAATCAAAATGTTTGTAACTTAAAATTTTTAA
TGAAGGATAATGAATATTT

FIGURE 4137

GGTCCCAAGGCTTTCCAGAGCGAACCTGTGCGGCTGCAGGCACCGGCGTGTTGAGTTTCCGGCGTTCCGAAGGAC
TGAGCTCTTGTCGCGGATCCCGTCCGCCGTTTCCAGCCCCCAGTCTCAGAGCGGAGCCCACAGAGCAGGGCACCG
GCATGGCCAAAGCCGCGGCGATCGGCATCGACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCA
AGGTGGAGATCATCGCCAACGACCAGGGCAACCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCGGC
TCATCGGGGATGCGGCCAAGAACCAGGTGGCGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCG
GCCGCAAGTTCGGCGACCCGGTGGTGCAGTCGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACA
AGCCCAAGGTGCAGGTGAGCTACAAGGGGGAGACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGA
CCAAGATGAAGGAGATCGCCGAGGCGTACCTGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACT
TCAACGACTCGCAGCGCCAGGCCACCAAGGATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACG
AGCCCACGGCCGCCGCCATCGCCTACGGCCTGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACC
TGGGCGGGGGCACCTTCGACGTGTCCATCCTGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCCGGGG
ACACCCACCTGGGTGGGGAGGACTTTGACAACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACA
AGAAGGACATCAGCCAGAACAAGCGAGCCGTGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGT
CGTCCAGCACCCAGGCCAGCCTGGAGATCGACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGG
CGAGGTTCGAGGAGCTGTGCTCCGACCTGTTCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCA
AGCTGGACAAGGCCCAGATTCACGACCTGGTCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGC
TGCAGGACTTCTTCAACGGGCGCGACCTGAACAAGAGCATCAACCCCGACGAGGCTGTGGCCTACGGGGCGGCGG
TGCAGGCGGCCATCCTGATGGGGGACAAGTCCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGT
CGCTGGGGCTGGAGACGGCCGGAGGCGTGATGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGA
CGCAGATCTTCACCACCTACTCCGACAACCAACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGA
CGAAAGACAACAATCTGTTGGGGCGCTTCGAGCTGAGCGGCATCCCTCCGGCCCCCAGGGGCGTGCCCCAGATCG
AGGTGACCTTCGACATCGATGCCAACGGCATCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAGCA
AGATCACCATCACCAACGACAAGGGCCGCCTGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGT
ACAAAGCGGAGGACGAGGTGCAGCGCGAGAGGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGA
AGAGCGCCGTGGAGGATGAGGGGCTCAAGGGCAAGATCAGCGAGGCGGACAAGAAGAAGGTTCTGGACAAGTGTC
AAGAGGTCATCTCGTGGCTGGACGCCAACACCTTGGCCGAGAAGGACGAGTTTGAGCACAAGAGGAAGGAGCTGG
AGCAGGTGTGTAACCCCATCATCAGCGGACTGTACCAGGGTGCCGGTGGTCCCGGGCCTGGGGGCTTCGGGGCTC
AGGGTCCCAAGGGAGGGTCTGGGTCAGGCCCTACCATTGAGGAGGTGGATTAGGGGCCTTTGTTCTTTAGTATGT
TTGTCTTTGAGGTGGACTGTTGGGACTCAAGGACTTTGCTGCTGTTTTCCTATGTCATTTCTGCTTCAGCTCTTT
GCTGCTTCACTTCTTTGTAAAGTTAAGTTGTAACCTGATGGTAATTAGCTGGCTTCATTATTTTTGTAGTACAAC
CGATATGTTCATTAGAATTCTTTGCATTTAATGTTGATACTGTAAGGGTGTTTCGTTCCCTTTAAATGAATCAAC
ACTGCCACCTTCTGTACGAGTTTGTTTTTTTTTTTTTTTTTTTTTTTTTTGCTTGGCGAAAACACTACAAAGGC
TGGGAATGTATGTTTTTATAATTTGTTTATTTAAATATGAAAAATAAAATGTTAAACTTT

FIGURE 4138

ACTGCGCAGGCCCAGCAAGCCCCCACAATTAAAAGCCCAGCGCCGACCCTTCCTGTCAATTAGGCGCTGAAGCGC
AGGCGGTCAGCATCGCCATGGAGACCAACACCCTTCCCACCGCCACTCCCCCTTCCTCTCAGGGTCCCTGTCCCC
TCCAGTGAATCCCAGAAGACTCTGGAGAGTTCTGAGCAGGGGGCGGCACTCTGGCCTCTGATTGGTCCAAGGAAG
GCTGGGGGGCAGGACGGGAGGCGAAACCCCTGGAATATTCCCGACCTGGCAGCCTCATCGAGCTCGGTGATTGGC
TCAGAAGGGAAAAGGCGGGTCTCCGTGACGACTTATAAAAGCCCAGGGGCAAGCGGTCCGGATAACGGCTAGCCT
GAGGAGCTGCTGCGACAGTCCACTACCTTTTTCGAGAGTGACTCCCGTTGTCCCAAGGCTTCCCAGAGCGAACCT
GTGCGGCTGCAGGCACCGGCGCGTCGAGTTTCCGGCGTCCGGAAGGACCGAGCTCTTCTCGCGGATCCAGTGTTC
CGTTTCCAGCCCCCAATCTCAGAGCCGAGCCGACAGAGAGCAGGGAACCGGC**ATG**GCCAAAGCCGCGGCGATCGG
CATCGACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCAAGGTGGAGATCATCGCCAACGACCA
GGGCAACCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCGGCTCATCGGGGATGCGGCCAAGAACCA
GGTGGCGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCGGCCGCAAGTTCGGCGACCCGGTGGT
GCAGTCGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACAAGCCCAAGGTGCAGGTGAGCTACAA
GGGGGACACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGACCAAGATGAAGGAGATCGCCGAGGC
GTACCTGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACTTCAACGACTCGCAGCGCCAGGCCAC
CAAGGATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACGAGCCCACGGCCGCCGCCATCGCCTA
CGGCCTGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACCTGGGCGGGGGCACCTTCGACGTGTC
CATCCTGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCCGGGGACACCCACCTGGGTGGGGAGGACTT
TGACAACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACAAGAAGGACATCAGCCAGAACAAGCG
AGCCGTGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGTCGTCCAGCACCCAGGCCAGCCTGGA
GATCGACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGGCGAGGTTCGAGGAGCTGTGCTCCGA
CCTGTTCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCAAGCTGGACAAGGCCCAGATTCACGA
CCTGGTCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGCTGCAGGACTTCTTCAACGGGCGCGA
CCTGAACAAGAGCATCAACCCCGACGAGGCTGTGGCCTACGGGGCGGCGGTGCAGGCGGCCATCCTGATGGGGGA
CAAGTCCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGTCGCTGGGGCTGGAGACGGCCGGAGG
CGTGATGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGACGCAGATCTTCACCACCTACTCCGA
CAACCAACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGACGAAAGACAACAATCTGTTGGGGCG
CTTCGAGCTGAGCGGCATCCCTCCGGCCCCCAGGGGCGTGCCCCAGATCGAGGTGACCTTCGACATCGATGCCAA
CGGCATCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAACAAGATCACCATCACCAACGACAAGGG
CCGCCTGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGTACAAAGCGGAGGACGAGGTGCAGCG
CGAGAGGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGAAGAGCGCCGTGGAGGATGAGGGGCT
CAAGGGCAAGATCAGCGAGGCCGACAAGAAGAAGGTGCTGGACAAGTGTCAAGAGGTCATCTCGTGGCTGGACGC
CAACACCTTGGCCGAGAAGGACGAGTTTGAGCACAAGAGGAAGGAGCTGGAGCAGGTGTGTAACCCCATCATCAG
CGGACTGTACCAGGGTGCCGGTGGTCCCGGGCCTGGGGGCTTCGGGGCTCAGGGTCCCAAGGGAGGGTCTGGGTC
AGGCCCCACCATTGAGGAGGTAGAT**TAG**GGGCCTTTCCAAGATTGCTGTTTTTGTTTTGGAGCTTCAAGACTTTG
CATTTCCTAGTATTTCTGTTTGTCAGTTCTCAATTTCCTGTGTTTGCAATGTTGAAATTTTTTGGTGAAGTACTG
AACTTGCTTTTTTTCCGGTTTCTACATGCAGAGATGAATTTATACTGCCATCTTACGACTATTTCTTCTTTTTAA
TACACTTAACTCAGGCCATTTTTTAAGTTGGTTACTTCAAAGTAAATAAACTTTAAAATTCAAGTGA

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FIGURE 4139

GGGCCAGTTTGGAAAAAGATTACTGAGTTGGAGCCGTCTCAAATTTGCAGGGAGGGACGGGGTGGGGGGTGGGGG
GACCCCGGTTGTGCAGTTTGATATTGAGGGAGCCCCCCACCTACTCGCTGGGGCTGCGTAATCTGGACGTTTCCAA
ACTGAAGCGAAGGCGTCGGGAGACTAGGCCTCAGAGAACCATGGCTACTGCCAAGGGAATCGCCATAGGCATCGA
CCTGGGCACCACCTACTCCTGTGTGGGGGTGTTCCAGCACGGCAAGGTGGAGATCATCGCCAACGACCAGGGCAA
CCGCACCACCCCCAGCTACGTGGCCTTCACAGACACCGAGCGGCTCATTGGGGATGCGGCCAAGAACCAGGTAGC
AATGAATCCCCAGAACACTGTTTTTGATGCTAAACGTCTGATCGGCAGGAAATTTAATGATCCTGTTGTACAAGC
AGATATGAAACTTTGGCCTTTTCAAGTGATTAATGAAGGAGGCAAGCCCAAAGTCCTTGTGTCCTACAAAGGGGA
GAATAAAGCTTTCTACCCTGAGGAAATCTCTTCGATGGTATTGACTAAGTTGAAGGAGACTGCTGAGGCCTTTTT
GGGCCACCCTGTCACCAATGCAGTGATTACCGTGCCAGCCTATTTCAATGACTCTCAACGTCAGGCTACTAAGGA
TGCAGGTGTGATTGCTGGACTTAATGTGCTAAGAATCATCAATGAGCCCACGGCTGCTGCCATTGCCTATGGTTT
AGATAAAGGAGGTCAAGGAGAACGACATGTCCTGATTTTTGATCTGGGTGGAGGCACATTTGATGTGTCAATTCT
GACCATAGATGATGGGATTTTTGAGGTAAAGGCCACTGCTGGGGACACTCACCTGGGTGGGGAGGACTTTGACAA
CAGGCTTGTGAGCCACTTCGTGGAGGAGTTCAAGAGGAAACACAAAAAGGACATCAGCCAGAACAAGCGAGCCGT
GAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGTCGTCCAGCACCCAGGCCAACCTAGAAATTGA
TTCACTTTATGAAGGCATTGACTTCTATACATCCATCACCAGAGCTCGATTTGAAGAGTTGTGTGCAGACCTGTT
TAGGGGTACCCTGGAGCCTGTAGAAAAAGCGCTTCGGGATGCCAAGATGGATAAGGCTAAAATCCATGACATTGT
TTTAGTAGGGGGCTCCACCCGCATCCCCAAGGTGCAGCGGCTGCTTCAGGACTACTTCAATGGACGTGATCTCAA
CAAGAGCATCAACCCTGATGAGGCCGTAGCATATGGGGCTGCGGTACAAGCAGCCATCCTGATGGGGGACAAGTC
TGAGAAGGTACAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGTCCCTGGGGCTGGAGACGGCTGGGGGCGTGAT
GACTGCCCTGATAAAGCGCAACTCCACCATCCCCACCAAGCAGACACAGATTTTCACCACCTACTCTGACAACCA
ACCCGGGGTGCTGATCCAGGTGTATGAGGGCGAGAGGGCCATGACAAAGGACAACAACCTGCTGGGGCGGTTTGA
CCTGACTGGAATCCCTCCAGCACCCAGGGGAGTTCCTCAGATCGAGGTGACGTTTGACATTGATGCCAATGGTAT
TCTCAATGTCACAGCCATGGACAAGAGCACCGGCAAGGTGAACAAGATCACCATCACCAATGACAAGGGCCGCCT
GAGCAAGGAGGAGATTGAGCGCATGGTTCTGGATGCTGAGAAATATAAAGCTGAAGATGAGGTCCAGAGGGAGAA
AATTGCTGCAAAGAATGCCTTAGAATCCTATGCTTTTAACATGAAGAGTGTTGTGAGTGATGAAGGTTTGAAGGG
CAAGATTAGTGAGTCTGATAAAAATAAAATATTGGATAAATGCAACGAGCTCCTTTCGTGGCTGGAGGTCAATCA
ACTGGCAGAGAAAGATGAGTTTGATCATAAGAGAAAGGAATTGGAGCAGATGTGTAACCCTATCATCACAAAACT
CTACCAAGGAGGATGCACTGGGCCTGCCTGCGGAACAGGGTATGTGCCTGGAAGGCCTGCCACAGGCCCCACAAT
TGAAGAAGTAGATTAAATTCTTTTTAGAACTGAAGCATCCTAGGATGCCTCTACATGTATTTCATTCCCCTCATCT
TCAAACATCATTATTATTCTTGACCAGACCTGAATCTAAGTTACCATCCCTTGGAAATTCTGGAGAAGGAGTCTC
ATGCACCACCTATCACACTCCCTCACATCCTGTTTCTGACTTTGGAATGGACTCAGGAAAACTAGGCCCCTCTTT
AAACCGTGTGATGTATTTGAATGTCTGTTATTTCCAGCCACCCTAACATTCTTCTTCCTGTGTGGATGCTTATTT
GTCAATCAGTAAATTTGTTCGTAAAG

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FIGURE 4140

GGCTTCCTCCTCCCCTCTACTCTACCCAGCTTGCGCTCCCCAGCCGCAAGTCGGCCGCGCTTTGCCCGTCAGCGC
TTGGAGCTTTCTGCGTCGCTTCCCGCTGCGCCTGCGCGGTCCCGCCTCGCCCCACGCGCGGGCTCGCGCTTCGGT
TTCCCCAGACCTGCTCGCAGCACCCTGCTGTCTTCCCGGTCCGGCCCGCTGCCCGCGGCGCCAGCACC**ATG**CTCT
TCTATTCTTTTTTCAAGTCCCTTGTGGGCAAGGATGTGGTCGTGGAACTAAAGAATGACCTGAGCATCTGTGGAA
CCCTCCATTCTGTGGATCAGTATCTCAACATCAAACTAACTGACATCAGTGTCACAGACCCTGAGAAATACCCTC
ACATGTTATCAGTGAAGAACTGCTTCATTCGGGGCTCAGTGGTCCGATACGTGCAGCTGCCAGCAGATGAGGTCG
ACACACAGTTGCTACAGGATGCGGCAAGGAAGGAAGCCCTGCAGCAGAAACAG**TGA**TGGCTCCTCCTCCTCTTCC
CCTCCCTCTTTCATTGGTGACCCATAACCCCAAGTCCCAGCCCAGAACCCCTAACCCCCAATACTTGAAGGGGTT
TTGTTTTTTTACTAATGATGGTTTTGTGGGTTTTTTTTAAGGGATGAGTGGATGAGAGGAGTAATAGGGAACAGC
TATCCTCTCTTGAGAAGGGGAGGATAAGTAGGCTGGGAAACTTCAAAGCCTTCCCAGTCCCCAGCACCTGCCTTT
CTCACTACTTCTCTGGAGATGGTAGGAGAGTTTCCTAGGTCTTTCCAGGGCAGCATGTGATTCATTTGGGGATGG
AAGGAATCTGTCCCGCATCGGGAATAAAATTTATGATGC

FIGURE 4141A

GTCACAAAGGGGGGAACACGTGGGCGCCGGCTGCCGGGGCGGCGATCTTAGGGAACTAGGGTCACCTGGAGAGCC
GCCCACCGTCTCTGCCCGCTCGACTCCTCCGCCCGGGCCGCTCGGCCGGTCCAGCCGCGGCCGGCGCCTGGCTGT
GAGGTGGATTCCCGGCCCAGTCTGACCATCTCCCTCCAGTTTTTCCACTTCGTTCGGACCTTCTCATAACTATGT
CCACCCTCTACGTCTCCCCTCACCCAGATGCCTTCCCCAGCCTCCGAGCCCTCATAGCCGCTCGCTATGGGGAGG
CTGGGGAGGGTCCCGGATGGGGAGGAGCCCACCCCCGCATCTGTCTCCAGCCACCCCCGACTAGCAGGACTCCCT
TTCCCCCACCCCGCCTGCCGGCCCTGGAGCAGGGGCCCGGTGGGCTCTGGGTGTGGGGGGCCACGGCTGTGGCCC
AGCTGCTGTGGCCAGCAGGCCTGGGGGGCCCAGGGGGCAGCCGGGCGGCTGTCCTTGTCCAACAGTGGGTCAGTT
ACGCCGACACGGAGTTAATACCAGCTGCCTGTGGAGCAACGCTGCCGGCCCTGGGACTCCGAAGCTCGGCCCAGG
ACCCCCAGGCTGTGCTGGGGGCCCTGGGCAGGGCCCTGAGCCCCTTGGAGGAGTGGCTTCGGCTGCACACCTACT
TGGCCGGGGAGGCCCCCACTCTGGCTGACCTGGCGGCTGTCACAGCCTTGCTGCTGCCTTTCCGATACGTCCTAG
ACCCACCTGCCCGCCGGATCTGGAATAATGTGACTCGCTGGTTTGTCACGTGTGTCCGGCAGCCAGAATTCCGAG
CCGTGCTAGGAGAAGTGGTTCTATACTCAGGAGCCAGGCCTCTCTCTCATCAGCCAGGCCCCGAGGCTCCTGCCC
TCCCAAAGACAGCTGCTCAGCTCAAGAAAGAGGCAAAGAAACGGGAGAAGCTAGAGAAATTCCAACAGAAGCAGA
AGATCCAACAGCAGCAGCCACCTCCAGGGGAGAAGAAACCAAAACCAGAGAAGAGGGAGAAACGGGATCCTGGGG
TCATTACCTATGACCTCCCAACCCCACCCGGGGAAAAGAAAGATGTCAGTGGCCCCATGCCCGACTCCTACAGCC
CTCGGTATGTGGAGGCTGCCTGGTACCCTTGGTGGGAGCAGCAGGGCTTCTTCAAGCCAGAGTATGGGCGTCCTA
ATGTGTCAGCAGCAAATCCCCGAGGTGTCTTCATGATGTGCATCCCACCCCCCAATGTGACAGGCTCCCTGCACC
TGGGCCATGCACTCACCAACGCCATCCAGGACTCCCTGACTCGATGGCACCGCATGCGTGGGGAGACCACCCTGT
GGAACCCTGGCTGTGACCATGCAGGTATTGCCACCCAGGTGGTGGTGGAGAAGAAGCTATGGCGTGAGCAGGGAC
TGAGCCGGCACCAGCTGGGCCGCGAGGCCTTTCTACAGGAAGTCTGGAAGTGGAAGGAGGAGAAAGGTGACCGGA
TTTACCACCAGTTGAAGAAGCTTGGCAGCTCCTTGGACTGGGATCGAGCCTGTTTCACCATGGACCCTAAACTCT
CAGCAGCTGTGACAGAGGCCTTTGTCCGGCTTCACGAGGAAGGCATCATCTATCGCAGTACCCGCCTTGTTAACT
GGTCCTGCACCCTCAACTCCGCCATCTCTGACATTGAGGTGGATAAGAAGGAGCTGACAGGTCGCACCCTGCTCT
CCGTGCCTGGCTACAAGGAGAAGGTGGAGTTCGGGGTCCTCGTGTCCTTTGCCTATAAGGTCCAAGGCTCAGATA
GCGACGAGGAGGTGGTGGTGGCAACAACTCGGATCGAGACAATGCTGGGAGATGTGGCTGTAGCTGTGCACCCCA
AAGATACCAGATACCAGCACCTGAAGGGGAAGAACGTGATCCACCCATTCCTGTCTCGGAGCCTTCCCATTGTCT
TCGATGAATTTGTGGACATGGACTTTGGCACAGGTGCTGTGAAGATCACCCCCGCACATGACCAAAATGACTATG
AAGTTGGGCAGCGGCACGGGCTGGAGGCCATCAGCATCATGGACTCCCGGGGGGCCCTCATCAATGTGCCTCCGC
CTTTCCTGGGCCTGCCCAGGTTTGAGGCCAGGAAAGCGGTGCTGGTGGCGCTGAAGGAGCGGGGACTGTTCCGTG
GCATTGAGGACAACCCCATGGTGGTGCCACTTTGCAACCGGTCGAAGGACGTGGTAGAGCCTCTGCTGCGGCCGC
AGTGGTACGTTCGCTGCGGGGAGATGGCCCAGGCTGCCAGCGCCGCTGTGACTCGGGGTGACCTCCGCATCCTGC
CTGAGGCCCATCAGCGCACATGGCATGCCTGGATGGACAACATCCGGGAGTGGTGCATTTCCAGGCAGCTGTGGT
GGGGCCATCGCATCCCAGCCTACTTTGTCACTGTCAGTGACCCAGCGGTGCCCCCTGGGGAGGACCCTGATGGGC
GGTACTGGGTGAGTGGACGCAATGAGGCGGAGGCCCGGGAGAAGGCAGCCAAGGAGTTCGGAGTGTCCCCTGACA
AGATCAGTCTCCAGCAAGATGAGGATGTATTGGATACCTGGTTCTCCTCTGGCCTCTTCCCCTTATCCATTTTGG
GCTGGCCCAACCAGTCAGAAGACCTGAGTGTGTTCTACCCCGGGACACTGCTGGAGACCGGTCATGACATCCTCT
TCTTCTGGGTGGCCCGGATGGTCATGCTGGGCCTGAAGCTCACGGGCAGGCTGCCCTTTAGAGAGGTCTACCTCC
ATGCCATCGTGCGAGATGCTCACGGCCGGAAGATGAGCAAGTCTCTAGGCAATGTCATCGATCCCCTGGATGTCA
TCTATGGAATCTCCCTGCAGGGCCTCCACAACCAGCTGCTGAACAGCAACCTGGATCCCAGCGAGGTGGAGAAGG
CCAAAGAAGGGCAGAAAGCTGACTTCCCAGCGGGGATTCCTGAATGTGGCACCGATGCTCTCCGGTTTGGATTAT
GTGCCTACATGTCCCAGGGTCGTGACATCAACCTGGATGTGAACCGGATACTGGGTTACCGCCACTTCTGCAACA
AGCTCTGGAATGCCACCAAGTTTGCCCTTCGTGGCCTTGGGAAGGGTTTTGTGCCCTCACCCACCTCCCAGCCCG
GAGGCCATGAGAGCCTGGTGGACCGCTGGATCCGCAGCCGCCTGACAGAGGCTGTGAGGCTCAGCAATCAAGGCT
TCCAGGCCTACGACTTCCCGGCCGTCACCACTGCCCAGTACAGCTTCTGGCTCTATGAGCTCTGTGATGTCTACT
TGGAGTGCCTGAAACCTGTACTGAATGGGGTGGACCAGGTGGCAGCTGAGTGTGCCCGCCAGACCCTGTACACTT
GCCTGGACGTTGGCCTGCGGCTGCTCTCACCCTTCATGCCCTTCGTGACGGAGGAGCTGTTCCAGAGGCTGCCCC
GGAGGATGCCGCAAGCTCCCCCTAGCCTCTGTGTTACCCCCTACCCGGAGCCCTCAGAGTGCTCCTGGAAGGACC
CCGAGGCAGAAGCCGCCCTTGAGCTGGCGCTAAGCATCACGCGAGCCGTGCGCTCCCTGCGGGCCGACTACAACC

FIGURE 4141B

TCACCCGGATCCGGCCTGACTGTTTCCTGGAAGTGGCGGATGAGGCCACGGGCGCCCTGGCATCGGCGGTGTCGG
GCTACGTGCAGGCCCTGGCCAGCGCAGGTGTGGTGGCTGTTCTGGCCCTGGGGGCTCCCGCCCCCCAGGGTTGCG
CTGTGGCTCTGGCTTCTGATCGCTGCTCCATCCACCTGCAGCTTCAGGGGCTGGTGGACCCTGCACGGGAGCTGG
GCAAGCTGCAAGCCAAGCGAGTTGAGGCCCAGCGGCAGGCCCAGCGTCTGCGGGAACGCCGTGCTGCCTCGGGCT
ATCCTGTCAAGGTGCCGCTCGAAGTCCAGGAGGCAGATGAAGCCAAGCTCCAACAGACAGAAGCAGAGCTCAGGA
AGGTGGATGAGGCCATCGCCCTATTCCAGAAGATGCTGTGATCCACCACCCAGCTTCACCCCTCACCCCCAGCGG
CTCACCATGGGGATGGCAGCAATAAAATATTTTCCCACAAAA

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FIGURE 4142

GCGGCTCTCTGATCCAGCCCGGGAGAGGACCGAGCTGGAGGAGCTGGGTGTGGGGTGCGTTGGGCTGGTGGGGAG
GCCTAGTTTGGGTGCAAGTAGGTCTGATTGAGCTTGTGTTGTGCTGAAGGGACAGCCCTGGGTCTAGGGGAGAGA
GTCCCTGAGTGTGAGACCCGCCTTCCCCGGTCCCAGCCCCTCCCAGTTCCCCCAGGGACGGCCACTTCCTGGTCC
CCGACGCAACC**ATG**GCTGAAGAACAACCGCAGGTCGAATTGTTCGTGAAGGCTGGCAGTGATGGGGCCAAGATTG
GGAACTGCCCATTCTCCCAGAGACTGTTCATGGTACTGTGGCTCAAGGGAGTCACCTTCAATGTTACCACCGTTG
ACACCAAAAGGCGGACCGAGACAGTGCAGAAGCTGTGCCCAGGGGGGCAGCTCCCATTCCTGCTGTATGGCACTG
AAGTGCACACAGACACCAACAAGATTGAGGAATTTCTGGAGGCAGTGCTGTGCCCTCCCAGGTACCCCAAGCTGG
CAGCTCTGAACCCTGAGTCCAACACAGCTGGGCTGGACATATTTGCCAAATTTTCTGCCTACATCAAGAATTCAA
ACCCAGCACTCAATGACAATCTGGAGAAGGGACTCCTGAAAGCCCTGAAGGTTTTAGACAATTACTTAACATCCC
CCCTCCCAGAAGAAGTGGATGAAACCAGTGCTGAAGATGAAGGTGTCTCTCAGAGGAAGTTTTTGGATGGCAACG
AGCTCACCCTGGCTGACTGCAACCTGTTGCCAAAGTTACACATAGTACAGGTGGTGTGTAAGAAGTACCGGGGAT
TCACCATCCCCGAGGCCTTCCGGGGAGTGCATCGGTACTTGAGCAATGCCTACGCCCGGGAAGAATTCGCTTCCA
CCTGTCCAGATGATGAGGAGATCGAGCTCGCCTATGAGCAAGTGGCAAAGGCCCTCAAA**TAA**GCCCCTCCTGGGA
CTCCCTCAACCCCCTCCATTTTCTCCACAAAGGCCCTGGTGGTTTCCACATTGCTACCCAATGGACACACTCCAA
AATGGCCAGTGGGCAGGGAATCCTGGAGCACTTGTTCCGGGATGGTGTGGTGGAAGAGGGGATGAGGGAAAGAAA
TGGGGGGCCTGGGTCAGATTTTTATTGTGGGGTGGGATGAGTAGGACAACATATTTCAGTAATAAAATACAGAAT
AAAAATCAAGTGTTTTT

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FIGURE 4143

CCGCTTAGACAATGCCCCGGAGCCGCCAGACCGTCGCGCCCCTGCCCCATCGTAGTATATGAGCTCGCCTACACA
AGGACCCCCGCTAAAAGCCAGAGCTCCCAGTCCCCGAGGCTTGAAGACGGGGACTCCCTTCTCCACCAACTCTGT
CCTCGGGGGGTGGGGCCCCAGCCGAGATCACAGCGCGACAGGAGTGGGGGTGGCCGCTGGAGACAGGTGAAGAAA
CAAGAAAACTAAGAAATCCGAGCGGTTGGAGGGGGAGTCTGTGTGGATGGGATGGGACGCCGGGGGAGGGGCTG
GGCCGCTGCTCCCATGCCCTGATCCGGGGAGTCCCAGAGAGCCTGGCGTCGGGGGAAGGTGCGGGGGCTGGCCTT
CCCGCTCTGGATCTGGCCAAAGCTCAAAGGGAGCACGGGGTGCTGGGAGGTAAACTGAGGCAACGACTGGGGCTA
CAGCTGCTAGAACTGCCACCTGAGGAGTCATTGCCGCTGGGACCGCTGCTTGGGGACACGGCCGTGATCCAAGGG
GACACGGCCCTAATCACGCGGCCCTGGAGCCCCGCTCGTAGGCCAGAGGTCGATGGAGTCCGCAAAGCCCTGCAA
GACCTGGGGCTCCGAATTGTGGAAATAGGAGACGAGAACGCGACGCTGGATGGCACTGACGTTCTCTTCACCGGC
CGGGAGTTTTTCGTAGGCCTCTCCAAATGGACCAATCACCGAGGAGCTGAGATCGTGGCGGACACGTTCCGGGAC
TTCGCCGTCTCCACTGTGCCAGTCTCGGGTCCCTCCCACCTGCGCGGTCTCTGCGGCATGGGGGGACCTCGCACT
GTTGTGGCAGGCAGCAGCGACGCTGCCCAAAAGGCTGTCCGGGCAATGGCAGTGCTGACAGATCACCCATATGCC
TCCCTGACCCTCCCAGATGACGCAGCTGCTGACTGTCTCTTTCTTCGTCCTGGGTTGCCTGGTGTGCCCCCTTTC
CTCCTGCACCGTGGAGGTGGGGATCTGCCCAACAGCCAGGAGGCACTGCAGAAGCTCTCTGATGTCACCCTGGTA
CCTGTGTCCTGCTCAGAACTGGAGAAGGCTGGCGCCGGGCTCAGCTCCCTCTGCTTGGTGCTCAGCACACGCCCC
CACAGCTGAGGGCCTGGCCTTGGGGTACTGCTGGCCAGGGGTAGGATAGTATAGGAAGTAGAAGGGGAAGGAGGG
TTAGATAGAGAATGCTGAATAGGCAGTAGTTGGGAGAGAGCCTCAATATTGGGGGAGGGGAGAGTGTAGGGAAAA
GGATCCACTGGGTGAATCCTCCCTCTCAGAACCAATAAAATAGAATTGACCTTTT

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FIGURE 4144

GCTGGAAGAGCAGCGGCCCGAGCCGGGGCCATGGCGAAGCTGCTGAGCTGCGTCCTAGGCCCCCGGCTCTACAAA
ATCTACCGGGAGAGGGACTCTGAAAGGGCCCCGGCCAGCGTCCCTGAGACGCCAACGGCAGTCACTGCCCCCCAT
TCCAGCTCCTGGGATACGTACTATCAGCCCCGTGCCCTGGAGAAACATGCTGACAGCATCCTGGCACTGGCTTCA
GTATTCTGGTCCATCTCTTATTACTCCTCTCCCTTCGCCTTCTTCTACTTGTACAGGAAAGGTTACTTGAGTTTG
TCCAAAGTGGTGCCGTTTTCTCACTATGCTGGGACATTGCTGCTACTTCTGGCAGGTGTGGCCTGCCTCCGAGGC
ATTGGCCGCTGGACCAACCCCCAGTACCGGCAGTTCATCACCATCTTGGAAGCAACACATCGGAACCAGTCTTCA
GAAAACAAGAGGCAGCTTGCCAACTACAACTTTGACTTCCGGAGCTGGCCAGTCGACTTCCACTGGGAAGAACCC
AGCAGCCGGAAGGAGTCTCGAGGGGGCCCTTCCCGCCGGGGTGTGGCCCTGCTTCGCCCAGAGCCCCTGCACCGG
GGGACAGCAGACACCCTCCTCAACCGGGTTAAGAAGCTGCCTTGTCAGATCACCAGCTACCTGGTGGCGCACACC
CTAGGGCGCCGGATGCTGTATCCAGGCTCTGTGTACCTGCTGCAGAAGGCCCTCATGCCTGTGCTGCTGCAGGGC
CAGGCCCGACTGGTGGAAGAGTGTAATGGGCGCCGGGCAAAGCTGCTGGCCTGTGATGGCAATGAGATTGACACC
ATGTTTGTGGACCGGCGGGGGACAGCTGAGCCCCAGGGACAGAAGCTGGTGATCTGCTGTGAGGGGAATGCTGGG
TTTTATGAGGTGGGCTGCGTCTCCACGCCCCTGGAAGCTGGATATTCAGTCCTGGGCTGGAATCATCCAGGCTTT
GCTGGAAGCACGGGGGTGCCATTCCCGCAGAATGAGGCTAATGCCATGGATGTGGTGGTCCAGTTTGCCATCCAC
CGCCTGGGCTTCCAGCCCCAGGACATCATCATCTACGCCTGGTCCATCGGCGGCTTCACTGCCACGTGGGCAGCC
ATGTCCTACCCAGATGTTAGTGCCATGATCCTGGATGCCTCCTTTGATGACCTGGTGCCCTTGGCCTTGAAGGTC
ATGCCAGACAGCTGGAGGGGCCTGGTGACCAGGACCGTGAGGCAGCATCTCAATCTAAACAACGCGGAGCAGCTG
TGCAGATACCAGGGTCCTGTACTGCTGATCCGGAGAACCAAGGATGAGATCATCACCACCACGGTTCCTGAGGAC
ATCATGTCCAACCGAGGCAATGACCTCCTGCTGAAGCTCCTGCAGCATCGGTATCCCCGGGTGATGGCAGAGGAG
GGTCTTCGAGTGGTGAGGCAGTGGTTGGAGGCCTCCTCACAGCTGGAGGAAGCCTCAATTTATAGCCGATGGGAG
GTGGAAGAGGACTGGTGTCTGTCTGTCCTCCGCTCCTACCAGGCAGAACACGGGCCCGACTTCCCCTGGAGCGTG
GGGGAGGACATGAGTGCAGATGGACGGCGGCAGCTGGCTTTGTTTCTGGCTCGGAAGCATCTGCACAACTTTGAG
GCCACTCACTGCACCCCACTCCCAGCCCAGAACTTCCAGATGCCCTGGCACCTCTAGGGACCAACTGGGACTCAT
TATGGAAGAATGGGGTGAGAGGAGACATGAGGAAAGACCCTCTTATTTGTGATTCTCTGTGTTCATGTTGCTGTT
TATAGTTTGTGGAAAGTGGGGGACCATCCCCCTTCTCACCACTGTTCCTCTTGCACGTTTCCCCTCATTCATGTG
GCTGTACTTAACCTTCTCCAACATACATCCTGCATTACATGAATGGATTATTCCTAATAATTAATAAAAAGGTAT
TTTTTCTACT

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FIGURE 4145

GGAGGAAGCGACCAGGTCCGGCACGAAGGAGGGAGAGGTGGCCTGAGGAGCGGAGGGGGGATGTGTGGATTCCGG
TGAAAGGGACCTGACAATCGCCCCCAACCCCTGACGTGAAGATGAGCAGCTCAGAGGAGGTGTCCTGGATTTCCT
GGTTCTGTGGGCTCCGTGGCAATGAATTCTTCTGTGAAGTGGATGAAGACTACATCCAGGACAAATTTAATCTTA
CTGGACTCAATGAGCAGGTCCCTCACTACCGACAAGCTCTAGACATGATCTTGGACCTGGAGCCTGATGAAGAAC
TGGAAGACAACCCCAACCAGAGTGACCTGATTGAGCAGGCAGCCGAGATGCTTTATGGATTGATCCACGCCCGCT
ACATCCTTACCAACCGTGGCATCGCCCAGATGTTGGAAAAGTACCAGCAAGGAGACTTTGGTTACTGTCCTCGTG
TGTACTGTGAGAACCAGCCAATGCTTCCCATTGGCCTTTCAGACATCCCAGGTGAAGCCATGGTGAAGCTCTACT
GCCCCAAGTGCATGGATGTGTACACACCCAAGTCATCAAGACACCATCACACGGATGGCGCCTACTTCGGCACTG
GTTTCCCTCACATGCTCTTCATGGTGCATCCCGAGTACCGGCCCAAGAGACCTGCCAACCAGTTTGTGCCCAGGC
TCTACGGTTTCAAGATCCATCCGATGGCCTACCAGCTGCAGCTCCAAGCCGCCAGCAACTTCAAGAGCCCAGTCA
AGACGATTCGCTGATTCCCTCCCCCACCTGTCCTGCAGTCTTTGACTTTTCCTTTCTTTTTTGCCACCCTTTCAG
GAACCCTGTATGGTTTTTAGTTTAAATTAAAGGAGTCGTTATTGTGGTGGGAATATGAAATAAAGTAGAAGAAAA
GGCC

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FIGURE 4146

GTGACGTTATTTCATTACACGGCTTCTCGGCATTCCACAGGTTTCCCTCCGCCTCCTGAGGGCCTTTCCTAACCC
ACAGAGTGGATTCCTGGCTCCAGAAAATGGGCTTGGAGCGGGGGCCACGTTGAGGAAGGCGAAGGGCATTGTGGG
GGCGTTATGTAAAAGTAGGACCCCAACCGACAGATCCTAGTGCTCGCGCCACCTGGGCGCGCGGAGCTTTGCTCG
TTTACTATTGAAAAAGTTCCAGCGCGGGAAACTGAACCCGGAGCTTTGCGCACGCCCGAGCCCTCAAGTAATGTG
GGTTGTGGTTTTTGTTGTTGTTGTCGCCACGCATGCGTCTTCGTGCCGTGTGGCTATTTGATTGTGTCAACTCTT
CTGATTAGAATGGCGCCATTTTGCGGTACGGAAGCTACACAGCAACACGTATAGGAGACTCTCCCCGAGATCTTC
TAGGGAGTGACCCATCTATTTTTGTTTGGGAAGAGGAAACTCCGAAATGGGATCGCGGAAGACTTAAAGGGCCAG
GCTGATTTTTTTTTCCTACTGGTCTCTGAGGCTGTGGTTGCTACAGGGTCACCACGAGCTTGGCTTACTTGTCTC
ATCCTTCCCTTGCCTGGTATCATTTTCTCAGTTCTCCCAAAAGCC**ATG**TCCCGGCCCTTGCTCATCACCTTCACC
CCAGCCACTGACCCCAGCGACCTCTGGAAGGATGGGCAGCAGCAGCCACAGCCCGAGAAGCCAGAGTCCACCCTG
GATGGGGCTGCAGCCCGAGCTTTCTATGAGGCCCTGATTGGGGATGAGAGCAGCGCTCCTGACTCCCAGAGATCT
CAGACTGAACCTGCCAGAGAAAGAAAGAGAAAGAAAAGAAGAATAATGAAGGCACCAGCAGCAGAAGCAGTGGCA
GAAGGAGCATCAGGAAGACATGGACAAGGGAGATCCCTTGAGGCTGAGGATAAGATGACTCACCGGATACTGAGG
GCAGCCCAGGAGGGGGACCTGCCAGAACTTAGGAGACTGCTGGAACCGCATGAGGCAGGAGGAGCTGGGGGGAAT
ATCAACGCCCGGGATGCCTTCTGGTGGACCCCACTGATGTGTGCTGCTCGAGCGGGCCAGGGGGCAGCTGTGAGC
TATCTCCTGGGCCGTGGGGCTGCCTGGGTGGGGGTCTGTGAGCTGAGTGGCAGGGATGCGGCTCAGCTCGCTGAA
GAAGCTGGCTTCCCTGAGGTAGCCCGCATGGTCAGGGAGAGCCATGGAGAGACAAGGAGCCCGGAAAACCGGTCT
CCTACTCCCTCCCTCCAGTACTGCGAGAACTGTGACACCCACTTCCAAGATTCCAACCACCGCACATCCACTGCT
CACCTGCTGTCACTGTCGCAGGGTCCTCAGCCTCCCAACCTTCCACTTGGGGTGCCCATCTCCAGCCCGGGCTTC
AAACTGCTGCTGAGGGGGGGCTGGGAGCCAGGAATGGGGCTGGGACCCCGGGGTGAGGGCCGTGCCAATCCCATC
CCCACTGTCCTCAAGAGAGACCAGGAAGGACTAGGCTACAGATCAGCACCCCAGCCCCGAGTGACACATTTCCCA
GCTTGGGATACCCGAGCTGTGGCTGGGAGGGAGAGACCCCCTCGGGTGGCCACACTGAGCTGGAGGGAGGAGAGA
AGGAGGGAGGAGAAAGACAGGGCTTGGGAGCGGGATCTAAGGACTTACATGAACCTCGAGTTC**TGA**CTTTGGTAA
AGTCTGACCCTAGTCTGCTGCTGAAGTCTGAACTTGGGCCTCTGACCTGGGCCCTTTGACTTCCCCTTCCTGGGA
TCTGCCCAGATGCAGATCCTGAAGTTTTTGGTCAATAGGCTCTGTCTTCGTGAGAGACGGGCTGAGAGTCAGAAA
TAAATCAACCATTTGTGGTTT

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FIGURE 4147

CCCAAGGCCGCGGCCCCGACGCTGGGCCCGGGAGCGGTCCCCGCGCACAGCGCCCGGACGCGTAGGTCCCGAAGT
AGGCCCGCGCTTTGCTTCGTAACTGGGGATCTCTGAGGACATCTTAGTTCTGACCTTGTGGAGGCCGCGTCTCTG
CTGCGTGTTCGCGGGCCAGTCGGGCCACTTTGTAGAAATCATAGCCCTCTAAATCAAGGGACGAACGCTGCTGGC
TGGAGTTTGCTGGACACTTTCATTCCACCTCCTAACAAAGAGAATTCCTATTCCTTGAGGTCCCTTGGGGCAGCA
GTTAAAGACTACACGATCCAGGAGCACCTAGGACCTGGGGCCACCTTCCTGCCCGCTTTATTGGATGGAGCACTG
CCTCCCCAGTTTCTGGGACACCGTGGGGTGTGGCCTTGGTGAGTGAAACTTGGGGTGCTGCCTGCTGGGAAGGAA
ATCCGGAAACGCAGAGAGGACTCTCTGGTGGTGACCCAGGCCTTGTCAGATCTGAGATTCTTGGAATCTCAGATT
GTGGGGGTGTGGATGGTGAATGAATTTGGGTATGCCCCCCTTTACCCCAGAACTGAAGAGGAAGCAAACTACTTG
CCACACTTGAGGCTGCATGACTATTCAGAGAAGGGAGGAGCCACTTCTGAATTCAGAGTAGGACTGCATCACCAG
GCAAATACCTGTTCTGAGCCAGAAAGACTCTGGCTTCTGAGGAGATCCTGAGAGTCTGAGTAGTGCCAGGAAGCA
GCCTCAGAATTTGGGGGCCCATTACACACCCCAGCC**ATG**TTCCTGCGACGGCTTGGTGGCTGGCTACCTCGCCCT
TGGGGCCGCCGGAAACCAATGAGGCCTGACCCGCCTTACCCAGAACCCAGACGGGTGGACAGCTCCTCGGAGAAT
TCAGGAAGTGACTGGGATAGTGCCCCAGAAACCATGGAAGATGTGGGGCATCCCAAGACTAAGGACTCGGGGGCA
TTGAGGGTTTCTAGGGCTGCTTCCGAACCAAGCAAGGAGGAGCCCCAAGTTGAGCAGCTAGGGAGCAAAAGAATG
GATTCCCTCAAGTGGGACCAGCCTATCTCTAGCACTCAAGAGTCTGGGAGACTGGAGGCTGGAGGGGCCAGTCCC
AAACTCAGATGGGATCATGTGGATTCAGGTGGCACCAGGAGACCAGGGGTGTCCCCTGAAGGGGGACTGAGCGTC
CCTGGGCCAGGAGCCCCATTGGAGAAACCTGGTAGGCGTGAGAAGCTGTTGGGCTGGCTGCGGGGGGAACCAGGA
GCTCCCTCCCGGTACTTGGGGGGCCCAGAAGAGTGTCTGCAGATCTCCACCAACCTGACCCTGCATCTTCTGGAG
CTGCTGGCCTCTGCCCTGCTGGCCCTGTGCTCACGACCACTGCGGGCAGCCTTGGACACACTGGGCCTGCGTGGA
CCGCTGGGCCTCTGGCTACATGGCCTACTGTCCTTCCTGGCTGCCCTGCATGGGCTCCATGCTGTTCTGAGCCTA
CTTACTGCCCACCCTTTGCACTTCGCCTGCCTCTTTGGTCTCCTGCAGGCCTTGGTGCTGGCTGTCAGCCTCCGG
GAGCCCAATGGGGATGAGGCGGCCACTGACTGGGAGAGTGAGGGGTTGGAGAGGGAAGGTGAGGAGCAGAGGGGA
GACCCGGGAAAGGGGCTG**TGA**CCGTGGGGTGGGGGCAAAGGGTGAAGAGAGTGTGGGCTTTAGGAGAAAAGTGTG
AGGCATGACCCAAATTGTAAGCATAGGGACCTCAGGGATGGGGAAGAAACCCGAGTACGAGGGTGCAGGGCCCCC
CTTCATACACAGGAGAGAACAGAACTATTTAGGGTGTTTGTGTTTATGGACAGTGAGGGCACTGCTCTTGGATTC
ACCAGCTGTTATTTTTGCTTTTACTTTTCTCCCACCTTCAGTTTTTTTTTTTTTTTCCACCTCCACTTTTTAAAA
GCAAAAAAAAAAAAAAAGTATGATGGTGGTGAATAAAGACCAAAGGGTCCTCTCTACCTTTGAAAACTCTCCTGGG
GTGGAGGAGACCAGGGCAGGATAGACAGACCTCTGCAGTAAGAGAGTGGTTGGGAAACCCAGGGTGTTCCTTGGA
TCTCAGGATCTGAGCCATCGAGGGAAGAGTGGGGCTGCTAGGCAAGTGGATTAGGGGGTCTGGATAGGGCCCCAC
AGGTGACAGGGAGCCTGCAGGGCGGATCTGGTGATCATGGGAGCCAGAGGGAGTGGGGACAGTGCAGGCAGTATT
GGCAGGAGGGCCAGTGCAGAAGGGCTGGTAGCTCAGGCAGTGTGGGGGAAGCACTGAAGCCTGTAGTCCCCACTT
GGGGGCTAGGGGTTTGCTCACTCAGCAATAAATAACTGTGTCACATCAAATCCTAAATATACCACTACAAAGTGA
GAGTTACTGCCACTCTGTTCTTACTGACACCGTCCAG

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FIGURE 4148A

TAGTGCGACGCACGCAGGCGTAGTACGGTCCCCCGGGCGACAGCGGTGGCGGCTCCTCGGGGTGCTCGGCTCCCT
CCCACCTAGGCCGGCCCCGGCCCGACTCGCCCTCAGAAACTCACTGTTTGGGGCTGCGGACTTTCTCGTCGTGCC
CCACAAAAGTAAAGCTTGGGGACCTGGGGGGAGCCGGAAGTATCGCTTCGAGATCCCCAAATACTATCGGGGAAA
CGGAAGTGGCCGTCGGTGGCAGGTTTGGGGGAGACCGGAAGTGACGAGACCTGTCGGCC**ATG**GAGCCTAATGATA
GTACCAGTACCGCTGTGGAGGAGCCTGACAGCTTGGAGGTGTTGGTGAAGACCTTGGACTCTCAAACTCGTACCT
TTATTGTGGGGGCCCAGATGAATGTAAAAGAGTTTAAGGAGCACATTGCTGCCTCTGTCAGCATCCCATCTGAAA
AACAACGGCTCATTTACCAGGGACGAGTTCTGCAAGATGATAAGAAGCTTCAGGAATACAATGTTGGGGGAAAGG
TTATCCACCTGGTGGAACGGGCTCCTCCTCAGACTCACCTCCCTTCTGGGGCATCTTCTGGGACGGGGTCTGCCT
CAGCCACTCATGGTGGGGGATCCCCCCCTGGTACTCGGGGGCCTGGGGCCTCTGTTCATGACCGGAATGCCAACA
GCTATGTCATGGTTGGAACCTTCAATCTTCCTAGTGACGGCTCTGCTGTGGATGTTCACATCAACATGGAACAGG
CCCCGATTCAGAGTGAGCCCCGGGTACGGCTGGTGATGGCTCAGCACATGATCAGGGATATACAGACCTTACTAT
CCCGGATGGAGACTCTCCCCTACCTTCAGTGTCGAGGAGGGCCCCAACCGCAGCACAGTCAGCCGCCCCCGCAGC
CACCGGCTGTGACCCCGGAGCCAGTAGCCTTGAGCTCTCAAACATCAGAACCAGTTGAAAGTGAAGCACCTCCCC
GGGAGCCCATGGAGGCAGAAGAAGTGGAGGAGCGTGCCCCAGCCCAGAACCCGGAGCTCACTCCTGGCCCAGCCC
CAGCGGGCCCAACACCTGCCCCGGAAACAAATGCACCCAACCATCCTTCCCCTGCGGAGTATGTCGAGGTGCTCC
AGGAGCTACAGCGGCTGGAGAGTCGCCTCCAGCCCTTCTTGCAGCGCTACTACGAGGTTCTGGGTGCTGCTGCCA
CCACGGACTACAATAACAATCACGAGGGCCGGGAGGAGGATCAGCGGTTGATCAACTTGGTAGGGGAGAGCCTGC
GACTGCTGGGCAACACCTTTGTTGCACTGTCTGACCTGCGCTGCAATCTGGCCTGCACGCCCCCACGACACCTGC
ATGTGGTCCGGCCTATGTCTCACTACACCACCCCCATGGTGCTCCAGCAGGCAGCCATTCCCATACAGATCAATG
TGGGAACCACTGTGACCATGACAGGAAATGGGACTCGGCCCCCCCCAACTCCCAATGCAGAGGCACCTCCCCCTG
GTCCTGGGCAGGCCTCATCCGTGGCTCCGTCTTCTACCAATGTCGAGTCCTCAGCTGAGGGGGCTCCCCCGCCAG
GTCCAGCTCCCCCGCCAGCCACCAGCCACCCGAGGGTCATCCGGATTTCCCACCAGAGTGTGGAACCCGTGGTCA
TGATGCACATGAACATTCAAGATTCTGGCACACAGCCTGGTGGTGTTCCGAGTGCTCCCACTGGCCCCCTGGGAC
CCCCTGGTCATGGCCAAACCCTGGGACAGCAGGTGCCAGGCTTCCCAACAGCTCCAACCCGGGTGGTGATTGCCC
GGCCCACTCCTCCACAGGCTCGGCCTTCCCATCCTGGAGGGCCCCCAGTCTCTGGGACACTGCAGGGCGCCGGTC
TGGGTACCAATGCCTCGTTGGCCCAGATGGTGAGCGGCCTTGTGGGGCAGCTTCTTATGCAGCCAGTCCTTGTGG
CTCAGGGGACCCCAGGTATGGCTCCACCGCCAGCCCCTGCCACTGCTTCTGCCAGTGCTGGCACCACCAACACAG
CTACCACAGCTGGCCCCGCTCCTGGGGGGCCTGCCCAGCCTCCACCCACCCCTCAACCCTCCATGGCTGATCTTC
AGTTCTCTCAGCTTCTGGGGAACCTGCTAGGGCCTGCAGGGCCAGGGGCTGGAGGGTCTGGTGTGGCTTCTCCCA
CCATCACTGTGGCGATGCCTGGTGTCCCTGCCTTTCTCCAAGGCATGACTGACTTCTTGCAGGCAACACAGACAG
CCCCTCCACCACCCCCACCTCCTCCACCCCCACCACCTGCCCCAGAGCAGCAGACCATGCCCCCACCAGGCTCCC
CTTCTGGTGGCGCAGGGAGTCCTGGAGGCCTGGGTCTTGAGAGCCTGTCACCGGAGTTTTTTACCTCAGTGGTGC
AGGGTGTGCTCAGCTCCCTGCTGGGCTCCCTGGGGGCTCGGGCTGGCAGCAGTGAAAGTATTGCTGCCTTCATAC
AACGCCTCAGTGGATCCAGCAACATCTTTGAGCCTGGAGCTGATGGGGCCCTTGGATTCTTTGGGGCCTTGCTTT
CTCTTCTGTGCCAGAACTTCTCTATGGTGGACGTAGTGATGCTTCTCCATGGGCATTTCCAGCCACTACAACGGC
TCCAGCCCCAGCTGCGATCCTTCTTCCACCAGCACTACCTGGGTGGTCAGGAGCCCACACCCAGTAACATCCGGA
TGGCAACCCACACATTGATCACGGGGCTAGAAGAGTATGTGCGGGAGAGTTTTTCCTTGGTGCAGGTTCAGCCAG
GTGTGGACATCATCCGGACAAACCTGGAATTTCTCCAAGAGCAGTTTAATAGCATTGCTGCGCATGTGCTGCATT
GCACAGATAGTGGATTTGGGGCCCGGTTGCTGGAGTTGTGTAACCAAGGCCTGTTTGAATGCCTGGCCCTAAACC
TGCACTGCTTGGGGGGACAGCAGATGGAGCTTGCTGCTGTTATCAATGGCCGAATTCGTCGTATGTCTCGTGGGG
TGAATCCCTCCTTGGTGAGCTGGCTGACCACTATGATGGGACTGAGGCTTCAGGTGGTACTGGAGCACATGCCTG
TAGGCCCTGATGCCATTCTCAGATACGTTCGCAGGGTTGGTGATCCCCCCCAGCCACTTCCTGAGGAGCCAATGG
AAGTTCAGGGAGCAGAAAGAGCTTCCCCTGAGCCTCAGCGGGAGAATGCTTCCCCAGCCCCTGGAACAACAGCAG
AAGAGGCCATGTCCCGAGGTCCACCTCCTGCTCCTGAGGGGGGCTCCCGGGATGAACAGGATGGAGCTTCAGCTG
AGACAGAACCTTGGGCAGCTGCAGTCCCCCCAGAATGGGTCCCTATTATCCAGCAGGACATTCAGAGCCAGCGGA
AGGTGAAACCGCAGCCCCCTCTGAGTGATGCCTACCTCAGTGGTATGCCTGCCAAGAGACGCAAGACGATGCAGG
GTGAGGGCCCCCAGCTGCTTCTCTCAGAGGCTGTGAGCCGGGCAGCTAAGGCAGCCGGAGCTCGGCCCCTGACGA
GCCCCGAGAGCCTGAGCCGGGACCTGGAGGCACCAGAGGTTCAGGAGAGCTACAGGCAGCAGCTCCGGTCTGATA

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FIGURE 4148B

TACAAAAACGACTGCAGGAAGACCCCAACTACAGTCCCCAGCGCTTCCCCAATGCCCAGCGGGCCTTTGCTGATG
ATCCTTAGCTCTTTGCTCTATGGCCCTTCCTCATCAGGGGACCGTTTCCCCCCTCTTCCTTCACAGTATTTAAGA
AATAAAAGTCGGATTTTTCTGGC

FIGURE 4149A

CCCTAGGCCCGGGTCCCGGATCCCCGCGCACCCGGCCAGGCTCTGGCACGTTTTGGGGGAGGTGCCTGCAGGACC
CAACATACTCAATGAGCTTCCAGCGCAATGTCCGATCGCTCGGGGCCGACTGCCAAGGGAAAGGATGGAAAGAAG
TATTCCTCGCTCAACCTGTTTGATACGTATAAGGGCAAGTCCTTAGAGATCCAGAAACCCGCTGTTGCCCCTCGC
CATGGCCTGCAGAGTCTCGGGAAAGTTGCCATTGCCCGGCGTATGCCACCTCCAGCCAACCTTCCAAGCCTGAAA
GCCGAGAACAAAGGCAATGACCCCAATGTCTCACTAGTGCCAAAAGACGGAACAGGATGGGCAAGCAAACAGGAG
CAGTCCGACCCCAAGAGTTCCGATGCCTCAACCGCTCAGCCGCCGGAATCGCAGCCACTGCCGGCTTCACAGACG
CCTGCCTCCAACCAGCCGAAACGACCCCCAGCAGCCCCCGAGAACACTCCTTTGGTTCCAAGCGGGGTAAAGTCC
TGGGCACAAGCCAGCGTCACCCATGGAGCACATGGAGATGGTGGAAGGGCATCAAGCCTACTGTCACGATTCTCT
CGAGAGGAATTTCCGACCCTGCAGGCGGCTGGCGACCAGGACAAGGCTGCCAAGGAAAGGGAGTCTGCCGAACAG
TCGTCTGGGCCCGGACCAAGCCTCCGCCCCCAAAATTCTACAACTTGGAGGGACGGAGGTGGGCGTGGCCCTGAT
GAGCTGGAGGGCCCGGACTCCAAACTTCATCATGGTCATGATCCCCGGGGTGGGCTACAGCCTTCAGGCCCACCC
CAGTTCCCTCCCTACCGCGGAATGATGCCGCCTTTCATGTATCCCCCATATCTCCCGTTCCCTCCGCCCTATGGA
CCCCAGGGGCCTTACCGATACCCCACTCCTGATGGGCCCAGCCGTTTTCCCCGTGTGGCGGGCCCCCGAGGCTCA
GGGCCACCAATGCGCTTAGTAGAGCCTGTGGGTCGTCCCTCTATTCTCAAAGAGGATAATCTCAAAGAGTTTGAT
CAGTTGGATCAGGAGAATGATGATGGTTGGGCAGGGGCCCATGAAGAGGTTGACTACACTGAAAAGCTCAAGTTC
AGCGATGAGGAAGATGGGCGAGACTCTGATGAGGAGGGAGCTGAGGGCCACAGGGATTCCCAATCAGCTTCTGGT
GAGGAACGGCCCCCTGAAGCAGATGGCAAAAAGGGCAACTCCCCCAACAGCGAACCGCCCACTCCTAAGACGGCC
TGGGCAGAAACCTCTCGGCCTCCAGAGACAGAGCCGGGACCTCCTGCCCCAAAGCCTCCCCTACCCCCACCTCAC
CGGGGCCCCGCCGGGAACTGGGGCCCCCCTGGGGACTACCCAGATCGTGGGGGTCCTCCCTGCAAGCCCCCAGCA
CCTGAAGATGAGGATGAGGCATGGCGGCAGCGACGAAAGCAGTCGTCATCTGAGATTTCCCTGGCAGTGGAGCGG
GCCCGGCGACGGCGAGAAGAAGAGGAGCGGCGCATGCAAGAAGAGCGCCGGGCAGCCTGTGCTGAGAAGCTCAAG
CGACTCGATGAAAAGTTTGGGGCACCTGACAAGCGGCTCAAAGCAGAGCCTGCTGCCCCACCTGCTGCCCCTTCT
ACCCCAGCTCCACCACCTGCAGTCCCTAAAGAACTCCCTGCACCTCCAGCTCCACCTCCAGCATCAGCCCCAACA
CCAGAGAAAGAACCTGAAGAGCCAGCACAGGCCCCTCCTGCCCAATCTACTCCTACTCCAGGTGTGGCTGCGGCT
CCCACTCTGGTGAGTGGTGGTGGCAGTACCAGTAGCACCAGCAGTGGCAGCTTCGAAGCCAGCCCAGTGGAACCA
CAACTGCCCTCAAAAGAGGGTCCTGAACCACCAGAAGAGGTTCCTCCTCCTACCACACCCCCAGTTCCAAAGGTG
GAACCCAAGGGTGATGGGATTGGTCCCACCCGCCAGCCCCCTAGTCAGGGCTTGGGCTACCCCAAATATCAGAAG
TCGTTGCCTCCTCGTTTCCAGCGGCAGCAGCAGGAGCAGCTCCTGAAGCAGCAGCAGCAGCACCAGTGGCAGCAG
CATCAACAGGGCTCTGCCCCTCCTACCCCAGTGCCCCCATCACCACCACAGCCTGTGACCCTGGGGGCTGTGCCA
GCTCCACAGGCTCCACCCCCGCCCCCCAAGGCCCTGTACCCAGGTGCTCTGGGCCGGCCCCCACCCATGCCCCCA
ATGAACTTTGATCCCCGATGGATGATGATTCCTCCTTATGTGGACCCCCGGCTCCTCCAGGGTCGTCCCCCTCTA
GACTTCTACCCTCCTGGTGTGCATCCCTCTGGCCTAGTTCCCCGAGAGCGTTCAGACAGTGGGGGCTCAAGCTCA
GAGCCATTTGACCGTCATGCACCTGCTATGTTACGGGAACGGGGCACTCCACCGGTGGATCCAAAGTTGGCCTGG
GTAGGAGATGTCTTCACCGCCACACCCGCTGAACCCCGCCCACTTACCTCACCTCTGCGCCAGGCTGCGGATGAG
GATGACAAGGGGATGAGGAGCGAGACTCCTCCAGTACCTCCCCCACCACCCTATCTGGCCAGTTATCCAGGCTTT
CCTGAGAATGGAGCCCCTGGGCCCCCAATCTCTCGCTTTCCTCTGGAGGAACCAGGGCCCCGTCCACTCCCCTGG
CCCCCAGGCAGTGATGAAGTGGCCAAGATACAAACTCCACCACCCAAGAAGGAGCCCCCTAAGGAGGAGACTGCA
CAGCTGACGGGGCCAGAAGCAGGCCGAAAGCCTGCCCGCGGAGTCGGGAGTGGAGGCCAGGGCCCCCCACCACCA
CGCAGAGAGAGTCGCACAGAGACCCGCTGGGGCCCTCGTCCAGGGAGCAGTCGTCGTGGAATCCCTCCAGAGGAG
CCAGGGGCCCCACCCCGCCGGGCTGGGCCTATAAAGAAACCTCCACCACCTACAAAAGTAGAAGAGCTGCCTCCC
AAGCCCCTCGAACAGGGGGATGAAACCCCCAAACCCCCAAAGCCAGACCCACTCAAGATAACCAAGGGGAAGCTA
GGGGGCCCCAAGGAGACCCCACCCAATGGAAATCTTTCCCCTGCCCCAAGGCTTCGGAGGGACTATTCGTATGAA
AGAGTGGGTCCTACCTCTTGCCGGGGTCGGGGCCGAGGCGAGTATTTTGCCAGAGGGAGGGGTTTTCGGGGGACC
TATGGGGGACGAGGGCGGGGAGCCCGAAGCCGGGAATTCCGCAGTTACCGAGAGTTTCGAGGAGATGATGGGCGT
GGAGGTGGGACAGGGGGACCAAACCACCCTCCTGCTCCCCGAGGCCGCACTGCCAGCGAGACACGGAGCGAGGGT
TCAGAGTATGAGGAAATCCCCAAGCGGCGCCGGCAGCGGGGCTCAGAAACAGGCAGCGAGACCCATGAGAGTGAT
CTGGCTCCTTCAGACAAGGAGGCTCCCACACCCAAGGAGGGAACACTCACCCAGGTCCCTCTCGCTCCCCCACCA
CCAGGAGCCCCACCTTCACCAGCCCCAGCCCGCTTCACTGCCCGGGGTGGGCGAGTCTTCACTCCCAGAGGGGTG

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FIGURE 4149B

CCATCTCGCCGGGGCCGAGGAGGAGGGAGGCCCCCTCCTCAAGTTTGCCCAGGCTGGAGCCCTCCAGCCAAGTCT
CTGGCTCCCAAGAAACCTCCCACAGGCCCTTTGCCACCAAGTAAGGAGCCTTTGAAAGAGAAGTTGATCCCAGGG
CCTCTGTCCCCTGTGGCGCGCGGAGGCAGCAATGGAGGTAGCAATGTGGGCATGGAAGATGGGGAGCGACCCCGA
AGGAGGCGACATGGGAGGGCTCAGCAGCAGGATAAACCGCCTCGTTTCCGGAGGCTGAAGCAGGAACGGGAGAAT
GCCGCAAGGGGGTCTGAGGGCAAGCCCTCCCTAACCCTTCCAGCCTCCGCTCCTGCACCTGAGGAGGCCCTCACA
ACAGTCACAGTGGCCCCAGCACCTCGCCGGGCAGCTGCCAAGTCTCCTGATCTGTCAAACCAGAACTCAGACCAA
GCCAATGAGGAATGGGAGACTGCATCAGAGAGCAGTGACTTCACCAGTGAGCGCCGAGGGGACAAAGAGGCACCC
CCACCAGTACTGCTGACACCCAAGGCTGTGGGAACTCCTGGGGGAGGTGGAGGTGGAGCCGTACCAGGTATTTCA
GCCATGTCCCGCGGAGATCTGAGCCAGAGAGCCAAGGATTTGAGTAAACGGAGCTTCTCAAGTCAGCGGCCAGGC
ATGGAACGGCAGAATCGGCGCCCTGGCCCAGGGGGCAAGGCTGGCAGCAGTGGCAGCAGCAGTGGAGGAGGCGGT
GGGGGTCCTGGAGGAAGGACCGGGCCAGGACGAGGCGACAAGAGGAGCTGGCCCTCTCCCAAGAACCGAAGTCGT
CCTCCAGAGGAGCGTCCCCCGGGGCTTCCCCTGCCTCCCCCACCTCCCAGCAGTTCTGCTGTCTTCCGCCTGGAC
CAAGTTATCCACAGCAACCCTGCTGGCATCCAACAGGCTCTGGCCCAGCTTAGTAGCCGTCAAGGGAGTGTAACT
GCACCAGGGGGTCATCCAAGGCACAAGCCTGGGCCTCCCCAAGCCCCTCAGGGCCCCTCTCCTAGGCCCCCAACC
CGATACGAGCCCCAGAGGGTCAACAGCGGCCTCAGTTCTGACCCCCACTTTGAGGAGCCGGGGCCAATGGTGAGA
GGGGTGGGTGGGACTCCTCGGGACTCTGCCGGGGTTAGTCCCTTTCCCCCTAAACGTCGGGAGCGGCCTCCCAGA
AAACCAGAGCTGCTACAGGAGGAATCTTTGCCACCTCCTCATAGCTCTGGATTCTTGGGCTCTAAGCCTGAGGGC
CCAGGCCCTCAGGCAGAGTCCAGAGATACAGGCACAGAGGCCCTGACCCCTCACATCTGGAACCGTTTACATACT
GCCACTAGCCGAAAGAGTTACCGGCCCAGCTCCATGGAGCCTTGGATGGAGCCCCTGAGTCCTTTTGAGGATGTG
GCTGGCACAGAAATGAGTCAGTCTGACAGTGGGGTGGACCTGAGTGGGGATTCTCAGGTGTCATCAGGTCCCTGC
AGCCAGCGAAGTTCCCCTGATGGAGGACTCAAGGGGGCAGCAGAGGGACCCCCCAAGAGGCCTGGAGGCTCCTCA
CCCCTGAATGCTGTTCCTTGTGAGGGTCCACCTGGCTCTGAACCTCCTAGGAGACCACCACCTGCCCCCCACGAT
GGGGACAGAAAGGAGCTGCCCCGGGAGCAGCCTCTGCCCCCTGGCCCCATTGGCACAGAACGATCACAGCATACA
GACCGAGGCACAGAGCCTGGCCCCATTCGGCCATCCCATCGACCTGGTCCCCCAGTCCAGTTTGGCACTAGTGAC
AAGGACTCAGACTTACGCCTAGTGGTAGGAGACAGCTTGAAAGCAGAGAAGGAGCTAACAGCATCAGTCACTGAG
GCCATTCCTGTATCACGAGACTGGGAGCTGCTTCCCAGTGCTGCTGCCTCTGCTGAGCCACAATCCAAGAACCTG
GATTCTGGGCACTGTGTCCCGGAGCCCAGCTCCTCAGGCCAGCGCCTGTATCCTGAGGTTTTCTATGGCAGTGCT
GGGCCTTCCAGTTCTCAGATCTCTGGGGGAGCCATGGACTCTCAATTACATCCAAACAGTGGAGGCTTCCGCCCT
GGGACACCCTCACTGCACCCTTACAGATCACAGCCCCTATACCTACCCCCCGGCCCAGCCCCTCCCTCAGCACTG
CTCTCTGGGGTAGCTCTCAAGGGCCAGTTTCTGGATTTCTCCACAATGCAAGCTACAGAGCTGGGGAAGTTGCCG
GCTGGAGGAGTTCTCTACCCTCCACCTTCCTTCCTCTACTCTCCGGCTTTCTGCCCCAGTCCTTTGCCTGACACA
TCGTTGCTTCAGGTACGCCAGGATCTGCCATCCCCTTCGGATTTTTATTCTACTCCTCTGCAGCCTGGTGGCCAA
AGTGGCTTTCTCCCTTCAGGGGCTCCTGCCCAGCAGATGCTTCTACCCATGGTAGACTCACAGCTGCCTGTGGTG
AACTTTGGCTCCCTGCCGCCAGCACCACCTCCTGCCCCACCTCCCCTTTCTCTGTTACCTGTGGGCCCTGCTCTG
CAGCCCCCCAGCCTGGCTGTGCGGCCCCCACCTGCTCCTGCTACTCGGGTGCTGCCTTCACCTGCCAGGCCCTTC
CCCGCTAGCTTGGGGCGAGCAGAGCTGCATCCAGTGGAACTAAAGCCGTTCCAGGATTATCAAAAACTGAGCAGC
AACCTTGGGGGACCTGGATCATCACGGACTCCCCCAACTGGAAGGTCCTTCTCTGGCCTCAATTCCCGTCTCAAG
GCCACGCCTTCCACCTACAGTGGAGTCTTCCGCACCCAGCGCGTCGACCTTTACCAGCAGGCCTCCCCACCAGAT
GCCCTGCGCTGGATACCTAAGCCTTGGGAGCGGACAGGGCTGCCACCTCGAGAAGGGCCCTCCCGACGGGCAGAG
GAGCCTGGGTCCCGAGGGGACAAGGAGCCTGGGTTGCCCCCACCCCGC**TGA**GGGAGTTCCTCTTGCCCCCTACCC
CCGGGGCTTGTATATAGATTATAAATATATAAGGGGGAAAGGGGTGGGCGGGGAGGGGTTGTGGGGCTGGGGCCT
CACTTCCCCTCCTCCCCCTTCCCCTGGTCCCCTGTCCCTGGGGCTGTTTGTTAAAAAAGAGTAATAAAAGGATTT

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FIGURE 4150

CAGTCTCA**ATG**GGGGCACTGGGGCTGGAGGGCAGGGGTGGGAGGCTCCAGGGGAGGGGTTCCCTCCTGCTAGCTG
TGGCAGGAGCCACTTCTCTGGTGACCTTGTTGCTGGCGGTGCCTATCACTGTCCTGGCTGTGCTGGCCTTAGTGC
CCCAGGATCAGGGAGGACTGGTAACGGAGACGGCCGACCCCGGGGCACAGGCCCAGCAAGGACTGGGGTTTCAGA
AGCTGCCAGAGGAGGAGCCAGAAACAGATCTCAGCCCCGGGCTCCCAGCTGCCCACCTCATAGGCGCTCCGCTGA
AGGGGCAGGGGCTAGGCTGGGAGACGACGAAGGAACAGGCGTTTCTGACGAGCGGGACGCAGTTCTCGGACGCCG
AGGGGCTGGCGCTCCCGCAGGACGGCCTCTATTACCTCTACTGTCTCGTCGGCTACCGGGGCCGGGCGCCCCCTG
GCGGCGGGGACCCCCAGGGCCGCTCGGTCACGCTGCGCAGCTCTCTGTACCGGGCGGGGGGCGCCTACGGGCCGG
GCACTCCCGAGCTGCTGCTCGAGGGCGCCGAGACGGTGACTCCAGTGCTGGACCCGGCCAGGAGACAAGGGTACG
GGCCTCTCTGGTACACGAGCGTGGGGTTCGGCGGCCTGGTGCAGCTCCGGAGGGGCGAGAGGGTGTACGTCAACA
TCAGTCACCCCGATATGGTGGACTTCGCGAGAGGGAAGACCTTCTTTGGGGCCGTGATGGTGGGG**TGA**GGGAATA
TGAGTGCGTGGTGCGAGTGCGTGAATATTGGGGGCCCGGACGCCCAGGACCCCATGGCAGTGGGAAAAATGTAGG
AGACTGTTTGGAAATTGATTTTGAACCTGATGAAAATAAAGAATGGAAAGCTTCAGTGCTGCCGATAAA

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FIGURE 4151

CCGAGCTTCTTAAACACAGGCCTTGGGCCTACGGCTCTGGGGGTACTTGGGGGGGCGGGGGCAGGTCTGATGAGT
AACCCCTCCCCCCAGGTTCCAGAGGAAGAAGCCTCCACATCTGTCTGCCGGCCCAAGAGTTCCATGGCCTCCACT
TCCCGCCGCCAACGCCGAGAACGTCGCTTTCGTCGTTACTTGTCTGCAGGACGGCTGGTCCGGGCCCAGGCCCTC
CTCCAGCGACACCCAGGCCTCGATGTAGATGCTGGGCAGCCCCCACCACTGCACCGGGCCTGTGCCCGCCACGAT
GCCCCTGCCCTGTGCCTGCTGCTTCGGCTCGGGGCTGACCCTGCCCACCAGGACCGCCATGGGGACACGGCACTG
CATGCTGCTGCCCGCCAGGGCCCAGATGCCTACACCGATTTCTTCCTCCCGCTGCTAAGCCGCTGTCCCTCCGCC
ATGGGAATAAAGAATAAGGATGGGGAGACCCCTGGCCAAATTTTGGGCTGGGGACCCCCCTGGGATTCTGCTGAA
GAGGAGGAAGAAGATGATGCCTCCAAGGAGCGGGAATGGAGACAGAAGCTCCAGGGTGAGCTGGAGGACGAGTGG
CAGGAAGTCATGGGGAGGTTTGAAGGTGATGCCTCCCATGAAACCCAGGAACCTGAGTCCTTCTCAGCCTGGTCA
GATCGCCTGGCCCGGGAACATGCCCAGAAGTGCCAGCAGCAGCAGCGAGAAGCAGAGGGATCCTGTCGACCCCCA
CGTGCTGAGGGCTCCAGCCAGAGCTGGCGACAGCAGGAGGAGGAGCAGCGGCTCTTCAGGGAGCGAGCCCGGGCC
AAGGAGGAAGAGCTGCGTGAGAGCCGAGCCAGGAGGGCGCAGGAGGCTCTAGGGGACCGAGAACCCAAGCCAACC
AGGGCCGGGCCCAGGGAAGAGCACCCCAGAGGAGCGGGGAGGGGCAGCCTCTGGCGATTTGGTGATGTGCCCTGG
CCCTGCCCTGGGGGAGGGGACCCAGAGGCCATGGCTGCAGCCCTGGTGGCCAGGGGCCCCCCTTTGGAGGAACAG
GGGGCTCTGAGGAGGTACTTGAGGGTCCAGCAGGTCCGCTGGCACCCTGACCGCTTCCTGCAGCGATTCCGAAGC
CAGATTGAGACCTGGGAGCTGGGCCGTGTGATGGGAGCAGTGACAGCCCTTTCTCAGGCCCTGAATCGCCATGCA
GAGGCCCTCAAGTGACCCTAGGGAAGAAGCAAGAAACTTCGGGGCTGCAGCCTCAGGATGAGGCAGAAGGAAGGG
TAAGGGAAAGGATGGGGACCACAAGGAAGAGCCAGGTGCTGCTCAGCAGAGGATATGGGTGGGAGCGAAAGTTGT
AACAAGTGGGGGTGGGGGGTGCGGGCCGCCACCACTGCTCCTTGACTCTGCCGTTTCCTAATAAGACCTGGTTCC
ACATCTC

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FIGURE 4152

CAGCATCGGCCATAACAACAGAAATGGCCAGTCAGTCCCAAGGTATCCAGCAGCTTCTGCAAGCTGAGAAGCGGG
CAGCTGAGAAGGTGGCAGATGCCAGAAAGAGGAAGGCCCGGCGACTGAAGCAGGCAAAGGAGGAGGCACAGATGG
AGGTGGAGCAATACCGCAGAGAGCGAGAGCACGAATTCCAGAGCAAGCAGCAGGCGACAGGCATTTTCCAAAGGC
AAGCCTGGAGCGCACGGATCTGTATAACCGCGGAAGGCCCTGTTTCCGGTCCCTTGCGCCTGCGCTCTTGCAGCC
AAGAAGGCGGGAGGCTGGAGTAGAGGGAAGCCTGCAACCGGAAGTGAAGGCAGATTTCCCTCCTTCGTCGCTGTT
GCTGCCGCCATACGCGCTCTCCCTGTTTAGCTCTTCTGTTAGAAATAGTATCTTTGTTTTCCTTTGCTGTTCCTC
AATCCCCTACTCTTCACCCCTTGTTTTCACCTATTTTGCGAGAACCCATCCAGATCCCCCTTCCCTTCTTCCCCT
GCCGGCCCAGTTATGGCAGAGAACGATGTGGACAATGAGCTCTTGGACTATGAAGATGATGAGGTGGAGACAGCA
GCTGGGGGAGATGGGGCTGAGGCCCCTGCCAAGAAGGATGTCAAGGGCTCCTATGTCTCCATCCACAGCTCTGGC
TTTCGTGACTTCCTGCTCAAGCCAGAGTTGCTCCGGGCCATTGTCGACTGTGGCTTTGAGCATCCGTCAGAAGTC
CAGCATGAGTGCATCCCTCAGGCCATTCTGGGAATGGATGTCCTGTGCCAGGCCAAGTCGGGCATGGGAAAGACA
GCAGTGTTTGTCTTGGCCACACTGCAACAGCTGGAGCCAGTTACTGGGCAGGTGTCTGTGCTGGTGATGTGTCAC
ACTCGGGAGTTGGCTTTTCAGATCAGCAAGGAATATGAGCGCTTCTCTAAATACATGCCCAATGTCAAGGTTGCT
GTTTTTTTTGGTGGTCTGTCTATCAAGAAGGATGAAGAGGTGCTGAAGAAGAACTGCCCGCATATCGTCGTGGGG
ACTCCAGGCCGTATCCTAGCCCTGGCTCGAAATAAGAGCCTCAACCTCAAACACATTAAACACTTTATTTTGGAT
GAATGTGATAAGATGCTTGAACAGCTCGACATGCGTCGGGATGTCCAGGAAATTTTTCGCATGACCCCCCACGAG
AAGCAGGTCATGATGTTCAGTGCTACCTTGAGCAAAGAGATCCGTCCAGTCTGCCGCAAGTTCATGCAAGATCCA
ATGGAGATCTTCGTGGATGATGAGACGAAGTTGACGCTGCATGGGTTGCAGCAGTACTACGTGAAACTGAAGGAC
AACGAGAAGAACCGGAAGCTCTTTGACCTTCTGGATGTCCTTGAGTTCAACCAGGTGGTGATCTTTGTGAAGTCT
GTGCAGCGGTGCATTGCCTTGGCCCAGCTACTAGTGGAGCAGAACTTCCCAGCCATTGCCATCCACCGTGGGATG
CCCCAGGAGGAGAGGCTTTCTCGGTATCAGCAGTTTAAAGATTTTCAACGACGAATTCTTGTGGCTACCAACCTA
TTTGGCCGAGGCATGGACATCGAGCGGGTGAACATTGCTTTTAATTATGACATGCCTGAGGATTCTGACACCTAC
CTGCATCGGGTGGCCAGAGCAGGCCGGTTTGGCACCAAGGGCTTGGCTATCACATTTGTGTCCGATGAGAATGAT
GCCAAGATCCTCAATGATGTGCAGGATCGCTTTGAGGTCAATATTAGTGAGCTGCCTGATGAGATAGACATCTCC
TCCTACATTGAACAGACACGGTAGAAGACTCGCCCATTTTGGAATGTGACCGTCTGTCCTTCAGGAGAGGACACC
AGGGTGGGGGTGAAGGAGACACTACTGCCCCCACCCCTGACAGCCCCCACCCCATGGCTTCCATCTTTTGCATCA
CCACCACTCCTGAACCCCCATTTCTGATTTGTCAGAATTTTTTTTTAACAAAACTAAAAATGAAACACATGTGTC
TGTGGTATCT

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FIGURE 4153

GGGCCATGGGGCTGGGCCGGGTCCTGCTGTTTCTGGCCGTCGCCTTCCCTTTTGCACCCCCGGCAGCCGCCGCTG
AGCCCCACAGTCTTCGTTACAACCTCATGGTGCTGTCCCAGGATGGATCTGTGCAGTCAGGGTTTCTCGCTGAGG
GACATCTGGATGGTCAGCCCTTCCTGCGCTATGACAGGCAGAAACGCAGGGCAAAGCCCCAGGGACAGTGGGCAG
AAGATGTCCTGGGAGCTGAGACCTGGGACACAGAGACCGAGGACTTGACAGAGAATGGGCAAGACCTCAGGAGGA
CCCTGACTCATATCAAGGACCAGAAAGGAGGCTTGCATTCCCTCCAGGAGATTAGGGTCTGTGAGATCCATGAAG
ACAGCAGCACCAGGGGCTCCCGGCATTTCTACTACAATGGGGAGCTCTTCCTCTCCCAAAACCTGGAGACTCAAG
AATCGACAGTGCCCCAGTCCTCCAGAGCTCAGACCTTGGCTATGAACGTCACAAATTTCTGGAAGGAAGATGCCA
TGAAGACCAAGACACACTATCGCGCTATGCAGGCAGACTGCCTGCAGAAACTACAGCGATATCTGAAATCCGGGG
TGGCCATCAGGAGAACAGTGCCCCCCATGGTGAATGTCACCTGCAGCGAGGTCTCAGAGGGCAACATCACCGTGA
CATGCAGGGCTTCCAGCTTCTATCCCCGGAATATCACACTGACCTGGCGTCAGGATGGGGTATCTTTGAGCCACA
ACACCCAGCAGTGGGGGGATGTCCTGCCTGATGGGAATGGAACCTACCAGACCTGGGTGGCCACCAGGATTCGCC
AAGGAGAGGAGCAGAGGTTCACCTGCTACATGGAACACAGCGGGAATCACGGCACTCACCCTGTGCCCTCTGGGA
AGGCGCTGGTGCTTCAGAGTCAACGGACAGACTTTCCATATGTTTCTGCTGCTATGCCATGTTTTGTTATTATTA
TTATTCTCTGTGTCCCTTGTTGCAAGAAGAAAACATCAGCGGCAGAGGGTCCAGAGCTTGTGAGCCTGCAGGTCC
TGGATCAACACCCAGTTGGGACAGGAGACCACAGGGATGCAGCACAGCTGGGATTTCAGCCTCTGATGTCAGCTA
CTGGGTCCACTGGTTCCACTGAGGGCGCCTAGACTCTACAGCCAGGCGGCCAGGATTCAACTCCCTGCCTGGATC
TCACCAGCACTTTCCCTCTGTTTCCTGACCTATGAAACAGAAAATAACATCACTTATTTATTGTTGTTGGATGCT
GCAAAGTGTTAGTAGGTATGAGGTGTTTGCTGCTCTGCCACGTAGAGAGCCAGCAAAGGGATCATGACCAACTCA
ACATTCCATTGGAGGCTATATGATCAAACAGCAAATTGTTTATCATGAATGCAGGATGTGGGCAAACTCACGACT
GCTCCTGCCAACAGAAGGTTTGCTGAGGGCATTCACTCCATGGTGCTCATTGGAGTTATCTACTGGGTCATCTAG
AGCCTATTGTTTGAGGAATGCAGTCTTACAAGCCTACTCTGGACCCAGCAGCTGACTCCTTCTTCCACCCCTCTT
CTTGCTATCTCCTATACCAATAAATACGAAGGGCTGTGGAAGATCAGAGCCCTTGTTCACGAGAAGCAAGAAGCC
CCCTGACCCCTTGTTCCAAATATACTCTTTTGTCTTTCTCTTTATTCCCACGTTCGCCCTTTGTTCAGTCCAATA
CAGGGTTGTGGGGCCCTTAACAGTGCCATATTAATTGGTATCATTATTTCTGTTGTTTTTGTTTTTGTTTTTGTT
TTTGTTTTTGAGACAGAGTCTCACTCTGTCACCCAGGCTGCAGTTCACTGGTGTGATCTCAGCTCACTGCAACCT
CTGCCTCCCAGGTTCAAGCACTTCTCGTACCTCAGACTCCCGAATAGCTGGGATTACAGACAGGCACCACCACAC
CCAGCTAATTTTTGTATTTTTTGTAGAGACGGGGTTTCGCCAAGTTGACCAGCCCAGTTTCAAACTCCTGACCTC
AGGTGATCTGCCTGCCTTGGCATCCCAAAGTGCTGGGATTACAAGAATGAGCCACCGTGCCTGGCCTATTTTATT
ATATTGTAATATATTTTATTATATTAGCCACCATGCCTGTCCTATTTTCTTATGTTTTAATATATTTTAATATAT
TACATGTGCAGTAATTAGATTATCATGGGTGAACTTTATGAGTGAGTATCTTGGTGATGACTCCTCCTGACCAGC
CCAGGACCAGCTTTCTTGTCACCTTGAGGTCCCCTCGCCCCGTCACACCGTTATGCATTACTCTGTGTCTACTAT
TATGTGTGCATAATTTATACCGTAAATGTTTACTCTTTAAAT

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FIGURE 4154

CACTGCTTGAGCCGCTGAGAGGGTGGCGACGTCGGGGCCATGGGGCTGGGCCCGGTCTTCCTGCTTCTGGCTGGC
ATCTTCCCTTTTGCACCTCCGGGAGCTGCTGCTGAGCCCCACAGTCTTCGTTATAACCTCACGGTGCTGTCCTGG
GATGGATCTGTGCAGTCAGGGTTTCTTGCTGAGGTACATCTGGATGGTCAGCCCTTCCTGCGCTATGACAGGCAG
AAATGCAGGGCAAAGCCCCAGGGACAGTGGGCAGAAGATGTCCTGGGAAATAAGACATGGGACAGAGAGACCAGG
GACTTGACAGGGAACGGAAAGGACCTCAGGATGACCCTGGCTCATATCAAGGACCAGAAAGAAGGCTTGCATTCC
CTCCAGGAGATTAGGGTCTGTGAGATCCATGAAGACAACAGCACCAGGAGCTCCCAGCATTTCTACTACGATGGG
GAGCTCTTCCTCTCCCAAAACCTGGAGACTGAGGAATGGACAGTGCCCCAGTCCTCCAGAGCTCAGACCTTGGCC
ATGAACGTCAGGAATTTCTTGAAGGAAGATGCCATGAAGACCAAGACACACTATCACGCTATGCATGCAGACTGC
CTGCAGGAACTACGGCGATATCTAGAATCCGGCGTAGTCCTGAGGAGAACAGTGCCCCCCATGGTGAATGTCACC
CGCAGCGAGGCCTCAGAGGGCAACATCACCGTGACATGCAGGGCTTCCAGCTTCTATCCCCGGAATATCATACTG
ACCTGGCGTCAGGATGGGGTATCTTTGAGCCACGACACCCAGCAGTGGGGGGATGTCCTGCCTGATGGGAATGGA
ACCTACCAGACCTGGGTGGCCACCAGGATTTGCCGAGGAGAGGAGCAGAGGTTCACCTGCTACATGGAACACAGC
GGGAATCACAGCACTCACCCTGTGCCCTCTGGGAAAGTGCTGGTGCTTCAGAGTCATTGGCAGACATTCCATGTT
TCTGCTGTTGCTGCTGGCTGCTGCTATTTTTGTTATTATTATTTTCTATGTCCGTTGTTGTAAGAAGAAAACATC
AGCTGCAGAGGGTCCAGAGCTCGTGAGCCTGCAGGTCCTGGATCAACACCCAGTTGGGACGAGTGACCACAGGGA
TGCCACACAGCTCGGATTTCAGCCTCTGATGTCAGCTCTTGGGTCCACTGGCTCCACTGAGGGCACCTAGACTCT
ACAGCCAGGCGGCTGGAATTGAATTCCCTGCCTGGATCTCACAAGCACTTTCCCTCTTGGTGCCTCAGTTTCCTG
ACCTATGAAACAGAGAAAATAAAAGCACTTATTTATTGTTGTTGGAGGCTGCAAAATGTTAGTAGATATGAGGCA
TTTGCAGCTGTGCCATATT

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FIGURE 4155

AGACGCCGAGATGCTGGTCATGGCGCCCCGAACCGTCCTCCTGCTGCTCTCGGCGGCCCTGGCCCTGACCGAGAC
CTGGGCCGGCTCCCACTCCATGAGGTATTTCGACACCGCCATGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCAT
CTCAGTGGGCTACGTGGACGACACGCAGTTCGTGAGGTTCGACAGCGACGCCGCGAGTCCGAGAGAGGAGCCGCG
GGCGCCGTGGATAGAGCAGGAGGGGCCGGAGTATTGGGACCGGAACACACAGATCTTCAAGACCAACACACAGAC
TGACCGAGAGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCGGGTCTCACACCCTCCAGAGCAT
GTACGGCTGCGACGTGGGGCCGGACGGGCGCCTCCTCCGCGGGCATAACCAGTACGCCTACGACGGCAAGGATTA
CATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCGGCGGACACCGCGGCTCAGATCACCCAGCGCAAGTGGGA
GGCGGCCCGTGTGGCGGAGCAGGACAGAGCCTACCTGGAGGGCACGTGCGTGGAGTGGCTCCGCAGATACCTGGA
GAACGGGAAGGACACGCTGGAGCGCGCGGACCCCCCAAAGACACACGTGACCCACCACCCCATCTCTGACCATGA
GGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGA
CCAAACTCAGGACACTGAGCTTGTGGAGACCAGACCAGCAGGAGATAGAACCTTCCAGAAGTGGGCAGCTGTGGT
GGTGCCTTCTGGAGAAGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCCTCACCCTGAG
ATGGGAGCCGTCTTCCCAGTCCACCGTCCCCATCGTGGGCATTGTTGCTGGCCTGGCTGTCCTAGCAGTTGTGGT
CATCGGAGCTGTGGTCGCTGCTGTGATGTGTAGGAGGAAGAGCTCAGGTGGAAAAGGAGGGAGCTACTCTCAGGC
TGCGTGCAGCGACAGTGCCCAGGGCTCTGATGTGTCTCTCACAGCTTGAAAAGCCTGAGACAGCTGTCTTGTGAG
GGACTGAGATGCAGGATTTCTTCACGCCTCCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAAGGC
ACCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCCACCCTTGTGTCCACTGTGA
CCCCTGTTCCCATGCTGACCTGTGTTTCCTCCCCAG

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FIGURE 4156

GCGTGATGTCTCACAGAAAGTTCTCCACTCCCAGACATGGGTCCCTCGGCTTCCTGCCTTGGAAGCGCAGCAGCA
GGCATTGTGGGAAGGTGAAGAGCTTCCCTAAGGATGACCCGTCCAAGCCGGTCCACCTCACAGCCTTCCTGGGAT
ACAAGGCTGGCATGACCCACATCGTGCGGGCTCTGGAGAAGATTGACCTTAAGTTCATTGACACCCCCTCCAAGT
TTGGCCATGGCCACTTCCAGACCATGGAGGAGAAGAAAGCATTCATGGGACCACTCAAGAAAGACCGAATTGCAA
AGGAAGAAGGAGCTTAATGCTGGGAACAGATATTGCAACTGGTGGGATCTCAATAAAAGTTATTTTCCA

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FIGURE 4157

ATTCTCCCCAGAGGCCGAGATGCGGGTCATGGCGCCCCGAGCCCTCCTCCTGCTGCTCTCGGGAGGCCTGGCCCT
GACCGAGACCTGGGCCTGCTCCCACTCCATGAGGTATTTCGACACCGCCGTGTCCCGGCCCGGCCGCGGAGAGCC
CCGCTTCATCTCAGTGGGCTACGTGGACGACACGCAGTTCGTGCGGTTCGACAGCGACGCCGCGAGTCCGAGAGG
GGAGCCGCGGGCGCCGTGGGTGGAGCAGGAGGGGCCGGAGTATTGGGACCGGGAGACACAGAACTACAAGCGCCA
GGCACAGGCTGACCGAGTGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGACGGGTCTCACACCCT
CCAGAGGATGTATGGCTGCGACCTGGGGCCCGACGGGCGCCTCCTCCGCGGGTATGACCAGTCCGCCTACGACGG
CAAGGATTACATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCCGCGGACACCGCGGCTCAGATCACCCAGCG
CAAGTTGGAGGCGGCCCGTGCGGCGGAGCAGCTGAGAGCCTACCTGGAGGGCACGTGCGTGGAGTGGCTCCGCAG
ATACCTGGAGAACGGGAAGGAGACGCTGCAGCGCGCAGAACCCCCAAAGACACACGTGACCCACCACCCCCTCTC
TGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGA
TGGGGAGGACCAGACCCAGGACACCGAGCTTGTGGAGACCAGGCCAGCAGGAGATGGAACCTTCCAGAAGTGGGC
AGCTGTGGTGGTGCCTTCTGGACAAGAGCAGAGATACACGTGCCATATGCAGCACGAGGGGCTGCAAGAGCCCCT
CACCCTGAGCTGGGAGCCATCTTCCCAGCCCACCATCCCCATCATGGGCATCGTTGCTGGCCTGGCTGTCCTGGT
TGTCCTAGCTGTCCTTGGAGCTGTGGTCACCGCTATGATGTGTAGGAGGAAGAGCTCAGGGCATTTTCTTCCCAC
AGGTGGAAAAGGAGGGAGCTGCTCTCAGGCTGCGTGCAGCAACAGTGCCCAGGGCTCTGATGAGTCTCTCATCAC
TTGTAAAGCCTGAGACAGCTGCCTGTGTGGGACTGAGATGCAGGATTTCTTCACACCTCTCCTTTGTGACTTCAA
GAGCCTCTGGCATCTCTTTCTGCAAAGGCGTCTGAATGTGTCTGCGTTCCTGTTAGCATAATGTGAGGAGGTGGA
GAGACAGCCCACCCCCGTGTCCACCGTGACCCCTGTCCCCACACTGACCTGTGTTCCCTCCCCGATCATCTTTCC
TGTTCCAGAGAGGTGGGGCTGGATGTCTCCATCTCTGTCTCAAATTCATGGTGCACTGAGCTGCAACTTCTTACT
TCCCTAATGAAGTTAAGAACCTGAATATAAATTTGTGTTCTCAAATATTTGCTATGAAGCGTTGATGGATTAATT
AAATAAGTCAATTCCTAGAAGTTGAGAGAGCAAATAAAGACCTGAGAACCTTCCAG

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FIGURE 4158

AGATGACACAAGTCACAGAAAAGTCCACAGAACACCCAGAAAAGACCACGTCAACCACAGAGAAAACCACAAGAA
CCCCAGAAAAGCCTACGCTATACTCAGAGAAGACCATATGCACCAAAGGGAAAAACACACCAGTCCCAGAAAAGC
CTACAGAAAACCTGGGGAACACCACACTGACCACTGAGACCATAAAAGCCCCAGTAAAGTCCACAGAAAACCCAG
AAAAAACAGCAGCAGTCACAAAGACTATAAAACCTTCAGTCAAGGTCACAGGAGACAAATCTCTCACTACTACCT
CTTCTCATCTAAATAAAACTGAAGTTACTCATCAGGTGCCCACTGGTTCTTTCACCCTCATTACATCTAGAACGA
AGCTGAGTTCTATCACATCAGAAGCCACAGGAAACGAGAGCCATCCATACCTCAATAAAGATGGCTCACAGAAAG
GTATCCACGCTGGACAGATGGGAGAGAATGATTCATTCCCTGCATGGGCCATAGTTATTGTGGTCCTGGTGGCTG
TGATTCTCCTCCTGGTGTTCCTTGGCCTGATCTTCTTGGTCTCCTATATGATGCGGACACGCCGCACACTAACCC
AGAACACCCAGTACAATGATGCAGAGGATGAGGGTGGCCCCAATTCCTACCCGGTCTACCTGATGGAGCAGCAGA
ATCTTGGCATGGGCCAGATCCCTTCCCCACGGTGATCTTGGAGTAGGCGCCCAGCCCTGGCTCTTCCATGCTCTG
CCCCTTTCCTGGATGAGGAACCGGACTCACAATTTCTATTTCCGGGACTACAGGAAGGGCAGAGAATACTGACGG
TTACCAGTATTAACCCTTCATCTGTTCTTGAAACTGGTTGGGGAATGAGGTGATAAGCAAGGAGGGTGTAAGTTT
AGGGGACAAAGAAGAAAGAATGAATAATACGAGCAGACATTCTCTGTAGAAGGTAATGGTCTGAGAATGAAAAGG
TGTTTGATGGACATGTTGTGGGGGCACCAATGCAGAACACTGCACTGAGTCCTAAAGGAAGGACAGGAGCCTTAT
AGGCAATGCCCCAGACTGACTTGTGAGTGGGGTTTATGGGGAAAGGGAGGGACTGAGGGCAGAGTCTCTGGGTTT
CAGGACAGCATTATGTTATTTCCATTCACTATTACTTAAGAGTTTGTGTGTAAACAGGCTCATCTCTGAGTTCTC
AGGACCCTTGCCCCCACCCCCATTTTTTTAATGAAAAAAAAAAACAAAAAAAACGGATCCAAGAAGAAAAGAGAA
TTTATTTCCTTCTCCACTCTCTCCATGCCCTGGAGAAAAAAAAGTCCAGAAGAAATCATAAATATCTCTCATCTA
CATGGTTGCTTCCTCTTCCTCCCAAATCCCTTAGTTTTCCTAAATGTCTACAGTGGACGCCCTGTTGGTTTGGCT
TGCTGGGTTGTGGGTGGACACGCAAGGAGGGGATTTTTATTTGGCCAGCAGTCTCACCCACTGATCTCCACCCCA
GACCTTCCCTGATTGGTGTCTCAGCATTTATTTTCCTGTCTCTTCCACCAAAAGCCAGCTGTAGCTTTATCTCGT
AAAAGTTACCCATCTTCTCTACTGTCCCCATTCTCTCTCCTCCCACCTTCACCCCAGATTCAAGTTTTCCTCCTT
GTAGGCATTTCATCTGTGTGTGTTTTCTGGATTTTCTCTCTCTCTTCTTATGGCCATTTCACCTTATTACTGATT
GGGTAGAGGGGGAAAAGGAGAATGATGATGATAGTTTCCTTCTGTCTATTGACCTTTTTTATAATAAAGTATAAC
ATGTT

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FIGURE 4159A

ATGGACACTGTGCTGGTGCTGCTCCTGGGCCTGCAGGCCTTGGCCGGACCCAGTCCGAAGCCCCAGAAGGACTCT
GTCTCAGACTGGGCCATTGTGTTGATCACTCTCACTTTGGTGGCAGCAATTGTCAGCCTAATGTACGGTATCAAG
AAGGCCTGCCAGTTCCGGAGGGAGATGAGTCTGGGGTGTGGCTGTGGCTCTGTGACCCCTTACAGCAGCCACCAT
GAGGGGGAGGCTGCCAGCCAGCGCTACTCTTGTCAAATGAAAGCTTCTTGGGGGGCAGGTGCTACTACATTCCAA
GAATATCAGAAAACTGGGGAACTCTCAACATCCGATCACATATTTCCCCTCACTCCAGGCCTTGTTTATAGTATC
CCTTTTGATCACATTGTTCTGCATTCAGGACAAAGACCTCCAGAGCTCCCTAAATCTACAGAAATCCATGAGCAA
AAACGCCACTGCAACACCACACGCCATTCTAAGCCAACTGACAAGCCTACAGGCAACTCCAAAACTATAGACCAC
AAAAGCTCTACAGATAATCATGAGGCTCCTCCCACTTCTGAAGAAAACTCCAGCAACCAAGGGAAAGACCCAATG
ATCCGGAACCAGCGCTCTGTTGATCCTGCTGACTCCACTACCACACATAAAGAATCCGCTGGAAAAAAACATATA
ACGCCAGCACCCAAGAGCAAAATAAACTGTCGTAAGTCCACAACAGGCAAATCAACGGTAACAAGAAAATCAGAT
AAAACTGGAAGACCTTTGGAAAAGTCCATGAGTACTTTGGATAAGACAAGTACCAGCTCACATAAGACTACAACT
TCCTTCCACAACTCAGGCAATTCACAGACCAAGCAAAAAAGCACATCTTTTCCAGAAAAAATCACAGCAGCCTCA
AAAACAACATACAAGACCACAGGAACCCCAGAAGAGTCAGAAAAAACTGAAGATTCCAGAACAACAGTTGCCTCA
GACAAGCTCCTGACAAAAACTACAAAAAACATACAAGAGACCATATCAGCCAATGAGCTCACACAATCTCTAGCA
GAGCCTACAGAACATGGAGGAAGGACAGCCAATGAGAACAACACACCATCCCCAGCAGAGCCTACAGAAAATAGA
GAAAGGACAGCCAATGAGAACACCACACTATCCCCAGCAGAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAG
AACACCGCACCATTCCCAGCAGGGCCTACAGAAAATAGAGAAATGACAGCCA**ATG**AGAATACCACACTATTCCCA
GCAGAGCCTACAGAACATGGAGAAAGGACAGCCAATGAGAACACCACACCATCCCCAGCAGAGCCTACAGAACAT
GGAGAAAGGACAGCCAATGAGAACACTACACCATCCCCAGCAGAGCCTACAGAACATGGAGAAAGGACCCCATTT
GCCAATGACAAAACCACATCATCCTCAGCAGAGTCTACAGAACATGGAGAAAGGACCCCACTGGCCAACGAGAAC
ACCACACCATCCCCAGCAGAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAGAACACCACACCATCCCCAGCA
GGGCCTACAGAAAACAGAGAAACGACAGCCAACGAGAAGACCACACTATCCCCAG**TAG**AGCCTACAGAAAATAGA
GAAACAACAGCCAATGAGAAGACCACACCATCCCCAGCAGAGCCTACAGAAAATGGACAAAGGACCCCATTTGCC
AATGAGAAAACCACATCATCCTCAGCAGAGCCTACAGAACACGGAGAAAGGACCCCACTGGCCAATGAGAACACC
ACACCATCCCCAGCAGAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAGAAGACCACACCATCCCCAGCAGAG
CCTACAGAAAATGGAGACAGGACTCCTTTGGCCAATGAGAAGACCACGCCATCTCTAGCAGAGCCTACAGAAAAT
GGACAAAGGACCCCATTTGCCAATGAGAAGACCACATCATCCTCAGCAGAGCCTACAGAACACGAAGAAAGGACT
CCACTGGCCAATGAGAACACCACACCATCCCCGGCAGAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAGAAC
ACCACACCATCCCCAGCAGGGCCTACAGAAAATAGAGAAATGACAGCCAACGAGAAGACCACACTATTCCCAGCA
GAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAGAAGACCACATCATCCCCAGCAGAGCCTACAGAAAATGGA
CAAAGGACCCCATTTGCCAATGAGAAAACCACATCATCCCCAGCAGAGCCTACAGAACACGGAGAAAGGACCCCA
CTGGCCAATGAGAACACCACACTATCCCCAGCAGAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAGAAGACC
ACACCATTCCCAGCAGAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAGAACACCACACCATCCCCAGCACAG
CCTACAGAAAATGGAGACAGGACTCCATTGGCCAATGAGAAGACCACACCATCTCTAGCAGAGCCTACAGAAAAT
GGAAAAAGGACCCCATTTGCCAATGAGAAGACCACATCATCCTCAGCAGAGCCTACAGAACACGCAGAAAGGACT
CCACTGGCCAATGAGAACACCACATCATCCCCAGCAGAGCCTACAGAAAATAGAGAAAGGACAGCCAATGAGAAG
ACCACACAATTCCCAGCAGAGCCTACAGAAAATAGAGAAAGCACAGCCAATGAGAAGACCACACCATTCCCAGCA
GAGCCTACAGAAAATAGAGAATGGACAGCCAATGAGAACACCACACTATCCCCAGCAGAGCCTACAGAACATGAA
GAAATGACCCCATTGGCCAATGAGAAGACCACACTATCCCCAGCAGAGCCTACAGAAAATGGAGAAAGGACCCCA
TTTACCAATGAGAAGACCACACCATCCTCAGCAGAGCCTACAGAACATGGAGAAAGGACCCCACTGGCCAATGAG
ATCACCACACCATCCCGAGCAGAGCCTACAGAACATGGAGAAAGGATAGCCAATGAGAAGGCCACACCATCCCCA
GCAAAGCCTACAGAACATGGAGAAACGACAGTCAATGAGGACACCACACCATCCTCAGCAGAGCCTACAGAAAAT
GGAGAAAGGACCCCACTGGCCAATGAGAACACCACAACATCCCCAACAGAGTCTACAGAACATGGAGAAAGGACA
GCCAATGAGAAGACCACACCATCCCCAGCAGAGCCTACAGAACATGGAGAAAGGACACCATCAGCCAATGAGAAG
ACCATACCATCTCCAGCAAAGCCTACAGAACACGAAGAAATGACCCCATCGGCCAATGAGAACACCACACCATCC
CCAGTAAAGCCTACAGAACATGGAGAAAAGACTACATTGGCCAATGAGAAGATCACACTATCCCCAGAAGGGCCT
ACAGAACATGGAGCAAAAACTACGTCGGCCAATGAGAAGATCACACCATCCCTAGCAAAGCCTACAGAACATGGA
GAAAGGACCACATCACCCAATGACAAGATCACCTCATCTGCAGCAGAGTCTACAGAACATAGAGATAGGGCTACA

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FIGURE 4159B

TCAGCCAAT

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FIGURE 4160

TTGGTGGATTCCTCAGTCCCTGCCGCCGCGGGGCGCCCTGGGATAGCGGCGGGGCCTCCTGAACAGATCTCGGCC
CCTTTCCAAACACTCCTGATGCCTCATTTGCCTCTCGCTTCTTTTCGACCACCATTTTGGGGGCTGAGGCACTCA
CGGGGCCTCCCCAGGTTTCACTCCGTTTCTACACAGTCGGAGCCCCATGGATCTCCCATCTCCCGGAGGAACCGT
GAAGCCAAACAGAAGCGCCTGCGAGAGAAGCAGGCTACTCTGGAGGCTGAGATAGCAGGGGAGAGCAAGTCACCT
GCAGAATCCATTAAGGCCTGGAGGCCTAAGGAGTTAGTATTGTATGAAATCCCTACGAAACCCGGTGAAAAGAAA
GATGTCTCTGGGCCCCTGCCTCCTGCATACAGCCCCCGATATGTTGAGGCTGCCTGGTACCCGTGGTGGGTACGA
GAGGGCTTCTTCAAACCAGAATATCAGGCCCGGCTGCCCCAAGCTACAGGGGAGACCTTTTCCATGTGTATCCCA
CCTCCCAATGTCACTGGCTCCCTGCACATTGGCCACGCACTCACGGTGGCCATACAGGATGCCCTCGTGCGCTGG
CACCGGATGCGTGGGGATCAAGTGCTGTGGGTCCCTGGTTCAGATCATGCAGGAATTGCTACACAAGCTGTGGTG
GAGAAACAACTGTGGAAGGAACGGGGAGTGAGGAGACATGAGCTGAGCCGGGAGGCCTTCCTTAGGGAGGTGTGG
CAGTGGAAGGAGGCGAAAGGTGGAGAGATCTGTGAGCAGCTGCGAGCTCTGGGTGCCTCCCTGGACTGGGATCGA
GAGTGTTTTACCATGGATGTTGGCTCCTCAGTGGCTGTGACTGAAGCTTTTGTGCGGCTCTACAAGGCGGGGTTG
CTGTACCGGAACCATCAGCTTGTCAACTGGTCATGTGCTTTAAGATCAGCCATCTCGGACATTGAGGTGGAGAAC
CGGCCCCTGCCTGGCCACACACAGCTTCGACTGCCTGGCTGCCCCACCCCCGTGTCTTTTGGCCTCCTATTTTCT
GTTGCCTTCCCCGTGGATGGAGAGCCTGATGCAGAGGTTGTGGTAGGAACCACAAGGCCAGAGACGCTGCCTGGA
GATGTGGCTGTGGCCGTTCATCCAGACGACTCGCGATACACACATCTACACGGGCGACAGCTTCGTCACCCCTTG
ATGGGGCAGCCTCTTCCCCTCATCACAGACTATGCTGTTCAGCCACATGTGGGCACGGGGGCAGTGAAGGTGACT
CCAGCTCACAGTCCTGCCGATGCTGAGATGGGGGCCCGACATGGCTTGAGCCCCTTGAATGTCATTGCGGAGGAT
GGGACCATGACCTCCCTCTGCGGGGACTGGCTGCAGGGTCTTCACCGGTTTGTGGCCCGGGAAAAGATAATGTCT
GTGCTGAGTGAATGGGGCCTGTTCCGGGGCCTCCAGAACCACCCCATGGTACTGCCCATCTGCAGCCGTTCTGGG
GATGTGATAGAATACCTGCTGAAGAACCAGTGGTTTGTCCGCTGCCAGGAAATGGGGGCCCGAGCTGCCAAGGCT
GTGGAGTCGGGGGCCCTGGAGCTCAGTCCCTCCTTCCACCAGAAGAACTGGCAGCACTGGTTTTCCCATATTGGG
GACTGGTGTGTCTCCCGGCAGCTGTGGTGGGGCCATCAGATTCCAGCCTACCTGGTTGTAGAGGACCATGCGCAG
GGAGAAGAGGACTGTTGGGTGGTTGGGCGGTCAGAGGCTGAGGCCAGAGAGGTAGCAGCGGAACTGACAGGGAGG
CCAGGGGCAGAGCTGACCCTGGAGAGGGATCCTGATGTCCTAGACACATGGTTTTCTTCTGCCCTGTTCCCCTTT
TCTGCCCTGGGCTGGCCCCAAGAGACCCCAGACCTTGCTCGTTTCTACCCCCTGTCACTTTTGGAAACGGGCAGC
GACCTTCTGCTGTTCTGGGTGGGCCGCATGGTCATGTTGGGGACCCAGCTCACAGGGCAGCTGCCCTTCAGCAAG
GTGCTTCTTCATCCCATGGTTCGGGACAGGCAGGGCCGGAAGATGAGCAAGTCCCTGGGGAATGTGCTGGACCCA
AGAGACATCATCAGTGGGGTGGAGATGCAGGTGCTGCAGGAAAAGCTGAGAAGCGGAAATTTGGACCCTGCAGAG
CTGGCCATTGTGGCTGCAGCACAGAAAAAGGACTTTCCTCACGGGATCCCTGAGTGTGGGACAGATGCCCTGAGA
TTCACACTCTGCTCCCATGGAGTTCAGGCGGGCGACTTGCACCTGTCAGTCTCTGAGGTCCAGAGCTGCCGACAT
TTCTGCAACAAGATCTGGAATGCTCTTCGCTTTATCCTCAATGCTTTAGGGGAGAAATTTGTGCCACAGCCTGCT
GAGGAGCTGTCTCCCTCCTCCCCGATGGATGCCTGGATCCTGAGCCGCCTTGCCCTGGCTGCCCAGGAGTGTGAG
CGGGGCTTCCTCACCCGAGAGCTCTCGCTCGTCACTCATGCCCTGCACCACTTCTGGCTTCACAACCTCTGTGAC
GTCTACCTGGAGGCTGTGAAGCCCGTGCTGTGGCACTCGCCCCGCCCCCTGGGGCCCCCTCAGGTCCTGTTCTCC
TGCGCTGACCTCGGCCTCCGCCTCCTGGCCCCACTGATGCCCTTCCTGGCTGAAGAGCTCTGGCAGAGGCTGCCC
CCCAGGCCTGGTTGCCCCCCTGCCCCCAGCATCTCGGTTGCCCCCTACCCCAGCGCCTGCAGCTTGGAGCACTGG
CGCCAGCCAGAGCTGGAGCGGCGCTTCTCCCGGGTCCAAGAGGTCGTGCAGGTGCTAAGGGCTCTCCGAGCCACG
TACCAGCTCACCAAAGCCCGGCCCCGAGTGCTGCTGCAGAGCTCAGAGCCTGGGGACCAGGGCCTCTTCGAGGCC
TTCTTGGAGCCCCTGGGCACCCTGGGCTACTGTGGGGCTGTGGGCCTGTTACCCCCAGGCGCAGCAGCTCCCTCC
GGCTGGGCCCAGGCTCCACTCAGTGACACGGCTCAAGTCTACATGGAGCTGCAGGGCCTGGTGGACCCGCAGATC
CAGCTACCTCTGTTAGCCGCCCGAAGGTACAAGTTGCAGAAGCAGCTTGACAGCCTCACAGCCAGGACCCCATCA
GAAGGGGAGGCAGGGACTCAGAGGCAACAAAAGCTTTCTTCCCTCCAGCTGGAATTGTCAAAACTGGACAAGGCA
GCCTCTCACCTCCGGCAGCTGATGGATGAGCCTCCAGCCCCAGGGAGCCCGGAGCTCTAACTCATCATCCCCATC
AGTTTTCCTCCCTCTCAGACCTGTCTTTGAGGACAAACAGATTTGTCAGCTGTCAGGGTGCAGTGGGACGTCAGA
GACTATGTGGTCCATCGCCTTCATTGTGTAAATGAGGACACAGACTGGCTTGGTCGCAGTGACTGTGGTGTCCTT
GAGATGCTCACATTACTGCCCGGCCTGCCTCCCACCTGGAAGTCTGGGAATGAGGAGATTGAGATAAACTTTTGA
AATCCC

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FIGURE 4161

CCCATCTTTTCCTCGCATTTTTTCACCATCTTTCCCTCAATCTCCAGGAGCCAATGCGAGACTTTGGCTCCGATT
AAGCGACGGCCCGAGACTCGGGGTGCGCGAGGAGGATCGACAGAGTGGTGATGGAGAGCACCCCTTCAAGGGGAC
TGAACCGAGTACACCTACAATGCAGGAATCTGCAGGAATTCTTAGGGGGCCTGAGCCCTGGGGTATTGGACCGAT
TGTATGGGCACCCTGCCACATGTCTGGCTGTCTTCAGGGAGCTCCCATCCTTGGCTAAGAACTGGGTGATGCGGA
TGCTCTTTCTGGAGCAGCCTTTGCCACAGGCTGCTGTAGCTCTGTGGGTAAAGAAGGAATTCAGCAAGGCTCAGG
AGGAAAGTACAGGGCTGCTGAGCGGCCTCCGGATCTGGCACACACAGCTGCTCCCAGGCGGGCTCCAGGGCCTCA
TCCTCAACCCCATTTTCCGCCAGAACCTCCGCATTGCCCTTCTGGGTGGGGGGAAGGCCTGGTCTGATGACACAA
GTCAGCTGGGACCAGACAAGCATGCCCGGGACGTTCCCTCCCTTGACAAGTACGCCGAGGAGCGATGGGAGGTGG
TCTTGCACTTCATGGTGGGCTCCCCCAGTGCAGCTGTCAGCCAGGACTTGGCTCAGCTCCTCAGCCAGGCTGGGC
TCATGAAGAGTACTGAACCTGGAGAGCCGCCCTGCATTACTTCCGCTGGCTTCCAGTTCCTGTTGCTGGACACCC
CGGCTCAGCTCTGGTACTTTATGTTGCAGTATTTGCAGACAGCCCAGAGCCGGGGCATGGACCTGGTAGAGATTC
TCTCCTTCCTCTTCCAGCTCAGCTTCTCTACTCTGGGCAAGGATTACTCTGTGGAAGGTATGAGTGATTCTCTGT
TGAACTTCCTGCAACATCTGCGTGAGTTTGGGCTTGTTTTCCAGAGGAAGAGGAAATCTCGGCGTTACTACCCCA
CACGCCTGGCCATCAATCTCTCATCAGGTGTCTCTGGAGCTGGGGGCACTGTGCATCAGCCAGGTTTCATTGTCG
TGGAAACCAATTACCGACTGTATGCCTACACGGAGTCGGAGCTGCAGATTGCCCTCATTGCCCTCTTCTCTGAGA
TGCTCTATCGGTTCCCCAACATGGTGGTGGCGCAGGTGACCCGGGAGAGTGTGCAGCAGGCAATCGCCAGTGGCA
TCACAGCCCAGCAGATAATCCATTTCCTAAGGACAAGAGCCCACCCAGTGATGCTCAAACAGACACCTGTGCTGC
CCCCCACCATCACCGACCAGATCCGGCTCTGGGAGCTGGAAAGGGACAGACTCCGGTTCACTGAGGGTGTCCTGT
ATAACCAGTTCCTGTCGCAAGTGGACTTTGAGCTGCTGCTGGCCCACGCGCGGGAGCTGGGCGTGCTCGTGTTCG
AGAACTCGGCCAAGCGGCTCATGGTGGTGACCCCGGCCGGGCACAGCGACGTCAAGCGCTTTTGGAAGCGGCAGA
AACATAGCTCCTGAGAGCGCGGGACTTGGACACGGACCTCGGCGGGCGGGACTGGGCGGGGCGGGGCATCAGAAC
TCAGGTGTTTTTTATTTACGCGTCAGGGCTTTTCTTGTTTAATAAAGTTATGATAGCT

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FIGURE 4162A

TTAGGAAGTTATTTAACTGATCTCTGCCCTAGTTTCTTCATGTGTTAAATATGGATAGTAATAGTATCTACCTTA
TGAAGTGACTGTGAAGATAAAATTATGGATTCTGTTTAAGGGTTTAGGCCAGTGTCTGGCACAGGGGAAGCATTC
TAAAAATATAGCTGATGCTGTTAAACAATGACTGTTGTTGTTGTTTTACTGTTATTATCCCCAAAGCGGCCCATT
CTGTCTGTTGCTGTCAGCTATGACTCAGTCCCCTGATTAACTTACGCACCACCCATTTTATCCCCTGCAGAGATG
CTGCCCCCACCCCCTTAGGCCCGAGGGATCAGGAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCT
CTTGGTGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCA
GGACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCCGCCCGCCACAGCAG
GTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGTACTTGCA
GGTGGATCTACAACGACTGCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGA
GTTCTCCCGGAGCTACCGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCA
GGAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCATGGTTGCCCGACT
GGTTCGCTTCTACCCCCGGGCTGACCGGGTCATGAGCGTCTGTCTGCGGGTAGAGCTCTATGGCTGCCTCTGGAG
GGATGGACTCCTGTCTTACACCGCCCCTGTGGGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTC
CACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGCT
GGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGAGCAACCACAGCTT
CTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGGCCTTCCAGGCTATGCAGGTCCACTGTAA
CAACATGCACACGCTGGGAGCCCGTCTGCCTGGCGGGGTGGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTG
GGAGGGGGAGCCCATGCGCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCT
TGGCGGCCGTGTGGCTCGCTTTCTGCAGTGCCGCTTCCTCTTTGCGGGGCCCTGGTTACTCTTCAGCGAAATCTC
CTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGCACCTTCCCGCCAGCCCCCTGGTGGCCGCC
TGGCCCACCTCCCACCAACTTCAGCAGCTTGGAGCTGGAGCCCAGAGGCCAGCAGCCCGTGGCCAAGGCCGAGGG
GAGCCCGACCGCCATCCTCATCGGCTGCCTGGTGGCCATCATCCTGCTCCTGCTGCTCATCATTGCCCTCATGCT
CTGGCGGCTGCACTGGCGCAGGCTCCTCAGCAAGGCTGAACGGAGGGTGTTGGAAGAGGAGCTGACGGTTCACCT
CTCTGTCCCTGGGGACACTATCCTCATCAACAACCGCCCAGGTCCTAGAGAGCCACCCCCGTACCAGGAGCCCCG
GCCTCGTGGGAATCCGCCCCACTCCGCTCCCTGTGTCCCCAATGGCTCTGCGTTGCTGCTCTCCAATCCAGCCTA
CCGCCTCCTTCTGGCCACTTACGCCCGTCCCCCTCGAGGCCCGGGCCCCCCCACACCCGCCTGGGCCAAACCCAC
CAACACCCAGGCCTACAGTGGGGACTATATGGAGCCTGAGAAGCCAGGCGCCCCGCTTCTGCCCCCACCTCCCCA
GAACAGCGTCCCCCATTATGCCGAGGCTGACATTGTTACCCTGCAGGGCGTCACCGGGGGCAACACCTATGCTGT
GCCTGCACTGCCCCCAGGGGCAGTCGGGGATGGGCCCCCCCAGAGTGGATTTCCCTCGATCTCGACTCCGCTTCAA
GGAGAAGCTTGGCGAGGGCCAGTTTGGGGAGGTGCACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTTAGTCT
TGATTTCCCCCTTAATGTGCGTAAGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGCCAGATGCCACCAA
GAATGCCAGGAATGATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGACCCAAACATCATTCGGCTGCT
GGGCGTGTGTGTGCAGGACGACCCCCTCTGCATGATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCT
CAGTGCCCACCAGCTGGAGGACAAGGCAGCCGAGGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGCCCACCAT
CAGCTACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCTATCTGGCCACACTCAACTTTGT
ACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAAATCGCAGACTTTGGCATGAG
CCGGAACCTCTATGCTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGA
GTGCATCCTCATGGGGAAGTTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGAT
GCTCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGGTCATCGAGAACGCGGGGGAGTTCTTCCGGGA
CCAGGGCCGGCAGGTGTACCTGTCCCGGCCGCCTGCCTGCCCGCAGGGCCTATATGAGCTGATGCTTCGGTGCTG
GAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCCAGCTGCATCGGTTCCTGGCAGAGGATGCACTCAACACGGT
GTGAATCACACATCCAGCTGCCCCTCCCTCAGGGAGCGATCCAGGGGAAGCCAGTGACACTAAAACAAGAGGACA
CAATGGCACCTCTGCCCTTCCCCTCCCGACAGCCCATCACCTCTAATAGAGGCAGTGAGACTGCAGGTGGGCTGG
GCCCACCCAGGGAGCTGATGCCCCTTCTCCCCTTCCTGGACACACTCTCATGTCCCCTTCCTGTTCTTCCTTCCT
AGAAGCCCCTGTCGCCCACCCAGCTGGTCCTGTGGATGGGATCCTCTCCACCCTCCTCTAGCCATCCCTTGGGGA
AGGGTGGGGAGAAATATAGGATAGACACTGGACATGGCCCATTGGAGCACCTGGGCCCCACTGGACAACACTGAT
TCCTGGAGAGGTGGCTGCGCCCCCAGCTTCTCTCTCCCTGTCACACACTGGACCCCACTGGCTGAGAATCTGGGG
GTGAGGAGGACAAGAAGGAGAGGAAAATGTTTCCTTGTGCCTGCTCCTGTACTTGTCCTCAGCTTGGGCTTCTTC

FIGURE 4162B

CTCCTCCATCACCTGAAACACTGGACCTGGGGGTAGCCCCGCCCCAGCCCTCAGTCACCCCCACTTCCCACTTGC
AGTCTTGTAGCTAGAACTTCTCTAAGCCTATACGTTTCTGTGGAGTAAATATTGGGATTGGGGGGAAAGAGGGAG
CAACGGCCCATAGCCTTGGGGTTGGACATCTCTAGTGTAGCTGCCACATTGATTTTTCTATAATCACTTGGGGTT
TGTACATTTTTGGGGGGAGAGACACAGATTTTTACACTAATATATGGACCTAGCTTGAGGCAATTTTAATCCCCT
GCACTAGGCAGGTAATAATAAAGGTTGAGTTTTCCAC

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FIGURE 4163

ACTTGGCCTTACACTCCGCTCGGCTCACCATGTGTCACTCTCGCAGCTGCCACCCGACCATGACCATCCTGCAGG
CCCCGACCCCGGCCCCCTCCACCATCCCGGGACCCCGGCGGGGCTCCGGTCCTGAGATCTTCACCTTCGACCCTC
TCCCGGAGCCCGCAGCGGCCCCTGCCGGGCGCCCCAGCGCCTCTCGCGGGCACCGAAAGCGCAGCCGCAGGGTTC
TCTACCCTCGAGTGGTCCGGCGCCAGCTGCCAGTCGAGGAACCGAACCCAGCCAAAAGGCTTCTCTTTCTGCTGC
TCACCATCGTCTTCTGCCAGATCCTGATGGCTGAAGAGGGTGTGCCGGCGCCCCTGCCTCCAGAGGACGCCCCTA
ACGCCGCATCCCTGGCGCCCACCCCTGTGTCCCCCGTCCTCGAGCCCTTTAATCTGACTTCGGAGCCCTCGGACT
ACGCTCTGGACCTCAGCACTTTCCTCCAGCAACACCCGGCCGCCTTCTAACTGTGACTCCCCGCACTCCCCAAAA
AGAATCCGAAAAACCACAAAGAAACACCAGGCGTACCTGGTGCGCGAGAGCGTATCCCCAACTGGGACTTCCGAG
GCAACTTGAACTCAGAACACTACAGCGGAGACGCCACCCGGTGCTTGAGGCGGGACCGAGGCGCACAGAGACCGA
GGCGCATAGAGACCGAGGCACAGCCCAGCTGGGGCTAGGCCCGGTGGGAAGGAGAGCGTCGTTAATTTATTTCTT
ATTGCTCCTAATTAATATTTATATGTATTTATGTACGTCCTCCTAGGTGATGGAGATGTGTACGTAATATTTATT
TTAACTTATGCAAGGGTGTGAGATGTTCCCCCTGCTGTAAATGCAGGTCTCTTGGTATTTATTGAGCTTTGTGGG
ACTGGTGGAAGCAGGACACCTGGAACTGCGGCAAAGTAGGAGAAGAAATGGGGAGGACTCGGGTGGGGGAGGACG
TCCCGGCTGGGATGAAGTCTGGTGGTGGGTCGTAAGTTTAGGAGGTGACTGCATCCTCCAGCATCTCAACTCCGT
CTGTCTACTGTGTGAGACTTCGGCGGACCATTAGGAATGAGATCCGTGAGATCCTTCCATCTTCTTGAAGTCGCC
TTTAGGGTGGCTGCGAGGTAGAGGGTTGGGGGTTGGTGGGCTGTCACGGAGCGACTGTCGAGATCGCCTAGTATG
TTCTGTGAACACAAATAAAATTGATTTACTGTCTGC

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FIGURE 4164

AGCAACGGGGTGCGGCAGGGTGGGGAACGCGGGAGCGGGGCCAGCTCCCAGGAAAGCTGGTCTGCGAGCGGCCCC
TGCCCGGCTCCCAGGTCCCTGCGCGACCCCGCCCTTCCCGAGACCCCAGCCGGGCTGCCGCCCGCGTCCCGGAAG
CTCCAGCCTGAACC**ATG**TTTTTCACTTGTGGCCCAAATGAGGCCATGGTGGTCTCCGGGTTCTGCCGAAGCCCCC
CAGTCATGGTGGCTGGAGGGCGTGTCTTTGTCCTGCCCTGCATCCAACAGATCCAGAGGATCTCTCTCAACACAC
TGACCCTCAATGTCAAGAGTGAAAAGGTTTACACTCGCCATGGGGTCCCCATCTCAGTCACTGGCATTGCCCAGG
TAAAAATCCAGGGGCAGAACAAGGAGATGTTGGCGGCCGCCTGTCAGATGTTCCTGGGGAAGACGGAGGCTGAGA
TTGCCCACATTGCCCTGGAGACGTTAGAGGGCCACCAGAGGGCCATCATGGCCCACATGACTGTGGAGGAGATCT
ATAAGGACAGGCAGAAATTCTCAGAACAGGTTTTCAAAGTGGCCTCCTCAGACCTGGTCAACATGGGCATCAGTG
TGGTTAGCTACACTCTGAAGGACATTCACGATGACCAGGACTATTTGCACTCTTTGGGGAAGGCTCGAACAGCTC
AAGTCCAAAAAGATGCACGGATTGGAGAAGCAGAGGCCAAGAGAGATGCTGGGATCCGGGAAGCTAAAGCCAAGC
AGGAAAAGGTGTCTGCTCAGTACCTGAGTGAGATCGAGATGGCCAAGGCACAGAGAGATTACGAACTGAAGAAGG
CCGCCTATGACATCGAGGTCAACACCCGCCGAGCACAGGCTGACCTGGCCTATCAGCTTCAGGTGGCCAAGACTA
AGCAGCAGATTGAGGAGCAGCGGGTGCAGGTGCAGGTGGTGGAGCGGGCCCAGCAGGTGGCAGTGCAGGAGCAGG
AGATCGCCCGGCGGGAGAAGGAGCTGGAGGCCCGGGTGCGGAAGCCAGCGGAAGCGGAGCGCTACAAGCTGGAGC
GCCTAGCCGAGGCAGAGAAGTCCCAACTAATTATGCAGGCGGAGGCAGAAGCCGCGTCTGTGCGGATGCGTGGGG
AAGCTGAGGCCTTTGCCATAGGGGCCCGAGCCCGAGCCGAGGCTGAGCAGATGGCCAAGAAGGCAGAAGCCTTCC
AGCTGTACCAAGAGGCTGCTCAGCTGGACATGCTGCTAGAGAAGCTGCCCCAGGTGGCAGAGGAGATCAGTGGTC
CCTTGACTTCAGCCAATAAGATCACACTGGTGTCCAGCGGCAGTGGGACCATGGGGGCAGCCAAAGTGACTGGGG
AAGTACTGGACATTCTAACTCGCCTGCCAGAGAGTGTGGAAAGACTCACAGGCGTGAGCATCTCCCAGGTGAATC
ACAAGCCTTTGAGAACAGCC**TGA**GCCTTCAGCCCTCACAGATGCCCAGCCTCATAGCTGAAGTTGCCTGAATGAT
CCTCCTGTTGCATGTAACCCACTGGCCTCCCTGAGCATGTCCATTGACAGTGAGGTCCCACCCCTCATCTCTCCT
TGCCAAATAGTTTGTGCCTTGTCTTGAAGGGGGTTGCTCCCCTTGCCAACCTCACACTGCTATGATTGCCAACTC
CAGCGGTCCCATGTCAGCCTTCTGATGATCCCACTCCACCCCACCTCAACTTATTTAACTTCCTAATTAAATCAG
ACTGTTTGAGCCTGTTGTCTAGAATATTTTCCTGACCAAGACTGAGGGATGGGCTGGAGGTTTTCAACTTTGCTA
CCCAAATAAATTGCTGTAAGTAAGTACT

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FIGURE 4165

CGCTGCTCCAGCCTCTGGGGCGCATTCCAACCTTCCAGCCTGCGACCTGCGGAGAAAAAAAATTACTTATTTTCT
TGCCCCATACATACCTTGAGGCGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGCACATCCAGGCTGG
TCAGTGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCACCGCTGT
CTTCCGTGGTCGGATGTCCATGAAGGAGGTCGATGAGCAGATGCTTAACGTGCAGAACAAGAACAGCAGCTACTT
TGTGGAATGGATCCCCAACAATGTCAAGACAGCCGTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTCAC
CTTCATTGGCAATAGCACAGCCATCCAGGAGCTCTTCAAGCGCATCTCGGAGCAGTTCACTGCCATGTTCCGCCG
GAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCTGAGAGCAACATGAA
CGACCTCGTCTCTGAGTATCAGCAGTACCAGGATGCCACCGCAGAAGAGGAGGAGGATTTCGGTGAGGAGGCCGA
AGAGGAGGCCTAAGGCAGAGCCCCCATCACCTCAGGCTTCTCAGTTCCCTTAGCCGTCTTACTCAACTGCCCCTT
TCCTCTCCCTCAGAATTTGTGTTTGCTGCCTCTATCTTGTTTTTTGTTTTTTCTTCTGGGGGGGGTCTAGAACAG
TGCCTGGCACATAGTAGGCGCTCAATAAATACTTGTTTGTTGAATGTCTCCTCTCTCTTTCCACTCTGGGAAACC
TAGGTTTCTGCCATTCTGG

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FIGURE 4166A

AGATCATGGAGGACACCCAGGCTATTGACTGGGATGTTGAAGAAGAGGAGGAGACAGAGCAATCCAGTGAATCCT
TGAGGTGTAACGTGGAGCCAGTAGGGCGGCTACATATCTTTAGTGGTGCCCATGGACCAGAAAAAGATTTCCCAC
TACACCTCGGGAAGAATGTGGTAGGCCGAATGCCTGACTGCTCTGTGGCCCTGCCCTTTCCATCTATCTCCAAAC
AACATGCAGAGATTGAAATCTTAGCCTGGGACAAGGCACCTATCCTCCGAGACTGTGGGAGCCTTAATGGTACTC
AAATCCTGAGACCTCCTAAGGTTTTGAGCCCTGGGGTGAGTCACCGTCTGAGGGACCAGGAATTGATTCTCTTTG
CTGACTTGCTCTGCCAGTACCATCGCCTGGATGTCTCTCTGCCCTTTGTCTCCCGGGGCCCTCTGACAGTAGAAG
AGACACCCAGAGTACAGGGAGAAACTCAACCCCAGAGGCTTCTGTTGGCTGAGGACTCGGAGGAGGAAGTAGATT
TTCTTTCTGAAAGGCGTATGGTAAAAAAATCAAGGACCACATCTTCCTCTGTGATAGTTCCAGAGAGTGATGAAG
AGGGGCATTCCCCGGTCCTGGGCGGCCTTGGGCCGCCTTTTGCCTTCAATTTGAACAGTGACACAGATGTGGAAG
AAGGTCAGCAACCAGCCACAGAGGAGGCCTCCTCAGCTGCCAGAAGAGGTGCCACTGTAGAGGCAAAGCAGTCTG
AAGCTAAAGTTGTAACTGAAATCCAGCTTGAAAAGGATCAGCCTTTAGTGAAGGAGAGGGACAATGATACAAAAG
TCAAGAGGGGTGCAGGGAATGGGGTGGTTCCAGCTGGGGTGATTCTGGAGAGGAGCCAACCTCCTGGAGAGGACA
GTGACACAGATGTGGATGATGACAGCAGGCCTCCTGGAAGGCCAGCTGAGGTCCATTTGGAAAGGGCTCAGCCTT
TTGGCTTCATCGACAGCGACACTGATGCGGAAGAAGAGAGGATCCCAGCAACCCCAGTTGTCATTCCTATGAAGA
AGAGGAAGATCTTCCATGGAGTAGGTACAAGGGGCCCTGGAGCACCAGGCCTGGCCCATCTGCAGGAGAGCCAGG
CTGGTAGTGATACAGATGTGGAAGAAGGCAAGGCCCCACAGGCTGTCCCTCTGGAGAAAAGCCAAGCTTCCATGG
TTATCAACAGCGATACAGATGACGAGGAAGAAGTCTCAGCAGCGCTGACTTTGGCACATCTGAAAGAGAGCCAGC
CTGCTATATGGAACAGAGATGCAGAAGAGGACATGCCCCAACGTGTGGTCCTTCTGCAGCGAAGCCAAACCACCA
CTGAGAGAGACAGTGACACAGACGTGGAGGAGGAAGAGCTCCCAGTGGAAAATAGAGAAGCTGTCCTCAAGGATC
ACACAAAGATTAGAGCCCTTGTTAGAGCACATTCAGAAAAGGACCAACCTCCTTTTGGGGACAGTGATGACAGTG
TGGAAGCAGATAAGAGCTCACCTGGGATCCACCTGGAGAGAAGCCAAGCCTCCACCACAGTGGACATCAACACAC
AAGTGGAGAAGGAAGTCCCGCCAGGGTCAGCCATTATACATATAAAGAAGCATCAGGTGTCTGTGGAGGGGACAA
ATCAAACAGATGTGAAAGCAGTTGGGGGACCAGCAAAGCTGCTTGTGGTATCTCTAGAGGAAGCCTGGCCTCTGC
ATGGGGACTGTGAAACAGATGCAGAGGAGGGCACCGCCCTAACAGCCTCAGTAGTTGCAGATGTAAGAAAGAGCC
AGCTTCCAGCAGAAGGGGATGCTGGGGCAGAGTGGGCTGCAGCTGTTCTTAAGCAGGAGAGAGCTCATGAGGTGG
GGGCCCAGGGTGGGCCACCTGTGGCACAAGTGGAGCAGGACCTCCCTATCTCAAGAGAGAACCTCACAGATCTGG
TGGTGGACACAGACACTCTAGGGGAATCCACCCAGCCACAGAGAGAGGGAGCCCAGGTCCCCACAGGAAGGGAGA
GAGAACAACATGTGGGTGGGACCAAGGACTCTGAAGACAACTATGGTGATTCTGAAGATCTGGACCTACAAGCTA
CCCAGTGCTTTCTGGAGAATCAGGGCCTGGAAGCAGTCCAGAGCATGGAGGATGAACCTACCCAGGCCTTCATGT
TGACTCCACCCCAAGAGCTTGGCCCTTCCCATTGCAGCTTCCAGACAACAGGTACCCTAGATGAACCATGGGAGG
TCCTGGCTACACAGCCATTCTGTCTGAGAGAGTCTGAGGACTCTGAGACCCAGCCTTTTGACACGCACCTTGAGG
CCTATGGACCTTGCCTGTCTCCACCTAGGGCAATACCAGGAGACCAACATCCAGAGAGCCCAGTTCACACAGAGC
CAATGGGGATTCAAGGCAGAGGGAGGCAGACTGTGGATAAAGTCATGGGTATACCAAAAGAAACAGCAGAGAGGG
TGGGCCCTGAGAGAGGGCCATTGGAGAGAGAAACTGAGAAACTGCTACCAGAAAGACAGACAGATGTGACAGGAG
AGGAAGAATTAACCAAGGGGAAACAGGACAGAGAACAAAAACAGTTGTTAGCTAGAGACACCCAGAGACAAGAAT
CTGACAAAAATGGGGAAAGTGCAAGTCCTGAAAGAGATAGGGAGAGTTTGAAGGTAGAAATTGAGACATCTGAGG
AAATACAAGAGAAACAAGTACAGAAGCAGACCCTTCCAAGCAAAGCATTTGAGAGAGAAGTAGAGAGACCAGTAG
CAAACAGAGAGTGCGATCCAGCCGAGTTAGAAGAGAAGGTGCCCAAAGTGATCCTGGAGAGAGATACACAGAGAG
GGGAGCCAGAGGGAGGGAGCCAGGACCAGAAAGGGCAGGCCTCCAGCCCAACACCAGAGCCTGGGGTGGGGGCGG
GGGACCTTCCGGGACCTACCTCAGCCCCCGTACCTTCTGGGAGCCAGTCAGGTGGAAGGGGATCCCCAGTGAGCC
CCAGGAGGCATCAGAAAGGCCTCCTGAATTGCAAGATGCCACCTGCTGAGAAGGCTTCCAGGATCAGAGCTGCTG
AGAAGGTTTCCAGGGGCGATCAGGAATCTCCAGATGCTTGTCTGCCTCCTACAGTACCTGAAGCCCCAGCCCCAC
CCCAAAAGCCCCTTAACTCTCAGAGCCAGAAACATCTTGCACCTCCGCCCCTTCTTTCTCCCCTTTTACCTTCTA
TCAAGCCAACCGTTCGTAAGACCAGGCAAGATGGGAGTCAGGAAGCTCCAGAGGCTCCCTTGTCCTCAGAGCTGG
AGCCTTTCCACCCAAAGCCTAAAATTAGAACTCGGAAGTCCTCCAGAATGACACCCTTTCCAGCTACCTCTGCTG
CCCCTGAGCCCCACCCTTCCACCTCCACAGCCCAGCCAGTCACTCCCAAGCCCACATCTCAGGCCACTAGGAGCA
GGACAAATAGGTCCTCTGTCAAGACCCCTGAACCAGTTGTCCCCACAGCCCCTGAGCTCCAGCCTTCCACCTCCA
CAGACCAGCCTGTCACCTCTGAGCCCACATCTCAGGTTACTAGGGGAAGAAAAAGTAGATCCTCTGTCAAGACCC

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FIGURE 4166B

CTGAAACAGTTGTGCCCACAGCCCTTGAGCTCCAGCCTTCCACCTCCACCGACCGACCTGTCACCTCTGAACCCA
CCTCTCAGGCTACTAGGGGAAGAAAAAATAGATCCTCTGTCAAGACCCCTGAACCAGTTGTCCCCACAGCCCCTG
AGCTCCAGCCTTCCACCTCCACAGACCAGCCTGTCACTTCTGAGCCCACATATCAGGCTACTAGGGGAAGAAAAA
ATAGATCCTCTGTCAAGACCCCTGAACCAGTTGTGCCCACAGCCCCTGAGCTCCGGCCTTCCACCTCCACAGACC
GACCTGTCACCCCCAAGCCCACATCTCGGACCACTAGGAGCAGGACAAATATGTCCTCTGTCAAGACCCCTGAAA
CAGTTGTCCCCACAGCCCCTGAGCTCCAGATTTCCACCTCCACAGACCAACCTGTCACCCCTAAGCCCACATCTC
GGACCACTAGGAGCAGGACAAATATGTCCTCTGTGAAGAACCCTGAATCAACTGTCCCTATAGCCCCTGAGCTCC
CACCTTCCACCTCCACAGAGCAGCCTGTCACCCCTGAGCCCACATCTCGGGCTACTAGGGGAAGAAAAAATAGAT
CCTCTGGCAAGACCCCTGAAACACTTGTCCCCACAGCCCCTAAGCTCGAGCCTTCCACTTCCACAGACCAACCTG
TCACTCCTGAGCCCACATCTCAGGCCACCAGGGGCAGGACAAATAGGTCCTCTGTGAAGACCCCTGAAACAGTTG
TCCCCACAGCCCCTGAGCTCCAGCCTTCCACCTCCACAGACCAGCCTGTTACCCCTGAGCCTACGTCTCAGGCTA
CTAGGGGAAGAACAGATAGATCCTCTGTCAAGACTCCTGAAACAGTTGTCCCCACAGCCCCTGAGCTACAGGCTT
CCGCCTCCACAGACCAGCCTGTCACCTCTGATCCCACATCTCGGACCACTAGGGGAAGAAAAAATCGGTCCTCTG
TCAAGACCCCTGAAACAGTTGTGCCCGCAGCCCCTGAGCTCCAGCCTCCCACCTCCACAGACCAACCTGTCACCC
CTGAGCCCACATCTCGGGCCACTAGGGGCAGGACAAATAGGTCCTCTGTCAAGACCCCTGAATCAATTGTCCCTA
TAGCCCCTGAGCTTCAGCCTTCCACCTCCAGAAACCAGCTTGTCACCCCTGAGCCCACATCTCGGGCCACTAGGT
GCAGGACAAATAGGTCCTCTGTCAAGACCCCTGAGCCAGTTGTCCCCACAGCCCCTGAGCCCCATCCTACCACCT
CCACAGACCAGCCTGTCACCCCCAAGCTCACATCTAGGGCCACTAGGAGAAAGACAAATAGGTCCTCTGTCAAGA
CTCCCAAACCAGTTGAACCAGCAGCCTCTGATCTTGAGCCTTTTACCCCCACAGACCAGTCCGTCACCCCTGAGG
CCATAGCTCAGGGTGGTCAGAGCAAAACACTGAGGTCTTCCACAGTAAGAGCTATGCCGGTTCCTACCACCCCTG
AATTCCAATCTCCTGTCACCACAGACCAGCCTATTTCCCCTGAGCCTATTACTCAACCCAGTTGCATCAAGAGGC
AGAGAGCCGCTGGGAACCCTGGCTCCCTCGCAGCTCCCATTGACCATAAGCCTTGCTCTGCACCCTTGGAACCTA
AATCCCAGGCCTCAAGGAACCAAAGATGGGGAGCAGTGAGAGCAGCTGAATCCCTTACAGCCATTCCTGAGCCTG
CCTCTCCCCAGCTTCTTGAGACACCAATTCATGCCTCCCAGATCCAAAAGGTGGAACCAGCAGGTAGATCTAGGT
TCACCCCGGAGCTCCAGCCTAAGGCCTCTCAAAGCCGCAAGAGGTCTTTAGCTACCATGGATTCACCACCACATC
AAAAACAGCCCCAAAGAGGGGAAGTCTCCCAGAAGACAGTGATTATCAAGGAAGAGGAAGAAGATACTGCAGAGA
AGCCAGGGAAGGAAGAGGATGTCGTGACTCCAAAACCAGGCAAGAGAAAGAGAGACCAGGCAGAGGAGGAGCCCA
ACAGAATACCAAGCCGCAGCCTCCGACGGACCAAACTTAACCAAGAATCAACAGCCCCCAAAGTGCTCTTCACAG
GAGTGGTGGATGCTCGGGGAGAGCGGGCTGTGCTGGCACTGGGGGGAAGTCTGGCTGGTTCAGCGGCAGAGGCTT
CCCACCTGGTCACTGATCGCATCCGCCGGACAGTCAAGTTCCTGTGTGCCCTGGGGCGGGGAATCCCCATTCTGT
CCCTGGACTGGCTGCATCAGTCCCGCAAGGCTGGTTTCTTCTTACCCCCGGATGAATATGTGGTGACCGACCCTG
AGCAAGAGAAGAACTTTGGCTTTAGCCTTCAAGACGCACTGAGCAGGGCTCGGGAGCGAAGGCTGCTAGAGGGCT
ATGAGATCTATGTGACCCCTGGAGTCCAGCCACCACCACCTCAGATGGGAGAGATTATTAGCTGCTGTGGAGGCA
CATACCTACCCAGCATGCCTCGGTCCTATAAGCCTCAGAGAGTTGTGATCACATGCCCTCAGGACTTCCCTCATT
GCTCCATTCCACTACGGGTTGGGCTGCCCCTCCTCTCGCCTGAGTTCCTGCTGACTGGAGTGCTGAAGCAGGAAG
CCAAGCCAGAGGCCTTTGTCCTCTCCCCTTTGGAGATGTCATCCACC**TGA**GAACTCCACTACCCTTTTCCCTCCC
AGACCACGAATTAGAAGATATGTGGAAGAAAGAACTCAGGGCGTTAGAAAGGATTGGGGTATATTGATACAACTT
GTCCTGGAACATGGGTGGGACCAGAAATCTTTATGAATAAATGAAAAGATAAGGGATTTGGAAGCCACAGGTTGT
TTTTTGTTTGTTTGTTTGTTTTTTTAATGGCCATTTTATTTTATTTGTATTTATAGTTTTTTATTTGTATAGATT
TAGGGGATACAAGATTTCTTACATGCATGTATTAAATGGCCATTTTAAAATTAGCTAGTTTCATGCTCAGATGTC
ATAAGTGGCAGCTATCTTTAGCCAGACTGTTGCAGTTATTGCTCGATGCCACTCATGGTGTCCTACCTCCTATTT
GGAAACCATCTCTATTTTTTTCTTACTGAGATTCTTACTTTGGGGTCAGGAACTTGAAGGGATGCTTGGAGTGAG
TAGATTTGAGGGTCCAGTTATGGAGTGCTACTAAAACATTTTCTTCTCTCCTGGCCTCTGGAAGCATCTTTAGCT
TTGACTTTGGGCAAGTCTCTGTACTTTTCTGGCCAGCTTTTCCAGGATTTATAAAATTAGAGCTTCGGCTTGACC
TCTGTGATAAATAAATATTCACTCTGTGCCTT

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FIGURE 4167

ATGGCCCCTGCACTGCTCCTGATCCCTGCTGCCCTCGCCTCTTTCATCCTGGCCTTTGGCACCGGAGTGGAGTTC
GTGCGCTTTACCTCCCTTCGGCCACTTCTTGGAGGGATCCCGGAGTCTGGTGGTCCGGATGCCCGCCAGGGATGG
CTGGCTGCCCTGCAGGACCGCAGCATCCTTGCCCCCCTGGCATGGGATCTGGGGCTCCTGCTTCTATTTGTTGGG
CAGCACAGCCTCATGGCAGCTGAAAGAGTGAAGGCATGGACATCCCGGTACTTTGGGGTCCTTCAGAGGTCACTG
TATGTGGCCTGCACTGCCCTGGCCTTGCAGCTGGTGATGCGGTACTGGGAGCCCATACCCAAAGGCCCTGTGTTG
TGGGAGGCTCGGGCTGAGCCATGGGCCACCTGGGTGCCCCTCCTCTGCTTTGTGCTCCATGTCATCTCCTGGCTC
CTCATCTTTAGCATCCTTCTCGTCTTTGACTATGCTGAGCTCATGGGCCTCAAACAGGTATACTACCATGTGCTG
GGGCTGGGCGAGCCTCTGGCCCTGAAGTCTCCCCGGGCTCTCAGACTCTTCTCCCACCTGCGCCACCCAGTGTGT
GTGGAGCTGCTGACAGTGCTGTGGGTGGTGCCTACCCTGGGCACGGACCGTCTCCTCCTTGCTTTCCTCCTTACC
CTCTACCTGGGCCTGGCTCACGGGCTTGATCAGCAAGACCTCCGCTACCTCCGGGCCCAGCTACAAAGAAAACTC
CACCTGCTCTCTCGGCCCCAGGATGGGGAGGCAGAGTGAGGAGCTCACTCTGGTTACAAGCCCTGTTCTTCCTCT
CCCGCTGAATTCTAAATCCTTAACATCCAGGCCCTGGCTGCTTCATGCCAGAGGCCCAAATCCATGGACTGAAGG
AGATGCCCCTTCTACTACTTGAGACTTTATTCTCTGGGTCCAGCTCCATACCCTAAATTCTGAGTTTCAGCCACT
GAACTCCAAGGTCCACTTCTCACCAGCAAGGAAGAGTGGGGTATGGAAGTCATCTGTCCCTTCACTGTTTAGAGC
ATGACACTCTCCCCCTCAACAGCCTCCTGAGAAGGAAAGGATCTGCCCTGACCACTCCCCTGGCACTGTTACTTG
CCTCTGCGCCTCAGGGGTCCCCTTCTGCACCGCTGGCTTCCACTCCAAGAAGGTGGACCAGGGTCTGCAAGTTCA
ACGGTCATAGCTGTCCCTCCAGGCCCCAACCTTGCCTCACCACTCCCGGCCCTAGTCTCTGCACCTCCTTAGGCC
CTGCCTCTGGGCTCAGACCCCAACCTAGTCAAGGGGATTCTCCTGCTCTTAACTCGATGACTTGGGGCTCCCTGC
TCTCCCGAGGAAGATGCTCTGCAGGAAAATAAAAGTCAGCCTTTTTCTAC

FIGURE 4168A

AGACAAAGCGGTCGCCGCCCCCGCCCGGCCCCCTGGTCTCTGTCTCCGTCCCTCCTCCTTTGCTGCCTCTTTCCC
TCCTCCTCTCCCTCCCTCCTCCCCTCCCTCCAGTCTCCGGATCTCCCTCGGTCCCTCTCTCCTCCTCTTCCTCTC
TCTGGACGCCCGGCTCCTCCGCACCCCCTCCCCCGGGGGTCCCGCGGCCTGTGAGTTGACTGAGGGGCTCAGACT
TGGGGAGTGGGTGTCTCCTCGCCCCTGTCCTTGCTCCCGTCCCTGGCCCGGACCTTGGCTGTCTCCTCTTTGTGC
CGAGATTGTCAGTCTGTGCGGCTACAGCGGGGTGGAGACGGCCGGCTCTGTCACGGCTTCATGAGAGCGGGGACG
GGGCGCAGGACTTGCAGGCGCCGGGGAGAAGAGACATGGAGCCGGCCCTTGGCACTCTGGGGTCGCGTGGGGCAG
TCGGTGGGGGAGGCAGGCGGTGGTGACAGGACAGGGTGGGGGTGGACGCCAGGGTTCTGGGAACGCGCTGGCAGC
CCTGACGCCCGGGTTCCGAAAGTCTCGGGGGTGGGTATTTCCCCCGACCCGCCTCGGGGGCGGAGTGCGGGGCAG
AGGGGTGGGGGCTGGGGAGAGGCGTGGCCCGAGCGGTGCTGGAAGCGGAGCCGGGACCTTTGGGGCCCGCGCTGA
GACGCGCCCGGCTGCTGCCGCCGCCCTCCTTTCCCCTCTTCCCTGGTTTCCCTTCTCCTCTAGACCTGTTCGCTC
TCCGCCCCTCCTTGCCTCCCCAACACCCCCTCAGGTCCCGTTGCCTCCTGGTCCTTTCAGGGATTCCTGGTCCTT
CCTTCCCACACTAGCCTCCCTGGGGTATCGCTGAGGCAGCCTGGCCTGCACCCAGGTTCCCCTCACCCCTGCCAC
ATTTCTCTCTTCTCCCTCACGCCAACTTTCCTTTTCGCCCTTCTCTCTCTTTCTCACATCCTAGAGACGGTCTTT
AATACGCATTAACCCTGTGCTGCCACATCTGGCTCCTGCCCTCATTGCCTCCAATCCGGACTCTTCCTCTCACAT
CACCCCCACCACCCCCAACTTGGGCTCACAACTTCTCTTCACTTTTTCCATTTCCCCAGTTCTCTGCCTTCCGTC
TTTCCCTCTGTCCTCATCCTTAGCCCCTCTGCCCTGCTTTGTGTCCCACCTCTCCCCCTCCACTTCCTCTCCTCC
CACCCTCAGTCTCACCCCCGGGCTGTCTCACTCTCTGGAGCCTCTCCTTCCTGTTCTCTGTCCCCAGTGCTCCCT
ACCCTCACCTCAAGACGACC**ATG**GCCACCATCCCAGACTGGAAGCTACAGCTGCTAGCCCGGCGCCGGCAGGAGG
AGGCGTCCGTTCGAGGCCGAGAGAAAGCAGAACGGGAGCGCCTGTCCCAGATGCCAGCCTGGAAACGAGGGCTCC
TGGAGCGCCGCCGGGCCAAGCTTGGGCTGTCCCCTGGGGAGCCTAGCCCTGTGCTAGGGACTGTAGAGGCTGGAC
CTCCAGACCCGGATGAGTCTGCGGTCCTTCTGGAGGCCATCGGGCCAGTGCACCAGAACCGATTCATCCGGCAGG
AGCGGCAGCAGCAGCAGCAGCAACAACAACGGAGTGAAGAGCTGCTAGCAGAGAGAAAGCCTGGGCCTCTGGAGG
CCCGGGAGCGGAGACCCAGCCCTGGGGAGATGCGGGATCAGAGCCCCAAGGGAAGAGAGTCAAGAGAAGAGAGAC
TAAGTCCGAGGGAGACCAGAGAGAGGAGGCTGGGGATAGGGGGAGCCCAAGAGTTGAGCCTGAGGCCTCTGGAGG
CTCGGGACTGGAGGCAAAGCCCAGGAGAGGTGGGAGACAGGAGCTCCCGACTGTCAGAGGCATGGAAATGGAGGC
TGAGTCCTGGAGAAACTCCAGAGCGGAGTCTGAGACTAGCAGAGTCTCGAGAGCAAAGCCCCAGGAGAAAAGAGG
TGGAAAGTAGACTGAGCCCAGGGGAATCTGCCTACCAGAAGTTGGGCCTGACAGAGGCCCATAAATGGAGACCTG
ACTCCAGAGAGTCTCAGGAACAGAGTTTGGTACAACTGGAGGCAACAGAGTGGAGGCTGAGGTCAGGAGAAGAAA
GACAAGACTACTCGGAAGAATGTGGGAGAAAAGAAGAGTGGCCAGTTCCAGGGGTAGCTCCAAAAGAGACTGCAG
AGCTGTCCGAGACCCTGACAAGGGAGGCCCAAGGCAACAGTTCCGCAGGAGTGGAGGCAGCAGAGCAGAGGCCTG
TGGAAGATGGCGAGAGGGGCATGAAGCCAACAGAAGGGTGGAAATGGACCCTGAACTCCGGGAAGGCTCGAGAAT
GGACACCCAGGGACATAGAGGCTCAAACTCAGAAACTAGAACCTCCAGAGTCAGCAGAGAAGCTTCTGGAATCTC
CCGGTGTGGAGGCTGGAGAAGGGGAGGCTGAGAAGGAGGAGGCGGGGGCTCAGGGCAGGCCTCTGAGAGCCCTGC
AGAACTGCTGCTCTGTGCCCTCCCCCCTCCCACCAGAGGACGCTGGGACTGGAGGCCTGAGACAGCAGGAAGAGG
AAGCAGTGGAGCTCCAGCCCCCACCACCAGCCCCTCTGTCTCCCCCACCCCCAGCCCCAACTGCCCCCCAACCTC
CTGGGGATCCCCTCATGAGCCGCCTGTTCTATGGGGTGAAGGCAGGGCCAGGGGTGGGGGCCCCCCGCCGCAGTG
GACACACCTTCACCGTCAACCCCCGGCGGTCTGTGCCCCCTGCGACCCCAGCCACCCCAACCTCTCCAGCCACAG
TTGATGCTGCAGTCCCGGGGGCTGGGAAGAAGCGGTACCCAACTGCCGAGGAGATCTTGGTTCTGGGGGGCTACC
TCCGTCTCAGCCGCAGCTGCCTTGCCAAGGGGTCCCCCGAAAGACACCACAAACAGCTTAAGATCTCCTTCAGCG
AGACAGCCCTGGAGACCACGTACCAATACCCCTCCGAGAGTTCGGTACTGGAGGAGCTGGGCCCGGAGCCTGAGG
TCCCCAGTGCCCCCAACCCTCCAGCAGCCCAACCCGACGACGAAGAGGATGAGGAAGAGCTGCTGCTGCTGCAGC
CAGAGCTCCAGGGCGGGCTGCGCACCAAGGCCCTGATTGTGGATGAGTCCTGCCGGCGG**TGA**CCATCTTCCAACA
TAGGGATATACCTCCCTCCTTCTTATAACTGAAGATCCTGGAGCCCGGAAGATTCAGGGCAGACAGACCCTGATA
ATGAGCCTGGCAGGGAAGGGCAACCAACATCTTGTAACTTGCTTTCCCCACCCTGTTTCTGGGGGCAGAGCCAAT
TGCCCAATTTCTACCCTAATCCAAAGTCCCTGGTGTGGGTGGGGTTAAACGTGCTGGTGCATCCTAGGTCATCCA
AGAGTGAGCGCCAAGTCCTGAGAAGGGGCACAGAACTCCCTGGAGGGTGGAGATGGAGCACCTGCCCCCCATGGC
AGGGTACACTCTCCCCACAGCCTTCCTCCCCACCATCCCGTGGGGACTCTCGGGATTTAAGCACTCGTCTCTCTG
GGAGGCCCAGACCCCACTCCATTTATAGGCACATCTCCTTCATTTCCTAGGTCACTGCCCCTTTGTTTACAGCTC

FIGURE 4168B

CTGCCTCCTCCCTTGACCACAGCCTGGTTTACAAATTCCATCAGCTCCCAGCCCCACCTGCCAAAGTCCCAGGTT
TACAAGCCACGCTTACTTGCTGTGTCTGCGTGGAATTCTCTCCTCTGTCCCCTCCAGTCTCCTCATTGGAGTGAC
CTGAAGGTGTGGCTTCCTCCACTTTTTCTCAGTATTACTTTGCCTTAGTTTTCCCCAAGAGGGAAGGCTGGAACT
CTTAACTCTGTACCCCTTGATAGTTATTTAATTCTGTTTCTCCTAGTGGTTCACAATTGAACTGAATTGAGATGG
TGTCGGGTGGCTAAGGAGACACCTCACCTCTCCTTCCCCATTGTGCCGCCTTTATCAATTGCCTGTTTTGTTTTG
TTTGTTTTTTAACTTTCCATAATAAAATGGAGTTCTCTTC

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FIGURE 4169

GTCGGAAGATCCTAGAGGTCCCAAGGTAGCTGACTTGCGAAGCTGAGGCTCCAGCCGAGGGCTCCAGGCCTCTGA
CCGGCCCAGCAGTGAGCGCGGCTGCCCGACGCTTCAGGGCCGGGAGCAGGGAGCGTGAGTCGCCATGGCGACGCC
GGCGGGTCTGGAGCGCTGGGTTCAGGACGAGCTGCACTCGGTGTTGGGGCTGAGCGAGCGGCACGTCGCCCAGTT
TCTGATCGGTACCGCACAGCGCTGCACCTCTGCCGAGGAGTTCGTGCAGCGCCTACGAGACACTGATACCTTGGA
TCTCAGTGGGCCGGCCCGGGACTTCGCCCTGAGACTCTGGAACAAGGTACCACGAAAGGCAGTGGTAGAAAAGCC
AGCTCGGGCAGCAGAGCGAGAGGCCCGGGCCCTGCTGGAGAAGAACCGATCTTATAGGTTACTGGAAGACAGTGA
AGAGAGCAGTGAGGAGACTGTGAGTAGGGCTGGAAGCAGCCTCCAGAAGAAACGTAAAAAGCGGAAACACCTCAG
GAAGAAGCGTGAGGAAGAAGAGGAGGAAGAGGCTTCTGAGAAAGGGAAGAAGAAAACAGGGGGGAGTAAACAGCA
GACAGAGAAGCCAGAGTCGGAAGATGAGTGGGAACGGACAGAGCGTGAACGCCTTCAGGACCTGGAGGAGCGTGA
TGCCTTTGCTGAGCGGGTTCGACAGCGGGACAAGGATCGGACTCGAAATGTCCTGGAACGGTCAGACAAGAAGGC
TTATGAAGAGGCTCAGAAGCGCCTCAAGATGGCCGAGGAAGACCGGAAGGCCATGGTCCCTGAGCTGCGGAAGAA
ATCTCGCCGAGAGTACCTGGCTAAGCGGGAGCGAGAGAAGCTTGAGGACCTGGAGGCGGAGCTGGCTGATGAGGA
GTTCCTTTTTGGGGACGTGGAGCTGAGCCGGCACGAGCGGCAGGAGCTCAAATATAAGCGGCGAGTGCGGGATCT
CGCCCGGGAGTACCGGGCAGCTGGGGAGCAGGAGAAGCTGGAGGCCACCAATCGCTACCACATGCCCAAGGAAAC
CCGAGGACAGCCAGCCCGAGCTGTGGATCTAGTGGAGGAGGAATCAGGAGCCCCTGGGGAGGAGCAGCGGCGCTG
GGAGGAGGCGCGGCTTGGGGCAGCGTCCCTGAAGTTTGGGGCCCGAGATGCTGCCTCTCAGGAGCCCAAGTATCA
ACTGGTGCTGGAGGAGGAGGAGACCATTGAGTTTGTCCGGGCCACTCAGCTCCAGGGTGATGAGGAGCCGTCAGC
TCCACCCACTTCAACTCAGGCCCAGCAGAAAGAGTCCATCCAGGCCGTCCGCCGCAGCCTCCCGGTGTTCCCATT
TCGAGAGGAGCTCCTGGCTGCTATTGCAAATCACCAAGTCCTCATCATTGAAGGCGAGACAGGCTCAGGGAAGAC
CACCCAGATCCCGCAGTATCTCTTTGAGGAGGGTTATACAAACAAGGGTATGAAGATTGCCTGCACCCAACCCCG
GAGAGTGGCTGCCATGAGTGTGGCCGCCCGAGTGGCCCGGGAGATGGGTGTGAAGCTTGGGAATGAGGTTGGCTA
CAGCATCCGCTTTGAGGACTGCACATCAGAGCGAACTGTCCTCCGCTACATGACAGATGGGATGCTTCTCCGGGA
GTTCCTCTCTGAGCCTGACCTGGCGAGTTACAGCGTGGTGATGGTGGATGAGGCACACGAAAGGACCCTACACAC
AGACATTCTCTTTGGATTGATCAAGGATGTTGCTCGCTTCCGACCTGAGCTCAAGGTCCTGGTGGCTTCAGCCAC
AATGGACACTGCCCGTTTTTCCACCTTCTTTGATGACGCCCCTGTGTTTCGAATCCCCGGACGCAGGTTTCCTGT
GGACATCTTCTACACCAAGGCTCCAGAGGCTGACTACTTGGAAGCTTGTGTAGTATCTGTGTTGCAGATCCATGT
GACCCAGCCCCCTGGGGATATCCTGGTGTTCCTGACAGGACAGGAGGAGATTGAGGCTGCCTGTGAGATGCTCCA
GGATCGCTGCCGCCGCCTGGGCTCCAAAATCCGGGAGCTCCTGGTGCTGCCCATTTATGCCAATCTGCCCTCTGA
CATGCAGGCCCGTATCTTCCAGCCCACACCACCTGGGGCACGAAAGGTGGTTGTGGCAACGAACATTGCTGAGAC
ATCACTCACCATTGAGGGCATCATTTATGTGCTGGATCCAGGGTTCTGTAAGCAGAAGAGCTACAACCCCCGCAC
AGGCATGGAATCGCTCACTGTCACACCCTGCAGCAAGGCCTCAGCCAATCAGCGAGCTGGCAGGGCAGGTCGGGT
GGCTGCAGGGAAGTGCTTCCGCCTGTATACCGCCTGGGCCTATCAGCACGAGCTTGAGGAAACCACAGTGCCTGA
GATCCAGAGGACCAGCTTGGGCAATGTCGTGTTGCTGCTCAAGAGCTTAGGGATCCATGACCTAATGCACTTTGA
TTTCCTGGACCCTCCACCATATGAGACACTGCTGCTGGCTTTGGAGCAGCTGTATGCTCTGGGAGCCCTCAACCA
CCTTGGGGAGCTCACCACGTCTGGTCGAAAGATGGCAGAGCTGCCGGTGGACCCCATGCTGTCCAAAATGATCTT
AGCCTCTGAGAAGTACAGCTGTTCAGAGGAGATCCTGACAGTGGCTGCCATGCTCTCTGTCAACAACTCCATCTT
CTACCGACCAAAGGACAAGGTCGTCCATGCTGACAATGCCCGTGTCAACTTCTTTCTCCCTGGCGGTGACCACCT
GGTTCTGCTAAATGTTTACACACAGTGGGCTGAGAGTGGTTACTCTTCCCAGTGGTGCTATGAGAACTTTGTACA
GTTCAGATCGATGCGCCGAGCCCGGGATGTGCGGGAACAGCTGGAAGGGCTCTTGGAACGTGTGGAAGTTGGTCT
CAGTTCCTGCCAGGGGGACTATATCCGTGTACGCAAGGCCATCACTGCTGGTTACTTTTACCACACGGCACGGTT
GACTCGGAGTGGCTACCGCACAGTGAAACAGCAGCAGACAGTCTTCATTCATCCCAACTCCTCCCTCTTTGAGCA
ACAGCCACGCTGGCTGCTCTACCACGAACTTGTCTTGACCACCAAAGAGTTCATGAGACAGGTACTGGAGATTGA
GAGCAGTTGGCTTCTGGAGGTGGCTCCCCATTATTATAAGGCCAAGGAGCTAGAAGATCCCCATGCTAAGAAAAT
GCCCAAAAAAAATAGGCAAAACACGAGAAGAGCTAGGGTAAGAGAAGGACGTAAACAGAACCTGACACCAGCTCCT
TTTCCTTCTATACATTATTTAATACCTATTAAATAAAATTATTTTTGGAATAAAGCTTGTGGGAACATTTGGGAT
CT

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FIGURE 4170

CTTCACGAAGCCGGCTCTGGGGCGCGCTCACCCCTGTGAGGAGGCCGGAGGTCGGACTCAGGAGGCTCCTTCTCC
ACTCCCGGAAGATCATGTACCAGCCCAGCCGGGGTGCGGCCCGGCGTCTCGGCCCTTGCCTGCGCGCCTACCAGG
CTCGACCCCAGGACCAGCTTTATCCAGGGACTCTACCATTCCCACCCCTTTGGCCCCACTCCACGACAACCACTT
CCCCATCTTCTCCTCTATTCTGGTCTCCCCTGCCCCCACGCCTTCCCACCCAGCGTCTTCCCCAGGTTCCCCCAC
TACCTCTCCCTCAGATCCAGGCCCTCAGCTCAGCATGGGTGGTTCTCCCTCCAGGAAAGGGGGAGGAGGGACCAG
GACCTGAGTTGCATAGCGGCTGCCTGGATGGGCTTAGAAGCCTTTTTGAGGGACCTCCCTGCCCCTATCCTGGGG
CTTGGATACCTTTCCAAGTCCCTGGAACTGCCCACCCTTCCCCTGCCACCCCGTCAGGAGATCCTAGT**ATG**GAGG
AACATCTGTCTGTCATGTATGAGAGACTGAGACAAGAGCTTCCCAAGCTCTTCCTTCAGTCCCACGACTACAGTC
TGTATTCCTTGGATGTGGAATTCATCAATGAGATCCTCAACATACGTACCAAGGGCCGGACATGGTACATTCTTT
CACTGACCCTCTGCCGTTTCCTGGCCTGGAATTATTTTGCACACCTTCGTTTGGAGGTTTTACAGCTGACCCGCC
ACCCTGAGAACTGGACCCTGCAAGCCCGGTGGCGGCTTGTGGGGCTGCCCGTCCACTTGCTCTTTTTGCGGTTCT
ACAAGCGTGACAAAGACGAGCATTACCGGACCTATGATGCCTACTCCACTTTCTACCTGAATTCCAGTGGCCTCA
TTTGTCGCCATCGTCTAGATAAACTGATGCCTTCACACTCACCTCCAACGCCTGTGAAGAAGCTGCTAGTGGGAG
CCCTGGTGGCCCTGGGGCTGTCAGAGCCAGAACCTGACTTAAACCTGTGTTCCAAGCCC**TGA**TCCTTGACCTTGG
AGTGGAGGCAGCACTGAAGACTGCTACGCCCAAGAGAAGGAGGTGGAGGCAGCCAAGAATCTCAGGAGCCAGCTT
CCTCTCCTCGTTTCTCTCCTTCCTTCCTTTCCATCTCATGCTGTGTAAAGCTGCTGTGTAATTTAACTTGTAAAT
AATAAAGTTTAACTGACTATATG

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FIGURE 4171

GCCTTTCCGTCAATTCCTGTCCTGGGCGTACGTCAAGATGGCGGCGTCTGTATTAAACACCGTGCTGAGGCGGCT
TCCTATGCTATCTCTCTTCCGAGGTTCTCACAGAGTTCAGGTTCCCCTCCAGACTCTTTGCACCAAAGCTCCCTC
TGAGGAAGATTCTTTGTCCTCAGTTCCCATTTCTCCTTATAAGGATGAGCCCTGGAAATATCTGGAATCAGAAGA
ATACCAGGAGCGATATGGTTCTCGCCCCGTCTGGGCTGACTACCGCCGCAACCACAAGGGTGGTGTACCCCCACA
GCGGACTCGGAAGACATGTATTCGTCGGAATAAAGTTGTTGGGAATCCCTGCCCCATCTGTCGAGATCACAAGTT
GCATGTTGACTTTAGGAACGTGAAGCTCTTGGAGCAATTTGTCTGCGCCCACACGGGTATCATCTTCTATGCTCC
ATACACAGGAGTCTGTGTGAAGCAGCACAAGCGGTTGACCCAGGCCATCCAGAAAGCCAGGGATCATGGTCTCCT
CATTTACCACATCCCCCAGGTTGAACCACGGGACCTTGACTTCAGTACCTCTCATGGGGCTGTGAGTGCTACTCC
GCCAGCCCCCACCCTGGTCTCAGGTGACCCCTGGTACCCATGGTACAACTGGAAACAGCCACCGGAGAGAGAACT
GTCTCGCCTTCGCCGGCTTTACCAGGGTCATCTCCAAGAAGAGAGTGGCCCCCCACCTGAGTCAATGCCCAAGAT
GCCCCCTAGAACACCAGCGGAAGCCTCCTCCACTGGGCAGACAGGCCCTCAGAGTGCTCTGTAGGAGCTGTAGAC
TGGGAAGAGAGGCCAGGCGTGGTGGCTCACTCCTGTAATCCCAGCACTTTGGGAAGCCAAGGTGGGCTGATCACT
TGATCCCAGGAGTTTGAGACCAGCCTGGGCACCATGGTGAAACCTCGTCTTTACCAAAAAATACAAAAATTAGCT
GGGTGTGGTGGTGCACACCTGTAGTCTCAACTATTGGGGAGGCTAAGGTAGGATCACTTGATCCCAGGAGGCGGA
GGTTGCAGTGAGTTGCAGTCACACCCCTGCACTCCAGCCTGGGTGACAGCTAGACCCTGTCTCAAAAAAAAAAAA
AAAGACTGGGAAGAGAGCTAGAGGGACTAGGAGATAATGTGTATGTAGGTTTATGTGATGGGATATCACCCTGAA
GAGTTGTGTCTTTTGTGGCCAGTGACAAATCCAGGAAATGAATGTTGCTGATAGGGATAAATCTTGAGGCTGAGG
GCGGGTGGTACAGATGTGTATGGGAAACCCCAACCCCTATATATTGTAAATAGATGGGCTGGGCTAAACATTGTT
GCCGTTTCATACTTCTACCAACTCAGCTTTTACACAATAAAGCTCTACTGTCTCTGG

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FIGURE 4172A

AGGTTTGAATTTTCTCGGAGAAAGACAGGCCGGCCACGAGGAAAACAGAAACAAGCCGCAGCAACATCTAAGCCC
TTGAAAGGATCCTGAGAGAGGGGGGAAAGGGAAAACAGCAGCCACCAGCCCAACCACTTGTGTCTTCTGCCCCTT
CCCACCTATCTTGCCCACCCCACCAGCCCACGCTGCTTGGGACTTGAAATCTGTGGCCGAAGGACCGTCACTACA
TAACTTCAAAAATAATCAACCACCCTCCCTTCCCAAACCACCCAAATTCACTCATCCAGCGTTTACTTTTTTGAA
TCCACTCAGAACTTTTTTCTGCGACCCCCCTCCCTAAATGGAGTTGGGTGGGGGGGAAATGAATACTGAGTTGGC
CTTTATTTTTTAAAAGACTTTTTGATCCAATGAGGCCCCCTAAATAATTGAGTTTTGGGTCCTGGTTGGTTGTTT
TATTTTTTTTCCTCCAAAATTTTACCCCCTCCCCCCTGAGCCCGAGGTGCTGACGTCGCAAAAAAATTGGATAAA
ACCACCATC**ATG**GGTTCGGGTCCCATAGACCCCAAAGAACTTCTCAAGGGCCTGGACAGCTTCCTTAACCGAGAT
GGGGAAGTCAAAAGTGTGGATGGGATTTCCAAGATCTTCAGTTTGATGAAGGAAGCACGAAAGATGGTGAGTCGA
TGCACTTACTTGAACATTCTCCTGCAGACCCGTTCACCAGAAATATTGGTCAAATTTATTGACGTTGGCGGCTAC
AAACTTCTTAACAATTGGCTGACGTATTCAAAGACAACCAACAACATTCCCCTCCTCCAGCAAATTCTACTGACC
CTGCAGCATCTACCGCTCACTGTAGACCATCTCAAGCAGAACAACACAGCTAAACTGGTGAAGCAGCTGAGCAAG
TCAAGTGAGGATGAAGAGCTCCGGAAATTGGCCTCAGTCCTTGTCAGCGACTGGATGGCTGTCATCCGCTCTCAG
AGCAGTACCCAGCCTGCTGAGAAAGATAAGAAGAAACGTAAAGATGAAGGAAAAAGTCGAACTACCCTTCCTGAG
CGACCTTTGACAGAGGTGAAGGCTGAGACCCGGGCTGAGGAGGCCCCAGAGAAGAAGAGGGAGAAGCCCAAGTCT
CTTCGCACCACAGCACCCAGTCATGCCAAGTTCCGTTCCACTGGACTAGAGCTGGAGACACCATCCTTGGTGCCT
GTGAAGAAGAATGCCAGCACAGTGGTGGTTTCTGACAAGTACAACCTTAAACCCATCCCCCTCAAACGTCAGAGC
AACGTAGCTGCTCCAGGAGATGCCACTCCCCCTGCAGAGAAGAAATACAAGCCACTCAACACAACACCTAATGCC
ACCAAAGAGATCAAAGTGAAGATCATCCCGCCACAGCCTATGGAGGGCCTGGGCTTTCTGGATGCTCTTAATTCA
GCCCCTGTTCCAGGCATCAAAATTAAGAAGAAAAAAAAAAGTACTGTCACCTACGGCTGCCAAGCCAAGCCCCTTT
GAAGGGAAAACGAGCACAGAACCAAGCACAGCCAAACCTTCTTCCCCAGAACCAGCACCACCTTCTGAGGCAATG
GACGCAGACCGTCCAGGCACCCCGGTTCCCCCTGTTGAAGTCCCGGAGCTCATGGATACAGCCTCTTTGGAGCCA
GGAGCTCTGGATGCCAAGCCAGTGGAGAGTCCTGGAGATCCTAACCAACTGACCCGGAAAGGCAGGAAGAGGAAA
AGTGTGACATGGCCTGAGGAAGGCAAACTGAGAGAATATTTCTATTTTGAATTGGATGAAACTGAACGAGTAAAT
GTGAATAAGATCAAGGACTTTGGTGAGGCCGCTAAGCGAGAGATACTGTCAGACCGACATGCATTTGAGACAGCG
CGGCGTCTGAGCCATGATAACATGGAGGAGAAGGTGCCCTGGGTGTGCCCCCGGCCCCTGGTTCTGCCCTCACCT
CTTGTCACCCCTGGAAGCAATAGTCAGGAGCGATATATCCAGGCTGAGCGGGAGAAGGGAATCCTTCAGGAGCTC
TTCCTGAACAAGGAGAGTCCTCATGAGCCTGATCCTGAGCCCTACGAGCCCATACCCCCTAAACTCATCCCCCTA
GATGAGGAGTGTTCCATGGATGAGACTCCGTATGTTGAGACTCTGGAACCTGGGGGGTCAGGTGGCTCACCTGAT
GGGGCAGGAGGCTCCAAGTTGCCTCCAGTTCTGGCCAATCTTATGGGAAGCATGGGTGCTGGAAAGGGCCCCCAA
GGCCCTGGAGGAGGAGGCATTAATGTCCAAGAGATCCTCACCTCCATCATGGGTAGCCCAAACAGTCATCCTTCA
GAGGAACTACTGAAACAACCAGACTATTCGGACAAGATCAAGCAGATGCTGGTGCCACATGGACTCCTAGGCCCT
GGCCCAATAGCCAATGGTTTCCCACCAGGGGGTCCTGGGGGCCCCAAGGGCATGCAGCACTTTCCCCCTGGACCT
GGGGGACCTATGCCAGGTCCCCATGGAGGCCCTGGTGGGCCAGTGGGTCCACGTCTTCTGGGTCCTCCACCCCCT
CCCCGGGGAGGTGATCCCTTCTGGGATGGCCCGGGCGACCCTATGCGGGGTGGCCCAATGCGGGGGGGTCCAGGA
CCAGGTCCTGGACCATACCATAGAGGCCGAGGTGGCCGAGGAGGAAACGAACCTCCTCCTCCTCCTCCATTC
CGAGGCGCCAGAGGAGGTCGCTCTGGAGGAGGACCCCCAAATGGACGAGGGGGCCCTGGTGGGGGCATGGTTGGA
GGTGGTGGGCATCGTCCTCACGAAGGCCCTGGTGGGGGCATGGGCAACAGCAGTGGACATCGTCCCCACGAAGGC
CCTGGCGGTGGCATGGGAAGTGGGCATCGCCCCCATGAAGGCCCTGGTGGTAGCATGGGTGGGGGTGGAGGACAT
CGTCCCCACGAAGGCCCTGGCGGTGGCATCAGTGGTGGCAGTGGCCATCGTCCCCATGAAGGCCCTGGCGGAGGA
ATGGGTGCCGGTGGTGGACATCGCCCCCACGAAGGCCCTGGCGGAAGCATGGGTGGAAGTGGTGGACATCGTCCC
CATGAAGGCCCTGGACACGGGGGGCCCCATGGCCACCGGCCTCATGATGTCCCTGGTCACCGAGGCCATGACCAT
CGAGGGCCGCCACCTCATGAGCACCGTGGCCATGATGGTCCTGGCCACGGGGGAGGGGGCCACCGAGGGCACGAT
GGAGGCCACAGCCATGGAGGAGACATGTCAAACCGCCCTGTCTGCCGACATTTCATGATGAAGGGCAACTGCCGC
TATGAGAACAACTGTGCCTTCTACCACCCGGGTGTCAATGGGCCCCCCCTGCCC**TAG**GGACCATTTGCCTGCCCT
GTTCACACAACCCCTGTGGACTGCAGCCTCGCTCTTTCCACCCTGTTATGGCTTCTGTGAGGCCCATTTTCCCTT
TTCCCCAGCTGATGAGGAGCCGGCCCCCTCAGTTCCCACTTGCTTGGGTTCCTGGGGGTTTTCTGATCACTGGTG
CGCATTGATGTACATATTTTCCTCCAGTCTGGGGAGGAGAGAGACTGGAAACGTTCCTGGACTGCTGAAGAGGAG

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FIGURE 4172B

ACCCAGTTGGCTTCACTTTTTGAGAAGATTCGCCCTGTACCCCAAACCCCTTTCCAGTATTACCCTTAATGCTTG
AGAACCTAAAGCTGGTTATCCTGGCGAACACCCCTACCCTTCTATTGCGGGTCCCCACATGCACACAGAACTCTG
ACACAGGATCAGCTGCACTTAAGAAATCATCCCAACTAAGTTCATTATTCCTCATGGGGTGGGGAGATGCTGAAA
GGGGTATTGTATATCCCACTGCACTGAGAGGGCTCAATCAGCTGGATTTGAGTTCTGGAACACACATCATCCCCA
CCCCTCCCCCAGCGTGGGCTCACCATTCTTAGTCCTTTCTCAAGTGGGACCTTCAACTTTCTGTGAACACCCAGT
CTGCGTCCTGGGTCTGCTAGGTTCGATGATGGCGAACTCGTATCTGCATCCGGTGCAAGTTTTAGCTGGCAGAGG
TGAGACCGGTGGTGCTGGTCTGCCTTTGCCAACTATAGCCAGTCTGGAGACTTGATAAAATACTTCAGTGAGACC
AGCTTCTCATCAACTTGGGCCCGGCGTGCTGGGCCTGAAAGTCACACTACATGCACTGCCTTTGGGAGTCAGCTC
ACTCCCTGCTCCCACCTGGAACCTTGCCAGCGTGAAGGAGGCTTCCAGGTACTTCACCCTGTCAACCACCTCTGA
ATCCCCACCAGGCGCCTTCCTGGGTGGATTCAACAAGATGATTTTGCCCTTTCCCAGTTCTCTCCTTCACTTTGG
CATCAGTTGTTTTCTATGAAAACAGTGGATTGGTTGGGTTTTGTGCAGGGTCTTGGGTTAGAGCCAAAATGGATT
TGAGGATGAGTATTTTTTTTTTTGGTTTTGTATATTTTGTACATTAATAATAAACAGTGGAAAGAGAAGCAGCTT

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FIGURE 4173

CGGGGGCGGGGTTGGCCGCGCCAGCTTGGAGAGCCAGCCCCATCGGGGTTCCCCGCCGCCGGAAGCGGAAATAGC
ACCGGGCGCCGCCACAGTAGCTGTAACTGCCACCGCGATGCCGAAGGCGCCCAAGCAGCAGCCGCCGGAGCCCGA
GTGGATCGGGGACGGAGAGAGCACGAGCCCATCAGACAAAGTGGTGAAGAAAGGGAAGAAGGACAAGAAGATCAA
AAAAACGTTCTTTGAAGAGCTGGCAGTAGAAGATAAACAGGCTGGGGAAGAAGAGAAAGTGCTCAAGGAGAAGGA
GCAGCAGCAGCAGCAACAGCAACAGCAGCAAAAAAAAAAAGCGAGATACCCGAAAAGGCAGGCGGAAGAAGGATGT
GGATGATGATGGAGAAGAGAAAGAGCTCATGGAGCGTCTTAAGAAGCTCTCAGTGCCAACCAGTGATGAGGAGGA
TGAAGTACCCGCCCCAAAACCCCGCGGAGGGAAGAAAACCAAGGGTGGTAATGTTTTTGCAGCCCTGATTCAGGA
TCAGAGTGAGGAAGAGGAGGAGGAAGAAAAACATCCTCCTAAGCCTGCCAAGCCGGAGAAGAATCGGATCAATAA
GGCCGTATCTGAGGAACAGCAGCCTGCACTCAAGGGCAAAAAGGGAAAGGAAGAGAAGTCAAAAGGGAAGGCTAA
GCCTCAAAATAAATTCGCTGCTCTGGACAATGAAGAGGAGGATAAAGAAGAAGAAATTATAAAGGAAAAGGAGCC
TCCCAAACAAGGGAAGGAGAAGGCCAAGAAGGCAGAGCAGGGTTCAGAGGAAGAAGGAGAAGGGGAAGAAGAGGA
GGAGGAAGGAGGAGAGTCTAAGGCAGATGATCCCTATGCTCATCTTAGCAAAAAGGAGAAGAAAAAGCTGAAAAA
ACAGATGGAGTATGAGCGCCAAGTGGCTTCATTAAAAGCAGCCAATGCAGCTGAAAATGACTTCTCCGTGTCCCA
GGCGGAGATGTCCTCCCGCCAAGCCATGTTAGAAAATGCATCTGACATCAAGCTGGAGAAGTTCAGCATCTCCGC
TCATGGCAAGGAGCTGTTCGTCAATGCAGACCTGTACATTGTAGCCGGCCGCCGCTACGGGCTGGTAGGACCCAA
TGGCAAGGGCAAGACCACACTCCTCAAGCACATTGCCAACCGAGCCCTGAGCATCCCTCCCAACATTGATGTGTT
GCTGTGTGAGCAGGAGGTGGTAGCAGATGAGACACCAGCAGTCCAGGCTGTTCTTCGAGCTGACACCAAGCGATT
GAAGCTGCTGGAAGAGGAGCGGCGGCTTCAGGGACAGCTGGAACAAGGGGATGACACAGCTGCTGAGAGGCTAGA
GAAGGTGTATGAGGAATTGCGGGCCACTGGGGCGGCAGCTGCAGAGGCCAAAGCACGGCGGATCCTGGCTGGCCT
GGGCTTTGACCCTGAAATGCAGAATCGACCCACACAGAAGTTCTCAGGGGGCTGGCGCATGCGTGTCTCCCTGGC
CAGGGCACTGTTCATGGAGCCCACACTGCTGATGCTGGATGAGCCCACCAACCACCTGGACCTCAACGCTGTCAT
CTGGCTTAATAACTACCTCCAGGGCTGGCGGAAGACCTTGCTGATCGTCTCCCATGACCAGGGCTTCTTGGATGA
TGTCTGCACTGATATCATCCACCTCGATGCCCAGCGGCTCCACTACTATAGGGGCAATTACATGACCTTCAAAAA
GATGTACCAGCAGAAGCAGAAAGAACTGCTGAAACAGTATGAGAAGCAAGAGAAAAAGCTGAAGGAGCTGAAGGC
AGGCGGGAAGTCCACCAAGCAGGCGGAAAAACAAACGAAGGAAGCCCTGACTCGGAAGCAGCAGAAATGCCGACG
GAAAAACCAAGATGAGGAATCCCAGGAGGCCCCTGAGCTCCTGAAGCGCCCTAAGGAGTACACTGTGCGCTTCAC
TTTTCCAGACCCCCCACCACTCAGCCCTCCAGTGCTGGGTCTGCATGGTGTGACATTCGGCTACCAGGGACAGAA
ACCACTCTTTAAGAACTTGGATTTTGGCATCGACATGGATTCAAGGATTTGCATTGTGGGCCCTAATGGTGTGGG
GAAGAGTACGCTACTCCTGCTGCTGACTGGCAAGCTGACACCGACCCATGGGGAAATGAGAAAGAACCACCGGCT
GAAAATTGGCTTCTTCAACCAGCAGTATGCAGAGCAGCTGCGCATGGAGGAGACGCCCACTGAGTACCTGCAGCG
GGGCTTCAACCTGCCCTACCAGGATGCCCGCAAGTGCCTGGGCCGCTTCGGCCTGGAGAGTCACGCCCACACCAT
CCAGATCTGCAAACTCTCTGGTGGTCAGAAGGCGCGAGTTGTGTTTGCTGAGCTGGCCTGTCGGGAACCTGATGT
CCTCATCTTGGACGAGCCAACCAATAACCTGGACATAGAGTCTATTGATGCTCTAGGGGAGGCCATCAATGAATA
CAAGGGTGCTGTGATCGTTGTCAGCCATGATGCCCGACTCATCACAGAAACCAATTGCCAGCTGTGGGTGGTGGA
GGAGCAGAGTGTTAGCCAAATCGATGGTGACTTTGAAGACTACAAGCGGGAGGTGTTGGAGGCCCTGGGTGAAGT
CATGGTCAGCCGGCCCCGAGAGTGAAGCTTTCCTTCCCAGAAGTCTCCCGAGAGACATATTTGTGTGGCCTAGAA
GTCCTCTGTGGTCTCCCCTCCTCTGAAGACTGCCTCTGGCCTGCAGCTGACCTGGCAACCATTCAGGCACATGAA
GGTGGAGTGTGACCTTGATGTGACCGGGATCCCACTCTGATTGCATCCATTTCTCTGAAAGACTTGTTTGTTCTG
CTTCTCTTCATATAACTGAGCTGGCCTTATCCTTGGCATCCCCCTAAACAAACAAGAGGTGACCACCTTATTGTG
AGGTTCCATCCAGCCAAGTTTATGTGGCCTATTGTCTCAGGACTCTCATCACTCAGAAGCCTGCCTCTGATTTAC
CCTACAGCTTCAGGCCCAGCTGCCCCCCAGTCTTTGGGTGGTGCTGTTCTTTTCTGGTGGATTTAATGCTGACTC
ACTGGTACAAACAGCTGTTGAAGCTCAGAGCTGGAGGTGAGCTTCTGAGGCCTTTGCCATTATCCAGCCCAAGAT
TTGGTGCCTGCAGCCTCTTGTCTGGTTGAGGACTTGGGGCAGGAAAGGAATGCTGCTGAACTTGAATTTCCCTTT
ACAAGGGGAAGAAATAAAGGAAAGGAGTTGCTGCCG

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FIGURE 4174

GGGAGCTCGGCGGAGGGCGGGCCAGGTGACTGGTCCGGGCCATGCCGAGGAAGAAGCCATTCAGCGTGAAGCAGA
AGAAGAAGCAGTTGCAGGACAAACGGGAGCGGAAGAGAGGGCTTCAAGATGGGCTGCGCTCCAGTTCCAACAGCC
GCAGCGGGAGCCGGGAGCGGCGAGAGGAACAGACCGACACCTCGGACGGGGAGTCTGTGACCCATCATATCCGCA
GGCTTAACCAGCAGCCTTCTCAGGGGCTGGGTCCACGAGGCTACGACCCAAATCGATACCGACTGCATTTTGAGA
GAGACAGCAGGGAGGAGGTAGAGAGGAGAAAGAGAGCAGCCCGGGAGCAAGTTCTACAGCCGGTCAGTGCTGAGT
TGTTGGAGCTGGACATCCGGGAGGTGTATCAGCCTGGCTCAGTTCTGGACTTTCCTCGACGTCCTCCTTGGAGCT
ATGAGATGTCCAAGGAGCAACTAATGAGCCAAGAGGAACGGAGCTTCCAAGACTATCTTGGGAAGATTCATGGGG
CTTACTCCTCTGAGAAACTCAGCTACTTTGAGCACAATCTGGAGACATGGAGGCAGCTGTGGCGGGTGTTAGAGA
TGTCTGACATCGTCCTGCTTATCACTGATATCCGACATCCAGTTGTGAATTTCCCGCCAGCACTTTATGAGTATG
TGACTGGAGAACTTGGACTGGCCCTGGTGCTGGTTTTGAACAAGGTGGATCTGGCCCCGCCAGCTCTTGTGGTTG
CCTGGAAGCATTATTTCCATCAACACTATCCCCAGCTCCACGTCGTCCTTTTCACCTCTTTTCCTCGGGACCCCC
GCACCCCACAGGATCCTAGTAGTGTCTTGAAGAAGAGTCGGAGGCGGGGGAGAGGATGGACTCGGGCCCTGGGGC
CAGAGCAGTTGCTGAGAGCCTGTGAAGCCATCACTGTGGGGAAAGTGGACTTGAGCAGCTGGCGGGAGAAGATTG
CTCGGGATGTGGCTGGGGCCACCTGGGGTAATGGCTCTGGGGAGGAGGAGGAAGAGGAGGATGGCCCAGCAGTCC
TGGTGGAGCAGCAGACTGATTCAGCAATGGAGCCAACTGGCCCAACCCAAGAGCGCTACAAGGATGGGGTGGTGA
CCATCGGCTGTGTGGGTTTCCCTAATGTGGGAAAGTCCTCGCTGATCAATGGGCTGGTGGGGCGGAAAGTCGTGA
GTGTCTCCAGAACCCCGGGCCATACCCGATACTTTCAGACCTACTTTCTTACCCCCTCTGTGAAGCTCTGTGACT
GCCCAGGCCTCATCTTCCCATCTCTTCTGCCTAGGCAGTTGCAGGTTCTGGCAGGGATCTACCCTATCGCCCAGA
TCCAGGAGCCCTACACTGCTGTGGGCTACCTGGCCTCCCGAATTCCCGTGCAGGCCCTGCTCCACCTGCGCCACC
CAGAGGCTGAGGACCCCTCAGCGGAACACCCCTGGTGTGCCTGGGACATCTGTGAAGCCTGGGCAGAGAAACGTG
GTTACAAGACAGCCAAGGCGGCTCGGAATGATGTGTACAGAGCAGCCAACAGTCTCTTGCGGCTGGCAGTGGACG
GCCGCCTCAGCCTGTGTTTTCATCCCCCAGGCTACAGTGAACAGAAAGGCACCTGGGAGTCCCATCCAGAGACCA
CGGAGCTGGTGGTTTTGCAGGGCAGGGTGGGGCCAGCAGGTGACGAGGAGGAGGAGGAAGAGGAAGAGCTGAGCA
GCTCCTGTGAGGAGGAGGGAGAGGAGGACCGGGATGCGGATGAGGAGGGAGAAGGGGATGAGGAGACCCCAACCT
CGGCTCCAGGGTCCAGCCTGGCTGGCCGAAACCCTTATGCCCTGCTGGGTGAGGATGAGTGCTGAGTTCCTCGCC
CAGCGCCATCTTCCCTCCCAGTATCTTTGCTTTTGGACTGACCTGGGGGTATCTCCCCTCTGCCACCCCAATTGT
GAATAAAGATTGTTTGCTTTGTAGCCCCTTCCCCAGATGAACTGAGGTGAGAGCGGCTGTTCCAGGCTAACAGCT
GTGGGAGGCTTCTCTCCTCTTCTCCCTTCTTTTTT

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FIGURE 4175

GGGATCATGGTAGATGGAACCCTCCTTTTACTCCTCTCGGAGGCCCTGGCCCTTACCCAGACCTGGGCGGGCTCC
CACTCCTTGAAGTATTTCCACACTTCCGTGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCATCTCTGTGGGCTAC
GTGGACGACACCCAGTTCGTGCGCTTCGACAACGACGCCGCGAGTCCGAGGATGGTGCCGCGGGCGCCGTGGATG
GAGCAGGAGGGGTCAGAGTATTGGGACCGGGAGACACGGAGCGCCAGGGACACCGCACAGATTTTCCGAGTGAAC
CTGCGGACGCTGCGCGGCTACTACAATCAGAGCGAGGCCGGGTCTCACACCCTGCAGTGGATGCATGGCTGCGAG
CTGGGGCCCGACAGGCGCTTCCTCCGCGGGTATGAACAGTTCGCCTACGACGGCAAGGATTATCTCACCCTGAAT
GAGGACCTGCGCTCCTGGACCGCGGTGGACACGGCGGCTCAGATCTCCGAGCAAAAGTCAAATGATGCCTCTGAG
GCGGAGCACCAGAGAGCCTACCTGGAAGACACATGCGTGGAGTGGCTCCACAAATACCTGGAGAAGGGGAAGGAG
ACGCTGCTTCACCTGGAGCCCCCAAAGACACACGTGACTCACCACCCCATCTCTGACCATGAGGCCACCCTGAGG
TGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCAGGATGGGGAGGGCCATACCCAGGAC
ACGGAGCTCGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAGTGGGCAGCTGTGGTGGTGCCTTCTGGA
GAGGAGCAGAGATACACGTGCCATGTGCAGCATGAGGGGCTACCCGAGCCCGTCACCCTGAGATGGAAGCCGGCT
TCCCAGCCCACCATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCCTTGGATCTGTGGTCTCTGGAGCTGTG
GTTGCTGCTGTGATATGGAGGAAGAAGAGCTCAGGTGGAAAAGGAGGGAGCTACTCTAAGGCTGAGTGGAGCGAC
AGTGCCCAGGGGTCTGAGTCTCACAGCTTGTAAAGCCTGAGACAGCTGCCTTGTGTGCGACTGAGATGCACAGCT
GCCTTGTGTGCGACTGAGATGCAGGATTTCCTCACGCCTCCCCTATGTGTCTTAGGGGACTCTGGCTTCTCTTTT
TGCAAGGGCCTCTGAATCTGTCTGTGTCCCTGTTAGCACAATGTGAGGAGGTAGAGAAACAGTCCACCTCTGTGT
CTACCATGACCCCCTTCCTCACACTGACCTGTGTTCCTTCCCTGTTCTCTTTTCTATTAAAAATAAGAACCTGGG
CAGAGTGCGGCAGCTCATGCCTGTAATCCCAGCACTTAGGGAGGCCGAGGAGGGCAGATCACGAGGTCAGGAGAT
CGAAACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAATTAGCTGGGCGCAGAGGCA
CGGGCCTGTAGTCCCAGCTACTCAGGAGGCGGAGGCAGGAGAATGGCGTCAACCCGGGAGGCGGAGGTTGCAGTG
AGCCAGGATTGTGCGACTGCACTCCAGCCTGGGTGACAGGGTGAAACGCCATCTCAAAAAATAAAAATTAAAAAA
TAAAAAAAGAACC

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FIGURE 4176

CCTGAGTCAGACGGGCATGGAGACGCTTCTGGAAGGAACACCGCAATGGCTGCGCAGGGACAGCCCCAGGTCCAG
TTCAAACTTGTATTGGTTGGTGATGGTGGTACTGGAAAAACGACTTTCGTGAAACATCATTTGACTGGTGAATTT
GAGAAGAAGTATGTAGCCACCTTGGGTGTTGAGGTTCATCCCCTAGTGTTCCATACCAACAGAGGACCTGTTAAG
TTCAATGTATGGGACACAGCCGGCCTGGAGAAATTCAGTGGACTGAGAGATGGCTATTATATCCAAGCCCAGAGT
ACCATCATAGTGTTTGATGTAACATCGAGAGTTACTTACAAGAATGTGCCTAACTGGCATAGAGATCTGGTATGA
GTGTGTGAAAACACCCCCACTGTGTTGAGTGGCAACAAAGTGGATATTAAGGACAGGAAAGTGAAGGCGAAATCC
ATTGTCTTCCACCGAAAGAAGAATCTTCAGTACTACGACATTTCTGCCAAAAGTAACTATAACTTTGAAAAGCCC
TTCCTCTGGCTTGCTAGGAAGCTCATTGGAGACCCTAACTTGGAATTTGTTGCCATGCCTGCTCTCGCCCCACCA
GAAGTTGTCATGGACCCAGCTTTGGCAGCACAGTATGAGCACGACTTAGAGGTTGCTCAGACAACTGCTCTCCCG
GACGAGGATGATGACCTGTGAGAATGAAGCTGGAGCCCAGCGTCAGAAGTCTAGTTTTATAGGCAGCTGTCCTGT
GATGTCAGTTGTGCAGCGTGTGTGCCACCTCATTATTATCTAGCTAAGCGGAACATGTGCTTCATCTGTGGGATG
CTGAAGGAGATGAGTGGGCTTCGCAGTGAATGTGGCAGTTCAAAAAATACCTTCATTGTTTGGACCTGCATATTT
AGCTGTTTTGGAACACAGTTGATTCCTTGAGTTTCAAATATAGACTGCTACAGTCACATCACAATATTCAGCGGT
GAAATCTTGTTTGTTACTGTCATTCCCATTCCTTTTCGTTTAGAATCAGAATAAAGTTGTATTTCAAATATCTAA

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FIGURE 4177

GGAGTCAGGAATGGAGAGAAGGGTAATGGTGTTACCTCTTATTGTGGAAACCTGTTGAGATCACAGAGAATATAC
TGACGGCATAAAAGGGCAGAACCATAGCAGGGTGCGCGCTGCTGTAGTTGCCTTCCATGGATCTATAGGAGAGCA
AGTCCTCCAGGAGAAGAAGTCCTCACCAGTGAACGGAGACCTCTCTGAACTAAGAATACCATGGCCACGTCAGCC
CCACTACGGAGCCTGGAAGAGGAGGTGACCTGCTCCATCTGTCTTGATTACCTGCGGGACCCTGTGACCATTGAC
TGTGGCCACGTCTTCTGCCGCAGCTGCACCACAGACGTCCGCCCCATCTCAGGGAGCCGCCCCGTCTGCCCACTC
TGCAAGAAGCCTTTTAAGAAGGAGAACATCCGACCCGTGTGGCAACTGGCCAGCCTGGTGGAGAACATTGAGCGG
CTGAAGGTGGACAAGGGCAGGCAGCCGGGAGAGGTGACCCGGGAGCAGCAGGATGCAAAGTTGTGCGAGCGACAC
CGAGAGAAGCTGCACTACTACTGTGAGGACGACGGGAAGCTGCTGTGCGTGATGTGCCGGGAGTCCCGGGAGCAC
AGGCCCCACACGGCCGTCCTCATGGAGAAGGCCGCCCAGCCCCACAGGGAAAAAATCCTGAACCACCTGAGTACC
CTAAGGAGAGACAGAGACAAAATTCAGGGCTTCCAGGCAAAGGGAGAAGCTGATATCCTGGCCGCGCTGAAGAAG
CTCCAGGACCAGAGGCAGTACATTGTGGCTGAGTTTGAGCAGGGTCATCAGTTCCTGAGGGAGCGGGAGGAACAC
CTGCTGGAACAGCTGGCGAAGCTGGAGCAGGAGCTCACGGAGGGCAGGGAGAAGTTCAAGAGCCGGGGCGTCGGG
GAGCTTGCCCGGCTGGCCCTGGTCATCTCCGAACTGGAGGGCAAGGCGCAGCAGCCAGCTGCAGAGCTCATGCAG
GACACGAGAGACTTCCTAAACAGGTATCCACGGAAGAAGTTCTGGGTTGGGAAACCCATTGCTCGAGTGGTTAAA
AAAAAGACCGGAGAATTCTCAGATAAACTCCTCTCTCTGCAACGAGGCCTGAGGGAATTCCAGGGGAAGCTGCTG
AGAGACTTGGAATATAAGACAGTGAGCGTCACCCTGGACCCACAGTCGGCCAGTGGGTACCTGCAGCTGTCAGAG
GACTGGAAGTGCGTGACCTACACCAGCCTGTACAAGAGTGCCTACCTGCACCCCCAGCAGTTTGACTGTGAGCCT
GGGGTGCTGGGCAGCAAGGGCTTCACCTGGGGCAAGGTCTACTGGGAAGTGGAAGTGGAGAGGGAGGGCTGGTCT
GAGGATGAAGAAGAGGGGGATGAGGAGGAAGAGGGAGAAGAGGAGGAGGAGGAAGAGGAGGCCGGCTATGGGGAT
GGATATGACGACTGGGAAACGGACGAAGATGAGGAATCGTTGGGCGATGAAGAGGAAGAAGAGGAGGAGGAAGAG
GAGGAAGTTCTGGAAAGCTGCATGGTGGGGGTGGCTAGAGACTCTGTGAAGAGGAAGGGAGACCTCTCCCTGCGG
CCAGAGGATGGCGTGTGGGCGCTGCGCCTCTCCTCCTCCGGCATCTGGGCCAACACCAGCCCCGAGGCTGAGCTT
TTCCCAGCACTGCGGCCCCGGAGAGTGGGCATCGCCCTGGATTATGAAGGGGGCACCGTGACTTTCACCAACGCA
GAGTCACAGGAACTCATCTACACCTTCACTGCCACCTTCACCCGGCGCCTGGTCCCCTTCCTGTGGCTCAAGTGG
CCAGGAACACGCCTCCTGCTAAGACCCTGAGCCCTGACATCTGCCCCCAGCCCCAACCCTCAGATGCTTCACTTC
TTTGGAATTCCAGGACTCTCAATGGGGGGACGGGATGCCTGGCCTAAGCACCTGGAGCAGGGGACCCCATATCCA
CTGGTAGCCACCTCCCCATTGCTGTGGCCCCCTGAAATCTCACTCAGTGCTGTTGCTCCATCTACTGCCCTAATG
GGGCTCTTTTCCCACCTCCTGCTGGTTTCCCGAGGGAACTTCTGACCCTGGAGTCCATGAGGGCTCCTTTCCTTT
TTGACCACGACCTTGGCCCTAGCTCTGCACTCTCTGGAATAAGGGCCCGATGCAGCATTTTCTTGCCCAGTGTGG
CAAGACCTCAGAAAAACCAGTCAATTACGCCTAAGATCATTTTGCTGTCCTTAAACCCCCCAGGTTCCTTCTTGC
ACAAATCCACTCTGCTGCCCACCTTCCCTGGCATTTTAAACAGACCTACCCCACCCCAACTCAGAGTTAAGCATA
CATGGCAATGCTGAAAATAAACAAAATCCACTGAGGCTTCCCAGGCCATTTAAAGCCTGGAGTACCAGCGCATAT
CATCTCATGGGGTCCAGAGTGGAGTCCAGGCTTCTCTGAAACCAGGGCTGAGCATATTTCCATAGCCAAGGAGGT
GGGACTCCCTGGAGCTATCTGTGGTCTTAGGGAAGGATCCAGACATACACGGCTTTGGGGTACAAGCTGTGATCA
CTGATCAATAAATTATCTCTAGATTGGTCCTTGTGAGGGGAGTTTTAAGAATCCAGAACATCTTGCTCTTGATCA
GCACATCCAAAAACACCAAGACAAACATCCAGTGGAGCAGAACCTCTCCTGCCTCGGGAGTTCTGACCGGGTTCC
CCAGCAGGGTGTTAAGCCTCTGTCTCTGGCCCTACCAGCATCCAGGTTCCACTTTCCTAGGAGAGAGTGGAGATG
GGAAGACAGGGAAAGGAAGGCAGCAGGAGGCCACAAGCCCACCAGGTCTTCATGTCAAGAGAGGGAGTAACATGT
CTTCTCATTGCCCACGGACCCAACCTCTGTCCAGGTGCCCCTCATCATCACAGTTTAACACAAGCTCCCCTGCTC
CAGCCAAATTGATCTCCCAGTCTTGTCCTTACCCATTCCAAGTGCTCTGCCAGCCCCTGTTCATCCAAGTTTTAA
GTCCTCCACCCTGTTATAAGAGACTGTTCCAACGGCTCTGGGCCTCAGTGGTCACTTGACCACCATTGTCTCAGA
GCTGCCCACTTTGTGTGTGTCACATGCTGCCTGAGTCACATGTACATCTTATTTCTGCCTCTAGTTTTGTAAGCT
CCTGGAGGGCGGATAACATCTTATACTACTCTTGTATTCTCATGGCACCTAGTGCAGTGCTGGGCACAGAGTAGG
TGCTCAATAAAGACTTGTTGAATGA

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FIGURE 4178

GGCGTTACGCAAGGCCTGGTGTTTACCTCCCGTGGGAGCCTCCTCCCTCCCTATAAAGCCTGATGTGGTGGAGAG
ATTTGACGAGACTGAGACTCTGGTTGAAGAGAGAGGCAATCCCAGGAGAGGGGCGGAAAGCGGCAAAAGTTAATG
CGGGAGTCGGAGAGAAGGGCATCTACACAGCAAGCAGCAGGGGCGGCCCGCCATCTGCGCGCTCGAAGGCGGTCA
CGGTGGTCGCGGAAGGGGCGGCGTCCAGATCCTGGCTTTCCATGGATGCGCCCGAGCTGGGCCCGGGGCTGGTGG
AGCGTCTGGAGCAGCTGGCGACGTGTCCTCTGTGCGGGGGCTCCTTCGAGGACCCGGTGCTTCTGGCGTGCGAGC
ACAGCTTCTGCCGCGCGTGTCTGGCCCGCCGCTGGGGGACTCCGCCGGCGACCGGCACCGAGGCTTCCCCCACCG
CCTGTCCCTGCTGCGGCCTGCCGTGTCCCCGCCGCAGCCTGAGGTCTAATGTGCGGCTGGCGGTGGAGGTGCGAA
TCAGCCGCGAGCTGCGAGAGAAGCTGGCTGAGCCTGGGGCCCGTGCGGGGAGACGCCGAGGGGGGCGCATCCCCA
CCATGGGCTGCCTGGACCTGCCCGGAGAGGATATGAGGAAGACATGGAGACGATTTGAAGTCCCAACATCCAAGT
CATCTAATTCAGAGGATGATCTCCCTGAAGATTATCCAGTGGTCAAAAAAAATGCTTCATAGACTGACAGCCGACC
TGACCCTGGACCCTGGGACCGCACACCGCCGCCTGCTCATCTCCGCCGACCGCCGCAGCGTACAACTGGCCCCAC
CAGGGACGCCCGCGCCCCCTGACGGCCCCAAGCGCTTCAATCAGCTCCCAGCTGTGCTGGGTGCGCAGGGCTTCG
GGGCCGGCCGCCACTGCTGGGAGGTGGAGACTGCGGACGCCGCCTCCTGCAGAGACTCTTCTGGGGAGGATGCGG
ACGACGAGGAGAGCCACTATGCAGTGGGCGCGGCCGGGGAATCAGTGCAACGCAAGGGCTGCGTAAGGCTGTGCC
CTGCGGGGGCCGTGTGGGCCGTGGAGGGCCGCGGCGGCCGCCTGTGGGCCCTCACGGCACCCGAACCCACCCTGC
TGGGCGGTGTTGAGCCCCCGCCGCGGCGCATTCGCGTGGACCTGGACTGGGAGCGGGGCCGCGTGGCCTTCTACG
ACGGCCGCTCACTCGACCTGCTTTACGCCTTCCAGGCGCCTGGCCCCCTGGGGGAGCGCATCTTCCCGCTGTTCT
GCACCTGCGACCCTCGTGCTCCGCTCCGCATTGTACCAGCGGAAAGCTGAGTCTCGTCTCCAACTAGAAGTTTGG
CCCGGCCACTGGCCCTGCAGCTGCTTTTTGGGGGTGGAATTCCCCACTCATTTCTGGGAACACATTCACACGCCC
ATTGCAGGAGTATTAATAGCAACCCACATTTTCGCCCCAAAATAATGAGACCTCACCTGGTCTCCACGTTTCCAC
GTCCCTGCTCAAAACCAAATCCATTCCTGCCTTCTGGCTCTCAGAATCTTCTCTCCCCTACAGCTACTACAGTAC
TTCCTGACTTCTCCCATTCAAACCATTCTAGGCCTGCAATGGGGAACAGGCCCTCCCCATCAGTATTGGTAAAGT
GACCATGATTCCTACATAGAGGCTCTGCTGGTCAAATACTTGACTCCCACTCTTGCCACTCCTAGCTCCAGAAGG
GCTCAGGGCCTTCCCCACAGATCTAAGGACTGGGCTACCCTGCCTGTCCACTGAGGTTTCTCCTAAAACAAGAGG
CTTGACTCTGGTCTGGGCCCTGTGGCCCTCTGGGAAGCTTTGTACCTCTTTTGCAGGATCCGGGGGTGGGGAGGG
ACAAGCTAGTTCCCCAACCTCCTATGACTGCTTTCTATGCTCACAGCCTTTTTTCCATAAGAACCTTCTTGAAAC
TTCTCCCCGCACATACTCACGGAAAGGAACCAATGGTGCTATTTCCCCTCTCTCCTCCTCAACCTGGGAATACTT
CAGACATCTCCAAACTCATCCTTGTGTATAGTCTCACACCCTTCCCCATAAGTATAAATGGGCCCATATTTAACA
CATTTTGTGATTTTGGGTTATTTATTTTGTGCATCTGTGGCAATAAATGAGATCTCAGTGGTGGTA

FIGURE 4179

CGGCGAGCCGGAAGTGGGGTTAGCCAGGTTATCCCCAGGGGTGGAGAAGCGGAGGCCCAGGAGGAGGGGGAATAA
AGAAGGTGGAGGATCCTGGCTACCACTCTGAATCCGATACCGCTTCTCTTAGACCTCAGCGACAGAAAAAGGGAA
GGGTGTCTCATCCCCCTTCCTCCTCTCCTCCCTGTCCTGAGCCTTAGCCATGGCCGAGGCAGGGGCTGGGCTGAG
CGAGACCGTCACTGAGACAACGGTTACCGTGACAACCGAGCCCGAGAACCGGAGCCTTACCATCAAACTTCGGAA
ACGGAAGCCAGAGAAAAAGGTAGAATGGACAAGTGACACTGTGGACAATGAACACATGGGCCGCCGCTCATCCAA
ATGCTGCTGTATTTATGAGAAACCTCGGGCCTTTGGCGAGAGCTCCACGGAAAGTGATGAGGAGGAAGAAGAGGG
CTGTGGTCATACACACTGTGTACGTGGCCACCGCAAAGGACGGCGTCGTGCAACCCTAGGACCGACCCCCACCAC
CCCTCCCCAGCCTCCTGACCCTTCCCAGCCCCCTCCAGGGCCAATGCAGCACTAAATCCCTCTCTCCTCCAGCAT
TCCTGTGTCTGTCTGGCCCTAAATGTATCCATGTGGCTACTTCTCCAGCCCCCTCCTTCCCTCTCTTCTGCCTGA
TAGAGGGAAGAGGAAGAGGAGGACGAACAGAGATCCTGAAATTCTGACTTGCTGCTATTCCAGAACCCAGCCTCC
TGGGTTTCCCCAGTCCTCATTTTTCCTCCCAATACCCACCCTTCTCTCTCGAGGGATCTAGGCACCTTGGTCCCA
GTGTCTTCCTTTTGTTCTCACTGCCAAACTGCCTGTCCTGGGATCTAGTTATCTTGGCCCTGCACTCTCAAGATG
AGTAGCGAACACTTAAATTGGGTTTTCAACAGTCCCAGCTTTCACTGCCAGGGTCCCAGTCAGATTCCAGGAATT
TGCGCCCTAACTTTGCTTGCTAATCCTGGTTTAGAGCTATCCCACTAAAATATTTAATCCTAATTCTTAGTCCTT
GCCTGTGAGATATGAGGTCTTACAGGAGACCTCAGAGCTCCCAGCCCTTCTCCTCCTGCTAACCCTTCTCACACC
CTCAAGAGGAGTTAGAAAAGAGGTCCTTGTCATTCTCACCTCTTATGGAAAATGGAATAAGAAATAATCATATCC
TTTCTTCCCACCCTTCTCCTGTTATTTAGGATTTCTGACAAAGCTGGCTTGAGATTGGTCACTTAGAGCCGACTG
TCTCCTCTGCCTTTTGTTTTTCAGCTTCAGAGACAGATCCAATATAGTCCCAGGGACCTGGGTCTCTGGGAGAGG
AAGGAAGAGGGAGGGAGCAAAGAGATTGGGGTATGTCCCCTGTAGTACACTCTTACCTCTTACTTCCTAGACTTT
GATTTCTCCGGCAGCCCAGATGTTCAGTTCTCTTGGCCCCTCTCTACCCCTTACTGGGATCTGGTTTTCATTTTC
CGGTCCTTTTGCCATACACAGTTACAGAGATCAGTCAAATCCATACCACCACTGAGATCTCATTTATTGCCACAG
ATGCACAAAATAAATAACCCAAAATCAC

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FIGURE 4180

GCAGAGCTGGCGCTCTAGCCCACGGAGTTGGTTAACTCCTCTCACCGGCCCCTGGAAAGGGTTCCAAGTCCTTTA
GTACCCGACGCTGTCTGGGAATTCCGGGCGTTTCGGCTCCTTGGTCGCAGAGGCAGGAGGCACCCGACCGCATGT
CTGTCATGGACCTCGCCAATACTTGCTCCAGCTTTCAGTCGGACCTGGATTTCTGTTCAGATTGCGGCTCGGTCC
TGCCTCTGCCCGGGGCTCAGGATACGGTCACCTGTATTCGCTGTGGCTTCAACATCAACGTTCGGGACTTTGAGG
GGAAGGTTGTGAAGACTTCGGTTGTGTTCCACCAACTGGGGACAGCCATGCCTATGTCGGTGGAGGAAGGGCCTG
AGTGCCAGGGACCTGTGGTTGACAGGCGCTGCCCTCGATGTGGTCATGAAGGAATGGCATACCACACCAGACAGA
TGCGTTCAGCCGATGAAGGGCAAACTGTCTTCTACACCTGTACCAACTGCAAGTTCCAGGAGAAGGAAGACTCTT
GACCTTTTTCCTGGGCAACTCTACAGTCCCTCCCTCCTTTCGGAAGGTGAAGGATACTGGGTTTTTAGATGCCTT
GTCCATCCTGTCTGGTTGCAATGTTTTGCTCCCAGAAGAGAATCAGATCATCATGTGGGGATTACCATTGTTCCT
GGAGTACTCCTACCCTTAGTTGAATTTCCTTATTAAAGTTATATTTTTCTATAAGACCCTGA

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FIGURE 4181

CCCCAGACGCCGAGGATGGCCGTCATGGCGCCCCGAACCCTCCTCCTGCTACTCTCGGGGGCCCTGGCCCTGACC
CAGACCTGGGCGGGCTCCCACTCCATGAGGTATTTCTTCACATCCGTGTCCCGGCCCGGCCGCGGGGAGCCCCGC
TTCATCGCCGTGGGCTACGTGGACGACACGCAGTTCGTGCGGTTCGACAGCGACGCCGCGAGCCAGAGGATGGAG
CCGCGGGCGCCGTGGATAGAGCAGGAGGGGCCGGAGTATTGGGACCAGGAGACACGGAATGTGAAGGCCCAGTCA
CAGACTGACCGAGTGGACCTGGGGACCCTGCGCGGCTACTACAACCAGAGCGAGGCCGGTTCTCACACCATCCAG
ATAATGTATGGCTGCGACGTGGGGTCGGACGGGCGCTTCCTCCGCGGGTACCGGCAGGACGCCTACGACGGCAAG
GATTACATCGCCCTGAACGAGGACCTGCGCTCTTGGACCGCGGCGGACATGGCGGCTCAGATCACCAAGCGCAAG
TGGGAGGCGGCCCATGAGGCGGAGCAGTTGAGAGCCTACCTGGATGGCACGTGCGTGGAGTGGCTCCGCAGATAC
CTGGAGAACGGGAAGGAGACGCTGCAGCGCACGGACCCCCCCAAGACACATATGACCCACCACCCCATCTCTGAC
CATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGG
GAGGACCAGACCCAGGACACGGAGCTCGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAGTGGGCGGCT
GTGGTGGTGCCTTCTGGAGAGGAGCAGAGATACACCTGCCATGTGCAGCATGAGGGTCTGCCCAAGCCCCTCACC
CTGAGATGGGAGCTGTCTTCCCAGCCCACCATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCCTTGGAGCT
GTGATCACTGGAGCTGTGGTCGCTGCCGTGATGTGGAGGAGGAAGAGCTCAGATAGAAAAGGAGGGAGTTACACT
CAGGCTGCAAGCAGTGACAGTGCCCAGGGCTCTGATGTGTCCCTCACAGCTTGTAAAGTGTGAGACAGCTGCCTT
GTGTGGGACTGAGAGGCAAGAGTTGTTCCTGCCCTTCCCTTTGTGACTTGAAGAACCCTGACTTTGTTTCTGCAA
AGGCACCTGCATGTGTCTGTGTTCGTGTAGGCATAATGTGAGGAGGTGGGGAGACCACCCCACCCCCATGTCCAC
CATGACCCTCTTCCCACGCTGACCTGTGCTCCCTCCCCAATCATCTTTCCTGTTCCAGAGAGGTGGGGCTGAGGT
GTCTCCATCTCTGTCTCAACTTCATGGTGCACTGAGCTGTAACTTCTTCCTTCCCTATTAAAATTAGAACCTTAG
TATAAATTTACTTTCTCAAATTCTTGCCATGAGAGGTTGATGAGTTAATTAAAGGAGAAGATTCCTAAAATTTGA
GAGACAAAATAAATGGAAGACATGAGAAC

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FIGURE 4182

ATGGTGCTCATGGCGCCCCGAACCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCCAGACCTGGGCGCGC
TCCCACTCCATGAGGTATTTCTACACCACCATGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCATCTCCGTCGGC
TACGTGGACGATACGCAGTTCGTGCGGTTCGACAGCGACGACGCGAGTCCGAGAGAGGAGCCGCGGGCGCCGTGG
ATGGAGCGGGAGGGGCCGGAGTATTGGGACCGGAACACACAGATCTGCAAGGCCCAAGCACGGACTGAACGAGAG
AACCTGCGGATCGCGCTCCGCTACTACAACCAGAGCGAGGGCGGTTCTCACACCATGCAGGTGATGTATGGCTGC
GACGTGGGGCCCGACGGGCGCTTCCTCTGCGGGTATGAACAGCACGCCTACGACGGCAAGGATTACATCGCTCTG
AACGAGGACCTGCGCTCCTGGACCGCGGCGGACATGGCAGCTCAGATCACCAAGCGCAAGTGGGAGGCGGCCCGT
CGGGCGGAGCAGCGGAGAGTCTACCTGGAGGGCGAGTTCGTGGAGTGGCTCCGCAGATACCTGGAGAACGGGAAG
GAGACGCTGCAGCGCGCGGACCCCCCCAAGACACATATGACCCACCACCCCATCTCTGACCATGAGGCCACCCTG
AGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGGGAGGACCAGACCCAC
ACACGGAGCTCGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAAGCCATCTTCCCAGCCCACCATCCCC
ATCGTGGGCATCGTTGCTGGCCTGGTTCTACTTGTAGCTGTGGTCACTGGAGCTGTGGTCGCTGCTGTAATGTGG
AGGAAGAAGAGCTCAGATAGAAAAGGAGGGAGCTACTCTCAGGCTGCAAGGCCATCTTCCCAGCCCACATTCCTC
ATCATGGGCATCGTTACCGTCCTGGTTGTTCTAGGTGCTGTGGTCACTGCTGTGATGTGGAAGAATAAGACCCCA
GGTAGGAAAGGGGTGGCACAGGGCTTGACCATCACATTTGTGTCAGGTGACAATAATGCCAGGATCCTCAGTATG
GGCAGCATCGCTTTGAGGTCAGTGATAGAGGGCCTGGTCCAGCTCCAGCTGCTGTGCAAGCAACTCCTCAGCTTG
GGCCAGCTCAGCTGTGTGGGGGGCTCAGGGCCCTGGTCAGAGGGAGTGGAGGAGGGAGCATCAGCCAGGGTAGAG
GGGTTGAGGCCCTTGGAACCTGTGTTGCAAGATCTCATGCCCTGCATGCTGCAAGGGTTTGCCTTCTCTGACAGA
CCATCCACTCATAAGGAGGTCAAAAACAAGTTCCACACAGCACTGAGACACAACCACCTCATTGTCCTCACCTCC
ACGGACAGAGCCCAGGACTTTGATAAGCGGGGGGCCAAACCCACCGCTGGGGTGAATCCATATAGACTAGAAAAA
ATGATGCCTAACTCTCAACAAGGTAGACGTGACTTAGTTGCCCTGGAACTTGCACAGGATGGAATAACAAGGCTG
AGGGAAGTGGGCATGGTGAAGGCCCACCAGTACCATGCTCCACAAGACAGTCCAAAGGAAACACCTTCCACCAGA
GCCTCAGAAACGTGA

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FIGURE 4183

ATGGCGCCCCGAAGCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCGATACTTGGGCGGGCTCCCACTCC
TTGAGGTATTTCAGCACCGCTGTGTCGCGGCCCGGCCGCGGGGAGCCCCGCTACATCGCCGTGGAGTACGTAGAC
GACACGCAATTCCTGCGGTTCGACAGCGACGCCGCGATTCCGAGGATGGAGCCGCGGGAGCCGTGGGTGGAGCAA
GAGGGGCCGCAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGACTGACCGAGTGGCCCTGAGG
AACCTGCTCCGCCGCTACAACCAGAGCGAGGCTGGGTCTCACACCCTCCAGGGAATGAATGGCTGCGACATGGGG
CCCGACGGACGCCTCCTCCGCGGGTATCACCAGCACGCGTACGACGGCAAGGATTACATCTCCCTGAACGAGGAC
CTGCGCTCCTGGACCGCGGCGGACACCGTGGCTCAGATCACCCAGCGCTTCTATGAGGCAGAGGAATATGCAGAG
GAGTTCAGGACCTACCTGGAGGGCGAGTGCCTGGAGTTGCTCCGCAGATACTTGGAGAATGGGAAGGAGACGCTA
CAGCGCGCAGATCCTCCAAAGGCACACGTTGCCCACCACCCCATCTCTGACCATGAGGCCACCCTGAGGTGCTGG
GCCCTGGGCTTCTACCCTGCGGAGATCACGCTGACCTGGCAGCGGGATGGGGAGGAACAGACCCAGGACACAGAG
CTTGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAGTGGGCCGCTGTGGTGGTGCCTCCTGGAGAGGAA
CAGAGATACACATGCCATGTGCAGCACGAGGGGCTGCCCCAGCCCCTCATCCTGAGATGGGAGCAGTCTCCCCAG
CCCACCATCCCCATCGTGGGCATCGTTGCTGGCCTTGTTGTCCTTGGAGCTGTGGTCACTGGAGCTGTGGTCGCT
GCTGTGATGTGGAGGAAGAAGAGCTCAGATAGAAACAGAGGGAGCTACTCTCAGGCTGCAGTCACTGACAGTGCC
CAGGGCTCTGGGGTGTCTCTCACAGCTAATAAAGTGTGAGACAGCTTCCTTGTGTGGGACTGAGAAGCAAGATAT
CAATGTAGCAGAATTGCACTTGTGCCTCACGAACATACATAAATTTTAAAAATAAAGAATAAA

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FIGURE 4184

GAGAGCACGACGTGCGCGCACCCTCTCCCCTTGTCCACTGCTGCCGCCTCCTTCTTCTGCCGCTCCTGGTGCTGC
TTGTGTGCTCGTTTGGAGCGGACCTGGTACCTCTTTTGTGAAGCGGCAGCTGAGGAGACTCCGGCGCTCGCC**ATG**

GCCGAAGAAAAGCCCAAGGAAGGAGTCAAGACTGAGAACAACGATCATATTAATTTGAAGGTGGCGGGGCAGGAT
GGTTCTGTGGTGCAGTTTAAGATTAAGAGGCATACACCACTTAGTAAACTAATGAAAGCCTATTGTGAACGACAG
GGATTGTCAATGAGGCAGATCAGATTCCGATTCGACGGGCAACCAATGAAACAGACACACCTGCACAGTTGGAAA
TGGAGGATGAAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTGAAAAGGGAACCTGCTTCTTT
ACTCCAGAACTCTGTTCTTTAAAGACCAAGATTACATTCTCAATTAGAAAACTGCAATTTGCTTCCACCACATCC
TGACTACTACCGTATAGTTTTCTCTATTCTTTCATTTCCCCCTTCCCCATTCCTTTACTGTACATAAAGTAACTG
GTATATGTGCACAAGCATATTACTTTTTTTTTTTAAAACTAAACAGCCAATGGTATGTTTTGATTGACATCAAGT
GGAGACGGGGCGGAAAAATACTGATTCTGTGAAAATACCCCCTTTCTCCATTAGTGGCATGCTCATTCAGCTCTT
ATCTTTATATTCCAGTAAGTTATTTTGCTCTCACTGTTTTAACAACAACAACAAAAAAACAACAACATAAAAATC
CTTGCATACCTTGTTCAATTGGAGAATTTTAATGTTTTTCATTTATCATTGTAAAACCAAGGACAATTTTATAAC
TTTTTTGTACTTAGCTGTTACATGCAGAGCAATCTGTCTTTAAGTAGGGATAAATTACTCTAAAACAAAAAAGAA
TCCTAGATAGTTTTCCCTTCAAGTCAAGCGTCTTGTTGTTTAAATAAACTTCTTGTTTAAAA

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FIGURE 4185

ATGAAGGCCAACTACAGCGCAGAGGAGCGCTTTCTCCTGCTGGGTTTCTCCGACTGGCCTTCCCTGCAGCCGGTC
CTCTTCGCCCTTGTCCTCCTGTGCTACCTCCTGACCTTGACGGGCAACTCGGCGCTGGTGCTGCTGGCGGTGCGC
GACCCGCGCCTGCACACGCCCATGTACTACTTCCTCTGCCACCTGGCCTTGGTAGACGCGGGCTTCACTACTAGC
GTGGTGCCGCCGCTGCTGGCCAACCTGCGCGGACCAGCGCTCTGGCTGCCGCGCAGCCACTGCACGGCCCAGCTG
TGCGCATCGCTGGCTCTGGGTTCCGCCGAATGCGTCCTCCTGGCGGTGATGGCTCTGGACCGCGCGGCCGCAGTG
TGCCGCCCGCTGCGCTATGCGGGGCTCGTCTCCCCGCGCCTATGTCGCACGCTGGCCAGCGCCTCCTGGCTAAGT
GGCCTCACCAACTCGGTTGCGCAAACCGCGCTCCTGGCTGAGCGGCCGCTGTGCGCGCCCCGCCTGCTGGACCAC
TTCATCTGTGAGCTGCCGGCGTTGCTCAAGCTGGCCTGCGGAGGCGACGGAGACACTACCGAGAACCAGATGTTC
GCCGCCCGCGTGGTCATCCTGCTGCTGCCGTTTGCCGTCATCCTGGCCTCCTACGGTGCCGTGGCCCGAGCTGTC
TGTTGCATGCGGTTCAGCGGAGGCCGGAGGAGGGCGGTGGGCACGTGTGGGTCCCACCTGACAGCCGTCTGCCTG
TTCTACGGCTCGGCCATCTACACCTACCTGCAGCCCGCGCAGCGCTACAACCAGGCACGGGGCAAGTTCGTATCG
CTCTTCTACACCGTGGTCACACCTGCTCTCAACCCGCTCATCTACACCCTCAGGAATAAGAAAGTGAAGGGGGCA
GCGAGGAGGCTGCTGCGGAGTCTGGGGAGAGGCCAGGCTGGGCAGTGA

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FIGURE 4186

GTGCAGAACCTTTGCCTCCTGGCCAGAGGGACCCTTCTGCAGGCTGATTCCAGCAGTGCCCGATGGTGGGACCCA
CACCAGACCAAGCCTTCGCCTCCCAGAGGCCTCCTGGCCCTCCTGTCATGGCCTGTGAGAGCCACACCCCTAGGC
CCCGTCTCCTAGTCTGCAGGCCGCAGGACCAGCTGCCCACGGCCCCAGGGGGCAGGGGCTGTAGATGAGGGTCTC
AGAGGTGGTGGGAGCACCCCCCCCACCCACAGTTCCTGGGCATTTCTTTAGAGCTTTAAAATGGCACCTGGAGAC
CACCAGGCGCGGCGATCAGATCGGGTGGTGTGGTGCCTCCTGGGACTGACCACTTCTTGCTCTCCGACCAGGCAG
GGGCGAGTGGCCTGGGAGGTTCCCGGACCCTCAGGGGGCCTGTGTCTCTGGGCACCGCAGCTCCGCCCCACTCCT
TCCTCCAGAACATTCCCCACTCGGGCTAGAGAATTGCGTCTGCTCCAGGAATGCATCCTAGCGTGTGTACGATCG
CGCCTGGGTGTCCTGTTCTCATGAGCAAGCGGTTTTAACCAGCAGCATAATTTATACTCATAGACAGGACTGGGG
GAAGGGCTGTTCCTGAGGCTGGGGTGCAGTGCCTTGGAAAGCACCCCTGAAACAGTGGACCTTGTATTTTTAGTG
TCCCCTGCAACCATCCTCTGACTTAGAGCAAGAATTTCCGCTGCTGCTACCCCCGAGATGGGCTTCACCAGATGT
TAATAACGTGCTTATTTTCTCTAAGTGCTATTTTGGCACCAGCGTTAGTTGCAATTTATATTCTGCAGCATTTGA
TGCTGGGAAAAGAACCCACCCTAATGGTCCCCAATTGGCAGAGCTCGGCTGTTAAGCAGCAGACCATATGCTGCC
TGCTGGAGGAGCGTGGTCAGCACTTGTCCCCGTGCCTGCGTGCGTGTGCCTGCGTGCACGTGTGCCTGCGGGTAC
CTGTGCCCTGTGTGTGCACATGTGCCTGCATGCGTGTGCCTGCGTGCACGTGTGCCTGTGTGTACATGTGCCTGC
GTGTACCTGTGCCCTGTGTGTGCACGTGTGCCTTCGTGTACCTGTGCCCTGTGTGTGCATGTGTGTGTGAGTCAC
GTCTTCCGTGTGTGTATGTGAGGGAGAGACTGTGGGGTTGGAGGGAGGGAGGAGGGGAAAGGGTATGTATCCCTT
TGTTCTTTAAAAGGGAGAGCCCCAACCTCTCTGGCTGCCCCCTCCTGCCTGTGCTCCCAGCTCACCCCACACCTA
GCTGCTATTTATTCTCCTGACCCCCTTCCCGGCCCTGCAGCCCCGTGTCCCGCAGCCTCCGCCCCGCCTCCTGCT
CCACGTCACCAGGCAACACTCGGCTCCACCAGGCTTCCGAAGGTGGCCCAGAGCAGGCACTTGAGCCTGATGACC
CAGAGCAAAGCTGCCTTTCTGGGCCTTGAGTACTCCTTTCTGCTATGGAAGGCTTTTCTTGTTTTCAACGGCCCG
TCCAGCCCAGGGGGGCTGGGTGAGGGCCGCTTCCTTCTGCAGCAGAGGGGGCGGGCTCTATCCTTGCCATCTGCT
GCCCCCAGAGGCCCTGCCAGGACATGGGCCTGAGCGGTTTCTTCTCCAAGAGGCCCTCCTGGGACCTGTCTGTGC
ACAGGGCGGGAAGACACTTGCTGCTTCGACCCAGGACGGCAGCCAGGACGGGCTGAGCTCCTCTTGCGCTGCAAA
CACACAAGGGTTGCCTGCCAGCTCAGCAGCGCCCTCCCTCAACCACACCCTGGGTCCGGACCCAGAGCCACAGGC
CGTTGGACCCAGGGGACCGGGGCTGGGCTCAGGCGTGGGCCTGGAGGGCTTGTGGAGGGGCCAGACCTAGAGCCG
TAGGGCTCCAACAGCTGAGGGCTGGGCCCCTGCCGGCCAATGAAGCTCCAGACCAGTGCTCCGGCCTTGGCGGTG
CCAGCAGTGCTCCTGCAGGGATGGAGGGTGCTGGAGGCCTGGATGCGGGGACCTTGATCCCCCAGCAGGCAGCGC
TGTGGTCCCAGCCACTCAGGAGGCTGAGGCAGGAGAATGGCATGAACCTGGGAGGCGGAGCTTGCAGTGAGCTGA
GATCGCACCACTGCATTCCAGCCTGGGCGACAGAGTGAGACTCCGTCTCAAAAAAAAAAAAAAACAAAAGAAGTTT
CTAGATCTACTGGGCATGATGAACACAAACCCCACAGACACTGAGGAACCCAGTGGTGGCAGTGACTCGGGCTCC
TCTGCTCTCTAAAGCTCCTTTGAGAAAC**ATG**GGAGGGGCCGGGCGTGGTGGTTCACGCCTGTCATCCCAGCACTT
TGGGAGGCTGGGGCAGGAGGATCGCTTGAGCCCAGGAGTTCGAGACCAGCCTGGGCAACATAGTGAGACTGTATC
GCTACATAAAATAAAAAAAAAAAGTTAGCTGGGCATTGTACATGTGCCTGTGGTCCCAGCTACTCAGGAGGCTGAG
GCAGGAGGATTGCTTGAGCCCAGGAGTTGGATGTTGCAGTGAGCCAAGATCGCACCATTGCCCTCCACTCTGGGC
CACGGAGCAATACCCTGTCTCAGAAAACAAACAACAAAAAGCAGAAACGCTGAAGGGGTCGGTTTACGGGAAAAC
CGCCTGTCAGAACACTTGGCTACTCCTACCCCAGATCAGTGGACCTGGGAATGAGGGTTGGTCCCGGGAGGCTTT
TCTCCAAGCTGTTGCCACCAGACCCGCCATGGGAACCCTGGCCACAGAAGCCTCCCGGGGAGTGAGCCAGAGCCT
GGACCGCTGTGCTGATGTGTCTGGGGTGGAGGGAGGGTGGGGAGTGTGCAAGGGTGTGTGTGTGCCCGGGGGGTG
TTCATGGGCAAGCATGTGCGTGCCTGTGTGTGTGCGTGCCCCTCCCCTGCAGCCGTCGGTGGTATCTCCCTCCAG
CCCCTTCGCCACCTTC**TGA**GCATTGTCTGTCCACGTGAGACTGCCCAGAGACAGCAGAGCTCCACGTGGTTTTAA
GGGGAGACCTTTCCCTGGACCTGGGGGTCTCGCCGTATCTCATGACCAGGTGCTAAATGACACGACATGCATCAC
CTGCCTTTCGATGACCAACCTCCCTGTCCCCGTCCCGCTGACCTGCCCCCGTGGCGTCTCACGGTGATGCCTGCT
CCTGACATTGGTGTTCACTGTAGCAAACTACATTCTGGATGGGAATTTTCATGTACATGTGTGGCATGTGGAAAA
TTTCAAATAAAATGGACTTGATTTAG

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FIGURE 4187

CGCGTCCGCCCCGCGAGCACAGAGCCTCGCCTTTGCCGATCCGCCGCCCGTCCACACCCGCCGCCAGCTCACCATG
GGATGATGATATCGCCGCGCTCGTCGTCGACAACGGCTCCGGCATGTGCAAGGCCGGCTTCGCGGGCGACGATGC
CCCCCGGGCCGTCTTCCCCTCCATCGTGGGGCGCCCCAGGCACCAGGGCGTGATGGTGGGCATGGGTCAGAAGGA
TTCCTATGTGGGCGACGAGGCCCAGAGCAAGAGAGGCATCCTCACCCTGAAGTACCCCATCGAGCACGGCATCGT
CACCAACTGGGACGACATGGAGAAAATCTGGCACCACACCTTCTACAATGAGCTGCGTGTGGCTCCCGAGGAGCA
CCCCGTGCTGCTGACCGAGGCCCCCCTGAACCCCAAGGCCAACCGCGAGAAGATGACCCAGATCATGTTTGAGAC
CTTCAACACCCCAGCCATGTACGTTGCTATCCAGGCTGTGCTATCCCTGTACGCCTCTGGCCGTACCACTGGCAT
CGTGATGGACTCCGGTGACGGGGTCACCCACACTGTGCCCATCTACGAGGGGTATGCCCTCCCCCATGCCATCCT
GCGTCTGGACCTGGCTGGCCGGGACCTGACTGACTACCTCATGAAGATCCTCACCGAGCGCGGCTACAGCTTCAC
CACCACGGCCGAGCGGGAAATCGTGCGTGACATTAAGGAGAAGCTGTGCTACGTCGCCCTGGACTTCGAGCAAGA
GATGGCCACGGCTGCTTCCAGCTCCTCCCTGGAGAAGAGCTACGAGCTGCCTGACGGCCAGGTCATCACCATTGG
CAATGAGCGGTTCCGCTGCCCTGAGGCACTCTTCCAGCCTTCCTTCCTGGGCATGGAGTCCTGTGGCATCCACGA
AACTACCTTCAACTCCATCATGAAGTGTGACGTGGACATCCGCAAAGACCTGTACGCCAACACAGTGCTGTCTGG
CGGCACCACCATGTACCCTGGCATTGCCGACAGGATGCAGAAGGAGATCACTGCCCTGGCACCCAGCACAATGAA
GATCAAGATCATTGCTCCTCCTGAGCGCAAGTACTCCGTGTGGATCGGCGGCTCCATCCTGGCCTCGCTGTCCAC
CTTCCAGCAGATGTGGATCAGCAAGCAGGAGTATGACGAGTCCGGCCCCTCCATCGTCCACCGCAAATGCTTCTAG
GGCGGACTATGACTTAGTTGCGTTACACCCTTTCTTGACAAAACCTAACTTGCGCAGAAAACAAGATGAGATTGG
CATGGCTTTATTTGTTTTTTTTGTTTTGTTTTGGTTTTTTTTTTTTTTTTGGCTTGACTCAGGATTTAAAAACTG
GAACGGTGAAGGTGACAGCAGTCGGTTGGAGCGAGCATCCCCCAAAGTTCACAATGTGGCCGAGGACTTTGATTG
CACATTGTTGTTTTTTTAATAGTCATTCCAAATATGAGATGCGTTGTTACAGGAAGTCCCTTGCCATCCTAAAAG
CCACCCCACTTCTCTCTAAGGAGAATGGCCCAGTCCTCTCCCAAGTCCACACAGGGGAGGTGATAGCATTGCTTT
CGTGTAAATTATGTAATGCAAAATTTTTTTAATCTTCGCCTTAATACTTTTTTATTTTGTTTTATTTTGAATGAT
GAGCCTTCGTGCCCCCCCTTCCCCCTTTTTTGTCCCCCAACTTGAGATGTATGAAGGCTTTTGGTCTCCCTGGGA
GTGGGTGGAGGCAGCCAGGGCTTACCTGTACACTGACTTGAGACCAGTTGAATAAAAGTGCACACCTTA

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FIGURE 4188

GCGGAGGGTGCGTGCGGGCCGCGGCAGCCGAACAAAGGAGCAGGGGCGCCGCCGCAGGGACCCGCCACCCACCTC
CCGGGGCCGCGCAGCGGCCTCTCGTCTACTGCCACCATGACCGCCAACGGCACAGCCGAGGCGGTGCAGATCCAG
TTCGGCCTCATCAACTGCGGCAACAAGTACCTGACGGCCGAGGCGTTCGGGTTCAAGGTGAACGCGTCCGCCAGC
AGCCTGAAGAAGAAGCAGATCTGGACGCTGGAGCAGCCCCCTGACGAGGCGGGCAGCGCGGCCGTGTGCCTGCGC
AGCCACCTGGGCCGCTACCTGGCGGCGGACAAGGACGGCAACGTGACCTGCGAGCGCGAGGTGCCCGGTCCCGAC
TGCCGTTTCCTCATCGTGGCGCACGACGACGGTCGCTGGTCGCTGCAGTCCGAGGCGCACCGGCGCTACTTCGGC
GGCACCGAGGACCGCCTGTCCTGCTTCGCGCAGACGGTGTCCCCCGCCGAGAAGTGGAGCGTGCACATCGCCATG
CACCCTCAGGTCAACATCTACAGCGTCACCCGTAAGCGCTACGCGCACCTGAGCGCGCGGCCGGCCGACGAGATC
GCCGTGGACCGCGACGTGCCCTGGGGCGTCGACTCGCTCATCACCCTCGCCTTCCAGGACCAGCGCTACAGCGTG
CAGACCGCCGACCACCGCTTCCTGCGCCACGACGGGCGCCTGGTGGCGCGCCCCGAGCCGGCCACTGGCTACACG
CTGGAGTTCCGCTCCGGCAAGGTGGCCTTCCGCGACTGCGAGGGCCGTTACCTGGCGCCGTCGGGGCCCAGCGGC
ACGCTCAAGGCGGGCAAGGCCACCAAGGTGGGCAAGGACGAGCTCTTTGCTCTGGAGCAGAGCTGCGCCCAGGTC
GTGCTGCAGGCGGCCAACGAGAGGAACGTGTCCACGCGCCAGGGTATGGACCTGTCTGCCAATCAGGACGAGGAG
ACCGACCAGGAGACCTTCCAGCTGGAGATCGACCGCGACACCAAAAAGTGTGCCTTCCGTACCCACACGGGCAAG
TACTGGACGCTGACGGCCACCGGGGGCGTGCAGTCCACCGCCTCCAGCAAGAATGCCAGCTGCTACTTTGACATC
GAGTGGCGTGACCGGCGCATCACACTGAGGGCGTCCAATGGCAAGTTTGTGACCTCCAAGAAGAATGGGCAGCTG
GCCGCCTCGGTGGAGACAGCAGGGGACTCAGAGCTCTTCCTCATGAAGCTCATCAACCGCCCCATCATCGTGTTC
CGCGGGGAGCATGGCTTCATCGGCTGCCGCAAGGTCACGGGCACCCTGGACGCCAACCGCTCCAGCTATGACGTC
TTCCAGCTGGAGTTCAACGATGGCGCCTACAACATCAAAGACTCCACAGGCAAATACTGGACGGTGGGCAGTGAC
TCCGCGGTCACCAGCAGCGGCGACACTCCTGTGGACTTCTTCTTCGAGTTCTGCGACTATAACAAGGTGGCCATC
AAGGTGGGCGGGCGCTACCTGAAGGGCGACCACGCAGGCGTCCTGAAGGCCTCGGCGGAAACCGTGGACCCCGCC
TCGCTCTGGGAGTACTAGGGCCGGCCCGTCCTTCCCCGCCCCTGCCCACATGGCGGCTCCTGCCAACCCTCCCTG
CTAACCCCTTCTCCGCCAGGTGGGCTCCAGGGCGGGAGGCAAGCCCCCTTGCCTTTCAAACTGGAAACCCCAGAG
AAAACGGTGCCCCCACCTGTCGCCCCTATGGACTCCCCACTCTCCCCTCCGCCCGGGTTCCCTACTCCCCTCGGG
TCAGCGGCTGCGGCCTGGCCCTGGGAGGGATTTCAGATGCCCCTGCCCTCTTGTCTGCCACGGGGCGAGTCTGGC
ACCTCTTTCTTCTGACCTCAGACGGCTCTGAGCCTTATTTCTCTGGAAGCGGCTAAGGGACGGTTGGGGGCTGGG
AGCCCTGGGCGTGTAGTGTAACTGGAATCTTTTGCCTCTCCCAGCCACCTCCTCCCAGCCCCCCAGGAGAGCTGG
GCACATGTCCCAAGCCTGTCAGTGGCCCTCCCTGGTGCACTGTCCCCGAAACCCCTGCTTGGGAAGGGAAGCTGT
CGGGTGGGCTAGGACTGACCCTTGTGGTGTTTTTTTGGGTGGTGGCTGGAAACAGCCCCTCTCCCACGTGGCAGA
GGCTCAGCCTGGCTCCCTTCCCTGGAGCGGCAGGGCGTGACGGCCACAGGGTCTGCCCGCTGCACGTTCTGCCAA
GGTGGTGGTGGCGGGCGGGTAGGGGTGTGGGGGCCGTCTTCCTCCTGTCTCTTTCCTTTCACCCTAGCCTGACTG
GAAGCAGAAAATGACCAAATCAGTATTTTTTTTAATGAAATATTATTGCTGGAGGCGTCCCAGGCAAGCCTGGCT
GTAGTAGCGAGTGATCTGGCGGGGGGCGTCTCAGCACCCTCCCCAGGGGGTGCATCTCAGCCCCCTCTTTCCGTC
CTTCCCGTCCAGCCCCAGCCCTGGGCCTGGGCTGCCGACACCTGGGCCAGAGCCCCTGCTGTGATTGGTGCTCCC
TGGGCCTCCCGGGTGGATGAAGCCAGGCGTCGCCCCCTCCGGGAGCCCTGGGGTGAGCCGCCGGGGCCCCCCTGC
TGCCAGCCTCCCCCGTCCCCAACATGCATCTCACTCTGGGTGTCTTGGTCTTTTATTTTTTGTAAGTGTCATTTG
TATAACTCTAAACGCCCATGATAGTAGCTTCAAACTGGAAATAGCGAAATAAAATAACTCAGTCTGC

FIGURE 4189

AGTCGGGAGGGGGCGCTGTGCGCAGGCGCGAGGTGACGCCGCGGCAGGGCCGGAAGGAGTGCAGCGGCTGCCACG
GAGCTCGCAGCTGCGGCTTCTGAGGAGTAAGCGGCGCGGTAGCGAAGGCCGCCGAACCTGCCTGGCTAGCCGGCG
ACTTGATTTTCAGTTCTTTTGAAACAGATGGTCACCATGTTTAGATATTAGCAGTCCCATATATGCATGTCTGCA
TTTGAAAATGGAAGAGGGAAACAACAATGAAGAGGTAATTCACTTGAACAACTTTCACTGCCATCGGGGACAAGT
TGCCTAAAATAGACTTTTTTGACTATTCTAAATTGACCCCTCTTGACCAGCGCTGCTTCATCCAAGCTGCTGACC
TCCTCATGGCCGACTTCAAAGTGCTCAGTAGTCAGGACATCAAGTGGGCCCTGCACGAGCTCAAAGGACACTATG
CAATCACCCGAAAGGCCTTGTCTGATGCCATTAAAAAATGGCAGGAGCTGTCACCAGAAACCAGTGGAAAAAGGA
AGAAGAGAAAACAAATGAACCAGTATTCTTACATTGATTTCAAGTTTGAACAAGGTGACATAAAAATAGAAAAGA
GGATGTTCTTTCTTGAAAATAAGCGACGACATTGTAGGTCCTATGACCGACGTGCTCTCCTTCCAGCTGTGCAAC
AAGAGCAGGAGTTCTATGAGCAGAAAATCAAAGAGATGGCAGAGCATGAAGACTTTTTGCTTGCCCTACAGATGA
ATGAAGAACAGTATCAAAAGGATGGCCAGCTGATTGAGTGTCGCTGCTGCTATGGGGAATTTCCATTCGAGGAGC
TGACGCAGTGCGCAGATGCTCACTTGTTCTGCAAAGAGTGTCTCATCAGATATGCCCAAGAGGCAGTCTTTGGAT
CTGGAAAGTTGGAGCTCAGCTGCATGGAAGGCAGCTGCACGTGTTCGTTCCCAACCAGTGAGCTGGAGAAGGTGC
TCCCCCAGACCATCCTGTATAAGTACTATGAGCGAAAAGCCGAGGAGGAGGTTGCGGCAGCCTACGCCGACGAGC
TTGTCAGGTGCCCGTCCTGTAGCTTTCCGGCTCTGTTGGACAGTGATGTGAAGAGGTTCAGCTGTCCTAATCCTC
ACTGCCGAAAGGAAACCTGTAGGAAGTGTCAGGGACTCTGGAAAGAACATAATGGCCTCACCTGTGAAGAGCTGG
CTGAAAAAGACGACATCAAGTACCGTACCTCTATTGAAGAAAAAATGACTGCTGCCCGCATTAGAAAATGCCACA
AGTGTGGGACTGGCCTCATCAAATCTGAAGGCTGCAACCGCATGTCTTGCCGCTGTGGTGCCCAGATGTGCTACC
TCTGTCGAGTTTCTATTAATGGATATGACCATTTCTGCCAACATCCCCGCTCACCAGGAGCCCCTTGCCAGGAGT
GTTCAAGATGCTCTCTCTGGACCGATCCCACTGAAGATGATGAGAAGCTTATTGAGGAAATCCAGAAGGAGGCTG
AAGAGGAACAGAAAAGAAAGAATGGAGAGAACACCTTCAAACGCATTGGACCCCCGCTGGAGAAGCCTGTGGAGA
AGGTGCAGAGGGTGGAGGCCCTCCCGAGGCCCGTTCCGCAGAACCTGCCACAGCCACAGATGCCACCCTATGCCT
TCGCGCACCCACCCTTCCCCCTGCCTCCCGTGCGGCCTGTGTTCAACAACTTCCCACTCAACATGGGGCCTATCC
CAGCCCCGTACGTGCCCCCTCTGCCCAACGTGCGGGTCAACTATGACTTCGGTCCCATCCACATGCCCCTGGAGC
ACAACCTGCCCATGCACTTTGGCCCCCAGCCGCGGCATCGCTTCTGATGGCCCCGAATCCCCATTGAGCAGCACA
AAGCCCGTTTGGGGTAGGAGTGTGGATGGAGAACCCTCCCCCAAGGCTGGTGTCTGTACCATTGCATCCTAAGTC
AGCTTGAAGGGTAGGCTGGTTTTCTTCCCACCCCTTTCCTAGAAGGGCTACTGCTCCTGGAAGAGTGGACGGATC
CATAATAAAGACGTCCCAAATGGTGGAGTTCGGAGAGAGCTGCGATGTGAACTGCCCCTCCCCTCGCATCCCCCA
GGCCACCAACGGCAGTCCTTCTGCCTTGTCCATGGCATAGGCCATAGACCAGGTCCCTGCTGCTCACACCTGGGC
CTCTCCTCGGAGCCGACCCCTGGGTAGCAAGGCAGCCGAGAGCATCTCCCTGGAGGGGCCCACGGTTGGGCCAAG
GGCAGAGGGGGCTGCACCTGCGGGCCTGGGAAGCATTGCTCAGGGTGGGGGGCTGGGACCATGGCCCGCAGAGGC
ACTGCCACAGCTGTGAGGGCCAAGATGCTGTCCCCCCATCCAAAACCCGTGCGCCACTGCAGTGAGTGTTGAGGG
CACCTCTCCTCCCCTCTTACACCTACTCAGATGAGGCAGCAGCAGACCCATCTCGCGGCGGGGGTTTTGTTCTGT
TGCCGCCTAACTTTCTCATCCTCGGTCTCTGGAAAGTCAGGCTGAGAAATCCTTTCCCAGGCCAGGCCGCTGCGG
TACACTGGATGGTTCTGAAGCTGGCCCATTGAAAGAGCCTCTTAAGGCAGCTGGGACAGAGGCCTGGTGGCCCTG
CTGGGCAGCCCAACTGCTGGGGGAGACGTTTCTGCCACCCTGGGTGATGAGCAGCTTTTCCCCCCTGGCTTTCTG
GGGGAGGAGTGGGCCTCCTTAGGGAGACAGGTGACCCTGGGTGCCACCCCTGCCCCGTGTGTGCCCCGGGTGTTC
TCAGTGGTTGCTGAAGGCAGGTAGAGGGTGCTGTCCAGTATCCCCCATGTGAAGGTCACTTCCCTTCTCATGGAG
TCAGCTGAGCATCAGCTCAGCCCTGCCATGTCCCCACTCACCCTCCTCGCCTCCTGTCCGGCCCTGGGTTTCTAG
CGGTGCCTGAGGCATCACTCTGGCCCATTGACAGATGAGAGGTCTGAAGCCTTCCTGGCCACAGGCATCACTTTC
TCCTCCTCCTCATGCCCTGCCTTGTCCTTGTCGTGTTGCCATGGGGTTCTGAGAGGCTGGGAGTTCACAGACCTC
AGACACAGCTGAGTCCGACAACCATTGGGGTGGGGCTGCATCAGTCTCCGGAGTGGCCCGCCACCTCCTGAAGCA
GGGCCTGGCCCACCCAAGGTGCCTGGGGCAGGCGGGCACCGTCATTCGCTGCCATTGGCTTCTCAGATGTATTTC
AAGGACTAAAGTGGGCTCTAAGATCTAAGATGGCCCGGCGCGGTGGCTCCCGCCTGTAATCCCAGCACTTTGGGA
GGCCGAGGCGGGCGGATGAGTTGAGGTCGGGAGTTTGAGTCCCCGTCTCTACTAAAAATACAAAATTAGCCGGAC
AAGGTGGCGCATGCCTATAATCCCAGGTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCAGAG
GTTGCAGTGAGCCAAGATTGTGCCACTGCACTCCAGCCTGAGCAACAAAAGCAAAACTCTATCTTT

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FIGURE 4190

GTCTCTGGGCGGGCCGTGGGAGGCTCCCGAGGTGGGGGCCGGGGCGGGATGGCTGCAGCGGCGGCCGGGGCCGGG
AGCGGGCCCTGGGCGGCCCAGGAGAAGCAGTTCCCGCCGGCGCTGCTGAGTTTCTTCATCTACAACCCGCGCTTC
GGGCCGCGCGAAGGACAGGAGGAAAATAAGATTTTATTTTATCATCCAAATGAGGTAGAAAAGAATGAGAAGATT
AGAAATGTCGGATTGTGTGAAGCTATTGTACAGTTTACAAGGACATTTAGCCCATCAAAACCTGCAAAATCTTTA
CATACACAGAAGAACAGACAGTTCTTCAATGAACCAGAAGAAAATTTCTGGATGGTCATGGTTGTTCGGAATCCT
ATAATTGAAAAACAGAGTAAAGATGGAAAACCAGTTATTGAATATCAAGAGGAGGAGTTGTTGGACAAGGTTTAT
AGCTCGGTGCTGCGGCAGTGCTACAGCATGTACAAGCTTTTTAATGGTACATTTCTGAAAGCCATGGAAGACGGA
GGCGTCAAGCTTCTGAAAGAAAGATTAGAGAAATTCTTCCATCGGTATTTGCAAACGCTACATTTGCAGTCATGT
GACCTACTTGACATTTTTGGTGGAATCAGCTTCTTCCCGTTGGATAAAATGACTTATTTGAAAATCCAGTCCTTT
ATTAATAGAATGGAGGAAAGCCTGAATATAGTCAAATACACTGCTTTTCTCTATAACGATCAGCTCATCTGGAGT
GGATTAGAACAAGATGACATGAGAATTTTATACAAATACCTTACCACCTCCCTTTTTCCAAGGCACATCGAACCT
GAGTTAGCAGGAAGGGATTCTCCAATAAGAGCAGAAATGCCAGGAAATCTTCAACACTATGGAAGATTTCTTACC
GGACCCTTGAACCTCAATGATCCAGATGCAAAATGCAGATTCCCCAAAATTTTTGTAAATACAGATGACACTTAT
GAAGAGCTCCATTTAATCGTTTATAAGGCCATGAGTGCGGCTGTGTGCTTTATGATCGACGCCTCTGTCCACCCA
ACGTTGGATTTTTGCCGAAGACTGGACAGCATCGTTGGGCCCCAGCTCACAGTGCTGGCCTCTGACATCTGTGAA
CAGTTTAACATCAACAAGAGGATGTCCGGGTCTGAGAAAGAACCCCAGTTTAAGTTTATCTACTTCAACCACATG
AATCTCGCCGAGAAGAGCACAGTTCACATGAGGAAAACGCCCAGCGTGTCGCTCACTTCCGTGCACCCGGATTTA
ATGAAGATTCTCGGTGACATCAACAGTGACTTTACCAGAGTGGATGAAGATGAGGAGATCATTGTGAAGGCCATG
AGTGATTACTGGGTTGTTGGAAAGAAGTCTGATCGGCGGGAGCTCTATGTTATTTTGAATCAAAAAAATGCAAAC
CTGATTGAAGTAAATGAAGAGGTCAAGAAACTTTGTGCAACGCAGTTCAACAACATCTTCTTCTTGGATTGACGG
ATGACGGCTCACCGAGAGCATATCTAAAAAACACTCTGCAAACATTTGGTCACATGCAAGTTAGTGGTCATATGA
CGGACTGCATTCAGGACAAGGGTAAAGCAATACTTGCTTTGAAGAATCACATTTCGACTCGGTCTGCTGATCTGA
GGTTTTTAGATTTTAAATATTTATGTGGAATTAATTAAAGGTAGTTGGCTATATCGCTATCATTTCATTCTTTTG
ACATTATGTGAATATTTTACTGGAAAATAAGACTAATAAATTGTTAAAAGTTTTTAAAATTCTGGTTTGGTGTTG
AGTCTCTCTCCTGCTGCCTATTTATAGATTACACTGGCCACCAGCTCCGTGACCCAGGCTGGAATGCAATGGCTC
ACTGCAGCCTCAACCTCCTGAGCTCAAGCAATCCTCCCACCTCAGCCTCCCAAGAAGCTAGAACCACATGTACAC
ACCACCACGGTCGGCTGATGTTTTAATTTTGCAGAGATGGGGGGGTCTCACTATGTTGCCCAGGCTGGTCTCGAA
CTCCCGTAATCCAGCCATGTAGGAAACCTGAGATGCAGTGGGCCAAGGGGTATGTTAAAACACTGTGACGAGTTC
AGTGCTAAGAACTGTAATGCTCAGGAAATCTTACAGCACGTGCCATCCTAAGCCTGTGTGTGTGTCCTCGTGTCT
CTCTACTTTTTCTTCTTCTTGCTGGTGATGGTCTTGCTGGATGGGGACACGGTCACATCCTCCTTGGGAGGGTCC
AGTATGAGGTGAGAGGATGACACGTCTGCCGGCTCCTTGAGCACTGTGATGTCCACCTCATAGTCATGTCTCTTG
GCCTCTTCCTCTCTCAAGATGAAGATGTTCAGCCT

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FIGURE 4191

CGAGGCGGATCGGGTGTTGCATCCATGGAGCGAGCTGAGAGCTCGAGTACAGAACCTGCTAAGGCCATCAAACCT
ATTGATCGGAAGTCAGTCCATCAGATTTGCTCTGGGCAGGTGGTACTGAGTCTAAGCACTGCGGTAAAGGAGTTA
GTAGAAAACAGTCTGGATGCTGGTGCCACTAATATTGATCTAAAGCTTAAGGACTATGGAGTGGATCTTATTGAA
GTTTCAGACAATGGATGTGGGGTAGAAGAAGAAAACTTCGAAGGCTTAACTCTGAAACATCACACATCTAAGATT
CAAGAGTTTGCCGACCTAACTCAGGTTGAAACTTTTGGCTTTCGGGGGGAAGCTCTGAGCTCACTTTGTGCACTG
AGCGATGTCACCATTTCTACCTGCCACGCATCGGCGAAGGTTGGAACTCGACTGATGTTTGATCACAATGGGAAA
ATTATCCAGAAAACCCCCTACCCCCGCCCCAGAGGGACCACAGTCAGCGTGCAGCAGTTATTTTCCACACTACCT
GTGCGCCATAAGGAATTTCAAAGGAATATTAAGAAGGAGTATGCCAAAATGGTCCAGGTCTTACATGCATACTGT
ATCATTTCAGCAGGCATCCGTGTAAGTTGCACCAATCAGCTTGGACAAGGAAAACGACAGCCTGTGGTATGCACA
GGTGGAAGCCCCAGCATAAAGGAAAATATCGGCTCTGTGTTTGGGCAGAAGCAGTTGCAAAGCCTCATTCCTTTT
GTTCAGCTGCCCCCTAGTGACTCCGTGTGTGAAGAGTACGGTTTGAGCTGTTCCGATGCTCTGCATAATCTTTTT
TACATCTCAGGTTTCATTTCACAATGCACGCATGGAGTTGGAAGGAGTTCAACAGACAGACAGTTTTTCTTTATC
AACCGGCGGCCTTGTGACCCAGCAAAGGTCTGCAGACTCGTGAATGAGGTCTACCACATGTATAATCGACACCAG
TATCCATTTGTTGTTCTTAACATTTCTGTTGATTCAGAATGCGTTGATATCAATGTTACTCCAGATAAAAGGCAA
ATTTTGCTACAAGAGGAAAAGCTTTTGTTGGCAGTTTTAAAGACCTCTTTGATAGGAATGTTTGATAGTGATGTC
AACAAGCTAAATGTCAGTCAGCAGCCACTGCTGGATGTTGAAGGTAACTTAATAAAAATGCATGCAGCGGATTTG
GAAAAGCCCATGGTAGAAAAGCAGGATCAATCCCCTTCATTAAGGACTGGAGAAGAAAAAAAAGACGTGTCCATT
TCCAGACTGCGAGAGGCCTTTTCTCTTCGTCACACAACAGAGAACAAGCCTCACAGCCCAAAGACTCCAGAACCA
AGAAGGAGCCCTCTAGGACAGAAAAGGGGTATGCTGTCTTCTAGCACTTCAGGTGCCATCTCTGACAAAGGCGTC
CTGAGACCTCAGAAAGAGGCAGTGAGTTCCAGTCACGGACCCAGTGACCCTACGGACAGAGCGGAGGTGGAGAAG
GACTCGGGGCACGGCAGCACTTCCGTGGATTCTGAGGGGTTCAGCATCCCAGACACGGGCAGTCACTGCAGCAGC
GAGTATGCGGCCAGCTCCCCAGGGGACAGGGGCTCGCAGGAACATGTGGACTCTCAGGAGAAAGCGCCTAAAACT
GACGACTCTTTTTCAGATGTGGACTGCCATTCAAACCAGGAAGATACCGGATGTAAATTTCGAGTTTTGCCTCAG
CCAACTAATCTCGCAACCCCAAACACAAAGCGTTTTAAAAAAGAAGAAATTCTTTCCAGTTCTGACATTTGTCAA
AAGTTAGTAAATACTCAGGACATGTCAGCCTCTCAGGTTGATGTAGCTGTGAAAATTAATAAGAAAGTTGTGCCC
CTGGACTTTTCTATGAGTTCTTTAGCTAAACGAATAAAGCAGTTACATCATGAAGCACAGCAAAGTGAAGGGGAA
CAGAATTACAGGAAGTTTAGGGCAAAGATTTGTCCTGGAGAAAATCAAGCAGCCGAAGATGAACTAAGAAAAGAG
ATAAGGTAAAACGATGTTTGCAGAAATGGAAATCATTGGTCAGTTTAACCTGGGATTTATAATAACCAAACTGAA
TGAGGATATCTTCATAGTGGACCAGCATGCCACGGACGAGAAGTATAACTTCGAGATGCTGCAGCAGCACACCGT
GCTCCAGGGGCAGAGGCTCATAGCACCTCAGACTCTCAACTTAACTGCTGTTAATGAAGCTGTTCTGATAGAAAA
TCTGGAAATATTTAGAAAGAATGGCTTTGATTTTGTTATCGATGAAAATGCTCCAGTCACTGAAAGGGCTAAACT
GATTTCCTTGCCAACTAGTAAAAACTGGACCTTCGGACCCCAGGACGTCGATGAACTGATCTTCATGCTGAGCGA
CAGCCCTGGGGTCATGTGCCGGCCTTCCCGAGTCAAGCAGATGTTTGCCTCCAGAGCCTGCCGGAAGTCGGTGAT
GATTGGGACTGCTCTTAACACAAGCGAGATGAAGAAACTGATCACCCACATGGGGGAGATGGACCACCCCTGGAA
CTGTCCCCATGGAAGGCCAACCATGAGACACATCGCCAACCTGGGTGTCATTTCTCAGAACTGACCGTAGTCACT
GTATGGAATAATTGGTTTTATCGCAGATTTTTATGTTTTGAAAGACAGAGTCTTCACTAACCTTTTTTGTTTTAA
AATGAACCTGCTACTTAAAAAAAATACACATCACACCCATTTAAAAGTGATCTTGAGAACCTTTTCAAACC

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FIGURE 4192

CCGAACGCCCGCAGCAGGGTCAGAAGGGAGGTGGCCGGTCTCCGTCGTGACCTCTGACGGTTTCTGAGCGTTGGC
CTTTGGCACGCGCTACCCCCTTTTGCTTTGGTTCTGCCATGCCGATGTACCAGGTAAAGCCCTATCACGGGGGCG
GCGCGCCTCTCCGTGTGGAGCTTCCCACCTGCATGTACCGGCTCCCCAACGTGCACGGCAGGAGCTACGGCCCAG
CGCCGGGCGCTGGCCACGTGCAGGAAGAGTCTAACCTGTCTCTGCAAGCTCTTGAGTCCCGCCAAGATGATATTT
TAAAACGTCTGTATGAGTTGAAAGCTGCAGTTGATGGCCTCTCCAAGATGATTCAAACACCAGATGCAGACTTGG
ATGTAACCAACATAATCCAAGCGGATGAGCCCACGACTTTAACCACCAATGCGCTGGACTTGAATTCAGTGCTTG
GGAAGGATTACGGGGCGCTGAAAGACATCGTGATCAACGCAAACCCGGCCTCCCCTCCCCTCTCCCTGCTTGTGC
TGCACAGGCTGCTCTGTGAGCACTTCAGGGTCCTGTCCACGGTGCACACGCACTCCTCGGTCAAGAGCGTGCCTG
AAAACCTTCTCAAGTGCTTTGGAGAACAGAATAAAAAACAGCCCCGCCAAGACTATCAGCTGGGATTCACTTTAA
TTTGGAAGAATGTGCCGAAGACGCAGATGAAATTCAGCATCCAGACGATGTGCCCCATCGAAGGCGAAGGGAACA
TTGCACGTTTCTTGTTCTCTCTGTTTGGCCAGAAGCATAATGCTGTCAACGCAACCCTTATAGATAGCTGGGTAG
ATATTGCGATTTTTCAGTTAAAAGAGGGAAGCAGTAAAGAAAAAGCCGCTGTTTTCCGCTCCATGAACTCTGCTC
TTGGGAAGAGCCCTTGGCTCGCTGGGAATGAACTCACCGTAGCAGACGTGGTGCTGTGGTCTGTACTCCAGCAGA
TCGGAGGCTGCAGTGTGACAGTGCCAGCCAATGTGCAGAGGTGGATGAGGTCTTGTGAAAACCTGGCTCCTTTTA
ACACGGCCCTCAAGCTCCTTAAGTGAATTGCCGTAACTGATTTTAAAGGGTTTAGATTTTAAGAATGGTGCTCTT
TCATGCCTATTATCAGTAAGGGGACTTGTATTAGAGTCAGAGTCTTTTTATTTAGGCCAGTTGTCAAGTGTCAAT
AAAAGCATCATGTAATTTA

FIGURE 4193A

GTTACTTCCGGGTCGGACGGCGCTAGCTGCAGCATCGGAGTGTGGCAGTGCTGGGCTGGCCGGCGGGCTGGGCTG
CGGCCCGCGCGCGGCCGGCGATGCAGGGGGGCAACTCCGGGGTCCGCAAGCGCGAAGAGGAGGGCGACGGGGCTG
GGGCTGTGGCTGCGCCGCCGGCCATCGACTTTCCCGCCGAGGGCCCGGACCCCGAATATGACGAATCTGATGTTC
CAGCAGAAATCCAGGTGTTAAAAGAACCCCTACAACAGCCAACCTTCCCTTTTGCAGTTGCAAACCAACTCTTGC
TGGTTTCTTTGCTGGAGCACTTGAGCCACGTGCATGAACCAAACCCACTTCGTTCAAGACAGGTGTTTAAGCTAC
TTTGCCAGACGTTTATCAAAATGGGGCTGCTGTCTTCTTTCACTTGTAGTGACGAGTTTAGCTCATTGAGACTAC
ATCACAACAGAGCTATTACTCACTTAATGAGGTCTGCTAAAGAGAGAGTTCGTCAGGATCCTTGTGAGGATATTT
CTCGTATCCAGAAAATCAGATCAAGGGAAGTAGCCTTGGAAGCACAAACTTCACGTTACTTAAATGAATTTGAAG
AACTTGCCATCTTAGGAAAAGGTGGATACGGAAGAGTATACAAGGTCAGGAATAAATTAGATGGTCAGTATTATG
CAATAAAAAAAATCCTGATTAAGGGTGCAACTAAAACAGTTTGCATGAAGGTCCTACGGGAAGTGAAGGTGCTGG
CAGGTCTTCAGCACCCCAATATTGTTGGCTATCACACCGCGTGGATAGAACATGTTCATGTGATTCAGCCACGAG
CAGACAGAGCTGCCATTGAGTTGCCATCTCTGGAAGTGCTCTCCGACCAGGAAGAGGACAGAGAGCAATGTGGTG
TTAAAAATGATGAAAGTAGCAGCTCATCCATTATCTTTGCTGAGCCCACCCCAGAAAAAGAAAAACGCTTTGGAG
AATCTGACACTGAAAATCAGAATAACAAGTCGGTGAAGTACACCACCAATTTAGTCATAAGAGAATCTGGTGAAC
TTGAGTCGACCCTGGAGCTCCAGGAAAATGGCTTGGCTGGTTTGTCTGCCAGTTCAATTGTGGAACAGCAGCTGC
CACTCAGGCGTAATTCCCACCTAGAGGAGAGTTTCACATCCACCGAAGAATCTTCCGAAGAAAATGTCAACTTTT
TGGGTCAGACAGAGGCACAGTACCACCTGATGCTGCACATCCAGATGCAGCTGTGTGAGCTCTCGCTGTGGGATT
GGATAGTCGAGAGAAACAAGCGGGGCCGGGAGTATGTGGACGAGTCTGCCTGTCCTTATGTTATGGCCAATGTTG
CAACAAAAATTTTTCAAGAATTGGTAGAAGGTGTGTTTTACATACATAACATGGGAATTGTGCACCGAGATCTGA
AGCCAAGAAATATTTTTCTTCATGGCCCTGATCAGCAAGTAAAAATAGGAGACTTTGGTCTGGCCTGCACAGACA
TCCTACAGAAGAACACAGACTGGACCAACAGAAACGGGAAGAGAACACCAACACATACGTCCAGAGTGGGTACTT
GTCTGTACGCTTCACCCGAACAGTTGGAAGGATCTGAGTATGATGCCAAGTCAGATATGTACAGCTTGGGTGTGG
TCCTGCTAGAGCTCTTTCAGCCGTTTGGAACAGAAATGGAGCGAGCAGAAGTTCTAACAGGTTTAAGAACTGGTC
AGTTGCCGGAATCCCTCCGTAAAAGGTGTCCAGTGCAAGCCAAGTATATCCAGCACTTAACGAGAAGGAACTCAT
CGCAGAGACCATCTGCCATTCAGCTGCTGCAGAGTGAACTTTTCCAAAATTCTGGAAATGTTAACCTCACCCTAC
AGATGAAGATAATAGAGCAAGAAAAAGAAATTGCAGAACTAAAGAAGCAGCTAAACCTCCTTTCTCAAGACAAAG
GGGTGAGGGATGACGGAAAGGATGGGGGCGTGGGATGAAAGTGGACTTAACTTTTAAGGTAGTTAACTGGAATGT
AAATTTTTAATCTTTATTAGGGTATAGTTGGTACAATGCTTCGTTGTATTTAGTAAGCCTTTACAAGACTTGTTA
AAGATGTCAGAGTGCCCCAAGCTGCCGTTCCTTCCCTTCCTGCCCCACAAGCTCCTTTTCCTGAATTTCCTACCT
AAATATTAACCATATGCCTAGTCTCTGAAACTAAAAACTTGGACCTCATCCTCAATTATTTTCTCCTTTCAACTC
TGTTGACCCTCTGTCTGGTCTTCCTCTAGAAGGTACCGCAGAAATTGATGTGTGCTCCCTGCCCTCGTCACTGCC
CAAGCCCGGGCCTGCACATACTCACTGGACTGTTCCAGTTTTGACAGCTGCCAGTCTTCCTGCCCCTTTCACACT
GCAGCTGAAGTTCATTACCTGAAGGACGCCTCATCATTTCATTCCTTGGCTCCAAACCTTCTGCTGCCTCTAAGA
TAAAAGCTCAACTTCTTAACAGTGTACAGTGTGCAACTTCCAACCTTTTTATCTGTTCTCTCCACCTTCAGTTTA
GCGTCATTCCAAAACCACACCCTTGCAAAGCTTTGTACTCCGCACCCCAGATGATCTCCAGGCAGCTCAGATCTC
TTTCCTGCCTTTGCCCTGCACTGTTCCCCGGTACTTCCTCCTTTATTGTAGCACTCAGCTCCCCAGCCAATCTGT
ACATCCCTCAGAGGCAGCGATCTGATGAATTGGTTTTTGAATCCCAGAAAGGGTCTGCCATGGAGTTGGCAGTCA
TCACGGTAGATGGCGTATGATTTTGCTGAATTTTAAATAAAATGAAAACCATAAATTACATGATGCTTTTATTGA
CACTTGACAACTGGCCTAAATAAAAAGACTCTGACTCTAATACAAGTCCCCTTACTGATAATAGGCATGAAAGAG
CACCATTCTTAAAATCTAAACCCTTTAAAATCAGTTACGGCAATTCACTTAAGGAGCTTGAGGGCCGTGTTAAAA
GGAGCCAGGTTTTCACAAGACCTCATCCACCTCTGCACATTGGCTGGCACTGTCACACTGCAGCCTCCGATCTGC
TGGAGTACAGACCACAGCACCACGTCTGCTACGGTGAGTTCATTCCCAGCGAGCCAAGGGCTCTTCCCAAGAGCA
GAGTTCATGGAGCGGAAAACAGCGGCTTTTTCTTTACTGCTTCCCTCTTTTAACTGAAAAATCGCAATATCTACC
CAGCTATCTATAAGGGTTGCGTTGACAGCATTATGCTTCTGGCCAAACAGAGAGAACAAGAAACGTGCAATGTTC
CCTTCGCCTTCGATGGGGCACATCGTCTGGATGCTGAATTTCATCTGCGTCTTCGGCACTGAAAAGAAAAAACAC
GCCAGGTAGCATCACCAGAGCAGCCCTGAGGGAAGTACTCGCACAGTGGGGAAGGGGACAGTCACCAAACACCAC
AGACTGATGACATGGGAAAGGGTGTTTTCAAGAAGAACATCACATTTTCAGTCTGTCTCTAAGATGCTTACTACT
GAAAAGGGTTTAAGTGCAAACTATGTTAAAAAAGTAACCAAAGAGTCATTCCTGGTATTTGATTATGACACTTCT

FIGURE 4193B

GAAGCTAGAAGGGACCTCAGACCACCTGCTCCAATCCCTGCTGCCTAAGGTTTTGGGGGCTGAGGGCTGGAAACC
CAGGAGCTGCATCTCCCAGGCTCTTGGCCTCATAATCGCCTTCTGTGAGACTGAGGGCAATTAAGATATGAATGA
CATGAACTCGCTTATCTCCATATCAACATAAACCAGAAGAGGCATACATCTGTGGGATAGTCAATACATAACATC
CTATCTTTATATGGCCATATGAGAAGATAACTTCAGTGTCCCTATGATGGTAAGTTCTTGAATGTGAGGGCAAGA
TGGCTGTGATAGCCATGACTCCCCGCTTTGCCTGGTTGGACAGAACCCCCTTCCCCAAATGCTCACAGTCCCCCC
CTTGAGCTGTGTCTCACTCAGAGACCCTAAATTTTGCAGACGAACAAGGGCATCTTTGCGTTGCTTCATCTCTGC
TCCTCCTCTAGAACTATCCCACAGGCTTTCTAGACTTAGAATATCTGACCTGATGCAAATCGCTATGTGGCCAGT
ATGCCACAGAATGTCCTAAACCCTTGCTGCCTCTTATCAAAACCATGTTGCACATCTCATCATATAGTACAGCTA
ACCCTTGAACAGTGGGGGGGTTAGGGACACTGACCCCCGACTGCTGTGCAGTCGAAAATCCACATAAAACTTCTG
ACTCCTTCAAAACTTAAGCACTAATAGCCTACTATTCATGGGAAGCCTTACCCATCACAGTTGATTAACACGTTT
TGTATGGTCTGTATATTATATGCTATATTCTTACAATAAACTTGAGAAAATGTTAAGAAAAT

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FIGURE 4194

CGGCCAGGCTGGTACAGGCGGCTGCTCGCGGAGGCACTTCTCCGAGCGTGACGTGCGGACTCCGCTCCACTGCGG
CCCGCCCGCCCGCCGGTCTAGCCGCCGCCTCCTTCGCTCCCTGAGCACGCCAGGCGAGGGTCAGCTGCCGGGGCG
ACGCGGCGCGGAGAGGGCGGGCGGGGGGGCTGTGGGAGCGCCGGTCTCTATATGGCGGCGGCTCTGTCGGGCCTG
GCTGTCCGGCTCTCGCGCTCGGCCGCCGCCCGCTCCTATGGGGTCTTCTGCAAGGGGCTGACTCGCACGCTGCTC
ATCTTCTTCGACCTGGCCTGGCGGCTGCGTATCAACTTCCCCTACCTCTACATCGTGGCTTCCATGATGCTCAAC
GTCCGCCTGCAGGTTCATATTGAGATCCATTGAAGGCCCTCCCAGACTGACGAAGGCGTGACCTCAGGCCCACCG
CATCCAAGAACACGAAGCATGAGGGACAGAAGAGGGCCCCTCGGCACCTGCCTGGCACAAGTGCAGCAGGCCGGA
GGAGGTGACTCGGACAAACTATCATGCAGCCTTAAGAAAAGAATGCCGGAGGGCCCTTGGCCTGCAGATGCACCC
TCCTGGATGAATAAGCCTGTGGTTGATGGAAATTCACAAAGTGAGGCATTATCACTGGAAATGAGAAAGGATCCG
AGCGGGGCTGGCCTCTGGCTTCACAGTGGCGGCCCAGTGCTTCCATATGTGAGAGAATCAGTAAGAAGAAATCCA
GCCTCAGCAGCCACTCCGAGCACAGCCGTGGGTTTGTTCCCTGCTCCAACAGAGTGTTTTGCTCGGGTGTCCTGC
AGTGGTGTTGAAGCTCTGGGGCGGCGAGACTGGCTGGGAGGAGGGCCCAGGGCCACTGACGGCCACAGAGGACAG
TGCCCCAAAGGAGAGCCTCGGGTGTCACGACTGCCACGCCATCAAAAAGTGCCGGAAATGGGAAGTTTTCAGGAT
GACCCACCAAGTGCTTTTCCCAAGGGTCTGGGCTCTGAGTTGGAACCCGCTTGCCTGCACTCCATCCTGTCTGCA
ACGCTGCACGTGTATCCCGAAGTGCTCCTGAGTGAGGAGACAAAACGCATTTTCCTTGACCGTTTAAAGCCCATG
TTTTCAAAGCAAACAATAGAATTCAAGAAAATGCTTAAAAGCACCTCAGATGGTCTGCAGATAACACTGGGGTTA
CTGGCTCTGCAACCTTTTGAATTAGCAAATACATTATGCCATAGTTAAGGTACAAGCAGAACAATACCAATAGAT
TAATTTTAAGAGTTGTCTTAGAATGATTTCTTTCGCATTAAGTCTGGATGCAAACTGTGCAGCCCTTAGGTTCCT
GCTGTAGTTTTGTACGACCTGGCAGACTTAAAGTAAATTGAGTTTAAATTCAAAGCCAGTTGATGCGGAAGGAAC
TTTTTTGGCATGTGTTAAATTGTGCTTTAAAAGACATATAAAGAATTGGGAAACATTTCAGGAGACGATCATAGC
CTGTATAAATACCAGATTAGAACATACGGATTTACCATGAAGTTCTGTCTTCAACATCCATTCTAAAGGGCTACT
GTCCCAAATCCTGTGTGTCCTTTTGACTTGTCTGATCACCCAATGGAAGTGGATACTTGTAAAGTCTACACCACT
GTACTTGGCGTTAAATCTTGCTGAATTCGTGGTAAGCTGTTACCATGTCTACATTTTGTAGAATGATTTTGGTCT
GCAGCAAAATTCGATTTCACTTCTCATACCCCTTTCCTTCCACTTGAAATGCAATTTAGACAGAGGCCCTGTGGT
GAAAGTTGCAATATTAAGTTTACCTTTAGAAGATCCCTTCTCAAACTCAGAACCCTAGCAGTGTTACCTTAAACA
AAAATGAGCTCGAGAAAAAAGTAGCTCAGTTACAGAGAAGCAAATCGAGTTATTTCCCACATAAAAAGTTTCCCA
GATTCTAAGAATTGCAGTATCCTGTACCCTAAAATTTTTCAAGGTGACTCCTGTTGTCGTCTGTTGATAACTTTA
ATAAAGGTCATTTAAGGACATAAGTTTTTAAAGACTCCCAAAGTGAAACTTAAACATTTTCGGGATTATCGATTG
CATATATCAGTTTATGCTGTGTGCTGAATTACTATGCCATGTGCTATTTTAGTGTTTGGGGAAAATGAAAAATAA
AATTTGTTCTTTAGCTT

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FIGURE 4195

CTGCCGGGCATCGGCTTCCCGTCCGCCGCGCCCCGAGCCCGCCGCTTCCTATCTCAGCGCCCTGCCGCCGCCGCC
GCGGCCCAGCGAGCGGCCCTG**ATG**CAGGCCATCAAGTGTGTGGTGGTGGGAGACGGAGCTGTAGGTAAAACTTGC
CTACTGATCAGTTACACAACCAATGCATTTCCTGGAGAATATATCCCTACTGTCTTTGACAATTATTCTGCCAAT
GTTATGGTAGATGGAAAACCGGTGAATCTGGGCTTATGGGATACAGCTGGACAAGAAGATTATGACAGATTACGC
CCCCTATCCTATCCGCAAACAGATGTGTTCTTAATTTGCTTTTCCCTTGTGAGTCCTGCATCATTTGAAAATGTC
CGTGCAAAGTGGTATCCTGAGGTGCGGCACCACTGTCCCAACACTCCCATCATCCTAGTGGGAACTAAACTTGAT
CTTAGGGATGATAAAGACACGATCGAGAAACTGAAGGAGAAGAAGCTGACTCCCATCACCTATCCGCAGGGTCTA
GCCATGGCTAAGGAGATTGGTGCTGTAAAATACCTGGAGTGCTCGGCGCTCACACAGCGAGGCCTCAAGACAGTG
TTTGACGAAGCGATCCGAGCAGTCCTCTGCCCGCCTCCCGTGAAGAAGAGGAAGAGAAAATGCCTGCTGTTG**TAA**

ATGTCTCAGCCCCTCGTTCTTGGTCCTGTCCCTTGGAACCTTTGTACGCTTTGCTCAAAAAAAAACAAAAAAAAA
AAACAAAAAAA

FIGURE 4196

GCGTTTGCGCTTGAGCGCCGATAATTTGGTGGCGGCGTCCGGAGGGTGCTGGTTTGTTCTCGGTGAACGGCGCGC
GGGGTCTCTCCTGAGTGCGAGCTACGGGACCTTCGCCATGCCGGGGATGGTACTCTTCGGCCGGCGCTGGGCCAT
CGCCAGCGACGACTTGGTCTTCCCAGGGTTCTTCGAGCTGGTCGTGCGAGTGCTGTGGTGGATTGGCATTCTGAC
GTTGTATCTCATGCACAGAGGAAAGCTGGACTGTGCTGGTGGAGCCTTGCTCAGCAGTTACTTGATCGTCCTCAT
GATTCTCCTGGCAGTTGTCATATGTACTGTGTCAGCCATCATGTGTGTCAGCATGAGAGGAACGATTTGTAACCC
TGGACCGCGGAAGTCTATGTCTAAGCTGCTTTACATCCGCCTGGCGCTGTTTTTTCCAGAGATGGTCTGGGCCTC
TCTGGGGGCTGCCTGGGTGGCAGATGGTGTTCAGTGCGACAGGACAGTTGTAAACGGCATCATCGCAACCGTCGT
GGTCAGTTGGATCATCATCGCTGCCACAGTGGTTTCCATTATCATTGTCTTTGACCCTCTTGGGGGGAAAATGGC
TCCATATTCCTCTGCCGGCCCCAGCCACCTGGATAGTCATGATTCAAGCCAGTTACTTAATGGCCTCAAGACAGC
AGCTACAAGCGTGTGGGAAACCAGAATCAAGCTCTTGTGCTGTTGCATTGGGAAAGACGACCATACTCGGGTTGC
TTTTTCGAGTACGGCAGAGCTTTTCTCAACCTACTTTTCAGACACAGATCTGGTGCCCAGCGACATTGCGGCGGG
CCTCGCCCTGCTTCATCAGCAACAGGACAATATCAGGAACAACCAAGAGCCTGCCCAGGTGGTCTGCCATGCCCC
AGGGAGCTCCCAGGAAGCTGATCTGGATGCAGAATTAGAAAACTGCCATCATTACATGCAGTTTGCAGCAGCGGC
CTATGGGTGGCCCCTCTACATCTACAGAAACCCCCTCACGGGGCTGTGCAGGATTGGTGGTGACTGCTGCAGAAG
CAGAACCACAGACTATGACTTGGTCGGAGGCGATCAGCTCAACTGTCACTTCGGCTCCATCCTGCACACCACAGG
GCTGCAGTACAGGGACTTCATCCACGTCAGCTTCCATGACAAGGTTTACGAGCTGCCGTTTTTAGTGGCTCTGGA
TCACAGGAAAGAGTCTGTTGTGGTCGCTGTGAGGGGGACCATGTCTCTGCAGGATGTCCTTACGGACCTGTCAGC
GGAGAGTGAGGTGCTGGACGTGGAGTGTGAGGTGCAGGACCGCCTGGCACACAAGGGTATTTCTCAAGCTGCCAG
ATACGTTTACCAACGACTCATCAACGACGGGATTTTGAGCCAAGCCTTCAGCATTGCTCCTGAGTACCGGCTGGT
CATAGTGGGCCACAGCCTCGGGGGCGGGGCGGCCGCCCTGCTGGCCACCATGCTCAGAGCCGCCTACCCGCAGGT
CAGGTGCTACGCCTTCTCCCCACCCCGGGGGCTGTGGAGCAAAGCTCTGCAGGAATATTCTCAGAGCTTCATCGT
GTCACTCGTCCTGGGGAAGGATGTGATTCCCAGGCTCAGTGTGACCAACTTGGAAGATCTGAAGAGAAGAATCTT
GCGAGTGGTCGCGCACTGCAATAAACCCAAGTACAAGATCTTGCTGCACGGTTTGTGGTACGAACTGTTTGGAGG
AAACCCCAACAACTTGCCCACGGAGCTGGACGGGGGCGACCAGGAAGTCCTGACACAGCCTCTTCTGGGGGAGCA
GAGCCTACTGACGCGCTGGTCCCCGGCCTACAGCTTCTCCAGCGACTCCCCACTGGACTCTTCTCCCAAGTACCC
CCCTCTCTACCCTCCCGGCAGGATCATCCACCTGCAGGAGGAGGGCGCCTCGGGGCGGTTTGGCTGCTGCTCTGC
TGCTCACTATAGCGCCAAGTGGTCACACGAAGCGGAATTCAGCAAAATACTCATAGGTCCGAAGATGCTCACCGA
CCACATGCCAGACATCCTGATGCGGGCCTTGGACAGCGTGGTCTCCGACAGAGCGGCCTGCGTCTCCTGTCCAGC
ACAAGGGGTCTCCAGTGTGGACGTGGCCTGACCAGGGCCACTGGAAACTGTCCCAGGAACGATGGACTCACGCTT
TTGTCCTTAAACTGACTTACCATCCGAGGAGTTCCCATGACGCCAAAACAGCGAATGTCCATCAACAGGAATCGG
ATGGGAACAGAATTCCATGGTCTCAATGACTTAAGTTTATGGGAAGTCATTGTGGCCATAATGGTAGCAGAAGTA
GTGAGCACGCTCAGGTGATAGGACGACTCCTGAGACCCAGCGACCGTGGAGACAGCCTCGGGAAGCCCTGGCCCG
TGGATGGATCCCTTGGCTGTCTGAGGACTGCTCCAGAAGTGCGGGAATCCAGGGCCCACCCAGAAGACCGTGAAC
AGTTCCTTAGCCTCCCACCCCCAAGGCAGCTCTTTTCATCCAACTCAGTTTACAGGCGTGGTTTGTTTTTCAAAC
TGGGCTTCCTGGATGTACAAATGGAACTGTGGTGAGGGTGCGGGCTGGGGTTTTCTCCTGGGCGTCACCAAGGGC
AGCCCTGGGCTCTGGCTGGGGATGAAGACGAAACCCGATCGGGAAAGTAAGTGGAGCCCCCGGCCCCGCCGAGCC
ACAGCCCCCCAACTGCCTATTCCCACTGCCCAGTTGTTTGTCCACATCAGGAGTTGCTGATTGAATTCTTGCTAC
TCTTCTGGCTCTGGGGTCGGCCAGTGGATTCAGGAGTTGAAACAATAAAGCGCGCGTCAC

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FIGURE 4197

GCCGCCGCCGCCATGAACATTTTCCGGCTGACTGGGGACCTGTCCCACCTGGCGGCCATCGTCATCCTGCTGCTG
AAGATCTGGAAGACGCGCTCCTGCGCCGGTATTTCTGGGAAAAGCCAGCTTCTGTTTGCACTGGTCTTCACAACT
CGTTACCTGGATCTTTTTACTTCATTTATTTCATTGTATAACACATCTATGAAGGTTATCTACCTTGCCTGCTCC
TATGCCACAGTGTACCTGATCTACCTGAAATTTAAGGCAACCTACGATGGAAATCATGATACCTTCCGAGTGGAG
TTTCTGGTGGTCCCTGTGGGAGGCCTCTCATTTTTAGTTAATCACGATTTCTCTCCTCTTGAGATCCTCTGGACC
TTCTCCATCTACCTGGAGTCCGTGGCTATCCTTCCGCAGCTATTTATGATCAGCAAGACTGGGGAGGCCGAGACC
ATCACCACCCACTACCTGTTCTTCCTGGGCCTCTATCGTGCTTTGTATCTTGTCAACTGGATCTGGCGCTTCTAC
TTTGAGGGCTTCTTTGACCTCATTGCTGTGGTGGCCGGCGTAGTCCAGACCATCCTATACTGTGACTTCTTCTAC
TTGTACATTACAAAAGTACTCAAGGGAAAGAAGCTCAGTTTGCCAGCATAAGTGCCAAAGACCATCACCAGCATC
TGTCCTTCAGGGTGCTCGGACAGAATTCTTACCACAGCAAAGGCATAAGATGCTTGATACGGAAAATCAGAAACT
TAACTCTTTTGTTGCAGATAGTCATCAGTGGCTCTGTAAAAACGCAGAGGAAAAGAGCCAGAAGGTTTCTGTTTA
ATGCATCTTGCCTTATCTTTTTTTATTACTGTGTACAAAGATTTTTTTACACAAAGAAACTTAATGCTGTATTAA
TAAATTCAGTGTGTAGCTTCAATTGGGATAGTTCCAAAAGTGAAGATTTTGTGAGGAATAAGTGCAAATTTTTTT
TTTATTTTAAAAAATTCTTTGAAACTCTTAAGTCTTTGTGTCTGCAATGAAATTGTACTCCTTGACAGTTGATAG
ATTATATATTCTTCCATCCCTCAAACTTGCATTCCACTATATTTATTTTTTGGCAAAAGATGAGCTGTATTTGTT
TGAAATCTGAGACACTATGTTCAATTGG

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FIGURE 4198

ATTAATTACGCCAAGAAAATCACTGACGACCTCTCGGCAAGCCCCTCCCCAGCGGTGTGATCCTGGACCCAAGGG
CTTGGGTGATGCCCACACAACACTTAAGGACAGGTCTGACCCGACCCCACTACACCACACCTAGAGCCCGGTCTT
GCACGGGCAGGGTGGGGAGCCGAGTGACCTCTCCCGGCGCCCGCCCCACCTCCCGAGCTGGCTGGGCTGCCACGT
CAGGCGCAGCCGGCCACGATCCTGCCCATCCTCCTCCCGCCCGTCCCATTGATTCGCGGGTTTCCTGCAACCCCG
GGACCCCCACGGGAGATCCCGGCCGGAGAAGCGCCCCCATTCAAGCCCAGAGAGGGGCCACGCCTGTCGGACCCC
CCGTCCCACGCCAACTTTTCAGACACAGCAGGGCCCCGCGCAGCCGGGTGCGCTCCGACAGCTCAAGTTCACGCG
GGGACCGACTGCAGAGCGGGGTCCCGCGCTGCGACACCCGGCCCGGAGCCCACCCCGAGGGCCCGCAGGCCGCTG
CCCCCCGGGTCCGGGCACCCGTTAGGCCGGCCGAGGGGGTGTGTCGGGCCGGCGCAGGCCCCGCGAGCCGTGGGG
TGGCCGAGGTCGGCGGGTCCTCGGCGAGACCCGGCCCCCACGCCCGAGCCTCTCCGGGCCTTCCCCCGCCGCTCA
CCGGCGCAGGAGCGCGTCTTCCAGATCTTCAGCAGCAGGATGACGATGGCCGCCAGGTGGGACAGGTCCCCAGTC
AGCCGGAAAATGTTCATGGCGGCGGCGGCGGTGGCGGTCGGCGCAGCGCGGCGGCCCCGGGGCTGGGCGGCTCAG
GAGGCGGCGGCCCCTGAGAGGAAGCGGCGAAGATGGCGAGATCGCCCGCGACGTGGCCAGGGACGTGGCCGAACT
GCCGGCGCGCGCGCGCGCGGGGCACCCTGGGAGAGCGGGGCCAGGCCCCGCCCCTTAAAGGGGGCGCGCCCCAGC
GCAGGCTCAGCAGGTCAGCTCGCAGGGACTCCCTTGCAAGAAGACCCCGGACTCTGCCAAATTTTCCCTGCCGGG
TTTCCGGCTTCTCCTCGGGTGCCAGCAGTTTCCTTTACTTTTTTGAAATAACACTCCCTGGGGATCTTTTCTTTC
CTCCCACATATCAAAAGAGCTCTACAGGCCTATTGTATGAAAAAGTGTAAGAGAAGGCCGGGTGCGGTGGCTCAT
GCCTGAAATTCTAGCAGTTTGAGAGGCCGAAACAGGAGGATCCTTTGAGCCTAGGAGTTCGAGACCAGCCTGGGC
AACCTAATGAGAGTTCCTCCACCCCCCGTCTCTACAAAAATTTTTTAAAAAATTAGCCAGGCCTGATGGTGGGTG
CCTGTAGTACCAGCTATTTTAAAGGCTAAGGCAGGAGGATTGCTTGAGCCCAGGACATCGAGGCTGCGGTGAACC
ATGATTGTACCACTGTATTCCAGCCTGGACGACTGAGTGAGACCCTGTCTCAAACAAAACAAAACAAAACAAAAC
AAAAAAAAGTACAAGAGGAAAAAAATTGATTTCTGATTGCCTCACTCAAGATAAGGTCAACATTGAAGGTGGAGG
TGGAAGATGCAGTTTATGTAGGGGTCTGAAGATTTTACCATTCTGGGGACTGTCTTTAAGAAAGAGAATCCAAAA
TTAGGTAGAAAAGTGAACGTCTGACCGGGCGCGGTGGCTCATCCCTGTAATCCCAGCACTTAAGGAGTACGAGAC
GGGAGGATCACGAGGTCAAGAGATCGACAGCATGCTGGCCAACGTGGTGAAACCCCGTCTCTACTGAAAATACAA
AAATTAGCCGGGCGTGGTGGCACGCACCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGGAGAATCGCTTGAA
CCTGGGAGGAGAAGGTTGCAGTGAGCTGAGATGGTGCCACTGCACTCCAGCCTGGCGACAGAGCAAGACTCCATC
TC

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FIGURE 4199

AAGTCTCGTATCGCGCCCGGGAGGCGCCGGAGCCCAGCGGCTGGCGCCAGATCCAGGCTCCTGGAAGAACCATGT
CCGGCAGCTACTGGTCATGCCAGGCACACACTGCTGCCCAAGAGGAGCTGCTGTTTGAATTATCTGTGAATGTTG
GGAAGAGGAATGCCAGAGCTGCCGGCTGAAAATTACCCAACCAAGAGAAATCTGCAGGATGGACTTTCTGGTCCT
CTTCTTGTTCTACCTGGCTTCGGTGCTGATGGGTCTTGTTCTTATCTGCGTCTGCTCGAAAACCCATAGCTTGAA
AGGCCTGGCCAGGGGAGGAGCACAGATATTTTCCTGTATAATTCCAGAATGTCTTCAGAGAGCCGTGCATGGATT
GCTTCATTACCTTTTCCATACGAGAAACCACACCTTCATTGTCCTGCACCTGGTCTTGCAAGGGATGGTTTATAC
TGAGTACACCTGGGAAGTATTTGGCTACTGTCAGGAGCTGGAGTTGTCCTTGCATTACCTTCTTCTGCCCTATCT
GCTGCTAGGTGTAAACCTGTTTTTTTTCACCCTGACTTGTGGAACCAATCCTGGCATTATAACAAAAGCAAATGA
ATTATTATTTCTTCATGTTTATGAATTTGATGAAGTGATGTTTCCAAAGAACGTGAGGTGCTCTACTTGTGATTT
AAGGAAACCAGCTCGATCCAAGCACTGCAGTGTGTGTAACTGGTGTGTGCACCGTTTCGACCATCACTGTGTTTG
GGTGAACAACTGCATCGGGGCCTGGAACATCAGGTACTTCCTCATCTACGTCTTGACCTTGACGGCCTCGGCTGC
CACCGTCGCCATTGTGAGCACCACTTTTCTGGTCCACTTGGTGGTGATGTCAGATTTATACCAGGAGACTTACAT
CGATGACCTTGGACACCTCCATGTTATGGACACGGTCTTTCTTATTCAGTACCTGTTCCTGACTTTTCCACGGAT
TGTCTTCATGCTGGGCTTTGTCGTGGTTCTGAGCTTCCTCCTGGGTGGCTACCTGTTGTTTGTCCTGTATCTGGC
GGCCACCAACCAGACTACTAACGAGTGGTACAGAGGTGACTGGGCCTGGTGCCAGCGTTGTCCCCTTGTGGCCTG
GCCTCCGTCAGCAGAGCCCCAAGTCCACCGGAACATTCACTCCCATGGGCTTCGGAGCAACCTTCAAGAGATCTT
TCTACCTGCCTTTCCATGTCATGAGAGGAAGAAACAAGAATGACAAGTGTATGACTGCC

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FIGURE 4200

AGGGGATTTTCATCTCAACAACAGAGTGTCCTCACCCAGGCCTGCCTTCCGGCCAGTATGGGCTTGTACATCAGG
CACCTTCCTGCATGTGTGGCCTCCGGCCTGCCCTCCTCTAGCCACATTCAAGTCCTTTCTCACCAGTTTAAAAAT
TGTGAAAGTGAACTGCCACCTATTTCAGAGGAGACATGACTGCCAGAAACGAGGTCTTGGTGCGGAAGGTCTTTG
GAGTGGGAGGGCTCTCAGGTGCAGGTGGCAGGTGTTCTGCACCTTGCTAGGCCAAGGAGCCCGCAGTCAGAGAGG
CTGGGAAGTGGGAGTCAGGGGCAGGGGGCCTTCCAGCCATCTTCCCCCGTACCCCCCAGCTGAGAACAGATGGAA
ACGTGAAGACGGGTAGCTGGGGCGGCCAGGGAACCCAAGTCCGCTGGCCGAAGCCAAAGCCCGGCACCACCCCCA
ATTCTTGCTGGTGGAAAGCACCGTGAAATCAACCAGCGGCAGCTCTGAACGCGACGCACAGCCCGCGAGGGAGCC
TGGGCAAGGACGGAGCGGGCCTGCACCGGCGGTTGGGCGGGCTCCGGGGGCGGGGTCCACCTGGGACCGCGGCGC
GCCCCTCACCGCTCGCGCCGCCAGGGGGCGCCCTCCGGAGAGCGCGCCTAGGCCGCGGCCTGCGCTTGGCCCCTG
CGGGCCGCCGTCTCCGTGCCCGGCATTCGGCCGCTGTTCGGCTGCGCGGCGGCAGCTCCCGGCGGCTCCTGGCGG
CGCCGCAGTCGGACCTTCGGGCGCCTGCTGGCCGGCGGCAGCAGCGATGGCCCCCTGAGCAGGCAGGGAGCAGGC
GGCGGCAGGCGGGCAAGCGGGCGGGTGCCGCAGCCCAGGCCCGGGTCGCGCCTCTTTGTTTCCACGGGTAGCGGC
GCAGTCCCGGGCCCCGGGCGGAAGTGAGACGCGCTCGGCGCGGGGGCCGCGGCGGCCGCACC**ATG**AGCGACATCC
GCCACTCGCTGCTGCGCCGCGATGCGCTGAGCGCCGCCAAGGAGGTGTTGTACCACCTGGACATCTACTTCAGCA
GCCAGCTGCAGAGCGCGCCGCTGCCCATCGTGGACAAGGGCCCCGTGGAGCTGCTGGAGGAGTTCGTGTTCCAGG
TGCCCAAGGAGCGCAGCGCGCAGCCCAAGGAGCAAACCAAGGACTCTGTTCGGCAGATTATTTTTTCATCCCTTT
TCAGCCCTCAAGGGAACAAAGCCGATGACAGCCGGATGAGCTTGTTGGGAAAACTGGTCTCCATGGCGGTGGCTG
TGTGTCGAATCCCGGTGTTGGAGTGTGCTGCCTCCTGGCTTCAGCGGACGCCCGTGGTTTACTGTGTGAGGTTAG
CCAAGGCCCTTGTAGATGACTACTGCTGTTTGGTGCCGGGATCCATTCAGACGCTGAAGCAGATATTCAGTGCCA
GCCCGAGATTCTGCTGCCAGTTCATCACCTCCGTTACCGCGCTCTATGACCTGTCATCAGATGACCTCATTCCAC
CTATGGACTTGCTTGAAATGATTGTCACCTGGATTTTTGAGGACCCAAGGTTGATTCTCATCACTTTTTTAAATA
CTCCGATTGCGGCCAATCTGCCAATAGGATTCTTAGAGCTCACCCCGCTCGTTGGATTGATCCGCTGGTGCGTGA
AGGCACCCCTGGCTTATAAAAGGAAAAAGAAGCCCCCCTTATCCAATGGCCATGTCAGCAACAAGGTCACAAAGG
ACCCGGGCGTGGGGATGGACAGAGACTCCCACCTCTTGTACTCAAAACTCCACCTCAGCGTCCTGCAAGTGCTCA
TGACGCTGCAGCTGCACCTGACCGAGAAGAATCTGTATGGGCGCCTGGGGCTGATCCTCTTCGACCACATGGTCC
CGCTGGTAGAGGAGATCAACAGGTTGGCGGATGAACTGAACCCCCTCAACGCCTCCCAGGAGATTGAGCTCTCGC
TGGACCGGCTGGCGCAGGCTCTGCAGGTGGCCATGGCCTCAGGAGCTCTGCTGTGCACGAGAGATGACCTGAGAA
CCTTGTGCTCCAGGCTGCCCCATAATAACCTCCTCCAGCTGGTGATCTCGGGTCCCGTGCAGCAGTCGCCTCACG
CCGCGCTCCCCCCGGGGTTCTACCCCCACATCCACACGCCCCCGCTGGGCTACGGGGCTGTCCCGGCCCACCCCG
CCGCCCACCCCGCCCTGCCCACGCATCCCGGCCACACCTTCATCTCCGGCGTGACCTTTCCCTTCAGGCCCATCC
GC**TAG**GCTGGCCCGTGTGTGCCTTCTGCGCTCTCGCTGGACGAAGCCTTTCGAGATGGAAGGGGTGGCCGGACTC
CCAGAAGAGAACCTCGGGGAAGGGGTCGGGCAGCCCCTCCCCGCCGGCAGAACCGTCTTGGTGTCACGGAGTCCA
GGTGCTTCCCACCCGGTCGCATTCTTTGACATGCAGATTGGATGGTGGAGGGAAGAGTCCAGCCTCTGCCGAGAG
CCTGCTGCGTGCATTTTTAAAAGATGCCGATCCTGGGAGCCTCTGTTCTCTGCGCATTTCAGACACAGCCTGTGT
GGCGAGGAGTGTGACGGCAGGAGCCACGGGTGCAAGCCCGTGTGTCTGGCCTCTTTCCTCGTGAAGACGATGTGT
CCCCGCCAGAAAAAGTGGGCTCCTTCTGCAGCCCCGTGAGCTGAGCCCAGGCTGCGTAGTGACCACAAGCTTATG
TGCAGCACTGCTCAGGGAGGCTGTCAGGAATTCCCCTCACCTCGGAAAGGAACTTCTCAGTTTTATTGGGGGTGT
CTAAATTTCCTTTCATATGTTCAAATAAATTTTTCTAAACAGT

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FIGURE 4201

CAGAACCAAGAAGGAGCCCTCTAGGACAGAAAAGGGGTATGTCGTCTTCTAGCACTTCAGATGCCATCTCTGACA
AAGGCGTCCTGAGACCTCAGAAAGAGGCAGTGAGTTCCAGTCAGGGACCCAGTGACCCTACGGACAGAGCGGAGG
TGGAGAAGGACTCGGGGCATGGCAGCACTTCCGTGGATTCTGAGGGGTTCAGCATCCCAGACACGGGCAGTCACT
GCAGCAGCGAGTGTGTGGCCAGCACCCCAGGGGACAGGGGCTCGCAGGAACATGTGGACTCTCAGGAGAAAGCGC
CTGAAACTGACGACTCTTTTTCAGATGTGGACTGCCATTCAAACCAGGAAGATACCGGATGTAAATTTCAGGTTT
TGCCTCAGCCAACTAATCTCACATCCCCAAACACAAAAGTGTTTTAAGAAAGAAGAAATTCTTTCCAATTCTGAC
ATTCGTCAAAAGTTAGTAAATACTCAGAACGTGTCAGCTTCTCAGGTTGATGTAGCTGTGAAAATTAATAAGAAA
GTTGTGCCCCTGAACTTTTCTGAGTTCTTTAGCTAAACGAATAAAGCAGTTACATCATGAAGCACAGCAAAGTGA
AGGGGAACAGAATTACAGGAAGTTTAGGGCAAGGATTTGTCCTGGAGAAAATCAAGCAGCCGAAGATGAACTAAG
AAAAGAGATAAGGTAAAACG**ATG**TTTGCAGAAATGGAAATCATTGGTCAGTTTAACCTGGGATTTATAATAACCA
AACTGAATGAGGATATCTTCATAGTGGACCAGCATGCCACGGACGAGAAGTATAACTTCGAGATGCTGCAGCAGC
ACACCGTGCTCCAGGGGCAGAGGCTCATAGCACCTCAGACTCTCAACTTAACTGCTGTTAATGAAGCTGTTCTGA
TAGAAAATCTGGAAATATTTAGAAAGAATGGCTTCGATTTTGTTATCGATGAAAATGTCATGGATTTTTCTCAAA
ATTGTATTCTTTTAGCTCCAGTCACTGAAAGGGCTAAACTGATTTCCTTGCCAACTAGTAAAAGCTGGACCTTCG
GACCCCAGGACGTCGATGAACTGATCTTCATGCTGAGCGACAGCCCTGGGGTCATGTGCCGGCCTTCCCGAGTCA
AGCAGATGTTTGCCTCCAGAGCCTGCCGGAAGTCGGTGATGATTGGGACTGCTCTTAACACAAGCGAGATGAAGA
AACTGATCACCCACATGGGGGAGATGGACCACCCCTGGAACTGTCCCCATGGAAGGCCAACCATGAGACACATCG
CCAACCTGGGTGTCATTTCTCAGAAC**TGA**CCGTAGTCACTGTATGGAATAATTGGTTTTATCGCAGATTTTTATG
TTTTGAAAGACAGAGTCTTCACTAACCTTTTTTGTTTTAAAATGAAACCTGCTACTTAAAAAAAATACACATCAC
ACCCATTTAAAAGTGATCTTGAGAACCTTTTCAAACCAGATGGAGCATTGCTTGCAAATTTTTTTTCTCTATGTT
TGCATGCGCTCGTGTGTGTGTGTCCAGGCAAGAACACATTTTATAAAAATAAGAACACTTGGGCTGGGCATGGTG
GCTCATGCCTGTGATCGCAGCACTTTGGGAGGCCGAGGCCGGCAGATCACCTGAGATCAGAAGTTCGAGACCAGC
CTGACCAACATGGAGAAACCCTGCCTCTACTAAAAATACAAAATTAGCCAGGTGTGCTGGCGCATGCCTGTAATC
CCCGCTACCCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCCGGGAGACGGAGGTTGCAGTGAACCGAGATTGCG
CCACTGCGCTCCAGCCTGGGTGAGATAGAGCAAGACTGTGTCTCAAAAAACAAAACAAAACAAAAC

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FIGURE 4202

GTCTCTGGGCGGGCCGTGGGAGGCTCCCGAGGTGGGGGCCGGGGCGGGATGGCTGCAGCGGCGGCCGGGGCCGGG
AGCGGGCCCTGGGCGGCCCAGGAGAAGCAGTTCCCGCCGGCGCTGCTGAGTTTCTTCATCTACAACCCGCGCTTC
GGGCCGCGCGAAGGACAGGAGGAAAATAAGATTTTATTTTATCATCCAAATGAGGTAGAAAAGAATGAGAAGATT
AGAAATGTCGGATTGTGTGAAGCTATTGTACAGTTTACAAGGACATTTAGCCCATCAAAACCTGCAAAATCTTTA
CATACACAGAAGAACAGACAGTTCTTCAATGAACCAGAAGAAAATTTCTGGATGGTCATGGTTGTTCGGAATCCT
ATAATTGAAAAACAGAGTAAAGATGGAAAACCAGTTATTGAATATCAAGAGGAGGAGTTGTTGGACAAGGTTTAT
AGCTCGGTGCTGCGGCAGTGCTACAGCATGTACAAGCTTTTTAATGGTACATTTCTGAAAGCCATGGAAGACGGA
GGCGTCAAGCTTCTGAAAGAAAGATTAGAGAAATTCTTCCATCGGTATTTGCAAACGCTACATTTGCAGTCATGT
GACCTACTTGACATTTTTGGTGGAATCAGCTTCTTCCCGTTGGATAAAATGACTTATTTGAAAATCCAGTCCTTT
ATTAATAGAATGGAGGAAAGCCTGAATATAGTCAAATACACTGCTTTTCTCTATAACGATCAGCTCATCTGGAGT
GGATTAGAACAAGATGACATGAGAATTTTATACAAATACCTTACCACCTCCCTTTTCCCAAGGCACATCGAACCT
GAGTTAGCAGGAAGGGATTCTCCAATAAGAGCAGAAATGCCAGGAAATCTTCAACACTATGGAAGATTTCTTACC
GGACCCTTGAACCTCAATGATCCAGATGCAAAATGCAGATTCCCCAAAATTTTTGTAAATACAGATGACACTTAT
GAAGAGCTCCATTTAATCGTTTATAAGGCCATGAGTGCGGCTGTGTGCTTTATGATCGACGCCTCTGTCCACCCA
ACGTTGGATTTTTGCCGAAGACTGGACAGCATCGTTGGGCCCCAGCTCACAGTGCTGGCCTCTGACATCTGTGAA
CAGTTTAACATCAACAAGAGGATGTCTGGGTCTGAGAAAGAACCCCAGTTTAAGTTTATCTACTTCAACCACATG
AATCTCGCCGAGAAGAGCACAGTTCACATGAGGAAAACGCCCAGCGTGTCGCTCACTTCCGTGCACCCGGATTTA
ATGAAGATTCTCGGTGACATCAACAGTGACTTTACCAGAGTGGATGAAGATGAGGAGATCATTGTGAAGGCCATG
AGTGATTACTGGGTTGTTGGAAAGAAGTCTGATCGGCGGGAGCTCTATGTTATTTTGAATCAAAAAAATGCAAAC
CTGATTGAAGTAAATGAAGAGGTCAAGAAACTTTGTGCAACGCAGTTCAACAACATCTTCTTCTTGGATTGACGG
ATGACGGCTCACCGAGAGCATATCTAAAAAACACTCTGCAAACATTTGGTCACATGCAAGTTAGTGGTCATATGA
CGGACTGCATTCAGGACAAGGGTAAAGCAATACTTGCTTTGAAGAATCAGATTTCGACTCGGTCTGCTGATCTGA
GGTTTTTAGATTTTAAATATTTATGTGGAATTAATTAAAGGTAGTTGGCTATATCGCTATCATTTCATTCTTTTG
ACATTATTTGAATATTTTACTGGAAAATAAGACTAATAAATTGTTAAAAGTTTTTAAAATTCTGGTTTGGTGTTG
AGTCTCTCTCCTGCTGCCTATTTATAGATTACACTGGCCACCAGCTCCGTGACCCAGGCTGGAATGCAATGGCTC
ACTGCAGCCTCAACCTCCTGAGCTCAAGCAATCCTCCCACCTCAGCCTCCCAAGAAGCTAGAACCACATGTACAC
ACCACCACGGTCGGCTGATGTTTTAATTTTGCAGAGATGGGGGGGTCTCACTATGTTGCCCAGGCTGGTCTCGAA
CTCCCGTAATCCAGCCATGTAGGAAACCTGAGATGCAGTGGGCCAAGGGGTATGTTAAAACACTGTGACGAGTTC
AGTGCTAAGAACTGTAATGCTCAGGAAATCTTACAGCACGTGCCATCCTAAGCCTGTGTGTGTGTCCTCGTGTCT
CTCTACTTTTTCTTCTTCTTGCTGGTGATGGTCTTGCTGGATGGGGACACGGTCACATCCTCCTTGGGAGGGTCC
AGTATGAGGTGAGAGGATGACACGTCTGCCGGCTCCTTGAGCACTGTGATGTCCACCTCATAGTCATGTCTCTTG
GCCTCTTCCTCTCTCAAGATAAAGATGTTCAGCCT

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FIGURE 4203

GGGTTATGGTGTGTGCTCGGTGGGGCTGGAGTGGCTGGCTTACCTCCTCGTGGCTTACAGCCTGGGCGCCTCAGC
CGCCTCACTCCTGGTTCTGCTGGGCCTGTGGCTGCCACACCCGGTGCCCCTCGTGGCTGGAGAAGGGGTGCACCT
GCTGCTCACCTTCATCCTCTTTTTCTGGGCCCCTGTGCCTCAGGTCCTGCAACACAGCTGGATCCTCTGTGTGGC
AGCCGCCCTTTGGGGTGTGGGCAGCGCCCTGAACAAGACTGGACTCAGCACACTCCTGGGAATCTTGTACGAAGA
CAAGGAGAGACAGGACTTCATCTTCACCATCTACCACTGGTGGCAGGCTGTGGCCATCTTCACCGTGTACCTGGG
CTCCAGCCTGCACATGAAGGCTAAGCTGGCGGTGCTGCTGGTGACGCTGGTGGTGGCCGCGGTCTCCTACCTGCG
GATGGAGCAGAAGCTGCGGCGGGGCGTGGCCCCGCGCCAGCCCCGCATCCCGCGGCCCCAGCACAAGGTGCGCGG
TGACGGCTACTTGGAGGAGGACAACTCGGACGAGAGCGACGCGGAGGGCGAGC**ATG**GGGACGGCGCGGAGGAGGA
GGCGCCGCCCCCGGGGCCCAGGCCTGGCCCCGAGCCCGCTGGACTCGGCCGCCGGCCCTGCCCGTACGAACAGGC
GCAGGGGGGCGACGGGCCGGAGGAGCAGTGAGGGGCCGCCTGGTCCCCGGACTCAGCCTCGCTCCTCGCCGGCCT
CAGTTTACCACGTCTTAGGTCGGGGGGACCCCCTCCGAGTCTCGCGCTGTCTTCGAAGGCCCCTGTCTCCCTTCC
CCCACGTTGGGGACGCCCCTCCCAGAGCCCGGGTCACCTCCGGGCTTCCGCAGCCCCCTCCAAGGCGGAGTGGAG
CCTTGGGAACTCCCCGGCCAAGCACAGGGGTTCGAAAATACAGC**TGA**TACCCCGCGGGCCCTTAGCACGCGCCCC
AGCGCCGGAGCAGGGTCAGGGTCTTCTTGCGACCCGGCCCCGCTCCAGATCCCCCCAGCTCTCGGCCGCGGACCC
GGGCCGCGTGTGAGCGCCCTTTGCACCTCCTATCTCCAGGGTCCGCCGAGAGCCACGATTTTTTACAGAAAATGA
GCGATAAAGAGATTTTGTACTGTC

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FIGURE 4204

GGGCATCATACTGGGCCCAGAGCTGGGAAGGAGTTGCTGCCAGCACAGGGTGGGCCTGGACTCCCCTCGCCCCTA
CCCCCAGTGGTTGTGGCTGTAGCCCTAAGCCTGGAGAGCAGGACCGGCCCGGGGTGTCTGGGAGGCTGCCAGGTG
CCTCCCAGAGCTCCCAAGGGCCCCCACCTGCAAGTGCCAGCCTCAGGGCAGTGCCCAAATGAGGCCCTCTCAGCT
GCAGCCAGCGATGCCTTGGGATGCTTACCGGGAGGGAGGCGGCTTTGGGCTCCTAAGTCCTTGGGAGAGGCTGGG
AGCAGTCACTGCGCGGCTTGCGCAAGCCCATTGTCGGGTTGGGTGGCTTCCTCAGCCAGGGCTGGGAGGGACTCC
AGGATCAGGTCCTCCCTGTCTCGAGTCTCAGTGGGGTGATGGGGAGGAGACCTGGCCACCCATGGCTCAGGGGCA
GCTGAGAACAAGGACCTGCTGGAGCTGGAAGTGCTGTGGTGTTGAGGGGTGGGGTGGGCAGCTTCTCACACCTGC
CTCCTGCCTCCTTCTGTCCACCTTTCCACCACCCTGACCTGTCCCAGCCCCACACATGGTTCTGCCTGGCTGGCC
TGCCCTTGGCACCTGGCGTAGAGCACACAGAAGGCACTCAGCTAATGCTGGGCAGGCCCACTCATGGGGAGTGCG
TGGCTGTGCAGCACCAGGGAACCGGCACAGCAGCGCCGGCAGAAATCACAGCAGTAAACTTGTCCGGGTTGTATG
CATCAAGGTGGCGATGGACGTGGGTCCCCCCACTGCACTGTGGCCCTGAGCACTGTATAGCAGCCCGGCAATGGG
AGCCATTATCTTGCCCCTTTGACAGAGGAGGACACAGAGGCACAGGGAGGTGAAGTAGCTGCCCCACACTAGTGC
CTCCTCGCTCACTCACCACCCCCTGCACCACAGTGCAGCCGCTTCTCCCACCAGCTGGGGTTCCTTGGACCCCCA
AGCCTGGGAAGGGGGAGGTGAGTTTACAAAATGGAAAGCTTAAAAGGAGAAAAGTGGAACCAGAGGTTTGAGAAG
CCCTGAGTGGTAGAGTAAGGCCTCCAGCGCTGCCTCTGGGTGCAGGGCAGAGTGGCAGAGGAGAGGGGGAGAGGC
ACTGGGCACCATGGGGGCCCAGTTCCCACTTCGGGGATCTCTCTCGCAGAACCGAGGGTCCCCTTCATGGGGGTA
G**ATG**CCCAGGGCTAGCTGTTGCCACTGTCTGTGTGGACCTGAGTCCTGGACATGCCCGAGTGACTCAGGAGTGGC
TGCTTGGGCGGGCTCTGTCACCCTAGGATGTTATACATTCTGGGAACTGGACAGGAGTGGCTGCTTGGGCGGGCT
CTGGCACCCTGGGATGTTATACATTCTGGGAACTGGACAGGAGTGGCTGCTTGGGTGGGCTCTGGCACCCTGGGA
TGTTATACATTCTGGGAACTGCAATCAGCCACTAGAGAAGTCGGAGCTACAGGAAGTGACCCTGGGGTGGGACCT
GGGGACATGGCCAGGTCAGCATGGGGACACCCGGCTCCAGCAGGAGCTCTGGTCTGTCCTGGGGTCTTTGGGGGC
AGGGCTGCGGCCCTGGGCAGGCTTCCTCCAGGCGGAGGTCCTGGGGAAGTGGGGGAGCCAGGCCNAGCTGCCGCC
NTNCCCCCNACNTANTNGTNAGCATCTGATTCGTCATCTCTCA**TGA**AGGCGATTTGGTTCATAACTCTGAAACTC
TGAAAAAGGTCAAAAGAAGCAGAGAGGCCCTCGGTGGATATGCCAGCTTTTCTGCCGGTGCTTTCTCCCACTACT
CTGGGTGGTCTGCTCTCCTCTTCAAACCTCAGCTCGCAGGGAGGGCCTGAATCTGCCAGCCCCTCAGGATCTCCT
TCCCTCTGGGCCCTCCCCAGCCTTAAGGAGCCTCCCAGACAGAAGGGTGGACAGAGCCACCTGGGCAGCCCGAGA
GACACACGGGGGTCCTCCCTGTGGACAGCCCTGCCAGCTTCCGCCCAGCCCTGAGCTTCATTTGCATCTTGAGGA
GTAAGGGGTGGTGAAATGGGAATGCTGGTCTGGCTCAGCTGGTCGTGGGCATAAGTGCCCGCTGAATGGATGGCA
TCTCTCCCTCCTGTCTTATGTTCTGGGGTCCAGGTGCTTCCCAGGGCCATGCCCCTGCTGCTAATGCTTGCCCTA
ACCCTTACCCTAACCAGCGTCCAGCGTCGTCTCACCGAGCCGTAAATAAATCAACAGATTCGCA

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FIGURE 4205

CGACATCAGAGATGAGGACAGCATTGCTGCTCCTTGCAGCCCTGGCTGTGGCTACAGGGCCAGCCCTTACCCTGC
GCTGCCACGTGTGCACCAGCTCCAGCAACTGCAAGCATTCTGTGGTCTGCCCGGCCAGCTCTCGCTTCTGCAAGA
CCACGAACACAGTGGAGCCTCTGAGGGGGAATCTGGTGAAGAAGGACTGTGCGGAGTCGTGCACACCCAGCTACA
CCCTGCAAGGCCAGGTCAGCAGCGGCACCAGCTCCACCCAGTGCTGCCAGGAGGACCTGTGCAATGAGAAGCTGC
ACAACGCTGCACCCACCCGCACCGCCCTCGCCCACAGTGCCCTCAGCCTGGGGCTGGCCCTGAGCCTCCTGGCCG
TCATCTTAGCCCCCAGCCTGTGACCTTCCCCCCAGGGAAGGCCCCTCATGCCTTTCCTTCCCTTTCTCTGGGGAT
TCCACACCTCTCTTCCCCAGCCGCAACGGGGGTGCCAGGAGCCCCAGGCTGAGGGCTTCCCCGAAANNGTCTGGG
ACCAGGTCCAGGTGGGCATGGAATGCTGATGACTTGGAGCAGGCCCCACAGACCCCACAGAGGATGAAGCCACCC
CACAGAGGATGCAGCCCCCAGCTGCATGGAAGGTGGAGGACAGAAGCCCTGTGGATCCCCGGATTTCACACTCCT
TCTGTTTTGTTGCCGTTTATTTTTGTACTCAAATCTCTACATGGAGATAAATGATTTAAACC

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FIGURE 4206

GCTCCGGGCCAGCCGCGGTCCAGAGCGCGCGAGGTTCGGGGAGCTCGGCCAGGCTGCTGGTACCTGCGTCCGCCC
GGCGAGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATGAAGATCTTCTT
GCCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTGATGTGCTTCTCCTGCTTGAACCAGAA
GAGCAATCTGTACTGCCTGAAGCCGACCATCTGCTCCGACCAGGACAACTACTGCGTGACTGTGTCTGCTAGTGC
CGGCATTGGGAATCTCGTGACATTTGGCCACAGCCTGAGCAAGACCTGTTCCCCGGCCTGCCCCATCCCAGAAGG
CGTCAATGTTGGTGTGGCTTCCATGGGCATCAGCTGCTGCCAGAGCTTTCTGTGCAATTTCAGTGCGGCCGATGG
CGGGCTGCGGGCAAGCGTCACCCTGCTGGGTGCCGGGCTGCTGCTGAGCCTGCTGCCGGCCCTGCTGCGGTTTGG
CCCCTGACCGCCCAGACCCTGTCCCCCGATCCCCCAGCTCAGGAAGGAAAGCCCAGCCCTTTCTGGATCCCACAG
TGTATGGGAGCCCCTGACTCCTCACGTGCCTGATCTGTGCCCTTGGTCCCAGGTCAGGCCCACCCCCTGCACCTC
CACCTGCCCCAGCCCCTGCCTCTGCCCCAAGTGGGGCCAGCTGCCCTCACTTCTGGGGTGGATGATGTGACCTTC
CTTGGGGGACCGCGGAAGGGACGAGGGTTCCCTGGAGTCTTACGGTCCAACATCAGGACCAAGTCCCATGGACAT
GCTGACAGGGTCCCCAGGGAGACCGTGTCAGTAGGGATGTGTGCCTGGCTGTGTACGTGGGTGTGCAGTGCACGT
GAGAGCACGTGGCGGCTTCTGGGGGCCATGTTTGGGGAGGGAGGTGTGCCAGCAGCCTGGAGAGCCTCAGTCCCT
GTAGCCCCCTGCCCTGGCACAGCTGCATGCACTTCAAGGGCAGCCTTTGGGGGTTGGGGTTTCTGCCACTTCCGG
GTCTAGGCCCTGCCCCAAATCCAGCCAGTCCTGCCCCAGCCCACCCCCACATTGGAGCCCTCCTGCTGCTTTGGT
GCCTCAAATAAATACAGATGTCCCC

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FIGURE 4207

TGTTGAGAGGCTGGCCTGCGGTGATGTGGCCAAAGAGGAAGAGCTGGGCTGGGGTGAGTGTTGGTCACATGGTTG
AAACTAGGTGGGGAGGGGAGTGGTCCAGGGGAGAGTCCAGGCCCAGCTCTGCTGGGACTTGCCATGGGGGTCACG
ACTCATCTGCAGGGAAGGTCTGGGCTTTATCTCTGAGCACCTCTGTGTGCTGCTCACCCTGAAGTGGGGGTGGGC
CTGTGCCTGGCCTGTCCCCTCATCCTGGGAGCTCCCAATGCCCATCTGCAAGGCTGTGGACCCCTCAGGAGTGGC
CTGGAGCCTGGCTCCCATTGCCAC**ATG**GTGGCTGTGTGTGTGGAGAGGGTTGATAGTGGAGTGGTCAGGCCCAGG
CTGCCCTGGGGGATGAAGTGCCATCCTCTGGGTGCCCTGGAGAAAGAAGAGAACTCAGTGAGCCCTGTCTGGTAC
TTTCCTGGAGGAGGGCTCCCATGCTGGCCCTCCACCCCTCTGTCCCCTGTCACCCTGAGGCCTCTGGATTTCCTC
TCTGCCCTTCCCAACCTGCCAACTTCACGGGTTTCTGGCTGGGTTCTGGGGATGGCCCCTAGGGGAGACGGGCCA
GGCACAAGCGGGGCTGTGTCAAGGTGGGTATGCAGGGGTAGCACAAGTGTGCAGAGCCTGGGGAGGCATGGGCAA
AGCATGGCAGGCGGCGGGGCAGGGGATCTTGGAAGGTCACGGGCTGGGGAGCAGTGTGGGCAGCGGCCCAGAGGT
GGGAAGGCCGTAGCT**TAG**CTGGGTGTCCCCTTTCTGTCCTCTGCAGGTGGAGCCCCCTGAGCTGCCCGCTGATCT
GCAGCACTGGATCTCCTACAACGAGGCCAGCAGCCAGCTGCTCCGCATGGAGAGTGGGCTCAGTGATGTCACCAA
GGACCAGTGACCGCCACCTTCACACCGTCTGCCCTGGCCACCATCCTGGGCCTGGGGGCTGCCCACAGATGGGCA
GTCTCAGCCATACTCTGTTCCAGCTGGAGTAGCCTCCTGACCAGCCTGGCCCACCCTGCTCCACCCACTGGGCCC
CCCCAGTTATTGATACCCCTCTGTGCTGGGCTCCACGCTAGGCAGAAGGAGGAGTGGCATTGGCATCCTGACCCA
GCTCTGCCCTCAAGGTGGGGATGGATGGGCAAAGGAGAGTCCTGCCTGGCCCTACGATGAGGCCACTCATGTGGG
CCTAGGTAGGGGAGGATGGTGCCTGGAGCAGAGGGACCCACAAGTGCCTCCCGAGCCTAGATCCTGGCTCGGACC
ACTGCAAGGGCCGAGGCAGGGCCAGACCAGAGCATCCTGGGTACAGGCCTGGGCTCTCCAGGGCCTGGGCCTGAT
TCAGGTGCAGTGGGCACTCCTGAAGGGTCAGAGCGGCATCTGCCAGGCAGCCCCTCTGGCTTCCGCTGAGGTGGT
TGCAGGCCTGGGGCAGAGCCTGGGTGGTCAGAGGCCGGGGCTAGAGGCAGATGGAAGGGAGGCATTTGCTGACAG
AGGACGGGGCACCCGGGCTCCCCACTGCAGTCGGCCTTGCCTCCTCCTCCTCCTCTACCTCCAGTCAGGCTGGAC
GGGAGGGTAGCCTTGTGGCTGAGAGGGGTCAGACTAGGTGGCACAGGGGCTCCTGGAAAGACAGCAGGCTTCCTG
CTGGGCGTTCCCTTGTTGGAGGGAATAGAGTGGGGGTGGGACTCTGCAGGGGTGTCCTTGTCCACTCGCACCCCT
CGCCGCCCACCAGGGCCATGCTCTGTGACTTGGGCTGATCCCCACCCTTTCTGGGCCTACAGCACCACAGGCCGC
TGTACCCCCTTAGAGCTGCCCCTCTCTGGCCTGGCCGGCAGGCGTCTTCTTAACTCCTTTGTCCTCTATATTCAG
CATGTTCCTTGTCAGCTGCTGGGCCGGCCCTGCCTTGCGCTAGCAGAGCCTCTCCTGGCAGCTTCTCAGGTCTCC
CTAATGGAGACACCAGCCTGAGGCTCCAGCTGATGCCCTCAGCTCCCAGAGAGGGGGTGCCCCATCTAGCTGGGT
GCAGGGGTCACTGCTTGTCAGCTCAGGGCCCTGTGCCCGCTTGCCTGTTCCCCTACATCTGTGCCTGCACATCCA
GAACTGCCTCCTTGCCGCTGCCTCCAGGAAGCCCACCTTGAGCCAGAGTCAAGGGCTGCAGCACTGCCCGATAGA
ACACGCCCGCCCTCACTGCTGTTCTTGCCTTACAGCCACCATGGGAAAGCTGCAACCTTTCTGTTTTATTTAAAG
AAAGCCCAACATTAAAGGGTTTTCATTGC

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FIGURE 4208

TTATCAGAGGTGAGCCCGTGCTCTTCAGCGGAGAAGATCCCCTACCTGGCCGCCGGCCACTTTCTGTGGGCCGTG
GGGTCCTCAAGGAGACGGCCCTTGGGCTCAGGGGCTGCGTTTCCACACGCGCCTTTCCCAGGGCTCCCGCGCCCG
TTCCTGCCTGGCCGCCGGCCGCTCCAACAGCAGCACAAGGCGGGACTCAGAACCGGCGTTCAGGGCCGCCAGCGG
CCGCGAGGCCCTGAGATGAGGCTCCAAAGACCCCGACAGGCCCCGGCGGGTGGGAGGCGCGCGCCCCGGGGCGGG
CGGGGCTCCCCCTACCGGCCAGACCCGGGGAGAGGCGCGCGGAGGCTGCGAAGGTTCCAGAAGGGCGGGGAGGGG
GCGCCGCGCGCTGACCCTCCCTGGGCACCGCTGGGGACG**ATG**GCGCTGCTCGCCTTGCTGCTGGTCGTGGCCCTA
CCGCGGGTGTGGACAGACGCCAACCTGACTGCGAGACAACGAGATCCAGAGGACTCCCAGCGAACGGACGAGGGT
GACAATAGAGTGTGGTGTCATGTTTGTGAGAGAGAAAACACTTTCGAGTGCCAGAACCCAAGGAGGTGCAAATGG
ACAGAGCCATACTGCGTTATAGCGGCCGTGAAAATATTTCCACGTTTTTTCATGGTTGCGAAGCAGTGCTCCGCT
GGTTGTGCAGCGATGGAGAGACCCAAGCCAGAGGAGAAGCGGTTTCTCCTGGAAGAGCCCATGCCCTTCTTTTAC
CTCAAGTGTTGTAAAATTCGCTACTGCAATTTAGAGGGGCCACCTATCAACTCATCAGTGTTCAAAGAATATGCT
GGGAGCATGGGTGAGAGCTGTGGTGGGCTGTGGCTGGCCATCCTCCTGCTGCTGGCCTCCATTGCAGCCGGCCTC
AGCCTGTCT**TGA**GCCACGGGACTGCCACAGACTGAGCCTTCCGGAGCATGGACTCGCTCCAGACCGTTGTCACCT
GTTGCATTAAACTTGTTTTCTGTTGATTACCTCTTGGTTTGACTTCCCAGGGTCTTGGGATGGGAGAGTGGGGAT
CAGGTGCAGTTGGCTCTTAACCCTCAAGGGTTCTTTAACTCACATTCAGAGGAAGTCCAGATCTCCTGAGTAGTG
ATTTTGGTGACAAGTTTTTCTCTTTGAAATCAAACCTTGTAACTCATTTATTGCTGATGGCCACTCTTTTCCTTG
ACTCCCCTCTGCCTCTGAGGGCTTCAGTATTGATGGGGAGGGAGGCCTAAGTACCACTCATGGAGAGTATGTGCT
GAGATGCTTCCGACCTTTCAGGTGACGCAGGAACACTGGGGGAGTCTGAATGATTGGGGTGAAGACATCCCTGGA
GTGAAGGACTCCTCAGCATGGGGGGCAGTGGGGCACACGTTAGGGCTGCCCCCATTCCAGTGGTGGAGGCGCTGT
GGATGGCTGCTTTTCCTCAACCTTTCCTACCAGATTCCAGGAGGCAGAAGATAACTAATTGTGTTGAAGAAACTT
AGACTTCACCCACCAGCTGGCACAGGTGCACAGATTCATAAATTCCCACACGTGTGTGTTCAACATCTGAAACTT
AGGCCAAGTAGAGAGCATCAGGGTAAATGGCGTTCATTTCTCTGTTAAGATGCAGCCATCCATGGGGAGCTGAGA
AATCAGACTCAAAGTTCCACCAAAAACAAATACAAGGGGACTTCAAAAGTTCACG

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FIGURE 4209

CTTTCCCGGAGGCTGGCAGATGCGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGCTGCTCGGGGAGGT
CCCCCGCCGCCCGGCCTCCCGGGGTGTCCCGGGCTCGCGCAGGACGCAGAAGGGCAGTGGAGCCAGGTGGGAGAA
GGAGAAGCACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCCGTACTTCGCACCCCCATACGAGCC
CCTTCCCGACGGAGTGCGTTTCTTCTATGAAGGAAGGCCTGTGAGATTGAGCGTGGCAGCGGAGGAGGTCGCCAC
TTTTTATGGGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCG
AAAGGAAATGGCGGTGGAAGAGAGGGAAGTCATCAAGAGCCTGGACAAGTGTGACTTCACGGAGATCCACAGATA
CTTTGTGGACAAGGCCGCAGCCCGGAAAGTCCTGAGCAGGGAGGAGAAGCAGAAGCTAAAAGAAGAGGCAGAAAA
ACTTCAGCAAGAGTTCGGCTACTGTATTTTAGATGGTCACCAAGAAAAAATAGGCAACTTCAAGATTGAGCCGCC
TGGCTTGTTCCGTGGCCGTGGCGACCATCCCAAGATGGGGATGCTGAAGAGAAGGATCACGCCAGAGGATGTGGT
TATCAACTGCAGCAGGGACTCGAAGATCCCCGAGCCGCCGGCGGGGCACCAGTGGAAGGAGGTGCGCTCCGATAA
CACCGTCACGTGGCTGGCAGCTTGGACCGAGAGCGTTCAGAACTCCATCAAGTACATCATGCTGAACCCTTGCTC
GAAGCTGAAGGGGGAGACAGCTTGGCAGAAGTTTGAAACAGCTCGACGCCTGCGGGGATTTGTGGACGAGATCCG
CTCCCAGTACCGGGCTGACTGGAAGTCTCGGGAAATGAAGACGAGACAGCGGGCGGTGGCCCTGTATTTCATCGA
TAAGCTGGCACTGAGAGCAGGAAATGAGAAGGAGGACGGTGAGGCGGCCGACACCGTGGGCTGCTGTTCCCTCCG
CGTGGAGCACGTCCAGCTGCACCCGGAGGCCGATGGCTGCCAACACGTGGTGGAATTTGACTTCCTGGGGAAGGA
CTGCATCCGCTACTACAACAGAGTGCCGGTGGAGAAGCCGGTGTACAAGAACTTACAGCTCTTTATGGAGAACAA
GGACCCCCGGGACGACCTCTTCGACAGGCTGACCACGACCAGCCTGAACAAGCACCTCCAGGAGCTGATGGACGG
GCTGACGGCCAAGGTGTTCCGGACCTACAACGCCTCCATCACTCTGCAGGAGCAGCTGCGGGCCCTGACGCGCGC
CGAGGACAGCATAGCAGCTAAGATCTTATCCTACAACCGAGCCAACCGAGTCGTGGCCATTCTCTGCAACCATCA
GCGAGCAACCCCCAGTACGTTCGAGAAGTCGATGCAGAATCTCCAGACGAAGATCCAGGCAAAGAAGGAGCAGGT
GGCTGAGGCCAGGGCAGAGCTGAGGAGGGCGAGGGCTGAGCACAAAGCCCAAGGGGATGGCAAGTCCAGGAGTGT
CCTGGAGAAGAAGAGGCGGCTCCTGGAGAAGCTGCAGGAGCAGCTGGCGCAGCTGAGTGTGCAGGCCACGGACAA
GGAGGAGAACAAGCAGGTGGCCCTGGGCACGTCCAAGCTCAACTACCTGGACCCCAGGATCAGCATTGCCTGGTG
CAAGCGGTTCAGGGTGCCAGTGGAGAAGATCTACAGCAAAACACAGCGGGAGAGGTTCGCCTGGGCTCTCGCCAT
GGCAGGAGAAGACTTTGAATTCTAACGACGAGCCGTGTTGAAACTTCTTTTGTATGTGTGTGTGTTTTTTTCACT
ATTAAAGCAGTACTGGGGAATTTTGTACAATAAAA

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FIGURE 4210

GCAGTCCAGCTGCTCTGGACGCTGAGGCCCCGGCTTCTCTTGCTGGGGTGTCGATTCGGGAGGGCTGAGGGCGCG
GCCGAGAGAACGGGGCGGTCACCGCCGCCGTGGCCCGCGCGTCCCGCGCTCTCCTTGCAGTGCAGGCCCCAGCCG
CTCTCGGGCGCGGCGTGGGGGAGGCGGCCCTGCAGGTGCGTACCCGGGGTCCGACACGTGCGGGGCTTCCTGCGA
GCTGAGTCCCCGCTGCGCGTCTTCAGGCCTTTGTAAGTTGTCAAATTTCCCACCGGCCCAGCTCATCGAGCTTCT
TCCCAGCTGTGAACAGGAGGGCCTGTTCCCTAATTCTTGCCGAAATTGTTCCAACTGCTGGTGTTCTGCAAGATG

GAGCCAGGAGGAGAGCCCACAGGTGCTAAAGAGAGCAGTACCCTGATGGAGTCCCTTGCAGCTGTGAAGGCTGCT
TTCCTGGCGCAGGCCCCGAGTGGCAGCCGGTCAGCCGAGGTGCAGGCAGCTCAGAGCACGGAGCCTGCCGCAGAG
GCAGGCGCTCCCGAGGGAGAGGGCCACAGAGGGGGGCCTCCCCGGGCGTTGGGGTCTCTTGGCCTTTGTGAAAAC
CAGGAAGCCAGAGAGAGGCCCGGAGGTTCCCCTCGAGGCCCGGTCACTTCTGAGAAAACTGGAGGACAGAGTGGC
CTCGAGTCAGACGTCCCTCCGAACGCAGGCCCCGGCGCAGAGGGCGGGGGCAGCTGGAAGGGGCGGCCTTTCCCG
TGCGGCGCCTGTGGCCGCAGCTTCAAGTGCTCCTCGGACGCGGCAAAGCACCGGAGCATCCACTCGGGGGAGAAA
CCGTACGAGTGCAGCGACTGCGGGAAGGCCTTCATCCACAGCTCGCACGTGGTCCGGCACCAGCGGGCGCACAGC
GGGGAGAGGCCCTACGCGTGCGCCGAGTGCGGCAAGGCCTTCGGCCAGAGCTTCAACCTCCTCCGGCACCAGCGC
GTGCACACGGGCGAGAAGCCCTACGCGTGCGCCGACTGCGGCAAGGCCTTCGGCCAGAGGTCGGACGCCGCCAAG
CACCGCCGCACCCACACCGGGGAGAGGCTGTACGCGTGCGGCGAGTGCGGGAAGCGCTTCCTGCACAGCTCGAAC
GTGGTCCGGCACCGGCGGACCCACCACGGGGAGAACCCGTACGAGTGCCGGGAGTGCGGCCAGGCCTTCAGCCAG
AGCTCCAACCTCCTCCAGCACCAGCGCGTGCACACGGGGGAGCGGCCCTTCGCCTGCCAGGACTGCGGCCGCGCC
TTCAGCCGCAGCTCCTTCCTCCGCGAGCACCGCCGCATCCACACCGGGGAGAAGCCCCACCAGTGCGGCCACTGC
GGGCGCGCGTTCCGGGCGCTGTCGGGCTTCTTCCGGCACCAGCGACTCCACACGGGCGAGAAGCCGTTCCGCTGC
ACCGAGTGCGGCCGCGCCTTCCGCCTGAGCTTCCACCTCATCCAGCACCGGCGGGTGCATGGCGCCGAGTGAGCC
GGGGCTGCGGCGGAAGAGATGCCGGCGGCCTGGTGGGCGCGAGGCCGAGGCCGGGGGAGGCTCCTGTCCGCCCCG
TGCGCGGTGAGGAAGTAACAGCCGGCTGCGCGCCTGGTTCTCGGGTTGCGAAAGCCTCGCCAGGCCTGCATCCGC
CTTGGCTTGGGAGCAATCAGGAGAGACAGGGCTCGGGGAAGGCGAGCGCTGCCCGCGGGAGGCGATTCCCAGAGG
CGGGGAGGTCTCTGGGGTCTGTCCCGGGCCGGCCGCCCGCCTCTGAAACTCCCCGCCTCCCACGGTCAGCTGCTG
CGGGGCAGTGGCCGGTGATTGAATCGGTCATTCCTCCGCAACCAGGCCTCCATCAAAACCCTGCATGAGATGACG
GCCTCGGGCTTCGGGTTGGTGAAGGCGGGGTGGGGGGGCAGTTACGAAGGGGGCGCCCAGACAGGGCATGGAAGC
CTCGCGTCCTCCCCCGTACCTTGCGGGTCGGTGGTTCATCCATGTATTTCAACGCCTTTTCACAGCCGGTTCATA
TGGTCCCGACTTCTGTGTGCTTAGAAAATTATGGAACTTGGCCGGGTGCGGTGGCTCCCGCCTGTAATCCTAGCA
CTTTGGGAGGCCGAGGCGGGCGGATCACACGGTCAAGAGATCAAGACCATCCTGGCCAACATGGCAAAACCCCCA
TCTCGACTAAAAATACAAAAAATTAATTGGGCGTGGTGGCGTGCGCCTGTAATCTCAGCTACTTGGGAGCCTGGG
GCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCGGAGATCTGGGCACTGTACTTTAGCCTGGGC
GACAGAGAGACCCATCTCAAAAAAAAAAATTGGAACCTGAGAAGGGGGTCGTGGGGTCCCCGGGGCCCACCGTCTG
CACTTGGCATCTGAAGTCGGGGTGGTCTTGTGGGACTGACCCCTTACCCTGTGGGTTCTGCACTAGCTCCGGGCA
ATTGGTGACAGAATCGAGTTAAATTGTAGGACATCGCGTTGGTGTCTGAGAGGGAGTTGGAGAGCTGGTTGGTGT
GGAGGGAAAGGCTTACACACATGTGATTTCAGAAGCGTTCTGTGGGTAGAGGAATCGTTTTCTCTTTGAGACTGT
TATGAGTATGTACAAATGTTATTTCCTGTAAAATATTTTCATTTTTTAAAATGTTATTTTCTAGAT

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FIGURE 4211

GGCCGGACACTTCCGTCCGGCGCGCGGCGTCCTCCTCCCGCTCGGAAGGTCCCAGGTGTGACACCTTCAGCAGGT
CTCAGGGAAGATGGCAGCCCTAGGGGACATTCAGGAGTCCCCTTCTGTCCCGTCCCCTGTCAGTCTCTCATCACC
GGGGACACCTGGAACCCAGCACCACGAGCCTCAGCTTCACCTCCATGGGCATCAACATGGCTCCCCTGGCTCCAG
CCCTAAGGTGCTCTCCCAGCCGTCCGACCTGGATCTCCAAGACGTAGAGGAAGTGGAGATCGGCAGAGACACCTT
CTGGCCCGACTCCGAGCCCAAGCCGGAGCAGGCTCCACGCTCTCCTGGCTCTCAGGCCCCTGACGAGGGGGCGGG
CGGGGCGCTGCGCAGCCTCCTGAGGAGCCTTCCCCGCAGGGCCCGGTGCAGCGCCGGCTTCGGGCCTGAATCCAG
CGCGGAGCGGCCGGCGGGCCAGCCGCCTGGGGCCGTCCCTTGCGCCCAGCCGCGGGGCGCCTGGCGCGTGACGCT
CGTGCAGCAAGCAGCGGCCGGGCCCGAGGGTGCGCCCGAGCGGGCTGCCGAGCTGGGAGTCAACTTCGGTCGGAG
CCGGCAGGGCAGCGCGCGGGGGGCCAAGCCGCACAGGTGCGAGGCCTGCGGCAAGAGTTTCAAGTATAACTCGCT
GCTCCTGAAGCACCAGCGCATCCACACGGGCGAGAAGCCCTACGCCTGCCACGAGTGCGGCAAGCGCTTCCGCGG
CTGGTCGGGCTTCATCCAGCACCACCGCATCCACACGGGCGAGAAGCCCTACGAGTGCGGCCAGTGCGGCCGCGC
CTTCAGCCACAGCTCGCACTTCACGCAGCACCTGCGCATCCACAACGGCGAGAAGCCCTACAAGTGCGGCGAGTG
CGGCCAGGCCTTCAGCCAGAGCTCCAACCTGGTGCGCCACCAGCGGCTGCACACGGGTGAGAAGCCCTACGCCTG
CAGCCAGTGCGGCAAGGCCTTCATCTGGAGCTCCGTGCTCATCGAGCACCAGCGCATCCACACTGGCGAGAAGCC
CTACGAGTGCTCCGACTGCGGCAAAGCCTTCCGCGGCCGCTCGCACTTCTTCCGGCACCTGCGGACCCACACGGG
CGAGAAGCCCTTCGCGTGTGGCGCCTGCGGCAAGGCCTTCGGCCAGAGCTCCCAGCTCATCCAGCACCAGCGGGT
GCACTACCGCGAGTAGCCGGGCGGGGGCTCGGGGCTCGGCCTCCTACCTGCCCCCAACCCACCCTCCACCCCGTC
CCCCACGGTGGGCACTGCCCAGCACCGCATGCCACGTGTCCGGAATAAATTCTTTTTGATTGTTGG

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FIGURE 4212A

GCCCTGACCAGCAGACACCATCCTTCCAGCCTCTCTTGGCCACCCGGACCAGCGGGCACCACCCTCCCAGCCTCA
CGCGGCCACCCTGACCAGCAGGCACCATCCTTCCAGCCTTGCTCAGTCACCCTGACCCAGAGGGCTGCCCTGACC
AGCGGGCACCATCCTCCCAGCCCCACTCAGCTGCCCTGACCAGCGGGCACCATCCTCCCAGCCTCACTCGGCCAG
CCGAGCTCTGTAGGCCTCAGAGTGCAGAGAACCTCAAATGTTGTGACTTTGCTCTGCTGCAGGGACCTGCCATGG
AGTGTCCCTTGTGCGAGCATTTTGAGAGCTATGCCAGCATCCATCCCTGCAGGTCCCATCCCTGAGCCATTTCTC
AGGAGAGCAGGAAGGGAGCAGGGAGAGGGGTGCTCCCAGCCAGCCCCGGAACCAGAGGTCTGGGGACGCAGCCGA
CCAGCCCTCCTTGTCTGGGCCTCTGTTTCCTCTTCGACACAGGGAAGCAGGGAGGGGCCGATCAGCGACTTAGGC
CTGTTGGCTGTGGTGGGGTCCACCTGCGTTTCTGGGGAGCCCACGGACCCTGGGGTGTACCTGGGTTTCATTCCC
AGTGACCTCTCCTATTGGTCCCCATTTGGGGCGCTGAGATGTGATCGTTTCTTTCCTGAGAATGAGCTGAGGTAA
AAACATGCTGGGGAGGAAGATGGGCCCTGGGGGCAGCGAGCTGCGCCTCTGCACCGGGAGAAAGGCCGTGTCCCC
AGAGCTGAGGCGGTGGTGGGCAGGGCTCCTGAGAAGCCGGGGCAGGGCAGGGTGTCTCTGAGGTCAATGAGGAAC
AGCTGAGGTCCAGGGACGCAGGAAGGATGGGGTGAACTCCGGGATGGGGCCGGCAGGGAGCCTCACGCTTACAGA
GCCTGGTGTTGGCACTCTCCTGGCTTCCTCCGCAAACCTAGCCACGTGGTCAGGGAGCCCGGGCCTAGCAGACGG
CCCCCACCTTGACAGAATCCCCAGGGTCGTGCGTGGCGGTGGGGGCGACTTCACAGCCGAGACCGGGCCTAACGC
TGCTGTCTCGCAGTCACCCCTGCAGGCCGCTCAGGGCAGGGCTCTGGCCTGACGGGGGTTCCTGGACACGCCTCT
GAGCCGGCAGCCCCTACCCGCACCCGTGCACCTTCCACGCCCGTCTCCAGCAGCCCCTGCCCCCACCCGCACCCC
TGCACCTGCCACGCCTGTCTCCGGCAGCCCCTGCCCGCACCCGCACCCCTGCACCTGCCACGCCCGTCTCCGGCA
GCACCTGCCACGCCCGTCTCCGGCAGCACCTGCCACGCCCGTCTCCGGCAGCACCTGCCACGCCCGTCTCCGGCA
GCCCCTGCCCGCACCCGCACCCCTGCACCTGCCACGCCCGTCTCCGGCAGCCCCTGCCTGCACCCGCACCCCTCA
CGGCTGTCTCCGGCAGCCCCTGCCCGCGCCCGCACCTCTGCACCTCCCACGCCCCTCTCCGGCAGCCCCTGCCCA
CACCCGCACCCCTGCACCTCCCACGCCCGTCTTGCCCTGGGGCCCAGGTGCAGGTCTGTGAGGAGGGCAGCCCCG
TGCTCCCGTGGCCACCGCTCAGCCAAATGGATTCAGCGAGGGTTTTTAGTGTTTGTGCCTGTGTCCCCGTGTGCC
TGTTTCCTGGTGAGGCTGGATGCCTGGCATGTCTGAACACTCACATTCCCCAGGCATGCATGTGCAGCCGCCGCC
GCCACCCATGTACTGTGGCGCTGACCCCTCCTGTAACAGCTGTGGTCTTGGCCTCTCGTGTTGGTGGCAGATGTC
CCATTTCCCAGTTACTTTCTGTTGTCCAAAAGTTTAACTGTCCTGCCAGCCAAAGCTGCTGAGCATTACTCTGAT
AGACCATCAGTCCTTGGTAAGTGTCCTGTGCATCTGGGATAAGCATCCGTTTGTTTTCAGCTGCGCTTTCTGTGA
CTTGCTCTGCGTGAGTCCTCGGTCCACGTGGGCCGTTGCGCTGGTTCCCAGCCTGCCCGACACACTCACTGCGAC
GCCTCCCTTGCCTACTGCTTGCTGGCTTCTGTGTTCTCTGCAGTAAACATTGATTTCTGACTCGAGTGCTGTCTT
CATTGAGCTCTCTGCACTCTGGGGATGCAGTCAGCGACCCCACGAAGGCTACCGGCTTCCTCCCAGGGAACAGTG
CAGGTGCTGCTTCCCAGGACCACAGGACCCTGGCTGGTCGCTGCCTGTGATGGGTCTCCACAAGACCACTCCCCA
TTAGCCAGACTCACAGGAGACTGACACATAAATGAGAAAGTTGTTCACTAACTCACAATGGGAGCAACCCTTTGC
AGTGCGGAAATGCTCTCAGCCTTTCTGGCCCCGGATACCTGGGAAGCTAAGGGTTCATTAGGTGGCCTAGTGCCT
GCACTCAGGATGCCCCAGAGGAGGCCCCGGGGGTTCCTGAACGCCTTCTTCAGGCCCTGTCTTCAGCCCTTCTCCA
GGCCCTCTGAGTTCCAAACAGCACTCACTTTTGTCTGGTCCTCTGTTCCCCGGCTCGCACCTCCTTCGTCAGGGC
AGTTGCTCTCAACCAGGGGTACTTCTGCCCCTGGGGCCCACTCGGCA**ATG**TCCGGGACCGTGTTGGCGGTCACAG
CTGGGCGGGGGCACCACCGGAATCTGGTGTGCAGAGGCGGGGGTCCTGCCCAGATGCCAGAGGTGCTGCAGGTGA
GAGATACAGATTTAGACCCTGTGACGACAAAGAAAAGGACGGGAAAGGTGGCTCTCAAGGCCCCAGGGAACCGCC
CAGAGACGCCTGGGGTTCCAGAAGCTGGAAAGGCATGGAGCGGTGCGGGAACAAGCCTCTGCGGTGGCTGGAGAT
GTGGGGATGGAGACTGGTCATGCCTTCACACACTTAACCAGAACCCTCCCAGCTCTCCCTCCCCTGCAACCAAGC
CAGCAAGGCGACACGGTGGCTGGCGCTGGCGAGAGGCAAGTGTGCTTGACTGCCTTTCTCCACTCTTGAGGACAA
CACCCAGAGTGGCCCCGTCTTTGCCCCACCAGCCCAGGCCTAAAGCTTCCTCATCATCCGCATCCCGGCCTGGGA
CT**TAG**GCGGACTTCTGCCAGCTGTGTCACGTGCAGGGGACTGCAGCCACTGACCCCCTCTCCCTTCTGTCCTGCT
CTTCTCTACCCCACAGCCCCAGGCAGATCTTCAGTGCATGTCAGCTCTCCTCCCTCCCTCCCTGCAGACCCCTGT
GCCCCGCAGTGCCCTGAGAATGACGTCTGAGCCCCCAGTGGAGGTGTCAAGGCTGTTCGGTCTGTCCCCATCCCG
TTCTGTCCTCCCCTTGCTCACCACACTCCCCTGCCTGGTCTTCCAAACTCGAACCCCAGGCAACTCCTTCAGGCA
TCAGACCTCTGCCCCTGCGCCCCTCCTGCCTCTCTGTGATGGGCTGGCCCTTCCCTTCTGCTGCCTCCCCTCCCT
CCTTCCTGCTCCAACCCCTATCTCTCTCTGATGCTGCCCCTTAGAGAAGCCTTCTTGGACCTTAAGCCTGGCCAC
TCCTCTAAGCCCCTCATCTCCAGGTGTGGTCTAGGAAGTGCTCTCAGCCTCTCTACTCCAGTGGCTCGGGGTCTC

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FIGURE 4212B

TGACCAGCCCTCCTGCCAGGGAAGCTTTGAAGGTTCCCACAGGGACCCCTAGAGACAAGGGCACTGCCCGTCCAG
ATGGCACCCTCACCCCAACCCCAGCAGCACTGGCTGGAGCAGGCCATGCCTGTGTGGGTATCTGAACAGGCACTG
GATTCCCCGATCTCAACAAAAGAAGCCCATGGAGGCCTTTTCTAATCCACAGTCCAAGAGGACAAATCAAGACAA
CAGGCTGGGGGGGCTGGCTGTGGGCCGACTCCCACGTCTTAGGACCAGGGGCTCTGGGGCTGTTTGGGCTGGAAC
CCCTCCTCCCAGCATAACAAACACTAGCTCATTATTTACAGTGAATACCCAACAAAACCCTGCTCGAGGTGAGGA
GCGGGGACCTGCTGCTCCAACAGACCAGACTGGCTGCTGGCTCCGAGCTCATTAAATCAGCAACCTTTGCACTCC

FIGURE 4213

GATGGCGGCGGAGCAGGACCCCGAGGCGCGCGCGGGGCGGCCGCTGCTCACTGACCTCTACCAGGCCACCATGGC
GTTGGGCTATTGGCGCGCGGGCCGGGCGCGGGACGCCGCCGAGTTCGAGCTCTTCTTCCGCCGCTGCCCGTTCGG
CGGCGCCTTCGCCTTGGTAGCCGGCTTGCGCGACTGTGTGCGCTTCCTGCGCGCCTTCCGCCTGCGGGACGCCGA
CGTGCAGTTCCTGGCCTCGGTGCTGCCCCCAGACACGGATCCTGCGTTCTTCGAGCACCTTCGGGCCCTCGACTG
CTCCGAGGTGACGGTGCGAGCCCTGCCCGAGGCTCCCTCGCCTTCCCCGGAGTGCCGCTCCTGCAGGTGTCCGGG
CCGCTCCTGGTGGTGCAGCTGCTGGAGACACCGCTGCTCTGCCTGGTCAGCTACGCCAGCCTGGTGGCCACCAAC
GCAGCGCGCGTTCGCTTGATCGCAGGGCCAGAGAAGCGGCTGCTAGAGATGGGCCTGAGGCGGGCTCAGGGCCCG
ATGGGGCCTGACAGCCTCCACCTACAGCTACCTGGGCGGCTTCGACAGCAGCAGCAACGTGCTAGCGGGCCAGCT
GCGAGGTGTGCCGGTGGCCGGGACCCTGGCCCACTCCTTCGTCACTTCCTTTTCAGGCAGCGAGGTGCCCCCTGA
CCCG**ATG**TTGGCGCCAGCAGCTGGTGAGGGCCCTGGGGTGGACCTGGCGGCCAAAGCCCAGGTGTGGCTGGAGCA
GGTGTGTGCCCACCTGGGGCTGGGGGTGCAGGAGCCGCATCCAGGCGAGCGGGCAGCCTTTGTGGCCTATGCCTT
GGCTTTTCCCCGGGCCTTCCAGGGCCTCCTGGACACCTACAGCGTGTGGAGGAGTGGTCTCCCCAACTTCCTAGC
AGTCGCCCTGGCCCTGGGAGAGCTGGGCTACCGGGCAGTGGGCGTGAGGCTGGACAGTGGTGACCTGCTACAGCA
GGCTCAGGAGATCCGCAAGGTCTTCCGAGCTGCTGCAGCCCAGTTCCAGGTGCCCTGGCTGGAGTCAGTCCTCAT
CGTAGTCAGCAACAACATTGACGAGGAGGCGCTGGCCCGACTGGCCCAGGAGGGCAGTGAGGTGAATGTCATTGG
CATTGGCACCAGTGTGGTCACCTGCCCCCAACAGCCTTCCCTGGGTGGTGTCTATAAGCTGGTGGCCGTGGGGGG
CCAGCCACGAATGAAGCTGACCGAGGACCCCGAGAAGCAGACGTTGCCTGGGAGCAAGGCTGCTTTCCGGCTCCT
GGGCTCTGACGGGTCTCCACTCATGGACATGCTGCAGTTAGCAGAAGAGCCAGTGCCACAGGCTGGGCAGGAGCT
GAGGGTGTGGCCTCCAGGGGCCCAGGAGCCCTGCACCGTGAGGCCAGCCCAGGTGGAGCCACTACTGCGGCTCTG
CCTCCAGCAGGGACAGCTGTGTGAGCCGCTCCCATCCCTGGCAGAGTCTAGAGCCTTGGCCCAGCTGTCCCTGAG
CCGACTCAGCCCTGAGCACAGGCGGCTGCGGAGCCCTGCACAGTACCAGGTGGTGCTGTCCGAGAGGCTGCAGGC
CCTGGTGAACAGTCTGTGTGCGGGGCAGTCCCCC**TGA**GACTCGGAGCGGGGCTGACTGGAAACAACACGAATCAC
TCACTTTTCCCC

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FIGURE 4214

CAGAAAAATGGCTACAAACTTCCTAGCACATGAGAAGATCTGGTTCGACAAGTTCAAATATGACGACGCAGAAAG
GAGATTCTACGAGCAGATGAACGGGCCTGTGGCAGGTGCCTCCCGCCAGGAGAACGGCGCCCGTGATCCTCCGTG
ACATTGCGAGAGCCAGAGAGAACATCCAGAAATCCCTGGCTGGAAGCTCAGGCCCCGGGGCCTCCAGCGGCACCA
GCGGAGACCACGGTGAGCTCGTCGTCCGGATTGCCAGTCTGGAAGTGGAGAACCAGAGTCTGCGTGGCGTGGTAC
AGGAGCTGCAGCAGGCCATCTCCAAGCTGGAGGCCCGGCTGAACGTGCTGGAGAAGAGCTCGCCTGGCCACCGGG
CCACGGCCCCACAGACCCAGTGACA**ATG**AGGAGGAGGACAAGGAGGCGGCACAGCTGCGGGAGGAGCGGCTACGG
CAGTACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGCCAAGTCCTCCATCCTGCTGGATGTCAAGCCTTGG
GATGATGAGACGGACATGGCCCAGCTGGAGGCCTGTGTGCGCTCTATCCAGCTGGACGGGCTGGTCTGGGGGGCT
TCCAAGCTGGTGCCCGTGGGCTACGGTATCCGGAAGCTACAGATTCAGTGTGTGGTGGAGGACGACAAGGTGGGG
ACAGACTTGCTGGAGGAGGAGATCACCAAGTTTGAGGAGCACGTGCAGAGTGTCGATATCGCAGCTTTCAACAAG
ATCTGAAGCC**TGA**GTGTGTGTACGTGCGCGCGTGCGTGAGGCCCTGCCACGATTAAAGACTGAGAC

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FIGURE 4215

CCCCGTGACCCCTCTTCAGGCACCCACCACCCTG**ATG**GTGACAGAGGGGGACAGCCAGCACCCATCTGTCCCCGT
CAGGGCTCTTGTTCTCACAGCCCCCTGGAGCATGCCCCATGCCCCAACCTTGGGCCTGGCTCCTGGCCCAGATGG
CACCTGGCCTCTTGAGTCTGCTGGGGGACCCCAAAGTTGGTGGTCCCATAGCCTGCCCTCCTGGGTCTCCACCTC
ATGCCTGGACAGGACGCTGTGGCCTGTCCGGGCCTTGGCCAGCCCTGCAGCTGCACCCCCGATCCTCATCCCTCA
CCCCATTCCCTGCCAGCATCCTAAGGCTCCTGGCGGGCATCCTCTCTGCTCAAAATTATTGACCTGTCTCCCGGC
CACACCTGCTGTGCCCTCTCAGCCAGGCCATCATCACCCCCTGTTCATTATGTCAGGCCTCATGGGAGCCTGGCC
TTCTCCAGAAGCTGGCCCCGGCGTCCTCCCAAGCTGGACCACGGCTGAA**TGA**GGAACGCGCCACTGGACACATGA
GGAAGAGGCTGCTCTGGGAGCTACTGATGCTGTGACCTCACCTCTCTGGCTTTGGGCGGCAGGTCCCTGCACCTA
GGATGCCTGCCTGGAAATGTCCTTGCATTCGTGGCCTCCTTCACAGCCTCCTCCTCAGAGAAGCCTCTGCGAGTG
CACAGGGAGTGTGTGCAGCCTTGTGAAGGGCTGGGACCACTTGCCCAGACTGGGGCCCCTCAGGCACAGGCGTGG
GGTCCTACTGACCTGTCTCCCCAGCTCCCACACAGAAAGCATCTAAAAT

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FIGURE 4216

CCTGGGCGGGCCCTGCGTCAGGTTGCAGTTTCACTTTTAGCTCTGGGCACCTCCAGCTCCTGCTCGCCGGACGGC
TCCCAGGGAGAGCAGACGCGCCAGACGCGCCACCCTCGGGGCGCCGACGGTCACGGAGCATGGGGTCGGCCTTTG
AGCGGGTAGTCCGGAGAGTGGTCCAGGAGCTGGACCATGGTGGGGAGTTCATCCCTGTGACCAGCCTGCAGAGCT
CCACTGGCTTCCAGCCCTACTGCCTGGTGGTTAGGAAGCCCTCAAGCTCATGGTTCTGGAAACCCCGTTATAAGT
GTGTCAACCTGTCTATCAAGGACATCCTGGAGCCGGATGCCGCGGAACCAGACGTGCAGCGTGGCAGGAGCTTCC
ACTTCTACGATGCCATGGATGGGCAGATACAGGGCAGCGTGGAGCTGGCAGCCCCAGGACAGGCAAAGATCGCAG
GCGGGGCCGCGGTGTCTGACAGCTCCAGCACCTCAATGAATGTGTACTCGCTGAGTGTGGACCCTAACACCTGGC
AGACTCTGCTCCATGAGAGGCACCTGCGGCAGCCAGAACACAAAGTCCTGCAGCAGCTGCGCAGCCGCGGGGACA
ACGTGTACGTGGTGACTGAGGTGCTGCAGACACAGAAGGAGGTGGAAGTCACGCGCACCCACAAGCGGGAGGGCT
CGGGCCGGTTTTCCCTGCCCGGAGCCACGTGCTTGCAGGGTGAGGGCCAGGGCCATCTGAGCCAGAAGAAGACGG
TCACCATCCCCTCAGGCAGCACCCTCGCATTCCGGGTGGCCCAGCTGGTTATTGACTCTGACTTGGACGTCCTTC
TCTTCCCGGATAAGAAGCAGAGGACCTTCCAGCCACCCGCGACAGGCCACAAGCGTTCCACGAGCGAAGGCGCCT
GGCCACAGCTGCCCTCTGGCCTCTCCATGATGAGGTGCCTCCACAACTTCCTGACAGATGGGGTCCCTGCGGAGG
GGGCGTTCACTGAAGACTTCCAGGGCCTACGGGCAGAGGTGGAGACCATCTCCAAGGAACTGGAGCTTTTGGACA
GAGAGCTGTGCCAGCTGCTGCTGGAGGGCCTGGAGGGGGTGCTGCGGGACCAGCTGGCCCTGCGAGCCTTGGAGG
AGGCGCTGGAGCAGGGCCAGAGCCTTGGGCCGGTGGAGCCCCTGGACGGTCCAGCAGGTGCTGTCCTGGAGTGCC
TGGTGTTGTCCTCCGGAATGCTGGTGCCGGAACTCGCTATCCCTGTTGTCTACCTGCTGGGGGCACTGACCATGC
TGAGTGAAACGCAGCACAAGCTGCTGGCGGAGGCGCTGGAGTCGCAGACCCTGTTGGGGCCGCTCGAGCTGGTGG
GCAGCCTCTTGGAGCAGAGTGCCCCGTGGCAGGAGCGCAGCACCATGTCCCTGCCCCCCGGGCTCCTGGGGAACA
GCTGGGGCGAAGGAGCACCGGCCTGGGTCTTGCTGGACGAGTGTGGCCTAGAGCTGGGGGAGGACACTCCCCACG
TGTGCTGGGAGCCGCAGGCCCAGGGCCGCATGTGTGCACTCTACGCCTCCCTGGCACTGCTATCAGGACTGAGCC
AGGAGCCCCACTAGCCTGTGCCCGGGCATGGCCTGGCAGCTCTCCAGCAGGGCAGAGTGTTTGCCCACCAGCTGC
TAGCCCTAGGAAGGCCAGGAGCCCAGTAGCCATGTGGCCAGTCTACCATGGGGCCCAGGAGTTGGGGAAACACAA
TAAAGGTGGCATACGAAGG

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FIGURE 4217

CAGGTGCAACTGACATGGGTGAACCCCAGGGATCCATGCGGATTCTAGTGACAGGGGGCTCTGGGCTGGTAGGCA
AAGCCATCCAGAAGGTGGTAGCAGATGGAGCTGGACTTCCTGGAGAGGACTGGGTGTTTGTCTCCTCTAAAGACG
CCGATCTCACGGATACAGCACAGACCCGCGCCCTGTTTGAGAAGGTCCAACCCACACACGTCATCCATCTTGCTG
CAATGGTGGGGGGCCTGTTCCGGAATATCAAATACAATTTGGACTTCTGGAGGAAAAACGTGCACATGAACGACA
ACGTCCTGCACTCGGCCTTTGAGGTGGGCGCCCGCAAGGTGGTGTCCTGCCTGTCCACCTGTATCTTCCCTGACA
AGACGACCTACCCGATAGATGAGACCATGATCCACAATGGGCCTCCCCACAACAGCAATTTTGGGTACTCGTATG
CCAAGAGGATGATCGACGTGCAGAACAGGGCCTACTTCCAGCAGTACGGCTGCACCTTCACCGCTGTCATCCCCA
CCAACGTCTTCGGGCCCCACGACAACTTCAACATCGAGGATGGCCACGTGCTGCCTGGCCTCATCCACAAGGTGC
ACCTGGCCAAGAGCAGCGGCTCGGCCCTGACGGTGTGGGGTACAGGGAATCCGCGGAGGCAGTTCATATACTCGC
TGGACCTGGCCCAGCTCTTTATCTGGGTCCTGCGGGAGTACAATGAAGTGGAGCCCATCATCCTCTCCGGTGGGC
GAGGAAGATGAGGTCTCCATCAAGGAGGCAGCCGAGGCGGTGGTGGAGGCCATGGACTTCCATGGGGAAGTCACC
TTTGATACAACCAAGTCGGATGGGCAGTTTAAGAAGACAGCCAGTAACAGCAAGCTGAGGACCTACCTGCCCGAC
TTCCGGTTCACACCCTTCAAGCAGGCGGTGAAGGAGACCTGTGCTTGGTTCACTGACAACTACGAGCAGGCCCGG
AAGTGAAGCTGGAAGACAGGATCAGGTGCCAGCGGACCATCGGCTGGCAGAGCCCAGCGGCCACCACCCGTCAAC
CCTGCCAGGAGCTGAGGGCACCACCCAGCAACCTGGGCCTGCATTCCATCCGCTCTGCAGCCCCAAGCATCTTTC
CAGTGGGGCCCCCATTCACGTTGGTCCTCAGGGAAACCAGGGTCCCGGGCAGGCCCGGCGCTTTGCTCCCCACAC
CAGCCCCCTGCGCGTGTCCACTCTGATCCTGCATCCCACTCCCTGGGAGCCAATAAAGTGCATTTTCACAG

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FIGURE 4218

AGCGCAGCGGCGTCCGAGGCAACAAGATGGCAGCTGCGGAGCCGTCTCCGCGGCGCGTGGGCTTCGTGGGCGCGG
GCCGCATGGCGGGGGCCATCGCGCAGGGCCTCATCAGAGCAGGAAAAGTGGAAGCTCAGCACATACTGGCCAGTG
CACCAACAGACAGGAACCTATGTCACTTTCAAGCTCTGGGTTGCCGGACCACGCACTCCAACCAGGAGGTGCTGC
AGAGCTGCCTGCTCGTCATCTTTGCCACCAAGCCTCATGTGCTGCCAGCTGTCCTGGCAGAGGTGGCTCCTGTGG
TCACCACTGAACACATCTTGGTGTCCGTGGCTGCTGGGGTGTCTCTGAGCACCCTGGAGGAGCTGCTGCCCCCAA
ACACACGGGTGCTGCGGGTCTTGCCCAACCTGCCCTGTGTGGTCCAGGAAGGGGCCATAGTGATGGCGCGGGGCC
GCCACGTGGGGAGCAGCGAGACCAAGCTCCTGCAGCATCTGCTGGAGGCCTGTGGGCGGTGTGAGGAGGTGCCTG
AAGCCTACGTCGACATCCACACTGGCCTCAGTGGCAGTGGCGTGGCCTTCGTGTGTGCATTCTCCGAGGCCCTGG
CTGAAGGAGCCGTCAAGATGGGCATGCCCAGCAGCCTGGCCCACCGCATCGCTGCCCAGACCCTGCTGGGGACGG
CCAAGATGCTGCTGCACGAGGGCCAACACCCAGCCCAGCTGCGCTCAGACGTGTGCACCCCGGGTGGCACCACCA
TCTATGGACTCCACGCCCTGGAGCAGGGCGGGCTGCGAGCAGCCACCATGAGCGCCGTGGAGGCTGCCACCTGCC
GGGCCAAGGAGCTCAGCAGAAAGTAGGCTGGGCTCTGGCCATCCTTTCCTGCCTCTGTGCCCCTGCCTCTCCCTG
TGTCCCTTCCCCTGAGGACTGCGGCTCCCTCCCTCCTGCATGAGGGTCTCCTACTGCTCCTTCTCCCCTTGCACA
GGGAAATGCAGGGGGCAGGACTTGGGAGGTTCCAGCAGGCGGGGGAGCCCCGACCAGTGGGGACACTCCTCCCTC
CCCAGTGAGCAGAAGGCACCGTGGTGGTGGCTCTGCCCCTTGCTGCAGTGAGCCCACCTTGCTGCAACATTGGTT
CTGAGGGGCCCAAGAGATGGCGTCTTGGTCATTTGCCCGCATGGTTGGGCAGTTGGTTGAGGCCATGAACAGAAC
TTACGGTAACAGGCACGGCTGGCCCAATGCCTGGTCTGGAGCTGGAGCTTGCCTTTGGCTTTCCAGGTGGCTCCG
TGCAGCTACAGCCAGGCCGGCTGCCTCATCTCAGCTCTAGGGGGCACGAGCCATATGGGGTCTGCACAAGAGACC
CTCTCCCCTGCAGTAAAGCCAGGGGCCCTGGCCTGATGGGGCCCCCATGGGGAGCTGGAGCCTGCCCTGCAGCCT
GGAGAAGAGGGTGGCTGTGGTGGGCGTGCTCATCCCCTGCTAAGGAGCAGGAGCTGCTGGGCCAGGTCTGCGGCA
GTGCTGGGGTGGCACCAGGTGGGCAGTGGTAGGTGGGGTGGCTTGAGGTCTGGGAGGGTGGCCCTGGCCAGCCAG
GACACATGCAGACCCCTGGCTTTAGTCTGGATACAGGCTCCCTCTTTCCTCCCAATCCTAAGCTCCTGACAAGTG
GCCAGGTGGCTCTGGGCCCTCCTGCCCCGTGCCTAGGTCAGGGGTCCTGGAATACCCCGTAGCTCTGGCACCACC
ACACTGGCCTCTGATGGCAAGACTTGGCCCCTCCACCTGTCCCTAACGGACGGCAGGTCAGGAAAGCCAGGACTC
AGGGGAGAAGCAAACCCCCAGGATTGAAGGCTAGGGTTCTAGGGCCTTTGGGTGGGGAGGGCCCGGGCCGGACAG
CCTCAGCTCCGTCCCCTGCCCCACAAGATTCACCTGGGCCTCCAGTCCCACGCTGGCCCCAACTGCTGCAGCTCT
CGGCTTCCGCCCAACAGCCTCTGGAGGTGAGGCGGGAGCATGCCCTCAGCGAGGCTGGGCGGCGGGTCCTGCTGT
GCCATCTCCCTGTGCGCCTGAGCAGATCAATCCACCAGTGCAAAACAGGGCTAACGGCACCTGCAGGACAGCAGC
ACGCTCCATCCCTCATGCTCAGCTGCCTCTGCGGCCACGGACTTCTGCCCTTCATCTGCTCTCTCTTACTCTCCT
GAGCCTAGCCCGTCCGTAAGCTCCCTCCCCTGCCTGGTTCCCAGGGCAGGCTGACTCAGTTGACTGCTTGGTCCA
AGCCTGGCCCTGGCACTTGTCAGGGTCAGCCTAAGGAGATGGGAATAAAGAGGCCAGAGAGCACCAAGTGAGCTC
ATGTTTC

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FIGURE 4219

TCCAGGCGCAGGCCGAGGCCTTCGCGCGCCAGATCTACGGGCCCGAGTGCACCTTCAAGGCCAGCCACGGCTGGT
TCTGGCGCTGGCAGAAGCGCCACGGCATCTCCAGCCAGCGCTTCTACGGCGAGGCCGGGCCCCCAGCCCCGAGCC
CCGCGCCCGGCCCGCCCGTCAAGGAGGAGCCCGCGCTGCCCTCCGGCGCCGGCCCCCTGCCCGACCGCGCCCCGG
CCCCGCCGCCCCCGGCCGAGGGCGGCTACGGGGACGAGCAGATTTACAGCGCCAGCGTCACCGGCCTCTACTGGA
AGCTGCTTCCGGAGCAGGCTGCGCCCCCGGGCGCAGGGGACCCCGGGGCGGGGGGCTGTGGCCGGCGCTGGCGGG
GCGACCGCGTAACGGTGCTGCTGGCCGCAAACCTGACCGGCAGCCACAAGCTGAAGCCGCTGGTCATCGGGCGGC
TGCCGGACCCGCCCAGCCTGCGCCACCACAACCAGGACAAGTTCCCGGCCTCCTACCGCTACAGCCCCGACGCCT
GGCTCAGCCGCCCGCTGCTGCGGGGCTGGTTCTTTGAGGAATTTGTCCCAGGCGTCAAACGCTACCTGCGCCGAA
GCTGCCTGCAGCAGAAGGCCGTGCTGCTGGTGGCCCACCCGCCCTGCCCAAGCCCAGCTGCCAGTATGCCCGCCC
TGGACAGCGAGGATGCCCCCGTGCGGTGCAGGCCGGAGCCCCTCGGTCCCCCGGAGGAGCTGCAGACACCGGATG
GCGCTGTGCGGGTGCTGTTCCTGTCCAAAGGCAGCAGCCGGGCACATATCCCCGCACCGCTGGAGCAGGGCGTGG
TGGCCGCCTTCAAACAGCTGTACAAGCGCGAGCTGCTGCGACTGGCTGTGTCCTGCGCCAGCGGCTCCCCGCTGG
ACTTCATGCGCAGCTTCATGCTCAAGGACATGCTCTACCTGGCTGGCCTCTCCTGGGACCTGGTGCAGGCGGGCA
GCATTGAGCGCTGCTGGCTGCTGGGCCTGCGGGCTGCCTTCGAGCCCCGGCCCGGCGAGGACAGTGCTGGGCAGC
CGGCCCAGGCCGAGGAAGCCGCCGAGCACAGCAGGGTGCTCAGCGACCTCACCCACCTGGCGGCTCTGGCCTACA
AGTGCCTGGCTCCGGAGGAGGTTGCGGAGTGGCTGCACCTGGACGATGATGGGGGTCCGCCCGAGGGCTGCAGGG
AGGAGGTGGGCCCAGCCCTGCCCCCTGCAGCGCCTCCGGCCCCAGCCAGTCTGCCCTCTGCCATGGGGGGCGGAG
AGGACGAGGAGGAGGCCACCGACTATGGAGGGACCTCAGTGCCGACTGCCGGGGAGGCCGTGCGGGGGCTAGAAA
CAGCTCTGCGGTGGCTGGAGAACCAGGACCCCAGAGAGGTGGGGCCACTGAGGCTGGTGCAGTTGCGCTCACTCA
TCAGCATGGCCCGGAGGCTGGGGGGCATCGGGCATACCCCAGCAGGCCCCTATGACGGTGTGTGACCAGGCCAGC
CCAGTGACCTTTCTCCTGCTGCACTTGGAGGGAGGGGACATACACACAGTCTCCCATCTCTCCTCCCCTCCCCCT
GGGGTGGCCCACCGCATGGGTACAGGGGGTTCCAGGAATCCAAATCCAGCATGGCTTGGAGGAGCTCTGTTGGTG
AGAGGTCGCCCTGCCTCACTGGCACCCTGGGGGCACAGCTGGAAGAGAGGCCTGGCCCATGCTCCTCTCAGGGCA
GGCACATGTACGGGGCATACAAGGCACAGCGCCTGTTGGAACAGGTGGCTGTGTTCCTGCTCTGGCCCCCGTGGG
GCTGGGCCTCCGCCCCTGCACCAGTCACATGCACTGGACGAGGGCCGAAACTCCTGTCTGCTATCGAGCCCTGGT
GCTATGTGGCCCCGGAGCCACAGCACAATCATCTCAGTGGCGAAGCACACCACTTGATTCTATTTTTTTTTAACA
CATTAAATCTGTTTTTAAAGAT

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FIGURE 4220

CGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGTGCTCGGGGAGGTCCCCGCCGCCCGCCTCCCGGGATGTCCGCTCGCGCAGGACGCAGAAGGGCAGTGGAGCCAGAAACAGCCAGAAAGGCCCTTTCAGAAATGTCTGTTGCACATGCTTTCCCCTCTCAGACCCTTCAGAGACTTCCTGTTGCTCTGAGGACACTCATCCCAGCCGACCAGGCCACCAGGCCCCCAACAGCACTACCTGGCTGGGGTCACGTGCAGGTCTCCTGGCTCTGGCAGGTGGGAGAAGGAGAAGCACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCCGTACTTCGCACCCCCATACGAGCCCCTTCCCGATGGAGTGCGTTTCTTCTATGAAGGAAGGCCTGTGAGATTGAGCGTGGCAGCGGAGGAGGTCGCCACTTTTTATGGGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCGAAAGG

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FIGURE 4221

GCGGACTCGGGAGATGGAGGAAAAGGAGATATTACGGCGGCAGATCCGCCTACTGCAGGGTCTGATTGATGACTA
CAAAACCCTCCACGGCAATGCCCCGGCCCCTGGTACCCCAGCAGCTTCTGGGTGGCAGCCACCCACTTACCACAG
TGGCAGAGCCTTTAGTGCCCGCTACCCTCGTCCAAGCCGGAGGGGCTACTCTTCCCACCATGGGCCTTCGTGGCG
CAAGAAATACTCCCTCGTGAATCGGCCCCCGGGACCCTCAGACCCTCCTGCCGACCATGCTGTGCGGCCGTTGCA
CGGGGCCCGGGGGGGCCAGCCTCCTGTCCCGCAGCAGCATGTCCTTGAGAGACAGGTCCAGCTCAGTCAGGGTCA
GAACGTGGTCATCAAAGTTAAACCGCCATCAAAGTCTGGCTCTGCCAGTGCCTCAGGGGCCCAGCGGGGCTCTTT
GGAAGAATATGAGGACACCCCCTGGAGTGACCAAAGGCCCCGGGAAGGTGAAGGTGAGCCCCCTCGGGGACAGCT
GCAGCCCTCGAGGCCAACAAGAGCCAGGGGGACCTGCAGTGTGGAAGATCCTCTTCTGGTCTGCCAGAAGGAGCC
TGGTAAGCCCAGGATGGTGAAGTCAGTGGGCAGTGTGGGCGACAGCCCCTGGGAGCCCCGCCGGACAGTCAGTGA
GAGCGTGATTGCCGTCAAGGCGAGCTTCCCATCCTCCGCTCTGCCCCCACGCACTGGCGTGGCCCTGGGCCGGAA
GCTGGGTTCTCATTCCGTGGCCAGCTGTGCTCCACAGCTCCTTGGGGACAGGAGAGTAGATGCTGGCCACACAGA
TCAGCCAGTTCCGTCTGGCTCAGTGGGGGGTCCCGCCAGACCGGCCTCAGGACCCAGGCAGGCCCGGGAGGCCTC
GCTGGTTGTGACCTGTCGAACTAACAAGTTCCGGAAAAACAACTACAAATGGGTGGCTGCCTCCTCGAAGAGTCC
CCGGGTTGCTCGGAGGGCCCTCAGTCCCAGAGTGGCTGCAGAGAATGTGTGCAAGGCCTCTGCTGGCATGGCAAA
CAAGGTGGAGAAGCCGCAGCTCATAGCTGACCCAGAGCCCAAGCCCAGGAAGCCAGCCACGTCCTCCAAGCCAGG
GTCTGCCCCCAGCAAGTACAAGTGGAAGGCCTCCAGCCCCTCTGCCTCCTCCTCTTCCTCCTTCCGTTGGCAGTC
GGAGGCCGGCAGCAAGGACCATGCCTCCCAGCTCTCCCCAGTCCTGTCTAGGTCCCCGTCGGGGGACAGACCAGC
AGTAGGACACAGTGGCTTGAAGCCCCTCTCTGGGGAGACCCCGCTCTCGGCTTACAAAGTGAAGAGCCGCACCAA
GATCATCCGGAGACGCGGCAGCACAAGCCTTCCTGGAGACAAGAAAAGCGGCACCTCACCTGCCGCCACCGCCAA
GAGCCACCTCAGCCTCCGGCGGAGACAGGCCCTCAGGGGGAAGAGCAGCCCTGTCCTGAAGAAGACCCCCAACAA
GGGCCTGGTACAGGTCACCACGCACCGACTATGTCGCCTGCCACCGAGCCGGGCCCACCTCCCCACCAAGGAAGC
GTCCAGCCTGCATGCTGTGCGGACTGCACCCACCAGCAAGGTGATCAAGACCCGCTACCGCATTGTCAAGAAGAC
GCCGGCCTCGCCTCTCAGCGCCCCGCCCTTCCCCCTGTCTCTGCCCTCCTGGCGGGCCCGGCGGCTCTCACTATC
CAGGTCCCTGGTGCTGAACCGCCTGCGTCCAGTTGCCAGCGGGGGTGGGAAAGCCCAACCGGGCTCCCCTTGGTG
GCGGAGCAAAGGCTACCGCTGCATCGGAGGGGTCCTCTACAAAGTATCTGCCAACAAGCTCTCCAAGACCTCCGG
CCAGCCCAGTGATGCGGGCAGCAGGCCCCTCCTGCGCACAGGCCGGCTGGATCCTGCAGGCAGCTGTAGCCGTTC
CCTGGCCAGCCGGGCAGTGCAGCGCAGCCTGGCCATCATCCGGCAGGCGCGGCAGCGCAGGGAGAAGAGGAAGGA
GTACTGCATGTACTACAACCGCTTCGGCAGGTGCAACCGTGGCGAGCGCTGCCCCTACATCCACGATCCCGAGAA
GGTGGCCGTGTGCACCAGGTTTGTCCGGGGCACCTGCAAGAAAACGGATGGGACCTGCCCCTTCTCCCACCATGT
GTCCAAGGAGAAGATGCCGGTGTGCTCCTACTTCCTGAAGGGCATCTGCAGCAACAGCAACTGTCCCTATAGCCA
CGTGTACGTGTCCCGCAAGGCCGAGGTCTGCAGCGACTTCCTCAAAGGCTACTGCCCCCTGGGTGCAAAGTGCAA
GAAGAAACACACGCTGCTGTGCCCCGACTTTGCCCGCAGGGGGGCGTGTCCCCGCGGCGCCCAGTGCCAGCTGCT
CCACCGTACCCAGAAACGCCACAGTCGGCGGGCAGCCACGTCCCCCGCCCCAGGGCCCAGCGACGCAACCGCCAG
GAGCAGGGTCTCGGCCAGCCACGGGCCCAGGAAGCCTTCAGCATCCCAGCGCCCCACCAGGCAGACGCCCAGCTC
GGCTGCCCTCACTGCGGCTGCCGTGGCTGCACCTCCCCACTGCCCAGGGGGGTCAGCCTCTCCCTCATCCTCGAA
GGCTTCCTCCTCCTCCTCCTCCTCCTCATCCCCTCCCGCTTCCTTGGACCACGAGGCACCATCTCTCCAGGAGGC
TGCCTTAGCAGCAGCGTGCTCCAACAGGCTCTGCAAGCTGCCTTCCTTCATCTCCCTGCAGTCCTCGCCGAGCCC
AGGAGCCCAGCCCAGGGTCCGGGCCCCTAGGGCCCCCCTCACCAAGGACTCAGGGAAGCCTCTGCACATCAAACC
ACGTCTGTGAGGACCCCAGGGACCGGCCTGCACCTACCTCAGACCCTCATCCTTGGAGAGGAAAGAGGCTCTGTC
CACCACTCTACCCCACAGGAGGGCCGCCCGCCACCAAGCCTCACCTGGGGGCCACAGGGACACTGCTCTGCCTGC
CTGGCCCTCAACCTTCCATGACCAGCGTGTGCGCAGGGCCTGGTCTTCCTCCCCCAAGCCAGGCCCCTGTCCCCA
CCCCACCACCTTCCAGGGTGCCAGGCAGGGCTGGCCTCCAGGCCTGTCCCCGACTGCCATTGGCAACAGTGGCCC
TGCAGCCCCCAGCCCTCCCCACCCAGGTTTTCGGCCCAGTGAAGAGGCCACTGGCCAGGCCTCCCAGGCAGGTGT
TTTATGTTCAGCAATAAAGGTTCTATCCGT

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FIGURE 4222

GCGCACCCCGCCCCCGGCGCCATCTTCCCGACCGCGAGCCGTCCAGGTCTCAGTGCTGTGCCCCCCCCAGAGCCT
AGAGGATGTTTCATGGGATCCCAGCCACGCCGGGCATAGGAGCCCCTGGGAACAAGCCGGAGCTGTATGAGGAAG
TGAAGTTGTACAAGAACGCCCGGGAGAGGGAGAAGTACGACAACATGGCAGAGCTGTTTGCGGTGGTGAAGACAA
TGCAAGCCCTGGAGAAGGCCTACATCAAGGACTGTGTCTCCCCCAGCGAGTACACTGCAGCCTGCTCCCGGCTCC
TGGTCCAATACAAAGCTGCCTTCAGGCAGGTCCAGGGCTCAGAAATCAGCTCTATTGACGAATTCTGCCGCAAGT
TCCGCCTGGACTGCCCGCTGGCCATGGAGCGGATCAAGGAGGACCGGCCCATCACCATCAAGGACGACAAGGGCA
ACCTCAACCGCTGCATCGCAGACGTGGTCTCGCTCTTCATCACGGTCATGGACAAGCTGCGTCTGGAGATCCGCG
CCATGGATGAGATCCAGCCCGACCTGCGAGAGCTGATGGAGACCATGCACCGCATGAGCCACCTCCCACCCGACT
TTGAGGGCCGCCAGACGGTCAGCCAGTGGCTGCAGACCCTGAGCGGCATGTCGGCGTCAGATGAGCTGGACGACT
CACAGGTGCGTCAGATGCTGTTCGACCTGGAGTCAGCCTACAACGCCTTCAACCGCTTCCTGCATGCCTGAGCCC
GGGGCACTAGCCCTTGCACAGAAGGGCAGAGTCTGAGGCGATGGCTCCTGGTCCCCTGTCCGCCACACAGGCCGT
GGTCATCCACACAACTCACTGTCTGCAGCTGCCTGTCTGGTGTCTGTCTTTGGTGTCAGAACTTTGGGGGCCGGG
CCCCTCCCCACAATAAAGATGCTCTCCGACCTTC

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FIGURE 4223

AGTCTGGCCCTGGACAACCCCAGCAAAGCCGCCCTCAGCCAGCCCAGAAGCACTGGGCCTTGGCCACAGCAACAC
CCACTGAGCACGCTGGGAGCTGAGTATGGCGTCCCTGGTCTCGCTGGAGCTGGGGCTGCTTCTGGCTGTGCTGGT
GGTGACGGCGACGGCGTCCCCGCCTGCTGGTCTGCTGAGCCTGCTCACCTCTGGCCAGGGCGCTCTGGATCAAGA
GGCTCTGGGCGGCCTGTTAAATACGCTGGCGGACCGTGTGCACTGCGCCAACGGGCCGTGTGGAAAGTGCCTGTC
TGTGGAGGACGCCCTGGGCCTGGGCGAGCCTGAGGGGTCAGGGCTGCCCCCGGGCCCGGTCCTGGAGGCCAGGTA
CGTCGCCCGCCTCAGTGCCGCCGCCGTCCTGTACCTCAGCAACCCCGAGGGCACCTGTGAGGACGCTCGGGCTGG
CCTCTGGGCCTCTCATGCAGACCACCTCCTGGCCCTGCTCGAGAGCCCCAAGGCCCTGACCCCGGGCCTGAGCTG
GCTGCTGCAGAGGATGCAGGCCCGGGCTGCCGGCCAGACCCCCAAGATGGCCTGCGTAGATATCCCTCAGCTGCT
GGAGGAGGCGGTGGGGGCGGGGGCTCCGGGCAGTGCTGGCGGCGTCCTGGCTGCCCTGCTGGACCATGTCAGGAG
CGGGTCTTGCTTCCACGCCTTGCCGAGCCCTCAGTACTTCGTGGACTTTGTGTTCCAGCAGCACAGCAGCGAGGT
CCCTATGACGCTGGCCGAGCTGTCAGCCTTGATGCAGCGCCTGGGGGTGGGCAGGGAGGCCCACAGTGACCACAG
TCATCGGCACAGGGGAGCCAGCAGCCGGGACCCTGTGCCCCTCATCAGCTCCAGCAACAGCTCCAGTGTGTGGGA
CACGGTATGCCTGAGTGCCAGGGACGTGATGGCTGCATATGGACTGTCGGAACAGGCTGGGGTGACCCCGGAGGC
CTGGGCCCAACTGAGCCCTGCCCTGCTCCAACAGCAGCTGAGTGGAGCCTGCACCTCCCAGTCCAGGCCCCCCGT
CCAGGACCAGCTCAGCCAGTCAGAGAGGTATCTGTACGGCTCCCTGGCCACGCTGCTCATCTGCCTCTGCGCGGT
CTTTGGCCTCCTGCTGCTGACCTGCACTGGCTGCAGGGGGGTCACCCACTACATCCTGCAGACCTTCCTGAGCCT
GGCAGTGGGTGCAGTCACTGGGGACGCTGTCCTGCATCTGACGCCCAAGGTGCTGGGGCTGCATACACACAGCGA
AGAGGGCCTCAGCCCACAGCCCACCTGGCGCCCTCCTGGCTATGCTGGCCGGGCTCTACGCCTTCTTCCTGTTTG
AGAACCTCTTCAATCTCCGGCAGCCCAGGGACCCGGAGGACCTGGAGGACGGGCCCTGCGGCCACAGCAGCCATA
GCCACGGGGGCCACAGCCACGGTGTGTCCCTGCAGCTGGCACCCAGCGAGCTCCGGCAGCCCAAGCCCCCCCACG
AGGGCTCCCGCGCAGACCTGGTGGCGGAGGAGAGCCCGGAGCTGCTGAACCCTGAGCCCAGGAGACTGAGCCCAG
AGTTGAGGCTACTGCCCTATATGATCACTCTGGGCGACGCCGTGCACAACTTCGCCGACGGGCTGGCCGTGGGCG
CCGCCTTCGCGTCCTCCTGGAAGACCGGGCTGGCCACCTCGCTGGCCGTGTTCTGCCACGAGTTGCCACACGAGC
TGGGGGACTTCGCCGCCTTGCTGCACGCGGGGCTGTCCGTGCGCCAAGCACTGCTGCTGAACCTGGCCTCCGCGC
TCACGGCCTTCGCTGGTCTCTACGTGGCACTCGCGGTTGGAGTCAGCGAGGAGAGCGAGGCCTGGATCCTGGCAG
TGGCCACCGGCCTGTTCCTCTACGTAGCACTCTGCGACATGCTCCCGGCGATGTTGAAAGTACGGGACCCGCGGC
CCTGGCTCCTCTTCCTGCTGCACAACGTGGGCCTGCTGGGCGGCTGGACCGTCCTGCTGCTGCTGTCCCTGTACG
AGGATGACATCACCTTCTGATACCCTGCCCTAGTCCCCCACCTTTGACTTAAGATCCCACACCTCACAAACCTAC
AGCCCAGAAACCAGAAGCCCCTATAGAGGCCCCAGTCCCAACTCCAGTAAAGACACTCTTGTCCTTGG

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FIGURE 4224

CCCCGGCACCCCAGGGCAGGTGCAGACCCGCGAGTGCATCGAGGCCGTGATCCGCTTCGCCTTCGAAGAGCGGCT
CTTTCTGCTGGCGGACGAGGTGTACCAGGACAACGTGTACGCCGCGGGTTCGCAGTTCCACTCATTCAAGAAGGT
GCTCATGGAGATGGGGCCGCCCTACGCCGGGCAGCAGGAGCTTGCCTCCTTCCACTCCACCTCCAAGGGCTACAT
GGGCGAGTGCGGGTTCCGCGGCGGCTATGTGGAGGTGGTGAACATGGACGCTGCAGTGCAGCAGCAGATGCTGAA
GCTGATGAGTGTGCGGCTGTGCCCGCCGGTGCCAGGACAGGCCCTGCTGGACCTGGTGGTCAGCCCGCCCGCGCC
CACCGACCCCTCCTTTGCGCAGTTCCAGGCTGAGAAGCAGGCAGTGCTGGCAGAGCTGGCGGCCAAGGCCAAGCT
CACCGAGCAGGTCTTCAATGAGGCTCCTGGCATCAGCTGCAACCCAGTGCAGGGCGCCATGTACTCCTTCCCGCG
CGTGCAGCTGCCCCCGCGGGCGGTGGAGCGCGCTCAGGAGCTGGGCCTGGCCCCCGATATGTTCTTCTGCCTGCG
CCTCCTGGAGGAGACCGGCATCTGCGTGGTGCCAGGGAGCGGCTTTGGGCAGCGGGAAGGCACCTACCACTTCCG
GATGACCATTCTGCCCCCCTTGGAGAAACTGCGGCTGCTGCTGGAGAAGCTGAGCAGGTTCCATGCCAAGTTCAC
CCTCGAGTACTCCTGAGCACCCCAGCTGGGGCCAGGCTGGGTCGCCCTGGACTGTGTGCTCAGGAGCCCTGGGAG
GCTCTGGAGCCCACTGTACTTGCTCTTGATGCCTGGCGGGGTGGGGTGGGGGGGGTGCTGGGCCCCTGCCTCTCT
GCAGGTCCCTAATAAAGCTGTGTGGCAGTCTG

FIGURE 4225A

ATGGAGCGGCTGCGGGACGTGCGGGAGCGGCTGCAGGCGTGGGAGCGCGCGTTCCGACGGCAGCGCGGGCGGCGA
CCGAGCCAGGACGACGTGGAGGCGGCGCCGGAGGAGACCCGCGCGCTCTACCGGGAATACCGCACTCTGAAGCGT
ACCACGGGCCAGGCCGGCGGCGGGCTCCGCAGCTCCGAGTCGCTCCCCGCGGCGGCCGAAGAGGCGCCAGAGCCC
CGCTGCTGGGGGCCCCATGTGAATCGGGCTGCGACCAAGAGTCCACAGTCTACGCCAGGGCGGAGCCGCCAGGGC
TCGGTGCCGGACTACGGGCAGCGGCTCAAGGCCAATCTGAAAGGCACCCTGCAGGCCGGACCAGCCCTGGGCCGC
AGACCGTGGCCTCTAGGAAGAGCCTCATCTAAGGCATCCACCCCAAAGCCCCCAGGTACAGGGCCTGTCCCCTCC
TTTGCAGAAAAAGTCAGTGATGAGCCTCCACAGCTCCCTGAGCCCCAGCCAAGGCCAGGCCGGCTCCAGCATCTG
CAGGCATCCCTGAGCCAGCGGCTGGGCTCCCTAGATCCTGGCTGGTTACAGCGATGTCACAGTGAGGTCCCAGAT
TTTCTGGGGGCCCCCAAAGCCTGCAGGCCTGATCTAGGCTCAGAGGAATCACAACTTCTGATCCCTGGTGAGTCG
GCTGTCCTTGGTCCTGGTGCTGGCTCCCAGGGCCCAGAGGCTTCAGCCTTCCAAGAAGTCAGCATCCGTGTGGGG
AGCCCCCAGCCCAGCAGCAGTGGAGGCGAGAAGCGGAGATGGAACGAGGAGCCCTGGGAGAGCCCCGCACAGGTC
CAGCAGGAGAGCAGCCAAGCTGGACCCCCATCGGAGGGGGCTGGGGCTGTAGCAGTTGAGGAAGACCCTCCAGGG
GAACCTGTACAGGCACAGCCACCTCAGCCCTGCAGCAGCCCATCGAACCCCAGGTACCACGGACTCAGCCCCTCC
AGTCAAGCTAGGGCTGGGAAGGCTGAGGGCACAGCCCCCCTGCACATCTTCCCTCGGCTGGCCCGCCATGACAGG
GGCAATTACGTACGGCTCAACATGAAGCAGAAACACTACGTGCGGGGCCGGGCACTCCGTAGCAGGCTCCTCCGC
AAGCAGGCATGGAAGCAGAAGTGGCGGAAGAAAGGGGAGTGTTTTGGGGGTGGTGGTGCCACAGTCACAACCAAG
GAGTCTTGTTTCCTGAACGAGCAGTTCGATCACTGGGCAGCCCAGTGTCCCCGGCCAGCAAGTGAGGAAGACACA
GATGCTGTTGGGCCTGAGCCACTGGTTCCTTCACCACAACCTGTACCTGAGGTGCCCAGCCTGGACCCCACCGTG
CTGCCACTCTACTCCCTGGGGCCCTCAGGGCAGTTGGCAGAGACGCCGGCTGAGGTGTTCCAGGCCCTGGAGCAG
CTGGGGCACCAAGCCTTTCGCCCTGGGCAGGAGCGTGCAGTCATGCGGATCCTGTCTGGCATCTCCACGCTGCTG
GTGCTGCCTACAGGTGCCGGCAAGTCCCTGTGCTACCAGCTCCCAGCGCTGCTCTACAGCCGGCGCAGCCCCTGC
CTCACGTTGGTCGTCTCTCCCCTGCTGTCACTCATGGATGACCAGGTGTCTGGCCTGCCACCGTGTCTCAAGGCG
GCCTGCATACACTCGGGCATGACCAGGAAGCAACGGGAATCTGTCCTGCAGAAGATTCGGGCAGCCCAGGTACAC
GTGCTGATGCTGACACCTGAGGCACTGGTGGGGGCGGGAGGCCTCCCTCCAGCCGCACAGCTGCCTCCAGTTGCT
TTTGCCTGCATTGATGAGGCCCACTGCCTCTCCCAGTGGTCCCACAACTTCCGGCCCTGCTACCTGCGCGTCTGC
AAGGTGCTTCGGGAGCGCATGGGCGTGCACTGCTTCCTGGGCCTCACAGCCACAGCCACACGCCGCACTGCCAGT
GACGTGGCACAGCACCTGGCTGTGGCTGAAGAGCCTGACCTCCACGGGCCAGCCCCAGTTCCCACCAACCTGCAC
CTTTCCGTGTCCATGGACAGGGACACAGACCAGGCACTGTTGACGCTGCTGCAAGGCAAACGTTTTCAAAACCTC
GATTCCATTATCATTTACTGCAACCGGCGCGAGGACACAGAGCGGATCGCTGCGCTCCTCCGAACCTGCCTGCAC
GCAGCCTGGGTCCCAGGGTCTGGAGGTCGTGCCCCCAAAACCACAGCCGAGGCCTACCACGCGGGCATGTGCAGC
CGGGAACGGCGGCGGGTACAGCGAGCCTTCATGCAGGGCCAGTTGCGGGGTGGTGGTGGCCACGGTGGCCTTTGG
GATGGGGCTGGACCGGCCAGATGTGCGGGCTGTGCTGCATCTGGGGCTGCCCCCAAGCTTCGAGAGCTACGTGCA
GGCCGTGGGCCGGGCCGGGCGTGACGGGCAGCCTGCCCACTGCCACCTCTTCCTGCAGCCCCAGGGCGAAGACCT
GCGAGAGCTGCGCAGACATGTGCACGCCGACAGCACGGACTTCCTGGCTGTGAAGAGGCTGGTACAGCGCGTGTT
CCCAGCCTGCACCTGCACCTGCACCAGGCCGCCCTCGGAGCAGGAAGGGGCCGTGGGTGGGGAGAGGCCTGTGCC
CAAGTACCCCCCTCAAGAGGCTGAGCAGCTTAGCCACCAAGCAGCCCCAGGACCCAGAAGGGTCTGCATGGGCCA
TGAGCGGGCACTCCCAATACAGCTTACCGTACAGGCTTTGGACATGCCGGAGGAGGCCATCGAGACTTTGCTGTG
CTACCTGGAGCTGCACCCACACCACTGGCTGGAGCTGCTGGCGACCACCTATACCCATTGCCGTCTGAACTGCCC
TGGGGGCCCTGCCCAGCTCCAGGCCCTGGCCCACAGGTGTCCCCCTTTGGCTGTGTGCTTGGCCCAGCAGCTGCC
TGAGGACCCAGGGCAAGGCAGCAGCTCCGTGGAGTTTGACATGGTCAAGCTGGTGGACTCCATGGGCTGGGAGCT
GGCCTCTGTGCGGCGGGCTCTCTGCCAGCTGCAGTGGGACCACGAGCCCAGGACAGGTGTGCGGCGTGGGACAGG
GGTGCTTGTGGAGTTCAGTGAGCTGGCCTTCCACCTTCGCAGCCCGGGGGACTTGACCGCTGAGGAGAAGGACCA
GATATGTGACTTCCTCTATGGCCGTGTGCAGGCCCGGGAGCGCCAGGCCCTGGCCCGTCTGCGCAGAACCTTCCA
GGCCTTTCACAGCGTAGCCTTCCCCAGCTGCGGGCCCTGCCTGGAGCAGCAGGATGAGGAGCGCAGCACCAGGCT
CAAGGACCTGCTCGGCCGCTACTTTGAGGAAGAGGAAGGGCAGGAGCCGGGAGGCATGGAGGACGCACAGGGCCC
CGAGCCAGGGCAGGCCAGACTCCAGGATTGGGAGGACCAGGTCCGCTGCGACATCCGCCAGTTCCTGTCCCTGAG
GCCAGAGGAGAAGTTCTCCAGCAGGGCTGTGGCCCGCATCTTCCACGGCATCGGAAGCCCCTGCTACCCGGCCCA
GGTGTACGGGCAGGACCGACGCTTCTGGAGAAAATACCTGCACCTGAGCTTCCATGCCCTGGTGGGCCTGGCCAC

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FIGURE 4225B

GGAAGAGCTCCTGCAGGTGGCCCGCTGA

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FIGURE 4226A

CGGGGCTGGAGGCGGTGGCTGCGGTTGCGGGACCGGCACTATGCTGGGCCTTCCTACCACTTGTGTGTGGCTTGG
TAGTGGCCTAGGGTCTCTCCTCCCTGCTGAAGTCCCTCTCCTGCAGGTGGCCGTCTGCCCGGCCCAGCACCATGC
ACACGCTTGTGTTCTTGAGCACACGGCAGGTGCTGCAGTGCCAGCCAGCTGCCTGCCAGGCCCTGCCCTTGCTGC
CACGCGAACTCTTCCCCCTGCTGTTCAAGGTGGCCTTCATGGACAAGAAGACAGTGGTACTGCGCGAGTTGGTAC
ACACGTGGCCCTTCCCGCTGCTCAGTTTCCAGCAGCTGCTACAGGAGTGTGCCCACTGCAGCCGTGCCCTCCTGC
AGGAGCGGCCTAGCACTGAGAGCATGCAGGCTGTTATCCTGGGGCTGACTGCCCGGCTCCACACCTCAGAGCCTG
GGGCCAGCACACAGCCCCTCTGCAGGAAGCATGCGCTGCGGGTGCTGGACATGACGGGCCTCTTGGATGATGGTG
TGGAACAGGATCCTGGCACCATGAGCATGTGGGACTGTACTGCTGCCGTAGCTCGCACATGCATTGCCCAGCAGC
AGGGTGGGGCCGCAGAGCCTGGGCCAGCCCCCATCCCCGTGGAGGTGCGCGTGGACCTGCGGGTGAACCGGGCCT
CCTATGCGTTCCTGCGGGAGGCACTCCGAAGCAGCGTGGGCAGCCCGCTGCGGCTCTGCTGCCGGGACCTGCGAG
CTGAGGACCTGCCCATGCGCAACACTGTGGCCCTGCTGCAGCTTCTGGATGCAGGCTGCCTGCGCCGCGTGGACC
TGCGCTTCAACAATCTGGGCCTGCGCGGCCTGTCTGTGATCATCCCACACGTGGCCCGCTTCCAGCACCTGGCCA
GCCTGCGGCTCCACTATGTGCATGGGGATTCAAGGCAGCCCTCCGTGGATGGCGAGGACAACTTCCGCTACTTCC
TTGCCCAGATGGGCCGCTTCACCTGTCTGCGTGAGCTCAGCATGGGCTCCTCTCTCCTTTCAGGGAGGCTGGACC
AGCTGCTCAGCACCCTGCAGAGCCCCCTGGAGAGCCTGGAGTTGGCCTTCTGTGCTCTGCTGCCTGAGGACCTAC
GCTTCCTGGCACGGAGCCCACATGCTGCCCACCTCAAGAAGTTGGACCTGAGTGGTAACGACCTGTCTGGCAGCC
AGCTGGCACCCTTCCAGGGTCTGTTGCAGGCATCAGCAGCCACACTGTTGCATCTGGAGCTGACTGAGTGTCAGC
TCGCAGACACCCAGCTGTTGGCCACACTACCCATCCTGACTCAGTGCGCCAGTCTCCGGTACCTTGGCCTCTATG
GCAACCCACTGTCCATGGCGGGCCTCAAGGAGCTGCTGCGGGACTCAGTGGCACAGGCTGAGCTGCGTACTGTGG
TGCACCCCTTCCCTGTGGACTGCTATGAGGGCTTGCCCTGGCCGCCGCCTGCCTCTGTCCTGCTGGAGGCCTCCA
TCAATGAGGAGAAGTTTGCCCGCGTAGAAGCTGAGTTGCACCAGCTGCTTCTAGCCTCAGGCCGTGCCCATGTGC
TCTGGACCACGGACATCTACGGGCGACTGGCTGCGGACTACTTCAGCCTATGATGAAGTAGCTCTGGGTGAGACA
CAGGCCGCCCTGCAGTCTCTTTAGGTAGGCAGGGCCTTTGCTGGGACCCCTGGTGGAGGCCTTCACAAAAGCACT
GGTTACTGGTTTCCTGCTGGGTCTACCTTGCTTCTGGGCACACCTCAAGCCTCCCCTGCTTTCTGCAGTGCCCCA
CGCGGTTTTCCCTGCACTTGCTCCATAATTGGCTGATCATCTGTGGGCCCCGGGGCTGGATGTCAGGCCTCCATT
GCCCTGCTCAGTTTGGCTGCATTTGGCTGCCGTCTGGGGTCCTGGTCCTTTGTGCAAATGCTTTGGGATTCCAGT
TGTGAGCTGAGAGAGATGATGGCCTCTCTGGGCCTTTCCTCTCCCTTTACTGAGAGCTCAGTGCTTCTGGGGTTG
AAGTTGGACAGAGGCCTGCTTCAGGGAAGCTGGGAGTCCCCAGGCACTCACGCCTCTTACGTGTTCCCTACCCTG
CCACCCAGCCACCCCACTGGGCTGGGCTCGGGCTGGAGGGGGTCATCAAGGTACACATGTGCCTGGAAGTTGAAT
TTGTGGCTGTTTTTTTTTCTGTCCACGTTGGTCACCCTTATCCTTATCTCTGCTGTCACCCCCAACATGGCCACC
CGGCAACAACTGCCATCCAGCCTGTCGCCCCGCCCTTCGCGGGGCAGCCCCGTCGGCACTGCCGGCCAGTCCTTG
CTCTTCCCACCTTTCGGAGGCCCAAGATCCTACTGTGGCCGGCCAGGGCCAGCGAGGGACCCCCCCCCATGCAGAG
CTGGAGGTTGGGGTGATGTCTTTTCGGAAGAGCTTCAAGGGAGGTGTTGGGGCCTCCCCGGCCACCTTCCATTGC
TACCCCAGGATTCCCGAGTGCAACGTTCCCGGCTCGCGCCCCACACACGGCTCAGCGCACACTGCGCGGCTTCCA
CCTTTACTGACGGAGCATGCGCGAGGCCGCACCGGCCAATCTCCGGCGCCCACGTCATCCGCGCGCCCGCGGCCC
TAGCAGTGGATCTCGTAGGCGACCGGCGGGGGCACGCGGAGTCCCGGCCCCGCCCCCTGTTCCGGGCCGCAGTCA
GCGGGCGCCTCCGCCGGACCCTCGGCGAAGAGCGGCTTGGAGCGGTTGATGACGAACATCTCGTGGCCGCGCTCG
TCGCGGAGCTCCTCTAGCTGTGCGAACGTACAGGGGCCGTCCAAGTAGTCGTTGACGAACAGCGCTCCCTCCCCC
GGAGGCCCCCGCGCCTTTTTTCGCCTGCGGCGCCGGCGACAGATCATGGCGACCAGGAGCAGCGCCGTGAGCGCC
AGCAGCGCGATGGCCGCCGCAATGGCCGTCTGTGTGGCCACGCCCAGGGCGCGGAAGGCCATGCTGCCCGCCTCG
GGCCGGGGCTCGCTGCCGGCGGGGCGGGCGGCCGGAGGCGGCGGTTGCGCGGGCTGCTGCGGCTGCTGCCGGGAC
GCGTTGACCAGGAGCCGGAAGGGCACGCGGGCAGCGCCGCCGGCGTTGGAGGCCTCGCACTCGTACTTACCGGCG
TGCGCCAGCGTGATGTTGCTGAGGAAGAGCATGCCGCTGCCCGTGTCGGATGCCGAGTGTCCGCCCAGGCCCAGC
AACCCGCCTTCTAGCTGGGCCTGGGCTCGCGGCCGGCCCTCGCGAGGCTGGGGCACCTTTCTCCAGGTCACCAAT
GGCTGCGGGTAGCCGGAGGCTTGGCAGGCAACCCGCAGGTCCTCACCCAGGTTGGCTGTGAGCTCCAGCGGCTGC
ACGTGGACAGAGGGCGGAATGCAGATGAGGCTGCTGTGGGATACGTCCAGGAGACTCTGGAGCGCCAGGCGCGGG
GGCTCTGCACACATGATCTTCCTGTCCCTGGAGGTGAGCAGCCGCTGGCCGCCCTCCTTGATCCAGGCACCCAGC
CAGTGCAGGGCGCAGTCACAGCGCCATGGGTTCTCTGTGGGAGAGCAGCGTTAGGCAGGTGGCTTGAGGGTGCTG

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FIGURE 4226B

CTAAAACAGCCTGTGCAGTTGGGGTTTTGCAGGCCAGGACAGAGGCCTCTTTCCCACCTCCCACAGCGTTTTCAC
ACGGAGTCCAAGGCCCTGCCACCCCTTCCTTGACCCCAAGCTCCTTGGGGCGGCAGGCCCTTCACCCTCNGCCCC
CCTCCCCTTTAGCTCTGTGATGCCTGCCTGTTACAGATCACTTCTCCGTCGGTCTCTGAGAAAGCACCTGCTCCT
TAAGTCTTCCTGCAACAAGTGCCACTGTTTTTAGGAACCTGGGCGTCCACATAGACATCTCACCAGCACTGAAAC
CTCACAAGTCCTCTCAGCCTTGCCTTTGGATGCCCTCTCTTGGGAATGTCCCCAGTCCTGGTCAGCTGTCTCTCT
CCTTTGCAATTTTGTCTGCCTCCCCTCAGCCTAAAAGTGTGCAGAACCCTCAATTCTGTTAAGTCACCCTGTGGA
GTTCCTGTCTTCTGTTTTCCCCAGGCAGGGTGCCTGAGCTGTATTCCCCAGCACACCCACTCCCGCAGCCCTCCA
GTGTGGCTGCAGGCGGTGGTGCAGCCTTCCAGACTGCTGCCCAGTTGCCTGATGTCAGAGCCCCTCCACACATGA
GCCTGCTCCCTACTGCCAACACCGTGGCCCAGACAGAGACGCTTTCCGAGGAAGAGGTACCTGTGAGGCGCAGGA
CTTGCAGACTGGCCAGGGGCTGCAGGGCCTCTCGGCTGATGGTGCCCAGCTGGTTCCTGCTGAGGTCCAGCAGTG
CTAGGGAGGACAGCCCCGCTAGAGCCTGGTCCTCCAGCAGCTCAATGCTGTTTTCTTGCAGGTGAAGCTCCTGCA
GTCGCTGAAGTAAGGACAGCAGATCGTGAGGAAAAAGGGCGCCGAGGTTGGGGGCATGTCTCTCTTCTTACCAAG
CTAGACTGGGTTGCCTTTTCTAACTATTCCAGCCCTACAGGGCGAGGGGCCATAATGGAGTATCCCGCCCCTTTA
GACCCCAGGCGCTCACCGGCAGGTGCAAGAAGGTGAAATCCAGCAGCCGCGCCAGCTGGTTGCCCGCCAGGTAGA
GCACGCGCAGCTGGGCCAGGCCTACGAAGGCGCCGCTGCGCAAGCCGCGCAGCCGGTTGCTAGTGAGCGCCAGCT
CCAGCAGGCGCGGCTGCGCGCGGAAGGCGCCGGCCTCCAGGGCGCGCAGGCTGTTGTTGTGCAGGTAGAGCCGGC
GCAGAGCGGCGAGTGGCGCCAGGGCTCCCGGCTCTAGGCGGGCGATGTTGTTGTCCTGCAGGAACAGTGTCTGCA
GGCCGGGGAAAGAGGAGGCGCTTACCCCGTTGCGGGGGTCTTCCTCTCCCTGGGGGCACCCCGTCCTCCCGCAGC
TCCACACGGTGCCCACCTGCGTCCCTGGCGGGATTCCCAGCGGGACGACGCGCAACCGCAGGGCGCCACACTCCA
CCGTGGCGCTGTAGCAGCGGCAGGCTGCTGGGCAGCCGGCGGCGCGGAGCGGCAGTAGTAGCAGCAGCAGCGGCA
GCAGTGCGGGGGCCCTCAGGGCCATCTCCCGAGGCCCGGTTCCTCACCGGCCCTTCCGCGGTTCAGCCGCAGACG
CGTGCCCTCCTGAAACACAGGTTGGCAGGCCAGTCTCGGCAGTCGAGAGCCAGCCAATAGATGGAATGGAGGCCT
GCACCTGCGTCTAACTTTTGACGCTATAAATAGGTTCAAGAAACTAATAAAACGTTCTGGTTTTCTCCTTTGAC

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FIGURE 4227

GCCCCCGAGGCCCGAGGGAGAGGGAAGAGCGCCGGGCCCGGGTCGCGGAGGCGGGCGCCGCCGGAACGCGAAGCG
CGGGGCTACTGCGGGCAGGCGCGAGTTCGCGCAGCACCGCCCCCGGCGTGACCTGCTGGTCGCTTCCGGCGCGGG
AGGAGAATGTGGCCGCCTTGCGGGACGCTCCGGACCCTGGCCTTGGCGCGGTCGCGGGGAGCCCGGGCCTGCAGC
GGGGATGGGGGCGTTTCCTACACGCAGGGCCAGAGTCCGGAGCCGCGGACCCGCGAGTATTTCTACTACGTGGAC
CACCAGGGCCAGCTTTTCCTGGATGATTCCAAAATGAAGAATTTCATCACCTGCTTCAAAGACCCGCAGTTCCTG
GTCACCTTCTTCTCCCGCCTGAGACCCAACCGCAGCGGGCGCTACGAGGCCGCTTTCCCCTTCCTCTCGCCCTGC
GGCAGAGAGCGCAACTTCCTGCGCTGCGAGGACCGGCCGGTGGTCTTCACGCACCTGCTGACCGCGGACCACGGG
CCTCCGCGCCTCTCCTACTGCGGCGGTGGCGAGGCCCTGGCCGTGCCCTTCGAGCCGGCGCGCCTGCTGCCCCTG
GCCGCCAACGGGCGCCTGTACCACCCGGCGCCGGAGCGTGCGGGCGGCGTGGGCCTGGTGCGCTCCGCCCTGGCC
TTCGAGCTCAGCGCCTGCTTCGAGTACGGGCCCGGCGCGCCTGCGCTGCCCTCGCACGTGCGCTGGCAGGGCCGC
CGCCTCGCCCTCACCATGGACCTGGCCCCGCTGCTGCTCGCGGCTCGGTCGCCCTGAGCGGGGCCAAGGGAAAGG
CGGGAGGCCGCGGGCGCCTCTCGCCCCGCTCCCCCGGGACTCCACGCCCCGGAAAGCCCGCGCCACCCGCGCTCG
CGGCAGCCTAGTGCGCCTGCGCGCTCGG

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FIGURE 4228

CTCCTGCGCACGCGGCCCGGTCGCTGTCGGAAGCGGCTGTGCGGGTGGCGGCCGGCGCGCGGTGGGGCATGGCGG
GTTCGCGGGGTGCGGGGCGCACGGCGGCGCCGAGCGTGCGGCCGGAGAAGCGGCGGTCTGAGCCCGAACTGGAGC
CTGAGCCCGAGCCGGAGCCCCCCCTCCTCTGCACCTCTCCTCTCAGCCACAGCACCGGCAGCGATTCTGGCGTCT
CCGACAGCGAGGAGAGTGTGTTCTCAGGCCTGGAAGATTCCGGCAGTGACAGCAGTGAGGATGATGACGAAGGCG
ACGAGGAGGGAGAGGACGGAGCCCTTGATGACGAGGGCCACAGTGGGATTAAAAAGACCACTGAGGAGCAGGTGC
AGGCCAGCACTCCTTGCCCGAGGACAGAGATGGCGAGCGCCCGGATTGGGGATGAGTATGCGGAGGACAGCTCTG
ATGAGGAGGACATCCGGAACACGGTGGGCAACGTGCCCTTGGAGTGGTACGATGACTTCCCCCACGTGGGCTACG
ACCTGGATGGCAGGCGCATCTACAAGCCCCTGCGGACCCGGGATGAGCTGGACCAGTTCCTGGACAAGATGGACG
ATCCTGACTACTGGCGCACCGTGCAGGACCCGATGACAGGGCGGGACCTGAGACTGACGGATGAGCAGGTGGCCC
TGGTGCGGCGGCTGCAGAGTGGCCAGTTTGGGGATGTGGGCTTCAACCCCTATGAGCCGGCTGTCGACTTCTTCA
GCGGGGACGTCATGATCCACCCGGTGACCAACCGCCCGGCCGACAAGCGCAGCTTCATCCCCTCCCTGGTGGAGA
AGGAGAAGGTCTCTCGCATGGTGCACGCCATCAAGATGGGCTGGATCCAGCCTCGCCGGCCCCGAGACCCCACCC
CCAGCTTCTATGACCTGTGGGCCCAGGAGGACCCCAACGCCGTGCTCGGGCGCCACAAGATGCACGTACCTGCTC
CCAAGCTGGCCCTGCCAGGCCACGCCGAGTCGTACAACCCACCCCCTGAATACCTGCTCAGCGAGGAGGAGCGCT
TGGCGTGGGAACAGCAGGAGCCAGGCGAGAGGAAGCTGAGCTTTTTGCCACGCAAGTTCCCGAGCCTGCGGGCCG
TGCCTGCCTACGGACGCTTCATCCAGGAACGCTTCGAGCGCTGCCTTGACCTGTACCTGTGCCCACGGCAGCGCA
AGATGAGGGTGAATGTAGACCCTGAGGACCTCATCCCCAAGCTGCCTCGGCCGAGGGACCTGCAGCCCTTCCCCA
CGTGCCAGGCCCTGGTCTACAGGGGCCACAGTGACCTTGTCCGGTGCCTCAGTGTCTCTCCTGGGGGCCAGTGGC
TGGTTTCAGGCTCTGACGACGGCTCCCTGCGGCTCTGGGAGGTGGCCACTGCCCGCTGTGTGAGGACTGTTCCCG
TGGGGGGCGTGGTGAAGAGTGTGGCCTGGAACCCCAGCCCCGCTGTCTGCCTGGTGGCTGCAGCCGTGGAGGACT
CGGTGCTGCTGCTGAACCCAGCTCTGGGGGACCGGCTGGTGGCGGGCAGCACAGATCAGCTGTTGAGCGCCTTCG
TCCCGCCTGAGGAGCCCCCCTTGCAGCCGGCCCGCTGGCTGGAGGCCTCAGAGGAGGAGCGCCAAGTGGGCCTGC
GGCTGCGCATCTGCCACGGGAAGCCAGTGACGCAGGTGACCTGGCACGGGCGTGGGGACTACCTGGCCGTGGTGC
TGGCCACCCAAGGCCACACCCAGGTGCTGATTCACCAGCTGAGCCGTCGCCGCAGCCAGAGTCCGTTCCGCCGCA
GCCACGGACAGGTGCAGCGAGTGGCCTTCCACCCTGCCCGGCCCTTCCTGTTGGTGGCGTCCCAGCGCAGCGTCC
GCCTCTACCACCTGCTGCGCCAGGAGCTCACCAAGAAGCTGATGCCCAACTGCAAGTGGGTGTCCAGCCTGGCGG
TGCACCCTGCAGGTGACAACGTCATCTGTGGGAGCTACGATAGCAAGCTGGTGTGGTTTGACCTGGATCTTTCCA
CCAAGCCATACAGGATGCTGAGACACCACAAGAAGGCTCTGCGGGCTGTGGCCTTCCACCCGCGGTACCCACTCT
TTGCGTCAGGCTCGGACGACGGCAGTGTCATCGTCTGCCATGGCATGGTGTACAATGACCTTCTGCAGAACCCCT
TGCTGGTGCCCGTCAAGGTGCTGAAGGGACACGTGCTGACCCGAGATCTGGGAGTGCTGGACGTCATCTTCCACC
CCACCCAGCCGTGGGTCTTCTCCTCGGGGGCAGACGGGACTGTCCGCCTCTTCACCTAGCTGTTCTGCCTGCCTG
GGGCTGGGGTGGTCGTGCTGAAGTCAACAGAGCCTTTACCCTGTGCTGCCTGGTGCTCCCACCTTCTTGAATTGG
GGTTGCCAACAAAGCCGCCCCCACCACA

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FIGURE 4229

GCCCGTTGCAAGATGGCGGCGGCCATGCTGGGCCCCGGGGCTGTGTGTGCGCAGCGGGCGGCGGCGCGGCCCGGA
AGGCTGGCGCGGCGACGGCGTTAGCCCGGCCCTCGGCCCCTCTTTGCGGCCGCTCCCTCCGCCTATTCCCTCCTT
GCTCGAGATGGATCTGCCCGTGGGCCCCGGCGCGGCGGGGCCCAGCAACGTCCCGGCCTTCCTGACCAAGCTGTG
GACCCTCGTGAGCGACCCGGACACCGACGCGCTCATCTGCTGGAGCCCGAGCGGGAACAGCTTCCACGTGTTCGA
CCAGGGCCAGTTTGCCAAGGAGGTGCTGCCCAAGTACTTCAAGCACAACAACATGGCCAGCTTCGTGCGGCAGCT
CAACATGTATGGCTTCCGGAAAGTGGTCCACATCGAGCAGGGCGGCCTGGTCAAGCCAGAGAGAGACGACACGGA
GTTCCAGCACCCATGCTTCCTGCGTGGCCAGGAGCAGCTCCTTGAGAACATCAAGAGGAAAGTGACCAGTGTGTC
CACCCTGAAGAGTGAAGACATAAAGATCCGCCAGGACAGCGTCACCAAGCTGCTGACGGACGTGCAGCTGATGAA
GGGGAAGCAGGAGTGCATGGACTCCAAGCTCCTGGCCATGAAGCATGAGAATGAGGCTCTGTGGCGGGAGGTGGC
CAGCCTTCGGCAGAAGCATGCCCAGCAACAGAAAGTCGTCAACAAGCTCATTCAGTTCCTGATCTCACTGGTGCA
GTCAAACCGGATCCTGGGGGTGAAGAGAAAGATCCCCCTGATGCTGAACGACAGTGGCTCAGCACATTCCATGCC
CAAGTATAGCCGGCAGTTCTCCCTGGAGCACGTCCACGGCTCGGGCCCCTACTCGGCCCCCTCCCCAGCCTACAG
CAGCTCCAGCCTCTACGCCCCTGATGCTGTGGCCAGCTCTGGACCCATCATCTCCGACATCACCGAGCTGGCTCC
TGCCAGCCCCATGGCCTCCCCCGGCGGGAGCATAGACGAGAGGCCCCTATCCAGCAGCCCCCTGGTGCGTGTCAA
GGAGGAGCCCCCCAGCCCGCCTCAGAGCCCCCGGGTAGAGGAGGCGAGTCCCGGGCGCCCATCTTCCGTGGACAC
CCTCTTGTCCCCGACCGCCCTCATTGACTCCATCCTGCGGGAGAGTGAACCTGCCCCCGCCTCCGTCACAGCCCT
CACGGACGCCAGGGGCCACACGGACACCGAGGGCCGGCTTCCTTCCCCCCCGCCCACCTCCACCCATGAAAAGTG
CTTCAGGGTAGCCTGCCTGGACAAGAATGAGCTCAGTGACCACTTGGATGCTATGGACTCCAACCTGGATAACCT
GCAGACCATGCTGAGCAGCCACGGCTTCAGCGTGGACACCAGTGCCCTGCTGGACCTGTTCAGCCCCTCGGTGAC
CGTGCCCGACATGAGCCTGCCTGACCTTGACAGCAGCCTGGCCAGTATCCAAGAGCTCCTGTCTCCCCAGGAGCC
CCCCAGGCCTCCCGAGGCAGAGAACAGCAGCCCGGATTCAGGGAAGCAGCTGGTGCACTACACAGCGCAGCCGCT
GTTCCTGCTGGACCCCGGCTCCGTGGACACCGGGAGCAACGACCTGCCGGTGCTGTTTGAGCTGGGAGAGGGCTC
CTACTTCTCCGAAGGGGACGGCTTCGCCGAGGACCCCACCATCTCCCTGCTGACAGGCTCGGAGCCTCCCAAAGC
CAAGGACCCCACTGTCTCCTAGAGGCCCCGGAGGAGCTGGGCCAGCCGCCCACCCCCACCCCCAGTGCAGGGCTG
GTCTTGGGGAGGCAGGGCAGCCTCGCGGTCTTGGGCACTGGTGGGTCGGCCGCCATAGCCCCAGTAGGACAAACG
GGCTCGGGTCTGGGCAGCACCTCTGGTCAGGAGGGTCACCCTGGCCTGCCAGTCTGCCTTCCCCCAACCCCGTGT
CCTGTGGTTTGGTTGGGGCTTCACAGCCACACCTGGACTGACCCTGCAGGTTGTTCATAGTCAGAATTGTATTTT
GGATTTTTACACAACTGTCCCGTTCCCCGCTCCACAGAGATACACAGATATATACACACAGTGGATGGACGGACA
AGACAGGCAGAGATCTATAAACAGACAGGCTCT

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FIGURE 4230

GTCCCTGGGCCGGACGGCGGTGTCCCGGCGTGGCGGGAAGCCGGCACTGGAGCGGGAGCGCACTGGGCGCGGGAC
CGGGAGGCGCAGGGACCGGACGGCTCCCGAGTCGCCCACCTGACGCTAGAAGAAGTCTTCACTTCCCAGGAGAGC
CAAAGCGTGTCTGGCCCTAGGTGGGAAAAGAACTGGCTGTGACCTTTGCCCTGACCTGGAAGGGCCCAGCCTTGG
GCTGA**ATG**GCAGCACCCACGCCCGCCCGTCCGGTGCTGACCCACCTGCTGGTGGCTCTCTTCGGCATGGGCTCCT
GGGCTGCGGTCAATGGGATCTGGGTGGAGCTACCTGTGGTGGTCAAAGAGCTTCCAGAGGGTTGGAGCCTCCCCT
CTTACGTCTCTGTGCTTGTGGCTCTGGGGAACCTGGGTCTGCTGGTGGTGACCCTCTGGAGGAGGCTGGCCCCAG
GAAAGGACGAGCAGGTCCCCATCCGGGTGGTGCAGGTGCTGGGCATGGTGGGCACAGCCCTGCTGGCCTCTCTGT
GGCACCATGTGGCCCCAGTGGCAGGACAGTTGCATTCTGTGGCCTTCTTAGCACTGGCCTTTGTGCTGGCACTGG
CATGCTGTGCCTCGAATGTCACTTTCCTGCCCTTCTTGAGCCACCTGCCACCTCGCTTCTTACGGTCATTCTTCC
TGGGTCAAGGCCTGAGTGCCCTGCTGCCCTGCGTGCTGGCCCTAGTGCAGGGTGTGGGCCGCCTCGAGTGCCCGC
CAGCCCCCATCAACGGCACCCCTGGCCCCCCGCTGGACTTCCTTGAGCGTTTTCCCGCCAGCACCTTCTTCTGGG
CACTGACTGCCCTTCTGGTCGCTTCAGCTGCTGCCTTCCAGGGTCTTCTGCTGCTGTTGCCGCCACCACCATCTG
TACCCACAGGGGAGTTAGGATCAGGCCTCCAGGTGGGAGCCCCAGGAGCAGAGGAAGAGGTGGAAGAGTCCTCAC
CACTGCAAGAGCCACCAAGCCAGGCAGCAGGCACCACCCCTGGTCCAGACCCTAAGGCCTATCAGCTTCTATCAG
CCCGCAGTGCCTGCCTGCTGGGCCTGTTGGCCGCCACCAACGCGCTGACCAATGGCGTGCTGCCTGCCGTGCAGA
GCTTTTCCTGCTTACCCTACGGGCGTCTGGCCTACCACCTGGCTGTGGTGCTGGGCAGTGCTGCCAATCCCCTGG
CCTGCTTCCTGGCCATGGGTGTGCTGTGCAGGTCCTTGGCAGGGCTGGGCGGCCTCTCTCTGCTGGGCGTGTTCT
GTGGGGGCTACCTGATGGCGCTGGCAGTCCTGAGCCCCTGCCCGCCCCTGGTGGGCACCTCGGCGGGGGTGGTCC
TCGTGGTGCTGTCGTGGGTGCTGTGTCTTGGCGTGTTCTCCTACGTGAAGGTGGCAGCCAGCTCCCTGCTGCATG
GCGGGGGCCGGCCGGCATTGCTGGCAGCCGGCGTGGCCATCCAGGTGGGCTCTCTGCTCGGCGCTGTTGCTATGT
TCCCCCCGACCAGCATCTATCACGTGTTCCACAGCAGAAAGGACTGTGCAGACCCCTGTGACTCC**TGA**GCCTGGG
CAGGTGGGGACCCCGCTCCCCAACACCTGTCTTTCCCTCAATGCTGCCACCATGCCTGAGTGCCTGCAGCCCAGG
AGGCCCGCACACCGGTACACTCGTGGACACCTACACACTCCATAGGAGATCCTGGCTTTCCAGGGTGGGCAAGGG
CAAGGAGCAGGCTTGGAGCCAGGGACCAGTGGGGGCTGTAGGGTAAGCCCCTGAGCCTGGGACCTACATGTGGTT
TGCGTAATAAAACATTTGTATTT

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FIGURE 4231

GCTTCCCCGAGCGCCGTCGGTGGTCATGGCTGCCCCAGCCTCCCGGCAGGTCCGACGCAGAGCCCGGGCAGCGCC
GCGGCCCCGCTCGGCCGAGGATTGGTGGTGGGACCGGCTGGCGCCGAGGGGCTCGGGGTACCACCTGCTGCAGTC
CGACAGCATGCTGCTGGTGCTGTCCGAACCAGGCCCCGCCCGGCCCCGCGCACAGCGGCGCGATTCCCGCCGCAC
TCCCCGGCAGCCGCCCCGGGGCCCCAGCGCCGCGGCCAAGCCCAAGGCCGGGCTCAGGTCCGAGGCGGCGGCCGC
GCCCGCACCCGCACCGGCACCCACGCCCACGCCCGAGGAAGGGCCCGACGCGGGCTGGGGAGACCGCATTCCCTT
GGAAATCCTGGTGCAGATTTTCGGGTTGTTGGTGGCGGCGGACGGCCCCATGCCCTTCCTGGGCAGGGCTGCGCG
CGTGTGCCGCCGCTGGCAGGAGGCCGCTTCCCAACCCGCGCTCTGGCACACCGTGACCCTGTCGTCCCCGCTGGT
CGGCCGGCCTGCCAAGGGCGGGGTCAAGGCGGAGAAGAAGCTCCTTGCTTCCCTGGAGTGGCTTATGCCCAATCG
GTTTTCACAGCTCCAGAGGCTGACCCTCATCCACTGGAAGTCTCAGCTGGTAGGTGAGTGCTGTCCTCGGCTCAC
TTTCCTCAAGCTCTCCGGCTGCCACGGTGTGACTGCTGACGCTCTGGTCATGCTAGCCAAAGCCTGCTGCCAGCT
CCATAGCCTGGACCTACAGCACTCCATGGTGGAGTCCACAGCTGTGGTGAGCTTCTTGGAGGAGGCAGGGTCCCG
AATGCGCAAGTTGTGGCTGACCTACAGCTCCCAGACGACAGCCATCCTGGGCGCACTGCTGGGCAGCTGCTGCCC
CCAGCTCCAGGTCCTGGAGGTGAGCACCGGCATCAACCGTAATAGCATTCCCCTTCAGCTGCCTGTCGAGGCTCT
GCAGAAAGGCTGCCCTCAGCTCCAGGTGCTGCGGCTGTTGAACCTGATGTGGCTGCCCAAGCCTCCGGGACGAGG
GGTGGCTCCCGGACCAGGCTTCCCTAGCCTAGAGGAGCTCTGCCTGGCGAGCTCAACCTGCAACTTTGTGAGCAA
CGAGGTCCTGGGCCGCCTACTCCACGGCTCTCCCAACCTGCGCTTACTGGATCTTCGTGGCTGTGCGCGCATCAC
GCCGGCTGGCCTTCAGGATCTGCCATGTCGGGAGCTGGAGCAGCTTCATCTGGGCCTGTATGGCACGTCAGACCG
GCTGACTCTAGCCAAGGAGGGCAGCCCCTTTTTGACCCAGAAGTGGTGCCATACACTGCGAGAACTGGACTTGAG
TGGCCAGGGGTTCAGTGAGAAGGACCTGGAGCAGGCCCTGGCTGCCTTCTTAAGCACCCCTGGGGGCTCACACCC
AGCCCTGTGCTCTCTTAACCTCAGGGGCACCCGGGTCACACCAAGCACTGTCAGCTCTGTGATCAGCAGCTGCCC
GGGCCTGCTTTACCTCAACCTGGAGTCCTGCCGGTGCCTTCCCCGGGGTTTGAAGCGGGCCTACCGGGGCCTGGA
GGAAGTCCAGTGGTGTCTGGAGCAGGTGCTCACCAGCCCCTCACCCAGCTAGGCAGCCACAGACCTGGGACACCT
CAGCCAGCTTGCCCACCCTCCACCTTTGCCCAATTTCAGATATTTGAGCATTTTGTTAAAATAAAACATTTTTAG
G

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FIGURE 4232

GAAGCTCTGGGAAGGGGATGCCCCCGAGGGTGCCAGTCCAGCTAGCTGCCCCACCCCTCAGGCCCAGCCTGGCCC
CCAAGCTCCCCACTCTGGTGCCCCGAGCAGCCCTGTGGGCAAGCAGCCGCCGCCATGGCCGAGCACCTGGAGCTG
CTGGCAGAGATGCCCATGGTGGGCAGGATGAGCACACAGGAGCGGCTGAAGCATGCCCAGAAGCGGCGCGCCCAG
CAGGTGAAGATGTGGGCCCAGGCTGAGAAGGAGGCCCAGGGCAAGAAGGGTCCTGGGGAGCGTCCCCGGAAGGAG
GCAGCCAGCCAAGGGCTCCTGAAGCAGGTCCTCTTCCCTCCCAGTGTTGTCCTTCTGGAGGCCGCTGCCCGAAAT
GACCTGGAAGAAGTCCGCCAGTTCCTTGGGAGTGGGGTCAGCCCTGACTTGGCCAACGAGGACGGCCTGACGGCC
CTGCACCAGTGCTGCATTGATGATTTCCGAGAGATGGTGCAGCAGCTCCTGGAGGCTGGGGCCAACATCAATGCC
TGTGACAGTGAGTGCTGGACGCCTCTGCATGCTGCGGCCACCTGCGGCCACCTGCACCTGGTGGAGCTGCTCATC
GCCAGTGGCGCCAATCTCCTGGCGGTCAACACCGACGGGAACATGCCCTATGACCTGTGTGATGATGAGCAGACG
CTGGACTGCCTGGAGACTGCCATGGCCGACCGTGGCATCACCCAGGACAGCATCGAGGCCGCCCGGGCCGTGCCA
GAACTGCGCATGCTGGACGACATCCGGAGCCGGCTGCAGGCCGGGGCAGACCTCCATGCCCCCCTGGACCACGGG
GCCACGCTGCTGCACGTCGCAGCCGCCAACGGGTTCAGCGAGGCGGCTGCCCTGCTGCTGGAACACCGAGCCAGC
CTGAGCGCTAAGGACCAAGACGGCTGGGAGCCGCTGCACGCCGCGGCCTACTGGGGCCAGGTGCCCCTGGTGGAG
CTGCTCGTGGCGCACGGGGCCGACCTGAACGCAAAGAGGTGCGGGCCAAGCTTCTGGAACTGAAACACAAGCACG
ACGCCCTCCTGCGCGCCCAGAGCCGCCAGCGCTCCTTGCTGCGCCGCCGCACCTCCAGCGCCGGCAGCCGCGGGA
AGGTGGTGAGGCGGGTGAGCCTAACCCAGCGCACCGACCTGTACCGCAAGCAGCACGCCCAGGAGGCCATCGTGT
GGCAACAGCCGCCGCCCACCAGCCCGGAGCCGCCCGAGGACAACGATGACCGCCAGACAGGCGCAGAGCTCAGGC
CGCCGCCCCCGGAGGAGGACAACCCCGAAGTGGTCAGGCCGCACAATGGCCGAGTAGGGGGCTCCCCAGTGCGGC
ATCTATACTCCAAGCGACTAGACCGGAGTGTCTCCTACCAGCTGAGCCCCCTGGACAGCACCACCCCCCACACCC
TGGTCCACGACAAGGCCCACCACACCCTGGCTGACCTGAAGCGCCAGCGAGCTGCTGCCAAGCTGCAGCGACCCC
CACCTGAGGGGCCCGAGAGCCCTGAGACAGCTGAGCCTGGCCTGCCTGGTGACACGGTGACCCCCCAGCCTGACT
GTGGCTTCAGGGCAGGCGGGGACCCACCCCTGCTCAAGCTCACAGCCCCGGCGGTGGAGGCTCCCGTGGAGAGGA
GGCCGTGCTGCCTGCTCATGTGAGGCTGTTGCTCAGCATGCAGGGGCCCTGTCTCGGGCACAGCCCAAGGCTGCC
TCCCCACGGTGCGTGCCCTGGTGCTGCGGGTGCAGCACGGAAACCCCGGCTTCTACTGTACAGGACACTGGCCCC
TCTCAGGTCAGAAGACATGCCTGGAGGGATGTCTGGCTGCAAAGACTATTTTTATCCTGCAACTCTTGATAAAGG
GCTGTTTTGCCATGG

FIGURE 4233

GGCGCCGAGTCTGGGCGCGGGGACGCGGGGCGGCGCGAAGCGGGGCCCTCTGCCGCCCCGCGCTCCCATGTACGC
CTTTTACTCGTTGCTCATCTACATCTTCTACAGCCTCTTCCGCAGGGATGGTGGCGCCGCGGCGGCCGCGGAGCC
CGGGGACCCCGCCCAGAGAGCCCGCAAGCCCCGGGGTCGCCGGCGCCCAGACCTGCCCGCGCCAGAGCTGTGGAC
CGAGCTGACCGGCCTGGCCGCCAGCTCCGAGCCTGAGGATGGGTCGGAAGGCGCAGCCGAGGGTCGCGCGGCCGC
GGTGTCCCTGGAAGAGGCCCTACTGCGCCTCGCCGAGTTCCTCTCCGTCCAGCTGGGGGCGGAAGAGAGCTGCGG
GGGCCCGGCGGACCTGGGCCAGTCTGGCGAGGTCCCCTCACTGTTGACAGTGACCAGTCAGCTCTTGGCCCTTCT
GGCATGGCTTCGAAGCCCCAGGGGGAGGCAGGCCCTGCTCCAGGGGACTCAGCCAGCCCCTCGGGTCCGGCCCCC
CTCTCCAGATGGATCCACATCCCAAGAAGAAAGCCCTTCCCACTTCACCGCAGTCCCAGGCGAGCCACTGGGGGA
TGAGACCCAGGGACAGCAGCCCCTCCAGTTGGAGGAGGATCAGAGGGCGTGGCAGCGGCTGGAGCAGCTCATCCT
GGGACAGGAGGAGCTGAAGCAGCAGCTGGAACAGCAGGAGGAGGAGTTGGGTCGACTGCGCCTGGGCGTGGGCGA
CGGACTCAGAGAAAAGGGTTCAGCATCTGACTCTGGAGAACGAGGCCCTGAAGCAGAGCCTGAGTCTC**ATG**CGGG
ACCTCCTGCTGCACTGGGGCCCCGGGCCCCCCATCAGGGCTCCGCAGGAGGAGGCGGAGGCATTGCTAGAGCTCC
AGGGCCGGCTTCAGGAGGCCCAAGACACCACAGAAGCCCTCCGAGCCCAGCTGGGGGTGCAGGAGGTGCAGCTGC
AGGGCCTTCAAGGGGCCCTCCAGCAGCTCCAGCAGGAGACGGAGCAGAACTGCAGGCGTGAGCTACAGCAGATGC
ATGGGCAGCTGGCAGGACTTCGGGCACGGATGGCCAGCCTGCGTCAGGGCTGCGGGGACCTCCGAGGTTTGGTCA
GCACCTTTACCCAGAGCTGTCAGGGTTCGCTGAGTGAGGCCCGGGGCCAGGTGTCCTGGGCCTTGGGGGCACTGT
CATCTGGAGGGCCTGGCACTCAGCTCCCTGAGGGGCAGCAAGGGCCCCCAGCCGGATGCCCAGGGCGGCTGCCAG
AACTCAAGGGAAATATCCGTGTGCTGTGTCGGCTGAGGCCAGGGACATCTTCTAGCCTTGTGAGTGTGGAGCCTG
GCCCAGGGGGCACCGTCACCACCTGCTACCGGGGGCGCCATCGTCGATTCCGCCTAGACTGGGTCTTCCCTCCAG
ACGCCAGCCAGGAGGAGGTCTTCAGAGAGCTGGAACCTGCGGTGCTGTCCTGCCTCCGAGGCTACAGCGTCTGCA
TCTTCACCTATGGCCAGACAGGCACCGGGAAGACCTACAGCATGGAGGGCCCTCCTGAGGACCCCGGCATAGTTC
CTAGGGCGCTGCAGTCGCTGTTCCGGGAGATGGGGGCCGGCCGGCAGCACCGGGTGACACTCAGCATGGTGGAGA
TCTACAATGAGGCTGTCAGGGACCTCCTTGCTCCAGGGCCTCCCGAGCGCCTGGCCGTGAGGCAGGGCCCAGAAG
GCCAGGGCGGGATCCAGGTGGCTGGCCTCACCCACTGGGACGTGCCCAACCTGGAGACATTGCACCAGATGCTGA
AACTGGGGAGGAGCAACCGGGCCACCGCCGCCACCGCCATGAACCAGCGCAGCTCCCGCTCGCATGCCCTGGTCA
CGCTGACGCTGCGCGCGGCGTCTCCACCGCGCGCTCCAGGCACCGCAGGCACGCTGCACCTGGTGGACCTGGCGG
GATCCGAACGCGCACGGAAGGCAGGGGCGGTCGGCCCGCCGCGGAGAGACCCAGACGGCGCCCGGCGCCTGCGGG
AGGCCCAGACCATAAACCGCTCGCTGCTGGCGCTAGGAGGCGTGATGGCCGCACTGCGGGCCCACCGGCCGCACG
TGCCCTTCCGCGACTCGCAGCTCACGCGACTGCTGCAGCCGGCGCTGGGCCCAGGCACCACCGCGGTGCTGCTGC
TGCAGGTGGGCGCCGGGGCGGGGCAGGTGTGTGCGTGCCGGTCGCCGCCCACCCGGGCCCGCCCACCCGCGCCTC
TTGCCCGCAGATCTCCACGCGGCCGGAGGATCTCGGGGAGACAGTCTGCTCCCTCAAGTTCGCCGACCGAGTGGG
TCAAGTGGAGCTGGGGCCAGCCCGGCGCCGCAGGGTCCCGCGCTCCTCCGGGACGCCTTCTTCCCTCAGCACCGA
CACTCCGCTCACCGGGACCCCCTGCACCCCTACGCCGTCCCCTGGCAGTCCTCCATGCCCCAGTCCCGACAACGG
CTCGGGCTCGGCTCTCGCGCCCGCAGAGGGCCTGCCCCTCTAGTCCTGGGTCGCGGCCCTGCCCATGGGGTCTCA
GGCCAGGTCTCTGCTGGCAGAGGCGG**TAG**TAAAGTCCCTGTACCCCGTCTCCCAGGGCACAAGCTCCCTAGCCTC
TTTGGATCCATTGCCCCTGAGCTCCCAGAGTCACCCCTCCACCTCCGCAGCCAGTGAAGTGTGTTGTGCCTGCTG
AAGTGATCACCCCCCGCCCCCAGCCCTGCATCAGGCCACAGGTCTTGGCTTTCTCCTTATCACCATTTGCTGTTA
TCACGGCACACAGCAGGGAATCCCAGGCCCCCCCGCCAAGTGGTTACCCAAGTCACCACTCCTGACCCAAAAATC
AGGCATGGCATTAAAACGTTGCAAATTCCTTTACTGTTATCCCCCCCACCACCAGGACCATGTAGGGTGCAGTCT
TTACTCCCTAACCCGTTTCCCGAAAAAGGTGCTACCTCCTTTCCAGACAGATGAGAGAGGGCAGGACTTCAGGCT
GGATCCACCACTGGGCTCTCCCTCCCCAGCCTGGAGCACGGGAGGGGAGGTGACGCCTGGTGACTGATGGATGGG
TATGGGCTGAGAAGAGGGGACTAGGAAGGGCTATTCCAGGCTCAGGCCCTGCTCCTGCAGGCTTTGCCGCTGAGT
GTAGGAAAAACAGGCATGGCAGACCAGGGTGAGGGTTGTGCCCAGCTGGGCCACGGCCATGCGTGGGGTGGCCCA
ATAAACACCGTGGACTCCC

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FIGURE 4234

CGGAGCAGTGGTCGGAGATGTGGCGACCGGCTGGAGTGCAGTGTCTCAATCTTGGCTCACTGCAATCTCCGCCTA
CCAAGATCAAGCGATTCTCCTGTCTCAGCCTCCCAACTACCTGGGATTACAGGTGCAGCTCTGTCATTTCCACTC
TGCTCTGCTGCACAGAAGGCAGAAGCCCTGGCCGTCCCCTGCTGTGTTCTTCAGGAGAAACGTCAGGGGCCTTCC
TCCAAGGTTCTCCAGCCCCACACCCCTGTGGAGGAAGGTGCTCTCCACCGCGGTAGTGGGGGCGCCCCTGCTCCT
CGGAGCCCGCT**ATG**TCATGGCAGAGGCACGGGAGAAGAGGAGGATGCGGCTCGTGGTGGATGGCATGGGGCGCTT
TGGCAGACCTTGCCTCCCCAGGCCTTGGAGACCCACCCTCCTGGTGTCCTCCTCTCTTCCTAGTGGACCTCAGGC
TGCAGGTCTCTGAAGGTCGGCCTGCAGATCTCCCTGGACTACTGGTGGTGCACCAATGTTGTCCTTCGAGGGGTG
GAAGAGAACAGCCCAGGCTACTTGGAGGTGATGTCTGCGTGTCACCAGCGGGCGGC**TGA**TGCCCTGGTGGCAGGG
GCCATCAGCAACGGGGGCCTCTACGTGAAGCTGGGCCAGGGGCTGTGCTCCTTCAACCACCTGCTTCCCCCCGAG
TATACCCGGACCCTGCGCGTGCTAGAGGACAGGGCCCTCAAGCGGGGCTTCCAGGAG

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FIGURE 4235

GGCGGGCTGGTGCTGTGTCCACTGCAATGCCTCTCCTCTCCCCAGATAGCAAAAAAGCTCATCAAGGCCTTTGCT
GAGCAGATATTTTACACCGGCTTCATCCACTCGGACCCACATCCTGGCAACGTTCTGGTGCGGAAAGGCCCGGAC
GGGAAAGCGGAGCTGGTGCTGCTGGACCACGGGCTCTACCAGTTCCTGGAGGAGAAGGACCGCGCAGCCCTCTGC
CAGCTGTGGCGGGCCATCATCCTGCGGGACGACGCCGCC**ATG**AGGGCGCACGCAGCCGCACTGGGGGTGCAAGAC
TACCTCCTGTTAGCCGAGATGTTCATGCAGCGCCCCGTGCGCCTGGGGCAGCTGTGGGGTTCGCACCTACTGAGC
CGCGAAGAGGCGGCCTACATGGTGGACATGGCCCGCGAGCGCTTCGAGGCCGTCATGGCGGTGCTCAGGGAGCTG
CCGCGGCCCATGCTGCTGGTGCTGCGCAACATCAACACCGTGCGCGCTATCAACGTGGCCCTCGGCGCCCCCGTG
GACCGCTACTTCCTTATGGCTAAAAGGGCTGTCCGGGGCTGGAGCCGCCTGGCGGGCGCCACGTATCGGGGTGTC
TACGGCACCAGCCTCCTGCGCCACGCCAAGGTCGTCTGGGAGATGCTCAAGTTTGAAGTGGCGCTCAGGCTGGAG
ACCTTGGCCATGCGGCTGACCGCCCTCCTGGCTCGTGCTCTGGTCCACCTGAGCCTCGTGCCCCCAGCGGAGGAG
CTCTACCAGTACCTGGAGACC**TAG**GGTGCAGCCGCCCAGGGCCGGCGGGGCCCTTTTCACCTTGGGCTGACGGAG
GTGGCGGGGCTAGAGGTGTAGACACCCCGAGCCCCGTGGGCACTCGCACTGGGGGGCTGTGACAGCAGCTGGGCC
AGGAGGCCGTGTAATGACCACACACTCCTCTCAAGCAAAAAA

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FIGURE 4236

ATGGTCACCATGGAGCCCGGGTACCTGTTCCTGGGTTCTCGCCTGGGCAATTCCCTCCTCCTCAAGTACACGGAG
AAGCTGCAGGAGCCCCCGGCCAGTGCTGTCCGTGAGGCTGCCGACAAGGAAGAGCCTCCCTCAAAGAAGAAGCGA
GTGGATGCGACGGCCGGCTGGTCAGCTGCGGGTAAGTCGGTGCCGCAGGATGAGGTGGACGAGATTGAAGTGTAC
GGCAGCGAGGCCCAGTCGGGAACACAGCTGGCCACCTACTCCTTTGAGGTGTGTGACAGCATCCTGAACATTGGA
CCCTGTGCCAATGCCGCCGTGGGCGAACCTGCCTTCCTCTCTAAAGAGTTTCAGAACAGCCCCGAGCCGGACCTG
GAGATTGTGGTTTGCTCCGGCCACGGGAAGAACGGGGCTTTGTCGGTGCTGCAGAAGAGCATCCGGCCCCAGGTG
GTGACAACATTTGAGCTTCCCGGCTGCTATGACATGTGGACAGTCATCGCCCCGGTGCGTAAGGAGGAGGAGGAC
AATCCCAAGGGGGAGGGCACAGAGCAGGAACCCAGCACCACCCCTGAAGCAGACGACGACGGCCGCAGACACGGA
TTCCTGATTCTGAGCCGGGAAGACTCCACCATGATCCTGCAGACGGGGCAGGAGATCATGGAGCTGGACACCAGT
GGCTTCGCCACTCAGGGCCCCACGGTCTTTGCTGGGAACATCGGGGACAACCGCTACATTGTCCAAGTGTCACCA
CTGGGCATCCGCCTGCTGGAAGGAGTGAATCAGCTGCACTTCATCCCCGTGGACCTGGGCGCCCCCATCGTGCAG
TGCGCCGTGGCCGACCCCTATGTGGTCATCATGAGTGCCGAGGGCCACGTCACCATGTTCCTGCTGAAGAGTGAC
TCCTACGGTGGCCGCCACCACCGCCTGGCGCTGCACAAGCCCCCGCTGCACCATCAGTCCAAGGTGATTACGCTG
TGCCTGTACCGAGACCTCAGCGGCATGTTCACCACTGAGAGCCGCCTGGGTGGGGCCCGTGACGAGCTCGGGGGC
CGCAGTGGCCCGGAGGCCGAGGGCCTGGGCTCAGAGACTAGCCCCACAGTGGATGACGAGGAGGAGATGCTGTAT
GGGGATTCGGGCTCCCTCTTCAGCCCCAGCAAGGAGGAGGCCCGAAGAAGCAGCCAGCCCCCTGCTGACCGGGAC
CCTGCACCCTTCCGGGCAGAGCCTACCCACTGGTGCCTGCTGGTGCGGGAGAATGGCACCATGGAGATCTACCAG
CTTCCCGACTGGCGGCTGGTGTTCCTGGTGAAGAACTTCCCTGTGGGGCAGCGGGTCCTTGTGGACAGCTCCTTT
GGACAGCCCACTACACAGGGCGAGGCCCGCAGGGAGGAGGCCACGCGCCAGGGGGAGCTGCCCCTCGTCAAGGAG
GTGCTGCTGGTGGCGCTGGGCAGCCGCCAGAGCAGGCCCTACCTGCTGGTGCATGTGGACCAAGAGCTGCTTATC
TACGAGGCCTTCCCCCACGACTCTCAGCTCGGCCAGGGCAATCTCAAAGTCCGCTTTAAGAAGGTCCCTCACAAC
ATCAACTTCCGTGAGAAGAAGCCAAAGCCATCCAAGAAGAAAGCAGAAGGTGGCGGCGCAGAGGAGGGGGCTGGG
GCCCGGGGCCTCGTGGCGCGTTTCCGCTACTTCGAGGATATTTATGGCTACTCAGGGGTCTTCATCTGCGGCCCC
TCCCCTCACTGGCTCTTGGTGACCGGCCGAGGGGCTCTGCGGCTACACCCCATGGCCATCGACGGCCCGGTCGAC
TCTTTCGCTCCATTCCACAATGTCAACTGTCCCCGCGGCTTCCTGTACTTCAACAGACAGGGCGAGCTGAGGATC
AGTGTCCTGCCTGCCTACCTGTCCTATGATGCCCCATGGCCTGTCAGGAAGATCCCGCAGCGTTGCACGGCCCAC
TATGTGGCTTACCACGTGGAGTTTAAGGTGTATGCTGTGGCCACCAGCACCAACACGCCGTGTGCCCGCATCCCA
CGCATGACTGGCGAGGAGAAGGAGTTTGAGACCATCGAGAGAGATGAGCGGTACATCCACCCCCAGCAGGAGGCC
TTCTCCATCCAGCTCATCTCCCCGGTCAGCTGGGAGGCTATTCCCAATGCCAGGATCGAGCTGCAGGAGTGGGAG
CATGTGACCTGCATGAAGACAGTGTCTCTGCGCAGTGAGGAGACCGTGTCGGGCCTCAAAGGCTACGTGGCCGCC
GGGACCTGCCTCATGCAGGGGGAGGAGGTCACGTGCCGAGGGCGGATCTTGATCATGGATGTGATTGAGGTGGTG
CCCGAGCCTGGCCAGCCCTTGACCAAGAACAAGTTCAAAGTCCTTTACGAGAAGGAGCAGAAGGGGCCCGTGACC
GCCCTGTGCCACTGCAATGGCCACCTGGTGTCGGCCATCGGCCAGAAGATTTTCCTGTGGAGCCTGCGGGCCAGC
GAGCTGACGGGCATGGCCTTCATCGACACGCAGCTCTACATACACCAGATGATCAGCGTCAAGAACTTCATCCTG
GCAGCCGACGTCATGAAGAGCATTTCGCTGCTGCGCTACCAGGAGGAAAGCAAGACGCTGAGCCTGGTGTCGCGG
GATGCCAAGCCCCTGGAGGTGTACAGCGTGGACTTCATGGTGGACAATGCCCAGCTGGGTTTTCTGGTGTCTGAC
CGCGACCGCAACCTCATGGTGTACATGTACCTGCCCGAAGCCAAGGAGAGTTTCGGGGGCATGCGCCTGCTGCGT
CGGGCAGACTTCCACGTGGGTGCCCACGTGAACACGTTTTGGAGGACCCCGTGCCGGGGGGCCACTGAAGGGCTC
AGCAAAAAGTCGGTCGTGTGGGAGAATAAGCACATCACGTGGTTTGCCACCCTGGACGGCGGCATCGGGCTGCTG
CTGCCCATGCAGGAGAAGACCTACCGGCGGCTGCTGATGCTGCAGAACGCGCTGACCACCATGCTGCCACACCAC
GCCGGCCTCAACCCCCGCGCCTTCCGGATGCTGCACGTGGACCGCCGCACCCTCCAGAATGCCGTGCGCAACGTG
CTGGATGGGGAGCTGCTCAACCGCTACCTGTACCTGAGCACCATGGAGCGCAGCGAGGTAGCCAAGAAGATCGGC
ACCACACCAGACATAATCCTGGACGACTTGCTGGAGACGGACCGCGTCACCGCCCACTTCTAGCCCCGTGGATGC
CGTCACCACCAGCACACGGAACTACCTCCCACCCCCTTTTTGTACAAAACACAAGGAAAAACATTTTTTGC

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FIGURE 4237

CGCTCGCTCCGGCAACTGGAGGCACGGCAGAGGAGGCAGGGCCGACGGCGGTGGGCGGTGCGTTGCGCAGGCTCG
GGCCTCCCGCTCGCCGCTGCGTTGGGACCGCGCAGCCCGGTGTGTGCAGTGGCCTCAGGGATCCGGAAAGTCTAG
GACTGAACTTCTCCTAACATCCAGTAATGGGGACCTGGAACCTGGGCGTACTAGAGTGCCGCGCGTAGGGCTCCA
GGTCGCTGGCTTCTGCGCTTTCTTCCTCTCCAAAGTTGAGTATCTCCTATCTGTGTCCTCATACATACTGCCGCC
TGAGGTGCC**ATG**GCCCCCAAGCCGGGGGCCGAGTGGAGCACAGCCCTGTCCCATCTGGTGCTGGGAGTGGTGTCT
CTGCACGCAGCCGTGAGCACAGCCGAGGCAAGTCGAGGGGCTGCTGCTGGCTTCCTGCTCCAGGTCTTGGCTGCC
ACCACCACGCTGGCCCCAGGGCTGAGCACACATGAAGACTGCCTTGCTGGAGCCTGGGTGGCCACCGTCATCGGC
CTTCCCCTTCTGGCCTTCGATTTCCACTGGGTGAATGGGGACCGCTCCTCTGCCAACCTGCTCCTGGGAGGAGGC
ATGGTGCTGGCAGTGGCTGGCGGCCACCTCGGCCCTGAGGGCCGCTCTGTGGCTGGTCAGGCAATGCTGTTGGTG
GTCGCAGTGACCATCCTCATTGTAGCTGTCTTCACGGCCAACACTTATGGGATGTGGGGGGGGGCGATGCTGGGT
GTGGCAGGCCTCCTGAGCCGGCTGGAGGAGGACAGGCTGCTGCTGCTACCGAAGGAGGATGTCTGTCGCTGGGCC
TTGGCTGTAGGCAGCTGGGCTTACTGCCGGGCCCTGCATACACAGCGCCTCCAGTGGGAG**TGA**CAGTTGGATACA
GCCAGGCAGGGTTTCTGCCCTGCCGAACACTTTCCCTCCCACCTGCCTGCTCCTGGCGCCTTCTCCCTAGGGGTA
GACTCTTCTGCCTACTGAAGTGGGTTTGCTGCACATTGACTGGTCAGGGGCAGAGTCTGGGTGCTGTCCTTTGGC
CACGTGTGGGGACTTGTCTAGACCAGAATGAAAGGGACAGGGTCCCAGACACGTTTGGGGGTCCTGATTCTGGGC
TGGACACGGTTGTGGATCCAGAGAAGAGGCCTAGTCTCCAATAAATCTTAGGAATTTTGCAGG

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FIGURE 4238

CTAATGGTCACTTGATGTGCGCTGGCTGTTTTATCCACCTACTAGCAGATGCCCGGCTGAAGGAGGAGCAGGCCA
CGTGCCCCAATTGTCGTTGTGAGATCAGTAAGAGCCTCTGCTGCCGGAACCTGGCCGTGGAGAAAGCCGTGAGCG
AGCTGCCTTCAGAGTGTGGCTTCTGCCTGCGCCAGTTTCCCCGCTCCCTCCTGGAGAGGCACCAGAAAGAGGAAT
GCCAGGACAGGGTAACCCAGTGCAAGTACAAACGCATCGGCTGCCCATGGCACGGCCCCTTCCATGAGCTGACGG
TGCACGAGGCTGCGTGCGCCCACCCGACCAAGACAGGCAGTGAGCTGATGGAGATCCTGGATGGGATGGACCAGA
GCCACCGCAAGGAGATGCAGCTGTACAACAGCATCTTCAGCCTGCTCAGCTTCGAGAAGATTGGCTACACAGAGG
TCCAGTTCCGGCCGTACCGCACAGACGACTTCATCACGCGCCTGTACTATGAGACGCCCAGGTTCACAGTGCTGA
ACCAGACGTGGGTCCTGAAGGCTCGAGTCAACGACTCGGAGCGTAACCCCAACCTGTCCTGCAAGCGTACGCTCT
CCTTCCAGCTCCTCCTCAAGAGCAAGGTCACGGCACCGCTGGAGTGCTCCTTCCTGCTGCTCAAGGGCCCCTACG
ACGACGTGAGGATCAGCCCCGTCATCTACCACTTTGTCTTCACCAACGAGAGCAACGAGACGGACTACGTGCCAC
TGCCCATCATTGACTCCGTGGAGTGCAACAAGCTGCTGGCTGCCAAGAACATCAACCTGCGGCTCTTCCTGTTCC
AGATACAGAAGTAGGGCGGGGCCTCAGGATGTCCGAGGAGCCCACGGGCGGCATCCCAGCACCGCTGCCCTGTCC
ACCTGGCTGGCAGCTGCTTCACAGGACTATCTGATCACTTTAGCAAAGGAGGAGAACAAACGAAGCCAACACAGG
GCAAGTCTGCATGCGTGCACGACGGGGCCCCCGCCTCCGGCTCACCCCACCGACCCCTGCCTCCCCTCCTTCCGA
GGGCCGCCAGAGGCTGGGCTGACCCGAAGAGGAGACGGTGCACCAGGCGCCCCGAGGCTAAGAGACGGTGGCAGC
AAGGAGGCCGAGAGGCACAGCGACCCTGCCCCAGCCCTTCTGTGCAGTCAGGCGGCGGTGCTGCTCCATCCCTGC
GGGTTCCGGCGGGGCGCGGGGGCCTTGCTGACATCAGACGGGATATCCGAATATCTGATAGCAATTAAAAGGCAG
CCTTGTTTCGTACTTTCTGTTTTGTTCGAGGGGAAGGCATGGCTGTGAATGGACAGCGTGGGGGCTTTGGTTTGG
CCTGGGGGTCAGAGCCTGCCCCGCCCCCATCTGTGTGCCCGCACACGTCCCCCGAGGAAAGACTCAGAGACACTG
CCTCCCCCTACGCTCTGTCATGGGGTCTTGAGACTGAGGCTTGGGCAGGAAGATCCAGGTAGGGTCGGGGCTGCC
CTGGCCAACCGGCCGCTCCCAGGGAGACAGGACTCAGCCACCAGGGCTCAGCAGGCATTTTCGGAAAGCAGGGTG
AAATTGTCTCTTCCCAGGAAAAAGATTAAACTCCTTGCAGGCTCTTGGATAAGTTACAC

FIGURE 4239

ATGCAATCAGTGTGGGAAGGCCTTCAGTCAGAGCTCAAGCCTTTTCCTCCATCATCGGGTTCATACTGGAGAGAA
ACCCTATGTATGTAATGAATGCGGCAGAGCCTTTGGTTTTAACTCTCATCTTACTGAACACGTAAGGATTCACAC
AGGAGAAAAACCCTATGTTTGTAATGAGTGCGGCAAAGCCTTTCGTCGGAGTTCCACTCTTGTTCAGCATCGAAG
AGTTCACACTGGGGAGAAGCCCTACCAGTGCGTTGAATGTGGGAAAGCTTTCAGCCAGAGCTCCCAGCTCACCCT
ACATCAGCGAGTTCACACTGGAGAGAAGCCCTATGACTGTGGTGACTGTGGGAAGGCCTTCAGCCGGAGGTCAAC
CCTCATTCAGCATCAGAAAGTTCACAGCGGAGAGACTCGTAAGTGCAGAAAACATGGTCCAGCCTTTGTTCATGG
CTCCAGCCTCACAGCAGATGGACAGATTCCCACTGGAGAGAAGCACGGCAGAGCCTTTAACCATGGTGCAAATCT
CATTCTGCGCTGGACAGTTCACACTGGTGAGAAATCCTTTGGATGTAATGAATATGGAAAAGCTTTCAGTCCCAC
CTCACGACCCACTGAAGATCAGATAATGCATGCTGGGGAAAAGCCCTATAAATGTCAAGAATGTGGAAACGCCTT
CAGTGGAAAGTCAACCCTTATTCAACATCAGGTAACTCACACTGGTCAGAAACCATGTCATTGCAGTGTGTATGG
GAAAGCCTTCAGCCAGAGTTCACAGCTCACACCACCTCAGCAGACTTGTGTTGGAGAGAAACCTGCTTTAAATGA
TGGCTCTAAAAGATACTTTATTCATATCAAGAAGATTTTCCAAGAAAGACATTTTTAATGTGATAAATGCAGAAG
ACAGTTTAGCAACTGTTCACTTGACATTAGAAGATAAGATGGCATAATGAAAGATATATAAGGTCTAAATATTAC
TGGCAAAGTAAAATAAATAGTTCAGATGACTACTAAAGTCAAAGTCATTAAATCTGGAAGTAAACACGAGAATTC
ATTCTGGGAAATCAGGCTGTCTGTGTAAAGGTTACTGCTGTGCTCAGGAGTTGAACCGTGTGGTGCTGTATCCGG
ATACTCATGACGAATGGATGGAGGGCGTGAAAAGTGAGCCCAGCTGGTGCTCTGGGTCTACCCTACCTGACATCC
TTCCAGTCTTATCCTTTGTTTCCTATCCAGGCCCAGGCTTGTGGCTGAGAACATCCACTTTCAGTCCCATATACC
TGCCTCCAAGTGTGGTACAGAGAACTTGGGCCTGCTGGGGGGCGCTTAGCCTTACTCTCTCCACCACCTCTCCCAC
CAACCCCCAGATGAACTGCAGGTAGACGTTTCTTCCTTGCTTGGAGCCCCAGTTTTTGCATTTCATTTTCATTAA
AATGAAAGGTGGTTTGGTTTTGGTTCTAAGGAGCTCTACAGTTTAACAGAGAGAGGGACCTTAGGGGCCAAGAAA
GCAGGGGCCTACCAAGTATCTCCACTTTTGAAAATTGTAATTACTGATAAAAAATTTTTTAAAGGCAGGTTTATT
GAAGCATAATTTATAAACAATAAAATTTACTCTTTTTAGTGT

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FIGURE 4240

GCGGCATGGGCAGTATCCGCCGCCATCCTCTTCCGTGAGGCGCGCTGAGACCCGGACCGGCCCTCCTGAGAGGAT
GCCGGTGCGGGCGCCCGCGGAGAGGGACCCGTCGCCATGGGCCGTGTGATCCGTGGACAGAGGAAGGGCGCCGGG
TCTGTGTTCCGCGCGCACGTGAAGCACCGTAAAGGCGCTGCGCGCCTGCGCGCCGTGGATTTCGCTGAGCGGCAC
GGCTACATCAAGGGCATCGTCAAGGACATCATCCACGACCCGGGCCGCGGCGCGCCCCTCGCCAAGGTGGTCTTC
CGGGATCCGTATCGGTTTAAGAAGCGGACGGAGCTGTTCATTGCCGCCGAGGGCATTCACACGGGCCAGTTTGTG
TATTGCGGCAAGAAGGCCCAGCTCAACATTGGCAATGTGCTCCCTGTGGGCACCATGCCTGAGGGTACAATCGTG
TGCTGCCTGGAGGAGAAGCCTGGAGACCGTGGCAAGCTGGCCCGGGCATCAGGGAACTATGCCACCGTTATCTCC
CACAACCCTGAGACCAAGAAGACCCGTGTGAAGCTGCCCTCCGGCTCCAAGAAGGTTATCTCCTCAGCCAACAGA
GCTGTGGTTGGTGTGGTGGCTGGAGGTGGCCGAATTGACAAACCCATCTTGAAGGCTGGCCGGGCGTACCACAAA
TATAAGGCAAAGAGGAACTGCTGGCCACGAGTACGGGGTGTGGCCATGAATCCTGTGGAGCATCCTTTTGGAGGT
GGCAACCACCAGCACATCGGCAAGCCCTCCACCATCCGCAGAGATGCCCCTGCTGGCCGCAAAGTGGGTCTCATT
GCTGCCCGCCGGACTGGACGTCTCCGGGGAACCAAGACTGTGCAGGAGAAAGAGAACTAGTGCTGAGGGCCTCAA
TAAAGTTTGTGTTTATGCC

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FIGURE 4241

GCGGACTCGGGTTGCCCTCGGTCCGAGTGATCCCTGGTCGCTTCCTTAGCCCTCCCGCCTTCGGCATTGGGGTCC
CCGCGTCCCCCGGGCCTCCAGGCGGGAAAGCGCGGGGGCTTTGCGGGGCCTTGAGCGCCTGGTGTGGGAGGTGGT
CGAGCCCAGCCACCCTCCCCCGCGGCGGCGCGAGGTCTCTCGGCCAGAACACGTGGATGCCCACCCACCACTGAG
CCTCATGGAGGTGGTAACATTTGGCGATGTGGCTGTGCACTTCTCTCGGGAGGAGTGGCAGTGTCTGGACCCTGG
CCAGAGGGCCCTCTACAGGGAAGTGATGCTGGAGAACCACAGCAGTGTGGCTGGACTAGCAGGATTCCTGGTTTT
CAAGCCTGAGCTGATCTCTCGGCTGGAGCAGGGAGAAGAGCCATGGGTCCTCGACCTGCAGGGAGCAGAGGGGAC
AGAGGCACCAAGGACCTCCAAGACAGATTCTACGATTAGGACTGAAAATGAGCAGGCCTGTGAGGACATGGACAT
CCTAAAATCAGAATCCTATGGGACAGTGGTCAGAATCTCCCCACAGGACTTTCCTCAGAATCCTGGCTTTGGAGA
CGTTTCTGATTCTGAGGTCTGGTTAGACAGTCATCTGGGCAGTCCCGGGCTGAAAGTGACAGGCTTTACCTTCCA
AAATAACTGTTTGAATGAGGAGACTGTGGTTCCCAAGACCTTCACCAAGGACGCACCCCAGGGATGTAAGGAGCT
GGGAAGCAGCGGCCTGGATTGTCAGCCTCTTGAAAGTCAGGGAGAGAGTGCGGAAGGGATGTCCCAGAGATGCGA
GGAGTGTGGCAAAGGCATCAGAGCCACTTCAGATATCGCTCTGCATTGGGAAATTAATACACAGAAAATTAGCAG
ATGTCAAGAATGCCAAAAAAAGTTATCTGACTGCTTGCAGGGGAAACATACAAATAACTGCCATGGAGAGAAGCC
GTACGAATGTGCAGAGTGTGGGAAAGTCTTCAGGCTCTGCTCGCAGCTTAATCAGCATCAGAGAATCCACACGGG
AGAGAAACCCTTTAAATGCACTGAGTGTGGAAAAGCCTTCCGCCTGAGCTCAAAACTTATTCAGCATCAAAGAAT
CCACACTGGGGAGAAGCCCTACAGATGTGAGGAATGTGGAAAAGCTTTTGGTCAGAGCTCAAGCCTCATCCACCA
TCAGAGAATCCACACAGGAGAGAGGCCCTATGGTTGTCGTGAGTGTGGGAAAGCCTTCAGCCAGCAGTCGCAGCT
GGTTAGACACCAGAGAACTCACACTGGGGAGAGGCCCTACCCTTGCAAGGAGTGTGGGAAGGCCTTCAGCCAGAG
CTCCACCCTAGCCCAGCATCAAAGGATGCATACTGGGGAGAAAGCTCAAATTCTAAAAGCCTCAGACAGTCCAAG
CCTTGTTGCACATCAGAGAATTCACGCTGTAGAGAAACCATTTAAGTGTGATGAGTGTGGGAAAGCTTTTAGGTG
GATCTCTCGCCTGAGTCAGCATCAGCTGATTCACACTGGAGAGAAGCCTTATAAATGCAACAAGTGTACAAAAGC
CTTTGGTTGTAGTTCACGGCTTATTCGCCATCAGAGAACTCACACTGGAGAAAAACCATTTAAATGTGATGAGTG
TGGCAAAGGCTTTGTTCAGGGCTCACACCTTATTCAGCATCAGCGAATCCACACTGGAGAGAAACCCTATGTGTG
TAATGACTGTGGAAAAGCCTTCAGTCAGAGTTCCAGCCTTATTTACCATCAGAGAATCCATAAAGGAGAGAAGCC
CTACGAATGCCTCCAATGCGGAAAAGCCTTCAGTATGAGCACACAGCTTACAATACATCAAAGGGTTCACACTGG
AGAGAGGCCCTATAAATGTAATGAATGTGGGAAAGCCTTCAGTCAAAACTCAACCCTTTTCCAACACCAGATAAT
TCATGCAGGGGTGAAGCCCTATGAGTGCAGTGAGTGTGGAAAAGCCTTCAGCCGGAGCTCATATCTTATTGAACA
CCAGAGAATACACACTAGGGCCCAGTGGTTTTACGAATATGGGAATGCCCTGGAAGGGTCCACCTTTGTGAGCCG
TAAAAAGGTTAATACTATAAAGAAACTGCATCAGTGTGAAGACTGTGAGAAGATATTTAGGTGGCGTTCACACCT
AATTATACACCAGAGAATTCACACCGGGGAGAAGCCTTATAAATGCAATGACTGTGGCAAAGCTTTTAATCGTAG
CTCAAGGCTTACCCAGCATCAAAAAATTCACATGGGATAGACCACTTACATATAAATGTGTATATATGTGAATAA
ACCTATAGCCTTAACTT

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FIGURE 4242

GGGCGCTTCCGGGGACCAGGCCCGCTTTTGGCTGCATCAGCCGGGGATTGCCGGCGCCAGGTGCTGGGGGCGACT
CGGACAGCGGGAGCGTGGGGTGGAGTAGGATGGAGTCTCCCTCCCGAGCTGGGGGTGTGGGCCTAGGAAAGGCTG
CTTCGCCGCTGTGTTCGGAGAGCTCTGGATACTGCGGGGCTTTTCCGCGGAGGAGCGCCCGCCGGCATCTGCATC
TGGGACCGACCTCCTGGGCTGGCTGATCAAAGAGGAAGCAGCAGCAATGTCTGCTGTGGGGGCTGCAACTCCATA
CCTGCATCATCCTGGTGATAGTCACAGTGGCCGAGTGAGTTTCTTGGGGGCCCAGCTTCCTCCAGAGGTGGCAGC
AATGGCCCGGCTACTAGGGGACCTAGACAGGAGCACGTTCAGAAAGTTGCTGAAGTTTGTGGTCAGCAGCCTGCA
GGGGGAGGACTGCCGAGAGGCTGTGCAGCGTCTTGGGGTCAGCGCCAACCTGCCGGAGGAGCAGCTGGGTGCCCT
GCTGGCAGGCATGCACACACTGCTCCAGCAGGCCCTCCGTCTGCCCCCCACCAGCCTGAAGCCTGACACCTTCAG
GGACCAGCTCCAGGAGCTCTGCATCCCCCAAGACCTGGTCGGGGACTTGGCCAGCGTGGTATTTGGGAGCCAGCG
GCCCCTCCTTGATTCTGTGGCCCAGCAGCAGGGGGCCTGGCTGCCGCATGTTGCTGACTTTCGGTGGCGGGTGGA
TGTAGCAATCTCCACCAGTGCCCTGGCTCGCTCCCTGCAGCCGAGCGTCCTGATGCAGCTGAAGCTTTCAGATGG
GTCAGCATACCGCTTTGAGGTCCCCACAGCCAAGTTCCAGGAGCTGCGGTACAGCGTGGCCCTGGTCCTAAAGGA
GATGGCAGATCTGGAGAAGAGGTGTGAGCGCAGACTGCAGGACTGACCCCTCACTTGACCAGTCCCATTCAGATC
CGGCTTGGACAGGCACCTGAGATGGTGCCAAAGTGCAGCTGACTCTTCCCACGACAGCCCTGCCCTTCCCATGAG
GCAGGCTCTTCAAGCGATATCTGAAGTGGCTCTGATGCCTTTGCCACACTCCTCGCATCTCTGGGACATCCCTTC
CGCACTCTCTCCCTGACTTTCAAGAGGCTGACAATCCAGGCCGCTGCTTCCCAGCTCCTTACATCCCTGGGGTGC
GTCCTTGGTGAAGGTCTTGGGAACCACAGTCTCCTCATTCAAACAGTTATTTTGGAAGGTAAAGCCTGTCACTTT
CAGCCCGGGACTGCCCAGATGACTGTCTAACCAGACCTCAGAATCAGAAACGTCTCCAAAGCCAGGATTCTGAGG
AAAGTCCTGTGGGGAGATTCTGACCACTGTCCCATAGGATTCTGATTTTAGGATGTCCATGTCCTCACAGGCCTG
CTCATTTTCAGTCCTAATCGTAGAATCTGAAATAAACAGGAACAAAGACGTTCCTTAGGCCCTGTGCTCAGAGAA
ATGATAAGACTACAAATGCGGGGGCCAGGGCTCAAGGCTCCCAGGATAGTTGCACTGAGCACTGTGAGGCCCCAG
GTGGAAACGTGCAAGAGAAGGCAGAGCCTTTGACAGTTCTCAAAAGTGGTTTCATACTTTTTACCTTGTTCACTC
ATTCGATAGCAATGAATGTTCATTGCTGGGGCAGGGCTGGGTTCTGTGAGCAGAGAGGTCCATCCTACAGGCACT
GGTGTGGGGCACAGTCCATGCAGAGGCAAAGGAGACAAAGCAAGACCAGAAGGGTGGGAAGCTACCACGGATTGG
GCTGCGGGGTCAGGGGCTCCAGCATCCGAGCTGGCGAGGAAACAGTACAGGGTCTGAGTTCTGAATGGAGAGCAT
GGATTGTGATGAGGAAACAAGGCTGGAAGAGCTGCCAAGGGACTTACTACGTGAGCTCAGAAGAGCACTGGGCAC
CTAGGCCGTTCATGGCTACTCCCTGGGGTGGGCTTCTCTGAGCAGGACCCAGCCCCCTCAGCTGCCTCCTGGCTG
CTGCTGCCAACTTGCACCTGGCCACCTCCCCTGCTTCTCCCTGGGCTGTGCGTGGCCACCTCTAAGACCACACTG
ACTTCTTCCCTGGGGCTGCAAGTTTCTGGAGGCCCCCAGGAGGCCTTCCAGACATCTGCGTTCCTTCTGGACTCT
CCAAGTAAGCACAGGCTTCTGTCCTACTCTGTAACCCTAGAGGGCACCTCTGCTGAGGTCAGACATCTCCTTGAT
GTCTGTGATCAAACCATGACAGGATGCAACCACAACACACGGCTATGATCATGACAACCACGGTCCCCACCACGA
CACAATCACGTTCACAACCACAACCACGCAGCCACAGGGTTTCACCGTGTTGGCCAGGATGGTCTCGATCTCCTG
ACCTCGTGATCCGCCCACCTCGGCCTCCCAAATCGCTAGAATGGCCGGCGTGAGCCACCATGCCCGGCTCCACGG
CCCCTACTTTTCACAACTTTGGACTGTCCAACTTGCTTCCCGAGGCCCCTACAAGCCGGTGGCCTCTGTAGGACC
TGGTCCTGCCCTGCTGCAGGAGTGACGGTGATGACCCAGCAGCAACTGAAAGGGAGGTGAGGGGCTTCCTTTCTG
CAGCTGAGATGCACGCAGACCCATCTCCCTTGTCATGCTGGGCAGCACACCGGCTAAGCAGGGGAGCAGAGCACC
AGGCCGGGCGCCTGCCCAGCAGGAGCTGATGCCGGAGGCAGTGGGTGCCCTGGTTAGGGCTGAGGACCCCAAGAT
AGGCTGAAGTCCTAACTTGAAGCACCTCAGAATGTGACCTTGTTTGGAAACACAGTCGTTGCAGATTAATTAGTC
ACCATGAGGTCACTGGGGTGGCCCCTAACCCACCATGACTGGTGTCCTTCTAAGGAGATGGCCACATGAACACAG
ACACGCAGGGAGAAGGCAGCCGTGTGAAGGAGTCGGAGATCAGAGTGAGGGACGCATCCACAAGCCAAGGAACCC
AAGGACTGCCAGAAAACCACCAGCTGCCCGGAGAGGCAGGACAGGATCCTTCCCTAAAGCCTTCACAGGGGGGCA
CGGCCCTGCTTGCTGACCCCCCGGTTTCAGATTTCCGGCCTCCACAGCTGTGAGACAATAAATTTCTGTTGTTTT

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FIGURE 4243

GCGCAGACGGGGCGGGGCAGCCCTTTGTCTGAAGGTGCTGCGGGATGCCGTTCCTTCGCGCGTGAGGCTGCGGCT
CTGACGCCCCATAGGCTCCTTCAATTTCCGTGATCCTCGGAGTCCCCAGGAGACCAGGTGATGGCAGCAGCCAGA
CTCCTGCCAGTGCCGGCAGGACCCCAGGCCAAGCTGACCTTCGAGGATGTGGCTGTGCTCCTCTCCCAGGATGAA
TGGGACCGCCTGTGCCCTGCTCAGAGGGGTCTCTACAGAAATGTGATGATGGAAACCTATGGGAATGTAGTCTCA
TTGGGACTTCCAGGATCCAAGCCTGACATAATCTCCCAGCTGGAGCGAGGGGAAGATCCCTGGGTCCTGGACAGG
AAGGGGGCTAAGAAGAGCCAGGGCCTGTGGAGTGACTACTCAGATCCTGTGCCCCAGAAACCGTGAGATGTCTCA
ATTCCCATGCAGGCAAAGGAGGGGAGCTTCACACTCAGCAGACCTCATAGCTGTTACACCAATGGCTTCTGCTGT
GGCTATCCCATGTCCGGTGTGAGGAGACAGTGGTATGACTCATCCCTTTGTGTCCGGAATTGGTGGGTTCTTGGT
CTCACTGACGTCAAGAATGAAGCTGCGGACCCTCGTGGTACAGCCAGCTCTAATGGCTTCCATTTGGCGTTTCCA
ACCATAATAGCCTTTACCAGTCAAGGAGCCAATGTGGGGG

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FIGURE 4244

CGGTAACTACCCCGGCTGCGCACAGCTCGGCGCTCCTTCCCGCTCCCTCACACACCGGCCTCAGCCCGCACCGGC
AGTAGAAGATGGTGAAAGAAACAACTTACTACGATGTTTTGGGGGTCAAACCCAATGCTACTCAGGAAGAATTGA
AAAAGGCTTATAGGAAACTGGCTTTGAAGTACCATCCTGATAAGAACCCAAATGAAGGAGAGAAGTTTAAACAGA
TTTCTCAAGCTTACGAAGTTCTCTCTGATGCAAAGAAAAGGGAATTATATGACAAAGGAGGAGAACAGGCAATTA
AAGAGGGTGGAGCAGGTGGCGGTTTTGGCTCCCCCATGGACATCTTTGATATGTTTTTTGGAGGAGGAGGAAGGA
TGCAGAGAGAAAGGAGAGGTAAAAATGTTGTACATCAGCTCTCAGTAACCCTAGAAGACTTATATAATGGTGCAA
CAAGAAAACTGGCTCTGCAAAAGAATGTGATTTGTGACAAATGTGAAGGTAGAGGAGGTAAGAAAGGAGCAGTAG
AGTGCTGTCCCAATTGCCGAGGTACTGGAATGCAAATAAGAATTCATCAGATAGGACCTGGAATGGTTCAGCAAA
TTCAGTCTGTGTGCATGGAGTGCCAGGGCCATGGGGAGCGGATCAGTCCTAAAGATAGATGTAAAAGCTGCAACG
GAAGGAAGATAGTTCGAGAGAAGAAAATTTTAGAAGTTCATATTGACAAAGGCATGAAAGATGGCCAGAAGATAA
CATTCCATGGTGAAGGAGACCAAGAACCAGGACTGGAGCCAGGCGATATTATCATTGTGTTAGATCAGAAGGACC
ATGCTGTTTTTACTCGACGAGGAGAAGACCTTTTCATGTGTATGGACATACAGCTCGTTGAAGCACTGTGTGGCT
TCCAGAAGCCAATATCTACTCTTGACAACCGAACCATCGTCATCACCTCTCATCCAGGTCAGATTGTCAAGCATG
GAGATATCAAGTGTGTACTAAATGAAGGCATGCCAATTTATCGTAGACCATATGAAAAGGGTCGCCTAATCATCG
AATTTAAGGTAAACTTTCCTGAGAATGGCTTTCTCTCTCCTGATAAACTGTCTTTGCTGGAAAAACTCCTACCCG
AGAGGAAGGAAGTGGAAGAGACTGATGAGATGGACCAAGTAGAACTGGTGGACTTTGATCCAAATCAGGAAAGAC
GGCGCCACTACAATGGAGAAGCATATGAGGATGATGAACATCATCCCAGAGGTGGTGTTCAGTGTCAGACCTCTT
AATGGGCCAGTGAATAACACTCACTGCTGGCATTTAATGTGCAGTAGTGAATGAGTGAAGGACTGTAATCATAAT
ATGCTCACTACTTGCTCTTGTTTTTGTTTTAATAAACTATAGTAGTGTTTTAAAAAGTTAAATGAAGAATAAACG
CAAATATAAAAGCTC

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FIGURE 4245

GAGGGAGAGCTGGGGCCTGCTCCCGGAGAGATACGGCTATGTCGATCGAAATCGAATCTTCGGATGTGATCCGCC
TTATTATGCAGTACTTGAAGGAGAACAGTTTACATCGGGCGTTAGCCACCTTGCAGGAGGAGACTACTGTGTCTC
TGAATACTGTGGACAGCATTGAGAGTTTTGTGGCTGACATTAACAGTGGCCATTGGGATACTGTGTTGCAGGCTA
TACAGTCTCTGAAATTGCCAGACAAAACCCTCATTGACCTCTATGAACAGGTTGTTCTGGAATTGATAGAGCTCC
GTGAATTGGGTGCTGCCAGGTCACTTTTGAGACAGACTGATCCCATGATCATGTTAAAACAAACACAGCCAGAGC
GATATATTCATCTGGAGAACCTTTTGGCCAGGTCTTACTTTGATCCTCGTGAGGCATACCCAGATGGAAGTAGCA
AAGAAAAGAGAAGAGCAGCAATTGCCCAGGCCTTAGCTGGCGAAGTCAGTGTGGTGCCTCCATCTCGTCTCATGG
CATTGCTGGGACAGGCACTGAAGTGGCAGCAGCATCAGGGATTGCTTCCTCCTGGTATGACCATAGATTTGTTTC
GAGGCAAGGCAGCTGTCAAAGATGTGGAAGAAGAAAAGTTTCCTACACAACTGAGCAGGCATATTAAGTTTGGTC
AGAAATCACATGTGGAGTGTGCTCGATTTTCTCCAGATGGTCAGTATTTGGTCACTGGGTCTGTTGATGGATTCA
TTGAAGTATGGAACTTTACTACTGGAAAAATCAGAAAGGATCTTAAGTACCAGGCCCAAGATAACTTTATGATGA
TGGATGATGCTGTCCTCTGCATGTGTTTCAGCAGAGATACAGAAATGTTAGCAACTGGGGCCCAAGATGGAAAAA
TCAAGGTGTGGAAGATTCAGAGTGGACAATGTTTAAGGAGATTTGAGAGGGCACACAGTAAGGGTGTCACCTGTC
TAAGCTTTTCTAAGGATAGCAGTCAGATCCTTAGTGCTTCTTTTGACCAGACAATTAGAATTCATGGTTTAAAAT
CTGGGAAAACCCTGAAGGAATTTCGTGGCCATTCCTCCTTTGTTAACGAAGCAACATTTACACAAGATGGACATT
ACATTATTAGTGCATCCTCTGATGGCACTGTAAAGATCTGGAATATGAAGACCACAGAATGTTCAAATACCTTTA
AATCCCTGGGCAGCACCGCAGGGACAGATATTACCGTCAACAGTGTGATTCTACTTCCTAAAAACCCTGAGCACT
TTGTGGTGTGCAACAGATCAAACACGGTGGTCATCATGAACATGCAGGGGCAGATTGTCAGAAGCTTCAGTTCTG
GTAAAAGAGAAGGTGGGGACTTTGTTTGCTGTGCCCTCTCTCCCCGTGGTGAATGGATCTACTGTGTAGGGGAGG
ACTTTGTGCTCTACTGTTTCAGTACAGTCACTGGCAAACTGGAGAGAACTTTGACAGTGCACGAGAAGGATGTGA
TTGGTATTGCACATCACCCTCATCAGAACCTGATTGCTACCTACAGTGAAGATGGACTCCTAAAGCTCTGGAAAC
CATAATTCAACTTTTCTTTTTAAATCAGCTCGAAAGCATGTACTTAAATGAAGCATATTCATGTAATGTGCTTTT
TTTTTTTTTTGCCAGCTTTTCTAAGCAAATAGATTGTCTGAATTAGTCACAG

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FIGURE 4246A

GCGGCCCGCGGGCGGGTCGCCTCCCCTCCTGTAGCCCACACCCTTCTTAAAGCGGCGGCGGGAAGATGAGGCTTC
GGGAGCCGCTCCTGAGCGGCAGCGCCGCGATGCCAGGCGCGTCCCTACAGCGGGCCTGCCGCCTGCTCGTGGCCG
TCTGCGCTCTGCACCTTGGCGTCACCCTCGTTTACTACCTGGCTGGCCGCGACCTGAGCCGCCTGCCCCAACTGG
TCGGAGTCTCCACACCGCTGCAGGGCGGCTCGAACAGTGCCGCCGCCATCGGGCAGTCCTCCGGGGAGCTCCGGA
CCGGAGGGGCCCGGCCGCCGCCTCCTCTAGGCGCCTCCTCCCAGCCGCGCCCGGGTGGCGACTCCAGCCCAGTCG
TGGATTCTGGCCCTGGCCCCGCTAGCAACTTGACCTCGGTCCCAGTGCCCCACACCACCGCACTGTCGCTGCCCG
CCTGCCCTGAGGAGTCCCCGCTGCTTGTGGGCCCCATGCTGATTGAGTTTAACATGCCTGTGGACCTGGAGCTCG
TGGCAAAGCAGAACCCAAATGTGAAGATGGGCGGCCGCTATGCCCCCAGGGACTGCGTCTCTCCTCACAAGGTGG
CCATCATCATTCCATTCCGCAACCGGCAGGAGCACCTCAAGTACTGGCTATATTATTTGCACCCAGTCCTGCAGC
GCCAGCAGCTGGACTATGGCATCTATGTTATCAACCAGGCGGGAGACACTATATTCAATCGTGCTAAGCTCCTCA
ATGTTGGCTTTCAAGAAGCCTTGAAGGACTATGACTACACCTGCTTTGTGTTTAGTGACGTGGACCTCATTCCAA
TGAATGACCATAATGCGTACAGGTGTTTTTCACAGCCACGGCACATTTCCGTTGCAATGGATAAGTTTGGATTCA
GCCTACCTTATGTTCAGTATTTTGGAGGTGTCTCTGCTCTAAGTAAACAACAGTTTCTAACCATCAATGGATTTC
CTAATAATTATTGGGGCTGGGGAGGAGAAGATGATGACATTTTTAACAGATTAGTTTTTAGAGGCATGTCTATAT
CTCGCCCAAATGCTGTGGTCGGGAGGTGTCGCATGATCCGCCACTCAAGAGACAAGAAAAATGAACCCAATCCTC
AGAGGTTTGACCGAATTGCACACACAAAGGAGAÇAATGCTCTCTGATGGTTTGAACTCACTCACCTACCAGGTGC
TGGATGTACAGAGATACCCATTGTATACCCAAATCACAGTGGACATCGGGACACCGAGCTAGCGTTTTGGTACAC
GGATAAGAGACCTGAAATTAGCCAGGGACCTCTGCTGTGTGTCTCTGCCAATCTGCTGGGCTGGTCCCTCTCATT
TTTACCAGTCTGAGTGACAGGTCCCCTTCGCTCATCATTCAGATGGCTTTCCAGATGACCAGGACGAGTGGGATA
TTTTGCCCCCAACTTGGCTCGGCATGTGAATTCTTAGCTCTGCAAGGTGTTTATGCCTTTGCGGGTTTCTTGATG
TGTTCGCAGTGTCACCCCAGAGTCAGAACTGTACACATCCCAAAATTTGGTGGCCGTGGAACACATTCCCGGTGA
TAGAATTGCTAAATTGTCGTGAAATAGGTTAGAATTTTTCTTTAAATTATGGTTTTCTTATTCGTGAAAATTCGG
AGAGTGCTGCTAAAATTGGATTGGTGTGATCTTTTTGGTAGTTGTAATTTAACAGAAAAACACAAAATTTCAACC
ATTCTTAATGTTACGTCCTCCCCCCACCCCCTTCTTTCAGTGGTATGCAACCACTGCAATCACTGTGCATATGTC
TTTTCTTAGCAAAAGGATTTTAAAACTTGAGCCCTGGACCTTTTGTCCTATGTGTGTGGATTCCAGGGCAACTCT
AGCATCAGAGCAAAAGCCTTGGGTTTCTCGCATTCAGTGGCCTATCTCCAGATTGTCTGATTTCTGAATGTAAAG
TTGTTGTGTTTTTTTTTAAATAGTAGTTTGTAGTATTTTAAAGAAAGAACAGATCGAGTTCTAATTATGATCTAG
CTTGATTTTGTGTTGATCCAAATTTGCATAGCTGTTTAATGTTAAGTCATGACAATTTATTTTTCTTGGCATGCT
ATGTAAACTTGAATTTCCTATGTATTTTTATTGTGGTGTTTTAAATATGGGGAGGGGTATTGAGCATTTTTTAGG
GAGAAAAATAAATATATGCTGTAGTGGCCACAAATAGGCCTATGATTTAGCTGGCAGGCCAGGTTTTCTCAAGAG
CAAAATCACCCTCTGGCCCCTTGGCAGGTAAGGCCTCCCGGTCAGCATTATCCTGCCAGACCTCGGGGAGGATAC
CTGGGAGACAGAAGCCTCTGCACCTACTGTGCAGAACTCTCCACTTCCCCAACCCTCCCCAGGTGGGCAGGGCGG
AGGGAGCCTCAGCCTCCTTAGACTGACCCCTCAGGCCCCTAGGCTGGGGGGTTGTAAATAACAGCAGTCAGGTTG
TTTACCAGCCCTTTGCACCTCCCCAGGCAGAGGGAGCCTCTGTTCTGGTGGGGGCCACCTCCCTCAGAGGCTCTG
CTAGCCACACTCCGTGGCCCACCCTTTGTTACCAGTTCTTCCTCCTTCCTCTTTTCCCCTGCCTTTCTCATTCCT
TCCTTCGTCTCCCTTTTTGTTCCTTTGCCTCTTGCCTGTCCCCTAAAACTTGACTGTGGCACTCAGGGTCAAACA
GACTATCCATTCCCCAGCATGAATGTGCCTTTTAATTAGTGATCTAGAAAGAAGTTCAGCCGAACCCACACCCCA
ACTCCCTCCCAAGAACTTCGGTGCCTAAAGCCTCCTGTTCCACCTCAGGTTTTCACAGGTGCTCCCACCCCAGTT
GAGGCTCCCACCCACAGGGCTGTCTGTCACAAACCCACCTCTGTTGGGAGCTATTGAGCCACCTGGGATGAGATG
ACACAAGGCACTCCTACCACTGAGCGCCTTTGCCAGGTCCAGCCTGGGCTCAGGTTCCAAGACTCAGCTGCCTAA
TCCCAGGGTTGAGCCTTGTGCTCGTGGCGGACCCCAAACCACTGCCCTCCTGGGTACCAGCCCTCAGTGTGGAGG
CTGAGCTGGTGCCTGGCCCCAGTCTTATCTGTGCCTTTACTGCTTTGCGCATCTCAGATGCTAACTTGGTTCTTT
TTCCAGAAGCCTTTGTATTGGTTAAAAATTATTTTCCATTGCAGAAGCAGCTGGACTATGCAAAAAGTATTTCTC
TGTCAGTTCCCCACTCTATACCAAGGATATTATTAAAACTAGAAATGACTGCATTGAGAGGGAGTTGTGGGAAAT
AAGAAGAATGAAAGCCTCTCTTTCTGTCCGCAGATCCTGACTTTTCCAAAGTGCCTTAAAAGAAATCAGACAAAT
GCCCTGAGTGGTAACTTCTGTGTTATTTTACTCTTAAAACCAAACTCTACCTTTTCTTGTTGTTTTTTTTTTTTT
TTTTTTTTTTTTTTTGGTTACCTTCTCATTCATGTCAAGTATGTGGTTCATTCTTAGAACCAAGGGAAATACTGC
TCCCCCCATTTGCTGACGTAGTGCTCTCATGGGCTCACCTGGGCCCAAGGCACAGCCAGGGCACAGTTAGGCCTG

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FIGURE 4246B

GATGTTTGCCTGGTCCGTGAGATGCCGCGGGTCCTGTTTCCTTACTGGGGATTTCAGGGCTGGGGGTTCAGGGAG
CATTTCCTTTTCCTGGGAGTTATGACCGCGAAGTTGTCATGTGCCGTGCCCTTTTCTGTTTCTGTGTATCCTATT
GCTGGTGACTCTGTGTGAACTGGCCTTTGGGAAAGATCAGAGAGGGCAGAGGTGGCACAGGACAGTAAAGGAGAT
GCTGTGCTGGCCTTCAGCCTGGACAGGGTCTCTGCTGACTGCCAGGGGCGGGGGCTCTGCATAGCCAGGATGACG
GCTTTCATGTCCCAGAGACCTGTTGTGCTGTGTATTTTGATTTCCTGTGTATGCAAATGTGTGTATTTACCATTG
TGTAGGGGGCTGTGTCTGATCTTGGTGTTCAAAACAGAACTGTATTTTTGCCTTTAAAATTAAATAATATAACGT
GAATAAATGACCCTATCTTTGT

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FIGURE 4247

TAGTCGGGCGGGGTTGTGAGACGCCGCGCTCAGCTTCCATCGCTGGGCGGTCAACAAGTGCGGGCCTGGCTCAGC
GCGGGGGGGCGCGGAGACCGCGAGGCGACCGGGAGCGGCTGGGTTCCCGGCTGCGCGCCCTTCGGCCAGGCCGGG
AGCCGCGCCAGTCGGAGCCCCCGGCCCAGCGTGGTCCGCCTCCCTCTGGGCGTCCACCTGCCCGGAGTACTGCCA
GCGGGCATGACCGACCCACCAGGGGCGCCGCCGCCGGCGCTCGCAGGCCGCGGATGAAGAAGAAAACCCGGCGCC
GCTCGACCCGGAGCGAGGAGTTGACCCGGAGCGAGGAGTTGACCCTGAGTGAGGAAGCGACCTGGAGTGAAGAGG
CGACCCAGAGTGAGGAGGCGACCCAGGGCGAAGAGATGAATCGGAGCCAGGAGGTGACCCGGGACGAGGAGTCGA
CCCGGAGCGAGGAGGTGACCAGGGAGGAAATGGCGGCAGCTGGGCTCACCGTGACTGTCACCCACAGCAATGAGA
AGCACGACCTTCATGTTACCTCCCAGCAGGGCAGCAGTGAACCAGTTGTCCAAGACCTGGCCCAGGTTGTTGAAG
AGGTCATAGGGGTTCCACAGTCTTTTCAGAAACTCATATTTAAGGGAAAATCTCTGAAGGAAATGGAAACACCGT
TGTCAGCACTTGGAATACAAGATGGTTGCCGGGTCATGTTAATTGGGAAAAAGAACAGTCCACAGGAAGAGGTTG
AACTAAAGAAGTTGAAACATTTGGAGAAGTCTGTGGAGAAGATAGCTGACCAGCTGGAAGAGTTGAATAAAGAGC
TTACTGGAATCCAGCAGGGTTTTCTGCCCAAGGATTTGCAAGCTGAAGCTCTCTGCAAACTTGATAGGAGAGTAA
AAGCCACAATAGAGCAGTTTATGAAGATCTTGGAGGAGATTGACACACTGATCCTGCCAGAAAATTTCAAAGACA
GTAGATTGAAAAGGAAAGGCTTGGTAAAAAAGGTTCAGGCATTCCTAGCCGAGTGTGACACAGTGGAGCAGAACA
TCTGCCAGGAGACTGAGCGGCTGCAGTCTACAAACTTTGCCCTGGCCGAGTGAGGTGTAGCAGAAAAAGGCTGTG
CTGCCCTGAAGAATGGCGCCACCAGCTCTGCCGTCTCTGGAGCGGAATTTACCTGATTTCTTCAGGGCTGCTGGG
GGCAACTGGCCATTTGCCAATTTTCCTACTCTCACACTGGTTCTCAATGAAAAATAGTGTCTTTGTGATTTTGAG
TAAAGCTCCTATCTGTTTT

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FIGURE 4248

GAAGTCGAGGCGGGAGTGACTCTGCTTCCGTTTCTGGTTTTGCTCTAGTGTTTGGGTTTCTTCGCGGCTGCTCAA
GATGAACCGACTCTTCGGGAAAGCGAAACCCAAGGCTCCGCCGCCCAGCCTGACTGACTGCATTGGCACGGTGGA
CAGTAGAGCAGAATCCATTGACAAGAAGATTTCTCGATTGGATGCTGAGCTAGTGAAGTATAAGGATCAGATCAA
GAAGATGAGAGAGGGTCCTGCAAAGAATATGGTCAAGCAGAAAGCCTTGCGAGTTTTAAAGCAAAAGAGGATGTA
TGAGCAGCAGCGGGACAATCTTGCCCAACAGTCATTCAACATGGAACAAGCCAATTATACCATCCAGTCTTTGAA
GGACACCAAGACCACGGTTGATGCTATGAAACTGGGAGTAAAGGAAATGAAGAAGGCATACAAGCAAGTGAAGAT
CGACCAGATTGAGGATTTACAAGACCAGCTAGAGGATATGATGGAAGATGCAAATGAAATCCAAGAAGCACTGAG
TCGCAGTTATGGCACCCCAGAACTGGATGAAGATGATTTAGAAGCAGAGTTGGATGCACTAGGTGATGAGCTTCT
GGCTGATGAAGACAGTTCTTATTTGGATGAGGCAGCATCTGCACCTGCAATTCCAGAAGGTGTTCCCACTGATAC
AAAAAACAAGGATGGAGTTCTGGTGGATGAATTTGGATTGCCACAGATCCCTGCTTCATAGATTTGCATCATTCA
AGCATATCTTGTAAAACAAACACATATTATGGGACTAGGAAATATTTATCTTTCCAAATTTGCCATAACAGATTT
AGGTTTCTTTCCTTTCTTTGAAGGAAAGTTTAATTACATTGCTCTTTTATTTTTTCCATTAAGAGACTCATTGCT
TGGGAAATGCTTTCTTCGTACTAAAATTTGATTCCTTTTTTTCTTATGAAAAACGAACTCAGTTTAAAAGTATTT
TTAGCTCGTATGACTTGTTTTCATTCATTAATAATAATTTGAAATAAAACTAAGGAAATGGAATCTTAAAAGTCT
ATGACAGTGTAACTCTACAGTCTCAAAATGACCTGATAAATTGATAAGACAAAGATGAGATTATTGGGGCTGTTC
ATATTATGATTCAGAATCATTTTCTATTGTGGTATTATAGGTTGGTTAAAGTGATGGCCTTTTTGATGGGTTTTG
TTGTGTCTTGTGAACAAGTCGTTACTGTGTCCATTATTGGAATGGAATTATCACTACTGTATCATGAGTGGGTAT
TTTGATTCTATGGTTCCCTCAGTATTACATCTTGACTTGTAATCAATTATGAATATTTCTTGATATTTAATGTAT
AGGACATTTATTTATACTCAATAAATATTTTTCAAAAGG

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FIGURE 4249A

ACGTGACCTGGTGACAGTGCTGACTTGGCTGTACAGCTCGATCTAGGTTCTGCGGCACGGGATGGCGGAGGCGCC
TCCTGTCTCAGGTACTTTTAAATTCAATACAGATGCTGCTGAATTCATTCCTCAGGAGAAAAAAAATTCTGGTCT
AAATTGTGGGACTCAAAGGAGACTAGACTCTAATAGGATTGGTAGAAGAAATTACAGTTCACCACCTCCCTGTCA
CCTTTCCAGGCAGGTCCCTTATGATGAAATCTCTGCTGTTCATCAGCATAGTTATCATCCGTCAGGAAGCAAACC
TAAGAGTCAGCAGACGTCTTTCCAGTCCTCTCCTTGTAATAAATCGCCCAAGAGCCATGGCCTTCAGAATCAACC
TTGGCAGAAATTGAGGAATGAGAAGCACCATATCAGAGTCAAGAAAGCACAGAGTCTTGCTGAGCAGACCTCAGA
TACAGCTGGATTAGAGAGCTCGACCAGATCAGAGAGTGGGACAGACCTCAGAGAGCATAGTCCTTCTGAGAGTGA
GAAGGAAGTTGTGGGTGCAGATCCCAGGGGAGCAAAACCCAAAAAAGCAACACAGTTTGTATACAGCTATGGTAG
AGGACCAAAAGTCAAGGGGAAACTCAAATGTGAATGGAGTAACCGAACAACTCCAAAACCGGAGGATGCTGGACC
CGAAAGTACCAAACCTGTGGGGGTTTTCCACCCTGACTCTTCAGAGGCATCCTCTAGAAAAGGAGTATTGGATGG
GTATGGAGCCAGACGAAATGAGCAGAGAAGATACCCACAGAAAAGGCCTCCCTGGGAAGTGGAGGGGGCCAGGCC
ACGACCAGGCAGAAATCCACCAAAACAGGAGGGCCACCGACATACAAACGCAGGACACAGAAACAACATGGGCCC
CATTCCAAAGGATGACCTCAATGAAAGACCAGCAAAATCTACCTGTGACAGTGAGAACTTGGCAGTCATCAACAA
GTCTTCCAGGAGGGTTGACCAAGAGAAATGCACTGTACGGAGGCAGGATCCTCAAGTAGTATCTCCTTTCTCCCG
AGGCAAACAGAACCATGTGCTAAAGAATGTGGAAACGCACACAGGTTCTCTAATTGAACAACTAACAACAGAAAA
ATACGAGTGCATGGTGTGCTGTGAATTGGTTCGTGTCACGGCCCCAGTGTGGAGTTGTCAGAGCTGTTACCATGT
GTTTCATTTGAACTGCATAAAGAAATGGGCAAGGTCTCCAGCATCTCAAGCAGATGGCCAGAGTGGTTGGAGGTG
CCCTGCCTGTCAGAATGTTTCTGCACATGTTCCTAATACCTACACTTGTTTCTGTGGCAAGGTAAAGAATCCTGA
GTGGAGCAGAAATGAAATTCCACATAGCTGTGGTGAGGTTTGTAGAAAGAAACAGCCTGGCCAGGACTGCCCACA
TTCCTGTAACCTTCTCTGCCATCCAGGACCCTGCCCACCCTGCCCTGCCTTTATGACAAAAACATGTGAATGTGG
ACGAACCAGGCACACAGTTCGCTGTGGTCAGGCTGTCTCAGTCCACTGTTCTAACCCATGTGAGAATATTTTGAA
CTGTGGTCAGCACCAGTGTGCTGAGCTGTGCCATGGGGGTCAGTGCCAGCCTTGCCAGATCATTTTGAACCAGGT
ATGCTATTGCGGCAGCACCTCCCGAGATGTGTTATGTGGAACCGATGTAGGAAAGTCTGATGGATTTGGGGATTT
CAGCTGTTTAAAGATATGTGGCAAGGACTTGAAATGCGGTAACCATACATGTTCGCAAGTGTGCCACCCTCAGCC
CTGCCAGCAATGCCCACGGCTCCCCCAGCTGGTGCGCTGTTGCCCCTGTGGCCAAACTCCTCTCAGCCAATTGCT
AGAACTTGGAAGTAGTAGTCGGAAAACATGCATGGACCCTGTGCCTTCATGTGGAAAAGTGTGCGGCAAGCCTCT
GCCTTGTGGTTCCTTAGATTTCATTCATACCTGTGAAAAGCTCTGCCATGAAGGAGACTGTGGACCATGCTCTCG
CACATCAGTTATTTCCTGCAGATGCTCTTTCAGAACAAAGGAGCTTCCATGTACCAGTCTCAAAAGTGAAGATGC
TACATTTATGTGTGACAAGCGGTGTAACAAGAAACGGTTGTGTGGACGGCATAAATGTAATGAGATATGCTGTGT
GGATAAGGAGCACAAGTGTCCTTTGATTTGTGGGAGGAAACTCCGTTGTGGCCTTCATAGGTGTGAAGAACCTTG
TCATCGTGGAAACTGCCAGACATGCTGGCAAGCCAGTTTTGATGAATTAACCTGCCATTGTGGTGCATCAGTGAT
TTACCCTCCAGTTCCCTGTGGTACTAGGCCCCCTGAATGTACCCAAACCTGCGCTAGAGTCCATGAGTGTGACCA
TCCAGTATATCATTCTTGTCATAGTGAGGAGAAGTGTCCCCCTTGCACTTTCCTAACTCAGAAGTGGTGCATGGG
CAAGCATGAGTTTCGGAGCAACATCCCCTGTCACCTGGTTGATATCTCTTGCGGATTACCCTGCAGTGCCACGCT
ACCATGTGGGATGCACAAATGTCAGAGACTCTGTCACAAAGGGGAGTGTCTTGTGGATGAGCCCTGCAAGCAGCC
CTGCACCACCCCCAGAGCTGACTGTGGTCACCCGTGTATGGCACCCTGCCATACCAGCTCACCCTGCCCTGTGAC
TGCTTGTAAAGCTAAGGTAGAGCTACAGTGTGAATGTGGACGAAGAAAAGAGATGGTGATTTGCTCTGAAGCATC
TAGTACTTATCAAAGAATAGCTGCAATCTCCATGGCCTCTAAGATAACAGACATGCAGCTTGGAGGTTCAGTGGA
GATCAGCAAGTTAATTACCAAAAAGGAAGTTCATCAAGCCAGGCTGGAGTGTGATGAGGAGTGTTCAGCCTTGGA
AAGGAAAAAGAGATTAGCAGAGGCATTTCATATCAGTGAGGATTCTGATCCTTTCAATATACGTTCTTCAGGGTC
AAAATTCAGTGATAGTTTGAAAGAAGATGCCAGGAAGGACTTAAAGTTTGTCAGTGACGTTGAGAAGGAAATGGA
AACCCTCGTGGAGGCCGTGAATAAGGGAAAGAATAGTAAGAAAAGCCACAGCTTCCCTCCCATGAACAGAGACCA
CCGCCGGATCATCCATGACTTGGCCCAAGTTTATGGCCTGGAGAGCGTGAGCTATGACAGTGAACCGAAGCGCAA
TGTGGTGGTCACTGCCATCAGGGGGAAGTCCGTTTGTCCTCCTACCACGCTGACAGGTGTGCTTGAAAGGGAAAT
GCAGGCACGGCCTCCACCACCGATTCCTCATCACAGACATCAGTCAGACAAGAATCCTGGGAGCAGTAATTTACA
GAAAATAACCAAGGAGCCAATAATTGACTATTTTGACGTCCAGGACTAAGAAGATCATGATGCACTTAGATAAAA
GAATGATTAGGTATAGTGGAGACTTATTTGCCAGCAGATAAATCATGCCCGTTCCCCTCTGCCTGGCAGAATCAC
AGTCTCACATACTGTCTTGTACTGACACATCCAAAGCATGAGTGTGTCAGAAATCCCTTGTCTATTCCTGTCTGT

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FIGURE 4249B

ATAAAGTGTTTCATTATGACCAGATCTCTGATTGTATGGTCACTAGGTATGCAATCACGCATTCAAAGAGGCTCT
TTACACCATCACTGTGATTGCTCTGAGAGTTGAGGGACTATTGGGCTTTATTTGGACAAACCAAACTTTTAGCCT
GAAACCAACTTTATGCCACTAAGTCATAGCCTCAGTTGTCCCAGTTATTTGTCCTCCTGAAAATGCCTGAAACAT
CAGACAGACATTGCTTGCTTTACCCAAACTGATCAAAATCTTTAGGAGCACAAATGAATTTTTTAGTCTGAAATA
CCAAATAATGAATTGGTATACCATATCCGGAATCACACATGTTATCTTAAACCCAGCCATCATACCTAAGTCTTT
TGCCAAAACCTCTCATAGGTATATCTAGCTGAACTTATTTTGGCATTTTCAATGTGATCAGTTCTAGACCTAGAA
GGGGGTCAGGCTGCTTTACAGAATTCTATTTCCTTAAGTCCCTGGCACTTCTCATACCACATCACTGAACCTGTT
CAGTAACAATCAGTTTGGCCGTCCCCCATGATGGTAGGAAATATAGAGAGCAAGTTCTTCTGCCAGGGTCACACT
GTGGTCTCTGAACTGACCAGTATATCCCTAACTCCTCTTTGATAGAGAAAGAGTCTCAAATGGACAACTGTCCTG
TGTTGCTTTCCCTAGGCCTTCAGCAGCCTATTGGCTCTCCCTGCCTCTGAGCTCTGGACTCTGTTTGAATATTCC
AAGTAGTATATGGACAGTCCAGGGCTTATGCCCAGCAGCCCACTGGAGGCATTCTTCAGGCTCCTTTAAGGCAGG
TGCATTGATAGTTCCATTAGTGTGACCCTTGCATTGGCACCCCTCCAGCCTGGAGGCCAGGCTTCCAGCAACTTC
CTTCTGCCCTAGAGCAAGCCATGAGCCCCAGAGCAGTAGCAGGAGACTTGAGAAGTAGAGTGACAAAAACAAGCA
CTTAATTAAATTATAAAATTTAACTTT

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FIGURE 4250

TGCTCGCTGCGCCACCGCCTCCCGCCACCCCTGCCCGCCCGACAGCGCCGCCGCCTGCCCCGCCATGGGTCGACA
GAAGGAGCTGGTGTCCCGCTGCGGGGAGATGCTCCACATCCGCTACCGGCTGCTCCGACAGGCGCTGGCCGAGTG
CCTGGGGACCCTCATCCTGGTGATGTTTGGCTGTGGCTCCGTGGCCCAGGTTGTGCTCAGCCGGGGCACCCACGG
TGGTTTCCTCACCATCAACCTGGCCTTTGGCTTTGCTGTCACTCTGGGCATCCTCATCGCTGGCCAGGTCTCTGG
GGCCCACCTGAACCCTGCCGTGACCTTTGCCATGTGCTTCCTGGCTCGTGAGCCCTGGATCAAGCTGCCCATCTA
CACCCTGGCACAGACGCTGGGAGCCTTCTTGGGTGCTGGAATAGTTTTTGGGCTGTATTATGATGCAATCTGGCA
CTTCGCCGACAACCAGCTTTTTGTTTCGGGCCCCAATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGACA
CTTGGATATGATCAATGGCTTCTTTGACCAGTTCATAGGCACAGCCTCCCTTATCGTGTGTGTGCTGGCCATTGT
TGACCCCTACAACAACCCCGTCCCCCGAGGCCTGGAGGCCTTCACCGTGGGCCTGGTGGTCCTGGTCATTGGCAC
CTCCATGGGCTTCAACTCCGGCTATGCCGTCAACCCTGCCCGGGACTTTGGCCCCCGCCTTTTTACAGCCCTTGC
GGGCTGGGGCTCTGCAGTCTTCACGACCGGCCAGCATTGGTGGTGGGTGCCCATCGTGTCCCCACTCCTGGGCTC
CATTGCGGGTGTCTTCGTGTACCAGCTGATGATCGGCTGCCACCTGGAGCAGCCCCCACCCTCCAACGAGGAAGA
GAATGTGAAGCTGGCCCATGTGAAGCACAAGGAGCAGATCTGAGTGGGCAGGGGCCATCTCCCCACTCCGCTGCC
CTGGCCTTGAGCATCCACTGACTGTCCAAGGGCCACTCCCAAGAAGCCCCCTTCACGATCCACCCTTTCAGGCTA
AGGAGCTCCCTATCTACCCTCACCCCACGAGACAGCCCCTTCAGGATTTCCACTGGACCTTGCCCAAATAGCACC
TTAGGCCACTGCCCCTAAGCTGGGGTGGAACCGGAATTTGGGTCAATACATCCTTTTGTCTCCCAAGGGAAGAGA
ATGGGCAGCAGGTATGTGTGTGTGCATGTGTGTGCATGTGTGTGCATGTGTGTGCAGGGGTGTGTGTGTGTGG
GGGGGGTTCCCAGATATTCAGGGCAAGGGACCAGTCGGAAGGGATTCTGGCTATTGGGGGAGCCCAGAGACAGGG
GAAGGCAGCCTGTCCATCTGTGCATAAGGAGAGGAAAGTTCCAGGGTGTGTATGTTTCAGGGGCTTCACATGGAG
GAGCTGCAGATAGATATGTGTTTCT

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FIGURE 4251A

CTGAAGTGCGGGAGAGTGCTGGACCCTGAGTGATGGGCCGGCGCCAGCTGGAGAGCAGCTTCGCGGAGCGACTG
GAGAGCCAGAGGTGATGGAACCAGCCCTGGAAGGCACAGGCAAAGAGGGGAAGAAAGCATCCTCCAGGAAGCGTA
CATTGGCTGAACCTCCAGCGAAGGGCCTCCTGCAGCCAGTGAAGCTCAGCAGGGCAGAACTGTACAAGGAGCCTA
CCAATGAGGAGCTTAATCGCCTTCGGGAGACTGAGATCTTGTTCCACTCCAGCTTGCTTCGTTTACAGGTAGAGG
AGCTACTAAAGGAAGTAAGGCTGTCAGAGAAGAAGAAGGATCGGATTGATGCCTTCCTACGGGAGGTCAACCAGC
GGGTTGTGAGGGTGCCCTCAGTCCCTGAGACAGAGCTCACTGACCAGGCATGGCTCCCAGCTGGGGTTCGAGTGC
CCCTCCACCAAGTGCCCTATGCCGTGAAGGGCTGTTTCCGCTTCCTGCCCCCAGCCCAGGTTACTGTTGTGGGCA
GCTACCTTCTGGGCACCTGCATCCGACCAGACATCAATGTGGATGTGGCACTGACCATGCCCAGGGAAATCCTAC
AGGACAAGGACGGGCTGAACCAGCGCTACTTCCGCAAGCGTGCCCTCTACCTGGCCCACTTGGCTCACCACCTGG
CCCAGGACCCCCTCTTTGGCAGTGTTTGCTTCTCCTACACAAATGGCTGCCACCTGAAACCCTCACTGTTGCTGC
GGCCGCGTGGAAAGGATGAGCGCCTGGTCACTGTACGTCTGCATCCGTGCCCTCCACCTGACTTCTTCCGCCCGT
GCCGCTTGCTGCCAACCAAGAACAATGTGCGCTCTGCCTGGTACCGAGGGCAGAGTCCTGCAGGGGATGGTAGCC
CAGAGCCTCCTACCCCCCGCTATAACACATGGGTCCTGCAAGATACAGTTCTCGAGTCCCATTTGCAGCTGCTGT
CAACCATTCTGAGTTCAGCCCAGGGCCTGAAGGATGGCGTGGCACTTCTGAAGGTCTGGCTGCGGCAGCGGGAGC
TGGACAAGGGCCAGGGTGGGTTTACTGGGTTCCTTGTCTCCATGCTGGTTGTCTTCCTTGTGTCTACACGCAAGA
TCCATACCACCATGAGTGGCTACCAGGTCCTGAGAAGTGTCTTGCAGTTTCTGGCCACTACAGACCTGACAGTCA
ACGGGATCAGTTTATGTCTCAGCTCAGATCCCTCTTTGCCGGCCCTGGCTGACTTCCACCAGGCCTTCTCCGTTG
TCTTCCTGGATTCCTCAGGCCATCTCAACCTCTGTGCTGATGTCACTGCCTCTACTTACCACCAGGTACAGCATG
AGGCACGGCTGTCTATGATGTTGCTGGACAGCAGAGCTGACGACGGGTTCCACCTGCTGTTGATGACTCCCAAAC
CCATGATCCGGGCTTTTGACCATGTCCTGCATCTCCGTCCACTGAGTCGCCTGCAGGCAGCGTGCCACCGGCTGA
AGCTCTGGCCAGAGCTGCAGGACAATGGTGGGGACTATGTCTCAGCTGCTTTGGGCCCCCTGACCACCCTCCTGG
AGCAGGGCCTGGGGGCTCGGCTGAACCTGCTGGCTCACTCTCGACCCCCAGTCCCAGAGTGGGACATCAGCCAAG
ATCCACCAAAGCACAAAGACTCTGGGACCCTGACCCTGGGACTCCTTCTCCGGCCTGAGGGACTGACCAGCGTCC
TTGAGCTGGGTCCAGAGGCAGACCAGCCTGAGGCTGCTAAATTCCGCCAGTTCTGGGGATCCCGCTCGGAGCTTC
GGCGTTTCCAGGACGGAGCCATTCGGGAAGCTGTGGTCTGGGAGGCAGCCTCTATGTCCCAGAAGCGCCTTATTC
CCCACCAGGTGGTCACCCACCTCTTGGCACTCCATGCTGACATCCCAGAAACCTGTGTCCACTATGTGGGGGGCC
CCCTGGATGCACTTATCCAAGGCCTGAAAGAGACCTCCAGCACAGGTGAGGAGGCCCTGGTAGCGGCGGTACGTT
GCTACGACGACCTCAGTCGCCTACTGTGGGGGCTAGAGGGTCTCCCACTGACCGTGTCTGCTGTTCAGGGAGCTC
ACCCAGTGCTGCGCTACACAGAGGTGTTCCCACCAACTCCAGTCCGTCCAGCCTTCTCCTTCTATGAGACTCTGC
GGGAGCGGTCCTCACTGCTGCCCCGGCTCGATAAGCCCTGTCCGGCCTACGTGGAGCCCATGACCGTGGTTTGTC
ACCTGGAGGGCAGTGGCCAGTGGCCACAGGACGCTGAGGCCGTGCAGCGGGTCCGAGCTGCCTTCCAGCTGCGCC
TGGCAGAGCTGTTGACACAACAGCATGGTCTGCAGTGCCGTGCCACTGCCACGCACACGGATGTCCTTAAGGATG
GATTTGTGTTTCGGATTCGCGTGGCCTATCAGCGGGAGCCCCAGATCCTGAAGGAGGTGCAGAGCCCAGAGGGGA
TGATCTCGCTGAGGGACACAGCTGCCTCCCTCCGCCTTGAGAGAGACACAAGGCAGTTGCCACTGCTCACCAGTG
CCCTGCACGGACTGCAGCAGCAGCACCCAGCCTTCTCTGGTGTGGCACGGCTGGCCAAGCGGTGGGTGCGTGCCC
AGCTTCTTGGTGAGGGTTTCGCTGATGAGAGCCTGGATCTGGTGGCCGCTGCCCTTTTCCTGCACCCTGAGCCCT
TCACCCCTCCGAGTTCCCCCCAGGTTGGCTTCCTTCGATTCCTTTTCTTGGTATCAACGTTTGATTGGAAGAACA
ACCCCCTCTTTGTCAACCTCAATAATGAGCTCACTGTGGAGGAGCAGGTGGAGATCCGCAGTGGCTTCCTGGCAG
CTCGGGCACAGCTCCCCGTCATGGTCATTGTTACCCCCCAAGACCGCAAAAACTCTGTGTGGACACAGGATGGAC
CCTCAGCCCAGATCCTGCAGCAGCTTGTGGTCCTGGCAGCTGAAGCCCTGCCCATGTTAGAGAAGCAGCTCATGG
ATCCCCGGGGACCTGGGGACATCAGGACAGTGTTCCGGCCGCCCTTGGACATTTACGACGTGCTGATTCGCCTGT
CTCCTCGCCATATCCCGCGGCACCGCCAGGCTGTGGACTCGCCAGCTGCCTCCTTCTGCCGGGGCCTGCTCAGCC
AGCCGGGGCCCTCATCCCTGATGCCCGTGCTGGGCTATGATCCTCCTCAGCTCTATCTGACGCAGCTCAGGGAGG
CCTTTGGGGATCTGGCCCTTTTCTTCTATGACCAGCATGGTGGAGAGGTGATTGGTGTCCTCTGGAAGCCCACCA
GCTTCCAGCCGCAGCCCTTCAAGGCCTCCAGCACAAAGGGGCGCATGGTGATGTCTCGAGGTGGGGAGCTAGTAA
TGGTGCCCAATGTTGAAGCAATCCTGGAGGACTTTGCTGTGCTGGGTGAAGGCCTGGTGCAGACTGTGGAGGCCC
GAAGTGAGAGGTGGACTGTGTGATCCCAGCTCTGGAGCAAGCTGTAGACGGACAGCAGGACATTGGACCTCTAGA
GCAAGATGTCAGTAGGATGACCTCCACCCTCCTTGGACATGAATCCTCCATGGAGGGCCTGCTGGCTGAACATGC

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FIGURE 4251B

TGAATCATCTCCAACAAAACCCAGCCCCAACTTTCTCTCTGATGCTCCAGCATTGGGGCAGGGGCATGGTGGCCC
ATGTAGTCTCCTGGGCCTCACCATCCCAGAAGAGGAGTGGGAGCCAGCTCAGAGAAGGAACTGAACCCAGGAGAT
CCATCCACCTATTAGCCCTGGGCCTGGACCTCCCTGCGATTTCCCACTCCTTTCTTAGTCTTCTTCCAGAAACAG
AGAAGGGGATGTGTGCCTGGGAGAGGCTCTGTCTCCTTCCTGCTGCCAGGACCTGTGCCTAGACTTAGCATGCCC
TTCACTGCAGTGTCAGGCCTTTAGATGGGACCCAGCGAAAATGTGGCCCTTCTGAGTCACATCACCGACACTGAG
CAGTGGAAAGGGGCTATATGTGTATGAATAGACCACATTGAAGGAGCACAATGCCCTCCTGTGTTGATGCCACTT
CCCAGGGTGGAGACAGTGGAAAAGAACCGAGGACAGGAAAGGATTGGGTAGGTGAAGGGGTCAGGGGACTGGTAG
TCACCCAATCTTGGAGAGGTGCAAAAAGCACTGGGGGCTACCCGTTAGCTGCATCTGCCCTGGCTGTTTGCCCGT
TCATGTCACAAACTGCCACTACTATGTACCTGCAGTGGGGTTGCAGAGATGGGGGAGACTCAAGTCTTACTCCCC
AGGAGCTCCCAGGGCCCAAGGAGGAGAATGCTGCCTCCTTTCAGTCTGGTCTACACCCACTTTCTGGTAGCCTCT
CTGCTTCCTGTAATTCTGGCTGTTTTTCCAGACTCAGCTCAAATAGTGCCCCTCCTTAAGCCCATCCCTCGCCCC
CAGCCTGAGGTGATCTTTCCCTCCTCTGAACTATTAGAGCAGTTACTGTCTGTTCAGTTCGTTTGGCAGGCACAC
ACAGTGGCATAAATTCTATTGTTTTGAACTCTGATTTAAAATTAAATTGCAGCTGGGCGTGGTGGCTTATGCTTG
TAATCCCAACACTTAGGGAGTCAGGAGAATCACTTGAGCTCAGGAGTTCTAGACCAATCTGGGCAACAGAGAGAC
CCCATCTCTTTTAAATAAAAAGTTAAATTGCTTAATTTCCCCCGTATTCCTGGCCTGTCTGCCCCTTTCACATAA
TTTTAACCTGGTTTCTTGTATGTAAACTCCTTGAGGGCAAGAACATGTTTGAACATAG

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FIGURE 4252

ACACTCTACCACC**ATG**AATCCATTCCTGATCCTTGCCTTTGTGGGAGCTGCTGTTGCTGTCCCCTTTGACGATGA
TGACAAGATTGTTGGGGGCTACACCTGTGAGGAGAATTCTCTCCCCTACCAGGTGTCCCTGAATTCTGGCTCCCA
CTTCTGCGGTGGCTCCCTCATCAGCGAACAGTGGGTGGTATCAGCAGCTCACTGCTACAAGACCCGCATCCAGGT
GAGACTGGGAGAGCACAACATCAAAGTCCTGGAGGGGAATGAGCAGTTCATCAATGCGGCCAAGATCATCCGCCA
CCCTAAATACAACAGGGACACTCTGGACAATGACATCATGCTGATCAAACTCTCCTCACCTGCCGTCATCAATGC
CCGCGTGTCCACCATCTCTCTGCCCACCACCCCTCCAGCTGCTGGCACTGAGTGCCTCATCTCCGGCTGGGGCAA
CACTCTGAGCTTTGGTGCTGACTACCCAGACGAGCTGAAGTGCCTGGATGCTCCGGTGCTGACCCAGGCTGAGTG
TAAAGCCTCCTACCCTGGAAAGATTACCAACAGCATGTTCTGTGTGGGCTTCCTTGAGGGAGGCAAGGATTCCTG
CCAGCGTGACTCTGGTGGCCCTGTGGTCTGCAACGGACAGCTCCAAGGAGTTGTCTCCTGGGGCCATGGCTGTGC
CTGGAAGAACAGGCCTGGAGTCTACACCAAGGTCTACAACTATGTGGACTGGATTAAGGACACCATCGCTGCCAA
CAGC**TAA**AGCCCCCGGTCCCTCTGCAGTCTCTATACCAATAAAGTGGCCCTGCTCTC

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FIGURE 4253

TCGTGTGTGAGGAGGACCCCGGGCGGGCCCACGGGCCGTGTGGGGCCTGGTCTGGCCCGCCGGGTGTGTGAAGAC
CGGGGCCCGGTGCTGCCCGGCCGGAGGGCGAGCGGAGGGGAGGGGCCTGGTCCGGCCCGGCCGGTGCGTGAGGAC
TGGGGCCCGGGCCCGGCGCCGCCGCCGCCGCCGCCGCGATGGCCCAGCAGCAGATGACCAGCTCGCAGAAGG
CCCTGATGCTCGAGCTGAAATCCCTGCAGGAGGAACCGGTGGAGGGCTTCCGGATCACCCTGGTGGACGAGTCCG
ACCTCTACAACTGGGAGGTGGCCATCTTCGGACCCCCCAACACCCTCTACGAAGGCGGCTACTTCAAGGCGCATA
TTAAATTTCCTATTGACTACCCCTATTCACCACCTACCTTCAGATTCTTGACCAAAATGTGGCACCCCAACATTT
ATGAGAATGGAGATGTATGCATTTCGATTCTTCATCCGCCTGTAGATGACCCACAGAGTGGAGAACTGCCTTCTG
AAAGGTGGAATCCTACTCAGAATGTGAGGACTATCCTATTAAGTGTAATCTCACTGCTTAATGAGCCCAACACCT
TCTCCCCAGCCAATGTCGATGCTTCAGTTATGTTCAGGAAATGGAGAGACAGTAAAGGAAAAGACAAAGAATATG
CTGAAATTATTAGGAAACAAGTTTCAGCCACTAAGGCCGAAGCAGAAAAGGATGGAGTGAAGGTCCCCACAACCC
TGGCGGAATACTGCATCAAAACTAAAGTGCCTTCCAATGACAACAGCTCAGATTTGCTTTACGACGACTTGTATG
ATGACGACATTGATGATGAAGATGAGGAGGAGGAAGATGCCGACTGTTATGATGATGATGATTCTGGGAATGAGG
AGTCGTGACGTGCTCCTTCAGTGCCCCTGTACTGCCCTGCCATCTCAGGCCAAAGGGAGGGGAGCAAGTGGGGAC
CTGGCCATGGCCCCTCAGCAAAAACCTATTCACAGCGGGTGGGGAAACACACACAGCTCCTGCTGACTCCCCTTA
TGGATCTCAGTTTGCTCCTTTTTATGGACCTTTAATGGAGAGAGAGTAACCCTCCACAGAATGTCTGAATTCTTG
CATTCTTTACCCTTCCATCACTATATTGATTCTTTTTTTAAAAAATATGAACCCAAACTCCCGCCTCACTTCGTC
TCTACAGAATGTTCACAGCAAAACACGTTTGGTCTGTTTTTAGATTCTTGAAGAATTCAATAGTCTTTCAAGATG
TTTAATGTGTTTAAAGCTGGGAACCTGTTGGGAGTTCACAAGTGCTGCATATACTGGGTAGCAAAAGAAAATGGA
AAAAAACCCACAAAACAAACTTTAAAAAAAAAAAAAAACAAATTTGCCAAGGTTTAGCTGCTCATTTACATTAGT
GTGTGTGCATTCGTTCAGCCCCATGGTGGTGAATTCTGTTTCTTTCCTTTCCTAAGGCTGGGACATGGTGGGCAT
CAGGGACTTTGTGCTAAGCCTGATGAAATGTGCTCCTTCAATCTCCATGAAACCATCGTAACATGGAGGCCTCAG
CTGCTCTGAGGAGAGAAATCAGACTTTGTTTTTTGAAATCGATTGGGATCGAAAGCCTGAAATAAATATTCATAC
TTTCCAT

FIGURE 4254A

ATTTTCTATTTTGTACATACATTATTTTGTATATACTGTATATGATGACTTCAGTGAGCAGTGACCATTGTCGAG
GTGCTCGGGAAAAACCACAGATTTCAGCAGCACAATCAACGCAACCACAGAAACAAGTGGTACAGGCAACAGCTG
AACAGATGCGTCTCGCTCAAGTGATCTTTGATAAGAATGATTCAGATTTTGAAGCTAAAGTTAAGCAGCTTATGG
AAGTGACAGGGAAAAATCAGGATGAATGCATAGTGGCCCTACATGATTGTAATGGAGATGTGAACAAAGCTATCA
ATATATTGCTGGAAGGGAATTCAGACACAACTTCATGGGAGACTGTAGGGTGTAAGAAAAAGAATTTTGCAAAAG
AAAATTCAGAAAACAAAGAGAATAGAGAGAAGAAAAGCGAGAAAGAATCGAGTCGTGGACGTGGAAACAACAACC
GGAAAGGAAGAGGCGGCAATCGTGGCAGAGAATTTAGAGGTGAAGAAAATGGAATTGATTGCAATCAAGTGGACA
AACCTTCAGATCGTGGCAAGCGAGCCCGGGGTAGAGGATTTGGACGTGGCAGAGGGAGAGGGGCAGGAAGGTTCT
CAACCCAAGGCATGGGGACATTCAATCCTGCAGACTATTCAGATTCTACATCTACAGATGTGTGTGGGACAAAGC
TAGTAGTTTGGGAAGCTGCTCAGAATGGTGCAGATGAGGGAACTGAACTGGCATCAAATACTCACAACATAGCTC
AGGATCTGTCAAACAAAAGTTCTTATGGACTCAAAGGGGCTTGGAAGAATTCTGTGGAAGAGTGGACAACAGAAG
ACTGGACTGAAGATCTTTCTGAAACAAAGGTCTTCACTGCCTCATCTGCTCCAGCAGAGAATCACATCTTACCTG
GGCAAAGCATTGATCTGGTAGCCTTGCTCCAGAAGCCTGTTCCTCACAGTCAAGCCTCAGAAGCCAACTCCTTTG
AAACTTCCCAACAGCAGGGCTTTGGCCAAGCCCTTGTCTTCACAAATTCGCAACACAACAATCAGATGGCACCAG
GGACTGGCAGCTCCACTGCCGTCAACTCCTGTTCTCCTCAGAGCCTGTCATCCGTCCTTGGCTCAGGATTTGGAG
AGCTTGCACCACCAAAAATGGCAAACATCACCAGCTCCCAGATTTTGGACCAGTTGAAAGCTCCGAGTTTGGGCC
AGTTTACCACCACCCCAAGTACACAGCAGAATAGTACAAGTCACCCTACAACTACTACTTCTTGGGACCTCAAGC
CCCCAACATCCCAGTCCTCAGTCCTCAGTCATCTTGACTTCAAATCTCAACCTGAGCCATCCCCAGTTCTTAGCC
AGTTGAGCCAGCGACAACAGCACCAGAGCCAGGCAGTCACTGTTCCTCCTCCTGGTTTGGAGTCCTTTCCTTCCC
AGGCAAAACTTCGAGAATCAACACCTGGAGACAGTCCCTCCACTGTGAACAAGCTTTTGCAGCTTCCCAGCACGA
CCATTGAAAATATCTCTGTGTCTGTCCACCAGCCACAGCCCAAACACATCAAACTTGCTAAGCGGCGGATACCCC
CAGCTTCTAAGATCCCAGCTTCTGCAGTGGAAATGCCTGGTTCAGCAGATGTCACAGGATTAAATGTGCAGTTTG
GGGCTCTGGAATTTGGGTCAGAACCTTCTCTCTCTGAATTTGGATCAGCTCCAAGCAGTGAAAATAGTAATCAGA
TTCCCATCAGCTTGTATTCGAAGTCTTTAAGTGAGCCTTTGAATACATCTTTATCAATGACCAGTGCAGTACAGA
ACTCCACATATACAACTTCCGTCATTACCTCCTGCAGTCTGACAAGCTCATCACTGAATTCTGCTAGTCCAGTAG
CAATGTCTTCCTCTTATGACCAGAGTTCTGTGCATAACAGGATCCCATACCAAAGCCCTGTGAGTTCATCAGAGT
CAGCTCCAGGAACCATCATGAATGGACATGGTGGTGGTCGAAGTCAGCAGACACTAGACACTCCAAAGACAACAG
GCCCTCCCTCTGCCCTCCCGTCTGTGAGCTCCCTGCCCAGCACCACCTCCTGCACTGCACTTCTGCCGTCCACAT
CCCAGCACACTGGCGACCTGACTAGCAGCCCTCTCTCTCAGCTTAGCAGTTCGCTCTCCAGCCACCAGAGCAGCC
TCTCTGCACATGCAGCCCTCTCCTCGAGCACGTCACACACACATGCCAGTGTGGAGAGCGCCTCTTCCCACCAGT
CCTCAGCCACCTTCTCCACGGCAGCGACCTCCGTCTCAAGTTCCGCATCCTCAGGCGCCAGCCTGTCCAGTAGCA
TGAACACCGCGAACAGCCTCTGTCTGGGTGGGACCCCCGCGAGTGCATCCAGCAGCAGTAGCAGGGCCGCGCCCT
TGGTGACCTCAGGCAAAGCACCCCCAAACTTACCTCAGGGGGTGCCTCCCCTGCTGCACAACCAGTACCTCGTAG
GTCCCGGAGGACTGCTTCCTGCCTACCCGATCTATGGCTATGACGAGCTCCAGATGCTGCAGTCACGGCTGCCAG
TGGACTACTATGGAATTCCCTTTGCTGCACCCACAGCGCTTGCCAGCCGAGATGGGAGCCTAGCTAATAATCCAT
ATCCAGGTGATGTCACAAAGTTTGGCCGTGGGGACTCTGCATCCCCTGCACCCGCTACCACACCAGCTCAGCCAC
AGCAGAGCCAATCACAGACCCACCACACAGCCCAGCAGCCCTTCGTGAATCCTGCACTGCCACCTGGCTATAGCT
ACACTGGTCTTCCCTACTACACAGGCATGCCCAGTGCCTTCCAGTATGGCCCCACCATGTTTGTCCCTCCAGCCT
CAGCCAAGCAACATGGGGTGAACCTCAGCACTCCCACACCTCCCTTCCAGCAGGCCAGTGGTTATGGCCAGCACG
GCTACAGTACAGGTTATGACGACCTGACCCAGGGGACAGCAGCAGGAGACTACTCCAAAGGTGGCTATGCTGGAT
CATCGCAGGCACCAAACAAGTCTGCAGGTTCTGGGCCTGGCAAAGGAGTATCAGTGTCTTCAAGCACCACTGGTC
TACCTGATATGACTGGTTCTGTCTACAATAAGACACAGACTTTTGACAAGCAGGGATTTCATGCAGGGACGCCTC
CACCTTTCAGCCTGCCCTCGGTCTTGGGCTCCACTGGGCCCCTGGCCTCGGGAGCGGCCCCTGGCTATGCACCCC
CACCATTCCTACACATCTTGCCAGCCCACCAGCAGCCCCACTCACAGCTGCTGCACCACCACCTTCCGCAGGATG
CACAGAGTGGCTCGGGTCAGCGCAGCCAGCCCAGCTCCCTGCAGCCCAAGTCTCAAGCCTCCAAACCTGCCTACG
GCAACTCTCCATACTGGACAAACTAAACCCAGAAGAGAGGGGTGGGCTGGGGCAAGGCTTATCCTGGGCAGGAGA
GAACACACGAGCACGTATTTGGGAGCCCAGTGCCCTTTCCTAGAATTCCCGACATGTGTCAGCCATGCCTCTGTG
GGGAGTCTGCCTCCCAGACTGGCTACTGTATGTAATGTATTTATGTATGTATTTGTAAATGTGATAGAAGTCTGG

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FIGURE 4254B

GGGGGAGTTGGGGGATGGCGGCAGATGTTAGCCAGGTCTGCCCTCCCCATTCAAGCCCCTTCTCCACTGTAGCAA
AATAAGCACCCCCACCCCATCTGCCTTCAGGTCTTCTTCACAGCCTGCACTGCCCAGTGGGCCACTAGGGGCAGT
CTCTGGAAGGGCTGGTTCAAGGCTGTTTGGGTATAGGGGTCAGGTACCAATGAAGAATCACGACTTGTCTCACTC
CTTTGGAAATTGTTTTCTTTCCTGTGTAATTACTTCATACCTCTGTTTTTGAGAAACTGTTCCGTTTGTCATCTG
TCATGGTCTCCTTCCACCAAATCTTCATCTGGGAATAGCAGCGGTATCCCTCCACCCAAGTATGGCCACCTGTTT
GTCTTCATATAGAACAGGGGCTTCTGGTCTGGTCATGTCCCTAGAGACTTACTAGAGACTGGCTGACCATG

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FIGURE 4255

TGGAAATCTAAAGGGAATGGTGAAGTTGCACCGTAAGGGGAAGGTGACTGAGGAGCTGAAACTGACTGAGGGGCT
GAAGCATTTCGGACAGGAGAAAGGATCAGGAGGAGACAGAGCGGAGAATGGAGCCTCAGGGCTACCCAGCGTTTG
GCTGGGATCACTCGCTTCACAAAAGGAAAAGACTTCCTCCTGTGAAGAGATCCTTAGTATACTACTTGAAGAACC
GGGAAGTCAGGCTACAGAATGAAACCAGCTACTCTCGAGTGTTGCATGGTTATGCAGCACAGCAACTTCCCAGTC
TCCTGAAGGAGAGAGAGTTTCACCTTGGGACCCTTAATAAAGTGTTTGCATCTCAGTGGTTGAATCATAGGCAAG
TGGTGTGTGGCACAAAATGCAACACGCTATTTGTCGTAGATGTCCAGACAAGCCAGATCACCAAGATCCCCATTC
TGAAAGACCGGGAGCCTGGAGGTGTGACCCAGCAGGGCTGTGGTATCCATGCCATCGAGCTGAATCCTTCTAGAA
CACTGCTAGCCACTGGAGGAGACAACCCCAACAGTCTTGCCATCTATCGACTACCTACGCTGGATCCTGTGTGTG
TAGGAGATGATGGACACAAGGACTGGATCTTTTCCATCGCATGGATCAGCGACACTATGGCAGTGTCTGGCTCAC
GTGATGGTTCTATGGGACTCTGGGAGGTGACAGATGATGTTTTGACCAAAAGTGATGCGAGACACAATGTGTCAC
GGGTCCCTGTGTATGCACACATCACTCACAAGGCCTTAAAGGACATCCCCAAAGAAGACACAAACCCTGACAACT
GCAAGGTTCGGGCTCTGGCCTTCAACAACAAGAACAAGGAACTGGGAGCAGTGTCTCTGGATGGCTACTTTCATC
TCTGGAAGGCTGAAAATACACTATCTAAGCTCCTCTCCACCAAACTGCCATATTGCCGTGAGAATGTGTGTCTGG
CTTATGGTAGTGAATGGTCAGTTTATGCAGTGGGCTCCCAAGCTCATGTCTCCTTCTTGGATCCACGGCAGCCAT
CATACAACGTCAAGTCTGTCTGTTCCAGGGAGCGAGGCAGTGGAATCCGGTCAGTGAGTTTCTACGAGCACATCA
TCACTGTGGGAACAGGGCAGGGCTCCCTGCTGTTCTATGACATCCGAGCTCAGAGATTTCTGGAAGAGAGGCTCT
CAGCTTGTTATGGGTCCAAGCCCAGACTAGCAGGGGAGAATCTGAAACTAACCACTGGCAAAGGCTGGCTGAATC
ATGATGAAACCTGGAGGAATTACTTTTCAGACATTGACTTCTTCCCCAATGCTGTTTACACCCACTGCTACGACT
CGTCTGGAACGAAACTCTTTGTGGCAGGAGGTCCCCTCCCTTCAGGGCTCCATGGAAACTATGCTGGGCTCTGGA
GTTAATGACAACTCCCCAAATGCAGAGATTTACACTAACTTCCATTCTCAGTTTCCTTGTTTCTTTTGATTTTTT
TTTTCCTAATTGTGTGAGGCTCTTGTGTTTTAGTGGGAACACCAAAGTTTGCCTATAGTTTAGGCACTTAATAGG
AAGAAGCTCTGTACAGAAATCTGAAAGTTGTTTTGCTTTTTGTTTTCCCCTTTGGTAATCAAAATTTTACTATCT
TTTATTATTTCTGGCTTTTCAACCAAACATTGTTGCTAATCCCTATTTTTCTTTAAGTGACACACATTCTCCTGT
CTCTGGCTTCTTCAGGCTGAAATGACATAGCTCACCCTTACTTCACTCTTGAGAGGTAGGGCTCCTTTATAATTA
CATGGTTGCTCTCAGACTTTCTGTGAAAGTTTGGGAGCTGTGTGTGTCTGTGTGTGTGTGAGAGAGAGATCTTGT
CTGCGTGTGTGTGTGTGATCTTGTGTGCCTGTAGGTACTGTGTGTCACTGAAATTACCTGGAGTGAGGATTACTT
GTAATTAAAATATTTATAAAAGAAACAACTTTATTCACAGAGTCCAGCTTTGGGACTAGTCTGTATCTTGTTTTT
TAAGTCTAACAACACTGATAATAGGAAGTAAAAACAGAAAGGAAAAGAAATTACCACTGGGAAAATCTTTTTAGT
TAGATTGTAGGCTTCCTGGGGCCTCCCATGCCAGGACTGCAAAGTGATCCAGCCCTACCTGTCTTCCCACCTGTG
TGTCCCCCGTGTGGGAAGTTGGTGTCACTTCCCCTTCCCACCCTCACATCTGCTTAGCCAGTAGCCACACCCCTA
AAACATCAGACTCACCATCCAGGTGCAGCTCCAGAGGCTACAAAAGGCTTCATGGGACTTGAATCCCCATCCTAG
CTTCTCTCTCCTTCCCCTCAAGACCTGATCTGGTTTTAAGGGGCCTGGAGCTGGGAGTCTCAAGTCTGCTAAGAT
TCACATCCATAGCCCCCATGGCTTTGAGGAGAATCCTCTCTGCCATTCTTCCAATCTCCCCAGTGGGTTTTGCTA
TTATTTTCTAAATTGGGTTAAGTCTAAGAAGGTGGGGGTGAGCAGGGGGTTTATCTGTGTGTAGTGAGTGCTTCA
TGTGTGGAATATTCATTTTCTTACTGCAGTGGGACTTGGGGTTGAAGCCACCCCTCCTACTCTGTTGGCTTAGCC
CTGAGATGGTGACAGGCTGGCCTGCAGTCAGCATCATTGTGCATGTGACAGCATCAATGTGATTAGTAATTTGTC
TGTTCCTCCCTTGAACTGTCTGTTTAGTCTGAGGTTTTTAAACTTGCAGGCAGCTGACTGTGATGTCCACTTGTT
CCCTGATTTTTACACATCATGTCAAAGATAACAGCTGTTCCCACCCACCAGTTCCTCTAAGCACATACTCTGCTT
TTCTGTCAACATCCCATTTTGGGGAAAGGAAAAGTCATATTTATTCCTGCACCCCAGTTTTTTAACTTGTTCTCC
CAGTTGTCCCCCTCTTCTCTGGGTGTAAGAAGGGAAATTGGAAAAAAAATTATATATATATTCTCCTTTTAATGG
TGGGGGGCTACTGGAGAGGAGAGACAGCAAGTCCACCCTAACTTGTTACACAGCACATACCACAGGTTCTGGAAT
TCTCATCTTCGAACCTAGAGAAATAGGTGCTATAAACAGGGAATTAAGCAAAATGCTGGATGCTATAGATCTTTT
AATTGTCTTAATTTTTTTTCTATTATTAAACTACAGGCTGTAGATTTCTTAGTTCTCACAGAACTTCTATCATTT
TAAACTGACTTGTATATTTAAAAAAAAAATCTTCAGTAGGATGTTTTGTACTATTGCTAGACCCTCTTCTGTAAT
GGGTAATGCGTTTGATTGTTTGAGATTTTCTGTTTTTAAAAATGTAGCACTTGACTTTTTGCCAAGGAAAAAAAT
AAAAATTATTCCAGTGC

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FIGURE 4256

ACTGGCGGTGGCTACGGTGACGGCCTGGCCCGGAGCGGGCAGAGTTGGAGGTGGTGGCGTTCGCTCTCCCTAGGG
GCTGTCGGGAGCTCAGCGGGGACCGAGCCTGGGAGGCCGGCCGGTGCCAGCACCTTTCGGCTTCTGAGACGGCGG
CAGCAGCGGCATTCAGGTTCTAA**ATG**GCTTCTAAGAAGTTGGGTGCAGATTTTCATGGGACTTTCAGTTACCTTG
ATGATGTCCCATTTAAGACAGGAGACAAATTCAAAACACCAGCTAAAGTTGGTCTACCTATTGGCTTCTCCTTGC
CTGATTGTTTGCAGGTTGTCAGAGAAGTACAGTATGACTTCTCTTTGGAAAAGAAAACCATTGAGTGGGCTGAAG
AGATTAAGAAAATCGAAGAAGCCGAGCGGGAAGCAGAGTGCAAAATTGCGGAAGCAGAAGCTAAAGTGAATTCTA
AGAGTGGCCCAGAGGGCGATAGCAAAATGAGCTTCTCCAAGACTCACAGTACAGCCACAATGCCACCTCCTATTA
ACCCCATCCTCGCCAGCTTGCAGCACAACAGCATCCTCACACCAACTCGGGTCAGCAGTAGTGCCACGAAACAGA
AAGTTCTCAGCCCACCTCACATAAAGGCGGATTTCAATCTTGCTGACTTTGAGTGTGAAGAAGACCCATTTGATA
ATCTGGAGTTAAAAACTATTGATGAGAAGGAAGAGCTGAGAAATATTCTGGTAGGAACCACTGGACCCATTATGG
CTCAGTTATTGGACAATAACTTGCCCAGGGGAGGCTCTGGGTCTGTGTTACAGGATGAGGAGGTCCTGGCATCCT
TGGAACGGGCAACCCTAGATTTCAAGCCTCTTCATAAACCCAATGGCTTTATAACCTTACCACAGTTGGGCAACT
GTGAAAAGATGTCACTGTCTTCCAAAGTGTCCCTCCCCCCTATACCTGCAGTAAGCAATATCAAATCCCTGTCTT
TCCCCAAACTTGACTCTGATGACAGCAATCAGAAGACAGCCAAGCTGGCGAGCACTTTCCATAGCACATCCTGCC
TCCGCAATGGCACGTTCCAGAATTCCCTAAAGCCTTCCACCCAAAGCAGTGCCAGTGAGCTCAATGGGCATCACA
CTCTTGGGCTTTCAGCTTTGAACTTGGACAGTGGCACAGAGATGCCAGCCCTGACATCCTCCCAGATGCCTTCCC
TCTCTGTTTTGTCTGTGTGCACAGAGGAATCATCACCTCCAAATACTGGTCCCACGGTCACCCCTCCTAATTTCT
CAGTGTCACAAGTGCCCAACATGCCCAGCTGTCCCCAGGCCTATTCTGAACTGCAGATGCTGTCCCCCAGCGAGC
GGCAGTGTGTGGAGACGGTGGTCAACATGGGCTACTCGTACGAGTGTGTCCTCAGAGCCATGAAGAAGAAAGGAG
AGAATATTGAGCAGATTCTCGACTATCTCTTTGCACATGGACAGCTTTGTGAGAAGGGCTTCGACCCTCTTTTAG
TGGAAGAGGCTCTGGAAATGCACCAGTGTTCAGAAGAAAAGATGATGGAGTTTCTTCAGTTAATGAGCAAATTTA
AGGAGATGGGCTTTGAGCTGAAAGACATTAAGGAAGTTTTGCTATTACACAACAATGACCAGGACAATGCTTTGG
AAGACCTCATGGCTCGGGCAGGAGCCAGC**TGA**GACCAGGCCCTGCCTAGGCCCTGCCGCAGAACCACCATCCCTG
GGAGGCCCTGCAGAGCCCACCTGTGGGGAAAGAGAAGGGGCAGCTTCCGGATTTTCTTTTGGGGGTTAGAAGGTC
AGGTGTGGAGACTGCTCGCCAGTCTCTGTGAGCCTAGGCCCTGAGCTGGGGAGGTGGGGAAGATTCGGGCATGTG
AGTGCCCCCAGAACTGTCCTGGCTCCTTCCGTATTAAACGCATTTGCATTTTGAGAAGTGTCCTTCCCACTTCAG
CCCTCCGGAGAGACTACCCTAGTCTTTCTGGGGTGTTTATGTCCTCAGCTGAAGCCTGGCCTAGTTGCTGAGAGG
GGCTGGGGAGATGGGGCGGGAGGGCCAGACTCAGTGCTGCTGTGGAGCTAGGTGCTTCCCCCTTCCCCTGAGACT
GGTGGACTGAACTCCAGTCAAGTTGAGTTCAAGTGAAAGATTCTTCCAGGGTTTTATTTTTTCCCCTCCTAACAA
AGTCTCATAGTGTTAACACTGGTTCTGCAATATCTCTGAGGTGCAAAGAATGCACTTTTCCCTATGGGGCCCAGA
GTTTGCCTTTTCTGCCAGGCAGTCACCATGCTTCCCTACCCCAGCCTGTTTCTTTTGGCTTGGTTTGGACCACAG
TCCTCTGCTACCCAGGGTTTTAGAGCCCCTGCTCTAGGAAACAGTTTAAGAAATCATTGGCCCCTTCCCAGCACA
TTGAATGGGTAAGCAGACAGGCCATGATTTAGTTGGCCAGCACTAACTCCACCTCTGTTCTCCTTGAACAGCTTC
CCCTCCAGCCCACTGCTTTAGGATGACACAATGAATAACACCTAGTCATAGAAATCAGTCTCTCTGGTTTGTTTT
GTATTATGTTGTACATCATTAAAGATCTAAATACAAAGGATATACAGTCTTGAATCTAAAATAATTTGCTAACTA
ACTATTTTGATTCTTCAGAGAGAACTACTAATAAAAATCTAAAAGGT

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FIGURE 4257

CAAGCGTAACCAGGCTCTTCTGATTGGCCGGTGTACTTCAGTTTCCGTCCAAGGTCCGCCTCCTACCTCCTTCTG
CTTCGGTGCGTTTGCTTCTGAGGATCTCCAGTGTCACAACAAACACATGCCAGCCCTGTTTTACAGGGAGCCCTG
GAGGAGTTGGGATAGAGGCCACATTGACTGAGGGTAGTTGCCAGGGTCCTGCAGTTATACACAAAGTCCTTAGGA
TAAGACC**ATG**GCCTTGAGAGCATGTGGCTTGATCATCTTCCGAAGATGCCTCATTCCCAAAGTGGACAACAATGC
AATTGAGTTTTTACTGCTGCAGGCATCAGATGGCATTCATCACTGGACTCCTCCCAAAGGCCATGTGGAACCAGG
AGAGGATGACTTGGAAACAGCCCTGAGGGAGACCCAAGAGGAAGCAGGCATAGAAGCAGGCCAGCTGACCATTAT
TGAGGGGTTCAAAAGGGAACTCAATTATGTGGCCAGGAACAAGCCTAAAACAGTCATTTACTGGCTGGCGGAGGT
GAAGGACTATGACGTGGAGATCCGCCTCTCCCATGAGCACCAAGCCTACCGCTGGCTGGGGCTGGAGGAGGCCTG
CCAGTTGGCTCAGTTCAAGGAGATGAAGGCAGCGCTCCAAGAAGGACACCAGTTTCTTTGCTCCATAGAGGCC**TG**
AGCTGACTGGAGCAGAGTCATTTGCTTCAGCAGGATCCTTGTGGGCCTTCTAAGATGAAGCCACCCTCAGGTCCA
GGGAAGGTTGTGCTGGTATTTGGCTCATGACAGCCAAGAGCAGATTTGTGAAATCGGCTCAACTCCCAGGTGAGA
GCAAGCAAAAATCTTGGCTGGGTGGAAAGGAAGGCAAAAGAGTAAAAATTAAAAAGGCCAGGCCCAGTAAGTGTA
CCTTGTACTTTATAAATAAACCTCAAGCAGCTC

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FIGURE 4258

CAAGCGTAACCAGGCTCTTCTGATTGGCCGGTGTACTTCAGTTTCCGTCCAAGGTCCGCCTCCTACCTCCTTCTG
CTTCGGTGCGTTTGCTTCTGAGGATCTCCAGTGTCACAACAAACACATGCCAGCCCTGTTTTACAGGGAGCCCTG
GAGGAGTTGGGATAGAGGCCACATTGACTGAGGGTAGTTGCCAGGGTCCTGCAGTTATACACAAAGTCCTTAGGA
TAAGACCATGGCCTTGAGAGCATGTGGCTTGATCATCTTCCGAAGATGCCTCATTCCCAAAGTGGACAACAATGC
AATTGAGTTTTTACTGCTGCAGGCATCAGATGGCATTCATCACTGGACTCCTCCCAAAGGCCATGTGGAACCAGG
AGAGGATGACTTGGAAACAGCCCTGAGGGAGACCCAAGAGGAAGCAGGCATAGAAGCAGGCCAGCTGACCATTAT
TGAGGGGTTCAAAAGGGAACTCAATTATGTGGCCAGGAACAAGCCTAAAACAGTCATTTACTGGCTGGCGGAGGT
GAAGGACTATGACGTGGAGATCCGCCTCTCCCATGAGCACCAAGCCTACCGCTGGCTGGGGCTGGAGGAGGCCTG
CCAGTTGGCTCAGTTCAAGGAGATGAAGGCAGCGCTCCAAGAAGGACACCAGTTTCTTTGCTCCATAGAGGCCTG
AGCTGACTGGAGCAGAGTCATTTGCTTCAGCAGGATCCTTGTGGGCCTTCTAAGATGAAGCCACCCTCAGGTCCA
GGGAAGGTTGTGCTGGTATTTGGCTCATGACAGCCAAGAGCAGATTTGTGAAATCGGCTCAACTCCCAGGTGAGA
GCAAGCAAAAATCTTGGCTGGGTGGAAAGGAAGGCAAAAGAGTAAAAATTAAAAAGGCCAGGCCCAGTAAGTGTA
CCTTGTACTTTATAAATAAACCTCAAGCAGCTC

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FIGURE 4259

GCCGGAACCGGGCGGGCAGAGGGGCGCTCGTAGGGTTGGGGGACGCCTGTGGCTTGGCTGCAGCGGCCGGCAAGA
CCCTGGAAGAGACCGTGGCTATGGAAACGGCCAAGGCTGTCTTGGAATGTCCTGAGCAGCCCTCCGAGTCGAGCC
TCTGCCCCCGAGTTTCTGAGTGACCTGGGTTGATATAGATTGACCTTGTGGGCAGCGAGAGTCACAGACAAGACA
GCAAGCAGGATGGAGCACTACCGGAAAGCTGGCTCTGTAGAGCTCCCAGCGCCTTCCCCAATGCCCCAGCTACCT
CCTGATACCCTTGAGATGCGGGTCCGAGATGGCAGCAAAATTCGCAACCTGCTGGGGTTGGCTCTGGGTCGGTTG
GAGGGCGGCAGTGCTCGGCATGTAGTGTTCTCAGGTTCTGGCAGGGCTGCAGGAAAGGCTGTCAGCTGCGCTGAG
ATTGTCAAGCGGCGGGTCCCAGGCCTGCACCAGCTCACCAAGCTACGTTTCCTTCAGACTGAGGACAGCTGGGTC
CCAGCCTCACCTGACACAGGGCTAGACCCCCTCACAGTGCGCCGCCATGTGCCTGCAGTGTGGGTGCTGCTCAGC
CGGGACCCCCTGGACCCCAATGAGTGTGGTTACCAACCCCCAGGAGCACCCCCTGGCCTGGGTTCCATGCCCAGC
TCCAGCTGTGGCCCTCGTTCCCGAAGAAGGGCTCGAGACACCCGATCGTGAAGACCTGCTGAGCCAGCCTGTTCT
CCGGGCCTGAATGTCTGGGGTGCTTGTGCCTTTTCTGAGAAGCGTTGTGACTGCTCAACATCCCCATCAAGGTTT
GAGTCCACAAAAGTGGACCTCCCTATCATGCTTCCCCTTCCCTCTAGCATGTGGGAAGGGACTGCTGTGAAGAAT
GACAGATGTGGGGCCTCTGCCAAGTTCTGCATTGCTAAATAAGGGCTTCCTCTGCCT

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FIGURE 4260

TGGGTCGGTAGTAGCGATGGCGGGTCTGACTGACTTGCAGCGGCTACAGGCCCGAGTGGAAGAGCTGGAGCGCTG
GGTGTACGGGCCGGGCGGGGCGCGCGGCTCACGGAAGGTGGCTGACGGCCTGGTCAAGGTGCAGGTGGCTTTGGG
GAACATTTCCAGCAAGAGGGAGAGGGTGAAGATTCTCTACAAAAAGATTGAAGATCTGATCAAGTACCTGGATCC
TGAGTACATCGACCGCATTGCCATACCTGATGCCTCTAAGCTGCAATTCATCCTAGCAGAGGAGCAGTTTATCCT
TTCCCAGGTTGCACTCCTGGAGCAGGTGAATGCCTTGGTGCCCATGCTGGACAGTGCTCACATCAAAGCCGTTCC
TGAGCATGCTGCCCGCCTGCAGCGCTTGGCCCAGATCCACATTCAGCAGCAGGCTCCATGGGGAGTGGGAGTCCG
TGATGAGGCAGGAAGTTTAGTGGAAGATGTGGGCTTTGCCCAGTTCCTTTCTGTGCTACACTTTGGCCCTACAGG
ACCAGTGTGTGGAAATCACTGAGGAGTCCAAGGCTCTCCTGGAGGAATACAACAAGACTACAATGCTTCTCTCCA
AGCAATTCGTGCAGTGGGATGAGCTACTTTGCCAGCTAGAGGCCGCCACGCAAGTGAAGCCAGCAGAGGAGTGAT
AGCTGCTCCCCATCCCAAAGTGGGCCTGGGCAGTCAGGCTCCAGGGCCCTATGCCAACCTGCCTTTGTTACAAGG
CAGAGGAAGCTTTGTATTTATTGGCTTCAAGGCCCACCTCTCTGTACTCTGGGCTCTAAAGTTGGAGGTCAGGTT
ACCTGAGGTTTGCAATTTGCAACACCCACCCTCCCCCCAATCAGTGTTCTTATTTCAGTGACAATAAACCATAGA
GATG

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FIGURE 4261

CTCCGAGGCCGTGAGCGCAAAGCCTCAGGCCCCGGCTCCCTCCTGAGCTGCGCCGTGCCAGGCCGCCCGCCGGGA
TGCAGTGGGCCGTGGGCCGGCGGTGGGCGTGGGCCGCGCTGCTCCTGGCTGTCGCAGCGGTGCTGACCCAGGTCG
TCTGGCTCTGGCTGGGTACGCAGAGCTTCGTCTTCCAGCGCGAAGAGATAGCGCAGTTGGCGCGGCAGTACGCTG
GGCTGGACCACGAGCTGGCCTTCTCTCGTCTGATCGTGGAGCTGCGGCGGCTGCACCCAGGCCACGTGCTGCCCG
ACGAGGAGCTGCAGTGGGTGTTCGTGAATGCGGGTGGCTGGATGGGCGCCATGTGCCTTCTGCACGCCTCGCTGT
CCGAGTATGTGCTGCTCTTCGGCACCGCCTTGGGCTCCCGCGGCCACTCGGGGCGCTACTGGGCTGAGATCTCGG
ATACCATCATCTCTGGCACCTTCCACCAGTGGAGAGAGGGCACCACCAAAAGTGAGGTCTTCTACCCAGGGGAGA
CGGTAGTACACGGGCCTGGTGAGGCAACAGCTGTGGAGTGGGGGCCAAACACATGGATGGTGGAGTACGGCCGGG
GCGTCATCCCATCCACCCTGGCCTTCGCGCTGGCCGACACTGTCTTCAGCACCCAGGACTTCCTCACCCTCTTCT
ATACTCTTCGCTCCTATGCTCGGGGCCTCCGGCTTGAGCTCACCACCTACCTCTTTGGCCAGGACCCTTGACCAG
CCAGGCCTGAAGGAAGACCTGCGGATAGACAGGAGCGGGCAGGCCCGCACATATCCACTTGCTGGAGCCCATGTT
TACAGACAGGGACATACACCATGCAGATCCTGAGTTCCTGCTGTATGAGCAGGGATATCCATGCTTATGTATCCA
AACACAGAGACCCATGGGAACAAATGAGACACATATAGATACTGAGACCTGTGTGTACAGTAGGACCATGCACTC
ACACCCATCTGGAGAGGGAGCCCCCGGTATACCAAGGGAGCCAGTTGTGTTCAGACACACACATCACAGCTTGAC
TCACTAACTGAGGCCTTTCCATAGCTCCACAGCTTCCCACCTCCTCCCCACCAAACCGGGGTTCTAGAGTTAAGG
ATGGGGGAGGGTATTATACTGCCTCAGTCTGACTCCTCAACCCAGCAGCAATTTGAGGGGATGAGGGGGAAGAGG
AGCTGCCTTTTGGAGGCCCCCTTCACCTGCAGCTATGATGCCCTTCCCCTTCTCCCCTGTCCTCACCATATGCCT
TATCCCCATTCTACTCCCCTGCTATGCAAGTGCCCCTGTGGCTTGTCCCCAACCCCCTCAGCAACAAAGCTCAGC
TGGGGAACGAGAGTAATTTGAAGAATGCTTGAAGTCAGCGTCTTCCATTCCAGAAAGACCCCCATTCTTCCTTTG
GGGGTATGATGTGGAAGCTGGTTTCAGCCCAGGACCCACCACTGAGGAGAGGATCTAGACAGGTGGGCCTAATTC
CAAGGGGCCCTTCCTGGCCTGGAGAAGGCCTTTTACACACACACAACACATACACACACACACACACACACACAT
ATCACAGTTTTCACACAGCCCCTGCTGCATTCTCTGTCCATCTGTCTGTTTCTATTAATAAAGATTTGTTGATCT
GTTCC

FIGURE 4262

TTTTCCAGCGGATCCCCCGGTGGCCTCATGTCGCGCAGTGGAACCGATCCTCAGCAACGCCAGCAGGCGTCAGAG
GCGGACGCCGCAGCAGCAACCTTCCGGGCAAACGACCATCAGCATATCCGCTACAACCCGCTGCAGGATGAGTGG
GTGCTGGTGTCAGCTCACCGCATGAAGCGGCCCTGGCAGGGTCAAGTGGAGCCCCAGCTTCTGAAGACAGTGCCC
CGCCATGACCCTCTCAACCCTCTGTGTCCTGGGGCCATCCGAGCCAACGGAGAGGTGAATCCCCAGTACGATAGC
ACCTTCCTGTTTGACAACGACTTCCCAGCTCTGCAGCCTGATGCCCCCAGTCCAGGACCCAGTGATCATCCCCTT
TTCCAAGCAAAGTCTGCTCGAGGAGTCTGTAAGGTCATGTGCTTCCACCCCTGGTCGGATGTAACGCTGCCACTC
ATGTCGGTCCCTGAGATCCGGGCTGTTGTTGATGCATGGGCCTCAGTCACAGAGGAGCTGGGTGCCCAGTACCCT
TGGGTGCAGATCTTTGAAAACAAAGGTGCCATGATGGGCTGTTCTAACCCCCACCCCCACTGCCAGGTATGGGCC
AGCAGTTTCCTGCCAGATATTGCCCAGCGTGAGGAGCGATCTCAGCAGGCCTATAAGAGTCAGCATGGAGAGCCC
CTGCTAATGGAGTACAGCCGCCAGGAGCTACTCAGGAAGGAACGTCTGGTCCTAACCAGTGAGCACTGGTTAGTA
CTGGTCCCCTTCTGGGCAACATGGCCCTACCAGACACTGCTGCTGCCCCGTCGGCATGTGCGGCGGCTACCTGAG
CTGACCCCTGCTGAGCGTGATGATCTAGCCTCCATCATGAAGAAGCTCTTGACCAAGTATGACAACCTCTTTGAG
ACGTCCTTTCCCTACTCCATGGGCTGGCATGGGGCTCCCACAGGATCAGAGGCTGGGGCCAACTGGAACCATTGG
CAGCTGCACGCTCATTACTACCCTCCGCTCCTGCGCTCTGCCACTGTCCGGAAATTCATGGTTGGCTACGAAATG
CTTGCTCAGGCTCAGAGGGACCTCACCCCTGAGCAGGCTGCAGAGAGACTAAGGGCACTTCCTGAGGTTCATTAC
CACCTGGGGCAGAAGGACAGGGAGACAGCAACCATCGCCTGACCACGCCGACCACAGGGCCTTGAATCCTTTTTT
GTTTTCAACAGTCTTGCTGAATTAAGCAGAAAGGGCCTTGAATCCTGGCCTGGAATTTGGGCAGATATAGCATTA
ATAAAACTGTGCATCTC

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FIGURE 4263

CTTGCAGCTGCCCACCTCACCCTCAGCTCTGGCCTCTTACTCACCCTCTACCACAGACATGGCTCAGTCACTGGC
TCTGAGCCTCCTTATCCTGGTTCTGGCCTTTGGCATCCCCAGGACCCAAGGCAGTGATGGAGGGGCTCAGGACTG
TTGCCTCAAGTACAGCCAAAGGAAGATTCCCGCCAAGGTTGTCCGCAGCTACCGGAAGCAGGAACCAAGCTTAGG
CTGCTCCATCCCAGCTATCCTGTTCTTGCCCCGCAAGCGCTCTCAGGCAGAGCTATGTGCAGACCCAAAGGAGCT
CTGGGTGCAGCAGCTGATGCAGCATCTGGACAAGACACCATCCCCACAGAAACCAGCCCAGGGCTGCAGGAAGGA
CAGGGGGGCCTCCAAGACTGGCAAGAAAGGAAAGGGCTCCAAAGGCTGCAAGAGGACTGAGCGGTCACAGACCCC
TAAAGGGCCATAGCCCAGTGAGCAGCCTGGAGCCCTGGAGACCCCACCAGCCTCACCAGCGCTTGAAGCCTGAAC
CCAAGATGCAAGAAGGAGGCTATGCTCAGGGGCCCTGGAGCAGCCACCCCATGCTGGCCTTGCCACACTCTTTCT
CCTGCTTTAACCACCCCATCTGCATTCCCAGCTCTACCCTGCATGGCTGAGCTGCCCACAGCAGGCCAGGTCCAG
AGAGACCGAGGAGGGAGAGTCTCCCAGGGAGCATGAGAGGAGGCAGCAGGACTGTCCCCTTGAAGGAGAATCATC
AGGACCCTGGACCTGATACGGCTCCCCAGTACACCCCACCTCTTCCTTGTAAATATGATTTATACCTAACTGAAT
AAAAAGCTGTTCTGTCTTCCCACCC

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FIGURE 4264

ATGACCACCTCAGCATGTTCCCACTTAAATAAAGGCATCAAGCAGGTGTACATATCCCTGCCTCAGGGTGAGAAA
GTCCGGGTCATGTATATCTGGATCGATGGTACTGGAAAAGGACTGCACTGCAAGACCTGGACCCTGGACAGTGAG
CCCAAGTGTGTGGAAGAGTTGCCTGAGGGGAATTTTGATGGCTCTATAGACCCTTTCCGTAAGGATCCTAACAAG
CTGGTATTGTGTGAAGTTTTCAAGTACAATCGAAAGCCTGCAGAGACCAATTTGAGGCACACCTGTAAACGGATA
ATCGACGTGATGAGCAACCAGCACCCCTGGTTTGGCATGGAGCAGGAATATACCCTCATGGGGACAAATGGCCAC
CCCTTTGGTTGGCCTTCCAGTGGCTTCCCGGGGCCTCAGACTCCATATTACTGCAGTGTGGGAGCAGACAGAACC
TATGGCAGGGACATCGTGGAGGCTCATTACAGCGCCTGCTTGTATGCTGGAGTCAGGATTGTGGGGACTAATGCC
AATCATGCCTCCCCACCCATTCCTGGGAACTGGAATGGTGCAGGCTGCCATACCAACTTTAGCACCAAGGCCATG
TGGGAGGAGAATGGTCTGAAATACACTGGGGAGGCCATCAAGAAATTAAGCAAGCGACACCAGTACCACATCTGT
GCCTGTGATCCCAAAGGAGGCCTGGACAAGGCCCGACACCTAACTGGATTCCATGAAACCTCCAACATCAACAAC
TTTTCTGCTGGTGTAGCCAATCGTAGCGCCAGCATATGCATTCCCTGGACTGTCGGCCAGGAGAAGAAGGGTTAC
TTTGAAGACCATCACCCCTCTGCCAACTGTGACCCCTTTTCGGTGACAGAAGCCCTCATCCGCACGTGTCTTCTC
AATGAAACTGGTGATGAGCCCTTCCAGTACAAAAACTAA

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FIGURE 4265

GAACATCCAGTAATGGATAAAAATGAGCTGGTTCAGAAGGCCAAACTGGCCGAGCAGGCTGAGTGGTATGATGAT
ATGGCAGCCTGCATGAAGTCTGTAACTGAGCAAGGAGCTTAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTT
GCTTATAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGCATCGTCTCAAGTATTGAACAAAAGACAGAAGGT
GCTGAGAAAAAAACAGCAGATGGCTCAAGAATACAGAGAGAAAACTGAGACCTAGCTAAGAGATAGCTGCAATGA
TGTACTGTCCCTTTTGGAAAAGTTCTTGATCCCCAGTGCTTCACAAGCGAGAGCAAATTCTTCTATTTGAAA**ATG**

AAAGGAGATCACTACCATTACTTGGCTGAGGTTGCCGCTGGTGATGATAAGAAAGGGACTGTGGATCAGTCACAA
CAAGCACACCAAGAAGCTTTTGAAATCAGCAAAAAGGAAATGCAACCAACATATCCTATCAGACTGGGTCTGGCC
CTTAACTTCTCCGTGTTCTATTATGACGTTCTGAATTCCCCAGAGAAAGCCTGCTCTCTTGCAAAGACAGCTTTT
GATGAAGCCATTGCTGAACTTGATACATTAAGTGAAGAGTCATCCAAAGACAGCACACTAATAATGCAATTACTG
AGAGACAACTTGACATTGTGGACATCGGATACCCGAGGAGACAAAGCTGAAGCAGGAGAAGGAGGGGAAAAT**TAA**

CCGGCCTTCCAACTTTTGTCTGCCTCGTTCTAAAATTTACACAGTAGACCATTTGTCATCCATGCTGTCCCACAA
ATAGTTGTTTACAATTTATGACAGGTTTATGTTACTTCTATTTGAATTTCTATATTTCCCACGTGGTTTTTATGT
TTAATATTAGGGGAGTAGAGCCAGTTAACATTTAGGGAGTTATCTGTTTTCATCTTGAGGTGGCCAATATGGGGA
TGTGGAATTTTTATACAAGTTATTAATGTTTGGCATAGTACTTTTGGTACATTGTGGCTTTACAAGGGCCAGTGT
TAAAACTGCTTCCATGTCTAAGCAAAGAAAACTGCCTACATATTGGTTTGTCCTGGTGGGGACTAAAAGGGATCA
TTGGTTCCAGTCACAGGTGTAGTAATTGTGGGTATTTTAAGGTTTGGAGCACTTACAAGGCTGTGGTAGAAACAG
ATATCCCACAGATACCACATGTTAAACCATGTATATCTGTGGAACACTCAATCTCAATGTGCATACCCTTGACTA
TAGCTGCAGAAGTGTTCCTTTAGACAAAGCTGTGACCCATTTTACTCTGGATAAGGGCAGAAACGGTTCACATTC
CATTATTTGTAAAGTTACCTGCTGTTAGCTTTCATTATTTTTGCTACACTCATTTTATTTGTATTTAAATGTCTT
AGGCAACCTAAGAACAAATGTAAAAGTAAAGATGCAGGGAAAATGAATTGCTTGGTATTCATTACTTCATGTATA
TCAAGCACAGCAGTAAAACAAAAACCCATGTATTTAACTTTTTTTTTAGGTTTTTTGCTTTTGTGATTTTTTTTT
TTGATACTTGCCTAACATGCATGTGCTGTAAAAATAGTTAACACGGAAATAACTTGAGATGATGGCTACCTTTGT
TTAATGTCTTATGAAATTTTCATGAACAATTCAAACATAATTGTTAAGAACACGTGTATTAAATTCATGTAAATG
GAATAAAAGTTTTAAGAATGGA

FIGURE 4266

CTGCCACTGCCACCTCGCGGATCAGGAGCCAGCGTTGTTCGCCCGACGCCTCGCTGCCGGTGGGAGGAAGCGAGA
GGGAAGCCGCTTGCGGGTTTGTCGCCGCTGCTCGCCCACCGCCTGGAAGAGCCGAGCCCCGGCCCAGTCGGTCGC
TTGCCACCGCTCGTAGCCGTTACCCGCGGGCCGCCACAGCCGCCGGCCGGGAGAGGCGCGCGCCATGGCTTCTGG
AGCCGATTCAAAAGGTGATGACCTATCAACAGCCATTCTCAAACAGAAGAACCGTCCCAATCGGTTAATTGTTGA
TGAAGCCATCAATGAGGACAACAGTGTGGTGTCCTTGTCCCAGCCCAAGATGGATGAATTGCAGTTGTTCCGAGG
TGACACAGTGTTGCTGAAAGGAAAGAAGAGACGAGAAGCTGTTTGCATCGTCCTTTCTGATGATACTTGTTCTGA
TGAGAAGATTCGGATGAATAGAGTTGTTCGGAATAACCTTCGTGTACGCCTAGGGGATGTCATCAGCATCCAGCC
ATGCCCTGATGTGAAGTACGGCAAACGTATCCATGTGCTGCCCATTGATGACACAGTGGAAGGCATTACTGGTAA
TCTCTTCGAGGTATACCTTAAGCCGTACTTCCTGGAAGCGTATCGACCCATCCGGAAAGGAGACATTTTTCTTGT
CCGTGGTGGGATGCGTGCTGTGGAGTTCAAAGTGGTGGAAACAGATCCTAGCCCTTATTGCATTGTTGCTCCAGA
CACAGTGATCCACTGCGAAGGGGAGCCTATCAAACGAGAGGATGAGGAAGAGTCCTTGAATGAAGTAGGGTATGA
TGACATTGGTGGCTGCAGGAAGCAGCTAGCTCAGATAAAGGAGATGGTGGAACTGCCCCTGAGACATCCTGCCCT
CTTTAAGGCAATTGGTGTGAAGCCTCCTAGAGGAATCCTGCTTTACGGACCTCCTGGAACAGGAAAGACCCTGAT
TGCTCGAGCTGTAGCAAATGAGACTGGAGCCTTCTTCTTCTTGATCAATGGTCCTGAGATCATGAGCAAATTGGC
TGGTGAGTCTGAGAGCAACCTTCGTAAAGCCTTTGAGGAGGCTGAGAAGAATGCTCCTGCCATCATCTTCATTGA
TGAGCTAGATGCCATCGCTCCCAAAAGAGAGAAAACTCATGGCGAGGTGGAGCGGCGCATTGTATCACAGTTGTT
GACCCTCATGGATGGCCTAAAGCAGAGGGCACATGTGATTGTTATGGCAGCAACCAACAGACCCAACAGCATTGA
CCCAGCTCTACGGCGATTTGGTCGCTTTGACAGGGAGGTAGATATTGGAATTCCTGATGCTACAGGACGCTTAGA
GATTCTTCAGATCCATACCAAGAACATGAAGCTGGCAGATGATGTGGACCTGGAACAGGTAGCCAATGAGACTCA
CGGGCATGTGGGTGCTGACTTAGCAGCCCTGTGCTCAGAGGCTGCTCTGCAAGCCATCCGCAAGAAGATGGATCT
CATTGACCTAGAGGATGAGACCATTGATGCCGAGGTCATGAACTCTCTAGCAGTTACTATGGATGACTTCCGGTG
GGCCTTGAGCCAGAGTAACCCATCAGCACTGCGGGAAACCGTGGTAGAGGTGCCACAGGTAACCTGGGAAGACAT
CGGGGGCCTAGAGGATGTCAAACGTGAGCTACAGGAGCTGGTCCAGTATCCTGTGGAGCACCCAGACAAATTCCT
GAAGTTTGGCATGACACCTTCCAAGGGAGTTCTGTTCTATGGACCTCCTGGCTGTGGGAAAACTTTGTTGGCCAA
AGCCATTGCTAATGAATGCCAGGCCAACTTCATCTCCATCAAGGGTCCTGAGCTGCTCACCATGTGGTTTGGGGA
GTCTGAGGCCAATGTCAGAGAAATCTTTGACAAGGCCCGCCAAGCTGCCCCCTGTGTGCTATTCTTTGATGAGCT
GGATTCGATTGCCAAGGCTCGTGGAGGTAACATTGGAGATGGTGGTGGGGCTGCTGACCGAGTCATCAACCAGAT
CCTGACAGAAATGGATGGCATGTCCACAAAAAAAAAATGTGTTCATCATTGGCGCTACCAACCGGCCTGACATCAT
TGATCCTGCCATCCTCAGACCTGGCCGTCTTGATCAGCTCATCTACATCCCACTTCCTGATGAGAAGTCCCGTGT
TGCCATCCTCAAGGCTAACCTGCGCAAGTCCCCAGTTGCCAAGGATGTGGACTTGGAGTTCCTGGCTAAAATGAC
TAATGGCTTCTCTGGAGCTGACCTGACAGAGATTTGCCAGCGTGCTTGCAAGCTGGCCATCCGTGAATCCATCGA
GAGTGAGATTAGGCGAGAACGAGAGAGGCAGACAAACCCATCAGCCATGGAGGTAGAAGAGGATGATCCAGTGCC
TGAGATCCGTCGAGATCACTTTGAAGAAGCCATGCGCTTTGCGCGCCGTTCTGTCAGTGACAATGACATTCGGAA
GTATGAGATGTTTGCCCAGACCCTTCAGCAGAGTCGGGGCTTTGGCAGCTTCAGATTCCCTTCAGGGAACCAGGG
TGGAGCTGGCCCCAGTCAGGGCAGTGGAGGCGGCACAGGTGGCAGTGTATACACAGAAGACAATGATGATGACCT
GTATGGCTAAGTGGTGGTGGCCAGCGTGCAGTGAGCTGGCCTGCCTGGACCTTGTTCCCTGGGGGTGGGGGCGCT
TGCCCAGGAGAGGGACCAGGGGTGCGCCCACAGCCTGCTCCATTCTCCAGTCTGAACAGTTCAGCTACAGTCTGA
CTCTGGACAGGGGGTTTCTGTTGCAAAAATACAAAACAAAAGCGATAAAATAAAAGCGATTTTCATTTGGTAGGC
GGAGAGTGAATTACCAACAGGGAATTGGGCCTTGGGCCTATGCCATTTCTGTTGTAGTTTGGGGCAGTGCAGGGG
ACCTGTGTGGGGTGTGAACCAAGGCACTACTGCCACCTGCCACAGTAAAGCATCTGCACTTGACTCAATGCTGCC
CGAGCCCTCCCTTCCCCCTATCCAACCTGGGTAGGTGGGTAGGGGCCACAGTTGCTGGATGTTTATATAGAGAGT
AGGTTGATTTATTTTACATGCTTTTGAGTTAATGTTGGAAAACTAATCACAAGCAGTTTCTAAACCAAAAAATGA
CATGTTGTAAAAGGACAATAAACGTTGGGTCAAAATGG

FIGURE 4267

AGGAGGACCTGGGGGTGTGGCAGCGAGGAAGGGCCGAGCCACGGACTGTGGGGCCGAAACTCGCTCCCGCCCACC
CTTTCTCGAGGCTGTGGCCTCCGCGAGAGCCGAGCGGGCCGCACCGCCGGCCGTGCGACTGCCCCAGTCAGACAC
GACCCCGGCTTCTAGCCCGCCTAAGCCTGTTTGGGGTTGCTGACTCGTTTCCTCCCCGAGTTTCCCGCGGGAACT
AACTCTTCAAGAGGACCAACCGCAGCCCAGAGCTTCGCAGACCCGGCCAACCAGAGGCGAGGTTGAGAGCCCGGC
GGGCCGCGGGGAGAGAGCGTCCCATCTGTCCTGGAAAGCCTGGGCGGGTGGATTGGGACCCCGAGAGAAGCAGGG
GAGCTCGGCGGGGTGCAGAAGTGCCCAGGCCCCTCCCCGCTGGGGTTGGGAGCTTGGGCAGGCCAGCTTCACCCT
TCCTAAGTCCGCTTCTGGTCTCCGGGCCCAGCCTCGGCCACC**ATG**TCCCGCCAGACCACCTCTGTGGGCTCCAGC
TGCCTGGACCTGTGGAGGGAAAAGAATGACCGGCTCGTTCGACAGGCCAAGGTGGCTCAGAACTCCGGTCTGACT
CTGAGGCGACAGCAGTTGGCTCAGGATGCACTGGAAGGGCTCAGAGGGCTCCTCCATAGTCTGCAAGGGCTCCCT
GCAGCTGTTCCTGTTCTTCCCTTGGAGCTGACTGTCACCTGCAACTTCATTATCCTGAGGGCAAGCTTGGCCCAG
GGTTTCACAGAGGATCAGGCCCAGGATATCCAGCGGAGCCTAGAGAGAGTGCTGGAGACACAGGAGCAGCAGGGG
CCCAGGTTGGAACAGGGGCTCAGGGAGCTGTGGGACTCTGTCCTTCGTGCTTCCTGCCTTCTGCCGGAGCTGCTG
TCTGCCCTGCACCGCCTGGTTGGCCTGCAGGCTGCCCTCTGGTTGAGTGCTGACCGTCTTGGGGACCTGGCCTTG
TTACTAGAGACCCTGAATGGCAGCCAGAGTGGAGCCTCTAAGGATCTGCTGTTACTTCTGAAAACTTGGAGTCCC
CCAGCTGAGGAATTAGATGCTCCATTGACCCTGCAGGATGCCCAGGGATTGAAGGATGTCCTCCTGACAGCATTT
GCCTACCGCCAAGGTCTCCAGGAGCTGATCACAGGGAACCCAGACAAGGCACTAAGCAGCCTTCATGAAGCGGCC
TCAGGCCTGTGTCCACGGCCTGTGTTGGTCCAGGTGTACACAGCACTGGGGTCCTGTCACCGTAAGATGGGAAAT
CCACAGAGAGCACTGTTGTACTTGGTTGCAGCCCTGAAAGAGGGATCAGCCTGGGGTCCTCCACTTCTGGAGGCC
TCTAGGCTCTATCAGCAACTGGGGGACACAACAGCAGAGCTGGAGAGTCTGGAGCTGCTAGTTGAGGCCTTGAAT
GTCCCATGCAGTTCCAAAGCCCCGCAGTTTCTCATTGAGGTAGAATTACTACTGCCACCACCTGACCTAGCCTCA
CCCCTTCATTGTGGCACTCAGAGCCAGACCAAGCACATACTAGCAAGCAGGTGCCTACAGACGGGGAGGGCAGGA
GACGCTGCAGAGCATTACTTGGACCTGCTGGCCCTGTTGCTGGATAGCTCGGAGCCAAGGTTCTCCCCACCCCCC
TCCCCTCCAGGGCCCTGTATGCCTGAGGTGTTTTTGGAGGCAGCGGTAGCACTGATCCAGGCAGGCAGAGCCCAA
GATGCCTTGACTCTATGTGAGGAGTTGCTCAGCCGCACATCATCTCTGCTACCCAAGATGTCCCGGCTGTGGGAA
GATGCCAGAAAAGGAACCAAGGAACTGCCATACTGCCCACTCTGGGTCTCTGCCACCCACCTGCTTCAGGGCCAG
GCCTGGGTTCAACTGGGTGCCCAAAAAGTGGCAATTAGTGAATTTAGCAGGTGCCTCGAGCTGCTCTTCCGGGCC
ACACCTGAGGAAAAAGAACAAGGGGCAGCTTTCAACTGTGAGCAGGGATGTAAGTCAGATGCGGCACTGCAGCAG
CTTCGGGCAGCCGCCCTAATTAGTCGTGGACTGGAATGGGTAGCCAGCGGCCAGGATACCAAAGCCTTACAGGAC
TTCCTCCTCAGTGTGCAGATGTGCCCAGGTAATCGAGACACTTACTTTCACCTGCTTCAGACTCTGAAGAGGCTA
GATCGGAGGGATGAGGCCACTGCACTCTGGTGGAGGCTGGAGGCCCAAACTAAGGGGTCACATGAAGATGCTCTG
TGGTCTCTCCCCCTGTACCTAGAAAGCTATTTGAGCTGGATCCGTCCCTCTGATCGTGACGCCTTCCTTGAAGAA
TTTCGGACATCTCTGCCAAAGTCTTGTGACCTG**TAG**CTGCCACGTTTTGAAGAGCTTGAGCTGGGTCCCCAGTGG
GCTGTCTCTCTGTGGGGAGGGCTTTCTGCTTCACCATCATTAGGAATGTGACCATTCCTATATAATTCCTGGACT
GGTGAGATTGGTGGTAGGCCTGTGAAATTTGCCCTAGTTACTACCATTCTCGTTTTGGAGGAAACAATCTCTGCC
ACCACCAAGTCATTGACTTTGCTCGAGGCACCTTTTTTCCTGTTTCTCCTTTTCTGTTGTCGAGTAAAATTTCAT
ATTTAT

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FIGURE 4268

TGGACAGTGGTGAATGGGACGTGCTGATTGCTCACTTCCTGGGTGTGGACCACTGTGGCCACAAGCATGGCCCTC
ACCACCCTGAAATGGCCAAGAAACTTAGCCAGATGGACCAGGTGATCCAGGGACTTGTGGAGCGTCTGGAGAATG
ACACACTGCTGGTAGTGGCTGGGGACCATGGGATGACCACAAATGGAGACCATGGAGGGGACAGTGAGCTGGAGG
TCTCAGCTGCTCTCTTTCTGTATAGCCCCACAGCAGTCTTCCCCAGCACCCCACCAGAGGAGCCAGAGGTGATTC
CTCAAGTTAGCCTTGTGCCCACGCTGGCCCTGCTGCTGGGCCTGCCCATCCCATTTGGGAATATCGGGGAAGTGA
TGGCTGAGCTATTCTCAGGGGGTGAGGACTCCCAGCCCCACTCCTCTGCTTTAGCCCAAGCCTCAGCTCTCCATC
TCAATGCTCAGCAGGTGTCCCGATTTCTTCATACCTACTCAGCTGCTACTCAGGACCTTCAAGCTAAGGAGCTTC
ATCAGCTGCAGAACCTCTTCTCCAAGGCCTCTGCTGACTACCAGTGGCTTCTCCAGAGCCCCAAGGGGGCTGAGG
CGACACTGCCGACTGTGATTGCTGAGCTGCAGCAGTTCCTGCGGGGAGCTCGGGCCATGTGCATCGAGTCTTGGG
CTCGTTTCTCTCTGAGCTTCCTTCTCCTACATCTGCTTGCTGCTGGGATACCCGTCACCACCCCTGGTCCTTTTA
CTGTGCCATGGCAGGCAGTCTCGGCTTGGGCCCTCATGGCCACACAGACCTTCTACTCCACAGGCCACCAGCCTG
TCTTTCCAGCCATCCATTGGCATGCAGCCTTCGTGGGATTCCCAGAGGGTCATGGCTCCTGTACTTGGCTGCCTG
CTTTGCTAGTGGGAGCCAACACCTTTGCCTCCCACCTCCTCTTTGCAGTAGGTTGCCCACTGCTCCTGCTCTGGC
CTTTCCTGTGTGAGAGTCAAGGGCTGCGGAAGAGACAGCAGCCCCCAGGGAATGAAGCTGATGCCAGAGTCAGAC
CCGAGGAGGAAGAGGAGCCACTGATGGAGATGCGGCTCCGGGATGCGCCTCAGCACTTCTATGCAGCACTGCTGC
AGCTGGGCCTCAAGTACCTCTTTATCCTTGGTATTCAGATTCTGGCCTGTGCCTTGGCAGCCTCCATCCTTCGCA
GGCATCTCATGGTCTGGAAAGTGTTTGCCCCTAAGTTCATATTTGAGGCTGTGGGCTTCATTGTGAGCAGCGTGG
GACTTCTCCTGGGCATAGCTTTGGTGATGAGAGTGGATGGTGCTGTGAGCTCCTGGTTCAGGCAGCTATTTCTGG
CCCAGCAGAGGTAGCCTAGTCTGTGATTACTGGCACTTGGCTACAGAGAGTGCTTGAGAACAGTGTAGCCTGGCC
TGTACAGGTACTGGATGATCTGCAAGACAGGCTCAGCCATACTCTTACTATCATGCAGCCAGGGGCCGCTGACAT
CTAGGACTTCATTATTCTATAATTCAGGACCACAGTGGAGTATGATCCCTAACTCCTGATTTGGATGCATCTGAG
GGACAAGGGGGGCGGTCTCCGAAGTGGAATAAAATAGGCCGGGCGTGGTGACTTGCACCTATAATCCCAGCACTT
TGGGAGGCAGAGGTGGGAGGATTGCTTGGTCCCAGGAGTTCAAGACCAGCCTGTGGAACATAACAAGACCCCGTC
TCTACTATTTAAAAAAAAGTGTAATAAAATGATAATATAATT

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FIGURE 4269

GGCTTCTGGGAGCGACCGCTCCGCTCGTCTCGTTGGTTCCGGAGGTCGCTGCGGCGGTGGGAA**ATG**CTGGCGCGC
GCGGCGCGGGGCACTGGGGCCCTTTTGCTGAGGGGCTCTCTACTGGCTTCTGGCCGCGCTCCGCGCCGCGCCTCC
TCTGGATTGCCCCGAAACACCGTGGTACTGTTCGTGCCGCAGCAGGAGGCCTGGGTGGTGGAGCGAATGGGCCGA
TTCCACCGGATCCTGGAGCCTGGTTTGAACATCCTCATCCCTGTGTTAGACCGGATCCGATATGTGCAGAGTCTC
AAGGAAATTGTCATCAACGTGCCTGAGCAGTCGGCTGTGACTCTCGACAATGTAACTCTGCAAATCGATGGAGTC
CTTTACCTGCGCATCATGGACCCTTACAAGGCAAGCTACGGTGTGGAGGACCCTGAGTATGCCGTCACCCAGCTA
GCTCAAACAACCATGAGATCAGAGCTCGGCAAACTCTCTCTGGACAAAGTCTTCCGGGAACGGGAGTCCCTGAAT
GCCAGCATTGTGGATGCCATCAACCAAGCTGCTGACTGCTGGGGTATCCGCTGCCTCCGTTATGAGATCAAGGAT
ATCCATGTGCCACCCCGGGTGAAAGAGTCTATGCAGATGCAGGTGGAGGCAGAGCGGCGGAAACGGGCCACAGTT
CTAGAGTCTGAGGGGACCCGAGAGTCGGCCATCAATGTGGCAGAAGGGAAGAAACAGGCCCAGATCCTGGCCTCC
GAAGCAGAAAAGGCTGAACAGATAAATCAGGCAGCAGGAGAGGCCAGTGCAGTTCTGGCGAAGGCCAAGGCTAAA
GCTGAAGCTATTCGAATCCTGGCTGCAGCTCTGACACAACATAATGGAGATGCAGCAGCTTCACTGACTGTGGCC
GAGCAGTATGTCAGCGCGTTCTCCAAACTGGCCAAGGACTCCAACACTATCCTACTGCCCTCCAACCCTGGCGAT
GTCACCAGCATGGTGGCTCAGGCCATGGGTGTATATGGAGCCCTCACCAAAGCCCCAGTGCCAGGGACTCCAGAC
TCACTCTCCAGTGGGAGCAGCAGAGATGTCCAGGGTACAGATGCAAGTCTTGATGAGGAACTTGATCGAGTCAAG
ATGAGT**TAG**TGGAGCTGGGCTTGGCCAGGGAGTCTGGGAACAAGGAAGCAGATTTTCCTGATTCTGGCTCTAGCT
TCCCTGCCAAGATTTTGGTTTTTATTTTTTTATTTGAACTTTAGTCGTGTAATAAACTCACCAGTGGCAAACC

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FIGURE 4270

ACAGCTAGGGCTGCTCAGTAACTGCCCCAACCACTACCACGTCCCCAAGTGCAACGGGACCCACGGAACTACAGG
TGTGGGGCAGGGTGAGCGTGGAAGAAGGGACGCGGATGGGGGTGCGCTTTGCAGACGATCTGGAGACTGCTGTGT
GTTGAGGGAAGATACGAAGTCGCGGGAGCAGTTGGGGACTCAATGTGTGGGCAACAAGGGTCCTGCTGAGCTCAG
GAGCTGCACGGAATGGTGGCAGTCACCTTGCCAGTGCAGCAGGCATGGATCAGACTGCAAGCTAGGGGCACGAGG
CATCAGTTGGGAAGAGGGGACGCACAGCTAGGCTTGAGGCCTCTTCATCGGGATGTCCCCAGGCCCCCCAGCCCA
GGCCCAGCATAAAGGCCGTGTTGGGGGGCCCCCCCTGACCCAAGGGGGGCTTC**ATG**CGCCACGTGCAGGCGGAGCC
GTCTCCATCCTCAGAGCCGGAGGCTGGCCCTTCACAGCCTCCAGTCAGGCAGGGGGCCCTCCAGGGTGGCCTGCT
CATGGGCTACAGCCCAGCAGGGGGGGCGACATCCCCCGGGGTCTACCAGGTATCCATCTTTTCCCCTCCGGCTGG
TACCTCTGAGCCTCATAGGGCCCTGAAACGACAAGCCCCATCCACTGAGGGTCCCCGGGAGCTGAAGAGAGGCCC
TGGGCTGGGGGCCAGAGAGGGACTACCCCCTGAAGAACCATCTACTGTGGGGCTCTTAGGCCCAGAGGGACCGGG
GCTGGGACTAGGTGTGGCCAGCCAGCATTTCTCCCACCGTGGCCTCTGTGTTGTGGAACAGAGAAGTAGTGTCAC
CTCATCTTGGACTTCGGGGGCCTGGAGTCCCCCCTGCCCCCCATCAAATGCTTCCTGCAATACTTTGCACACCAG
AGACTGGGCCTCCCCAGATCCAGGGGGACAGGGGTCCCTGGGGGAGTCCCCAGGGCCAGCCCCTCCAGGCCAGCT
GCACACACTTGACACTGATTTGCACAGTCTTGCACAAATAGGGGGTAAGAGCCCAGTGGCTGGGGTGGGCAATGG
GGGTAGCCTCTGGCCTAGGGAGTCCCCTGGCACTGCCAATGGGCACAGTCCCGAGCACACACCCCCTGGCCCTGG
ACCCCCAGGCCCCTGCCCCACCAAGCGAAGGCTGCTTCCTGCTGGAGAAGCCCCAGATGTCAGCTCTGAGGAAGA
GGGGCCAGCCCCTCGGAGGCGCCGGGGATCCCTGGGCCACCCTACTGCTGCCAACAGTTCTGATGCCAAAGCCAC
ACCCTTCTGGAGCCACCTGCTGCCTGGGCCCAAAGAGCCTGTTTTGGACCCAACAGACTGCGGTCCCATGGGGCG
GAGGCTGAAAGGAGCCCGTCGCCTGAAGCTGAGCCCCCTTCGAAGCCTCCGGAAGGGGCCAGGCCTGCTGAGCCC
CCCCAGTGCCTCCCCTGTTCCTACCCCTGCTGTCAGCCGTACCCTGCTGGGCAACTTTGAGGAATCATTGCTGCG
AGGACGTTTTGCACCATCTGGCCACATTGAGGGCTTCACAGCAGAAATTGGAGCTAGTGGGTCATACTGCCCCCA
GCACGTCACGCTGCCTGTCACTGTCACATTCTTTGATGTTTCTGAGCAAAATGCCCCGGCTCCCTTCCTGGGCAT
CGTGGATCTGAACCCCTTGGGGAGGAAGGGTTACAGCGTGCCCAAGGTGGGCACCGTCCAAGTGACCTTATTTAA
CCCCAGTCCCTTCACTTCCCCTACCCTC**TGA**CCTATCTCTGAAAGCCAAGTTATGCGTATGTGTGTGTGCACAAG
CTTGTCTTTGTGTGGTATGTGTGTGTGAGTGTGCATGTATGCACACACACAGGGGTTAACCACCCCTCACCTAGG
GCTCCAGACTCCAGTTGTCCCTCTCCTCCTACCTGTGTCTCCTTGTTTTGGGGTCCTGACTGAAGAAGGTGTCCA
GGGGGCAGAGTCAGGGCCAAGCACTGGGGTGCCTCCTCTCACCTGGCCAGACTCTGACCCACCTACCTCAGCTGG
GGTGAGGGGCACCCCTCAAACTCAGTCATGTGGTTCCAAACTACCCCATTCCCCACTCCAGACTCTGACCCAGCC
TCAGTCCTAACTCCTGGGGCTGGGCTGAGGGGAACAAGCATTTGCTGAAACTTGAAAAAACAAAGCAAATCAAAA
ACAGGAAAAAATTGTACCTGGTACTTTTTTTTAG

FIGURE 4271A

CCCAGCCTGCCGGCCGGTACTCACCGCTACCCGGAGTTCGCTCAGACGGTGAGATTTGGGGCGGGTCCGAGGCAG
CGGCGGGACGCTACCTGCGACCGGGACCATGAGGAGCTGCCAGACCCGTGGGGCCGGTAACGAGAGCAGTCGCGG
CACCTGCTGAGAGGAAAGAGGGAGCGGTCCGGCGCGGCTGGGGCGCGGCAGAGGCTTGCCCGATCCTCGGCC**ATG**

TCACTGCTCTGCGTGCGCGTTAAAAGGGCCAAATTCCAGGGTTCACCAGATAAATTTAACACATATGTGACCCTG
AAAGTACAGAATGTGAAGAGCACAACTGTAGCAGTTCGTGGTGATCAGCCTTCCTGGGAACAGGATTTCATGTTT
GAGATTAGTCGCCTGGACCTGGGTCTAAGTGTGGAGGTATGGAACAAAGGACTGATCTGGGACACCATGGTGGGG
ACTGTGTGGATTGCGCTGAAGACTATTCGTCAGTCGGATGAGGAAGGGCCTGGGGAATGGTCCACATTAGAGGCA
GAGACGTTAATGAAAGACGATGAGATCTGTGGAACTAGAAACCCAACTCCTCATAAAATTTTGCTTGATACAAGA
TTTGAGTTGCCTTTTGATATCCCAGAGGAGGAAGCCAGATATTGGACCTACAAATGGGAGCAAATCAATGCCTTG
GGAGCTGACAATGAGTATTCTAGTCAAGAAGAAAGCCAGAGGAAGCCATTGCCCACTGCTGCCGCCCAGTGTTCT
TTTGAAGACCCTGATAGTGCCGTCGATGACCGAGATAGTGACTATCGCAGTGAGACCAGCAACAGCTTCCCACCT
CCTTACCATACAGCTTCCCAGCCCAACGCTTCTGTGCACCAGTTCCCTGTGCCGGTGCGATCGCCACAGCAGCTG
CTACTTCAAGGCAGTTCCCGGGACTCTTGTAATGACTCTATGCAAAGTTATGACCTTGATTATCCAGAGCGGCGG
GCTATCAGCCCCACCAGCAGCAGTAGGTATGGCTCCTCCTGTAATGTGAGTCAAGGAAGCTCTCAGCTAAGTGAA
CTAGACCAGTATCACGAACAAGATGACGACCATCGGGAGACGGACTCGATTCATTCTTGCCACAGCTCTCACAGC
CTGTCCAGAGATGGCCAAGCAGGTTTTGGAGAACAAGAGAAACCCTTGGAGGTGACAGGTCAAGCAGAGAAGGAG
GCAGCATGTGAACCCAAGGAGATGAAAGAAGATGCCACAACCCACCCTCCCCCAGATCTGGTGCTGCAAAAAGAC
CACTTCCTAGGTCCCCAGGAGAGTTTTCCTGAGGAGAATGCATCTTCACCATTTACCCAAGCCAGAGCACATTGG
ATCCGAGCAGTTACCAAGGTTCGACTCCAGCTGCAGGAGATTCCAGATGATGGTGACCCCTCTCTGCCTCAGTGG
CTCCCGGAAGGGCCAGCCGGAGGGCTCTATGGCATTGACAGCATGCCAGATTTACGCAGAAAGAAGCCACTGCCA
CTTGTCAGTGATCTGTCACTGGTCCAGTCTCGGAAGGCAGGAATCACTTCTGCAATGGCTACACGCACTTCTCTT
AAGGACGAAGAGCTGAAATCCCACGTGTATAAGAAAACCCTGCAGGCCTTAATCTACCCCATTTCGTGCACCACT
CCTCATAACTTTGAGGTCTGGACGGCCACTACCCCAACCTACTGCTATGAGTGTGAAGGCCTGCTCTGGGGCATT
GCCCGGCAGGGCATGCGCTGCAGCGAATGTGGAGTCAAGTGCCATGAGAAGTGCCAGGATCTGCTCAATGCTGAC
TGCCTGCAGCGGGCTGCAGAAAAGAGCTGTAAACATGGAGCTGAGGACCGGACCCAGAACATTATCATGGCCATG
AAGGACCGCATGAAGATCCGAGAGCGAAATAAGCCAGAGATCTTTGAAGTTATCCGGGACGTCTTCACAGTGAAC
AAAGCTGCCCATGTGCAGCAGATGAAAACAGTGAAGCAGAGTGTACTGGATGGCACCTCCAAATGGTCAGCCAAG
ATCACCATTACTGTGGTGTGTGCCCAGGGCCTACAAGCCAAGGACAAAACAGGATCCAGTGACCCTTACGTGACT
GTGCAAGTCAGCAAAACTAAGAAGCGTACCAAGACCATTTTTGGAAACTTGAATCCTGTTTGGGAGGAGAAGTTC
CATTTTGAGTGCCACAACTCCTCTGACCGCATTAAGGTGCGTGTATGGGATGAGGATGATGACATCAAGTCAAGA
GTAAAGCAACGCCTAAAGCGAGAGTCTGATGATTTCCTTGGCCAAACCATCATTGAGGTTCGGACCCTAAGTGGC
GAGATGGACGTCTGGTACAACTTGGAGAAGAGGACAGACAAATCAGCCGTCTCAGGGGCTATCCGACTACAAATC
AGTGTGGAGATCAAGGGGGAGGAGAAAGTAGCCCCATACCACGTGCAGTATACATGTCTCCATGAGAATCTTTTC
CATTACCTCACAGACATTCAGGGCAGTGGAGGAGTCCGCATCCCTGAAGCTCGAGGAGACGATGCCTGGAAGGTG
TACTTTGATGAGACAGCCCAAGAAATTGTGGATGAATTTGCCATGCGTTATGGCATTGAGTCCATATATCAGGCC
ATGACGCACTTTGCATGTTTATCATCCAAGTACATGTGTCCTGGTGTGCCAGCAGTGATGAGCACCTTACTGGCC
AACATCAACGCCTACTATGCCCACACAACTGCCTCTACCAATGTCTCTGCATCTGATCGCTTTGCAGCCTCCAAC
TTTGGGAAAGAGAGATTTGTAAAACTGCTGGACCAGCTACACAACTCACTGAGGATCGACCTCTCTACATACAGG
AATAATTTCCCTGCTGGGAGTCCTGAACGGCTTCAGGACTTAAAATCCACAGTGGATTTGCTGACCAGCATTACT
TTCTTCAGAATGAAGGTACAAGAACTGCAAAGCCCTCCAAGAGCCAGCCAGGTGGTAAAGGATTGTGTGAAGGCC
TGTTTGAACTCCACATATGAATATATCTTCAACAACTGCCACGACTTATACAGCCGCCAGTACCAGCTGAAGCAG
GAGCTACCTCCAGAGGAACAAGGGCCCAGCATTCGGAACCTGGATTTCTGGCCCAAGCTCATCACACTCATCGTG
TCAATCATAGAGGAAGATAAGAATTCCTACACACCTGTTCTGAACCAGTTTCCTCAGGAGTTGAATGTGGGAAAA
GTCAGCGCAGAAGTGATGTGGCATTTGTTTGCCCAAGACATGAAATATGCATTGGAGGAGCATGAGAAAGACCAC
CTGTGTAAAAGTGCTGACTACATGAACCTGCACTTCAAGGTGAAGTGGCTCCACAATGAATACGTGCGGGATCTG
CCTGTCCTCCAGGGGCAGGTGCCTGAGTACCCAGCGTGGTTTGAGCAGTTCGTGCTACAATGGCTGGATGAGAAT
GAGGATGTATCCCTGGAATTCCTGCGTGGGGCCCTGGAACGAGATAAGAAGGATGGATTCCAGCAGACATCAGAG
CATGCACTCTTTTCCTGCTCTGTGGTGGATGTCTTCACACAACTCAATCAGAGCTTTGAGATCATCCGGAAGCTG

FIGURE 4271B

GAATGCCCAGACCCCAGCATCCTTGCCCACTACATGAGGAGGTTTGCTAAGACCATCGGGAAGGTGCTGATGCAG
TATGCAGACATCTTGTCAAAGGACTTCCCAGCCTATTGCACAAAGGAGAAACTGCCCTGCATCCTGATGAACAAC
GTGCAGCAACTGAGGGTCCAGCTGGAGAAAATGTTTGAGGCCATGGGAGGCAAGGAGCTGGACCTTGAAGCTGCA
GACAGTCTGAAGGAGCTGCAGGTGAAACTGAATACGGTTCTGGATGAGCTCAGCATGGTGTTTGGAAACAGTTTC
CAGGTACGGATTGATGAGTGTGTTCGACAAATGGCCGACATCCTGGGCCAGGTTCGGGGCACAGGGAATGCATCT
CCAGACGCCAGGGCCTCAGCGGCTCAGGATGCAGATAGCGTACTCCGGCCTCTCATGGACTTCCTGGATGGCAAC
CTCACCCTCTTTGCCACTGTGTGTGAGAAGACGGTTCTGAAGCGTGTACTGAAGGAGCTCTGGCGCGTGGTGATG
AACACAATGGAGAGGATGATTGTTCTGCCCCCACTCACTGACCAGACGGGCACCCAGCTGATCTTCACTGCTGCC
AAGGAGCTGAGCCATCTTTCCAAACTCAAGGATCACATGGTACGAGAGGAAACACGGAATCTCACTCCAAAGCAG
TGTGCAGTCCTTGACCTCGCCCTGGACACCATCAAGCAATACTTCCATGCAGGAGGCAATGGGCTGAAGAAAACC
TTCCTGGAGAAGAGCCCAGATCTGCAGTCTCTACGCTATGCCCTGTCTCTGTACACACAGACTACTGACACTCTC
ATCAAGACCTTTGTGCGCTCGCAGACCACCCAAGGGTCTGGTGTGGACGATCCTGTGGGAGAAGTCTCTATTCAG
GTGGACTTGTTTACACACCCTGGTACTGGGGAGCACAAGGTCACAGTGAAAGTGGTGGCTGCCAATGACCTCAAG
TGGCAGACAGCGGGTATGTTCCGGCCTTTCGTGGAGGTGACTATGGTTGGCCCACACCAAAGTGATAAGAAGAGG
AAGTTCACAACCAAATCCAAAAGCAACAACTGGGCCCCCAAGTACAATGAGACATTCCACTTCCTCCTGGGAAAT
GAGGAGGGGCCCGAGTCCTATGAGTTGCAGATATGCGTGAAGGATTACTGCTTTGCCCGGGAAGATCGCGTGCTA
GGGCTGGCTGTGATGCCTCTGAGGGATGTCACAGCCAAGGGCAGCTGTGCCTGCTGGTGCCCCTTGGGCCGGAAG
ATCCATATGGATGAGACAGGCCTGACCATTCTCCGGATTTTATCTCAGAGGAGCAATGACGAGGTGGCCCGAGAA
TTTGTGAAACTCAAATCAGAGTCTCGTTCCACGGAGGAGGGGAGC**TGA**ACACCTTCGACTCCTGTGCCAATCAGG
CAGCAGCAATTTCACAAATCAGGGCCAGTGGGAGTTAGCTGTGTAACCGGCTTAGGGTCTTTGCAGTCAAGAGGC
TGACCCCTTCAGTTAAAGATATTTAAGGAAAAATTTGGGGTGGTGATAATATGGCTTTTCACAGAAAGGGTCATG
AAGCCCTGGCCCAACAGGACTGTGGTACTAGGGGCTGGGATGTGGGGTTACCACATGGAGAGATTTTCCATTAAG
AGAGAAGGACAAACATTTCTGAGAGTGTCAGCCATTCTTGGTAGACACCTCTCCACTCCTCATCCCACCTCTACC
CATCTCCATGCCACACCTTATCCAGTTAGACACATACATACCAATCATTAGAAGAACAAGTTTAGAAGGTGTGGA
ACTTGTGCCTGGCTGGCTGGGTAGTCAGCTGAGCCTGTTGCTGAGCCCGGTGGTCTGGATTGGAGTATGGCCAGG
GCAGGAGTACACAGAATAGAATTTAGACTGTCCCTTGAGTAGAATCCACTGATTTTCTGTGGCTCCAGTGAGAAC
AAGGCTTTGAAACTGAACAAGATAACTTCTAGAAATGAACTGTACTAATCCCTTTCCCCAGATTGTATCATGAGT
AGAATCAGGTTCACGTGGTGCTTCAAAGCCCTGAGAAGAATATTTGTTTGGACCCCAGGCACTAGGGGCCACCTG
CCTGGGAGTCTCCCTGCCTCACTCCTCTAGGCAGGGGAGTGATGCTTCAGGACGTGACAGGCTGTTCTAACATGT
GTCTACCTGAGGGCTAGTTGAAGGATCCAGGAGTATTTTCTTCTTGGGTGGGCCCTGAACAAAGCCAAAAATTGT
AGAAACCAGTCTAGAAAAAGTCCTGCTCATCTGTGGCCACTGCCTTCTAGCCGTCCTCCACCTTGCAGAAAGAAT
CTAGCCTTTGGTCTCTCTCTCTCTCATCGGGGTCATTTGCTATTCCCCTCTGATATTCAACCCTATAGAAGGAGC
CTGGACTCTGATCCCTCTGTACAGGCTGGATGGAAGGGGCCCTCCACACTTCCTGGGAGGTCAGAGACAAACTGT
TTCAGAGAGTCAGATGGACTTCCCAAGACTTGTTGAGAGATGTGACATGGTTCTTGGATTTCCTCTGTAGCAGCC
TCCTGGACTTCCTGAGGACTCGACATTGTCCACAGATGTACTGGCCATTACATGAAACAAGAAACCAAGCATCTT
TGCTGTTGTTAATTATTATATGTGCCATTGTTACAGGAGATTATAGGCTAGTCTGTAATAAATTATCTTATAGC

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FIGURE 4272

ACAGCTTCAAGTGAAGTTAATCTGAGGTGAAGCAAACAGAAAATTGTGGAGGTTTTGTTGGTGTGCAATGGAGGA
ACATGGCTCAAGAAACTAATCACAGCCAAGTACCTATGCTTTGTTCCACTGGCTGCGGATTTTATGGAAACCCTC
GTACAAATGGCACGTGTTCAGTATGCTATAAAGAACATCTTCAAAGACTGAATAGTAGTAATGGTAGAATAAGCC
AACCTGCAACCTCTGAATCTTTACCAGTTCAATGCACAGATGGCAGTGTCCCAGAAGCCCAGTCAACATTAGACT
CTACATCTTCATCTATGCAGCCAAGCCCTGTATCAAATCAGTCACTTTTATCAGAATCTGTAGCATCTTCTCAAT
TGGACAGTACATCTGTGGACAAGCAGTACCTGAAACAGAAGATCTGCAGGCTTCAGTATCAGACATGGCACAGCA
GCCATCTGAAGAGCAAAGCAAGTCTCTTGAAAAACCAAAACAAAAAAAGAATCTCTGTTTCATGTGCAGGAAGAA
AGTGGGACTTACTAGGTTTGAATGCGGTGTAGAAATGTTTACTGTGGTGTACACTGTTACTCAGATCTACACAAT
TGCTCTTAAAATTACAAAGCTGATGCCGCTGAGAAAATCAGAAAAGAAAATCCAGTAGTTGTTGGCGAGAAGATC
CAAAAGATTTGAACTCCTGCTGGAATACAAAATTCTTGATCATCTGCAAACTAAAAATTGACTTGAGGTTTTTTT
TTCCCTAGTCATTGGGAAAGTAGAGCAGTGTATCTTGCATGTCATCGGATGAATAGATTTTTGTTTTGATTTTGT
TTTGAAAATGACTCTGAACATTTATTTCCATTGCAATTTCTGTGGCTGAGAAGACTTAAACTTTACAAGTATTAT
CCTTATAAGATCATTTTAATTTTAGTTGAGTGCAGAGGGCTTTTATAACAAACGTGCAGAAATTTTGGTGGACTG
TGATTTTTCCAGTATTAAATATGCATGCATTAATCTTGCAGTTTATTTTCTCATTGTGTACATATATATTGCTTT
TCTTTGCAGCACGATTTCTCTTTTGATAATGCCCTTTGGGGCACAACTAGTTATCGGTAACTGAATGTATCTTAA
TCATTATGGCTGCTTCTGTTTTTTCATTAACAAAGGTTATTCATATGTTAGCATATAGTTTCTTTGCACCCACTA
TTTATGTCTGAATCATTTGTCACGAGAGTGTGTGCTGATGAGATTCTAAGTTTGTGTGTTTAAACTTTTTTTTGA
GCGAGGGAAGAAAAAGCTGTATGCATTTCATTGCTGTCTACAGGTTTCTTTCAGATTATGTTCATGGGTTTGTGT
GTATACGATATGAAGAATGATCTGAAGTAATTGTGCTGTATTTATGTTTATTCACCAGTCTTTGATTAAATAAAA
AGGAAAACCAG

FIGURE 4273A

TCCCGTGGAACAGTGTCTCAGCTGGAACTGTCGCGGTAGAGCTTGGTCGGAGTGCAAAAGGGACAGACGCATCAG
GGGTCCAGCTCAAGGCTCCTGACAGAGGTGCCAAGCTCTCCTGATGAAATGTGTTCTGCCCCACTGGGCTCCAGG
GACAGTGTCTGGTGCTGTTGAAGCCCTTATTCGAACTTTCCAGAATGGATAGTCCCCCAAAGCTGACTGGAGAGA
CCCTCATCGTTCATCACATCCCCCTGGTGCACTGCCAAGTCCCAGACAGGCAGTGCTGTGGAGGGGCAGGTGGAG
GTGGTGGGAGCACAAGACCTAATCCCTTCTGCCCACCTGAGCTGGGCATCACCCAGCCCGATCAAGACCTAGGAC
AAGCTGACTCCCTGCTATTCAGCAGCCTGCACTCTACTCCAGGAGGAACTGCACGGTCTATAGACAGCACCAAGA
GTAGGAGTCGGGATGGAAGAGGCCCTGGAGCCCCCAAACGACACAACCCCTTCTTGCTGCAGGAGGGTGTGGGTG
AGCCAGGACTTGGTGACCTGTATGATGACAGCATTGGTGACAGTGCCACCCAGCAGTCCTTCCACCTGCATGGCA
CTGGCCAGCCCAACTTTCATCTATCCTCTTTCCAGCTGCCACCATCTGGCCCCAGAGTGGGCAGGCCATGGGGGA
CAACACGCAGTCGGGCTGGAGTGGTGGAAGGGCAGGAACAGGAGCCAGTGATGACCTTGGATACTCAGCAGTGCG
GCACCAGCCACTGCTGCCGGCCAGAGCTGGAAGCAGAGACTATGGAGCTGGATGAGTGTGGGGGACCTGGTGGGA
GTGGCAGTGGGGGTGGAGCCAGCGATACCTCTGGCTTTTCCTTTGACCAGGAATGGAAGCTCAGTTCAGATGAAT
CCCCAAGGAACCCTGGATGCTCCGGCTCAGGGGACCAGCACTGCCGCTGCAGTAGCACATCCAGTCAGTCCGAGG
CAGCTGACCAGTCCATGGGCTATGTGAGCGACTCCTCCTGCAACAGTTCAGATGGTGTGCTGGTCACCTTCAGCA
CCCTCTACAACAAGATGCATGGCACCCCCCGTGCCAATCTCAACTCTGCCCCACAGTCCTGCAGCGACTCTTCCT
TCTGCAGCCACTCAGACCCTGGCGCCTTCTATCTGGATCTGCAGCCCTCCCCATTTGAGTCTAAGATGTCTTATG
AGTCCCATCACCCTGAAAGTGGAGGAAGGGAAGGGGGCTATGGTTGCCCTCATGCCTCTTCTCCTGAGCTTGATG
CCAACTGCAACTCCTACCGCCCACACTGTGAGCCGTGCCCAGCAGTGGCTGACCTCACAGCCTGCTTCCAAAGCC
AGGCCCGTCTTGTTGTGGCCACACAAAATTACTATAAACTTGTCACCTGTGACCTATCTTCCCAATCATCCCCAA
GCCCTGCTGGCTCTTCCATCACTAGCTGCTCTGAGGAACACACCAAGATAAGTCCCCCACCAGGCCCTGGCCCAG
ACCCAGGCCCCAGCCAGCCCTCTGAGTATTACCTATTCCAGAAGCCAGAAGTCCAGCCAGAGGAACAAGAAGCAG
TGAGTTCCTCCACCCAAGCAGCAGCTGCTGTGGGCCCCACTGTGCTTGAGGGACAAGTATACACGAATACTTCAC
CCCCCAACCTCAGCACTGGACGTCAGCGCTCCCGCAGCTATGATCGCAGCCTGCAGCGCAGCCCTCCTGTCCGCC
TGGGCTCGCTGGAACGTATGTTGAGTTGCCCAGTGCGCTTGAGTGAGGGCCCTGCAGCCATGGCCGGGCCTGGCT
CCCCACCCAGGAGGGTCACCTCCTTTGCCGAGCTGGCCAAGGGCCGGAAGAAAACTGGAGGCTCTGGCTCGCCCC
CACTTCGTGTGAGTGTTGGGGACTCCTCCCAGGAGTTCTCACCCATCCAAGAAGCCCAGCAAGATCGGGGGGCCC
CACTGGATGAGGGCACTTGCTGTAGCCATAGCCTGCCACCCATGCCTTTGGGGCCAGGCATGGACCTACTTGGCC
CAGACCCAAGTCCACCCTGGTCCACCCAGGTCTGTCAGGGACCCCACTCCAGTGAGATGCCTCCTGCTGGCCTCA
GAGCTACTGGGCAAGGCCCCCTGGCTCAGCTGATGGATCCAGGGCCTGCTCTCCCAGGGAGCCCAGCCAACAGCC
ATACCCAGAGGGATGCAAGAGCTAGAGCTGACGGGGGTGGCACCGAGAGCCGACCAGTCCTTCGCTACAGCAAGG
AACAGAGGCCAACCACACTGCCCATCCAGCCCTTCGTGTTCCAGCACCACTTCCCCAAGCAGCTGGCCAAGGCCC
GGGCCCTCCACAGCCTTTCCCAGCTCTACAGCCTCTCAGGCTGCAGCCGTACACAGCAGCCTGCCCCACTGGCTG
CCCCTGCTGCTCAAGTCTCAGTCCCAGCTCCCTCAGGGGAACCGCAGGCATCCACTCCCCGAGCCACTGGCAGAG
GTGCCAGGAAAGCTGGGTCTGAGCCAGAGACCTCTCGGCCATCGCCCCTGGGCAGCTACTCCCCCATCCGGAGTG
TTGGCCCCTTTGGGCCCAGCACTGACTCTTCTGCCTCCACTTCGTGCTCCCCTCCCCCAGAGCAGCCCACAGCCA
CAGAAAGCCTGCCCCCATGGAGCCACTCCTGTCCTTCTGCTGTCCGGCCTGCCACCTCCCAGCAGCCGCAGAAGG
AGGATCAGAAGATACTGACCTTGACTGAGTACCGGCTCCATGGAACAGGAAGCTTGCCGCCTCTGGGCTCCTGGC
GATCTGGCCTCAGCCGAGCAGAGAGCCTGGCCCGGGGAGGTGGTGAGGGCAGCATGGCCACCAGGCCCAGTAATG
CCAACCACCTATCCCCTCAAGCCCTCAAGTGGCGGGAATACAGGAGGAAGAACCCACTAGGGCCACCTGGTTTGT
CAGGGAGCCTAGACCGAAGATCACAAGAAGCTCGGCTGGCCCGAAGAAACCCTATCTTTGAGTTCCCTGGCTCCC
TCAGTGCTGCCAGCCATCTGAACTGCCGGCTGAATGGCCAAGCAGTGAAGCCGTTACCACTGACCTGCCCTGACT
TCCAGGACCCCTTTTCCTTGACGGAGAAGCCTCCAGCTGAGTTTTGTCTGTCCCCAGATGGCAGCTCAGAGGCCA
TTTCCATTGACCTGCTTCAGAAAAAAGGGCTGGTAAAAGCTGTTAACATCGCTGTGGACCTCATTGTGGCTCATT
TTGGCACAAGCCGGGATCCCGGGGTGAAGGCAAAGCTGGGAAACAGTTCTGTGAGCCCCAATGTGGGCCACCTGG
TTCTGAAGTACTTGTGCCCTGCCGTCCGCGCCGTGCTGGAGGATGGGCTCAAGGCCTTTGTACTGGACGTCATCA
TCGGGCAGCGTAAGAACATGCCATGGAGTGTGGTTGAGGCTTCCACACAGCTAGGCCCATCCACCAAGGTCCTGC
ATGGCCTCTACAACAAAGTCAGCCAATTCCCAGAGCTCACCAGTCATACCATGCGCTTCAACGCCTTCATCCTCG
GCCTGCTCAACATCCGGTCCCTGGAGTTCTGGTTTAATCACCTCTATAACCACGAAGACATCATCCAGACCCACT

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FIGURE 4273B

ACCAGCCCTGGGGCTTCCTGAGTGCAGCTCATACCGTGTGTCCCGGCCTCTTTGAAGAGCTGCTGCTGCTGCTAC
AGCCCCTGGCCCTGCTGCCCTTCAGCCTCGACTTGCTGTTCCAGCACCGGCTGCTGCAAAGTGGGCAGCAGCAGC
GGCAGCACAAGGAACTGCTGCGGGTGTCCCAGGACCTGCTGCTGTCTGCCCACTCCACGCTGCAGCTGGCCCGGG
CCCGGGGCCAGGAGGGCCCTGGAGACGTGGACAGGGCAGCCCAAGGGGAGCGGGTGAAGGGTGTGGGTGCCTCAG
AAGGTGGAGAAGAGGAAGAGGAAGAAGAGGAGACAGAAGAGGTGGCAGAGGCAGCCGGGGGCTCAGGGCGTGCCA
GGTGGGCCCGAGGTGGGCAGGCCGGCTGGTGGTACCAGCTCATGCAGAGCTCCCAGGTCTACATCGATGGCTCCA
TTGAGGGTTCCAGGTTCCCTCGTGGTAGCAGCAACAGCAGCAGCGAGAAAAAGAAAGGGGCAGGAGGTGGGGGAC
CTCCCCAGGCTCCACCACCCCGAGAGGGAGTAGTGGAGGGGGCTGAGGCCTGCCCTGCCTCTGAGGAGGCCCTGG
GCCGGGAAAGGGGCTGGCCCTTCTGGATGGGGAGCCCCCCTGACTCTGTGCTGGCCGAGCTGAGGCGCAGTCGGG
AGAGGGAAGGGCCCGCTGCCTCGCCAGCAGAAAATGAGGAAGGGGCCTCAGAGCCTTCACCTGGAGGCATCAAGT
GGGGACACCTCTTTGGCTCCCGAAAAGCCCAGCGGGAGGCCCGGCCCACAAATAGGCTCCCCTCGGACTGGCTGA
GCCTGGACAAGTCCATGTTCCAACTAGTGGCGCAGACAGTGGGTTCCCGCCGGGAGCCAGAGCCCAAGGAGAGCC
TGCAGGAGCCACACTCCCCAGCCCTGCCCTCCAGTCCTCCGTGTGAGGTGCAGGCACTGTGCCACCACCTGGCCA
CCGGCCCTGGACAGCTGAGCTTCCACAAAGGAGACATCCTACGAGTGCTGGGGCGAGCTGGAGGAGACTGGCTGC
GCTGCAGCCGTGGCCCCGACTCTGGCCTGGTGCCCCTGGCCTACGTGACATTGACCCCAACTCCAAGTCCAACCC
CTGGAAGCAGCCAAAACTGAGGCCCTGTGCATGCTGGTGGCCTCAGGGACCCTCATAACCCCCAGACTCAGAGCC
CGAGAGCCCTTCCCAAGCCATTGGCTTGGCTGCAGAGTAGACTGAGAGCTGGGGCCACGTATCCCTGTGCTGGCA
CCTGCTCCCTGTGCTCAGTATTAATTACGCCCCCTTAACTGTCCCAGTGACCTTGTCCAGACCTCCACCCAGGAG
AGGGATGGGACACAGCACTGGGCTGCCAGGATTCCCCTGGCCCGTCTGGGCCAACCCTTCCATGGGTGAAGACAA
GCAAGTCCCCCTGGAGGCGGGTGGCCCAGAAAGCCATCTACAGGGTTCCCTAGGCCAGGTGGAGATGAGGATGGG
TAACAGTATTGGGGCCAGATCCCTAAGCCCCCCAGCTGTAAATAGGCTGTGGCCAGTGCCTGGTCATCAGAAGAG
GGAGGAGGAGCCCAGGCGTCTGTTTATGTATTTATTTATTTATTTATTATACCTATTAATAAAAAAGGTGCTCAG
CCTCC

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FIGURE 4274

GGGCGGCCGGCCAATGCCGGACCGCTTCGGCACCGCCCGCCCGATCCCTCCACCCGTGGGCCGGCAATGGCGGGC
GCAGTTTCGCTCTTGGGTGTGGTGGGGCTGCTGCTTGTGTCTGCGCTGTCCGGGGTCCTAGGAGACCGCGCCAAT
CCCGACCTCCGGGCACACCCAGGGAACGCAGCCCACCCCGGCTCTGGAGCCACGGAACCCCGGCGGCGACCACCG
CTCAAGGATCAACGCGAGCGGACCCGGGCCGGGTCGCTGCCTCTGGGGGCGCTGTACACCGCGGCCGTCGCGGCT
TTTGTGCTGTACAAGTGTTTGCAGGGGAAAGATGAAACTGCGGTTCTCCACGAGGAGGCAAGCAAGCAGCAGCCA
CTGCAGTCAGGTGGGTTTAGCAGAAGTCTGTGCTGGGTCGGGGGAGTTTAGGGGACAGCAGAAGATACATAACCA
CTTCTGCCCCCTTTTTTCCCTTATCCCCAGAGCAACAGCTGGCCCAGTTGACACAACAGCTGGCCCAGACAGAGC
AGCACCTGAACAACCTGATGGCCCAGCTGGACCCCCTTTTTGAGCGGTGAGGAGAGCAATGATTCTGTGAATTTT
TGGGGAATTTGTGGCAGGAGGGAGGAATGGGGACATAGGTTGGGAGCCACTGAGTGGACATTTCTTCAGTGTGAC
TACTCTGGCTGGAGCCCAGCAGGAGCTTCTGAACATGAAGCTATGGACCATCCACGAGCTGCTGCAAGATAGCAA
GCCGGACAAGGATATGGAGGCTTCAGAACCAGGTGAAGGCTCGGGAGGCGAGTCTGCTGGAGGTGGAGACAAAGT
CTCTGAAACTGGAACATTCCTGATCTCTCCCCACACAGAGGCCAGCAGACCTCTTCCTGAGGACTTCTGTTTAAA
GGAGGACGAGGAGGAGATTGGTGACAGTCAGGCCTGGGAGGAGCCCACAAACTGGAGCACAGAGACATGGAACCT
AGCTACTTCCTGGGAGGTGGGGCGGGGACTACGGAGAAGGTGCAGCCAGGCTGTGGCAAAGGGCCCCAGTCACAG
CCTTGGCTGGGAAGGAGGGACGACAGCTGAAGGTCGACTAAAACAAAGTCTGTTTTCATG

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FIGURE 4275

AGTGTCGATCCCTCAGCCAGGGCATGGAGCTCTCCTGCCCCGGTTCGCGGTGCCCGGTGCAAGAGCAGCGTGCCC
GCTGGGAGCGGAAACGCGCCTGCACCGCCCGGGAGCTGCTAGAGACCGAGCGGCGCTACCAAGAACAGCTGGGGC
TGGTGGCCACGTACTTTTTGGGGATCCTGAAAGCCAAGGGGACCCTGCGACCACCTGAGCGCCAGGCCCTGTTTG
GCTCCTGGGAGCTCATCTACGGCGCCAGCCAGGAGCTGCTTCCCTACCTGGAAGGAGGATGCTGGGGCCAAGGGC
TGGAGGGCTTCTGCCGCCACTTGGAGCTCTATAACCAATTTGCTGCCAACTCAGAGAGGTCCCAGACCACCCTGC
AGGAGCAGCTAAAGAAAAATAAAGGTTTCCGGAGGTTTGTACGGCTTCAGGAAGGCCGCCCTGAGTTTGGGGGCC
TTCAGCTCCAGGACCTGCTCCCTCTGCCTCTGCAACGGCTCCAGCAGTATGAGAATCTCGTCGTAGCTTTGGCTG
AAAACACAGGTCCCAACAGCCCTGACCATCAACAGCTCACACCTGTCCTTCCCTCATGAGAAGCTACTGCTTATG
TCCACAGACCAGGAGGAGCTGTCACGCTGGTACCACAGTCTGACTTGGGCTATCAGCAGCCAGAAAAACTAGAGG
AATCTTATAGATTCCAGAACTCAGGATACCTCAGGGATAGGTCACAGCCAAGAGTACAAAGGAATCTTCAGTACT
GAACAAAACAGAACCCTTCATGATTTGACAAAGGTCACTTTCTGTTTGCCTGGACCAAGCTACTCCAGATCATCT
GACCAACTCTTAAAAATCACGGCCAGGCACAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAAGCAGAGGTGG
CAGGATCATTCCAGCCCAGGAGTTCAAGACCAGCCTGGGCAACACAGTGAGTGAGACCCTGTCTCTATTTAAGAA
AAAATAATTAAGAAATTTTATTAAAAAAGAAGAATCAGGAAACCAAGTCCAACCCAACTAAACCTCAAATGAACC
AGCCCCTAACACAGATGAGGGGATTTGGGACTGATAAGCTCTGTGCTGTGTCCATGGCCCGTCATTTATCAAGGC
TGCAGCTTTGTAAATGTGGCTATTTTTATGTTGTGTATAGTTTCTATCATTTATTTTTCCACTGGATTTGAGTAA
AGTTTTTTTTCTTTTTTTTGGGAAAGACCCTTCTGTCTCAGTTTTGCTATGAGAAAAGGGATTTTTGGGCCCTGA
ACGCGGGCATGCTGGTGGCCTCAGGAATACGAGGAAAAGAGCTGGAGCTCCCTCTATCTTCTCTGCTGTCACACT
GGAAGGCAGCCTCTTTTTGTCCTAATAAGGACAGCTCTTCAAGAAGGCCCAGTTGTCCTTAGGCACCTAGTATGG
GTGTGTACAACCAACTAGGATCGAAAAAACACACAGGAGCACTCCATCATGAAAACAGACTTTGTTTTAGTCGAC
CTTCAGCTGTCGTCCCTCCTTCCCAGCCAAGGCTGTGACTGGGGCCCTTTGCCACAGCCTGGCTGCACCTTCTCC
GTAGTCCCCGCCCCACCTCCCAGGAAGTAGCTAGGTTCCATGTCTCTGTGCTCCAGTTTGTGGGCTCCTCCCAGG
CCTGACTGTCACCAATCTCCTCCTCGTCCTCCTTTAAACAGAAGTCCTCAGGAAGAGGTCTGCTGGCCTCTGTGT
GGGGAGAGATCAGGAATGTTCCAGTTTCAGAGACTTTGTCTCCACCTCCAGCAGACTCGCCTCCCGAGCCTTCAC
CTGGTTCTGAAGCCTCCATATCCTTGTCCGGCTTGCTATCTTGCAGCAGCTCGTGGATGGTCCATAGCTTCATGT
TCAGAAGCTCCTGCTGGGCTCCAGCCAGAGTAGTCACACTGAAGAAATGTCCACTCAGTGGCTCCCAACCTATGT
CCCCATTCCTCCCTCCTGCCACAAATTCCCCAAAAATTCACAGAATCATTGCTCTCCTCACCGCTCAAAAAGGGG
GTCCAGCTGGGCCATCAGGTTGTTCAGGTGCTGCTCTGTCTGGGCCAGCTGTTGTGTCAACTGGGCCAGCTGTTG
CTCTGGGGATAAGGGAAAAAAGGGGGCAGAAGTGGTTATGTATCTTCTGCTGTCCCCTAAACTCCCCCGACCCAG
CACAGACTTCTGCTAAACCCACCTGACTGCAGTGGCTGCTGCTTGCTTGCCTCCTCGTGGAGAACCGCAGTTTCA
TCTTTCCCCTGTTGTGGAAGAAGGAAAGGGCAGTACTGAAGCAACAAGGTTCTGCTCCATCACCTCAGTCTCCAG
AGCCAGCCAAGAGAGAGTGCAATTTGAGATGGAGACAGTGATTGGGTTTTTACCTCAGAGAATCACAATCCTAGT
CTATCTAGCTCCTCACCCAGCATATGAAGCGACGTCCTATGTCCCACACATGGTCAGTTTGCTGAAACACCTCCA
GGAATGAGCAACTCCCTCCGGTTTGAAAAAAGCTCTGGTGGCTGAGTGCTGTGGCTCACACCTGTAATCCCAGCA
CTTCGGGAAGCCAAGGGCCTCCTCCCAAGGAGAACATGAGACCACTTCATATCTGGAACTCTAGAAACACTGGCT
GCAGCAATCAACCTCCTGTGCCAAGGCTGGCCCCACTCTTGTAGCATGGACACTGCTAGCTGGGTTCAAATCCCA
GCTCCAGCAGTTGCCAGCGCTGGGTGACCTCGAGCAAGTGACTACTCCTCACTGGATTGTAGGAGAACTAAATGT
GATAGTCATTATTTACAGTTCACCACACGCTCTTCACATCCGTTACCTCCCTGGATCCTCAAAATAACCTCATAA
TATTGGAAGGCC

FIGURE 4276

GCCCGTACACACCGTGTGCTGGGACACCCCACAGTCAGCCGCATGGCTCCCCTGTGCCCCAGCCCCTGGCTCCCT
CTGTTGATCCCGGCCCCTGCTCCAGGCCTCACTGTGCAACTGCTGCTGTCACTGCTGCTTCTGGTGCCTGTCCAT
CCCCAGAGGTTGCCCCGGATGCAGGAGGATTCCCCCTTGGGAGGAGGCTCTTCTGGGGAAGATGACCCACTGGGC
GAGGAGGATCTGCCCAGTGAAGAGGATTCACCCAGAGAGGAGGATCCACCCGGAGAGGAGGATCTACCTGGAGAG
GAGGATCTACCTGGAGAGGAGGATCTACCTGAAGTTAAGCCTAAATCAGAAGAAGAGGGCTCCCTGAAGTTAGAG
GATCTACCTACTGTTGAGGCTCCTGGAGATCCTCAAGAACCCCAGAATAATGCCCACAGGGACAAAGAAGGGGAT
GACCAGAGTCATTGGCGCTATGGAGGCGACCCGCCCTGGCCCCGGGTGTCCCCAGCCTGCGCGGGCCGCTTCCAG
TCCCCGGTGGATATCCGCCCCCAGCTCGCCGCCTTCTGCCCGGCCCTGCGCCCCCTGGAACTCCTGGGCTTCCAG
CTCCCGCCGCTCCCAGAACTGCGCCTGCGCAACAATGGCCACAGTGTGCAACTGACCCTGCCTCCTGGGCTAGAG
ATGGCTCTGGGTCCCGGGCGGGAGTACCGGGCTCTGCAGCTGCATCTGCACTGGGGGGCTGCAGGTCGTCCGGGC
TCGGAGCACACTGTGGAAGGCCACCGTTTCCCTGCCGAGATCCACGTGGTTCACCTCAGCACCGCCTTTGCCAGA
GTTGACGAGGCCTTGGGGCGCCCGGGAGGCCTGGCCGTGTTGGCCGCCTTTCTGGAGGAGGGCCCGGAAGAAAAC
AGTGCCTATGAGCAGTTGCTGTCTCGCTTGGAAGAAATCGCTGAGGAAGGCTCAGAGACTCAGGTCCCAGGACTG
GACATATCTGCACTCCTGCCCTCTGACTTCAGCCGCTACTTCCAATATGAGGGGTCTCTGACTACACCGCCCTGT
GCCCAGGGTGTCATCTGGACTGTGTTTAACCAGACAGTGATGCTGAGTGCTAAGCAGCTCCACACCCTCTCTGAC
ACCCTGTGGGGACCTGGTGACTCTCGGCTACAGCTGAACTTCCGAGCGACGCAGCCTTTGAATGGGCGAGTGATT
GAGGCCTCCTTCCCTGCTGGAGTGGACAGCAGTCCTCGGGCTGCTGAGCCAGTCCAGCTGAATTCCTGCCTGGCT
GCTGGTGACATCCTAGCCCTGGTTTTTGGCCTCCTTTTTGCTGTCACCAGCGTCGCGTTCCTTGTGCAGATGAGA
AGGCAGCACAGAAGGGGAACCAAAGGGGGTGTGAGCTACCGCCCAGCAGAGGTAGCCGAGACTGGAGCCTAGAGG
CTGGATCTTGGAGAATGTGAGAAGCCAGCCAGAGGCATCTGAGGGGGAGCCGGTAACTGTCCTGTCCTGCTCATT
ATGCCACTTCCTTTTAACTGCCAAGAAATTTTTTAAAATAAATATTTATAAT

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FIGURE 4277

TCCCGCTCCGTCCTCCTCGCCTGCCACCGGTGCACCCAGTCCGCTCACCCAGCCCAGTCCGTCCGGTCCTCACCG
CCTGCCGGCCGGCCCACCCCCCACCGCAGCCATGGACGCCATCAAGAAGAAGATGCAGATGCTGAAGCTGGACAA
GGAGAACGCCATCGACCGCGCCGAGCAGGCCGAAGCCGACAAGAAGCAAGCTGAGGACCGCTGCAAGCAGCTGGA
GGAGGAGCAGCAGGCCCTCCAGAAGAAGCTGAAGGGGACAGAGGATGAGGTGGAAAAGTATTCTGAATCCGTGAA
GGAGGCCCAGGAGAAACTGGAGCAGGCCGAGAAGAAGGCCACTGATGCTGAGGCAGATGTGGCCTCCCTGAACCG
CCGCATTCAGCTGGTTGAGGAGGAGCTGGACCGGGCCCAGGAGCGCCTGGCTACAGCCCTGCAGAAGCTGGAGGA
GGCCGAGAAGGCGGCTGATGAGAGCGAGAGAGGAATGAAGGTCATCGAAAACCGGGCCATGAAGGATGAGGAGAA
GATGGAACTGCAGGAGATGCAGCTGAAGGAGGCCAAGCACATCGCTGAGGATTCAGACCGCAAATATGAAGAGGT
GGCCAGGAAGCTGGTGATCCTGGAAGGAGAGCTGGAGCGCTCGGAGGAGAGGGCTGAGGTGGCCGAGAGCCGAGC
CAGACAGCTGGAGGAGGAACTTCGAACCATGGACCAGGCCCTCAAGTCCCTGATGGCCTCAGAGGAGGAGTATTC
CACCAAAGAAGATAAATATGAAGAGGAGATCAAACTGTTGGAGGAGAAGCTGAAGGAGGCTGAGACCCGAGCAGA
GTTTGCCGAGAGGTCTGTGGCAAAGTTGGAGAAAACCATCGATGACCTAGAAGAGACCTTGGCCAGTGCCAAGGA
GGAGAACGTCGAGATTCACCAGACCTTGGACCAGACCCTGCTGGAACTCAACAACCTGTGAGGGCCAGCCCCACC
CCCAGCCAGGCTATGGTTGCCACCCCAACCCAATAAAACTGATGTTACTAGCCTCTC

FIGURE 4278A

AACTCGGGCGTCGTCCTGGCGTCCTCTCCGGATTGCGCCGCACCCTCGCTTCCTGCCAGGGAGGGGCTGCCGGGC
TTTGGCGGCTCCCGAGCATCGAGAACGGGGCCAGAGCAGCTTCCTGCCTGCCCCCCGCGACCATAGAGCGCGGGC
CCAGGGCGCCGCCCGCGGGTGGGGGACGTTCCCAGGACGGAAGTGGCCGAGAGAGTGTCGAAGGGAGGGCGAGGC
CGGAGCCCGAGGGCGACCCGAGAAGCGGCGGGGCGGCGGGCCGGCGGGCGGGGCGCAGAGCCAGGCAGCGCAGGT
ATAGCCAGGCTGGAGAAAAGAAGCTGCCACC**ATG**GTTGCACTTTCACTGAAGATCAGCATTGGGAATGTGGTGAA
GACGATGCAGTTTGAGCCGTCTACCATGGTGTACGACGCCTGCCGCATCATTCGTGAGCGGATCCCAGAGGCCCC
AGCTGGTCCTCCCAGCGACTTTGGGCTCTTTCTGTCAGATGATGACCCCAAAAAGGGTATATGGCTGGAGGCTGG
GAAAGCTTTGGACTACTACATGCTCCGAAATGGGGACACTATGGAGTACAGGAAGAAACAGAGACCCCTGAAGAT
CCGTATGCTGGATGGAACTGTGAAGACGATCATGGTGGATGACTCTAAGACTGTCACTGACATGCTCATGACCAT
CTGTGCCCGCATTGGCATCACCAATCATGATGAATATTCATTGGTTCGAGAGCTGATGGAAGAGAAAAAGGAGGA
AATAACAGGGACCTTAAGAAAGGACAAGACATTGCTGCGAGATGAAAAGAAGATGGAGAAACTAAAGCAGAAATT
GCACACAGATGATGAGTTGAACTGGCTGGACCATGGTCGGACACTGAGGGAGCAGGGTGTAGAGGAGCACGAGAC
GCTGCTGCTGCGGAGGAAGTTCTTTTACTCAGACCAGAATGTGGATTCCCGGGACCCTGTACAGCTGAACCTCCT
GTATGTGCAGGCACGAGATGACATCCTGAATGGCTCCCACCCTGTCTCCTTTGACAAGGCCTGTGAGTTTGCTGG
CTTCCAATGCCAGATCCAGTTTGGGCCCCACAATGAGCAGAAGCACAAGGCTGGCTTCCTTGACCTGAAGGACTT
CCTGCCCAAGGAGTATGTGAAGCAGAAGGGAGAGCGTAAGATCTTCCAGGCACACAAGAATTGTGGGCAGATGAG
TGAGATTGAGGCCAAGGTCCGCTACGTGAAGCTAGCCCGTTCTCTCAAGACTTACGGTGTCTCCTTCTTCCTGGT
GAAGGAAAAAATGAAAGGGAAGAACAAGCTAGTGCCCAGGCTTCTGGGCATCACCAAGGAGTGTGTGATGCGAGT
GGATGAGAAGACCAAGGAAGTGATCCAGGAGTGGAACCTCACCAACATCAAACGCTGGGCTGCGTCTCCCAAAAG
CTTCACCCTGGATTTTGGAGATTACCAAGATGGCTATTACTCAGTACAGACAACTGAAGGGGAGCAGATTGCACA
GCTCATTGCCGGCTACATCGATATCATCCTGAAGAAGAAAAAAAGCAAGGATCACTTTGGGCTGGAAGGAGATGA
GGAGTCTACTATGCTGGAGGACTCAGTGTCCCCCAAAAAGTCAACAGTCCTGCAGCAGCAATACAACCGGGTGGG
GAAAGTGGAGCATGGCTCTGTGGCCCTGCCTGCCATCATGCGCTCTGGAGCCTCTGGTCCTGAGAATTTCCAGGT
GGGCAGCATGCCCCCTGCCCAGCAGCAGATTACCAGCGGCCAGATGCACCGAGGACACATGCCTCCTCTGACTTC
AGCCCAGCAGGCACTCACTGGAACCATTAACTCCAGCATGCAGGCCGTGCAGGCTGCCCAGGCCACCCTGGATGA
CTTTGACACTCTGCCGCCTCTTGGCCAGGATGCTGCCTCTAAGGCCTGGCGTAAAAACAAGATGGATGAATCAAA
GCATGAGATCCACTCTCAGGTAGATGCCATCACAGCTGGTACTGCGTCTGTGGTGAACCTGACAGCAGGGGACCC
TGCTGAGACAGACTATACCGCAGTGGGCTGTGCAGTCACCACAATCTCCTCCAACCTGACGGAGATGTCCCGTGG
GGTGAAGCTGCTGGCTGCCTTGCTGGAGGACGAAGGCGGCAGTGGTCGGCCCCTGTTGCAGGCAGCAAAGGGCCT
TGCGGGAGCAGTGTCAGAACTGCTGCGCAGTGCCCAACCAGCCAGTGCTGAGCCCCGTCAGAACCTGCTGCAAGC
AGCTGGGAACGTGGGCCAGGCCAGTGGGGAGCTGTTGCAACAAATTGGGGAAAGTGATACTGACCCCCACTTCCA
GGATGCGCTAATGCAGCTCGCCAAAGCTGTGGCAAGTGCTGCAGCTGCCCTGGTCCTCAAGGCCAAGAGTGTGGC
CCAGCGGACAGAGGACTCGGGACTTCAGACCCAAGTTATTGCTGCAGCAACACAGTGTGCCCTATCCACTTCCCA
ACTAGTGGCCTGTACTAAGGTGGTGGCACCTACAATCAGCTCACCTGTCTGCCAAGAGCAACTGGTGGAGGCTGG
ACGACTGGTAGCCAAAGCCGTGGAGGGCTGTGTGTCTGCCTCCCAGGCAGCTACAGAGGATGGGCAACTGTTGCG
AGGGGTAGGAGCAGCAGCCACAGCTGTCACCCAGGCCCTAAATGAGCTGCTGCAGCATGTGAAAGCCCATGCCAC
AGGGGCTGGGCCTGCTGGCCGTTATGACCAGGCTACTGACACCATCCTAACCGTCACTGAGAACATCTTTAGCTC
CATGGGTGATGCTGGGGAGATGGTGCGACAGGCCCGCATCCTGGCCCAAGCCACATCTGACCTGGTCAATGCCAT
CAAGGCTGATGCTGAGGGGGAAAGTGATCTGGAGAACTCCCGCAAGCTCTTAAGTGCTGCCAAGATCCTAGCTGA
TGCCACAGCCAAGATGGTAGAGGCTGCCAAGGGAGCAGCTGCCCACCCTGACAGTGAGGAGCAGCAGCAGCGGCT
GCGGGAGGCAGCTGAGGGGCTGCGCATGGCCACCAATGCAGCTGCGCAGAATGCCATCAAGAAAAAGCTGGTGCA
GCGCCTGGAGCATGCAGCCAAGCAGGCTGCAGCCTCAGCCACACAGACCATCGCTGCAGCTCAGCACGCAGCCTC
TACCCCCAAGGCCTCTGCCGGCCCCCAGCCCCTGCTGGTGCAGAGCTGCAAGGCAGTGGCAGAGCAGATTCCACT
GCTGGTGCAGGGCGTCCGAGGAAGCCAAGCCCAGCCTGACAGCCCCAGCGCTCAGCTTGCCCTCATTGCTGCCAG
CCAGAGCTTCCTGCAGCCAGGTGGGAAGATGGTGGCAGCTGCAAAGGCCTCAGTGCCAACGATTCAGGACCAGGC
TTCAGCCATGCAGCTGAGTCAGTGTGCCAAGAACCTGGGCACCGCGCTGGCTGAACTCCGGACGGCTGCCCAGAA
GGCTCAGGAAGCATGTGGACCTTTGGAGATGGATTCTGCACTGAGTGTGGTACAGAATCTAGAGAAAGATCTACA
GGAAGTGAAGGCAGCAGCTCGAGATGGCAAGCTTAAACCCTTACCTGGGGAGACAATGGAGAAGTGTACCCAGGA

FIGURE 4278B

CCTGGGCAACAGCACCAAAGCCGTGAGCTCAGCCATCGCCCAGCTACTGGGAGAGGTTGCCCAGGGCAATGAGAA
TTATGCAGGTATTGCAGCTCGGGATGTGGCAGGTGGGCTGCGGTCACTGGCCCAGGCCGCTAGGGGAGTCGCTGC
ACTGACGTCAGATCCTGCAGTGCAGGCCATTGTACTTGATACGGCCAGTGATGTGCTGGACAAGGCCAGCAGCCT
CATTGAGGAGGCGAAAAAGGCAGCTGGCCATCCAGGGGACCCTGAGAGCCAGCAGCGGCTTGCCCAGGTGGCTAA
AGCAGTGACCCAGGCTCTGAACCGCTGTGTCAGCTGCCTACCTGGCCAGCGCGATGTGGATAATGCCCTGAGGGC
AGTTGGAGATGCCAGCAAGCGACTCCTGAGTGACTCGCTTCCTCCTAGCACTGGGACATTTCAAGAAGCTCAGAG
CCGGTTGAATGAAGCTGCTGCTGGGCTGAATCAGGCAGCCACAGAACTGGTGCAGGCCTCTCGGGGAACCCCTCA
GGACCTGGCTCGAGCCTCAGGCCGATTTGGACAGGACTTCAGCACCTTCCTGGAAGCTGGTGTGGAGATGGCAGG
CCAGGCTCCGAGCCAGGAGGACCGAGCCCAAGTTGTGTCCAACTTGAAGGGCATCTCCATGTCTTCAAGCAAACT
TCTTCTGGCTGCCAAGGCCCTGTCCACGGACCCTGCTGCCCCTAACCTCAAGAGTCAGCTGGCTGCAGCTGCCAG
GGCAGTAACTGACAGCATCAATCAGCTCATCACTATGTGCACCCAGCAGGCACCCGGCCAGAAGGAGTGTGATAA
CGCCCTGCGGGAATTGGAGACGGTCCGGGAACTCCTGGAGAACCCAGTCCAGCCCATCAATGACATGTCCTACTT
TGGTTGCCTGGACAGTGTAATGGAGAACTCAAAGGTGCTGGGCGAGGCCATGACTGGCATCTCCCAAAATGCCAA
GAACGGAAACCTGCCAGAGTTTGGAGATGCCATTTCCACAGCCTCAAAGGCACTTTGTGGCTTCACCGAGGCAGC
TGCACAGGCTGCATATCTGGTTGGTGTCTCTGACCCCAATAGCCAAGCTGGACAGCAAGGGCTAGTGGAGCCCAC
ACAGTTTGCCCGTGCAAACCAGGCAATTCAGATGGCCTGCCAGAGTTTGGGAGAGCCTGGCTGTACCCAGGCCCA
GGTGCTCTCTGCAGCCACCATTGTGGCTAAACACACCTCTGCACTGTGTAACAGCTGTCGCCTGGCTTCTGCCCG
TACCACCAATCCTACTGCCAAGCGCCAGTTTGTACAGTCAGCCAAGGAGGTGGCCAACAGCACAGCTAATCTTGT
CAAGACCATCAAGGCGCTAGATGGGGCCTTCACAGAGGAGAACCGTGCCCAGTGCCGAGCAGCAACAGCCCCTCT
GCTGGAGGCTGTGGACAATCTGAGTGCCTTTGCGTCCAACCCTGAGTTCTCCAGCATTCCTGCCCAGATCAGCCC
TGAGGGTCGGGCTGCCATGGAGCCCATTGTGATCTCTGCCAAGACAATGTTAGAGAGTGCCGGGGGACTCATCCA
GACAGCCCGGGCCCTCGCAGTCAATCCCCGGGACCCCCCGAGCTGGTCGGTGCTGGCCGGCCACTCCCGTACTGT
CTCAGACTCCATCAAGAAGCTAATTACAAGCATGAGGGACAAGGCTCCAGGGCAGCTGGAGTGTGAAACGGCCAT
TGCAGCTCTGAACAGTTGTCTACGGGACCTAGACCAGGCTTCCCTCGCTGCAGTCAGCCAGCAGCTTGCTCCCCG
TGAGGGAATCTCTCAAGAGGCCTTGCACACTCAGATGCTCACTGCAGTCCAAGAGATCTCCCATCTCATTGAGCC
GCTGGCCAATGCTGCCCGGGCTGAAGCCTCCCAGCTGGGACACAAGGTGTCCCAGATGGCGCAGTACTTTGAGCC
GCTCACCCTGGCTGCAGTGGGTGCTGCCTCCAAGACCCTGAGCCACCCGCAGCAGATGGCACTCCTGGACCAGAC
TAAAACATTGGCAGAGTCTGCCCTGCAGTTGCTATACACTGCCAAGGAGGCTGGTGGTAACCCAAAGCAAGCAGC
TCACACCCAGGAAGCCCTGGAGGAGGCTGTGCAGATGATGACCGAGGCCGTAGAGGACCTGACAACAACCCTCAA
CGAGGCAGCCAGTGCTGCTGGGGTCGTGGGTGGCATGGTGGACTCCATCACCCAGGCCATCAACCAGCTAGATGA
AGGACCAATGGGTGAACCAGAAGGTTCCTTCGTGGATTACCAAACAACTATGGTGCGGACAGCCAAGGCCATTGC
AGTGACCGTTCAGGAGATGGTTACCAAGTCAAACACCAGCCCAGAGGAGCTGGGCCCTCTTGCTAACCAGCTGAC
CAGTGACTATGGCCGTCTGGCCTCGGAGGCCAAGCCTGCAGCGGTGGCTGCTGAAAATGAAGAGATAGGTTCCCA
TATCAAACACCGGGTACAGGAGCTGGGCCATGGCTGTGCCGCTCTGGTCACCAAGGCAGGCGCCCTGCAGTGCAG
CCCCAGTGATGCCTACACCAAGAAGGAGCTCATAGAGTGTGCCCGGAGAGTCTCTGAGAAGGTCTCCCACGTCCT
GGCTGCGCTCCAGGCTGGGAATCGTGGCACCCAGGCCTGCATCACAGCAGCCAGCGCTGTGTCTGGTATCATTGC
TGACCTCGACACCACCATCATGTTCGCCACTGCTGGCACGCTCAATCGTGAGGGTACTGAAACTTTCGCTGACCA
CCGGGAGGGCATCCTGAAGACTGCGAAGGTGCTGGTGGAGGACACCAAGGTCCTGGTGCAAAACGCAGCTGGGAG
CCAGGAGAAGTTGGCGCAGGCTGCCCAGTCCTCCGTGGCGACCATCACCCGCCTCGCTGATGTGGTCAAGCTGGG
TGCAGCCAGCCTGGGAGCTGAGGACCCTGAGACCCAGGTGGTACTAATCAACGCAGTGAAAGATGTAGCCAAAGC
CCTGGGAGACCTCATCAGTGCAACGAAGGCTGCAGCTGGCAAAGTTGGAGATGACCCTGCTGTGTGGCAGCTAAA
GAACTCTGCCAAGGTGATGGTGACCAATGTGACATCATTGCTTAAGACAGTAAAAGCCGTGGAAGATGAGGCCAC
CAAAGGCACTCGGGCCCTGGAGGCAACCACAGAACACATACGGCAGGAGCTGGCGGTTTTCTGTTCCCCAGAGCC
ACCTGCCAAGACCTCTACCCCAGAAGACTTCATCCGAATGACCAAGGGTATCACCATGGCAACCGCCAAGGCCGT
TGCTGCTGGCAATTCCTGTCGCCAGGAAGATGTCATTGCCACAGCCAATCTGAGCCGCCGTGCTATTGCAGATAT
GCTTCGGGCTTGCAAGGAAGCAGCTTACCACCCAGAAGTGGCCCCTGATGTGCGGCTTCGAGCCCTGCACTATGG
CCGGGAGTGTGCCAATGGCTACCTGGAACTGCTGGACCATGTACTGCTGACCCTGCAGAAGCCAAGCCCAGAACT
GAAGCAGCAGTTGACAGGACATTCAAAGCGTGTGGCTGGTTCCGTCACTGAGCTCATCCAGGCTGCTGAAGCCAT

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FIGURE 4278C

GAAGGGAACAGAATGGGTAGACCCAGAGGACCCCACAGTCATTGCTGAGAATGAGCTCCTGGGAGCTGCAGCCGC
CATTGAGGCTGCAGCCAAAAAGCTAGAGCAGCTGAAGCCCCGGGCCAAACCCAAGGAGGCAGATGAGTCCTTGAA
CTTTGAGGAGCAGATACTAGAAGCTGCCAAGTCCATTGCAGCAGCCACCAGTGCACTGGTAAAGGCTGCGTCGGC
TGCCCAGAGAGAACTAGTGGCCCAAGGGAAGGTGGGTGCCATTCCAGCCAATGCACTGGACGATGGGCAGTGGTC
CCAGGGCCTCATTTCTGCTGCCCGGATGGTGGCTGCGGCCACCAACAATCTGTGTGAGGCAGCCAATGCAGCTGT
ACAAGGCCATGCCAGCCAGGAGAAGCTCATCTCATCAGCCAAGCAGGTAGCTGCCTCCACAGCCCAGCTCCTTGT
GGCCTGCAAGGTCAAGGCTGACCAGGACTCGGAGGCAATGAAACGACTTCAGGCTGCTGGCAACGCAGTGAAGCG
AGCCTCAGATAATCTGGTGAAAGCAGCACAGAAGGCTGCAGCCTTTGAAGAGCAGGAGAATGAGACAGTGGTGGT
GAAAGAGAAGATGGTTGGCGGCATTGCCCAGATCATCGCAGCACAGGAAGAAATGCTTCGGAAGGAACGAGAGCT
GGAAGAGGCGCGGAAGAAACTGGCCCAGATCCGGCAGCAGCAGTACAAGTTTCTGCCTTCAGAGCTTCGAGATGA
GCACTAAAGAAGCCTCTTCTATTTAATGCAGACCCGGCCCAGAGACTGTGCGTGCCACTACCAAAGCCTTCTGGG
CTGTCGGGGCCCAACCTGCCCAACCCCAGCACTCCCCAAAGTGCCTGCCAAACCCCAGGGCCTGGCCCCGCCCAG
TCCCGCAGTACATCCCCTGTCCCCTCCCCAACCCCAAGTGCCTTCATGCCCTAGGGCCCCCCAAGTGCCTGCCCC
TCCCCAGAGTATTAACGCTCCAAGAGTATTATTAACGCTGCTGTACCTCGATCTGAATCTGCCGGGGCCCCAGCC
CACTCCACCCTGCCAGCAGCTTCCGGCCAGTCCCCACAGCCTCATCAGCTCTCTTCACCGTTTTTTGATACTATC
TTCCCCCACCCCCAGCTACCCATAGGGGCTGCAGAGTTATAAGCCCCAAACAGGTCATGCTCCAATAAAAATGAT
TCTACCTAC

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FIGURE 4279

ATGGAGCTGGAATTGGATGCTGGTGACCAAGACCTGCTGGCCTTCCTGCTAGAGGAAAGTGGAGATTTGGGGACG
GCACCCGATGAGGCCGTGAGGGCCCCACTGGACTGGGCGCTGCCGCTTTCTGAGGTACCGAGCGACTGGGAAGTA
GATGATTTGCTGTGCTCCCTGCTGAGTCCCCCAGCGTCGTTGAACATTCTCAGCTCCTCCAACCCCTGCCTTGTC
CACCATGACCACACCTACTCCCTCCCACGGGAAACTGTCTCTATGGATCTAGAGAGTGAGAGCTGTAGAAAAGAG
GGGACCCAGATGACTCCACAGCATATGGAGGAGCTGGCAGAGCAGGAGATTGCTAGGCTAGTACTGACAGATGAG
GAGAAGAGTCTATTGGAGAAGGAGGGGCTTATTCTGCCTGAGACACTTCCTCTCACTAAGACAGAGGAACAAATT
CTGAAACGTGTGCGGAGGAAGATTCGAAATAAAAGATCTGCTCAAGAGAGCCGCAGGAAAAAGAAGGTGTATGTT
GGGGGTTTAGAGAGCAGGGTCTTGAAATACACAGCCCAGAATATGGAGCTTCAGAACAAAGTACAGCTTCTGGAG
GAACAGAATTTGTCCCTTCTAGATCAACTGAGGAAACTCCAGGCCATGGTGATTGAGATATCAAACAAAACCAGC
AGCAGCAGCACCTGCATCTTGGTCCTACTAGTCTCCTTCTGCCTCCTCCTTGTACCTGCTATGTACTCCTCTGAC
ACAAGGGGGAGCCTGCCAGCTGAGCATGGAGCCAGCTTCGTGCCCTCCCCAGTGAGGACCCTTACCAGCTGGAGC
TGCCTGCCCTGCAGTCAGAAGTGCCGAAAGACAGCACACACCAGTGGTTGGACGGCTCAGACTGTGTACTCCAGG
CCCCTGGCAACACTTCCTGCCTGCTGCATTACATGCCTCAGGCTCCCAGTGCAGAGCCTCCCCTGGAGTGGCCAT
TCCCTGACCTCTTCTCAGAGCCTCTCTGCCGAGGTCCCATCCTCCCCCTGCAGGCAAATCTCACAAGGAAGGGAG
GATGGCTTCCTACTGGTAGCCCCTCTGTCATTTTGCAGGACAGATACTCAGGCTAG

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FIGURE 4280

AGACCGGAAAGGGCTCGGGTCATCCCGGCGCCCAGGGTCACCTTCCCACGGGCTGGCACCTGGGCGCGGGCGCTG
CCCCGGAGCCGGCCGGCGGGACCTGGCGCCCAATCCTGGGGGACCCGGTGCCGTGGCCCAGGGGCCGGGCCGAGG
TCCCGGGGGCGGTGCCTTGCGGGCCCGTCCCGGGGCGGTGCCTGGTGGGCTGGCCCCGCGGCTCCTCCCCTCTCT
GCGGGCCCAGTCGCCCTTTGGCCGGGCGAGCTAATCGTCGGCTCAATGACGACGAGGCCCGACCCTTCCCGTCCA
GGACCTACAGAGACAACCGAAGGAGAGCCCAAGGCGGCTTCTTTGCTGTCGCCGCCCCCACTGAAGCAAGAGCTC
CCCGGCTCCACTGAAACACCAGCTCATTTAAGCTTTCCCCAACGCCCGGCCCTCCGGGACGATACCTAACAACGA
CCGGCGCCCGCATCTGGAATAGGCTGGCGAGATACTTAGTATCCGAGGGCTCGGGACTTGGCGCCATCGAGGTCA
TGGGGACCCAGGATCCAGGGAACATGGGAACCGGCGTCCCAGCCTCGGAGCAGATAAGCTGTGCCAAAGAGGATC
CACAAGTTTATTGCCCTGAAGAGACTGGCGGCACCAAGGATGTGCAGGTTACAGACTGTAAGAGTCCCGAAGACA
GCCGACCCCCAAAAGAGACGGACTGCTGCAATCCGGAGGACTCTGGGCAGCTGATGGTTTCCTATGAGGGTAAAG
CTATGGGCTACCAGGTGCCTCCCTTTGGCTGGCGCATCTGTCTGGCTCATGAGTTTACAGAGAAGAGGAAACCCT
TTCAAGCTAACAACGTCTCCCTAAGCAACATGATAAAGCATATAGGCATGGGCTTGAGGTACCTGCAGTGGTGGT
ACCGGAAGACCCATGTGGAAAAGAAGACACCTTTCATCGACATGATCAATTCTGTACCCCTAAGACAGATTTATG
GTTGTCCCTTGGGTGGCATCGGGGGAGGCACTATTACCCGTGGCTGGAGAGGCCAGTTCTGTCGTTGGCAGCTTA
ACCCTGGAATGTATCAGCACCGGACAGTCATCGCTGACCAAGACAGCAGCCTGCCTGTAGGAGTCTTTGTGTGGG
ATGTGGAAAATGAAGGGGACGAAGCTCTAGATGTGTCCATCATGTTCTCCATGCGGAATGGACTGGGTGGTGGAG
ACGATGCCCCAGGGGTTTGTGGAATGAGCCCTTCTGTCTGGAGCGTAGCGGGGAAACTGTCCGGGGGCTGCTCCT
GCATCATCCAACCCTTCCAAACCCCTACACG**ATG**GCTGTGGCTGCACGAGTCACGGCAGCTACCACGGTAACCCA
CATCACAGCCTTTGACCCTGACAGCACGGGGCAGCAGGTGTGGCAGGATCTACTTCAGGATGGACAGCTGGACTC
TCCCACTGGCCAAAGCACCCCTACGCAGAAAGGAGTAGGCATTGCTGGAGCTGTGTGTGTTTCCAGCAAGTTGCG
ACCTCGAGGCCAGTGCCGCCTGGAGTTTTCACTGGCTTGGGACATGCCCAGGATCATGTTTGGAGCTAAAGGCCA
AGTCCACTACAGGCGGTATACAAGGTTCTTTGGCCAGGATGGAGATGCAGCACCTGCCCTCAGCCACTATGCACT
GTGCCGATACGCAGAGTGGGAAGAGAGGATCTCAGCTTGGCAGAGCCCGGTATTGGATGACAGATCACTGCCTGC
CTGGTACAAATCTGCGCTGTTCAATGAACTATACTTCCTGGCTGATGGAGGCACAGTGTGGCTGGAAGTTCTTGA
GGACTCCCTACCAGAGGAGCTGGGCAGAAACATGTGTCACCTCCGCCCCACCCTACGGGACTACGGTCGATTTGG
CTACCTTGAGGGCCAGGAGTACCGCATGTACAACACATATGATGTCCACTTTTATGCTTCCTTTGCCCTCATCAT
GCTCTGGCCCAAACTTGAGCTCAGCCTACAGTATGACATGGCTCTGGCCACTCTCAGGGAGGACCTGACACGGCG
ACGGTACCTGATGAGTGGGGTGATGGCACCTGTGAAAAGGAGGAACGTCATCCCCCATGATATTGGGGACCCAGA
TGATGAACCATGGCTCCGCGTCAATGCATATTTAATCCATGATACTGCTGATTGGAAGGACCTGAACCTGAAGTT
TGTGCTGCAGGTTTATCGGGACTATTACCTCACGGGTGATCAAAACTTCCTGAAGGACATGTGGCCTGTGTGTCT
AGCTGTGATGGAATCTGAAATGAAGTTTGACAAGGACCATGATGGACTCATTGAAAATGGAGGCTATGCAGACCA
GACCTATGATGGATGGGTGACCACAGGCCCCAGTGCTTACTGTGGAGGGCTGTGGCTGGCAGCTGTGGCTGTGAT
GGTCCAGATGGCTGCTCTGTGTGGGGCACAGGACATCCAGGATAAGTTTTCTTCTATCCTCAGCCGGGGCCAAGA
AGCCTATGAGAGACTGCTGTGGAATGGCCGCTATTACAACTATGACAGCAGCTCTCGGCCTCAGTCTCGTAGTGT
TATGTCTGACCAGTGTGCTGGACAGTGGTTCCTGAAGGCCTGTGGCCTAGGAGAAGGAGACACTGAGGTGTTTCC
TACCCAACATGTGGTCCGTGCTCTCCAAACTATCTTTGAGCTGAACGTCCAGGCCTTTGCAGGAGGGGCCATGGG
GGCTGTGAATGGGATGCAGCCCCATGGTGTCCCTGATAAATCCAGTGTGCAGTCTGATGAAGTCTGGGTGGGTGT
GGTCTACGGGCTGGCAGCTACCATGATCCAAGAGGGCCTGACTTGGGAGGGCTTCCAGACAGCTGAAGGCTGCTA
CCGTACCGTGTGGGAGCGCCTGGGTCTGGCCTTCCAGACCCCAGAGGCATACTGCCAGCAGCGAGTGTTCCGCTC
ACTGGCCTACATGCGGCCACTGAGCATATGGGCCATGCAGCTAGCCCTGCAACAGCAGCAGCACAAAAAGGCCTC
CTGGCCAAAAGTCAAACAGGGCACAGGACTAAGGACAGGGCCTATGTTTGGACCAAAGGAAGCCATGGCAAACCT
GAGCCCAGAG**TGA**GCCGTCTGAACTGTGGGAGGGAAGTGCTAACAGCCCAGCCTCCAGCCTGGCCTTTCCTCCTT
CCCCTCTGAACCTCCTGCAACCCTGAGCCATCAGGACAATCATACCCCTTCCCTTCTCTCCACCCAATTGTGCCA
GTAAATGGGGGTTGAGGGTGACCTAGGCAGCATTAGAATCACTTATTTATTTCTTTCCTCACCTGTTCCCTGACT
GCGTGAAATGTTCAGGGAGGTCAGTTGATTTCCCCAGGTACATTCATGGTGTGACAGACACATGGGTACAAATAA
AAGACCCAGAAAGCC

FIGURE 4281A

GCCAGGTCCCTGAGGGGCGGGCAGATGAGGCCTAGGGGTGCCGATCCCTAGTGTCGACTATGCGAGATCTGATTC
CGGAGCTGCCATGATTGAAGTGGTAGCAGAGCTCAGCCGGGGTCCTGTATTTTTGGCTGGGGAGGCGCTGGAGTG
TGTAGTGACCGTCACCAACCCCCTTCCGCCCACGGCCACTTCTGCATCCAGTGAGGCCCTGGCCTGGGCCAGTGC
CCAAATCCACTGCCAGTTCCATGCCAGTGAGAGTCGAGTAGCACTGCCTCCTCCTGACTCTAGTCAGCCAGATGT
CCAGCCCGACAGCCAGACTGTCTTTCTGCCACACCGAGAGGTGAGAGGGGCCAGTGTATCCTTTCTACTCCACCG
AAAATTCTATTCTGTGACCTGAGGCTTGATCCTGGAGAGTCCAAATCATACTCCTACAGTGAAGTGCTGCCCATA
GAGGGACCACCCTCCTTTCGGGGTCAGTCAGTCAAGTACGTCTACAAACTGACCATTGGCTGCCAGCGTGTCAAC
TCCCCTATCACTTTACTCAGAGTCCCTCTGAGGGTTCTTGTGCTGACTGGCCTTCAGGATGTCCGGTTTCCCCAG
GATGAGGCTGTAGCCCCATCCAGTCCATTCTTGGAGGAGGATGAAGGTGGGAAGAAAGATTCATGGCTAGCTGAG
CTGGCTGGGGAACGCCTA**ATG**GCTGCCACATCCTGCCGCAGCCTCCATCTATACAATATCAGTGATGGCCGAGGG
AAAGTTGGGACGTTTGGCATCTTCAAATCTGTGTACAGACTTGGCGAGGACGTGGTGGGGACCTTAAACTTAGGG
GAAGGAACCGTAGCTTGTTTGCAGTTTTCAGTCAGCTTACAGACCGAGGAGCGTGTACAGCCTGAGTACCAGCGG
CGACGTGGGGCAGGGGGTGTCCCCTCTGTGTCACATGTGACTCACGCCCGGCACCAGGAATCCTGCCTACATACA
ACTAGAACCAGCTTCTCCCTCCCAATCCCTCTCAGCTCCACCCCAGGCTTCTGTACAGCCATTGTGTCCTTGAAG
TGGAGATTGCATTTTGAATTTGTAACGTCCCGAGAACCAGGATTGGTACTCCTACCCCCTGTGGAACAGCCCGAA
CCTACCACCTGGACAGGACCTGAGCAAGTACCTGTAGACACCTTCAGCTGGGACCTGCCCATCAAGGTGCTGCCT
ACTAGCCCCACCCTGGCCTCATATGCTGCCCCAGGCCCCAGCACCAGCACCATAACCATC**TGA**AACTGGCCCACC
CTGGTGCTAGTTCCTTCCGGATACTGAGAACTCAGCACCTGGACTCTAATGGGACCCACTTTTTCCACCTGGGGT
CCAATGTCGTGGACAGTGAGAGTCGGGCTTTCAGCTATAGCATTAATTTATTTGTTCAGAATACATTGGCAGCTG
CTAGTGGTTTCCCTGGAAGTGGCAGCAGCAGTGAGCAGTCAGCAGATGGATGATCAGTTGAGTTTAGCTGGAGTG
GGGAGCAGGAGCCCCAGGAACAGGGGTGTTGGCTGAGCCCCATTCTGGGTCAGGCCCTCCCCCTTTGCAGGGCAG
CCGAGGGTCAGATTTTTGCACCAAGGAGAACTGGCAGGTTCCTGCCTCCTGACGTACCTCACACCCAGCCGGGAA
GTCGATGGGATGCTGGGACCTGGGGAACCAAGGATAGGGGAAGGAGTCAGCACAGTGAAAGGCTGCCTTTATCCC
TGCCCACATGTTCCCTCTCTCACAGTTTTCCCCCCACAGAGCCCCTTTCAGTGGCCCCTTGGTCCTCCTAACTAA
GCTGTCACCTACCATATGTGGGCCTTTTTGTTTTATAACAGGAGTATTTTCTCTCCAGGTCCACCCCAACCTCCC
CTGATTTATAGCCTGAAGCCTTATCTTTCACACTAGTGTTGGTCCCTTCAGGTTTGGCCCATCTTGTATTGCTCT
TCTGTTCATTCTTACATCACAGCAATCTAGTCACTCCCTGGTCATCCCTCAGTCACTCATATCAGAGTCATTCTC
TCTGGCCATCTTTGGTCACTCACGTGTCACAGCAGCCCACGCCAACAGGATGCAGACAGGTGCAATGGAAACAGT
CCTTGCGGAGCCAAGACTCACCCAGGGTAAAATATTTCCCCTCATAGTGACAGGGGGCTAGGGAAGAACGGGAAA
TGTTAGTAGGTGTAGGAGTGCTGATGAGAGGCAGAGGCTCTTCTGGTCTGGGGTGGAGACAGTAAGTACGCACTA
TCCCCGTATTTAGTTTGTCTTTCCTGTTTCACAGCTGGAGGAAGCCTGGGTATTTTGACACGGGATCATCTGTAA
GGCCCCATCCTCCCTGTGCCCTCTCTGCTGCTCCTCCATTCCTAACGCTTCACCCCACTTTACCTTGAGCTTGGA
AGTAGCACTTGCTGTAGACTCCTGGGTGCTGGAGGAGTAGAGACATCACCAAGCAGATGATCCCCCAGCCTCCTA
GGATCCCCTTGGCCTGTCCAGCCCAGAGCATCCTTAGGGCCATTGCTGCTGCACAGCCCTCTCAGACCCTTCTTG
GCCTCTGCTCAGCTACTCTGGTCTTGACTCCTTGACTTTGCTTTGCGTTGCTCCTTGAGTCTTAGTTTCTGTCTT
TCTCCCCTGGGCTCCTGTCTCACACTATCTCCCTGCCCTCTGCTCTCACAGGCTGGGGATGTTTATAAAGTGAGG
ACCCTGGCCCCCTGCTGAGTAGAGCTGGAAAAGTTGTAACTCTGTTTCCTGAGGTGAGGGCATGAAAACAAGAGG
TCTAGCTTTAACAAGCTGTGAGAGCTGATTCATGCCCCGGCACAGCTAGAGGGAGGGAGGTGGCCATGGAGGGGG
CACTGGACTGGGCACTTCCCCAGCAAGGAGGCAGGAGGGGCGAGGGCCCCCAGGTGGTCCCCAGATCTCTTCCCT
GACCTGGAGAGAAGGAAGCATTCCACCTTCCCCCTTTCTCCCCCACTGCCACCACCAGGGGTGTGTATGCTGGGA
TCCCTGCCTGGACCGGAGGGAGGCATTTCCTGGGGATGGTTAATCCTGTGCCCCAGCCAAACCCAGGAGCTGCAA
TAGGGTGCGACGGCCAGAAGCTCCAGGAGAGTGAGCAGGCACCTGGAGTGGAGACTGTGTTTCCCTCAGATCCTA
GGGCAGGGTTTCCCTAATGTATCCAAGAAATAGGGCTGCCCCTCAGAGATGGTGGGGAGGGTCTCTTTTCCTCAG
GCATTCCAGAGGTGAACTGTCCATTGCTTATCACCTTCAAACATACAGCAGATGTGGGATCACCCCACATCTGGG
GATGGTTCTTTCCCCTTTCAAAGAGGAGCATCTCTAAGTGCCCTGATGGGATGAATCACTCCAGGTTCACAGAGG
TGTCCTCTCTTTCCTCCCATATATAATGGAGTGAGGTTTTTAGGAATTTATCATTTGGCATCCTCTGAGTTTCCC
ACAGGTTCTGGAGGAGCCCAGGATGGATTATTGAGAGCATGGGCTGTAGAGACAGTCTTCTTGGATTCAGATCCT
GACTCCACTTAGCTATGTAACCTGGTCAGATTACTTCACCTCTCTGAGCCTGTTTCCTCATCTATAAATTGGGGA

FIGURE 4281B

TAGTAATGCCAACTCATTGGGCTGTTATGAGGATTACTGAGATAATGCGTGCAGTGCTCTTATCACCATCTCTGG
TGCGTAAGCGTCAGGAAATAGCAGTTGCTGTGATTGGGGCTAAAGCTCTGAGGCAAAATGGGCGACATTATTTTC
TTTGAATGACATTAAGCAGTTTGTGCATAGCTGAGGGCTTCTATTGGGGATGGCTGTCTCCTGGCATAGACCTCT
GCACCTTTCACACTCATACTCCTTGTCAGCAGTCCCCAACCTTTTTGGTACCAGGGACCGGTTTTGTGGAAAACA
ATTTTTCCACCAGTGGATGGAGGGGGATAGCAGCGGGGAGATGATTTTGGGATGAAACTGTTTCATCTCAGATCA
TCAGGCATTAGATTCTCATAAGGAGTGTGCAATCTAGATCCCTTGCATGCGGAGTTCACAGTGGGGTTTGCACTC
CTGTGAGAATCTAATGCCTCTGCTGATCTGCCAGGAGGAGGAGCTCAGGCGGTAATGCTCACTCGCCTGCCGCCC
ACCTCCTGCTTTGTGCTCCCGCTTCCTAACAGGCCACAGACTGGTACTGGCCTGTGGCCTGGGGGATGGAGACCC
CTAATCCATGTCACCTTTCCCACCTCTTTCAAAAACAGGTACCTCCAGGAACATTTTGGTTTTGGCCCTTGTATT
GACTTCTGAATGTCTAGTTTGAGAAACTGTTCCCAATAAGCCTTCTTCCCCCAGATCTGCACCCTCGCCTCTACC
CTAGGACAAGATGTCCTTTTCTCATCATCCTGCCAGGCTAACTTTAAGTCTCCTGCTTTTTCTCACTTGGATTTG
GATCCATTTCTTCCTATTTCCGCTCATGTGAACTCTCCAGTTCTCCTTTCTCACCACTCTCCTGCTAGCCATCTC
TTTGGCACTAAAGGCCCTGGTCAAATTGGATTTCTTTCATTTTTCCACACTTCAAAGACCCATGTTCTAGGTATT
CTCCATAGGGATAGTCTCTTTGGCATTTATTTGGTTTTTCTACGTTTTCAGTCCCATTTACTCCAAGACTCACTC
CCTGCCACCTAGTGCATCAGATACAGCTACTTCTGGCTGACTTTTCAAGGGGGACCACCCTACCTGTCATCTCTT
CACTGTTCAGAAATGACTGTGTCAGTGCACCTCAAACTCCCTTGCTGTCCTTTTCCAAGGAGACAGCTAAGGTGG
ATGGAGATGCAGAATGGACCTCACGTTCGCCCTAGTCAGGACTGATACCCTTTCCGTTTCAGAGGATTGCCAAGA
AAAAACTCACAGTTGAGGCAGGGTGCTCTGAGGTCGGCTGCGGTGTGGGAGGCACGGCCTGGGCCTGCTCTCTGG
GCTGGAGCAGGTGGATTCGAAGGCCTGTCTAGCACGAGGGCCCAAAGGTCTTGTCAGTGGCCAGTAGCTCTGCCG
CCTTTCCCAGAGAGGGGGTCCAGGGGACATCCTGGAAGGCTGGGCCCTGGGCCACCTTCTGCTCTTGCAAGCTAG
AGCCAGCCCAATAGGGGGCGGATGTGAGTGGGGAGCTGGGGCGCATGAAGGTGGGGGTGATGCCGAAGGGGAAGG
GATCGCCAGTGGGGATTGGTGCGTGTGCGGAAACGGGGACAGAAGTGAAGGTTCATCGCCTATAACGAAGATGAG
GTAGGCATATAGGGGCTTCTGGAAAGCTAGAGGCTGGGCTGAGCCAGGAGTCCTCTCCCAGAAGTTGGGGGGCGG
TGCAGAGGTGTGGGTCGAGCCCGCATGCGTGCCTGCTGGGGAGGGGGTGAGTGGTGAGGACCAGGCCCGCTGGGT
CCTGGGGGGCGCGGTGGCTGGCGCGCAGGTCCCGGAGGGGGCGGCTGGCGCGCACTACACGCTTGGGAACAAGGAA
AACATCCGCCGGAGGCCCGGCCGGGCGGCGCTCCAGCCTCGGGGCAGGTGCGCGGAGAGGAAGTGAGAGCATTCC
GGCCCCCCCACCCCAACCCCGGCCGCTGGCCCTCTGGTGAGTCACAGCCGACCCCCGCCGCCGGAGGGAGAGGGG
AGCTGCGGGCCAGAGCCCCGGAGGGTCTGGAGGAGCCAGGAGGGTTTCTGGGAGCAGAGGGTCACTTAGTGGGCT
TCTGTCGTGGTGTCGCTACGGGCGCGAAACGGACACTGAACACAGTCTGACTGTATGGAGGCAGGTGGGGAGGGA
TCCCCTGGGAGAACTTGGCGGGCCGAGAGCAGACCCCAGGGCAAGGAGGGGCCCCCGAGGGGGAAACCGGGAGTC
GGGCAGGTGGCGTAACCCAGAAAGGGAAGGAGAGCCGGATTGATTGGGGTGAGAGAGGAAGGAAGCACGCCAAGT
TAGGCCTGGGAGAACTGAGGGACCTGAGGAGGGAGGAGGGAGACCAACACAGGGTGGGAAGGCGGAAATGGCCAA
ACCCCAGGCATCAGGTCTGTCCAGAGGCTGACGTAGACAGTGAAGGGTGAAGGGTAGGTTTTAGGAGTAGGGGGA
GTTATGATTATTTGGTTACATTTTGGGATTATTTGGTCTCACAGGTAGAAGGGAGCCTGCTGGTCTCTGTGTAAC
GGATGGCTTAAAAGCAAGGTTGTCTGCGTCTTGGATTACTGTCTGCCATTCAGCCTTTGCCAAAAAATTTGGCAC
TGATCTGCACATTTTTATAGTCATTTAAAATTGTATGACTCTGTCAAATGATTTAAGTAATTTTGGTGGATTTTT
AAAAATAAAAAAAT

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FIGURE 4282

ATGGCGCTGCCATCACTTCTGCTGTTGGTGGCAGCCCTGGCAGGTGGGGTGCGTCCTCCCGGGGCGCGGAACCTG
ACGCTGGCGGTGGTGCTGCCAGAACACAACCTGAGCTATGCCTGGGCCTGGCCACGGGTGGGACCCGCTGTGGCA
CTAGCTGTGGAGGCTCTGGGCCGGGCACTGCCCGTGGACCTGCGGTTTGTCAGCTCCGAACTGGAAGGCGCCTGC
TCTGAGTACCTGGCACCGCTGAGCGCTGTGGACCTCAAGCTGTACCATGACCCCGACCTGCTGTTAGGTCCCGGT
TGCGTGTACCCTGCTGCCTCTGTGGCCCGCTTTGCCTCCCACTGGCGCCTTCCCCTGCTGACTGCGGGTGCTGTG
GCCTCTGGTTTTTCGGCTAAGAATGACCATTATCGTACCCTGGTTCGCACTGGCCCCTCTGCTCCCAAGCTGGGT
GAGTTTGTGGTGACACTACACGGGCACTTCAATTGGACTGCCCGTGCTGCCTTGCTGTACCTGGATGCTCGCACA
GATGACCGGCCTCACTACTTCACCATCGAGGGCGTCTTTGAGGCCCTGCAGGGCAGCAACCTCAGTGTGCAGCAC
CAGGTGTATGCCCGAGAGCCAGGGGGCCCCGAGCAGGCCACCCACTTCATCCGGGCCAACGGGCGCATTGTGTAT
ATCTGCGGCCCTCTGGAGATGCTGCATGAGATCCTGCTTCAGGCCCAGAGGGAGAATCTGACCAATGGGGATTAT
GTCTTCTTTTACCTGGATGTCTTTGGGGAGAGTCTCCGTGCAGGCCCCACACGTGCTACAGGCCGGCCCTGGCAG
GACAATCGCACCCGGGAACAGGCCCAGGCCCTCAGAGAGGCCTTTCAGACTGTATTGGTGATCACGTACCGAGAA
CCCCCAAATCCTGAGTATCAGGAATTCCAGAATCGTCTGCTGATAAGAGCCCGGGAAGACTTTGGTGTGGAGCTG
GGCCCTTCCCTGATGAACCTCATCGCTGGCTGCTTCTATGATGGGATCCTGCTATATGCTGAAGTCCTGAATGAG
ACAATACAGGAAGGAGGCACCCGGGAGGATGGACTTCGAATTGTGGAAAAGATGCAGGGACGAAGATATCACGGT
GTAACTGGGCTGGTTGTCATGGACAAGAACAATGACCGAGAGACTGACTTTGTCCTCTGGGCCATGGGAGACCTG
GATTCTGGGGACTTTCAGCCTGCAGCCCACTACTCGGGAGCTGAGAAGCAGATTTGGTGGACGGGACGGCCTATT
CCCTGGGTGAAGGGGGCTCCTCCCTCGGACAATCCCCCCTGTGCCTTTGACTTGGACGACCCATCCTGTGATAAA
ACTCCACTTTCAACCCTGGCAATTGTGGCTCTGGGCACAGGAATCACCTTCATCATGTTTGGTGTTTCCAGCTTC
CTAATTTTCCGAAAGCTGATGCTGGAGAAGGAGCTGGCTAGCATGTTGTGGCGTATTCGCTGGGAAGAACTGCAG
TTTGGCAACTCAGAGCGTTATCACAAAGGTGCAGGCAGTCGCCTCACACTGTCGCTGCGGGGATCCAGTTACGGC
TCGCTCATGACAGCCCATGGGAAATACCAGATCTTTGCCAACACCGGTCACTTCAAGGGAAATGTTGTCGCCATC
AAACATGTGAATAAGAAGCGCATTGAGCTGACCCGGCAGGTTCTGTTTGAACTCAAACATATGAGAGATGTTCAG
TTCAACCATCTCACTCGCTTCATTGGCGCCTGCATAGACCCTCCCAACATTTGCATTGTCACTGAATACTGTCCT
CGTGGGAGTTTACAGGATATTCTAGAAAATGACAGCATCAACTTGGACTGGATGTTTCGTTATTCACTCATTAAT
GACCTTGTTAAGGGCATGGCCTTTCTCCACAACAGCATTATTTCATCGCATGGGAGTCTCAAGTCCTCCAACTGT
GTGGTGGATAGTCGTTTTGTGCTCAAAATCACAGACTATGGCCTGGCCAGCTTCCGATCAACTGCTGAACCTGAT
GACAGCCATGCCCTCTATGCCAAGAAGCTGTGGACTGCCCCAGAACTGCTCAGTGGGAACCCCTTGCCAACCACA
GGCATGCAGAAGGCTGACGTCTATAGCTTTGGGATCATCCTGCAGGAGATAGCACTTCGCAGTGGTCCTTTCTAC
TTGGAGGGCCTGGACCTCAGCCCCAAAGAGATTGTCCAGAAGGTACGAAATGGTCAGCGGCCATATTTCCGGCCA
AGCATTGACCGGACCCAACTGAATGAAGAGCTAGTTTTGCTGATGGAGCGATGTTGGGCTCAGGACCCAGCTGAG
CGGCCAGACTTTGGACAGATTAAGGGCTTCATTCGGCGCTTTAACAAGGAGGGTGGCACCAGCATATTGGACAAC
CTCCTGCTGCGCATGGAACAGTATGCCAATAACTTGGAGAAGCTGGTGGAGGAACGCACACAGGCCTATCTGGAG
GAAAAACGCAAGGCTGAAGCTCTGCTCTACCAAATCCTACCCCATTCAGTGGCAGAGCAGTTAAAACGGGGAGAG
ACTGTACAGGCTGAGGCCTTTGACAGTGTTACCATCTACTTCAGTGACATTGTTGGCTTCACAGCATTGTCAGCA
GAGAGCACCCCCATGCAGGTAGTGACACTTCTTAATGACCTGTATACCTGCTTTGATGCCATAATTGACAACTTT
GATGTCTACAAGGTGGAGACGATTGGGGATGCTTACATGGTGGTATCTGGCCTCCCAGGCCGAAATGGTCAACGC
CATGCACCAGAAATTGCTCGTATGGCCCTAGCATTACTAGATGCAGTTTCTTCCTTTCGCATCCGCCACCGACCC
CATGACCAGCTGAGGCTACGCATAGGGGTCCATACTGGTAAGGCTGACTCTCACTCCAGCCCTAGTCTCCACCTT
TCCCAGACTCTCCCAACCTGTTTCTTCTCAAAGGGCCAGTCTGTGCTGGGGTTGTTGGCCTGAAGATGCCCCGTT
ATTGTCTTTTTGGAGACACAGTGAACACTGCTTCTCGAATGGAGTCTAATGGTCAAGCGCTGAAGATCCATGTCT
CCTCTACCACCAAGGATGCCCTAGATGAGCTAGGATGCTTCCAGCTAGAGCTTCGGGGGGATGTGGAAATGAAGG
GAAAAGGAAAGATGCGAACATACTGGCTCTTAGGAGAGCGGAAAGGACCTCCTGGACTCCTGTAAACCCCCATTC
TTTCCAAGTCAGATAGTCTTCTGCTGCTGGTACCTGGGTGGGCAATGGCCACCATGTCTGCACACACCAGAAATG
GACATTTTCATATGCAATGGAAAACAGCCACAAAAAAACCTACCTTATATGGAAGTTGTAGCCCTCTGCAGCTCA
GCCCTGTACATATACCTGTCCCTCTCTGGCTTGGTCCCCTTCCTCCCTACTTTCTGTAAATATCTGTATCTAAAC
CAGAATATTTTGGTCAAATATAAAACAATAAT

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FIGURE 4283

GTCTGAAGATGGAGACCAACGAGTCTACGGAGGGATCGCGGTCGCGGTCGCGATCTTTAGACATACAGCCCAGCT
CCGAAGGACTGGGGCCCACTTCGGAACCGTTTCCTTCTTCAGATGACAGTCCCAGGTCGGCCCTGGCAGCTGCAA
CCGCAGCAGCTGCAGCGGCTGCATCAGCTGCTGCAGCTACTGCAGCCTTCACCACTGCCAAAGCAGCTGCATTAT
CTACAAAGACCCCAGCGCCCTGTTCTGAGTTCATGGAGCCGTCCTCTGACCCCAGCCTTCTTGGGGAGCCCTGTG
CGGGACCCGGCTTTACCCACAATATAGCCCATGGGAGTCTTGGCTTTGAGCCCGTCTATGTTTCCTGTATTGCTC
AGGACACTTGCACTACAACTGACCATAGTTCTAATCCTGGCCCTGTTCCAGGCTCTAGCTCTGGGCCTGTTCTTG
GTTCCAGCTCAGGTGCTGGCCATGGCTCTGGCTCTGGCTCTGGTCCTGGCTGTGGCTCTGTCCCTGGCTCTGGCT
CTGGTCCTGGTCCTGGCTCTGGTCCTGGCTCTGGTCCTGGTCATGGCTCTGGCTCTCATCCTGGTCCTGCCTCTG
GGCCTGGTCCAGACACTGGCCCTGACTCTGAGCTCAGCCCCTGTATTCCTCCAGGGTTCAGAAACCTGGTGGCAG
ATCGGGTCCCTAACTATACCTCCTGGAGTCAGCACTGCCCCTGGGAGCCCCAGAAACAACCACCTTGGGAATTTT
TGCAAGTCTTAGAACCGGGTGCCCGAGGACTATGGAAACCCCCAGACATTAAAGGGAAGCTTATGGTTTGCTATG
AAACTTTGCCGCGGGGCCAGTGCCTCCTCTACAACTGGGAGGAAGAGAGAGCCACCAACCACCTGGATCAAGTCC
CAAGCATGCAGGATGGCTCTGAGAGTTTTTTCTTCCGACACGGACACCGGGGACTGCTGACTATGCAACTAAAGT
CACCCATGCCCTCCAGCACCACCCAGAAAGACTCGTACCAGCCACCAGGAAACGTCTATTGGCCACTTCGAGGGA
AGCGTGAAGCCATGCTGGAGATGCTCCTGCAGCATCAGATCTGTAAAGAGGTGCAGGCAGAACAGGAACCCACAA
GGAAGCTCTTCGAGGTTGAGTCTGTGACACACCATGACTACCGAATGGAGCTGGCACAAGCAGGGACTCCTGCCC
CAACAAAGCCTCACGACTACCGCCAGGAGCAACCTGAGACCTTCTGGATACAGAGGGCACCACAGCTGCCGACAT
GGTGGCCATTGCCCACCCAGGTACCAGCAGCAGAAGACTATCTGACTTGGAAAGAATGGGGGTTTACAGGAGTCC
AGGAGGTCCTTTCCGCTCTCCTAAGAGCCACACCTGGTGAATACTCAGTAAACATTTGCGGAATGAATGAACACC
CTGTCTGCAGCAGGACATGGACAAATAGGCTCTGCCATCAGGAAATGGGAAGCAAGAAAACGGTAACTCAAGAGG
ACAGAGGCTGGTGAGGAGGTAAAGCAGGCCCAGTGAAATGGACCTGACAGCCCAAACTGTCAGAGAGGAGGAAAG
CAGGCATTTGATTTTGGTAATTGTGCCAAAGCTATGTAAGAGAATAAATGCCATTGTTTTAAGGA

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FIGURE 4284

CGGGTGAGAGGTTCCCGCGGCTCAGGGAAGATGGCGGCAGCCGTGGTGCTGGCTGCTGGGTTGCGCGCGGCGCGC
AGAGCCGTGGCGGCCACGGGGGTGCGCGGGGGGCAGGTCCGAGGAGCTGCAGGTGTGACTGATGGGAATGAAGTG
GCCAAGGCCCAGCAGGCAACTCCTGGGGGAGCAGCCCCAACCATCTTCTCCCGGATCCTGGACAAGAGCCTCCCA
GCTGACATTCTCTATGAGGACCAGCAGTGTCTTGTGTTCCGTGATGTGGCCCCTCAGGCTCCTGTGCACTTCCTG
GTCATTCCTAAGAAGCCCATTCCTCGGATTAGCCAGGCTGAAGAAGAAGACCAGCAGCTTCTAGGACACCTACTC
CTTGTGGCCAAGCAGACAGCAAAGGCTGAGGGCCTGGGAGATGGATACCGACTTGTGATCAACGATGGGAAGCTG
GGTGCACAATCTGTGTATCATCTGCACATTCATGTACTTGGGGGCCGGCAGCTCCAGTGGCCTCCAGGTTGAACC
TGCCAACTGATTAAAGGACACCAGACTCTGGATGCTTGGATGGAAAGGGAAAAATGGACCCTGTGATGCTAATAA
AACTGTTCTCCCTT

FIGURE 4285

AAAAAGAAATCAAGAATGCAATTTTATTTACAATAGTCACGCCAAAAATACCTAGAAATAAATTTAACTGAGGAT
GTAAAAGACCTCTACAAGGAGAGTTCAATCGGTAGCGGGAGCGGAGAGCTGACCCCAGAGAGCCCTGGGCAGCCC
CACCTCCGCCGCCGGCCTAGTTACCATCACACCCCGGGAGAAGCCGCAGCTGCCGCAGCCGGCCCCAGTCACCAT
CACCGCAACTATGAGCAGCGAGGCCGAGACCCAGCAGCCGCCCGCCGCTCCCCCACGCCGCCCCCGCCCTCAGCG
CCGCCGACACCCACCCCAGCACTGCAGGCAGCGGCGCAGGAAGCGGTGGCCCGGGCGGCCTCACATCGGCGGCGC
CTGCCGGCGGGGACAAGAAGGTCATCGCAACGAAGGTTTTGGGAACAGTAAAATGGTTCAGTGTAAGGAACGGAT
ATGGTTTCATCAACAGGAATGACACCAAGGAAGATGTATTTGTACACCAGACTGCCAGAAAGAAGAATAACCCCA
GGAAGTACCTTCGCAGTGTAGGAGATGGAGAGACTGTGGAGTTTGATGTTGTTGAAGGAGAAAAGGGTGCGGAGG
CAGCAAATGTTACAGGGCCTGGTGGTGTTCCAGTTCAAGGCAGTACATATGCAGCAGACCGTAACCATTATAGAC
GCTATCCACGTCGTAGGGTCCTCCACGCAATTACCAGCAAAATTACCAGAATAGTGAGAGTGGGGAAAAGAACGA
GGGATCGGAGAGTGCTCCCGCAGGCCAAGCCCAACAACGCCGGCCCTACCGCAGGCGAAGGTTCCCACCTTACTA
CATGCGGAGACCCTATGGGCGTCGACCACAGTATTCCAACCCTCCTGTGCAGGGTGAAGTGATGGAGGGTGCTGA
CAACCAGGGTGCAGGAGAACAAGGTAGACCAGTGAGGCAGAATACGTATCGGGGATATAGACCACGATTCCGCAG
GGGCCCTCCACGCCAAAGACAGCCTAGAGAGGACGGCAATGATGAAGATAAAGAAAATCAAGGAGATGAGACCCA
AGGTCAGCAGCCACCTCAACGTCGGTACCGCCGCAACTTCAATTGCCGACGCAGACACCCAGAAAACCCTAAACC
ACAAGATGGCAAAGAGACAAAAGCAGCCGATCCACCAGCTGAGAATTCGTCCACTCCTGAGGCTGAGCGGGGCAG
GACTGAGTAAATGCCAGCTTACCATCTCTACCATCATCCGGTTTAGTCATCCAACAGGAAGAAATATGAAATTCC
AGCTATAAGAAATGAACAAAAGATTGGAGCTGAAGACCTTAAGTGCTTGCTTTTTGCCCGTTGACCAGATAAATA
GAACTATCTGCATTATCTATGCAGCATGGGATTTTTATTATTTTTACCTAAAGACGTCTCTTTTTTGGTAATAACA
AACGTGTTTTTTAAAAAAGCCTGGTTTTTTTCAATACGCCTTTAAAGG

FIGURE 4286A

GCGGCGGCGGTAGCGGCGGCAGCGGCTGCGGCCAAGCTGGGTCCGAGCATCCCGCGGCTCTGGAGCCGCCCGGCC
CGGACATGGCGACCGTCCGGGCCTCTCTGCGAGGTGCGCTGCTCCTTCTGCTGGCCGTGGCGGGGGTCGCGGAGG
TGGCAGGGGGCCTGGCTCCGGGCAGTGCGGGTGCATTGTGTTGTAATCATTCAAAGGATAACCAAATGTGCCGTG
ATGTATGTGAACAGATTTTCTCCTCAAAAAGTGAATCCCGACTAAAACATCTGTTGCAGCGAGCCCCAGATTATT
GCCCAGAGACAATGGTTGAAATTTGGAATTGTATGAATTCATCTTTGCCAGGTGTGTTTAAGAAGTCTGATGGCT
GGGTTGGCTTAGGCTGCTGTGAACTGGCTATTGCCTTGGAGTGTCGACAGGCATGCAAGCAGGCATCTTCAAAGA
ATGATATTTCCAAAGTTTGCAGAAAAGAATATGAGAATGCTCTTTTCAGTTGCATTAGCAGAAATGAAATGGGCT
CGGTTTGTTGCAGTTATGCAGGTCATCACACAAACTGCCGAGAATACTGTCAAGCCATTTTTCGAACAGACTCTT
CTCCTGGTCCATCTCAGATAAAAGCAGTGGAAAATTATTGCGCCTCTATTAGTCCACAATTAATACATTGTGTGA
ACAATTATACTCAATCTTATCCAATGAGGAACCCAACGGATAGTTTATATTGCTGTGACAGAGCTGAAGACCATG
CTTGCCAAAATGCCTGCAAGAGAATCCTGATGTCCAAGAAAACGGAAATGGAGATTGTTGATGGTCTCATCGAGG
GTTGTAAGACCCAGCCCTTGCCTCAAGATCCTCTTTGGCAATGTTTTCTTGAAAGCTCACAATCTGTTCACCCTG
GAGTCACTGTACACCCTCCTCCCTCTACAGGCCTCGATGGGGCTAAATTGCATTGTTGTTCTAAAGCAAACACTT
CAACATGTAGGGAACTCTGCACTAAACTTTACAGCATGAGCTGGGGCAATACACAGAGTTGGCAAGAGTTTGATC
GCTTTTGTGAATATAATCCAGTGGAAGTGTCCATGTTGACCTGTTTAGCGGATGTCCGGGAACCTTGCCAGTTGG
GCTGTAGAAACCTTACTTACTGTACTAATTTTAACAACAGGCCAACAGAACTTTTCAGGAGTTGTAATGCACAGT
CAGATCAAGGAGCCATGAATGACATGAAGTTGTGGGAGAAAGGAAGCATAAAGATGCCATTTATCAATATACCTG
TTCTTGATATTAAAAAGTGCCAGCCAGAGATGTGGAAAGCAATAGCTTGTTCACTGCAGATTAAACCTTGTCATA
GTAAATCTCGGGGAAGTATTATTTGCAAATCAGATTGTGTGGAGATTCTTAAAAAATGTGGAGACCAGAACAAAT
TCCCTGAAGACCACACAGCTGAAAGTATTTGTGAGCTTCTGTCACCTACAGATGATCTGAAGAATTGTATACCTT
TGGATACATACCTCAGGCCAAGTACTTTAGGTAACATTGTAGAAGAAGTGACTCATCCCTGTAACCCAAATCCTT
GCCCTGCCAATGAGCTCTGTGAAGTAAACCGAAAAGGATGTCCATCTGGAGATCCCTGTCTTCCATACTTTTGTG
TTCAAGGTTGCAAACTGGGAGAAGCTTCTGATTTCATTGTCCGTCAAGGGACACTAATCCAGGTGCCATCATCTG
CAGGGGAAGTTGGTTGTTATAAAATCTGTTCATGTGGACAAAGTGGACTCTTAGAAAACTGTATGGAAATGCACT
GTATAGACCTCCAGAAGTCTTGTATTGTTGGAGGAAAAAGAAAAAGTCATGGAACATCCTTTAGTATTGACTGCA
ATGTCTGTTCTTGTTTTGCTGGCAATTTGGTGTGCTCTACCCGCCTTTGCCTCAGTGAGCACAGTTCAGAAGATG
ACCGTCGTACCTTCACAGGTCTGCCCTGTAACTGTGCAGATCAGTTTGTCCCTGTATGTGGGCAGAATGGGCGCA
CTTACCCCAGTGCCTGCATTGCTCGCTGTGTGGGCCTCCAAGACCATCAGTTTGAGTTTGGATCATGCATGTCAA
AGGATCCATGTAATCCTAATCCCTGCCAAAAAAACCAAAGGTGCATACCCAAACCACAGGTCTGCCTGACGACTT
TTGATAAATTTGGATGTAGCCAGTATGAGTGTGTACCAAGACAGCTCGCGTGTGACCAGGTCCAAGATCCTGTTT
GTGACACAGACCACATGGAGCACAACAATCTCTGCACTTTATACCAAAGAGGAAAAAGCCTCTCTTACAAAGGTC
CCTGCCAGCCCTTTTGCAGAGCAACCGAGCCCGTATGTGGGCACAATGGTGAGACCTACAGCAGTGTGTGTGCTG
CCTACTCGGATCGCGTGGCAGTCGATTACTATGGGGACTGCCAGGCCGTCGGAGTCCTCTCAGAGCACAGCTCCG
TCGCCGAGTGTGCTTCTGTCAAGTGTCCTTCGCTCTTGGCAGCTGGATGCAAACCCATCATCCCACCGGGTGCTT
GTTGCCCATTATGTGCTGGGATGTTAAGAGTTTTATTTGACAAAGAAAAACTGGATACTATTGCTAAGGTAACAA
ATAAAAAGCCAATAACAGTTCTGGAAATACTTCAGAAAATCCGCATGCACGTGTCTGTCCCACAGTGTGATGTGT
TTGGATACTTCAGCATTGAATCAGAAATTGTGATCCTGATCATTCCCGTCGATCACTATCCAAAAGCTCTGCAGA
TTGAAGCCTGCAATAAAGAAGCAGAGAAGATTGAGTCCCTTATCAACTCTGACAGCCCGACTTTGGCGTCCCATG
TCCCTCTCTCTGCCCTCATCATTTCCCAGGTACAGGTCTCCAGCAGTGTGCCATCGGCCGGTGTCAGGGCCAGGC
CTTCTTGCCACTCCCTCCTCCTTCCCCTCAGCTTGGGCCTTGCCTTGCACTTGCTCTGGACATATAACTGACTGC
CCACGGAAAGTGCAGAATGCTCCTCCACCTCACTCTCCTGCCTTGAAAAAGACATTCAGGACTGCTGGTTTGTAG
TTGAATATTGGCCAAGGAAAGGCACATGTCACCTCTATTCGCCACACAGTATTTTTTTTTTAATCCGCCAATAT
TAGTAGGATTTTTGTTTTGTTTTTACAAATGTTAAAATGTGTTGTTCCAAATACTAATGAAAACAGAATGTCTCT
TCCTGGTAGACCACTGCCATATGATTTACATTTCCTCACCATAAGGGTCCCCCACTCTAAAGCAAATTTATCGCT
GGGAAATGAGATGACCACTTTTTAGAAAGATAATTCACTGTACTATCAGGTTCACAAACTTCATTTCAGAGTTCT
TTTTGAAGTATTTAAGGTTCCCGTTGCATTTGTTTTGTTTACAGATAATTACCTACTCTGGCTAGAAGCTAGGGG
TCCCAGTGAAGAGCCACTGCCATTAAAGAATATGAAACATAGATAAAACATCTTTGAAATTATGTAAATTATGTA
AATTATCAGGCAAATTTGCATTAAATTACAGAAATTTAATTCAGAACCCCAACTACTGTGTTATGCAAAAGCAAG

FIGURE 4286B

CTGATTAAATGACACTCATATAATTATATGTTGTAAGCAACAGGCTCACTGGTCACGGATTTGTGTCTGTGACTT
TTGTGAAAGGGAGAAGTGACATTGCATCAAAGCATCTTGCATTATGCAATTTTTATATTAACCAGATATATATTC
ATCGGTATTCATCCAAGTTAAATGTAGAGTTTTTAAACATCAATCTTTAAACCAATTGCTGCTACTTATATAATT
GCCAAAAAGTGAAATAATGTGTAGTTCATGTAAATAATACATTATATTTCTATTTTATTATGAAGAAGGTGAATA
GCCATATTTGTAAAATGACAATCATGTGTGTTAACCCAGTGCTTTCCATTCGTGAAAACACATTTGCTTTTTGTG
ATATGCACAATGTAGATAAGTGTTCTGTCTGACTTTCTTTTTTGATATAGAAGTATAAAGAATTGTGGTTTATAT
ATTTAAAAGTGTCAAGCTGAGTATTAAAATGTATGCATGTTGTCTAAGAAATTGAATACTTTGAATGTGTTTCAC
AGTTTGAAATAAGCTATTTGATGTAATACTTCTTGTGTGTATGCACATGAACTTAGATTTTACATGAAGTATTTT
TTCAGTATTATATGTACCCTCTGAAATACATAGGGATATGCGTATTATACCAAAATGTTGCTGAAAAATGGGCAC
TTAAAGCTTTCAGAATATGTCAGTGCTGATGTAGCATGCTTGTTGCAATTGCCTTTTTTCTGTATAAATGTCTTT
AATGCAATATACTGGAAAGCTTTTCTATTTTAATAAAAATAATTTTTATATG

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FIGURE 4287

GTGGTGTCGGTGGGTCGGTTGGTTTTTGTCTCACCGTTGGTGTCCGTGCCGTTCAGTTGCCCGCCATGGCTGAGC
TGGATCCGTTCGGCGCCCCTGCCGGCGCCCCTGGCGGTCCCGCGCTGGGGAACGGAGTGGCCGGCGCCGGCGAAG
AAGACCCGGCTGCGGCCTTCTTGGCGCAGCAAGAGAGCGAGATTGCGGGCATCGAGAACGACGAGGCCTTCGCCA
TCCTGGACGGCGGCGCCCCCGGGCCCCAGCCGCACGGCGAGCCGCCGGGGGGTCCGGATGCTGTTGATGGAGTAA
TGAATGGTGAATACTACCAGGAAAGTAATGGTCCAACAGACAGTTATGCAGCTATTTCACAAGTGGATCGATTGC
AGTCAGAGCCTGAAAGTATCCGTAAATGGAGAGAAGAACAAATGGAACGCTTGGAAGCCCTTGATGCCAATTCTC
GGAAGCAAGAAGCAGAGTGGAAAGAAAAGGCAATAAAGGAGCTAGAAGAATGGTATGCAAGACAGGACGAGCAGC
TACAGAAAACAAAAGCAAACAACAGGGTGGCAGATGAAGCTTTCTACAAACAACCCTTCGCTGACGTGATTGGTT
ATGTCACAAACATAAACCATCCTTGCTACAGCCTAGAACAGGCAGCAGAAGAAGCCTTTGTAAATGACATTGACG
AGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGACTTTAACCCCAAGTCTAGCAAGCAGGCCA
AAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGCCCCGCTGGTGCACTGAAGAGCCACCCTGT
GGAAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTTCACAGTCATTGGATTAATTATGTTGAGT
TCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTCATTGTTTGTGATTGCATGTTTCCTTCCTTCAACTGTGT
TCTCCCTGGCATTCAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAGGGAAGCTTCCCAAGAGTAGCCTCAACCT
GTGCTTCTGTGCATTATTCTGAGAATAAATTTCTGTTTCAAACTGT

FIGURE 4288A

GGAACTCTATTTTAAGAACCTCTCAAAACGAAACAAGCAAATCATGGAGAAGAATGGAAATAACCGAAAGCTGCG
GGTTTGTGTTGCTACTTGTAACCGTGCAGATTATTCTAAACTTGCCCCGATCATGTTTGGCATTAAAACCGAACC
TGAGTTCTTTGAACTTGATGTTGTGGTACTTGGCTCTCACCTGATAGATGACTATGGAAATACATATCGAATGAT
TGAACAAGATGACTTTGACATTAACACCAGGCTACACACAATTGTGAGGGGAGAAGATGAGGCAGCCATGGTGGA
GTCAGTAGGCCTGGCCCTAGTGAAGCTGCCAGATGTCCTTAATCGCCTGAAGCCTGATATCATGATTGTTCATGG
AGACAGGTTTGATGCCCTGGCTCTGGCCACATCTGCTGCCTTGATGAACATCCGAATCCTTCACATTGAAGGTGG
GGAAGTCAGTGGGACCATTGATGACTCTATCAGACATGCCATAACAAAACTGGCTCATTATCATGTGTGCTGCAC
CCGCAGTGCAGAGCAGCACCTGATATCCATGTGTGAGGACCATGATCGCATCCTTTTGGCAGGCTGCCCTTCCTA
TGACAAACTTCTCTCAGCCAAGAACAAAGACTACATGAGCATCATTCGCATGTGGCTAGGTGATGATGTAAAATC
TAAAGATTACATTGTTGCACTACAGCACCCTGTGACCACTGACATTAAGCATTCCATAAAAATGTTTGAATTAAC
ATTGGATGCACTTATCTCATTTAACAAGCGGACCCTAGTCCTGTTTCCAAATATTGACGCAGGGAGCAAAGAGAT
GGTTCGAGTGATGCGGAAGAAGGGCATTGAGCATCATCCCAACTTTCGTGCAGTTAAACACGTCCCATTTGACCA
GTTTATACAGTTGGTTGCCCATGCTGGCTGTATGATTGGGAACAGCAGCTGTGGGGTTCGAGAAGTTGGAGCTTT
TGGAACACCTGTGATCAACCTGGGAACACGTCAGATTGGAAGAGAAACAGGGGAGAATGTTCTTCATGTCCGGGA
TGCTGACACCCAAGACAAAATATTGCAAGCACTGCACCTTCAGTTTGGTAAACAGTACCCTTGTTCAAAGATATA
TGGGGATGGAAATGCTGTTCCAAGGATTTTGAAGTTTCTCAAATCTATCGATCTTCAAGAGCCACTGCAAAAGAA
ATTCTGCTTTCCTCCTGTGAAGGAGAATATCTCTCAAGATATTGACCATATTCTTGAAACTCTAAGTGCCTTGGC
CGTTGATCTTGGCGGGACGAACCTCCGAGTTGCAATAGTCAGCATGAAGGGTGAAATAGTTAAGAAGTATACTCA
GTTCAATCCTAAAACCTATGAAGAGAGGATTAATTTAATCCTACAGATGTGTGTGGAAGCTGCAGCAGAAGCTGT
AAAACTGAACTGCAGAATTTTGGGAGTAGGCATTTCCACAGGTGGCCGTGTAAATCCTCGGGAAGGAATTGTGCT
GCATTCAACCAAACTGATCCAAGAGTGGAACTCTGTGGACCTTAGGACCCCCCTTTCTGACACTTTGCATCTCCC
TGTGTGGGTAGACAATGATGGCAACTGTGCTGCCCTGGCGGAAAGGAAATTTGGCCAAGGAAAGGGACTGGAAAA
CTTTGTTACACTTATCACAGGCACAGGAATCGGTGGTGGAATTATCCATCAGCATGAATTGATCCACGGAAGCTC
CTTCTGTGCTGCAGAACTGGGCCACCTTGTTGTGTCTCTGGATGGGCCTGATTGTTCCTGTGGAAGCCATGGGTG
CATTGAAGCATACGCCTCTGGAATGGCCTTGCAGAGGGAGGCAAAAAAGCTCCATGATGAGGACCTGCTCTTGGT
GGAAGGGATGTCAGTGCCAAAAGATGAGGCTGTGGGTGCGCTCCATCTCATCCAAGCTGCGAAACTTGGCAATGC
GAAGGCCCAGAGCATCCTAAGAACAGCTGGAACAGCTTTGGGTCTTGGGGTTGTGAACATCCTCCATACCATGAA
TCCCTCCCTTGTGATCCTCTCCGGAGTCCTGGCCAGTCACTATATCCACATTGTCAAAGACGTCATTCGCCAGCA
GGCCTTGTCCTCCGTGCAGGACGTGGATGTGGTGGTTTCGGATTTGGTTGACCCCGCCCTGCTGGGTGCTGCCAG
CATGGTTCTGGACTACACAACACGCAGGATCTACTAGACCTCCAGGAACAGACATGGACCTTCTCTCCAGAGCTC
CTGAGTGGAATCAAGTTCTTGTCTTTAGGATGACCGTTTCTTAACAATCAAATCTGGTATTGAACTGCAGGTGAC
TTTGGCAGAGAAATGTTTTCACTTTTGGTCTCCTCTTCCAGAGTCACCTTTCCCCACTCCTATTTTTGTAGATGC
TATTCTTTCTGATGTCTTCTTACTAGGGGTCATTTTAGCTCAAACCCTGTAAGTTACAGTCACAATTTTCTGTGC
CAAAGCAGCTACAATAATAGAGAGGAAGCCTTCTTAGAACTCTGCTTACTAATGTATTAATACCACTGAGACCTT
CAGGCCTTGCCTGGGATATCACTTCATCCTGAAGTTTGCATTAATAATCCTTCCAGGCCGGGCACAGTGGCTCAC
GCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGCGGATCACGAGGTCAGGAGATCGAGACCGCCCTGGCTAA
CATGGTGAAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCTGGGTGTGGTGGCGGGTCCCAGC
TACTCGGGAGGCTGAGGCAGGAGAATGGCATGAACCCCAGGCTGGAGTGCAGTGGCTCAATGCAACCTCTGCCCC
CCAAGTTCAAGTGATTCTCCTGCCTCAGCCTCTTGAGTAGCTGGGATTACAGGCACATGCACCACGCCCGGCTGA
TTTTTTTTTGTATTTTTAGTAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGACCTCAGGTGA
TCCGCCCGCCTCTGCCTCCCAAAGTGCTGGGATTACAGGTGTAAGCCATCACACCTGGCCCTAGTGACAGGTTTT
TATGGGTACTTTTAGATGATCTAAGAAATCATGTGCATATATCTTTCAGATTTCTATTTTGGGAAAATGAAGGTT
TCTACAACATATTGTTTCAGTGTTCAAATAAACTGAAGGACTCAACATTACATTTGAACTATATCCTTCCTAGTG
GGTTAGTGTGAAAAAGAGTTTGGCTGATTCCTAAAACTCTGCCAGCCCTGCAGTAATCTCCAGGGCCTGGTTATT
GTTCAGACATTCCATGGTGATTCCTGGGAAGGAAGCTTGGCTGCTCAGTTTCTGAGTCTGGGGTGAGATAATGTT
CTGGGAAGGGACATCTGTTCTTTGGTGTAATCTCTCATGGTGAAATCTGCTCTGTACATCAGACAATTGCATTGC
TACCAAGTTTCATACCAAATATTTGAAAGGATGGTATTGAATCTAAAACCAAATATTAGTTTTTATTAAACTCAT
GGGAAGGCTAATATATTCCAACGTAAATTATTACATATGGTTAAGTAATTGCATGTTAATTTATTTTAATGTAAA

FIGURE 4288B

TATTTTTGTTACTGTTCTGAGCCAAATTCTAAAGAAAAAATAAATACATTTCCTTGTTG

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FIGURE 4289A

AAGCCAACATCACTTCTCAGGGGAACGATGCAACACACCTGCACGCAACAGAAGAAGTCCTCCTGTCAGGCGCCA
GAGAGGAAGAAGGGATCGTCTGTCTCGACATAATTCCATTAGTCAAGATGAAAACTATCACCATCTCCCTTACGC
ACAGCAGCAAGCAATAGAGGAGCCTCGAGCCTTCCACCCTCCGAATGTATCTCCCCGTCTGCTACATCCTGCTGC
TCATCCACCCCAGCAGAATGCAGTCATGGTTGACATACATGATCAGCTCCATCAAGGAACAGTCCCTGTTTCTTA
CACAGTAACAACAGTGGCACCACATGGGATTCCACTCTGCACAGGCCAGCACATCCCTGCTTGTAGTACACAGCA
GGTCCCAGGATGCTCTGTGGTTTTCAGTGGACAGCACCTCCCTGTCTGTAGTGTGCCTCCTCCAATGCTTCAGGC
ATGTTCAGTTCAGCACTTACCAGTACCATATGCTGCATTCCCACCCCTTATTTCTAGTGATCCATTTCTTATACA
TCCTCCTCACCTTTCTCCCCATCATCCTCCTCATTTGCCACCACCAGGCCAGTTTGTCCCTTTCCAAACACAGCA
ATCACGATCGCCTCTGCAAAGGATAGAAAATGAAGTGGAACTCTTAGGAGAACATCTTCCAGTAGGAGGTTTTAC
TTACCCTCCATCAGCCCACCCCCCAACATTACCTCCATCAGCTCCCTTGCAGTTCTTAACACATGATCCTTTGCA
TCAGGAGGTGTCCTTTGGAGTACCTTATCCTCCATTTATGCCTCGGAGGCTTACAGGACGTAGTAGATACCGATC
CCAGCAGCCAATACCACCTCCCCCTTATCATCCCAGCTTACTGCCATATGTGTTATCAATGCTTCCAGTGCCACC
TGCAGTGGGCCCAACTTTCAGCTTTGAATTAGATGTAGAAGATGGAGAAGTAGAAAATTACGAGGCCCTGTTAAA
CCTGGCAGAGCGACTGGGAGAGGCAAAGCCTCGTGGACTGACTAAAGCAGATATTGAACAACTTCCTTCTTATCG
GTTCAATCCTAACAACCACCAGTCAGAACAGACTTTGTGTGTAGTATGCATGTGTGATTTTGAGTCAAGGCAGCT
ACTTAGAGTCTTACCCTGTAACCACGAGTTCCATGCCAAGTGTGTTGACAAATGGCTTAAGGCAAATCGTACTTG
CCCAATTTGCCGAGCTGATGCTTCAGAAGTGCATCGGGATTCAGAATGACCAACCTAAGAAGCACAAATTTAGTT
TGGGTGTTCCTCATCACATGTATATACGGACTATCCATTGAACTTAATCTGTGTGGCTTCCAGCCCTCCCTTTAC
CAAAAGGGTCAATGGACCTTTCTTTGCACTGTGTGACTTAATCAACTATAAAAGCTTACAATTAGTCTTCACAGT
TATGGGATTGTTATACTAACCGTGTGATTGGAACTCCAAAGACTTTTTCTTTAGCTTAATTTTGTGTGTGCACTA
ACATTCCCTGGTTTTTGTGTGATCATTCCGAGTGTTGCTGCAAGATTACAGTGGACGTGATCTTTTAGCATGTGC
TTTTATAAAAAGTGGTAGCTACAGATGATATAGCAATCTACCTTATATAGAGCCTTCAGAAACTGTGAGTGGAAA
TGAATGCGCAGCGTATGACTGTTGGTGATAAGTGTATCTGTGTGAGTGTGTGCAACTACTTGTGTGAGGGCATGG
TAGCTAACGTGTGTATGAGATCCTATATACCAGCATGTACCAAGAATGTGTGTGTAGTTTTAATTATGCTGCAAT
GTATAATCTGGTGTGTTATTTAAACAGCACTAGTACTGTACACTGGTTTTTTTCCCTTGTGTTTGCTGTTGCACA
CTGATTGCTGAGGGTGCATCAATTACAAGCATTGAATACTCCATCCCCTTCCCTCCCAGTGAATGGAATGAGAAA
AGCCTTCTTCCTTTGCTTCAGGCAGCTGTCACCTTCTCTTTATTGGTGGTCCTAAGTGGGTCACTTAAGAAAAAA
AAGTGTAACAAATTCTCGCTCCATGAACCTGGTTTTTTTTTATTCTGTTGTGGAAATTTTTAAATCTCCAACTTG
CTGTTTCCAAAAAGAAGGTGCAATATCATATATCATCAGTTAGCAATATTAGCATTTCAATCAGTGATTTGAATG
TTGATACTTTTTTTTCCTTTACATTTCCAGTAAGTTTCTTACAGAAAGTACCTGTGATTTTTTTTAATGTTTAGA
TTTGTAGTCTAGTCTATTCTGAAGATATTTGATTAATATATTTCTAAGAAGACCACTAGTCCCATGAAGTCTCAC
CTTGTTGACTTCCACCAGAACAAAACCTGTTAATTCAGCTTGACTTCTCATATGTGTTCTGTGTTCAAGCTCCTG
TGGGCAACTCAATTGTTTTAAGAAAACTCTATTTCTGTTCATATTAATTCACTTGCCAGACTCCAATTCTGAAAG
TTGTCTAGTTCTTCCTTCATCACACGTGCTTCTCATCGAAACCCTGGTTTCAGGATGGATCAAGTGCTGTTACAG
CTCATGTTCCTTAGACCTGATTTGTTTTGATATTTTACTGCCTTTCCTTTTAATTTTTGTTTGAATGAGAAAAGT
TTAATACAACAGGTGTCCAGAATACTTGCAGTATAAATGAAGATTTGGTTTTTGTATAAAAAAATAATGCTGTTA
AACAGGAGTTGACCTTCATTTAGTTGATGTAATACATAGCTGTATGGGGTTTTTTTTAGTAAGTTCTTTGAGCAT
AATTCACTTTAAAGTCATTTTTCCAGCAATGTTTAAATTACTTTCTCATTCTTTTAGTGTATTCAACATTGTCTG
CCTCTTCCTGCAGTTGATGTAATTGCTTTGTTTGCAATAGCACAAGCTGCATTATTCCAGTCAGGACTGTGATAA
CTTGCTGCCAGCCCCACTCAACTTTCAGTTGGCTCTGTGTCAGTTTTCCATTCAGTGTTAACTACTTGTTACTGC
CATGCTGCTTGCCCTCCCTTGAAGTGTCTATAAGCTCATCACAGCCTAGAGTTAAGTAAAGTCAATTCACAGAAG
CACAATTTTGCCCTTTGCGAGACATTGTTGCCTCTATCTAGTCCTACAAGTAGGGTTTTGCATACTGTGTTTGCC
CCTAGGGTTGTCAGTGCATCAGAAATACTTCTAAATAGTGGTAAAAATGCACATGGTTAATGCACATGTTACTTT
TAAATCATTAGGATATCCCTCACCTGTTCCTGATGAATAAAAAGTGTGTTAAAGACCAAAATTCTTGGCATAATA
ATCAGCTACATACAAATCACATATAGTTTAATCTTTTTTAATGAAAAAAAATCATGTTTAAAATGGCAAAAGCCC
ATCTTATACACTTTTATATAGCTGCAAAAAAATCTTAACTCAGCTGTGGGTTTTTTGTGGGTTCTTGTTTGTTTT
TTGGCATGAATTGTCATCTTTGGTGTTTTTTTAACCCCCAGCCCCTCAAAAAAATAAGGCCTCCAGGTATCAAGA
TCTCATATTAGGATTTTCTGTCCTTAATTTTTTGAGCAAAATCTGGAAAATGTGAAAGCATATTTAGATTTTATA

FIGURE 4289B

TACTATCTGAAATGTGATTTGTTAAGATTCTTAAATTTGGGCCTCTTAGAATAATTTTGAATGAGATCTACCGAC
TCACTTGTGAGAATATTTTTCACAGATTATCTTTGGGCCTTTTCATTAGAAAGCTGTTTGTTTGTCCCCCTGTTG
GTACATTTGGTTACCTCATTTTGCCGTTTCAGATTGTGAAAGCTCACAGGGGTGTTTTTTGGAATCATTTGCTGA
GTCATTTTCTCAAATCATATTCCATTGTATCAGTTAACATATAGTTTTAAATGTATGTATTATAAATATCTGTAA
CCAAATCATTTGAAGGCTTGATAAATTTTTAACAAAGTTTGTACATTTTTTATGAAAGTTACTAGTAATGCTTTA
CTAAGTAGTGCAATGAATTTTTATTTTTAATCCCTGTGCCCAATTTTGGAGTTGAGAGGGTTGTTGGTAATAAAT
GTATGATGTACACTT

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FIGURE 4290

GGTGACTGGCCCAGCCGCACCGCGTCTCCCGCCTTCTCCGCAGCCCCGCAGGCCCCGGGCCCTGTCATTCCCAGC
GCTGCCCTGTCTTGCGTTCCAGTGTTCCAGCTTCTGCGAGATGACCCTCAAGGCGAGCGAGGGCGAGAGTGGGGG
CAGCATGCACACGGCGCTCTCCGACCTCTACCTGGAGCATTTGCTGCAGAAGCGTAGTCGGCCAGAGGCTGTATC
GCATCCATTGAATACTGTGACCGAGGACATGTACACCAACGGGTCTCCTGCCCCAGGTAGCCCTGCCCAGGTCAA
GGGACAGGAGGTGCGGAAAGTGCGACTCATACAGTTTGAGAAGGTCACAGAAGAGCCCATGGGAATCACGCTGAA
GCTGAATGAAAAACAGTCCTGTACGGTGGCCAGAATTCTTCATGGTGGCATGATCCATAGACAAGGCTCCCTTCA
CGTGGGGGATGAGATCCTAGAAATCAATGGCACAAATGTGACAAATCATTCAGTGGATCAGCTGCAGAAGGCGAT
GAAAGAAACCAAAGGAATGATCTCATTAAAAGTAATTCCCAACCAGCAAAGCCGTCTTCCTGCACTACAGATGTT
CATGAGAGCGCAGTTTGACTATGATCCCAAAAAGGACAATCTGATCCCTTGCAAGGAGGCGGGACTGAAGTTTGC
TACTGGGGACATTATCCAGATTATCAACAAGGATGACAGCAATTGGTGGCAGGGACGGGTGGAAGGCTCCTCCAA
GGAGTCAGCAGGATTGATCCCTTCCCCTGAGCTGCAGGAATGGCGAGTGGCAAGTATGGCTCAGTCAGCTCCTAG
CGAAGCCCCGAGCTGCAGTCCCTTTGGGAAGAAGAAGAAGTACAAAGACAAATATCTGGCCAAGCACAGCTCGAT
TTTTGATCAGTTGGATGTTGTTTCCTACGAGGAAGTCGTTCGGCTCCCTGCATTCAAGAGGAAGACCCTGGTGCT
GATCGGAGCCAGTGGGGTGGGTCGCAGCCACATTAAGAATGCCCTGCTCAGCCAGAATCCGGAGAAGTTTGTGTA
CCCTGTCCCATATACAACACGGCCGCCAAGGAAGAGTGAGGAAGATGGGAAGGAGTACCACTTTATCTCAACGGA
GGAGATGACGAGGAACATCTCTGCCAATGAGTTCTTGGAGTTTGGCAGCTACCAAGGCAACATGTTTGGCACCAA
ATTTGAAACAGTGCACCAGATCCATAAGCAGAACAAGATTGCCATCCTTGACATTGAGCCCCAGACCCTGAAAAT
TGTTCGGACAGCAGAACTTTCGCCTTTCATTGTGTTCATTGCACCTACTGACCAGGGCACTCAGACAGAAGCCCT
GCAGCAGCTGCAGAAGGACTCTGAGGCCATCCGCAGCCAGTACGCTCACTACTTTGACCTCTCACTGGTCAATAA
TGGTGTTGATGAAACCCTTAAGAAATTACAAGAAGCCTTCGACCAAGCGTGCAGTTCTCCACAGTGGGTGCCTGT
CTCCTGGGTTTACTAAGCTTGTAGAATGGGGGAACCCACTGTATGCCCCTCTCCAGCATTTGGAATTCCACCCGC
CTTGCTTTAAGACAAACAGGGCTGCTCCAACTAGTTTTGTGTCAGCTTCCAGCTCTCTGCAGCTATCCTAATTCA
GCCAGTAAGGTTCAGTCTTCTTGCTCAGGCTCCTGAAGGGTTGATTCTCCTGATAGATGGGGCCCCACTGATCTG
GATTTGAAAAGGATTTCTAGAAATTGGGGGTAAGAAGTACTACCAAAATGTAACTGCTAATCAAGGGTGATGCAC
AGCAAAAGCAATGGACCCCATCCCTCTAAAGCCTGCCCTCCTTTGCCTTCAACTGTATATGCTGGGTATTTCATT
TGTCTTTTTATTTTGGAGAAAGCGTTTTTAACTGCAACTTTCTATAATGCCAAAATGACACATCTGTGCAATAGA
ATGATGTCTGCTCTAGGGAAACCTTCAAAAGCAATAAAAATGCTGTGTTG

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FIGURE 4291

AGCAGCGCGGCCTGACGGGACCAAGGCGGCGGGAGTCTGCGGTCGTTCCCTCGGCTGTGGACCGGGCGGCACGCA
CGCGGTGCAGGGTAACATGGCGGATGCGGAAGTAATTATTTTGCCAAAGAAACATAAGAAGAAAAAGGAGCGGAA
GTCATTGCCAGAAGAAGATGTAGCCGAAATACAACACGCTGAAGAATTTCTTATCAAACCTGAATCCAAAGTTGC
TAAGTTGGACACGTCTCAGTGGCCCCTTTTGCTAAAGAATTTTGATAAGCTGAATGTAAGGACAACACACTATAC
ACCTCTTGCATGTGGTTCAAATCCTCTGAAGAGAGAGATTGGGGACTATATCAGGACAGGTTTCATTAATCTTGA
CAAGCCCTCTAACCCCTCTTCCCATGAGGTGGTAGCCTGGATTCGACGGATACTTCGGGTGGAGAAGACAGGGCA
CAGTGGTACTCTGGATCCCAAGGTGACTGGTTGTTTAATCGTGTGCATAGAACGAGCCACTCGCTTGGTGAAGTC
ACAACAGAGTGCAGGCAAAGAGTATGTGGGGATTGTCCGGCTGCACAATGCTATTGAAGGGGGGACCCAGCTTTC
TAGGGCCCTAGAAACTCTGACAGGTGCCTTATTCCAGCGACCCCCACTTATTGCTGCAGTAAAGAGGCAGCTCCG
AGTGAGGACCATCTACGAGAGCAAAATGATTGAATACGATCCTGAAAGAAGATTAGGAATCTTTTGGGTGAGTTG
TGAGGCTGGCACCTACATTCGGACATTATGTGTGCACCTTGGTTTGTTATTGGGAGTTGGTGGTCAGATGCAGGA
GCTTCGGAGGGTTCGTTCTGGAGTCATGAGTGAAAAGGACCACATGGTGACAATGCATGATGTGCTTGATGCTCA
GTGGCTGTATGATAACCACAAGGATGAGAGTTACCTGCGGCGAGTTGTTTACCCTTTGGAAAAGCTGTTGACATC
TCATAAACGGCTGGTTATGAAAGACAGTGCAGGTAAATGCCATCTGCTATGGGGCCAAGATTATGCTTCCAGGTG
TTCTTCGATATGAGGACGGCATTGAGGTCAATCAGGAGATTGTGGTTATCACCACCAAAGGAGAAGCAATCTGCA
TGGCTATTGCATTAATGACCACAGCGGTCATCTCTACCTGCGACCATGGTATAGTAGCCAAGATCAAGAGAGTGA
TCATGGAGAGAGACACTTACCCTCGGAAGTGGGGTTTAGGTCCAAAGGCAAGTCAGAAGAAGCTGATGATCAAGC
AGGGCCTTCTGGACAAGCATGGGAAGCCCACAGACAGCACACCTGCCACCTGGAAGCAGGAGTATGTTGACTACA
GTGAGTCTGCCAAAAAAGAGGTGGTTGCTGAAGTGGTAAAAGCCCCGCAGGTAGTTGCCGAAGCAGCAAAAACTG
CGAAGCGGAAGCGAGAGAGTGAGAGTGAAAGTGACGAGACTCCTCCAGCAGCTCCTCAGTTGATCAAGAAGGAAA
AGAAGAAGAGTAAGAAGGACAAGAAGGCCAAAGCTGGTCTGGAGAGCGGGGCCGAGCCTGGAGATGGGGACAGTG
ATACCACCAAGAAGAAGAAGAAGAAGAAGAAAGCAAAAGAGGTAGAATTGGTTTCTGAGTAGTGAAGGCCACTTG
AAGCTGGAGGAGAAACTAAAGCCTTATTGAGAAAACATGTTATAGATCCTTTTGTTGCTGAGAGAGTGGAACATA
GGTCCTAGACAGGGTGAAGAGTTCTGGCACATTTTAGCTGCTACTTTGAGACCTCGGTGATGTTACCTGGTGTGG
TCATCCCATCTTGTCCTGTTTTAAGGATATGGGTGGTGAAAGATGAAAGAGGCAGAGTTTATCCCAATGACTTCT
CTGTTTGAGTTGGGAAGCCTCACCTTCAGACCCAGTAACTGTCCGCAGCTGTCTGCTAGTGGTTGTCTTAACATC
GTAGTCCTAGTTTGCATTTTTTAAATCCCCTCTGTTTAAAAGGTTTGTAAAACAAAAACAAAAAACTAAGTCTGC
TCAGTGAAATGCTGTAGAACCCTAAATAAGTGGTAGAAGAGTGTCACTGAATTTTGTCTCTGAATTCAGTATAAC
TGAGTTTTGTCCATGCTGGTGTCTGGGTTATAGGCCTGATGGGCCTGGTAGTTTTCCATCTTGTTCTGGCCTAGA
GGTCAGTCCTTTGCACTTCCTCAAAGCTTGTGTACAGTGCTCACCTAAATCCATCTGACTACTTGTTCCTGTGCC
CTCTTGTTTTAGGCCTCGTTTACTTTTAAAAAATGAAATTGTTCATTGCTGGGAGAAGAATGTTGTAATTTTTAC
TTATTAAAGTCAACTTGTTAAGTTTTTTATGTATTCCTGTTGGGTTTTCTTGTTGATCTCATGCTAGCAGAGCAA
AAATTGTAAAATATTTTGATTAAAAATCTAGGGACCTTTATGTCCTATTTG

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FIGURE 4292

CATGGCCCTTGTGATCCAGGTGGGGAAACTAAGGCCCAGAGAAGTGAGGACCCCGCAGACTATCAATCCCAGTCT
CTTCCCCTCACTCCCTGTGAAGCTCTCCAGCATCATCGAGGTCCCATCAGCCCTTGCCCTGTTGGATGAATAGGC
ACCTCTGGAAGAGCCAACTGTGTGAGATGGTGCAGCCCAGTGGTGGCCCGGCAGCAGATCAGGACGTACTGGGCG
AAGAGTCTCCTCTGGGGAAGCCAGCCATGCTGCACCTGCCTTCAGAACAGGGCGCTCCTGAGACCCTCCAGCGCT
GCCTGGAGGAGAATCAAGAGCTCCGAGATGCCATCCGGCAGAGCAACCAGATTCTGCGGGAGCGCTGCGAGGAGC
TTCTGCATTTCCAAGCCAGCCAGAGGGAGGAGAAGGAGTTCCTCATGTGCAAGTTCCAGGAGGCCAGGAAACTGG
TGGAGAGACTCGGCCTGGAGAAGCTCGATCTGAAGAGGCAGAAGGAGCAGGCTCTGCGGGAGGTGGAGCACCTGA
AGAGATGCCAGCAGCAGATGGCTGAGGACAAGGCCTCTGTGAAAGCCCAGGTGACGTCCTTGCTCGGGGAGCTGC
AGGAGAGCCAGAGTCGCTTGGAGGCTGCCACTAAGGAATGCCAGGCTCTGGAGGGTCGGGCCCGGGCGGCCAGCG
AGCAGGCGCGGCAGCTGGAGAGTGAGCGCGAGGCGCTGCAGCAGCAGCACAGCGTGCAGGTGGACCAGCTGCGCA
TGCAGGGCCAGAGCGTGGAGGCCGCGCTCCGCATGGAGCGCCAGGCCGCCTCGGAGGAGAAGAGGAAGCTGGCCC
AGTTGCAGGTGGCCTATCACCAGCTCTTCCAAGAATACGACAACCACATCAAGAGCAGCGTGGTGGGCAGTGAGC
GGAAGCGAGGAATGCAGCTGGAAGATCTCAAACAGCAGCTCCAGCAGGCCGAGGAGGCCCTGGTGGCCAAACAGG
AGGTGATCGATAAGCTGAAGGAGGAGGCCGAGCAGCACAAGATTGTGATGGAGACCGTTCCGGTGCTGAAGGCCC
AGGCGGATATCTACAAGGCGGACTTCCAGGCTGAGAGGCAGGCCCGGGAGAAGCTGGCCGAGAAGAAGGAGCTCC
TGCAGGAGCAGCTGGAGCAGCTGCAGAGGGAGTACAGCAAACTGAAGGCCAGCTGTCAGGAGTCGGCCAGGATCG
AGGACATGAGGAAGCGGCATGTCGAGGTCTCCCAGGCCCCCTTGCCCCCCGCCCCTGCCTACCTCTCCTCTCCCC
TGGCCCTGCCCAGCCAGAGGAGGAGCCCCCCCGAGGAGCCACCTGACTTCTGCTGTCCCAAGTGCCAGTATCAGG
CCCCTGATATGGACACCCTGCAGATACATGTCATGGAGTGCATTGAGTAGGGCCGGCCAGTGCAAGGCCACTGCC
TGCCGAGGACGTGCCCGGGACCGTGCAGTCTGCGCTTTCCTCTCCCGCCTGCCTAGCCCAGGATGAAGGGCTGGG
TGGCCACAACTGGGATGCCACCTGGAGCCCCACCCAGGAGCTGGCCGCGGCACCTTACGCTTCAGCTGTTGATCC
GCTGGTCCCCTCTTTTGGGGTAGATGCGGCCCCGATCAGGCCTGACTCGCTGCTCTTTTTGTTCCCTTCTGTCTG
CTCGAACCACTTGCCTCGGGCTAATCCCTCCCTCTTCCTCCACCCGGCACTGGGGAAGTCAAGAATGGGGCCTGG
GGCTCTCAGGGAGAACTGCTTCCCCTGGCAGAGCTGGGTGGCAGCTCTTCCTCCCACCGGACACCGACCCGCCCG
CTGCTGTGCCCTGGGAGTGCTGCCCTCTTACCATGCACACGGGTGCTCTCCTTTTGGGCTGCATGCTATTCCATT
TTGCAGCCAGACCGATGTGTATTTAACCAGTCACTATTGATGGACATTTGGGTTGTTTCCCATCTTTTTGTTACC
ATAAATAATGGCATAGT

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FIGURE 4293

AGGGACAGCCCAGAGGAGGCGTGGCCACGCTGCCGGCGGAAGTGGAGCCCTCCGCGAGCGCGCGAGGCCGCCGGG
GCAGGCGGGGAAACCGGACAGTAGGGGCGGGGCCGGGCCGGCGATGGGGATGCGGGAGCACTACGCGGAGCTGCA
CCCGTGCCCGCCGGAATTGGGGATGCAGAGCAGCGGCAGCGGGTATGGCAGGCAGCCGGCGGGCCGGCCTCCAGC
GCAGGTGCCCGAGAGGCAGGGGCTGGCCTGGGATGCGCGCGCACCTGCCCTCGCCCCGCCCCGCCCGCACGAGGG
GTGGTGGCCGAGGCCCCGCCCCGCACGCCTCGCCTGAGGCGGGTCCGCTCAGCCCAGGCGCCCGCCCCCGCCCCC
GCCGATTAAATGGGCCGGCGGGGCTCAGCCCCCGGAAACGGTCGTACACTTCGGGGCTGCGAGCGCGGAGGGCGA
CGACGACGAAGCGCAGACAGCGTC**ATG**GCAGAGCAGGTGGCCCTGAGCCGGACCCAGGTGTGCGGGATCCTGCGG
GAAGAGCTTTTCCAGGGCGATGCCTTCCATCAGTCGGATACACACATATTCATCATCATGGGTGCATCGGGTGAC
CTGGCCAAGAAGAAGATCTACCCCACCATCTGGTGGCTGTTCCGGGATGGCCTTCTGCCCGAAAACACCTTCATC
ATGGGCTATGCCCGTTCCCGCCTCACAGTGGCTGACATCCGCAAACAGAGTGAGCCCTTCTTCAAGGCCACCCCA
GAGGAGAAGCTCAAGCTGGAGGACTTCTTTGCCCGCAACTCCTATGTGGCTGGCCAGTACGATGATGCAGCCTCC
TACCAGCGCCTCAACAGCCACATGGATGCCCTCCACCTGGGGTCACAGGCCAACCGCCTCTTCTACCTGGCCTTG
CCCCCGACCGTCTACGAGGCCGTCACCAAGAACATTCACGAGTCCTGCATGAGCCAGATAGGCTGGAACCGCATC
ATCGTGGAGAAGCCCTTCGGGAGGGACCTGCAGAGCTCTGACCGGCTGTCCAACCACATCTCCTCCCTGTTCCGT
GAGGACCAGATCTACCGCATCGACCACTACCTGGGCAAGGAGATGGTGCAGAACCTCATGGTGCTGAGATTTGCC
AACAGGATCTTCGGCCCCATCTGGAACCGGGACAACATCGCCTGCGTTATCCTCACCTTCAAGGAGCCCTTTGGC
ACTGAGGGTCGCGGGGGCTATTTCGATGAATTTGGGATCATCCGGGACGTGATGCAGAACCACCTACTGCAGATG
CTGTGTCTGGTGGCCATGGAGAAGCCCGCCTCCACCAACTCAGATGACGTCCGTGATGAGAAGGTCAAGGTGTTG
AAATGCATCTCAGAGGTGCAGGCCAACAATGTGGTCCTGGGCCAGTACGTGGGGAACCCCGATGGAGAGGGCGAG
GCCACCAAAGGGTACCTGGACGACCCCACGGTGCCCCGCGGGTCCACCACCGCCACTTTTGCAGCCGTCGTCCTC
TATGTGGAGAATGAGAGGTGGGATGGGGTGCCCTTCATCCTGCGCTGCGGCAAGGCCCTGAACGAGCGCAAGGCC
GAGGTGAGGCTGCAGTTCCATGATGTGGCCGGCGACATCTTCCACCAGCAGTGCAAGCGCAACGAGCTGGTGATC
CGCGTGCAGCCCAACGAGGCCGTGTACACCAAGATGATGACCAAGAAGCCGGGCATGTTCTTCAACCCCGAGGAG
TCGGAGCTGGACCTGACCTACGGCAACAGATACAAGAACGTGAAGCTCCCTGACGCCTACGAGCGCCTCATCCTG
GACGTCTTCTGCGGGAGCCAGATGCACTTCGTGCGCAGCGACGAGCTCCGTGAGGCCTGGCGTATTTTCACCCCA
CTGCTGCACCAGATTGAGCTGGAGAAGCCCAAGCCCATCCCCTATATTTATGGCAGCCGAGGCCCCACGGAGGCA
GACGAGCTGATGAAGAGAGTGGGTTTCCAGTATGAGGGCACCTACAAGTGGGTGAACCCCCACAAGCTC**TGA**GCC
CTGGGCACCCACCTCCACCCCCGCCACGGCCACCCTCCTTCCCGCCGCCCGACCCCGAGTCGGGAGGACTCCGGG
ACCATTGACCTCAGCTGCACATTCCTGGCCCCGGGCTCTGGCCACCCTGGCCCGCCCCTCGCTGCTGCTACTACC
CGAGCCCAGCTACATTCCTCAGCTGCCAAGCACTCGAGACCATCCTGGCCCCTCCAGACCCTGCCTGAGCCCAGG
AGCTGAGTCACCTCCTCCACTCACTCCAGCCCAACAGAAGGAAGGAGGAGGGCGCCCATTCGTCTGTCCCAGAGC
TTATTGGCCACTGGGTCTCACTCCTGAGTGGGGCCAGGGTGGGAGGGAGGGACAAGGGGGAGGAAAGGGGCGAGC
ACCCACGTGAGAGAATCTGCCTGTGGCCTTGCCCGCCAGCCTCAGTGCCACTTGACATTCCTTGTCACCAGCAAC
ATCTCGAGCCCCCTGGATGTCCCCTGTCCCACCAACTCTGCACTCCATGGCCACCCCGTGCCACCCGTAGGCAGC
CTCTCTGCTATAAGAAAAGCAGACGCAGCAGCTGGGACCCCTCCCAACCTCAATGCCCTGCCATTAAATCCGCAA
ACAGCC

FIGURE 4294

AACCACATCTTCGTCCCAGCCCCGGAGGCTCCTGTGGGCAAGATCGTGAGCCAACGGGTTCCTGAGGCCCCTCCT
GGCCAGGCAGGGTTTCCCCGCGCGTTTCCGAGGAGCCCTGCCTGGCCGGGCGGCTGGACAAACAGGTCGTAGCAC
CGATCGCGCCCGCCCCCAGCAGGGGTCCCGCACAGGCTTGCCCCTGACCCCCACCCAAACCTGTCCTTCCGCTTT
GCCCCCAAACAGTGCACTTGCCGGCGGTCCCAACCCAGCAGGAGAAGTGGAC**ATG**AGGTTGGCAGGCCCTCTCCG
CATTGTGGTCCTAGTCGTCAGTGTGGGTGTCACATGGATCGTGGTCAGCATCCTCCTGGGTGGGCCTGGCAGTGG
CTTTCCTCGCATCCAGCAACTCTTCACCAGTCCAGAGAGCTCGGTGACTGCAGCGCCACGGGCCAGGAAGTACAA
GTGTGGCCTGCCCCAGCCGTGTCCTGAGGAGCACCTGGCCTTCCGCGTGGTCAGCGGGGCCGCCAACGTCATTGG
GCCCAAGATCTGCCTCGAGGACAAGATGCTGATGAGCAGCGTCAAGGACAACGTGGGCCGCGGGCTGAACATCGC
CCTGGTGAACGGGGTCAGCGGCGAGCTCATCGAGGCCCGGGCCTTTGACATGTGGGCCGGAGATGTCAACGACCT
GTTGAAGTTTATTCGGCCACTGCACGAAGGCACCCTGGTGTTCGTGGCATCCTACGACGACCCAGCCACCAAGAT
GAATGAAGAGACCAGAAAGCTCTTCAGTGAGCTGGGCAGCAGGAACGCCAAGGAGCTGGCCTTCCGGGACAGCTG
GGTGTTTGTCGGGGCCAAGGGTGTGCAGAACAAGAGCCCCTTTGAGCAGCACGTGAAGAACAGTAAGCACAGCAA
CAAGTACGAAGGCTGCCCCGAGGCGCTGGAGATGGAAGGCTGTATCCCGCGGAGAAGCACGGCCAGC**TAG**CACGG
CCAGTGCCAGGACCGGGCCGAGGGAGGCCAGACCAAGGGAGGCACGCGCGCTGCCGGGCGGACAGAGGCTGAGGC
TCACACCCCACACCCGGGCAGGAGCGCTCCCTGGCCCCAACACATCGGGGCTCCGAGGCAGTGACCAGAACGTGG
TCTCAAGGTGGTGGGGGCTATGGGGGCTGCAGGGGGTAGCCCTGCCGCACTTTGTCACGGGAGCCCAGGGTACCC
GCCTCCTTTTCGTAACACTGTTCCCCCCGGTCAGCCCATCTAGCCCTGTCCTCCATTCCTCACGCCATCTCCATC
CCCATCTTGAGTCCTGGAACGGCCCTGGGTGCCTGCCCCTCACTGTGCATCTCTGGGAGCAGCCCGGCAGGTTGG
GGCGTCTTCCAGAACCTCTCCCTTCTGGAGCCACTCTGCACTGCGGGCTAAACATGTTTCCAGTGTGATTCCTTC
CAGTGAGCCAAACCCGGTGGCTGCTTCATGAGCCTGACTGCCTCTCGCCTGCTCTCAGCAGGAAGGGACCCCTGG
AGCAGGCTGGCCCGGGGTGGTGAAGTAGCTGGAGCCCGATCACAGTCCCGCGGTTTGTCAGGGGGCCCACCTTCT
AGATGACCCCTTAATAAAGTGATGGCCCCAC

FIGURE 4295

GAGCTCGCGGGCGACTGCCTGCCAGGCAGACGCTGCAGCTAAGCTGCGCGGTGGCTGTGGCAGGTGAGAGCCTCC
GGAAGGGAGGCGGCCTCTGGCCCCGACCCTGCTCCGCGATCGCCCACTCGGGCGCCCGGCCGGGCCTGGCAGGGA
AGGGCCGCCGCCGCCGCCGCGCGTTTGCGAGGCCTGGCGGGGCCGCGGGGCCCAGGAATGGCGTAAGGGGCCCCC
CCAGACTCCGAGACGGCCCGAGCGGGTCGCCGGCTGTGGGACGGCGGCGTGCCCTTCCTTTCCTCCCTCCCAGGT
TCGCGCCCGAGCTCTGCTAGCCACCCGTCCGACAACTTCCGGACTCCCAGGGACAGCCCTGCCATCAAGGAAGAC
AGCACAGGACTGGGACCCACCCATGAACCCTTCTCAGGACAACCCAACAGCACCAGTGGGGATGTTCTCCTAAGC
CGCAGAGGGCCTGGGCACGCCATCCGTCCTCCAGGAAGAGCC**ATG**GTGTTAATGCAGGACAAGGGCAGCTCTCAG
CAGTGGCCTGGTCTGGGGGGCGAGGGTGGTGGCACAGGTCCCTTAAGCATGCTCAGAGCTGCCCTGCTGCTCATC
AGCCTGCCATGGGGGGCCCAAGGGACAGCCAGCACCAGCCTCAGCACTGCTGGGGGTCACACCGTGCCACCGACT
GGGGGCCGCTACTTGAGCATTGGAGATGGCTCTGTGATGGAGTTTGAGTTTCCTGAGGACAGTGAGGGCATCATC
GTGATCTCCAGCCAGTACCCAGGCCAGGCCAACAGGACGGCGCCTGGCCCCATGCTCAGGGTCACCTCCCTGGAC
ACAGAGGTGCTGACCATCAAGAACGTGAGTGCTATAACCTGGGGAGGCGGGGGTGGCTTTGTGGTGAGCATCCAC
TCAGGCCTGGCTGGGCTGGCCCCACTCCACATCCAGCTCGTGGACGCCCATGAGGCCCCGCCCACACTGATTGAG
GAGCGGAGAGACTTCTGCATCAAGGTCTCACCTGCTGAAGACACGCCTGCCACCCTCAGCGCCGACCTGGCCCAC
TTCTCGGAAAACCCAATCCTCTACCTGCTCCTGCCTCTTATCTTTGTCAACAAGTGTTCGTTTGGGTGCAAAGTG
GAACTCGAGGTTCTGAAGGGGCTCATGCAGAGCCCCCAGCCCATGCTGCTGGGCCTCCTGGGCCAGTTTCTGGTC
ATGCCCTTGTACGCTTTCCTCATGGCCAAGGTCTTCATGCTGCCCAAGGCCCTGGCTCTGGGCCTCATCATCACC
TGCTCGTCGCCTGGCGGCGGGGGGAGCTACCTCTTCAGCCTCCTTCTTGGAGGGGACGTCACCCTGGCCATCTCC
ATGACTTTCCTCTCTACGGTGGCTGCCACTGGCTTCTTGCCTCTGTCTTCGGCCATCTACAGCCGCCTGCTCAGC
ATCCATGAGACGCTCCACGTGCCCATCTCCAAGATCCTGGGGACCCTGCTGTTCATTGCCATCCCCATAGCCGTG
GGCGTGCTGATCAAGTCCAAGCTCCCCAAGTTCTCCCAGCTGCTGCTGCAGGTCGTCAAGCCCTTCAGCTTTGTG
CTCCTCCTGGGCGGCCTCTTCCTGGCCTATCGCATGGGGGTCTTCATCCTGGCAGGCATCCGGCTACCCATCGTA
CTGGTGGGTATCACGGTGCCCCTGGTTGGCCTGTTGGTGGGCTACTGCCTAGCCACGTGTCTGAAGCTGCCAGTG
GCCCAGCGGCGGACGGTCAGCATTGAGGTAGGGGTGCAGAACAGCCTGCTGGCCTTGGCCATGCTGCAGCTATCC
CTCCGCCGCCTTCAAGCTGACTATGCCTCCCAGGCCCCCTTCATTGTGGCGCTGAGCGGCACCTCCGAGATGCTG
GCCTTGGTCATTGGCCACTTCATCTACAGCAGCCTGTTCCCAGTTCCC**TGA**GGCCTCTGGGTCAAGCTTTCATCA
GCCCCAGCCCCCACACTCCACCAAAGTTCTCATGCACTATGCACTCAGAAAAATCCAGGCTTATTTTTTTTACTG
ATTTTTTATTCTCCAGCTTTCAGTGCCAAAGAGGCCATGCTGAGTTAGGTAGGTGGGCGCTGCCCAGAAAATATA
TTTCAATAAAAGAGAGAAGCAAGC

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FIGURE 4296

ATGCAGCTGACGGTGAAGGCGCTGCAGGGCCGCGAGTGCAGCCTGCAGGTGCCAGAGGACGAGCTGGTGTCCACG
CTGAAGCAGCTGGTCTCCGAGAAGCTGAACGTCCCAGTGCGCCAGCAGCGGCTGCTGTTCAAGGGCAAGGCCCTG
GCAGATGGGAAACGACTCTCGGATTATAGCATCGGGCCCAACTCCAAGCTCAACCTAGTGGTCAAACCCCTGGAG
AAGGTGCTACTAGAAGAAGGCGAGGCCCAGAGGCTGGCCGACTCCCCACCCCCGCAGGTCTGGCAGCTGATCTCC
AAAGTCTTGGCCCGCCACTTCAGTGCGGCAGATGCCAGCAGGGTCCTGGAACAGCTACAGAGGGATTACGAGAGG
TCCCTGAGTCGCCTGACGCTGGACGACATCGAACGGTTGGCCAGCCGCTTCCTGCACCCTGAAGTGACTGAGACA
ATGGAGAAGGGCTTCTCCAAATAG

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FIGURE 4297

CGGGACGCGGATGCAGACGCAGGCGGAGGCGCTGACGGCGGGGATGGCCGGGGTGGCCACAGCTGCCGCGGGGGC
GTGGACACAGCCGCAGCTCCGGCCGGTGGAGCTCCCCCAGCGCACGCGCCAGGTCCGGGCAGAGACGCCGCGTCT
GCGCCAGGGGGTCACGAATGCGGCCGCACATATTCACCCTCAGCGTGCCTTTCCCGACCCCCTTGGAGGCGGAAA
TCGCCCATGGGTCCCTGGCACCAGATGCCGAGCCCCACCAAAGGGTGGTTGGGAAGGATCTCACAGTGAGTGGCA
GGATCCTGGTCGTCCGCTGGAAAGCTGAAGACTGTCGCCTGCTCCGAATTTCCGTCATCAACTTTCTTGACCAGC
TTTCCCTGGTGGTGCGGACCATGCAGCGCTTTGGGCCCCCCGTTTCCCGCTAAGCCTGGCCTGGGCAAATGGAGC
GAGGTCCCACTTTGCGTCTCCTTGTAGGCAGTGCGTCCATCCTTCCCTAGGGCAGGAATTCCCACAGTTGCTACT
TTCCTGGGAGGGCCTCATGTTTTATCTGGTTCTTAAATGTTTGTTACTACAGAAAATAAAACTG

FIGURE 4298A

AGTGTGTGGGCGGCGGCGGCGGCGGCTGCGCGCTTGGGGCCCGGGGCGCGGGGCGAGGCCGTGGGGACGTGCGAG
CGGGGCCGCGGTGGGGCTCGGGGGCGCGTCCACGTGGCCAGAGGGCGGCCACCCGGAGCCAGCGGAGGGACAGGC
CTGTCCCCAGGCGCGGCTGCCGGCC**ATG**CCCTCTGTCTGCCTCCTCCTGCTGCTCTTCCTTGCCGTGGGGGGGGC
CCTGGGCAACAGGCCCTTCCGTGCCTTCGTGGTGACAGACACCACGCTTACCCACCTGGCTGTGCACCGGGTGAC
TGGGGAGGTGTTCGTGGGCGCAGTGAACCGAGTCTTTAAGCTGGCCCCCAACCTGACTGAGCTGCGGGCCCATGT
CACGGGGCCCGTCGAGGACAACGCTCGCTGCTACCCGCCCCCCAGCATGCGCGTGTGTGCCCACCGCCTGGCCCC
CGTGGACAACATCAACAAGCTGCTGCTCATAGACTATGCGGCCCGCCGCCTGGTGGCCTGCGGCAGCATCTGGCA
GGGCATCTGCCAGTTCCTGCGTCTGGACGACCTCTTCAAGCTGGGTGAGCCGCACCACCGCAAGGAGCACTACCT
GTCGGGGGCCCAGGAGCCCGACTCCATGGCTGGTGTCATTGTGGAGCAGGGCCAGGGGCCCAGCAAGCTGTTTGT
GGGCACTGCTGTCGACGGCAAGTCGGAGTACTTCCCCACCTTGAGCTCCCGCAAGCTCATCAGTGATGAAGACAG
CGCGGACATGTTCAGTCTCGTGTACCAGGATGAGTTTGTGTCCTCCCAGATCAAGATCCCCTCAGACACGCTGTC
CTTGTACCCTGCCTTTGACATCTACTACATCTACGGCTTCGTCAGCGCCTCCTTCGTGTACTTCCTGACGCTGCA
GCTGGACACCCAGCAGACGCTGTTGGACACAGCGGGCGAGAAATTTTTCACGTCCAAGATCGTGCGCATGTGCGC
GGGAGACTCAGAGTTCTACTCATACGTGGAATTCCCCATCGGCTGCTCCTGGCGCGGCGTGGAGTACCGCTTGGT
GCAGAGCGCCCACCTGGCCAAGCCTGGCCTGCTGCTGGCCCAGGCCCTGGGCGTGCCGGCTGATGAGGACGTCCT
CTTCACCATCTTCTCTCAGGGCCAGAAGAACCGGGCCAGCCCACCCCGGCAGACCATCCTCTGCCTCTTCACCCT
CAGCAACATCAATGCCCACATCCGGCGCCGCATCCAGTCCTGCTATCGTGGGGAGGGCACTCTGGCTCTGCCCTG
GCTGCTGAACAAGGAGCTGCCCTGCATCAACACCCCCATGCAGATCAACGGCAACTTCTGTGGGCTGGTGTTGAA
CCAGCCTCTGGGAGGCCTGCATGTGATCGAGGGGCTGCCCCTGCTGGCCGACAGCACCGACGGCATGGCCAGCGT
GGCCGCCTACACCTACCGCCAGCACTCTGTGGTCTTCATTGGCACGCGCAGCGGCAGCTTGAAGAAGGTGCGGGT
CGATGGCTTCCAGGATGCCCACCTGTATGAGACAGTCCCCGTGGTGGATGGCAGCCCCATCCTCCGAGACCTGCT
CTTCAGCCCGGACCACCGGCACATCTATCTCCTGAGTGAGAAGCAGGTGAGCCAGCTCCCGGTGGAGACCTGTGA
GCAGTACCAGAGCTGCGCAGCCTGCCTGGGCTCCGGGGACCCGCACTGTGGTTGGTGTGTGCTGCGACACAGGTG
CTGCCGCGAAGGGGCCTGTCTGGGCGCCTCTGCCCCACACGGCTTTGCTGAGGAGCTGAGCAAGTGTGTCCAGGT
GCGGGTCCGGCCCAACAATGTGTCAGTGACGTCACCTGGGGTGCAGCTGACCGTCACCCTGCACAACGTGCCAGA
CCTCAGTGCGGGCGTGAGCTGCGCCTTCGAGGCGGCGGCGGAGAACGAGGCGGTCCTGCTGCCCTCCGGTGAACT
GCTCTGCCCCTCACCCTCCCTCCAGGAGCTCCGAGCTCTTACCAGGGGGCATGGGGCCACCCGCACTGTGCGGCT
GCAGCTTCTCTCCAAGGAGACAGGCGTGAGGTTTGCCGGTGCTGACTTTGTCTTCTACAACTGCAGCGTCCTCCA
GTCGTGCATGTCCTGTGTTGGCAGCCCTTACCCCTGCCACTGGTGTAAGTACCGCCACACGTGTACCAGCCGCCC
CCACGAGTGCTCCTTCCAGGAGGGCAGGGTCCACAGCCCTGAGGGCTGCCCTGAGATCCTGCCCAGTGGGGACCT
CCTGATCCCCGTTGGGGTCATGCAGCCTCTTACCTTGCGGGCTAAGAACCTACCTCAGCCGCAGTCGGGCCAGAA
GAACTATGAGTGCGTGGTGCGGGTGCAGGGGCGGCAGCAGCGGGTGCCTGCCGTGCGCTTCAACAGCAGCAGTGT
GCAGTGCCAGAACGCCTCGTACTCCTATGAAGGTGATGAGCATGGTGACACCGAGCTGGACTTCTCCGTGGTCTG
GGATGGAGACTTCCCCATAGACAAGCCTCCCAGCTTCCGAGCCCTCCTGTACAAGTGCTGGGCGCAGCGGCCCAG
CTGTGGCCTCTGCCTCAAGGCTGATCCCCGCTTCAACTGTGGCTGGTGCATCTCAGAGCACAGGTGCCAGCTGCG
GACCCACTGCCCGGCCCCGAAGACCAACTGGATGCACCTGAGCCAGAAGGGCACCCGGTGCAGCCACCCCCGCAT
CACGCAGATCCACCCTCTCGTGGGGCCCAAGGAAGGAGGCACCCGGGTCACCATCGTGGGTGACAACCTGGGCCT
CTTGTCCCGAGAGGTGGGCCTGCGGGTGGCTGGCGTGCGTTGCAACTCCATTCCGGCCGAGTACATCAGTGCTGA
GAGGATCGTGTGTGAGATGGAGGAGTCGCTGGTGCCCAGCCCGCCGCCGGGGCCCGTGGAGCTGTGTGTGGGTGA
CTGTTCAGCCGACTTCCGCACGCAGTCGGAGCAGGTCTACAGCTTTGTGACCCCAACGTTTGACCAAGTGAGTCC
CAGCCGTGGCCCGGCGTCCGGGGGCACACGGCTTACCATCTCAGGCAGCTCTCTGGATGCTGGCAGCAGGGTCAC
AGTGACTGTGAGGGACAGCGAGTGCCAGTTTGTAAGGAGAGATGCCAAGGCGATCGTGTGCATCTCACCTCTCTC
CACCCTGGGCCCCAGCCAGGCCCCCATCACACTTGCCATTGACCGGGCTAACATCTCCAGCCCCGGGCTCATCTA
CACCTACACTCAGGACCCCACCGTCACCCGCCTTGAGCCCACCTGGAGCATCATCAATGGAAGCACTGCCATCAC
TGTGAGTGGGACCCACCTGCTGACGGTCCAGGAGCCCCGGGTCCGTGCCAAGTACCGCGGCATTGAGACCACCAA
TACATGCCAAGTGATCAACGACACTGCCATGCTGTGTAAGGCCCCCGGCATCTTTCTTGGGCGGCCCCAGCCTCG
GGCGCAAGGCGAGCACCCTGATGAGTTTGGCTTCCTGCTGGACCACGTGCAAACGGCCCGCTCCCTCAACCGCTC
CTCCTTTACCTACTACCCTGATCCCAGCTTTGAGCCGCTGGGGCCCTCTGGCGTGCTGGACGTCAAACCGGGCTC

FIGURE 4298B

CCACGTGGTGCTGAAGGGCAAGAACCTGATTCCCGCGGCAGCCGGCAGCTCCCGCCTCAACTACACTGTGCTGAT
AGGAGGCCAGCCGTGTTCGCTCACTGTCTCGGACACACAACTCCTGTGCGACTCACCCAGCCAGACTGGCCGGCA
GCCTGTCATGGTGCTGGTGGGTGGCCTGGAGTTCTGGCTGGGCACCCTGCACATCTCGGCAGAGCGGGCGCTGAC
CCTACCGGCCATGATGGGGCTGGCGGCGGGGGGTGGGCTCCTGCTGCTGGCCATCACAGCCGTGCTGGTGGCGTA
CAAGCGCAAGACTCAGGACGCGGACCGTACCCTCAAGCGTCTGCAGCTGCAGATGGACAACCTGGAGTCCCGTGT
GGCCCTGGAGTGCAAGGAAGCTTTTGCAGAGCTGCAGACGGACATCAATGAGCTGACTAACCACATGGACGAGGT
GCAGATCCCCTTCCTGGACTACCGGACTTACGCCGTGCGCGTGCTCTTCCCGGGCATCGAGGCCCACCCGGTGCT
CAAGGAGCTGGATACGCCACCCAACGTGGAGAAGGCCCTGCGCCTCTTCGGGCAGCTGCTGCACAGCCGCGCGTT
CGTGCTTACCTTCATCCACACGCTGGAGGCCCAGAGCAGCTTCTCCATGCGCGACCGCGGCACCGTGGCCTCGCT
CACCATGGTGGCCCTGCAGAGCCGGCTCGACTATGCCACGGGGCTGCTCAAGCAACTGCTGGCCGACCTCATCGA
GAAGAACCTCGAGAGCAAGAACCACCCCAAGCTGCTGCTACGCAGGACAGAGTCAGTGGCTGAGAAGATGCTTAC
CAACTGGTTCACGTTCCTGCTGCATAAGTTTCTGAAGGAGTGTGCTGGGGAGCCTCTCTTCCTGCTTTACTGTGC
CATCAAGCAGCAGATGGAGAAGGGCCCCATTGATGCCATCACGGGCGAGGCACGATACTCCCTGAGCGAGGACAA
GCTCATCCGTCAGCAGATCGACTACAAGACACTGACCCTTCACTGCGTGTGTCCGGAGAACGAGGGCAGCGCCCA
GGTCCCAGTGAAGGTTCTCAACTGTGACAGCATCACCCAGGCCAAAGATAAGCTGCTGGACACTGTGTACAAGGG
CATTCCGTACTCCCAGCGTCCCAAAGCTGAGGACATGGACCTGGAGTGGCGCCAGGGCCGCATGACTCGCATCAT
CCTCCAGGATGAGGATGTCACCACCAAGATCGAGTGTGACTGGAAGAGGCTCAACTCACTGGCCCACTACCAGGT
GACAGACGGTTCCTTGGTGGCATTGGTGCCCAAACAAGTGTCTGCCTATAACATGGCCAACTCCTTCACCTTCAC
CCGCTCCCTCAGCCGCTACGAGAGCTTGCTCCGCACGGCCAGCAGCCCTGATAGCCTCCGCTCACGGGCACCCAT
GATTACGCCTGACCAGGAGACAGGCACCAAATTGTGGCACCTGGTGAAAAACCACGACCATGCCGACCATCGCGA
GGGGGACCGTGGCAGCAAGATGGTCTCCGAGATCTACCTGACACGGCTGCTGGCCACCAAGGGCACACTGCAGAA
GTTCGTGGATGACCTCTTTGAGACAGTGTTCAGCACAGCCCACCGGGGCTCGGCCCTGCCCCTGGCCATCAAGTA
CATGTTCGACTTCCTGGATGAGCAGGCGGACCAGCGCCAGATCAGCGACCCCGATGTGCGCCACACCTGGAAGAG
CAACTGCCTGCCGCTGCGCTTCTGGGTGAATGTGATCAAGAACCCGCAGTTCGTGTTCGACATCCACAAGAACAG
CATCACGGATGCCTGCCTGTCGGTGGTAGCCCAGACCTTCATGGACTCCTGCTCTACATCCGAGCACCGCCTGGG
GAAGGACTCGCCCTCCAACAAACTGCTCTACGCCAAGGACATCCCCAACTACAAGAGCTGGGTGGAGAGGTATTA
TCGAGACATTGCAAAGATGGCATCCATCAGCGACCAGGACATGGATGCCTACCTGGTGGAGCAGTCCCGCCTCCA
CGCCAGCGACTTCAGCGTCCTGAGTGCGCTCAACGAGCTGTATTTCTATGTCACCAAGTACCGCCAGGAGATTCT
CACGGCTCTGGACCGAGATGCCTCTTGTCGGAAGCATAAGTTGCGGCAGAAACTGGAACAGATCATCAGCCTCGT
GTCCAGCGACAGC**TAA**GGTGGTGGAATCGGTGAGGAGGGGGCTTCTCAGTCCTGTGCCGTCCTCCCATCCAGGGG
AGTGGCTGGCTCAAGCCTGGGTCCCCGGGCTGAGCCCTGGATTGGGTATCGTGGGGCAGGTCACCCTGGCCACGA
TGCCCCCGGCACACCCAGGCCCCCTTCATTAGTGCCTTGCTTTGGGCCCTGCAGGGGGAGGGGTGACAGGGCGAG
CCCCCACCCCAGCAGCAGCAATACCCCC

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FIGURE 4299

CCGCCGCTGCCGCTGCCGCTGTCGCTGTCGCCGCCGCCGCCGCCCGCCGCCGCCGCCGCCGCCGCCGCTGCC
ATGGCTCAATACAAGGGCGCCGCGAGCGAGGCCGGCCGCGCCATGCACCTGATGAAGAAGCGGGAGAAGCAGCGC
GAGCAGATGGAGCAGATGAAGCAGCGCATCGCGGAGGAGAACATCATGAAATCCAACATTGACAAGAAGTTCTCT
GCGCACTACGACGCGGTGGAGGCAGAGCTCAAGTCCAGCACCGTGGGTCTCGTGACCCTGAATGACATGAAGGCC
AAGCAGGAGGCTCTGGTGAAGGAGCGGGAGAAGCAGCTGGCCAAGAAGGAGCAGTCCAAGGAGCTGCAGATGAAG
CTGGAGAAGCTTCGAGAGAAGGAGCGTAAGAAGGAAGCCAAGCGGAAGATCTCCAGCCTGTCCTTCACCCTGGAG
GAGGAAGAAGAGGGAGGCGAGGAGGAAGAGGAGGCGGCCATGTATGAGGAGGAGATGGAAAGGGAAGAGATCACC
ACGAAGAAGAGAAAACTGGGGAAGAACCCAGACGTTGACACAAGCTTCTTGCCTGATCGAGACCGTGAGGAGGAG
GAGAATCGGCTTCGGGAAGAGCTGCGGCAGGAGTGGGAAGCCAAGCAGGAGAAGATCAAGAGTGAGGAGATCGAG
ATCACCTTCAGCTACTGGGATGGCTCTGGGCACCGGCGGACAGTCAAGATGAGAAAGGGCAACACCATGCAGCAG
TTCCTGCAGAAGGCGCTCGAGATCCTTCGGAAAGACTTCAGTGAGCTGAGGTCCGCAGGGGTGGAGCAGCTCATG
TACATCAAGGAGGACTTGATCATCCCTCACCATCACAGCTTCTACGACTTCATCGTCACCAAGGCACGGGGGAAG
AGTGGACCACTCTTCAACTTTGATGTTCATGACGATGTGCGGTTGCTCAGTGACGCCACTGTGGAGAAGGATGAG
TCCCATGCAGGCAAGGTGGTGCTGAGGAGCTGGTACGAGAAGAACAAGCACATCTTTCCCGCCAGCCGCTGGGAA
CCCTACGACCCTGAAAAGAAGTGGGACAAGTACACGATCCGCTGAGCATCCAGGAGGCTGCGCGGCCCCGGCTCC
TCAGCTCCCTCAGTGTGCCCCGTGGTGTCACCGGGACTCCAGGCACCCGCTCCCCTGCGACCATGCCAGGCACGC
TGGGAGGAGGACGGCAGCTGCTCGTGTCCTGCCCCTGCCACATCAGTGACTGCTTTATTCTTTTCCAATAAAGAA
GTGCACGTGTCAGAGCTGGAGCGCCTGCATTGTGAG

FIGURE 4300

CGGCGGCGGCGGTGGCGGCGGCGACTGCTGCGGTGAAGGAGGAGGAGGAGCCGAGCGGGCGCTGGCACCGAGGCC
TGACCATGGACGAGGAATACGATGTGATCGTGCTGGGGACCGGTCTCACCGAATGCATCCTGTCGGGCATCATGT
CTGTGAACGGGAAGAAGGTGCTGCACATGGACCGGAACCCCTACTACGGGGGCGAGAGCTCCTCCATCACACCCC
TGGAGGAGCTGTATAAGCGTTTTCAGTTGCTGGAGGGGCCCCCTGAGTCGATGGGCCGAGGCCGAGACTGGAATG
TTGACCTGATTCCCAAATTCCTCATGGCTAACGGGCAGCTGGTAAAGATGCTACTGTATACAGAGGTGACTCGCT
ACCTGGACTTCAAGGTGGTGGAGGGCAGCTTTGTCTACAAGGGGGGCAAGATCTACAAAGTGCCGTCCACTGAGA
CTGAGGCCTTGGCTTCCAATCTGATGGGCATGTTTGAGAAACGGCGCTTCCGCAAGTTCCTGGTGTTTGTGGCAA
ACTTCGATGAGAATGACCCCAAGACCTTTGAGGGCGTTGACCCCCAGACTACCAGCATGCGTGACGTCTACCGGA
AGTTTGATCTGGGCCAGGATGTCATCGATTTCACTGGCCATGCCCTGGCGCTCTACCGCACTGATGACTACCTGG
ACCAGCCCTGCCTTGAGACCGTCAACCGCATCAAGTTGTACAGTGAGTCCCTGGCCCGGTATGGCAAGAGCCCAT
ATTTATACCCGCTCTACGGCTTGGGCGAGCTGCCCCAGGGTTTTGCAAGATTGAGTGCCATCTATGGGGGGACAT
ATATGCTGAACAAACCTGTGGATGACATCATCATGGAGAACGGCAAGGTGGTGGGCGTGAAGTCTGAGGGAGAGG
TGGCCCGCTGCAAGCAGCTGATCTGTGACCCCAGCTACATCCCGGACCGTGTGCGGAAGGCTGGCCAGGTTATCC
GCATCATCTGTATCCTTAGCCACCCCATCAAGAACACCAACGACGCCAACTCCTGCCAAATAATCATCCCCCAGA
ACCAGGTCAACAGGAAGTCAGACATCTACGTGTGCATGATCTCCTATGCACACAACGTGGCGGCCCAGGGCAAGT
ACATAGCTATTGCCAGCACTACTGTGGAGACCACGGACCCTGAAAAGGAGGTGGAGCCGGCTCTGGAGCTGTTGG
AGCCCATTGACCAGAAGTTTGTGGCTATCAGTGACTTGTATGAGCCCATTGATGATGGTTGTGAGAGCCAGGTGT
TCTGTTCCTGCTCCTACGATGCCACCACACACTTTGAGACAACCTGCAACGACATCAAAGACATCTACAAACGCA
TGGCTGGCACGGCCTTTGACTTTGAGAACATGAAGCGCAAACAGAACGACGTCTTTGGAGAAGCTGAGCAGTGAT
TGTGGCCGCCCCCAGCCCCTGCTGCCCCAGCCTGTGTCTGTTCTCCTCGAGGGCTCCAGCATCCTCTGCTTCCCC
CACCACGTTCCCATCACCCACCTCATTGATCCACTGACCAAATCCTTAACCCTAGCGATGGCTTGGGAGATGGGG
GGTTGGATAGCATCCTCTTTCTTGGCCCTTCCTTATCCTAGGAAAAGAGGGTTCCTCTCCTTGTGTGTGTCTCTT
CCCCCCACCCCTAATTCTTCTGCTCTGTTTGGGAAGACGTGGAGGAAAAGGTGACTTCTGCCCCCACCGCTCTTA
CCCCCACTGTAGTGGCCTTTGGAGATGCCCCCACCTCCCCCCCCACCAACTCTCGCGTGTTGGAGAGAAGGGGCCC
TCCCAGCACAAAGTTGCATTCCTCCCCCCTAATTTATTCTAATTTATTAACTTTGACCCACCCTTTCTGAGCCTG
CAGCCTTCCCGTGTGGCCTGAGGGCTGTCGAGTGAGCTGCCCCAGCCCCTCCCAGCCCTTGCCCAGCCTGGGGGA
GTGGGGAAGGCTTGGGCATGGCCCCGTTGGAGGTTGATTTGCTGTTTTGTTTCTTGTCTTTGTGTTCTGTGGTAC
TTGCTGAGAGAAAAGAAAAGTGAGCCAAGCAGAAGGAGGTGGGAAAACGGACCCAAACCCCAGTGTGCCCTGCCC
CATGCCTTTCCTTTAGTGGTGGGAAACCCTTATCTTGCAAAGTGAATGTGTCCCCTTCCCCACCCTCTAGTGTAT
TTCACAGAAAACAAAACCTCCCAATAAAACGGTTGAAACCTG

FIGURE 4301

GGCAGTGGAGGCTGAGGCTATGATGGCGGCCATGGCGACGGCTCGAGTGCGGATGGGGCCGCGGTGCGCCCAGGC
GCTCTGGCGCATGCCGTGGCTGCCGGTGTTTTTGTCGTTGGCGGCGGCGGCGGCGGCGGCAGCGGCGGAGCAGCA
GGTCCCGCTGGTGCTGTGGTCGAGTGACCGGGACTTGTGGGCTCCTGCGGCCGACACTCATGAAGGCCACATCAC
CAGCGACTTGCAGCTCTCTACCTACTTAGATCCCGCCCTGGAGCTGGGTCCCAGGAATGTGCTGCTGTTCCTGCA
GGACAAGCTGAGCATTGAGGATTTCACAGCATATGGCGGTGTGTTTGGAAACAAGCAGGACAGCGCCTTTTCTAA
CCTAGAGAATGCCCTGGACCTGGCCCCCTCCTCACTGGTGCTTCCTGCCGTCGACTGGTATGCAGTCAGCACTCT
GACCACTTACCTGCAGGAGAAGCTCGGGGCCAGCCCCTTGCATGTGGACCTGGCCACCCTGCGGGAGCTGAAGCT
CAATGCCAGCCTCCCTGCTCTGCTGCTCATTCGCCTGCCCTACACAGCCAGCTCTGGTCTGATGGCACCCAGGGA
AGTCCTCACAGGCAACGATGAGGTCATCGGGCAGGTCCTGAGCACACTCAAGTCCGAAGATGTCCCATACACAGC
GGCCCTCACAGCGGTCCGCCCTTCCAGGGTGGCCCGTGATGTAGCCGTGGTGGCCGGAGGGCTAGGTCGCCAGCT
GCTACAAAAACAGCCAGTATCACCTGTGATCCATCCTCCTGTGAGTTACAATGACACCGCTCCCCGGATCCTGTT
CTGGGCCCAAAACTTCTCTGTGGCGTACAAGGACCAGTGGGAGGACCTGACTCCCCTCACCTTTGGGGTGCAGGA
ACTCAACCTGACTGGCTCCTTCTGGAATGACTCCTTTGCCAGGCTCTCACTGACCTATGAACGACTCTTTGGTAC
CACAGTGACATTCAAGTTCATTCTGGCCAACCGCCTCTACCCAGTGTCTGCCCGGCACTGGTTTACCATGGAGCG
CCTCGAAGTCCACAGCAATGGCTCCGTCGCCTACTTCAATGCTTCCCAGGTCACAGGGCCCAGCATCTACTCCTT
CCACTGCGAGTATGTCAGCAGCCTGAGCAAGAAGGGTAGTCTCCTCGTGGCCCGCACGCAGCCCTCTCCCTGGCA
GATGATGCTTCAGGACTTCCAGATCCAGGCTTTCAACGTAATGGGGGAGCAGTTCTCCTACGCCAGCGACTGTGC
CAGCTTCTTCTCCCCCGGCATCTGGATGGGGCTGCTCACCTCCCTGTTCATGCTCTTCATCTTCACCTATGGCCT
GCACATGATCCTCAGCCTCAAGACCATGGATCGCTTTGATGACCACAAGGGCCCCACTATTTCTTTGACCCAGAT
TGTGTGACCCTGTGCCAGTGGGGGGGTTGAGGGTGGGACGGTGTCCGTGTTGTTGCTTTCCCACCCTGCAGCGCA
CTGGACTGAAGAGCTTCCCTCTTCCTACTGCAGCATGAACTGCAAGCTCCCCTCAGCCCATCTTGCTCCCTCTTC
ACCCCGCTGAGGAGCTTTCTTGGGCTGCCCCCATCTCTCCCAACAAGGTGTACATATTCTGCGTAGATGCTAGAC
CAACCAGCTTCCCAGGGTTCGTCGCTGTGAGGCGTAAGGGACATGAATTCTAGGGTCTCCTTTCTCCTTATTTAT
TCTTGTGGCTACATCATCCCTGGCTGTGGATAGTGCTTTTGTGTAGCAAATGCTCCCTCCTTAAGGTTATAGGGC
TCCCTGAGTTTGGGAGTGTGGAAGTACTACTTAACTGTCTGTCCTGCTTGGCTGTCGTTATCGTTTTCTGGTGAT
GTTGTGCTAACAATAAGAAGTACACGGGTTTATTTCTGTGGCCTGAGAAGGAAGGGACCTCCACGACAGGTGGGC
TGGGTGCGATCGCCGGCTGTTTGGCATGTTCCCACCGGGAGTGCCGGGCAGGAGCATGGGGTGCTTGGTTGTTTC
CTTCCTAATAAAATAAACGCGGGTCGCCATG

FIGURE 4302

CCGGGCCGGGGTGCCAGCGCCCGCTTTCCCGTTTCCTCCCGTTCCGCAGCGCGCCCACGGCCTGTGACTTCGGAG
ACCGCTCCCCAGTGACGAGAGAGCGGGGCCGGGCGCTGCTCCGGCCTGACCTGCGAAGGGACCTCGGTCCAGTAC
CCTGTTGCGCCGCGCCCCCGTCCGTCCGTGCGCGGGCCAGTCAGGGGCCAGTGTGTCGAGGCGGTAGAGGTCGCA
GCCTAGAGGCGTTCCACAGGTCGGCCCGGGGCGCTGGGAGCCCGGCCGGCGGTCGGGTGGGGTGGCCTCTGCACG
TGAAAGTGGCCGTTCCCCGCGGTGCCGCCGCTCACCTGGACCCTGGCCAGCAGCGTCGTCATGGGCTTGGTGGGC
ACCTACAGCTGCTTCTGGACCAAGTACATGAACCACCTGACCGTGCACAACAGGGAGGTGCTGTACGAGCTCATC
GAGAAGCGAGGCCCGGCCACGCCCCTCATCACCGTGTCCAATCACCAGTCCTGCATGGACGACCCTCATCTCTGG
GGGATCCTGAAACTCCGCCACATCTGGAACCTGAAGTTGATGCGTTGGACCCCTGCAGCTGCAAGACATCTGCTT
CACCAAGGAGCTACACTCCCACTTCTTCAGCTTGGGCAAGTGTGTGCCTGTGTGCCGAGGAGCAGAATTTTTCCA
AGCAGAGAATGAGGGGAAAGGTGTTCTAGACACAGGCAGGCAC**ATG**CCAGGTGCTGGAAAAAGAAGAGAGAAAGG
AGATGGCGTCTACCAGAAGGGGATGGACTTCATTTTGGAGAAGCTCAACCATGGGGACTGGGTGCATATCTTCCC
AGAAGGGAAAGTGAACATGAGTTCCGAATTCCTGCGTTTCAAGTGGGGAATCGGGCGCCTGATTGCTGAGTGTCA
TCTCAACCCCATCATCCTGCCCCTGTGGCATGTCGGAATGAATGACGTCCTTCCTAACAGTCCGCCCTACTTCCC
CCGCTTTGGACAGAAAATCACTGTGCTGATCGGGAAGCCCTTCAGTGCCCTGCCTGTACTCGAGCGGCTCCGGGC
GGAGAACAAGTCGGCTGTGGAGATGCGGAAAGCCCTGACGGACTTCATTCAAGAGGAATTCCAGCATCTGAAGAC
TCAGGCAGAGCAGCTCCACAACCACCTCCAGCCTGGGAGA**TAG**GCCTTGCTTGCTGCCTTCTGGATTCTTGGCCC
GCACAGAGCTGGGGCTGAGGGATGGACTGATGCTTTTAGCTCAAACGTGGCTTTTAGACAGATTTGTTCATAGAC
CCTCTCAAGTGCCCTCTCCGAGCTGGTAGGCATTCCAGCTCCTCCGTGCTTCCTCAGTTACACAAAGGACCTCAG
CTGCTTCTCCCACTTGGCCAAGCAGGGAGGAAGAAGCTTAGGCAGGGCTCTCTTTCCTTCTTGCCTTCAGATGTT
CTCTCCCAGGGGCTGGCTTCAGGAGGGAGCATAGAAGGCAGGTGAGCAACCAGTTGGCTAGGGGAGCAGGGGGCC
CACCAGAGCTGTGGAGAGGGGACCCTAAGACTCCTCGGCCTGGCTCCTACCCACCGCCCTTGCCGAACCAGGAGC
TGCTCACTACCTCCTCAGGGATGGCCGTTGGCCACGTCTTCCTTCTGCCTGAGCTTCCCCCCCACCACAGGCCCT
TTCCTCAGGCAAGGTCTGGCCTCAGGTGGGCCGCAGGCGGGAAAAGCAGCCCTTGGCCAGAAGTCAAGCCCAGCC
ACGTGGAGCCTAGAGTGAGGGCCTGAGGTCTGGCTGCTTGCCCCCATGCTGGCGCCAACAACTTCTCCATCCTTT
CTGCCTCTCAACATCACTTGAATCCTAGGGCCTGGGTTTTCATGTTTTTGAAACAGAACCATAAAGCATATGTGT
TGGCTTGTT

FIGURE 4303

CTTGAACGCCTGACCTCGTATCCACCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACGCC
CAGCCCATAATTTATTGATTTTTTAAAATTTGTCCAGCCTTCTATTACCACGTCGAATCCATTAGCTACAGCCAT
CCCATGAGAAGCTGAGTGGATTCAGCCCCACCTCCTGCTCACAGACCCTGTCCGAGCACCTCATTTGTCCCAACA
GCATTACTGCAGGACCCCCAGGACGTTGGACTGCCAGCTCCCTGGGTCTCCTCCTCTCTGGGGCAGATCCTCAGT
CCTCCCTTGACTTCACGACTGTGGCCAGATCATGTGTGGACTGTCCCTCTCTTTGGGTCTCCAGAGCGCTTGCAT
CAAACACCCCTAACTCAGAAGTGTGCAGCCACACTGGGACTCAGAACCCAACAACAGGGACAGAAGACTCACGCC
CTTGGGGTGCCCGGTCTCGTGGCATCAGGCATGACTTCCAGCTCCTGCGCCTTCCCCAGCAACTGCTGACTGGGG
ACCCAGACCGGGAGCTGAGCGACGGGCCTGGCGAGCGAAGCTCGGGGTCTCACTCAGGCACCAGCCCCTCCTTGC
CCCAGGCTTGAGTGACTCACAGCCCTATTCAGGCAGGAGCTGCTCTTCTGGGGTATCGCGATCCACTTAAGGATG
AGGCAGACTTGGTGACAAGCTGGTCTGAGCAGCGCCTCCAGAGCCAGAACTGAGCCCAGTGAGAGCGCACCCTGG
GGCAGCCTGGATTCCTGGGGTGTCCCCGGCAGCCACACACAGCC**ATG**CACTACCCAACTGCACTCCTCTTCCTCA
TCCTGGCCAATGGGGCCCAGGCCTTTCGCATCTGCGCCTTCAATGCCCAGCGGCTGACACTGGCCAAGGTGGCCA
GGGAGCAGGTGATGGACACCTTAGTTCGGATACTGGCTCGCTGTGACATCATGGTGCTGCAGGAGGTGGTGGACT
CTTCCGGCAGCGCCATCCCGCTCCTGCTTCGAGAACTCAATCGATTTGATGGCTCTGGGCCCTACAGCACCCTGA
GCAGCCCCCAGCTGGGGCGCAGCACCTACATGGAGACGTATGTGTACTTCTATCGGTCACACAAAACACAGGTCC
TGAGTTCCTACGTGTACAACGATGAGGATGACGTCTTTGCCCGGGAGCCATTTGTGGCCCAGTTCTCTTTGCCCA
GCAATGTCCTTCCCAGCCTGGTGTTGGTCCCGCTGCACACCACTCCTAAGGCCGTAGAGAAGGAGCTGAACGCCC
TCTACGATGTGTTTCTGGAGGTCTCCCAGCACTGGCAGAGCAAGGACGTGATCCTGCTTGGGGACTTCAATGCTG
ACTGCGCTTCACTGACCAAAAAGCGCCTGGACAAGCTGGAGCTGCGGACTGAGCCAGGCTTCCACTGGGTGATTG
CCGATGGGGAGGACACCACAGTGCGGGCCAGCACCCACTGCACCTATGCCCGCGTCGTGCTGCACGGGGAGCGCT
GCCGGAGTCTGCTGCACACTGCGGCTGCCTTTGACTTCCCCACGAGCTTCCAGCTCACCGAGGAGGAGGCCCTCA
ACATCAGTGACCACTACCCCGTGGAGGTGGAGCTGAAGCTGAGCCAGGCGCACAGCGTCCAGCCTCTCAGCCTCA
CTGTTCTGTTGCTGCTATCACTCCTGTCCCCTCAGCTGTGCCCTGCTGCC**TGA**GCGTCCCCCTACCCCCCCAGGG
CCTGCTGCCTTTTGGGACTTAAACCCCAGCCTCCCCCGTCCATCCAGCCCTGGGGCTGGGGGGCTTCAACTATAG
TTGCCCTGTGACTGTAGTCCACCCCTGCCTGCCTTGTTTGATTTGGCTCTTGTTCTTTGGTTGGGCTTGTGCCTA
GATTAGGAGAGGAAGCCAGGGGCCCTGCACTCATGCCACCTGCCAGGTAGTGTAGTATCAGGAGTGGAGACAAAG
TGGGCTCTGGGTTGGGGTAGGGGAAGGGAGGGTTCAGAAAGAGGAATGAAGATGTTGTATGACAAGAAGGAAAGT
TACTGAGAACAAAAACCCAGATTGGTGAGATAGGACACTTGTGCAGCAGATATGCCAATGGGCCATGTTTATTGT
GGATTGGTAAGAATCACCAGGAAACCATTAAGCCCCAATAGCTACAAGGAGGGTGGTTAATCTGCTATATCAAAC
TCCTTCCCTGAAACCAGCAAACACCGGGAAACATTTTGGCTCATTATAATCCGGTGAACAATGCAGTCAGGCCTG
TTATAACCGCTGAGCAGCCACACTCGCACCTCCTGGGTGCTGTAGTCTGTGTTGGTACAGGCTTCTGCATGCCTG
GTAAAGGTCCAGCCAAGGCTGGTCAAGGCAACATCTCCACACAGAAAATCTGCACCAGTTATGTAAGCTAAAAAG
CTGTGTGAACCCAGGTGTCCCGGAAAGGGGCTGCAGGACACAGCAAAATGCCAGCAGCATGCCGGACCCCTCCCT
TCCATCCTCCTCTCCAAAGAAGAGAGGTCAGGAAAAACACTGGCTGGGACGCTAGAAGGGTCATGTGTTAACTAT
AATCACATTTATGGTTTGGAACCATCACCCCAAGGTAAAAAAAAAATAAAAGGTATTCCCAGGTATGTTTGGCAA
AATAAAATAAAGGTAATTAAAAACCT

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FIGURE 4304

CTCTTTCCCTTCGGTGTGCCACTGAAGATCCTGGTGTCGCCATGGGCCGCCGCCCCGCCCGTTGTTACCGGTATT
GTAAGAACAAGCCGTACCCAAAGTCTCGCTTCTGCCGAGGTGTCCCTGATGCCAAGATTCGCATTTTTGACCTGG
GGCGGAAAAAGGCAAAAGTGGATGAGTTTCCGCTTTGTGGCCACATGGTGTCAGATGAATATGAGCAGCTGTCCT
CTGAAGCCCTGGAGGCTGCCCGAATTTGTGCCAATAAGTACATGGTAAAAAGTTGTGGCAAAGATGGCTTCCATA
TCCGGGTGCGGCTCCACCCCTTCCACGTCATCCGCATCAACAAGATGTTGTCCTGTGCTGGGGCTGACAGGCTCC
AAACAGGCATGCGAGGTGCCTTTGGAAAGCCCCAGGGCACTGTGGCCAGGGTTCACATTGGCCAAGTTATCATGT
CCATCCGCACCAAGCTGCAGAACAAGGAGCATGTGATTGAGGCCCTGCGCAGGGCCAAGTTCAAGTTTCCTGGCC
GCCAGAAGATCCACATCTCAAAGAAGTGGGGCTTCACCAAGTTCAATGCTGATGAATTTGAAGACATGGTGGCTG
AAAAGCGGCTCATCCCAGATGGCTGTGGGGTCAAGTACATCCCCAGTCGTGGCCCTCTGGACAAGTGGCGGGCCC
TGCACTCATGAGGGCTTCCAATGTGCTGCCCCCCTCTTAATACTCACCAATAAATTCTACTTCCTGTCCACCTAT
GTCTTTGTATCTACATTCTTGACGGGGAAGGAACTTCCTCTGGGAACCTTTGGGTCATTGCCCTTTCACTTCAGA
AACAGGTTGACAACTCAGCCCTGCTCATGAGGCAGCAAACCCTGCAAAGGGCTGGGACTGGTGGCCTTATGTCAG
TTGTCTACTCTGGAGCTTGACTTGGACCTCCCCAGGTCCTAGGCAGTAGGTTGAAAAACACTGAAGTGCTTTTCA
TGAAGCACAGCTGCAGCAAAGCCTTGCAATCCCAGGCTGGGGTCAGCCTACAGTTGTGTTGCTTATTACAACACA
TGCGGACCAAGAGGGGCTTGTGGGCTAGAGGCTGACCAGCAGCGTTTATTTAGCAAGGGTAGGTGTGCATCACAT
TGGGCTTGTTCTCACCCATCTGGTTTGGCCATTCCTCCTTGGTGGGAATCATCCAGGTACTGCTGAGGTCACCTG
CGATTTGCCCCATTTCCTATCTCTAGCAACCTCCTGGGCCCCATGCCCCCACCCCTTCTAGAACCTGCATTCCCA
GGGCCTTCACCACCTGACCAAAGGTCTAGGCTAACCTTTGGTCATTTGTAACAAGACCTCGGAACAGACACGTGT
GTGGCATGGTTTGGCCTGGGGATCTTAGATGTCTGACCTGAACTATTGTAGAACAGCGCTGGCTTTTGGGGGAGC
AGCAAAAATGAGAGGAGTGCTAGGTGGGTGGCCTGAGCATCTGTATCCAGGGACAGGACTCCAAAGGCTTTTGGT
CCCAGAGCTGGGGTATGTTGGCCCCAGCCCCCAGCCTGTGGCTCCCAAAAGGCCTCTGGTTTTTTGTAATCTCAG
TTTACAGCCATTTCTTAGGTTTTTAATTACCTTTATTTTATTTTGCCAAACATACCTGGGAATACCTTTTATTTT
TTTTTTACCTTGGGGTGATGGTTCCAAACCATAAATGTGATTATAGTTAACACATGACCCTTCTAGCGTCCCAGC
CAGTGTTTTTCCTGACCTCTCTTCTTTGGAGAGGAGGATGGAAGGGAGGGGTCCGGCATGCTGCTGGCATTTTGC
TGTGTCCTGCAGCCCCTTTCCGGGACACCTGGGTTCACACAGCTTTTTAGCTTACATAACTGGTGCAGATTTTCT
GTGTGGAGATGTTGCCTTGACCAGCCTTGGCTGGACCTTTACCAGGCATGCAGAAGCCTGTACCAACACAGACTA
CAGCACCCAGGAGGTGCGAGTGTGGCTGCTCAGCGGTTATAACAGGCCTGACTGCATTGTTCACCGGATTATAAT
GAGCCAAAATGTTTCCCGGTGTTTGCTGGTTTCAGGGAAGGAGTTTGATATAGCAGATTAACCACCCTCCTTGTA
GCTATTGGGGCTTAATGGTTTCCTGGTGATTCTTACCAATCCACAATAAACATGGCCCATTGGCATATCTGC

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FIGURE 4305

CGGCCGGTTTTGGTAGGCCCGGGCCGCCGCCAGGCCTCCGCCTGAGCCCGCACCCGCCATGGACAACTACGCAGA
TCTTTCGGATACCGAGCTGACCACCTTGCTGCGCCGGTACAACATCCCGCACGGGCCTGTAGTAGGATCAACTCG
TAGGCTTTACGAGAAGAAGATCTTCGAGTACGAGACCCAGAGGCGGCGGCTCTCGCCCCCCAGCTCGTCCGCCGC
CTCCTCTTATAGCTTCTCTGACTTGAATTCGACTAGAGGGGATGCAGATATGTATGATCTTCCCAAGAAAGAGGA
CGCTTTACTCTACCAGAGCAAGGGCTACAATGACGACTACTATGAAGAGAGCTACTTCACCACCAGGACTTATGG
GGAGCCCGAGTCTGCCGGCCCGTCCAGGGCTGTCCGCCAGTCAGTGACTTCATTCCCAGATGCTGACGCTTTCCA
TCACCAGGTGCATGATGACGATCTTTTGTCTTCTTCTGAAGAGGAGTGCAAGGATAGGGAACGCCCCATGTACGG
CCGGGACAGTGCCTACCAGAGCATCACGCACTACCGCCCTGTTTCAGCCTCCAGGAGCTCCCTGGACCTGTCCTA
TTATCCTACTTCCTCCTCCACCTCTTTTATGTCCTCCTCATCATCTTCCTCTTCATGGCTCACCCGCCGTGCCAT
CCGGCCTGAAAACCGTGCTCCTGGGGCTGGGCTGGGCCAGGATCGCCAGGTCCCGCTCTGGGGCCAGCTGCTGCT
TTTCCTGGTCTTTGTGATCGTCCTCTTCTTCATTTACCACTTCATGCAGGCTGAAGAAGGCAACCCCTTCTAGAG
GGAGCCATGAGGGTCTGGGCTTCAGAGCTAGGTCTTTGGGGAAGTCCTGGCTGACTGCCTTAGCAGTGGGGGTGG
GGGTGGGGGCAGGGGCAGGGGCTTTATGTGTTTTTGCTTGGGGGGCGCTGGGCCTAGCCCAGAGTAGTGCTTGCT
CCCCCTGCCTTGTCCCACCAGGGAGGCAGCAGACTCAGGCCCTCCATGGTCCTCTTTGTCATTTTGTTGACATGC
ATTCCTCCTTTTGTCATCTTGTTGGGGGGAGGGGATTAACCAAAGGCCACCCTGACTTTGTTTTTGTGGACACAC
AATAAAAGCCCCGTTTATTTGT

FIGURE 4306A

GCGATCCGGGCGCCACCCCGCGGTCATCGGTCACCGGTCGCTCTCAGGAACAGCAGCGCAACCTCTGCTCCCTGC
CTCGCCTCCCGCGCGCCTAGGTGCCTGCGACTTTAATTAAAGGGCCGTCCCCTCGCCGAGGCTGCAGCACCGCCC
CCCCGGCTTCTCGCGCCTCAAAATGAGTAGCTCCCACTCTCGGGCGGGCCAGAGCGCAGCAGGCGCGGCTCCGGG
CGGCGGCGTCGACACGCGGGACGCCGAGATGCCGGCCACCGAGAAGGACCTGGCGGAGGACGCGCCGTGGAAGAA
GATCCAGCAGAACACTTTCACGCGCTGGTGCAACGAGCACCTGAAGTGCGTGAGCAAGCGCATCGCCAACCTGCA
GACGGACCTGAGCGACGGGCTGCGGCTTATCGCGCTGTTGGAGGTGCTCAGCCAGAAGAAGATGCACCGCAAGCA
CAACCAGCGGCCCACTTTCCGCCAAATGCAGCTTGAGAACGTGTCGGTGGCGCTCGAGTTCCTGGACCGCGAGAG
CATCAAACTGGTGTCCATCGACAGCAAGGCCATCGTGGACGGGAACCTGAAGCTGATCCTGGGCCTCATCTGGAC
CCTGATCCTGCACTACTCCATCTCCATGCCCATGTGGGACGAGGAGGAGGATGAGGAGGCCAAGAAGCAGACCCC
CAAGCAGAGGCTCCTGGGCTGGATCCAGAACAAGCTGCCGCAGCTGCCCATCACCAACTTCAGCCGGGACTGGCA
GAGCGGCCGGGCCCTGGGCGCCCTGGTGGACAGCTGTGCCCCGGGCCTGTGTCCTGACTGGGACTCTTGGGACGC
CAGCAAGCCCGTTACCAATGCGCGAGAGGCCATGCAGCAGGCGGATGACTGGCTGGGCATCCCCCAGGTGATCAC
CCCCGAGGAGATTGTGGACCCCAACGTGGACGAGCACTCTGTCATGACCTACCTGTCCCAGTTCCCCAAGGCCAA
GCTGAAGCCAGGGGCTCCCTTGCGGCCCAAACTGAACCCGAAGAAAGCCCGTGCCTACGGGCCAGGCATCGAGCC
CACAGGCAACATGGTGAAGAAGCGGGCAGAGTTCACTGTGGAGACCAGAAGTGCTGGCCAGGGAGAGGTGCTGGT
GTACGTGGAGGACCCGGCCGGACACCAGGAGGAGGCAAAAGTGACCGCCAATAACGACAAGAACCGCACCTTCTC
CGTCTGGTACGTCCCCGAGGTGACGGGGACTCATAAGGTTACTGTGCTCTTTGCTGGCCAGCACATCGCCAAGAG
CCCCTTCGAGGTGTACGTGGATAAGTCACAGGGTGACGCCAGCAAAGTGACAGCCCAAGGTCCCGGCCTGGAGCC
CAGTGGCAACATCGCCAACAAGACCACCTACTTTGAGATCTTTACGGCAGGAGCTGGCACGGGCGAGGTCGAGGT
TGTGATCCAGGACCCCATGGGACAGAAGGGCACGGTAGAGCCTCAGCTGGAGGCCCGGGGCGACAGCACATACCG
CTGCAGCTACCAGCCCACCATGGAGGGCGTCCACACCGTGCACGTCACGTTTGCCGGCGTGCCCATCCCTCGCAG
CCCCTACACTGTCACTGTTGGCCAAGCCTGTAACCCGAGTGCCTGCCGGGCGGTTGGCCGGGGCCTCCAGCCCAA
GGGTGTGCGGGTGAAGGAGACAGCTGACTTCAAGGTGTACACAAAGGGCGCTGGCAGTGGGGAGCTGAAGGTCAC
CGTGAAGGGCCCCAAGGGAGAGGAGCGCGTGAAGCAGAAGGACCTGGGGGATGGCGTGTATGGCTTCGAGTATTA
CCCCATGGTCCCTGGAACCTATATCGTCACCATCACGTGGGGTGGTCAGAACATCGGGCGCAGTCCCTTCGAAGT
GAAGGTGGGCACCGAGTGTGGCAATCAGAAGGTACGGGCCTGGGGCCCTGGGCTGGAGGGCGGCGTCGTTGGCAA
GTCAGCAGACTTTGTGGTGGAGGCTATCGGGGACGACGTGGGCACGCTGGGCTTCTCGGTGGAAGGGCCATCGCA
GGCTAAGATCGAATGTGACGACAAGGGCGACGGCTCCTGTGATGTGCGCTACTGGCCGCAGGAGGCTGGCGAGTA
TGCCGTTCACGTGCTGTGCAACAGCGAAGACATCCGCCTCAGCCCCTTCATGGCTGACATCCGTGACGCGCCCCA
GGACTTCCACCCAGACAGGGTGAAGGCACGTGGGCCTGGATTGGAGAAGACAGGTGTGGCCGTCAACAAGCCAGC
AGAGTTCACAGTGGATGCCAAGCACGGTGGCAAGGCCCCACTTCGGGTCCAAGTCCAGGACAATGAAGGCTGCCC
TGTGGAGGCGTTGGTCAAGGACAACGGCAATGGCACTTACAGCTGCTCCTACGTGCCCAGGAAGCCGGTGAAGCA
CACAGCCATGGTGTCCTGGGGAGGCGTCAGCATCCCCAACAGCCCCTTCAGGGTGAATGTGGGAGCTGGCAGCCA
CCCCAACAAGGTCAAAGTATACGGCCCCGGAGTAGCCAAGACAGGGCTCAAGGCCCACGAGCCCACCTACTTCAC
TGTGGACTGCGCCGAGGCTGGCCAGGGGGACGTCAGCATCGGCATCAAGTGTGCCCCTGGAGTGGTAGGCCCCGC
CGAAGCTGACATCGACTTCGACATCATCCGCAATGACAATGACACCTTCACGGTCAAGTACACGCCCCGGGGGGC
TGGCAGCTACACCATTATGGTCCTCTTTGCTGACCAGGCCACGCCCACCAGCCCCATCCGAGTCAAGGTGGAGCC
CTCTCATGACGCCAGTAAGGTGAAGGCCGAGGGCCCTGGCCTCAGTCGCACTGGTGTCGAGCTTGGCAAGCCCAC
CCACTTCACAGTAAATGCCAAAGCTGCTGGCAAAGGCAAGCTGGACGTCCAGTTCTCAGGACTCACCAAGGGGGA
TGCAGTGCGAGATGTGGACATCATCGACCACCATGACAACACCTACACAGTCAAGTACACGCCTGTCCAGCAGGG
TCCAGTAGGCGTCAATGTCACTTATGGAGGGGATCCCATCCCTAAGAGCCCTTTCTCAGTGGCAGTATCTCCAAG
CCTGGACCTCAGCAAGATCAAGGTGTCTGGCCTGGGAGAGAAGGTGGACGTTGGCAAAGACCAGGAGTTCACAGT
CAAATCAAAGGGTGCTGGTGGTCAAGGCAAAGTGGCATCCAAGATTGTGGGCCCCTCGGGTGCAGCGGTGCCCTG
CAAGGTGGAGCCAGGCCTGGGGGCTGACAACAGTGTGGTGCGCTTCCTGCCCCGTGAGGAAGGGCCCTATGAGGT
GGAGGTGACCTATGACGGCGTGCCCGTGCCTGGCAGCCCCTTTCCTCTGGAAGCTGTGGCCCCCACCAAGCCTAG
CAAGGTGAAGGCGTTTGGGCCGGGGCTGCAGGGAGGCAGTGCGGGCTCCCCCGCCCGCTTCACCATCGACACCAA
GGGCGCCGGCACAGGTGGCCTGGGCCTGACGGTGGAGGGCCCCTGTGAGGCGCAGCTCGAGTGCTTGGACAATGG
GGATGGCACATGTTCCGTGTCCTACGTGCCCACCGAGCCCGGGGACTACAACATCAACATCCTCTTCGCTGACAC

FIGURE 4306B

CCACATCCCTGGCTCCCCATTCAAGGCCCACGTGGTTCCCTGCTTTGACGCATCCAAAGTCAAGTGCTCAGGCCC
CGGGCTGGAGCGGGCCACCGCTGGGGAGGTGGGCCAATTCCAAGTGGACTGCTCGAGCGCGGGCAGCGCGGAGCT
GACCATTGAGATCTGCTCGGAGGCGGGGCTTCCGGCCGAGGTGTACATCCAGGACCACGGTGATGGCACGCACAC
CATTACCTACATTCCCCTCTGCCCCGGGGCCTACACCGTCACCATCAAGTACGGCGGCCAGCCCGTGCCCAACTT
CCCCAGCAAGCTGCAGGTGGAACCTGCGGTGGACACTTCCGGTGTCCAGTGCTATGGGCCTGGTATTGAGGGCCA
GGGTGTCTTCCGTGAGGCCACCACTGAGTTCAGTGTGGACGCCCGGGCTCTGACACAGACCGGAGGGCCGCACGT
CAAGGCCCGTGTGGCCAACCCCTCAGGCAACCTGACGGAGACCTACGTTCAGGACCGTGGCGATGGCATGTACAA
AGTGGAGTACACGCCTTACGAGGAGGGACTGCACTCCGTGGACGTGACCTATGACGGCAGTCCCGTGCCCAGCAG
CCCCTTCCAGGTGCCCGTGACCGAGGGCTGCGACCCCTCCCGGGTGCGTGTCCACGGGCCAGGCATCCAAAGTGG
CACCACCAACAAGCCCAACAAGTTCACTGTGGAGACCAGGGGAGCTGGCACGGGCGGCCTGGGCCTGGCTGTAGA
GGGCCCCTCCGAGGCCAAGATGTCCTGCATGGATAACAAGGACGGCAGCTGCTCGGTCGAGTACATCCCTTATGA
GGCTGGCACCTACAGCCTCAACGTCACCTATGGTGGCCATCAAGTGCCAGGCAGTCCTTTCAAGGTCCCTGTGCA
TGATGTGACAGATGCGTCCAAGGTCAAGTGCTCTGGGCCCGGCCTGAGCCCAGGCATGGTTCGTGCCAACCTCCC
TCAGTCCTTCCAGGTGGACACAAGCAAGGCTGGTGTGGCCCCATTGCAGGTCAAAGTGCAAGGGCCCAAAGGCCT
GGTGGAGCCAGTGGACGTGGTAGACAACGCTGATGGCACCCAGACCGTCAATTATGTGCCCAGCCGAGAAGGGCC
CTACAGCATCTCAGTACTGTATGGAGATGAAGAGGTACCCCGGAGCCCCTTCAAGGTCAAGGTGCTGCCTACTCA
TGATGCCAGCAAGGTGAAGGCCAGTGGCCCCGGGCTCAACACCACTGGCGTGCCTGCCAGCCTGCCCGTGGAGTT
CACCATCGATGCAAAGGACGCCGGGGAGGGCCTGCTGGCTGTCCAGATCACGGATCCCGAAGGCAAGCCGAAGAA
GACACACATCCAAGACAACCATGACGGCACGTATACAGTGGCCTACGTGCCAGACGTGACAGGTCGCTACACCAT
CCTCATCAAGTACGGTGGTGACGAGATCCCCTTCTCCCCGTACCGCGTGCGTGCCGTGCCCACCGGGGACGCCAG
CAAGTGCACTGTCACAGGTGCTGGCATCGGCCCCACCATTCAGATTGGGGAGGAGACGGTGATCACTGTGGACAC
TAAGGCGGCAGGCAAAGGCAAAGTGACGTGCACCGTGTGCACGCCTGATGGCTCAGAGGTGGATGTGGACGTGGT
GGAGAATGAGGACGGCACTTTCGACATCTTCTACACGGCCCCCCAGCCGGGCAAATACGTCATCTGTGTGCGCTT
TGGTGGCGAGCACGTGCCCAACAGCCCCTTCCAAGTGACGGCTCTGGCTGGGGACCAGCCCTCGGTGCAGCCCCC
TCTACGGTCTCAGCAGCTGGCCCCACAGTACACCTACGCCCAGGGCGGCCAGCAGACTTGGGCCCCGGAGAGGCC
CCTGGTGGGTGTCAATGGGCTGGATGTGACCAGCCTGAGGCCCTTTGACCTTGTCATCCCCTTCACCATCAAGAA
GGGCGAGATCACAGGGGAGGTTCGGATGCCCTCAGGCAAGGTGGCGCAGCCCACCATCACTGACAACAAAGACGG
CACCGTGACCGTGCGGTATGCACCCAGCGAGGCTGGCCTGCACGAGATGGACATCCGCTATGACAACATGCACAT
CCCAGGAAGCCCCTTGCAGTTCTATGTGGATTACGTCAACTGTGGCCATGTCACTGCCTATGGGCCTGGCCTCAC
CCATGGAGTAGTGAACAAGCCTGCCACCTTCACCGTCAACACCAAGGATGCAGGAGAGGGGGGCCTGTCTCTGGC
CATTGAGGGCCCGTCCAAAGCAGAAATCAGCTGCACTGACAACCAGGATGGGACATGCAGCGTGTCCTACCTGCC
TGTGCTGCCGGGGGACTACAGCATTCTAGTCAAGTACAATGAACAGCACGTCCCAGGCAGCCCCTTCACTGCTCG
GGTCACAGGTGACGACTCCATGCGTATGTCCCACCTAAAGGTCGGCTCTGCTGCCGACATCCCCATCAACATCTC
AGAGACGGATCTCAGCCTGCTGACGGCCACTGTGGTCCCGCCCTCGGGCCGGGAGGAGCCCTGTTTGCTGAAGCG
GCTGCGTAATGGCCACGTGGGGATTTCATTCGTGCCCAAGGAGACGGGGGAGCACCTGGTGCATGTGAAGAAAAA
TGGCCAGCACGTGGCCAGCAGCCCCATCCCGGTGGTGATCAGCCAGTCGGAAATTGGGGATGCCAGTCGTGTTCG
GGTCTCTGGTCAGGGCCTTCACGAAGGCCACACCTTTGAGCCTGCAGAGTTTATCATTGATACCCGCGATGCAGG
CTATGGTGGGCTCAGCCTGTCCATTGAGGGCCCCAGCAAGGTGGACATCAACACAGAGGACCTGGAGGACGGGAC
GTGCAGGGTCACCTACTGCCCCACAGAGCCAGGCAACTACATCATCAACATCAAGTTTGCCGACCAGCACGTGCC
TGGCAGCCCCTTCTCTGTGAAGGTGACAGGCGAGGGCCGGGTGAAAGAGAGCATCACCCGCAGGCGTCGGGCTCC
TTCAGTGGCCAACGTTGGTAGTCATTGTGACCTCAGCCTGAAAATCCCTGAAATTAGCATCCAGGATATGACAGC
CCAGGTGACCAGCCCATCGGGCAAGACCCATGAGGCCGAGATCGTGGAAGGGGAGAACCACACCTACTGCATCCG
CTTTGTTCCCGCTGAGATGGGCACACACACAGTCAGCGTGAAGTACAAGGGCCAGCACGTGCCTGGGAGCCCCTT
CCAGTTCACCGTGGGGCCCCTAGGGGAAGGGGGAGCCCACAAGGTCCGAGCTGGGGGCCCTGGCCTGGAGAGAGC
TGAAGCTGGAGTGCCAGCCGAATTCAGTATCTGGACCCGGGAAGCTGGTGCTGGAGGCCTGGCCATTGCTGTCGA
GGGCCCCAGCAAGGCTGAGATCTCTTTTGAGGACCGCAAGGACGGCTCCTGTGGTGTGGCTTATGTGGTCCAGGA
GCCAGGTGACTACGAAGTCTCAGTCAAGTTCAACGAGGAACACATTCCCGACAGCCCCTTCGTGGTGCCTGTGGC
TTCTCCGTCTGGCGACGCCCGCCGCCTCACTGTTTCTAGCCTTCAGGAGTCAGGGCTAAAGGTCAACCAGCCAGC

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FIGURE 4306C

CTCTTTTGCAGTCAGCCTGAACGGGGCCAAGGGGGCGATCGATGCCAAGGTGCACAGCCCCTCAGGAGCCCTGGA
GGAGTGCTATGTCACAGAAATTGACCAAGATAAGTATGCTGTGCGCTTCATCCCTCGGGAGAATGGCGTTTACCT
GATTGACGTCAAGTTCAACGGCACCCACATCCCTGGAAGCCCCTTCAAGATCCGAGTTGGGGAGCCTGGGCATGG
AGGGGACCCAGGCTTGGTGTCTGCTTACGGAGCAGGTCTGGAAGGCGGTGTCACAGGGAACCCAGCTGAGTTCGT
CGTGAACACGAGCAATGCGGGAGCTGGTGCCCTGTCGGTGACCATTGACGGCCCCTCCAAGGTGAAGATGGATTG
CCAGGAGTGCCCTGAGGGCTACCGCGTCACCTATACCCCCATGGCACCTGGCAGCTACCTCATCTCCATCAAGTA
CGGCGGCCCCTACCACATTGGGGGCAGCCCCTTCAAGGCCAAAGTCACAGGCCCCCGTCTCGTCAGCAACCACAG
CCTCCACGAGACATCATCAGTGTTTGTAGACTCTCTGACCAAGGCCACCTGTGCCCCCCAGCATGGGGCCCCGGG
TCCTGGGCCTGCTGACGCCAGCAAGGTGGTGGCCAAGGGCCTGGGGCTGAGCAAGGCCTACGTAGGCCAGAAGAG
CAGCTTCACAGTAGACTGCAGCAAAGCAGGCAACAACATGCTGCTGGTGGGGGTTCATGGCCCAAGGACCCCCTG
CGAGGAGATCCTGGTGAAGCACGTGGGCAGCCGGCTCTACAGCGTGTCCTACCTGCTCAAGGACAAGGGGGAGTA
CACACTGGTGGTCAAATGGGGGGACGAGCACATCCCAGGCAGCCCCTACCGCGTTGTGGTGCCC**TGA**GTCTGGGG
CCCGTGCCAGCCGGCAGCCCCCAAGCCTGCCCCGCTACCCAAGCAGCCCCGCCCTCTTCCCCTCAACCCCGGCCC
AGGCCGCCCTGGCCGCCCGCCTGTCACTGCAGCCGCCCCTGCCCTGTGCCGTGCTGCGCTCACCTGCCTCCCCAG
CCAGCCGCTGACCTCTCGGCTTTCACTTGGGCAGAGGGAGCCATTTGGTGGCGCTGCTTGTCTTCTTTGGTTCTG
GGAGGGGTGAGGGATGGGGGTCCTGTACACAACCACCCACTAGTTCTCTTCTCCAGCCAAGAGGAATAAAGTTTT
GCTTCCATTC

FIGURE 4307A

CCGGAAAATGGCCGCCGCCGCCGCCGCCGCGCCGAGCGGAGGAGGAGGAGGAGGCGAGGAGGAGAGACTGCTCCA
TAAAAATACAGACTCACCAGTTCCTGCTTTGATGTGACATGTGACTCCCCAGAATACACCTTGCTTCTGTAGACC
AGCTCCAACAGGATTCC**ATG**GTAGCTGGGATGTTAGGGCTCAGGGAAGAAAAGTCAGAAGACCAGGACCTCCAGG
GCCTCAAGGACAAACCCCTCAAGTTTAAAAAGGTGAAGAAAGATAAGAAAGAAGAGAAAGAGGGCAAGCATGAGC
CCGTGCAGCCATCAGCCCACCACTCTGCTGAGCCCGCAGAGGCAGGCAAAGCAGAGACATCAGAAGGGTCAGGCT
CCGCCCCGGCTGTGCCGGAAGCTTCTGCCTCCCCCAAACAGCGGCGCTCCATCATCCGTGACCGGGGACCCATGT
ATGATGACCCCACCCTGCCTGAAGGCTGGACACGGAAGCTTAAGCAAAGGAAATCTGGCCGCTCTGCTGGGAAGT
ATGATGTGTATTTGATCAATCCCCAGGGAAAAGCCTTTCGCTCTAAAGTGGAGTTGATTGCGTACTTCGAAAAGG
TAGGCGACACATCCCTGGACCCTAATGATTTTGACTTCACGGTAACTGGGAGAGGGAGCCCCTCCCGGCGAGAGC
AGAAACCACCTAAGAAGCCCAAATCTCCCAAAGCTCCAGGAACTGGCAGAGGCCGGGGACGCCCCAAAGGGAGCG
GCACCACGAGACCCAAGGCGGCCACGTCAGAGGGTGTGCAGGTGAAAAGGGTCCTGGAGAAAAGTCCTGGGAAGC
TCCTTGTCAAGATGCCTTTTCAAACTTCGCCAGGGGGCAAGGCTGAGGGGGGTGGGGCCACCACATCCACCCAGG
TCATGGTGATCAAACGCCCCGGCAGGAAGCGAAAAGCTGAGGCCGACCCTCAGGCCATTCCCAAGAAACGGGGCC
GAAAGCCGGGGAGTGTGGTGGCAGCCGCTGCCGCCGAGGCCAAAAAGAAAGCCGTGAAGGAGTCTTCTATCCGAT
CTGTGCAGGAGACCGTACTCCCCATCAAGAAGCGCAAGACCCGGGAGACGGTCAGCATCGAGGTCAAGGAAGTGG
TGAAGCCCCTGCTGGTGTCCACCCTCGGTGAGAAGAGCGGGAAAGGACTGAAGACCTGTAAGAGCCCTGGGCGGA
AAAGCAAGGAGAGCAGCCCCAAGGGGCGCAGCAGCAGCGCCTCCTCACCCCCCAAGAAGGAGCACCACCACCATC
ACCACCACTCAGAGTCCCCAAAGGCCCCCGTGCCACTGCTCCCACCCCTGCCCCCACCTCCACCTGAGCCCGAGA
GCTCCGAGGACCCCACCAGCCCCCCTGAGCCCCAGGACTTGAGCAGCAGCGTCTGCAAAGAGGAGAAGATGCCCA
GAGGAGGCTCACTGGAGAGCGACGGCTGCCCCAAGGAGCCAGCTAAGACTCAGCCCGCGGTTGCCACCGCCGCCA
CGGCCGCAGAAAAGTACAAACACCGAGGGGAGGGAGAGCGCAAAGACATTGTTTCATCCTCCATGCCAAGGCCAA
ACAGAGAGGAGCCTGTGGACAGCCGGACGCCCGTGACCGAGAGAGTTAGC**TGA**CTTTACACGGAGCGGATTGCAA
AGCAAACCAACAAGAATAAAGGCAGCTGTTGTCTCTTCTCCTTATGGGTAGGGCTCTGACAAAGCTTCCCGATTA
ACTGAAATAAAAAATATTTTTTTTTCTTTCAGTAAACTTAGAGTTTCGTGGCTTCAGGGTGGGAGTAGTTGGAGC
ATTGGGGATGTTTTTCTTACCGACAAGCACAGTCAGGTTGAAGACCTAACCAGGGCCAGAAGTAGCTTTGCACTT
TTCTAAACTAGGCTCCTTCAACAAGGCTTGCTGCAGATACTACTGACCAGACAAGCTGTTGACCAGGCACCTCCC
CTCCCGCCCAAACCTTTCCCCCATGTGGTCGTTAGAGACAGAGCGACAGAGCAGTTGAGAGGACACTCCCGTTTT
CGGTGCCATCAGTGCCCCGTCTACAGCTCCCCCAGCTCCCCCCACCTCCCCCACTCCCAACCACGTTGGGACAGG
GAGGTGTGAGGCAGGAGAGACAGTTGGATTCTTTAGAGAAGATGGATATGACCAGTGGCTATGGCCTGTGCGATC
CCACCCGTGGTGGCTCAAGTCTGGCCCCACACCAGCCCCAATCCAAAACTGGCAAGGACGCTTCACAGGACAGGA
AAGTGGCACCTGTCTGCTCCAGCTCTGGCATGGCTAGGAGGGGGGAGTCCCTTGAACTACTGGGTGTAGACTGGC
CTGAACCACAGGAGAGGATGGCCCAGGGTGAGGTGGCATGGTCCATTCTCAAGGGACGTCCTCCAACGGGTGGCG
CTAGAGGCCATGGAGGCAGTAGGACAAGGTGCAGGCAGGCTGGCCTGGGGTCAGGCCGGGCAGAGCACAGCGGGG
TGAGAGGGATTCCTAATCACTCAGAGCAGTCTGTGACTTAGTGGACAGGGGAGGGGGCAAAGGGGGAGGAGAAGA
AAATGTTCTTCCAGTTACTTTCCAATTCTCCTTTAGGGACAGCTTAGAATTATTTGCACTATTGAGTCTTCATGT
TCCCACTTCAAAACAAACAGATGCTCTGAGAGCAAACTGGCTTGAATTGGTGACATTTAGTCCCTCAAGCCACCA
GATGTGACAGTGTTGAGAACTACCTGGATTTGTATATATACCTGCGCTTGTTTTAAAGTGGGCTCAGCACATAGG
GTTCCCACGAAGCTCCGAAACTCTAAGTGTTTGCTGCAATTTTATAAGGACTTCCTGATTGGTTTCTCTTCTCCC
CTTCCATTTCTGCCTTTTGTTCATTTCATCCTTTCACTTCTTTCCCTTCCTCCGTCCTCCTCCTTCCTAGTTCAT
CCCTTCTCTTCCAGGCAGCCGCGGTGCCCAACCACACTTGTCGGCTCCAGTCCCCAGAACTCTGCCTGCCCTTTG
TCCTCCTGCTGCCAGTACCAGCCCCACCCTGTTTTGAGCCCTGAGGAGGCCTTGGGCTCTGCTGAGTCCGACCTG
GCCTGTCTGTGAAGAGCAAGAGAGCAGCAAGGTCTTGCTCTCCTAGGTAGCCCCCTCTTCCCTGGTAAGAAAAAG
CAAAAGGCATTTCCCACCCTGAACAACGAGCCTTTTCACCCTTCTACTCTAGAGAAGTGGACTGGAGGAGCTGGG
CCCGATTTGGTAGTTGAGGAAAGCACAGAGGCCTCCTGTGGCCTGCCAGTCATCGAGTGGCCCAACAGGGGCTCC
ATGCCAGCCGACCTTGACCTCACTCAGAAGTCCAGAGTCTAGCGTAGTGCAGCAGGGCAGTAGCGGTACCAATGC
AGAACTCCCAAGACCCGAGCTGGGACCAGTACCTGGGTCCCCAGCCCTTCCTCTGCTCCCCCTTTTCCCTCGGAG
TTCTTCTTGAATGGCAATGTTTTGCTTTTGCTCGATGCAGACAGGGGGCCAGAACACCACACATTTCACTGTCTG
TCTGGTCCATAGCTGTGGTGTAGGGGCTTAGAGGCATGGGCTTGCTGTGGGTTTTTAATTGATCAGTTTTCATGT

FIGURE 4307B

GGGATCCCATCTTTTTAACCTCTGTTCAGGAAGTCCTTATCTAGCTGCATATCTTCATCATATTGGTATATCCTT
TTCTGTGTTTACAGAGATGTCTCTTATATCTAAATCTGTCCAACTGAGAAGTACCTTATCAAAGTAGCAAATGAG
ACAGCAGTCTTATGCTTCCAGAAACACCCACAGGCATGTCCCATGTGAGCTGCTGCCATGAACTGTCAAGTGTGT
GTTGTCTTGTGTATTTCAGTTATTGTCCCTGGCTTCCTTACTATGGTGTAATCATGAAGGAGTGAAACATCATAG
AAACTGTCTAGCACTTCCTTGCCAGTCTTTAGTGATCAGGAACCATAGTTGACAGTTCCAATCAGTAGCTTAAGA
AAAAACCGTGTTTGTCTCTTCTGGAATGGTTAGAAGTGAGGGAGTTTGCCCCGTTCTGTTTGTAGAGTCTCATAG
TTGGACTTTCTAGCATATATGTGTCCATTTCCTTATGCTGTAAAAGCAAGTCCTGCAACCAAACTCCCATCAGCC
CAATCCCTGATCCCTGATCCCTTCCACCTGCTCTGCTGATGACCCCCCCAGCTTCACTTCTGACTCTTCCCCAGG
AAGGGAAGGGGGGTCAGAAGAGAGGGTGAGTCCTCCAGAACTCTTCCTCCAAGGACAGAAGGCTCCTGCCCCCAT
AGTGGCCTCGAACTCCTGGCACTACCAAAGGACACTTATCCACGAGAGCGCAGCATCCGACCAGGTTGTCACTGA
GAAGATGTTTATTTTGGTCAGTTGGGTTTTTATGTATTATACTTAGTCAAATGTAATGTGGCTTCTGGAATCATT
GTCCAGAGCTGCTTCCCCGTCACCTGGGCGTCATCTGGTCCTGGTAAGAGGAGTGCGTGGCCCACCAGGCCCCCC
TGTCACCCATGACAGTTCATTCAGGGCCGATGGGGCAGTCGTGGTTGGGAACACAGCATTTCAAGCGTCACTTTA
TTTCATTCGGGCCCCACCTGCAGCTCCCTCAAAGAGGCAGTTGCCCAGCCTCTTTCCCTTCCAGTTTATTCCAGA
GCTGCCAGTGGGGCCTGAGGCTCCTTAGGGTTTTCTCTCTATTTCCCCCTTTCTTCCTCATTCCCTCGTCTTTCC
CAAAGGCATCACGAGTCAGTCGCCTTTCAGCAGGCAGCCTTGGCGGTTTATCGCCCTGGCAGGCAGGGGCCCTGC
AGCTCTCATGCTGCCCCTGCCTTGGGGTCAGGTTGACAGGAGGTTGGAGGGAAAGCCTTAAGCTGCAGGATTCTC
ACCAGCTGTGTCCGGCCCAGTTTTGGGGTGTGACCTCAATTTCAATTTTGTCTGTACTTGAACATTATGAAGATG
GGGGCCTCTTTCAGTGAATTTGTGAACAGCAGAATTGACCGACAGCTTTCCAGTACCCATGGGGCTAGGTCATTA
AGGCCACATCCACAGTCTCCCCCACCCTTGTTCCAGTTGTTAGTTACTACCTCCTCTCCTGACAATACTGTATGT
CGTCGAGCTCCCCCCAGGTCTACCCCTCCCGGCCCTGCCTGCTGGTGGGCTTGTCATAGCCAGTGGGATTGCCGG
TCTTGACAGCTCAGTGAGCTGGAGATACTTGGTCACAGCCAGGCGCTAGCACAGCTCCCTTCTGTTGATGCTGTA
TTCCCATATCAAAAGACACAGGGGACACCCAGAAACGCCACATCCCCCAATCCATCAGTGCCAAACTAGCCAACG
GCCCCAGCTTCTCAGCTCGCTGGATGGCGGAAGCTGCTACTCGTGAGCGCCAGTGCGGGTGCAGACAATCTTCTG
TTGGGTGGCATCATTCCAGGCCCGAAGCATGAACAGTGCACCTGGGACAGGGAGCAGCCCCAAATTGTCACCTGC
TTCTCTGCCCAGCTTTTCATTGCTGTGACAGTGATGGCGAAAGAGGGTAATAACCAGACACAAACTGCCAAGTTG
GGTGGAGAAAGGAGTTTCTTTAGCTGACAGAATCTCTGAATTTTAAATCACTTAGTAAGCGGCTCAAGCCCAGGA
GGGAGCAGAGGGATACGAGCGGAGTCCCCTGCGCGGGACCATCTGGAATTGGTTTAGCCCAAGTGGAGCCTGACA
GCCAGAACTCTGTGTCCCCCGTCTAACCACAGCTCCTTTTCCAGAGCATTCCAGTCAGGCTCTCTGGGCTGACTG
GGCCAGGGGAGGTTACAGGTACCAGTTCTTTAAGAAGATCTTTGGGCATATACATTTTTAGCCTGTGTCATTGCC
CCAAATGGATTCCTGTTTCAAGTTCACACCTGCAGATTCTAGGACCTGTGTCCTAGACTTCAGGGAGTCAGCTGT
TTCTAGAGTTCCTACCATGGAGTGGGTCTGGAGGACCTGCCCGGTGGGGGGGCAGAGCCCTGCTCCCTCCGGGTC
TTCCTACTCTTCTCTCTGCTCTGACGGGATTTGTTGATTCTCTCCATTTTGGTGTCTTTCTCTTTTAGATATTGT
ATCAATCTTTAGAAAAGGCATAGTCTACTTGTTATAAATCGTTAGGATACTGCCTCCCCCAGGGTCTAAAATTAC
ATATTAGAGGGGAAAAGCTGAACACTGAAGTCAGTTCTCAACAATTTAGAAGGAAAACCTAGAAAACATTTGGCA
GAAAATTACATTTCGATGTTTTTGAATGAATACGAGCAAGCTTTTACAACAGTGCTGATCTAAAAATACTTAGCA
CTTGGCCTGAGATGCCTGGTGAGCATTACAGGCAAGGGGAATCTGGAGGTAGCCGACCTGAGGACATGGCTTCTG
AACCTGTCTTTTGGGAGTGGTATGGAAGGTGGAGCGTTCACCAGTGACCTGGAAGGCCCAGCACCACCCTCCTTC
CCACTCTTCTCATCTTGACAGAGCCTGCCCCAGCGCTGACGTGTCAGGAAAACACCCAGGGAACTAGGAAGGCAC
TTCTGCCTGAGGGGCAGCCTGCCTTGCCCACTCCTGCTCTGCTCGCCTCGGATCAGCTGAGCCTTCTGAGCTGGC
CTCTCACTGCCTCCCCAAGGCCCCCTGCCTGCCCTGTCAGGAGGCAGAAGGAAGCAGGTGTGAGGGCAGTGCAAG
GAGGGAGCACAACCCCCAGCTCCCGCTCCGGGCTCCGACTTGTGCACAGGCAGAGCCCAGACCCTGGAGGAAATC
CTACCTTTGAATTCAAGAACATTTGGGGAATTTGGAAATCTCTTTGCCCCCAAACCCCCATTCTGTCCTACCTTT
AATCAGGTCCTGCTCAGCAGTGAGAGCAGATGAGGTGAAAAGGCCAAGAGGTTTGGCTCCTGCCCACTGATAGCC
CCTCTCCCCGCAGTGTTTGTGTGTCAAGTGGCAAAGCTGTTCTTCCTGGTGACCCTGATTATATCCAGTAACACA
TAGACTGTGCGCATAGGCCTGCTTTGTCTCCTCTATCCTGGGCTTTTGTTTTGCTTTTTAGTTTTGCTTTTAGTT
TTTCTGTCCCTTTTATTTAACGCACCGACTAGACACACAAAGCAGTTGAATTTTTATATATATATCTGTATATTG
CACAATTATAAACTCATTTTGCTTGTGGCTCCACACACACAAAAAAAGACCTGTTAAAATTATACCTGTTGCTTA

FIGURE 4307C

ATTACAATATTTCTGATAACCATAGCATAGGACAAGGGAAAATAAAAAAAGAAAAAAAAAGAAAAAAAAACGACAA
ATCTGTCTGCTGGTCACTTCTTCTGTCCAAGCAGATTCGTGGTCTTTTCCTCGCTTCTTTCAAGGGCTTTCCTGT
GCCAGGTGAAGGAGGCTCCAGGCAGCACCCAGGTTTTGCACTCTTGTTTCTCCCGTGCTTGTGAAAGAGGTCCCA
AGGTTCTGGGTGCAGGAGCGCTCCCTTGACCTGCTGAAGTCCGGAACGTAGTCGGCACAGCCTGGTCGCCTTCCA
CCTCTGGGAGCTGGAGTCCACTGGGGTGGCCTGACTCCCCCAGTCCCCTTCCCGTGACCTGGTCAGGGTGAGCCC
ATGTGGAGTCAGCCTCGCAGGCCTCCCTGCCAGTAGGGTCCGAGTGTGTTTCATCCTTCCCACTCTGTCGAGCCT
GGGGGCTGGAGCGGAGACGGGAGGCCTGGCCTGTCTCGGAACCTGTGAGCTGCACCAGGTAGAACGCCAGGGACC
CCAGAATCATGTGCGTCAGTCCAAGGGGTCCCCTCCAGGAGTAGTGAAGACTCCAGAAATGTCCCTTTCTTCTCC
CCCATCCTACGAGTAATTGCATTTGCTTTTGTAATTCTTAATGAGCAATATCTGCTAGAGAGTTTAGCTGTAACA
GTTCTTTTTGATCATCTTTTTTTAATAATTAGAAACACCAAAAAAATCCAGAAACTTGTTCTTCCAAAGCAGAGA
GCATTATAATCACCAGGGCCAAAAGCTTCCCTCCCTGCTGTCATTGCTTCTTCTGAGGCCTGAATCCAAAAGAAA
AACAGCCATAGGCCCTTTCAGTGGCCGGGCTACCCGTGAGCCCTTCGGAGGACCAGGGCTGGGGCAGCCTCTGGG
CCCACATCCGGGGCCAGCTCCGGCGTGTGTTCAGTGTTAGCAGTGGGTCATGATGCTCTTTCCCACCCAGCCTGG
GATAGGGGCAGAGGAGGCGAGGAGGCCGTTGCCGCTGATGTTTGGCCGTGAACAGGTGGGTGTCTGCGTGCGTCC
ACGTGCGTGTTTTCTGACTGACATGAAATCGACGCCCGAGTTAGCCTCACCCGGTGACCTCTAGCCCTGCCCGGA
TGGAGCGGGGCCCACCCGGTTCAGTGTTTCTGGGGAGCTGGACAGTGGAGTGCAAAAGGCTTGCAGAACTTGAAG
CCTGCTCCTTCCCTTGCTACCACGGCCTCCTTTCCGTTTGATTTGTCACTGCTTCAATCAATAACAGCCGCTCCA
GAGTCAGTAGTCAATGAATATATGACCAAATATCACCAGGACTGTTACTCAATGTGTGCCGAGCCCTTGCCCATG
CTGGGCTCCCGTGTATCTGGACACTGTAACGTGTGCTGTGTTTGCTCCCCTTCCCCTTCCTTCTTTGCCCTTTAC
TTGTCTTTCTGGGGTTTTTCTGTTTGGGTTTGGTTTGGTTTTTATTTCTCCTTTTGTGTTCCAAACATGAGGTTC
TCTCTACTGGTCCTCTTAACTGTGGTGTTGAGGCTTATATTTGTGTAATTTTTGGTGGGTGAAAGGAATTTTGCT
AAGTAAATCTCTTCTGTGTTTGAACTGAAGTCTGTATTGTAACTATGTTTAAAGTAATTGTTCCAGAGACAAATA
TTTCTAGACACTTTTTCTTTACAAACAAAAGCATTCGGAGGGAGGGGGATGGTGACTGAGATGAGAGGGGAGAGC
TGAACAGATGACCCCTGCCCAGATCAGCCAGAAGCCACCCAAAGCAGTGGAGCCCAGGAGTCCCACTCCAAGCCA
GCAAGCCGAATAGCTGATGTGTTGCCACTTTCCAAGTCACTGCAAAACCAGGTTTTGTTCCGCCCAGTGGATTCT
TGTTTTGCTTCCCCTCCCCCCGAGATTATTACCACCATCCCGTGCTTTTAAGGAAAGGCAAGATTGATGTTTCCT
TGAGGGGAGCCAGGAGGGGATGTGTGTGTGCAGAGCTGAAGAGCTGGGGAGAATGGGGCTGGGCCCACCCAAGCA
GGAGGCTGGGACGCTCTGCTGTGGGCACAGGTCAGGCTAATGTTGGCAGATGCAGCTCTTCCTGGACAGGCCAGG
TGGTGGGCATTCTCTCTCCAAGGTGTGCCCCGTGGGCATTACTGTTTAAGACACTTCCGTCACATCCCACCCCAT
CCTCCAGGGCTCAACACTGTGACATCTCTATTCCCCACCCTCCCCTTCCCAGGGCAATAAAATGACCATGGAGGG
GGCTTGCACTCTCTTGGCTGTCACCCGATCGCCAGCAAAACTTAGATGTGAGAAAACCCCTTCCCATTCCATGGC
GAAAACATCTCCTTAGAAAAGCCATTACCCTCATTAGGCATGGTTTTGGGCTCCCAAAACACCTGACAGCCCCTC
CCTCCTCTGAGAGGCGGAGAGTGCTGACTGTAGTGACCATTGCATGCCGGGTGCAGCATCTGGAAGAGCTAGGCA
GGGTGTCTGCCCCCTCCTGAGTTGAAGTCATGCTCCCCTGTGCCAGCCCAGAGGCCGAGAGCTATGGACAGCATT
GCCAGTAACACAGGCCACCCTGTGCAGAAGGGAGCTGGCTCCAGCCTGGAAACCTGTCTGAGGTTGGGAGAGGTG
CACTTGGGGCACAGGGAGAGGCCGGGACACACTTAGCTGGAGATGTCTCTAAAAGCCCTGTATCGTATTCACCTT
CAGTTTTTGTGTTTTGGGACAATTACTTTAGAAAATAAGTAGGTCGTTTTAAAAACAAAAATTATTGATTGCTTT
TTTGTAGTGTTCAGAAAAAAGGTTCTTTGTGTATAGCCAAATGACTGAAAGCACTGATATATTTAAAAACAAAAG
GCAATTTATTAAGGAAATTTGTACCATTTCAGTAAACCTGTCTGAATGTACCTGTATACGTTTCAAAAACACCCC
CCCCCCACTGAATCCCTGTAACCTATTTATTATATAAAGAGTTTGCCTTATAAATTT

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FIGURE 4308

CGCGGACCCGGCCGGCCCAGGCCCGCGCCCGCCGCGGCCCTGAGAGGCCCCGGCAGGTCCCGGCCCGGCGGCGGC
AGCCATGGCCGGGGGGCCGGGCCCGGGGGAGCCCGCAGCCCCCGGCGCCCAGCACTTCTTGTACGAGGTGCCGCC
CTGGGTCATGTGCCGCTTCTACAAAGTGATGGACGCCCTGGAGCCCGCCGACTGGTGCCAGTTCGCCGCCCTGAT
CGTGCGCGACCAGACCGAGCTGCGGCTGTGCGAGCGCTCCGGGCAGCGCACGGCCAGCGTCCTGTGGCCCTGGAT
CAACCGCAACGCCCGTGTGGCCGACCTCGTGCACATCCTCACGCACCTGCAGCTGCTCCGTGCGCGGGACATCAT
CACAGCCTGGCACCCTCCCGCCCCGCTTCCGTCCCCAGGCACCACTGCCCCGAGGCCCAGCAGCATCCCTGCACC
CGCCGAGGCCGAGGCCTGGAGCCCCCGGAAGTTGCCATCCTCAGCCTCCACCTTCCTCTCCCCAGCTTTTCCAGG
CTCCCAGACCCATTCAGGGCCTGAGCTCGGCCTGGTCCCAAGCCCTGCTTCCCTGTGGCCTCCACCGCCATCTCC
AGCCCCTTCTTCTACCAAGCCAGGCCCAGAGAGCTCAGTGTCCCTCCTGCAGGGAGCCCGCCCCTTTCCGTTTTG
CTGGCCCCTCTGTGAGATTTCCCGGGGCACCCACAACTTCTCGGAGGAGCTCAAGATCGGGGAGGGTGGCTTTGG
GTGCGTGTACCGGGCGGTGATGAGGAACACGGTGTATGCTGTGAAGAGGCTGAAGGAGAACGCTGACCTGGAGTG
GACTGCAGTGAAGCAGAGCTTCCTGACCGAGGTGGAGCAGCTGTCCAGGTTTCGTCACCCAAACATTGTGGACTT
TGCTGGCTACTGTGCTCAGAACGGCTTCTACTGCCTGGTGTACGGCTTCCTGCCCAACGGCTCCCTGGAGGACCG
TCTCCACTGCCAGACCCAGGCCTGCCCACCTCTCTCCTGGCCTCAGCGACTGGACATCCTTCTGGGTACAGCCCG
GGCAATTCAGTTTCTACATCAGGACAGCCCCAGCCTCATCCATGGAGACATCAAGAGTTCCAACGTCCTTCTGGA
TGAGAGGCTGACACCCAAGCTGGGAGACTTTGGCCTGGCCCGGTTCAGCCGCTTTGCCGGGTCCAGCCCCAGCCA
GAGCAGCATGGTGGCCCGGACACAGACAGTGCGGGGCACCCTGGCCTACCTGCCCGAGGAGTACATCAAGACGGG
AAGGCTGGCTGTGGACACGGACACCTTCAGCTTTGGGGTGGTAGTGCTAGAGACCTTGGCTGGTCAGAGGGCTGT
GAAGACGCACGGTGCCAGGACCAAGTATCTGAAAGACCTGGTGGAAGAGGAGGCTGAGGAGGCTGGAGTGGCTTT
GAGAAGCACCCAGAGCACACTGCAAGCAGGTCTGGCTGCAGATGCCTGGGCTGCTCCCATCGCCATGCAGATCTA
CAAGAAGCACCTGGACCCCAGGCCCGGGCCCTGCCCACCTGAGCTGGGCCTGGGCCTGGGCCAGCTGGCCTGCTG
CTGCCTGCACCGCCGGGCCAAAAGGAGGCCTCCTATGACCCAGGTGTACGAGAGGCTAGAGAAGCTGCAGGCAGT
GGTGGCGGGGGTGCCCGGGCATTCGGAGGCCGCCAGCTGCATCCCCCCTTCCCCGCAGGAGAACTCCTACGTGTC
CAGCACTGGCAGAGCCCACAGTGGGGCTGCTCCATGGCAGCCCCTGGCAGCGCCATCAGGAGCCAGTGCCCAGGC
AGCAGAGCAGCTGCAGAGAGGCCCCAACCAGCCCGTGGAGAGTGACGAGAGCCTAGGCGGCCTCTCTGCTGCCCT
GCGCTCCTGGCACTTGACTCCAAGCTGCCCTCTGGACCCAGCACCCCTCAGGGAGGCCGGCTGTCCTCAGGGGGA
CACGGCAGGAGAATCGAGCTGGGGGAGTGGCCCAGGATCCCGGCCCACAGCCGTGGAAGGACTGGCCCTTGGCAG
CTCTGCATCATCGTCGTCAGAGCCACCGCAGATTATCATCAACCCTGCCCGACAGAAGATGGTCCAGAAGCTGGC
CCTGTACGAGGATGGGGCCCTGGACAGCCTGCAGCTGCTGTCGTCCAGCTCCCTCCCAGGCTTGGGCCTGGAACA
GGACAGGCAGGGGCCCGAAGAAAGTGATGAATTTCAGAGCTGATGTGTTCACCTGGGCAGATCCCCCAAATCCGG
AAGTCAAAGTTCTCATGGTCAGAAGTTCTCATGGTGCACGAGTCCTCAGCACTCTGCCGGCAGTGGGGGTGGGGG
CCCATGCCCGCGGGGGAGAGAAGGAGGTGGCCCTGCTGTTCTAGGCTCTGTGGGCATAGGCAGGCAGAGTGGAAC
CCTGCCTCCATGCCAGCATCTGGGGGCAAGGAAGGCTGGCATCATCCAGTGAGGAGGCTGGCGCATGTTGGGAGG
CTGCTGGCTGCACAGACCCGTGAGGGGAGGAGAGGGGCTGCTGTGCAGGGGTGTGGAGTAGGGAGCTGGCTCCCC
TGAGAGCCATGCAGGGCGTCTGCAGCCCAGGCCTCTGGCAGCAGCTCTTTGCCCATCTCTTTGGACAGTGGCCAC
CCTGCACAATGGGGCCGACGAGGCCTAGGGCCCTCCTACCTGCTTACAATTTGGAAAAGTGTGGCCGGGTGCGGT
GGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCGCTGGAGCCCAGTAGGTCAAGACCAG
CCAGGGCAACATGATGAGACCCTGTCTCTGCCAAAAAATTTTTTAAACTATTAGCCTGGCGTGGTAGCGCACGCC
TGTGGTCCCAGCTGCTGGGGAGGCTGAAGTAGGAGGATCATTTATGCTTGGGAGGTCGAGGCTGCAGTGAGTCAT
GATTGTATGACTGCACTCCAGCCTGGGTGACAGAGCAAGACCCTGTTTCAAAAAGAAAAACCCTGGGAAAAGTGA
AGTATGGCTGTAAGTCTCATGGTTCAGTCCTAGCAAGAAGCGAGAATTCTGAGATCCTCCAGAAAGTCGAGCAGC
ACCCACCTCCAACCTCGGGCCAGTGTCTTCAGGCTTTACTGGGGACCTGCGAGCTGGCCTAATGTGGTGGCCTGC
AAGCCAGGCCATCCCTGGGCGCCACAGACGAGCTCCGAGCCAGGTCAGGCTTCGGAGGCCACAAGCTCAGCCTCA
GGCCCAGGCACTGATTGTGGCAGAGGGGCCACTACCCAAGGTCTAGCTAGGCCCAAGACCTAGTTACCCAGACAG
TGAGAAGCCCCTGGAAGGCAGAAAAGTTGGGAGCATGGCAGACAGGGAAGGGAAACATTTTCAGGGAAAAGACAT
GTATCACATGTCTTCAGAAGCAAGTCAGGTTTCATGTAACCGAGTGTCCTCTTGCGTGTCCAAAAGTAGCCCAGG
GCTGTAGCACAGGCTTCACAGTGATTTTGTGTTCAGCCGTGAGTCACACTACATGCCCCCGTGAAGCTGGGCATT
GGTGACGTCCAGGTTGTCCTTGAGTAATAAAAACGTATGTT

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FIGURE 4309

GAATTTCCCCCAGCGAGGCGAGTGAGGCGAAATACCCGTATGGTGATAGCTGGCCTTTTCGCGCCAATACTGAAA
AAGGCAGAACGTTCCTCCGCTGGCGCCAGCCAATCAGCAGGACTCCTGCCTTCCTTCGGGGCAAGGTCGCAGCAT
CTGCCTCGGAAATCACGAAATCACGGGGCTTCTTTCTGCTGGCTCAGCCGGGAGGCCCAGAGTGTTCTGCAGAGG
CTGCGTATTGAAGGCTGCTCTCTGAAGCTCCCTGCCCCAGGTCACGCCGCCGGTTCCAG**ATG**AATCCAGAGTGGG
GGCAGGCCTTCGTGCACGTGGCCGTGGCCGGTGGCCTCTGTGCCGTGGCTGTGTTCACGGGCATTTTCGACAGTG
TTTCCGTGCAAGTGGGCTATGAGCACTACGCCGAGGCGCCCGTGGCCGGCCTCCCTGCCTTCCTGGCCATGCCGT
TCAACTCACTCGTGAACATGGCCTACACGCTGCTGGGGCTGTCGTGGCTGCACAGGGGCGGCGCGATGGGGCTGG
GTCCCCGCTACCTGAAGGACGTGTTCGCAGCCATGGCCCTGCTCTATGGCCCCGTGCAGTGGCTGCGCCTGTGGA
CGCAGTGGCGCCGTGCCGCGGTGCTGGACCAGTGGCTCACACTGCCCATCTTTGCATGGCCCGTGGCCTGGTGCC
TCTACCTAGACCGCGGCTGGCGGCCCTGGCTGTTCCTCTCTCTTGAGTGCGTCTCCCTGGCCAGTTATGGCCTCG
CTCTGCTGCATCCCCAGGGCTTCGAGGTCGCACTGGGTGCTCACGTGGTGGCCGCTGTGGGGCAGGCGCTGCGCA
CCCACAGGCACTATGGCAGCACCACCTCGGCTACCTACTTAGCTTTGGGGGTGCTCTCTTGCCTGGGCTTTGTGG
TCCTCAAGCTGTGTGACCATCAGCTCGCACGGTGGCGTCTCTTCCAGTGCCTCACAGGCCACTTCTGGTCCAAGG
TCTGTGACGTGCTCCAGTTCCACTTTGCGTTTTTGTTTCTGACGCATTTCAACACTCACCCAAGATTCCATCCCT
CTGGCGGGAAGACGCGT**TGA**ACCCAGGGAAGAACCTGCTGAAAACCGATGACCCCCAGCATTGAAATGGACTCTG
AGATGGCAGCGTGGTGCCAGTGTCAGACATCCTGTGTGTGATGATATGCACTGATCACACAAGACTGCCCTTTCC
TGAGAAGCTGCGGGCTTCGGTGTGGAGGGGTGGAGTGCTGTGATCTCGACAACTTACTTTCAAAGACATAAAGCA
CAGATCTCCGCACAGGGGATGTGTGTGTTCCTGATGTAATTTGCATAACTTTTCTGTAGTTTGAAATGTTTCCAA
ATAAATATTGGCAAGGGGAGTGGAAATGACACCAAGAAGCCCCTCATGCTCATGGTTGGAC

FIGURE 4310A

AGGGAGGAGGCATGAGCGCCCTGCCGTTACCGCTTCTTCTGCCGTACAGTTGCCGCTTCGGGGCCTAACTCTAGC
TCTTTGAAGCGGCTCCTGTGGGAAGGAGTCATAAGGCGGGAAGTGAGGATCGGACACCGCCTTGAGTTTGGTGTG
CAGTGGAAGAACTGACCTAGGAGGAAGAGAATAGGGGGGAACGGGGAGCTAGTCTCAAGATGGCGGCTCCCACGG
CGGCAGGCGCAGCCTGAGCAGCAGAGGCGGACTAAGGGGAGAGGCGCGAGACTTCACAAGCCGTACGGCGCGAGC
CCCCAAACGGCCCTCGAGAGCTCGAGCTGGTTCCACCGGCCTCCGGCCCGCCTCCATTCGTTAGGTGTGTCGAGG
CTGTTTCGGGAGCGGCGGCTGCACTAAGGCGCTGGGCGGGGAAGCGGGACGGTCTCAAGATGGCGGCTCCCACAA
TTGTGGTCTGAGCGCCGGCGGGGCTGCGACGACCGCGGCGCTTGTGGCTCCTTTCCACCCGCCCCGGAAGCCGGC
CAGTGCTGGGGACTTGGGGGTGTGGGAACCGGGCCGGGGCTCCGCCATTTCCGGCGGGGGAGGGCTACGACTGAG
GAAGGGAGGAGAGAGAGGCGGCTCAAGATGGCGGCTCCCAGGGCCTCCCGCCCGAGCTTGTAAGCGGGAGCGCCC
GGACAAGTAGTCGGGGCGACGGGACTCAGCGGCCTCCAGCTTCTTGAGCCTAGGCGCTCGACAGTTTCGGGCGGC
TCTTGCGGAGACGGGGTGAGCGAGAAGAAAGGGAAGAGCCAAAGGGAAGGAGGGCAGTTAAGATGGCGGCCTCCA
TGGAGTCGTCTACCGCTGTGTGAGAAACCGCTTCTCCGTGAGAGCTGCCTTAGACGAAAGGGGGTGTGTGAAAGG
AATTGAGGGGCTCCCTTCCCGCTTGTTGACTTCTCCCCACCGCACCCTTTCCCGGAACT**ATG**GCTTCGGCCGTGT
CGCCCGCCAACTTGCCAGCGGTGCTTCTGCAGCCCCGCTGGAAGCGAGTGGTGGGCTGGTCGGGTCCGGTGCCAC
GGCCCCGCCACGGCCACCGCGCCGTGGCCATCAAGGAGCTCATCGTGGTGTTTGGCGGCGGCAACGAGGGAATAG
TGGACGAACTGCACGTGTACAACACGGCAACCAACCAGTGGTTCATCCCAGCCGTGAGGGGGGACATTCCCCCTG
GGTGTGCAGCCTATGGCTTCGTGTGTGACGGGACTCGCCTCCTGGTGTTTGGTGGGATGGTGGAGTATGGGAAAT
ACAGCAATGACCTCTACGAACTCCAGGCGAGCCGGTGGGAGTGGAAGAGACTCAAAGCAAAGACGCCCAAAAACG
GGCCCCCTCCGTGTCCTCGACTCGGGCACAGCTTCTCCCTTGTGGGCAACAAATGCTACCTGTTTGGGGGTCTGG
CCAATGATAGCGAGGACCCAAAGAACAACATTCCAAGGTACCTGAATGACTTATATATCCTGGAATTACGGCCAG
GCTCTGGAGTGGTAGCCTGGGACATTCCCATCACTTACGGGGTCCTACCACCACCCCGGGAGTCACATACTGCCG
TGGTCTACACCGAAAAAGACAATAAGAAGTCCAAGCTGGTGATCTACGGCGGGATGAGTGGCTGCAGGCTGGGGG
ACCTGTGGACCCTAGATATTGACACCCTGACGTGGAATAAGCCCAGTCTCAGCGGGGTGGCGCCTCTTCCTCGCA
GTCTCCACTCGGCAACCACCATCGGAAATAAAATGTACGTGTTTGGTGGCTGGGTGCCTCTCGTCATGGATGACG
TCAAAGTGGCCACACACGAGAAGGAGTGGAAGTGTACCAACACGCTGGCTTGTCTCAACCTGGATACCATGGCCT
GGGAGACCATCCTGATGGATACACTGGAGGACAACATCCCCCGTGCTCGGGCTGGCCACTGCGCAGTCGCCATCA
ACACCCGCCTGTACATTTGGAGTGGGCGTGACGGCTACCGCAAGGCCTGGAACAACCAGGTCTGCTGCAAGGACC
TCTGGTACCTAGAGACAGAAAAGCCACCACCCCCAGCCCGAGTACAACTGGTACGCGCCAACACCAACTCCCTGG
AGGTGAGCTGGGGGGCAGTGGCAACAGCCGACAGCTACCTTCTCCAGCTCCAGAAATATGACATTCCTGCCACGG
CTGCTACTGCCACCTCCCCTACACCCAATCCGGTCCCATCTGTGCCTGCCAACCCTCCCAAGAGCCCTGCCCCAG
CAGCAGCCGCACCTGCTGTGCAGCCGCTGACCCAAGTAGGCATCACGCTCCTGCCCCAGGCTGCCCCCGCACCCC
CGACCACCACCACCATCCAGGTCTTGCCAACGGTGCCTGGCAGCTCCATTTCTGTGCCCACCGCAGCCAGGACTC
AAGGTGTCCCTGCTGTTCTCAAAGTGACCGGTCCTCAGGCTACAACAGGAACTCCATTGGTCACCATGCGACCTG
CCAGCCAGGCTGGGAAAGCCCCTGTCACCGTGACCTCCCTTCCCGCCGGAGTGCGGATGGTTGTGCCAACACAGA
GTGCCCAGGGAACGGTGATTGGCAGTAGCCCACAGATGAGTGGGATGGCCGCACTGGCCGCTGCGGCCGCTGCCA
CCCAGAAGATCCCCCCTTCCTCGGCACCCACGGTGCTGAGTGTCCCAGCGGGTACCACCATCGTGAAGACCATGG
CTGTGACACCTGGCACTACCACCCTCCCAGCCACTGTGAAGGTGGCCTCCTCGCCAGTCATGGTGAGCAACCCTG
CCACTCGCATGCTGAAGACTGCAGCCGCCCAGGTGGGGACATCGGTTTCCTCCGCCACCAACACGTCTACCCGCC
CTATCATCACAGTGCACAAGTCAGGCACTGTGACAGTGGCCCAGCAAGCCCAGGTGGTGACCACAGTTGTGGGCG
GGGTCACCAAGACCATCACCCTGGTGAAGAGCCCCATCTCTGTCCCAGGAGGCAGTGCTCTGATTTCCAATCTGG
GCAAAGTGATGTCGGTGGTCCAGACCAAACCAGTTCAGACTTCAGCAGTCACAGGCCAGGCGTCCACGGGTCCTG
TGACTCAGATCATCCAGACCAAAGGGCCCCTGCCAGCGGGAACAATCCTGAAGCTGGTGACCTCAGCAGATGGCA
AGCCCACCACCATCATCACTACCACGCAGGCCAGTGGGGCGGGGACCAAGCCCACCATCCTGGGCATCAGCAGCG
TCTCCCCCAGTACCACCAAGCCCGGCACGACCACCATCATCAAAACCATCCCCATGTCGGCCATCATCACCCAGG
CGGGCGCCACGGGTGTGACCAGCAGTCCTGGCATCAAGTCCCCCATCACCATCATCACCACCAAGGTGATGACTT
CAGGAACTGGAGCACCTGCGAAAATCATCACTGCTGTCCCCAAAATTGCCACTGGCCACGGGCAGCAGGGAGTGA
CCCAGGTGGTGCTTAAGGGGGCCCCGGGACAGCCAGGCACCATCCTCCGCACTGTGCCCATGGGGGGTGTTCGCC
TGGTCACACCCGTCACCGTCTCCGCCGTCAAGCCAGCCGTCACCACGTTGGTTGTGAAAGGCACCACAGGTGTCA

FIGURE 4310B

CGACCCTAGGCACAGTGACAGGCACCGTCTCCACCAGCCTTGCCGGGGCGGGGGGCCACAGCACTAGTGCTTCCC
TGGCCACGCCCATCACCACCTTGGGCACCATTGCCACCCTCTCAAGCCAGGTGATCAACCCCACTGCCATCACTG
TGTCGGCCGCACAGACCACGCTGACAGCGGCAGGCGGGCTCACAACCCCAACCATCACCATGCAGCCCGTGTCCC
AGCCCACCCAGGTAACTCTGATCACGGCACCTAGTGGGGTGGAGGCCCAGCCTGTGCATGACCTCCCTGTGTCCA
TTCTGGCCTCCCCGACTACAGAACAGCCCACCGCCACAGTTACCATCGCCGACTCAGGCCAGGGTGATGTGCAGC
CTGGCACTGTCACCTTGGTGTGCTCCAACCCACCCTGTGAGACCCACGAGACTGGCACCACCAACACGGCCACCA
CTACTGTTGTGGCTAACCTTGGGGGACACCCCCAGCCCACCCAAGTGCAGTTCGTCTGTGACAGACAGGAGGCAG
CTGCTTCTCTTGTGACCTCGACTGTGGGCCAGCAGAATGGTAGCGTGGTCCGAGTCTGTTCGAACCCGCCCTGCG
AGACCCACGAGACGGGCACCACCAACACCGCCACCACCGCCACCTCCAACATGGCCGGGCAGCATGGCTGCTCAA
ACCCACCCTGCGAGACCCACGAGACGGGCACCACCAACACTGCCACTACAGCCATGTCGAGCGTCGGCGCCAACC
ACCAGCGAGATGCCCGTCGGGCCTGTGCAGCTGGCACCCCTGCCGTGATCCGGATCAGTGTGGCCACTGGGGCGC
TGGAGGCAGCCCAGGGCTCTAAGTCCCAGTGCCAAACCCGCCAGACCAGCGCGACCAGCACCACCATGACTGTGA
TGGCCACCGGGGCCCCGTGCTCGGCCGGCCCACTCCTTGGGCCGAGCATGGCACGGGAGCCCGGGGGCCGCAGCC
CTGCTTTTGTGCAGTTGGCCCCTCTGAGCAGCAAAGTCAGGCTGAGCAGCCCAAGCATTAAGGACCTTCCTGCGG
GGCGCCACAGCCATGCGGTCAGCACCGCTGCCATGACCCGTTCCAGCGTGGGTGCTGGGGAGCCCCGCATGGCAC
CTGTGTGCGAGAGCCTCCAGGGTGGCTCGCCCAGCACCACAGTGACTGTGACAGCCCTGGAGGCACTGCTGTGCC
CCTCGGCCACCGTGACCCAAGTCTGCTCCAACCCACCATGTGAGACCCACGAGACAGGCACCACCAACACCGCCA
CTACCTCGAATGCAGGCAGCGCCCAGAGGGTGTGCTCCAACCCGCCATGCGAGACCCACGAGACGGGCACCACCC
ACACGGCCACCACCGCTACTTCAAACGGGGGCACGGGCCAGCCCGAGGGTGGGCAGCAGCCCCCTGCTGGTCGCC
CCTGTGAGACACACCAGACCACTTCCACTGGCACCACCATGTCGGTCAGCGTGGGTGCCCTGCTTCCCGACGCCA
CTTCTTCCCACAGGACCGTGGAGTCTGGCCTAGAGGTGGCGGCGGCACCCAGCGTCACCCCCCAGGCTGGCACCG
CGCTGCTGGCTCCTTTCCCAACACAGAGGGTGTGCTCCAACCCCCCCTGTGAGACCCACGAGACGGGCACCACTC
ACACGGCCACCACTGTCACTTCCAACATGAGTTCAAACCAAGACCCCCCACCTGCTGCCAGCGATCAGGGAGAGG
TGGAGAGCACCCAGGGCGACAGCGTGAACATCACCAGCTCCAGTGCCATCACGACAACCGTGTCCTCCACACTGA
CGCGGGCTGTGACCACCGTGACGCAGTCCACACCGGTCCCGGGCCCCTCTGTGCCGCCCCCAGAGGAACTCCAGG
TGTCGCCAGGTCCTCGCCAGCAGCTGCCGCCACGGCAGCTTCTGCAGTCGGCTTCCACAGCCCTGATGGGGGAGT
CCGCCGAGGTCCTGTCAGCCTCCCAGACCCCTGAGCTCCCGGCCGCCGTGGATCTGAGCAGCACAGGGGAGCCAT
CTTCGGGCCAGGAGTCTGCCGGCTCTGCGGTGGTGGCCACTGTGGTGGTCCAGCCACCCCCACCCACACAGTCCG
AAGTAGACCAGTTATCACTTCCCCAAGAGCTAATGGCCGAGGCCCAAGCTGGCACCACCACCCTCATGGTAACGG
GGCTCACCCCCGAGGAGCTGGCAGTGACGGCTGCTGCAGAAGCAGCTGCCCAGGCCGCAGCCACGGAGGAAGCCC
AGGCCCTGGCCATCCAGGCGGTGCTCCAGGCCGCGCAGCAGGCCGTCATGGGCACCGGCGAGCCCATGGACACCT
CCGAGGCAGCAGCAACCGTGACTCAGGCGGAGCTGGGGCACCTGTCGGCCGAGGGTCAGGAGGGCCAGGCCACCA
CCATACCCATTGTGCTGACACAGCAGGAGCTGGCTGCCCTGGTGCAGCAGCAGCAGCTGCAGGAGGCCCAGGCCC
AGCAGCAGCATCACCACCTCCCCACTGAGGCCCTGGCCCCTGCCGACAGTCTCAACGACCCAGCCATTGAGAGCA
ATTGCCTCAATGAGCTGGCCGGCACGGTCCCCAGCACTGTGGCGCTGCTGCCCTCAACGGCCACTGAGAGCCTGG
CTCCATCCAACACATTTGTGGCCCCCCAGCCGGTTGTGGTGGCCAGCCCAGCCAAGCTGCAGGCTGCAGCTACCC
TGACCGAAGTGGCCAATGGCATCGAGTCCCTGGGTGTGAAGCCAGACCTGCCGCCCCCACCCAGCAAAGCCCCCA
TGAAGAAGGAAAACCAGTGGTTTGATGTGGGAGTCATTAAGGGCACCAATGTAATGGTGACACACTATTTCCTGC
CACCAGATGATGCTGTCCCATCAGACGATGATTTGGGCACCGTCCCTGACTATAACCAGCTGAAGAAGCAGGAGC
TGCAGCCAGGCACAGCCTATAAGTTTCGTGTTGCCGGAATCAATGCCTGTGGCCGGGGGCCCTTCAGCGAAATCT
CAGCCTTTAAGACGTGCCTGCCTGGTTTCCCAGGGGCCCCTTGTGCCATTAAAATCAGCAAAAGTCCGGATGGTG
CTCACCTCACCTGGGAGCCACCCTCTGTGACCTCCGGCAAGATTATCGAGTACTCCGTGTACCTGGCCATCCAGA
GCTCACAGGCTGGGGGCGAGCTCAAGAGCTCCACCCCGGCCCAGCTGGCCTTCATGCGGGTGTACTGCGGGCCCA
GCCCCTCCTGCCTGGTGCAGTCCTCCAGCCTTTCCAACGCCCACATCGACTACACCACCAAGCCCGCCATCATCT
TCCGCATCGCCGCCCGCAATGAGAAGGGCTATGGCCCGGCCACACAAGTGAGGTGGCTGCAGGAAACCAGTAAAG
ACAGCTCTGGCACCAAGCCAGCCAACAAGCGGCCCATGTCCTCTCCAGAAATGAAATCTGCTCCAAAGAAATCTA
AGGCCGATGGTCAG**TGA**GAGGAAGCTGACTAGCCCCTGGATTCTTCTCCAGACCCCCCTGCTTCAGGAACACCCG
CCAGGGCCCACCCCTCCCACCCCGTCCCAGCATTCGCACTTCACCCTCGCGAGCCGCTGTTCACTCCTCTCCCCT

FIGURE 4310C

TTCTCTTTCTCTCTGTTTTTAAAATAATCTAAAGAAAGCACATTTTACCATTGCTGTTGGGAGGAAGCAGAGGCA
GATGGGAAAGCAGAGAGAGGAGCGCGCTTCCTTTCCTCCCCGCTGCCGCCCACCCTGGGGAGAGACTTTTGCGGG
GAGGGAAGGCGGAGCTGAGGACAGCCAGCTCCGCCCTCCCAAGGCTGTGCGTTCCTGAGGGCCAGGTCGGGGGCA
GGCATGGAGGGGAGGAAAGGCGTCCCTCTTGGCCCTCCCCAGAGTGGCTTTCCTGGCACCCTGGCCTGGGTGTCT
GGTTCTGTTTTCTTTTCTTCCCCTTGTGTTTCCAGTCACCTAACTTCCCTTCCTCAGGCTCCCCCGGCCCACCCT
GCTCAGTGACCCCACAGGAAGCTTACACATTTTCTCAGAGGCCTTTGTGCTCCCACCTCTTCTACCCTCCCCCTC
TTCTTTCCCATTTTAAAAAAGAAAAGAAGGAAAAAGAAAAAAGGGGCAAGGAGCCCCGCGGCGGCCTGGGCAGCG
CCTGTGCAGACCTCCCTGCAGGCCGCACTGCCAACTGCTGCATTTGTTGTGTTTTTTAGGTTGCAATTGGTGAAG
TTCACACTTTCATTGTAATTTTAGCGTGTGGGGTTTTGTCCCTTTTTTGTTGTTGTTAGCTGTGTACAGAATGTG
TAATCTTTTTTCTTTTCTCTTTTTTTTGTTTTGTTTTGTTTTGTTTTTTGTTTTTTTACTTTTTTCTTCTTGGCTA
ATTCTTGGCAGGGATCTTTCTGGAGGAAAAGCTGGGGCCAGCCAGGGCAGGAGAGGTGTGAAATCTGCCACGAGG
GGCCTGCTGTTTGCCACCCAGCCCAACTTCCTGTTGCTGGCCCCTGCCCTCTGCCCTTTTGCCTGTCCTCAGGCC
GCTGGAACAAAGGAAGGACAGCTCATTCCTCATGGGCGATCACTCCGCATCTATAGGGTCGAGCCTAGGGGAGCT
TGAGGGAGGGCTGGGGCCTCCTTGTCCTGGATTTCCAGCTCTCCCCATGCCCCCTCCCTGAGCACCACCGGCACC
GCCTCCCAAACAGGGCTGCTGGTTTCCGCAGCCACTGCTCCACCTCCCCCAAATCGTCATGGAAAGGGTGGAGAA
TGGAGGGGAACCAGGCGTCCTTGGAGGCAGCTTGGGAGGGTGACTGTGTAGTGTCACCCACAAGGGAGGCTAGGG
CAATGGAGCAGGCCACCAGCAGCAGCTGTGCAGCATGGAACTCAGGCCAGGCTCCGAGGCTGGGGGATCTGCTTG
GAGTTTTCTGCCCCCCACCCCAAACTTCTGTCGAGGAGCAAGGCTTGCCAGCAAGTCAGAAGGATTTGAACCGAG
CAGCCAATCTTTCCAGCCCTCCCCTACCGACCTCTGCCTGGAGACGCAGCAGCCTGTGTCCTCCAGGGCCTCTGG
TTTGTTGTATTATAGTATATTTCGCTGTGGAAAATGTCACGTTTAGTCACCTTGGAGCCCACTCACCTGGTCCTG
TTGTTTTACCCCATCCCTTCTCTCGCGCGCCTATTGATTTGTTTCTGAGGAGAGTACACCGTTCACTATTGTAGA
GTAACCCCTGTGACTCAATATTACCATAGTGCGATGTCGTTTTGTGCTATTTTGAACAATTAAAAGACTTTTTTT
GAAATAA

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FIGURE 4311

CGGTCCCAGCCCCGGCCGTCCCGGCGTCGCTTCGGAGCGCGGCGGCAGCTGACTGCGCCTTCACGATCCGCTGGG
ACCCGCGAGCCCCGCCGCCGTTATGAACATCCGCAATGCGAGGCCAGAGGACCTAATGAACATGCAGCACTGCAA
CCTCCTCTGCCTGCCCGAGAACTACCAGATGAAATACTACTTCTACCATGGCCTTTCCTGGCCCCAGCTCTCTTA
CATTGCTGAGGACGAGAATGGGAAGATTGTGGGGTATGTCCTGGCCAAAATGGAAGAGGACCCAGATGATGTGCC
CCATGGACATATCACCTCATTGGCTGTGAAGCGTTCCCACCGGCGCCTCGGTCTGGCTCAGAAACTGATGGACCA
GGCCTCTCGAGCCATGATAGAGAACTTCAATGCCAAATATGTCTCCCTGCATGTCAGGAAGAGTAACCGGGCCGC
CCTGCACCTCTATTCCAACACCCTCAACTTTCAGATCAGTGAAGTGGAGCCCAAATACTATGCAGATGGGGAGGA
CGCCTATGCCATGAAGCGGGACCTCACTCAGATGGCCGACGAGCTGAGGCGGCACCTGGAGCTGAAAGAGAAGGG
CAGGCACGTGGTGCTGGGTGCCATCGAGAACAAGGTGGAGAGCAAAGGCAATTCACCTCCGAGCTCAGGAGAGGC
CTGTCGCGAGGAGAAGGGCCTGGCTGCCGAGGATAGTGGTGGGGACAGCAAGGACCTCAGCGAGGTCAGCGAGAC
CACAGAGAGCACAGATGTCAAGGACAGCTCAGAGGCCTCCGACTCAGCCTCCTAGAGCCTGCCCCATCCCCTCCT
CACCCCACGAGCTTTCACAATAAATTCGCTCCGTGGCACTG

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FIGURE 4312

CGTGGGAGCAGTGGGGTTCGACGGCGCGGCCGCGAGGCCGCCATGGCCGCTCACGGGAAGCTGCGGCGGGAGCGG
GGGCTGCAGGCTGAGTATGAGACGCAAGTCAAAGAGATGCGCTGGCAGCTGAGCGAGCAGCTGCGCTGCCTGGAG
CTGCAGGGCGAGCTGCGGCGGGAGTTGCTGCAGGAGCTGGCAGAGTTCATGCGGCGCCGCGCTGAGGTGGAGCTG
GAATACTCCCGGGGCCTGGAAAAGCTGGCCGAGCGCTTCTCCAGCCGTGGAGGCCGCCTGGGGAGCAGCCGGGAG
CACCAAAGCTTCCGGAAGGAGCCGTCCCTCCTGTCGCCCTTGCACTGCTGGGCGGTGCTGCTGCAGCACACGCGG
CAGCAGAGCCGGGAGAGCGCGGCCCTGAGTGAGGTGCTGGCCGGGCCCCTGGCCCAGCGCCTGAGTCACATTGCA
GAGGACGTGGGGCGCCTGGTCAAGAAGAGCAGGGATCTGGAGCAGCAGCTGCAGGATGAGCTCCTGGAGGTGGTC
TCAGAGCTCCAGACGGCCAAGAAGACGTACCAGGCATATCACATGGAGAGCGTGAATGCCGAGGCCAAGCTCCGG
GAGGCCGAGCGGCAGGAGGAGAAGCGGGCAGGCCGGAGTGTCCCCACCACCACCGCTGGTGCCACTGAGGCAGGG
CCCCTCCGCAAGAGCTCCCTCAAGAAGGGAGGGAGGCTGGTGGAGAAGCGGCAGGCCAAGTTCATGGAGCACAAA
CTCAAGTGCACAAAGGCGCGCAACGAGTACCTGCTTAGCCTGGCTAGTGTCAACGCTGCTGTCAGTAACTACTAC
CTGCATGACGTCTTGGACCTCATGGACTGCTGTGACACAGGGTTCCACCTGGCCCTGGGGCAGGTGCTCCGGAGC
TACACGGCCGCTGAGAGCCGCACCCAAGCCTCCCAAGTGCAGGGCCTGGGCAGCCTGGAAGAAGCTGTGGAGGCC
CTGGATCCTCCAGGGGACAAAGCCAAGGTTCTCGAGGTGCATGCTACCGTCTTCTGTCCCCCGCTGCGCTTTGAC
TACCACCCCCATGATGGGGATGAGGTGGCTGAGATCTGCGTTGAAATGGAGCTGCGGGACGAGATTCTGCCCAGA
GCCCAGAACATCCAGAGCCGCCTGGACCGACAGACCATTGAGACAGAGGAGGTGAACAAGACTCTGAAGGCGACA
CTGCAGGCCCTGCTGGAGGTGGTGGCCTCGGATGACGGGGATGTGCTTGATTCCTTCCAGACCAGCCCCTCCACC
GAGTCCCTCAAGTCCACCAGCTCAGACCCAGGCAGCCGGCAGGCGGGCCGGAGGCGCGGCCAGCAGCAGGAGACC
GAAACCTTCTACCTCACGAAGCTCCAGGAGTATCTGAGTGGACGGAGCATCCTCGCCAAGCTGCAGGCCAAGCAC
GAGAAGCTGCAGGAGGCCCTTCAGCGAGGTGACAAGGAGGAGCAGGAGGTGTCTTGGACCCAGTACACACAGAGA
AAATTCCAGAAGAGCCGCCAGCCCCGCCCCAGCTCCCAGTATAACCAGAGACTCTTTGGGGGAGACATGGAGAAG
TTTATCCAGAGCTCAGGCCAGCCTGTGCCCCTGGTGGTGGAGAGCTGCATTCGCTTCATCAACCTCAATGGCCTG
CAGCATGAAGGCATCTTCCGGGTATCGGGTGCCCAGCTCCGGGTCTCAGAGATCCGTGATGCCTTCGAGAGAGGG
GAGGACCCACTGGTGGAGGGCTGCACTGCCCATGACCTGGACTCGGTGGCCGGGGTGCTGAAGCTCTACTTCCGG
AGCCTGGAGCCCCCACTCTTCCCCCCAGACCTGTTCGGCGAGCTGCTGGCTTCTTCGGAGCTGGAGGCCACAGCG
GAGAGGGTGGAGCACGTGAGCCGCCTGCTGTGGCGGCTGCCCGCGCCGGTGCTGGTGGTTCTGCGCTACCTCTTC
ACCTTCCTCAACCACCTGGCCCAGTACAGCGATGAGAACATGATGGACCCCTACAACCTGGCCGTGTGCTTCGGG
CCCACGCTGCTACCGGTGCCCGCTGGGCAGGACCCGGTGGCGCTGCAGGGCCGGGTGAACCAGCTGGTGCAGACG
CTCATAGTGCAGCCCGATCGGGTCTTCCCGCCCCTGACCTCGCTGCCTGGCCCCGTCTACGAGAAGTGCATGGCA
CCGCCTTCCGCCAGCTGCCTGGGGGACGCCCAGCTGGAGAGCCTGGGGGCGGACAATGAGCCGGAGCTGGAAGCC
GAGATGCCCGCACAGGAGGATGACCTGGAGGGGGTCGTGGAGGCTGTGGCCTGCTTTGCCTACACGGGCCGCACA
GCCCAGGAGCTGAGCTTCCGGCGGGGGGACGTACTGCGGCTGCACGAGAGGGCCTCGAGCGACTGGTGGCGGGGG
GAGCACAACGGCATGCGGGGCCTCATCCCCCACAAGTATATCACGCTGCCCGCCGGGACGGAGAAGCAGGTGGTG
GGCGCAGGGCTGCAGACTGCAGGGGAGTCTGGGAGCAGTCCCGAGGGCCTCCTGGCATCGGAGCTGGTCCACCGG
CCAGAGCCATGCACCTCACCTGAGGCCATGGGACCCTCTGGACACAGACGACGCTGCTTGGTCCCAGCCTCCCCA
GAGCAACACGTGGAGGTGGATAAGGCTGTGGCACAGAACATGGACTCTGTGTTTAAGGAGCTCTTGGGAAAGACC
TCTGTCCGCCAGGGCCTTGGGCCAGCATCTACCACCTCTCCCAGTCCTGGGCCCCGAAGCCCAAAGGCCCCGCCC
AGCAGCCGCCTGGGCAGGAACAAAGGCTTCTCCCGGGGCCCTGGGGCCCCAGCCTCACCCTCAGCTTCCCACCCC
CAGGGCCTAGACACGACCCCCAAGCCACACTGAGGTGCCGCTGCTGGAGATGCGTGCCCCCGGCGGCTACCCGCT
GGACCGGCCACTCTCCCCAGCCCCCTTGCTTCTCTCCAGCCCTGTCCAGCAAGTGCAGGGTGCCTGCACTTCACC
CTGTGCAGAGAGGTGGGATGGGGCCGTGCACACAGGGATGCCCGCTCCACATCCTGCCTGCCCCTCAGCCCTGGC
CCAGGCCCCTTTTGGAGGCAGCTGAGGAAGGATGCTGGGGAAAGCCCTCTTCTGCAGCTTTGTGGAAGGCTGATC
AGTGGCTGCTGGGTGGCGGGTACCCTTGCTCAGATGCCTGGCAGGGCTGGGTGGCGATTCATAAAGACCTCGTGT
TGATTCCCCG

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FIGURE 4313

GATCCTGGGTTCTGTGCATCCGTCTGTCTGACCATCCCTCTCAATCTTCCCTGCCCAGGACTGGCCATACTGCCA
CCGACACGTGCACACACGCCAACAGGCATCTGCCATGCTGGCATCTCTATAAGGGCTCCAGTCCAGAGACCCTGG
GCCATTGAACTTGCTCCTCAGGCAGAGGCTGAGTCCGCACATCACCTCCAGGCCCTCAGAACACCTGCCCCAGCC
CCACCATGCTCATGGCGTCCACCACTTCCGCTGTGCCTGGGCATCCCTCTCTGCCCAGCCTGCCCAGCAACAGCA
GCCAGGAGAGGCCACTGGACACCCGGGACCCGCTGCTAGCCCGGGCGGAGCTGGCGCTGCTCTCCATAGTCTTTG
TGGCTGTGGCCCTGAGCAATGGCCTGGTGCTGGCGGCCCTAGCTCGGCGGGGCCGGCGGGGCCACTGGGCACCCA
TACACGTCTTCATTGGCCACTTGTGCCTGGCCGACCTGGCCGTGGCTCTGTTCCAAGTGCTGCCCCAGCTGGCCT
GGAAGGCCACCGACCGCTTCCGTGGGCCAGATGCCCTGTGTCGGGCCGTGAAGTATCTGCAGATGGTGGGCATGT
ATGCCTCCTCCTACATGATCCTGGCCATGACGCTGGACCGCCACCGTGCCATCTGCCGTCCCATGCTGGCGTACC
GCCATGGAAGTGGGGCTCACTGGAACCGGCCGGTGCTAGTGGCTTGGGCCTTCTCGCTCCTTCTCAGCCTGCCCC
AGCTCTTCATCTTCGCCCAGCGCAACGTGGAAGGTGGCAGCGGGGTCACTGACTGCTGGGCCTGCTTTGCGGAGC
CCTGGGGCCGTCGCACCTATGTCACCTGGATTGCCCTGATGGTGTTCGTGGCACCTACCCTGGGTATCGCCGCCT
GCCAGGTGCTCATCTTCCGGGAGATTCATGCCAGTCTGGTGCCAGGGCCATCAGAGAGGCCTGGGGGGCGCCGCA
GGGGACGCCGGACAGGCAGCCCCGGTGAGGGAGCCCACGTGTCAGCAGCTGTGGCCAAGACTGTGAGGATGACGC
TAGTGATTGTGGTCGTCTATGTGCTGTGCTGGGCACCCTTCTTCCTGGTGCAGCTGTGGGCCGCGTGGGACCCGG
AGGCACCTCTGGAAGGGGCGCCCTTTGTGCTACTCATGTTGCTGGCCAGCCTCAACAGCTGCACCAACCCCTGGA
TCTATGCATCTTTCAGCAGCAGCGTGTCCTCAGAGCTGCGAAGCTTGCTCTGCTGTGCCCGGGGACGCACCCCAC
CCAGCCTGGGTCCCCAAGATGAGTCCTGCACCACCGCCAGCTCCTCCCTGGCCAAGGACACTTCATCGTGAGGAG
CTGTTGGGTGTCTTGCCTCTAGAGGCTTTGAGAAGCTCAGCTGCCTTCCTGGGGCTGGTCCTGGGAGCCACTGGG
AGGGGGACCCGTGGAGAATTGGCCAGAGCCTGTGGCCCCGAGGCTGGGACACTGTGTGGCCCTGGACAAGCCACA
GCCCCTGCCTGGGTCTCCACATCCCCAGCTGTATGAGGAGAGCTTCAGGCCCCAGGACTGTGGGGGCCCCTCAGG
TCAGCTCACTGAGCTGGGTGTAGGAGGGGCTGCAGCAGAGGCCTGAGGAGTGGCAGGAAAGAGGGAGCAGGTGCC
CCCAGGTGAGACAGCGGTCCCAGGGGCCTGAAAAGGAAGGACCAGGCTGGGGCCAGGGGACCTTCCTGTCTCCGC
CTTTCTAATCCCTCCCTCCTCATTCTCTCCCTAATAAAAATTGGAGCTCATTTTCCACATGGCAAGGGGTCTCCT
TGGA

FIGURE 4314A

GCGCGGTGCCGCCGGGAAAGATGGTCGTGGCGCTGCGGTACGTGTGGCCTCTCCTCCTCTGCAGCCCCTGCCTGC
TTATCCAGATCCCCGAGGAATATGAAGGACACCATGTGATGGAGCCACCTGTCATCACGGAACAGTCTCCACGGC
GCCTGGTTGTCTTCCCCACAGATGACATCAGCCTCAAGTGTGAGGCCAGTGGCAAGCCCGAAGTGCAGTTCCGCT
GGACGAGGGATGGTGTCCACTTCAAACCCAAGGAAGAGCTGGGTGTGACCGTGTACCAGTCGCCCCACTCTGGCT
CCTTCACCATCACGGGCAACAACAGCAACTTTGCTCAGAGGTTCCAGGGCATCTACCGCTGCTTTGCCAGCAATA
AGCTGGGCACCGCCATGTCCCATGAGATCCGGCTCATGGCCGAGGGTGCCCCCAAGTGGCCAAAGGAGACAGTGA
AGCCCGTGGAGGTGGAGGAAGGGGAGTCAGTGGTTCTGCCTTGCAACCCTCCCCCAAGTGCAGAGCCTCTCCGGA
TCTACTGGATGAACAGCAAGATCTTGCACATCAAGCAGGACGAGCGGGTGACGATGGGCCAGAACGGCAACCTCT
ACTTTGCCAATGTGCTCACCTCCGACAACCACTCAGACTACATCTGCCACGCCCACTTCCCAGGCACCAGGACCA
TCATTCAGAAGGAACCCATTGACCTCCGGGTCAAGGCCACCAACAGCATGATTGACAGGAAGCCGCGCCTGCTCT
TCCCCACCAACTCCAGCAGCCACCTGGTGGCCTTGCAGGGGCAGCCATTGGTCCTGGAGTGCATCGCCGAGGGCT
TTCCCACGCCCACCATCAAATGGCTGCGCCCCAGTGGCCCCATGCCAGCCGACCGTGTCACCTACCAGAACCACA
ACAAGACCCTGCAGCTGCTGAAAGTGGGCGAGGAGGATGATGGCGAGTACCGCTGCCTGGCCGAGAACTCACTGG
GCAGTGCCCGGCATGCGTACTATGTCACCGTGGAGGCTGCCCCGTACTGGCTGCACAAGCCCCAGAGCCATCTAT
ATGGGCCAGGAGAGACTGCCCGCCTGGACTGCCAAGTCCAGGGCAGGCCCCAACCAGAGGTCACCTGGAGAATCA
ACGGGATCCCTGTGGAGGAGCTGGCCAAAGACCAGAAGTACCGGATTCAGCGTGGCGCCCTGATCCTGAGCAACG
TGCAGCCCAGTGACACAATGGTGACCCAATGTGAGGCCCGCAACCGGCACGGGCTCTTGCTGGCCAATGCCTACA
TCTACGTTGTCCAGCTGCCAGCCAAGATCCTGACTGCGGACAATCAGACGTACATGGCTGTCCAGGGCAGCACTG
CCTACCTTCTGTGCAAGGCCTTCGGAGCGCCTGTGCCCAGTGTTCAGTGGCTGGACGAGGATGGGACAACAGTGC
TTCAGGACGAACGCTTCTTCCCCTATGCCAATGGGACCCTGGGCATTCGAGACCTCCAGGCCAATGACACCGGAC
GCTACTTCTGCCTGGCTGCCAATGACCAAAACAATGTTACCATCATGGCTAACCTGAAGGTTAAAGATGCAACTC
AGATCACTCAGGGGCCCCGCAGCACAATCGAGAAGAAAGGTTCCAGGGTGACCTTCACGTGCCAGGCCTCCTTTG
ACCCCTCCTTGCAGCCCAGCATCACCTGGCGTGGGGACGGTCGAGACCTCCAGGAGCTTGGGGACAGTGACAAGT
ACTTCATAGAGGATGGGCGCCTGGTCATCCACAGCCTGGACTACAGCGACCAGGGCAACTACAGCTGCGTGGCCA
GTACCGAACTGGATGTGGTGGAGAGTAGGGCACAGCTCTTGGTGGTGGGGAGCCCTGGGCCGGTGCCACGGCTGG
TGCTGTCCGACCTGCACCTGCTGACGCAGAGCCAGGTGCGCGTGTCCTGGAGTCCTGCAGAAGACCACAATGCCC
CCATTGAGAAATATGACATTGAATTTGAGGACAAGGAAATGGCGCCTGAAAAATGGTACAGTCTGGGCAAGGTTC
CAGGGAACCAGACCTCTACCACCCTCAAGCTGTCGCCCTATGTCCACTACACCTTTAGGGTTACTGCCATAAACA
AATATGGCCCCGGGGAGCCCAGCCCGGTCTCTGAGACTGTGGTCACACCTGAGGCAGCCCCAGAGAAGAACCCTG
TGGATGTGAAGGGGGAAGGAAATGAGACCACCAATATGGTCATCACGTGGAAGCCGCTCCGGTGGATGGACTGGA
ACGCCCCCCAGGTTCAGTACCGCGTGCAGTGGCGCCCTCAGGGGACACGAGGGCCCTGGCAGGAGCAGATTGTCA
GCGACCCCTTCCTGGTGGTGTCCAACACGTCCACCTTCGTGCCCTATGAGATCAAAGTCCAGGCCGTCAACAGCC
AGGGCAAGGGACCAGAGCCCCAGGTCACTATCGGCTACTCTGGAGAGGACTACCCCCAGGCAATCCCTGAGCTGG
AAGGCATTGAAATCCTCAACTCAAGTGCCGTGCTGGTCAAGTGGCGGCCGGTGGACCTGGCCCAGGTCAAGGGCC
ACCTCCGCGGATACAATGTGACGTACTGGAGGGAGGGCAGTCAGAGGAAGCACAGCAAGAGACATATCCACAAAG
ACCATGTGGTGGTGCCCGCCAACACCACCAGTGTCATCCTCAGTGGCTTGCGGCCCTATAGCTCCTACCACCTGG
AGGTGCAGGCCTTTAACGGGCGAGGATCGGGGCCCGCCAGCGAGTTCACCTTCAGCACCCCAGAGGGAGTGCCTG
GCCACCCCGAGGCGTTGCACCTGGAGTGCCAGTCGAACACCAGCCTGCTGCTGCGCTGGCAGCCCCCACTCAGCC
ACAACGGCGTGCTCACCGGCTACGTGCTCTCCTACCACCCCCTGGATGAGGGGGGCAAGGGGCAACTGTCCTTCA
ACCTTCGGGACCCCGAACTTCGGACACACAACCTGACCGATCTCAGCCCCCACCTGCGGTACCGCTTCCAGCTTC
AGGCCACCACCAAAGAGGGCCCTGGTGAAGCCATCGTACGGGAAGGAGGCACTATGGCCTTGTCTGGGATCTCAG
ATTTTGGCAACATCTCAGCCACAGCGGGTGAAAACTACAGTGTCGTCTCCTGGGTCCCCAAGGAGGGCCAGTGCA
ACTTCAGGTTCCATATCTTGTTCAAAGCCTTGGGAGAAGAGAAGGGTGGGGCTTCCCTTTCGCCACAGTATGTCA
GCTACAACCAGAGCTCCTACACGCAGTGGGACCTGCAGCCTGACACTGACTACGAGATCCACTTGTTTAAGGAGA
GGATGTTCCGGCACCAAATGGCTGTGAAGACCAATGGCACAGGCCGCGTGAGGCTCCCTCCTGCTGGCTTCGCCA
CTGAGGGCTGGTTCATCGGCTTTGTGAGTGCCATCATCCTCCTGCTCCTCGTCCTGCTCATCCTCTGCTTCATCA
AGCGCAGCAAGGGCGGCAAATACTCAGTGAAGGATAAGGAGGACACCCAGGTGGACTCTGAGGCCCGACCGATGA
AAGATGAGACCTTCGGCGAGTACAGGTCCCTGGAGAGTGACAACGAGGAGAAGGCCTTTGGCAGCAGCCAGCCAT

FIGURE 4314B

CGCTCAACGGGGACATCAAGCCCCTGGGCAGTGACGACAGCCTGGCCGATTATGGGGGCAGCGTGGATGTTCAGT
TCAACGAGGATGGTTCGTTCATTGGCCAGTACAGTGGCAAGAAGGAGAAGGAGGCGGCAGGGGGCAATGACAGCT
CAGGGGCCACTTCCCCCATCAACCCTGCCGTGGCCCTAGAATAGTGGAGTCCAGGACAGGAGATGCTGTGCCCCT
GGCCTTGGGATCCAGGCCCCTCCCTCTCCAGCAGGCCCATGGGAGGCTGGAGTTGGGGCAGAGGAGAACTTGCTG
CCTCGGATCCCCTTCCTACCACCCGGTCCCCACTTTATTGCCAAAACCCAGCTGCACCCCTTCCTGGGCACACGC
TGCTCTGCCCCAGCTTGGGCAGATCTCCCACATGCCAGGGGCCTTTGGGTGCTGTTTTGCCAGCCCATTTGGGCA
GAGAGGCTGTGGTTTGGGGGAGAAGAAGTAGGGGTGGCCCGAAAGGGTCTCCGAAATGCTGTCTTTCTTGCTCCC
TGACTGGGGGCAGACATGGTGGGGTCTCCTCAGGACCAGGGTTGGCACCTTCCCCCTCCCCCAGCCACTCCCCAG
CCAGCCTGGCTGGGACTGGGAACAGAACTCGGTGTCCCCACCATCTGCTGTCTTTTCTTTGCCATCTCTGCTCCA
ACCGGGATGGGAGCCGGGCAAACTGGCCGCGGGGGCAGGGGAGGCCATCTGGAGAGCCCAGAGTCCCCCCACTCC
CAGCATCGCACTCTGGCAGCACCGCCTCTTCCCGCCGCCCAGCCCACCCCATGGCCGGCTTTCAGGAGCTCCATA
CACACGCTGCCTTCGGTACCCACCACACAACATCCAAGTGGCCTCCGTCACTACCTGGCTGCGGGGCGGGCACAC
CTCCTCCCACTGCCCACTGGCCGGC

FIGURE 4315

TCGTGTTCATGGGAGCTCGTTTTCTTTTCCTCTAGGCAGAGAAGAGGCGATGGCGGCGATGGCATCTCTCGGCGC
CCTGGCGCTGCTCCTGCTGTCCAGCCTCTCCCGCTGCTCAGCCGAGGCCTGCCTGGAGCCCCAGATCACCCCTTC
CTACTACACCACTTCTGACGCTGTCATTTCCACTGAGACCGTCTTCATTGTGGAGATCTCCCTGACATGCAAGAA
CAGGGTCCAGAACATGGCTCTCTATGCTGACGTCGGTGGAAAACAATTCCCTGTCACTCGAGGCCAGGATGTGGG
GCGTTATCAGGTGTCCTGGAGCCTGGACCACAAGAGCGCCCACGCAGGCACCTATGAGGTTAGATTCTTCGACGA
GGAGTCCTACAGCCTCCTCAGGAAGGCTCAGAGGAATAACGAGGACATTTCCATCATCCCGCCTCTGTTTACAGT
CAGCGTGGACCATCGGGGCACTTGGAACGGGCCCTGGGTGTCCACTGAGGTGCTGGCTGCGGCGATCGGCCTTGT
GATCTACTACTTGGCCTTCAGTGCGAAGAGCCACATCCAGGCCTGAGGGCGGCACCCCAGCCCTGCCCTTGCTTC
CTTCAATAAACATCACAGGACCTGGGACTGCACAGGA

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FIGURE 4316

GGTCGCGGTCCCCCCCTCAACATGGCGGCAGCGGTGCTCTAGGCGCCGGAAGGGGGCGTGAATCGGTGCGACCGC
GCGCGTGCGCAGTACCGGGTCCGCGCCTGTCCCCGAAACTTCGCACCCCGTCGAACTCTCGCGAGAGCGGTATCT
GCGTGTCGGGACGTGCGGAGGCTCTCACTTTCCGTCATGGCGCTGAAGGTAGCGACCGTCGCCGGCAGCGCCGCG
AAGGCGGTGCTCGGGCCAGCCCTTCTCTGCCGTCCCTGGGAGGTTCTAGGCGCCCACGAGGTCCCCTCGAGGAAC
ATCTTTTCAGAACAAACAATTCCTCCGTCCGCTAAGTATGGCGGGCGGCACACGGTGACCATGATCCCAGGGGAT
GGCATCGGGCCAGAGCTCATGCTGCATGTCAAGTCCGTCTTCAGGCACGCATGTGTACCAGTGGACTTTGAAGAG
GTGCACGTGAGTTCCAATGCTGATGAAGAGGACATTCGCAATGCCATCATGGCCATCCGCCGGAACCGCGTGGCC
CTGAAGGGCAACATCGAAACCAACCATAACCTGCCACCGTCGCACAAATCTCGAAACAACATCCTTCGCACCAGC
CTGGACCTCTATGCCAACGTCATCCACTGTAAGAGCCTTCCAGGCGTGGTGACCCGGCACAAGGACATAGACATC
CTCATTGTCCGGGAGAACACAGAGGGCGAGTACAGCAGCCTGGAGCATGAGAGTGTGGCGGGAGTGGTGGAGAGC
CTGAAGATCATCACCAAGGCCAAGTCCCTGCGCATTGCCGAGTATGCCTTCAAGCTGGCGCAGGAGAGCGGGCGC
AAGAAAGTGACGGCCGTGCACAAGGCCAACATCATGAAACTGGGCGATGGGCTTTTCCTCCAGTGCTGCAGGGAG
GTGGCAGCCCGCTACCCTCAGATCACCTTCGAGAACATGATTGTGGATAACACCACCATGCAGCTGGTGTCCCGG
CCCCAGCAGTTTGATGTCATGGTGATGCCCAATCTCTATGGCAACATCGTCAACAATGTCTGCGCGGGACTGGTC
GGGGGCCCAGGCCTTGTGGCTGGGGCCAACTATGGCCATGTGTACGCGGTGTTTGAAACAGCTACGAGGAACACC
GGCAAGAGTATCGCCAATAAGAACATCGCCAACCCCACGGCCACCCTGCTGGCCAGCTGCATGATGCTGGACCAC
CTCAAGCTGCACTCCTATGCCACCTCCATCCGTAAGGCTGTCCTGGCATCCATGGACAATGAGAATATGCACACT
CCGGACATCGGGGGCCAGGGCACAACATCTGAAGCCATCCAGGACGTCATCCGCCACATCCGCGTCATCAACGGC
CGGGCCGTGGAGGCCTAGGCTGGCCCTAGGACCTTCTTGGTTTGCTCCTTGGATTCCCCTTCCCACTCCAGCACC
CCAGCCAGCCTGGTACGCAGATCCCAGAATAAAGCACCTTCTCCCTAG

FIGURE 4317A

GCGGACGGACGCGCCTGGTGCCCCGGGGAGGGGCGCCACCGGGGGAGGAGGAGGAGGAGAAGGTGGAGAGGAAGA
GACGCCCCCTCTGCCCGAGACCTCTCAAGGCCCTGACCTCAGGGGCCAGGGCACTGACAGGACAGGAGAGCCAAG
TTCCTCCACTTGGGCTGCCCGAAGAGGCCGCGACCCTGGAGGGCCCTGAGCCCACCGCACCAGGGGCCCCAGCAC
CACCCCGGGGGCCTAAAGCGACAGTCTCAGGGGCCATCGCAAGGTTTCCAGTTGCCTAGACAACAGGCCCAGGGT
CAGAGCAACAATCCTTCCAGCCACCTGCCTCAACTGCTGCCCCAGGCACCAGCCCCAGTCCCTACGCGGCAGCCA
GCCCAGGTGACATGCCGGTGCTCTCCAGGCCCCGGCCCTGGCGGGGGAACACGCTGAAGCGCACGGCCGTGCTCC
TGGCCCTCGCGGCCTATGGAGCCCACAAAGTCTACCCCTTGGTGCGCCAGTGCCTGGCCCCGGCCAGGGGTCTTC
AGGCGCCCGCCGGGGAGCCCACGCAGGAGGCCTCCGGGGTCGCGGCGGCCAAAGCTGGCATGAACCGGGTATTCC
TGCAGCGGCTCCTGTGGCTCCTGCGGCTGCTGTTCCCCCGGGTCCTGTGCCGGGAGACGGGGCTGCTGGCCCTGC
ACTCGGCCGCCTTGGTGAGCCGCACCTTCCTGTCGGTGTATGTGGCCCGCCTGGACGGAAGGCTGGCCCGCTGCA
TCGTCCGCAAGGACCCGCGGGCTTTTGGCTGGCAGCTGCTGCAGTGGCTCCTCATCGCCCTCCCTGCTACCTTCG
TCAACAGTGCCATCCGTTACCTGGAGGGCCAACTGGCCCTGTCGTTCCGCAGCCGTCTGGTGGCCCACGCCTACC
GCCTCTACTTCTCCCAGCAGACCTACTACCGGGTCAGCAACATGGACGGGCGGCTTCGCAACCCTGACCAGTCTC
TGACGGAGGACGTGGTGGCCTTTGCGGCCTCTGTGGCCCACCTCTACTCCAACCTGACCAAGCCACTCCTGGACG
TGGCTGTGACTTCCTACACCCTGCTTCGGGCGGCCCGCTCCCGTGGAGCCGGCACAGCCTGGCCCTCGGCCATCG
CCGGCCTCGTGGTGTTCCTCACGGCCAACGTGCTGCGGGCCTTCTCGCCCAAGTTCGGGGAGCTGGTGGCAGAGG
AGGCGCGGCGGAAGGGGGAGCTGCGCTACATGCACTCGCGTGTGGTGGCCAACTCGGAGGAGATCGCCTTCTATG
GGGGCCATGAGGTGGAGCTGGCCCTGCTACAGCGCTCCTACCAGGACCTGGCCTCGCAGATCAACCTCATCCTTC
TGGAACGCCTGTGGTATGTTATGCTGGAGCAGTTCCTCATGAAGTATGTGTGGAGCGCCTCGGGCCTGCTCATGG
TGGCTGTCCCCATCATCACTGCCACTGGCTACTCAGAGTCAGATGCAGAGGCCGTGAAGAAGGCAGCCTTGGAAA
AGAAGGAGGAGGAGCTGGTGAGCGAGCGCACAGAAGCCTTCACTATTGCCCGCAACCTCCTGACAGCGGCTGCAG
ATGCCATTGAGCGGATCATGTCGTCGTACAAGGAGGTGACGGAGCTGGCTGGCTACACAGCCCGGGTGCACGAGA
TGTTCCAGGTATTTGAAGATGTTCAGCGCTGTCACTTCAAGAGGCCCAGGGAGCTAGAGGACGCTCAGGCGGGGT
CTGGGACCATAGGCCGGTCTGGTGTCCGTGTGGAGGGCCCCCTGAAGATCCGAGGCCAGGTGGTGGATGTGGAAC
AGGGGATCATCTGCGAGAACATCCCCATCGTCACGCCCTCAGGAGAGGTGGTGGTGGCCAGCCTCAACATCAGGG
TGGAGGAAGGCATGCATCTGCTCATCACAGGCCCCAATGGCTGCGGCAAGAGCTCCCTGTTCCGGATCCTGGGTG
GGCTCTGGCCCACGTACGGTGGTGTGCTCTACAAGCCCCCACCCCAGCGCATGTTCTACATCCCGCAGAGGCCCT
ACATGTCTGTGGGCTCCCTGCGTGACCAGGTGATCTACCCGGACTCAGTGGAGGACATGCAAAGGAAGGGCTACT
CGGAGCAGGACCTGGAAGCCATCCTGGACGTCGTGCACCTGCACCACATCCTGCAGCGGGAGGGAGGTTGGGAGG
CTATGTGTGACTGGAAGGACGTCCTGTCGGGTGGCGAGAAGCAGAGAATCGGCATGGCCCGCATGTTCTACCACA
GGCCCAAGTACGCCCTCCTGGATGAATGCACCAGCGCCGTGAGCATCGACGTGGAAGGCAAGATCTTCCAGGCGG
CCAAGGACGCGGGCATTGCCCTGCTCTCCATCACCCACCGGCCCTCCCTGTGGAAATACCACACACACTTGCTAC
AGTTCGATGGGGAGGGCGGCTGGAAGTTCGAGAAGCTGGACTCAGCTGCCCGCCTGAGCCTGACGGAGGAGAAGC
AGCGGCTGGAGCAGCAGCTGGCGGGCATTCCCAAGATGCAGCGGCGCCTCCAGGAGCTCTGCCAGATCCTGGGCG
AGGCCGTGGCCCCAGCGCATGTGCCGGCACCTAGCCCGCAAGGCCCTGGTGGCCTCCAGGGTGCCTCCACCTGACC
ACAACCGTCCCCGGCCCCTGCCCCGCCCCCAAGCTCGGATCACATGAAGGAGACAGCAGCACCCACCCATGCACG
CACCCCGCCCCTGCATGCCTGGCCCCTCCTCCTAGAAAACCCTTCCCGCCCTCGGGAAAGTAGATGTGGAGGGTG
GCGCCCTGCGTAACCCTCGCCCTGTCCCTCCCACTCCCTGGGGGCGCTGTTCCACAGTGACTGGGCCCTGTCCAG
GGCAGTGAGTCCTCTACTTTGCTCCGTGGAGGAAGCTGGGGTACAAGGGGCCCAGTGCTGGCCACACAGCAGCGC
AGCCGAGCCCCAGGAGCCCGTCAGGCCACAGCCCCTGGCACTGCAGGTGGCCTCCCTCCAGAGACTCGAGTCCCC
ATGATTCCCTCCTCGTCAGTCTCTCAAAGACCCCATGGTCCATCCCCTGAGGGTGGTCAGCCAAGGCTCCCGTTC
CGTGGGATGCCATAAAAGCCGCCCAGTGGGACCCACAGTCACACAGAGCGCCTCACCTGCATCCTCTCCCCCACA
AGAGCCCCAAAGATCCCACGGGAGAGGGGAGAGGGACGCACAGCACTGCCTGCCAAGCGAGAATGCAGGCCCCGC
CCCCTCGGCCCCTCACCACCTCTTTCTACAGCCTAATTTATTGGATTCCCTATTCGTAGCCATCTCCGTGGCCAA
TGTGACTACCGTGCCAGCAGCGGGGGCGGCCCAGCCTCTGAGTCCCGTGGGGCCCCGGCTCCCACCGGTGCCAAA
CCCAGCCCCTGCGGCCGTCACCCCGCCAGCCTACACTGCCAGCCGCCACCGGGGCACACGGGCCTCTGCTTGCCA
GCCAGGAGTGCGGACACCATGTTCCCAGCTCAGTGCCAAAGAGGGGTCACCAGGGGGAGCTGTCTGCGGAGCCAG
CGCCTGCCCGAGAGAGACCCCACCGCCACCGTGTGCCTTTCCCGGGCCCTCAGCCCTCGGGCCGGGCACCACCCC

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FIGURE 4317B

CAGTCCCCCCAGTAAA

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FIGURE 4318

TTTCCGGCCGCGGTATGAGGGGCGGGGCCGGGGCTGCTGTGGGAGAGTTCTGTTGCTGCGGCGGGGCCTGCACGT
TGACTGTGGGAAACTCGGAAACAAGCTCACATCTTCCTGTGGGAAACCTTCTAGCAACAGGATGAGTCTGCAGTG
GACTGCAGTTGCCACCTTCCTCTATGCGGAGGTCTTTGTTGTGTTGCTTCTCTGCATTCCCTTCATTTCTCCTAA
AAGATGGCAGAAGATTTTCAAGTCCCGGCTGGTGGAGTTGTTAGTGTCCTATGGCAACACCTTCTTTGTGGTTCT
CATTGTCATCCTTGTGCTGTTGGTCATCGATGCCGTGCGCGAAATTCGGAAGTATGATGATGTGACGGAAAAGGT
GAACCTCCAGAACAATCCCGGGGCCATGGAGCACTTCCACATGAAGCTTTTCCGTGCCCAGAGGAATCTCTACAT
TGCTGGCTTTTCCTTGCTGCTGTCCTTCCTGCTTAGACGCCTGGTGACTCTCATTTCGCAGCAGGCCACGCTGCT
GGCCTCCAATGAAGCCTTTAAAAAGCAGGCGGAGAGTGCTAGTGAGGCGGCCAAGAAGTACATGGAGGAGAATGA
CCAGCTCAAGAAGGGAGCTGCTGTTGACGGAGGCAAGTTGGATGTCGGGAATGCTGAGGTGAAGTTGGAGGAAGA
GAACAGGAGCCTGAAGGCTGACCTGCAGAAGCTAAAGGACGAGCTGGCCAGCACTAAGCAAAAACTAGAGAAAGC
TGAAAACCAGGTTCTGGCCATGCGGAAGCAGTCTGAGGGCCTCACCAAGGAGTACGACCGCTTGCTGGAGGAGCA
CGCAAAGCTGCAGGCTGCAGTAGATGGTCCCATGGACAAGAAGGAAGAGTAAGGGCCTCCTTCCTCCCCTGCCTG
CAGCTGGCTTCCACCTGGCACGTGCCTGCTGCTTCCTGAGAGCCCGGCCTCTCCCTCCAGTACTTCTGTTTGTGC
CCTTCTGCTTCCCCCATTCCCTTCCACAGCTCATAGCTCGTCATCTCGGCCCTTGTCCACACTCTCCAAGCACAT
TACAGGGGACCTGATTGCTACACGTTCAGAATGCGTTTGCTGTCATCCTGCTTGGCCTGGCCAGGCCTGGCACAG
CCTTGGCTTCCACGCCTGAGCGTGGAGAGCACGAGTTAGTTGTAGTCCGGCTTGCGGTGGGGCTGACTTCCTGTT
GGTTTGAGCCCCTTTTTGTTTTGCCCTCTGGGTGTTTTCTTTGGTCCCGCAGGAGGGTGGGTGGAGCAGGTGGAC
TGGAGTTTCTCTTGAGGGCAATAAAAGTTGTCATGGTG

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FIGURE 4319A

TAGTCGGAGCGAGGTGGCGAGTCGCTGAGCCCGCCGCGGCCCCGAGAGCGGCTGCAGCCGCCGCCGCCGGGAAGG
AGAGGGCGAGGCGCGCCCGAGCCGCCGCCGCCGCCGCCACCGCCGCCGCCGCCACCACCGCCACCGGAGTCGCGG
GCCAGCCGGGCAGCCTCCGCGGGCCCCGGCCGGGGCGGGGGGCGCGGGCCACAGGCCCCTGCTCCGGCCGCCGCT
TGCAGACCGCGGGCGCCGATGTCGCCCGCGCCCCGCTAGGCTGAGCCTCGGGTCGGGCGAGGAGCCGCCGCAGCC
GCCGCCGCCCGAGCCGCGGGCAGGAGCCTCGGGAGCCGCCGCCGCCGCCGCCGCCGCCCGGCCGGGCCCCGCCGC
CGCCCGCGCGCCCCCGGGCCCCCGACACACATGAGATTCTTCAGGCTCACTTTCAAGTGCTTCGTGGACTGCTTC
TGACTGCGCCGCCCGCGCCCCGCACCCCGCCGCCCGCCCGCCGCCCCGTCCCCCGGCCCGGCCGCCCCCCGGCCC
CCGGCCGGCCCGCGCCCTCGGGGCCCTCCCCGGTGCCGCCGGTGCCCCCCGCCTGACCGCCGCCCCCCGTGAGGC
GCCGCGACCCCGGCCCGGCCGTGCGGCCCGCCGAGGCCATGGCGAAGAAGAGCGCCGAGAACGGCATCTATAGCG
TGTCCGGCGACGAGAAGAAGGGCCCCCTCATCGCGCCCGGGCCCGACGGGGCCCCGGCCAAGGGCGACGGCCCCG
TGGGCCTGGGGACACCCGGCGGCCGCCTGGCCGTGCCGCCGCGCGAGACCTGGACGCGCCAGATGGACTTCATCA
TGTCGTGCGTGGGCTTCGCCGTGGGCTTGGGCAACGTGTGGCGCTTCCCCTACCTGTGCTACAAGAACGGCGGAG
GTGTGTTCCTTATTCCCTACGTCCTGATCGCCCTGGTTGGAGGAATCCCCATTTTCTTCTTAGAGATCTCGCTGG
GCCAGTTCATGAAGGCCGGCAGCATCAATGTCTGGAACATCTGTCCCCTGTTCAAAGGCCTGGGCTACGCCTCCA
TGGTGATCGTCTTCTACTGCAACACCTACTACATCATGGTGCTGGCCTGGGGCTTCTATTACCTGGTCAAGTCCT
TTACCACCACGCTGCCCTGGGCCACATGTGGCCACACCTGGAACACTCCCGACTGCGTGGAGATCTTCCGCCATG
AAGACTGTGCCAATGCCAGCCTGGCCAACCTCACCTGTGACCAGCTTGCTGACCGCCGGTCCCCTGTCATCGAGT
TCTGGGAGAACAAAGTCTTGAGGCTGTCTGGGGGACTGGAGGTGCCAGGGGCCCTCAACTGGGAGGTGACCCTTT
GTCTGCTGGCCTGCTGGGTGCTGGTCTACTTCTGTGTCTGGAAGGGGGTCAAATCCACGGGAAAGATCGTGTACT
TCACTGCTACATTCCCCTACGTGGTCCTGGTCGTGCTGCTGGTGCGTGGAGTGCTGCTGCCTGGCGCCCTGGATG
GCATCATTTACTATCTCAAGCCTGACTGGTCAAAGCTGGGGTCCCCTCAGGTGTGGATAGATGCGGGGACCCAGA
TTTTCTTTTCTTACGCCATTGGCCTGGGGGCCCTCACAGCCCTGGGCAGCTACAACCGCTTCAACAACAACTGCT
ACAAGGACGCCATCATCCTGGCTCTCATCAACAGTGGGACCAGCTTCTTTGCTGGCTTCGTGGTCTTCTCCATCC
TGGGCTTCATGGCTGCAGAGCAGGGCGTGCACATCTCCAAGGTGGCAGAGTCAGGGCCGGGCCTGGCCTTCATCG
CCTACCCGCGGGCTGTCACGCTGATGCCAGTGGCCCCACTCTGGGCTGCCCTGTTCTTCTTCATGCTGTTGCTGC
TTGGTCTCGACAGCCAGGTTTGTAGGTGTGGAGGGCTTCATCACCGGCCTCCTCGACCTCCTCCCGGCCTCCTAC
TACTTCCGTTTCCAAAGGGAGATCTCTGTGGCCCTCTGTTGTGCCCTCTGCTTTGTCATCGATCTCTCCATGGTG
ACTGATGGCGGGATGTACGTCTTCCAGCTGTTTGACTACTACTCGGCCAGCGGCACCACCCTGCTCTGGCAGGCC
TTTTGGGAGTGCGTGGTGGTGGCCTGGGTGTACGGAGCTGACCGCTTCATGGACGACATTGCCTGTATGATCGGG
TACCGACCTTGCCCCTGGATGAAATGGTGCTGGTCCTTCTTCACCCCGCTGGTCTGCATGGGCATCTTCATCTTC
AACGTTGTGTACTACGAGCCGCTGGTCTACAACAACACCTACGTGTACCCGTGGTGGGGTGAGGCCATGGGCTGG
GCCTTCGCCCTGTCCTCCATGCTGTGCGTGCCGCTGCACCTCCTGGGCTGCCTCCTCAGGGCCAAGGGCACCATG
GCTGAGCGCTGGCAGCACCTGACCCAGCCCATCTGGGGCCTCCACCACTTGGAGTACCGAGCTCAGGACGCAGAT
GTCAGGGGCCTGACCACCCTGACCCCAGTGTCCGAGAGCAGCAAGGTCGTCGTGGTGGAGAGTGTCATGTGACAA
CTCAGCTCACATCACCAGCTCACCTCTGGTAGCCATAGCAGCCCCTGCTTCAGCCCCACCGCACCCCTCCAGGGG
GCCTGCCTTTCCCTGACACTTTTGGGGTCTGCCTGGGGGAGGAGGGGAGAAAGCACCATGAGTGCTCACTAAAAC
AACTTTTTCCATTTTTAATAAAACGCCAAAAATATCACAACCCACCAAAAATAGATGCCTCTCCCCCTCCAGCCC
TAGCCGAGCTGGTCCTAGGCCCCGCCTAGTGCCCCACCCCCACCCACAGTGCTGCACTCCTCCTGCCCCTGCCAC
GCCCACCCCCTGCCCACCTCTCCAGGCTCTGCTCTGCAGCACACCCGTGGGTGACCCCTCACCCCAGAAGCAGCA
GTGGCAGCTTGGGAAATGTGAGGAAGGGAAGGAGGGAGAGACGGGAGGGAGGAGAGAGAGGAGAAGGGAGGCAGG
GGAGGGGCAGCAGAACCAAGGCAAATATTTCAGCTGGGCTATACCCCTCTCCCCATCCCTGTTATAGAAGCTTAG
AGAGCCAGCCAGCAATGGAACCTTCTGGTTCCTGCGCCAATCGCCACCAGTATCAATTGTGTGAGCTTGGGTGCG
AGTGCACGCGTGCGTGAGTACGGAGAGTATATATAGATCTCTATCTCTTAGCAAAGGTGAATGCCAGATGTAAAT
GGCGCCTCTGGGCAAAGGAGGCTTGTATTTTGCACATTTTATAAAAACTTGAGAGAATGAGATTTCTGCTTGTAT
ATTTCTAAAAAGAGGAAGGAGCCCAAACCATCCTCTCCTTACCACTCCCATCCCTGTGAGCCCTACCTTACCCCT
CTGCCCCTAGCCAAGGAGTGTGAATTTATAGATCTAACTTTCATAGGCAAAACAAAAGCTTCGAGCTGTTGCGTG
TGTGAGTCTGTTGTGTGGATGTGCGTGTGTGGTCCCCAGCCCCAGACTGGATTGGAAAAGTGCATGGTGGGGGCC
TCGGGGCTGTCCCCACGCTGTCCCTTTGCCACAAGTCTGTGGGGCAAGAGGCTGCAATATTCCGTCCTGGGTGTC

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FIGURE 4319B

TGGGCTGCTAACCTGGCCTGCTCAGGCTTCCCACCCTGTGCGGGGCACACCCCCAGGAAGGGACCCTGGACACGG
CTCCCACGTCCAGGCTTAAGGTGGATGCACTTCCCGCACCTCCAGTCTTCTGTGTAGCAGCTTTAACCCACGTTT
GTCTGTCACGTCCAGTCCCGAGACGGCTGAGTGACCCCAAGAAAGGCTTCCCCGACACCCAGACAGAGGCTGCAG
GGCTGGGGCTGGGTGAGGGTGGCGGGCCTGCGGGGACATTCTACTGTGCTAAAAAGCCACTGCAGACATAGCAAT
AAAAACATGTCATTTTCC

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FIGURE 4320

GCTTCTGCGCGCCGGGGCCGCCTCTCCTTCCGCCGGTGCCGCGGCGCCTCATGGAAGCCCCGGAGGCGGCGGAGG
GGGGCCTGCAGCGCGGGGCCCGGAGGGCAGCCGGCGCCCGAAGCCAGGGTGCACTTCCGAGTGGCGAGGTTCATC
ATGGAGGCAGGTGTCAAGCTAGGGATGCGGTCCATTCCCATTGCCACTGCTTGCACCATTTACCATAAGTTCTTT
TGCGAGACCAACCTGGACGCCTATGACCCTTACCTGATTGCCATGTCTTCAATTTACTTGGCCGGCAAAGTGGAA
GAGCAGCACCTGCGGACTCGTGACATCATCAATGTGTCCAACAGGTACTTTAACCCAAGCGGTGAGCCCCTGGAA
TTGGACTCCCGCTTCTGGGAACTCCGGGACAGCATCGTGCAGTGTGAGCTTCTCATGCTGAGAGTTCTGCGCTTC
CAGGTCTCCTTCCAGCATCCACACAAGTACCTGCTCCACTACCTGGTTTCCCTCCAGAACTGGCTGAACCGCCAC
AGCTGGCAGCGGACCCCTGTTGCCGTCACCGCCTGGGCCCTGCTGCGGGACAGCTACCATGGGGCGCTGTGCCTC
CGCTTCCAGGCCCAGCACATCGCCGTGGCGGTGCTCTACCTGGCCCTGCAGGTCTACGGAGTTGAGGTGCCCGCC
GAGGTCGAGGCTGAGAAGCCGTGGTGGCAGGTGTTTAATGACGACCTTACCAAGCCAATCATTGATAATATTGTG
TCTGATCTCATTCAGATTTATACCATGGACACAGAGATCCCCTAAGGTCCTGGCCCAGGCCTGCCCAAAGAGAAG
CCACATCTGCGTTTGTCCTTTGAGAGGACTTTGACTACAATACAGGCATGACATCAATGAAAGGAAAGTCATGAA
ATCGATGAGACTGAATCCCTACGGATTTCTTAAAAGCCAGATTTGTAGGGAGAATGAATGTGCAACGTGGCTGAA
ATCTATTTTGTGTAATAAAAGGTGATACAAGTC

FIGURE 4321

TCTCTCCACAAACTGCCCAGGAGTGAGTAGCTGCTTTCGGTCCGCCGGACACACCGGACAGATAGACGTGCGGAC
GGCCCACCACCCCAGCCCGCCAACTAGTCAGCCTGCGCCTGGCGCCTCCCCTCTCCAGGTCCATCCGCCATGTGG
CCCCTGTGGCGCCTCGTGTCTCTGCTGGCCCTGAGCCAGGCCCTGCCCTTTGAGCAGAGAGGCTTCTGGGACTTC
ACCCTGGACGATGGGCCATTCATGATGAACGATGAGGAAGCTTCGGGCGCTGACACCTCGGGCGTCCTGGACCCG
GACTCTGTCACACCCACCTACAGCGCCATGTGTCCTTTCGGCTGCCACTGCCACCTGCGGGTGGTTCAGTGCTCC
GACCTGGGTCTGAAGTCTGTGCCCAAAGAGATCTCCCCTGACACCACGCTGCTGGACCTGCAGAACAACGACATC
TCCGAGCTCCGCAAGGATGACTTCAAGGGTCTCCAGCACCTCTACGCCCTCGTCCTGGTGAACAACAAGATCTCC
AAGATCCATGAGAAGGCCTTCAGCCCACTGCGGAAGCTGCAGAAGCTCTACATCTCCAAGAACCACCTGGTGGAG
ATCCCGCCCAACCTACCCAGCTCCCTGGTGGAGCTCCGCATCCACGACAACCGCATCCGCAAGGTGCCCAAGGGA
GTGTTCAGTGGGCTCCGGAACATGAACTGCATCGAGATGGGCGGGAACCCACTGGAGAACAGTGGCTTTGAACCT
GGAGCCTTCGATGGCCTGAAGCTCAACTACCTGCGCATCTCAGAGGCCAAGCTGACTGGCATCCCCAAAGACCTC
CCTGAGACCCTGAATGAACTCCACCTAGACCACAACAAAATCCAGGCCATCGAACTGGAGGACCTGCTTCGCTAC
TCCAAGCTGTACAGGCTGGGCCTAGGCCACAACCAGATCAGGATGATCGAGAACGGGAGCCTGAGCTTCCTGCCC
ACCCTCCGGGAGCTCCACTTGGACAACAACAAGTTGGCCAGGGTGCCCTCAGGGCTCCCAGACCTCAAGCTCCTC
CAGGTGGTCTATCTGCACTCCAACAACATCACCAAAGTGGGTGTCAACGACTTCTGTCCCATGGGCTTCGGGGTG
AAGCGGGCCTACTACAACGGCATCAGCCTCTTCAACAACCCCGTGCCCTACTGGGAGGTGCAGCCGGCCACTTTC
CGCTGCGTCACTGACCGCCTGGCCATCCAGTTTGGCAACTACAAAAAGTAGAGGCAGCTGCAGCCACCGCGGGGC
CTCAGTGGGGGTCTCTGGGGAACACAGCCAGACATCCTGATGGGGAGGCAGAGCCAGGAAGCTAAGCCAGGGCCC
AGCTGCGTCCAACCCAGCCCCCCACCTCGGGTCCCTGACCCCAGCTCGATGCCCCATCACCGCCTCTCCCTGGCT
CCCAAGGGTGCAGGTGGGCGCAAGGCCCGGCCCCCATCACATGTTCCCTTGGCCTCAGAGCTGCCCCTGCTCTCC
CTCCACAGCCACCCAGAGGCACCCCATGAAGCTTTTTTCTCGTTCACTCCCAAACCCAAGTGTCCAAGTCTCCAG
TCCTAGGAGAACAGTCCCTGGGTCAGCAGCCAGGAGGCGGTCCATAAGAATGGGGACAGTGGGCTCTGCCAGGGC
TGCCGCACCTGTCCAGACACACATGTTCTGTTCCTCCTCCTCATGCATTTCCAGCCTTTCAACCCTCCCCGACTC
TGCGGCTCCCCTCAGCCCCCTTGCAAGTTCATGGCCTGTCCCTCCCAGACCCCTGCTCCACTGGCCCTTCGACCA
GTCCTCCCTTCTGTTCTCTCTTTCCCCGTCCTTCCTCTCTCTCTCTCTCTCTTTCTGTGTGTGTGTGTGTGTG
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTTGTGCTTCCTCAGACCTTTCTCGCTTCTGAGCTTGGTGGC
CTGTTCCCTCCATCTCTCCGAACCTGGCTTCGCCTGTCCCTTTCACTCCACACCCTCTGGCCTTCTGCCTTGAGC
TGGGACTGCTTTCTGTCTGTCCGGCCTGCACCCAGCCCCTGCCCACAAAACCCCAGGGACAGCGGTCTCCCCAGC
CTGCCCTGCTCAGGCCTTGCCCCCAAACCTGTACTGTCCCGGAGGAGGTTGGGAGGTGGAGGCCCAGCATCCCGC
GCAGATGACACCATCAACCGCCAGAGTCCCAGACACCGGTTTTCCTAGAAGCCCCTCACCCCCACTGGCCCACTG
GTGGCTAGGTCTCCCCTTATCCTTCTGGTCCAGCGCAAGGAGGGGCTGCTTCTGAGGTCGGTGGCTGTCTTTCCA
TTAAAGAAACACCGTGCAACGTG

FIGURE 4322

ATGGGCGGGGCGCGGCTCGGAGCGCGAAACATGGCGGGGCAGGACGCTGGCTGCGGCCGTGGCGGCGACGACTAC
TCAGAGGACGAAGGCGACAGCAGCGTGTCCAGGGCGGCTGTGGAGGTGTTCGGGAAGCTGAAGGACCTAAACTGC
CCCTTCCTCGAGGGTCTGTATATCACAGAGCCAAAGACAATTCAGGAACTGCTGTGCAGCCCCTCAGAGTACCGC
TTGGAGATCCTAGAGTGGATGTGTACCCGGGTCTGGCCCTCACTGCAGGACAGGTTCAGCTCACTGAAAGGGGTC
CCAACAGAGGTGAAGATCCAAGAAATGACGAAGCTGGGCCACGAGCTGATGCTGTGTGCGCCAGATGACCAGGAG
CTCCTCAAGGGCTGTGCCTGCGCCCAGAAGCAGCTACACTTCATGGACCAGTTGCTCGATACCATCCGGAGCCTG
ACCATTGGGTGCTCCAGTTGCTCGAGCCTGATGGAGCACTTCGAGGACACCAGGGAGAAGAACGAGGCCTTGCTG
GGGGAGCTCTTCTCTAGCCCCCACCTGCAGATGCTCCTGAATCCAGAGTGCGACCCGTGGCCCCTGGACATGCAG
CCCCTCCTCAACAAGCAGAGTGATGACTGGCAGTGGGCCAGTGCCTCTGCCAAGTCCGAGGAGGAGGAGAAGCTG
GCGGAGCTTGCCAGGCAGCTGCAGGAGAGTGCTGCCAAGTTGCACGCGCTTAGAACGGAGTACTTTGCACAGCAT
GAGCAAGGGGCTGCTGCGGGCGCAGCCGACATCAGCACCCTAGACCAGAAGCTGCGTCTGGTCACTTCCGACTTC
CACCAGCTAATCTTGGCTTTTCTCCAAGTCTACGACGACGAGCTGGGCGAGTGCTGCCAGCGCCCAGGCCCTGAC
CTCCACCCGTGCGGCCCCATCATCCAGGCCACGCACCAGAATCTGACTTCCTACAGCCAAATCCCCAGAGGCCAA
CCTAAAAAGCCGGCTTTAGTTACGATGACTACAGTTCCCACGTGCGCAACTCTGCCCTTGGCTCAAGGATTCCGT
GATGTTCATTTTGGTTTTCTAAGCGAGAGGCTCCGAGCCTTCCAACCTCTGACTGGCTGGTCCTGTGAGACCCCT
CGATCAGGGATGCTGCTGCAAGTGGTCATGGCAGTTGCTGACACCTCTGCGAAGGCCGTGGAGACCGTGAAGAAG
CAGCAAGGCGAGCAGATCTGCTGGGGTGGCAGCAGCTCCGTCATGAGTCTAGCTACCAAGATGAATGAACTAATG
GAGAAATAGAAAGTCTTCAGTGATGGCCTACGCCAAAGCACAGGATGGGGCGGGCAGGAAGCCCTCTCCCAAGAT
CGAGTTGGCCGAGGATGGATGATTGTGGCAGCAGAAGCCGTTGCAGCCCCACGTTGTGCTCTAGGCAGCTGGGGG
CGGGCTGCGGCCGCTGATTAAAGGCCGCCTAGAGCAGCCTGTGTGGCGACAGGTGCCCAGAAGCCCAGGAAGCCG
GTCAGTGCCCGCCCCAGTTTGAGGACTTGCTATCCCCGTGGGAACATCACC**ATG**TCCGAGGCACCCCGGGCCGAG
ACCTTTGTCTTCCTGGACCTGGAAGCCACTGGGCTCCCCAGTGTGGAGCCCGAGATTGCCGAGCTGTCCCTCTTT
GCTGTCCACCGCTCCTCCCTGGAGAACCCGGAGCACGACGAGTCTGGTGCCCTAGTATTGCCCCGGGTCCTGGAC
AAGCTCACGCTGTGCATGTGCCCGGAGCGCCCCTTCACTGCCAAGGCCAGCGAGATCACCGGCCTGAGCAGTGAG
GGCCTGGCGCGATGCCGGAAGGCTGGCTTTGATGGCGCCGTGGTGCGGACGCTGCAGGCCTTCCTGAGCCGCCAG
GCAGGGCCCATCTGCCTTGTGGCCCACAATGGCTTTGATTATGATTTCCCCCTGCTGTGTGCCGAGCTGCGGCGC
CTGGGTGCCCGCCTGCCCCGGGACACTGTCTGCCTGGACACGCTGCCGGCCCTGCGGGGCCTGGACCGCGCCCAC
AGCCACGGCACCCGGGCCCGGGGCCGCCAGGGTTACAGCCTCGGCAGCCTCTTCCACCGCTACTTCCGGGCAGAG
CCAAGCGCAGCCCACTCAGCCGAGGGCGACGTGCACACCCTGCTCCTGATCTTCCTGCACCGCGCCGCAGAGCTG
CTCGCCTGGGCCGATGAGCAGGCCCGTGGGTGGGCCCACATCGAGCCCATGTACTTGCCGCCTGATGACCCCAGC
CTGGAGGCC**TGA**

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FIGURE 4323

CCGAGCGGGCTGGGGGAGGGGAGCGTGGGGCCGACAGTTTTGGGGGTGAAAAGGCAAAAGGCGGGTGAAAGGCTG
CCTCCCGAGACTCTCCTTGCTTGGAATTCTGCCCACTCTGCGGAGTTAGCAGTCACGACCTCCAGCACAGGATGT
GGTACCACAGATTGTCCCACCTACACAGCAGGCTTCAGGACTTGCTGAAGGGAGGAGTCATATATCCGGCCCTTC
CACAGCCCAACTTCAAAAGCTTACTTCCTTTAGCTGTCCATTGGCACCATACAGCCTCCAAGTCTCTGACTTGTG
CTTGGCAGCAACATGAAGATCATTTTGAGCTGAAATATGCTAATACCGTGATGCGCTTTGATTACGTCTGGCTTC
GAGACCACTGCCGCTCAGCATCGTGCTACAACTCTAAGACTCACCAGCGCAGCCTGGATACTGCCAGTGTGGATT
TATGTATCAAGCCAAAGACCATTCGTCTGGATGAGACCACACTCTTTTTCACTTGGCCAGATGGTCATGTGACTA
AATATGATTTGAATTGGCTGGTGAAAAACAGCTATGAAGGGCAGAAACAAAAAGTCATCCAGCCTAGAATACTAT
GGAATGCTGAAATCTACCAGCAAGCCCAAGTTCCATCGGTAGATTGCCAGAGCTTCTTAGAAACCAACGAGGGAC
TGAAGAAGTTTCTGCAAAACTTTCTGCTCTATGGAATTGCATTCGTAGAAAATGTCCCTCCCACTCAAGAGCACA
CAGAGAAGTTGGCAGAAAGGATCAGCTTAATCAGAGAAACCATTTATGGGAGGATGTGGTATTTCACTTCAGACT
TCTCCAGAGGTGACACTGCGTACACCAAGCTAGCTCTGGATCGGCACACTGACACTACCTATTTTCAAGAGCCCT
GTGGCATTCAAGTGTTTCATTGTCTTAAACATGAAGGAACTGGTGGCAGGACACTGCTAGTAGATGGATTCTATG
CAGCAGAACAGGTACTTCAAAAGGCACCTGAGGAATTTGAACTCCTCAGTAAAGTGCCATTGAAGCATGAATATA
TTGAAGATGTTGGAGAATGTCACAACCACATGATTGGGATTGGGCCAGTCTTAAATATCTACCCATGGAATAAAG
AGCTGTATTTGATCAGGTACAACAACTATGACCGGGCTGTCATCAATACCGTTCCTTATGATGTCGTCCATCGCT
GGTATACAGCACACCGGACTCTAACGATAGAGTTGAGGAGACCTGAGAATGAGTTTTGGGTCAAACTAAAGCCTG
GCAGGGTCCTATTTATAGACAACTGGCGTGTCCTACATGGCAGGGAATGCTTCACTGGCTACCGCCAACTGTGTG
GCTGCTATTTAACAAGAGATGATGTATTAAACACTGCTCGCCTCTTGGGGCTTCAGGCTTAAAATTGACAGCATC
TGGATTATGAATACACCTGGCACCCTGGCTACCAGAATTTCATATGGGCAGAATAATATTGTGTCAAACTCTACT
TCAGATTGTCTCCTTATCCCATCCCACAAAACAGAATCTGTCCGTTTCTCTAGTAAGGGAGACTTGTTGGAGAGG
CGGGACTCTGAGTTATCTAATGTCAGACATCTAGTGGGGCAGCTCTCTTCCTCATGTTATAACATGGATCCACTT
GTTTTATTTAAACCTTTTAATATAATTTTGGTCAGTCTCCTTCAGAAATATAATCTCCATATTGATAGGAAAGCA
ATAATTGCCATGAGGTAACGATTTTTTTCCCAAGTAGATCAGTTAGAAAGAAATGCATTCTAGAAATAACAAAAA
TCCTGATAAAGCAACAATTTGCAAAATGTTTGGTCTTAGGACACCTTAACACTCTTAAAAGTTATTGAAGGCCCC
AAGGAGTTCTTGGGTGTGGGTTCTATCTATTGATACTAATTATTTTAGGTATTAAGACTGAGAAATATTTAAAGC
TCAAGAAGAACACAGAAGCACACATCCCTCAGCTATGAGAGAGATGACATAACCATATGTCATGTAGCCTCTGGA
AAAGTCCTCTGTATCCTCATGAGATAACGAGAGGGGGAAAAAAAGCTACTACTGCCTTTGTAACTTCCACTTAGC
CTACTACAGGGCTATGCACATCTTAGTTTCCAAAAGTCTGCTTAATTTCAAAAGAAAAATGCCTAATTGAATGTA
ACTCATCTTGGTGTTATTATACAAAATAATTTTTAATCTGCAGACCCACGAAAAGGGTCTCAGGGACTCCTCCAG
GGGTCTTCAGACCATACTTTGAGAACCCATGGGCTAGCGACTACCTTGAGACAGTCCTTTACCTAGGCCTGTGGA
TTAAAGGGTTTAGCTGAAACCCTAGATTCTTCTCTGTAGTCTAATAGAACTCCAAACATTGTAAGAATTGCTTGG
TAGCATAAGCTCAGGGATAAGGTGGGAATTGAGTTCAAATATAGTGTTTTATCTTCCACACAAATCATCTCTATA
GGAGTTAAATTAGGAAGTCACAACAGCGCCTGTTGAACAAACTCATCAGTGTGGTAATCCTATGAGGGATAATTG
CAGAAAGGTTTTAGAGACTTGTGAGGTTCCATATGATAATTCTTTACACCTCCCCCCCCCAAGAGAAAGTACACA
GGGCTATTCTGTAATATTGTTCAGGGAAATCAGCATGATAGATGCTGTGCCTCCAGAGAGTTCTCTGGAGATTAC
TACCCAAATGTGTATTTTGGCAATTTGGTGGTATTTAGGATGTAATATGTTTTCCTCCATTTCTGCTAATTTTCT
CTCTCTCTCTCTCATAACATACTATACATGCTAATTGCCAAGATTTGAATGAGTCAAATTT

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FIGURE 4324

AAAACGATTTCAAGAGCTGCACTTAAGCATCTAGAATTTTCTGCGTCACACCTCTTGAGAGAAGAGACTGGCTCC
AGGTCTGACTCAGTCCACTACAAGCTAGACGGTCTTCTTAAAGCACCAACATTACTTGAGTCTTTGGATAAAATT
GAGAAAAGAGTCTACAAGTATTGTGGACTCTACAGGAGGCAGGAGGCTGACAACTGGCAGTAAAGACAAAG**ATG**T
CAGGCCTGCGGCCCGGCACTCAAGTGGACCCTGAGATTGAGCTTTTTGTAAAGGCTGGAAGTGATGGAGAGAGTA
TTGGAAACTGTCCCTTTTGCCAACGCCTTTTCATGATCCTCTGGCTTAAAGGAGTTAAATTTAATGTGACAACTG
TTGACATGACCAGAAAGCCTGAAGAACTAAAGGACTTAGCCCCAGGTACCAATCCTCCGTTCCTGGTGTATAACA
AGGAGTTGAAAACAGACTTCATTAAAATTGAGGAGTTTTTAGAACAAACCCTGGCTCCTCCAAGGTACCCTCACC
TGAGTCCCAAGTACAAGGAGTCTTTTGATGTGGGCTGTAACCTCTTTGCCAAGTTTTCTGCATACATTAAGAATA
CACAAAAGGAGGCAAATAAGAATTTTGAAAAATCTCTGCTCAAAGAATTCAAGCGTCTGGATGACTACTTAAACA
CCCCACTTCTGGATGAAATTGATCCAGACAGTGCTGAGGAACCCCCAGTTTCCAGAAGACTATTCTTGGATGGGG
ACCAGCTAACACTGGCTGATTGTAGCTTGTTACCCAAGCTGAACATTATTAAAGTTGCTGCCAAGAAATATCGTG
ACTTTGACATTCCAGCAGAATTCTCAGGAGTCTGGCGTTATCTCCACAATGCCTATGCCCGTGAAGAATTTACCC
ACACGTGTCCTGAAGACAAAGAAATTGAAAATACTTACGCAAATGTGGCTAAACAGAAGAGT**TAG**GAGAGCTCTT
ACAGGAGAAAAGGCTATATTTGTGATCAGATTTTACTTATTGACATATTAGAAAGGTTTTTGCAAATAAGAATAT
GAAAAATACTGTTTCTTCTATCCAACTCTCTTATGAAAAGGAACTCTGTATTTTCTATTAGCCATAAATAATCTG
TCCACTGTATTTTACAGGTCTTCATACTTTTACTTAATTTTCTTTATCTGTATGGCAAACCACTGCAATCCTGAA
TGACATGGAAAGCATCACAATCTTTTGCCCTTTGCTTGAATTCCTGGAATGCATACATATAAGCTAAACAGATGT
CTGCAGTTATAAATGTCATAAGTAGAGGTACAATCTCACCCTGCTCCTTAGAAACATTTCCATATAAATCGCTAA
AATAATTTCACATTTTTGTTAGTTTAATATATACATGAGTTTATTTCTGATATAAATAATAAATACAGAGAGTGA
GCATATCAGAGAGGCAAATTCTTAAAGAATGATTTTTAAAATCAGCTCTAGGAAGAGCTCAAGATCAATTGGTCA
TAGAACAGCATTTGACGCCTAGAACTATGACCACCTCATGGTCAGAGATGAGAATGTAGCCTTTGTGACCAGATT
ATATTATTTTTAAATGAAGAAGCACTCATTAAATAAAACATAATTTTAAAAAACAATATAAGAAACAAAGTCAAC
TGAATCTTTTATTCATAGAAATGAAAAGGAAAATAAAAACTGTGGCTGACC

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FIGURE 4325

CTCTTACAGATAGTGCGGCGGCCCAGGCGTCGCGTCTACGCGGGGGATTACAGTAACCCGGTTGTCAGTGATGAG
TCAGAGTGCGTGGTGCTGATGCTGCTGCCATTTCATCACCTTTGCGAGCGCAGCATCCATCCCTCCGCTCTCCCG
GCGCCTGGGCCTACCCAGCTTCGGGCTCCCAGGCCAGCGATGCGCTCGCGGCTGAGCTAGATCCTGCCGAGCCGC
GCTCTCTGAGGCGTCGGCGGGGCGCCCCCTCCCGCCGTCCCCGGTCCGGGCCAAGGAGACCTGCAGAGCCGCGGC
C**ATG**GAGGCCATCTGGCTGTACCAGTTCCGGCTCATTGTCATCGGGGATTCCACAGTGGGCAAGTCCTGCCTGAT
CCGCCGCTTCACCGAGGGTCGCTTTGCCCAGGTTTCTGACCCCACCGTGGGGGTGGATTTTTTCTCCCGCTTGGT
GGAGATCGAGCCAGGAAAACGCATCAAGCTCCAGATCTGGGATACCGCGGGTCAAGAGAGGTTCAGATCCATCAC
TCGCGCCTACTACAGGAACTCAGTAGGTGGTCTTCTCTTATTTGACATTACCAACCGCAGGTCCTTCCAGAATGT
CCATGAGTGGTTAGAAGAGACCAAAGTACACGTTCAGCCCTACCAAATTGTATTTGTTCTGGTGGGTCACAAGTG
TGACCTGGATACACAGAGGCAAGTGACTCGCCACGAGGCCGAGAAACTGGCTGCTGCATACGGCATGAAGTACAT
TGAAACGTCAGCCCGAGATGCCATTAATGTGGAGAAAGCCTTCACAGACCTGACAAGAGACATATATGAGCTGGT
TAAAAGGGGGGAGATTACAATCCAGGAGGGCTGGGAAGGGGTGAAGAGTGGATTTGTACCAAATGTGGTTCACTC
TTCAGAAGAGGTTGTCAAATCAGAGAGGAGATGTTTGTGC**TAG**TCAGTTCTTTTATTTCCAAAACATGCTCTCCT
ACTTGAACTGAAAAGTAAGAGAAATAAATAGAATCTTTGTGT

FIGURE 4326

ACGCTTGTCACTTACCTGAGCGCAGCCAATCAGCACCTAGAGGTTGGGCTACTTTCGGCCAAAGGAGAACGGGGA
CTTGTGGGGGACGCTCCCTGCGCACCAATGAATGTGCATGGAGATGGAGAGGCGGGCCTGCAAGTGCGAACAAGC
CAATCACGGAATCCCGGCGGCCGGCGGCCCGGGAGGCAGTCGCGCGCTCGCATCCCCAAGATGGCGGCCGTTAAG
GACAGTTGTGGCAAAGGAGAAATGGCCACAGGGAATGGGCGGCGGCTCCACCTGGGGATTCCTGAGGCCGTGTTT
GTGGAAGATGTAGATTCCTTCATGAAACAGCCTGGGAATGAGACTGCAGATACAGTATTAAAGAAGCTGGATGAA
CAGTACCAGAAGTATAAGTTTATGGAACTCAACCTTGCTCAAAAGAAAAGAAGGCTAAAAGGTCAGATTCCTGAA
ATTAAACAGACTTTGGAAATTCTAAAATACATGCAGAAGAAAAAAGAGTCCACCAACTCAATGGAGACCAGATTC
TTGCTGGCAGATAACCTGTATTGCAAAGCTTCAGTTCCTCCTACCGATAAAATGTGTCTGTGGTTGGGGGCTAAT
GTAATGCTTGAATATGATATTGATGAAGCTCAGGCATTGTTGGAAAAGAATTTATCGACTGCCACAAAGAATCTT
GATTCCCTGGAGGAAGACCTTGACTTTCTTCGAGATCAATTTACTACCACAGAAGTCAATATGGCCAGGGTTTAT
AATTGGGATGTAAAAAGAAGAAACAAGGATGACTCTACCAAGAACAAAGCATAATGCTGGCAATTAAAAATGTGG
TTTAGTTTTCCAAACATGTTATCTTAAATACCCCTTTATCCTTACAGGTTGACATAACTTTGAATGTTTTAACAG
CAAGAATTTTAAGAAAAGATAAACACCATTTTATTTATTTATAAAAACAAAATTAGTTTCAAATATTTTTGACAT
TGTGATTTTTTTTTCCACATTTCTCAGCAAAGCTAATGGTATTTTAATCATTATTTTTGCCTGTCATAAGAAAAC
TCTTAGCTGAAATGGCCGAAAACTGTGAGACATGCTATGGAAGCTGAATGCCGGACGCTAGCACAGTTTACTTTT
TCCCTTTCTAATCGGCTGATGTTACTCTCACTTGATGTGGTTAAACCATTTTAGAGGTAGAGAAGACAGACAGTT
TGAATATTTGTAAACTTGTTTTTCTTTGGTATATTTAGGACTTAGTGGTCCTCTGTTGCTATTGTCTTCTATAAG
TGGAGTTTCATGACTTACTGCTTAACGAATAACTAACTACTATGATATTCTGGACATTTTAGGAAATGGTAATTT
GCCTTGCTACACATTAAGAGGGCTATTAAGACTACATTTTTTCTAACCTCAGATAAGTGCAGTGTCTTTGCAATG
CCAACATAAGGGAGATCTTGGCCAACGTGAAATAAAATTACTCATTCAAAACTCTGCCTAAGGTGATTTTGTAGT
TCTTAACAGTTCTCCAGAGCATCTTGAACAGGAATATTAAGATAAATGTGAATCTGCAATGGCTGAAAAGAGTTG
TGAGCTTTTTTATTCATGATAAAACCTTATAGGAATAGTATAAAAAATCCCTGTGGAAAGCTACTAGTACATTGA
CCAGCGCTGGGTGATACAGATTCTGATAAAAACATAAATGTATTAGTTCATCTCCATGTAGTAAAAAGTATACTT
ATACAATGTTTTGTACTTGTATTTCATGAAATTAAAACAGTGATGCTAAAAC

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FIGURE 4327

GACATCATGGGCTATTTTTAGGGGTTGACTGGTAGCAGATAAGTGTTGAGCTCGGGCTGGATAAGGGCTCAGAGT
TGCACTGAGTGTGGCTGAAGCAGCGAGGCGGGAGTGGAGGTGCGCGGAGTCAGGCAGACAGACAGACACAGCCAG
CCAGCCAGGTCGGCAGTATAGTCCGAACTGCAAATCTTATTTTCTTTTCACCTTCTCTCTAACTGCCCAGAGCTA
GCGCCTGTGGCTCCCGGGCTGGTGTTTCGGGAGTGTCCAGAGAGCCTGGTCTCCAGCCGCCCCCGGGAGGAGAGC
CCTGCTGCCCAGGCGCTGTTGACAGCGGCGGAAAGCAGCGGTACCCACGCGCCCGCCGGGGGAAGTCGGCGAGCG
GCTGCAGCAGCAAAGAACTTTCCCGGCTGGGAGGACCGGAGACAAGTGGCAGAGTCCCGGAGCCAACTTTTGCAA
GCCTTTCCTGCGTCTTAGGCTTCTCCACGGCGGTAAAGACCAGAAGGCGGCGGAGAGCCACGCAAGAGAAGAAGG
ACGTGCGCTCAGCTTCGCTCGCACCGGTTGTTGAACTTGGGCGAGCGCGAGCCGCGGCTGCCGGGCGCCCCCTCC
CCCTAGCAGCGGAGGAGGGGACAAGTCGTCGGAGTCCGGGCGGCCAAGACCCGCCGCCGGCCGGCCACTGCAGGG
TCCGCACTGATCCGCTCCGCGGGGAGAGCCGCTGCTCTGGGAAGTGAGTTCGCCTGCGGACTCCGAGGAACCGCT
GCGCACGAAGAGCGCTCAGTGAGTGACCGCGACTTTTCAAAGCCGGGTAGCGCGCGCGAGTCGACAAGTAAGAGT
GCGGGAGGCATCTTAATTAACCCTGCGCTCCCTGGAGCGAGCTGGTGAGGAGGGCGCAGCGGGGACGACAGCCAG
CGGGTGCGTGCGCTCTTAGAGAAACTTTCCCTGTCAAAGGCTCCGGGGGGCGCGGGTGTCCCCCGCTTGCCACAG
CCCTGTTGCGGCCCCGAAACTTGTGCGCGCAGCCCAAACTAACCTCACGTGAAGTGACGGACTGTTCT**ATG**ACTG
CAAAGATGGAAACGACCTTCTATGACGATGCCCTCAACGCCTCGTTCCTCCCGTCCGAGAGCGGACCTTATGGCT
ACAGTAACCCCAAGATCCTGAAACAGAGCATGACCCTGAACCTGGCCGACCCAGTGGGGAGCCTGAAGCCGCACC
TCCGCGCCAAGAACTCGGACCTCCTCACCTCGCCCGACGTGGGGCTGCTCAAGCTGGCGTCGCCCGAGCTGGAGC
GCCTGATAATCCAGTCCAGCAACGGGCACATCACCACCACGCCGACCCCCACCCAGTTCCTGTGCCCCAAGAACG
TGACAGATGAGCAGGAGGGCTTCGCCGAGGGCTTCGTGCGCGCCCTGGCCGAACTGCACAGCCAGAACACGCTGC
CCAGCGTCACGTCGGCGGCGCAGCCGGTCAACGGGGCAGGCATGGTGGCTCCCGCGGTAGCCTCGGTGGCAGGGG
GCAGCGGCAGCGGCGGCTTCAGCGCCAGCCTGCACAGCGAGCCGCCGGTCTACGCAAACCTCAGCAACTTCAACC
CAGGCGCGCTGAGCAGCGGCGGCGGGGGCGCCCTCCTACGGCGCGGCCGGCCTGGCCTTTCCCGCGCAACCCCAGC
AGCAGCAGCAGCCGCCGCACCACCTGCCCCAGCAGATGCCCGTGCAGCACCCGCGGCTGCAGGCCCTGAAGGAGG
AGCCTCAGACAGTGCCCGAGATGCCCGGCGAGACACCGCCCCTGTCCCCCATCGACATGGAGTCCCAGGAGCGGA
TCAAGGCGGAGAGGAAGCGCATGAGGAACCGCATCGCTGCCTCCAAGTGCCGAAAAAGGAAGCTGGAGAGAATCG
CCCGGCTGGAGGAAAAAGTGAAAACCTTGAAAGCTCAGAACTCGGAGCTGGCGTCCACGGCCAACATGCTCAGGG
AACAGGTGGCACAGCTTAAACAGAAAGTCATGAACCACGTTAACAGTGGGTGCCAACTCATGCTAACGCAGCAGT
TGCAAACATTT**TGA**AGAGAGACCGTCGGGGGCTGAGGGGCAACGAAGAAAAAAAATAACACAGAGAGACAGACTT
GAGAACTTGACAAGTTGCGACGGAGAGAAAAAAGAAGTGTCCGAGAACTAAAGCCAAGGGTATCCAAGTTGGACT
GGGTTGCGTCCTGACGGCGCCCCCAGTGTGCACGAGTGGGAAGGACTTGGCGCGCCCTCCCTTGGCGTGGAGCCA
GGGAGCGGCCGCCTGCGGGCTGCCCCGCTTTGCGGACGGGCTGTCCCCGCGCGAACGGAACGTTGGACTTTTCGT
TAACATTGACCAAGAACTGCATGGACCTAACATTCGATCTCATTCAGTATTAAAGGGGGGAGGGGGAGGGGGTTA
CAAACTGCAATAGAGACTGTAGATTGCTTCTGTAGTACTCCTTAAGAACACAAAGCGGGGGGAGGGTTGGGGAGG
GGCGGCAGGAGGGAGGTTTGTGAGAGCGAGGCTGAGCCTACAGATGAACTCTTTCTGGCCTGCCTTCGTTAACTG
TGTATGTACATATATATATTTTTTAATTTGATGAAAGCTGATTACTGTCAATAAACAGCTTCATGCCTTTGTAAG
TTATTTCTTGTTTGTTTGTTTGGGTATCCTGCCCAGTGTTGTTTGTAAATAAGAGATTTGGAGCACTCTGAGTTT
ACCATTTGTAATAAAGTATATAATTTTTTTATGTTTTGTTTCTGAAAATTCCAGAAAGGATATTTAAGAAAATAC
AATAAACTATTGGAAAGTACTCCCCTAACCTCTTTTCTGCATCATCTGTAGATACTAGCTATCTAGGTGGAGTTG
AAAGAGTTAAGAATGTCGATTAAAATCACTCTCAGTGCTTCTTACTATTAAGCAGTAAAAACTGTTCTCTATTAG
ACTTTAGAAATAAATGTACCTGATGTACCTGATGCTATGGTCAGGTTATACTCCTCCTCCCCCAGCTATCTATAT
GGAATTGCTTACCAAAGGATAGTGCGATGTTTCAGGAGGCTGGAGGAAGGGGGGTTGCAGTGGAGAGGGACAGCC
CACTGAGAAGTCAAACATTTCAAAGTTTGGATTGTATCAAGTGGCATGTGCTGTGACCATTTATAATGTTAGTAG
AAATTTTACAATAGGTGCTTATTCTCAAAGCAGGAATTGGTGGCAGATTTTACAAAAGATGTATCCTTCCAATTT
GGAATCTTCTCTTTGACAATTCCTAGATAAAAAGATGGCCTTTGCTTATGAATATTTATAACAGCATTCTTGTCA
CAATAAATGTATTCAAATACC

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FIGURE 4328A

GTTAACAAAAGGATTAATGGGTTGCTTAAATTAGTGAGCTTCATCAGTTTTATTTTTAATTCCTTGAGATAATGA
ATTTTAAAAGCAATAAATACAATGCTGTAGTTTTTGACTTCTTTTCTAAATATTTACATGGATTTACATGAAAGA
ACTAAAGAGATAGTATTTGTGGAACCAATTTAAACTCTTACATGCCTTTCAGGATTTGGGAATGTATTAACACCT
GCTGCTTTGTATCCAGTCTAAGGGAGCCTATTTGTTTGTTATCACATTGACTTCCTTTGATGTCTTTTAGTGTTA
CCCTCACTCAGACCCAAGGATTATGTCTTTTGGGGCTCCCATCATCCTGAGCTAGAGACACGTGACAGGGGTACA
CTCTCCTACAAAACCAGCCAGTTACTCAGTAAAGTGGACGATAGAAGAAAAAGAGCTGTTTGAACAAGGGCTGGC
TAAATTTGGCCGAAGATGGACCAAAATTTCAAAGCTAATTGGAAGCCGCACTGTTTTACAAGTGAAGAGTTATGC
AAGACAGTATTTTAAAAATAAGGTCAAATGCGGTCTGGATAAAGAAACACCAAATCAGAAGACCGGCCATAATCT
TCAAGTTAAAAATGAAGATAAAGGGACAAAGGCATGGACACCATCATGTTTAAGGGGACGTGCTGATCCCAACTT
GAATGCTGTAAAAATTGAAAAGTTATCTGATGATGAAGAAGTAGACATCACAGATGAGGTGGACGAGTTGTCTTC
TCAAACACCCCAGAAGAATTCTAGCAGTGATCTCTTGTTAGACTTTCCTAATAGTAAA**ATG**CATGAAACCAATCA
AGGAGAATTCATTACTTCTGACAGCCAGGAAGCTCTCTTTTCTAAGTCTTCCAGGGGCTGTCTTCAAAATGAAAA
GCAAGATGAAACACTTTCAAGCTCAGAAATTACACTGTGGACTGAGAAACAGAGCAATGGTGACAAAAAATCAAT
TGAATTAAATGACCAGAAATTTAATGAATTGATTAAAAACTGCAACAAGCATGATGGAAGGGGAATAATAGTTGA
TGCCAGGCAGTTGCCTTCTCCAGAGCCTTGTGAAATTCAGAAAAATTTGAATGATAATGAAATGCTTTTTCATTC
TTGCCAAATGGTAGAGGAAAGCCATGAGGAAGAAGAGCTTAAGCCACCAGAACAGGAAATAGAAATAGATAGAAA
TATCATTCAAGAAGAAGAAAAACAAGCAATTCCTGAGTTTTTTGAGGGGCGCCAAGCTAAAACACCAGAACGCTA
TTTGAAAATTAGAAATTATATTTTGGATCAATGGGAGATATGCAAACCAAAATACTTAAATAAGACCTCAGTACG
TCCTGGCCTGAAGAACTGTGGAGATGTTAATTGTATTGGACGGATTCATACATACCTCGAATTGATAGGAGCAAT
CAATTTTGGATGTGAACAGGCTGTGTATAATAGGCCACAAACAGTTGACAAAGTACGAATCAGAGACAGAAAAGA
TGCAGTAGAAGCATACCAACTTGCCCAGCGTCTGCAGTCTATGCGTACAAGGAGACGTAGGGTCCGAGACCCATG
GGGAAACTGGTGTGATGCAAAGGACTTAGAAGGACAAACGTTTGAGCATCTCTCTGCTGAGGAGTTGGCAAAAAG
AAGAGAAGAGGAAAAAGGCAGACCTGTTAAATCTTTAAAAGTGCCAAGACCAACAAAAAGCTCGTTTGATCCCTT
CCAACTGATACCTTGTAATTTTTTTAGTGAAGAAAAGCAGGAGCCATTTCAGGTGAAAGTGGCTTCAGAAGCACT
TTTAATAATGGATTTGCATGCTCATGTTTCTATGGCAGAAGTGATTGGTCTGTTAGGAGGAAGATACTCAGAAGT
TGATAAAGTAGTTGAAGTCTGTGCAGCAGAACCATGTAACAGTCTGAGTACAGGACTACAGTGTGAGATGGATCC
TGTATCACAAACACAGGCCTCAGAAACCTTGGCTGTTAGAGGCTTCAGTGTTATTGGATGGTATCATTCTCATCC
TGCTTTTGATCCTAATCCTTCCTTACGAGATATTGACACACAAGCTAAATACCAGAGTTACTTCTCCAGAGGAGG
TGCAAAGTTCATTGGGATGATTGTTAGTCCCTATAATCGAAATAATCCCTTACCATATTCTCAGATTACCTGCCT
GGTTATAAGTGAGGAAATTAGCCCAGATGGCTCTTATCGCTTACCTTACAAATTTGAAGTACAGCAGATGTTAGA
AGAACCTCAGTGGGGATTAGTATTTGAAAAGACAAGATGGATAATAGAAAAATACAGGCTCTCCCATAGCAGCGT
CCCCATGGATAAAATCTTTCGCCGGGATTCTGACCTGACTTGTTTGCAGAAACTTTTGGAGTGTATGAGGAAGAC
TCTGAGCAAAGTGACCAATTGCTTTATGGCTGAAGAATTCTTGACTGAAATAGAAAATTTGTTCCTTTCCAATTA
TAAAAGCAACCAAGAGAATGGAGTAACCGAAGAGAACTGTACAAAGGAATTGTTAATG**TGA**TTATTTTAAAGTTA
AGACATTTTAATCTTGACACAGTAGATCTTACTTTCAAAGTTATAAACTTGAAGTGATTGTAGTTAACATTGGCA
CAGCTTTGGTATTTTTTCTCTATTTCACAAAATCCAAACTTTGCCACATAAATCATGTGAAAAGGAAGAGATACA
AATTTGTTTTCATATAGTGATTATCAGAGTGTTCTGCAAACCAGGGTCCACCACGGTGTTCTAGTCCTTTACTGA
GCAATGCTGTAGGCTGTGAAACTAAGCAACCTGGTCGGCTTTACTGTTGTGTTCAGCTTGGGATTTGGACTATGT
CTCTAAGTCATTTCTTCCCTGAACTAGTCATTTATGTTCCATTGTGGTATCTCCTATTTCATTTAAAAGCACTTC
CATTCTTTCCATATATTCTGCTGAGATTTGTTTATGGCTATAAATGAGATATGGATGGGTGGTCACTGAGATAAT
TAATATGGTTTAGAACTACTGATTAATAAATCTAACAGGAGACCAGGAGAGGCATGACAAGAAAATCTTAAAAAC
AGGAAAAACCCAAAGGAGAGAACTAAATTACCAGTTTCTAATCATAGATACTATCTTCCATTTCATTGTATAGCA
GTAGTATCATAAGATATGCCATTTTCTCAGCTATCTGAAAATTTTTAACCAATTTTACACACATAAAATAATTAG
CTTCAATTGTGAGTCCACTTACATTAGTAGGTGTGATAAAACCTCATTTAACTGGAACATAGGTAATCATAACTC
AAACTTTTTTTCTACTGCCTACTACTAGGAGAAAGAGGCAAATGATAATAAAGCTGGAATAAATCAGAGATTTAA
TTTTTAAAACAAGCCTTTCAGGACATGTTACATATTCAGCCCAGTTTCATATGCTTTCTGAATCTATAATGGAGG
TCAGTGAACTTTTTTAATGTAAAGGGCCAGTTTGTAAATAATTTTGGCTTTTCAGGCCACATATGATGTCTATGA
GACATTCTTCTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTTTTACAGCCCTTTAAAATGATAAAAA

FIGURE 4328B

CCATTGTTAACTCACAGGCCTCATAAAACATAGGCTGTTGGCTATTATTCTCCAACCCTTGATCTAGAGAATTTT
AAACATTAGAATTTTGTTTTACATTTGTTAAGCTTTACGTCATCTTCAAATGACACCAAAACTCAGAATTATGAT
CTGCATTTAAGCCAATTTTAAAATAAAATAAGCAGTCAATGCTGCCTCATTTATTGAAATTCAGTAGATTTTAGT
TTATTTCTTAGTAGTCAGAGAATTGATTTATAGCTATTCACCAAACATTCTTACTAACGTTTCCTTATATCTAAA
TCAGATTGATTCTATATTTTGCTTTGTTTGTAATCAATAGCCAATGAAGAATAAGGAGTATTGGAAGAAGCAGTG
AGTCAGCTTTAGGTGACCTGGTTCTTGTCTCAACTTTGTGATTTGGGGAGATACAGTTTACTTTCCCTGAGCCTT
AATTCTTGTGTAACTGAAGTCTAACTTAACTTCTTAATGTCCTTCCAGAACTAAAATTTTATTGTTCATTCTAAT
CGTTGGACTACTCTTGTGAAGTTTATATTTTGAGTTAATACAGTTTCCAAATTAACATACATTTAAAAAAAAAAG
GGTAGTATTTTTCCATTTCTCTGTGTGCACTTAGGATAAACAGTGAAGTATAGCTTATAAAACAATTAGTTTGAG
GGCTGAGAGTGTAAGAGGAACTATACCAAAAGTCAGGAAACCTGAGCTCTTACCCTAACTCTGTTACCAACTTTG
CTGTGTGACCTTAATCAAAACACATAACCTGGACCCCATGCTCCTCACCAGTAAATCAAGGGCCTGAATTTTATG
GCTTAGTATTCCCTTCCAAGCTCCGAAGTTGCGTGATTCTGTGAAAGGCAGTGATTGATTCCTTTGTACTCATCT
TCCTTTTGACCTGTTTCCTCATGATATATTGGGGAACAAATACTAAAAAGTGTTTTATACTAGCTTTCTTGATTG
ACATTTCCCTATAATACTGATGAATTTGGGTGATGGAAAGTAATGGAAATTGTTAAAAGTTCTGCTCTCAAATCT
GAGTCTCCTTGCCCTGTGTGCCAATGTTTAACCATATTTGCTAATCTAAGCCATATTGCGAGGATCTCAAGGATG
ATACTTGTCAAGAGTTTGGGGCCTTGAGAGCACAGTTTTCAAAATAATACTTAGTATTTTCTGACTATAGAGTAC
ATTTGTCTTGTAAAGTATATTTTAAAATACAGAGAAGTGTGAAGTACAAATATCTCAGTGCTACTATTTAAAAAA
ACACAATTAGTATATAAATCCTTCCCCATTTTTTTGACAGTATAATTTTAGTATGTTAAACTTGGTTACTTCTTT
CTCTCTTCCTCCATCATTTTCCCTGCTTCCTTTTTCTTTTGTCATATTCTTAAAACAATTTTGCAACCACAGGTA
CCCACATTGCTGGCACTACCAGCCTTGGGCTACTACCGAGGATAATGGAGCCAGGGCCTTGTAGAAGCACAGAGG
AAGTCTAGAACTGAGGGGGCCTATGATACAGGAAGTTCAGGAGGCAGAGTCTCAAAGGAACACCTGCCTTTAATA
ATGTTTACAGAAGTGGAGAAAGGACTAAAGGACTTAAAGACATGCAGGTGTCTTCATCCTGATTCTGTCTTTGTT
ATTGCACAATGACTATAAAATAATGACCTAATTTTTTTTTTTTCTGGCTTGGCTAATGGAAATCGACACTAGCG
CTTCCCCAGTATTAGACTTAATCTAATTCCAAAGTAACATTCAAGAAAAGAAAAACCAGTGGAACAGGATCAGTA
AGCTCAGACTCTCCATCTCCATTATTTTAGCCTTGACCATTCTTCTCTAATCCTTTTAAATTATCTTCAGTTTCC
AGTTCAAGTTACATTGCTTCAGTTACAGTTTGTTTGACCCTGTATTCAGAGCTGCATTATGATTCTTGTGGGCCC
TAGATAGTTTTGCCATCTTAGACCCCTTCTTCCATACAAAATTAAAAGTGATATTTTACAATTGTATCTGTATGA
AATGAATGTATTAATATTTTAGATTAAAACATTTTGTTTAGAAGTTCAGTTTTTTCTTATGAGGCTAAAAAAAAT
TAAAACATTTTTGTGGGCTTCTAAAAAACTGTGGGCCTTAGGTACTGTGCCTAATGGATAAGTTGGCATTGCCTG
TATTCTGAAGGGCATCATTGGAAAAATAGCAGTCATTATTCTGTCCCCTTCTCCCACCACCACAGTCCTTGGAGA
AGCCTTTGCCACTCCATCCAGGAGCACTGCAGTTTCCACGGTTATAGATCTATAGACTTGAACTTACTTCCTTCC
CAACCTAACGAAAACTCACAAGGATTACTTGGGACCATTCATCCTCAAAAAAGATAGGAGGCAGTGGTTTGTTTT
AGTCTTCAGATATTTTTGTTTTGGTCAGTCCCTAATCTGTAGTTTTGAAACTCGTGCCACACTTGAAAGGGAAAC
ATCCTACTACCTTTCTTTCCTCTCCATTTCCCACAAACCCTTTCCTTCATCATCACTCCCTGCATTCTTACTTCT
CAGCATATAAATACAAGACCCTTCTTTCTATTATTTGTTGAAAGCTAGGCCTGTAAAATAGAGATGGACAGACCA
TGCATGTTTCCATGAAGCTATTTAATGCTGCTCCCAGTCTTCTGTCCATACCATTCCTTCCCTGCCCCTAGGAGT
GGGGTTGAGGTCTGTGACATGCAGACTGTAAGCACAGTCAGAACCTCTGCAGCTCTCAACCCAACAGAGGAGACT
GTGGCTTCAACATGCCAACCTGAGCAGGTCTCCTCTGCATTACCTTCCTCCCATTTCTCTTCCTGGGTCCTGATG
AGGTGAGCTGGAGGAACCAATAGTCAGGATGCCCTGGAATTGATGTTGCTCTGTTTTGTGCTCACAAAACAGCCA
TGTAACACATGAGCACCTGAGTTGAAGCCATCCAGTCGCAAGTCAGCAGACAGCAGTTGATGGAATTCTCAGTAG
AAATTCAGTAAGGGTGCCCAAATTTTATTTTTTTTTTCACCTATACTCTACCAATATATGGTATTTAGGAAAACT
TCTTTTATCCAAGCACAAAGAAAAGCACACACATTTTTATAATCATCTGCTTCATCAGGGTAAATAAATAATTTA
ACAAATTTGATCAGCATCTCTAGTTTACCAGTACTTTAATATTAGTTTTCTTACAAATTAATGTATTTTGCAATA
TTTCCAGAAAATCACTGTGGGAGAATAATGTAATATACTTTAGGATATATTTCCTGACCTTTTCTTAAATGGCTT
CATGTGCTATTCCCCCAAATTCTGCTTTCTCTATTTTCTTTTTTATTTAACCTATAATTATACTTTCTAGTATAT
TCTGAGTCTATCTTCTAAGCCACCTTACATTTTTCCTGGAACAAGGGAGGGAATAAATAGTTGCCTCCACTAAAT
CAGGAAAAAATAAAAATATCCCAGGGGAGCTGTGATTATGCCAAGAGCTCTAAACAGAAGTTTGAGAAGGTAAAA
ATTAAGTTGTAGTATCTGAGTTGTTTTTATTTTCTTCCTTTGGTGTTTATGAAGGTATTCATAAGAACTTTAATT

FIGURE 4328C

TCAGGGGAAAAAAATGCCTGATTTGCTATTTTTGACATTTCCTCGTCTCTTAAGAAGTCAGTTAAATATGTTTTC
ATAGTTTATATTCCTGTTTCATAGATTACTGTGAAACATGTATTTAAACCTATGAATTATAAAATAGTATTTAGA
TTCTAGCGTGAGTTAAATAGATTAGTCATATATCTTTTAGATTTGTGGATTTGACATGTAAATTATGTGTTGTGT
ATAAGTAAGTTAGTTACTAAACATATGGCATGGTTATTGATAAACTTGTTGCTATTTTTTTCCAAATGCTATCAG
TGTTTGTGGACTTTTAAAAATTAGTTTGAATTTTGGAATGTTCTGTGATAAAATGTAATTTCAACTATTTTGTAC
ATTTAAATATGCCATGTTGTATATGTCTGTATTTAAAAATGTTGTAAATACCTGCATTTTAAGAATTATGAAAGA
TTTTCCTCAAAAATGACAGAACTCTCCATACTTAATTGTGACACATTATAAGATATCTGATTTTAAGCTTTTGGA
TTTTGTTCTAAAAATTAAGTTTAAACATGCTGAAAATTCCATAAAAATAAAATTTTGAAAATAAA

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FIGURE 4329

GAACTGGTGGCAGTGAGAGACTTCGGCGGACATGGCTCCCAGCGTGCCAGCGGCAGAACCCGAGTGTCCTAAAGG
CTGTGCTGCTGGGGCCTCCCAGGGCCGGTAAAGGCACCCAGGCACCCAGATTGGCTGAAAACTTCTGTGTCTGCC
ATTTAGCTACTGGGGACATGCTGAGGGCCATGGTGGCTTCTGGCTCAGAGCTAGGAAAAAAGCTGAAGGCAACTA
TGGATGCTGGGAAACTGGTGAGTGATGAAATGGTAGTGGAGCTCATTGAGAAGAATTTGGAGACCCCCTTGTGCA
AAAATGGTTTTCTTCTGGATGGCTTCCCTCGGACTGTGAGGCAGGCAGAAATGCTCGATGACCTCATGGAGAAGA
GGAAAGAGAAGCTTGATTCTGTGATTGAATTCAGCATCCCAGACTCTCTGCTGATCCGAAGAATCACAGGAAGGC
TGATCACCCCAAGAGTGGCCGTTCCTACCACGAGGAGTTCAACCCTCCAAAAGAGCCCATGAAAGATGACATCAC
CGGGGAACCCTTGATCCGTTGATCAGATGATAATGAAAAGGCCTTGAAAATCTGCCGGCAAGCCTACCACACTCA
AACCACCCCACTCATAGAGTACTACAGGAAACGGGGGATCCACTCTGCCATCAATGCATCCCAGACCCCTGATGT
CGTGTTCGCAAGCATCCTAGCAGCCTTCTCCAAAGCCACATCCTAGTATCAGAAGGCCAGGCGAAACTGCAACAC
TGCTCATCACCCGGTGGCGTGATCCCTGCTCTTAGGTGCTGGGCAGAGGGAAAGGGTGGTCAGGGTGAGGATGGT
GAGGGAGGGCTGGTGAGGGGCTGAGAGGAATACTTGAAACAACAGCAGTGTTATTGTAATGTGGCAGTTTATTTT
ATACATAGGTGAGAGTTTTTAAAGTGTAAGGGAAAAATTAATTTTTTAAAAAACACCATGCTTGGAGGGTGGGGG
TAGAAATAGAGAGACACAATATTATTTCTAAGGAATCGGGTTTTCATTTACTCTGGACTGGTGAAAATATTTTTT
AAAGCCAGTGCTCTAAGACCTCAGCTTTTATCTCAGAACCCCATGGGTTCCAGACCAAGAGTACAGGAAATCAAA
TTGTTGTCCTGTCTGTCTATAGCTTGGAACAGGGAGGCTTTGATTACTGACCCCGGTTCCACACACTGTAAGATC
AAAAAACCATTTCCACATCTGAAAGAGATGTAAGGTGTATTCATAGGGATGGTGGCTCAACAAATCAAACAAACT
GGAATCAAGGGGAGGGAGAAGGGAATGAAATGGAAAGGGAGGCTGATTCCCTTCCCCTGACTTACCACTAATTTA
CTAGGCTACGTAATCTCATGAGTAACCTCTCACAGCTACCCAGCACATGCCACAATCCTATGCTCTTGCCTTCTT
TTATCTGCAATGTGTGAAGGGACTCTTTTAAATAAATGAGCAAGTGTCCTAAGCTATGTCATCCAAAGATTGTCC
TTTCCATTCTCAAATCCTGTGACTGGGATCACTCAACAGCACTGTGATGTATTATTTTCAATGAGGTGCCTTTCT
TAACTGACCAAATGCTGCCTTGTTTGGCCCCTAAATCAATAAAATATGTTAAAATTTG

FIGURE 4330

CGGGTCTGATAGTCCCTACCTGTCAGGACTGGTGTTAGGATGAGATAATGTTTGTGAACTGTAAACTATATAAAC
GTGTGCTACTGTGAGAACTGGACAAAGAAGAGAGGGAGTGAGAGAAATTAAGGGAGGGCTGGGGCTGGGAAAGAA
CGAAAAGGGAGTCGCGTATAGAGGAGAGCGCGACAGTCGCGAGCCACACTTTGCAATGAAACTCTTTAGACTTTC
TGCCGGGAGAGCGGCCCAGACGCGCCAGGTCTGTAGCAGGAGGCCGCGCCGAGGGCGGGTCCCCAGAAGCCTACA
GGTGAGTATCGGTTCTCCCCTTCCCGGCTTTCGGTCCGGAGGAGGCGGGAGCAGCTTCCCTGTTCTGATCCTATC
GCGGGCGGCGCAGGGCCGGCTTGGCCTTCCGTGGGACGGGGAGGGGGGCGGGATGTGTCACCCAAATACCAGTGG
GGACGGTCGGTGGTGGAACCAGCCGGGCAGGTCGGGTAGAGTATAAGAGCCGGAGGGAGCGGCCGGGCGGCAGAC
GCCTGCAGACCATCCCAGACGCCGGAGCCCGAGCCCCGCCGAGTCCCCGCGCCTCATCCGCCCGCGTCCGGTCCG
CGTTCCTCCGCCCCACA**ATG**GCTCGGGGCCCCGGCCTCGCGCCGCCACCGCTGCGGCTGCCGCTGCTGCTGGTGG
TGCTGGCGGCGGTGACCGGCCACACGGCCGCGCAGGACAACTGCACGTGTCCCACCAACAAGATGACCGTGTGCA
GCCCCGACGGCCCCGGCGGCCGCTGCCAGTGCCGCGCGCTGGGCTCGGGCATGGCGGTCGACTGCTCCACGCTGA
CCTCCAAGTGTCTGCTGCTCAAGGCGCGCATGAGCGCCCCCAAGAACGCCCGCACGCTGGTGCGGCCGAGTGAGC
ACGCGCTCGTGGACAACGATGGCCTCTACGACCCCGACTGCGACCCCGAGGGCCGCTTCAAGGCGCGCCAGTGCA
ACCAGACGTCGGTGTGCTGGTGCGTGAACTCGGTGGGCGTGCGCCGCACGGACAAGGGCGACCTGAGCCTACGCT
GCGATGAGCTGGTGCGCACCCACCACATCCTCATTGACCTGCGCCACCGCCCCACCGCCGGCGCCTTCAACCACT
CAGACCTGGACGCCGAGCTGAGGCGGCTCTTCCGCGAGCGCTATCGGCTGCACCCCAAGTTCGTGGCGGCCGTGC
ACTACGAGCAGCCCACCATCCAGATCGAGCTGCGGCAGAACACGTCTCAGAAGGCCGCCGGTGAAGTGGATATCG
GCGATGCCGCCTACTACTTCGAGAGGGACATCAAGGGCGAGTCTCTATTCCAGGGCCGCGGCGGCCTGGACTTGC
GCGTGCGCGGAGAACCCCTGCAGGTGGAGCGCACGCTCATCTATTACCTGGACGAGATTCCCCCGAAGTTCTCCA
TGAAGCGCCTCACCGCCGGCCTCATCGCCGTCATCGTGGTGGTCGTGGTGGCCCTCGTCGCCGGCATGGCCGTCC
TGGTGATCACCAACCGGAGAAAGTCGGGGAAGTACAAGAAGGTGGAGATCAAGGAACTGGGGGAGTTGAGAAAGG
AACCGAGCTTG**TAG**GTACCCGGCGGGGCAGGGGATGGGGTGGGGTACCGGATTTCGGTATCGTCCCAGACCCAAG
TGAGTCACGCTTCCTGATTCCTCGGCGCAAAGGAGACGTTTATCCTTTCAAATTCCTGCCTTCCCCCTCCCTTTT
GCGCACACACCAGGTTTAATAGATCCTGGCCTCAGGGTCTCCTTTCTTTCTCACTTCTGTCTTGAAGGAAGCATT
TCTAAAATGTATCCCCTTTCGGTCCAACAACAGGAAACCTGACTGGGGCAGTGAAGGAAGGGATGGCACAGCGTT
ATGTGTAAAAAACAAGTATCTGTATGACAACCCGGGATCGTTTGCAAGTAACTGAATCCATTGCGACATTGTGAA
GGCTTAAATGAGTTTAGATGGGAAATAGCGTTGTTATCGCCTTGGGTTTAAATTATTTGATGAGTTCCACTTGTA
TCATGGCCTACCCGAGGAGAAGAGGAGTTTGTTAACTGGGCCTATGTAGTAGCCTCATTTACCATCGTTTGTATT
ACTGACCACATATGCTTGTCACTGGGAAAGAAGCCTGTTTCAGCTGCCTGAACGCAGTTTGGATGTCTTTGAGGA
CAGACATTGCCCGGAAACTCAGTCTATTTATTCTTCAGCTTGCCCTTACTACCACTGATATTGGTAATGTTCTTT
TTTGTAAAATGTTTGTACATATGTTGTCTTTGATAATGTTGCTGTAATTTTTTAAAATAAAACACGAATTTAATA
AAATATGGGAAAGGCACAAACCAGAAGTCGGCATTTGTGAAAAGTCCCTCCAGATTTCTATCACATTGGTCTCTA
ATTTCCCAAGACTTGTATTTTTTTTTTATTTCAAATTATAACACTTTTTTTTCCCCCAGAAGTGGGTGTTTCATG
TTGCTACTCTGGTGTGTCCTAAGATATCCTAACTGGCCAGTGTAAATGCTATTCTTTCTAAATAAGATTATTTGG
AAACTTCCTTCAAACTGCAGGAGGGTGAGCTTGAGGGAGGAAGCTAAACTAGCTGCTTTTATGAAAAAGAGTGCC
AGTCTTTGGTCATCTCTAAACAAGGCTTATCACCAATGGAGACAGAAAACTCTAGTTCAAGAGCTGTACCTCCTT
TGAATCCCAGCCCTACTTTGAAATAGGTGGTACTATTTCCATTTAGCCTTTGAGCAAATCACTTAATCTCAAAGC
GTTGTGGCTCTAAGATTAAACGACTTT

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FIGURE 4331

GTATGGCGGGCAGGAAGTGCGGGTGCGCGCCTGCGCATAGGTCGGGTCTGCGGTGTCACCGCTTTCGCTTCTGCT
TGAGTAGTCAAGTGAAAAA**ATG**AGCTTCATCTGTGGATTGCAGTCTGCTGCTAGAAACCATGTTTTCTTCCGATT
TAATTCACTGTCTAACTGGAGAAAATGTAACACATTAGCATCCACCTCACGGGGCTGTCATCAAGTACAAGTTAA
CCATATAGTAAATAAGTATCAGGGACTGGGAGTAAATCAGTGTGACAGGTGGAGTTTTCTGCCTGGAAACTTTCA
TTTTTATAGTACTTTTAACAACAAAAGAACAGGAGGCCTCTCAAGTACCAAAAGTAAGGAAATTTGGAGGATTAC
CAGCAAATGTACTGTATGGAATGATGCTTTTTCAAGACAGCTGCTAATAAAAGAAGTTACAGCAGTCCCTAGTCT
GTCAGTATTGCATCCTCTAAGCCCTGCTTCCATAAGAGCTATTAGGAATTTCCATACTTCTCCACGGTTTCAAGC
TGCTCCGGTTCCTCTCTTGTTGATGATTCTTAAACCAGTACAGAAGTTATTTGCAATCATTGTAGGCAGGGGCAT
AAGGAAATGGTGGCAGGCACTTCCTCCTAACAAGAAGGAAGTAGTTAAAGAAAATATAAGGAAGAATAAATGGAA
GCTATTCCTTGGTTTGAGTAGTTTTGGATTGCTCTTTGTGGTGTTTTATTTTACTCACCTGGAAGTAAGTCCAAT
CACAGGAAGGAGCAAGCTACTATTATTGGGGAAAGAACAGTTCAGACTTTTATCGGAACTGGAATATGAAGCATG
GATGGAAGAATTTAAAAATGATATGCTAACTGAGAAAGATGCCCGATACCTGGCTGTTAAAGAAGTGCTTTGTCA
TCTAATTGAATGCAATAAAGATGTTCCAGGGATCTCTCAGATCAATTGGGTTATTCATGTGGTTGATTCCCCAAT
TATTAATGCCTTCGTGCTTCCAAATGGACAAATGTTTGTTTTCACTGGATTTTTAAATAGTGTAACCGATATTCA
TCAACTTTCTTTCCTTCTGGGCCATGAAATAGCACATGCAGTACTTGGGCATGCTGCAGAAAAGGCTGGCATGGT
TCATTTGTTGGATTTCCTAGGTATGATTTTCCTCACAATGATTTGGGCCATTTGTCCTCGAGATAGCTTGGCACT
TTTGTGCCAGTGGATACAGTCTAAATTGCAGGAGTATATGTTTAATAGACCATACAGCAGAAAATTGGAGGCCGA
AGCTGACAAAATTGGACTACTGCTTGCTGCAAAGGCTTGTGCAGACATAAGAGCCAGTTCAGTGTTTTGGCAGCA
AATGGAGTTCGTTGATAGCCTGCATGGCCAACCCAAGATGCCAGAATGGTTATCTACACACCCTTCTCATGGCAA
TCGAGTTGAGTACTTGGATAGACTTATACCTCAGGCTCTCAAAATTAGAGAGATGTGTAATTGTCCACCACTGTC
TAATCCAGACCCTCGATTACTATTCAAACTCAGCACGAAGCATTTTCTTGAAGAATCAGAGAAAGAAGACCTAAA
TATCACGAAGAAACAGAAAATGGATACTCTTCCTATTCAAAAACAGGAGCAAATACCATTAACATACATAGTTGA
GAAAAGAACGGGCAGT**TGA**ATTAAAATTTATGAGACACAAGATATATGAAGAATGTTGCAGTCCTTATCATTTTA
TGTTACTTTTTAAAAAATGATGTTTGAAGTGAAAAAAAAAAAGGATATTCAGGGTCAAATCATGTACATTACAGAT
ATTATCTAAATTCTTCTAGAATTTATTTTTCATGAAATATTGATGTATTTTAATCTATGTTAAAATATCTTCAAT
GAGGAAAATGTCACAGAATAAATTTATATTACACATTTT

FIGURE 4332

AGCCTGAACCTCTAGGACTTTTAATTGATACCAGTGGTCTCCGCTCTGAAACAGTCCACCAGAATGAGGGTACCA
AACTGACCTCAGAGGTTTCCAGGTTTGATGAACTTGTGAAAAAATTCAAAGTCGAATATCATGCTGGTGGCTCTA
CCCAGAATTCAATTAAAGTGGCTCAGAATCTGGAGAGCCTGTCTTGTTTGCCCGGACAGATACCCCTCTTCCAGC
AGATCTCTGCACAGAATTATTTTCAGACCACAGCAAGAAGGGTCAGAGCTGAGAATGGACCACCTGAGGATCTGC
TGTGGGATGGAGCAGGAACCTGCTTAGGTGGTACCAATCTTGACTTCCAG**ATG**GAACAGTACATCTCTATAAGGA
AAAGTGATGGCATCCACATCGTAAATCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTTGTGCCATTGTTG
CCATTGAAAACCCTGCTGATGTCAGTGTTATATCCTCCAGGAATATTGGCCAAAGGGCTGTGCTGAAGTTTGCTG
CTGCCACTGGAGCCACTCCAATTGTTGGCCACTTCACTCCTGGAACCTTCACTAACCACATCCAGGCAGCCTTCC
AAGAGCCACGGCTTCTTGTGGTTACTGACCCCAGGGCTGACCACCAGCCTCTCACAGAGGCATCTTACGTTAACC
TATCTACCGTTGCTTTGTGTAACACAGATTCTCCTCTGCACTTTGTGGACATTGCCATTCTATGCAACAATAAGG
GAGCTCACTCAATGGGTTTGATGTGGTGGATGCCAGCCCGGGAAGGTTTGCGCGCGTGTGGCACCATTTCCCATG
AACACCCATGGGAATTCATGCCTGATCTCTACAGAGATCCTAAAGAGACTGAAAAAGCAGAGCAGCCTGCTGCTG
AAAAGGCTGTGACCAAGGAGGAATTTCAGGGTGAATGGACTGCTCCAGCTCCTGAGTTAACTGCTACTCAGCCTG
AGGTTGCAGACTGGTCTGAAGGTGTGCAGGTGCCCTCTGCGCCTATTCATCAGTTCCCTACTGAAGACTGGAGTG
CTGAGCCTGCCACGGAAGGCTGGTCCACAGCTCCCAATGCTCAGGCCATTGAATGGTGGATGATTCAACAGCCAC
ACAAAGCAGCAACATTTTTTGGATGCATTGGGATAGATAAATTTGGGGAGATCCTGAAGAGAAAAGCTGCTGAAG
CCCATGTGGATGCTCATTACTACGAGCAGAATGAGCAGCCAACAGGAACTTGTGCTGCATGCATCACTGGTGACA
ACAGGTCCCTCATAGCTAATCTTGCTGCTGCCAATTGTTATAAAAAGGAAAAACATCTTGATCTGGAGAAAAACT
GGATGTTGGTAGAAAAAGCAAGAGTTTGTTATATAGCAGGTGTGATAAAGCATATTACTAGAAAAGCATCAATCG
GTCTTTCAGGTACAATACCAGAGGAACCATCACAGTTTATTTACCTTTCAGAAGCTTTAAAAATAAAGTTACATG
ATGCCTCTGCTCTCCAGATTTCTAATCAAACCCTGGAACAAAAGAGCCAAGCACATTCTATC**TGA**

FIGURE 4333A

GGTTGAGAATGCTTGCACCAAGCTTGTCCAGGCAGCTCAGATGCTTCAGTCAGACCCTTACTCAGTGCCTGCTCG
AGATTATCTAATTGATGGGTCAAGGGGCATCCTCTCTGGAACATCAGACCTGCTCCTTACCTTCGATGAGGCTGA
GGTCCGTAAAATTATTAGAGTTTGCAAAGGAATTTTGGAATATCTTACAGTGGCAGAGGTGGTGGAGACTATGGA
AGATTTGGTCACTTACACAAAGAATCTTGGGCCAGGAATGACTAAGATGGCCAAGATGATTGACGAGAGACAGCA
GGAGCTCACTCACCAGGAGCACCGAGTGATGTTGGTGAACTCGATGAACACCGTGAAAGAGTTGCTGCCAGTTCT
CATTTCAGCTATGAAGATTTTTGTAACAACTAAAAACTCAAAAAACCAAGGCATAGAGGAAGCTTTAAAAAATCG
CAATTTTACTGTAGAAAAAATGAGTGCTGAAATTAATGAGATAATTCGTGTGTTACAACTCACCTCTTGGGATGA
AGATGCCTGGGCCAGCAAGGACACTGAAGCCATGAAGAGAGCATTGGCCTCCATAGACTCCAAACTGAACCAGGC
CAAAGGTTGGCTCCGTGACCCTAGTGCCTCCCCAGGGGATGCTGGTGAGCAGGCCATCAGACAGATCTTAGATGA
AGCTGGAAAAGTTGGTGAACTCTGTGCAGGCAAAGAACGCAGGGAGATTCTGGGAACTTGCAAAATGCTAGGGCA
GATGACTGATCAAGTGGCTGACCTCCGTGCCAGAGGACAAGGATCCTCACCGGTGGCCATGCAGAAAGCTCAGCA
GGTATCTCAGGGTCTGGATGTGCTCACAGCAAAAGTGGAAAATGCAGCTCGCAAGCTGGAAGCCATGACCAACTC
AAAGCAGAGCATTGCAAAGAAGATCGATGCTGCTCAGAACTGGCTTGCAGATCCAAATGGTGGACCGGAAGGAGA
AGAGCAGATTCGAGGTGCTTTGGCTGAAGCTCGGAAAATAGCAGAATTATGTGATGATCCTAAAGAAAGAGATGA
CATTCTACGTTCCCTTGGGGAAATATCTGCTCTGACTTCTAAATTAGCAGATCTACGAAGACAGGGGAAAGGAGA
TTCTCCAGAGGCTCGAGCCTTGGCCAAACAGGTGGCCACGGCCCTGCAGAACCTGCAGACCAAAACCAACCGGGC
TGTGGCCAACAGCAGACCGGCCAAAGCAGCTGTACACCTTGAGGGCAAGATTGAGCAAGCACAGCGGTGGATTGA
TAATCCCACAGTGGATGACCGTGGAGTCGGTCAGGCTGCCATCCGGGGGCTTGTGGCCGAAGGGCATCGTCTGGC
TAATGTTATGATGGGGCCTTATCGGCAAGATCTTCTCGCCAAGTGTGACCGAGTGGACCAGCTGACAGCCCAGCT
GGCTGACCTGGCTGCCAGAGGGGAAGGGGAGAGTCCTCAGGCACGAGCACTTGCATCTCAGCTCCAAGACTCCTT
AAAGGATCTAAAAGCTCGGATGCAGGAGGCCATGACTCAGGAAGTGTCAGATGTTTTCAGCGATACCACAACTCC
CATCAAGCTGTTGGCAGTGGCAGCCACGGCGCCTCCTGATGCGCCTAACAGGGAAGAGGTATTTGATGAGAGGGC
AGCTAACTTTGAAAACCATTCAGGAAAGCTTGGTGCTACGGCCGAGAAGGCGGCTGCGGTTGGTACTGCTAATAA
ATCAACAGTGGAAGGCATTCAGGCCTCAGTGAAGACGGCCCGAGAACTCACACCCCAGGTGGTCTCGGCTGCTCG
TATCTTACTTAGGAACCCTGGAAATCAAGCTGCTTATGAACATTTTGAGACCATGAAGAACCAGTGGATCGATAA
TGTTGAAAAAATGACAGGGCTGGTGGACGAAGCCATTGATACCAAATCTCTGTTGGATGCTTCAGAAGAAGCAAT
TAAAAAAGACCTGGACAAGTGCAAGGTAGCTATGGCCAACATTCAGCCTCAGATGCTGGTTGCTGGGGCAACCAG
TATTGCTCGTCGGGCCAACCGGATCCTGCTGGTGGCTAAGAGGGAGGTGGAGAATTCCGAGGATCCCAAGTTCCG
TGAGGCTGTGAAAGCTGCCTCTGATGAATTGAGCAAAACCATCTCCCCGATGGTGATGGATGCAAAAGCTGTGGC
TGGAAACATTTCCGACCCTGGACTGCAAAAGAGCTTCCTGGACTCAGGATATCGGATCCTGGGAGCTGTGGCCAA
GGTCAGAGAAGCCTTCCAACCTCAGGAGCCTGACTTCCCGCCGCCTCCACCAGACCTTGAACAACTCCGACTAAC
AGATGAGCTTGCTCCTCCCAAACCACCTCTGCCTGAAGGTGAGGTCCCTCCACCTAGGCCTCCACCACCAGAGGA
AAAGGATGAAGAGTTCCCTGAGCAGAAGGCCGGGGAGGTGATTAACCAGCCAATGATGATGGCTGCCAGACAGCT
CCATGATGAAGCTCGCAAATGGTCCAGCAAGCCGGGCATCCCAGCCGCTGAGGTGGGTATAGGTGTTGTAGCTGA
GGCAGATGCGGCCGATGCTGCTGGCTTCCCTGTCCCCCCTGACATGGAAGACGATTACGAACCTGAGCTGCTGTT
AATGCCATCCAATCAGCCGGTCAACCAGCCCATTCTGGCCGCGGCTCAGTCCTTGCATCGGGAAGCTACCAAGTG
GTCTAGTAAGGGCAATGACATCATTGCAGCAGCCAAGCGCATGGCTCTGCTGATGGCTGAGATGTCTCGGCTGGT
AAGAGGGGGCAGTGGTACCAAGCGGGCACTCATTCAGTGTGCCAAGGACATCGCCAAGGCCTCAGATGAGGTGAC
TCGGTTGGCCAAGGAGGTTGCCAAGCAGTGCACAGATAAACGGATTAGAACCAACCTCTTACAGGTATGTGAGCG
AATCCCAACCATAAGCACCCAGCTCAAAATCCTGTCCACAGTGAAGGCCACCATGCTGGGCCGGACCAACATCAG
TGATGAGGAGTCTGAGCAGGCCACAGAGATGCTGGTTCACAATGCCCAGAACCTCATGCAGTCTGTGAAGGAGAC
TGTGCGGGAAGCTGAAGCTGCTTCAATCAAAATTCGAACAGATGCTGGATTTACACTGCGCTGGGTTAGAAAGAC
TCCCTGGTACCAGTAGGCACCTGGCTGAGCCTGGCTGGCACAGAAACCTCTACTAAAAAGAAGGAAAATGATCTG
AGTCCCAGGAGCTGCCCAGAGTTGCTGGGAGCTGAAAAATCACATCCTGGCCTGGCACATCAGAAAGGAATGGGG
GCCTCTTCAAATTAGAAGACATTTATACTCTTTTTTCATGGACACTTTGAAATGTGTTTCTGTATAAAGCCTGTA
TTCTCAAACACAGTTACACTTGTGCACCCTCTATCCCAATAGGCAGACTGGGTTTCTAGCCCATGGACTTCACAT
AAGCTCAGAATCCAAGTGAACACTAGCCAGACACTCTGCTCTGCCCTTGTTCCCTAGGGGACACTTCCCTCTGTT
TCTCTTTCCTTGGCTCCCATTCACTCTTCCAGAATCCCAAGACCCAGGGCCCAGGCAAATCAGTTACTAAGAAGA

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FIGURE 4333B

AAATTGCTGTGCCTCCCAAAATTGTTTTGAGCTTTCCATGTTGCTGCCAACCATACCTTCCTTCCCTGGGCTGTG
CTACCTGGGTCCTTTTCAGAAGTGAGCTTTGCTGCTACAGGGGAAGGTGGCCTCTGTGGAGCCCCAGCATATGGG
GGCCTGGATTCATTTCCTGCCCTTCCTCAGTTTAATCCTTCTAGTTTCCCACAATATAAAACTGTACTTCACTGT
CAGGAAGAAATCACAGAATCATATGATTCTGCTTTTACCATGCCCCTGAGCAATGTCTGTGCTAGGGAAACTTCC
CGTCCCATATCCTGCCTCAGCCCGCCAAGGTAGCCATCCCATGAACACACTGTGTCCTGGTGCTCTCTGCCACTG
GAAGGGCAGAGTAGCCAGGGTGTGGCCCTGCCATCTTCCCAGCAGGGCCACTCCCGGCACTCCATGCTTAGTCAC
TGCCTGCAGAGGTCTGTGCTGAGGCCTTATCATTCATTCTTAGCTCTTAATTGTTCATTTTGAGCTGAAATGCTG
CATTTTAATTTTAACCAAAACATGTCTCCTATCCTGGTTTTTGTAGCCTTCCTCCACATCCTTTCTAAACAAGAT
TTTAAAGACATGTAGGTGTTTGTTCATCTGTAACTCTAAAAGATCCTTTTTAAATTCAGTCCTAAGAAAGAGGAG
TGCTTGTCCCCTAAGAGTGTTTAATGGCAAGGCAGCCCTGTCTGAAGGACACTTCCTGCCTAAGGGAGAGTGGTA
TTTGCAGACTAGAATTCTAGTGCTGCTGAAGATGAATCAATGGGAAATACTACTCCTGTAATTCCTACCTCCCTG
CAACCAACTACAACCAAGCTCTCTGCATCTACTCCCAAGTATGGGGTTCAAGAGAGTAATGGGTTTCATATTTCT
TATCACCACAGTAAGTTCCTACTAGGCAAAATGAGAGGGCAGTGTTTCCTTTTTGGTACTTATTACTGCTAAGTA
TTTCCCAGCACATGAAACCTTATTTTTTCCCAAAGCCAGAACCAGATGAGTAAAGGAGTAAGAACCTTGCCTGAA
CATCCTTCCTTCCCACCCATCGCTGTGTGTTAGTTCCCAACATCGAATGTGTACAACTTAAGTTGGTCCTTTACA
CTCAGGCTTTCACTATTTCCTTTATAATGAGGATGATTATTTTCAAGGCCCTCAGCATATTTGTATAGTTGCTTG
CCTGATATAAATGCAATATTAATGCCTTTAAAGTATGAATCTATGCCAAAGATCACTTGTTGTTTTACTAAAGAA
AGATTACTTAGAGGAAATAAGAAAAATCATGTTTGCTCTCCCGGTTCTTCCAGTGGTTTGAGACACTGGTTTACA
CTTTATGCCGGATGTGCTTTTCTCCAATATCAGTGCTCGAGACACAGTGAAGCAAATTAAAAAAAA

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FIGURE 4334

TCAGGATCTACAGTCTTTGCAGAAATTCAGGGGGTCATTGATGCTTGCATTAAACTATCTGGAATGCCTGATCTC
TCCCTTTCTTTCATGAACCCTAGGCTTCTGGATGATGTCAGCTTTCACCCCTGCATCCGGTTCAAGCGTTGGGAA
TCTGAAAGAGTTTTGTCATTTATTCCTCCAGATGGAAATTTCCGACTCATATCATACCGTGTCAGCTCACAAAAT
CTAGTGGCAATACCAGTGTATGTGAAACATAGTATCAGCTTTAAGGAGAACAGTTCTTGCGGCAGATTTGATATA
ACAATTGGACCAAAGCAGAATATGGGGAAAACTATTGAAGGAATTACAGTGACAGTTCACATGCCAAAAGTTGTG
CTGAACATGAACCTGACACCCACACAAGGCAGCTATACATTTGATCCAGTCACCAAGGTACTAACATGGGATGTG
GGAAAAATTACTCCACAAAAGCTCCCAAGTCTTAAAGGACTGGTAAATTTACAGTCTGGAGCCCCCAAACCAGAA
GAGAATCCGAGCCTCAACATACAGTTTAAGATCCAGCAGCTTGCTATTTCAGGCTTAAAAGTAAACCGTTTGGAC
ATGTATGGGGAGAAATATAAGCCATTTAAAGGAGTCAAATACGTCACGAAAGCTGGAAAGTTCCAAGTGAGGACA
TGAGAAGAGGCCAAAATTCCTCAGGACCAGTTTGTTTTCCAAGTGTCATTACGATGTATCACTATTAGGTACCAA
GTGAGTGGGAATACATATTCTAGTTAAAGCATTTGTGTCTAGCTACACACCGCTAACAAAGTTACTTAGTTATCA
ATGTAGGATTCTTAAGGAGCTTTAAGCTAAGGAAACCTTTTAGTGACTTAGCTTATTTTGTATCTTTTCACTTAG
GAAGATTTTGGAGGTGATTTTTTTCCATAGGAGGATACCATCTGGCGGCTGCACATTGTAACAGTAAAGGCAGAA
AGCTGTAGTGATAACCTCTCTCCTAAAAGAGTTAACTGGTCTCATCCAGCAGAAGCTATCTTAAATCTGTGATGT
GTCAGGTGCAGCCAAATATCACACCTTCTGATCTTAGCCATCCCAAACCAGTATCTGTCCCGAGAGGAAATTCCC
CCCACCCCCAGAAGTTTACAGAAAACTGCCTCTTCAAGTGTTTGCCTTATTCAGCTTTTCACTTGTGCCATTAAG
CAAGCACTGTAGCAAAAGCCACTTCCACATGGCCCTGGCAGGGAGCACTGCTGCTCCATGCTCCATTCTCACTGT
ACTTGGTATTGTATTTTTTATAAATAAGATTTTTATGTAAAGCTTAGAATTTGATTTACAGGGACCTTGCTGCAG
TAAATACCATCTCAATTTTGTGCCACTGGTTCAGCTGTTAGCACAGTAAAAAAATCATTTGTATCAAAGGGGCAA
ATGCTTTATTAAGGTAGTAAAAGGGAACATTACTTCTGCTTTTAGGAAGTTACTGCAAGCACAAGCATTTGTGCT
TTTAAGCAAATTAAAGTAGTAAAAGAAAAACTTAAGTGAAACCTTTGCCATCTTCATGTTTTATAATATAAAGCT
TACCCAACACCAGTTAAGCCATGGTTAACCTAAATGCCTCATGCCCCAGTTCAGCAAAAGGAGGAAAATGTGCCT
GCCTCACAGTCATCAGTCTTTTTAAATCTTTTTTGTTGTTGTTCTTAAGGGTTTGAATTTGTCTGCATTCCTTGT
CTTTAGGGGAAATTCCCTTTTCATATTGTGTGCTTCCCAAAGCTATAGTCATAGATTTCTTCCAGAAACTATTGT
CATAATTGTCACTGGAGTGCTTAAATATACGTACTATACTGACAAAATACATGGAAGTGAGTTATAATGAGGCAG
AAACAAAATCCTCGGTAACATTGATGATACTCTACCGATCACCGTGGTTTTGGAAAGTCAGTCAACAGTTGTATT
ATTGCACTCAATTTCATTGTGACATTTTATTTAACTTCTTCATCTTGGTGGTCCTTGCCCAGTTATTTTGCCTCA
TTAGACATCAAGAAATGGAGAAAGACTGAAAGTTAATATCTTAAGTGCTTGTTCTTCATGTTTCCTTCTTGTTAT
TTATGCTATTCTCTTTGTGGCTCCATTCTTCTTTCAATCTTCTCAGCTTATAACCGTCTTTCCCTTATGCTAAGG
ATAGCCCTTACACTCATCCCATCTATGCTGTCAAGGGCTGCTGGTTGGTGCTGGTACAAGGAGCCCACTCAGCAG
TTTTCTTACCTTTGCCTGCCCTGCCTTTCATGGAATAAGAAAGGCAACGTTTTGCAGCTTCCAAATTTCTGAAGA
AACTAATCTCAGATTGGCAGTTAAAGTCAAAATGTTGCCAAATATTTATTCCTTTTGCCTAAGTTTGGCTACCCG
GTTCAATTGCTTTTTATTTTTAATGTCTTGACTCTTCAGAGTTCGTACCTCAAAAGAACAATGAGAACATTTGCT
TTGCTTTCTGCTGAATCCCTAATCTCAACAATCTATACCTGGACTGTCCAGTTCTCCTCCTGTGCTATCTTCTCT
TCTATCCAAGTAGAATGTACGCCAGGAGCTCCTTCCCTCTAGCAATTTCTACTAAAATGTCCAAGTAGAATGTTT
CCTTTTACAATCAAATTACTGTATTTATTAATTTGCTAGAATCCAGTAAATCATTTTGGTAGCTCTGGCTGTGCT
ATCAATAAAAAGATGAAAGC

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FIGURE 4335

ATGCTGCCCCTGCAAAGCATCGGAGGGGTCTGGGTCCCTGGTAGAGGGTCCTCAAAGGTGGCGCGGTCAGCCAGC
TCGGTCCCCCTGCGGGCCACGACTGGCGAAGGGCTGCTGGAGCCGGAGCTGCACCAGACAGGCGGGGACTCAGCC
AAACGGAGAGAACGTCTGGCAAGGGCGCCGTCACCCTCCTCCCCAAGTCCGGCAGCGCTCACCTCAGCGCTTGCG
GCGCCTCCACCTTCAGCTTTTTGGGCTTCGGCTCCTCCTCAGCAGCTGCCATCTTCGCGCTCCCACCCCACTTTG
GCTCTACAGCCCACCTCTGCCATCCACTCTCTGGTCCCGCCCCCTCTTCGCATCACCGCTTTCTCTTCTCCAAAT
CCCGCCCCTCCAGACTCCGCCCATTCTGTGCCGCTGTCATCCACAATCATTGGCTCTATCCGTCGGCACCAACAG
CGAATGCCCCGCCCATTCCTGACCCCGCCTCCCCTACCATGA

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FIGURE 4336

ATGATCCACAGTCTATTTCTCATAAACTGTTCCGGTGACATATTTCTAGAGAAGCACTGGAAGAGCGTTGTGAGC
CAGTCTGTCTGTGATTATTTCTTTGAAGCTCAAGAGAAAGCTGCTGATGTTGAAAATGTACCACCTGTCATTTCA
ACACCTCACCACTACCTCATCAGTATCTACCGGGATAAGCTCTTCTTTGTATCTGTCATACAGACCGAAGTGCCA
CCTCTCTTTGTAATTGAGTTCCTACATCGAGTTGCTGACACTTTTCAGGACTACTTTGGTGAGTGTTCAGAGGCT
GCAATTAAGGATAATGTGGTCATAGTATATGAACTCTTAGAAGAAATGTTAGACAATGGATTTCCACTGGCTACC
GAATCTAACATTTTGAAAGAATTGATTAAACCACCAACAATTCTACGCTCTGTTGTCAACTCTATTACAGGCAGT
AGTAATGTTGGGGACACACTCCCCACCGGGCAGCTGTCCAACATACCATGGCGTCGGGCAGGGGTAAAGTACACA
AACAATGAAGCCTATTTTGATGTTGTTGAAGAAATAGACGCAATTATAGATAAATCAGGCCTTTCTGGGACACTT
CTGGTTCTCAGTACCTTTGAGCAAAGCAACTGCAATAGCCTGCAGGTGTCTCAAGAAGGTTGCAACTGCAAGCTG
TTAGGAGAGAAGCATGCAAGCGCTGGGGCAGGGATGCATGGAGCTCATAAAGGACATCCAAGAGGATCTGAGGGC
ATCACGGCAGAGAACTGGCAGCTTTCACTCTGCAGATCCTCAGAACACATGTTGTCATTTAATTAA

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FIGURE 4337

CTTTTCCTCCTTGGCTGTCTGAAGATAGATCGCCATCATGAACGACACCGTAACTATCCGCACTAGAAAGTTCAT
GACCAACCGACTACTTCAGAGGAAACAAATGGTCATTGATGTCCTTCACCCCGGGAAGGCGACAGTGCCTAAGAC
AGAAATTCGGGAAAAACTAGCCAAAATGTACAAGACCACACCGGATGTCATCTTTGTATTTGGATTCAGAACTCA
TTTTGGTGGTGGCAAGACAACTGGCTTTGGCATGATTTATGATTCCCTGGATTATGCAAAGAAAAATGAACCCAA
ACATAGACTTGCAAGACATGGCCTGTATGAGAAGAAAAAGACCTCAAGAAAGCAACGAAAGGAACGCAAGAACAG
AATGAAGAAAGTCAGGGGGACTGCAAAGGCCAATGTTGGTGCTGGCAAAAAGTGAGCTGGAGATTGGATCACAGC
CGAAGGAGTAAAGGTGCTGCAATGATGTTAGCTGTGGCCACTGTGGATTTTTCGCAAGAACATTAATAAACTAAA
AACTTCATGTGT

FIGURE 4338A

ATGGTGAAGGAGCAGTTCCGGGAGACGGATGTGGCCAAGAAAATAAGCCACATCTGTTTTGGAATGAAGTCACCT
GAGGAGATGCGCCAGCAGGCGCACATCCAAGTTGTGAGTAAGAACCTGTACAGCCAGGACAACCAACATGCCCCC
TTGCTATATGGGGTGCTCGACCATAGGATGGGTACGAGTGAGAAGGATCGTCCATGTGAAACCTGTGGGAAAAAC
TTGGCTGACTGTCTAGGCCAGTATGGGTATATCGACCTGGAGTTGCCGTGTTTTCATGTAGGGTACTTCAGAGCA
GTCATAGGCATCTTACAGATGATCTGCAAAACCTGCTGCCACATCATGCTGTCCCAAGAGGAGAAGAAGCAGTTT
CTGGACTATCTAAAGAGGCCCGGCCTGACCTACCTTCAGAAGCGAGGACTGAAAAAGAAAATCTCTGACAAGTGC
CGGAAGAAAAACATCTGCCATCACTGTGGCGCTTTTAATGGTACCGTAAAGAAGTGTGGACTGCTGAAAATAATT
CATGAGAAATACAAGACCAACAAAAAAGTGGTGGATCCCATTGTATCAAATTTCCTTCAGTCTTTTGAAACAGCC
ATTGAACATAATAAAGAAGTGGAGCCTCTGCTGGGAAGGGCACAGGAAAACTTGAATCCCTTAGTAGTTCTGAAT
TTATTTAAACGAATCCCAGCTGAAGATGTTCCTCTACTTCTGATGAACCCAGAAGCCGGAAAGCCGTCTGATTTG
ATTCTCACACGACTTTTGGTGCCTCCTTTGTGTATCAGACCCTCCGTTGTGAGTGATTTGAAGTCTGGCACCAAT
GAAGATGATCTGACAATGAAACTGACAGAAATCATTTTCCTAAACGATGTTATTAAAAAGCATCGGATCTCAGGA
GCCAAGACCCAGATGATCATGGAGGACTGGGATTTCCTGCAGCTGCAGTGTGCCCTCTACATTAACAGTGAGCTC
TCGGGCATTCCCCTCAACATGGCACCCAAGAAGTGGACCAGAGGCTTCGTCCAACGCCTGAAGGGAAAACAGGGT
CGATTTAGAGGAAATCTCTCAGGAAAGAGAGTGGATTTTTCTGGCAGAACAGTCATCTCGCCCGACCCCAACCTC
CGGATTGATGAGGTAGCTGTGCCAGTTCATGTGGCCAAAATTCTAACTTTTCCTGAGAAGGTAAACAAAGCAAAC
ATCAATTTCTTGAGGAAACTGGTTCAAAACGGCCCTGAGGTTCACCCAGGAGCAAACTTCATTCAGCAGAGACAT
ACGCAGATGAAAAGGTTTTTGAAATACGGAAATCGAGAAAAGATGGCTCAAGAGCTCAAGTATGGTGACATCGTA
GAGAGACACCTCATCGATGGAGATGTGGTGCTGTTCAATCGGCAGCCCTCGCTGCACAAATTGAGCATTATGGCT
CATCTGGCCAGGGTCAAGCCCCACCGGACCTTCAGATTTAATGAGTGTGTCTGTACACCCTATAATGCTGACTTT
GATGGTGATGAAATGAACCTTCATCTTCCTCAAACAGAAGAAGCTAAAGCAGAGGCCCTTGTTCTGATGGGGACT
AAAGCAAATCTTGTAACCCCGAGGAATGGGGAACCGCTGATTGCTGCTATTCAGGATTTTCTAACAGGTGCCTAT
CTCCTCACTCTCAAGGACACTTTCTTTGATCGAGCCAAGGCTTGCCAAATCATTGCTTCAATACTGGTTGGCAAG
GATGAGAAAATTAAAGTTCGCCTCCCACCGCCTACAATCCTAAAGCCTGTCACCCTGTGGACGGGAAAGCAGATC
TTCAGTGTCATCCTCAGGCCTAGCGATGACAATCCAGTGAGGGCCAACCTGCGAACCAAGGGCAAGCAGTACTGT
GGCAAAGGGGAAGATCTCTGTGCCAATGATTCCTATGTTACAATCCAGAACAGTGAGTTGATGAGTGGCAGCATG
GACAAAGGAACCCTAGGGTCAGGATCCAAGAACAATATTTTTTACATTTTGCTGCGAGACTGGGGACAGAATGAA
GCTGCAGATGCCATGTCACGGCTCGCCAGGCTGGCTCCTGTCTACCTGTCTAACCGTGGTTTCTCAATTGGGATC
GGTGATGTCACACCTGGCCAAGGACTGCTGAAGGCCAAGTATGAGTTGCTGAATGCCGGCTACAAGAAATGTGAT
GAGTACATCGAAGCCCTGAACACGGGCAAGCTGCAGCAGCAGCCTGGCTGCACTGCTGAGGAGACCCTGGAGGCA
CTGATCCTGAAGGAGCTGTCTGTGATCCGTGACCACGCTGGCAGTGCCTGCCTCCGGGAGCTGGACAAGAGCAAC
AGCCCCCTCACCATGGCTCTGTGCGGCTCCAAAGGTTCCTTCATTAACATATCACAGATGATTGCCTGTGTGGGA
CAGCAGGCCATCAGTGGCTCTCGAGTGCCAGACGGCTTTGAAAACAGGTCCTTGCCTCATTTTGAAAAACACTCA
AAGCTCCCAGCTGCCAAAGGCTTTGTGGCTAATAGCTTTTATTCCGGTTTGACACCAACTGAGTTTTTCTTCCAC
ACAATGGCCGGCCGGGAAGGTCTAGTCGACACGGCTGTAAAGACAGCTGAAACGGGATACATGCAGCGAAGGCTT
GTCAAATCTCTTGAAGATCTTTGCTCCCAGTATGATCTGACAGTCCGAAGCTCTACTGGCGATATTATCCAGTTC
ATTTATGGAGGAGATGGCTTAGATCCTGCAGCTATGGAGGGAAAAGATGAACCTTTGGAGTTTAAAAGGGTTCTG
GACAACATCAAAGCAGTCTTCCCGTGTCCCAGTGAGCCTGCTCTCAGCAAAAACGAGCTGATCCTGACCACAGAG
TCCATCATGAAGAAGAGTGAGTTCCTCTGCTGCCAGGACAGCTTCCTGCAGGAAATAAAAAAATTCATTAAGGGG
GTCTCTGAGAAGATCAAGAAAACCAGAGATAAATATGGCATCAATGATAACGGCACAACAGAGCCCCGTGTGCTG
TACCAGCTGGACCGCATCACCCCCACCCAAGTAGAAAAGTTTCTGGAGACCTGTAGGGACAAGTACATGAGGGCA
CAGATGGAGCCAGGTTCTGCAGTGGGTGCTCTGTGTGCCCAGAGCATTGGTGAGCCAGGCACCCAGATGACCCTG
AAGACTTTCCACTTTGCAGGTGTGGCCTCCATGAACATCACCCTGGGCGTGCCCCGGATTAAAGAGATCATCAAC
GCTTCCAAGGCCATCAGCACTCCAATTATCACAGCACAGCTAGACAAGGATGACGACGCGGATTATGCTCGCCTC
GTGAAAGGGAGAATTGAGAAAACCCTCTTGGGAGAGATTTCCGAGTATATTGAAGAAGTGTTTCTTCCTGATGAC
TGCTTTATTCTCGTCAAGCTCTCCCTGGAACGGATTAGGCTTCTGAGACTGGAAGTGAACGCTGAGACAGTGAGA
TATTCCATCTGCACATCCAAGCTCCGTGTGAAGCCCGGTGATGTGGCTGTTCATGGTGAGGCTGTGGTGTGTGTC
ACCCCCAGAGAGAACAGCAAGAGCTCCATGTACTACGTGCTGCAGTTCCTGAAAGAGGATCTCCCCAAGGTGGTG

FIGURE 4338B

GTGCAGGGCATTCCAGAGGTGTCCAGAGCTGTCATCCACATTGACGAGCAGAGTGGAAAGGAGAAGTACAAGCTT
CTGGTGGAAGGTGATAACCTGCGGGCAGTCATGGCCACACACGGTGTGAAGGGCACCCGAACCACCTCCAATAAC
ACCTATGAGGTGGAGAAAACTCTGGGCATCGAGGCCGCCCGGACAACGATCATCAATGAAATCCAGTACACCATG
GTGAACCACGGCATGAGCATCGACAGGAGGCACGTGATGCTGCTCTCCGACCTCATGACCTACAAGGGTGAAGTC
CTGGGCATCACTAGGTTTGGCCTGGCCAAGATGAAGGAGAGTGTGCTGATGCTGGCCTCCTTTGAGAAGACGGCT
GACCATCTCTTTGACGCTGCCTACTTCGGGCAGAAGGACTCTGTGTGTGGGGTGTCTGAGTGCATCATCATGGGA
ATCCCAATGAACATTGGAACCGGGCTCTTCAAGCTGCTTCACAAGGCTGACAGGGACCCGAACCCTCCCAAGAGG
CCCCTGATCTTCGACACAAATGAATTCCACATCCCCCTTGTCACA**TAG**

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FIGURE 4339

GTGTGTGGGTGTGTGTGTGAACTTTCATTTCCAATTCCTCACAGACTGGTATTTAGCCAAATACACTGACAATTC
CTAGAGAGATGAAAATTTAAAACTCTAAGTCTTGCAAAAGGTAAGCTCTATTTTTTTCTTGTTAGATTCAACAGA
CATAAAATTACGACGTCCTGTTTCCATAGCAGTTTCTAGACACTCACTGTCAATTTCTGAGCATGCCTTGTTGCA
GTAGGGGCTTGGTTTGTGTCCAGGTGCTGTTATGTGGAGCACACTGGAGTACCCCTGGCCTGGTGTCTATAGACC
CCTTTGTCAAACTCCTATAGTACAGGGCTGGCCCAAGTTGGCGCCATCATCTTTCTGTGACTCTCCTCTTGGCCA
TGAGCTATCTGGCTCCTTAAACTTGTCGTTTCCTGCAGAATCCTGCTAATGATTAGACCACCGCCACATGTCCTC
CAAACTTCCTTCTGATGCCCTGGGATTCCCCCAACCATTGCAAACCCAACCCAGGGTGTTAACTGCAGTGGGGTG
GGCAGTTTACATATGAGTGATCAACTCAAGAGGGGCAATTTTCTTTCCCAGTTTCTTGCTGGTGAAGGAGAGTCA
GGTGGGGATGGAGCAGAGTGCCAAGGAGCACAAAGCAGACAGCCACACAGTAGAAAGAGTGCAAGCTGTACTGCC
TTGCCTCAAACCTGGGGTCTTACTCTGAGCTGAATGACGTGTCTGGGGGGCTCTTTTGCAGGGGTCATCCAGGGA
GGAGCCCTGTCAAGCATTTGCACTCAGATCTTGGCAATGGTCAATCAAGAACAAAATAAAGTCCTGTGGATTCCA
GCCTGCCCGCTCTAGGAGAATGCTGTGCTGTGGATGACTGCAGCTGGCCGCCTGAGGGGACACCAGACTCAGCTC
TTTTCTAGCGACTGAAAGTAGAAGTCTGTCCGTCTATGAACATGCGGGGGAAGGATCCGGAACCAGGACCCAGAA
GCACCTCCTTTGTAGACAGAGGGCCACGGCTGCGTGCGATCCAGGCCCAGGCCCACACACTCTGCCCGTGTCACA
CGTGTGCTTTAACACAAAACAGATAACACTAAAGACGGGTTCAGCACCCACCTTTCTTTAGCCAGCTGATCAGAG
ATGCTGCAAAGAGAACCTTTCGGATCACTCGTTTACAAGCCTTTTCTAAGTATTTGGTGGTTTATGTTTACTTGA
ACGGCTCCATGTTGCCGGTGCCCAGCCCCTGTCCCCTCTGTCAACCCCCTGTCGCTTTGGTGTTGGTTTCGTTCC
CGTCTTCAGCAAAACGACCTTGGAACCTCA**ATG**GGGGCTGCTTTGCTTTGGGAGGTTCTTGTTGGTGGGACCAGA
GCTTTGACAAACCTCCTGCTCCTTGGTGGCACCTCTCCTGGAAGGACGTCACAACTCCAGGTGCTCAGACTGCCT
GTGGCAGCAGAACCAGTGCCTTTGGCATTTTCCTCCCACAATGGGGAAGGTGACTTTGGCATTCTTACAAACTCG
TCTCTCGGCCTTTCTCTCCTGCCTTCCACAGCCTCTCGTTTCTCCTCCATCTGTGCTTATTACTTGAGGACTGTG
TCTGCTCCG**TGA**GAGCTGCGTGGGCAGGGCTGCAGTGGGGTCCAGGTGGTGTTCAGCTGTGCTGATGCCTGCCAT
TGGGTCCTCCTTAGGCTCTGTAAGTCGTGACAGCCTTCATCAGTGCAATGTTTGCAGGGTAATTCTTAAACTTTT
TAGAGGGTGGCAGGTACATCAGTTCTTTTTGATATGAAAACATTCATGTTTCAGACATTGAATTGAGAGCTTTTA
GGGGAAGCATAATGGTTATTGTCACTATCAACAGTCTAAAAAGAAAAACTGAGGTCTTTTTAATCTTGATTACAG
CACTCACGGCATGCACCCTACTCAGTGTGGGTGTCTTCGTTTGGGGGCTTTTTTTTTTTTTGCACTTCTGAGGCT
AGATATGTCTGGCTGAAGATTTGATGTGGTTCCTCCTTAAGCTATGCGTCCTGTTAATAATAGGTACTGTACTGG
GCTCTGTGTAAGTGTCGTTGGGGTAGGACCTATATTTTAATACTGTTCCTAACATTTCATTTTACTAGCGAGAAA
TCTTTGATTTCATTTTATTCTTTGTAATTCTAGACACTAGATTGTAGTTTAGCCATAACTGATGTTTTTTAAAAA
GGGATATATTTTCTTGCACAGTTGTTCAAAAAAGAGACAAGTTTCAGTCCTCAATGCTGTCCTTTGTTTTACAGG
TACAAGTTTTCTAGCTCAGACAAACTATGAAAAACTGTAGACTATTCTCAAGGTATTAACTCGCAGACCCTCTGG
GGGTAGGGGCTGTTTTCTAAGTTACAGGCAGAGTGGGACTGAGATGGTACAGTGTGCACAGACAGGTACTGAGCT
GACAGACTGGGATTTTCTGTACTAAAATGTTACTTTGTATCAAAAGTTAAACAGGCTTTAGTACAACAAATAAAG
GTCAATTTCTGT

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FIGURE 4340

ATTTTAAAGCCAGTCCCAGCAGGTCAAATGATAGTTTCTCCATCAAGCAATATTTCCACTTCAACTTCCACTCTT
CAGAGCCCTGTGGGAGCTGGCACACACACTGTCACAAAAATTCAGTCTGGCATAACTGGGACAGTCATATCGGCT
CCTTTAAGCATTCCCATCACCCCAGCCATGCCCCTAGATGAAGACCCCTCCAAAGTGTGTAGACATAGTCTAAAA
TGTTTGGAGTGTAATGAAGTCTTCAGTATGAGACATCA**ATG**GCTACACATTTCCAGCAGGCTGCAGATACACGTG
GACAAAAGACTTGCACTATCTGCCAGATGCTGCTTCCTAACCAGTGCAGTTACGCATCACACCAGAGAATCCATC
AGCACAAATCTCTCTACACCTGCCCTGAGTGCGGGGCCATCTGCAGGTCGGTGCACTTCCAGACCCATGTCACCA
AGAACTGTCTGCACTACATGAGGAGAGTTGGTTTTCGATGTGTGCATTGCAATGTTGTATACTCTGATGTGGCTG
CCCTGCAGTCTCACATTCAAGGTTCTCACTGTGAAGTCTTCTACAAGTGTCCTATTTGTCCAATGGCATGTAAGT
CCGCCCCAAGCACACATTCCCACACCTACACACAGCATCCTGGCATCAAGATAGGAGAACCAGAAATAATATATA
AGTGTTCCATGTGCGACACTGTGTTCACCCTGCAAACCTTGCTGTATCGCCACTTTGACCAACACATTGAAAACC
AGAAGTTGTCTGTTTTCAAGTGTCCAGACTGTTATCTTTTATATGCACAGAAGCAACTTATGATGGACCATATCA
AGTCTATGCATGGAACATTGAAAAGTATTGAAGGGCCTCCAAACTTGGGTATAAACTTGCCTTTGAGCATTAAGC
CTGCAACTCAAAATTCAGCAAATCAGAACAAAGAGGACACCAAATCCATGAATGGGAAAGAGAAATTGGAAAAGA
AATCTCCATCTCCTGTGAAAAAATCAGTGGAAACCAAGAAAGTGGCCAGTCCTGGGTGGACGTGTTGGGAGTGTG
ACCGCCTGTTCATTCAGAGAGATGTGTACATATCCCACGTGAGGAAGGAGCAAGGGAAGCAAATGAAGAAACATC
CCTGCCGCCAGTGTGACAAGCTCATCCCACAGCCTGTGCCAGCACAACCGGATCAAGCACAAAGGCATCAGGAAA
GTGTATGCCTGCTCGCACTGCCCAGACTCCAGACGTACCTTTACCAAACGATTGATGCTAGAGAAGCACGTCCAG
CTGATGCACAGCCTCAAGGACCC**TGA**CCTGAAAGAAATGACAGATGCCACCAATGAGGAGGAAACAGAAATAAAA
GAAGACACCAAGTTCCCCAGTCCCAAGTGGAAGTTGGAAGAACCAGTTCTGGAGCTCAGGCCTTCCTGAGGAGCA
ATCACTCAACCACTGAAAAAGCTGAAAATCAATGTTTTTAAGGTTCTCAAGAGTGCCATGTGTGGCTTCACCACC
GAAAACCTGCTTCAGTTCCACGAACACATCCCTCAGCACAAATCTGATAGTTCTTCCTACCAGTGCCAGGAGTGT
GGCCTCTGGTACACGTCTCACGTCTCTCTGTCCAGGCACCTCTTCATTGTACACAAGTTAAAGGAACCTCAGCCA
GTGTCCAAGCAAAATGGAGCTGGGGAAGATAACCAACAGGAGAACAAACCCAGCCATGAGGATGAATCCCCCAAT
GGCACCGTGTCAGACAGAAAGTGCAAAGTGTGCGTGAAAACTTTTGAAACTGAAGCTGCCTTAAATACTCACATG
CGGATACATGGCATGGCCTTCATCAAATCCAAAAGGATGAGCTCAGCCAAGAAATAGCCACAGAAGGTACATGAG
GAAAATCCCTGTCCACATTGGAATAAAAAAGATATTTTTGTTACAAAAAGTTTGCAGTATAATAAACAGTACTGT
CTAGGCTGTTGCAATATGTTCTCTTTCAACGTACCTTCCTTCACCTCGTTGTATATATCCTCGATAAGTAGTAAA
ACAGTATTTGAGTTTCAAAGAGTTTGTATAGATTTAAATGAATAACTTTTTATACTGTTTGTTACACATTTGTAT
CAGTATTTAGTGGCAAACGATTTGAGTTGTTTTGGGTCAGAATTTTTCTTTTTGTACTGTTTCTTTAAAACAGAG
TTCTTAGTAACAGGGGCAGCTCCTGAATTCAAATAAACCATTTTGTATGTTTGGATTTTGAAGAGGTTAACTAAT
TACAGGCTAAAATAATGCCTTTTTTAGTGTTTTTAATTTTTAGAATACACTACATAAATTGTAAGTAATTGTGGG
TCTCAAAAACCCTAGGAACTTTTAAGTGTCTTAGCACTTCCTCGATGTGCCTGCCCTGAAGGAGTGAGCTCACAT
GTGAGACAACTGCACTCCAGTGTGGGCGTGCCTTTTTCTTCAGGCCATGCGAAGGGTGTTTAAAGCAGCCTTGCA
GGTCGCTCCTTTCCCAGCCGTGGATAAAAACTGAAGCCAGGAATCTAATAAGGAATGCTGATTTCCTCAATTCCA
TTTTGGGGCATGGGGAAGGCTGTTCTAAAGAAAAAAATGGGACTGGTTTTCTAGGCAGATCTGCAAGGCTGGCTT
TAAAAGCACAAGGAGGGAAAGTAACGAAAGGGCTGGACTACTATAAAAGTTACAAATACGTAGTTAGACCAATAG
ATTTATATAGTCAGGTTTTTGTCATGTAATTTATTAACTATTACAGAAACACAACTAAGAATATCAAGTATTTCT
CTGGCTCTTGACAGAAAAAAAAATCAGTTGACTTAACCCTTTGCTGTCAAAAGAGTTGGCATTGCCTGTTCTAGG
TGCTACTGCCAAATGTTCTGATACTTAGAGTTGGGATGCACAACGTCAACCACTGACTTCTCAATGCAGCCGCCT
GTGTATTGCAATTGGCCGTTACCTTAAGCGCGGGGCCACCCGGGTTTAGTTCAGCCATTTCAAGAAGTATATTTA
ACGTCGGTAGTTCTGCTTTATTAAAATGCAGCAGAGGTACTCTTCTGTCCCTTCCGTTTATAGTTCTCTGAGAGA
GTTCTATTTTTTGGTTTTGTTTCGTGTTTTCTTTTGCATTTCATATCTTACATTTATCCCTGAACATGTTTTGTA
CTTTTTTTTGTTGTTAAGAAAAGGAATTCTTTTGTGTATCTATAGATACTTGCATGATCTACTGTAGTCAACGTT
CGGTTCCTCAAAAGGTCTTGCTGCTGTCAGGTGTTATGCACTCCATCCATAATAACTGTGTGAAACACATTTCAT
ATGTAAATAAACGTGGGACATTTGGCCC

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FIGURE 4341A

AGCCCCGTGCTGATCCCATTCCAATATGTAGCTTCTGTTTGGGGACTAAAGAATCAAATCGTGAAAAGAAACCAG
AAGAACTCCTCTCTTGTGCAGATTGTGGCAGTAGTGGACACCCATCCTGTTTGAAATTTTGTCCTGAATTAACAA
CAAATGTAAAGGCCTTAAGGTGGCAGTGCATCGAATGCAAGACATGCAGTGCCTGTAGAGTCCAAGGCAGAAATG
CTGATAATATGCTTTTTTGTGATTCCTGTGATAGAGGATTTCATATGGAATGCTGTGACCCACCACTTTCCAGAA
TGCCAAAAGGGATGTGGATTTGCCAAGTCTGCAGACCAAAGAAAAAGGGAAGAAAACTACTTCATGAGAAAGCTG
CACAAATAAAACGACGATATGCAAAACCCATTGGACGACCGAAAAATAAATTAAAGCAACGATTGTTGTCTGTAA
CCAGTGATGAAGGATCCATGAATGCATTCACAGGAAGGGGGTCACCTGGTAGGGGTCAAAAGACTAAAGTCTGTA
CCACACCTTCATCTGGTCATGCTGCATCTGGGAAGGACTCAAGCAGCAGATTGGCTGTTACAGACCCCACTCGGC
CTGGTGCCACCACCAAAATCACCACCACCTCCACCTACATTTCTGCCTCTACACTTAAAGTTAACAAGAAAACCA
AAGGGCTCATTGATGGCCTTACTAAGTTTTTTACACCATCACCTGATGGTCGCAGATCACGAGGTGAAATTATAG
ACTTTTCAAAGCACTATCGTCCAAGGAAAAAGGTCTCTCAGAAACAGTCATGCACTTCTCATGTGTTGGCTACAG
GTACCACACAAAAGCTAAAACCTCCACCTTCTTCACTTCCACCCCCAACCCCCATCTCCGGTCAGAGCCCCAGTT
CACAAAAGTCCAGCACGGCCACTTCTTCTCCCTCTCCCCAGAGTTCTTCCAGCCAGTGCAGTGTGCCCTCCCTGA
GCAGCCTTACCACTAACAGCCAGCTGAAGGCACTCTTTGATGGGCTTTCTCATATCTATACCACTCAGGGACAGT
CTCGCAAAAAGGGACACCCGAGTTATGCACCACCCAAACGTATGCGTCGTAAAACTGAATTATCTTCCACGGCAA
AATCTAAAGCCCACTTCTTTGGCAAAAGAGATATTAGAAGTCGGTTTATTTCTCACTCCTCCTCCTCTAGCTGGG
GGATGGCTAGAGGAAGTATTTTTAAAGCAATTGCTCACTTCAAGCGAACAACTTTCCTTAAAAAGCACAGGATGC
TAGGCAGATTAAAATATAAAGTGACCCCTCAGATGGGGACCCCCTCACCAGGGAAGGGGAGCTTGACAGACGGAA
GGATTAAACCTGATCAGGATGATGATACTGAAATAAAAATAAACATCAAACAAGAAAGTGCAGATGTAAATGTGA
TTGGAAACAAGGATGTCGTTACTGAAGAGGATTTGGATGTTTTTAAGCAGGCCCAGGAACTTTCTTGGGAGAAAA
TAGAGTGTGAGAGTGGGGTGGAAGACTGTGGCCGGTACCCTTCTGTGATTGAATTTGGTAAATATGAAATCCAAA
CCTGGTACTCCTCGCCTTACCCACAGGAATATGCAAGATTACCAAAGCTTTACCTGTGTGAATTCTGTCTTAAAT
ATATGAAAAGTAAAAATATTTTGCTAAGACACTCCAAGAAGTGTGGATGGTTTCATCCTCCAGCAAATGAAATTT
ACCGAAGGAAAGACCTTTCAGTATTTGAGGTTGATGGGAATATGAGCAAAATTTATTGCCAAAACCTTTGCTTGT
TAGCCAAGCTCTTCCTGGACCACAAAACGTTGTATTATGATGTCGAGCCATTCCTTTTTTATGTCCTTACAAAAA
ATGATGAAAAGGGCTGTCATCTGGTTGGATACTTCTCTAAGGAAAAGCTTTGCCAGCAGAAGTATAATGTCTCCT
GCATAATGATCATGCCCCAGCACCAAAGGCAAGGATTTGGACGGTTTCTCATTGATTTCAGCTATTTGCTTTCTA
GAAGAGAAGGCCAAGCAGGGTCTCCTGAAAAGCCTCTCTCCGATCTGGGCCGTCTCTCCTACCTGGCATATTGGA
AGAGCGTCATCTTGGAGTATCTCTACCACCACCATGAGAGGCACATCAGCATCAAGGCAATTAGCAGAGCGACGG
GCATGTGCCCACATGACATTGCCACCACTCTGCAGCACCTCCACATGATCGACAAGAGAGATGGCAGATTTGTCA
TCATTAGACGGGAAAAGTTGATATTGAGCCACATGGAAAAGCTGAAAACCTGTTCCAGAGCCAATGAACTTGATC
CAGACAGTCTGAGGTGGACCCCAATTTTAATTTCTAATGCTGCAGTGTCTGAAGAAGAGCGAGAAGCTGAGAAAG
AGGCTGAGCGGCTAATGGAACAAGCTAGCTGCTGGGAGAAGGAGGAACAAGAAATCCTGTCAACTAGAGCTAACA
GTAGGCAATCACCTGCAAAAGTACAATCGAAAAATAAATATTTGCATTCCCCGGAGAGCCGGCCAGTCACAGGGG
AGCGAGGGCAGCTGCTGGAGCTGTCTAAAGAGAGCAGTGAAGAAGAAGAGGAGGAGGAGGACGAGGAGGAGGAAG
AAGAGGAGGAAGAAGAGGAAGAGGATGAAGAGGAGGAAGAAGAGGAAGAAGAAGAAGAAGAAGAAAATATTC
AAAGCTCTCCCCCAAGATTGACGAAACCACAGTCAGTTGCCATAAAGAGAAAGAGGCCTTTTGTACTAAAGAAGA
AAAGGGGTCGTAAACGCAGGAGGATCAACAGCAGTGTAACAACAGAGACCATTTCAGAGACGACAGAAGTACTGA
ATGAGCCCTTTGACAACTCAGATGAAGAGAGGCCAATGCCACAGCTGGAGCCTACCTGTGAGATTGAAGTGGAGG
AAGATGGCAGGAAGCCAGTCCTGAGAAAAGCATTCCAGCATCAGCCTGGGAAGAAAAGACAAACAGAGGAAGAGG
AAGGAAAAGACAATCATTGCTTCAAGAATGCTGACCCTTGTAGAAACAATATGAATGATGATTCAAGTAACTTGA
AAGAAGGCAGTAAAGACAATCCCGAACCTCTAAAGTGCAAACAAGTGTGGCCAAAAGGAACAAAGCGCGGTCTAT
CTAAGTGGAGGCAAAACAAAGAGAGGAAGACCGGATTTAAACTGAATTTGTACACCCCGCCAGAAACACCCATGG
AGCCTGACGAGCAGGTAACAGTGGAAGAACAGAAGGAGACTTCAGAAGGAAAAACCAGCCCCAGTCCCATCAGGA
TTGAGGAGGAGGTCAAGGAAACTGGGGAAGCCCTGTTGCCTCAAGAGGAAAACAGAAGGGAAGAAACATGTGCCC
CTGTAAGTCCAAACACATCACCAGGTGAAAAACCAGAAGATGATCTCATCAAACCTGAGGAAGAGGAAGAGGAGG
AGGAGGAGGAAGAGGAAGAAGAGGAAGAAGAGGAAGGGGAAGAAGAAGAAGGAGGAGGAAATGTAGAAAAAGATC
CAGATGGTGCTAAAAGCCAAGAAAAAGAGGAACCAGAAATCTCCACGGAAAAAGAAGACTCTGCACGTTTGGATG

FIGURE 4341B

ATCACGAAGAGGAGGAGGAAGAGGATGAAGAGCCATCCCACAACGAGGACCATGATGCCGATGACGAGGATGACA
GCCACATGGAGTCTGCCGAAGTGGAGAAGGAAGAGCTGCCCAGAGAAAGCTTCAAAGAAGTACTGGAAAACCAGG
AGACTTTTTTAGACCTTAATGTGCAGCCTGGTCACTCGAACCCAGAGGTCTTAATGGACTGTGGCGTCGACCTGA
CAGCTTCTTGTAACAGTGAGCCCAAGGAGCTTGCTGGGGACCCTGAAGCTGTACCCGAATCTGACGAGGAGCCAC
CCCCAGGAGAACAGGCACAGAAGCAGGACCAAAAGAACAGCAAGGAAGTCGATACAGAGTTCAAAGAGGGAAACC
CAGCAACCATGGAAATCGACTCTGAGACTGTCCAGGCCGTTCAGTCTTTGACCCAGGAGAGCAGCGAACAGGACG
ACACCTTTCAGGATTGTGCCGAGACTCAAGAGGCCTGTAGAAGCCTACAGAACTACACCCGTGCAGACCAAAGTC
CACAGATTGCCACCACGCTCGACGATTGCCAACAGTCGGACCACAGTAGCCCAGTTTCATCCGTCCACTCCCATC
CTGGCCAGTCCGTACGTTCTGTCAACAGCCCAAGTGTCCCTGCTCTGGAAAACAGCTACGCCCAAATCAGCCCAG
ATCAAAGTGCCATCTCAGTGCCATCTCTGCAGAACATGGAAACCAGTCCCATGATGGATGTCCCATCAGTTTCAG
ATCATTCACAGCAAGTCGTAGACAGTGGATTTAGTGACCTGGGCAGTATCGAGAGCACAACTGAGAACTACGAAA
ACCCAAGCAGCTACGATTCTACTATGGGAGGCAGCATCTGTGGAAACGGCTCTTCACAGAACAGCTGCTCCTATA
GCAACCTCACCTCCAGCAGTCTGACACAGAGCAGCTGTGCTGTCACCCAGCAGATGTCCAACATCAGCGGGAGCT
GCAGCATGCTGCAGCAAACCAGCATCAGCTCCCCTCCGACCTGCAGCGTCAAGTCTCCTCAAGGCTGTGTGGTGG
AGAGGCCTCCGAGCAGCAGCCAGCAGCTGGCTCAGTGCAGCATGGCTGCTAACTTCACCCCACCCATGCAGCTGG
CTGAAATCCCCGAGACGAGCAACGCCAACATTGGCTTATACGAGCGAATGGGTCAGAGTGATTTTGGGGCTGGGC
ATTACCCGCAGCCGTCAGCCACCTTCAGCCTTGCCAAACTGCAGCAGTTAACTAATACACTTATTGATCATTCAT
TGCCTTACAGCCATTCCGCTGCTGTGACTTCCTATGCAAACAGTGCCTCTTTGTCCACACCATTAAGTAACACAG
GGCTTGTTCAACTTTCTCAGTCTCCACACTCCGTCCCTGGGGGACCCCAAGCACAAGCTACCATGACCCCACCCC
CCAACCTGACTCCTCCTCCAATGAATCTGCCGCCGCCTCTTTTGCAACGGAACATGGCTGCATCAAATATTGGCA
TCTCTCACAGCCAAAGACTGCAAACCCAGATTGCCAGCAAGGGCCACATCTCCATGAGAACCAAGTCAGCGTCTC
TGTCACCAGCCGCTGCCACCCATCAGTCACAAATCTATGGGCGCTCCCAGACTGTAGCCATGCAGGGTCCTGCAC
GGACTTTAACGATGCAAAGAGGCATGAACATGAGTGTGAACCTGATGCCAGCGCCAGCCTACAATGTCAACTCTG
TGAACATGAACATGAACACTCTCAACGCCATGAATGGGTACAGCATGTCCCAGCCAATGATGAACAGTGGCTACC
ACAGCAATCATGGCTATATGAATCAAACGCCCCAATACCCTATGCAGATGCAGATGGGCATGATGGGCACCCAGC
CATATGCCCAGCAGCCAATGCAGACCCCACCCCACGGTAACATGATGTACACGGCCCCCGGACATCACGGCTACA
TGAACACAGGCATGTCCAAACAGTCTCTCAATGGCTCCTACATGAGAAGG**TAG**

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FIGURE 4342

CCCGCGGCCTCGCC**ATG**GCGACCCACGGACAGACTTGCGCGCGTCCAATGTGTATTCCTCCATCATATGCTGACC
TTGGCAAAGCTGCCAGAGATATTTTCAACAAAGGATTTGGTTTTGGGTTGGTGAAACTGGATGTGAAAACAAAGT
CTTGCAGTGGCGTGGAATTTTCAACGTCCGGTTCATCTAATACAGACACTGGTAAAGTTACTGGGACCTTGGAGA
CCAAATACAAGTGGTGTGAGTATGGTCTGACTTTCACAGAAAAGTGGAACACTGATAACACTCTGGGAACAGAAA
TCGCAATTGAAGACCAGATTTGTCAAGGTTTGAAACTGACATTTGATACTACCTTCTCACCAAACACAGGAAAGA
AAAGTGGTAAAATCAAGTCTTCTTACAAGAGGGAGTGTATAAACCTTGGTTGTGATGTTGACTTTGATTTTGCTG
GACCTGCAATCCATGGTTCAGCTGTCTTTGGTTATGAGGGCTGGCTTGCTGGCTACCAGATGACCTTTGACAGTG
CCAAATCAAAGCTGACAAGGAATAACTTTGCAGTGGGCTACAGGACTGGGGACTTCCAGCTACACACTAATGTCA
ATGATGGGACAGAATTTGGAGGATCAATTTATCAGAAAGTTTGTGAAGATCTTGACACTTCAGTAAACCTTGCTT
GGACATCAGGTACCAACTGCACTCGTTTTGGCATTGCAGCTAAATATCAGTTGGATCCCACTGCTTCCATTTCTG
CAAAAGTCAACAACTCTAGCTTAATTGGAGTAGGCTATACTCAGACTCTGAGGCCTGGTGTGAAGCTTACACTCT
CTGCTCTGGTAGATGGGAAGAGCATTAATGCTGGAGGCCACAAGGTTGGGCTCGCCCTGGAGTTGGAGGCT**TAA**T
CCAGCTGAAAGAAACCTTTGGGAATGGATATCAGAAGATTTGGCCTTAATATATTTCCATTGTGACCAGCAGCAG
GCTTTTTTCCCCCAAGAAGATGATCAAAACAAAGGATGATCTCAACAAGAGCTGTATTTTAAGTATTTAGACAGT
TCTTTGTTAGCTGGTTTCTAGTTGGTTATCTAGTTACCAATGCTGCAGTCCTGCAGTCACCTATACATTATTTAA
ATGTATTTAACTGTTAAATGCGCTACCCACCAATAATGAAATAGACCTTTATGAAAACTGTGCAATTGTGTGCAT
GTTTGTTTTTATGTTCCTTTAGAAAACATTGACTGTTACCATTGAATGAGATGGATCAGTGGATATTAAGATGAG
GTTACAAATTTTGTTAAGTTCAGCCATTATTACTTTTGGTATCCCAGAACATGACAAATTATGAATAAAACAAGT
ATACAT

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FIGURE 4343

GACCTGTCACTGCCTCCCGCCGCCTCCTGCCCGCGCC**ATG**ACCCAGCCGGTGCCCCGGCTCTCCGTGCCCGCCGC
GCTGGCCCTGGGCTCAGCCGCACTGGGCGCCGCCTTCGCCACTGGCCTCTTCCTGGGGAGGCGGTGCCCCCCATG
GCGAGGCCGGCGAGAGCAGTGCCTGCTTCCCCCCGAGGACAGCCGCCTGTGGCAGTATCTTCTGAGCCGCTCCAT
GCGGGAGCACCCGGCGCTGCGAAGCCTGAGGCTGCTGACCCTGGAGCAGCCGCAGGGGGATTCTATGATGACCTG
CGAGCAGGCCCAGCTCTTGGCCAACCTGGCGCGGCTCATCCAGGCCAAGAAGGCGCTGGACCTGGGCACCTTCAC
GGGCTACTCCGCCCTGGCCCTGGCCCTGGCGCTGCCCGCGGACGGGCGCGTGGTGACCTGCGAGGTGGACGCGCA
GCCCCCGGAGCTGGGACGGCCCCTGTGGAGGCAGGCCGAGGCGGAGCACAAGATCGACCTCCGGCTGAAGCCCGC
CTTGGAGACCCTGGACGAGCTGCTGGCGGCGGGCGAGGCCGGCACCTTCGACGTGGCCGTGGTGGATGCGGACAA
GGAGAACTGCTCCGCCTACTACGAGCGCTGCCTGCAGCTGCTGCGACCCGGAGGCATCCTCGCCGTCCTCAGAGT
CCTGTGGCGCGGGAAGGTGCTGCAACCTCCGAAAGGGGACGTGGCGGCCGAGTGTGTGCGAAACCTAAACGAACG
CATCCGGCGGGACGTCAGGGTCTACATCAGCCTCCTGCCCCTGGGCGATGGACTCACCTTGGCCTTCAAGATC**TA**
GGGCTGGCCCCTAGTGAGTGGGCTCGAGGGAGGGTTGCCTGGGAACCCCAGGAATTGACCCTGAGTTTTAAATTC
GAAAATAAAGTGGGGCTGGGACACACG

FIGURE 4344

CTGGCAGCGGCGGCGGCGGCGGCGCGGGACGCGTCACATCCCCTTGACCCTCCAATCACCTCGGGCTCCCATTTG
ATTGGAAGGCGGCAAAGGCTTTAATCTCCCCCTTGGTGCAGCTGCTTTTGAAGTGAGTTTCCTCGCCAGAGCCCC
GGCTGGACACGCAGCGGCTCGCATCGCAGAGCGCAGCGCCGGCGCGGGGCCGCGAGAACGCAGCGCAGGGGAGCA
GCCCGAGGCGGACACCGCGAGCCGCCCGGCACTCCCGCAGTCCAGCCGGCTCCTCTAGCCCGGCCACGGCTCCGC
TGCGGGCCACCCAGGATTACTCGCGTCTGGCTCCAGGCGCCGAGAAGGCGCGCTGGGCGCCCGTGGCCGCCGCGC
CAGCTCCTCCTCCTCCCGCTGCTCCTGCTCCCGGGGCGAGCGCGCAGCCCCGAGCCCGCCCCGCGCCTCCCGGAG
CCCTCCCCCCCCGCTGCTCCCATGCGCGCGGGTGGGTC**ATG**AGCACAGCGCCCTCGCTTTCTGCCCTAAGAAGCAG
TAAGCACAGCGGCGGCGGCGGCGGCGGAGGCGGAGGCGGCGGTGCAGACCCTGCCTGGACCAGCGCGCTCTCTGG
AAATAGCTCCGGCCCCGGCCCAGGCTCGTCCCCGGCCGGCAGCACCAAGCCTTTTGTGCACGCCGTGCCCCCCTC
TGACCCCCTGCGCCAGGCCAACCGCCTGCCAATCAAGGTGCTGAAGATGCTGACGGCACGAACTGGCCACATTTT
GCACCCCGAGTACCTGCAGCCCCTGCCTTCCACGCCGGTCAGCCCCATCGAGCTCGATGCCAAGAAGAGCCCGCT
GGCGCTGTTGGCGCAAACATGTTCGCAGATCGGGAAGCCCGACCCCTCGCCCTCCTCCAAACTCTCCTCGGTTGC
CTCCAACGGGGGCGGCGCGGGCGGTGCCGGCGGCGGTGCTGCGGGCGACAAGGACACCAAATCGGGCCCCCTGAA
GCTGAGCGACATCGGCGTGGAGGACAAGTCGAGTTTCAAGCCGTACTCCAAACCCGGCTCGGATAAGAAGGAGCC
GGGAGGCGGCGGTGGAGGCGGTGGCGGTGGCGGGGGCGGCGGCGGGGGTGTTTCGTCGGAGAAGTCGGGATTCCG
GGTACCGAGCGCCACCTGCCAGCCATTCACGCCCAGGACAGGCAGCCCGAGCTCCAGCGCCTCGGCATGCTCGCA
GAGAGGTATGCTGTCCTCGGCCGGGGGTGCCCCGGAGGGCAAGTACGACAAGAAAGACACTGTCGTGGGCGGCGG
TGGCAAGGGCACCGGGGGCGCCTCGGCCGAAGGGGGACCCACGGGGCTGGCACACGGCCGGATTAGCTGCGGCGG
CGGGATTAATGTGGATGTGAACCAGCATCCGGATGGGGGCCCGGGAGGCAAGGCTCTGGGCTCGGACTGCGGCGG
TTCATCGGGCTCCAGCTCCGGCTCCGGCCCCAGCGCGCCCACCTCCTCCTCAGTGTTGGGCTCTGGGCTGGTGGC
TCCCGTGTCACCCTACAAGCCGGGCCAGACAGTGTTCCCTCTGCCTCCCGCGGGTATGACCTACCCAGGCAGCCT
GGCCGGGGCCTACGCCGGCTACCCGCCCCAGTTCCTGCCACACGGCGTGGCACTTGACCCCACCAAGCCGGGCAG
CCTGGTGGGGGCGCAGCTGGCGGCGGCCGCGGCCGGGTCTCTGGGCTGCAGTAAGCCGGCCGGCTCCAGCCCTTT
GGCCGGAGCGTCTCCGCCGTCCGTGATGACAGCCAGTTTGTGCCGGGACCCTTACTGCCTCAGCTACCACTGCGC
TAGCCACCTGGCAGGGGCGGCGGCCGCCAGCGCTTCTTGCGCACATGATCCGGCTGCTGCGGCTGCGGCGCTGAA
GTCCGGATACCCGCTGGTGTACCCCACGCACCCGCTGCACGGTGTGCACTCCTCGCTAACGGCCGCCGCGGCTGC
TGGCGCCACACCGCCCTCCCTGGCCGGCCACCCCCTCTACCCCTACGGCTTTATGCTCCCTAACGACCCACTCCC
CCACATCTGCAACTGGGTGTCGGCCAACGGGCCGTGCGACAAGCGCTTCGCCACGTCCGAAGAGCTGCTGAGCCA
CTTGCGGACCCATACGGCATTTCCCGGGACAGACAAACTGCTGTCGGGCTACCCCAGCTCGTCGTCTCTGGCCAG
CGCTGCCGCGGCCGCCATGGCTTGCCACATGCACATCCCCACCTCGGGCGCACCGGGCAGCCCTGGGACGCTGGC
GCTGCGCAGCCCCCACCACGCGCTGGGACTCAGCAGCCGCTACCACCCCTACTCCAAGAGCCCGCTTCCCACGCC
TGGCGCCCCCGTGCCGGTGCCCGCCGCCACCGGACCGTACTACTCCCCCTACGCCCTCTACGGACAGAGACTGAC
CACCGCCTCGGCGCTGGGGTATCAG**TGA**GGGCGGCCGGGAGGGCGAGCGAGGGAGAGGAGGGAGAGGGGGAGGGG
AGGAGTCCAGGGAGAGGCGGGATCACGGCCCAGGCTGCTGACACCCGCGCGTGGGGAGGACTCGGGCCACGAAAG
GAAAGAAATGTATACCGTATCTATCTACCCGACAGCAGCGACCGAGACCCGGTGGGACACTCCCCTTCTCCCCAC
TTTCACCTCCCCACCCAAACTTTATAAAAGTTGAAAAAATATCATTTGACTTTTTATAGAAAAAAAAAGGAAAAA
ATAATTGAGAAAGTGTTCATCTGAGGACTGCATCGGTGGACACTGGTATTTATTTATGTTAGCTCCAAGCGGACC
GGTGGTTCAAAAGTGCATTATTTAGTTTGAGCTCTGTAGGTAAAAAGGAGGTGGGAAAAATTTTAAAACTTGAGG
GTAAAAATGTGGAAAACAAACCCTCCCATCCCTTGTAGATTATAAATAAAAGCAAAACCGCCACAGAACTAGAGG
TCTTCTCTTTAATGTTACTTTAAAATTGCTATGATTGTATTGTACGTTATTTAATGTCTGATTGAAACACAAATT
TACATGCATGTTTGTTAC

FIGURE 4345

CCCGCACTCTGCGCCTCTCCTCGCCTTTCTCGCACCTGCTCCTGCGCCAGGCCCGGAGACCCCCGGGGCGGCTTC
CCAGAACCTGCGGAGCACAACTGGCCGACCGACCCATTCATTGGGAACCCCGTCTTTTGCCAGAGCCCACGTCCC
CTGCCACCTCTAGCTCGGAGCGGCGTGTAGCGCC**ATG**GAGAAGAGCAACGAGACCAACGGCTACCTTGACAGCGC
TCAGGCGGGGCCTGCGGCCGGGCCCGGAGCTCCGGGGACCGCGGCGGGACGCGCACGGCGTTGCGCGGGCTTCCT
GCGGCGCCAAGCGCTGGTGCTGCTCACCGTGTCCGGGGTGCTGGCGGGCGCGGGCCTGGGCGCGGCGTTGCGCGG
GCTCAGCCTGAGCCGCACGCAGGTCACCTACCTGGCCTTCCCCGGCGAGATGCTGCTCCGCATGCTGCGCATGAT
CATCCTGCCGCTGGTGGTCTGCAGCCTGGTGTCGGGCGCCGCCTCGCTCGATGCCAGCTGCCTCGGGCGTCTGGG
CGGCATCGCTGTCGCCTACTTTGGCCTCACCACACTGAGTGCCTCGGCGCTCGCCGTGGCCTTGGCGTTCATCAT
CAAGCCAGGATCCGGTGCGCAGACCCTTCAGTCCAGCGACCTGGGGCTGGAGGACTCGGGGCCTCCTCCTGTCCC
CAAAGAGACGGTGGACTCTTTCCTCGACCTGGCCAGAAACCTGTTTCCCTCCAATCTTGTGGTTGCAGCTTTCCG
TACGTATGCAACCGATTATAAAGTCGTGACCCAGAACAGCAGCTCTGGAAATGTAACCCATGAAAAGATCCCCAT
AGGCACTGAGATAGAAGGGATGAACATTTTAGGATTGGTCCTGTTTGCTCTGGTGTTAGGAGTGGCCTTAAAGAA
ACTAGGCTCCGAAGGAGAAGACCTCATCCGTTTCTTCAATTCCCTCAACGAGGCGACGATGGTGCTGGTGTCCTG
GATTATGTGGTACGTACCTGTGGGCATCATGTTCCTTGTTGGAAGCAAGATCGTGGAAATGAAAGACATCATCGT
GCTGGTGACCAGCCTGGGGAAATACATCTTCGCATCTATATTGGGCCATGTTATTCATGGAGGAATTGTTCTGCC
ACTTATTTATTTTGTTTTCACACGAAAAAACCCATTCAGATTCCTCCTGGGCCTCCTCGCCCCATTTGCGACAGC
ATTTGCTACCTGCTCCAGCTCAGCGACCCTTCCCTCTATGATGAAGTGCATTGAAGAGAACAATGGTGTGGACAA
GAGGATCAGCAGGTTTATTCTCCCCATCGGGGCCACCGTGAACATGGACGGAGCAGCCATCTTCCAGTGTGTGGC
CGCGGTGTTCATTGCGCAACTCAACAACGTAGAGCTCAACGCAGGACAGATTTTCACCATTCTAGTGACTGCCAC
AGCGTCCAGTGTTGGAGCAGCAGGCGTGCCAGCTGGAGGGGTCCTCACCATTGCCATTATCCTGGAGGCCATTGG
GCTGCCTACTCATGACCTGCCTCTGATCCTGGCTGTGGACTGGATTGTGGACCGGACCACCACGGTGGTGAATGT
GGAAGGGGATGCCCTGGGTGCAGGCATTCTCCACCACCTGAATCAGAAGGCAACAAAGAAAGGCGAGCAGGAACT
TGCTGAGGTGAAAGTGGAAGCCATCCCCAACTGCAAGTCTGAGGAGGAGACATCGCCCCTGGTGACACACCAGAA
CCCCGCTGGCCCCGTGGCCAGTGCCCCAGAACTGGAATCCAAGGAGTCGGTTCTG**TGA**TGGGGCTGGGCTTTGGG
CTTGCCTGCCAGCAGTGATGTCCCACCCTGTTCACCCAGCCGCCAGTCATGGACACAGGGCACTGCCCTTGCCAA
CTTTTACCCTCCCAAGCAATGCTTTGGCCCAGTCGCTGGCCTGAGGCTTACCTCTCGGCACTGGCATTGGGCTCC
CCAGCCGGAACTGGTTACCAAGGACAAGGACACTCTGACATTCGGCTTGATCCATGTCCAGGTGCAACTGTGTGT
ACACCAGGGATCTGTTTGGAAACAACCCCTTGAGCTGCCAGGCTCAAGAAATCATGGACTCACAGGGTCCTGTGT
GGTT

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FIGURE 4346

AGGGGGAGTCCGAGCGAAGTCCTAGCCAGCGAGTCAGAGGGGAGGGGAGCAGGGAGGGGCCGAGGGTGGGGAGGT
GAGGGAGTGGGGAATGGGGCGGGCGACAACCCTTCAGGTACGCATGCCCCAGAGGCGCGGCGCTTGGCGGGAAGC
TGAGTCCTGGCCTTGCGTCGCACTGTCTGTCCTCAGCTCGCGTAGCCGCGCTCGCGACTCCCTTTCCCGGCATGC
CAGGCGGTGCGGCCGCCCTCTGGGCCGTGTAAAGGCCCCTCGGTCTAAGGCTTCCCTATTTCCTGGTTCGCCGGC
GGCCATTTTGGGTGGAAGCGATAGCTGAGTGGCGGCGGCTGCTGATTGTGTTCTAGGGGACGGAGTAGGGGAAGA
CGTTTGCTCTCCCGGAACAGCCTATCTCATTCCTTTCTTTCGATTACCCGTGGCGCGGAGAGTCAGGGCGGCGGC
TGCGGCAGCAAGGGCGGCGGTGGCGGCGGCGGCAGCTGCAGTGAC**ATG**TCCAGCATGAATCCCGAATATGATTAT
TTATTCAAGTTACTTCTGATTGGCGACTCAGGGGTTGGAAAGTCTTGCCTTCTTCTTAGGTTTGCAGATGATACA
TATACAGAAAGCTACATCAGCACAATTGGTGTGGATTTCAAAATAAGAACTATAGAGTTAGACGGGATCACCTCC
AGTTATTACAGAGGAGCCCATGGCATCATAGTTGTGTATGATGTGACAGATCAGGAGTCCTTCAATAATGTTAAA
CAGTGGCTGCAGGAAATAGATCGTTATGCCAGTGAAAATGTCAACAAATTGTTGGTAGGGAACAAATGTGATCTG
ACCACAAAGAAAGTAGTAGACTACACAACAGCGAAGGAATTTGCTGATTCCCTTGGAATTCCGTTTTTGGAAACC
AGTGCTAAGAATGCAACGAATGTAGAACAGTCTTTCATGACGATGGCAGCTGAGATTAAAAAGCGAATGGGTCCC
GGAGCAACAGCTGGTGGTGCTGAGAAGTCCAATGTTAAAATTCAGAGCACTCCAGTCAAGCAGTCAGGTGGAGGT
TGCTGC**TAA**AATTTGCCTCCATCCTTTTCTCACAGCAATGAATTTGCAATCTGAACCCAAGTGAAAAAACAAAAT
TGCCTGAATTGTACTGTATGTAGCTGCACTACAACAGATTCTTACCGTCTCCACAAAGGTCAGAGATTGTAAATG
GTCAATACTGACTTTTTTTTTATTCCCTTGACTCAAGACAGCTAACTTCATTTTCAGAACTGTTTTAAACCTTTG
TGTGCTGGTTTATAAAATAATGTGTGTAATCCTTGTTGCTTTCCTGATACCAGACTGTTTCCCGTGGTTGGTTAG
AATATATTTTGTTTTGATGTTTATATTGGCATGTTTAGATGTCAGGTTTAGTCTTCTGAAGATGAAGTTCAGCCA
TTTTGTATCAAACAGCACAAGCAGTGTCTGTCACTTTCCATGCATAAAGTTTAGTGAGATGTTATATGTAAGATC
TGATTTGCTAGTTCTTCCTTGTAGAGTTATAAATGGAAAGATTACACTATCTGATTAATAGTTTCTTCATACTCT
GCATATAATTTGTGGCTGCAGAATATTGTAATTTGTTGCACACTATGTAACAAAACAACTGAAGATATGTTTAAT
AAATATTGTACTTATTGGAAGTAATATCAAACTGTATGGTGATAAGTATTGTTTTGATTCTTATGGTTAAAGGGA
AATAGAGCCTTGCATTATATTCAACACAGCCATTTGTGTGTGCACAATGCAAACTAAGGTATTCTAGACCTATCT
TAGAGCAGCATCCAGTATTTGCTTTCTAGATAATATGCCCAATAACATGACCTAGAGGGGCTTCTGTGCTGTGTA
GGGATTTAACCAACTTCAGTGGTTCAGGGAGCTCAAACTATATGTAAAACAAGTTTAGAATGTATGCTATCTAGC
CCGTTATCTCTGATCCTTCTCTAAAACCATTTGAAATAGCTTCATTGATCAACATTTCATAAATGCATCTGTGGT
AGAGGTAGAAAGCAGCACCTTTCCTAATTGGCAAATGATCAGACTAATGTGTGCTAATGTTTTTCTTCCATGCTT
TCAGTCAGATTCAACTATTTTATCCTCCACAGTTGCTTAACTTGGTGTTGGAGGAGGGTTTAAGCATTAAGATAG
GAAGCAGGAAATTTGATTGCTCTAAATTTAGAAATTATATCCCTAAAAATTAAAACATGAATACTGGGTGGTAAT
GATAATTGAGGCAAATGTATTTATTTTGGTGACATTTTGCATATATGAAGATTTTCTGAAATAGGACCTTCAAGA
TCCTAGGGGGTTTTGTTTGGTTTTTAATTGTGAGGAATAAAAAATCTTCTGCCCACACTGGCATTTTAAGGTGAC
TGAGGTCAAACGTTGTTTCCTTAGGTTGAAATAGCAGCCAAAACATTCTTCACGCAGGGGCTTGGGATATGGCTG
CTGGCAACACATTTTGTTGTGGGCTCCTTAATTTAATGATAAAATTTAAGCTAAACACAAGCCAAAAATGAATAG
GTTTTTTTAATTTTTATTTTTCACTAAACAGGCAATTGAAATACATGGTACAAAAATAAGTGGTAAGATAATTGT
AAAATGAAATGGACAGAATATTCAATTTTCCATCTATGAAAATTTCACAATAAAAATCATAGTTTACTTTGT

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FIGURE 4347

AGCTGCTGCAGCTGCAGCCCGACCGCGAGCGTGCCAAGCGGCTTCAGCAGCTAGCGGAGCGGTGGCGGCGGCCCC
GCTCAGGAGACCACCAGATTCCCCTCTTCCCGCGGCCTCGCCATGGCGACCCACGGACAGACTTGCGCGCGTCCA
ATGTGTATTCCTCCATCATATGCTGACCTTGGCAAAGCTGCCAGAGATATTTTCAACAAAGGATTTGGTTTTGGG
TTGGTGAAACTGGATGTGAAAACAAAGTCTTGCAGTGGCGTGGAATTTTCAACGTCCGGTTCATCTAATACAGAC
ACTGGTAAAGTTACTGGGACCCTGGAGACCAAATACAAGTGGTGTGAGTATGGTCTGACTTTCACAGAAAAGTGG
AACACTGATAACACTCTGGGAACAGAAATCGCAATTGAAGACCAGATTTGTCAAGGTTTGAAACTGACATTTGAT
ACTACCTTCTCACCAAACACAGGAAAGAAAAGTGGTAAAATCAAGTCTTACAAGAGGGAGTGTATAAACCTTGGT
TGTGATGTTGACTTTGATTTTGCTGGACCTGCAATCCATGGTTCAGCTGTCTTTGGTTATGAGGGCTGGCTTGCT
GGCTACCAGATGACCTTTGACAGTGCCAAATCAAAGCTGACAAGGAATAACTTTGCAGTGGGCTACAGGACTGGG
GACTTCCAGCTACACACTAATGTCAATGATGGGACAGAATTTGGAGGATCAATTTATCAGAAAGTTTGTGAAGAT
CTTGACACTTCAGTAAACCTTGCTTGGACATCAGGTACCAACTGCACTCGTTTTGGCATTGCAGCTAAATATCAG
TTGGATCCCACTGCTTCCATTTCTGCAAAAGTCAACAACTCTAGCTTAATTGGAGTAGGCTATACTCAGACTCTG
AGGCCTGGTGTGAAGCTTACACTCTCTGCTCTGGTAGACGGGAAGAGCATTAATGCTGGAGGCCACAAGGTTGGG
CTCGCCCTGGAGTTGGAGGCTTAATCCAGCTGAAAGAAACCTTTGGGAATGGATATCAGAAGATTTGGCCTTAAT
ATATTTCCATTGTGACCAGCAGCAGGCTTTTTTCCCCCAAGAAGATGATCAAAACAAAGGATGATCTCAACAAGA
GCTGTATTTTAAGTATTTAGACAGTTCTTTGTTAGCTGGTTTCTAGTTGAATTGGTTATCTAGTTACCAATGCTG
CAGTCCTGCAGTCACCTATACATTATTTAAATGTATTTAACTGTTAAATGCGCTACCCACCAATAATGAAATAGA
CCTTTATGAAAA

FIGURE 4348

GAGAAAACGGCCGGGCGGCGGTGGCTGTAGGTTGTGCGGCTGCAGCGGCTCTTCCCTGGGCGGACGATGGACAGC
CAGGGCAGGAAGGTGGTGGTGTGCGACAACGGCACCGGGTTTGTGAAGTGTGGATATGCAGGCTCTAACTTTCCA
GAACACATCTTCCCAGCTTTGGTTGGAAGACCTATTATCAGATCAACCACCAAAGTGGGAAACATTGAAATCAAG
GATCTTATGGTTGGTGATGAGGCAAGTGAATTACGATCAATGTTAGAAGTTAACTACCCTATGGAAAATGGCATA
GTACGAAATTGGGATGACATGAAACACCTGTGGGACTACACATTTGGACCAGAGAAACTTAATATAGATACCAGA
AATTGTAAAATCTTACTCACAGAACCTCCTATGAACCCAACCAAAAACAGAGAGAAGATTGTAGAGGTAATGTTT
GAAACTTACCAGTTTTCCGGTGTATATGTAGCCATCCAGGCAGTTCTGACTTTGTACGCTCAAGGTTTATTGACT
GGTGTAGTGGTAGACTCTGGAGATGGTGTGACTCACATTTGCCCAGTATATGAAGGCTTTTCTCTCCCTCATCTT
ACCAGGAGACTGGATATTGCTGGGAGGGATATAACTAGATATCTTATCAAGCTACTTCTGTTGCGAGGATACGCC
TTCAACCACTCTGCTGATTTTGAAACGGTTCGCATGATTAAAGAAAAACTGTGTTACGTGGGATATAATATTGAG
CAAGAGCAGAAACTGGCCTTAGAAACCACAGTATTAGTTGAATCTTATACACTCCCAGATGGACGTATCATCAAA
GTTGGGGGAGAGAGATTTGAAGCACCAGAAGCTTTATTTCAGCCTCACTTGATCAATGTTGAAGGAGTTGGTGTT
GCTGAATTGCTTTTTAACACAATTCAGGCAGCTGACATTGATACCAGATCTGAATTCTACAAACACATTGTGCTT
TCTGGAGGGTCTACTATGTATCCTGGCCTGCCATCACGGTTGGAACGAGAACTTAAACAGCTTTACTTAGAACGA
GTTTTGAAGGGTGATGTGGAAAAACTTTCTAAATTTAAGATCCGCATTGAAGACCCACCCCGCAGAAAGCACATG
GTATTCCTGGGTGGTGCAGTTCTAGCGGATATCATGAAAGACAAAGACAACTTTTGGATGACCCGACAAGAGTAC
CAAGAAAAGGGTGTCCGTGTGCTAGAGAAACTTGGTGTGACTGTTCGATAAACTCCAAAGCTTGTTCCCGTCATA
CCCGTAATGCTTTCTTTTTTCCTTTATTGCCAATCTTTGAACTCATTCAACTCCAGGACATGGAAGAGGCCTCTC
TCTGCCCTTTGACTGGAAAGGTCAAGTTTTATTCTGGTGTCTTGGGGAAGCTTTGTTAAATTTTTGTTAATGTGG
GTAAATCTGAGTTTAATTCAACTGCTTCCCTACATAGACTAGAGGGCTAAGGATTCTGTCTGCTGCTTTGTTTCT
TCTAAGTAGGCATTTAGATCATTCCTATAGGCTTCCTATTTTCACTTTACTGCTCTAATGCTGCTAGTCGTAGTC
TTTAGCACACTAGGTGGTATGCCTTTATTAGCATAAAACAAAAAAAACTTTAACAGGAGCTTTTACATATTACTG
GGATGGGGGGTGGTTCGGGATGGGTGGGCAGCTGCTGAACCCTTTAGGGCATTTCCTCTGTAATGTGGCGCTTTC
AACTGTACTGCTGCAGCTTTAAGTACCTTAAAGCTTCTCCTGTGAACTTCTTAGGGAAATGTTAGGTTCAGAACT
AAAGTGTTTTGGGTGGGTTTTGTTGCGGGGGGGAGGGTAACAATGGGTGGTCTTCTGATTTTTATTTTTGAGGTT
TTGTCAACTGGAGTACGTAGAGGAACTTTATTTACAGTACTTTGATTTGGCAGGTTTTCTTCTACTTGTGCTCTG
CCTGGAGCTGTTTCCATATGATATAAAAAGCAAGTGTAGTATTCCATTACTATGTGGCTTAGGGATTTATTTGTT
TTTTAAAATCAACCATGTTAGCTGGGATTAGACTCCCTACAGTCCTTCAATGGAAAAGTAACATTTAAAAATCCT
TTGGGTAATTCGAATTACAGATTTAAAAGAGCTTAAGATCTGGTGTTTTGTTAATGCTTCTGTTTATTCCAGAAG
CATTAAGGTAACCCATTGCCAAGTATCATTCTTGCAAATTATTCTTTTATATAACTGACCAGTGCTTAATAAAAC
AAGCAGGTACTTACAAATAATTACTGGCAGTAGGTTATAATTGGTGGTTTAAAAATAACATTGGAATACAGGACT
TGTTGCCAATTGGGTAATTTTCATTAGTTGTTTTGTTTGTTTTGATTTGAAACCTGGAAATACAGTAAAATTTGA
CTGTTTAAAATGTTGGCCAAAAAAATCAAGATTTAATTTTTTTATTTGTACTGAAAAACTAATCATAACTGTTAA
TTCTCAGCCATCTTTGAAGCTTGAAAGAAGAGTCTTTGGTATTTTGTAAACGTTAGCAGACTTTCCTGCCAGTGT
CAGAAAATCCTATTTATGAATCCTGTCGGTATTCCTTGGTATCTGAAAAAAATACCAAATAGTACCATACATGAG
TTATTTCTAAGTTTGAAAAATAAAAAGAAATTGCATCACACTAATTACAAAATA

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FIGURE 4349

CCCGCCTCCCGCCTCCCGCCTCCCTCCAGCTGCGAGTGCGGCCTCGGCTGGCGGCGGCACCAGGCCACAGTTGTA
AGGGATCTTGTGGCTGTCAGGATGGCAGAGGAGCAGGAGTTCACCCAGCTCTGCAAGTTGCCTGCACAGCCCTCA
CACCCACACTGCGTGAACAACACCTACCGCAGCGCACAGCACTCCCAGGCTCTGCTCCGAGGGCTGCTGGCTCTC
CGGGACAGCGGAATCCTCTTCGATGTTGTGCTGGTGGTGGAGGGCAGACACATCGAGGCCCATCGCATCCTGCTG
GCTGCGTCCTGCGATTACTTCAGAGGAATGTTTGCTGGGGGATTGAAGGAGATGGAACAGGAAGAGGTCCTGATC
CACGGTGTGTCCTACAATGCTATGTGCCAAATCCTACATTTCATATACACCTCCGAGCTGGAGCTCAGCCTGAGC
AATGTACAAGAGACACTGGTGGCTGCCTGCCAGCTTCAGATCCCAGAAATTATCCATTTCTGCTGTGATTTCCTC
ATGTCCTGGGTGGACGAAGAGAACATTCTCGATGTCTACCGGCTGGCAGAGCTGTTTGACTTGAGCCGCCTGACT
GAGCAACTGGACACCTATATCCTCAAAAACTTTGTGGCCTTCTCTCGGACTGACAAGTACCGCCAGCTTCCATTG
GAGAAGGTCTACTCCCTCCTCAGCAGCAATCGCCTGGAGGTCTCCTGCGAGACCGAGGTATATGAGGGGGCCCTT
CTCTACCATTATAGCCTGGAGCAGGTGCAGGCTGACCAGATCTCGCTGCACGAGCCCCCAAAGCTCCTTGAGACA
GTGCGGTTTCCGCTGATGGAAGCTGAGGTCCTGCAGCGGCTGCATGACAAGCTGGACCCCAGCCCTTTGAGGGAC
ACAGTGGCCAGCGCCCTCATGTACCACCGGAACGAGAGCCTACAGCCCAGCCTGCAGAGCCCGCAAACGGAGCTG
CGGTCGGACTTCCAGTGCGTTGTGGGCTTCGGGGGCATTCACTCCACGCCGTCCACTGTCCTCAGCGACCAGGCC
AAGTATCTAAACCCCTTACTGGGAGAGTGGAAGCACTTCACTGCCTCCCTGGCCCCCCGCATGTCCAACCAGGGC
ATCGCGGTGCTCAACAACTTCGTATACTTGATTGGAGGGGACAACAATGTCCAAGGATTTCGAGCAGAGTCCCGA
TGCTGGAGGTATGACCCACGGCACAACCGCTGGTTCCAGATCCAGTCCCTGCAGCAGGAGCACGCCGACCTGTCC
GTGTGTGTTGTAGGCAGGTACATCTACGCTGTGGCGGGCCGTGACTACCACAATGACCTGAATGCTGTGGAGCGC
TACGACCCTGCCACCAACTCCTGGGCATACGTGGCCCCACTCAAGAGGGAGGTGTATGCCCACGCAGGCGCGACG
CTGGAGGGGAAGATGTATATCACCTGCGGCCGCAGAGGGGAGGATTACCTGAAAGAGACACACTGCTACGATCCA
GGCAGCAACACTTGGCACACACTGGCTGATGGGCCTGTGCGGCGCGCCTGGCACGGCATGGCAACCCTCCTCAAC
AAGCTGTATGTGATCGGGGGCAGCTGGGGTTGGAGGATGAGAGCTCCTGAGGGGCAGAGGAGCAGAGATGCATCA
GCTCGCCTGGGACTGGCTCTGTGATAAAAAGACCCCTCCCGCTGGGTTTTCAGACCCCATGTTGTTGGTCAATGA
AATAAAGCATCTTACAG

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FIGURE 4350

TTGGGCCTGGCTCTGTGACTGAGGCGGCGGCGGTGGCGGCCAAGCGGGATACGGGCGGCGGGAGCTGGGGAACAG
GC**ATG**GACGTTTCCGGGCAAGAGACCGACTGGCGGAGCACCGCCTTCCGGCAGAAGCTGGTCAGTCAAATCGAGG
ATGCCATGAGGAAAGCTGGTGTGGCACACAGTAAATCCAGCAAGGATATGGAGAGCCATGTTTTCCTGAAGGCCA
AGACCCGGGACGAATACCTTTCTCTCGTGGCCAGGCTCATTATCCATTTTCGAGACATTCATAACAAGAAATCTC
AAGCTTCCGTCAGTGATCCTATGAATGCACTCCAGAGCCTGACTGGCGGACCTGCTGCGGGAGCCGCTGGAATTG
GCATGCCTCCTCGGGGCCCGGGACAGTCTCTGGGCGGGATGGGTAGCCTTGGTGCCATGGGACAGCCAATGTCTC
TCTCAGGGCAGCCGCCTCCTGGGACCTCGGGGATGGCCCCTCACAGCATGGCTGTCGTGTCTACGGCAACTCCAC
AGACCCAGCTGCAGCTCCAGCAGGTGGCGCTGCAGCAGCAGCAGCAACAGCAGCAGTTCCAGCAGCAGCAGCAGG
CGGCGCTACAGCAGCAGCAGCAGCAGCAGCAACAGCAGCAGTTCCAGGCTCAGCAGAGTGCCATGCAGCAGCAGT
TCCAAGCAGTAGTGCAGCAGCAGCAGCTCCAGCAGCAGCAGCAGCAGCAGCAGCATCTAATTAAATTGCATC
ATCAAAATCAGCAACAGATACAGCAGCAGCAACAGCAGCTGCAGCGAATAGCACAGCTGCAGCTCCAACAACAGC
AACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGGCTTTGCAGGCCCAGCCACCAATTCAGCAGCCAC
CGATGCAGCAGCCACAGCCTCCGCCCTCCCAGGCTCTGCCCCAGCAGCTGCAGCAGATGCATCACACACAGCACC
ACCAGCCGCCACCACAGCCCCAGCAGCCTCCAGTTGCTCAGAACCAACCATCACAACTCCCGCCACAGTCGCAGA
CCCAGCCTTTGGTGTCACAGGCGCAAGCTCTCCCTGGACAAATGTTGTATACCCAACCACCACTGAAATTTGTCC
GAGCTCCGATGGTGGTGCAGCAGCCCCCAGTGCAGCCCCAGGTGCAGCAGCAGCAGACAGCAGTACAGACAGCTC
AGGCTGCCCAGATGGTGGCTCCCGGAGTCCAGATGATCACGGAAGCCTTGGCCCAAGGTGGGATGCACATAAGAG
CCCGGTTCCCGCCTACCACCGCTGTGTCCGCCATCCCGTCAAGCTCCATCCCTTTGGGCAGACAGCCCATGGCAC
AGGTCAGCCAGAGCAGCCTCCCCATGCTGTCCTCGCCGTCACCGGGCCAGCAGGTGCAGACCCCGCAGTCGATGC
CCCCTCCCCCCCAGCCGTCCCCGCAGCCCGGCCAGCCCAGCTCACAGCCCAACTCCAACGTCAGCTCTGGCCCTG
CCCCATCTCCCAGTAGCTTCCTGCCCAGCCCCTCACCGCAGCCCTCCCAGAGCCCAGTGACGGCGCGGACCCCAC
AGAACTTCAGTGTCCCCTCACCTGGACCTTTAAACACACCTGTGAACCCCAGCTCTGTCATGAGCCCAGCTGGCT
CCAGCCAGGCTGAGGAGCAGCAGTACCTGGACAAGCTGAAGCAGCTGTCGAAGTACATCGAGCCCCTGCGCCGCA
TGATCAACAAGATCGACAAGAACGAAGACAGAAAAAAGGACCTGAGTAAGATGAAGAGCCTTCTGGACATTCTGA
CAGACCCCTCGAAGCGGTGTCCCCTGAAGACCTTGCAAAAGTGTGAGATCGCCCTGGAGAAACTCAAGAATGACA
TGGCGGTGCCCACTCCCCCACCGCCCCCGGTGCCACCGACCAAACAGCAGTACCTATGCCAGCCGCTCCTGGATG
CCGTCCTGGCCAACATCCGCTCACCTGTCTTCAACCATTCCCTGTACCGCACATTCGTTCCAGCCATGACCGCCA
TTCACGGCCCACCCATCACGGCCCCAGTGGTGTGCACCCGGAAGCGCAGGCTTGAGGATGATGAGCGGCAGAGCA
TCCCCAGTGTGCTCCAGGGTGAGGTGGCCAGGCTGGACCCCAAGTTCCTGGTAAACCTGGACCCTTCTCACTGCA
GCAACAATGGCACTGTCCACCTGATCTGCAAGCTGGATGACAAGGACCTCCCAAGTGTGCCACCACTGGAGCTCA
GTGTGCCCGCTGACTATCCTGCCCAAAGCCCGCTGTGGATAGACCGGCAGTGGCAGTACGACGCCAACCCCTTCC
TCCAGTCGGTGCACCGCTGCATGACCTCCAGGCTGCTGCAGCTCCCGGACAAGCACTCGGTCACCGCCTTGCTCA
ACACCTGGGCCCAGAGCGTCCACCAGGCCTGCCTCTCAGCCGCC**TAG**CCAAGACTGCAGGGATGGCCCGCAGCCT
CATCGGGGCCAAGGACACACGCCTCCTGTCAGACACTTCTAGGTGTTGGCTTCCTTAGAGAGCCTGGGGTTAGGT
TAGCTTTCCTGCTTTTATCTTCTGCCTTGGGGACCTGCCAAACGAAATCCCACACCTGTACAGAACTGGGATAGG
CGCAGTGGAGCGGGTTGCTTGGGGGGCGTTGGCCGACTTCTTAGAGAAGGCCCTCCATGTGACTTCCTCCCAGGA
GCCAGATGCGATCCTCAGGCTGCTCTCACCGTGGCCTGTCCACGGTCCAGGTCCATCTCAGCAGCGTGAGGGTGC
ACTCAGGGTGTTGTTAGAGCGTCTCGTGTGTGCTAGACGCACCCCTACTCGTTCCTATAGAACACAGAGGACATA
GGAAACCCTTAAAACACACATGGGATTCTCTGGTCACAGTTTTGGGTTCAGGCTATGCTGCTTTGGGCAGGTGGA
GCACCCCCCGAGGAAGCCTGCAAGTCCAGGGCACAGGCTGCCTTTTGGAGGGAGGGCTGGCCCATAGGTGCTGCT
GGCTCCCCGCCACCAGCTGGGCCTCAGCCCTCACGGCATTCCTGCTGAGCACCGTGGGGCACCCAGGGAGCAGGG
GCGTCAGGGATCCTGCTGCCGGCACCCCTGTGCCGCTGGCATGAGGGCCGTGTCCCCACTGTGAAGGATGAAGAG
CAAGGCCCTCAGGACCCGTGTCCTCAGAGCACCACACACTGAGCACCCAGAGACAGCGGGCCTGGCAGCGGGCCG
GGCCATGCAGGGAGCGCCTCCCTATGTTGCCTGCCACTCTGGGCACCGGCCAGCACCCTCTGGTGAGAAGAGGTC
CCCCCTTTTTATGTGCACTACCCCACCATCTGTGATTATAATAAATTTATTATTCCTGTG

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FIGURE 4351

CTCATCTTCACGTTTTCTGCATCTATTGAAGTGCGCCACTGAGATCGTGGAGTTCTTCCCTGTTTGTCCATATGA
TGAACAACACTGATTTTCTGATGTTGAACAATCCCTGGAATAAACTCTGTTTGGTTTCCATGGATTTCTGTTTCC
CTTTAGATTTTGTTAGTAATTTATTTTGGATTTTTGCATCCAAGTTCATAATTGTAACTGGACAAATAAAGGCAG
ATTTTAAAAGGACAAGTTGGGAGGCTAAGGCGGAAGGATCACTTGAGCCTGGGAGATTGAAGCTGCAGCTAGCTT
CGATTGTTCCACTGTACTCCAGCCTGGTGACAGCAGGACCTGCCTCTAAAATAATAATACTTAAAAGGACGAGTT
TACCTACAGTCTCACCAAGCAATGAAAGAGCTTATCTTCTTCCTGTTTCCTTTACGGATCTTGCTCATGTATTTT
ATCTTAGTTACTTTAGCATAAATGCTAAATCAAATTCTTTTTCACTAGACATCATAATAGCTCTAGGCATACCAC
ATAATACCCAAGCACATTTTAATCATTAAAATTGTTTCCTTTTTTTGTGGCTACTGTAACCACTTCAGCGAACCA
TTTAGTGTGTAGTGGGTTTAAATTTTTTCTCCTTCCTGGGATAAATTTCCCAGGAGAGGGATAATTGGGTCAAAA
GTTACGAACATATTTATGGGTTCTTTTCCACAAGAGATCGATCAGTTTGCAAGTGCCATCTGCACTGTGGGGGAA
CCAATCTTCAACTTGCCTGCATTTGGTATTAGTATTTCATTAACCTTTCATTGATCTAATTACGGCTCTTTGACA
CAATTTTCATCAGTGATGGACTAAGTGTGATCCGGCCTGACCCGCCTCCGGCCGGCGTGAGAAGGGGCATGTGTC
GGGCTACCCTCGGGCTTCCCCTGCCGCCCATTGTGATCCAGCCCGCTAGGCGCTCCCTGCCGCCCATTGTGACGC
CTGCCAGCCGCAGGCTGGGTCCCCGAGGCGGGCGGCATTTAGGCTCGGTCTCCACAGCCATGGCCGCGACGCAGG
AGCTGCTGCTGCAGTTGCAGAAGGATAACCGAGATGGTCGCCAGCGGAAGCAGGAGCTAGAGAAGCTGATGCGCG
GGCTCGAGGCCGAGAGCGAGAGCCTGCCTCAACCAGCGCCTGCAGGACCTGAGCGAGCGGGAGCGGAGGCTGCTG
CGGAGGCGAAGCCAGGAAGCGCTGCTTCTGCAAGGGGAGGTGCGCGAGGCGGCGCGGGAGCGCGCGCAGCGGGTG
CGCAGAAGACTGGAGGAGGCGGAGCGCCACAAGGAGGACTTGAAGCCCGGTAAACCCCGTCCTTACGAGCCCCGC
CCCTAGCTCTTCTACTACGGAGGGGAACTGCAGAGCCAGAAGAGCACGGAGCAGCAACTCGCAGCCCAATTGGTG
ACGCTGCAGAATGAACTGGAGCTGGCGGAGACCAAATGCGCCTTGCAGGAGGAGAAGCTGCAGCAGGACGCGCTG
CAGACAGCGGAGGCCTGGGCCATATTCCAGGAGCAGACCGTAGTCCTGCAGGTGTGACGGGCAGCTTCGCAGAGT
GCAGTACAGCACCGAGTCGCTCATGGAGGAGATGGCCAGGGCGGACCGAGAGACGCGGCTGTTCGGCGGTCCTCG
CGCGCTGGCCATCAGGCGCTGCTGACGCTGCCGCTCCTCTTCCTGGGGCTGTCGCTGCTCTGGACGGTGCTGTTG
GACCCCGGCGCCGTCTCCGCGTGGCTCTGGAGCCTCACCTCGGAGACGACGCTGCGCCGCCTGCGCTACACGCTG
TCCCCGCTGCTGGAGCTGCGCGCTAACGGGCTGCTGCCAACCTAAGTGCAGCGCCCCGCGCCTGGCTCCAGGTGG
ACTCCAGGGCACCGGCTTTATTTCTGGTGCACTCCTCTCCTGAGAGTGTAGACCAAGGTCGCCTAATAAACTCCT
CAAGGGAT

FIGURE 4352

TGGTTTCTAAATCTTATTCAGTGAGCACGTGTTCCTTTTTTTAATTAGAGAAAACTTGACAGTAGCCCCTTTTTG
TGTTTCACAGAGGAGCTAACATTCCTTCTGTACCTGTAGTTCATGCGGGAGATGGCAGGGGCCTGGCACATGACG
GTGGAGCAGAAATTTGGCCTGTTTTCTGCTGAGATAAAGGAAGCAGACCCCCTGGCTGCCTCGGAAGCAAGTCAA
CCCAAACCCTGTCCCCCCGAAGTGACCCCCCACTACATCTGGATCGACTTCCTGGTGCAGCGGTTTGAGATCGCC
AAGTACTGCAGCTCTGACCAAGTGGAGATCTTCTCCAGCCTGCTGCAGCGCTCCATGTCCCTGAACATCGGCGGG
GCCAAGGGGAGCATGAACCGGCACGTGGCGGCCATCGGGCCCCGCTTCAAGCTGCTGACCCTGGGGCTGTCCCTC
CTGCATGCCGATGTGGTTCCAAATGCAACCATCCGCAATGTGCTTCGCGAGAAGATCTACTCCACTGCCTTTGAC
TACTTCAGCTGTCCCCCAAAGTTCCCTACTCAAGGAGAGAAGCGGCTGCGTGAAGACATAAGCATCATGATTAAA
TTTTGGACCGCCATGTTCTCAGATAAGAAGTACCTGACCGCCAGCCAGCTTGTTCCCCCAGATAATCAGGACACC
CGGAGCAACCTGGACATAACTGTCGGCTCTCGGCAACAAGCCACCCAAGGCTGGATCAACACATACCCCCTGTCC
AGCGGCATGTCCACCATCTCCAAGAAATCAGGCATGTCTAAGAAAACCAACCGGGGCTCCCAGCTGCACAAATAC
TACATGAAGCGCAGGACGCTGCTGCTGTCCCTGCTGGCCACTGAGATCGAGCGTCTCATCACATGGTACAACCCG
CTGTCAGCCCCGGAACTGGAACTAGACCAGGCCGGAGAGAACAGCGTGGCCAACTGGAGATCTAAGTACATCAGC
CTGAGTGAGAAGCAGTGGAAGGACAACGTGAACCTCGCCTGGAGCATCTCTCCCTACCTAGCCGTGCAGCTGCCT
GCCAGGTTTAAGAACACAGAAGCCATTGGGAACGAAGTGACCCGTCTCGTTCGGTTGGACCCGGGAGCCGTTAGT
GATGTGCCTGAAGCAATCAAGTTCCTGGTCACCTGGCACACCATCGACGCCGATGCTCCAGAGCTCAGCCATGTG
CTGTGCTGGGCGCCCACGGACCCACCCACAGGCCTCTCCTACTTCTCCAGCATGTACCCGCCGCACCCTCTCACG
GCGCAGTACGGGGTGAAAGTCCTGCGGTCCTTCCCTCCGGACGCCATCCTCTTCTACATCCCCCAGATTGTGCAG
GCCCTCAGGTACGACAAGATGGGCTATGTGCGGGAGTATATTCTGTGGGCAGCGTCTAAATCCCAGCTTCTGGCA
CACCAGTTCATCTGGAACATGAAGACTAACATTTATCTAGATGAAGAGGGCCACCAGAAAGACCCTGACATCGGC
GACCTCCTGGATCAGTTGGTAGAGGAGATCACAGGCTCCTTGTCCGGCCCAGCGAAGGACTTTTACCAGCGGGAG
TTTGATTTCTTTAACAAGATCACCAACGTGTCGGCTATCATCAAGCCCTACCCTAAAGGCGACGAGAGAAAGAAG
GCTTGTCTGTCGGCCCTGTCTGAAGTGAAGGTGCAGCCGGGCTGCTACCTGCCCAGCAACCCTGAGGCCATTGTG
CTGGACATCGACTACAAGTCTGGGACCCCGATGCAGAGTGCTGCAAAAGCCCCATATCTGGCCAAGTTCAAGGTG
AAGCGATGTGGAGTTAGTGAACTTGAAAAAGAAGGTCTGCGGTGCCGCTCAGACTCCGAGGATGAGTGCAGCACG
CAGGAGGCCGACGGCCAGAAGATCTCCTGGCAGGCAGCCATCTTCAAGGTGGGAGACGACTGCCGGCAGGACATG
CTGGCCCTGCAGATCATCGACCTCTTCAAGAACATCTTCCAGCTGGTCGGCCTGGACCTCTTTGTTTTTCCCTAC
CGCGTGGTGGCCACTGCCCCTGGGTGCGGGGTGATCGAGTGCATCCCCGACTGCACCTCCCGGGACCAGCTGGGC
CGCCAGACAGACTTCGGCATGTACGACTACTTCACACGCCAGTACGGGGATGAGTCCACTCTGGCCTTCCAGCAG
GCCCGCTACAACTTCATCCGAAGCATGGCCGCCTACAGCCTCCTGCTGTTCCTGCTGCAGATCAAGGACAGACAC
AACGGCAACATTATGCTGGACAAGAAGGGTCATATCATCCACATCGACTTTGGCTTCATGTTTGAAAGCTCGCCG
GGCGGCAATCTCGGCTGGGAACCCGACATCAAGCTGACGGATGAGATGGTGATGATCATGGGGGGCAAGATGGAG
GCCACACCCTTCAAGTGGTTCATGGAGATGTGTGTCCGAGGCTACCTGGCTGTGCGGCCCTACATGGACGCGGTC
GTCTCCCTGGTCACTCTCATGTTGGACACGGGCCTGCCCTGTTTTCGCGGCCAGACAATCAAGCTCTTGAAGCAC
AGGTTTAGCCCCAACATGACTGAGCGCGAGGCTGCAAATTTCATCATGAAGGTCATCCAGAGCTGCTTCCTCAGC
AACAGGAGCCGGACCTACGACATGATCCAGTACTATCAGAATGACATCCCCTACTGAGGAGGGGACCTTCGAGGG
CCTCTGCCCCATGTGCCCTCAAAGCTGTCCCACAATCATGGAGCCCTGCGACCTCCCTGCCCTGCCGCCACATGC
AGTGGAGGAGAGGCCTGTGGCCCAAAGAACCTGGTAGCGCCTCCTGGGGCAGCACGTGGGTGGCGCAGCCTTGGT
AACGCCATGGACTGCAGCGACAATCAATGGATGGTGCTGTCTATGCACAGGTGTGAGTCCTCTGTTTGCACTGGA
CATATTCCCTACCTGTCTTATTTCATAGGTACATGAAGTATTGTGTATAAAAAAAGAGATAAGATTTAACCAACA
TCAACAAAATAAAAACCCAAAATAGT

FIGURE 4353

GGAGTTCGCGCGACGACCGCGGGGTCGGCGGGCGGGGGCGAGGCCCTGGACGGCGGCGGCAGTGGGGCTCCTCCTT
CTGTTTCCCAGACCGAGAGCCGCGCCGGCACCATGTCAGCTTACCCTAAAAGCTACAATCCGTTCGACGACGACG
GGGAGGACGAAGGCGCCCGGCCGGCCCCTTGGAGGGACGCCCGAGACCTCCCCGACGGGCCCGACGCGCCCGCGG
ACAGGCAGCAGTACTTGCGGCAGGAGGTCCTCCGCAGGGCTGAGGCCACGGCCGCCAGCACCAGCAGGTCCCTGG
CCCTCATGTACGAGTCCGAGAAGGTTGGGGTCGCCTCTTCCGAGGAGCTCGCCCGTCAGCGAGGAGTCCTGGAGC
GCACAGAGAAGATGGTGGACAAGATGGACCAAGATTTGAAGATCAGCCAGAAACACATCAATAGCATTAAGAGCG
TGTTTGGGGGGCTGGTCAATTACTTCAAATCCAAACCAGTAGAGACCCCACCTGAACAGAATGGCACCCTCACCT
CCCAGCCCAACAACAGATTGAAAGAAGCTATAAGTACAAGTAAAGAACAGGAAGCAAAGTACCAGGCCAGCCACC
CAAACCTTAGAAAGCTGGATGATACAGACCCTGTCCCCAGAGGGGCTGGTTCTGCCATGAGTACTGATGCTTACC
CAAAGAACCCACACCTTCGAGCCTATCACCAGAAGATCGACAGCAACCTAGATGAGCTGTCCATGGGACTGGGTC
GTCTGAAGGACATAGCCCTGGGGATGCAGACAGAAATTGAGGAGCAAGATGACATTCTTGACCGGCTGACAACCA
AAGTGGACAAGTTAGATGTCAACATAAAAAGCACAGAAAGAAAAGTTCGACAACTCTGAAGACAGACGGATTTCC
ACTCTATTGTGATGAAAAGATTTGAAAGATCTTTTTTTGAACTTCCAAGAAATTTCATTTACTATTTTAGTATGT
AAATTAATGTGTGTTTGCAAATGTTATAATAGAGTAGGTCTTAAGACATTTTTGCTGTTATAAGGAAGTGTTTGT
CCCACATTTTCCTAGGGTTAACACCTCACCAAGTTCTTCCAGCAAAATGCTTATTAGAGTTTTTGTCTGAGCACA
GTAGCCTGGCCCTGCATATCTTGGGCGTTTGATTACCATGCTGGAATAAGAAGAGTTGCATTTCTCATTTTAATG
AGCATATGGAAAGATGGGAACAGAATTTCAGTCTTGCAGCCATGAGCCTCTATTTCTCATTCCTAAGCCTTACCA
TGAGTCAGAGTGTTAAGGGGGCCTGTGAGCCAGTCGTTTGGTGGAGGAGGGTCCTTCCCACACCTTTGTTTAGGA
GTCATCATTCACACACACACACACACACACACACACACACACACACACACACTCTGAGCACATTATCTGTGATTCTT
TCATCCTCCCAGAAAGGATCAGTGTTAGAATGGGAAATAGAGTGTGCCATCTTGCTCTTTTGTTGGCAGATGTCC
CCGCTTCCCTCCAGCCCCCCATCCTTGGCATGTATATTAGTAGGAGGGCTTCACACCAGCACTGCTCACTGCGAC
TCCTGGAAATGTGTGGGGAATTGGGTGAGCCCCTCTTCCCCACGTGCTCCCATCTGTAACTCTCCATCTGTGATT
TGCAACAGGTCTTCCACTGGCTCGAGGCTGCGAGGCTGACCGACAGGGGCGCCCAATAGAGTTTGTGGGAATGGA
GTATTGCACAGATGCAGCTGCACAATGGTCTTCCTCCACCCCTCTGGGAATCACCATTAGGCAGGCCTCAGTAGG
GCAAAATGTTTATTTGGTACCGGGGGTCTCCTGACCTGTCTAGCATTCCCACCCACTCTTCTGCACTTCTTGCAA
GGTAACTTGAATCATCACTTATTTCTCTGCCACCTGGTTTTAGGACTGGCACTCTATAAATGACGCTGACTTTGT
ATAGAAGGATTTTGCTAAGGGGGCAAAAAGCCCAGATACCATTTTAACTGGCCCAGCTCATTTTCTCCTTTCATT
TTACAAAAGAAATCATGCAGAAGCATCAATTAAAACTGATTTATTTATGTTGGTACATCCAACAAAATAGTTGGA
GCCACAAGGCCCTTGTCTTTTTAAAAAAACAAAATATTTTGAAGATGGTGAAAGTGACTGATTTTAATAATGAGA
TAGGTCACTTAAAATAACAGTGCCTTTGACCTTAAAACATGGCACTGGCCCATGTGACCTTTGCCATTTCCCAGT
ACTTCCCTTTACAGTCTGCAGCCTATAAACAGTGGTGTCTCAAAGCAAAGGAAACCTCCACAAGTGCTGCAACAG
TGCATTAGTTTTTATGTAGCAATTTGTTTATAAAAATTCCCATCCCATAATGCATGACCTTCCTAAAAATACCCA
CAGCCTCCATAGGCAAGGTGAGCTTTCTGTGCTACCCACTGGTTAGATTCCAGCCACCTCAGGGATTCTGATCCA
TGTCATTAACGACCATCCCAGGGTGTGAGGGCCTGATTAAAGCTTATCGAACTAGACATTTGTTTATTAGATGAG
CTCGGCATTATTATTTTCTCAATAACTGGTAGAAGGGAAATTTTAAACATAACACTCAACCCAAACAAAACTACT
TCGTGAGGCTTTCAGCAAAAAGGCTGCTTAAAAGCATGAACCCGGGATGCAGAGCAGCTTTTGTGCACGGTTCCA
CTTACTGTAATTGTTTCTGGTTCTTTCCTCTAACACCTTCCATGTATGTCAACTTTTTATCACCGTCAGGCATAG
ACTCGTGGAGATTAGTCATTATAGCTCAGACCTAAGCTAATTATTTAAAATAAATACATGTAAAGGCCACTGCCA
CATTCTCAGCAGA

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FIGURE 4354

AACAGGTTAAGTAGCAGGTTGGGTTTTTATGATAGTGCAAGGAATGACTCATGCCTCTGAGCTTCTAAACTGAAG
CTGCTGTAACTAAAGGAATCTGAAAAGAACAACCCTGAAGCAGAGGCCTTTATTGTCTTGGTTGCCAGTAGTACC
TTGTTTTGCCATGTAGCAGACAACACACAAAATAATGCAGTTGTGGTGTGCCATGCTATGTGCACAGCCCCTTGG
ATTACTTTGTTTTAAAAAGCATCAGAGTTGGGGGTACTTTAGGGAAACCTTTGCTTACCTTGTTTTGCCAGTGAT
AAGAGCAGTGGGTTGGAGGGCACTTGGCCAGTTTTCTGTTCAGCTTTTCAGTGAATGTACCCCTTTAAGGTTCAG
ACTTAAACTTCCTTAAAAAGTGGCGTTGTTCATAGAATCGTTGGACTCATTAATGAATCGTTCAACTCCACTCAC
TGAAGCCCAGACCTCCGTGCCCAGGCCCAATCTCGTCAGGCTGCCAGAGAAAGTTGGTGCTGCTCATACTGGTCT
CACAGTCTAAGTAAGTGTCTGTGATGCTCCCAAGCAAAGGAAATGCAAGCTCTGGAAATTCGTTAATGTATTTGA
TGTCTTAGTGTTTTAGTGACTAGGGAGACCATTAACTAGTTTATCATTAACCACTTATCAGTGTATTGATGTTAA
AGCATTTCCCTGTTAGCTAAAAGAGGCCTGTTCATACAAGCCAACTGGTATATACGTGTGGTTCATCCATCATCT
GCTGCACATAGCAGACTAGAATTCTGGGAACCCTGTGCAATTCAGTCTGCTCTCCCTTGTGGACCCTGGTAAAGA
AAAGCCTCAGCTCATAGTGAACACAGCAGACCTAGAAATGTAGCAGCAGCCTACTGAGTAGCTTTCATTTACTGA
TCATCTGCTGTGACTGTGGCCCTGTCTGGAGGTTCCTAGGTTTTGAGATTTAGAGCAATGCATTCTGGAGACAGA
ACCAGCAGAACAGCCATTTTTCAATTTTTCTTTAAATCAGTATTCCATCAGGCAGATAACTGCTGTATTCATGAA
TCTTGAGAGTGTTCCTGAGACAGAATTAATGGTCATTTGGGAAAACTATCGCCATGGCTTCCCATCTGTGGTTTT
CCTCTAAAAGCCTTGGAGATTAGCCCTTCCTTGCCAGTGAGAACGGTGACCGCCTCCTGCTCTGCACGGTCTGCG
GCAGTTGCCGCTTCTGGTTAGGTGTGTCAGGTTGGCTTATTTTGGGTTCAGGCCTGGCGTAGCACCCACAAGTGG
CAGACATATCACAAGAGTCCCCAGACTCTGCCTAGAAACAGTGTTTGCCCTTTGGCCAGTGACGTGGTTCATCCC
GGCCC**ATG**TTGAGCCATGAGTGGAGTTTCCAACAGAGGGAGGAATGTGTGCCTTGTTCAAGGAGGGCACGACCCT
TAGGCCTTTTTCAACCAGATTTAGCTGAAGGGCTTGACACCTTTGAATTACAGCAGTTGACTCAGAGTGCAAGAA
GTCTGGCCATTTTGGAAAGCAAGGTTTCCTTTCAGCCCTGTCTACTGACCAATACCCCGACTCACCTTGTGTGGC
GCACTTCAGAATCAGATATACCTAGAGTATACCTGTGGTTTGGTTTTATAATTAATCAGCTCGTTACTTCAGCCC
ATGAAAATGGCATCCAGGGCTGCCAGGAGATTCAGAGCTCAAAACAAGGCGAGCTTGAGTTCTGCACTCCAGATA
TGTGCCAAAAC**TAG**TAAAACTTAACGGACTTACAACCTTGTCAGTTTTTTTAATGAGGCAGGGATACTCTGTTTT
TCACACTAAACATATGAATGCAGCACTGCTGCCTCAGCTCAGCTTCGTGCCTGGGTTCCCCACTGGTCTGGGAAG
ACTGTTGTGCTCCATAGAGCAGTGCACATCTGACCCAGAGGGTGGGTGTTCATAACTGCTACTTGCTCTGCTCTA
CCATGTTTAAAGAAATATTTGGATGTTAAATTAACTCACTATGGTTTTTCACCTGGGAAGGAAACAAATTACGTA
CTAGAGGGCATTGACTGGTTAAAAACTTGTGTATCCCGGGAAGGACCTGCGGTACAGGAGTCAGCCATGTCTGTG
CTGTGTGGAACCACCTGATGACATGGTTAACGAGGAAGACGATGTGTTGACCGGCTGCCGTTTGAGGACTTTGGT
CACCCAGACTAGACACCTTCTGTGCTCATGTTTGGAAAGCTGAAAGGGAAGGACAGCTGTGCCCTCCTGGGAGCT
CATGTGTCCCTGGCGCTGTGCTAGCTTTCCTTTACAGCTGTTTACAGACAAGGCAGGCCTGAGGCAGATGGCCAC
TGCTCTTGTGATGTTTGCTCAGAGGAATATGAACATTTTATTTTTGAAAAGGGATGATGTGGTTTTTTGCCAGGT
GTTTATAATTAATCCTTTAATATTATGGTTATTAACCTCTTAAACATGAATGAATTCTTGATTGTTTTAACACAG
TACCTAAGACTAATGCTTTCTGTGGACACCACTGAGCTCTGCCTCAACTCCACCCTCTGCGACCGGAGGACTATG
CCCCTAGTAACTGCTGTCGGTGTGGACGCTGTGCTGGTTCTGTTTTCTAAAGGAGCAGAAGGACAGGTCTCTGAG
ACAGGATCGTTGTCCCTACAGGAGGAACAGTGGCCTTGCTTCTTAGACGGTCTTCACTGTGTGTTTTAAAACAAC
AACAACAACAACAACAACAACATAAAACTCTTTTGACCTGTAACTTAAAGATCATAAACTTCAGGCAATAATATT
TTCTGTGTAAGCTTTTAAAATTATTTTTGGGGATCATAGCTTGTTTTATTTTGTGCTATAAAATTAACAGTATTA
AATGACTTATATTCTTAGAATA

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FIGURE 4355

CGTGAGTGCCGCTGACAGAAGTCAAGAGAATCGGCTGGGACGGGGTTGGGGCGACAACGGGCCGGGGGGGACCCG
ACAGGCCAGAGCCCCTTGGGGAGGAGCGGCGGCTGGAGGCGCGAGGCTCCTCCGGATGCCCGGAGAGCCGCTTGC
GACTTAACTCCCGCCTCTTTCCCAG**ATG**CCGCGTCACTGCTCCGCCGCCGGCTGCTGCACACGGGACACGCGCGA
GACGCGCAACCGCGGCATCTCCTTCCACAGACTTCCCAAGAAGGACAACCCGAGGCGAGGCTTGTGGCTGGCCAA
CTGCCAGCGGCTGGACCCCAGCGGCCAGGGCCTGTGGGACCCGGCATCCGAGTACATCTACTTCTGCTCCAAACA
CTTTGAGGAGGACTGCTTTGAGCTGGTGGGAATCAGTGGATATCACAGGCTAAAGGAGGGGGCAGTCCCCACCAT
ATTTGAGTCTTTCTCCAAGTTGCGCCGGACAACCAAGACCAAAGGACACAGTTACCCACCTGGCCCCGCTGAAGT
CAGCCGGCTCAGACGATGCAGGAAGCGCTGCTCCGAGGGCCGAGGGCCCACAACTCCATTTTCTCCACCTCCACC
TGCTGATGTCACCTGCTTTCCTGTGGAAGAGGCCTCAGCACCTGCCACTTTGCCGGCCTCCCCAGCTGGGAGGCT
GGAGCCTGGCCTTAGCAGCCCCTTTTCAGACCTACTGGGCCCCTTGGGTGCCCAGGCAGATGAAGCAGGCTGCAG
CGCCCAGCCTTCACCAGAGCGGCAGCCCTCCCCTCTCGAACCACGGCCAGTCTCCCCCTCAGCGTATATGCTGCG
CCTGCCCCCACCCGCCGGAGCCTACATCCAGAATGAACACAGCTACCAGGTGGGCAGCGCCTTACTCTGGAAGCG
GCGAGCCGAGGCAGCCCTTGATGCCCTTGACAAGGCCCAGCGCCAGCTGCAGGCCTGCAAGCGGCGGGAGCAGCG
GCTGCGGTTGAGACTGACCAAGCTGCAGCAGGAGCGGGCACGGGAGAAGCGGGCACAGGCAGATGCCCGCCAGAC
TCTGAAGGAGCATGTGCAGGACTTTGCCATGCAGCTGAGCAGCAGCATGGCC**TGA**GGGGCTGCTGGACTGACCGA
GGGGCTGCCCAGCAAGACTGCAGCCTCTTCCTCCCTCAGATCCCACCAGACCCACCAGGTGCCATAATAAAGCGG
ATTCTAGACGGAG

FIGURE 4356A

GGACACTTGACATCAGTGGTGTCAAGACAACTCTAAGAAGGTTTTCCGTGATCCTGCAAGCCCTGCCTTCCTTCC
TGGGATCCTGCCTTCAATTTGATTGCACAGGTACCACAGCAAGCCAGTGCTGTGTGCTCCGAGTTCCAGGGCGTC
CTCCAGCTCAGCCACTGCACTGAGAACATGGACTCTCTGTGGGGCCCAGGAGCCGGGAGTCACCCCTTTGGGGTC
CACAACACCCGGCTGTCCCCAGACTTGTGTCCAGGGAAGATAGTGTTGAGGGCCCTCAAGGAGAGCGGGGCAGGG
ATGCCTGAGCAGGACAAGGACCCTAGAGTCCAAGAGAATCCTGGTGATCAGAGAAGGGTCCCCGAGGTCACCGGG
GATGCACCGTCTGCATTTCGGCCCCTGCGGGACAATGGAGGCCTCTCTCCCTTTGTGCCCGGGCCCGGGCCTCTG
CAGACAGACCTCCATGCCCAGAGGTCAGAAATCAGATATAACCAGACATCCCAGACCTCCTGGACGAGCTCCTGC
ACCAACCGAAATGCCATCTCCAGCTCCTACAGCTCCACGGGAGGCTTGCCGGGGCTAAAGCGGAGGAGGGGGCCA
GCCTCATCCCACTGCCAGCTGACCCTCAGTTCCTCAAAGACAGTGAGTGAGGACAGGCCTCAGGCTGTCTCTTCA
GGTCACACCCAGTGTGAAAAGGCAGCAGATATAGCACCAGGGCAGACACTCGCCCTCAGGAATGACTCCTCCACA
TCCGAGGCCTCTAGGCCCAGTACACACAAGTTTCCCCTGCTGCCACGCAGGCGAGGGGAGCCTTTGATGCTGCCA
CCTCCCTTAGAGCTGGGGTACCGGGTCACTGTTGAAGACCTTGACCGGGAGAAGGAGGCGGCATTCCAGCGCATC
AACAGTGCACTGCAAGTTGAGGACAAGGCCATCTCGGACTGCAGACCCTCACGGCCTTCCCACACTTTGTCCTCA
CTTGCAACAGGGGCTTCTGGTCTGCCTCCCGTTTCTAAAGCACCCAGTATGGATGCACAGCAGGAGACACACAAG
TCCCAAGACTGCCTGGGCCTACTGGCCCCCTTAGCATCTGCTGCAGGGGTCCCCTCTACAGCTCCCATGTCTGGG
AAGAAGCACAGACCACCAGGCCCCCTGTTCTCCTCCTCAGATCCCCTTCCTGCCACCTCTTCCCATTCCCAGGAC
TCAGCCCAGGTCACCTCGCTGATTCCTGCCCCCTTCCCAGCTGCAAGCATGGATGCGGGCATGAGAAGAACAAGG
TGTGGCACTTCTGCTCCTGCAGCTGCCGCAGCAGCCCCTCCCCCCTCCACATTGAACCCCACGTTGGGGTCACTA
CTGGAGTGGATGGAGGCCCTTCACATTTCTGGGCCTCAGCCACAGCTGCAGCAGGTGCCCAGAGGTCAGAACCAG
AGATCCCAGACCTCCCGGACCAGCTCGTGCCCCAAACGAAATGCCATCTCGAGCCCCTACCGCTCTACGGGAGGC
CTCCCGGAACGAAAGCGGAGAAGGGGGCCAGCCTCATCCCACTGCCAGCTGACCCTCAGTTCCTGAAACACAGAC
CCAGGGTGCATGCCCATCTCCAGCCCAGGGCAGCTCCCCTGTAAGCTGGGTGAGCTACTGAAGCCAAGGCGGGAG
GCAGCTGACAACACCCACAGCCCATGCGGAGGTGGTGGAAAGGCTGGACTCAGCAGCAACACCAAATCCTGGACC
AGGCAGAAACCACCCAAGACTGAGGGGCTCGTGCCAGAGCGGTGGCCACAGGGCTGAATGGTTGCTGAGACAGAG
ATGGAAGCCAGGACAAGGGAGCCCACCGGGCCCAGATAGAGACTTCAGAACCCACTCCTGAGAACAGCGGAGCCA
GGCGCTTAGAGGAAGACCAAATGCTGCCAGGACACGGATTGTCCAGGGATTACATTCCAGCATCTTATTAGATGG
CCTGATTAGCCAGAGGTTTCCAGGCCGTCTGTCCGCCTCCAGGAGATGGACTGGGACCTTTAGACATCGGTGGAG
AACAGGATGCTCTGTCCCTTGCTGTCCAGGGCAGGGATGGCCTCCAGCCGCAAGAAGTACAGCAGCACCTCGACC
TGCCCTCGCGGAGTGGGGAAGAGGAGAGTGGCTCGGAAGGGGGCGCACAGCTGCTGGTGGGAGGTCTTTGGGGCC
CAAGATCCCAAGTCCACCTCAGGTGCTAGAAACCCCTGCTGGTGTCATGAACCCCTTACAGTGAGACGGGGGTGG
GGTGGGGTCCTGACAAGGCATGACTTGTTGGGTGGGGGGTGGTTATTTATTTTAGAGATGCACAGGGCCTTGCTC
TGTCCCCCAGGCTGGAGTACAGTGGCTCCATCATGGATCACTGCAGCCTCTAACTCCTGGGCTCAAGCAATCCTC
CTGTGTCAGCCTCCCAGATACCTAGGATTACAGATATGTGCCCCAATGCCTGCCTAATTTTTCTTTGTATTTTTT
CTGGAGATGGGGTTTGCTACATTGCCCAGACTGGTCTCAAACACCTGGGTTCAGTTGTCCTGCCTCGGCCTCCCA
AAGTGCTGGGATTACAGGCATGAGCCACCACACTCGAACACTTGGGGTGGTTTTAAGCCCCCAGCAAGGTGCACC
AGCAGGACCAGGAGGTGGCCTAGGCACCCCCTATCACTCCCATCCATGCAAACCTAGGCAAGTCCCTGTCTCTGA
ATCTCAGCCACCACCACATACAATGCAAGTCGGAAGATGGGCAGGACTGGGGGTGGGGCAGGCAGAGGCCACCTC
TGTCAGGCTGGGGTTGCATGGGCTGGAGGCTGTCTTCCCATACCTGGGACATGACCTCCAAGGACCAGCTGTCAG
TCATGGTGATGGGCTGGCTGGGGTTGGCAGGGAGCTTGCTCTCCTTCTCGGAGGGCCGGAGCAGCGTGGGGCCAA
ACACCGTGCCAAGGTTGTGCAGGGACATCTTATTGACTGCCTCCTTCTCTGCCATCCTGTAGAGGACCGAAGCAG
AGGGTGCTGTTTCAACGCCACCACCAGGAGAGAGGCAGAGGGGCTGTGCCGTGCTAGAGTCCTCAGGGAGGGAGT
GACCTCGACCCTGGCTGTGCTGCAAGCTGACTCCAGCCTTGGGGTCAGCAGCACCCGGCAAACAGCAGCAGGAGG
AGCCGCTAGAGCAGCTGCTCATGGGCAGAGCTGCCCTCGGGCAACTCCTGCCACCACCCCCTCCCCAGGGAGCCC
AAGGCAGGGGAGGCTCAGCATGGAATGAAACAGGGGAGTGAGGGACACAAGGAGGTGGGAAGTGGGAGGGTCCCA
GCCCCACCAAGTACGCAGAGACCCCCTCGACATCCTGGACACCACAGGGGCACCTGCAGGCTGGGAGACCAGGTC
CTCTGTGCATGGGCCCGGGAGGCAGACCTGCCCTAAGGGTGATGCACAGGCTACAGGTGCTGCACGCTCCAGCGC
CCACTCTAGACATCAGCCTCCAGGTTGACTAAGGGTCAGGTCATGTTTGAAACCATGCTTGGCTGGACCAGGACC
CATGGCAAGAGCACCTGGGCACCAGTGTTTAGCCCTGGTCTGCAGGAAGGAGGACAGCAGACTTTAGGACCCCAC

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FIGURE 4356B

AGCACGGCAGTGCTGACCATTTCACCCACTTGGCCTCCTTGAGAAATATGGATGGGGAGCCCTCTGGGGATGGGC
AAGGCCTTCCAGGATAGGCTCAGTTTTGGTCCCCTGCTTTTTGAGGTTGGGTTAAAATTCCGACCATGGCAGAGG
AAGCACAGCTCGGGTTCCCACACCTCACTTTTCACAGCCTCTGAGGGCAGCAGTGCACGTGGAGGAGACGTCTCC
CATGAGGCCAAGGCCTCCAGTGCTCACCGATGCCCTCTGCGAAGTTGGGGTAGAACTCGTCAGTGAAGAGGGGCT
CGGGCAGCTCACGGAAGTACAGCTTCAGCATGCCTGCGATGGCGTTCACGTCCATCTCGCTCATCATCACTGACA
CGTCCTTGTTATCTGGAAAGAGCACGGAAATGCAGCGGCCTCCTTGAAGATCCTGATAAATGAAGAAAAGACACA
GAGAAGGATGTGACATGCCTGGGCCATGGAGCACTCTGAGATCTCATCGTGGACACCACTGCCCACACCTCCATC
CCGTCCTGCGCAGGCCGACACTCACTGACGTTGAAGCCTGCCTTCAGTGCCTGGATGTCTGCGGCCACCCCAGAC
ATGCGGTAGATGCCCACCTCCTCCATGCCTCGGCGCTCGATCTCCTCCACGCACTGACGCACGATGTAGGGCACC
TTGGACCTCTCTCTCCTGCGGGAGGAGGGAATGTTCTCAGTGTCCTAACAGCCCTGCTTGGGCCATAACACAGGA
GACCTGCTCCCTATCTGCGCACCCGGAGGTGGGGTGAGGACGGTGACGAAGGTACCCAGGTCTGGGGCTGCACAC
AGAGCCTTCTGCATGCCTGTCCTCCCTCTGCAAGCTCTGTCCTCATTGCATGTACTTTCTCAGGAACCTTTCAAG
CGGCCAGAACCCCTGCGAATCACACATGACCTTTGTGGGAAGGTCAGGAGGCCTGTCTAAGTCAAGTCAGCACGG
GAAGGGCATCTGACAGATTCCAGGCCTGGGGTTAGCAGCCTGTGCCCCCGGCTGGGAGGTCAGACCCGGTGTTGG
TCCTGCCACCCACGTGCTGTGTGAGAGGAGAATCCCTGACCCCTGCCCTGGGCCTTAACACACATCCGACGAATG
AATGAAGGGTTGCCTCAGCACCGGTGCTCCAAGTCCTGCGATGCTAAGTGCTTTTCTCCTCTGAGTCTTAGCAAT
GGACAATTCCAATACCTCCACACAGGACACTAGAGTAAGAATCCTTCACAGTTAGAACGCAGTGCTGTGCGGAGG
CCTTAACTTGAGTTCTGTTTTGCACCTGGATTTACCAGCACATCAAAGCTGCTTCGCAAGCCCCCTCATCAGCAG
GGCTTATGTGGGGGAGCTGCTGATGGAGTCCTCGCTGCTCATGCCCACAGCCCTCCCAGAGTGCTATGCGAGTGG
CTGCCGTGCAGTTGGGGGTGGGGCGTGGTGTTTAGACACAGATAGGAGTCCAGGGTATGACTGATGGAGGCCCCG
GCCCACGTGACCAGCAAGGTCAGAGGCCCAGCCAGATTCCATCCTGGGGAAGCAAATGAATTCTCAGAGGAAGTG
GTCTGTGTCTGTATGAACTGCTCTCAAACCAACAAATAGGCTTCTCTTGGCAACTGACTCGTGACAAAGGGTTCA
AGATTGTTTGAAAAAAAAAAAAAAAGGGGGGGAACAGGGAGGCAGTAGGTCCTGGAAAAGTAAATTCTTTATTTTA
CAATAAGAAAGTGATTACATATTTTATTTTTTTTACAATGGTGGAAAATTAGAAGTGATTGTGAAAATGATGTCT
ACCCGCCTTGCTGATGAGTAGGATGTGATTTGGCTCTTTAGGAAACTGAATTTGCAGAACTTAAGAATATTGATT
TATAAAGGGCATGGCCATTGACCCAGTCCATCTTATGCAAATCTGGATGCCATAAATAATATTTAAAAATGAAAG
TATTGGGGTGGAGGTTGCAGTGAGCGGAGATCGCCCCACTACACTCCAGCCTGGTCAACAGAGTGAGACTCTGTC
TCAAAACAAAAAAAAAAAAAAAAAAAAAGGAAGAAGTCATTCCCAACATTGCTCATCAAATTATGACCATAAATTTC
CAGGATCAGACTAACGGCTAAAGAGACTGATGCATCAACACCAGGCAGAGAATAAAGCAGATTTTTTTTGTTTTG
TTTTGGAGAGCCTCTAGGAACTTGAAAAATACATATGCCACACTCTTAAGACCCGGTGGTTCTTAATCAGGGATG
TTCATTAAAATGCTGGAAAACTGTAAAGACTTCCAGGTCCCATCCAAGGAGATTTTGCTTCTGATTGACTGGCTA
GTGGCCTGGCCATTGGTATTTTGAAAAATCCCTCCAAGTGATTCTTTTACATCCCAGCTAGAAAACCCTAAATTA
AAGGTGAAAAACCAGACACCAAGTGGCATTTAAATAAATGTCAACTTTAACTCC

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FIGURE 4357

CGGGAAGATGGCGGGCCGGGCGACTTGAGATCCGCGGGTCTCCCTGCTCCTTTTCCGTCTGCGTCGGGAGCTCCC
GGGCACGTGAGGCCGTGCCGCGTTTACTGGCGGGAGGGACGGCCTAGCCGGGCGACGCCTCGGAGGAGGCCGCGG
ACCCCTTAGGTGCTGGGCCCTTGGAAATCGGCGCGTGGGGGGCGGTGCTCGAGCTGAGCGCGAGAGGGCGGGAGA
GCTCGTGGGGTGCGAGGGGAGCAGGACGCCCGGCCGGGCAGCATGAGTCAGCAGCGGCCGGCGAGGAGATTACCC
AGTCTCCTCCTGCACCCGACGGAGGAGACCCCATCAACGTGGAGGGCCTGCTGCCATCAAAAATAAGGATTAATT
TAGAAGATAATGTACAATATGTGTCCATGAGAAATCTGCTCCCGGGGGTATTCTTGACTTAAACAAGGTTGCAAC
GAAAGTGGGAGTCCGAAAGCGGAGAGTGTATGACATCACCGATGTCTTAGATGGAATCGACCTCGTTGAAAAGAA
ATCCAAGAACCATATTAGATGGATAGGATCTGATCTTAGCAATTTTGGAGCAGTTCCCCAACAAAAGAAGCTACA
GGAGGAACTTGCTGACTTACCAGCAATGGAAGATGCTTTGGATGAGTTAATTAAGGATTGTGCTCAGCAGCTGTT
TGAGTTAACAGATGACAAAGAAAATGAAAGACTAGCATATGTGACCTATCAAGACATTCATAGCATTCAGGCCTT
CCATGAACAGATCGTCATTGCAGTTAAAGCTCCAGCAGAAACCAGATTGGATGTTCCAGCTCCCAGAGAAGACTC
TATCACAGTGCACATAAGGAGCACCAACGGACCTATCGATGTCTATTTGTGAGAAGTGGAGCAGGGTCAGACCAG
TAACAAAAGGTCTGAAGGTGTCAGGACCTCTTCATCTGAGAGCACTCATCCAGAAGGCCCTGAGGAAGAAGAAAA
TCCTCAGCAAAGTGAAGAATTGCTTGAAGTAAGCAACTGATGGCATTTGAGAATTTATGTATCACTGAGTTTTTT
GGGAATATCTTCCTGGAGAATTACGCATCAAATTTGATTCTCAGAGCAATAAATTATCCATGAAGTGCTCTCGTT
CTCAGTAGCGGCATCATGGCCAGTAGTGTCTTTGAGGAGTTCACCACTTAGATTACTGAGTAATTGTGGTTTCCA
CATTTGAAAACAACTCCTTTTATAATTATTCACTGCTTTTTGTCAGTGAAATAGACATCTTGCCTCCTGAAGTAG
CTTCATCACAGAGTGTCATGAAGACAGACAGTCAGGCTGAAAAGGACAGTTCTTTGTGGACTCTACCCTTCCCTT
CAAGGAGTATGTCATATGTCACAAAAGAAATTGCCTTACACTGGTTCATGTTTGCAGTTACTGTTGTACATTGCA
TAGATGTACACACGAATTTAAATGTGATGTCTTTGTATATATCTGTATAATGTTGAGATTACTTACGAAATATGT
CTGAGTGACACTTTTCACTCTCGTACAGCCAAAATAATGTATATATGGAAAGTGACAGACAAATTCTCTAATCTC
TTTGGTATCTATAACTTATTAGAATCCTCTGGATGAGGGTTAGAAGAGACTTTTTCCAAACTTCTACATGTAGAA
GTATCATAAATGTGCTACACATTTATGTTTGTGGATTTAATTAAAGTATTTTAATATGGTTTTCAGTGCTAAAAT
TGGAGTCAGATACTTCTTGGTTTTAAGCTGTCTACCTAATTGCTGTCTCCCAGCAGATCGGTGGCATGCCCAGTG
GCTTTGGGGGCAAGGATAGAAATGTCATCAGGAAATAGCTGAATTCATTGTGAAACATGAATTCAGTCATGGTGA
TAATTGGAAACTCCTTTCAGGTTTTTGCAAGTAGATTTTGTAATGTTTGTGTATGCAGCCTTGCTGTTGAGTCAG
TCCAAGGGGTTTTACTTAGGACAAGTTGTACCTTGCCCTCTCTCCAGCTCTGCTCCCACATTTTCACATACCTAG
CTATTTCTACCTCATTGGGTAAGTCATTTACCACTCTGTGCCTCAGTTTACTCTGTAGTTTACCATTAGACTGTG
AGCTCCTTGAGGGACTTTGTCATAATCACTGTTACATCCCAGTGCCTCACACCATGCCTGGCCCTTAAGAAGTGC
TCAATAAATGTCTGAACAAAAAAAAAAACAAAAAAAA

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FIGURE 4358

CGGGAAGATGGCGGGCCGGGCGACTTGAGATCCGCGGGTCTCCCTGCTCCTTTTCCGTCTGCGTCGGGAGCTCCC
GGGCACGTGAGGCCGTGCCGCGTTTACTGGCGGGAGGGACGGCCTAGCCGGGCGACGCCTCGGAGGAGGCCGCGG
ACCCCTTAGGTGCTGGGCCCTTGGAAATCGGCGCGTGGGGGGCGGTGCTCGAGCTGAGCGCGAGAGGGCGGGAGA
GCTCGTGGGGTGCGAGGGGAGCAGGACGCCCGGCCGGGCAGCATGAGTCAGCAGCGGCCGGCGAGGAGATTACCC
AGTCTCCTCCTGCACCCGACGGAGGAGACCCCATCAACGTGGAGGGCCTGCTGCCATCAAAAATAAGGATTAATT
TAGAAGATAATGTACAATATGTGTCCATGAGAAATCTGCTCCCGGGGGTATTCTTGACTTAAACAAGGTTGCAAC
GAAACTGGGAGTCCGAAAGCGGAGAGTGTATGACATCACCGATGTCTTAGATGGAATCGACCTCGTTGAAAAGAA
ATCCAAGAACCATATTAGATGGATAGGATCTGATCTTAGCAATTTTGGAGCAGTTCCCCAACAAAAGAAGCTACA
GGAGGAACTTTCTGACTTACCAGCAATGGAAGATGCTTTGGATGAGTTAATTAAGGATTGTGCTCAGCAGCTGTT
TGAGTTAACAGATGACAAAGAAAATGAAAGACTAGCATATGTGACCTATCAAGACATTCATAGCATTCAGGCCTT
CCATGAACAGATCGTCATTGCAGTTAAAGCTCCAGCAGAAACCAGATTGGATGTTCCAGCTCCCAGAGAAGACTC
TATCACAGTGCACATAAGGAGCACCAACGGACCTATCGATGTCTATTTGTGAGAAGTGGAGCAGGGTCAGACCAG
TAACAAAAGGTCTGAAGGTGTCAGGACCTCTTCATCTGAGAGCACTCATCCAGAAGGCCCTGAGGAAGAAGAAAA
TCCTCAGCAAAGTGAAGAATTGCTTGAAGTAAGCAACTGATGGCATTTGAGAATTTATGTATCACTGAGTTTTTT
GGGAATATCTTCCTGGAGAATTACGCATCAAATTTGATTCTCAGAGCAATAAATTATCCATGAAGTGCTCTCGTT
CTCAGTAGCGGCATCATGGCCAGTAGTGTCTTTGAGGAGTTCACCACTTAGATTACTGAGTAATTGTGGTTTCCA
CATTTGAAAACAACTCCTTTTATAATTATTCACTGCTTTTTGTCAGTGAAATAGACATCTTGCCTCCTGAAGTAG
CTTCATCACAGAGTGTCATGAAGACAGACAGTCAGGCTGAAAAGGACAGTTCTTTGTGGACTCTACCCTTCCCTT
CAAGGAGTATGTCATATGTCACAAAAGAAATTGCCTTACACTGGTTCATGTTTGCAGTTACTGTTGTACATTGCA
TAGATGTACACACGAATTTAAATGTGATGTCTTTGTATATATCTGTATAATGTTGAGATTACTTACGAAATATGT
CTGAGTGACACTTTTCACTCTCGTACAGCCAAAATAATGTATATATGGAAAGTGACAGACAAATTCTCTAATCTC
TTTGGTATCTATAACTTATTAGAATCCTCTGGATGAGGGTTAGAAGAGACTTTTTCCAAACTTCTACATGTAGAA
GTATCATAAATGTGCTACACATTTATGTTTGTGGATTTAATTAAAGTATTTTAATATGGTTTTCAGTGCTAAAAT
TGGAGTCAGATACTTCTTGGTTTTAAGCTGTCTACCTAATTGCTGTCTCCCAGCAGATCGGTGGCATGCCCAGTG
GCTTTGGGGGCAAGGATAGAAATGTCATCAGGAAATAGCTGAATTCATTGTGAAAC**ATG**AATTCAGTCATGGTGA
TAATTGGAAACTCCTTTCAGGTTTTTGCAAGTAGATTTTGTAATGTTTGTGTATGCAGCCTTGCTGTTGAGTCAG
TCCAAGGGGTTTTACTTAGGACAAGTTGTACCTTGCCCTCTCTCCAGCTCTGCTCCCACATTTTCACATACCTAG
CTATTTCTACCTCATTGGGTAAGTCATTTACCACTCTGTGCCTCAGTTTACTCTGTAGTTTACCATTAGACTGTG
AGCTCCCTGAGGGACTTTGTCATAATCACTGTTACATCCCAGTGCCTCACACCATGCCTGGCCCT**TAA**GAAGTGC
TCAATAAATGTCTGAACAAAAAAAAAAAAAAAAAA

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FIGURE 4359

GGGCTGAATGGTCGCTGAGACAGAGATGGAAGCCAGGACAAGGGAGCCCACCGGGCCCAGATAGAGACTTCAGAA
CCCACTCCTGAGAACAGCGGAGCCAGGCGCTTAGAGGAAGACCAAATGCTGCCAGGACACGGATTGTCCAGGGAT
TACATTCCAGCATCTTATTAGAGGACCGAAGCAGAGGGTGCTGTTTCAACGCCACCACCAGGAGAGAGGCAGAGG
GGCTGTGCCGTGCTAGAGTCCTCAGGGAGGGAGTGACCTCGACCCTGGCTGTGCTGCAAGCTGACTCCAGCCTTG
GGGTCAGCAGCACCCGGCGAACAGCAGCAGGAGGAGCCGCTAGAGCAGCTGCTCATGGGCAGAGCTGCCCTCGGG
CAACTCCTGCCACCACCCCCTCCCCAGGGAGCCCAAGGCAGGGGAGGCTCAGCATGGAATGAAACAGGGGAGTGA
GGGACACAAGGAGGTGGGAAGTGGGAGGGTCCCAGCCCCACCAAGTACGCAGAGACCCCCTCGACATCCTGGACA
CCACAGGGGCACCTGCAGGCTGGGAGACCAGGTCCTCTGTGCATGGGCCCGGGAGGCAGACCTGCCCTAAGGGTG
ATGCACAGGCTACAGGTGCTGCACGCTCCAGCGCCCACTCTAGACATCAGCCTCCAGGTTGACTAAGGGTCAGGT
CATGTTTGAAACCATGCTTGGCTGGACCAGGACCCATGGCAAGAGCACCTGGGCACCAGTGTTTAGCCCTGGTCT
GCAGGAAGGAGGACAGCAGACTTTAGGACCCCACAGCACGGCAGTGCTGACCATTTCACCCACTTGGCCTCCTTG
AGAAATATGGATGGGGAGCCCTCTGGGGATGGGCAAGGCCTTCCAGGATAGGCTCAGTTTTGGTCCCCTGCTTTT
TGAGGTTGGGTTAAAATTCCGACCATGGCAGAGGAAGCACAGCTCGGGTTCCCACACCTCACTTTTCACAGCCTC
TGAGGGCAGCAGTGCACGTGGAGGAGACGTCTCCCATGAGGCCAAGGCCTCCAGTGCTCACCGATGCCCTCTGCG
AAGTTGGGGTAGAACTCGTCAGTGAAGAGGGGCTCGGGCAGCTCACGGAAGTACAGCTTCAGCATGCCTGCGATG
GCGTTCACGTCCATCTCGCTCATCATCACTGACACGTCCTTGTTATCTGGAAAGAGCACGGAAATGCAGCGGCCT
CCTTGAAGATCCTGATAA**ATG**AAGAAAAGACACAGAGAAGGATGTGACATGCCTGGGCCATGGAGCACTCTGAGA
TCTCATCGGGGACACCACTGCCCACACCTCCATCCCGTCCTGCGCAGGCCGACACTCACTGACGTTGAAGCCTGC
CTTCAGTGCCTGGATGTCTGCGGCCACCCCAGACATGCGGTAGATGCCCACCTCCTCCATGCCTCGGCGCTCGAT
CTCCTCCATGCACTGGCGCACGATGTAGGGCACCTTGGACCTCTCTCTCCTGCGGGAGGAGGGAATGTTCTCAGT
GTCCTAACAGCCCTGCTTGGGCCA**TAA**CACAGGAGACCTGCTCCCTATCTGCGCACCCGGAGGTGGGGTGAGGAC
GGTGACGAAGGTACCCAGGTCTGGGGCTGCACACAGAGCCTTCTGCATGCCTGTCCTCCCTCTGCAAGCTCTGTC
CTCATTGCATGTACTTTCTCAGGAACCTTTCAAGCGGCCAGAACCCCTGCGAATCACACATGACCTTTGCGGGAA
GGTCAGGAGGCCTGTCTAAGTCAAGTCAGCACGGGAAGGGCATCTGACAGATTCCAGGCCTGGGGTTAGCAGCCT
GTGCCCCCGGCTGGGAGGTCAGACCCGGTGTTGGTCCTGCCACCCACGTGCTGTGTGAGAGGAGAAACCCTGACC
CCTGCCCTGGGCCTTAACACACATCCGACGAATGAATGAAGGGTTGCCTCAGCACCGGTGCTCCAAGTCCTGCGA
TGCTAAGTGCTTTTCTCCTCTGAGTCTTAGCAATGGACAATTCCAATACCTCCACACAGGACACTAGAGTAAGAA
TCCTTCACAGTTAGAACGCAGTGCTGTGCGGAGGCCTTAACTTGAGTTCTGTTTTGCACCTGGATTTACCAGCAC
ATCAAAGCTGCTTCGCAAGCCCCCTCATCAGCAGGGCTTATGTGGGGGAGCTGCTGATGGAGTCCTCGCTGCTCA
TGCCCACAGCCCTCCCAGAGTGCTATGCGAGTGGCTGCCGTGCAGTTGGGGGTGGGGCGTGTGTTTAGACACAGA
TAGGAGTCCAGGGTATGACTGATGGAGGCCCCGGCCCACGTGACCAGCAAGGTCAGAGGCCCAGCCAGATTCCAT
CCTGGGGAAGCAAATGAATTCTCAGAGGAAGTGGTCTGTGTCTGCATGAACTGCTCTCAAACCAACAAATAGGCT
TCTCTTGGCAACTGACTCGTGACAAAGGGTTCAAGATTGTTTGAAAAAAAAAAAAAGGGGGGGGGGAACAGGGAGG
CAGTAGGTCCTGGAAAAGTAAATTCTTTATTTTACAATAAGAAAGTGATTACATATTTTATTTTTTTTACAATGG
TGGAAAATTAGAAGTGATTGTGAAAATGATGTCTACCCGCCTTGCTGATGAGTAGGATGTGATTTGGCTCTTTAG
GAAACTGAATTTGCAGAACTTAAGAATATTGATTTATAAAGGGCATGGCCATTGACCCAGTCCATCTTATGCAAA
TCTGGATGCCATAAATAATATTTAAAAATGAAAGTATTGGGGTGGAGGTTGCAGTGAGCGGAGATCGCCCCACTA
CACTCCAGCCTGGTCAACAGAGTGAGACTCTGTCTCA

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FIGURE 4360

AGAATGAACTGGAGCTGGCGGAGACCAAATGCGCCTTGCAGGAGGAGAAGCTGCAGCAGGACGCGCTGCAGACAG
CGGAGGCCTGGGCCATATTCCAGGAGCAGACCGTAGTCCTGCAGGTGCGGCCCCACTCAGACGCCAAGGTGCCTC
CCGCCTCTCCTCCCCCAGACCTGGGGCGGTGTGACGGGCAGCTTCGCGGAGTGCAGTACAGCACCGAATCGCTCA
TGGAGGAGATGGCCAGGGCGGACCGAGAGACGCGGCTGTTCGGCGGCCCTCGCGCGCTGGCCATCAGGCGGTGCG
TGCTGGGCGCGCTGCAGGTGCTGCTGACGCTGCCGCTCCTCTTCCTGGGGCTGTCGCTGCTCTGGACGGTGCTGT
TGGACCCCGGCGCCGTCTCCGCGTGGCTCTGGAGCCTCACCTCGGAGACGACGCTGCGCCGCCTGCGCTACACGC
TGTCCCCGCTGCTGGAGCTGCGCGCTAACGGGCTTCTGCCAACCTAAGTGCAGCGCCCCGCGCCTGGCTCCAGGT
GGACTCCAGGGCACCTGGCTTTATTTCTGGTGCACTCCTCTCCTGAGAGTGTAGACCAAGGTTGCCTAATAAACT
CAAGGGATGAA

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FIGURE 4361

GAACCCAGGAGGCAGAGGTTGCAGTGAGCCAAGATCGTGCCACTGCACTCCAGCCTGGCGACAGAGCGAGACTCC
ATTTAAAAAAAAAAACACCAGGGCATCTGTAAGCCACTTTGGGAGTCAAAAGAATGTAGAGCTGGGCTGGACTCC
TTAGAAGAAAGTTAAGTTCTGAGTGTGGGAGGAAGTGCCTGCACCCCCACATCCAGACAGCCCGTCACTCCTGCT
GCCGAAGACTGACTTGCTGATTCGGGCTCTGCCTCCATAGTGGGGGCACAGAGCCAGGGAGAGTGCCCACAGGCC
CAGGGATCCTGGGTGTGGGACCAGGGAGAATGCCCACAGGCCCCAGGGCCTTTTTGAGCCCAGGGCGCTCTCTGC
ACAGGCCCGCTACAACTTCATCCGAAGCATGGCCGCCTACAGCCTCCTGCTGTTCCTGCTGCAGATCAAGGACAG
ACACAACGGCAACATTATGCTGGACAAGAAGGGCCATATCATCCACATCGGTCAGCCAGCCACAGCGCCACCCTC
CTCTCCCTTCACCCCGGCACCCAGGGGTGGATAGGGATCCCCACCCCACAGAGAGGAGAATGCCCAGGACCACCC
TGCCAGGAGTGTCAGGGTCCAGCTCTGAGGTCCGAACTGTCGGCCACCAAGCTGTTCTGCTGTAGAGGGTGCCTG
GCCCCGGCCCCAGGGAGCTGGGGCGAGAGCCGCCATTGCTCTGAGTCAGAAGCTGGAGCTGGGCGGAGTGGGGCT
GGTCCAGGTTCAGTGCCCCAGCTTGGCTCCTTCCTCCACTTCCTCCCTTCTCTTTCTCTGCCTGCTGCCCCACCA
CCCACCCCATCACTGTCTCCAAGAAAACACAACCTGCCTTTTGGGGGTGGAGGGGGTGCTCCTGTTGAAGAGTCC
TTTTCCACTCCTCAAAACAGACCACTCGTCCTTGCCCGCCCTGGCTCCTACCCAGTCACAGGCAGCTCTTTGGGG
TTTTGCAGACTTTGGCTTCATGTTTGAAAGCTCGCCGGGCGGCAATCTCGGCTGGGAACCCGACATCAAGCTGAC
GGATGAGATGGTGATGATCATGGGGGGCAAGATGGAGGCCACACCCTTCAAGTGGTTCATGGAGATGTGTGTCCA
GGCTACCTGGCTGTGCGGTGAGCCTGGGTGAGGGCCAGGGTGGAGGCGGAGGGGGTGTGTGGAACGTTCTGAGAT
CCCCTTTAGGATGAAGGGAATCGGGTTCCAGAGAGTGAGGTAGGTGCTAGCAGCCACCTGCTGACCTACACCTGT
CCTTTGGTCACCTCTGTCTGCCCACCTGTGCCAATAAATTCTTGCTCTGGGCATCTAATTCCAACCACCTTCCCC
ACAATCCTGCCCACGCCTTCAGCC**ATG**GGCTCTCCCTTTCTGGGCATCCCATCCACCTTGTCACCAAAGCCTGAG
CACCTGCCACCCCACAGGCTACGTGCCAAAGATGGGCTTTGTCCCAGTTTCATATACAGGTCACTTGGCCAAGGC
CACAGTCCAACCTGGGTTCATCCCCACTGCCCCGCAGAGAAAGGCAGGTCAGCGTGTCTGCATCCCACCCAGGTG
CAGAAGCCATGGCCGGCAGCCTTATGTGGGGGACAGGGCAGGACACTCAGCCTGTCCAGAGTGCGTATGGGCAGC
CCTTGCCTGGGCAGTACGGGTGACCGAGTGCAGCAGATCGAAAGTTGCCTCGGGGATGTGCAAGATGTGGCAGGC
GAGGTGGGTGGCAGGAGCCCACACCTGAGGCTGTTGGCATCAGCCAGTCCACAGGACTACAGGCAGGGCCACCAC
CTAGGCTGGCCTCAGCCCACCGCTCCCTCCTGTCTCTCCCCAGGCCCTACATGGATGTGGTCGTCTCCCTGGTCA
CTATCATGTTGGACACGGGCCTGCCCTGTTTTCGCGGCCAGACAATCAAGCTCT**TGA**AGTTTAGCCCCAACATGA
CTGAGCGCGAGGCTGCAAATTTCATCATGAAGGTCATCCAGAGCTGCTTCCTCAGCAACAGGAGCCGGACCTACA
ACATGATCCAGTACTATCAGAATGACATCCCCTACTGAGGAGGGGACCTTCGAGGGCCTCTGCCCCATGTGCCCT
TGAAGCTGCCCCACAATCATGGAGCCCTGCGACCTACCCGCCCTGCCGCCACATGCAGTGGAGGAGAGGCCTGTG
GCCCGAAGAGCCTGGTAGCGCCTCCTGGGGCAGCACGTGGGTGGCGCAGGCTTAGTAACGCCGTGGACTGCAGCG
ACAATCAGTGGATGGTGCTGTCTATGCACAGGTGTGAGTCCTCTGTTTGCACTGGACATATTCCCTACCTGTTTT
ATTTCATAGGTACATGAAGTATTGTGTATAAAAAAAGAGATAAGATTTAACCAACATCAACAAAATAAAAACCCA
AAATAGTG

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FIGURE 4362

GAGCTTGAAGAAATCCGCAAATGTGGGATGAAAAACTTCCGTAACATCCAGGTTGATGAAGCTAATTTATTGACT
TGGCAAGGGCTTATTGTTCCTGACAACCCTCCATATGATAAGGGAGCCTTCAGAATCGAAATCAACTTTCCAGCA
GAGTACCCATTCAAACCACCGAAGATCACATTTAAAACAAAGATCTATCACCCAAACATCGACGAAAAGGGGCAG
GTCTGTCTGCCAGTAATTAGTGCCGAAAACTGGAAGCCAGCAACCAAAACCGACCAAGTAATCCAGTCCCTCATA
GCACTGGTGAATGACCCCCAGCCTGAGCACCCGCTTCGGGCTGACCTAGCTGAAGAATACTCTAAGGACCGTAAA
AAATTCTGTAAGAATGCTGAAGAGTTTACAAAGAAATATGGGGAAAAGCGACCTGTGGACTAAAATCTGCCACGA
TTGGTTCCAGCAAGTGTGAGCAGAGACCCCGTGCAGTGCATTCAGACACCCCGCAAAGCAGGACTCTGTGGAAAT
TGACACGTGCCACCGCCTGGCGTTCGCTTGTGGCAGTTACTAACTTTCTACAGTTTTCTTAATCAAAAGTGGTCT
AGGTAACCTGTAAAGAAAGGATTAAAAATTTAAGATGTTCTAGTTCTGCTCTCTTTGTTTTAAAAATCACTGCTT
CAATCTACTTCAAAAGAATGGTGTTTCTTTTCTTGTCCAATTTTATCCAAAATCTTCAAGTTACATTTAACCCAT
AAGGTTTAAAAAAAAGGAAAAAAAACGGTTGTGGTTCCCTTTCTTCCCTACCCTTGCCACTCCCACTTTCTGGCA
CCGAGTTTATTTTTCACTTACTTACTTCCCCAGACCCCGGGCTCGCCTCCACAAAGGAGAAAAGACTGCCCTGGC
GGTCCTGGTGGCTTTTCTTAGCATGTGTGGCACTGTTGCCCAGTGTGGGAGTTGGTTTAAATTCTCCTGACTCCA
GTTTATAACATCCTTTTAAAAAATTTAAAAACAAACAGCCACACCCCTCCTCCAGTCCTTCTCCTCAGTTCTTGT
GTGAAACTCCAGCTGATGTTACCACAGTAACATCAGTTAATTGGGCAAGCCCTGATGTCAGTGTGTGTAACTGAC
CTCTGGCCTGGCCTGCACAGAGAAGCCCTATAATCACAGGTCTGTGGTGGCCCCGAAATGGGGGGCCTGCTAGTC
AGGAGGATGCTGTGCACACTGTGTGTGATGAATCTCGCCAGAAAGGCTCCTGAGGTCCCAGGTTGGCACTTCTCC
CTGCAGCCATTGTAGAAGATCTGCTGGTCCTTGCAGGCAAAGCTACAGCCAGAATGTCCGTTTGAAACTCCTAGC
TCATCTGTCACCGAGCTTCATCCGAATGTGCCACGGAGCTTGCTCTCCACTTCCTCCGTGCAGTGGCCCTGCCAC
AGCCCTCCCTCGGCACACTTTGACCCTTTGTAGGATTGGAATTAGCAGGACTCGGCTATTTAAAGCACCAGTCTG
GGGTCGCCTGGGCCCCTGCTGACCCCCTCCTCCAGAGCAGCCAGCCCAGCCCGGGAACAAGACGGACTTCCTCTC
CCTTCGGACTCACAGCCTTTGCAGAGTCAAGCTCCACTTGAAGCTCACTCAGTAATATCCTTTCAATGTGTTTTA
TATTGTTTTGACTGCCTTTTTTTGTAGAAATAAAAATTGACCTTAGAATTTATCGTCAGATAAACTTGTAAAGAT
TTGAATATTAATGTCTTTTCAAGGCAAATGGGATTGTCCCCGCACTAGTAGAGAATCCATGTCGCTCTGACACCC
CAAGGAAGCCGACGATCCAAATGCCGTGTGTCACCAACCCCGCTTCTGCCACTGGCGGCTTCCCTTCTTGGCTCT
TGGGGGGGACTAGATCCTGTGGAGAAGATGACTTAAACTTTGCTTTTTGTTTTAATTTTAATTCTATAACTTGAG
ATCTTTCCGGGGCCTACAGGCGTGTAAGACAGCTTGGTCTGGTCTGTGCAGAAGTGGGGAGTGATGGGCAGGTTC
GGCAGCCTAACATTGTTCAGGCGCATGGCCCCTGCGGTGTGTACACGAACTCGGCTTCTTTTGTCCTAGGTACGC
CAAGGGCAGGTTTCTGGAGACTCCCTTGTGCCCGGGATGGCAAGGGCACCGGGCTGGCGTTTCCACATCTGTCTT
CATTAGCAGAAAAGTGATGATGGATTTTATTTCACTCACACTCCAGTTTGTAATAAA**ATG**CCAAATTCTGTCAGC
TATCCAAACAAGCCACCATTTGTTCTTGTTGCTTCTCTGGATCCAGAAATGTTGCCATTCTTGGAAACTGTCCCA
TTGCTTCGTATTTCTGCCAACGTAGCTCTGCCTGCCTGTCAACCCCTCACTGCACTCTGCTCATCACGGGAGGAT
ACCTGTGTGCCGGCAGCCCCTCAGGGACTCTCAGCCCTGGCACTGGCACCCCAGGGTTGGCCCCGTCAGCAGAGG
CTTGGCTTTCGAGCCAGTGGGTGTCTCTCCTTTGGGCCTGGGCGGCTTGCTCCTGCCAGCCATGCCTTCAGGGTA
GGCTCTGAGCAAGCTGGCGAACAGCCCTGGCTGCTCCAAAACCAAAAAGCTGGGTCCTCTGGAGGAGGGGCGAGC
TGTGGAGCAGCCACCCACTGCTGCCCCAAGCTCACTCAGGAATTCACACCCGCCTGGTTTCTTGAAGTGTGCTGG
GTCCTTCCCTCTGCTCCCTACTCCCCACCACGGCAGAGAATAGGCTTTCTAAGATGCTGCGATCCCGTTCTGCTG
CCCGTAATAAAAATGCTCTCAGACACTG

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FIGURE 4363

GGGCTGTCCGGCCCACTCCCCTGGGAGCGCGAGCGGTGGACCCAGGCGGCCATGTCCCGCCCTCGCATGCGCCTG
GTGGTCACCGCGGACGACTTTGGTTACTGCCCGCGACGCGATGAGGGTATCGTGGAGGCCTTTCTGGCCGGGGCT
GTGACCAGCGTGTCCCTGCTGGTCAACGGTGCGGCCACGGAGAGCGCGGCGGAGCTGGCCCGCAGGCACAGCATC
CCCACGGGCCTCCACGCCAACCTGTCCGAGGGCCGCCCCGTGGGTCCGGCCCGCCGTGGCGCCTCATCGCTGCTC
GGCCCGGAAGGCTTCTTCCTTGGCAAGATGGGATTCCGGGAGGCGGTGGCGGCCGGAGACGTGGATTTGCCTCAG
GTGCGGAGCCGCAGCTACAGGAGGATGCTCGCGAGGACCCCCAGAGCTCCGCCCGGAGGGTACTGTGAGGCCGTT
AGGAGCTGGCGGTGGATGACTTCCGCATTCAAACACTGGAGCCATCACACGGAAGCACGAGGAGGGTATCCTCGG
CAGCTACTCCCGGTCGCTCAAGGTGTCTCTCGCTCGCCCTCTAGGTGCGGGAGGAGCTCGAGGCCCAACTAAGCT
GCTTCCGGGAGCTGCTGGGCAGGGCCCCCACGCACGCGGACGGGCACCAGCACGTGCACGTGCTCCCAGGTGGAC
AGACGCCTTCGTGGGCCTGAGCACTTGCGGCCGGCACATGTCCGCTCACCGCGTGTCCGGGGCCCTGGCGCGGGT
CCTGGAAGGTACCCTAGCGGGCCACACCCTGACAGCCGAGCTGATGGCGCACCCCGGCTACCCCAGTGTGCCTCC
CACCGGCGGCTGCGGTGAAGGCCCCGACGCTTTCTCTTGCTCTTGGGAGCGGCTGCATGAGCTGCGCGTCCTCAC
CGCGCCCACGCTGCGGGCCCAGCTTGCCCAGGATGGCGTGCAGCTTTGCGCCCTCGACGACCTGGACTCCAAGAG
GCCAGGGGAGGAGGTCCCCTGTGAGCCCACTCTGGAACCCTTCCTGGAACCCTCCCTACTCTGACCCCCTACAGA
CAACCAAGCACTAATCCCCTTAGTACCAAGAAAGGGGAGCCAGGATTTAGTCCTGGCCCAGCCCAGAGCTGGGAC
CTGGAGCACGATCTGTTGACTTCCCTGGGTAGGACACTGCCACCTCTGGGCTCAGGTCCTCATGCCTCCAAATGG
CATCTAGAGTTTGAGCAGCCTTCTTGGCTGCAGGCAGGCCTAGCCTGTGGCAGCGGGCTAGGGCCCGCAGAGCAT
TTGGTGCCCCTCCATGTTGCAATGCAAACACCTTCACCACTGGGGCAGTGGGGAGAGATGGCTATATTAATAAAA
TAACGTGTGTCTTTC

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FIGURE 4364

GCTGGAGCCGGGCCGGGGCG**ATG**TGGAGCGCGGGCCGCGGCGGGGCTGCCTGGCCGGTGCTGTTGGGGCTGCTGC
TGGCGCTGTTAGTGCCGGGCGGTGGTGCCGCCAAGACCGGTGCGGAGCTCGTGACCTGCGGGTCGGTGCTGAAGC
TGCTCAATACGCACCACCGCGTGCGGCTGCACTCGCACGACATCAAATACGGATCCGGCAGCGGCCAGCAATCGG
TGACCGGCGTAGAGGCGTCGGACGACGCCAATAGCTACTGGCGGATCCGCGGCGGCTCGGAGGGCGGGTGCCCGC
GCGGGTCCCCGGTGCGCTGCGGGCAGGCGGTGAGGCTCACGCATGTGCTTACGGGCAAGAACCTGCACACGCACC
ACTTCCCGTCGCCGCTGTCCAACAACCAGGAGGTGAGTGCCTTTGGGGAAGACGGCGAGGGCGACGACCTGGACC
TATGGACAGTGCGCTGCTCTGGACAGCACTGGGAGCGTGAGGCTGCTGTGCGCTTCCAGCATGTGGGCACCTCTG
TGTTCCTGTCAGTCACGGGTGAGCAGTATGGAAGCCCCATCCGTGGGCAGCATGAGGTCCACGGCATGCCCAGTG
CCAACACGCACAATACGTGGAAGGCCATGGAAGGCATCTTCATCAAGCCTAGTGTGGAGCCCTCTGCAGGTCACG
ATGAACTC**TGA**GTGTGTGGATGGATGGGTGGATGGAGGGTGGCAGGTGGGGCGTCTGCAGGGCCACTCTTGGCAG
AGACTTTGGGTTTGTAGGGGTCCTCAAGTGCCTTTGTGATTAAAGAATGTTGGTCTATGA

FIGURE 4365

GAACTCGGCTGCGGCTCCATGGTCTGAGTTGTCAGCCGTTGTTTTTTCGTGCTCGCTAGTCGCCGCCGCCGCTCC
GCCATGGGGAAGCGACAGCACCAAAAGGACAAAATGTACATTACCTGTGCTGAATACACTCACTTTTATGGTGGC
AAGAAGCCAGATCTCCCACAAACAAATTTTCGTCGTTTACCTTTTGACCACTGCAGTCTCTCTCTGCAGCCCTTT
GTCTACCCAGTCTGCACTCCCGATGGCATCGTCTTTGACTTACTGAACATTGTTCCATGGCTTAAGAAGTACGGG
ACCAACCCCAGCAATGGAGAGAAGCTGGACGGGAGGTCCCTGATCAAGCTGAACTTTTCCAAGAACAGTGAGGGG
AAGTACCACTGCCCAGTGCTGTTTACCGTGTTCACCAACAACACCCACATCGTGGCTGTGAGGACGACCGGCAAC
GTCTACGCCTATGAGGCAGTGGAACAGCTAAATATCAAGGCCAAGAACTTCCGGGACCTGCTGACCGACGAGCCC
TTCTCCCGGCAGGACATCATCACCCTCCAGGACCCCACCAATTTGGACAAGTTCAATGTCTCTAACTTCTATCAT
GTGAAGAATAACATGAAAATAATAGACCCAGATGAAGAGAAGGCCAAACAGGACCCGTCTTATTATCTGAAAAAT
ACAAATGCCGAGACCCGAGAGACCCTGCAGGAGCTCTACAAGGAGTTCAAAGGGGACGAGATTCTGGCAGCCACC
ATGAAGGCCCCGGAGAAGAAGAAAGTGGACAAGCTGAACGCTGCCCACTATTCCACAGGGAAGGTCAGCGCTTCC
TTCACCTCCACCGCGATGGTCCCGGAGACCACACATGAAGCAGCTGCCATCGACGAGGATGTGCTGCGCTACCAG
TTTGTGAAGAAGAAGGGCTACGTGCGGCTGCACACCAACAAGGGCGACCTCAACCTGGAGCTGCACTGCGACCTG
ACACCAAAAACCTGCGAAAACTTCATCAGGCTTTGCAAGAAGCATTATTACGATGGCACCATCTTCCACAGATCC
ATCCGGAACTTTGTGATCCAAGGGGGCGACCCCACAGGCACAGGCACGGGTGGGGAGTCATACTGGGGGAAGCCC
TTCAAAGACGAGTTCCGGCCCAACCTCTCGCACACGGGCCGCGGCATCCTCAGCATGGCCAACTCCGGGCCCAAC
AGCAACAGGTCTCAATTCTTCATCACGTTTCGCTCCTGTGCCTACCTGGACAAGAAGCATACCATCTTTGGACGG
GTTGTTGGGGGCTTTGACGTACTGACAGCCATGGAGAATGTGGAGAGTGACCCCAAAACTGACCGCCCTAAGGAG
GAGATCCGCATTGATGCCACTACAGTGTTCGTGGACCCCTATGAGGAGGCCGATGCCCAGATTGCGCAGGAGCGG
AAGACACAGCTCAAGGTAGCCCCGGAGACCAAAGTGAAGAGCAGCCAGCCCCAGGCAGGGAGCCAGGGCCCCCAG
ACCTTCCGCCAGGGCGTGGGCAAGTACATCAACCCAGCAGCCACGAAGCGAGCAGCAGAGGAAGAGCCCTCAACC
AGTGCCACTGTCCCCATGTCCAAGAAGAAGCCCAGTCGGGGTTTTGGGGACTTCAGCTCCTGGTAGCAGCAGGTT
GGCCGCTGTGGACCTTGGTGGGGTTGCAGGGCTGGGGGCCCATGTCCACATCTCCATTTCCAGCCTTTCTAGCCT
GCCCTCTGCTGCCAGCCAATAAATTGCTTGCCTGCTGCCTGCATCCCCTTTCCTGGCCCCTGGGAGCCCACAGCC
TTCCCATCCCTTAACCTGTTGCCAAGGGCCTTGGCCCTGTTTCCAGGACCTGGCCCAGCCAGAGCCCACTGCTGG
GACCTTCAAGCACAAGGCCTGCCCTACACCCAGGCTGGTGCCTCAGGCCTCCCCTCTAGTAGGCAGGCCAGGTTA
GTGAGGAAGGACTGTGTCTCCAGATTGTGGTTTCCTCTTTAAGACAGGGTCTTGCTCTGTTGCCCAGGCTCCAGT
GCAGTGGTGTGATCATGGCTCACTGCAGCCTCGACCTCCTGGGCTCAAGCAATCCTCCTGCCTCAGCCTCGCAAG
TAGCTGGGACTACAGCCGTGCACCACTACATCCAGCTGTATATGTCTGGTTTTCTTACCCCTACTTCTGTCATCT
TCTCAGGGACAGCCTATTTATACAACCAGTGTGGTCCCCTGACCAACGCCATTACCTGGGACAAGTTTTCAGACC
CCAGACTTACTGAGCCTAAGCCTCTGCAGGGTGGGCTTCTCGGTCTGTTTTGACAAAACTTCAGGGGCTTCTGAA
GGCTGGTGTTGGACGGCAGCATTGAGTTTCCTGCCGTGCCCTGCCTGAGCTCTCAGGGCCCTGCTCACCTGCTCT
GGCTGTGAACCACCTGGGCTTCATCTCAAGCCTGCCTGGCGTCTCTGTGCCCCTGTGAGAATCTTGAGGGGACCC
ACACTGGGTTGAGGCCAGTGTCTCCTGCTGTGAGAACAAGTGGATGTCCCTCTCCCCGCCCTCCTGCTGAAGTGG
CCTTGCTGCTCTCAGGCCCGGCCA

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FIGURE 4366

TAAATTTGCAGAACTTCAAATTGGCTATTCCTCTTGCAAATGAACCCTTAAAGTACAGTGTTATTTAAGAATCTT
CCAGAGGCAGTCAACAGACTTATACACTAAGGGCATTTTTGGTTTTTAGCTTGTTCAAAAACAGAGGCCAGCACA
GATGACATTTTAGATACACTCTAAATTGAGAATGGTGTCTAGTGGAACATGTTTATTTAAGCCAGTAGATTCCTT
ATCTAGAAAGCAGGTGAGCTAGCCCTTAGAGAAGGCTGTCCCGGGGCCCGCAGAGGTGCCCTTACTGAGGTGACA
GCCTCACAGGGTCTGGTACCAGGGGTTGTGCCCTCAGCAGTGACAGCAGCTTAGGTGTCAGGCAGTTGCTGAGTG
GCTGGTCCATGTCTATAGAGTAACACACTGGACCGAGGAAAAGTCAGATTTCATTTTCTACCCTGGATGTACTTG
AAGAAAAAGAATTATTTTTGCATATGAAAGAGGCCAGAACCCACAGGAAAAACTTCAAAACTTGACATTTGCCAG
AATGTTTAAAATTTGTTCAGAAAAGGTTAAAGCAACAAGTTTAGCCTTTGTGCATGAAGACGCCTGGCCTGCTAG
ACGCGTTGCCCGTCCCTGCGTGGTGCTGTCCCATGTCACTTGAACTGATAGAGGGGCCTGTGCAATCTCCTAAGG
CCTGTGTTTCTGCCATATATTTTATTATAAATTACAATCCACTCATCCACCTGCCCTCCACCAGGAGTGGGCACC
CCATAAGGGTTTAGGCCACTTTGCAGAGGATGGAGGTCAAAAACCACTCCCAGATAAGTTTGGTTTTCAACATTT
AGTAACTTGTCTCAGGGCAGAGGGCAGGCAGGGGGACCGAGGGGCAGCAGATAGGAGAGCACTGAGCCCGGATAG
TTCTCAGCCTGGCAAGTGGCTCTGAAGCTGCCTTCAGACAAGGCTAGTCTAGGGGCAAGAGTGCGAGCTGGCTGA
CAATAAGAACGTGGCCACCTGCCCAGCTTCACACCTCCCCCGACTTCAGCCCTTCCTAAACCCAGACCTGCGGTC
CAGGCAGGCACTGGGCTGTGCCCACTCGAGCTCACTGCCCACACACAGCATGCCTTTGGGTGCCATCTCTTTGCC
CAAGCCTGGAAGCCTTGGCAGGTGGGAAATGCCGCTGCCCTGGTGGGC**ATG**GCACTGAGATGCATCCACTCAGCA
GGAGTGACAGAGGCAGAAGTTCCTTTAAAGCACATCTTCCACTTAGGAAAGGAAGGAAATCTTTGTACTGTCTTG
GAAGCCTCCACATCCGGCTATGGCCCTGCAAGCTGCTTTATCCCTGCGCTAGTCTCCCCCGAGGGTTTAGGCTGG
CCCAGCACATCCTGTCCTCCTGAGCTCGCGTGCAGCCACCCAGAGCGCAGGGGTCACTGCACGCTGCAGGGCTCT
TGCTGCCATGGTCTCAAGCCTGAAGAGGCTCCGCCCACAAGCTGGCCCATGAAGTTAGCAATGCCTGTGGCTTCA
GTCAATTGTCTTGAGACTGTGAAGAGGCTGAAAGACACCTTCCCGGGTGGAAGAAGGAGTTCACTGAAAACTTAT
CTTAAACTGACCCTTCCCTTTGAG**TGA**GTCTTCATTCCTCTCCCATGTGGGAACCCAGCCTCCGATGCCCCGGGG
ACTAGGGGAAACAGTTGGAGGTTCGTGCCGTCCCCAGCCTGCCACGGGTGCGAGGACAGCCAAGTCCTGAGTGAC
TCAAGATGCTTCACTTACATGGAAGAAACTTCTAAAACTCTACCGAGTGGTTTTTGTATATACTAAAGTTCTATT
TAGAGCTTTTCTGTTTTGGGCAAGTTCGCTGCTCCTTCTATTTGGGCACTTTGGTTTTTGTACTGTCTTTTGTGA
CGGCATTGATTGAACATTTTTTACTAGTAGTCTTATGACTTTTGTATTTTTTTTTTTTTTTGTAATTTATACCAA
CAACACTTTTATCACTTTTTTTTTGTTGGGCTTCTGCAAAATACAAGCTCATTTTTAAACCAAATGAACAGACCA
TGAGCTGGCTTCAGGGGAAGTGCTATTCACAGGACCATATCCACCACCCTCTTAAATTCCTAAACAATATCATCT
AGGACTTCTATTTAAGTTATTTAAAATAAATCTTCCTTGAGAGCCTTGGGAGGTGATGTCAGGGTTATAAATGGC
ACAGTGCATTTGCTGTAGGAATGTGGTTTGGCATTGTTTTATACACACAGTATTTTTTATACCTTAATGCTTATT
CTTGATGGCATCTGTCAGATATTAGAATTGAAAATAAGAATCTTCCCAAAATCCTTTAATTTACCTGATGCCCTC
ATCAGGTCGTTAAAAATTCAAATGGTTTTAATAGCTAAAAAACTACAAATTAAGCTCTAAAACAAACAAACTACA
GAAATGTAAACCTTCATTTGCCAAAGGTCCTTGGTGGCCTGTCCCCTGCCCTGGGAGCAGATGGCCCTGAAGCCC
TTCCCTCACTGTGCAGGCCACCGGGTGAGGCTGGACGGTCACCCATGGTGGCTTCACTGCAAGGAGCAGGACTGC
CGAGCTCAAGCACGGGGCCTTCAGCTTCCCCTGTCCTCTGGCCACACCGCCAGCCCTTGGTCCTTATCTGTGTGA
GGTTTACAAATAAAGCTTCTGATGTCAAATGTT

FIGURE 4367A

CTGTTTTCTCTTTATTTGCTTATATGTTAATATGGTTTTTAAATTGGTAACTTTTATATAGTATGGTAACAGTAT
GTTAATACACACATACATACGCACACATGCTTTGGGTCCTTCCATAATACTTTTATATTTGTAAATCAATGTTTT
GGAGCAATCCCAAGTTTAAGGGAAATATTTTTGTAAATGTAATGGTTTTGAAAATCTGAGCAATCCTTTTGCTTA
TACATTTTTAAAGCATTTGTGCTTTAAAATTGTTATGCTGGTGTTTGAAACATGATACTCCTGTGGTGCAGATGA
GAAGCTATAACAGTGAATATGTGGTTTCTCTTACGTCATCCACCTTGACATGATGGGTCAGAAACAAATGGAAAT
CCAGAGCAAGTCCTCCAGGGTTGCACCAGGTTTACCTAAAGCTTGTTGCCTTTTCTTGTGCTGTTTATGCGTGTA
GAGCACTCAAGAAAGTTCTGAAACTGCTTTGTATCTGCTTTGTACTGTTGGTGCCTTCTTGGTATTGTACCCCAA
AATTCTGCATAGATTATTTAGTATAATGGTAAGTTAAAAAATGTTAAAGGAAGATTTTATTAAGAATCTGAATGT
TTATTCATTATATTGTTACAATTTAACATTAACATTTATTTGTGGTATTTGTGATTTGGTTAATCTGTATAAAAA
TTGTAAGTAGAAAGGTTTATATTTCATCTTAATTCTTTTGATGTTGTAAACGTACTTTTTAAAAGATGGATTATT
TGAATGTTTATGGCACCTGACTTGTAAAAAAAAAAAACTACAAAAAAATCCTTAGAATCATTAAATTGTGTCCCT
GTATTACCAAAATAACACAGCACCGTGCATGTATAGTTTAATTGCAGTTTCATCTGTGAAAACGTGAAATTGTCT
AGTCCTTCGTTATGTTCCCCAGATGTCTTCCAGATTTGCTCTGCATGTGGTAACTTGTGTTAGGGCTGTGAGCTG
TTCCTCGAGTTGA**ATG**GGGATGTCAGTGCTCCTAGGGTTCTCCAGGTGGTTCTTCAGACCTTCACCTGTGGGGGG
GGGGGTAGGCGGTGCCCACGCCCATCTCCTCATCCTCCTGAACTTCTGCAACCCCACTGCTGGGCAGACATCCTG
GGCAACCCCTTTTTTCAGAGCAAGAAGTCATAAAGATAGGATTTCTTGGACATTTGGTTCTTATCAATATTGGGC
ATTATGTAATGACTTATTTACAAAACAAAGATACTGGAAAATGTTTTGGATGTGGTGTTATGGAAAGAGCACAGG
CCTTGGACCCATCCAGCTGGGTTCAGAACTACCCCCTGCTTATAACTGCGGCTGGCTGTGGGCCAGTCATTCTGC
GTCTCTGCTTTCTTCCTCTGCTTCAGACTGTCAGCTG**TAA**AGTGGAAGCAATATTACTTGCCTTGTATATGGTAA
AGATTATAAAAATACATTTCAACTGTTCAGCATAGTACTTCAAAGCAAGTACTCAGTAAATAGCAAGTCTTTTTA
AATGCTGCTTTATTTCACTAAATTTTGTTGTGAGGTGTCACTAAAATGCCTGCAAACAAACGTAACTGCTAATCT
GAGAGGAAACCCTCTTACTAATCAGAGAAGAAACCCTCCTGTCAGAAACCTTCAGGGAAGTGAGCTGATCACACC
TAAACTGGGAGTTTGCAATGGGGTATTTGAAGCACTGTGGGAGTATTCCACTGGCCCTCTCCCTGAGAGACTTAA
CAGTCTTCCCTGTTGTCCAGATTCTGTATAAGGCAATCAGAATAATCATCTTCCTTGTTCAGCAGAGGAGCCTGG
TCCCATTTTCCCCACTTTGTGATGGGCTTCTCTCAGCGGTAGCTCAGCAGTTCCAGATGGCAGTTTGGACCAGCA
TCTAGGCTGGCCAGTTCGCTGTGTTTACTTAGAACCAACACGTTCAGAGCTGGCCTGGACCATCTGAGGGGAACA
GGAAACACCCCTAGGCTGTGGAAGCAAGTGCAGACCCCCACCCCCGGCCCTGAAGCCAAGGGGGCAGGGTTTGGG
AGTGGCCAAAGAGAAGCAGTGCAGGGATGGGTTTTCCTAGGGACAGGCTTAGCATTCCTGACTCTAGGAAGAAGG
AGCAGTGAGGCGGAGAAACAGTGGAGGGGATGGTGGCATTGGGCCCCATGGGGCCGAGATGGACACAGGGCTCGT
TCTCTTGAGTCTGGTGCCAAGGACAGCTGAAGACGACATCATTTTCAGGTGGAGAGGAGAGAGTGGAGGGAGATC
ATGCCCTGTGATGTGTCTTTTGCAGGTGAAGGTGGGAGACAAGGTCTCTGCTGACGATGAGGCAGAGCCACCGTG
AAAGTTGTAATAGGAGGACTGCCCGCCGCTGGAAGGGCCTGCAGTGACGCTAGGACACCCTCTGCCTGCATGTCA
CGTTAGCTGGGCTGGGCGAAGTAGAAGACCAAGGGGAAGAGGTGCAGTGGGGAGACCAGGTGGGATGCAACCACA
GGACCAGTGGAGGGGCTGTGGCACGTGGGCGGAGACTGAGTGGCTGGGCATGTGTTGTGGCTGAGCATGTGGTGT
GGGCAGTGGTCCTAGACCCCGCCATGTCCGGACAATGATATAGAGCGTCTCAGCATCGCCAGTCTAGACTGTCTA
TGGAGAGCAGAAAGTTGTCTGGGGCTGCCTGGGGAACTGTGAGGCCAGCTATATCACCGTCGCTGATGGTGACAT
TACGGTGGTGGCAGGAGCAAGGAGAGAGGGAAGAAGGACCCCGTCCAGCTTTAGTCACAAAATACCCAATGGAAG
ATGCCAGTGCCAATCCTGTGGGTTTCCTTGGGACTTCACACTGGCTTTCTTATCTGCTCCAGATCCATTCAGTAG
TCACTGAGTTCCTGCCAAATACTTTGTAGCGCCAGAAGCCAGGAGCGGGGTCTGCAGCAGGGCAGTCCCCATTTT
CAGGAAATGCCTGGAGCTGCTGGTCCCTGAGAGAAAGGAAAACATCTTTCAGCCGTACGCAGGCCAAGAAGGCCA
ATGTCCAGTAGCTTTGTGATTTTTTTTATATTTTTTTATTTATTTATTTTTGAGATAGAGTCTTGCTCTGTCGCT
CAGGCTGGAGTGCAGTGGCGTGATCTCCACTCACTGCAACTTCCGCCTCCTGGGGTCAAGCAGTTCTGCCTCAGC
CTCCCGAGTAGCTGGGATTACAGGCACACGCCACCACACCCAGCTAATTTTTGTGTTTTTAGTAGAGACGGTTTC
ACCATGTCGGCCAGGCTGGTCTCAAACTCCTGACCTCAGATGATTCAGCCTCCCAAAGTGCTGGGATTACAGGTG
TGAGCCACTGCACCCAGCCTGTGATGTTTCTGTGGGGTTCCACAAATGTGTGTGTGTGTAAAAGCTGATGATTAC
AGCAAGAATGTGAACAGTAGCAGTTTTCCATTTGAAGGCAAGTTTTGTCTTTATCTGGGTATCAGAAGGACCCTC
TGGGCCATTGTCGCTTCCTGTACTCAGAGCCACCCTAGTACTACGGGCACACACAGAAAACAGCAGCCTGCGTAC
TTTCAAAGGAAAGGCATCTTTAATCACCAATGCCTGGAAAAATTATTTTGTTTCCCTCTTCCTTCCGTCTTGTTT

FIGURE 4367B

CCTAACTTCTTACCAAAGTTTAGAGTCTGAGTTTTTCGTATAATAATGTCCCACATCCACACATCGGGCCTACAG
ATGCTCTCCCTTGAATCGACTGGAAACATGACACCGGTTCCATGCTCTGGAACTGTCACCTGTGATGTGCTGGGC
TGTGTCCCAAGCACAGGAATCCCAGCAGTTTCAGCTCGATGCAGAACCACCATGCTCCAGACACAGGCTTGGGAA
AGACACGTCAAAATTAAAATACTAGGTAAGAGAAGCACCTGATTGGGTAGAAGTTGGAGAGGAATCCTGGAATTT
TGTGGCCAGAAGGAGCCACTGCCCCTTTTGTTTAGTAAGACTAGACAGTAACAGAAGCCAGTTGTCAGCTATGAA
AGTGGTGGGTGAAGCAGGGGAGGCTCCTCTATGGTGGGACCCTGGACAAGGGAAGCCGAATGTGTGAAGAAGGGG
TGCGGGGGTGTGCGGTGCCCTAGGACACTAGGGCAAAGGTTTCAAACCTGGAACAAGGCACTGGAGGAAGATCTG
CTGCCAGTCAGCAGTGCGGGCCCTCGAGTTAGCAGTCCGTGCGCAGAGGGGCCAGTTCTGAGACCAGTTTGGAGA
GTCAGGCAGTGACCCATTGGCCATGTCATAATTCCTTCAGCCTGCCTCCTCTTTAATCCCAGAGAGTGCTCTTTC
TTCATACTTCCTTTAAAATACTAAATTGTTCCCATTCCATGGGGAGCTGGCTAGGCTTTACAGGCTAGGAAATGT
AGGTTTTCTGAGATGGAACCATCTACACAAGGAGGAGGAAGGCACTAAGACTACAGATGAGACCCATGACAGGGC
TGAGCATTTGGAAGCCAACCCTGGTTGCTTTTCAAGAATTGCTTTGTGGCTGGGTGCAGTGGTTCACACCTGTAA
TTGCAGCACTTTGGGAGGCTGAGGCAGGTGGATTGCTTGAACCCAGGAGTTCGAGACCAGCCTGGGCAACATATG
GGACACCCCACCGCCCCCGGCTCTGCAAAAAAATTAAAAATTAGCCAGGCGTGGTGTCATGAGCCTGTGGTCTCA
ACTACTCAGGAGGCTGAGGCTGGAGGATCGCTTGAACCTGGGAGGTCAAGGCTCCAGTGAACCATAATTGTGCCA
CTGCACTGCAGCCTGGGCGACAATTTGTTTTCTAAATTGCTTTTGAAAGTCTACTGCATTACATATTCCAAAAAG
CAGTGGTTTTCAAATACTTTTATCACCGATATCCTTTTATGAAATGAAATCAGTAGAACTTTCTCTGCTCTGAAT
AAGCAAGGGTGGGAACCTGTCTACCTCCCACAGATAGCATAATGTGCCTGCCATAGAGGAGCCAAAAAATGGTGA
TGGGAACTGAGAGGAGAGCAAATGTCACAAAAGACTGAGCAATTGAGAAAACAAAACAAGACCACAGATGACTGT
TAACGCCTCCACAGTGGACCAAGAAAGGACAGAGAGCTGGCAGCATGGGCATCACTGTCTGGTCGGCAGCAGGAA
GGCCTCGCTAGGGAATTGAGTACAGTCATCTAACTAGTTTAAAAGTACAGGAAGGATGATTAAGGCTATTGGAGA
GGTCATACAAATAGGGGAGGGGCAGGCAATGGCTGATAAGACATGAATTTGTAAGGCGATGAGTATTGCAGTCAG
CAAAACAAACGAGACTGCTCTCCCAACACATAACTCAGCAGGGAGGCCAGGCATTGGTTTAACCATTTAATATAA
AGAAGTTAAAATTACAAATGCGCTAAGTGCCTAAAGAAGAATAAGTGCAGGAATGAGAGCAGCATGGACTGCCAC
AGTTTTAGAATAAGCACTGTCACTGCTAGATTGGAAACAAAAATCCATAAATTTGGCCCGGTGTGGTGGCGGACG
CCTGTAGTCCCAGCTACTTGGAGGCTGAGGCGTGAGAATCGCTTGAACCCGGGAGGCGGAGGTTGCAGTGAGCCG
AGATGGCGCCACTGCACTCCAGCCTGGGCGTCAGAGTGAGAACTCTGTATCAAAAAATAAAAATAAAAAAAAGTC
CATAAATCTGCAATGTCTCAGTTAAGAAAGAAAGACTGGGCCAATGCAGATTTCAAACCGGAGAAAGTCATACTG
TCAGTGAAGGCCGCCTGTGGCCGGAAGGCGCCAGGGGATTAGCACCCTGGACTCAGTGTTGCTGGGAAACAGGGC
CCCAAGGCTGGGAGCACAGTGTTTAAAGGGCATCTACCCAAGAAGGGAGCACAGGGCAAGGAGGAGCTGCAGGGG
GGCTTGGCTGCCAAAGTGAATTCTGAGGAGAGAGCTATTGCTGCCTACGATATGCAGGCTGCACAGAACACAAGT
GGAATCAGCAGGCAGGAGAGGCAGCTAACGACGCAGCCCGTTTCTTATTTCTGTTTTCTCACAAGCGATGAAAGT
GGAAAAGAGGGTGAGCAGGTGGCCCACACATGTGCCTCCAGTGCTGCGGCCCCTCCGGGGACCATCAGCCAGGCC
CCGGGGAGGGAGCCAGCCACAGTGTGTCCGGCTCTTCTCTGAAGGGAAGAGAGCCTTGAATAGACTGAAGCGAAG
ACGGTTCTGCAAGGACAAGGCAGACCGAAGGCATTGGTTTTTTTTTTCAGATAAGGAGAATTAGACTCCCAAGTA
GACACCAGAGTCACTGTTTGGTTGGTGGGTGATAGTGGGGTCACAGTGGCTGCCTGTGCTCCCCCAGGGTGAGCG
TGACTGTGCTAACCTGGGTGGGGCAGCATGCACACCCCTCTGGCAGCCCTTTGTTGCTCGCTGATGACAAGTTTG
GATGATCCCGCCAAACAGCTTGCTAAGATGTAGTCCCCAGTGTTGGAGGTGGGGCCTGATGGGAGGTGCTACCCT
TGTGAGATAAGGTTGTGTAAAAGCCTGTGGCACCTCCCCACACTGACGCTCTCACCCCTGCTCTGGCCATGTGCC
GCGCCTGCTCCCACTTCCCCTTCTGCCAGGAGTAAAAGCCCCCGAGACCTCCCAGAAGCCAAGCAGATGCTAGTG
CCATGCTTCCTCTGCAGCCTGCAGAACTGTGAGCCAATTAAACCTCTTTTCTCTAT

FIGURE 4368

GGCAGATGATTCTGGACCAGATGAAGCCTGAGGAGCCTTCCAGCTCTAAGATAGCAGGATAGGAGACTTCTAAGA
TTGGAGCTGCAGAAGACTTGCCAGCCCACCAGCACAATGTCAGGAAGCCATACACCTGCCTGTGGCCCTTTCTCA
GCCCTGACTCCGAGCATATGGCCCCAGGAGATCTTGGCCAAGTACACGCAGAAGGAAGAGTCAGCAGAGCAACCA
GAGTTCTACTACGATGAGTTTGGTTTCCGTGTGTACAAGGAAGAAGGTGATGAGCCTGGCTCCAGTCTGCTGGCG
AACTCCCCTCTGATGGAGGATGCTCCACAGAGGCTGCGGTGGCAGGCCCACCTGGAGTTCACCCATAACCACGAT
GTGGGGGATCTCACCTGGGACAAGATTGCCGTCTCCCTACCCCGCTCTGAGAAGCTCCGCTCCCTGGTGCTGGCC
GGCATCCCACATGGCATGAGGCCACAGCTGTGGATGCGGCTCTCTGGGGCCCTGCAGAAGAAGAGGAACTCTGAG
CTGTCCTACCGCGAGATTGTGAAGAACAGCTCCAACGATGAGACCATCGCTGCCAAGCAGATCGAGAAGGACCTG
CTCCGCACCATGCCCAGCAACGCCTGCTTCGCCAGCATGGGTAGCATCGGGGTGCCCCGCCTGCGCAGGGTGCTC
CGGGCCCTGGCCTGGCTCTACCCAGAGATCGGCTACTGCCAGGGCACCGGCATGGTGGCCGCCTGCCTCCTGCTG
TTCCTGGAGGAGGAGGACGCCTTCTGGATGATGTCTGCCATCATCGAGGACCTGCTCCCCGCCTCCTACTTCAGC
ACCACCCTGCTGGGTGTCCAGACTGACCAGCGGGTCCTGCGCCACCTCATTGTCCAGTACCTGCCTCGCCTGGAC
AAGCTGCTCCAGGAGCATGACATTGAGCTGTCCCTGATCACACTGCACTGGTTCCTCACGGCCTTCGCCAGCGTG
GTGGACATCAAGCTGCTCCTGCGCATCTGGGACCTGTTTTTCTACGAGGGCTCCCGGGTGCTGTTCCAGCTCACG
CTGGGCATGCTGCACCTCAAGGAGGAAGAGCTGATCCAGTCAGAGAACTCGGCCTCCATCTTCAACACGCTATCG
GATATCCCGTCGCAGATGGAGGACGCGGAGCTGCTTCTGGGGGTGGCCATGCGGCTGGCCGGCTCCCTCACCGAT
GTGGCCGTGGAGACTCAGCGCCGCAAGCACCTGGCCTATCTCATTGCAGACCAGGGCCAGCTCCTGGGGGCCGGC
ACCCTCACCAACCTCTCTCAGGTTGTTCGCCGCAGGACCCAGCGGAGGAAGTCCACCATCACTGCTCTGCTCTTC
GGGGAGGATGACCTGGAGGCACTCAAGGCCAAGAACATCAAGCAGACGGAACTGGTGGCTGACCTCCGGGAAGCC
ATCCTGCGCGTGGCACGCCACTTCCAGTGCACAGACCCCAAAAACTGCAGCGTGGTGAGTCGCCAGCTCCCTGGG
CTGCTACCAAACACGGCCCTAACTCCTCCAACCCCCTTGGTGGGCCTGTGTTCACTGTGGCAGGAGCTGACTCCA
GACTATAGCATGGAGAGCCACCAGCGGGACCACGAGAACTACGTGGCGTGCTCACGCAGCCACCGGCGCCGAGCC
AAGGCCCTGCTGGACTTTGAGCGGCACGACGACGACGAGCTGGGCTTCCGCAAGAACGACATCATCACAATCGTG
TCTCAGAAGGACGAGCACTGCTGGGTGGGGGAGCTCAACGGCCTGCGAGGCTGGTTTCCAGCCAAGTTCGTGGAA
GTCCTGGATGAGCGCAGCAAAGAGTACTCCATCGCGGGGGATGACTCGGTGACGGAGGGGGTCACAGACCTCGTG
CGAGGGACCCTCTGCCCGGCCCTTAAGGCCCTGTTCGAACATGGACTGAAGAAGCCATCCCTGCTTGGGGGCGCC
TGCCACCCCTGGCTGTTTATCGAGGAGGCTGCAGGCCGGGAGGTCGAGAGAGACTTTGCCTCCGTGTATTCCCGT
CTGGTGCTCTGTAAGACCTTCAGGTTGGATGAAGATGGCAAAGTCCTGACCCCGGAGGAGCTGCTCTACCGGGCT
GTGCAGTCTGTGAACGTGACCCACGATGCAGTGCATGCACAAATGGATGTGAAGCTCCGCTCACTGATCTGCGTG
GGGCTCAAGTGACAGGTGCTGCACCTGTGGCTGGAGGTGCTCTGCTCCAGCCTGCCCACCGTGGAGAAGTGGTAC
CAGCCCTGGTCCTTCCTGCGCAGCCCGGGCTGGGTCCAGATCAAGTGTGAGCTCCGAGTCCTCTGCTGCTTTGCC
TTCAGCCTCTCCCAGGACTGGGAGCTCCCTGCGAAGAGAGAGGCGCAGCAGCCCCTGAAGGAGGGCGTCCGGGAC
ATGCTGGTGAAGCACCACCTCTTCAGCTGGGATGTGGACGGGTGACCCCCTCCTCCCCAGCCCAACCTCGGGCCT
GCGTCTGAGGTGGCCCAGGACCCCAAGCTGCAGAGCCCAGGGAAGAGCAGCTCCAGAGCCCTGGCCGGGGCCGCG
GGATATCAATATCAGGCTGCCCCACTCCACGTTCCCCAGCACATCCCAGGTGGTGGGAGCAGAGGGTACCCTGCC
CCACCAGGGTCCTTAGGGATGCTCTAGGCCAAACCACAGTTTGTACCAAAAACCTTGTGAGGAGGTGGGGGAGCC
ATGTCTGTGCTCAGGAAGAGGGAAGGGGATGGGGGTGGCTAGTAGGCTCCTGGCCTCTTTGGTTTATAAATAAAC
TGTGTCTGTCTTTGAGAAAGCA

FIGURE 4369A

ACTTCTGCAATTACAGACAGTTGCACTTCAAGGGGACCCTTCTTTCACACTACATCCTTCTGTTTTTAGACTTTT
TTTGCGTTTGAAAATGTGTTTTTTGAGGTGGAATACCCAACTGACCCCTCATCTCTCCTCTCTCTCTGCTGCCCT
GCAGTGCTACAGTTGAAACTCCAGCAGCGCCGGACCCGGGAAGAACTGGTGAGCCAAGGGATCATGCCGCCTTTG
AAAAGTCCAGCCGCATTTCATGAGCAGAGAAGGAGCTTGGAGCGGGCCAGGACAGAGGACTATCTCAAACGGAAG
ATTCGTTCCCGGCCGGAGAGATCGGAGCTGGTCAGGATGCACATTTTGGAAGAGACCTCGGCTGAGCCATCCCTC
CAGGCCAAGCAGCTGAAGCTGAAGAGAGCCAGACTAGCCGATGACCTCAATGAGAAGATTGCACAGAGGCCTGGC
CCCATGGAGCTGGTGGAGAAGAACATCCTTCCTGTTGAGTCCAGCCTGAAGGAAGCCATCATTGTGGGCCAGGTG
AACTATCCCAAAGTAGCAGACAGCTCTTCCTTCGATGAGGACAGCAGCGATGCCTTATCCCCCGAGCAGCCTGCC
AGCCATGAGTCCCAGGGTTCTGTGCCGTCACCCCTGGAGGCCCGAGTCAGCGAACCACTGCTCAGTGCCACCTCT
GCATCCCCCACCCAGGTTGTGTCTCAACTTCCGATGGGCCGGGATTCCAGAGAAATGCTTTTCCTGGCAGAGCAG
CCTCCTCTGCCTCCCCCACCTCTGCTGCCTCCCAGCCTCACCAATGGAACCACTATCCCCACTGCCAAGTCCACC
CCCACACTCATTAAGCAAAGCCAACCCAAGTCTGCCAGTGAGAAGTCACAGCGCAGCAAGAAGGCCAAGGAGCTG
AAGCCAAAGGTGAAGAAGCTCAAGTACCACCAGTACATCCCCCCGGACCAGAAGCAGGACAGGGGGGCACCCCCC
ATGGACTCATCCTACGCCAAGATCCTGCAGCAGCAGCAGCTCTTCCTCCAGCTGCAGATCCTCAACCAGCAGCAG
CAGCAGCACCACAACTACCAGGCCATCCTGCCTGCCCCGCCAAAGTCAGCAGGCGAGGCCCTGGGAAGCAGCGGG
ACCCCCCCAGTACGCAGCCTCTCCACTACCAATAGCAGCTCCAGCTCGGGCGCCCCTGGGCCCTGTGGGCTGGCA
CGTCAGAACAGCACCTCACTGACTGGCAAGCCGGGAGCCCTGCCGGCCAACCTGGACGACATGAAGGTGGCAGAG
CTGAAGCAGGAGCTGAAGTTGCGATCACTGCCTGTCTCGGGCACCAAAACTGAGCTGATTGAGCGCCTTCGAGCC
TATCAAGACCAAATCAGCCCTGTGCCAGGAGCCCCCAAGGCCCCTGCCGCCACCTCTATCCTGCACAAGGCTGGC
GAGGTGGTGGTAGCCTTCCCAGCGGCCCGGCTGAGCACGGGGCCAGCCCTGGTGGCAGCAGGCCTGGCTCCAGCT
GAGGTGGTGGTGGCCACGGTGGCCAGCAGTGGGGTGGTGAAGTTTGGCAGCACGGGCTCCACGCCCCCCGTGTCT
CCCACCCCCTCGGAGCGCTCACTGCTCAGCACGGGCGATGAAAACTCCACCCCCGGGGACACCTTTGGTGAGATG
GTGACATCACCTCTGACGCAGCTGACCCTGCAGGCCTCGCCACTGCAGATCCTCGTGAAGGAGGAGGGCCCCCGG
GCCGGGTCCTGTTGCCTGAGCCCTGGGGGGCGGGCGGAGCTAGAGGGGCGCGACAAGGACCAGATGCTGCAGGAG
AAAGACAAGCAGATCGAGGCGCTGACGCGCATGCTCCGGCAGAAGCAGCAGCTGGTGGAGCGGCTCAAGCTGCAG
CTGGAGCAGGAGAAGCGAGCCCAGCAGCCCGCCCCCGCCCCCGCCCCCCTCGGCACCCCCGTGAAGCAGGAGAAC
AGCTTCTCCAGCTGCCAGCTGAGCCAGCAGCCCCTGGGCCCCGCTCACCCATTCAACCCCAGCCTGGCGGCCCCA
GCCACCAACCACATAGACCCTTGTGCTGTGGCCCCGGGGCCCCCGTCCGTGGTGGTGAAGCAGGAAGCCTTGCAG
CCTGAGCCCGAGCCGGTCCCCGCCCCCCAGTTGCTTCTGGGGCCTCAGGGCCCCAGCCTCATCAAGGGGGTTGCA
CCTCCCACCCTCATCACCGACTCCACAGGGACCCACCTTGTCCTCACCGTGACCAATAAGAATGCAGACAGCCCT
GGCCTGTCCAGTGGGAGCCCCCAGCAGCCCTCGTCCCAGCCTGGCTCTCCAGCGCCTGCCCCCTCTGCCCAGATG
GACCTGGAGCACCCACTGCAGCCCCTCTTTGGGACCCCCACTTCTCTGCTGAAGAAGGAACCACCTGGCTATGAG
GAAGCCATGAGCCAGCAGCCCAAACAGCAGGAAAATGGTTCCTCAAGCCAGCAGATGGACGACCTGTTTGACATT
CTCATTCAGAGCGGAGAAATTTCAGCAGATTTCAAGGAGCCGCCATCCCTGCCAGGGAAGGAGAAGCCATCCCCG
AAGACAGTCTGTGGGTCCCCCCTGGCAGCACAGCCATCACCTTCTGCTGAGCTCCCCCAGGCTGCCCCACCTCCT
CCAGGCTCACCCTCCCTCCCTGGACGCCTGGAGGACTTCCTGGAGAGCAGCACGGGGCTGCCCCTGCTGACCAGT
GGGCATGACGGGCCAGAGCCCCTTTCCCTCATTGACGACCTCCATAGCCAGATGCTGAGCAGCACTGCCATCCTG
GACCACCCCCCGTCACCCATGGACACCTCGGAATTGCACTTTGTTCCTGAGCCCAGCAGCACCATGGGCCTGGAC
CTGGCTGATGGCCACCTGGACAGCATGGACTGGCTGGAGCTGTCGTCAGGTGGTCCCGTGCTGAGCCTAGCCCCC
CTCAGCACCACAGCCCCCAGCCTCTTCTCCACAGACTTCCTCGATGGCCATGATTTGCAGCTGCACTGGGATTCC
TGCTTGTAGCTCTCTGGCTCAAGACGGGGTGGGGAAGGGGCTGGGAGCCAGGGTACTCCAATGCGTGGCTCTCCT
GCGTGATTCGGCCTCTCCACATGGTTGTGAGTCTTGACAATCACAGCCCCTGCTTTTTCCCTTCCCTGGGAGGCT
AGAACAGAGAAGCCCTTACTCCTGGTTCAGTGCCACGCAGGGCAGAGGAGAGCAGCTGTCAAGAAGCAGCCCTGG
CTCTCACGCTGGGGTTTTGGACACACGGTCAGGGTCAGGGCCATTTCAGCTTGACCTCCTTTTTTGAGGTCAGGG
GGCACTGTCTGTCTGGCTACAATTTGGCTAAGGTAGGTGAAGCCTGGCCAGGCGGGAGGCTTCTCTTCTGACCCA
GGGCTGAGACAGGTTAAGGGGTGAATCTCCTTCCTTTCTCTCCCTGCTTTGCTGTGAAGGGAGAAATTAGCCTGG
GCCTCTACCCCCTATTCCCTGTGTCTGCCAACCCCAGGATCCCAGGGCTCCCTGCCATTTTAGTGTCTTGGTGTA
GTGTAACCATTTAGTGGTTGGTGGCAACAATTTTATGTACAGGTGTATATACCTCTATATTATATATCGACATAC

FIGURE 4369B

ATATATATTTTTGGGGGGGGGCGGACAGGAGATGGGTGCAACTCCCTCCCATCCTACTCTCACAGAAGGGCCTGG
ATGCAAGGTTACCCTTGAGCTGTGTGCCACAGTCTGGTGCCCAGTCTGGCATGCAGCTACCCAGGCCCACCCATC
ACGTGTGATTGACATGTAGGTACCCTGCCACGGCCTATGCCCCACCTGCCCTGCTTCCTGGCTCCTTATCAGTGC
CATGAGGGCAGAGGTGCTACCTGGCCTTCCTGCCAGGAGCTCTCCACCCACTCACATTCCGTCCCCGCCGCCTCA
CTGCAGCCAGCGTGGCCCTAGGACAGGAGGAGCTTCGGGCCCAGCTTCACCCTGCGGTGGGGCTGAGGGGTGGCC
ATCTCCTGCCCTGGGGCCACTGGCTTCACATTCTGGGCTGACTCATAGGGGAGTAGGGGTGGAGTCACCAAAACC
AGTGCTGGGACAAAGATGGGGAAGGTGTGTGAACTTTTTAAAATAAACACAAAAACACAG

FIGURE 4370

GCGGGTTTGAGAGGGCGGGGATTGCGACTCTCACACCCTGAGCTCCGGTGCTCCTTTCCTAACTCCACTGGCTGC
GGCATCTGTGGGAAAAGTGTGGCTGGGTCTTCGAGGAGCCGCACCA**ATG**GCTTCCGTGCTGTCCTACGAAAGCCT
GGTCCACGCCGTGGCCGGAGCCGTGGGAAGCGTGACAGCAATGACAGTGTTTTTTCCCCTGGATACAGCTAGACT
TCGACTTCAGGTTGATGAGAAAAGAAAATCCAAAACTACACACATGGTGCTCCTGGAGATCATTAAAGAAGAAGG
ACTCCTGGCACCATATCGAGGGTGGTTTCCAGTGATTTCCAGTCTCTGCTGCTCCAATTTTGTCTATTTCTACAC
TTTTAATAGCCTCAAAGCACTCTGGGTCAAAGGTCAACATTCTACCACTGGAAAAGATCTGGTAGTTGGGTTTGT
TGCAGGAGTGGTTAATGTGTTGCTAACAACTCCACTCTGGGTGGTAAACACCAGACTGAAGCTTCAAGGAGCAAA
ATTTAGGAATGAAGACATTGTACCAACAAACTACAAAGGTATCATTGATGCTTTTCATCAGATCATTCGCGATGA
AGGAATCTCGGCTTTATGGAATGGCACATTTCCCTCATTGCTGTTGGTCTTCAATCCTGCCATCCAGTTCATGTT
TTATGAAGGTTTAAAACGGCAGCTTTTAAAGAAACGGATGAAGCTTTCTTCCTTGGATGTGTTCATCATTGGTGC
AGTAGCCAAAGCGATTGCCACCACGGTGACCTATCCCCTGCAGACGGTACAGTCAATTCTGAGGTTTGGGCGTCA
TAGACTAAACCCAGAAAACAGAACATTGGGAAGTCTTCGGAATATTCTCTATCTTCTTCACCAACGAGTAAGACG
TTTTGGAATAATGGGACTCTACAAAGGCCTTGAAGCCAAACTGCTGCAGACAGTCCTCACTGCTGCTCTCATGTT
CCTTGTTTATGAGAAACTGACAGCTGCCACCTTCACAGTTATGGGGCTGAAGCGTGCACACCAACAC**TGA**GACGC
CTTCCCATGAAAAATTCCGAAGATGCTCAAGAGGGAGGTTTCCTCCTGAGTGAAGAGAAGTGATTCTCCCTTGAC
TCTGGCTCCTGCCACCACAAATGTTACCCTCATTGGCTTGAAAAGCATCCAAGGGTGCACAGGGAGTATGGCCAA
CTGGACCTGTTGTCACCTTAATTGTCATGCTGGCTGGTTGGATTTTGGGGTGGCAGTTGGACTAATGTGAAAAAA
ACATTGCTGAAAACCTAAAAATGAAAGTTTGTGAGTGTTTATTGGTTTTCTTAAGAGAAATGGACTATTTTGCTC
TCATGTGTAATGTTTTCTATTTAAATCTTTCTTAAATATACCAGCTGTTCTCTTTCCCTGAACTCTCCCCCAGGT
TCTAGGACAAATTTAATAACATGTAATTCTCCTCAAATACTTTTGTATGTCTCAGTGTTGGTGTTTTCCTCCCTA
AAACTAACATTAGGGCTGTGCCACGGGCATGACTTTATTTTTGTTGGGCTTTTTTTTCCCTGCTTAAGGAGAGGT
GTCTTTTTTGGATATGAGCTATTTATTTTGTGAAATGAAAATTGTTCACCCAAATGATTCTCTTATAAACTATTT
GTAAATGTCACTTATTCATTAGTGTTTGACATAATTTTTAGAATATTTATTTTGAATCAATCCTTTCATTACGAA
AGACTTGAAGTTTTGTGTCCATTCTTACAAGCCCTGGTCAGTCAAGTCCCAATAAATGGTCAGCAC

FIGURE 4371

GGGTGGGAGGAGCCAGCGGCCGGGGAGGTTCTAGTCTGTTCTGTCTTGCGGCAGCCGCCCCCTTCTGCGCGGTCA
CGCCGAGCCAGCGCCTGGGCCTGGAACCGGGCCGTAGCCCCCCCAGTTTCGCCCACCACCTCCCTACC**ATG**GACC
CCCGCAAAGTGAACGAGCTTCGGGCCTTTGTGAAAATGTGTAAGCAGGATCCGAGCGTTCTGCACACCGAGGAAA
TGCGCTTCCTGAGGGAGTGGGTGGAGAGCATGGGTGGTAAAGTACCACCTGCTACTCAGAAAGCTAAATCAGAAG
AAAATACCAAGGAAGAAAAACCTGATAGTAAGAAGGTGGAGGAAGACTTAAAGGCAGACGAACCATCAAGTGAGG
AAAGTGATCTAGAAATTGATAAAGAAGGTGTGATTGAACCAGACACTGATGCTCCTCAAGAAATGGGAGATGAAA
ATGCGGAGATAACGGAGGAGATGATGGATCAGGCAAATGATAAAAAAGTGGCTGCTATTGAAGCCCTAAATGATG
GTGAACTCCAGAAAGCCATTGACTTATTCACAGATGCCATCAAGCTGAATCCTCGCTTGGCCATTTTGTATGCCA
AGAGGGCCAGTGTCTTCGTCAAATTACAGAAGCCAAATGCTGCCATCCGAGACTGTGACAGAGCCATTGAAATAA
ATCCTGATTCAGCTCAGCCTTACAAGTGGCGGGGGAAAGCACACAGACTTCTAGGCCACTGGGAAGAAGCAGCCC
ATGATCTTGCCCTTGCCTGTAAATTGGATTATGATGAAGATGCTAGTGCAATGCTGAAAGAAGTTCAACCTAGGG
CACAGAAAATTGCAGAACATCGGAGAAAGTATGAGCGAAAACGTGAAGAGCGAGAGATCAAAGAAAGAATAGAAC
GAGTTAAGAAGGCTCGAGAAGAGCATGAGAGAGCCCAGAGGGAGGAAGAAGCCAGACGACAGTCAGGAGCTCAGT
ATGGCTCTTTTCCAGGTGGCTTTCCTGGGGGAATGCCTGGTAATTTTCCCGGAGGAATGCCTGGAATGGGAGGGG
GCATGCCTGGAATGGCTGGAATGCCTGGACTCAATGAAATTCTTAGTGATCCAGAGGTTCTTGCAGCCATGCAGG
ATCCAGAAGTTATGGTGGCTTTCCAGGATGTGGCTCAGAACCCAGCAAATATGTCAAAATACCAGAGCAACCCAA
AGGTTATGAATCTCATCAGTAAATTGTCAGCCAAATTTGGAGGTCAAGCG**TAA**TGTCCTTCTGATAAATAAAGCC
CTTGCTGAAGGAAAAGCAACCTAGATCACCTTATGGATGTCGCAATAATACAAACCAGTGTACCTCTGACCTTCT
CATCAAGAGAGCTGGGGTGCTTTGAAGATAATCCCTACCCCTCTCCCCCAAATGCAGCTGAAGCATTTTACAGTG
GTTTGCCATTAGGGTATTCATTCAGATAATGTTTTCCTACTAGGAATTACAAACTTTAAACACTTTTTAAATCTT
CAAAATATTTAAAACAAATTTAAAGGGCCTGTTAATTCTTATATTTTTCTTTACTAATCATTTTGGATTTTTTTC
TTTGAATTATTGGCAGGGAATATACTTATGTATGGAAGATTACTGCTCTGAGTGAAATAAAAGTTATTAGTGCGA
GGCAAACATAACTCATTTGAGGATAAAGTTTGTGTTGGATATGTGGTTCCTGATGCATTTTGACTTGTCTTTTTA
AATGCTTTATCTTTTTCTTTAAAGATTTATTTCAATAAAACTAATTGGGACCACCCGTATTTCAGTAGGACCTGG
GTAGGGATTGGAAGTACTTGGCAGGGCAGCAGCAATCTTGCTGTGTTTGATATAACATGCATCCTTGGGCAGGTT
GCCCTTAAATCTTACACTGTGGTGAAGGGATGTTTTTTTTGTAATGCTGCAGTAGAGTTGGAGTACTTAGTTCTC
TTGTTGTCCAGTATATCTAATAAGTGTTTTTCATATTATTTCCACGTAAGGGAAATAAGGTAGTACTTTTCTTTT
TATATTTCTATGCTTAAAATTCTCTTTCCTAGTCAAAAATTGCCCAAATCTGTGTTTGCTTTCTGCTTGCTACAT
TTGTCTCCCTTACTTTTCTTGAGCTAAAGACAGGCTTTTTCCACCGGCATCATCACTGCTATCATCATTAACAGC
GTAATTATACAAGCATATTTAATGCTGAGTTTAATTTAATATGTAATACATATGGTAATTGTAGGGTAATACCCA
CAACAACTGTAGTTTCTTACTTGGCCAAGAGAATGCTTATTTAAGTGTTAGACTTCCATTCTGGCAAAATCTTGC
CTTATCAGAAGACATTGGAAAGAGGGATTCCCTTTGGTGTTTGGTCTTCTACTTAGAAAAACCTATTGCAGTTAG
TTTATCTTGTAGTATTCATCTTTGTATTCTGAAGATAAGGTTTGAATTAAATTGATACACACAGAGGGGAACCGA
TTTTTTTTATCCAATGTGAATTATAAATGAGATAATCCACAGTTATTCATTGTGGAGTTGTTGAGACTATGAAAG
ACTCATTGTCTTTGTATTCAGCTCTTAAATAGTGTAACTATATCCCCACCTCTGCTTGCTTTCTTTCCCTCCCCT
CCAATGATAAAGAAAATGATAAATTTTCTGTTGTGCATTCAATTCTTATTTTAAATAAGACTAAGTATAGGCATT
GTACCTGACATTGCTACGTTTCTACCAGTGTTTCAATTTAAAGTGCTAGTGTTTAAAAACATTTTCAAGGGATAA
GGCCTTCTGTACTTTGCTTATTTGAAGAATCAGTGGTAGGAGCAGTGAAGTAAATTCTATGGAGTACATTTCTAA
AATACCACATTTCTGAAATCATAAATAAGTTTATTCAGGTTCTAACCCTTTGCTGTACACAAGCAGACAGAAATG
CATCTGTTACATAAATGAGAAAAAGCTATTATGCTGATGGAGCATGCTTTTTAAATCCTTTAAAAACACTCACCA
TATAAACTTGCATTTGAGCTTGTGTGTTCTTTTGTTAATGTGTAGAGTTCTCCTTTCTCGAAATTGCCAGTGTGT
ACTTGGCTTAACTCAAGAACAGTTTCTTCTGGATTCCTTATTTGATTTATTTAACCTAATTATATTCTAATATTG
CAAATATTACCATAAGTGGGTAAAAGTAAAATTCCTCTTCTG

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FIGURE 4372

GGTTTCCTGGCGACGCGGCCCTGCAGGCGGTTGCGTTCCCCGTCGTTACCCTCTTTCTCTTCCCGACGCGTGAGT
TAGGCCGTAATGCCTTGGCTGCTCTCAGCCCCCAAGCTGGTTCCCGCTGTAGCAAACGTCCGCGGCCTCTCAGGA
TGTATGTTGTGTTCACAGCGAAGGTACTCCCTTCAGCCTGTCCCAGAAAGGAGGATTCCAAACCGATACTTAGGC
CAGCCCAGCCCCTTTACACACCCACACCTCCTCAGACCAGGGGAGGTAACTCCAGGACTATCTCAGGTGGAATAT
GCACTTCGCAGACACAAACTAATGTCTCTGATCCAGAAGGAAGCTCAAGGGCAGAGTGGGACAGACCAGACAGTG
GTTGTGCTCTCCAACCCTACATACTACATGAGCAACGATATTCCCTATACTTTCCACCAAGACAACAATTTCCTG
TACCTATGTGGATTCCAAGAGCCTGATAGCATTCTTGTCCTTCAGAGCCTCCCTGGCAAACAATTACCATCACAC
AAAGCCATACTTTTTGTGCCTCGGCGAGATCCCAGTCGAGAACTTTGGGATGGTCCGCGATCTGGCACTGATGGA
GCAATAGCTCTAACTGGAGTAGACGAAGCCTATACGCTAGAAGAATTTCAACATCTTCTACCAAAAATGAAAGCT
GAGACGAACATGGTTTGGTATGACTGGATGAGGCCCTCACATGCACAGCTTCACTCTGACTATATGCAGCCCCTG
ACTGAGGCCAAAGCCAAGAGCAAGAACAAGGTTCGGGGTGTTCAGCAGCTGATACAGCGCCTCCGGCTGATCAAG
TCTCCTGCAGAAATTGAACGAATGCAGATTGCTGGGAAGCTGACATCACAGGCTTTCATAGAAACCATGTTCACC
AGTAAAGCCCCTGTGGAAGAAGCCTTTCTTTATGCTAAGTTTGAATTTGAATGCCGGGCTCGTGGCGCAGACATT
TTAGCCTATCCACCTGTGGTGGCTGGTGGTAATCGGTCAAACACTTTGCACTATGTGAAAAATAATCAACTCATC
AAGGATGGGGAAATGGTGCTTCTGGATGGAGGTTGTGAGTCTTCCTGCTATGTGAGTGACATCACACGTACGTGG
CCAGTCAATGGCAGGTTCACCGCACCTCAGGCAGAACTCTATGAAGCCGTTCTAGAGATCCAAAGAGATTGTTTG
GCCCTCTGCTTCCCTGGGACAAGCTTGGAGAACATCTACAGCATGATGCTGACCCTGATAGGACAGAAGCTTAAA
GACTTGGGGATCATGAAGAACATTAAGGAAAATAATGCCTTCAAGGCTGCTCGAAAATACTGTCCTCATCATGTT
GGCCACTACCTCGGGATGGATGTCCATGACACTCCAGACATGCCCCGTTCCCTCCCTCTGCAGCCTGGGATGGTA
ATCACAATTGAGCCCGGCATTTATATTCCAGAGGATGACAAAGATGCCCCAGAGAAGTTTCGGGGTCTTGGTGTA
CGAATTGAGGATGATGTAGTGGTGACTCAGGACTCACCTCTCATCCTTTCTGCAGACTGTCCCAAAGAGATGAAT
GACATTGAACAGATATGCAGCCAGGCTTCTTGACCTTCACTGCGGCCCACATGCACCTCAGGTTCAAAATGGGTG
TCTTCTGGCAGCCCTGCACGTGTGCTTTCTGAGTGTCTCTGTGTGTGCATTAATATATGCATTCCATTTGGGAGC
ATAGCAGCTGTGTGAATGTATGTAATTGTGTGTGGGGGGTTTTTTGTTTTAAGTAGTTAGAAGTCTGGGAAAATG
AATTTTTGAATAGTATGTTACTGCAGCTTTGGTAACATTAATTCTATAGAATTAATGATCAGAGCAAGTTTAATT
TTTAAACATAAAGGTCTTGGTTACACATGTCCATGCATTCCAGTTAACACATTTAAACATATAGAAAATTCACTT
CTTCTTTCAAGTCCTTCCCTTTCTATACTTTTGCTGAGATCAACCCAATATCATAAGAAGTTTGTGTGATGCCTG
TATTTTTAGCTAATTACCAAGGTCTCTGCCTATGCAAAAATTCATCTTTCGGTGATTGTGGGCGGCCAATACATA
CCTTCTGTAACTCCTCCCTACCTATTCTAGATCCTGCATATCTACTGGAGCCATATGAGCCCTCAGGGGCACTGG
TGTCCTGCAGTCTTACTAGTCAGCCACAGTCCAGGTTCCAGCAACACTAGCTACCTACCAAACAAAACACTTCTG
AGCTTTTCTTGCCATTTGGTTGCCTGGGACCTGGAAAGTGTTTAGATTCTTGATAAAGATGGAAATGGAAGAGAA
AGAAAATTATATATGTATATACTAAAGATCCAGACATCAGGGCTGGGCACAGCGGTTCCGCCTGTAATCCCAGCA
CTTTGGGAGGTCCAGGCAGGTGGATCTCTTGAGACCAGGAGGTCAAGACCAGCCTGGCCAACGTGGTGAAACACT
GTCTCTACTAAAAATACAAAAATGAGCTGGGTGTGATGATACATGCCTGTAATCCTGGCTACTTGGGAGGCTGAG
GCATGAGAATTGCTTGAACCTGGGAGGTGGAGGTTGCAGTGAGCTGAGCTCATGCGACTGCACTCCAGCCTGGGT
GACTGAGCAAGACTCTGCCTCAAAAAAACAAATAAATAAATAAAATCCTGACATCCTGCCATCTTTTCTCTTCAA
TTTAAAGTTGATTTCTTAATGATGACTTCAAAAATTAATAAAAAGAAAAGAAAAAAATGATTTCT

FIGURE 4373

TAACATTGTCTTTAACATAAAAGTGTACCTATTTGCAGTCACTACCTCTATCACCACCACCAGCAGAGCCTGAGC
TGAGGAAACCACGGTTCTCAATACCCAGCACACCCACTTCCAACTATCTGTTAAAACATGGTGGATTACTATGAA
GTTCTAGGACTGCAAAGATATGCTTCACCTGAGGACATTAAAAAAGCTTATCATAAAGTGGCACTTAAATGGCAC
CCTGATAAAAATCCAGAAAATAAAGAAGAAGCAGAGAGAAAATTCAAAGAAGTAGCTGAGGCATACGAGGTATTA
TCAAATGATGAGAAACGGGACATTTATGATAAATATGGCACAGAAGGATTAAACGGAGGTGGAAGTCATTTTGAT
GATGAATGTGAGTACGGCTTCACATTCCATAAGCCAGATGATGTTTTTAAAGAAATTTTTCATGAAAGGGATCCA
TTTTCTTTTCACTTCTTTGAAGACTCGCTTGAGGACCTGTTAAATCGTCCAGGAAGCTCCTATGGAAACAGAAAC
AGAGATGCAGGATACTTTTTCTCCACTGCCAGTGAATATCCAATTTTTGAGAAATTTTCTTCATATGATACAGGA
TATACATCACAGGGTTCATTGGGGCATGAAGGCCTTACTTCTTTCTCTTCCCTGGCTTTTGATAATAGTGGGATG
GACAACTACATATCTGTTACAACTTCAGACAAAATCGTTAATGGCAGAAATATTAATACAAAGAAAATTATTGAA
AGTGATCAAGAAAGAGAAGCTGAAGATAATGGAGAGTTGACATTTTTTCTTGTAAATAGTGTGGCCAATGAAGAG
GGCTTTGCAAAAGAATGCAGCTGGAGAACACAGTCATTCAACAACTATTCACCAAATTCTCACAGCTCCAAACAT
GTATCTCAATATACTTTCGTGGACAATGATGAGGGAGGTATATCTTGGGTTACCAGCAACAGAGATCCCCCTATT
TTCTCAGCAGGAGTCAAAGAGGGTGGTAAGAGGAAAAAAAAGAAGCGTAAAGAGGTGCAAAAGAAGTCTACCAAA
AGGAATTGTTAAATTGACTCTTCAAATATATAACATTTGAACACAATTGTGTGTGTTTTGGTTAATCACAAATTT
TGTAGATAACACTTAATACTATACTAAGAGCTTTTCAACACTTTTAGCAGGATTGTGGACATTTGGTTAGTAGTT
TTTTTGAATGGGTATGTCAGAAAAGGATGAGTTTGTGGTGACAGTTGGTGCTAATAAGAATTTGCCTGGGCAGTA
TAGTGAGATCTTTTCTCTACAAAAAATTTAAAAATTAGCCAAGTGTGGTGGTGTGCACCTGTAGTCCCAGCTACT
CGGGAAGCTGGTAGAAAGACTGCTTGAGCCTGGAAGACATAGGTTGCAGTGTAATGGGATCACGCCACTGCACTC
CAGCTTGGGTGACAAAGTAAGACCCTGTCTTAAAAAAAAAAAAAAAGGAATTTGGAAAACTGCAATGAGTTTTTTA
CTTTTGAATTTTTCTTTAGTAGAGTTTATAGCCTATTTTTCTTTTTTCTAATTAAAACCACTATACAAACTTACG
AAACATGCATAGCATTAGAAGACAAGAATGTATCAAGACACACAGGTTCAGACTACACAATTATTCATGAAATGG
CTGTTTTCCAATGGAGGAACAGCATTTGATGCATTATAACTTAAAGGTACTACAAATTAAAAATTAAAGTATAAA
GTATTTTAAGTTAGAAATAGACTTAGCTGGGTGCAGTGGCTCACACCTGTAATCCTAGCATCTTGGGAGGCCCAG
GCAGGAGGGTTGAAGTCAGAATTTCACGACAGTCCGGGTAACATAATGAGACCTGTCCTCTATGAAAAAACTTTT
TTAAAAATTTAGCTGGGTGTGGTGGTACGTGCCTGTAGGCCTAGCTACTTAGGAGGCTGAGGTGGGAGGATTGCT
TGAGCCCAGGAGTTTGAGGTTGTAGGGAGCTATGATCTTGCCATTGCACTCCAGCTGAGAGTGTGACCCTGTCTC
TAAAGAAAAACTATAGAAAATTTAAAAAATTAAAAAACGGGTAACATGGTAAATTTTATGTAGTATATTTTACCA
CATTTTTTTTAAAGGCCAGTCTTATCCTGAATTCCTCAGAGCAGTCTGTATGGTAGGCCATCAGTGAATCACTCC
AGACAGGAAATTTTCTATTTTTGTTTAGAGTTTGTACACAAAATCTACAAATACATTACTCTAAAATAGCACCTA
TAGCCATTTTAATTTAGTCATGTTGGGAGAAAAATAGATGGGTTACAAATACATCAGATATCGAGCAAATGGTTT
GAGTTACATCTAGCAGCACTAAAACTTATTCAACTTTGGCCAAATACAAATGCGAAATTAGAAAAAAATTATAAT
ATCTGCTATTTTTAAAAGACAGCTATAGTCAAGAGCTTGTGTTTTGTATCGGTATTTGATTTTTAGTGGGCAGAT
GGGAGAAGGAAAGGTTATTTATTCTATAGAAGAGACTGCGGACAATTAGTATTCAAAGTTTATTTTCAGAAAATA
AAATAATAAAAGCCCAGGGTATTTTAAA

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FIGURE 4374

CCAAAATGGCGGCAGCGATGGATGTGGATACCCCGAGCGGCACCAACAGCGGCGCGGGCAAGAAGCGCTTTGAAG
TGAAAAAGTGGAATGCAGTAGCCCTCTGGGCCTGGGATATTGTGGTTGATAACTGTGCCATCTGCAGGAACCACA
TTATGGATCTTTGCATAGAATGTCAAGCTAACCAGGCGTCCGCTACTTCAGAAGAGTGTACTGTCGCATGGGGAG
TCTGTAACCATGCTTTTCACTTCCACTGCATCTCTCGCTGGCTCAAAACACGACAGGTGTGTCCATTGGACAACA
GAGAGTGGGAATTCCAAAAGTATGGGCACTAGGAAAAGACTTCTTCCATCAAGCTTAATTGTTTTGTTATTCATT
TAATGACTTTCCCTGCTGTTACCTAATTACAAATTGGATGGAACTGTGTTTTTTTCTGCTTTGTTTTTTCAGTTT
GCTGTTTCTGTAGCCATATTGTATTCTGTGTCAAATAAAGTCCAGTTGGATTCTGG

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FIGURE 4375

GCTCTTTCTCAGTGACCGGGTTCTAGGCTTAGGCGCAGACGGGTTAGGGGAGCCAACATGCCAGTGGCCCGGAGC
TGGGTTTGTCGCAAAACTTACGTGACCCCGCGGAGATCCTTTGAGAAATCTCGTCTCGACCAAGAGCTGAAGCTG
ATCGAAGAGTATGGGCTCCGGAATAAACGTGAGGTCTGGAGGGTCAAATTTACCCTGGCCAAGATAGAGGATTTC
TTAGAGAGACGCCTACAGACCCAGGTCTTCAAGCTGGGCTTGGCCAAGTCCATCCACCACGCTCGCGTGCTGATC
CGCCAGCGCCATTTCAGGGTCCGCAAGCAGGTGGTGAACATCCCGTCCTTCATTGTCCGCCTGGATTCCCAGAAG
CACATCGACTTCTCTCTGTGCTCTCCCTATGGGGGTGGCCGCCCGGGCCGCGTGAAGAGGAAGAATGCCAAGAAG
GGCCAGGGTGGGGCTGGGGCTGGAGACCACAAGGAGGAGGATTAAGCCCACCTGTCCCTCCTGGGCTGCTGCATT
GTCTAGTTTTCCTGCCAAATAAACAGGATCAGCGCTTTAAAAAAAAAAAAA

FIGURE 4376A

CTTGTTTGTGTGCTAGGCTGGGGGGGAGAGAGGGCGAGAGAGAGCGGGCGAGAGTGGGCAAGCAGGACGCCGGGC
TGAGTGCTAACTGCGGGAGCCAGAGAGTGCGGAGGGGAGTCGGGTCGGAGAGAGGCGGCAGGGGCCGAGACAGTG
GCAGGGGGCCCGGGGCGCACGGGCTGAGGCGACCCCCAGCCCCCTCCCGTCCGCACACACCCCCACCGCGGTCCA
GCAGCCGGGCCGGCGTCGACGCCTAGGGGGGACCATTACATAACCCCGCGCCCCGCGGCGTCTTCTCCCGCCGCC
GCGGGCGGCCCCGAACGGAGCCCCGGGGGGCGGGCGCTCCCAGCACCTGGCCGCCGGCGGTGGGGGCCGTAGCAG
CGGCCGTATTTATTTATTTTCCGCGGGAAAGGAAGGCGAAGGAGGGGAGCGCGGCGCGAGGAGGGGCCGCCTGCG
CCGCCGCCGGAGCGGGGCCTCCTCGGTGGGCTCCGCGTCGGCGCGGGCGTGCGGGCGGCGCTGCTCGGCCCGGCC
CCCTCGGCCCTCTGGTCCGGCCAGCTCCGCTCCCGGCGTCCTTGCCGCGCCTCCGCCGGCCGCCGCGCGATGTGA
GGCGGCGGCGCCAGCCTGGCTCTCGGCTCGGGCGAGTTCTCTGCGGCCATTAGGGGCCGGTGCGGCGGCGGCGGC
GCGGAGCGCGGCGGCAGGAGGAGGGTTCGGAGGGTGGGGGCGCAGGCCCGGGAGGGGGCACCGGGAGGAGGTGAG
TGTCTCTTGTCGCCTCCTCCTCTCCCCCCTTTTCGCCCCCGCCTCCTTGTGGCGATGAGAAGGAGGAGGACAGCG
CCGAGGAGGAAGAGGTTGATGGCGGCGGCGGAGCTCCGAGAGACCTCGGCTGGGCAGGGGCCGGCCGTGGCGGGC
CGGGGACTGCGCCTCTAGAGCCGCGAGTTCTCGGGAATTCGCCGCAGCGGACGCGCTCGGCGAATTTGTGCTCTT
GTGCCCTCCTCCGGGCTTGGGCCCAGGCCCGGCCCCTCGCACTTGCCCTTACCTTTTCTATCGAGTCCGCATCCC
TCTCCAGCCACTGCGACCCGGCGAAGAGAAAAAGGAACTTCCCCCACCCCCTCGGGTGCCGTCGGAGCCCCCCAG
CCCACCCCTGGGTGCGGCGCGGGGACCCCGGGCCGAAGAAGAGATTTCCTGAGGATTCTGGTTTTCCTCGCTTGT
ATCTCCGAAAGAATTAAAA**ATG**GCCGAGAATGTGGTGGAACCGGGGCCGCCTTCAGCCAAGCGGCCTAAACTCTC
ATCTCCGGCCCTCTCGGCGTCCGCCAGCGATGGCACAGATTTTGGCTCTCTATTTGACTTGGAGCACGACTTACC
AGATGAATTAATCAACTCTACAGAATTGGGACTAACCAATGGTGGTGATATTAATCAGCTTCAGACAAGTCTTGG
CATGGTACAAGATGCAGCTTCTAAACATAAACAGCTGTCAGAATTGCTGCGATCTGGTAGTTCCCCTAACCTCAA
TATGGGAGTTGGTGGCCCAGGTCAAGTCATGGCCAGCCAGGCCCAACAGAGCAGTCCTGGATTAGGTTTGATAAA
TAGCATGGTCAAAAGCCCAATGACACAGGCAGGCTTGACTTCTCCCAACATGGGGATGGGCACTAGTGGACCAAA
TCAGGGTCCTACGCAGTCAACAGGTATGATGAACAGTCCAGTAAATCAGCCTGCCATGGGAATGAACACAGGGAT
GAATGCGGGCATGAATCCTGGAATGTTGGCTGCAGGCAATGGACAAGGGATAATGCCTAATCAAGTCATGAACGG
TTCAATTGGAGCAGGCCGAGGGCGACAGAATATGCAGTACCCAAACCCAGGCATGGGAAGTGCTGGCAACTTACT
GACTGAGCCTCTTCAGCAGGGCTCTCCCCAGATGGGAGGACAAACAGGATTGAGAGGCCCCCAGCCTCTTAAGAT
GGGAATGATGAACAACCCCAATCCTTATGGTTCACCATATACTCAGAATCCTGGACAGCAGATTGGAGCCAGTGG
CCTTGGTCTCCAGATTCAGACAAAAACTGTACTATCAAATAACTTATCTCCATTTGCTATGGACAAAAAGGCAGT
TCCTGGTGGAGGAATGCCCAACATGGGTCAACAGCCAGCCCCGCAGGTCCAGCAGCCAGGCCTGGTGACTCCAGT
TGCCCAAGGGATGGGTTCTGGAGCACATACAGCTGATCCAGAGAAGCGCAAGCTCATCCAGCAGCAGCTTGTTCT
CCTTTTGCATGCTCACAAGTGCCAGCGCCGGGAACAGGCCAATGGGGAAGTGAGGCAGTGCAACCTTCCCCACTG
TCGCACAATGAAGAATGTCCTAAACCACATGACACACTGCCAGTCAGGCAAGTCTTGCCAAGTGGCACACTGTGC
ATCTTCTCGACAAATCATTTCACACTGGAAGAATTGTACAAGACATGATTGTCCTGTGTGTCTCCCCCTCAAAAA
TGCTGGTGATAAGAGAAATCAACAGCCAATTTTGACTGGAGCACCCGTTGGACTTGGAAATCCTAGCTCTCTAGG
GGTGGGTCAACAGTCTGCCCCCAACCTAAGCACTGTTAGTCAGATTGATCCCAGCTCCATAGAAAGAGCCTATGC
AGCTCTTGGACTACCCTATCAAGTAAATCAGATGCCGACACAACCCCAGGTGCAAGCAAAGAACCAGCAGAATCA
GCAGCCTGGGCAGTCTCCCCAAGGCATGCGGCCCATGAGCAACATGAGTGCTAGTCCTATGGGAGTAAATGGAGG
TGTAGGAGTTCAAACGCCGAGTCTTCTTTCTGACTCAATGTTGCATTCAGCCATAAATTCTCAAAACCCAATGAT
GAGTGAAAATGCCAGTGTGCCCTCCCTGGGTCCTATGCCAACAGCAGCTCAACCATCCACTACTGGAATTCGGAA
ACAGTGGCACGAAGATATTACTCAGGATCTTCGAAATCATCTTGTTCACAAACTCGTCCAAGCCATATTTCCTAC
GCCGGATCCTGCTGCTTTAAAAGACAGACGGATGGAAAACCTAGTTGCATATGCTCGGAAAGTTGAAGGGGACAT
GTATGAATCTGCAAACAATCGAGCGGAATACTACCACCTTCTAGCTGAGAAAATCTATAAGATCCAGAAAGAACT
AGAAGAAAAACGAAGGACCAGACTACAGAAGCAGAACATGCTACCAAATGCTGCAGGCATGGTTCCAGTTTCCAT
GAATCCAGGGCCTAACATGGGACAGCCGCAACCAGGAATGACTTCTAATGGCCCTCTACCTGACCCAAGTATGAT
CCGTGGCAGTGTGCCAAACCAGATGATGCCTCGAATAACTCCACAATCTGGTTTGAATCAATTTGGCCAGATGAG
CATGGCCCAGCCCCCTATTGTACCCCGGCAAACCCCTCCTCTTCAGCACCATGGACAGTTGGCTCAACCTGGAGC
TCTCAACCCGCCTATGGGCTATGGGCCTCGTATGCAACAGCCTTCCAACCAGGGCCAGTTCCTTCCTCAGACTCA
GTTCCCATCACAGGGAATGAATGTAACAAATATCCCTTTGGCTCCGTCCAGCGGTCAAGCTCCAGTGTCTCAAGC

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FIGURE 4376B

ACAAATGTCTAGTTCTTCCTGCCCGGTGAACTCTCCTATAATGCCTCCAGGGTCTCAGGGGAGCCACATTCACTG
TCCCCAGCTTCCTCAACCAGCTCTTCATCAGAATTCACCCTCGCCTGTACCTAGTCGTACCCCCACCCCTCACCA
TACTCCCCCAAGCATAGGGGCTCAGCAGCCACCAGCAACAACAATTCCAGCCCCTGTTCCTACACCTCCTGCCAT
GCCACCTGGGCCACAGTCCCAGGCTCTACATCCCCCTCCAAGGCAGACACCTACACCACCAACAACACAACTTCC
CCAACAAGTGCAGCCTTCACTTCCTGCTGCACCTTCTGCTGACCAGCCCCAGCAGCAGCCTCGCTCACAGCAGAG
CACAGCAGCGTCTGTTCCTACCCCAACAGCACCGCTGCTTCCTCCGCAGCCTGCAACTCCACTTTCCCAGCCAGC
TGTAAGCATTGAAGGACAGGTATCAAATCCTCCATCTACTAGTAGCACAGAAGTGAATTCTCAGGCCATTGCTGA
GAAGCAGCCTTCCCAGGAAGTGAAGATGGAGGCCAAAATGGAAGTGGATCAACCAGAACCAGCAGATACTCAGCC
GGAGGATATTTCAGAGTCTAAAGTGGAAGACTGTAAAATGGAATCTACCGAAACAGAAGAGAGAAGCACTGAGTT
AAAAACTGAAATAAAAGAGGAGGAAGACCAGCCAAGTACTTCAGCTACCCAGTCATCTCCGGCTCCAGGACAGTC
AAAGAAAAAGATTTTCAAACCAGAAGAACTACGACAGGCACTGATGCCAACTTTGGAGGCACTTTACCGTCAGGA
TCCAGAATCCCTTCCCTTTCGTCAACCTGTGGACCCTCAGCTTTTAGGAATCCCTGATTACTTTGATATTGTGAA
GAGCCCCATGGATCTTTCTACCATTAAGAGGAAGTTAGACACTGGACAGTATCAGGAGCCCTGGCAGTATGTCGA
TGATATTTGGCTTATGTTCAATAATGCCTGGTTATATAACCGGAAAACATCACGGGTATACAAATACTGCTCCAA
GCTCTCTGAGGTCTTTGAACAAGAAATTGACCCAGTGATGCAAAGCCTTGGATACTGTTGTGGCAGAAAGTTGGA
GTTCTCTCCACAGACACTGTGTTGCTACGGCAAACAGTTGTGCACAATACCTCGTGATGCCACTTATTACAGTTA
CCAGAACAGGTATCATTTCTGTGAGAAGTGTTTCAATGAGATCCAAGGGGAGAGCGTTTCTTTGGGGGATGACCC
TTCCCAGCCTCAAACTACAATAAATAAAGAACAATTTTCCAAGAGAAAAAATGACACACTGGATCCTGAACTGTT
TGTTGAATGTACAGAGTGCGGAAGAAAGATGCATCAGATCTGTGTCCTTCACCATGAGATCATCTGGCCTGCTGG
ATTCGTCTGTGATGGCTGTTTAAAGAAAAGTGCACGAACTAGGAAAGAAAATAAGTTTTCTGCTAAAAGGTTGCC
ATCTACCAGACTTGGCACCTTTCTAGAGAATCGTGTGAATGACTTTCTGAGGCGACAGAATCACCCTGAGTCAGG
AGAGGTCACTGTTAGAGTAGTTCATGCTTCTGACAAAACCGTGGAAGTAAAACCAGGCATGAAAGCAAGGTTTGT
GGACAGTGGAGAGATGGCAGAATCCTTTCCATACCGAACCAAAGCCCTCTTTGCCTTTGAAGAAATTGATGGTGT
TGACCTGTGCTTCTTTGGCATGCATGTTCAAGAGTATGGCTCTGACTGCCCTCCACCCAACCAGAGGAGAGTATA
CATATCTTACCTCGATAGTGTTCATTTCTTCCGTCCTAAATGCTTGAGGACTGCAGTCTATCATGAAATCCTAAT
TGGATATTTAGAATATGTCAAGAAATTAGGTTACACAACAGGGCATATTTGGGCATGTCCACCAAGTGAGGGAGA
TGATTATATCTTCCATTGCCATCCTCCTGACCAGAAGATACCCAAGCCCAAGCGACTGCAGGAATGGTACAAAAA
AATGCTTGACAAGGCTGTATCAGAGCGTATTGTCCATGACTACAAGGATATTTTTAAACAAGCTACTGAAGATAG
ATTAACAAGTGCAAAGGAATTGCCTTATTTCGAGGGTGATTTCTGGCCCAATGTTCTGGAAGAAAGCATTAAGGA
ACTGGAACAGGAGGAAGAAGAGAGAAAACGAGAGGAAAACACCAGCAATGAAAGCACAGATGTGACCAAGGGAGA
CAGCAAAAATGCTAAAAAGAAGAATAATAAGAAAACCAGCAAAAATAAGAGCAGCCTGAGTAGGGGCAACAAGAA
GAAACCCGGGATGCCCAATGTATCTAACGACCTCTCACAGAAACTATATGCCACCATGGAGAAGCATAAAGAGGT
CTTCTTTGTGATCCGCCTCATTGCTGGCCCTGCTGCCAACTCCCTGCCTCCCATTGTTGATCCTGATCCTCTCAT
CCCCTGCGATCTGATGGATGGTCGGGATGCGTTTCTCACGCTGGCAAGGGACAAGCACCTGGAGTTCTCTTCACT
CCGAAGAGCCCAGTGGTCCACCATGTGCATGCTGGTGGAGCTGCACACGCAGAGCCAGGACCGCTTTGTCTACAC
CTGCAATGAATGCAAGCACCATGTGGAGACACGCTGGCACTGTACTGTCTGTGAGGATTATGACTTGTGTATCAC
CTGCTATAACACTAAAAACCATGACCACAAAATGGAGAAACTAGGCCTTGGCTTAGATGATGAGAGCAACAACCA
GCAGGCTGCAGCCACCCAGAGCCCAGGCGATTCTCGCCGCCTGAGTATCCAGCGCTGCATCCAGTCTCTGGTCCA
TGCTTGCCAGTGTCGGAATGCCAATTGCTCACTGCCATCCTGCCAGAAGATGAAGCGGGTTGTGCAGCATACCAA
GGGTTGCAAACGGAAAACCAATGGCGGGTGCCCCATCTGCAAGCAGCTCATTGCCCTCTGCTGCTACCATGCCAA
GCACTGCCAGGAGAACAAATGCCCGGTGCCGTTCTGCCTAAACATCAAGCAGAAGCTCCGGCAGCAACAGCTGCA
GCACCGACTACAGCAGGCCCAAATGCTTCGCAGGAGGATGGCCAGCATGCAGCGGACTGGTGTGGTTGGGCAGCA
ACAGGGCCTCCCTTCCCCCACTCCTGCCACTCCAACGACACCAACTGGCCAACAGCCAACCACCCCGCAGACGCC
CCAGCCCACTTCTCAGCCTCAGCCTACCCCTCCCAATAGCATGCCACCCTACTTGCCCAGGACTCAAGCTGCTGG
CCCTGTGTCCCAGGGTAAGGCAGCAGGCCAGGTGACCCCTCCAACCCCTCCTCAGACTGCTCAGCCACCCCTTCC
AGGGCCCCCACCTGCAGCAGTGGAAATGGCAATGCAGATTCAGAGAGCAGCGGAGACGCAGCGCCAGATGGCCCA
CGTGCAAATTTTTCAAAGGCCAATCCAACACCAGATGCCCCCGATGACTCCCATGGCCCCCATGGGTATGAACCC
ACCTCCCATGACCAGAGGTCCCAGTGGGCATTTGGAGCCAGGGATGGGACCGACAGGGATGCAGCAACAGCCACC

FIGURE 4376C

CTGGAGCCAAGGAGGATTGCCTCAGCCCCAGCAACTACAGTCTGGGATGCCAAGGCCAGCCATGATGTCAGTGGC
CCAGCATGGTCAACCTTTGAACATGGCTCCACAACCAGGATTGGGCCAGGTAGGTATCAGCCCACTCAAACCAGG
CACTGTGTCTCAACAAGCCTTACAAAACCTTTTGCGGACTCTCAGGTCTCCCAGCTCTCCCCTGCAGCAGCAACA
GGTGCTTAGTATCCTTCACGCCAACCCCCAGCTGTTGGCTGCATTCATCAAGCAGCGGGCTGCCAAGTATGCCAA
CTCTAATCCACAACCCATCCCTGGGCAGCCTGGCATGCCCCAGGGGCAGCCAGGGCTACAGCCACCTACCATGCC
AGGTCAGCAGGGGGTCCACTCCAATCCAGCCATGCAGAACATGAATCCAATGCAGGCGGGCGTTCAGAGGGCTGG
CCTGCCCCAGCAGCAACCACAGCAGCAACTCCAGCCACCCATGGGAGGGATGAGCCCCCAGGCTCAGCAGATGAA
CATGAACCACAACACCATGCCTTCACAATTCCGAGACATCTTGAGACGACAGCAAATGATGCAACAGCAGCAGCA
ACAGGGAGCAGGGCCAGGAATAGGCCCTGGAATGGCCAACCATAACCAGTTCCAGCAACCCCAAGGAGTTGGCTA
CCCACCACAGCAGCAGCAGCGGATGCAGCATCACATGCAACAGATGCAACAAGGAAATATGGGACAGATAGGCCA
GCTTCCCCAGGCCTTGGGAGCAGAGGCAGGTGCCAGTCTACAGGCCTATCAGCAGCGACTCCTTCAGCAACAGAT
GGGGTCCCCTGTTCAGCCCAACCCCATGAGCCCCCAGCAGCATATGCTCCCAAATCAGGCCCAGTCCCCACACCT
ACAAGGCCAGCAGATCCCTAATTCTCTCTCCAATCAAGTGCGCTCTCCCCAGCCTGTCCCTTCTCCACGGCCACA
GTCCCAGCCCCCCCACTCCAGTCCTTCCCCAAGGATGCAGCCTCAGCCTTCTCCACACCACGTTTCCCCACAGAC
AAGTTCCCCACATCCTGGACTGGTAGCTGCCCAGGCCAACCCCATGGAACAAGGGCATTTTGCCAGCCCGGACCA
GAATTCAATGCTTTCTCAGCTTGCTAGCAATCCAGGCATGGCAAACCTCCATGGTGCAAGCGCCACGGACCTGGG
ACTCAGCACCGATAACTCAGACTTGAATTCAAACCTCTCACAGAGTACACTAGACATACAC**TAG**AGACACCTTGT
AGTATTTTGGGAGCAAAAAAATTATTTTCTCTTAACAAGACTTTTTGTACTGAAAACAATTTTTTTGAATCTTTC
GTAGCCTAAAAGACAATTTTCCTTGGAACACATAAGAACTGTGCAGTAGCCGTTTGTGGTTTAAAGCAAACATGC
AAGATGAACCTGAGGGATGATAGAATACAAAGAATATATTTTTGTTATGGCTGGTTACCACCAGCCTTTCTTCCC
CTTTGTGTGTGTGGTTCAAGTGTGCACTGGGAGGAGGCTGAGGCCTGTGAAGCCAAACAATATGCTCCTGCCTTG
CACCTCCAATAGGTTTTATTATTTTTTTTAAATTAATGAACATATGTAATATTAATAGTTATTATTTACTGGTGC
AGATGGTTGACATTTTTCCCTATTTTCCTCACTTTATGGAAGAGTTAAAACATTTCTAAACCAGAGGACAAAAGG
GGTTAATGTTACTTTAAAATTACATTCTATATATATATAAATATATATAAATATATATTAAAATACCAGTTTTTT
TTCTCTGGGTGCAAAGATGTTCATTCTTTTAAAAAATGTTTAAAAAAAA

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FIGURE 4377

GGCAGGCCAATATGGCTTCCTGCACCTGGTGACGCTTGGCGAAACTGAGGTCTCATGGAGAAGCCCCGGAGTATT
GAGGAGACCCCATCTTCAGAACCAATGGAGGAAGAGGAAGATGACGACTTGGAGCTGTTTGGTGGCTATGATAGT
TTCCGGAGTTATAACAGCAGTGTGGGCAGTGAGAGCAGCTCCTATCTGGAGGAGTCAAGTGAAGCAGAAAATGAG
GATCGGGAAGCAGGGGAACTGCCGACCTCCCCGCTGCATTTGCTCAGCCCTGGGACTCCTCGCTCCTTGGATGGC
AGTGGTTCTGAGCCAGCTGTCTGTGAGATGTGTGGTATCGTGGGTACAAGGGAAGCCTTCTTCTCCAAGACCAAG
AGGTTCTGCAGCGTCTCCTGCTCCAGGAGCTACTCCTCCAACTCCAAGAAAGCCAGTATCTTGGCTAGGTTACAG
GGAAAACCACCGACCAAAAAAGCCAAAGTCCTGCACAAGGCTGCCTGGTCTGCCAAAATTGGAGCCTTCCTCCAC
TCTCAAGGGACAGGACAGCTGGCAGATGGGACACCAACAGGACAAGACGCTCTGGTCTTGGGCTTCGACTGGGGG
AAGTTCCTGAAGGATCACAGTTACAAGGCTGCTCCCGTCAGCTGTTTCAAGCACGGTATCGGGTGCTGCTTCGGT
ATGAAGGCTTTGAAAATGACGCCAGCCATGACTTCTGGTGCAACCTGGGAACAGTGGATGTCCACCCCATTGGCT
GGTGTGCCATCAACAGCAAGATCCTAGTGCCTCCACAGCCATCCATGCCAAGTTCACCGACTGGAAGGGCTACCT
C**ATG**AAACGGCTGGTGGGCTCCAGGACGCTTCCCGTGGATTTCCACATCAAGATGGTGGAGAGCATGAAGTACCC
CTTTAGGCAGGGCATGCGGCTGGAAGTGGTGGACAAGTCCCAGGTGTCACGCACTCGCATGGCTGTGGTGGACAC
AGTAATCGGGGGTCGCCTACGGCTCCTCTACGAGGATGGTGACAGTGACGACGACTTCTGGTGCCACATGTGGAG
CCCCCTGATCCACCCAGTGGGTTGGTCACGACGTGTGGGCCACGGCATCAAGATGTCAGAGAGGCGAAGTGACAT
GGCCCATCACCCCACCTTCCGGAAGATCTACTGTGATGCCGTTCCTTACCTCTTCAAGAAGGTACGAGCAGTCTA
CACAGAAGGCGGTTGGTTTGAGGAAGGGATGAAGCTGGAGGCCATTGACCCCCTGAATCTGGGCAACATCTGCGT
GGCAACTGTCTGTAAGGTTCTCCTGGATGGATACCTGATGATCTGTGTGGACGGGGGGCCCTCCACAGATGGCTT
GGACTGGTTCTGCTACCATGCCTCTTCCCACGCCATCTTCCCGGCCACCTTCTGTCAGAAGAATGACATTGAGCT
CACACCGCCAAAAGGTTATGAGGCACAGACTTTCAACTGGGAGAACTACTTGGAGAAGACCAAGTCGAAAGCCGC
TCCATCGAGACTCTTTAACATGGATTGCCCAAACCATGGCTTCAAGGTGGGCATGAAGCTGGAGGCCGTGGACCT
GATGGAGCCCCGGCTCATCTGTGTGGCCACGGTGAAACGAGTGGTGCATCGGCTCCTCAGCATCCACTTTGACGG
CTGGGACAGCGAGTACGACCAGTGGGTGGACTGCGAGTCCCCAGACATCTACCCCGTCGGCTGGTGTGAGCTCAC
CGGCTACCAGCTCCAGCCTCCTGTGGCCGCAGAACCGGCCACACCGCTGAAGGCCAAAGAGGCCACAAAGAAGAA
AAAGAAACAGTTTGGGAAGAAAAGGAAAAGAATCCCGCCCACTAAGACGCGACCCCTCAGACAGGGGTCCAAGAA
GCCCCTGCTGGAGGACGACCCTCAGGGTGCCAGGAAGATCTCGTCGGAGCCTGTTCCTGGCGAGATCATTGCTGT
GCGTGTGAAGGAAGAGCATCTAGACGTGGCCTCGCCCGACAAGGCTTCAAGTCCAGAGCTGCCTGTCTCCGTCGA
GAACATCAAGCAGGAAACAGACGAC**TGA**GCCTTCCTGCCTCCAGCCTGGCTTCTAGCTGGAAGCCAGCCCAGCGT
TTCTCTACCACCACCACCATGCCTCCACCTGACTTTGGCTTGGAGACTGATCCTCTCTGTGTAAATTCTGCCCGG
TGCTGTGAAGGCTGGACGGTGGAGGACCTGCTGGGGTCTCCTGGGACCCGCCTGTTGCTTCTGCCCTCCCCTGTG
GAAAGGTCTATATGACGGGCCGCCTGAGGCCCCAGAACTCGTCTGTGAACCACCTTTTCCAGCCAGAGTTCCCAA
AGCTGGAACGCTAGCTGCCTGCTCTTCCTTAAGATGGCCTCCCCCCGACCCGCCACGGCCCTCAGTTGCCAGGGA
TGGGGCCACCACTGTCACACTGTGGAATACAAGACAGTGAACTCTGTCTGCCTGAACGAGCCATGTAAATTAAGT
TCTAGAGCAGCTCTCTGAGCAGGATAAGGTCCCCTGACAGTGAGTTGTGTGGTGGGGGCAGCCTCTGCCTCAAAA
ATTCACCAAGCAGAATGCCTCTCAGCCTCATGTGTTGGTCCTCTGCTCCTCCTAGCTCCCCAGGGATGTTGGGGA
CCCAGCTTGTCTCGGCAGCTAAGAAGCAGTGACCAGGATGTGGATTTTGGCGACCTGTGTGGTGGCCTTGAGCTG
CTTTCTGTGTTTGTGAGGACTGACTCCCATTTCCTAAAGGAAATGCCCCCGGGGAGGACATTGGGAGGAAGATGG
CCTGAGTGTGCACTTTGGCTCTGCTACCTGCTCCTGAAGCCCCGCTAAAAATAATTCATCCAAGATTCCTTTGTA
GTTAAAGGGTCCAGTTCTGACTGGAGCCTCTAGAGAGCTGGGCTTGTATGTTCTTTTGGCCTTTTGTTCCTACCT
AAATGAAGAAACCATGCCTGGAGGGGCCGTGAACACAGAACCCTCAAGACAAGGATGACAGAGCTGGAGGACACA
TCTAGCTGCCATTGCAACCTCACTGGGCTCCCCAGACTCTGTGTGTGAGAAATTAAACCCCCTGCTTGCTTG

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FIGURE 4378

ATGGCCTCGGAAGACATTGCCAAGCTGGCAGAGACACTTGCCAAGACTCAGGTGGCCGGGGGACAGCTGAGTTTC
AAAGGCAAGAGCCTCAAACTCAACACTGCAGAAGATGCTAAAGATGTGATTAAAGAGATTGAAGACTTTGACAGC
TTGGAGGCTCTGCGTCTGGAAGGCAACACAGTGGGCGTGGAAGCAGCCAGGGTCATCGCCAAGGCCTTAGAGAAG
AAGTCGGAGTTGAAGCGCTGCCACTGGAGTGACATGTTCACGGGAAGGCTGCGGACCGAGATCCCACCAGCCCTG
ATCTCACTAGGGGAAGGACTCATCACAGCTGGGGCTCAGCTGGTGGAGCTGGACTTAAGCGACAACGCATTCGGG
CCCGACGGTGTGCAAGGCTTCGAGGCCCTGCTCAAGAGCTCAGCCTGCTTCACCCTGCAGGAACTCAAGCTCAAC
AACTGTGGCATGGGCATTGGCGGCGGCAAGATCCTGGCTGCAGCTCTGACCGAATGTCACCGGAAATCCAGTGCC
CAAGGCAAGCCTCTGGCCCTGAAGGTCTTTGTGGCTGGCAGAAACCGTCTGGAGAATGATGGCGCCACTGCCTTG
GCAGAAGCTTTTAGGGTCATCGGGACCCTGGAGGAGGTCCACATGCCACAGAATGGGATCAACCACCCTGGCATC
ACTGCCCTGGCCCAGGCTTTCGCTGTCAACCCCCTGCTGCGGGTCATCAACCTGAATGACAACACCTTCACTGAG
AAGGGCGCCGTGGCCATGGCCGAGACCTTGAAGACCTTGCGGCAGGTGGAGGTGATTAATTTTGGGGACTGCCTG
GTGCGCTCCAAGGGTGCAGTTGCCATTGCAGATGCCATCCGCGGCGGCCTGCCCAAGCTAAAGGAGCTGAACTTG
TCATTCTGTGAAATCAAGAGGGATGCTGCCCTGGCTGTTGCTGAGGCCATGGCAGACAAAGCTGAGCTGGAGAAG
CTGGACCTGAATGGCAACACCCTGGGAGAAGAAGGCTGTGAACAGCTTCAGGAGGTGCTGGAGGGCTTCAACATG
GCCAAGGTGCTGGCGTCCCTCAGTGATGACGAGGACGAGGAGGAGGAGGAGGAAGGAGAAGAGGAAGAAGAGGAA
GCAGAAGAAGAGGAGGAGGAAGATGAGGAAGAGGAGGAAGAAGAGGAGGAGGAGGAGGAAGAAGAGCCTCAGCAG
CGAGGGCAGGGAGAGAAGTCAGCCACGCCCTCACGGAAGATTCTGGACCCTAACACTGGGGAGCCAGCTCCCGTG
CTGTCCTCCCCACCTCCTGCAGACGTCTCCACCTTCCTGGCTTTTCCCTCTCCAGAGAAGCTGCTGCGCCTAGGG
CCCAAGAGCTCCGTGCTGATAGCCCAGCAGACTGACACGTCTGACCCCGAGAAGGTGGTCTCTGCCTTCCTAAAG
GTGTCATCTGTGTTCAAGGACGAAGCTACTGTGAGGATGGCAGTGCAGGATGCAGTAGATGCCCTGATGCAGAAG
GCTTTCAACTCCTCGTCCTTCAACTCCAACACCTTCCTCACCAGGCTGCTCGTGCACATGGGTCTGCTCAAGAGT
GAAGACAAGGTCAAGGCCATTGCCAACCTGTACGGCCCCCTGATGGCGCTGAACCACATGGTGCAGCAGGACTAT
TTCCCCAAGGCCCTTGCACCCCTGCTGCTGGCGTTCGTGACCAAGCCCAACAGCGCCCTGGAATCCTGCTCCTTC
GCCCGCCACAGTCTGCTGCAGACGCTGTACAAGGTCTAG

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FIGURE 4379

AGCAGAGGTCACCTCCTGACATGCGCTCTGGGAAAGGTGGCAGAGGGCAGGACACCATGAGCTCAGGATCTGTGT
GAGGTGTGGGAGGTGGGAAGGGTGAGGGTCTGGGGGGAATGCGGAGAAAAGGGAGGCTTGACCCCGGGCACCATGG
GCCACTCCAGGATGGGACACGGCCCCTCTTTCTTGGGGACCCAGTATGTCCTCTCCTCTAGACCCAGACATACAG
TTATAACCGTCTGTCCTAGCCCCTCCCTAATCCCTGGCCCTCCCAGCTGTCTGGGACTTCAGTGGACCCCCAGCC
CCTGCCCCCACTCACCAAGGCCTCGCTCGTCCCTCTCGTCTGACATGTCTGTGTGCACCCCCCTCCTCTCCACCC
TACCTTCCATCAACCAGGGCAGATCCACCGTGCCCTGGTTCCCCAGACATTCCAGAATGCCCCACATCATTGGCA
CAGGAGTGGGGCAGCCCCGGAAGGAACCAGGGATTAGGCTGTAGGGGGGTGAGAAGGAGAGAAGGGACCACCCCA
TTCTTCTCAAGCAAGGATTGCCAGCGCGCGCTGACACAGTGATGGGCTGCCCAGGGCTGGAGGGGACGCTGTTCC
TCCCGCCGCCACTGCCCAACCTTTCCTGATAATCGTGGCATGCGCCCTTTCCTCTTCCCTGCCCCACCCCCTGGC
CGCAGCAGGCCAGCACTGCAGAGTTTGGGTGCTGGTGGTGTGGCTGTAGGGGAGGGGAGACCACACCCAAGGTGG
GGGCTGTGGCCATGTGTGGCCGTGATGTCGATGATACTCGTTTTCCCTGATCCGTGGTGTTGCAGTCCGTTGTCA
CCAGCCTTGTTTCTAGTGTGTATATATGTCGCCCCCGTGATGCATATATACACAGGTATTAAATATATCGCTCTA
TATAATATTATATATGTGTGTGGTATCCAAGGAATCACTTTTATGAGGGCTAAAGATAAAGAATTTGGCCAGAAA
ATGCAGCCATCCTTGTGTGATTAGGAGGGTTTCAGGGGCCACTGGACTATTTGCAAGGTGACAGGGACTGGAGCC
ATGGCTCAGAGGTGATTCGGGCAGCCAGGGACAGGAGCCACCCTCCCCAGGCCCAACTCTGCTAGCTTCCCAGAC
CACCCCCATCGAGTGCGGAGAGAGTGGGAGTGCTCAGGGAAAGAAGGTGATTTGTATTTGTCTCCCCGCTGAAAA
GAACAGGATTCAAGTCCAGAGTTTTCATCTTCAGCCTGTGATCTGTCCAGGGACCCTTGGGATCTGGGGCTTCCT
GGCCTGGCCAGAGCTGGAGCCCCCACAGGGTAAGGAAGAGAGAGTGGGAGGCAGAGTGTGATGGGGAGGAGGGAC
AGGAAGACCCTTTTAATGATGAGGGTAACTATTTCAGTTGTGAGCCTTCTAGGGCCCCAGGCTGGGAGGCTCAGA
GGACTGAATCTGGGACCTGTGTTCCCCCCGGCAGGCAGGGACAAGATGGCATGGCAAGCATGGGGGCGGGGTGGG
TGGGGAGGGATGCTGCATTTCTCAGCTGGGCAGTAATCAATTTAATGGTCCTTTAAAATGTCTGTGTATTAAAAA
TTTAAGAATACCACACTTTAATATTAAATATTCATAAGGTCTAGTATCTTGATAATAATGTAGATGTTTTAATAA
CAATTTTTGTCCTTCTTAAAATAAAATGAAAGAAACTTG

FIGURE 4380

GGGAGGCGAGGTGCGCGAGCCGAGTCCGGGGCACG**ATG**TCCGACGCGGGCGGCGGAAAGAAGCCGCCTGTGGACC
CGCAGGCAGGACCCGGTCCGGGGCCGGGGCGCGCAGCTGGGGAAAGGGGCCTGTCGGGGTCCTTCCCCCTGGTCC
TGAAGAAGCTGATGGAGAACCCCCCGCGCGAGGCGCGCCTCGATAAGGAAAAGGGGAAGGAAAAGCTGGAGGAGG
ACGAGGCCGCAGCCGCCAGCACCATGGCTGTCTCAGCCTCCCTCATGCCACCCATCTGGGACAAGACCATCCCAT
ATGATGGCGAATCTTTCCACCTGGAGTACATGGACCTGGATGAGTTCCTGCTGGAGAATGGCATCCCCGCCAGCC
CCACCCACCTGGCCCACAACCTGCTGCTGCCTGTAGCAGAGCTAGAAGGGAAGGAGTCTGCCAGCTCTTCCACAG
CATCCCCACCATCCTCCTCCACTGCCATCTTTCAGCCCTCTGAAACCGTGTCCAGCACAGAATCTTCCCTGGAGA
AGGAGAGGGAGACTCCCAGTCCCATCGACCCCAATTGTGTGGAAGTGGATGTGAACTTCAATCCGGACCCCGCCG
ACCTGGTGCTCTCCAGTGTGCCAGGCGGGGAGCTCTTCAACCCTCGGAAGCACAAGTTTGCTGAGGAGGACCTGA
AGCCCCAGCCTATGATCAAAAAGGCCAAGAAGGTCTTTGTCCCCGACGAGCAGAAGGATGAAAAGTACTGGACAA
GACGCAAGAAGAACAACGTGGCAGCTAAACGGTCACGGGATGCCCGGCGCCTGAAAGAGAATCAGATCACCATCC
GGGCAGCCTTCCTGGAGAAGGAGAACACAGCCCTGCGGACGGAGGTGGCCGAGCTACGCAAGGAGGTGGGCAAGT
GCAAGACCATCGTGTCCAAGTATGAGACCAAATACGGGCCCTTG**TAA**CCCGTGCCCCCCGCCCGGGCGGGGTACT
GCCTGCACCTCAGACCTCTGCCTG

FIGURE 4381

ACTGGGGCCCACAGTCAGACATGAGCCACTGGTGGGGCAGAAATAGGCTCCTGGTTCTGTGTGATCCAAAGTTGG
TGCTTTTCTGTCTATCCCTAGCTGTTGGTCACCACCAGCTTTCTGCATATTTTCTCACGGTGCCTCTCATTTCCC
AGAGCCGCCTGGAGCCCAAGGCTGTACACGTGCCCTGTGCTGATTCTCTGCCTAGGAAAGGACC**ATG**CAGCTAGA
GATCAAAGTGGCCCTGAACTTCATCATCTCCTACTTGTACAACAAGCTGCCCCGGCGCCGGGCAGACCTGTTTGG
GGAGGAGCTAGAGCGGCTTTTGAAAAAGAAATATGAAGGCCACTGGTACCCTGAGAAGCCACTGAAAGGCTCTGG
CTTCCGCTGTGTTCACATTGGGGAGATGGTGGACCCCGTGGTGGAGCTGGCCGCCAAGCGGAGTGGCCTGGCGGT
GGAAGATGTGCGGGCCAATGTGCCTGAGGAGCTGAGTGTCTGGATTGATCCCTTTGAGGTGTCCTACCAGATTGG
TGAGAAGGGAGCTGTGAAAGTGCTGTACCTGGATGACAGTGAGGGTTGCGGTGCCCCAGAGCTGGACAAGGAGAT
CAAGAGCAGCTTCAACCCTGACGCCCAGGTGTTCGTGCCCATTGGCAGCCAGGACAGCTCCCTGTCCAACTCCCC
ATCGCCATCCTTTGGCCAGTCACCCAGCCCTACCTTCATTCCCCGCTCCGCTCAGCCCATCACCTTCACCACCGC
CTCCTTCGCTGCCACCAAATTTGGCTCCACTAAGATGAAGAAGGGGGGCGGGGCAGCAAGTGGTGGGGGTGTAGC
CAGCAGTGGGGCGGGTGGCCAGCAGCCACCACAGCAGCCTCGCATGGCCCGCTCACCCACCAACAGCCTGCTGAA
GCACAAGAGCCTCTCTCTGTCTATGCATTCACTGAACTTCATCACGGCCAACCCGGCCCCTCAGTCCCAGCTCTC
ACCCAATGCCAAGGAGTTCGTGTACAACGGTGGTGGCTCACCCAGCCTCTTCTTTGATGCGGCCGATGGCCAGGG
CAGCGGCACCCCAGGCCCGTTTGGAGGCAGTGGGGCTGGCACCTGCAACAGCAGCAGCTTTGACATGGCCCAGGT
ATTTGGAGGTGGTGCCAACAGCCTCTTCCTGGAGAAGACACCCTTTGTGGAAGGCCTCAGCTACAACCTGAACAC
CATGCAGTATCCCAGCCAGCAGTTCCAGCCCGTGGTGCTGGCCAAC**TGA**CCATCTACCTGCCCGTGGGGCCAGGA
GCACCCAAGACCACAGAAAAGAGAAAGGAAAGGCCAAAAAAAAGAGGAAAAG

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FIGURE 4382

CCGAAGCTTCCGGTGGCCGGCTTAGTTAGGAGCTATGGCTAAACATCATCCTGATTTGATCTTTTGCCGCAAGCA
GGCTGGTGTTGCCATCGGAAGACTGTGTGAAAAATGTGATGGCAAGTGTGTGATTTGTGACTCCTATGTGCGTCC
CTGCACTCTGGTGCGCATATGTGATGAGTGTAACTATGGATCTTACCAGGGGCGCTGTGTGATCTGTGGAGGACC
TGGGGTCTCTGATGCCTATTATTGTAAGGAGTGCACCATCCAGGAGAAGGACAGAGATGGCTGCCCAAAGATTGT
CAATCTGGGGAGCTCTAAGACAGACCTCTTCTATGAACGCAAAAAATACGGCTTCAAGAAGAGGTGATTGGTGGG
TGGCCCCTTCCTCCCCCCAACATCAGTCTGCTGCAGCTGCCAGAAAACATGCCTACTACTACCAGCAGAAAGGGA
GCAGAGCCCAGAGCATCACCAGGAGTGCCTGCTAGTGTACTGGCAGCTTGCCACCCCCTCCTCTCCCTTCACCCA
GACACGTGGTAGGGATGGAAAAGGATTCTTCACAGAGCACTCTGGCACACCATATCGGAGAAAACTTGATAGATT
AGTTAATGGTTTTTCTTGAATTCGAGAAGCAAAGATCTGTTCTCCATATTGGTATGTTCTCCCTCAACCAAGATC
TTCTAAAAAGAAATAATATTTTAGTCTTCTGCTTGAGGAACTGACTGTGAAGCGACGCCCAGTGAAAAACATGTT
CTTGCAGCAGCTCTGGTGGCAGCTGTCCTTGAGGAACCTTTGGTGTGTGGTGGGAAGCTATCAGAACAAGAAATG
TAGGCATTTCCCGTTTTTTTTGGGGGGGGGGTGGGGGGGCAGGGCTCTGCCCTCTTGAAAGGCATTTACTTGTTT
AACACTTGTCCAGCTACAGTGGGGTACAGTAGCTGGCTATTCACAGGCATCATCATAGCCCACTAGTCTCATATT
ATTTTCCTTTTGAGAAATTGGAAACTCTTTCTGTTGCTATTATATTAATAAAGTTGGTGTTTATTTTCTGGT

FIGURE 4383

AAAGCTCTGGGTGTGCGGCAGTACCATGTGGCCTCAGTCCTGTGCCAACGGGCCAAGGTGGCGATGAGCCACTTT
GAGCCCAACGAGTACATCCATTATGACCTGCTAGAGAAGAACATTAACATTGTTCGCAAACGACTGAACCGGCCG
CTGACACTCTCGGAGAAGATTGTGTATGGACACCTGGATGACCCCGCCAGCCAGGAAATTGAGCGAGGCAAGTCG
TACCTGCGGCTGCGGCCGGACCGTGTGGCCATGCAGGATGCGACGGCCCAGATGGCCATGCTCCAGTTCATCAGC
AGCGGGCTGTCCAAGGTGGCTGTGCCATCCACCATCCACTGTGACCATCTGATTGAAGCCCAGGTTGGGGGCGAG
AAAGACCTGCGCCGGGCCAAGGACATCAACCAGGAAGTTTATAATTTCCTGGCAACTGCAGGTGCCAAATATGGC
GTGGGCTTCTGGAAGCCTGGATCTGGAATCATTCACCAGATTATTCTGGAAAACTATGCGTACCCTGGTGTTCTT
CTGATTGGCACTGACTCCCACACCCCCAATGGTGGCGGCCTTGGGGGCATCTGCATTGGAGTTGGGGGTGCCGAT
GCTGTGGATGTCATGGCTGGGATCCCCTGGGAGCTGAAGTGCCCCAAGGTGATTGGCGTGAAGCTGACGGGCTCT
CTCTCCGGTTGGTCCTCACCCAAAGATGTGATCCTGAAGGTGGCAGGCATCCTCACGGTGAAAGGTGGCACAGGT
GCAATCGTGGAATACCACGGGCCTGGTGTAGACTCCATCTCCTGCACTGGCATGGCGACAATCTGCAACATGGGT
GCAGAAATTGGGGCCACCACTTCCGTGTTCCCTTACAACCACAGGATGAAGAAGTACCTGAGCAAGACCGGCCGG
GAAGACATTGCCAATCTAGCTGATGAATTCAAGGATCACTTGGTGCCTGACCCTGGCTGCCATTATGACCAACTA
ATTGAAATTAACCTCAGTGAGCTGAAGCCACACATCAATGGGCCCTTCACCCCTGACCTGGCTCACCCTGTGGCA
GAAGTGGGCAAGGTGGCAGAGAAGGAAGGATGGCCTCTGGACATCCGAGTGGGTCTAATTGGTAGCTGCACCAAT
TCAAGCTATGAAGATATGGGGCGCTCAGCAGCTGTGGCCAAGCAGGCACTGGCCCATGGCCTCAAGTGCAAGTCC
CAGTTCACCATCACTCCAGGTTCCGAGCAGATCCGCGCCACCATTGAGCGGGACGGCTATGCACAGATCTTGAGG
GATCTGGGTGGCATTGTCCTGGCCAATGCTTGTGGCCCCTGCATTGGCCAGTGGGACAGGAAGGACATCAAGAAG
GGGGAGAAGAACACAATCGTCACCTCCTACAACAGGAACTTCACGGGCCGCAACGACGCAAACCCCGAGACCCAT
GCCTTTGTCACGTCCCCAGAGATTGTCACAGCCCTGGCCATTGCGGGAACCCTCAAGTTCAACCCAGAGACCGAC
TACCTGACGGGCACGGATGGCAAGAAGTTCAGGCTGGAGGCTCCGGATGCAGATGAGCTTCCCAAAGGGGAGTTT
GACCCAGGGCAGGACACCTACCAGCACCCACCCAAGGACAGCAGCGGGCAGCATGTGGACGTGAGCCCCACCAGC
CAGCGCCTGCAGCTCCTGGAGCCTTTTGACAAGTGGGATGGCAAGGACCTGGAGGACCTGCAGATCCTCATCAAG
GTCAAAGGGAAGTGTACCACTGACCACATCTCAGCTGCTGGCCCCTGGCTCAAGTTCCGTGGGCACTTGGATAAC
ATCTCCAACAACCTGCTCATTGGTGCCATCAACATTGAAAACGGCAAGGCCAACTCCGTGCGCAATGCCGTCACT
CAGGAGTTTGGCCCCGTCCCTGACACTGCCCGCTACTACAAGAAACATGGCATCAGGTGGGTGGTGATCGGAGAC
GAGAACTACGGCGAGGGCTCGAGCCGGGAGCATGCAGCTCTGGAGCCTCGCCACCTTGGGGGCCGGGCCATCATC
ACCAAGAGCTTTGCCAGGATCCACGAGACCAACCTGAAGAAACAGGGCCTGCTGCCTCTGACCTTCGCTGACCCG
GCTGACTACAACAAGATTCACCCTGTGGACAAGCTGACCATTCAGGGCCTGAAGGACTTCACCCCTGGCAAGCCC
CTGAAGTGCATCATCAAGCACCCCAACGGGACCCAGGAGACCATCCTCCTGAACCACACCTTCAACGAGACGCAG
ATTGAGTGGTTCCGCGCTGGCAGTGCCCTCAACAGAATGAAGGAACTGCAACAGTGAGGGCAGTGCCTCCCCGCC
CCGCCGCTGGCGTCAAGTTCAGCTCCACGTGTGCCATCAGTGGATCCGATCCGTCCAGCCATGGCTTCCTATTCC
AAG

FIGURE 4384A

GTGATACGAGCGGCGGCACGTGGCGCGGGTGCGGGGCGTGGAGTGGCGTGGCGTGGAGTGGCGTGGCGTGGCGGG
GTCTCGCGGCGCGGGCGCGCACCCGGAGCTGTGGACGGAGAGTGCCTCCCTCTGGCCTCAGTTTCCTCATGTTGT
AGTAGCGGAGCATGGCCCGGACCGGGCCCCCGAGACCGCCCCGTGCAACCTCACCGCCAGCCTGGGGGCCTCAGC
GACTGGGACGGGACCAAGGGGCTCGGGGATTCTCCCTGCCCCCGGCCCTGGTGCGTGACTGACCCTCCTGTTCCC
AGAGCCCCCAGCGCAGGCCGGGATGTTCGTCCTGGTGGAAATGGTGGACACCGTCCGGATCCCCCCTTGGCAGTT
TGAGAGGAAGCTCAACGACTCCATTGCCGAGGAGCTGAACAAGAAGTTGGCCAACAAGGTCGTGTACAACGTGGG
ACTCTGCATTTGTCTGTTTGATATCACCAAACTGGAGGATGCCTATGTATTCCCTGGGGATGGCGCATCACACAC
CAAAGTCCATTTTCGCTGCGTGGTGTTTCATCCATTCCTAGATGAGATTCTCATTGGGAAGATCAAAGGCTGCAG
CCCAGAAGGAGTGCACGTCTCTCTAGGCTTCTTCGATGACATTCTCATCCCCCCAGAGTCACTGCAGCAGCCAGC
CAAGTTCGACGAAGCGGAGCAGGTGTGGGTGTGGGAGTACGAGACGGAGGAAGGAGCACACGACCTCTACATGGA
CACCGGCGAGGAGATCCGCTTCCGGGTGGTGGACGAGAGCTTTGTTGACACGTCCCCCACAGGGCCCAGCTCAGC
AGATGCCACCACTTCCAGTGAGGAGCTGCCAAAGAAGGAGGCTCCGTACACGCTTGTGGGATCCATCAGTGAGCC
AGGCCTGGGCCTTCTCTCCTGGTGGACCAGCAACTAGCCCTGGGGCTGGACAGTGGACCCTACCAGCCTGCGGGA
AGGTGGTATGGCCGGCTGTGAAGACAACAGCAGCTGAGGCCGATGCTAAGGAGATAGTGTCTCGAGCTGGACAGT
GAGGCAAGGCCAGGAGTGCCCACCAGCTTGCCCCGCTCCTCCACCATCTAGGCCCTGCTCCTCCTTCACTGCAGT
GATGGATCCATCTGTGGCTGTGGCTGTTGGGCCTCCACTGACCTTGACTGAAAAGACCCTTCCTGGACCCTGGAC
TTGACAACAAACGGCACAGACACCAATCACTCACAGAACAGTCACTGGTTTTGGATTCTTGTTTTCCTTGCAAGA
ACAAAAGGTTCTCTAGAATCCTTCAGCCACCAATGAAATGATCAGGCAGGAGAAAAACTTTAGATGGGAGTCTTG
TCATCAAAAATAAATACAGTTGCATGGAGCTGCTTAAGATCTGAACCAAACTCAAAATAGGAAGACGGGGGCTAA
AAAGTTATTTTAAGAACCCCCCCACCACAACCACAGTCACTCCGTGGGCTAAGCGGGGAGCAGGAAGCATGTCTG
GTCACACCATCTTGGAATAGGAAGCC**ATG**GCTGGACGGATCGGATCCACTGATGGCACACGTGGAGCTGAACTTG
ACGCCAGCGGCGGGGCGGGGAGGCACTGCCCTCACTGTTGCAGTTCCTTCATTCTGTTGAGGGCACTGCCAGCGC
GGAACCACTCAATCTGCGTCTCGTTGAAGGTGTGGTTCAGGAGGATGGTCTCCTGGGTCCCGTTGGGGTGCTTGA
TGATGCACTTCAGGGGCTGCAAGGAGAAGGTGGGTGTGGGTGGAAGTGGTGGGTACTGTGTGCCCTTGGCCCCGC
AGGGGGGTCAGGGAGACAGGGCACTGCCTGGGGACCTAAGAGGTCAGCAGGCAAACCAAATCCTAGGCCAGTCTG
TGCCTGATGGCCCAGGTCAGACCCAGGTGGCACCTACAGGGGATTCCTGGGGCCCAGAGGGTCCTGCAGTGGGTG
GGCTGTCCCCTGAGTGCCAGGTCCTGGTGAGTAAAGGGAGGTTGGGGAGGTGTGAGGGCCCCGGGTTGACTCCAA
CCCCCAACTCTGAGAAGCCACTTTGCTTTCTCTGTGGGGCCACCTGGAGAACTGGGGGCCTTTCCAGCTGGAATG
AAGCCTCCTGGGAGAAGCTACCCTGGGGCCAGTGCAGGAGGGGAAACAAGGTGGCTGCCCCTCACCCCACCACCT
CAGGGGGACCCGGGCCCCTAACCTTGCCAGGGGTGAAGTCCTTCAGGCCC**TGA**ATGGTCAGCTTGTCCACAGGGT
GAATCTTGTTGTAGTCAGCCGGGTCAGCGAAGGTCAGAGGCAGCAGGCCCTGTTTCTTCAGGTTGGTCTCTGGAA
AGCAGGCGGCATTCGGTCATCGGGGGCCTGACTAGCCTGGAGAGCTTCATTTTCTGAACCCATCTGGGGCTCTGG
GAGATGCCCCTAATCCTGCTGCCTGGGACAATGCCCGGGCAGTGACTATGGGGCCCTGGTCTGCTCCCTTTCACT
AGGGGTGCCCCTAGCAAGTGTGCGCTGGTGCTGAGGTCTGCGAGGCCTTCCTGCTGCACATTCATGATCAGAAAG
AACCCCCTGGCACATGTCCTAGATCTCAGCGGCTCAGATCTACAAGCCTGGAAGCAGGGCCTGCGGGAAGCCGGG
AAGCTGAGCGTCGGATGTGCACTGTGTGAGCCTAAGAAGGGGCAAGAGGCTGACGGGCCTGTGGGCTGCAGTGGA
CACAGCCTAGAACCAGGCCCAACTCAGCCACGGGCAGGGAGAGTGACCTTGATCACTAGGGATGGGATGAGGATG
GCCTGGGTACAGACTCCAGCTCACCGTGGATCCTGGCAAAGCTCTTGGTGATGATGGCCCGGCCCCCAAGGTGGC
GAGGCTCCAGAGCTGCATGCTCCCGGCTCGAGCCCTCGCCGTAGTTCTCGTCTCCGATCACCACCCACCTGATGC
CATGTTTCTGTCAGGCAAGCGGGGGTAAGGTTATAAGGCAGAGGAGGGCACCGTCCTCACCTGTCTGGCCCTACC
TGCCTGGCCTCACCCACCTGGCGCCTGGGCATCCTGAGGCTCCCGGTAAAGGGGCTGGAGGGGCCCTTCCTCGCC
TGCTGCCTAAGGGCAAGTGAAGCCTGCGTGAATGAGACCCAAACGAGGCCCCGAGGGGACAGAGGCACGTGGTTG
TTTGCAGTGGCAAAGAAGACAGAAGCCACCCATTGGTGCTTGGCAGAGGCAGGTGTGTGTGGAGGGAGGTTGGGT
GAGACAGGGACGGCCTCCGGGCCCCACACAAGATGCATCTGTGAAGCTCAAGGCGCCCCCTTCCTGGGAGCACCC
TCTGCCCCACCCAGCCACCAGGGGGTGCCAGAGTCCTTTCACCCGGCTGGGCCAGGACTTGGGTTCAGCCCTGGT
TCTGTTTGTTTCTCAAAGCAGAAAAAGTCCAATCACCTCAGACCCTCTCTGCCTGCTCACTGTGAGGCCCCGTGT
AGCCCCCTCTCTGAGCTTTTGGCCTCTGACTTCCTGAGTCGGCCCCCTTCCTTGTCTTTGTCTAGGGCCAGATAT
CCTAAGATATCTCTCACTAACTCCTCCTGGTGCAGGGACCCGGCTGTACCACCGGACCTGGGCCTCATGCCTTCT

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FIGURE 4384B

CAGCCACAGGGAGGGGCTGCAGGCCTCTCCTCCCTTCCACAGCAGTCCCCTTTGGGCTTGGTCGGCCTCCTTCCC
AGTTTCCACTCCCCTAATGTCCTCCCTGCACCTGCCTTGCAGGCCCCTTCAGGAGTGACCACTGGCATTGCCCCT
ATCAACTCTGACCCACCTTGTAGTAGCGGGCAGTGTCAGGGACGGGGCCAAACTCCTGAGTGACGGCATTGCGCA
CGGAGTTGGCCTTGCCGTTTTCAATGTTGATGGCACCAATGAGCAGGTTGTTGGAGATGTTATCCAAGTGCCCAC
GGAACTTGAGCCAGGGGCCAGCAGCTGAGATGTGGTCAGTGGTACACTTCCCTTTGACCTTGGGTGGTAAGTAGA
GAGGACAGAGGTCAGGGCATGGCCCTGGAGGGGTGGATGACAAGCCCTCCAGAGGCAGGCAGCAGGCCCCGGGGC
CCAGGAGGGGTGACAGAGGGGTGAGAGGCAGGCAAGTCTTCAGACACGTGTTCTGTGGTCCTGGTGCTTCCACCC
TAAGGCCACATGGGCTCAGGCCAGGCCTTCATCCCCTCAAAGGCCTCTGGCTGCTCAGTCTCCCTTATGGGGCAG
AGGCCGCCCAAAGTTGGGACAGGTCAATGTTCGCTCACCCTTCAGGCCTCAGCTGCAAGATCAGCCACAGACCTC
ATGCTGGACACAGGAGCCCAGGACATGCCTGGGTCCTGGCTGATGACTGATTAGTCTCTTCTGTCACAGGGGTGC
CTGGAGACCCCTTAATAAGCAGCATAAATAAATATCTGACACAGATTGGAGGCCTCTGGCCACACC

FIGURE 4385

AGCCATGGCAGTCACCGCCCAGGCAGCCCGCAGGAAGGAGCGCGTCCTCTGCCTGTTTGACGTGGACGGGACCCT
CACGCCGGCTCGCCAGAAAATTGACCCTGAGGTGGCCGCCTTCCTGCAGAAGCTACGAAGTAGAGTGCAGATCGG
TGTGGTGGGCGGCTCTGACTACTGTAAGATCGCTGAGCAGCTGGGTGACGGGGATGAAGTCATTGAGAAGTTTGA
TTATGTGTTTGCCGAGAACGGGACGGTGCAGTATAAGCACGGACGACTGCTCTCCAAGCAGACCATCCAGAACCA
CCTGGGGGGAGGAGCTGCTGCAGGACTTGATCAACTTCTGCCTCAGCTACATGGCCCTGCTCAGGCTGCCCAAGAA
GCGTGGAACCTTCATCGAGTTCCGGAATGGCATGCTGAACATCTCGCCCATCGGCCGGAGCTGCACCCTGGAGGA
GAGGATCGAGTTCTCCGAACTGGACAAGAAAGAGAAGATCCGGGAGAAGTTCGTGGAAGCCCTGAAAACAGAGTT
TGCTGGCAAAGGGCTGAGGTTCTCTCGAGGAGGCATGATCAGCTTTGACGTCTTCCCCGAGGGCTGGGACAAGCG
CTACTGCCTGGATAGCCTGGACCAGGACAGCTTCGACACCATCCACTTCTTTGGGAACGAGACTAGCCCTGGTGG
GAACGACTTTGAGATCTTTGCCGACCCCCGGACTGTTGGCCACAGCGTGGTGTCTCCTCAGGACACGGTGCAGCG
ATGCCGGGAGATTTTCTTCCCAGAGACAGCTCATGAGGCGTGACCGGGGCCCACATCTGTGTGTCGTGACTTCTG
AAGAGTTTGGCCTAGGCCTAAAGAGAGGTCCTGGTGTTGGATAGATGCCAGGGCCCCTCCTCTGGCCCAGGACGC
CTGCTGCAAGCCCACCCAGATGGGGCCAGAGTCTGTGTGGACAACCGTCCCCAGCCAGTCTGCTCCTAGTGGCAC
TGGCTTCGTCCTCCCAGGGCCCAGAGTGTTCCCCATGCTCCACCTGGTGGCCCAGGCCACAGCTGCTGCTTGTAT
TTCGGTACAGAAGAGGTTTCTTTCTGCACCAGGAGGAGGCGTGCTCAAGTATCGGTACGAGATCTAGCCTGCCCT
GCCTGCCTGCCCTGGGCGATGAGGTACGGTGGGGAAGGTGCCTATTTTAGAGAACTTTGTCACAGTATTAAAGTT
CCC

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FIGURE 4386

GCGGGCCGTTATCCATTTGTGTTGTTCGCCAGCTAGGCCTGGCCTCGTCCCGCTTCGCTCGGTCGGTCTCGCGCG
CCCCCATAGCCTTGCTAGAGGGTTAGCGTTAGCCTTAAGTGTGCGAATCCGAGGAGCAGCGACAGACTCGAGACC
ACGCTCCTTCCTCGGGAAGGAGGCGGCACCTCGCGTTTGAGGCCCGCCTGCGTTTGAGGCCCGCCTGCGCTTGCG
GCCCGCCTGCGCTTGAGGCCTGTCTGCGTTTGAGATCTCATTGGGCGTGATTGAGGAATTTGGGGAGGTTTTTGG
GCGGTATTGAGGACGAGGGGGTCCGTTAGTCAGCATAGAATCCTGGAGCGGGAATCCCTCACCGTCTAAATGGCG
TCGGGGGCGGGACCTCCGGGATCTGGCTTCCGCGGGCCGCCGCCGGCCCTGAAACGTGAGGGATAGCTGAGATGA
GGCAGCTACTGGGATGGCCCCCATGCGCATTTACATGCAGTCCGACTGCCGAGCTTTCGAGGCAGCAGGATTTAC
CGTCCACATTCCTCACTACTAACCAAGCTTTTAGAACAGATCTCACAAGAACCTAGAGGTCGGTATTTTTTCGAT
TTAAATTTGCCTGTTACTGACGTTAACGTCTTTCGCCTAGTGAGCAGTAGCCAAC**ATG**TCAGGGTGGGAGTCATA
TTACAAAACCGAGGGCGATGAAGAAGCAGAGGAAGAACAAGAAGAGAACCTTGAAGCAAGTGGAGACTATAAATA
TTCAGGAAGAGATAGTTTGATTTTTTTGGTTGATGCCTCCAAGGCTATGTTTGAATCTCAGAGTGAAGATGAGTT
GACACCTTTTGACATGAGCATCCAGTGTATCCAAAGTGTGTACATCAGTAAGATCATAAGCAGTGATCGAGATCT
CTTGGCTGTGGTGTTCTATGGTACCGAGAAAGACAAAAATTCAGTGAATTTTAAAAATATTTACGTCTTACAGGA
GCTGGATAATCCAGGTGCAAAACGAATTCTAGAGCTTGACCAGTTTAAGGGGCAGCAGGGACAAAAACGTTTCCA
AGACATGATGGGCCACGGATCTGACTACTCACTCAGTGAAGTGCTGTGGGTCTGTGCCAACCTCTTTAGTGATGT
CCAATTCAAGATGAGTCATAAGAGGATCATGCTGTTCACCAATGAAGACAACCCCCATGGCAATGACAGTGCCAA
AGCCAGCCGGGCCAGGACCAAAGCCGGTGATCTCCGAGATACAGGCATCTTCCTTGACTTGATGCACCTGAAGAA
ACCTGGGGGCTTTGACATATCCTTGTTCTACAGAGATATCATCAGCATAGCAGAGGATGAGGACCTCAGGGTTCA
CTTTGAGGAATCCAGCAAGCTAGAAGACCTGTTGCGGAAGGTTCGCGCCAAGGAGACCAGGAAGCGAGCACTCAG
CAGGTTAAAGCTGAAGCTCAACAAAGATATAGTGATCTCTGTGGGCATTTATAATCTGGTCCAGAAGGCTCTCAA
GCCTCCTCCAATAAAGCTCTATCGGGAAACAAATGAACCAGTGAAAACCAAGACCCGGACCTTTAATACAAGTAC
AGGCGGTTTGCTTCTGCCTAGCGATACCAAGAGGTCTCAGATCTATGGGAGTCGTCAGATTATACTGGAGAAAGA
GGAAACAGAAGAGCTAAAACGGTTTGATGATCCAGGTTTGATGCTCATGGGTTTCAAGCCGTTGGTACTGCTGAA
GAAACACCATTACCTGAGGCCCTCCCTGTTCGTGTACCCAGAGGAGTCGCTGGTGATTGGGAGCTCAACCCTGTT
CAGTGCTCTGCTCATCAAGTGTCTGGAGAAGGAGGTTGCAGCATTGTGCAGATACACACCCCGCAGGAACATCCC
TCCTTATTTTGTGGCTTTGGTGCCACAGGAAGAAGAGTTGGATGACCAGAAAATTCAGGTGACTCCTCCAGGCTT
CCAGCTGGTCTTTTTACCCTTTGCTGATGATAAAAGGAAGATGCCCTTTACTGAAAAAATCATGGCAACTCCAGA
GCAGGTGGGCAAGATGAAGGCTATCGTTGAGAAGCTTCGCTTCACATACAGAAGTGACAGCTTTGAGAACCCCGT
GCTGCAGCAGCACTTCAGGAACCTGGAGGCCTTGGCCTTGGATTTGATGGAGCCGGAACAAGCAGTGGACCTGAC
ATTGCCCAAGGTTGAAGCAATGAATAAAAGACTGGGCTCCTTGGTGGATGAGTTTAAGGAGCTTGTTTACCCACC
AGATTACAATCCTGAAGGGAAAGTTACCAAGAGAAAACACGATAATGAAGGTTCTGGAAGCAAAAGGCCCAAGGT
GGAGTATTCAGAAGAGGAGCTGAAGACCCACATCAGCAAGGGTACGCTGGGCAAGTTCACTGTGCCCATGCTGAA
AGAGGCCTGCCGGGCTTACGGGCTGAAGAGTGGGCTGAAGAAGCAGGAGCTGCTGGAAGCCCTCACCAAGCACTT
CCAGGAC**TGA**CCAGAGGCCGCGCGTCCAGCTGCCCTTCCGCAGTGTGGCCAGGCTGCCTGGCCTTGTCCTCAGCC
AGTTAAAATGTGTTTCTCCTGAGCTAGGAAGAGTCTACCCGACATAAGTCGAGGGACTTTATGTTTTTGAGGCTT
TCTGTTGCCATGGTGATGGTGTAGCCCTCCCACTTTGCTGTTCCTTACTTTACTGCCTGAATAAAGAGCCCTAAG
TTTGTACT

FIGURE 4387

ATCCGTGTCCTTGCGGTGCTGGGCAGCAGACCGTCCAAACCGACACGCGTGGTATCCTCGCGGTGTCCGGCAAGA
GACTACCAAGACAGACGCT**ATG**ACTGAGGCTGATGTGAATCCAAAGGCCTATCCCCTTGCCGATGCCCACCTCAC
CAAGAAGCTACTGGACCTCGTTCAGCAGTCATGTAACTATAAGCAGCTTCGGAAAGGAGCCAATGAGGCCACCAA
AACCCTCAACAGGGGCATCTCTGAGTTCATCGTGATGGCTGCAGACGCCGAGCCACTGGAGATCATTCTGCACCT
GCCGCTGCTGTGTGAAGACAAGAATGTGCCCTACGTGTTTGTGCGCTCCAAGCAGGCCCTGGGGAGAGCCTGTGG
GGTCTCCAGGCCTGTCATCGCCTGTTCTGTCACCATCAAAGAAGGCTCGCAGCTGAAACAGCAGATCCAATCCAT
TCAGCAGTCCATTGAAAGGCTCTTAGTC**TAA**ACCTGTGGCCTCTGCCACGTGCTCCCTGCCAGCTTCCCCCCTGA
GGTTGTGTATCATATTATCTGTGTTAGCATGTAGTATTTTCAGCTACTCTCTATTGTTATAAAATGTAGTACTAA
ATCTGGTTTCTGGATTTTTGTGTTGTTTTTGTTCTGTTTTACAGGGTTGCTATCCCCCTTCCTTTCCTCCCTCCC
TCTGCCATCCTTCATCCTTTTATCCTCCCTTTTTGGAACAAGTGTTCAGAGCAGACAGAAGCAGGGTGGTGGCAC
CGTTGAAAGGCAGAAAGAGCCAGGAGAAAGCTGATGGAGCCAGGACAGAGATCTGGTTCCAGCTTTCAGCCACTA
GCTTCCTGTTGTGTGCGGGGTGTGGTGGAATTAAACAGCATTCATTGTGTGTCCCTGTGCCTGGCACACAGAATC
ATTCATACGTGTTCAAGTGATCAAGGGGTTTCATTTGCTCTTGGGGGATTAGGTATCATTTGGGGAGGAAGCATG
TGTTCTGTGAGGTTGTTCGGCTATGTCCAAGTGTCGTTTACTAATGTACCCCTGCTGTTTGCTTTTGGTAATGTG
ATGTTGATGTTCTCCCCCTACCCACAACCATGCCCTTGAGGGTAGCAGGGCAGCAGCATACCAAAGAGATGTGCT
GCAGGACTCCGGAGGCAGCCTGGGTGGGTGAGCCATGGGGCAGTTGACCTGGGTCTTGAAAGAGTCGGGAGTGAC
AAGCTCAGAGAGCATGAACTGATGCTGGCATGAAGGATTCCAGGAAGATCATGGAGACCTGGCTGGTAGCTGTAA
CAGAGATGGTGGAGTCCAAGGAAACAGCCTGTCTCTGGTGAATGGGACTTTCTTTGGTGGACACTTGGCACCAGC
TCTGAGAGCCCTTCCCCTGTGTCCTGCCACCATGTGGGTCAGATGTACTCTCTGTCACATGAGGAGAGTGCTAGT
TCATGTGTTCTCCATTCTTGTGAGCATCCTAATAAATCTGTTCCATTTTG

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FIGURE 4388

GAGCTGAGGTGTGGGTGTTCGTTTCTCAGGTGAAACATGGCTAAAAGCTTACGGAGTAAGTGGAAAAGAAAGATG
CGTGCTGAAAAGAGAAAAAAGAATGCCCCAAAGGAGGCCAGCAGGCTTAAAAGTATTCTCAAACTAGACGGTGAT
GTTTTAATGAAAGATGTTCAAGAGATAGCAACTGTGGTGGTACCCAAACATTGCCAAGAGAAAATGCAATGTGAG
GTAAAAGATGAAAAAGATGACATGAAAAGGGAGACTGATACTAAGAGAAACAAAAAGACTCTTCTAGACCAGCAT
GGACAGTACCCAATATGGATGAACCAAAGGCAAAGAAAAAGGCTGACGGCAAAGCGAGAGAAAAGAAAGGGGAAA
AGCAAAGCAAAAGCAGTGAAAGTGGCAAAGGGTTTGGCGTGGTAGACTCTTAAAACCTTGGAAAATGCCACATGG
GATAGATGATGGATTAGAATGTATATACATGTATACTTTGATTTCAGCTGCCACCAAATGAAAACCATTTGTTTT
CCTATTTTAACTTGGCCTTTTTTCTTCAATTCAAACCCAGCATAACTCCTGAAGTTTGTTTTGGGAACTTGAATA
AAATATTTTCTTTGATACA

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FIGURE 4389

GGACCACAGCTGATGATGGTACAGAGACCCAGGCTCCTGCAGGAGATGACCAGGGACAGTTAAGAGTTGAAATTG
CTGAAGAGATCCAGGTACAAGGGCAAGGAAATAAGAATGACGGTGGAGTTGAGGATGTTGCAGAACTCCAGGATA
TAGGAAGCCAGAGAAAGTGCACAGATGAGGATGTTGGAGAGCCTCGAGCACCAAGGGGAGGAAACAAGGATCTGG
TCAGAGGAGAGGATGCTGTGAGGGACAGTCTCCAAGTCGACTGTTCTGGGAGTGAGAGGCCCACAGGCAGGAAGC
ACAGCCTACCATGGCCTCCAGCCTTCACTGGCTATGGATGTGGGACCCGGGAACAGGAACAGGCAGTGGCTGTGA
ATGGTTTCATCTCTGCCCCCTGTCCTGAG**ATG**AATCCTGTCCCCCACTGGGGTGAAGTCTTCCTGCTGGTGGGTG
GGGAGGGAGAGCATCTGGCCAGCCAGGGCACAACCCCTGCCAGGGATCATAGAGTGGGGATCAGTCCAGCCTCCC
AGCAGGCCCAACCTGAATCCTGGAGAAGACGACAAAGGGACAAAGGGGTGGATCCAGAGAAGGCCCCCAGCCTGA
CTCGGCAGTCCCAAAACCCTCCGTCTCTGACAGCTCCCTTGGGCATGCCCTCTGCCTGCTCCTGTCTCCCGTGTG
GCCCAGCCCCGGAAGCTGCCATCATTCTAGCGGGTCCTCCCACCGCCCTCACTGTCCTGCCCAAGGGGACAGGCC
TCAAGAAGAGCAAACGACTGCTCCTGGAGTCCCTCATGCGGAGGAGGATTGCACACCTGAAGTGGGGTCTTCCCC
GGCGGATCCTGGAGTCCTATTTCCTGTTTAACTTCTTAGGATCTTGCTCATTGACCCTTGCTGGGGCGAGGCTCT
CTGGACTGAACACAGGCCAGGAGCTCCAAGCCCAGCAGGAAAGGTATTGTGAGGCCCAAGGCTCCCCACCAGGCC
TTAAGTCCCCAGAGAGGTTCCAGAGGGTTCAGCGCCCAGACAGAAAAAGCTCGAAACTTCCTATACAAGCCAGAG
CTCTGGAGAGGAACAGACCGCACATGTCAGAGCCCATTAAGCATTTCCATCCAGCC**TGA**AAAGGCCAGGAGAGTC
AGGCCACCAGGGGGCGCCAGAGAACCACAGGAGATCCAGGAAGCGCTTGCTAGGACCAAGCTCCCAGCTCCCAGG
ACCCCCAGGCCGGCAGCGGAGTCCAGGAGCTGGTGTGGCCCACAAAGGGTCGGAGAGCCTCCCAGTGAGAACAGT
AGGGGCAGGAAAATGATCAGGTCAAGGGTCTCCCAGCTGGCAGAGAGGGCTCCCAGCAGAGTGAGGACTTCATTC
TCTAGGGCAGACCACGCCCACTGGAGGAAGGAATGTACATCCTGGGAGGCCTCTAAGCTCCCCAGACTCAAATGC
CAGCAGCTCACATACTGGAGAAGAGGAAGCCTGGAATCTACAGGGTGCAGAGGGGCTGGGCAGCAGCCTTCCTGC
CATTCTGCAGAACCTGTCAGCTTCAAAGGGAGGCTCCACTCTGCGGTGGCAAAGCTGGGCCTGACCCTTCTGGCC
AAGATGTCCTGGTCCCCACAGCTCGCCAAGCGCAAGCACTTGGCCCCTAACCTGAGCCTGAGGGAACCTGATTCT
ACTCTGCCTCCCAAAGTGGGTGATCCTCGTGCAGGGGAGGACAGCATCGGAGATCACACTGCTTCACAGAGGGAT
CTTCAGCTGCAAGGTCACTGCTGTACTGGGGCCACCCTTCCTAAGACAGAGAGTCCCCAGGGCCAGGAGGCACCT
GGGAACCCAAATGGGGCTCCACAGAATACACGAGCCTCCAAAAAGTTTAGTATTATGAAGCATCTGAATTTTTTT
CTCTTCCAGAATGGCTTTAAAAAGTAGACTCAGGCCCAGAGTCCTCAGGACATATCAGAAAAGCTTTGAGAGTGT
CCTGATCCCTGCAAAGCCTCTAATAAATTGGTCATTTGG

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FIGURE 4390

AGTTGCTTTGCTGTTAGCCTGTTGGACCTTCGAGCCTAGCTGCTCGCACAGGACTCGGCCACCTGCCCTTCCTGC
ACCGACTGGCCAGCTCAAGAGGTTTGGATATGGACCTTCTTCAATTCCTGGCCTTCCTCTTTGTCCTGCTTTTGT
CTGGGATGGGAGCCACAGGCACCTTGAGGACCTCCCTGGACCCAAGCCTGGAGATCTACAAGAAGATGTTTGAGG
TGAAGCGGCGGGAGCAGCTGTTGGCACTGAAGAACCTGGCACAGCTGAACGACATCCACCAGCAGTACAAGATCC
TTGATGTCATGCTCAAGGGGCTCTTTAAGGTGCTGGAGGACTCCCGGACAGTGCTCACCGCTGCTGATGTGCTCC
CAGATGGGCCCTTCCCCCAGGACGAGAAGCTGAAGGATGCTTTCTCCCACGTGGTGGAGAACACGGCCTTCTTCG
GCGATGTGGTGCTGCGCTTCCCGAGGATTGTGCACTATTACTTTGACCACAACTCCAACTGGAACCTCCTCATCC
GCTGGGGTATCAGTTTCTGCAACCAGACAGGCGTCTTCAACCAGGGGCCCCACTCGCCCATCCTCAGCCTGATGG
CCCAGGAGCTGGGGATCAGTGAGAAAGACTCCAACTTCCAGAACCCATTTAAAATCGACCGCACAGAGTTCATTC
CCAGCACTGACCCTTTCCAGAAGGCCCTGAGAGAAGAAGAGAAACGCCGAAAGAAAGAGGAGAAGCGGAAGGAGA
TCCGAAAAGGCCCAAGGATCTCCAGATCCCAGTCTGAGTTATAGCCCTGGAGCAGCTCAGGGCTCAGGGGGCCAC
AAGGAGGCAGGTCGGGAGGAAGAAGAGGTGGAGGTGTGGTTGTGGTGGAGAGCACCAGCTAGCCCCTTCCAGAAG
GGGAGGCCACATTTGCCCGGCCCCCTGGAGCTGGGTCTGAGCCCCAGCTGAAGGGACTGAGCCTCAGATGGCTGG
ATTTTCTCTCAGGGGCCTCCTGCTGAAGGGGCCTTCAGAGGATTTTATGCTGGAAATATGACCCTGTGCAGACTG
CTGGGGGAGGCAGGAGGATGCCTGCCTGGACCCTGTTGGTGGCTGAAGACCTCTGGCCAGCTGGCTTCCGCCCTT
GGTGGGGAAGCAGCAGAACTAGGTTCTGAGCCACGGGTCAGGGTGCCACCCTGCTGCTGGCCCCACTGTGTCACA
GAGCTGCCTGGCACAGGTCCCAGCCCCTCTGCAGAGACACAATAAAAGCCAGCAGACCCTTTG

FIGURE 4391A

CCGTCGGTGAGGCGGTGCCGGGCGGGGGGTTGTCGGGTGTCATGGGCGGTGGCGACGGCACCGCCCCCGCGTCTCC
CTGAGCGGGACGGCAGGGGGGGCTTCTGCGCTGAGCCGGGCGATGGACGACAGCGGCGAGCTGGGTGGTCTGGAG
ACCATGGAGACCCTCACGGAGCTGGGCGACGAGCTGACCCTGGGAGACATCGACGAGATGCTGCAATTTGTCAGT
AATCAAGTGGGAGAGTTCCCTGACTTGTTTTCAGAACAGCTGTGTAGCTCCTTTCCTGGCAGTGGTGGTAGTGGT
AGCAGCAGCGGCAGCAGTGGCAGCAGCAGCAGCAGCAATGGCAGGGGCAGCAGCAGCGGAGCTGTGGACCCT
TCAGTGCAACGGTCATTCACCCAGGTCACATTACCTTCCTTCTCTCCCTCGGCGGCCTCCCCACAGGCTCCAACT
CTGCAAGTCAAGGTTTCTCCCACCTCAGTTCCCACCACACCCAGGGCAACTCCTATTCTTCAGCCCCGCCCCCAG
CCCCAGCCTCAACCTCAAACTCAGCTGCAACAACAGACGGTAATGATCACGCCAACATTCAGCACCACTCCGCAG
ACGAGGATCATCCAGCAGCCTTTGATATACCAGAATGCAGCTACTAGCTTTCAAGTCCTTCAGCCTCAAGTCCAA
AGCCTGGTGACATCCTCCCAGGTACAGCCGGTCACCATTCAGCAGCAGGTGCAGACAGTACAGGCCCAGCGGGTG
CTGACACAAACGGCCAATGGCACGCTGCAGACCCTTGCCCCGGCTACGGTGCAGACAGTTGCTGCGCCACAGGTG
CAGCAGGTCCCGGTCCTGGTCCAGCCTCAGATCATCAAGACAGATTCCCTTGTTTTGACCACACTGAAGACAGAT
GGCAGCCCTGTTATGGCTGCGGTCCAGAACCCGGCCCTCACCGCCCTCACCACCCCTATCCAGACGGCTGCCCTT
CAAGTACCAACCCTGGTGGGCAGCAGTGGGACCATTCTGACCACAATGCCTGTAATGATGGGGCAAGAGAAAGTG
CCCATTAAGCAGGTACCTGGGGGAGTCAAGCAGCTTGAGCCCCCCAAAGAAGGAGAAAGGCGGACAACCCATAAT
ATCATTGAGAAACGATATCGCTCCTCCATCAATGACAAAATCATCGAATTGAAAGACCTGGTCATGGGGACAGAC
GCCAAGATGCACAAGTCTGGCGTTCTGAGGAAGGCCATTGATTACATCAAATACTTGCAGCAGGTCAATCATAAA
CTGCGCCAGGAGAACATGGTGCTGAAGCTGGCAAATCAAAAGAACAAGCTTCTAAAGGGCATCGACCTAGGCAGT
CTGGTGGACAATGAGGTGGACCTGAAGATCGAGGACTTTAATCAGAATGTCCTTCTGATGTCCCCCCCAGCCTCT
GACTCAGGGTCCCAGGCTGGCTTCTCTCCCTACTCCATTGACTCTGAGCCAGGAAGCCCTCTATTGGATGATGCA
AAGGTCAAAGATGAGCCAGACTCTCCTCCTGTGGCGCTGGGCATGGTAGACCGCTCACGGATTCTTCTGTGTGTC
CTCACCTTCCTGTGCCTCTCCTTTAACCCCCTGACTTCCCTGCTGCAGTGGGGAGGGGCCCACGACTCTGACCAG
CACCCACACTCAGGCTCTGGCCGCAGTGTCCTGTCATTCGAGTCAGGTTCTGGGGGCTGGTTTGACTGGATGATG
CCTACTCTTCTCTTATGGCTGGTAAATGGTGTGATTGTCCTGAGCGTCTTTGTGAAGCTGCTGGTTCATGGGGAG
CCAGTGATCCGGCCACACTCGCGCTCCTCGGTCACCTTCTGGAGGCACCGGAAACAGGCAGATCTGGATCTCGCC
AGAGGAGATTTTGCAGCTGCTGCCGGCAACCTACAAACCTGCCTGGCAGTTTTGGGCCGGGCACTGCCCACCTCC
CGCCTGGACCTGGCCTGCAGCCTCTCCTGGAACGTGATCCGCTACAGCCTGCAGAAGCTACGCCTGGTGCGCTGG
CTGCTCAAGAAAGTCTTCCAGTGCCGGCGGGCCACGCCAGCCACTGAGGCAGGCTTTGAAGACGAAGCTAAGACC
AGCGCCCGGGATGCGGCTCTGGCCTATCACCGGCTGCACCAGCTGCACATCACAGGGAAGCTTCCTGCAGGATCC
GCCTGTTCCGATGTACACATGGCGTTGTGTGCCGTGAACCTGGCTGAATGTGCAGAGGAGAAGATCCCACCGAGC
ACACTGGTTGAGATCCATCTGACTGCTGCCATGGGGCTCAAGACCCGGTGTGGAGGCAAGCTGGGCTTCCTGGCC
AGCTACTTCCTCAGCCGAGCCCAGAGCCTGTGTGGCCCCGAGCACAGTGCTGTTCCTGACTCCCTGCGCTGGCTC
TGCCACCCCCTGGGCCAGAAGTTTTTCATGGAGCGGAGCTGGTCTGTGAAGTCAGCTGCCAAGGAGAGTCTATAC
TGTGCCCAGAGGAACCCAGCTGACCCCATTGCGCAGGTCCACCAGGCCTTCTGCAAGAACCTGCTGGAGCGAGCT
ATAGAGTCCTTGGTGAAACCTCAGGCCAAGAAGAAGGCTGGAGACCAGGAAGAAGAGAGCTGTGAATTCTCCAGT
GCTCTGGAGTACTTGAAATTACTTCATTCTTTTGTGGACTCTGTGGGGGTTATGAGCCCCCCACTCTCCAGGAGC
TCCGTGCTCAAGTCCGCCCTGGGTCCAGACATCATCTGTCGGTGGTGGACGTCTGCAATCACTGTGGCCATCAGC
TGGCTCCAGGGAGACGATGCAGCTGTGCGCTCTCATTTTACCAAAGTGGAACGCATCCCCAAGGCCCTGGAAGTG
ACAGAGAGCCCCCTGGTGAAGGCCATCTTCCATGCCTGCAGAGCCATGCATGCCTCACTCCCTGGGAAAGCAGAT
GGGCAGCAGAGTTCCTTCTGCCATTGCGAGAGGGCCAGTGGCCACCTATGGAGCAGCCTCAACGTCAGTGGGGCC
ACCTCTGACCCTGCCCTCAACCACGTGGTCCAGCTGCTCACCTGTGACCTGCTACTGTCGCTACGGACAGCGCTC
TGGCAAAAACAGGCCAGTGCCAGCCAGGCTGTGGGGGAGACCTACCACGCGTCAGGCGCTGAACTGGCGGGCTTC
CAACGGGACCTGGGCAGCCTGCGCAGGCTGGCACACAGCTTCCGCCCAGCATACCGCAAGGTGTTCCTGCATGAA
GCCACCGTGCGCCTGATGGCAGGAGCCAGCCCCACCCGCACCCACCAGCTGCTGGAACACAGCCTGCGGCGGCGC
ACCACGCAGAGCACCAAGCACGGAGAGGTGGATGCCTGGCCCGGCCAGCGAGAGCGGGCCACCGCCATCCTGCTG
GCCTGCCGCCACCTGCCCCTCTCCTTCCTCTCCTCCCCGGGCCAGCGGGCAGTGCTGCTGGCCGAAGCTGCCCGC
ACCCTGGAGAAGGTGGGCGACCGGCGCTCCTGCAACGACTGCCAGCAGATGATTGTTAAGCTGGGTGGTGGCACT
GCCATTGCCGCCTCCTGACCACCAGGCTCAGCCCACCCCTCCACCTCTCTCTCGATTTCTCTCTCTCCCCCTCAG

FIGURE 4391B

CATCTTCCCGCTGAGAGTGGTGGGGAAGAGCCTTGTCTTCTTAGCTGTCACCTGCCGAGGCTTCTGGGCCACTCA
GGCCAGTGCACCCCTGGGCAGAGCCCCTTAAAGCTGCTGTCACTAGATGCCCATGGTCCAGGGCCTGGTGGGCGT
GAGAGGATAGGTGGCAGGGCAGAAACTGGGCAGCCCTGACTTGATAGCAGCAGGGGGAGCTCCCAAGCTGCCAAG
CCCCTGCCTCCAGCCTTCCTGAGTTTCTCTCTCCTGAACCCTACTCTCTCCTTTTTGCTTCCTCAGTTTTTATCA
GGCTTTCTCTGGGGGACAGCAGTCTCTGAGCACCAGGGAGCAGTTGCCCTCAGGCCTGTGCCCAGCATGCCCTCC
CCTTTTTATACGAATGTTTTCTACCAGTGTGCTTGGGTTTGCCATGATGCGAGGCTGAGTTGCTGTAGCGTCTTG
ATTCTCTCCCTGGGTCTGCGTTCCCTCCCCTGGGCCTGACTGAGCCTGCTCATTGTTTTTCCCTTTATTACACAG
GACAGCCAGGGGAGGAGGGGGGCCCAGCCCTGGGAGGCTGGTGGGAGGCAGGGGGCAGGCCTGCGGATGCATGAA
ATAATGTTGGCATTATTTTTTAATTTTTTAAAAAATAAATGGTATCTTA

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FIGURE 4392

GCACCGCAGGAGCAACGGTTGGTCCTGCGGCTGTGATGTCGGTGTTGAGGCCCCTGGACAAGCTGCCCGGCCTGA
ACACGGCCACCATCTTGCTGGTGGGCACGGAGGATGCTCTTCTGCAGCAGCTGGCGGACTCGATGCTCAAAGAGG
ACTGCGCCTCCGAGCTGAAGGTCCACTTGGCAAAGTCCCTCCCTTTGCCCTCCAGTGTGAATCGGCCCCGAATTG
ACCTGATCGTGTTTGTGGTTAATCTTCACAGCAAATACAGTCTCCAGAACACAGAGGAGTCCCTGCGCCATGTGG
ATGCCAGCTTCTTCTTGGGGAAGGTGTGTTTCCTCGCCACAGGTGCTGGGCGGGAGAGCCACTGCAGCATTCACC
GGCACACCGTGGTGAAGCTGGCCCACACCTATCAAAGCCCCCTGCTCTACTGTGACCTGGAGGTGGAAGGCTTTA
GGGCCACCATGGCGCAGCGCCTGGTGCGCGTGCTGCAGATCTGTGCTGGCCACGTGCCCGGTGTCTCAGCTCTGA
ACCTGCTGTCCCTGCTGAGAAGCTCTGAGGGCCCCTCCCTGGAGGACCTGTGAGGGTGGCTGGCCCCTGGGCTGC
CCCTTCTCATGGCTTCGTGCTGACTCCATAAACATTCTCTGTTGAGGATGTCCAGTCAGGGCTTGACAGGCCCAG
GCTCAGCCCGCCGTGGCTGGGAAGGTTCCCTGCAGTGCCAGTGCTGCAGCAGGGAGAGCTGGGCAGAAGCAGCGA
GGGGGCCCAGCTGGCGAGACTGTAGCCCCCTCCCACTCCCACACTCACTCTTGCAGAGCCTGTGTCTTTAAGCAG
CTGGCGTGTTACATCTCCATTTAAGGTTTCCTTTGAACAAAAGGTCTGTGGCTAAAAAAAGTTTAAAAATC

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FIGURE 4393A

GATTCGAGTCAGAAGCGGCGGCAGGTCTGAACGCTTCGGTAGGATAAGTGCGGTGGGAGGGGGCTCTGCGGTTTT
GGGGAGCCCAGGGCGGGAACCCGGACCCGGCTGGAAGTCCGGAGCCTGGCCGCAGCCCCGCCCCTCCGCTCTTTC
TTGGTGACCTTAAGCCAGTGGCTGCCTTTTTCTGAGCCCGGGCGGGGCCGAAGGCGGCCCGTAGGCCCTCGGGAC
TCCCAGCACTGCAGAGGGTGTGAGGTCTGACATCCAAGACACGTTGTTTCGTATTTCTGAAGGAAGAACTGAAGC
TCCGGGAAGTGATGGCTGGGGATGGGGCGGGCAACTTGGGGACCGAGTGTACGATCCACGCCTAAGGTTGAGGGC
GGCCGAGCTAGCCAGGCAGCCGTGACCCCAGTGCTTTTCAGACGTTTCTTAGCTTCCAGAGCCCAACACATACAG
CTGATACACGCAGACCAGATCTGGTCAGGTCCTCGGAAGCTGAGTCCAGAGCG**ATG**CTGCTGAAGACAGTGCTCT
TGCTGGGACATGTGGCCCAGGTGCTGATGCTGGACAATGGGCTCCTGCAGACACCACCCATGGGCTGGCTGGCCT
GGGAACGCTTCCGCTGCAACATTAACTGTGATGAGGACCCAAAGAACTGCATAAGTGAACAGCTCTTCATGGAGA
TGGCTGACCGGATGGCACAGGATGGATGGCGGGACATGGGCTACACATACCTCAACATTGATGACTGCTGGATCG
GTGGTCGCGATGCCAGTGGCCGCCTGATGCCGGATCCCAAGCGCTTCCCTCATGGCATTCCTTTCCTGGCTGACT
ACGTTCACTCCCTGGGCCTGAAGTTGGGTATCTACGCGGACATGGGCAACTTCACCTGCATGGGTTACCCAGGCA
CCACACTGGACAAGGTGGTCCAGGATGCTCAGACCTTCGCCGAGTGGAAGGTAGACATGCTCAAGCTGGATGGCT
GCTTCTCCACCCCCGAGGAGCGGGCCCAGGGGTACCCCAAGATGGCTGCTGCCCTGAATGCCACAGGCCGCCCCA
TCGCCTTCTCCTGCAGCTGGCCAGCCTATGAAGGCGGCCTCCCCCCAAGGGTGAACTACAGTCTGCTGGCGGACA
TCTGCAACCTCTGGCGTAACTATGATGACATCCAGGACTCCTGGTGGAGCGTGCTCTCCATCCTGAATTGGTTCG
TGGAGCACCAGGACATACTGCAGCCAGTGGCCGGCCCTGGGCACTGGAATGACCCTGACATGCTGCTCATTGGGA
ACTTTGGTCTCAGCTTAGAGCAATCCCGGGCCCAGATGGCCCTGTGGACGGTGCTGGCAGCCCCCCTCTTGATGT
CCACAGACCTGCGTACCATCTCCGCCCAGAACATGGACATTCTGCAGAATCCACTCATGATCAAAATCAACCAGG
ATCCCTTAGGCATCCAGGGACGCAGGATTCACAAGGAAAAATCTCTCATCGAAGTGTACATGCGGCCTCTGTCCA
ACAAGGCTAGCGCCTTAGTCTTCTTCAGCTGCAGGACCGATATGCCTTATCGCTACCACTCCTCCCTTGGCCAGC
TGAACTTCACCGGGTCTGTGATATATGAGGCCCAGGACGTCTACTCAGGTGACATCATCAGTGGCCTCCGAGATG
AAACCAACTTCACAGTGATCATCAACCCTTCAGGGGTAGTGATGTGGTACCTGTATCCCATCAAGAACCTGGAGA
TGTCCCAGCAG**TGA**GGAGCTGGGACATGTGACAGGCTGTGGTGGCACCACTGAGCCTAGACCATGGAGCCTTGGC
ATGCCCAGGGCAAGTGGGGAGGTTCTCTGCTCCCCAGGCCTGCTCGGTGACTGACCCCATCATACCCAAAGTGCA
ATCTCACGGCCAGGTTCTATGCCCTGTCCAAGCGTAAACCCTCTTGGAAACTTCTTTTGGGGCAATTTTCCTGTG
GCCTTCCTGGCCTCTACTTCCATGTGCGCAGCCCCACAGACGTTGCTGAGCAACTCGCCAGCCTCCTGAGCTCCA
TGCCCATCAGGACTCTAGCCTCTGACCTTGCTGTTGACTCTGAAATCAGGATTTGGAAGTTTTCGAATTAGGAGT
AGAGAGATCTGACCTCTTGCCAGGAATGCCCATGGATCATGTGATTGGCTTTTCTACCCATAGAGGGCCTTGCAG
CCTGATACCACCTGGGAGTGAGGGTCACAAAGGAGACCTTGGCTCCCTCAGGTCACCAATAAACCTGTTCTTTAA
TCAAGTAGTTGTAATATGGACCTGGGGTACCTTTAGTTAGGGACTCTGGTGGCACTACACGGGGTGCTGGATTCA
AATCTCACCTCTATGGATGATGTCTGGCATCGTCTGGCCCCTCCTTTTCCAAAGTGACCAGAAGATTGTACTTCC
TAGAGATGCCAGACTTGCCTCACACCCAGGAGCTGCCCCTGCTGTGCCTGGTATGCTGGCAGTGGTGATGGTGAC
AACACAATGAGGCCAAGTAGCAATGCTCCCAGGTCCTGCAGCTTGTGCTCTGCCCAGCAGTGCCCCTGGCCCAGC
ACCTCAGCCTGCTCTTCTCTCTGGTGGCTCCACCCCAACCCCTACTTCTTTTCCTTTATTTCTCTCCCAACCTGG
CTGCAAAGGAGGTTCATATTCCCCAGATGTGTCCACAAACCTGTCCAGGAGTTGTGTCTTAAAATTGATTTCCTG
TCCCTCTTCCTAAGGACAGGGGTAACAGTCAAAGTGAAGGAATGATGGGTTCTTGCCTGTCTTGCTTTGGTCCGT
ATTTCCCAAGCCCTCCTCTTTTAGCCAAGGCTACAGGGCACTTGTCTTCCCTGGTGGCTCTCCCCTTTGGAGAGA
GCTAGTGGCAGAGCAACCTAGCTAGGTCCTCCTTGGGCTTTGAATGCAGGAGCACCCAGTGCCCCAGGCCTTGCA
CTGTGCTGCCCAAGGAGTATTTTCTGGGTGGATCTCCCATACTCCTCAGGGTTCTGAGGTCCTTGTATTTAGGGT
ATGGTGTAAAAACTTACATATGCACATTTTGTTACATCATTTAAGATGATTGAAGCTTTACTGGTTAAGTATAGG
GTCACCAGAGAAAGTTCCTTTCCCCAGTTGATGTCTTGAGGCTGTTGAGAAACTTAGGACAGAAGCCTACCTCAT
CCCAGGCCTGCCCCTCCGTGCATAGCTCTGCCTTTGGGTCTTGTTCATAGTGCTGTTCAGGCAAAATGGAATAGT
CTCAGGTGGGAACACCTTCTCTTGCTAGCTCCAGGAAGGCTTTGTGGGAAATGAGTTGAGACCATGGACTTGGGA
GTTGGGGGCCAGAGTTGAGCCTGGACTTGACCAATTAATTCCCTTACCTTTCAGCCCAAGATAGCTACATGTCTT
TACTTGCTGTATAAGTTTTCCTTTTGTCCTGGGGGTGCCTGATTGATCCTATCTCTTCACCCTTCATTCTTTCAA
CAAACATGCCATCTATCTCCCAGGACATTTATTCCCTTCTATTCAAGGCCAGTTAGGAATGCAATTATTTTTTTT
TTTCAGTTAAATACAGACTTGTTTGGACGCAAGGTACCCTTTCTCTTTTTAAAAACTTTTTATCATGAAAACTTT

FIGURE 4393B

CAAATACAAAAATAAAATGGTAGAGTGAACCTCCATG

FIGURE 4394

GGGCGGCACGAGGGCTGGGCGGTGGGGTGCGGGTGCCCGGGTGAGGGGCGGAGCTGGGGGC**ATG**GCGTCCGGAGC
GGCTCGCTGGCTAGTATTGGCACCCGTCAGGTCCGGGGCTCTCCGGAGCGGGCCTAGCTTGAGGAAAGATGGCGA
TGTCTCCGCCGCATGGAGCGGCTCAGGCCGGAGCCTGGTACCGTCGAGGTCAGTCATCGTTACCCGCAGCGGCGC
CATTTTGCCCAAACCGGTGAAAATGTCCTTCGGCCTTCTCCGTGTGTTCTCCATTGTGATCCCCTTTCTCTATGT
CGGGACACTCATTAGCAAGAACTTTGCTGCTCTACTTGAGGAACATGACATTTTTGTTCCAGAGGATGATGATGA
TGATGAC**TAA**CAGGAATTACAGAAAGGAGAAAGCACTAACTGAAGAAATGGTGATGCTCTCAGTTTCTCTGCCTT
CCCTATCAGCAGAAAGGCTCGGGGAAGGCCCTCAGCCTCCCAGTCTGGTGAAGCTTCCTGTATGGTCCATGACCG
TATTCCACCCCAGGCTCTGGGAGGCTCCCTGAGATGTGCTGTCCACTAAGCACTGCACAAACAAGCAATCAAATT
ATGAATAAACATAATAAATATCAGCCGTGCG

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FIGURE 4395

GGCGTTTCTGTAGATGAGCATGCGCAGCACCCACCGTTCGCTCAGCCAGAGAGAGGCTTCCCAGCCAATCCGAGA
GCCTCAGAGTCATCCTCCCGCCCACCCAGCATACAGGCGGGGCGTTCCTCCTTAGCCAATGGGAAAAGACATTCG
CCCGCGGTCCGCACGCGCTGCTTGCAAAGGGGTGGGGTTGTGGAGTGGATGCTTTGGCAAGATGGCGGGGAGCGG
CGTCCGCCAAGCTACTTCTACCGCCAGCACCTTCGTGAAGCCCATTTTCAGTCGGGACATGAACGAGGCCAAGCG
GAGGGTGCGCGAGCTCTACCGCGCCTGGTATCGGGAGGTGCCGAACACTGTGCACCAATTCCAGCTGGACATCAC
TGTGAAAATGGGACGGGATAAAGTCCGAGAAATGTTTATGAAGAATGCCCATGTCACAGACCCCAGGGTGGTTGA
TCTTCTGGTCATTAAGGGAAAGATCGAACTGGAAGAAACAATTAAAGTATGGAAGCAGCGGACACATGTTATGCG
GTTCTTCCATGAAACAGAAGCGCCAAGGCCAAAGGATTTCCTATCCAAGTTCTATGTTGGCCACGATCCATGAAG
TCATTCAGTGGAAAGATGCACGTTGATACTATTTTAGAGCACAAATAAACTCACTATACAATGGTCACTTTGTGA
TAGAATTCCATTGATGAACCAATTTTCTGCAGCCTCTTTTTGCCTGAGCAAGTGGGACCTTGGTATACACATCAC
CTGTTCTTTCCCTTTTCTTGAAATGTGGTGTTTGCTGTAAATTGGATTGAATTATTTTTCTCAGAGCCTTGCATG
TCAGTAAACAGGAAGGAAGGAGGCCATCTGTTCAAAAATTGTGACATTGGGCATGAGGCTGGACGACTTGTTAAT
GTAGTTGTTTCTATAGCCCCTATGATTAGACACTTCAGTGTCAGGGCACAGATTATCTAAAATTAGCCAGCTCTT
CCTGTCAGGGATCAGGGCAGCACTAACAGGCGCAAAAGTAGAGCTGTCAAGATGGGCTAGTTTTCCTTGGGTTCT
GAAGAAAATGGATGTGCAAAGGCTTGGCTCCGCTACTTGTAACAAGCTCCAGCCCTTAAAATGAAATTAACTTCC
TACTCAGGCACCCTGCTTAGGTGCACAGCTGTTCAATATACACAGAGAACAGAAATATTCCTACTGTCTTTGGAA
ACCCTGGTGTACCTCTCAGTGGCAGAATAAACATCAACACAGGTTCAAGAACTG

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FIGURE 4396

GTTCCACCGCTGTCGCCGCCGTAGTGCGGCATGCCGCTCGGCGGAGGGGCCGGGCCTGCGTTCTCTCCTCCTTCC
TCCCCGCCTCTGGCTGCCGGCAGGACCTTTCTCTCGCTGCTACTGGGACCCCGTGTCATAGCCCAGGCTGAGCAC
GATGCCCCCTCAAAAGGGAGGTGATGGAATTAAACCACCCCCAATCATTGGAAGATTTGGAACCTCACTGAAAAT
TGGTATTGTTGGATTGCCAAATGTTGGGAAATCTACTTTCTTCAATGTATTAACCAATAGTCAGGCTTCAGCAGA
AAACTTCCCATTCTGCACTATTGATCCTAATGAGAGCAGAGTACCTGTGCCAGATGAAAGGTTTGACTTTCTTTG
CCAATATCACAAACCAGCAAGCAAAATTCCTGCCTTTCTAAATGTAGTGGATATTGCTGGCCTTGTGAAAGGAGC
TCACAATGGGCAGGGCCTGGGGAATGCTTTTTTATCTCATTTTAGTGCTTGTGATGGCATCTTTCATCTAACACG
TGCTTTTGAAGATGATGATATCACACATGTTGAAGAAAGTGTAGATCCTATTCGAGATATAGAAATAATACATGA
AGAGCTTCAGCTTAAAGATGAGGAATGACTGGGCCCATTATAGATAAACTAGAAAAGGTGGCTGTGAGAGGAGGA
GATAAAAAACTAAAACCCAAATATGATATAATGTGCAAAGTAAAATCCTGGGTTATAGATCAAAAGAACCTGTTC
GCTTCTATCATGATTGGAATGACAAAGAGATTGAAGTGTTGAATAAACACTTATTTTTGACTTCAAAACCA**ATG**G
TCTACTTGGTTAATCTTTCTGAAAAAGACTACATTAGAAAGAAAAACAAATGGCTGATAAAAATTAAAGAGTGGG
TGGACAAGTATGACCCAGGTGCCTTGGTCATTCCTTTTAGTGGGGCCTTGGAACTCAAGTTGCAAGAATTGAGTG
CTGAGGAGAGACAGCAGTATCTGGAAGCGAACATGACACAAAGTGCTTTGCCAAAGATCATTAAGGCTGGGTTTG
CAGCACTCCAACTAAAATACTTTTTCACTGCAGGCCCAGATGAAGTGCGTGCACGGACCATCAGGAAAGGGACTA
AGGCTCCTCAGGCTGCAGGAAAGATTCACACAGATTTTGAAAAGGGATTCATTATGGCTGAAGTAATGAAATATG
AAGATTTTAAAGAGGAAGGTTCTGAAAATGCAGTCAAGGCTGCTGGAAAGTACAGACAACAAGGCAGAAATTATA
TTGTTGAAGATGGAGATATTATCTTCTTCAAATTTAACACACCT**TAA**CAACTGAAGAAGAAATAAAATTTAGTTA
CTGCTCAGATAAACATACAACTTCCAAAAGGCATCTGATTTTTTAAAAATTAAAATTTCTGAAAACCAATGGGAC
AAATAAAGTTGGGGAGATGGGAATCTTTGACAAACAAATTATTTTTGTTTTAAAATTAAAATACTGTGTACCCTC
TCCCCCCAATGAAATGCAAGTTCACTAAATGTGAACACCTTTGCTTTTCATGTGATTAAGACCCTACTCCAAATT
ATAGAAGCTTTTCAAGAACCATGTTACTCTCATGATACTTCATTAATCTCCATCATGTATGCCAAGCCTAACACA
TTTGACAGTGAGAACAATGTGGCTTGCTCCTTTTTGAATCTACAGATAATGCATGTTTTATAGTACTCCAGATGT
CTACACTCAATAAAACATTTGACAAAACC

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FIGURE 4397

GAGAGTGTCCTGCCTGGTCCTCTGTGCCTGGTGGGGTGGGGGTGCCAGGTGTGTCCAGAGGAGCCCAGTTGGTAG
TGAGGCAGCCATGGGGCTAGAAGCACTGGTGCCCCTGGCCATGATAGTGGCCATCTTCCTGCTCCTGGTGGACCT
GATGCACCGGCACCAACGCTGGGCTGCACGCTACCCGCCAGGTCCCCTGCCACTGCCCGGGCTGGGCAACCTTGC
TGCATGTGGACTTCCAGAACACACCATACTGCTTCGACCAGTTGCGGCGCCGCTTCGGGGACGTGTTCAGCCTGC
AGCTGGCCTGGACGCCGGTGGTCGTGCTCAATGGGCTGGCGGCCGTGCGCGAGGCGATGGTGACCCGCGGCGAGG
ACACGGCCGACCGCCCGCCTGCGCCCATCTACCAGGTCCTGGGCTTCGGGCCGCGTTCCCAAGGGGTGATCCTGT
CGCGCTATGGGCCCGCGTGGCGCGAGCAGAGGCGCTTCTCCGTGTCCACCTTGCGCAACTTGGGCCTGGGCAAGA
AGTCGCTGGAGCAGTGGGTGACCGAGGAGGCCGCCTGCCTTTGTGCCGCCTTCGCCGACCAAGCCGGACGCCCCT
TTCGCCCCAACGGCCTCTTGGACAAAGCCGTGAGCAACGTGATCGCCTCCCTCACCTGCGGGCGCCGCTTCGAGT
ACGACGACCCTCGCTTCCTCAGGCTGCTGGACCTAGCTCAGGAGGGACTGAAGGAGGAGTCGGGCTTCCTGCGCG
AGGTGCTGAATGCTGTCCCCGTCCTCCCGCACATCCCAGCGCTGGCTGGCAAGGTCCTACGCTTCCAAAAGGCTT
TCCTGACCCAGCTGGATGAGCTGCTAACTGAGCACAGGATGACCTGGGACCCAGCCCAGCCACCCCGAGACCTGA
CTGAGGCCTTCCTGGCAAAGAAGGAGAAGGCCAAGGGGAGCCCTGAGAGCAGCTTCAATGATGAGAACCTGCGCA
TAGTGGTGGGTAACCTGTTCCTTGCCGGGATGGTGACCACCTCGACCACGCTGGCCTGGGGCCTCCTGCTCATGA
TCCTACACCTGGATGTGCAGCTCCGTGTCCAACAGGAGATCGACGACGTGATAGGGCAGGTGCGGCGACCAGAGA
TGGGTGACCAGGCTCACATGCCCTGCACCACTGCCGTGATTCACGAGGTGCAGCGCTTTGGGGACATCATCCCCC
TGAGTGTGACCCATATGACATCCCGTGACATCGAAGTACAGGGCTTCCGCATCCCTAAGGGAACGACACTCATCA
CCAACCTGTCATCGGTGCTGAAGGATGAGGCCGTCTGGAAGAAGCCCTTCCGCTTCCACCCCGAACACTTCCTGG
ATGCCCAGGGCCACTTTGTGAAGCCGGAGGCCTTCCTGCCTTTCTCAGCAGGCCGCCGTGCATGCCTCGGGGAGC
CCCTGGCCCGCATGGAGCTCTTCCTCTTCTTCACCTCCCTGCTGCAGCACTTCAGCTTCTCCGTGGCCGCCGGAC
AGCCCCGGCCCAGCCACTCTCGTGTCGTCAGCTTTCTGGTGACCCCATCCCCCTACGAGCTTTGTGCTGTGCCCC
GCTAGAATGGGGTACCTAGTCCCCAGCCTGCTCCCTAGCCAGAGGCTCTAATGTACAATAAAGCAATGTGGTAGT
TCCAACTTGGGTCCCCTGCTCACGCCCTCGTTGGGATCATCCTCCTCAGGGCAACCCCACCCCTGCCTCATTCCT
GCTTACCCCACCGCCTGGCCGCATTTGAGACGGGTACGTTGAGGCTGAGCAGATGTCAGTTACCCTTGCCCATAA
TCCCATGTCCCCCACTGACCCAACTCTGACTGCCCAGATTGGTGACAAGGACTACATTGTCCTGGCATGTGGGGA
AGGGGCCAGAATGGGCTGACTAGAGGTGTCAGTCAGCCCTGGATGTGGTGGAGAGGGCAGGACTCAGCCTGGAGG
CCCATATTTCAGGCCTAACTCAGCCCACCCCACATCAGGGACAGCAGTCCTGCCAGCACCATCACAACAGTCACC
TCCCTTCATATATGACACCCCAAAATGGAAGACAAATCATGTCAGGGAGCTATATGCCAGGGCTACCTCCCAGGG
CTCAGTCGGCAGGTGCCAGAACATTCCCTGGGAAGGCCCCAGGAAAACCCAGGACCGAGCCACCGCCCTCAGCCT
GTCACCTTGTGTCCAAAATTGGTGGGTTCTTGGTCTCACTGACTTCAAGAATGAAGCCGTGGACCCTCACGGTGA
GTGTTACAGTTCTT

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FIGURE 4398

ACACCATCCTCTTAGTTGCTCAGACTGAAAACCTAGCAGCCATCCTGGATTTCTCTCACACTGCCTATTCAACGT
GTGAATGCATGAGTGGAAAGCTGAGTTCGCACTCGTGACTGGCCGGGGTCAACTCTGACATTCGCTCCCACTTTC
GCGCGCTGATTTATCTCTGAGCGGATGAAGGTTGGGCCATGGCGGGCGGGGCCGGGGAGGCGGGCTTGGAGTGAG
GGGGCGGGGCAGGCGCCACGAAAACGCGCTCGCGCCGGCGCCGAACCGCAACTCCCGGCGGCCCCCGCGCTCCCG
GGTGGCAAGATGGTGGCGCGCAGGAGGAAGTGCGCCGCGCGGGACCCGGAGGACCGTATCCCCAGCCCACTGGGC
TACGCAGCTATTCCAATCAAGTTCTCTGAAAAGCAACAGGCTTCTCACTACCTCTATGTGAGAGCACACGGCGTT
CGACAAGGCACCAAGTCCACCTGGCCTCAGAAGAGGACTCTTTTTGTCCTCAATGTGCCCCCATACTGCACAGAG
GAGAGCCTGTCCCGCCTCCTGTCCACCTGTGGCCTCGTCCAGTCTGTAGAGTTGCAGGAGAAGCCGGACCTGGCT
GAGAGCCCAAAGGAGTCAAGGTCGAAGTTTTTTCATCCCAAGCCAGTTCCGGGTTTCCAGGTAGCCTATGTGGTG
TTCCAGAAGCCAAGTGGGGTGTCAGCGGCCTTGGCCCTGAAGGGCCCCCTGCTGGTGTCCACAGAGAGCCACCCT
GTGAAGAGTGGCATTCACAAGTGGATCAGTGACTACGCAGACTCTGTGCCCGACCCTGAGGCCCTGAGGGTGGAA
GTGGACACGTTCATGGAGGCATATGACCAGAAGATCGCTGAGGAAGAAGCTAAGGCCAAGGAGGAGGAGGGGGTC
CCTGACGAGGAGGGCTGGGTGAAGGTGACCCGCCGGGGCCGGCGGCCTGTGCTCCCCCGGACTGAGGCAGCCAGC
TTGCGGGTGCTGGAGAGGGAGAGACGGAAGCGCAGCCGAAAAGAGCTGCTCAACTTCTACGCCTGGCAGCATCGA
GAGAGCAAGATGGAGCATCTAGCGCAGCTGCGCAAGAAGTTCGAGGAGGACAAGCAGAGGATCGAGCTGCTGCGG
GCCCAGCGCAAATTCCGACCGTACTGAGCTGTGAGAGCCGCAGTGAATGGCTGGAGGTGCAGGGCCAGGAGGAGG
CGAGGCAGGGCCTGCAGCGGTCTCTGAGAGGCCGAGCTCTGGCCAACGGGCCCCAGGTTGAAGGCCACCGCGTCC
AACAGCCCCATCAGAGTCCACACAGGCCAGGAGGGAAGGACCAGGCCACCCCTCGGGTCTTGTGCTTCAGCAGTC
CTGGGGACCCAGGCGTGCCGAGAGGAGGACTTGTCCTTCCTGCTTCTTGCCTCCACACCCTCCTCTCCAGGACCC
TGGATGAATCCGTTCTGTGCTTCCTTTTCCCTCAATGCAAAAGCCCTTGCTGGCAACGAAAAAGCCTCAAAAGCA
GTGAGAATACAAGAACCTTTTATTTTCCATCCAGTTGGGCAGCAGGGAAAGGCTAGGTGGGCCCAGCCCGCCCTT
CCTTCCTCCAGCTGGCTGGAGATTATTAGCCAGGAGACAGCAGCCCTGGAACCCAGACTCTGTCTCCCCCTTGAG
GTCACAGATGTTGAAGTTGGAATCTCGCTCCTTCCCCTGACTACCATCCTAGGCTGGGCCTCAAGACTAGTGAGG
CCTGTCCCCACCATCCCTGGCCTTGTTGTGGGGCTCAGGAACTCAGAGTCCCAGTGTTGAGTCTGGGAGCACTAG
GTCTTCATAGTTCCAGGCCCAGAGCTACAGCTGGGCTGGGAGCGTGTGTGTGCACTGTAAGAAGGAGCTGATGAT
ACTGGCCACGTGCTGGGGTTCGCTCATGTGGACACAGTGATTGCCTGGGACTTCCACAAACTGGAACCGCTCTTT
GAGGGTGGATTTCATTGTGTCTATCATGAACGACAGGGACTCCTTGTCAGAGTAATTCTCTCTTGGATCAAAATA
TCCGTGGACTGCTTTGATCAACAGGACATGGGCCTGCAGCTTCCTGATGGAATGCGCACACAGCTCCCTGCTGAC
GAAGTCAATGCTGTTCTCTGCC

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FIGURE 4399

ATGAGTGAGAACGCCGCACCAGGTCTGATCTCAGAGCTGAAGCTGGCTGTGCCCTGGGGCCACATCGCAGCCAAA
GCCTGGGGCTCCCTGCAGGGCCCTCCAGTTCTCTGCCTGCACGGCTGGCTGGACAATGCCAGCTCCTTCGACAGA
CTCATCCCTCTTCTCCCGCAAGACTTTTATTACGTTGCCATGGATTTCGGAGGTCATGGGCTCTCGTCCCATTAC
AGCCCAGGTGTCCCATATTACCTCCAGACTTTTGTGAGTGAGATCCGAAGAGTTGTGGCAGCCTTGAAATGGAAT
CGATTCTCCATTCTGGGCCACAGCTTCGGTGGCGTCGTGGGCGGAATGTTTTTCTGTACCTTCCCCGAGATGGTG
GATAAACTTATCTTGCTGGACACGCCGCTCTTTCTCCTGGAATCAGATGAAATGGAGAACTTGCTGACCTACAAG
CGGAGAGCCATAGAGCACGTGCTGCAGGTAGAGGCCTCCCAGGAGCCCTCGCACGTGTTCAGCCTGAAGCAGCTG
CTGCAGAGGTTACTGAAGAGCAATAGCCACTTGAGTGAGGAGTGCGGGGAGCTTCTCCTGCAAAGAGGAACCACG
AAGGTGGCCACAGGTCTGGTTCTGAACAGAGACCAGAGGCTCGCCTGGGCAGAGAACAGCATTGACTTCATCAGC
AGGGAGCTGTGTGCGCATTCCATCAGGAAGCTGCAGGCCCATGTCCTGTTGATCAAAGCAGTCCACGGATATTTT
GATTCAAGACAGAATTACTCTGAGAAGGAGTCCCTGTCGTTCATGATAGACACGATGAAATCCACCCTCAAAGAG
CAGTTCCAGTTTGTGGAAGTCCCAGGCAATCACTGTGTCCACATGAGCGAACCCCAGCACGTGGCCAGTATCATC
AGCTCCTTCTTACAGTGCACACACATGCTCCCAGCCCAGCTGTAG

FIGURE 4400A

CGATGAAGTGCAACCTTCACATGAATGGGAATGTTATCACCTCAGACCAGCCCATCCTGCTGTGAGTTCCAAAGG
CGGGGTGCTGGGGAGAGGCAGCTCCGTCCATCTCTTTTTGTTCTAATGGGTAAACTGCCTGCATCACAGCTCCCC
TTCATCCCCCCATTCCGTTTCCTCTGTTCTAATGGCAGCTGGCCGTTTCATATGCTTAAACTTGACCAAAATGGT
TTGCTTTGTTATTTCCCCAGGGCTTGACCCTATAGGGACTAGCATTATGATCTCGTTCTCAGCTTTCTGATTTAG
AAATATCTGAGTGGAAGTTGGAGGGGGAGGCTGCTTGGGTCTCCTAGCTGTGTGCATCATCCCGGGAACAGAGAA
CTCCACTGCATGATTGGCTCTGATGGAGACAGTGCCAGATGCTACCCCTTATTTTGTTCCCCAGTGAGGTTTTTT
GTTTGTTTGTTTGTTTGTTTGTTTTTTGCTTTTTCAGTTATTTTGAGAGTCTCACTGTGTTGCCCAGGTTGGTTT
CAAACTCCTGGGGTCAAGCAACCCTCTCCCCTCAGCCTCCTGAGGACCTGGGACTATAGGCGCACACCATCACGC
CCAGCTGGATTTGGCTTTTAAGTACAGTGGGAAGCCATTGAAGGCTTTTGTTGCACACAGCTGAGTATACATGCC
TGGCCCAGGACTGAGGGATGTTTTGAAGCCTGAGATGCATAAAATGTTGAGACTGTGAGGACTTCACCTTCTAGA
TAAGGAAGCAGATACCAGGGAGGAGGTTAGACTTGCCAGGGTGAGTGGGATAGTGTGGGGCAGGGCTGAAATAGA
CTTTGAGATTTAAAAAGACTAGGATTTGAACCCTGGGTAATGAATTATGTGATTTGGATAAGTTCTTAAACTGTG
TTCAAGGAATAAGAAATATTTCTTAGGGTTTTGTAACCTAATAAGTTTGGGAACTACTGGGCTAAACAGAGTTAC
ATCTGTTTCACTTTCGGGCTTCTCAGATTGTGTAATATGCTAATGGATGTTACCATCCAGAAGGAACATGCAGTG
TTTCCTAAACTTAAAACCACAATTAGCCAGGTGTGGTGGCATGCACCTATAGTCCCAGTTACTTGGGGGGCCGAG
GTGGGAGGATCGCTTGAGCCTGGAAGATCGAGACTAGTGAGCCATCATCATGCCACTGCACTTCAGCCTGGGTGA
CAGAGTGAGATTCTGTCTCAAAAAAACCCCACAAAACCCTAGAACATACAGCACTGCCTGCGTCTCCATTTTCTC
ATCAGTAAATAAGAAAAACACAGCCTGGGCCACATAGCAAGACCTGGTCTCTACAAAAAATTTTAAAAATGAGCC
AGGCATGGTGGTACACGCCTGTAGTCCTAGCTCCTTAGGAGGCTGTGGCAGGAGAACTGCTTGAGCCTAGGAGAT
GGAGGCTGATGTGAGCTGTGATTGAGTTTGCTGCGAGGTGGAATGAGATGAAGGGGTATGGAAAGTGTTACACCC
AGTGCCTAGCTCATGACAGATGCCCAGTAAATGGTGGGTCCCCTCCCCATCTAAGGAAAAACTGACAAGAATTTT
TGACTCTTCTCTGCTCTCCACAGGCGGCTGAGTGACAGCCCATCAATGAAAAAGGAGAGCGAGCTGCCTCGCAGG
GTGAACTCTGCCTCCTCCTCCAACCCCCCTGCCGAAGTGGACCCTGACACCATCCTGAAGGCACTCTTCAAGTCC
TCAGGGGCCTCTGTGACCACGCAGCCCACAGAATTCAAAATCAAGCTTTGAGCAGGGGAGTGAGGCAGCCAGAAG
TGGGGGCAGAGGAGGGTGGCTCTGTTTCCCCAAGGCAAAGCTTATGACCAATGGGCCATCGGACTGGAGACCCCT
GATTGTGGGAAGGGTTGCCAGGGATAAAGAGCTTCCTCACTGGATGGGACCCGCCTTTCTGTGTTGTGTTCTGCC
CTGTGCTCTTCTCTCTACGTTAACGTTTCCTGTAGTATGTTTCTTCATCTCATCGCCAAGGTAGGCTTGTGTTTT
TCAGTGTGTGCCTCCCCGAGCCTCAGCCCCAAGCTGATTTCTTATCTGGAAATGGTACACTGAATTCTCTGGGTG
GCTTTCTTGTGGCCCCATGGGATGCAGCGTGGGGGCTGTCTGAAGGACCCTGCTTTTTCCAGGGGCCGAGGGGCT
GCCTTTCCTTTGTGTGTATTAAGCTTTTCAAACAATGGAGGGGATGGAGAGCCCTGGTGTCCTGACGGGAGCCAG
GTCGGCCTGAGAGCTGTGCCGCTCCTCTGTCTTGTCAGTGGAGGTGCCTGGGTGGGGAGCAGGTCTCAGGCCTCT
TGTCCTCTCCCCAGTGGCTCCAGGCCTCACTAGTGGCAAGGGCAGGATGAGGCTGCACCGCTGGGAAGAGTCTAT
CTAAGCTCTTGGCTTGGAGTCCCGTGTCGTCTCCACCCAGAGGAAGTTCTCCAGAGTTCACCTTTCCCTTTTCCT
TGAGTTGTGCTGA**ATG**CCCCACCCCAGCTCTCTTTCCCTTCTGGGTGTCTTTGCTGGGAGGGGGCTGTGTTGTGA
GCCCTCCCGGTTCTCACCTCGCCTGGCACTTAACCACACCCTGGTTTTGTGTAGCCGCCAGCTCTCTTCTGGTTG
GGCCTTTGAAAGGCTCAGCCTCCCATTGTGCAGTGCTTGGGTTTGGAGCTTATTTGAATGGAAGAGGTCAGTTTG
TTCCTGGCTCTCCATTTCTGGCCTCAGTTGTCTACAGGACAGTGGTCAGGGATGCCTGGAGGCATATATCCAGCT
GCCACCAAGGGGCACTGTTTGTTCCCACTTATGTGAG**TGA**CCCCATCCATCCATGACCAGAGGATTATTTTCCTG
CCTTGGCAGAGGAGGAGGAGTCAAGGGAGCAGGGCAGCTCTACCAGGCAAGGTGTTTCCCCAGCATAGGCGCAGA
CAGTTGGGACGAAACTTCAGAGCCCAGGCAGTCCCTGAATGACCAGGCCAGTGTTGTCACTGAGTGGTCCCCTGC
TGGTTGGGAGTGAAGAGAATCCAGGCTGGCAGAGCTGGAGCCAGTTGGGGAGCACGGTTCTGGGAGCTCTGCAAA
ATCAGTAGCAAGTGCTGGAAAAGGCACATGCCGAAGATACTCAAGAGCTCCCAAGATTTGCTTGAGGCTAGCCCA
GTGAAAAAAACCAGAGACTCATGTTTCCAGGGGTCAGTCTGTCAGGCAGGAAGGACCCAGGATTTGAACCCAGCT
TCAGTGTGCAGGCTCTGAGGCTGCCCAGGACGGGAAAGTCCAAGGAAGGGGCCTGGTGGTGCTCCACTTGCAGTT
CTTTAAAGAATGCTGCTTTTTATTCTCCTAACCCTTTCAAGTGGGTGCAGACTTCTCGTTAGCAGCTGGAAGACA
TTCCTCCCACACTTTTCCCTTCCTGGCCCAAGAGAGCATCCAGAAGGCAGTAGGACCTGGTTTTTCAGGTACTGG
GAGCCGGGGGCTCACTGCTTGCACTGTGCTTAGGGTAGGGATGGTAAATATCCTCCCTGCATGGCTTTATCCTCC
CTCTCATCCCAAAGCAGGTATCTTCTGGTTGTCACAGAGTTTCATTGAGTCCAGCTGCAGCCACGTGGCCATCTG

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FIGURE 4400B

GAGCTGGTGCTATAGGTGACCATCTGGTACATTGAGGGGACCTGTTTGCCTCCTCCACTCTATAAGCAGTCATCT
TGGGAGACCGGGAGGAGAAGGTGGTGGGCTAGTCCTGTGTCCTCCTCCACTTCCCATGCCTCTATGTTACCCATC
TGTGTCTCCTGTGCAGAAGGAGAGGAAGGGGCATTAAGAGATGAAGGGTGATTATGTATTACTTATCCATTTCTG
AATAAACATTTGTTATTCCTACCTTTGAGTTATCTTTTTTTTTTTTTTTTTTTTTTTGAGACAAAGTCTCAC
TCTGTTGCCAAGGCTGGAGTGCAGTGGCACTATCTCAGCTCACTGCAACCTCCGCAGCCAGACTCAAGTAATCCT
CCCACCTCAGCCTCCCAATTAGCTGGGACTGCAGGCGTGCATCACCATGTCTGGCTAATTTTTGTAGAGATGAGG
TTTCACCATGTTGCACAAGCTGGTCTTGAAATCCTGACCTCAGGTGGTCTGCCTGCCTCGGCCTCCCAAAGTTGG
AATTAACAGGCGTGAGCCACCACGCCCAGCCAAGGGTTTTAATCTTGCAGGGATTTCAACATTTGGGGTGGAACT
TAATTATTTAAAAAATAGAGACAGATTCTTGCTATGATACCCAGGATGGTCTTGAACTCCTGGGCACAAGTGATC
CTCCTGCTTCAGCCTCTCAAAGTGTTGGAGTTACAGGCATGAGCCACTGCTCCCCACCAGGGATGCAAATTACTT
GATACTCCTCTCCAGAAGGTGGGGTCCTGTGCCCCTCCTGAACCCAAGTGTGCTCTGTTACTACTTTGACCAGAT
GTGACTCTGCCATTTCTGTGCCTAGGCTTTTAAAGATGGTCACTTCTCCATTTCCTGTGCCTGGAACATTCTCTG
GGAGCCTTGACACCACATTTGAAGTTGCCTATTGGGGCCAGCATGGTGGCTCACGCCTGTAATCCCAGCACTTCA
GAAGGCCGAGGCAGGCAGATCGCATGAAATCAGGAGTTTGAGACCAGCCTAACCAACGTGGTAAAACCCTGTCTC
TACTAAAAATTACAAAAATTAGAGGGGCGCGGTGGTGGGCGCTTGTAATCCCAGCTATTCAGGAGGCTGAGGCAG
GAGAATCACTTGAACCCGGGAGGCGGAGTTTGCAGTGAGGTGAAATCACGCCACTGCACTCCAGCCTGTGCAACA
GAGCGAGGCTCTGTCTCAAAAGAAAAAAAATAGTTGACTGTCGGTTTGGCATGGTGGCTCATGCCTCTTGTCCCA
GCACTTTGGGATGCTGAGGCAGGAAGATTACTGGAGCTCAGGAGTTCGAGACCAGCTTGGGCAATATAGTGAAGC
CCTATCTTTACAAAAAACGAAAAATTAGCTCAGCTACTCAGGAGCCTGAAATGGAGGATCATTTGTGCCCAGGAG
GCAGAGGTCGCAGTGAGCTGTGATCATGCCACTATACTCCATCCTGGGCAACACAGTGAGACGGCAGAAAAAAAA
AAATAGTTGACTATTGAGTCTCATATCTGATTGCCCACCTGACATCTCCCCTGAGTGGCCTAATGGGCATCTCAC
CACGGCCCACAGAGAACTGATCTACTCGATTTTCCCTAAGCTGGCCCCTCTCCTGCAGTCTACCCATGTCAGTCA
ATGGCAACACCATCCTCTTAGTTGCTCAGACTGAAAAGCTAGCAGCCATCCTGGATTTCTCTCACACTGCCTATT
CAACGTGTGAATGCATGAGTGGAAAGCTGAGTTCGCACTCGTGACTGGCCGGGGTCGACTCTGACATTCACTCCC
ACTTTGGCGCGCTGATTTGCCTCTGAGCGGATGAAGGTTGAGCCATGGCGGGCGGGGCCGGGGAGGCGGGCTTGG
AGCGAGGGGGCGGGGCAGGCGCCACAAAAACGCGCTCGCGCCGGCGCCGAACCGCAACTCCCGGCGACCCCCGCG
CTCCCGGGTGGCAAGATGGTGGCGCGCAGGACGAAGCTCGCGGCGCGGGACCCGGAGGACGGTATCCCGAGCCCA
CCGTGCTACGCAGGTGAGGGGATCCGGAACGCGAGACCGGGGGCGGCCAGCATCGCCGGGAGGTGTTTGGGGGCT
GGCGGCGGCCGGGGGTCCCCAGGAGCGGCCGC

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FIGURE 4401

CGCGACGGTCTCGGCGGCGGCGGCGGCGGCGACAGAGCGAGCGCGGCGCGGGGCCACC**ATG**GGGGCCCAGCTCAG
CACGTTGGGCCATATGGTGCTCTTCCCAGTCTGGTTCCTGTACAGTCTGCTCATGAAGCTGTTCCAGCGCTCCAC
GCCAGCCATCACCCTCGAGAGCCCGGACATCAAGTACCCGCTGCGGCTCATCGACCGGGAGATCATCAGCCATGA
CACCCGGCGCTTCCGCTTTGCCCTGCCGTCACCCCAGCACATCCTGGGCCTCCCTGTCGGCCAGCACATCTACCT
CTCGGCTCGAATTGATGGAAACCTGGTCGTCCGGCCCTATACACCCATCTCCAGCGATGATGACAAGGGCTTCGT
GGACCTGGTCATCAAGGTTTACTTCAAGGACACCCATCCCAAGTTTCCCGCTGGAGGGAAGATGTCTCAGTACCT
GGAGAGCATGCAGATTGGAGACACCATTGAGTTCCGGGGCCCCAGTGGGCTGCTGGTCTACCAGGGCAAAGGGAA
GTTCGCCATCCGACCTGACAAAAAGTCCAACCCTATCATCAGGACAGTGAAGTCTGTGGGCATGATCGCGGGAGG
GACAGGCATCACCCCGATGCTGCAGGTGATCCGCGCCATCATGAAGGACCCTGATGACCACACTGTGTGCCACCT
GCTCTTTGCCAACCAGACCGAGAAGGACATCCTGCTGCGACCTGAGCTGGAGGAACTCAGGAACAAACATTCTGC
ACGCTTCAAGCTCTGGTACACGCTGGACAGAGCCCCTGAAGCCTGGGACTACGGCCAGGGCTTCGTGAATGAGGA
GATGATCCGGGACCACCTTCCACCCCCAGAGGAGGAGCCGCTGGTGCTGATGTGTGGCCCCCCACCCATGATCCA
GTACGCCTGCCTTCCCAACCTGGACCACGTGGGCCACCCCACGGAGCGCTGCTTCGTCTTC**TGA**GGGCCGGGCAC
GGTCACACGGCCACCCGCCCCGCGCACCCCACGCCCTGTTCACGCTCACCCAGTCACCTCCCCACATCGCACACT
GGGGCCCCGGGTTCAGCCTGGCCTGCCCGTGCCCTGGTGAATCACCTGGCTGAGCAGTTCCCCTGGAGCCCCTTC
GGGAGCAGGGCTGTGTCCCAGATGGGCCACGGCTGAGCCTTCAGAGTACGTCCTGCCTGGCACTTACTGGTCCTT
ACCAGAGACGCCCAGCCCCATCCCTGTCCTCATGACCCCTCGTCCACCCCCCACACACACTATAAGGCTGAGGGC
TGCCAGCAGCCCCGTCTGCCCACCATTCCCGGCCGTGGACCATAGTCGGGATGTCAGCAGACACACATGGGCAGC
CCAAAGCTGCAGGTGCCAGGGCCCACCCCAGCCTCGCCTGTCACCCCCACTCCCGCCTCAGGGCCAGGCCCAGGC
CTCACCACCTGACGCTGCATGAGACATTGACACCAGAAAGCCCTCTTGGGGGCACTGCTCCCTACCCCAGGGCCC
TGGCCAGCCGGGAGCTTGGCTCTCCTCTGGCTAGAGTGGGAAGAGGGGGCTGGCCATGGGGCCCTCCCAGAACCT
CAGCATTTCCTTCCAGCCCATCCAAACACTGAGGCAGCCTTGGGGAACCCCGAGCTGGGGGGTTGGCAGCCCACT
GCACCGCCTCAGGGTTTTGGGGTCCTGGGCTGGGGCCACCATCCCTGATGGCAGAACTCCCACAACCACATGTAT
TTATTCCTCTGTCCTAAACCGTCCCCTCCTTCCCTCACCCCCAGCACAGGGGGATTCTGAGCAGTGCCTCTTGTC
TGAGGGACATATCAGTGACCTCGACGTTGCCTTTAGACTACAGTTGTGTTAGCCTCTTGCGTATTGGCTTTTTCA
GAGTCATTTATGAGCAGAAAAAAAAAAAGTAAAACTTTGCTAATATT

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FIGURE 4402

ATGCCTTCAAAGGAAAAGCAAGGGACACTCACCTTGCAAAACCATCAAAACTATTCCCACAGACGCCACATGAGC
CCCCATTTATCTGACTTAAAAGAAGCAGGGTCTGCTGGGATTCGAATCCTCTGGTTCCAGAGAGAGAAGCTCTTT
CAAAGACTGGATTCTGGCCCACAAAAGAAGGTTCCTGCTTACTGGAATCAAGAGGTCAAAGATTTTTCTGAATCA
TGCATCCACGGAGAAGAGCCCATTAGGGCTATTCCAGCAGACAGCAGTAAGGATGTCCATGAGCTTTATGTTGTT
GTTGGGAGCTGGGATTCTACTCTTCCAGAAGAATATGACCTCAAAAGGAGCCACCACAGAACGAGCTCGGCACCC
ATCTACGAATGTATTGCTAAGGATCATTGGGGATGGGGTGACCCAGAAGTGAACTGGCTCCATGATCCATTAAAC
AATCACCCTGAAATCCACAGTGCCAGTCAACTAATGGGGCTTGGAGCCATCATTAGGTCACTGGAAAATGATATC
TTCCTGGAGGTTGATACTGGCTTCACCATCCTGAGAGCAGAAGGCTTGAGGGAGGAACAGCCTCCTGGGCATGGA
GGCACCTGCCATCCCACATCAAATCACAGAGCCATGCTTAAAAGGGCCAGGTGGATGACTTATGTGGAAGAAGTG
AGCCGGGTGAGGATTTCTACTTCGAGAAACCTTGCTCGAAGCGCTTTCATCATTCTCTCCTACACAACAAACCCT
GAACTCTTAGAAGCAGCTCTTGGCACAGGAGCCTCCAACCCGTTTTTCAGCCGGCTTTCTCTACTTGTTTCTCAT
TCCATGATCACAGAAAACAGCTCCATTAAGACTCTTTTCAGGTCTACCAAAGAGCTAGTGATTGCACTCAATCGA
TGTTTCTTCGGCATTACTCAAAGTGCAGCTACACTCAGCCCACAGCTTCACATCAGATTTATCAGCAGAGAACAA
AAGAAGTACTTGAAATTGCCACTTACAACGTTTATGAGTAAACTGGAATCCAAAGTCTGGCCTCTAGCCAAGCGG
TTACGCCAGTGGCCTGACTCATATACAAAGAAGTTTGAGCACAGAATCTACCCCATCACATTTTCTGTTGGAAAC
CCTCAGGAGTGGAAGAAATTGTTCAAACCCTGTGCTGCCCAGAGACTCTTTCTTCCGATCAACCTGGAGCTCTAC
GCCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATAC
TTTCTTCACCAATCTCATGAGGAGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAACGAGGTGGCCGA
ATCTTCCTTCAGGATATCAAGAAACCAGACTGTGACGACTGGGAGAGCGGGCTGAATGCGATGGATGACAAAAAT
GACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATTGGGTGGC
CACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAATATCTCTTTGACAAGCACACGCTG
GGAGACAGTGATAACGAAAGCTAA

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FIGURE 4403

ATGCTGACCCCGGCGTTCGACCTCAGCCAGGATCCGGACTTCCTGACTATCGCCATCCGCGTGCCCTACGCCCGG
GTCTCCGAGTTCGACGTCTACTTCGAGGGGTCTGACTTCAAGTTCTACGCCAAGCCATACTTTCTCAGGCGAGTT
CGGGGAATTTTTACCATTCGCCTGCCCAAAGAAACCCCTGGCCAGCATTTTGAGGGGCTGAACATGTTAACTGCT
CTTCTGGCACCAAGAAAATCCAGGACAGCAAAACCACTTGTGGAAGAAATAGGTGCTTCTGAGATTCCTGAGGAA
GTAGTTGACGATGAAGAGTTTGATTGGGAAATTGAGCAGACACCCTGTGAAGAGGTATCAGAAAGTGCTTTGAAT
CCGCAGTGCCACTATGGATTTGGAAACTTACGATCAGGAGTGTTGCAACGGTTACAGCTGCTGTTTATGGCAGCC
GTAACAAGTGGTTCAAAACTGAGTGATCATGATGAACTGAGTGATGTTATTGATATTAAGGATCCAGATTTCACC
CCTGCAGCTGAACGAAGACAGAAGCGCCTGGCCGCTGAGCTGGCCAAGTTTGATCCTGATCATTATCTAGCTGAC
TTTTTTGAAGATGAGGCGATTGAACAGATTTTGAAGTATAATCCTTGGTGGACTGACAAATATTCAAAAATGATG
GCCTTTTTGGAAAAGAGTCAGGAACAAGAAAATCATGCTACATTAGCGTGGGCTGTTGTCTGTTTAACACCTCCT
CATCAGGTGTCGCCAGGCAGATACAACAGTGCAGTGCCTCCCTATTCTGTGATCTTAAAAGTGTACACCCTTGCC
ACAACCATAGCATTTGCTCAGTACTCTCAACATAAACCAAGCTTAGATCGCAATGAAACTGCGGACCTGCAGGCT
GCCTTGCTTCACTGA

FIGURE 4404

ATGATCTTTAATTTTGCCCTGAATACCTTGGTTGCAATCACTGTGCTTGTTTATCCAAACGGCATTCAGGAATAC
ATACGACAACTGCCTCCGAATTTTCCCTACAGAGATGATGTCATGAGGCCTGGAGAACCCAGGAGTTTCCAAGCT
GTGCTGCCACCCGAGCTCTGGATCCACCTGGCTGTGGTGGCCTGTGGCAATCGGCTGGAGGAGACGCTGGTCATG
CTCAAATCAGCTGTGCTTTTTAGCCACAGGAAGATCCAATTCCACATCTTCACTGAAGACTCTCTGAAGCCCGAG
TTTGATAAGCAGTTACGCCAGTGGCCTGACTCATATACAAAGAAGTTTGAGCACAGAATCTACCCCATCACATTT
TCTGTTGGAAACCCTCAGGAGTGGAAGAAATTGTTCAAACCCTGTGCTGCCCAGAGACTCTTTCTTCCGATCAAC
CTGGAGCTCTACGCCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAAC
TTTGCCAAATACTTTCTTCACCAATCTCATGAGGAGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAA
CGAGGTGGCCGAATCTTCCTTCAGGATATCAAGAAACCAGACTGTGACGACTGGGAGAGCGGGCTGAATGCGATG
GATGACAAAAATGACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAA
GAATTGGGTGGCCACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAATATCTCTTTGAC
AAGCACACGCTGGGAGACAGTGATAACGAAAGCTAA

FIGURE 4405

ATGGAGTTGATGCGTTGGTCCACACTTGTGGAGGACTATGGAATGGAATTAAGAAAAGGTTCCGTTGGCAGTCCT
GCAACTGATGCTTTTGGTTCTACAGAGGAAGGCGAAAAAAGGTGGAAAGATTTGAATAACAGAGTTGTTGAACAT
AATATTAGAATAATGGCCAAGTATTATACTCGGATGACAATGAAAAGGATGGTACAGCTTCTGGATCTATCTGTT
GATGAGTCCGAAGCCTTTCTCTCAAATCTAGTAGTTAACAAGACCATATTTGCTAAAGTAGACAGATTAGCAGGA
ATTAACAACTTCCAGAGACCCAAGGATCCAAATAATTTATGA

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FIGURE 4406

ATGGAGTTGATGCGTTGGTCCACACTTGTGGAGGACTATGGAATGGAATTAAGAAAAGGTTCCGTTGGCAGTCCT
GCAACTGATGCTTTTGGTTCTACAGAGGAAGGCGAAAAAAGGTGGAAAGATTTGAATAACAGAGTTGTTGAACAT
AATATTAGAATAATGGCCAAGTATTATACTCGGATGACAATGAAAAGGATGGTACAGCTTCTGGATCTATCTGTT
GATGAGTCCGAAGCCTTTCTCTCAAATCTAGTAGTTAACAAGACCATATTTGCTAAAGTAGACAGATTAGCAGGA
ATTAACAACTTCCAGAGACCCAAGGATCCAAATAATTTATGA

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FIGURE 4407

GTCCCTCACACCGAGAGTTCCTGCGCGTGGGGAGTTGGAGAGTTTGCGTGGCGGGAACGCGGCGGCAGTGAGAGC
GAGCGGCGCCGGCCCTTGCGTCCGGTGCGGCGATGCTGACCCCGGCGTTCGACCTCAGCCAGGATCCGGACTTCC
TGACTATCGCCATCCGCGTGCCCTACGCCCGGGTCTCCGAGTTCGACGTCTACTTCGAGGGGTCTGACTTCAAGT
TCTACGCCAAGCCATACTTTCTCAGATTAACCCTTCCTGGAAGAATTGTAGAAAATGGAAGTGAGCAAGGGTCCT
ATGATGCAGATAAAGGAATTTTTACCATTCGCCTGCCCAAAGAAACCCCTGGCCAGCATTTTGAGGGGCTGAACA
TGTTAACTGCTCTTCTGGCACCAAGAAAATCCAGGACAGCAAAACCACTTGTGGAAGAAATAGGTGCTTCTGAGA
TTCCTGAGGAAGTAGTTGACGATGAAGAGTTTGATTGGGAAATTGAGCAGACACCCTGTGAAGAGGTATCAGAAA
GTGCTTTGAATCCGCAGTGCCACTATGGATTTGGAAACTTACGATCAGGAGTGTTGCAACGGTTACAGGATGAAC
TGAGTGATGTTATTGATATTAAGGATCCAGATTTCACCCCTGCAGCTGAACGAAGACAGAAGCGCCTGGCCGCTG
AGCTGGCCAAGTTTGATCCTGATCATTATCTAGCTGACTTTTTTGAAGATGAGGCGATTGAACAGATTTTGAAGT
ATAATCCTTGGTGGACTGACAAATATTCAAAAATGATGGCCTTTTTGGAAAAGAGTCAGGAACAAGAAAATCATG
CTACATTAGTGTCTTTTTCTGAAGAAGAGAAGTATCAGCTACGAAAATTTGTCAATAAATCTTATCTGCTGGACA
AGAGAGCCTGTCGTCAAGTGTGCTACAGTTTGATTGATATCCTTCTGGCATATTGCTATGAAACCCGTGTCACTG
AAGGAGAGAAGAATGTTGAATCTGCATGGAATATCAGGAAACTGAGTCCAACACTATGCTGGTTTGAGACTTGGA
CTAACGTTCATGATATCATGGTGTCTTTTGGAAGAAGGGTGTTGTGTTACCCACTCTATCGCCATTTCAAGCTGG
TGATGAAGGCCTACAGGGACACTATAAAGATATTGCAACTGGGTAAAAGTGCAGTTTTAAAGTGTCTCCTGGATA
TTCACAAAATTTTTCAGGAAAATGACCCAGCGTACATACTGAATGATCTCTACATCTCAGACTACTGTGTGTGGA
TTCAGAAAGTCAAATCCAAAAAGTTGGCAGCTCTTGCAGAAGCCTTAAAGGAAGTCTCCCTTACAAAGGCCCAGC
TGGGGTTAGAACTGGAAGAACTAGAAGCAGCAGCACTGCTTGTCCAGGAGGAAGAAACTGCATTAAAAGCAGCCC
ATTCAGTTTCTGGGCAGCAGACACTTTGCTCCAGCTCTGAGGCAAGTGATTCGGAGGACTCAGACAGCAGCGTGT
CATCTGGAAACGAAGACTCAGGCTCAGATTCAGAACAAGATGAACTCAAAGATAGTCCATCTGAGACAGTCAGTT
CTTTGCAAGGTCCCTTTCTTGAAGAAAGCAGTGCCTTTCTTATTGTTGATGGTGGAGTACGCAGAAACACAGCCA
TCCAGGAGTCTGATGCCAGTCAGGGAAAGCCACTTGCCTCTTCCTGGCCTCTTGGAGTGTCTGGGCCTCTGATAG
AGGAGCTTGGGGAACAACTGAAGACTACAGTTCAGGTTTCTGAACCCAAGGGCACCACTGCTGTAAACCGCAGCA
ATATTCAGGAGAGAGACGGCTGTCAGACACCAAATAATTGACTCTTAGGTGGTTTTATTCATTGTTGAGAAATAT
GGTAGATTGGGTTTCATTTACCGAATGAGAATTCTTCATTTTCACTTTGTAATTTTTCTTAGTATATAGTCAGCC
CACTGTATTTGTGTGTTCCACATCTGTGGATTCAACCAACTGCAGATCAAAAATATTGAAGAAAAAATCGCATCT
GTACCAAACATGTACAGACTTTTTTCTTGTTATTATTCTCTAAATAATACAGTATGACAACTATTTCCACAGCAT
TTACATTGTATTGGGTAATATAAGTAATCTAGTGATGATTTAAACTGTGCAGGAGGATGTGGGTAGGTTATATGC
AAATACTGCACCATTTTTTATCAGGGGCTTGAGCATCTGAGGATTTTAGTATCCTCAGGAGTCCTGGAACCAACC
CCCCACAGATACGGGGACAACTTTATGACATTGTTTTTCAACCAATGAATGTTTATACCTTTTGTTTTCCTTGCC
GCGACTGTGAAGATAAAGTTCAAAAGTATTTTTACCAAAGTGTAGCTAATATTTCAAGCTGAAAATAATAGTTCT
ACTGCCCGTGTCTCCAGAATGTAGAGCCCATCAATATTTTTATTTTAGGAGGTGTACTTGACACCCAATAAACTG
CACGTATCAAAAGTGTACAATGTGTTGGCGTATGTATACCCTGCGTAAAACTATCACCACAACTGAAGTGAGGAA
CGGACCCATCATTCCCAAGTGCCCTTGTGCCCTGTTATTAGTTTGCATGTCCTAGAATTCTATGTAAATTGAATC
ATACAATATGTATCCCTTTTTTGGTCAGGCATATTTTACTCAGTATAGTTATTTTGAGATTCATCCATGTGGTAG
CATGTGTCACGAGTTTTTGTTTTTATGTTTTTCATTGCTGAGTACTGCTTCATTGAATAGATTTGTTCATTGACC
TATCGATGGACACCTGGGTTGTTT

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FIGURE 4408

GTGGCACTCACCCGGCTCGCGCGGCCCCGGCGCCCCACGCGCGCGCGTCGTTCTCCCGCCCGCTCGCTCCCCGGC
GCTCACACCTGAGCTCACTCGCGCACGCCCGCCCGGCCCGAGAACCGCGCCGCCGCCTCGGCCCCGCGGAAGCCC
CGCCGCGCC**ATG**TCTTCGCCTCCCGAAGGGAAACTAGAGACTAAAGCTGGACACCCGCCCGCCGTGAAAGCTGGT
GGAATGCGAATTGTGCAGAAACACCCACATACAGGAGACACCAAAGAAGAGAAAGACAAGGATGACCAGGAATGG
GAAAGCCCCAGTCCACCTAAACCCACTGTGTTCATCTCTGGGGTCATCGCCCGGGGTGACAAAGATTTCCCCCCG
GCGGCTGCGCAGGTGGCTCACCAGAAGCCGCATGCCTCCATGGACAAGCATCCTTCCCCAAGAACCCAGCACATC
CAGCAGCCACGCAAG**TGA**GCCTGGAGTCCACCAGCCTGCCCCATGGCCCCGGCTCTGCTGCACTTGGTATTTCCC
TGACAGAGAGAACCAGCAGTTTCGCCCAAATCCTACTCTGCTGGGAAATCTAAGGCAAAACCAAGTGCTCTGTCC
TTTGCCTTACATTTCCATATTTAAAACTAGAAACAGCTCCAGCCCAAACCTTGTTTATGGGGAGTCTGGTTGGAT
GTCATTTGAGGATCATTGTGCCCCTAGAGGTGCCATTAGCAGAATTTGCCAAGATCCGAGAAAAATTTTAGCTTT
AGTTCTATTTCAGCAGTCACCTGACGTCCTTGTCTATGGTCTTAAAAACAAGAAGGCACACATTTGAGAAGATGA
GATTAAGGTTAGGAGAAAACCTCAGTCATTGCATGCTTTTTAGTATGGGCCAATAAAATCTCAACACCTGTGGGA
GAGTAAGAACTAAGGGAATGAGTTTGGGCGGCCCCTCATAAAGGACCTTAGAGGCAGGGAACAGCAATGCCAAAT
TTCCCTCTCTCGTGAGATGGGGGATCCTGTGCAGGCTGATGAGGCACCCATGAGAAAAGCCGAAAAAGCATGCAT
CTTAGAAATAGCCCCTCAATTCCAGGAGTCAACATGCCAAAGAATGAGGCTGGAGACAGGTAGCTCCGAGGGAGG
ACTTCTGGCATGAGATCTCGGCACGGCAAGCCCAGCATCGCCTCAGCCCAGACAGGCTCCACCAGGAGATCAAGC
AAGGGCTGCCTTTCAGGAGTCACCTCCTGAGCCACTTCAGAGTTCTGGAAGTGACCACGGACCAGGGTGGAGGAA
TAGACTTCTAGTTCATTCTGGGACACTTGAGCCAGAGAGTTGAAAGCTTGGAAAGACCAGATAAGAAACCTGCCC
TTTGTCTCCCTAGGGACATGAGACACCACATTCCATTTGTGCTAGAAAAACCTATCCACTGATGAGTCTAACTGT
TCCAAACGCCTCCCACCTGGTGTGCACAGCTGCCTGGGTCCATTGTCACTTGGGTGCATCAGGTTGTCCTCCGAT
TTTTAGATGAGTTTCCTGTCTAGAGATGTCCTAGTCTGCTCACTGGCTGGTGGCAGTAGGGTACCCTGCGTCCTC
GAAAAGCCAGAGGGTTCACCTAGTCAGACGAAACTCCAGAACAGTGCTTGTGGAGGGCCTGACTGTCCTGCTCAC
CCACAGCCGATCTGCTGCAGGTCAGCAACTGTGTCGTGAGCAGCTGCCAACCACCAGCCTTTCTGGTGCTGTTCT
CCAGTTCACGTCTGCCAGCTGGTGAGGGCAGAGGCAGACCTGGTCAGACCCAGCGCCCCTCCTCCCTGAGGGAGC
ATGGCACAGCCTCACACTTGAAAGACGGTGTTTGGTTTCCCATCTAATCAACTTAAGGGAAGCCGGCATGTACCC
TTCAAGGCCCTGTCACCACCTATTTCCTGATCAGTTGGTATAAACTGAGGGTGGCTTTTAGAGACCCAGACTTGG
TTGGCAGCGCTGCCATGGAACACCCCAGCAAGCACCTCCCAGCCTGCCTTTCGGAGCAGCACCCAGGAGGGGATG
CCGCGCTCCAGCAACACCAGGTCAGGCCTGTGCAGACCCCTGCCCTGCCGCTGCAGAAATCCAGAAGCATCCTTA
ATGCTTCTCAGTCTTCAGCCAGAGGGAGGGCTGTTATTTCCAGAGGTGCGCTTTTTATGTACTTTTAGCTAGATG
TGGCATGCATCTGTGAGCTTTAGATCATTAAATCCAAAATGTTTGCCTAAATGAG

FIGURE 4409

ATGTTGGCCAAAACTGGTGTCCATCACTACGGTGGCAATAATATTGAACTGGGCACAGCATGCGGAAAATATTAC
AGAGTGGGCACACCGGCTATCATTGATCTAGCTTCCGCCTTATTCACCCCTGATGGGAGGCAGAGGTGGAGCCAG
GAGAGCTCTGCTCATGACTGTGCTCCAGGAGGCTCCACCTCCGTGTGCACCCAGAAGGCCCACAGGAGAGATGTT
GTAGCCTGCAAAGCACTACTGCCTGCACGACTGCACGGCCGGCTCCACAGGCTCCTCGGAAACGACAGCAGGAGC
AAAGATGAGGGCTACAGTGCCAGGGGGCTGGCCATTGCCAAGCCTCCCCACGTGGCCTTTCCAGAAGACAGTACC
ATCACTGACCTCACTGTCATTGGCCCCATTCGCCGGCAGCTCTGGACACCAGATGGGCCTGGCGTGGAGCCTCAT
TGCTGGTGGTTAAGCAGTTTAGCTCACTTCTTACCTCAGCATCTTTGA

FIGURE 4410

GCAGTGGCACGATCCTGGTTCACTGCACCCTCTGCCTCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCAAG
TAGCTGGTACTACAGGTGCGTGCCACCACACCTGGCTTATTTTAGTTATTTTAGTAGAGATAGGGTTTCACCATG
TTGGCCAGGCTGGTCTCGGAACTCCTGACTGCAGGTGATCCGTCCTCCTTGGGCTCCCAAAGTGCTGGGATTATA
GGTGTGAGCCCCCACGCCTGGCCAACTTGATTATATTAATTTTGGGTTTTTTGTTTTGTTTTGTTTTGTTTTTTA
ATTTTTCAAAGAATTTGTGGATCTTGGTATAAAGTCATTGGAACATATCTGTTTTAACAGCAAGAGATCCTAGGC
AGATACTTCAAAAGGTTAAAAATTCTTAATCCTACAGAATTTTAAATGAATCTTATCAATGTTTTGTAAACAAAC
AATATGAATGGCCAAAAAATTGCCCTCCATTTTACTGGCAGGTAATTTATATTGTCTTACTTAAGAATTCTCCCC
TAGTTTTTCAATTGTACTTTATCGTGTTGTTTTCAATGAGATAAGTATTTTCATAGGGAAAGCATTTTCCAGCAT
AATATTTGCTTGGGTAGCATCCGGGTTTTAGTATTTAACCAAGAGCCTTTTAAATATTGAAAACCCATAGTTCAG
AAAATGTTAGTATTGCTGCCCTTCTTCACATAAATTTTTTTTTAAATTATACTATTATTTTGCTTAATTTTATAT
TGGGTTAAAACAACCTTCAAGAAGGTTAACTAGGAAAGAAGACCTTTTTGTTTTATTTTTACTATTTATATATAG
AAGACAAATCAGCATTTGGTGATAGTTTTACATGACCAGTTATCAAACGGTCATAGTATGAAGTGTGCAGTTGTT
CATTATTAGTAAATTATGTTTGATTTTTAAACTATTTAGTACTAATAGTTGAGATGAAAACTGAAGAAAAATGCC
AATGTGACGTTTGTGTATAGCTAGCCTTAAAAAACTTCCCATGTTTTTAGGTGACTTTTTTCCCCCTCTTAGTAC
TCTGGAGAAACAATGAAGATGGGCCATCTCAATTCCAGATGTAAACAAAAAGTAATTTTTATTTCAACATTTAAT
GTAACTGCTATTATTGTGGATTCTTGTCTTGTGTATTTTCTTTCCCTTATTCAAGTAATATAGAATAACTTTCCT
TAAAATGATTTGATCCAAGATACGTCATTTCTGTATTGGCAAAATGCCACTATTAAAGTGTAATTCTTGAATTTA
GGTTGAATTGATGACTTTTTAAAACAAAACAAACACTGGACAGTTCTACATTGTATTGCGTTTGCGA**ATG**TGCGT
GAACACACGCACACGTGCAGGAGAATGTAGTGCCATAAGAACACTGGCGCTTTTTAAAACTTTCCAAGCTAGCTA
CTTATTTTCATTTTCAGGGTTGAGTACTCTAAGCTCTCTACTTACTGTGAGAAGTTTTCTACATTGTAAAATTAA
AAGATTATATTTAAAATACTTCTTTAGGATGTTATTCAGCCATCAAAAAAAAACCCAACTAAAATGTCTTACCAG
TAAAGTATTATTAAAAGCCTCATTTGTGGAGATTCGC**TGA**CTTCCTTGGTTAAGCTGTCTTGTATTTACTTAATT
TGTCCCCTCAACCAGGTGTTTTCTTTTCAGCCTGTTACTGTCCTGTGCCATTTTTAAAAATAGCCATCATGAGTA
AGGGCTTCTTTAAAATAATCCCTGACAATATCTTTGGCATTAATACGACATAAAGACAAGACAGTATATGTATGT
TTTCATTCCTGTTTTGTACGAGTGCCTCATTTTGTAGTCATGAAAGTAACATAGTACCTTAAATAAAAATGTAAT
GACTAATCTAAGGTCTAGGAATAACTATTGTAGAAGCTAAGTAGAACACTTAGTTTGGGGTGTCAATTTTCTATC
AACGCAAACACCTTAGGGTACCCAGACCAATTTTATGTATATATATTCTGAAATGCTCCCTTTTTAATGTGGTCA
TTTGTTGCCTTCTAAGTTGAGAGGACAAAACTGAATAAAGTGAATGTTAATTGT

FIGURE 4411A

AGACATATGTAGAGTGTGTCGGTCAGAAGGAACACCTGAGAAACCGCTTTATCATCCTTGTGTATGTACTGGCAG
TATTAAGTTTATCCATCAAGAATGCTTAGTTCAATGGCTGAAACACAGTCGAAAAGAATACTGTGAATTATGCAA
GCACAGATTTGCTTTTACACCAATTTATTCTCCAGATATGCCTTCACGGCTTCCAATTCAAGACATATTTGCTGG
ACTGGTTACAAGTATTGGCACTGCAATACGATATTGGTTTCATTATACACTTGTGGCCTTTGCATGGTTGGGAGT
TGTTCCTCTTACAGCATGCCGCATCTACAAGTGCTTGTTTACTGGCTCCGTGAGCTCACTACTGACGCTGCCATT
AGATATGCTGTCAACGGAAAATTTGTTGGCAGATTGTTTGCAGGGTTGTTTTGTGGTGACGTGCACACTGTGTGC
ATTCATCAGCCTGGTGTGGTTGAGAGAGCAGATAGTCCATGGGGGAGCACCAATTTGGTTGGAGCATGCTGCCCC
ACCGTTCAATGCTGCGGGGCATCACCAAAATGAGGCTCCAGCAGGAGGAAATGGTGCAGAAAATGTTGCTGCTGA
TCAGCCTGCTAACCCACCAGCTGAGAACGCAGTGGTGGGGGAAAACCCTGATGCCCAGGATGACCAGGCAGAAGA
GGAGGAGGAGGACAATGAGGAGGAAGATGACGCTGGTGTGGAGGATGCGGCAGATGCTAATAACGGAGCCCAGGA
TGACATGAATTGGAATGCTTTAGAATGGGACCGAGCTGCTGAAGAGCTTACATGGGAAAGAATGCTAGGACTTGA
TGGATCACTAGTTTTTCTGGAACATGTCTTCTGGGTGGTATCTTTAAATACACTGTTCATTCTTGTTTTTGCATT
TTGCCCTTACCATATTGGTCATTTCTCCCTTGTTGGTTTGGGATTTGAAGAACACGTCCAAGCATCTCATTTTGA
AGGCCTAATCACAACCATAGTTGGGTATATACTTTTAGCAATAACACTGATAATTTGTCATGGCTTGGCAACTCT
TGTGAAATTTCATAGATCTCGTCGCTTACTGGGAGTCTGCTATATTGTTGTTAAGGTCTCTTTGTTAGTGGTGGT
AGAAATTGGAGTATTCCCTCTCATTTGTGGTTGGTGGCTGGATATCTGTTCCTTGGAAATGTTTGATGCTACTCT
GAAAGATCGAGAACTGAGCTTTCAGTCGGCTCCAGGTACTACCATGTTTCTGCATTGGCTAGTGGGAATGGTATA
TGTCTTCTACTTTGCCTCCTTCATTCTACTACTGAGAGAGGTACTTCGACCTGGTGTCCTGTGGTTTCTAAGGAA
TTTGAATGATCCAGATTTCAATCCAGTACAGGAAATGATCCATTTGCCAATATATAGGCATCTCCGAAGATTTAT
TTTGTCAGTGATTGTCTTTGGCTCCATTGTCCTCCTGATGCTTTGGCTTCCTATACGTATAATTAAGAGTGTGCT
GCCTAATTTTCTTCCATACAATGTCATGCTCTACAGTGATGCTCCAGTGAGTGAACTGTCCCTCGAGCTGCTTCT
GCTTCAGGTTGTCTTGCCAGCATTACTCGAACAGGGACACACGAGGCAGTGGCTGAAGGGGCTGGTGCGAGCGTG
GACTGTGACCGCCGGATACTTGCTGGATCTTCATTCTTATTTATTGGGAGACCAGGAAGAAAATGAAAACAGTGC
AAATCAACAAGTTAACAATAATCAGCATGCTCGAAATAACAACGCTATTCCTGTGGTGGGAGAAGGCCTTCATGC
AGCCCACCAAGCCATACTCCAGCAGGGAGGGCCTGTTGGCTTTCAGCCTTACCGCCGACCTTTAAATTTTCCACT
CAGGATATTTCTGTTGATTGTCTTCATGTGTATAACATTACTGATTGCCAGCCTCATCTGCCTTACTTTACCAGT
ATTTGCTGGCCGTTGGTTAATGTCGTTTTGGACGGGGACTGCCATAAGGGCTGTGACGGTGATGGTGGCATGGAT
GCCTCAGGGACGCAGAGTGATCTTCCAGAAGGTTAAAGAGTGGTCTCTCATGATCATGAAGACTTTGATAGTTGC
GGTGCTGTTGGCTGGAGTTGTCCCTCTCCTTCTGGGGCTCCTGTTTGAGCTGGTCATTGTGGCTCCCCTGAGGGT
TCCCTTGGATCAGACTCCTCTTTTTTATCCATGGCAGGACTGGGCACTTGGAGTCCTGCATGCCAAAATCATTGC
AGCTATAACATTGATGGGTCCTCAGTGGTGGTTGAAAACTGTAATTGAACAGGTTTACGCAAATGGCATCCGGAA
CATTGACCTTCACTATATTGTTCGTAAACTGGCAGCTCCCGTGATCTCTGTGCTGTTGCTTTCCCTGTGTGTACC
TTATGTCATAGCTTCTGGTGTTGTTCCTTTACTAGGTGTTACTGCGGAAATGCAAAACTTAGTCCATCGGCGGAT
TTATCCATTTTTACTGATGGTCGTGGTATTGATGGCAATTTTGTCCTTCCAAGTCCGCCAGTTTAAGCGCCTTTA
TGAACATATTAAAAATGACAAGTACCTTGTGGGTCAACGACTCGTGAACTACGAACGGAAATCTGGCAAACAAGG
CTCATCTCCACCACCTCCACAGTCATCCCAAGAATAAAGTAGTTGTCTCAACAACTTGACCTTCCCCTTTACATG
TCCTTTTTTGTGGACTTCTCTCTTTGGAGATTTTTCCCAGTGATCTCTCAGCGTTGTTTTTAAGTTAAATGTATT
TGACTTGTGTTCTCAGCATTCAGAGAGCAGCGGTGTAAGATTCTGCTGTTCTCCCTGGATCTTCTGACATTACTG
CTGTCTGAGATTTGTATATGTGTAAATACAAGTTCCTTGATACCCTAAAACCTTGGATTAAACAGAATGTGCATT
GTACATCTTTAAACAAAATGTATATTAATTTATTAAATCTAGTTGTCACTTTATTTTGGACCTGCTGTGATCTCG
ACAGGAAACGTGCCACAGAGCAGTAGTGCGCAGGCAAGACTTTTCAGTGACGCCTTGTGGAACGCAGTTCATGAT
GTCCTAGCAGCTCTCACTAAGGGAACTGTACATTCTTTCTTTCTTGGCTATTCAGACCTTACCAAGAACGTTAAA
GGAAACAAGTAGAAATCAGCAGTGGAGTGTCTGTGGTAAGAAAACATGAACTTTATGCTTCACTGTTAGTTGTTT
GTGGAAGTTATTTTGTATAACACCAAAGCTGTTGTACATTTCCTACTGCCTGATTTTTTTCATGTGTCTGTGTTT
GTAATATTGTATAGTATCTTGTGCTAGGTGAGGAAATTATTTTTAATTTTGATAATTTAATATTCCTAGTGTGAT
CAGCATTGGGAGTTGGGTTTCAGTGGGGCATGTCTATACTTAGAGAAAAAAAGTCCAAATGAAGATTTTCATGAG
TCAGCCCCCCCGCCCGCCCCCACCCCACACCCACATCCTCTCTTTTCCACACACAACTATCTGTTTATTTTTTGT
AGCAGTGGCCGAAAGTCCTGCAAGGTCATAAATCTTTCAGAGTGACATCACCAACTGTACTGCATCTTACTGGAT

FIGURE 4411B

TTAGGACTTCTGAGATGCTTGTGAAGTATAGATGTGGTTGTGGTCTTAGATTGACAGCATTAGAGAAGACTGGTT
AGAACATCTGGTCTCGCTGGTTAGTGCCTCGTTGGCTGAGGACTAGGTGTGCATTTCTCCTAGCTTTTCATCAGG
AAATCCCAAAGTTTCCAAAGCTTTTTGTTTACAGAATAAAACTTCAAATAAAACCAATTCATTATTTGTCCAGAA
GGAAGCTTGGCTGAGCTGGCCTTTTAACATAGGAATGTATTTCGTTGGAAACATTCTGAAAAATCTCAGAGAACT
GAACCCTTACAAACTTTGTTTTCCCTCATAACCAAAGCTTCAGGTTAGAAGTTTAGAAAAATAGAATGGTTGGGT
ACATGATCTAAATGTTTAATGCTAAAGGTATATCGTAAGGGTAGTGTTTGTTTTTGAACGATAATTTAGAAGTTC
TCATAGAAAGCGTATAACATAGGTCTTCAGAAACTATAAAAGAATTTTCATATAGTATTAAAATCCATAGACTAA
AATCTGAGAATTTTTTAACATATGCAAGTCAGCCAAACATAAGCTACCAAAATAAAGAGCAATGTGTTCTGGCTG
TTTTATACTTCAACAATTTTTTCCCTAAGTGGTAAGCAATTACTTTAAAACATATTTTTAAAAACATCGGTATCG
GGAGCTGCGGTGGCTCCGGCCGGTTGTCCTGGCACACAAGGAGGCGAGGCTATGCGTTCGAGGCCAACCTAGGCA
AAATTGG

FIGURE 4412A

TAGACTACATGAGGAAATAATTGACTTTTATAACTTCATGTCCCCTTGTCCTGAAGAAGCAGCTATGAGAAGAGA
GGTGGTGAAACGGATCGAAACTGTGGTGAAAGACCTTTGGCCGACGGCTGATGTACAGATATTTGGCAGCTTTAG
TACAGGTCTTTATCTTCCAACTAGCGACATAGACCTGGTGGTCTTCGGGAAATGGGAGCGTCCTCCTTTACAGCT
GCTGGAGCAAGCCCTGCGGAAGCACAACGTGGCTGAGCCGTGTTCCATCAAAGTCCTTGACAAGGCTACGGTACC
AATAATAAAGCTCACAGATCAGGAGACTGAAGTGAAAGTTGACATCAGCTTTAACATGGAGACGGGCGTCCGGGC
AGCGGAGTTCATCAAGAATTACATGAAGAAATATTCATTGCTGCCTTACTTGATTTTAGTATTGAAACAGTTCCT
TCTGCAGAGGGACCTGAATGAAGTTTTTACAGGTGGAATTAGCTCATACAGCCTAATTTTAATGGCCATTAGCTT
TCTACAGTTGCATCCAAGAATTGATGCCCGGAGAGCTGATGAAAACCTTGGAATGCTTCTTGTAGAATTTTTTGA
ACTCTATGGGAGAAATTTTAATTACTTGAAAACCGGTATTAGAATCAAAGAAGGAGGTGCCTATATCGCCAAAGA
GGAGATCATGAAAGCCATGACCAGCGGGTACAGACCGTCGATGCTGTGCATTGAGGACCCCCTGCTGCCAGGGAA
TGACGTTGGCCGGAGCTCCTATGGCGCCATGCAGGTGAAGCAGGTCTTCGATTATGCCTACATAGTGCTCAGCCA
TGCCGTGTCACCGCTGGCCAGGTCCTATCCAAACAGAGACGCCGAAAGTACTTTAGGAAGAATCATCAAAGTAAC
TCAGGAGGTGATTGACTACCGGAGGTGGATCAAAGAGAAGTGGGGCAGCAAAGCCCACCCGTCGCCAGGCATGGA
CAGCAGGATCAAGATCAAAGAGCGAATAGCCACATGCAATGGGGAGCAGACGCAGAACCGAGAGCCCGAGTCTCC
CTATGGCCAGCGCTTGACTTTGTCGCTGTCCAGCCCCCAGCTCCTGTCTTCAGGCTCCTCGGCCTCTTCTGTGTC
TTCACTTTCTGGGAGTGACGTTGATTCAGACACACCGCCCTGCACAACGCCCAGTGTTTACCAGTTCAGTCTGCA
AGCGCCAGCTCCTCTCATGGCCGGCTTACCCACCGCCTTGCCAATGCCCAGTGGCAAACCTCAGCCCACCACTTC
CAGAACACTGATCATGACAACCAACAATCAGACCAGGTTTACTATACCTCCACCGACCCTAGGGGTTGCTCCTGT
TCCTTGCAGACAAGCTGGTGTAGAAGGAACTGCGTCTTTGAAAGCCGTCCACCACATGTCTTCCCCGGCCATTCC
CTCAGCGTCCCCCAACCCGCTCTCGAGCCCTCATCTGTATCATAAGCAGCACAACGGCATGAAACTGTCCATGAA
GGGCTCTCACGGCCACACCCAAGGCGGCGGCTACAGCTCTGTGGGTAGCGGAGGTGTGCGGCCCCCTGTGGGCAA
CAGGGGACACCACCAGTATAACCGCACCGGCTGGAGGAGGAAAAAACACACACACACACGGGACAGTCTGCCCGT
GAGCCTCAGCAGATAATGGCTCCTGGCTGCGTCAGCCTCCCCCACCCCTCTGCAGACTGCCCCGCGGCCTCGGCC
ACCGGCAGGGGAACCGAGACCAGCACCCCGCACGTCAGCCGGGCTCGCGGCACGCCCGCCGCTGATCACTCTGCA
TGTTTCTTCGTGTGGTGGTCGCGTCCATCTTCAAGAACAGCTCGTTGTGCTCATCTGTGAAGCCTTATTAAACGT
GGACGTTGTTTTCTGCCTTCCCAGGATTCTTCCTTCAGTGCTGAGGCAGGTTGGGCTCAGGAACTGCAGGGACGT
GAACATGCGCTTGCGGTTTGAGGTAGCCGTGTCTGTTCCTTCGCGGTTTGCTATTTTCATTTCCTGTTCGTCAAA
GCAGCAGAGGAGATCAAACCCCGTTCGTGTGTCTTTCCTCCATGGATAAGCTTGGGAGGTCATTGTTTTACTGCC
CTCACATTTTGTTTGAAATTTCAGAACTGTTTTTCTATGTAAATATTGAAAACTTATGATTTGTGCAATAACTCA
GATATTTTTTATTTAATTTCCTATTTTCACATAAGTTATATTTAAGGGAGGAGGGAATTTTTTTTAAACAAGCTT
AGGTCCTTTCCCGAGCTGCATTTTCTAAGTTGGGTCATCGTGTCGGCTGGTTGTCTGACGAGCATCGTTACAAAC
ACCATGATGAGGGGTTTGGGGTTTTATTTTGATGTCTTTTCTTTTGGTCGGAAGTGAGTGAAGGAGCCAGGTCGC
CCTGAAGGTTTTCCAAAGGGCTTGGCTCCAGAGCCACCTGGCAGACTGCCCGTGGCCCTGCTGTCGGGCCCCAGG
CCGTTGTCCTGCTCTGACCACAGAGTTTTAATGTTTTGGTTTTCACTTCTTTTAAACTGGACAACAAATCCAGCA
TTTCAAGTGCCAGAAGTATAACTTTCTAAGGAGAGAAGGGTTGTCACATTATAAAATCTTTAGGAAAATGTGAAC
TGGAAAACGCTTCGGTCAGTTTTAGTGACATAGCCTGTGATGATGGGTCTGGTGACTATTATTGCGGACCGTGGT
ACCCAGTTTTAGGAATGTGGAGAAAGGAATTCTGTTGATTCCGTTGAGGAATCTGTAGCGTATGCATTCGTTCTG
TTAAGAGCAAATCTAGGAGAAGTGCTTCAGCTGCCCAGTGCGCCGTGGGGAGTGTTTTAACGGATCGTGTCGCAG
GAGAGCACAGCCCAGCGTTGGGGCCGGGACCGCTGGCGCCCGACGTCGGAAGCATACAGGTATACTATGCAAGTG
TATTCTGCCACAACAACCACTGTCTTTGTTACCTTTTTTTGAACAAGAATATATCCATCCTGCCTAACCCTGAGT
TTTTGGAGCACCACAGTTGTCCTGGGAGTTGGTTGCATCTTGTAGGCCATCTGACTTCCTGTTTTTAAAACGGGG
GTCTGGTCTTGCTAAACACTACAGGTAGGTTGGTCTTTGAAGTCCACTAGTGGAGAATGTCAAGACAAGATACTT
ATTACCATGACATCTGATGCATGTGCAGCAGTGGGGAGTTCTAGATTGATCTCTGAATGTGATCGACGCCCAGCA
AGGACAAGCTTTAAAATGTCTGCGGTCTGCCCTTTTGAAGCAGGACTGGCTCACTCTGTCATTGGGAGCTGTCAG
CTGCGACTGCAGGTTCTCTAGGAGGCATTCCAGAATAGAGTAGCACACTGTGTCTGCAGTTCTCGATGACCGAAA
GTTATCAAAAATATTTAAAATATTTAAATTGTGAACCTATTGATAAAGAATATTTATAAAAACTGATCTGTAGGC
CTGTACTAATCTCTACGCATTAGCAATATTGACTGTAAACCCACATTAAGGAAACCACTACGGGTCTGGCAGTGC
GTGTCCCGTGGGGTGTGCATTTTAAAACTCGATTCATAGACACAGGTACCATGTTCCATTTCCGTCATGGTGAAG

FIGURE 4412B

CAAATGAATTGGCCTGGCTACCACTGTGGTCGCGTGCTACAGGTTTGACAAAAAGATATCATGTTTCGATTTTTT
TGTGTGTGGACAACAATATGGAAGCTAAAATTGACATATTTTTATGTAAAGTTTTTCTATTCTTTGATTTTTAAT
AAACTTTGGAAACC

FIGURE 4413

CTCTCCCTGCACCTTTCTTTATCTTGGAGCCTCTCCCATCTCTCCCTCCCTCTTCCTCCCTACCCCACCCTCCGA
CCACCCCACTTCTTCCCCTCCCCTCACACTTCCCTCCCTCCCTTCTCTCGTCTCCTCCCCACTGCGCCTCCCTCC
CTCCTGGCCTTCCTTCCCTTCCCCGACTTTGCAGATTTCTCTTCCCCCAGGCCTCCCTCCTCCACCTCTCCGCCC
CCTCCGGGCTTGGCTCTCCCAGGAGGCTACGACTGGAGCCACTGGTCCCGCAGGATCCCCGCGTCCTCGGTCGCC
GCGTCCACGTCCCTCTCGCGTCCCCGCCCGGCGCCACGCCGCCTCCTCTGGGTTCGGCCTCCGCGCGGTGCAGCG
CAGTCTCAGGCCGCGGGACAAGCCCGACTTAAATCTCTGCA**ATG**GCTAACGAAGCTTATCCTTGTCCGTGTGACA
TTGGCCACAGACTTGAGTATGGAGGGCTAGGCCGTGAAGTTCAAGTCGAGCACATCAAGGCTTATGTCACCAAAT
CCCCCGTTGATGCAGGCAAAGCTGTGATTGTCATTCAAGATATATTTGGCTGGCAGTTGCCCAATACCAGATATA
TAGCTGACATGATCTCAGGAAATGGATACACAACCATTGTTCCAGACTTCTTTGTAGGGCAAGAGCCTTGGGACC
CCTCTGGCGACTGGTCTATCTTCCCTGAGTGGCTGAAAACAAGAAATGCCCAGAAGATCGATAGAGAGATCAGTG
CTATCTTGAAGTATCTGAAACAACAGTGTCATGCCCAGAAAATTGGCATCGTGGGATTCTGCTGGGGTGGAACTG
CTGTCCATCATTTGATGATGAAATACTCAGAATTCAGGGCAGGGGTGTCCGTCTATGGCATTGTCAAGGATTCTG
AAGACATTTACAATTTAAAGAACCCCACTTTGTTCATTTTTGCTGAAAATGATGTTGTGATTCCACTCAAGGACG
TATCTTTGCTGACTCAGAAGTTGAAAGAACACTGCAAAGTTGAATATCAAATTAAAACATTTTCTGGGCAGACTC
ATGGGTTCGTGCATCGGAAGAGAGAAGATTGCTCACCTGCAGACAAGCCCTACATTGACGAGGCCAGAAGGAATT
TAATTGAGTGGCTGAACAAGTACATG**TAG**CAAGAATCAAGGGCAAGCCTTCCTAGAATAGCTTTCATCCCAAAAT
TTGCTTGGAAATAGTTAGATCATTTGATTTAATTTTCACTTTTATAAAATAAGTGTAGGAATCCTAAAATTGATT
ATTTCATTTGAAACACAAATTCAGTAGGACGTAATGCATGAAATAATTTAATTTTTGACATGTACATCGAATCAT
AATTTAAAAACAAGGTCTGACCAGGTGTAGTGCCTCATGCCTGTAATTCCAGCACTTTGGGAGGCCAAAGTGGGT
GGATCACCTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAGACCCCATCTCTACAAAAAATACAAAA
ATTAGCCTGGTGTGGTGGTGCACGCCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCACAAGAATCAATAGAACCC
AGGAGGTGGAGACTGCAGTGAGCCAAGATTGTGCCACTACTGTACTCTAGCCTGGGCAGCAGAGTGAGACCCTGT
CTCAAAAATAAATAAGTAAATAAATAAATAAATAAAATAAAAACCAGGTCAGTACCTGGAGAATTTGAATGATAG
AGAATGATAGAGTAATACCCTAATTATTAGTTAAAACCTACAGGCCGGGTGCGGTGGCTCACGCCTGTAATCCCA
GCACTTTGGGAGGCCGAGGTGGGTGGATCACTTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAAC
CCCATCTCTACTAAAAATATAAAAATCAGCCGGGCATGGTGGCATGTGCCTGTAATCCCAGCTACTCAGGAGTCT
GAGGAGGAGAATCACTTGAACCTGGAGGCAGAGGTTGCAGTGAGTCGAGGTTGCGCTACTGCACTCCAGCCTGGA
CAACAGAGGGAGACTCTGTCTC

FIGURE 4414

AATAAAGAAATAGTGCTTTAAGTCAATGAATTCCTCCTTGGGACCCACTATCGAGAAACTATCAGTGGTAACGTT
TTAAAAAATGACAAATTCAATCTGCTCTTGACTTGTGTGTCCTAAGATTTCCACTAAGTGTCTTCAAACCTCCCC
CTCCCCGGCTTCCTGGATAATAGAAGTTCCCGAAGGCCGCCGATTCCAGAAGATACTGTCTGGCGTGAAATTAGT
CTCAGTAGAAACATAAGTCCCGCGCGTCTTGTGCTGCGCGTGCGCAAGCTTTTGGGCCCTCCCGAGAAAGGGAAG
TGCATTCTCGCTTCCGTAGCGGTCTCCGCCGGTTGGGGGGAAGTAATTCCGGTTGTTGCACC**ATG**GCGTCCATGG
GGACCCTCGCCTTCGATGAATATGGGCGCCCTTTCCTCATCATCAAGGATCAGGACCGCAAGTCCCGTCTTATGG
GACTTGAGGCCCTCAAGTCTCATATAATGGCAGCAAAGGCTGTAGCAAATACAATGAGAACATCACTTGGACCAA
ATGGGCTTGATAAGATGATGGTGGATAAGGATGGAGATGTGACTGTAACTAATGATGGGGCCACCATCTTAAGCA
TGATGGATGTTGATCATCAGATTGCCAAGCTGATGGTGGAACTGTCCAAGTCTCAGGATGATGAAATTGGAGATG
GAACCACAGGAGTGGTTGTCCTGGCTGGTGCCTTGTTAGAAGAAGCGGAGCAATTGCTAGACCGAGGCATTCACC
CAATCAGAATAGCCGATGGCTATGAGCAGGCTGCTCGTGTTGCTATTGAACACCTGGACAAGATCAGCGATAGCG
TCCTTGTTGACATAAAGGACACCGAACCCCTGATTCAGACAGCAAAAACCACGCTGGGCTCCAAAGTGGTCAACA
GTTGTCACCGACAGATGGCTGAGATTGCTGTGAATGCCGTCCTCACTGTAGCAGATATGGAGCGGAGAGACGTTG
ACTTTGAGCTTATCAAAGTAGAAGGCAAAGTGGGCGGCAGGCTGGAGGACACTAAACTGATTAAGGGCGTGATTG
TGGACAAGGATTTCAGTCACCCACAGATGCCAAAAAAAGTGGAAGATGCGAAGATTGCAATTCTCACATGTCCAT
TTGAACCACCCAAACCAAAAACAAAGCATAAGCTGGATGTGACCTCTGTCGAAGATTATAAAGCCCTTCAGAAAT
ACGAAAAGGAGAAATTTGAAGAGATGATTCAACAAATTAAAGAGACTGGTGCTAACCTAGCAATTTGTCAGTGGG
GCTTTGATGATGAAGCAAATCACTTACTTCTTCAGAACAACTTGCCTGCGGTTCGCTGGGTAGGAGGACCTGAAA
TTGAGCTGATTGCCATCGCAACAGGAGGGCGGATCGTCCCCAGGTTCTCAGAGCTCACAGCCGAGAAGCTGGGCT
TTGCTGGTCTTGTACAGGAGATCTCATTTGGGACAACTAAGGATAAAATGCTGGTCATCGAGCAGTGTAAGAACT
CCAGAGCTGTAACCATTTTTATTAGAGGAGGAAATAAGATGATCATTGAGGAGGCGAAACGATCCCTTCACGATG
CTTTGTGTGTCATCCGGAACCTCATCCGCGATAATCGTGTGGTGTATGGAGGAGGGGCTGCTGAGATATCCTGTG
CCCTGGCAGTTAGCCAAGAGGCGGATAAGTGCCCCACCTTAGAACAGTATGCCATGAGAGCGTTTGCCGACGCAC
TGGAGGTCATCCCCATGGCCCTCTCTGAAAACAGTGGCATGAATCCCATCCAGACTATGACCGAAGTCCGAGCCA
GACAGGTGAAGGAGATGAACCCTGCTCTTGGCATCGACTGTTTGCACAAGGGGACAAATGATATGAAGCAACAGC
ATGTCATAGAAACCTTGATTGGCAAAAAGCAACAGATATCTCTTGCAACACAAATGGTTAGAATGATTTTGAAGA
TTGATGACATTCGTAAGCCTGGAGAATCTGAAGAA**TGA**AGACATTGAGAAAACTATGTAGCAAGATCCACTTCTG
TGATTAAGTAAATGGATGTCTCGTGATGCATCTACAGTTATTTATTGTTACATCCTTTTCCAGACACTGTAGATG
CTATAATAAAAATAGCTGTTTGGTAACCATAGTTTCACTTGTTCAAAGCTGTGTAATCGTGGGGGTACCATCTCA
ACTGCTTTTGTATTCATTGTATTAAAAGAATCTGTTTAAACAACCTTTATCTTCTCTTCGGGTTTAAGAAACGTT
TATTGTAACAGTAATTAAATGCTGCCTTAATTG

FIGURE 4415

GTATACCCCTAGAAACACTTAAAGAAGAAAGTCAGTCAAGACATGTTCTACCTGCAAGTTTTGAAGTCAACAGTT
TGCAGAAAAGCAACTGGGGGTTCTTACTTACTGGGCTTGTGGGTGGCACCCCTGGTGGCTGTGTACGCTGTAGCC
ACGCCGTTTGTAACGCCAGCCCTTCGAAAAGTCTGTTTGCCGTTTGTACCTGCAACTACGAAGCAGATTGAAAAT
GTTGTGAAAATGTTGCGATGCCGAAGAGGATCCCTTGTGGACATCGGTAGTGGGGACGGACGCATTGTTATTTTT
ATTGCATATTATTACTTGTTCACAAAACCATCCTCCCAGACACTTTCATTTCACTGCTGCTGTGCTAGCCCACTG
ATGGAGAGATGCAGTGGATTTTCAGCAATGTTTTGTTCGACCTCCCCGGGGGTTGGCTGACCTAGAATCAATTAT
GGAGGTGTTCCAAGTGAACCTGAATGTCTATTCTGATACTTGAGGTCATAGCGGCTGCGAAGAAAGGGTTCACAG
CAGTTGGTTATGAATTAAACCCATGGCTAGTTTGGTATTCCAGATACCGCGCTTGGCGAGAAGGTGTGCATGGAT
CTGCCAAATTTTATATTTCAGATTTGTGGAAGGTTACTTTTTCGCAGTACTCGAACGTTGTTATTTTCGGTGTGC
CTCAGATGATGCTGCAGTTGGAGAAGAAACTTGAACGTGAACTTGAGGATGATGCACGAGTTATTGCTTGCCGGT
TCCCTTTCCCACATTGGACTCCAGACCACGTCACGGGGGAGGGGATAGACACAGTGTGGGCATATGATGCAAGCA
CTTTTAGAGGCCGTGAAAAGAGGCCCTGTACATCGATGCATTTCCAGCTGCCCATTCAAGCATAAACTTGACTGG
GAGTGTTTTTCTGAAATATTGTAGTCTTCCCTGATCTTGTAGAGACTTACAGCTGTGTCCTTAGCAAAGGAGCAT
AATTGTCTTTGGTTTGGAATGAGAAATTACTATTACTTTCCTTAACTGTTGGAGAAAACAAACGAAGAAAAACAG
GTAGATTTAAAATCTGCTTTTGATGCTATTTTCTTAAAAATTGTACTTACTGCCTTTCCATGCACCTGGATGCAT
GAAAAGATGAATAAGTGATGGTCATGGTTATGGGTAGGAAAATAAGATGCCAATAGCTCTTCACATTATAAACAA
TATGGCTTAATGCCTCGATAAGGAGAAATGATTTTTAAAGACAGTATATATTACCAACTGTTTGTAGTATCCTAT
AACTTTGTTCATACTTAAGTTGTATCTCTTTCCTTTTTGTACTTCATGGCAAAATTAATTTTCTAAAGGATTCAG
AGAGGCGTTTATATTTTATAACATTTATTAGAAATAATTTGTTCCACCACTAGATTACTGTATTTTATGGAATCT
AAGCTGTATATGTGTACATTTGTATACATGTATGTGTAAATGTAAGCCTGACGTGGGTTCAGATTCCAGTTTTGT
CATCAGCAAGAGGCCTCGGACCCATGACTTACTGCCTCTGAGCCTTGGCTTTCTGTGTATCTCTGCCACTGGGAT
AATGGTACACATAACAGTGGAGTGGGGACCAATTTCTAAAACTCATGGCACCTAGTCTTTGGTCCATAAATGGTG
TTTGTTATTTTAGACACTGAGAAAAATCTTATTCACAGAAGTTGCAGATTATTTCTGCTAGTCACTTTTTTATTT
CTTGAGAGCTGCCACTCATTTAATATTTCTCATTTATGAGAAGAGACTTGACTGATTTAGATAAAAGACGAATTA
AGGAAAACCTTTGAACGTGAGTAGACAAGCTTCATATATCTGTAAAGTGAATATTGAATGGTAGCTTGAGTCATT
CGTACTTATCACAGAAAAGAATTGAACTCCCAGTCATACACCTGTAACTGAAATACCAAACTGTCTTAATGGAGA
TGTAATGAAGTAAGATGGTCACATCTTTAACTAAACTTATAAAAATTG

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FIGURE 4416

GGAGCTTTCTATTGGTCCTGGGTACCGAGCATGGGCGCTGCGTCAGTGCGCGCTGGCGCAAGGTTGGTGGAAGTC
GCGTTGTGCAGTTTCACTGTTACATGCCTTGAAGTGATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGA
CAGGCAAAGGCCATCGCAGAAGAAATATGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATT
AGTGAATCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTGTTGTTGTGGTTTCTACCACGGGCACCGGA
GACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAACCAAACACTGCCGGTTGATTTCTTTGCTCAC
CTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAATACACCTACTTTTGCAATGGGGGGAAGATAATTGATAAA
CGACTTCAAGAGCTTGGAGCCCGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTGTG
GTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAAGAGGAGATA
AGTGGCGCACTCCCGGTGGCATCACCTGCATCCTCGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAA
TCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGAAGAAAGGATTCTGAGGTTTTGAAGCAAAATGCAGTGAAC
AGCAACCAATCCAATGTTGTAATTGAAGACTTTGAGTCCTCACTTACCCGTTCGGTACCCCCACTCTCACAAGCC
TCTCTGAATATTCCTGGTTTACCCCCAGAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAGGAGGAAAGC
CAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAATTTCAAAGGCAGTTCAACTTACTACGAATGAT
GCCATAAAAACCACTCTGCTGGTAGAATTGGACATTTCAAATACAGACTTTTCCTATCAGCCTGGAGATGCCTTC
AGCGTGATCTGCCCTAACAGTGATTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAG
CACTGCGTCCTTTTGAAAATAAAGGCAGACACAAAGAAGAAAGGAGCTACCTTACCCCAGCATATACCTGCGGGA
TGTTCTCTCCAGTTCATTTTTACCTGGTGTCTTGAAATCCGAGCAATTCCTAAAAAGGCATTTTTGCGAGCCCTT
GTGGACTATACCAGTGACAGTGCTGAAAAGCGCAGGCTACAGGAGCTGTGCAGTAAACAAGGGGCAGCCGATTAT
AGCCGCTTTGTACGAGATGCCTGTGCCTGCTTGTTGGATCTCCTCCTCGCTTTCCCTTCTTGCCAGCCACCACTC
AGTCTCCTGCTCGAACATCTTCCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTATTTCACCCA
GGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTGTCTACTGCCACAACAGAGGTTCTGCGGAAGGGAGTA
TGTACAGGCTGGCTGGCCTTGTTGGTTGCTTCAGTTCTTCAGCCAAACATACATGCATCCCATGAAGACAGCGGG
AAAGCCCTGGCTCCTAAGATATCCATCTCTCCTCGAACAACAAATTCTTTCCACTTACCAGATGACCCCTCAATC
CCCATCATAATGGTGGGTCCAGGAACCGGCATAGCCCCGTTTATTGGGTTCCTACAACATAGAGAGAAACTCCAA
GAACAACACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTTTGGCTGCAGGCATAAGGATAGGGATTATCTA
TTCAGAAAAGAGCTCAGACATTTCCTTAAGCATGGGATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCT
CCTGTTGGGGAGGAGGAAGCCCCAGCAAAGTATGTGCAAGACAACATCCAGCTTCATGGCCAGCAGGTGGCGAGA
ATCCTCCTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATGCAAAGAATATGGCCAAGGATGTACATGATGCC
CTTGTGCAAATAATAAGCAAAGAGGTTGGAGTTGAAAAACTAGAAGCAATGAAAACCCTGGCCACTTTAAAAGAA
GAAAAACGCTACCTTCAGGATATTTGGTCATAAAACCAGAAATTAAAGAAAGAGGATTAAGCTTTTTTGACTGAA
AGTACTAAAAGTCAGCTTTACTAGTGCCAAACCTTTAAATTTTCAAAAGAAAATTTTCTTTCAACATTTCTTGAA
GGACATGGAGTGGAGATTGGATCATTTAACAATATAACAAAACTTCCTGATTTGATTTTACGTATCTTCTATCTA
CGCCCTTCCTGTGCCTGTGACTCTCCCCAAATTGCCCTGTTGCCTTGAGCTCTTCTGAGCTAAGGCAGCCTTCAG
TCCCTATCAGCGCCTCCTTTACTTCCCAGAGAACTTCACAGAGACTCTGTCCTTCCATGCAAAGGCTTCCTGAAA
TAGGGAGACTGACTGAGTAGCTCATTCTTGTGACTTACAGTGCCAACATTTAAAAAAGTATGAAAATGATTTATT
TTTATATGATGTATACCCATAAAGAATGCTCATATTAATGTACTTAAATTACACATGTAGAGCATATCTGTTATA
TGTTTATGTAACTATCAAATGGTTATTTGTTACTAAAGCTATATTTCTGATAAAAAATATTTTAGGATAATTGCC
TACAGAGGGATTTATTTTTATGATGCTGGAAATATGAAATGTATTTTAAAATTTCACTCTGGCATATGATTTATC
TATCACCATTACTTTTTTTTAAGTCACAATTTCAGAATTTTGGGACATTTGCATTCAATTTACAGGTACCAGTAC
GTACATATTTTAATAGAAAGATACAACCTTTTTATTTTCACTCCTTTTATTTCTGCTGCTTGGCACATTTTTGAG
TTTTCCCACATTATTTGTCTCCATGATACCACTCAAGCAGTGTGCTGGACCTAAAATACTGACTTTAGTTAGTAT
CCTTGGATTTTTAGATTCCCAGTGTCTAATTCCCTGTTATAATTTGCACAAACAAAACAAAATGTTATGATAATC
TTTCTCCACTGTTCTAATATATATTGTATTTTTATTTGATAGCTTGGGATTTAAAACATCTCTGTTGAAGGCTTT
TGATCCTTTTGAGAAATAAAGATCTGAAAGAAATGGCATAATCTT

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FIGURE 4417

CCAGAACACAGGTGTCATGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCG
TCATTGGACACGTAGATTCGGCAGGATGTCTACAAAATTGGTGGTATTGGTAGTGTTCCTGTTGGCCGAGTGGAG
ACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACAGAAGTAAAATCTGTCGAA
ATGCACCATGAAGCTTTGGGTGAAGCTCTTCCTGGGGACAGTGTGGGCTTCCATGTCAAGAATGTGTCTGTCAAG
GATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAG
GTGATTATCCTGAACCATCCAGGCCAAATAAGCGCTGGCTATGCCCCTGTATTGGATTGCCACACGGCTCATATT
GCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTC
TTGAAGTCCGGTGATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGCTGAGAGCTTCTCAGACTAT
CCACCTTTGGGTCGCTTTGCTGTTCGTGATATGAGACACACAGTTGCGGTGGGTGTCATCAAAGCAGTGGACAAG
AAGGCTGCTGGAGCTGGCAAGGTCACCAACTCTGCCCAGAAAGCTCAGATGGCTAAATGAATATTATCCCTAATA
C

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FIGURE 4418

CTTTTTCACAACGGGTTTGCCGCCAGAACACAGGTGTCATGAAAACTACCCCTAAAAGCCAAA**ATG**GGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCAGTAGCATCGACAAAAGAACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACT
ATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTC
CCGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCTAAGAATGGGCAGACCCGAGAGCATGCCCTT
CTGGCTTACACACTGGGTGTGAAACAACTAATTGTTGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGC
CAGAAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTA
GCATTTGTGCCAATTTCTGGTTGGAATGGTAACAACATGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGA
TGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCATGCTGCTTGAGGCTCTGGACTGCATCCTACCACCA
ACTCGTCCAACTGACAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTAGTGTTCCT
GTTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACAGAA
GTTGTGGGCTTCCATGTCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAAT
GACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAA

FIGURE 4419

GCCACTGCCTGGCACCCCGACGGGAGGGGCTCCGGATCGTTCGGAGCCGGCTGAACCCCTTCGGCCGCGAGCGAC
CGCATGAGTCGGGGGACTATGCCCCAGCCCGAAGCGTGGCCAGGCGCGAGCTGCGCCGAGACGCCGGCGCGGGAG
GCGGCGGCCACGGCGCGGGACGGCGGGAAGGCGGCGGCCAGCGGGCAGCCGCGGCCCGAGATGCAGTGCCCGGCC
GAGCAGTGAGAGGACATGTACCGTGCTGCAGATGAAATAGAAAAGGAGAAAGAATTGCTTATACATGAAAGAGGG
GCATCAGAACCGAGATTAAGCGTAGCTCCTGAAATGGATATCATGGACTACTGCAAAAAAGAATGGAGAGGAAAT
ACACAGAAAGCAACGTGT**ATG**AAAATGGGCTATGAAGAGGTTTCTCAGAAGTTCACCTCCATACGGCGAGTCCGT
GGTGATAATTACTGTGCACTGAGGGCCACGCTGTTCCAGGCCATGAGCCAGGCTGTGGGGCTGCCGCCCTGGCTG
CAGGACCCGGAGCTCATGCTGTTACCAGAAAAACTCATAAGCAAATACAACTGGATCAAGCAATGGAAACTTGGA
CTGAAATTTGATGGGAAGAATGAGGACCTGGTTGATAAAATTAAAGAGTCCCTTACTCTGCTGAGGAAGAAGTGG
GCAGGCTTGGCTGAAATGAGAACTGCTGAAGCAAGACAGATAGCTTGTGATGAACTATTCACAAATGAGGCGGAG
GAATATAGCCTCTATGAAGCTGTAAAATTTCTAATGCTAAACAGAGCCATTGAACTATATAATGATAAAGAGAAA
GGAAAGGAAGTACCATTTTTCTCTGTGCTTCTGTTTGCTCGGGACACATCAAATGACCCAGGACAGCTTCTGAGG
AACCACCTCAACCAGGTGGGACACACTGGTGGTCTTGAACAGGTTGAAATGTTCCTTCTTGCCTATGCTGTGCGC
CACACCATCCAGGTGTACCGGCTCTCCAAGTACAACACGGAAGAATTCATCACAGTCTACCCCACCGACCCACCC
AAGGACTGGCCAGTGGTAACGCTCATTGCTGAGGACGATCGGCACTATAACATCCCCGTCAGAGTGTGTGAGGAG
ACCAGTCTA**TGA**GAGACGCATGCTCCTGACAGCCTGGCGACGTGGCGAAGATGCACAGGTGGCTCCTGGGCTTGG
GCTGCAGGTTTGGGGGTCTCTAAGAACAATCTCTGAGAAGAACCCTTGGGCCCCTGGGAGCCAAGTTGGACAGGA
TGTCCTGAAGACTAGCTTTTGATAAGAGAAATTAACCAAGTCTTTCCCCTCATCTATGATGCAATATATTTCAGT
GGGGGCCTTCAGAGCACACCTGTTGGACGGTGCAAACCATATCTTCTCCAGAAGGCAAATACTTTTGTATCAGAG
GAAACTCAGTTTTGGAGAGGAATATGTTCTTTATATCTCAAATCAAAACTCTCTCTAATGGTAAACTGGCTTCTA
ATTTTTTTAAGTACAGTATTTTTTTTTCCCCTTTAGTAGTAACGGGTTTCTATAGATCTTCCTATACAGTCTGCT
TTAACTCAGGACCTTGAGATTATGAGACTGACGTGCTGCCCACTGCACTGAGGGGGCTTCTAACAGTCTGCTTTA
AGTGGTATAATTCTGGGATAGATCTGTTACTGGCATAGTCATGACAACCTCTGGTAATCTTACCTTCTCCTTTTT
ATGAAGGGAAGAGCAATGGTTTGGACTTACATCTTAATTAAGGCTATTTTAAGCAGATTGTTTTGCAACAGATTA
AGAATTGGGTCCCAAAGTGGGTTATTTCAAGGCATTTTTGAAGACTGGAGGAGCGTAGGAGGGAGTGGTGAGGGA
ACCTAGAACTTCTTGCTCCTTGTGACTATGACAGATGTCTGATGCCCCCAGCGCACTGGAGTCTGGGGCTTGGTG
CAGGTGGTGCCCCATCAGTGTGGACAGACACTACTTGCCTTTGTGGTTTAGTGTTGGAAGCTTTAATTATTCTAC
AGTTCCATAGATTCACAATTTTATAGCCAAACAGTTTGTATCCACCTGCTTTCAGAGGAGGAACCAAAGGCCAAA
TTACTTTGAGGTAGGGCTTAGCTGGACCTGGGTTTTCCTATGCTCTTTTCATGCTGTGTTGGAGGGTGTGTCCAC
TGCCAGATCTGTGTAACCCGTCTGGGTCAGGGGATGAGTGACAGCAAACCATCTTAAAATTTTTCATGAGTACAT
TTAAGCGGAAGCATACGGGAATATGAGTGCAAAAGTGTGGCTGAGCCGCGTATGCCCTTGATTGGTTTTGGGAAG
CCTGAGGGAGGCAGCCTTCCTGGCTATGAGCCATCGCCTGCCCAATCAGGCTAAGGGTGGTGACTGGGGTGGTGA
AGGGGCAGCTCTGCTGAGCATGGTCTGCCTTATGGCCTGAATTGTCCTCAAGGGGTGTGGACTGCAGATGGTGTT
CACATGAACCGGAGACATCACTCTTTAGGATTCTACTGGCAGCCCCTGAATTGGCTCAACGTTTGTGGAGGTGGT
ATTTCCCTGAAGTACTGAGCTTTGTTTTATAATAATTAAAATCCTTATTTGGTCCAATTTAATATAGTTTAGAAG
CTATTTTTTTTGAGGCAAACCGTTTTTGAAAATGTAAATTTTGTTTTTAATTAAAAATAAAGTCTTAGTTAAGAA
AACTCAGGATGCACAAAACTATTCAGACTGTTACTTTAGCTTTCTCCCATTACCTCATCAGTAATATTCACCACA
TTTTGCTAAATATTTATTGATTAGAGTGTTGAAATCAAATTCTGCTCTAAATGTGTGTGAATATGTTGGAGAGGC
TTTGTGTTCTTCACTGTGAAATGCAATTGTGCCTTGAATAAGAAGGTACCTAGAAGCCAAATTAAAGTAATAATG
ACTTCTT

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FIGURE 4420A

CTCTTTTTTTTCCCGGCAGATCTTTGTTGTGTGGGAGGGCAGCAGGGATGGACTTGAGCTTGCGGATCCCCTGCT
AGAGCAGCCGCGCTCGGAGAAGGCGCCGCAGCCGCGAGGAGGAGCCGCCGCCGCCGCGCCCGAGGCCCCGCCGCC
CGCGGCCTCTGTCGGCCCGCGCCCCGCTCGCCCCGTCGCCCCGTCGCCCCTCGCCTCCCCGCAGAGTCCCCTCGC
GGCAGCAGATGTGTGTGGGGTCAGCCCACGGCGGGGACTATGGTGAAATTCCCGGCGCTCACGCACTACTGGCCC
CTGATCCGGTTCTTGGTGCCCCTGGGCATCACCAACATAGCCATCGACTTCGGGGAGCAGGCCTTGAACCGGGGC
ATTGCTGCTGTCAAGGAGGATGCAGTCGAGATGCTGGCCAGCTACGGGCTGGCGTACTCCCTCATGAAGTTCTTC
ACGGGTCCCATGAGTGACTTCAAAAATGTGGGCCTGGTGTTTGTGAACAGCAAGAGAGACAGGACCAAAGCCGTC
CTGTGTATGGTGGTGGCAGGGGCCATCGCTGCCGTCTTTCACACACTGATAGCTTATAGTGATTTAGGATACTAC
ATTATCAATAAACTGCACCATGTGGACGAGTCGGTGGGGAGCAAGACGAGAAGGGCCTTCCTGTACCTCGCCGCC
TTTCCTTTCATGGACGCAATGGCATGGACCCATGCTGGCATTCTCTTAAAACACAAATACAGTTTCCTGGTGGGA
TGTGCCTCAATCTCAGATGTCATAGCTCAGGTTGTTTTTGTAGCCATTTTGCTTCACAGTCACCTGGAATGCCGG
GAGCCCCTGCTCATCCCGATCCTCTCCTTGTACATGGGCGCACTTGTGCGCTGCACCACCCTGTGCCTGGGCTAC
TACAAGAACATTCACGACATCATCCCTGACAGAAGTGGCCCGGAGCTGGGGGGAGATGCAACAATAAGAAAGATG
CTGAGCTTCTGGTGGCCTTTGGCTCTAATTCTGGCCACACAGAGAATCAGTCGGCCTATTGTCAACCTCTTTGTT
TCCCGGGACCTTGGTGGCAGTTCTGCAGCCACAGAGGCAGTGGCGATTTTGACAGCCACATACCCTGTGGGTCAC
ATGCCATACGGCTGGTTGACGGAAATCCGTGCTGTGTATCCTGCTTTCGACAAGAATAACCCCAGCAACAAACTG
GTGAGCACGAGCAACACAGTCACGGCAGCCCACATCAAGAAGTTCACCTTCGTCTGCATGGCTCTGTCACTCACG
CTCTGTTTCGTGATGTTTTGGACACCCAACGTGTCTGAGAAAATCTTGATAGACATCATCGGAGTGGACTTTGCC
TTTGCAGAACTCTGTGTTGTTCCTTTGCGGATCTTCTCCTTCTTCCCAGTTCCAGTCACAGTGAGGGCGCATCTC
ACCGGGTGGCTGATGACACTGAAGAAAACCTTCGTCCTTGCCCCCAGCTCTGTGCTGCGGATCATCGTCCTCATC
GCCAGCCTCGTGGTCCTACCCTACCTGGGGGTGCACGGTGCGACCCTGGGCGTGGGCTCCCTCCTGGCGGGCTTT
GTGGGAGAATCCACCATGGTCGCCATCGCTGCGTGCTATGTCTACCGGAAGCAGAAAAAGAAGATGGAGAATGAG
TCGGCCACGGAGGGGGAAGACTCTGCCATGACAGACATGCCTCCGACAGAGGAGGTGACAGACATCGTGGAAATG
AGAGAGGAGAATGAATAAGGCACGGGACGCCATGGGCACTGCAGGGACAGTCAGTCAGGATGACACTTCGGCATC
ATCTCTTCCCTCTCCCATCGTATTTTGTTCCCTTTTTTTTGTTTTGTTTTGGTAATGAAAGAGGCCTTGATTTAA
AGGTTTCGTGTCAATTCTCTAGCATACTGGGTATGCTCACACTGACGGGGGGACCTAGTGAATGGTCTTTACTGT
TGCTATGTAAAAACAAACGAAACAACTGACTTCATACCCCTGCCTCACGAAAACCCAAAAGACACAGCTGCCTCA
CGGTTGACGTTGTGTCCTCCTCCCCTGGACAATCTCCTCTTGGAACCAAAGGACTGCAGCTGTGCCATCGCGCCT
CGGTCACCCTGCACAGCAGGCCACAGACTCTCCTGTCCCCCTTCATCGCTCTTAAGAATCAACAGGTTAAAACTC
GGCTTCCTTTGATTTGCTTCCCAGTCACATGGCCGTACAAAGAGATGGAGCCCCGGTGGCCTCTTAAATTTCCCT
TCCGCCACGGAGTTCGAAACCATCTACTCCACACATGCAGGAGGCGGGTGGCACGCTGCAGCCCGGAGTCCCCGT
TCACACTGAGGAACGGAGACCTGTGACCACAGCAGGCTGACAGATGGACAGAATCTCCCGTAGAAAGGTTTGGTT
TGAAATGCCCCGGGGGCAGCAAACTGACATGGTTGAATGATAGCATTTCACTCTGCGTTCTCCTAGATCTGAGCA
AGCTGTCAGTTCTCACCCCCACCGTGTATATACATGAGCTAACTTTTTTAAATTGTCACAAAAGCGCATCTCCAG
ATTCCAGACCCTGCCGCATGACTTTTCCTGAAGGCTTGCTTTTCCCTCGCCTTTCCTGAAGGTCGCATTAGAGCG
AGTCACATGGAGCATCCTAACTTTGCATTTTAGTTTTTACAGTGAACTGAAGCTTTAAGTCTCATCCAGCATTCT
AATGCCAGGTTGCTGTAGGGTAACTTTTGAAGTAGATATATTACCTGGTTCTGCTATCCTTAGTCATAACTCTGC
GGTACAGGTAATTGAGAATGTACTACGGTACTTCCCTCCCACACCATACGATAAAGCAAGACATTTTATAACGAT
ACCAGAGTCACTATGTGGTCCTCCCTGAAATAACGCATTCGAAATCCATGCAGTGCAGTATATTTTTCTAAGTTT
TGGAAAGCAGGTTTTTTCCTTTAAAAAAATTATAGACACGGTTCACTAAATTGATTTAGTCAGAATTCCTAGACT
GAAAGAACCTAAACAAAAAAATATTTTAAAGATATAAATATATGCTGTATATGTTATGTAATTTATTTTAGGCTA
TAATACATTTCCTATTTTCGCATTTTCAATAAAATGTCTCTAATACAATACGGTGATTGCTTGTGTGCTCAACAT
ACCTGCAGTTGAAACGTATTGTATCAATGAACATTGTACCTTATTGGCAGCAGTTTTATAAAGTCCGTCATTTGC
ATTTGAATGTAAGGCTCAGTAAATGACAGAACTATTTTTCATTATGGGTAACTGGGGAATAAATGGGTCACTGGA
GTAGGAATAGAAGTGCAAGCTGGAAAGGCAAAAATGAGAAAGAAAAAGGCAGGCCCTTTGTGTCTACCGTTTTCA
GTGCTGTGTGATCATATTGTTCCTCACAGCAAAAAAGAATGCAAGGGCATAATGTTAGCTGTGAACATGCCAGGG
TTGCATTCACATTCCTGGGTACCCAGTGCTGATGGGGTGTGCCCACGTGGGGACATGTCCTTGGCGTGCTTCCTC
AGAGTGGCTTTTCCTCCATTAATACATATATGAGTACTGAAAAATTAAGTTGCATAGCTGCTTTGCAGTGGTTTC

FIGURE 4420B

AGAGGCAGATCTGAGAAGATTAAAAAAAAATCTCAAATGTATCAGCTTTTTTTAAAGGACATTACTAGAAAATTA
AACAGTATTTTTTAACATGTGTGACTTTCATGCTTCTGGGGTTGGAGCTTAAAGATCCAAACTGAGAAAGCAGGC
CGGGCATGGTGGCTCATGCCTGTAATCCCAACACTTTGGGAGGCCAAGGAGGGTGGATCACTTAAGGTCAGGAGT
TTGAGACCAGCCTGGCCAACATGGCGAAACCCTGTCTCTACTAAAAACATAAAAATTAGCTGGGGGTGGTAGCAC
ATACCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTTGCTTGATCCTGGGAGGCAGAGGTTGTAGTG
AGCCGAGATCGCGCCATCGCACTCCAGCCTGGGTGACAAGAGCAAAACTCCATCTC

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FIGURE 4421

CGCGTGCGCAGAGCGAACGCCTGCAGCCTCCCTGCCCCTCCCACAACGCTCGACCCCAGGATTCCCCCGGCTCGC
CTGCCCGCCATGGCCGACAAGGAAGCAGCCTTTGACAACACAGTGGAAGAATGAGTGATCAACAAGGAATACAAA
ATATGGAAAAAGAACACCCCTTTTCTTTATAATTTGGTGATGACCCATGCTCTGGAGTGGCCCAGCCTAACTGCC
CAGTGGCTTCCAGATGTAACCAGACCAGAAGGGAAAGATTTCAGCCTTCATCGACTTGTCCTGGGGACACACACA
TCGGATGAACAAAACCATCTTGTTATAGCCAGTGTGCAGCTGCCTGATGATGATGCTCAGTTTGATGCATCACAC
TACGACAGAGAGAAAGGAGAATTTGGAGGTTTTGGTTCAGTTAGTGGAAAAATTGAAATAGAAATCAAGATCAAC
CATGAAGGAAAAGTAAACAGGGCCCGTTATATGCCCCAGAACCCTTGTATCATCACAACAAAGACTCCTTCCAGT
GATATTCTTGTCTTTGACTATACAAAACATCCTTCTAAACCAGATCCTTCTGGAGAATGCAACCCAGACTTGCGT
CTCCGTGGACATCAGAAGGAAGGCTATGGGCTTTCTTGGAACCTAAATCTCAGTGGGCACTTACTTAGTGCTTCA
GATGACCACACCATCTGCCTGTGGGACATCAGTGCCGTTCCAAAGGAGGGAAAAGTGGTAGATGCGAAGACCATC
TTTACAGGGCATACGGCAATAGTAGAAGATGTTTCCTGGCATCTACTCTGTGAGTCTCTGTTTGGGTCAGTTGCT
GATGATCAGAAACTGATGATTTGGGATACTCGTTCAAACAATACTTCCAAACCAAGCCACTCAGTTGACACTCAC
ACTGCTGAAGTGAACTGCCTTTCTTTCAGTCCTTATAGTGAGTTCATTCTTGCCACAGGATCAGCTGACAAGACT
GTTGCCTTGTGGGATCTGAGAAATCTGAAACTTAAGTTGCATTCCTTTGAGTCACATAAGGATGAAATATTCCAG
GTTCAGTGGTCACCTCACAATGAGACTATTTTAGCTTCCAGTGGTACTGATCACAGACCGAATGTCTAGGATTTA
AGTAAAATTGGAGAGGAACAATCCCCAGAAGATGCAGAAGACAGGCCACCAGAGTTGTTGTTTATTCATGGTGGT
CACACTGCCAAGATACCTGATTTCTCCTGGAATCCCAGTGAACCTTGAGTGATGTGTTCTGTATCGGAAGACAAT
ATCATGCAAGTGTGGCAAATGGCAGAGAACATTTATAATGATGAAGACCCTGAAGGAAGCATGGATCCAGAAGGA
CAAGGGTCCTAAATATGTCTTTACTTCTTGTGATTTTAGACTCCCCTTTTTTCTTCTCAACCCCGAGAGTGATTT
AACACTGGTTCTGAGACAGATTTTATTCAGCTATCCCTCTATATAATAGGTACCACCGATAATGCTATTAGCCCA
AACAGTGGGTGTTTTCTAAATATTAATGGGGGGCTTGATTCAACAAAGCTACAGAGTTATGTTGAAATTTTCTTC
AGGAATTTTCTAGTAACCCAGGTCTAAAGTAGCTACAGAAAGGGGAATATTATGTGTGATTATTTTTCTTCTTAT
GCTATATCCCCAAGTTTTTTGGACTCATTTAAGTAAAGGCTAGAGTGAGTAAGGAGAATAGAGCCAAATGAGGTA
GGTGTCTGAGCCATGAAGTATAAATACTGAAAGATGTCACTTTTATTCAGGAAATAGGGGAGATTCAAGTCATAT
AGATTCCTACTCGAAAATCTCGACACCTGAGTTTCCAGGATGCACATTTTCATACGTAGACCAGTTTCCTCTTGG
TTTCTTCAGTTAAGTCAAAACAGCACGTTCCTCTTTCCCCATATATTCATATATTTTTGCTCGTTAGTGTATTTC
TTGAGCTGTTTTCATGTTGTTTATTTCCTGTCTGTGAAATGGTGTTTTTTTTTTTTTGTTGGTGTGTGTTTTTT
TTTTTTAACTTGGGACCGCCAAGTTGTAAAGATGTATGTTTTTACCTGACAGGTATACCACAGGTAGATTGTCAA
GTTGAGAAGAGTGAATCGATAAATTGTATTTGTTTTAAAAATTAAATTAATCCTTGATAAGAGTTGCTTTTTTTT
TAGGAGTTTGTCCTTGACCACTAGTTTGATGCCATCTCCATTTTGGGTGACCTGTTTCACCAGCAGGCCTATTAC
TCTCCATGACTAACTGTGTAAGTGCTTAAAATGGAATAAATTGCTTTTCTACATT

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FIGURE 4422

AGGAATGCAGCGGCTGCCACGGAGCTCGTAGCTGCAGCTTTGGAGGAGTAAGCGGCGTGGTAGCGAAGGTCGCCG
AACCCGCCTGGCTAGCCGGCGAGTTGAGTGGCGACTCTTTTGAAACAGATGGTCACCATGTTTAGATATTAGCAG
TCCCGTATGTGCATGTCTGCATTTGAAAATGGAAGAGGGAAACAACAATGAAGAGGTAATTCACTTGAACAACTT
TCACTGCCATCGGGGACAAGACTTTGTAATTTTCTTCTGGAAAACCCAGATTATCCAAAGAGAGAAGACAGAATC
ATTATAAATCCCAGTAGCAGTCTGCTGGCCAGCCAAGATGAGACAAAGTTGCCTAAAATAAGACTTTTTTGACTA
TTCTAAATTGACTCCTCTTGACCAGCACTGCTTCATCCAAGCTGCTGACCTCCTCATGGCCGACTTCAAAGTGCT
CAGTAGTCAGGACATCATGTGGGCCCTGCACGAGCTCAAAGGACACT**ATG**CAATCACCCGAAAGGGGTTGGCATC
TGCACATCCTTCCTGGGCATCTCGTGGGCACTGCTCGATTACCACCAGGCCTTGCACACCTGCCTCCCCTCCAAG
CCCCTCCTGGGCCTGGGCTCCTCTGTGATCTACGTCCTGTGGAACCTGCTGCTACTGTGGCCCCGAGTCCTAGCT
GTGGCCCTGTTCTCAGCCCTCTTCCCCAGTATGTAGCCCTGCATTTCCTGGGCCTGTGGCTGGTACTGCTGCTCT
GGGTTTGGCTTCAAGGCACAGACTTCATGCTGGACCCCAGTTCCGAGTATCCTCTATTTCTCCTGGTTCAACGTG
GC**TGA**GGG

FIGURE 4423

GTGCGTCGCGGGGGCGGGGCCGCGCAGGCGTACCGGGTGCCCCGGCTCTGGAGCATAAACAAGAGCGGGGACGGG
ATGAGGCGGCGGTTGATCCCAGGGTGGCGAGTGGCGGCGACCGAGGCGGCGAGCGGGGCCCGGCGCCGACCCTGA
GTGCAGCCTGACCCGCCCTCGCGCGCGCGCCCTCCCCGGCCGGGCCCACTCGCCGCGCGCCCAGCC**ATG**AACCTG
GCGAGCCAGAGCGGGGAGGCCGGCGCCGGCCAGCTGCTCTTCGCCAACTTCAACCAGGACAACACAGAAGTGAAA
GGGGCATCAAGAGCAGCTGGTCTTGGCCGTCGCGCTGTTGTCTGGTCCCTAGCTGTTGGTAGTAAGTCCGGTTAT
AAATTTTTCTCCCTTTCTTCTGTGGATAAGCTGGAACAGATCTATGAATGCACCGATACGGAAGATGTGTGCATT
GTAGAGAGATTGTTCTCCAGCAGCCTAGTGGCCATCGTCAGCCTTAAAGCACCAAGGAAGCTAAAGGTTTGCCAC
TTTAAGAAGGGAACTGAGATCTGCAACTACAGCTACTCCAACACGATTCTGGCTGTGAAGCTCAACAGGCAGAGG
CTGATAGTATGCCTGGAGGAGTCCCTGTACATCCACAACATTCGGGACATGAAGGTGCTGCATACGATCAGGGAG
ACGCCTCCAAACCCTGCAGGCCTGTGTGCGCTGTCAATCAACAACGACAACTGCTACTTGGCGTACCCAGGGAGC
GCGACCATCGGAGAGGTGCAGGTCTTCGATACCATTAATTTGAGAGCTGCAAACATGATTCCGGCTCACGACAGT
CCTTTAGCGGCACTGGCCTTTGACGCAAGTGGAACTAAACTTGCCACGGCTTCGGAGAAGGGGACCGTGATTAGG
GTATTTTCCATTCCAGAAGGACAAAAACTCTTTGAGTTTCGGAGAGGAGTAAAGAGGTGCGTGAGCATCTGCTCC
CTGGCCTTCAGCATGGACGGCATGTTCCTCTCCGCCTCCAGCAACACTGAGACCGTGCACATCTTCAAACTCGAG
ACTGTGAAAGAAAAACCCCCAGAGGAGCCCACCACCTGGACCGGGTACTTCGGGAAAGTGCTCATGGCCTCCACC
AGCTACCTGCCTTCCCAAGTGACAGAAATGTTCAACCAGGGCAGAGCCTTCGCCACGGTCCGCCTGCCATTCTGC
GGCCACAAAAACATCTGCTCGCTAGCCACAATTCAGAAGATCCCGCGGTTGTTGGTGGGTGCCGCCGACGGGTAC
CTGTACATGTACAACCTGGACCCCCAGGAGGGCGGCGAGTGTGCCCTGATGAAGCAGCACCGGCTGGACGGCAGT
CTGGAAACGACCAATGAGATCTTGGACTCTGCCTCTCACGACTGCCCCTTAGTCACTCAGACATACGGCGCAGCT
GCAGGAAAAGGTACTTACGTGCCTTCATCCCCAACGAGACTTGCCTACACAGACGACCTGGGTGCTGTGGGTGGC
GCCTGCCTGGAGGACGAGGCCAGCGCCCTGCGCCTGGATGAGGACAGCGAGCACCCGCCCATGATTCTTCGGACT
GAC**TGA**ACTTGACCTGTGACCTCTGACCCGGGGAGCAGAGAACACTGGCTTCACAGAGGACTTTGTGCATTGCTG
CTATGAACTTTGACCTGAGTCGGGGGAGAGGATGGCAGAGACTTTATTAAAAAAAAAAAAAAGATTGTAGTGGTAG
TCTAACTCCATAACGCTGAGGAAATACATCATTTTCACTTCAGTGGCTTTTAAATCCTGCTTATGAATTTTAGCT
TTTTGTTTGTTTGTTTTCTCTTTTTGCCAAAATTAACTGTTTGGTGAAGCCCGCAAAACCTCCTCGCTTTGCATG
CATGAACGTGCCAAGCCAGCATAGGGGAGCTAGAAGCCACTTTCCAGCCACCTGCCGTTGGGTTTTTTCATATCT
GTACATAATGCCGAGTGCGTAAGGAAACCGTGGCGTCGCGCACAGTGGGTCTGCTTGTCAAGGCCAGTTCTGCAG
TGACAGGCCCAGGGGCTGCCCACCAGGTGTGCTGGGCAGACTTCAGCTGGGACAGAAGTCCGATCTCCCTAGGGC
CCCACCTGGACCATTTTCCCTCCGTTTTATTTTGTTAATTAAATTCTTTCCAAATTGGATCGCTCTGGGATTTCT
TCCATGGTGGACTTTTGTTTCTGATCTTGTTTTCCCTGTGGATATTGGAGGACAGCGAGGTTCTTTCTGATACTA
AAAACCTTTCTTTCAGGCAGCAAATGAACTTGAAAGGTTGCCTGGACTCGCTGGAGCAAAGGAAAGCGATTTTGT
TTGTATAATTAAATGATCTGTTCTTCTACTTCACTCTT

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FIGURE 4424A

CGCCTGGCACTCTCACCCGAAGACAAGCCCATCCGCTTGTCCCCCTCCAAGATCACAGAGCCGCTGCGGGAGGGC
CCGGAGGAAGAACCGCTGGCTGAGCGGGAGGTGAAGGCAGAGGTGGAGGACATGGACGAGGGCCCCACAGAGCTG
CCGCCTCTGGAGTCGCCGCTGCCACTGCCCGCCGCGGAAGCCATGGCTACCCCCAGCCCTGCAGGGGGTTGTGGA
GGTGGCCTGTTGGAGGCCCAGGCGCTGAGTGCCACCGGGCAGAGCTGCGCAGAGCCCTCTGAGTGTCCAGACTTT
GTGGAGGGGCCTGAACCACGGGTGGATTCCCCGGGCCGGACAGAACCCTGCACCGCCGCCCTGGACCTGGGGGTG
CAGCTGACACCCGAGACACTGGTGGAGGCCAAGGAGGAGCCGGTGGAGGTGCCTGTGGCGGTGCCCGTGGTGGAG
GCAGTGCCCGAGGAAGGCCTGGCGCAGGTGGCACCGAGCGAGTCCCAGCCCACCCTAGAAATGTCAGACTGTGAC
GTGCCCGCCGGGGAGGGACAGTGCCCGAGCCTGGAGCCCCAAGAGGCCGTGCCTGTACTCGGCAGCACCTGCTTC
CTGGAAGAGGCAAGCTCTGACCAGTTCCTGCCCAGTCTGGAGGACCCACTGGCTGGCATGAACGCCCTGGCGGCA
GCTGCGGAGCTGCCCCAGGCCAGGCCTCTGCCCTCCCCGGGTGCTGCTGGAGCCCAGGCCTTGGAGAAGCTGGAA
GCAGCCGAGAGCCTTGTCTTGGAGCAGAGCTTCCTGCATGGCATCACCCTGCTAAGTGAGATCGCAGAGCTGGAG
CTGGAGAGGAGGAGCCAAGAGATGGGAGGTGCGGAGCGGGCCCTGGTGGCGCGGCCCTCCCTGGAGAGTCTGCTG
GCAGCTGGCAGCCACATGCTGAGGGAGGTGCTGGATGGGCCCGTGGTGGACCCACTCAAGAACCTGCGGCTCCCG
CGGGAGCTGAAGCCCAACAAGAAGTACAGCTGGATGCGCAAGAAGGAGGAGCGGATGTATGCCATGAAGTCCTCC
CTGGAGGACATGGACGCCCTGGAGCTGGACTTCCGGATGCGGCTGGCCGAGGTGCAGCGCCAGTACAAGGAGAAG
CAGCGTGAGCTGGTGAAGCTGCAGCGCCGCCGGGACTCCGAGGACAGGCGCGAGGAACCCCATAGAAGCTTGGCA
CGCAGAGGCCCTGGCAGGCCGCGGAAACGGACCCACGCCCCGAGCGCCCTGTCGCCCCCCCGCAAGAGAGGGAAG
AGCGGCCACAGTAGCGGAAAGCTGAGCAGCAAGTCTCTGCTGACATCAGATGATTATGAGCTGGGAGCAGGGATA
AGAAAGAGACACAAGGGGTCTGAGGAGGAACATGATGCCCTCATCGGAATGGGGAAAGCCAGGGGGAGGAACCAG
ACTTGGGATGAACATGAGGCCTCGTCGGACTTCATCAGTCAGCTAAAGATTAAGAAGAAGAAGATGGCCAGCGAC
CAGGAGCAGTTGGCAAGCAAGCTCGACAAGGCCCTCTCCCTCACCAAGCAGGACAAGTTGAAGTCGCCCTTCAAG
TTTTCGGACAGTGCTGGGGGGAAATCGAAAACTAGCGGGGGCTGCGGCAGGTACTTGACTCCTTACGACAGCCTG
CTGGGGAAGAACAGGAAGGCGCTGGCCAAGGGCCTCGGCCTGTCTCTGAAATCCTCCAGAGAAGGTAAACACAAA
AGGGCAGCCAAAACCAGGAAGATGGAGGTGGGGTTCAAGGCCAGAGGCCAGCCCAAGTCGGCCCATTCCCCGTTT
GCCTCGGAAGTGAGCAGCTACTCTTACAATACGGACTCAGAGGAAGACGAAGAATTCCTGAAGGACGAGTGGCCC
GCCCAAGGCCCCTCCAGCTCCAAACTGACGCCTTCCCTCCTGTGTAGCATGGTGGCAAAGAACAGCAAGGCAGCT
GGTGGCCCCAAGCTGACCAAGAGGGGCCTGGCGGCCCCCCGGACTCTGAAACCCAAGCCGGCCACCAGCAGGAAG
CAGCCGTTTTGTCTGCTGCTTCGAGAGGCCGAGGCGCGTTCCTCCTTCAGCGACTCTTCGGAGGAATCGTTTGAC
CAAGATGAGAGCTCGGAGGAGGAGGACGAGGAGGAGGAGCTCGAGGAGGAGGACGAGGCCAGCGGTGGTGGCTAC
AGGCTGGGTGCCCGGGAGCGGGCCCTGTCACCGGGCCTGGAGGAGAGTGGGCTGGGCCTGCTGGCACGCTTCGCC
GCCAGCGCCCTCCCCAGCCCCACGGTGGGTCCATCCCTGTCTGTGGTACAGCTGGAGGCCAAGCAGAAGGCCGGG
AAGAAAGAGGAGCGGCAGAGCCTGCTGGGCACAGAGTTCGAGTACACCGACTCAGAGAGCGAGGTCAAGGTGCGC
AAGCGGTCGCCTGCGGGGCTGCTGCGGCCCAAGAAGGGGCTGGGGGAGCCGGGACCCTCCCTGGCCGCACCCACG
CCTGGCGCCCGCGGTCCCGACCCCAGCAGCCCAGACAAGGCCAAGCTGGCGGTGGAGAAGGGGCGCAAGGCCCGG
AAGCTGCGGGGCCCCAAGGAGCCTGGCTTCGAGGCGGGGCCCGAGGCCAGCGACGACGACCTGTGGACGCGGCGC
CGCAGCGAGCGCATCTTCCTGCACGACGCCTCGGCTGCTGCACCTGCGCCCGTCAGCACCGCGCCCGCCACCAAG
ACCAGCCGCTGCGCCAAGGGCGGCCCCCTGAGCCCGCGCAAGGACGCCGGGCGTGCAAAGGACAGGAAGGACCCC
AGGAAGAAGAAGAAAGGGAAAGAGGCTGGGCCAGGAGCTGGGCTGCCGCCGCCCCGAGCTCCTGCCTTGCCCTCT
GAGGCCAGGGCTCCTCCTCCTCCTCCTCCTCCTCCTCCTCATCCTCCTCTTCCTCCTCCTCCTCTTCCTCCTCCT
CCTCTTCCTCTTCGTCTTCCTCCTCTTCCTCCTCCTCCTCTTCCTCGTCCTCATCCTCCTCCTCCTCCTCCTCTT
CCTCCTCTTCTTCCTCCACCACAGACGAGGACTCTTCCTGCAGCTCGGACGATGAGGCAGCCCCCGCCCCCACGG
CTGGCCCTTCCGCGCAGGCGGCGCTCCCCACCAAGGCCACCAAGCAGGCCGGCAAGGCGCGGCCCTCGGCCCACT
CCCCAGGCAAGAAGACGCCCGCGCCCCAGCCCCAGGCGCCTCCTCCGCAGCCCACACAGCCTCTGCAGCCCAAGG
CTCAGGCCGGGGCCAAGAGCCGACCCAAGAAGAGAGAGGGCGTCCACCTCCCCACCACCAAGGAGCTGGCCAAGC
GGCAGCGCCTGCCGTCCGTGGAGAACCGGCCCAAGATCGCCGCCTTCCTGCCAGCCCGGCAGCTCTGGAAGTGGT
TCGGCAAGCCCACCCAGCGGCGTGGCATGAAGGGCAAGGCCCGCAAGCTCTTCTACAAGGCCATCGTGCGCGGCA
AGGAGATGATCCGTATCGGGGACTGTGCCGTGTTCCTCTCTGCCGGCCGCCCCAACCTGCCCTACATCGGCCGCA
TCCAGAGCATGTGGGAGTCGTGGGGCAACAACATGGTGGTCCGCGTCAAGTGGTTCTACCACCCCGAGGAGACCA

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FIGURE 4424B

GCCCGGGCAAGCAGTTCCACCAGGGCCAGCACTGGGACCAGAAGTCCAGCCGCAGCCTCCCGGCGGCCCTGCGGG
TCTCCAGCCAGAGGAAGGACTTCATGGAGCGCGCGCTATACCAGTCCTCGCATGTGGACGAAAATGACGTGCAGA
CGGTGTCGCACAAGTGCCTGGTGGTGGGCCTGGAGCAGTATGAGCAGATGCTGAAGACCAAGAAGTACCAGGACA
GCGAGGGCCTGTACTACCTCGCGGGCACCTACGAGCCCACCACGGGCATGATCTTCTCCACGGACGGCGTGCCCG
TGCTCTGCTGAGCCCGCCGGGCCCTGCGGGCCACCTGTGCCCCGAGGGCGGCCAGGGACCCATCTCCATCACTGC
CATGGCGCGGAGACCACGTGCGTTGTGTGCATGCGAGCGCTCCTGCAGGCGTGTGCATGGGGCCAGGTGTGCACG
TGGATGCCCGGGTGAGTGTGTGTGCATGCACGTGTGTGCACGCATGTGCACATGCCTCCAGCCCCACCTTCCAAC
CCCTCAGTGCCCCCAGGACAGGGGCCCCTCTTAGCTATCAGGGTATGGCCGGACCGGCCCTTCCTGCCCAGCACG
TTGCAAGCACTTGGCCAGGCCGGCCCTCCAGGCTGCTGCTGCGTGGGGGCCCGGGTGCCCCCAGGTCCATGCAGA
CTGGGGATTCGGTGGGGAGGGGCGCTTCTAAGGAACCAAACTGACGCTCACTCTGGGCTTCCCAAGCACCCTTAG
CATGGAGCCCACCCCAAGGCCTCCCACCGTGCATGGGACAGGGCAGCCCGATGCCAGCTGGCCTACCTGACTGTG
CCAGGGGCCCTGCCCCCACCCTCTCAGGATGGCCTAGACTTGGGGAACAGAGCCGGGTGGGGTTGCAGCCCGGAG
TGTCTGTCAAAGGCACCAGGTGGAGAGGGCCCGGCACAGGCCCACCCTGGTCCAAACCCTCACACTACAGAAAAC
CCCAATGGTGCTGAAACTGTCGCCCGGCCACGCCTGGCCCCTCCCCACCCAGGAGGGAGGTGGCACTTCTTAACC
TGTACAGTTTTATTGTACCAAGAGACTCGCCCCGCCCCTGTATCATAAGCCTTTAAATGGAGTCAACTTTTTAAT
TATATATATAAAGATAAATATATATAAATATATATATAAACTTTTTAAAACTGTGAAAAATAGCTATGAAATTAT
AAAAAAAAACATTCTGACGTGCAGAATATTATTTTTTATTTCCTGTTAGATTATAGTGTCTAGCACCGGCTTCAC
CGGCCTCCCAGTCCCCAGCACACCCCCCGCCCACCCCACCAAGTGTACTGTACTCACCCCCCAGGATAGAGAAGT
GTTTGTTAGGGAGAGAAGAGGGAGAGGCAGGAGCCGGCCCAAGCCCAGGGTCCCTGCTTGGGCCCCAGAAAGCAC
TTAACCAGGCCCCAAGCCTTCAAGGGAAACCAAGGCCTCAACCAGACAATCTTGAGGGAAGGAAAAGCCAGACTT
TGGGTTTGTTTTTTGGGGGAATTATTGGTTTTTTTTTTTATGTTTCTTTTGGAATTTTGTTTGTTGGCAAATTCT
GTGTGATCTTTTTTCATAAAAAAAAAGAAAAGATTTAATTGGAAAAAT

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FIGURE 4425

GTGCAGAACCTTTGCCTCCTGGCCAGAGGGACCCTTCTGCAGGCTGATTCCAGCAGTGCCCGATGGTGGGACCCA
CACCAGACCAAGCCTTCGCCTCCCAGAGGCCTCCTGGCCCTCCTGTCATGGCCTGTGAGAGCCACACCCCTAGGC
CCCGTCTCCTAGTCTGCAGGCCGCAGGACCAGCTGCCCACGGCCCCAGGGGGCAGGGGCTGTAGATGAGGGTCTC
AGAGGTGGTGGGAGCACCCCCCCCACCCACAGTTCCTGGGCATTTCTTTAGAGCTTTAAAATGGCACCTGGAGAC
CACCAGGCGCGGCGATCAGATCGGGTGGTGTGGTGCCTCCTGGGACTGACCACTTCTTGCTCTCCGACCAGGCAG
GGGCGAGTGGCCTGGGAGGTTCCCGGACCCTCAGGGGGCCTGTGTCTCTGGGCACCGCAGCTCCGCCCCACTCCT
TCCTCCAGAACATTCCCCACTCGGGCTAGAGAATTGCGTCTGCTCCAGGAATGCATCCTAGCGTGTGTACGATCG
CGCCTGGGTGTCCTGTTCTCATGAGCAAGCGGTTTTAACCAGCAGCATAATTTATACTCATAGACAGGACTGGGG
GAAGGGCTGTTCCTGAGGCTGGGGTGCAGTGCCTTGGAAAGCACCCCTGAAACAGTGGACCTTGTATTTTTAGTG
TCCCCTGCAACCATCCTCTGACTTAGAGCAAGAATTTCCGCTGCTGCTACCCCCGAGATGGGCTTCACCAGATGT
TAATAACGTGCTTATTTTCTCTAAGTGCTATTTTGGCACCAGCGTTAGTTGCAATTTATATTCTGCAGCATTTGA
TGCTGGGAAAAGAACCCACCCTAATGGTCCCCAATTGGCAGAGCTCGGCTGTTAAGCAGCAGACCATATGCTGCC
TGCTGGAGGAGCGTGGTCAGCACTTGTCCCCGTGCCTGCGTGCGTGTGCCTGCGTGCACGTGTGCCTGCGGGTAC
CTGTGCCCTGTGTGTGCACATGTGCCTGCATGCGTGTGCCTGCGTGCACGTGTGCCTGTGTGTACATGTGCCTGC
GTGTACCTGTGCCCTGTGTGTGCACGTGTGCCTTCGTGTACCTGTGCCCTGTGTGTGCATGTGTGTGTGAGTCAC
GTCTTCCGTGTGTGTATGTGAGGGAGAGACTGTGGGGTTGGAGGGAGGGAGGAGGGGAAAGGGTATGTATCCCTT
TGTTCTTTAAAAGGGAGAGCCCCAACCTCTCTGGCTGCCCCCTCCTGCCTGTGCTCCCAGCTCACCCCACACCTA
GCTGCTATTTATTCTCCTGACCCCCTTCCCGGCCCTGCAGCCCCGTGTCCCGCAGCCTCCGCCCCGCCTCCTGCT
CCACGTCACCAGGCAACACTCGGCTCCACCAGGCTTCCGAAGGTGGCCCAGAGCAGGCACTTGAGCCTGATGACC
CAGAGCAAAGCTGCCTTTCTGGGCCTTGAGTACTCCTTTCTGCTATGGAAGGCTTTTCTTGTTTTCAACGGCCCG
TCCAGCCCAGGGGGGCTGGGTGAGGGCCGCTTCCTTCTGCAGCAGAGGGGGCGGGCTCTATCCTTGCCATCTGCT
GCCCCCAGAGGCCCTGCCAGGACATGGGCCTGAGCGGTTTCTTCTCCAAGAGGCCCTCCTGGGACCTGTCTGTGC
ACAGGGCGGGAAGACACTTGCTGCTTCGACCCAGGACGGCAGCCAGGACGGGCTGAGCTCCTCTTGCGCTGCAAA
CACACAAGGGTTGCCTGCCAGCTCAGCAGCGCCCTCCCTCAACCACACCCTGGGTCCGGACCCAGAGCCACAGGC
CGTTGGACCCAGGGGACCGGGGCTGGGCTCAGGCGTGGGCCTGGAGGGCTTGTGGAGGGGCCAGACCTAGAGCCG
TAGGGCTCCAACAGCTGAGGGCTGGGCCCCTGCCGGCCAATGAAGCTCCAGACCAGTGCTCCGGCCTTGGCGGTG
CCAGCAGTGCTCCTGCAGGGATGGAGGGTGCTGGAGGCCTGGATGCGGGGACCTTGATCCCCCAGCAGGCAGCGC
TGTGGTCCCAGCCACTCAGGAGGCTGAGGCAGGAGAATGGCATGAACCTGGGAGGCGGAGCTTGCAGTGAGCTGA
GATCGCACCACTGCATTCCAGCCTGGGCGACAGAGTGAGACTCCGTCTCAAAAAAAAAAAAAAACAAAAGAAGTTT
CTAGATCTACTGGGCATGATGAACACAAACCCCACAGACACTGAGGAACCCAGTGGTGGCAGTGACTCGGGCTCC
TCTGCTCTCTAAAGCTCCTTTGAGAAAC**ATG**GGAGGGGCCGGGCGTGGTGGTTCACGCCTGTCATCCCAGCACTT
TGGGAGGCTGGGGCAGGAGGATCGCTTGAGCCCAGGAGTTCGAGACCAGCCTGGGCAACATAGTGAGACTGTATC
GCTACATAAAATAAAAAAAAAAAGTTAGCTGGGCATTGTACATGTGCCTGTGGTCCCAGCTACTCAGGAGGCTGAG
GCAGGAGGATTGCTTGAGCCCAGGAGTTGGATGTTGCAGTGAGCCAAGATCGCACCATTGCCCTCCACTCTGGGC
CACGGAGCAATACCCTGTCTCAGAAAACAAACAACAAAAAGCAGAAACGCTGAAGGGGTCGGTTTACGGGAAAAC
CGCCTGTCAGAACACTTGGCTACTCCTACCCCAGATCAGTGGACCTGGGAATGAGGGTTGGTCCCGGGAGGCTTT
TCTCCAAGCTGTTGCCACCAGACCCGCCATGGGAACCCTGGCCACAGAAGCCTCCCGGGGAGTGAGCCAGAGCCT
GGACCGCTGTGCTGATGTGTCTGGGGTGGAGGGAGGGTGGGGAGTGTGCAAGGGTGTGTGTGTGCCCGGGGGGTG
TTCATGGGCAAGCATGTGCGTGCCTGTGTGTGTGCGTGCCCCTCCCCTGCAGCCGTCGGTGGTATCTCCCTCCAG
CCCCTTCGCCACCTTC**TGA**GCATTGTCTGTCCACGTGAGACTGCCCAGAGACAGCAGAGCTCCACGTGGTTTTAA
GGGGAGACCTTTCCCTGGACCTGGGGGTCTCGCCGTATCTCATGACCAGGTGCTAAATGACACGACATGCATCAC
CTGCCTTTCGATGACCAACCTCCCTGTCCCCGTCCCGCTGACCTGCCCCCGTGGCGTCTCACGGTGATGCCTGCT
CCTGACATTGGTGTTCACTGTAGCAAACTACATTCTGGATGGGAATTTTCATGTACATGTGTGGCATGTGGAAAA
TTTCAAATAAAATGGACTTGATTTAG

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FIGURE 4426

CGCGTCCGCCCCGCGAGCACAGAGCCTCGCCTTTGCCGATCCGCCGCCCGTCCACACCCGCCGCCAGCTCACCATG
GGATGATGATATCGCCGCGCTCGTCGTCGACAACGGCTCCGGCATGTGCAAGGCCGGCTTCGCGGGCGACGATGC
CCCCCGGGCCGTCTTCCCCTCCATCGTGGGGCGCCCCAGGCACCAGGGCGTGATGGTGGGCATGGGTCAGAAGGA
TTCCTATGTGGGCGACGAGGCCCAGAGCAAGAGAGGCATCCTCACCCTGAAGTACCCCATCGAGCACGGCATCGT
CACCAACTGGGACGACATGGAGAAAATCTGGCACCACACCTTCTACAATGAGCTGCGTGTGGCTCCCGAGGAGCA
CCCCGTGCTGCTGACCGAGGCCCCCCTGAACCCCAAGGCCAACCGCGAGAAGATGACCCAGATCATGTTTGAGAC
CTTCAACACCCCAGCCATGTACGTTGCTATCCAGGCTGTGCTATCCCTGTACGCCTCTGGCCGTACCACTGGCAT
CGTGATGGACTCCGGTGACGGGGTCACCCACACTGTGCCCATCTACGAGGGGTATGCCCTCCCCCATGCCATCCT
GCGTCTGGACCTGGCTGGCCGGGACCTGACTGACTACCTCATGAAGATCCTCACCGAGCGCGGCTACAGCTTCAC
CACCACGGCCGAGCGGGAAATCGTGCGTGACATTAAGGAGAAGCTGTGCTACGTCGCCCTGGACTTCGAGCAAGA
GATGGCCACGGCTGCTTCCAGCTCCTCCCTGGAGAAGAGCTACGAGCTGCCTGACGGCCAGGTCATCACCATTGG
CAATGAGCGGTTCCGCTGCCCTGAGGCACTCTTCCAGCCTTCCTTCCTGGGCATGGAGTCCTGTGGCATCCACGA
AACTACCTTCAACTCCATCATGAAGTGTGACGTGGACATCCGCAAAGACCTGTACGCCAACACAGTGCTGTCTGG
CGGCACCACCATGTACCCTGGCATTGCCGACAGGATGCAGAAGGAGATCACTGCCCTGGCACCCAGCACAATGAA
GATCAAGATCATTGCTCCTCCTGAGCGCAAGTACTCCGTGTGGATCGGCGGCTCCATCCTGGCCTCGCTGTCCAC
CTTCCAGCAGATGTGGATCAGCAAGCAGGAGTATGACGAGTCCGGCCCCTCCATCGTCCACCGCAAATGCTTCTAG
GGCGGACTATGACTTAGTTGCGTTACACCCTTTCTTGACAAAACCTAACTTGCGCAGAAAACAAGATGAGATTGG
CATGGCTTTATTTGTTTTTTTTGTTTTGTTTTGGTTTTTTTTTTTTTTTGGCTTGACTCAGGATTTAAAAACTG
GAACGGTGAAGGTGACAGCAGTCGGTTGGAGCGAGCATCCCCCAAAGTTCACAATGTGGCCGAGGACTTTGATTG
CACATTGTTGTTTTTTTAATAGTCATTCCAAATATGAGATGCGTTGTTACAGGAAGTCCCTTGCCATCCTAAAAG
CCACCCCACTTCTCTCTAAGGAGAATGGCCCAGTCCTCTCCCAAGTCCACACAGGGGAGGTGATAGCATTGCTTT
CGTGTAAATTATGTAATGCAAAATTTTTTTAATCTTCGCCTTAATACTTTTTTATTTTGTTTTATTTTGAATGAT
GAGCCTTCGTGCCCCCCCTTCCCCCTTTTTTGTCCCCCAACTTGAGATGTATGAAGGCTTTTGGTCTCCCTGGGA
GTGGGTGGAGGCAGCCAGGGCTTACCTGTACACTGACTTGAGACCAGTTGAATAAAAGTGCACACCTTA

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FIGURE 4427

GCGGAGGGTGCGTGCGGGCCGCGGCAGCCGAACAAAGGAGCAGGGGCGCCGCCGCAGGGACCCGCCACCCACCTC
CCGGGGCCGCGCAGCGGCCTCTCGTCTACTGCCACCATGACCGCCAACGGCACAGCCGAGGCGGTGCAGATCCAG
TTCGGCCTCATCAACTGCGGCAACAAGTACCTGACGGCCGAGGCGTTCGGGTTCAAGGTGAACGCGTCCGCCAGC
AGCCTGAAGAAGAAGCAGATCTGGACGCTGGAGCAGCCCCCTGACGAGGCGGGCAGCGCGGCCGTGTGCCTGCGC
AGCCACCTGGGCCGCTACCTGGCGGCGGACAAGGACGGCAACGTGACCTGCGAGCGCGAGGTGCCCGGTCCCGAC
TGCCGTTTCCTCATCGTGGCGCACGACGACGGTCGCTGGTCGCTGCAGTCCGAGGCGCACCGGCGCTACTTCGGC
GGCACCGAGGACCGCCTGTCCTGCTTCGCGCAGACGGTGTCCCCCGCCGAGAAGTGGAGCGTGCACATCGCCATG
CACCCTCAGGTCAACATCTACAGCGTCACCCGTAAGCGCTACGCGCACCTGAGCGCGCGGCCGGCCGACGAGATC
GCCGTGGACCGCGACGTGCCCTGGGGCGTCGACTCGCTCATCACCCTCGCCTTCCAGGACCAGCGCTACAGCGTG
CAGACCGCCGACCACCGCTTCCTGCGCCACGACGGGCGCCTGGTGGCGCGCCCCGAGCCGGCCACTGGCTACACG
CTGGAGTTCCGCTCCGGCAAGGTGGCCTTCCGCGACTGCGAGGGCCGTTACCTGGCGCCGTCGGGGCCCAGCGGC
ACGCTCAAGGCGGGCAAGGCCACCAAGGTGGGCAAGGACGAGCTCTTTGCTCTGGAGCAGAGCTGCGCCCAGGTC
GTGCTGCAGGCGGCCAACGAGAGGAACGTGTCCACGCGCCAGGGTATGGACCTGTCTGCCAATCAGGACGAGGAG
ACCGACCAGGAGACCTTCCAGCTGGAGATCGACCGCGACACCAAAAAGTGTGCCTTCCGTACCCACACGGGCAAG
TACTGGACGCTGACGGCCACCGGGGGCGTGCAGTCCACCGCCTCCAGCAAGAATGCCAGCTGCTACTTTGACATC
GAGTGGCGTGACCGGCGCATCACACTGAGGGCGTCCAATGGCAAGTTTGTGACCTCCAAGAAGAATGGGCAGCTG
GCCGCCTCGGTGGAGACAGCAGGGGACTCAGAGCTCTTCCTCATGAAGCTCATCAACCGCCCCATCATCGTGTTC
CGCGGGGAGCATGGCTTCATCGGCTGCCGCAAGGTCACGGGCACCCTGGACGCCAACCGCTCCAGCTATGACGTC
TTCCAGCTGGAGTTCAACGATGGCGCCTACAACATCAAAGACTCCACAGGCAAATACTGGACGGTGGGCAGTGAC
TCCGCGGTCACCAGCAGCGGCGACACTCCTGTGGACTTCTTCTTCGAGTTCTGCGACTATAACAAGGTGGCCATC
AAGGTGGGCGGGCGCTACCTGAAGGGCGACCACGCAGGCGTCCTGAAGGCCTCGGCGGAAACCGTGGACCCCGCC
TCGCTCTGGGAGTACTAGGGCCGGCCCGTCCTTCCCCGCCCCTGCCCACATGGCGGCTCCTGCCAACCCTCCCTG
CTAACCCCTTCTCCGCCAGGTGGGCTCCAGGGCGGGAGGCAAGCCCCCTTGCCTTTCAAACTGGAAACCCCAGAG
AAAACGGTGCCCCCACCTGTCGCCCCTATGGACTCCCCACTCTCCCCTCCGCCCGGGTTCCCTACTCCCCTCGGG
TCAGCGGCTGCGGCCTGGCCCTGGGAGGGATTTCAGATGCCCCTGCCCTCTTGTCTGCCACGGGGCGAGTCTGGC
ACCTCTTTCTTCTGACCTCAGACGGCTCTGAGCCTTATTTCTCTGGAAGCGGCTAAGGGACGGTTGGGGGCTGGG
AGCCCTGGGCGTGTAGTGTAACTGGAATCTTTTGCCTCTCCCAGCCACCTCCTCCCAGCCCCCCAGGAGAGCTGG
GCACATGTCCCAAGCCTGTCAGTGGCCCTCCCTGGTGCACTGTCCCCGAAACCCCTGCTTGGGAAGGGAAGCTGT
CGGGTGGGCTAGGACTGACCCTTGTGGTGTTTTTTTGGGTGGTGGCTGGAAACAGCCCCTCTCCCACGTGGCAGA
GGCTCAGCCTGGCTCCCTTCCCTGGAGCGGCAGGGCGTGACGGCCACAGGGTCTGCCCGCTGCACGTTCTGCCAA
GGTGGTGGTGGCGGGCGGGTAGGGGTGTGGGGGCCGTCTTCCTCCTGTCTCTTTCCTTTCACCCTAGCCTGACTG
GAAGCAGAAAATGACCAAATCAGTATTTTTTTTAATGAAATATTATTGCTGGAGGCGTCCCAGGCAAGCCTGGCT
GTAGTAGCGAGTGATCTGGCGGGGGGCGTCTCAGCACCCTCCCCAGGGGGTGCATCTCAGCCCCCTCTTTCCGTC
CTTCCCGTCCAGCCCCAGCCCTGGGCCTGGGCTGCCGACACCTGGGCCAGAGCCCCTGCTGTGATTGGTGCTCCC
TGGGCCTCCCGGGTGGATGAAGCCAGGCGTCGCCCCCTCCGGGAGCCCTGGGGTGAGCCGCCGGGGCCCCCCTGC
TGCCAGCCTCCCCCGTCCCCAACATGCATCTCACTCTGGGTGTCTTGGTCTTTTATTTTTTGTAAGTGTCATTTG
TATAACTCTAAACGCCCATGATAGTAGCTTCAAACTGGAAATAGCGAAATAAAATAACTCAGTCTGC

FIGURE 4428

GTCTCTGGGCGGGCCGTGGGAGGCTCCCGAGGTGGGGGCCGGGGCGGGATGGCTGCAGCGGCGGCCGGGGCCGGG
AGCGGGCCCTGGGCGGCCCAGGAGAAGCAGTTCCCGCCGGCGCTGCTGAGTTTCTTCATCTACAACCCGCGCTTC
GGGCCGCGCGAAGGACAGGAGGAAAATAAGATTTTATTTTATCATCCAAATGAGGTAGAAAAGAATGAGAAGATT
AGAAATGTCGGATTGTGTGAAGCTATTGTACAGTTTACAAGGACATTTAGCCCATCAAAACCTGCAAAATCTTTA
CATACACAGAAGAACAGACAGTTCTTCAATGAACCAGAAGAAAATTTCTGGATGGTCATGGTTGTTCGGAATCCT
ATAATTGAAAAACAGAGTAAAGATGGAAAACCAGTTATTGAATATCAAGAGGAGGAGTTGTTGGACAAGGTTTAT
AGCTCGGTGCTGCGGCAGTGCTACAGCATGTACAAGCTTTTTAATGGTACATTTCTGAAAGCCATGGAAGACGGA
GGCGTCAAGCTTCTGAAAGAAAGATTAGAGAAATTCTTCCATCGGTATTTGCAAACGCTACATTTGCAGTCATGT
GACCTACTTGACATTTTTGGTGGAATCAGCTTCTTCCCGTTGGATAAAATGACTTATTTGAAAATCCAGTCCTTT
ATTAATAGAATGGAGGAAAGCCTGAATATAGTCAAATACACTGCTTTTCTCTATAACGATCAGCTCATCTGGAGT
GGATTAGAACAAGATGACATGAGAATTTTATACAAATACCTTACCACCTCCCTTTTTCCAAGGCACATCGAACCT
GAGTTAGCAGGAAGGGATTCTCCAATAAGAGCAGAAATGCCAGGAAATCTTCAACACTATGGAAGATTTCTTACC
GGACCCTTGAACCTCAATGATCCAGATGCAAAATGCAGATTCCCCAAAATTTTTGTAAATACAGATGACACTTAT
GAAGAGCTCCATTTAATCGTTTATAAGGCCATGAGTGCGGCTGTGTGCTTTATGATCGACGCCTCTGTCCACCCA
ACGTTGGATTTTTGCCGAAGACTGGACAGCATCGTTGGGCCCCAGCTCACAGTGCTGGCCTCTGACATCTGTGAA
CAGTTTAACATCAACAAGAGGATGTCCGGGTCTGAGAAAGAACCCCAGTTTAAGTTTATCTACTTCAACCACATG
AATCTCGCCGAGAAGAGCACAGTTCACATGAGGAAAACGCCCAGCGTGTCGCTCACTTCCGTGCACCCGGATTTA
ATGAAGATTCTCGGTGACATCAACAGTGACTTTACCAGAGTGGATGAAGATGAGGAGATCATTGTGAAGGCCATG
AGTGATTACTGGGTTGTTGGAAAGAAGTCTGATCGGCGGGAGCTCTATGTTATTTTGAATCAAAAAAATGCAAAC
CTGATTGAAGTAAATGAAGAGGTCAAGAAACTTTGTGCAACGCAGTTCAACAACATCTTCTTCTTGGATTGACGG
ATGACGGCTCACCGAGAGCATATCTAAAAAACACTCTGCAAACATTTGGTCACATGCAAGTTAGTGGTCATATGA
CGGACTGCATTCAGGACAAGGGTAAAGCAATACTTGCTTTGAAGAATCACATTTCGACTCGGTCTGCTGATCTGA
GGTTTTTAGATTTTAAATATTTATGTGGAATTAATTAAAGGTAGTTGGCTATATCGCTATCATTTCATTCTTTTG
ACATTATGTGAATATTTTACTGGAAAATAAGACTAATAAATTGTTAAAAGTTTTTAAAATTCTGGTTTGGTGTTG
AGTCTCTCTCCTGCTGCCTATTTATAGATTACACTGGCCACCAGCTCCGTGACCCAGGCTGGAATGCAATGGCTC
ACTGCAGCCTCAACCTCCTGAGCTCAAGCAATCCTCCCACCTCAGCCTCCCAAGAAGCTAGAACCACATGTACAC
ACCACCACGGTCGGCTGATGTTTTAATTTTGCAGAGATGGGGGGGTCTCACTATGTTGCCCAGGCTGGTCTCGAA
CTCCCGTAATCCAGCCATGTAGGAAACCTGAGATGCAGTGGGCCAAGGGGTATGTTAAAACACTGTGACGAGTTC
AGTGCTAAGAACTGTAATGCTCAGGAAATCTTACAGCACGTGCCATCCTAAGCCTGTGTGTGTGTCCTCGTGTCT
CTCTACTTTTTCTTCTTCTTGCTGGTGATGGTCTTGCTGGATGGGGACACGGTCACATCCTCCTTGGGAGGGTCC
AGTATGAGGTGAGAGGATGACACGTCTGCCGGCTCCTTGAGCACTGTGATGTCCACCTCATAGTCATGTCTCTTG
GCCTCTTCCTCTCTCAAGATGAAGATGTTCAGCCT

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FIGURE 4429

CGAGGCGGATCGGGTGTTGCATCCATGGAGCGAGCTGAGAGCTCGAGTACAGAACCTGCTAAGGCCATCAAACCT
ATTGATCGGAAGTCAGTCCATCAGATTTGCTCTGGGCAGGTGGTACTGAGTCTAAGCACTGCGGTAAAGGAGTTA
GTAGAAAACAGTCTGGATGCTGGTGCCACTAATATTGATCTAAAGCTTAAGGACTATGGAGTGGATCTTATTGAA
GTTTCAGACAATGGATGTGGGGTAGAAGAAGAAAACTTCGAAGGCTTAACTCTGAAACATCACACATCTAAGATT
CAAGAGTTTGCCGACCTAACTCAGGTTGAAACTTTTGGCTTTCGGGGGGAAGCTCTGAGCTCACTTTGTGCACTG
AGCGATGTCACCATTTCTACCTGCCACGCATCGGCGAAGGTTGGAACTCGACTGATGTTTGATCACAATGGGAAA
ATTATCCAGAAAACCCCCTACCCCCGCCCCAGAGGGACCACAGTCAGCGTGCAGCAGTTATTTTCCACACTACCT
GTGCGCCATAAGGAATTTCAAAGGAATATTAAGAAGGAGTATGCCAAAATGGTCCAGGTCTTACATGCATACTGT
ATCATTTCAGCAGGCATCCGTGTAAGTTGCACCAATCAGCTTGGACAAGGAAAACGACAGCCTGTGGTATGCACA
GGTGGAAGCCCCAGCATAAAGGAAAATATCGGCTCTGTGTTTGGGCAGAAGCAGTTGCAAAGCCTCATTCCTTTT
GTTCAGCTGCCCCCTAGTGACTCCGTGTGTGAAGAGTACGGTTTGAGCTGTTCCGATGCTCTGCATAATCTTTTT
TACATCTCAGGTTTCATTTCACAATGCACGCATGGAGTTGGAAGGAGTTCAACAGACAGACAGTTTTTCTTTATC
AACCGGCGGCCTTGTGACCCAGCAAAGGTCTGCAGACTCGTGAATGAGGTCTACCACATGTATAATCGACACCAG
TATCCATTTGTTGTTCTTAACATTTCTGTTGATTCAGAATGCGTTGATATCAATGTTACTCCAGATAAAAGGCAA
ATTTTGCTACAAGAGGAAAAGCTTTTGTTGGCAGTTTTAAAGACCTCTTTGATAGGAATGTTTGATAGTGATGTC
AACAAGCTAAATGTCAGTCAGCAGCCACTGCTGGATGTTGAAGGTAACTTAATAAAAATGCATGCAGCGGATTTG
GAAAAGCCCATGGTAGAAAAGCAGGATCAATCCCCTTCATTAAGGACTGGAGAAGAAAAAAAAGACGTGTCCATT
TCCAGACTGCGAGAGGCCTTTTCTCTTCGTCACACAACAGAGAACAAGCCTCACAGCCCAAAGACTCCAGAACCA
AGAAGGAGCCCTCTAGGACAGAAAAGGGGTATGCTGTCTTCTAGCACTTCAGGTGCCATCTCTGACAAAGGCGTC
CTGAGACCTCAGAAAGAGGCAGTGAGTTCCAGTCACGGACCCAGTGACCCTACGGACAGAGCGGAGGTGGAGAAG
GACTCGGGGCACGGCAGCACTTCCGTGGATTCTGAGGGGTTCAGCATCCCAGACACGGGCAGTCACTGCAGCAGC
GAGTATGCGGCCAGCTCCCCAGGGGACAGGGGCTCGCAGGAACATGTGGACTCTCAGGAGAAAGCGCCTAAAACT
GACGACTCTTTTTCAGATGTGGACTGCCATTCAAACCAGGAAGATACCGGATGTAAATTTCGAGTTTTGCCTCAG
CCAACTAATCTCGCAACCCCAAACACAAAGCGTTTTAAAAAAGAAGAAATTCTTTCCAGTTCTGACATTTGTCAA
AAGTTAGTAAATACTCAGGACATGTCAGCCTCTCAGGTTGATGTAGCTGTGAAAATTAATAAGAAAGTTGTGCCC
CTGGACTTTTCTATGAGTTCTTTAGCTAAACGAATAAAGCAGTTACATCATGAAGCACAGCAAAGTGAAGGGGAA
CAGAATTACAGGAAGTTTAGGGCAAAGATTTGTCCTGGAGAAAATCAAGCAGCCGAAGATGAACTAAGAAAAGAG
ATAAGGTAAAACGATGTTTGCAGAAATGGAAATCATTGGTCAGTTTAACCTGGGATTTATAATAACCAAACTGAA
TGAGGATATCTTCATAGTGGACCAGCATGCCACGGACGAGAAGTATAACTTCGAGATGCTGCAGCAGCACACCGT
GCTCCAGGGGCAGAGGCTCATAGCACCTCAGACTCTCAACTTAACTGCTGTTAATGAAGCTGTTCTGATAGAAAA
TCTGGAAATATTTAGAAAGAATGGCTTTGATTTTGTTATCGATGAAAATGCTCCAGTCACTGAAAGGGCTAAACT
GATTTCCTTGCCAACTAGTAAAAACTGGACCTTCGGACCCCAGGACGTCGATGAACTGATCTTCATGCTGAGCGA
CAGCCCTGGGGTCATGTGCCGGCCTTCCCGAGTCAAGCAGATGTTTGCCTCCAGAGCCTGCCGGAAGTCGGTGAT
GATTGGGACTGCTCTTAACACAAGCGAGATGAAGAAACTGATCACCCACATGGGGGAGATGGACCACCCCTGGAA
CTGTCCCCATGGAAGGCCAACCATGAGACACATCGCCAACCTGGGTGTCATTTCTCAGAACTGACCGTAGTCACT
GTATGGAATAATTGGTTTTATCGCAGATTTTTATGTTTTGAAAGACAGAGTCTTCACTAACCTTTTTTGTTTTAA
AATGAACCTGCTACTTAAAAAAAATACACATCACACCCATTTAAAAGTGATCTTGAGAACCTTTTCAAACC

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FIGURE 4430

CCGAACGCCCGCAGCAGGGTCAGAAGGGAGGTGGCCGGTCTCCGTCGTGACCTCTGACGGTTTCTGAGCGTTGGC
CTTTGGCACGCGCTACCCCCTTTTGCTTTGGTTCTGCCATGCCGATGTACCAGGTAAAGCCCTATCACGGGGGCG
GCGCGCCTCTCCGTGTGGAGCTTCCCACCTGCATGTACCGGCTCCCCAACGTGCACGGCAGGAGCTACGGCCCAG
CGCCGGGCGCTGGCCACGTGCAGGAAGAGTCTAACCTGTCTCTGCAAGCTCTTGAGTCCCGCCAAGATGATATTT
TAAAACGTCTGTATGAGTTGAAAGCTGCAGTTGATGGCCTCTCCAAGATGATTCAAACACCAGATGCAGACTTGG
ATGTAACCAACATAATCCAAGCGGATGAGCCCACGACTTTAACCACCAATGCGCTGGACTTGAATTCAGTGCTTG
GGAAGGATTACGGGGCGCTGAAAGACATCGTGATCAACGCAAACCCGGCCTCCCCTCCCCTCTCCCTGCTTGTGC
TGCACAGGCTGCTCTGTGAGCACTTCAGGGTCCTGTCCACGGTGCACACGCACTCCTCGGTCAAGAGCGTGCCTG
AAAACCTTCTCAAGTGCTTTGGAGAACAGAATAAAAAACAGCCCCGCCAAGACTATCAGCTGGGATTCACTTTAA
TTTGGAAGAATGTGCCGAAGACGCAGATGAAATTCAGCATCCAGACGATGTGCCCCATCGAAGGCGAAGGGAACA
TTGCACGTTTCTTGTTCTCTCTGTTTGGCCAGAAGCATAATGCTGTCAACGCAACCCTTATAGATAGCTGGGTAG
ATATTGCGATTTTTCAGTTAAAAGAGGGAAGCAGTAAAGAAAAAGCCGCTGTTTTCCGCTCCATGAACTCTGCTC
TTGGGAAGAGCCCTTGGCTCGCTGGGAATGAACTCACCGTAGCAGACGTGGTGCTGTGGTCTGTACTCCAGCAGA
TCGGAGGCTGCAGTGTGACAGTGCCAGCCAATGTGCAGAGGTGGATGAGGTCTTGTGAAAACCTGGCTCCTTTTA
ACACGGCCCTCAAGCTCCTTAAGTGAATTGCCGTAACTGATTTTAAAGGGTTTAGATTTTAAGAATGGTGCTCTT
TCATGCCTATTATCAGTAAGGGGACTTGTATTAGAGTCAGAGTCTTTTTATTTAGGCCAGTTGTCAAGTGTCAAT
AAAAGCATCATGTAATTTA

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FIGURE 4431A

GTTACTTCCGGGTCGGACGGCGCTAGCTGCAGCATCGGAGTGTGGCAGTGCTGGGCTGGCCGGCGGGCTGGGCTG
CGGCCCGCGCGCGGCCGGCGATGCAGGGGGGCAACTCCGGGGTCCGCAAGCGCGAAGAGGAGGGCGACGGGGCTG
GGGCTGTGGCTGCGCCGCCGGCCATCGACTTTCCCGCCGAGGGCCCGGACCCCGAATATGACGAATCTGATGTTC
CAGCAGAAATCCAGGTGTTAAAAGAACCCCTACAACAGCCAACCTTCCCTTTTGCAGTTGCAAACCAACTCTTGC
TGGTTTCTTTGCTGGAGCACTTGAGCCACGTGCATGAACCAAACCCACTTCGTTCAAGACAGGTGTTTAAGCTAC
TTTGCCAGACGTTTATCAAAATGGGGCTGCTGTCTTCTTTCACTTGTAGTGACGAGTTTAGCTCATTGAGACTAC
ATCACAACAGAGCTATTACTCACTTAATGAGGTCTGCTAAAGAGAGAGTTCGTCAGGATCCTTGTGAGGATATTT
CTCGTATCCAGAAAATCAGATCAAGGGAAGTAGCCTTGGAAGCACAAACTTCACGTTACTTAAATGAATTTGAAG
AACTTGCCATCTTAGGAAAAGGTGGATACGGAAGAGTATACAAGGTCAGGAATAAATTAGATGGTCAGTATTATG
CAATAAAAAAAATCCTGATTAAGGGTGCAACTAAAACAGTTTGCATGAAGGTCCTACGGGAAGTGAAGGTGCTGG
CAGGTCTTCAGCACCCCAATATTGTTGGCTATCACACCGCGTGGATAGAACATGTTCATGTGATTCAGCCACGAG
CAGACAGAGCTGCCATTGAGTTGCCATCTCTGGAAGTGCTCTCCGACCAGGAAGAGGACAGAGAGCAATGTGGTG
TTAAAAATGATGAAAGTAGCAGCTCATCCATTATCTTTGCTGAGCCCACCCCAGAAAAAGAAAAACGCTTTGGAG
AATCTGACACTGAAAATCAGAATAACAAGTCGGTGAAGTACACCACCAATTTAGTCATAAGAGAATCTGGTGAAC
TTGAGTCGACCCTGGAGCTCCAGGAAAATGGCTTGGCTGGTTTGTCTGCCAGTTCAATTGTGGAACAGCAGCTGC
CACTCAGGCGTAATTCCCACCTAGAGGAGAGTTTCACATCCACCGAAGAATCTTCCGAAGAAAATGTCAACTTTT
TGGGTCAGACAGAGGCACAGTACCACCTGATGCTGCACATCCAGATGCAGCTGTGTGAGCTCTCGCTGTGGGATT
GGATAGTCGAGAGAAACAAGCGGGGCCGGGAGTATGTGGACGAGTCTGCCTGTCCTTATGTTATGGCCAATGTTG
CAACAAAAATTTTTCAAGAATTGGTAGAAGGTGTGTTTTACATACATAACATGGGAATTGTGCACCGAGATCTGA
AGCCAAGAAATATTTTTCTTCATGGCCCTGATCAGCAAGTAAAAATAGGAGACTTTGGTCTGGCCTGCACAGACA
TCCTACAGAAGAACACAGACTGGACCAACAGAAACGGGAAGAGAACACCAACACATACGTCCAGAGTGGGTACTT
GTCTGTACGCTTCACCCGAACAGTTGGAAGGATCTGAGTATGATGCCAAGTCAGATATGTACAGCTTGGGTGTGG
TCCTGCTAGAGCTCTTTCAGCCGTTTGGAACAGAAATGGAGCGAGCAGAAGTTCTAACAGGTTTAAGAACTGGTC
AGTTGCCGGAATCCCTCCGTAAAAGGTGTCCAGTGCAAGCCAAGTATATCCAGCACTTAACGAGAAGGAACTCAT
CGCAGAGACCATCTGCCATTCAGCTGCTGCAGAGTGAACTTTTCCAAAATTCTGGAAATGTTAACCTCACCCTAC
AGATGAAGATAATAGAGCAAGAAAAAGAAATTGCAGAACTAAAGAAGCAGCTAAACCTCCTTTCTCAAGACAAAG
GGGTGAGGGATGACGGAAAGGATGGGGGCGTGGGATGAAAGTGGACTTAACTTTTAAGGTAGTTAACTGGAATGT
AAATTTTTAATCTTTATTAGGGTATAGTTGGTACAATGCTTCGTTGTATTTAGTAAGCCTTTACAAGACTTGTTA
AAGATGTCAGAGTGCCCCAAGCTGCCGTTCCTTCCCTTCCTGCCCCACAAGCTCCTTTTCCTGAATTTCCTACCT
AAATATTAACCATATGCCTAGTCTCTGAAACTAAAAACTTGGACCTCATCCTCAATTATTTTCTCCTTTCAACTC
TGTTGACCCTCTGTCTGGTCTTCCTCTAGAAGGTACCGCAGAAATTGATGTGTGCTCCCTGCCCTCGTCACTGCC
CAAGCCCGGGCCTGCACATACTCACTGGACTGTTCCAGTTTTGACAGCTGCCAGTCTTCCTGCCCCTTTCACACT
GCAGCTGAAGTTCATTACCTGAAGGACGCCTCATCATTTCATTCCTTGGCTCCAAACCTTCTGCTGCCTCTAAGA
TAAAAGCTCAACTTCTTAACAGTGTACAGTGTGCAACTTCCAACCTTTTTATCTGTTCTCTCCACCTTCAGTTTA
GCGTCATTCCAAAACCACACCCTTGCAAAGCTTTGTACTCCGCACCCCAGATGATCTCCAGGCAGCTCAGATCTC
TTTCCTGCCTTTGCCCTGCACTGTTCCCCGGTACTTCCTCCTTTATTGTAGCACTCAGCTCCCCAGCCAATCTGT
ACATCCCTCAGAGGCAGCGATCTGATGAATTGGTTTTTGAATCCCAGAAAGGGTCTGCCATGGAGTTGGCAGTCA
TCACGGTAGATGGCGTATGATTTTGCTGAATTTTAAATAAAATGAAAACCATAAATTACATGATGCTTTTATTGA
CACTTGACAACTGGCCTAAATAAAAAGACTCTGACTCTAATACAAGTCCCCTTACTGATAATAGGCATGAAAGAG
CACCATTCTTAAAATCTAAACCCTTTAAAATCAGTTACGGCAATTCACTTAAGGAGCTTGAGGGCCGTGTTAAAA
GGAGCCAGGTTTTCACAAGACCTCATCCACCTCTGCACATTGGCTGGCACTGTCACACTGCAGCCTCCGATCTGC
TGGAGTACAGACCACAGCACCACGTCTGCTACGGTGAGTTCATTCCCAGCGAGCCAAGGGCTCTTCCCAAGAGCA
GAGTTCATGGAGCGGAAAACAGCGGCTTTTTCTTTACTGCTTCCCTCTTTTAACTGAAAAATCGCAATATCTACC
CAGCTATCTATAAGGGTTGCGTTGACAGCATTATGCTTCTGGCCAAACAGAGAGAACAAGAAACGTGCAATGTTC
CCTTCGCCTTCGATGGGGCACATCGTCTGGATGCTGAATTTCATCTGCGTCTTCGGCACTGAAAAGAAAAAACAC
GCCAGGTAGCATCACCAGAGCAGCCCTGAGGGAAGTACTCGCACAGTGGGGAAGGGGACAGTCACCAAACACCAC
AGACTGATGACATGGGAAAGGGTGTTTTCAAGAAGAACATCACATTTTCAGTCTGTCTCTAAGATGCTTACTACT
GAAAAGGGTTTAAGTGCAAACTATGTTAAAAAAGTAACCAAAGAGTCATTCCTGGTATTTGATTATGACACTTCT

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FIGURE 4431B

GAAGCTAGAAGGGACCTCAGACCACCTGCTCCAATCCCTGCTGCCTAAGGTTTTGGGGGCTGAGGGCTGGAAACC
CAGGAGCTGCATCTCCCAGGCTCTTGGCCTCATAATCGCCTTCTGTGAGACTGAGGGCAATTAAGATATGAATGA
CATGAACTCGCTTATCTCCATATCAACATAAACCAGAAGAGGCATACATCTGTGGGATAGTCAATACATAACATC
CTATCTTTATATGGCCATATGAGAAGATAACTTCAGTGTCCCTATGATGGTAAGTTCTTGAATGTGAGGGCAAGA
TGGCTGTGATAGCCATGACTCCCCGCTTTGCCTGGTTGGACAGAACCCCCTTCCCCAAATGCTCACAGTCCCCCC
CTTGAGCTGTGTCTCACTCAGAGACCCTAAATTTTGCAGACGAACAAGGGCATCTTTGCGTTGCTTCATCTCTGC
TCCTCCTCTAGAACTATCCCACAGGCTTTCTAGACTTAGAATATCTGACCTGATGCAAATCGCTATGTGGCCAGT
ATGCCACAGAATGTCCTAAACCCTTGCTGCCTCTTATCAAAACCATGTTGCACATCTCATCATATAGTACAGCTA
ACCCTTGAACAGTGGGGGGGTTAGGGACACTGACCCCCGACTGCTGTGCAGTCGAAAATCCACATAAAACTTCTG
ACTCCTTCAAAACTTAAGCACTAATAGCCTACTATTCATGGGAAGCCTTACCCATCACAGTTGATTAACACGTTT
TGTATGGTCTGTATATTATATGCTATATTCTTACAATAAACTTGAGAAAATGTTAAGAAAAT

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FIGURE 4432

CGGCCAGGCTGGTACAGGCGGCTGCTCGCGGAGGCACTTCTCCGAGCGTGACGTGCGGACTCCGCTCCACTGCGG
CCCGCCCGCCCGCCGGTCTAGCCGCCGCCTCCTTCGCTCCCTGAGCACGCCAGGCGAGGGTCAGCTGCCGGGGCG
ACGCGGCGCGGAGAGGGCGGGCGGGGGGGCTGTGGGAGCGCCGGTCTCTATATGGCGGCGGCTCTGTCGGGCCTG
GCTGTCCGGCTCTCGCGCTCGGCCGCCGCCCGCTCCTATGGGGTCTTCTGCAAGGGGCTGACTCGCACGCTGCTC
ATCTTCTTCGACCTGGCCTGGCGGCTGCGTATCAACTTCCCCTACCTCTACATCGTGGCTTCCATGATGCTCAAC
GTCCGCCTGCAGGTTCATATTGAGATCCATTGAAGGCCCTCCCAGACTGACGAAGGCGTGACCTCAGGCCCACCG
CATCCAAGAACACGAAGCATGAGGGACAGAAGAGGGCCCCTCGGCACCTGCCTGGCACAAGTGCAGCAGGCCGGA
GGAGGTGACTCGGACAAACTATCATGCAGCCTTAAGAAAAGAATGCCGGAGGGCCCTTGGCCTGCAGATGCACCC
TCCTGGATGAATAAGCCTGTGGTTGATGGAAATTCACAAAGTGAGGCATTATCACTGGAAATGAGAAAGGATCCG
AGCGGGGCTGGCCTCTGGCTTCACAGTGGCGGCCCAGTGCTTCCATATGTGAGAGAATCAGTAAGAAGAAATCCA
GCCTCAGCAGCCACTCCGAGCACAGCCGTGGGTTTGTTCCCTGCTCCAACAGAGTGTTTTGCTCGGGTGTCCTGC
AGTGGTGTTGAAGCTCTGGGGCGGCGAGACTGGCTGGGAGGAGGGCCCAGGGCCACTGACGGCCACAGAGGACAG
TGCCCCAAAGGAGAGCCTCGGGTGTCACGACTGCCACGCCATCAAAAAGTGCCGGAAATGGGAAGTTTTCAGGAT
GACCCACCAAGTGCTTTTCCCAAGGGTCTGGGCTCTGAGTTGGAACCCGCTTGCCTGCACTCCATCCTGTCTGCA
ACGCTGCACGTGTATCCCGAAGTGCTCCTGAGTGAGGAGACAAAACGCATTTTCCTTGACCGTTTAAAGCCCATG
TTTTCAAAGCAAACAATAGAATTCAAGAAAATGCTTAAAAGCACCTCAGATGGTCTGCAGATAACACTGGGGTTA
CTGGCTCTGCAACCTTTTGAATTAGCAAATACATTATGCCATAGTTAAGGTACAAGCAGAACAATACCAATAGAT
TAATTTTAAGAGTTGTCTTAGAATGATTTCTTTCGCATTAAGTCTGGATGCAAACTGTGCAGCCCTTAGGTTCCT
GCTGTAGTTTTGTACGACCTGGCAGACTTAAAGTAAATTGAGTTTAAATTCAAAGCCAGTTGATGCGGAAGGAAC
TTTTTTGGCATGTGTTAAATTGTGCTTTAAAAGACATATAAAGAATTGGGAAACATTTCAGGAGACGATCATAGC
CTGTATAAATACCAGATTAGAACATACGGATTTACCATGAAGTTCTGTCTTCAACATCCATTCTAAAGGGCTACT
GTCCCAAATCCTGTGTGTCCTTTTGACTTGTCTGATCACCCAATGGAAGTGGATACTTGTAAAGTCTACACCACT
GTACTTGGCGTTAAATCTTGCTGAATTCGTGGTAAGCTGTTACCATGTCTACATTTTGTAGAATGATTTTGGTCT
GCAGCAAAATTCGATTTCACTTCTCATACCCCTTTCCTTCCACTTGAAATGCAATTTAGACAGAGGCCCTGTGGT
GAAAGTTGCAATATTAAGTTTACCTTTAGAAGATCCCTTCTCAAACTCAGAACCCTAGCAGTGTTACCTTAAACA
AAAATGAGCTCGAGAAAAAAGTAGCTCAGTTACAGAGAAGCAAATCGAGTTATTTCCCACATAAAAAGTTTCCCA
GATTCTAAGAATTGCAGTATCCTGTACCCTAAAATTTTTCAAGGTGACTCCTGTTGTCGTCTGTTGATAACTTTA
ATAAAGGTCATTTAAGGACATAAGTTTTTAAAGACTCCCAAAGTGAAACTTAAACATTTTCGGGATTATCGATTG
CATATATCAGTTTATGCTGTGTGCTGAATTACTATGCCATGTGCTATTTTAGTGTTTGGGGAAAATGAAAAATAA
AATTTGTTCTTTAGCTT

FIGURE 4433

CTGCCGGGCATCGGCTTCCCGTCCGCCGCGCCCCGAGCCCGCCGCTTCCTATCTCAGCGCCCTGCCGCCGCCGCC
GCGGCCCAGCGAGCGGCCCTG**ATG**CAGGCCATCAAGTGTGTGGTGGTGGGAGACGGAGCTGTAGGTAAAACTTGC
CTACTGATCAGTTACACAACCAATGCATTTCCTGGAGAATATATCCCTACTGTCTTTGACAATTATTCTGCCAAT
GTTATGGTAGATGGAAAACCGGTGAATCTGGGCTTATGGGATACAGCTGGACAAGAAGATTATGACAGATTACGC
CCCCTATCCTATCCGCAAACAGATGTGTTCTTAATTTGCTTTTCCCTTGTGAGTCCTGCATCATTTGAAAATGTC
CGTGCAAAGTGGTATCCTGAGGTGCGGCACCACTGTCCCAACACTCCCATCATCCTAGTGGGAACTAAACTTGAT
CTTAGGGATGATAAAGACACGATCGAGAAACTGAAGGAGAAGAAGCTGACTCCCATCACCTATCCGCAGGGTCTA
GCCATGGCTAAGGAGATTGGTGCTGTAAAATACCTGGAGTGCTCGGCGCTCACACAGCGAGGCCTCAAGACAGTG
TTTGACGAAGCGATCCGAGCAGTCCTCTGCCCGCCTCCCGTGAAGAAGAGGAAGAGAAAATGCCTGCTGTTG**TAA**

ATGTCTCAGCCCCTCGTTCTTGGTCCTGTCCCTTGGAACCTTTGTACGCTTTGCTCAAAAAAAAACAAAAAAAAA
AAACAAAAAAA

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FIGURE 4434

GCGTTTGCGCTTGAGCGCCGATAATTTGGTGGCGGCGTCCGGAGGGTGCTGGTTTGTTCTCGGTGAACGGCGCGC
GGGGTCTCTCCTGAGTGCGAGCTACGGGACCTTCGCCATGCCGGGGATGGTACTCTTCGGCCGGCGCTGGGCCAT
CGCCAGCGACGACTTGGTCTTCCCAGGGTTCTTCGAGCTGGTCGTGCGAGTGCTGTGGTGGATTGGCATTCTGAC
GTTGTATCTCATGCACAGAGGAAAGCTGGACTGTGCTGGTGGAGCCTTGCTCAGCAGTTACTTGATCGTCCTCAT
GATTCTCCTGGCAGTTGTCATATGTACTGTGTCAGCCATCATGTGTGTCAGCATGAGAGGAACGATTTGTAACCC
TGGACCGCGGAAGTCTATGTCTAAGCTGCTTTACATCCGCCTGGCGCTGTTTTTTCCAGAGATGGTCTGGGCCTC
TCTGGGGGCTGCCTGGGTGGCAGATGGTGTTCAGTGCGACAGGACAGTTGTAAACGGCATCATCGCAACCGTCGT
GGTCAGTTGGATCATCATCGCTGCCACAGTGGTTTCCATTATCATTGTCTTTGACCCTCTTGGGGGGAAAATGGC
TCCATATTCCTCTGCCGGCCCCAGCCACCTGGATAGTCATGATTCAAGCCAGTTACTTAATGGCCTCAAGACAGC
AGCTACAAGCGTGTGGGAAACCAGAATCAAGCTCTTGTGCTGTTGCATTGGGAAAGACGACCATACTCGGGTTGC
TTTTTCGAGTACGGCAGAGCTTTTCTCAACCTACTTTTCAGACACAGATCTGGTGCCCAGCGACATTGCGGCGGG
CCTCGCCCTGCTTCATCAGCAACAGGACAATATCAGGAACAACCAAGAGCCTGCCCAGGTGGTCTGCCATGCCCC
AGGGAGCTCCCAGGAAGCTGATCTGGATGCAGAATTAGAAAACTGCCATCATTACATGCAGTTTGCAGCAGCGGC
CTATGGGTGGCCCCTCTACATCTACAGAAACCCCCTCACGGGGCTGTGCAGGATTGGTGGTGACTGCTGCAGAAG
CAGAACCACAGACTATGACTTGGTCGGAGGCGATCAGCTCAACTGTCACTTCGGCTCCATCCTGCACACCACAGG
GCTGCAGTACAGGGACTTCATCCACGTCAGCTTCCATGACAAGGTTTACGAGCTGCCGTTTTTAGTGGCTCTGGA
TCACAGGAAAGAGTCTGTTGTGGTCGCTGTGAGGGGGACCATGTCTCTGCAGGATGTCCTTACGGACCTGTCAGC
GGAGAGTGAGGTGCTGGACGTGGAGTGTGAGGTGCAGGACCGCCTGGCACACAAGGGTATTTCTCAAGCTGCCAG
ATACGTTTACCAACGACTCATCAACGACGGGATTTTGAGCCAAGCCTTCAGCATTGCTCCTGAGTACCGGCTGGT
CATAGTGGGCCACAGCCTCGGGGGCGGGGCGGCCGCCCTGCTGGCCACCATGCTCAGAGCCGCCTACCCGCAGGT
CAGGTGCTACGCCTTCTCCCCACCCCGGGGGCTGTGGAGCAAAGCTCTGCAGGAATATTCTCAGAGCTTCATCGT
GTCACTCGTCCTGGGGAAGGATGTGATTCCCAGGCTCAGTGTGACCAACTTGGAAGATCTGAAGAGAAGAATCTT
GCGAGTGGTCGCGCACTGCAATAAACCCAAGTACAAGATCTTGCTGCACGGTTTGTGGTACGAACTGTTTGGAGG
AAACCCCAACAACTTGCCCACGGAGCTGGACGGGGGCGACCAGGAAGTCCTGACACAGCCTCTTCTGGGGGAGCA
GAGCCTACTGACGCGCTGGTCCCCGGCCTACAGCTTCTCCAGCGACTCCCCACTGGACTCTTCTCCCAAGTACCC
CCCTCTCTACCCTCCCGGCAGGATCATCCACCTGCAGGAGGAGGGCGCCTCGGGGCGGTTTGGCTGCTGCTCTGC
TGCTCACTATAGCGCCAAGTGGTCACACGAAGCGGAATTCAGCAAAATACTCATAGGTCCGAAGATGCTCACCGA
CCACATGCCAGACATCCTGATGCGGGCCTTGGACAGCGTGGTCTCCGACAGAGCGGCCTGCGTCTCCTGTCCAGC
ACAAGGGGTCTCCAGTGTGGACGTGGCCTGACCAGGGCCACTGGAAACTGTCCCAGGAACGATGGACTCACGCTT
TTGTCCTTAAACTGACTTACCATCCGAGGAGTTCCCATGACGCCAAAACAGCGAATGTCCATCAACAGGAATCGG
ATGGGAACAGAATTCCATGGTCTCAATGACTTAAGTTTATGGGAAGTCATTGTGGCCATAATGGTAGCAGAAGTA
GTGAGCACGCTCAGGTGATAGGACGACTCCTGAGACCCAGCGACCGTGGAGACAGCCTCGGGAAGCCCTGGCCCG
TGGATGGATCCCTTGGCTGTCTGAGGACTGCTCCAGAAGTGCGGGAATCCAGGGCCCACCCAGAAGACCGTGAAC
AGTTCCTTAGCCTCCCACCCCCAAGGCAGCTCTTTTCATCCAACTCAGTTTACAGGCGTGGTTTGTTTTTCAAAC
TGGGCTTCCTGGATGTACAAATGGAACTGTGGTGAGGGTGCGGGCTGGGGTTTTCTCCTGGGCGTCACCAAGGGC
AGCCCTGGGCTCTGGCTGGGGATGAAGACGAAACCCGATCGGGAAAGTAAGTGGAGCCCCCGGCCCCGCCGAGCC
ACAGCCCCCCAACTGCCTATTCCCACTGCCCAGTTGTTTGTCCACATCAGGAGTTGCTGATTGAATTCTTGCTAC
TCTTCTGGCTCTGGGGTCGGCCAGTGGATTCAGGAGTTGAAACAATAAAGCGCGCGTCAC

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FIGURE 4435

GCCGCCGCCGCC**ATG**AACATTTTCCGGCTGACTGGGGACCTGTCCCACCTGGCGGCCATCGTCATCCTGCTGCTG
AAGATCTGGAAGACGCGCTCCTGCGCCGGTATTTCTGGGAAAAGCCAGCTTCTGTTTGCACTGGTCTTCACAACT
CGTTACCTGGATCTTTTTACTTCATTTATTTCATTGTATAACACATCTATGAAGGTTATCTACCTTGCCTGCTCC
TATGCCACAGTGTACCTGATCTACCTGAAATTTAAGGCAACCTACGATGGAAATCATGATACCTTCCGAGTGGAG
TTTCTGGTGGTCCCTGTGGGAGGCCTCTCATTTTTAGTTAATCACGATTTCTCTCCTCTTGAGATCCTCTGGACC
TTCTCCATCTACCTGGAGTCCGTGGCTATCCTTCCGCAGCTATTTATGATCAGCAAGACTGGGGAGGCCGAGACC
ATCACCACCCACTACCTGTTCTTCCTGGGCCTCTATCGTGCTTTGTATCTTGTCAACTGGATCTGGCGCTTCTAC
TTTGAGGGCTTCTTTGACCTCATTGCTGTGGTGGCCGGCGTAGTCCAGACCATCCTATACTGTGACTTCTTCTAC
TTGTACATTACAAAAGTACTCAAGGGAAAGAAGCTCAGTTTGCCAGCA**TAA**GTGCCAAAGACCATCACCAGCATC
TGTCCTTCAGGGTGCTCGGACAGAATTCTTACCACAGCAAAGGCATAAGATGCTTGATACGGAAAATCAGAAACT
TAACTCTTTTGTTGCAGATAGTCATCAGTGGCTCTGTAAAAACGCAGAGGAAAAGAGCCAGAAGGTTTCTGTTTA
ATGCATCTTGCCTTATCTTTTTTTATTACTGTGTACAAAGATTTTTTTACACAAAGAAACTTAATGCTGTATTAA
TAAATTCAGTGTGTAGCTTCAATTGGGATAGTTCCAAAAGTGAAGATTTTGTGAGGAATAAGTGCAAATTTTTTT
TTTATTTTAAAAAATTCTTTGAAACTCTTAAGTCTTTGTGTCTGCAATGAAATTGTACTCCTTGACAGTTGATAG
ATTATATATTCTTCCATCCCTCAAACTTGCATTCCACTATATTTATTTTTTGGCAAAAGATGAGCTGTATTTGTT
TGAAATCTGAGACACTATGTTCAATTGG

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FIGURE 4436

ATTAATTACGCCAAGAAAATCACTGACGACCTCTCGGCAAGCCCCTCCCCAGCGGTGTGATCCTGGACCCAAGGG
CTTGGGTGATGCCCACACAACACTTAAGGACAGGTCTGACCCGACCCCACTACACCACACCTAGAGCCCGGTCTT
GCACGGGCAGGGTGGGGAGCCGAGTGACCTCTCCCGGCGCCCGCCCCACCTCCCGAGCTGGCTGGGCTGCCACGT
CAGGCGCAGCCGGCCACGATCCTGCCCATCCTCCTCCCGCCCGTCCCATTGATTCGCGGGTTTCCTGCAACCCCG
GGACCCCCACGGGAGATCCCGGCCGGAGAAGCGCCCCCATTCAAGCCCAGAGAGGGGCCACGCCTGTCGGACCCC
CCGTCCCACGCCAACTTTTCAGACACAGCAGGGCCCCGCGCAGCCGGGTGCGCTCCGACAGCTCAAGTTCACGCG
GGGACCGACTGCAGAGCGGGGTCCCGCGCTGCGACACCCGGCCCGGAGCCCACCCCGAGGGCCCGCAGGCCGCTG
CCCCCCGGGTCCGGGCACCCGTTAGGCCGGCCGAGGGGGTGTGTCGGGCCGGCGCAGGCCCCGCGAGCCGTGGGG
TGGCCGAGGTCGGCGGGTCCTCGGCGAGACCCGGCCCCCACGCCCGAGCCTCTCCGGGCCTTCCCCCGCCGCTCA
CCGGCGCAGGAGCGCGTCTTCCAGATCTTCAGCAGCAGG**ATG**ACGATGGCCGCCAGGTGGGACAGGTCCCCAGTC
AGCCGGAAAATGTTCATGGCGGCGGCGGCGGTGGCGGTCGGCGCAGCGCGGCGGCCCCGGGGCTGGGCGGCTCAG
GAGGCGGCGGCCCCTGAGAGGAAGCGGCGAAGATGGCGAGATCGCCCGCGACGTGGCCAGGGACGTGGCCGAACT
GCCGGCGCGCGCGCGCGCGGGGCACCCTGGGAGAGCGGGGCCAGGCCCCGCCCCTTAAAGGGGGCGCGCCCCAGC
GCAGGCTCAGCAGGTCAGCTCGCAGGGACTCCCTTGCAAGAAGACCCCGGACTCTGCCAAATTTTCCCTGCCGGG
TTTCCGGCTTCTCCTCGGGTGCCAGCAGTTTCCTTTACTTTTTTGAAA**TAA**CACTCCCTGGGGATCTTTTCTTTC
CTCCCACATATCAAAAGAGCTCTACAGGCCTATTGTATGAAAAAGTGTAAGAGAAGGCCGGGTGCGGTGGCTCAT
GCCTGAAATTCTAGCAGTTTGAGAGGCCGAAACAGGAGGATCCTTTGAGCCTAGGAGTTCGAGACCAGCCTGGGC
AACCTAATGAGAGTTCCTCCACCCCCCGTCTCTACAAAAATTTTTTAAAAAATTAGCCAGGCCTGATGGTGGGTG
CCTGTAGTACCAGCTATTTTAAAGGCTAAGGCAGGAGGATTGCTTGAGCCCAGGACATCGAGGCTGCGGTGAACC
ATGATTGTACCACTGTATTCCAGCCTGGACGACTGAGTGAGACCCTGTCTCAAACAAAACAAAACAAAACAAAAC
AAAAAAAAGTACAAGAGGAAAAAAATTGATTTCTGATTGCCTCACTCAAGATAAGGTCAACATTGAAGGTGGAGG
TGGAAGATGCAGTTTATGTAGGGGTCTGAAGATTTTACCATTCTGGGGACTGTCTTTAAGAAAGAGAATCCAAAA
TTAGGTAGAAAAGTGAACGTCTGACCGGGCGCGGTGGCTCATCCCTGTAATCCCAGCACTTAAGGAGTACGAGAC
GGGAGGATCACGAGGTCAAGAGATCGACAGCATGCTGGCCAACGTGGTGAAACCCCGTCTCTACTGAAAATACAA
AAATTAGCCGGGCGTGGTGGCACGCACCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGGAGAATCGCTTGAA
CCTGGGAGGAGAAGGTTGCAGTGAGCTGAGATGGTGCCACTGCACTCCAGCCTGGCGACAGAGCAAGACTCCATC
TC

FIGURE 4437

AAGTCTCGTATCGCGCCCGGGAGGCGCCGGAGCCCAGCGGCTGGCGCCAGATCCAGGCTCCTGGAAGAACCATGT
CCGGCAGCTACTGGTCATGCCAGGCACACACTGCTGCCCAAGAGGAGCTGCTGTTTGAATTATCTGTGAATGTTG
GGAAGAGGAATGCCAGAGCTGCCGGCTGAAAATTACCCAACCAAGAGAAATCTGCAGGATGGACTTTCTGGTCCT
CTTCTTGTTCTACCTGGCTTCGGTGCTGATGGGTCTTGTTCTTATCTGCGTCTGCTCGAAAACCCATAGCTTGAA
AGGCCTGGCCAGGGGAGGAGCACAGATATTTTCCTGTATAATTCCAGAATGTCTTCAGAGAGCCGTGCATGGATT
GCTTCATTACCTTTTCCATACGAGAAACCACACCTTCATTGTCCTGCACCTGGTCTTGCAAGGGATGGTTTATAC
TGAGTACACCTGGGAAGTATTTGGCTACTGTCAGGAGCTGGAGTTGTCCTTGCATTACCTTCTTCTGCCCTATCT
GCTGCTAGGTGTAAACCTGTTTTTTTTCACCCTGACTTGTGGAACCAATCCTGGCATTATAACAAAAGCAAATGA
ATTATTATTTCTTCATGTTTATGAATTTGATGAAGTGATGTTTCCAAAGAACGTGAGGTGCTCTACTTGTGATTT
AAGGAAACCAGCTCGATCCAAGCACTGCAGTGTGTGTAACTGGTGTGTGCACCGTTTCGACCATCACTGTGTTTG
GGTGAACAACTGCATCGGGGCCTGGAACATCAGGTACTTCCTCATCTACGTCTTGACCTTGACGGCCTCGGCTGC
CACCGTCGCCATTGTGAGCACCACTTTTCTGGTCCACTTGGTGGTGATGTCAGATTTATACCAGGAGACTTACAT
CGATGACCTTGGACACCTCCATGTTATGGACACGGTCTTTCTTATTCAGTACCTGTTCCTGACTTTTCCACGGAT
TGTCTTCATGCTGGGCTTTGTCGTGGTTCTGAGCTTCCTCCTGGGTGGCTACCTGTTGTTTGTCCTGTATCTGGC
GGCCACCAACCAGACTACTAACGAGTGGTACAGAGGTGACTGGGCCTGGTGCCAGCGTTGTCCCCTTGTGGCCTG
GCCTCCGTCAGCAGAGCCCCAAGTCCACCGGAACATTCACTCCCATGGGCTTCGGAGCAACCTTCAAGAGATCTT
TCTACCTGCCTTTCCATGTCATGAGAGGAAGAAACAAGAATGACAAGTGTATGACTGCC

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FIGURE 4438

GGAGGAGGAAGAGGTGGAGCTGGAGCTCATGCCGGTGGACCTGGGGTCAGAGCAGGAGCTGGAGCAGCAGCGGCA
GGAGTTGGAGCGGCAGCAGGAGCTGGAACGGCAGCAGGAGCAGCGGCAGCTGCAGCTCAAACTGCAGGAGGAGCT
GCAGCAGCTGGAGCAACAGCTGGAGCAGCAGCAGCAGCAGCTGGAGCAGCAGGAGGTGCAGCTGGAGCTGACCCC
GGTGGAGCTAGGCGCCCAGCAGCAGGAGGTGCAGCTGGAGCTGACCCCCGTGCAGCCGGAGCTGCAGCTGGAACT
GGTGCCAGCCGCAGGGGGCGGCGGAGCGGCGGTCCCGGGGGCTCCGGCCGCGGTCGTGGTGGCTCCCCCGGGCTA
CGTGGTGGTGCAGGAGCTCATGGTGCTGCCCGCCGTGGCAGCGCCGGCCGTGGTGGCCATCCCGGGCCCGGCAGG
CAGCGCGGCGTTGACCCCTGCACGGCAGCGGCGGCGGCGGCGCGCTCGGGACCGGCCGACCATCTGCGGGGAGTG
CGGCAAGGGCTTCAGCCGCAGCACGGACCTGGTGCGCCACCAGGCCACGCACACGGGTGAGCGGCCACACCGCTG
CGGCGAGTGCGGCAAGGGCTTCTCGCAGCACTCGAATCTGGTGACGCACCAACGCATCCACACGGGCGAGAAACC
CTACGCCTGCTCCTACTGCGCCAAGCGCTTCAGCGAGAGCTCGGCGCTCGTGCAGCACCAGCGCACGCACACCGG
GGAGCGACCCTACGCCTGCGGGGACTGTGGCAAGCGCTTCAGCGTCTCCTCCAACCTGCTGCGCCACCGGCGCAC
GCACTCGGGCGAGCGGCCCTACGTGTGCGAGGACTGTGGCGAGCGCTTCCGACACAAGGTGCAGATCCGCCGCCA
CGAGCGCCAGCTGCACGGCGCGGGCCGCTCCAGGGGCCTCGGCCTGCTGCGCGCCTCGCGGCCGGCGGCCCTCGG
TGGCCCAGCCCGCGCGGAGCAGGCCGCTACAGCCACTGCGCCCGCAGACAAGGCGCTGTGAGGGCCGTGATCGGG
GCTGCCTGGCCGGGAGGGGACCCCCCACCCGCCTCCACCTGAAAAGCTCCTTGACCCGGGTTCATGGGCGCTGGA
GGCGTCCTGGAATATCCCTGGAGTAAAAGGCTTCCACCATCATCATCATCATCATCTTCCGGATTCCCTGAGAAA
ATACCAGGTTCACAGATTTCACCGCCAGAAAAATCCATCCGCCAAAAGAGAAGTGGACCGGGGCTGAAACAGCAC
ACGGGACACGTTTGTCTGCCCTTTGAGGGGTCTGCCAAAGGTTTTCCCTCCGGGAAAACTGGACTTACTACGAAC
GAGGAAAAACCCCCAGTGGCGAGACGATTAATGACACTGGCCGAGGACTGGACACCCACCAGGGAATCAAGACGT
GGTGAGACACACGTGGAAAATCTTCGATCCTGGTGAAAATGATCGCAAGGAGAAATTCGGGGAGGAAGCAAACTT
GTTTGCACTATGTAGAAACTGACCAAGGCATCGAATCGTCCTCAGACACTGTGCCATTGCTGGGGCTGGGGAAAG
AATATCTGAGACGACGTTTGGGAGCAATGCTCTTTACCACGTTCACCAAGTCGTCTGGGGCAGGGGTTGTGAGCT
GCAGCAGTTGCTGGTGCCTTGTGGGAAGGTGGGGCAGGGAGGAGGCTGCCCGCCACCTCTGCCCCCAGTCACTTC
CTGCTTGACCTGACTCTTCACATGTGGCTGCTTAATTCCTGCCCCTCTCCCCCCAGCTGCTTCTCCTTTACTAAC
ACACCTGCTACATTTTACACATGTGTTGGTAAGTGAGAAACAGAAACGAAAAATAAATTAAAATGCAG

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FIGURE 4439

TACTCTAAATGAAGAAAGTCTTTATCAGAAAATTCGTATTTTGGAGAAACCTTTTGAATATATTGAATGCCAGAA
AGCCTTCCAAAAGGACACTGTTTTTGTTAATCAC**ATG**GAAGAAAAGCCCTATAAGTGGAATGGATCTGAAATAGC
CTTTCTCCAGATGTCGGACCTCACTGTACATCAGACATCTCATATGGAAATGAAGCCCTATGAATGCAGTGAATG
TGGGAAATCCTTCTGTAAAAAGTCAAAATTTATTATACATCAGAGGACTCACACAGGAGAGAAACCTTACGAATG
TAATCAGTGTGGGAAATCCTTCTGCCAGAAGGGAACCCTTACTGTGCATCAGAGAACACACACAGGGGAGAAGCC
CTATGAATGTAATGAATGTGGGAAGAACTTTTACCAGAAGTTACACCTCATTCAGCATCAGAGAACTCACTCAGG
AGAGAAGCCCTATGAATGTAGTTATTGTGGAAAATCCTTTTGCCAGAAGACACACCTCACACAACATCAGAGAAC
ACATTCAGGAGAGAGACCTTATGTTTGTCATGACTGTGGGAAAACCTTCTCGCAGAAGTCAGCACTTAATGACCA
TCAGAAAATTCACACAGGTGTGAAACTCTACAAGTGTAGTGAATGTGGGAAATGCTTCTGCCGCAAGTCTACTCT
CACGACCCACCTGAGGACCCACACAGGAGAGAAACCGTATGAATGTAATGAGTGTGGAAAATTCTTCTCTCGGTT
GTCATATCTCACTGTACATTATAGAACTCATTCAGGAGAGAAACCCTATGAATGTAATGAATGTGGAAAAACCTT
CTACCTGAATTCAGCCCTCATGAGACATCAGAGAGTGCACACAGGAGAGAAACCTTACGAATGTAATGAATGTGG
AAAGTTATTCTCCCAGTTGTCATACCTCACTATCCATCATAGAACTCATTCAGGAGTAAAACCCTATGAATGTAG
TGAATGTGGGAAAACCTTCTACCAGAACTCAGCCCTTTGTAGACATCGGAGAATACACAAAGGAGAGAAGCCCTA
TGAATGCTATATATGTGGAAAATTCTTCTCTCAGATGTCATACCTCACTATACATCATAGAATTCATTCAGGAGA
GAAGCCCTATGAATGTAGTGAATGTGGGAAAACCTTCTGCCAGAATTCAGCCCTTAATCGACATCAGAGAACACA
CACAGGAGAGAAAGCCTACGAATGTTATGAATGTGGGAAGTGCTTCTCTCAGATGTCCTATCTCACTATACATCA
TCGAATTCATTCAGGAGAGAAACCCTTTGAATGTAATGAGTGTGGAAAAGCCTTCTCTCGGATGTCATACCTCAC
TGTACATTATAGAACTCATTCAGGAGAGAAACCCTATGAGTGTACTGAATGTGGAAAAAAATTCTACCACAAATC
AGCATTCAACAGCCATCAGAGAATTCATAGGAGAGGCAATATGAATGTAATAGATGTGGGAAGGCTTCTC**TGA**AG
TCAGACCTCATTTTATATCAGAGAACCCTTTCAGTATAGTGAATCAGAAACTCCTGCCTGAAGTCAAACACCTTG
TACATCAGAGAGTTCACACAGGTTAGTGTGGACATCCCCTTGTGTGTTGGACTCATAATCTGAAGACTCACAGAA
TGGAAACCATGATTATAACAAGACCACATGGTATAACAATACTAGACTATAGACAAGTAAAAATTTATAAATATT
AAGAATGTATATACATGTCACCATGGATTGGAACTGTTTTGCATATCAGGGAAATCATAGCCAAGGGGAAATCTA
TCAGTATAAGGAATGTGGAAGACATAATCCTTTGGAAACTGTTAATACTAAAAGATATGTTTCTGATACAATAGC
AAACTTG

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FIGURE 4440

GTCTCTGGGCGGGCCGTGGGAGGCTCCCGAGGTGGGGGCCGGGGCGGGATGGCTGCAGCGGCGGCCGGGGCCGGG
AGCGGGCCCTGGGCGGCCCAGGAGAAGCAGTTCCCGCCGGCGCTGCTGAGTTTCTTCATCTACAACCCGCGCTTC
GGGCCGCGCGAAGGACAGGAGGAAAATAAGATTTTATTTTATCATCCAAATGAGGTAGAAAAGAATGAGAAGATT
AGAAATGTCGGATTGTGTGAAGCTATTGTACAGTTTACAAGGACATTTAGCCCATCAAAACCTGCAAAATCTTTA
CATACACAGAAGAACAGACAGTTCTTCAATGAACCAGAAGAAAATTTCTGGATGGTCATGGTTGTTCGGAATCCT
ATAATTGAAAAACAGAGTAAAGATGGAAAACCAGTTATTGAATATCAAGAGGAGGAGTTGTTGGACAAGGTTTAT
AGCTCGGTGCTGCGGCAGTGCTACAGCATGTACAAGCTTTTTAATGGTACATTTCTGAAAGCCATGGAAGACGGA
GGCGTCAAGCTTCTGAAAGAAAGATTAGAGAAATTCTTCCATCGGTATTTGCAAACGCTACATTTGCAGTCATGT
GACCTACTTGACATTTTTGGTGGAATCAGCTTCTTCCCGTTGGATAAAATGACTTATTTGAAAATCCAGTCCTTT
ATTAATAGAATGGAGGAAAGCCTGAATATAGTCAAATACACTGCTTTTCTCTATAACGATCAGCTCATCTGGAGT
GGATTAGAACAAGATGACATGAGAATTTTATACAAATACCTTACCACCTCCCTTTTCCCAAGGCACATCGAACCT
GAGTTAGCAGGAAGGGATTCTCCAATAAGAGCAGAAATGCCAGGAAATCTTCAACACTATGGAAGATTTCTTACC
GGACCCTTGAACCTCAATGATCCAGATGCAAAATGCAGATTCCCCAAAATTTTTGTAAATACAGATGACACTTAT
GAAGAGCTCCATTTAATCGTTTATAAGGCCATGAGTGCGGCTGTGTGCTTTATGATCGACGCCTCTGTCCACCCA
ACGTTGGATTTTTGCCGAAGACTGGACAGCATCGTTGGGCCCCAGCTCACAGTGCTGGCCTCTGACATCTGTGAA
CAGTTTAACATCAACAAGAGGATGTCTGGGTCTGAGAAAGAACCCCAGTTTAAGTTTATCTACTTCAACCACATG
AATCTCGCCGAGAAGAGCACAGTTCACATGAGGAAAACGCCCAGCGTGTCGCTCACTTCCGTGCACCCGGATTTA
ATGAAGATTCTCGGTGACATCAACAGTGACTTTACCAGAGTGGATGAAGATGAGGAGATCATTGTGAAGGCCATG
AGTGATTACTGGGTTGTTGGAAAGAAGTCTGATCGGCGGGAGCTCTATGTTATTTTGAATCAAAAAAATGCAAAC
CTGATTGAAGTAAATGAAGAGGTCAAGAAACTTTGTGCAACGCAGTTCAACAACATCTTCTTCTTGGATTGACGG
ATGACGGCTCACCGAGAGCATATCTAAAAAACACTCTGCAAACATTTGGTCACATGCAAGTTAGTGGTCATATGA
CGGACTGCATTCAGGACAAGGGTAAAGCAATACTTGCTTTGAAGAATCAGATTTCGACTCGGTCTGCTGATCTGA
GGTTTTTAGATTTTAAATATTTATGTGGAATTAATTAAAGGTAGTTGGCTATATCGCTATCATTTCATTCTTTTG
ACATTATTTGAATATTTTACTGGAAAATAAGACTAATAAATTGTTAAAAGTTTTTAAAATTCTGGTTTGGTGTTG
AGTCTCTCTCCTGCTGCCTATTTATAGATTACACTGGCCACCAGCTCCGTGACCCAGGCTGGAATGCAATGGCTC
ACTGCAGCCTCAACCTCCTGAGCTCAAGCAATCCTCCCACCTCAGCCTCCCAAGAAGCTAGAACCACATGTACAC
ACCACCACGGTCGGCTGATGTTTTAATTTTGCAGAGATGGGGGGGTCTCACTATGTTGCCCAGGCTGGTCTCGAA
CTCCCGTAATCCAGCCATGTAGGAAACCTGAGATGCAGTGGGCCAAGGGGTATGTTAAAACACTGTGACGAGTTC
AGTGCTAAGAACTGTAATGCTCAGGAAATCTTACAGCACGTGCCATCCTAAGCCTGTGTGTGTGTCCTCGTGTCT
CTCTACTTTTTCTTCTTCTTGCTGGTGATGGTCTTGCTGGATGGGGACACGGTCACATCCTCCTTGGGAGGGTCC
AGTATGAGGTGAGAGGATGACACGTCTGCCGGCTCCTTGAGCACTGTGATGTCCACCTCATAGTCATGTCTCTTG
GCCTCTTCCTCTCTCAAGATAAAGATGTTCAGCCT

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FIGURE 4441

CCTCAGCTGCGATGCCCAAGAGAAACAGGCTGGTGGAGGGGCAGACCCCCTACAAGGCCTGAAGGTGCCGTTCCT
CCACCCGCTCCTCTTGTGGCCAGAGGAGAGGGACACCCCCGCCATGAAGAGCTCTGAACGGTTGGAACTCTCAGG
GGATCCAGAACTGCAGCTGGTCCTCGCTGGGCTGTTCCTGTCCATCTGCCTGGTCATGGTGCTGGGGAACCTGCT
CATCATCCTGGCCATCAGCCCTGACTCCCACCTCCACACCCCCGTGTACTTCTTCCTCTCCAACCTGTCCTTGCC
TGACATCAGTTTCACCTCCACCACAGTCCCCAAGATGATTGTGGACATCCAATCTCACAGCAGAGCATGGAAGAG
AGGCATGCTCCTGAGTGTGATGGCCTATGACTGGTTTGTAGCCATCTGTCACCCTCTATATCATTCAGCCATCAT
GAACCCTCTTTTAGATGCCCAGCTGCACAACTTGATTGCCTTACAAGTGACCTGCTTCAAGGATGTGGAAATTCC
TAATTTCTTCTGTGACCCTTCTCAACTCCCCCATCTTGCATGTTGTGACACCTTCACCATTAACATAATCATGTA
TTTCCCTGCCGCCATATTTGGTTTTCTTCCCATCTCGGGGACCCTTTTCTCTTACTCTAAAATTGTTTCCTCCAT
TCTGAGGGTTTCATCGTCAGGTGGGAGAAAGGGTGCAGTGGCCTCAGTGATGTACGCGGTTGTCACCCCCATGCT
GAACCCCTTCGTCTACAGCCTGAGAAACAGGGATGTTAAAGGTGTCCTGCGGCGGCCACACGGCAGCACAGTCTA
A

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FIGURE 4442

GGGTTATGGTGTGTGCTCGGTGGGGCTGGAGTGGCTGGCTTACCTCCTCGTGGCTTACAGCCTGGGCGCCTCAGC
CGCCTCACTCCTGGTTCTGCTGGGCCTGTGGCTGCCACACCCGGTGCCCCTCGTGGCTGGAGAAGGGGTGCACCT
GCTGCTCACCTTCATCCTCTTTTTCTGGGCCCCTGTGCCTCAGGTCCTGCAACACAGCTGGATCCTCTGTGTGGC
AGCCGCCCTTTGGGGTGTGGGCAGCGCCCTGAACAAGACTGGACTCAGCACACTCCTGGGAATCTTGTACGAAGA
CAAGGAGAGACAGGACTTCATCTTCACCATCTACCACTGGTGGCAGGCTGTGGCCATCTTCACCGTGTACCTGGG
CTCCAGCCTGCACATGAAGGCTAAGCTGGCGGTGCTGCTGGTGACGCTGGTGGTGGCCGCGGTCTCCTACCTGCG
GATGGAGCAGAAGCTGCGGCGGGGCGTGGCCCCGCGCCAGCCCCGCATCCCGCGGCCCCAGCACAAGGTGCGCGG
TGACGGCTACTTGGAGGAGGACAACTCGGACGAGAGCGACGCGGAGGGCGAGC**ATG**GGGACGGCGCGGAGGAGGA
GGCGCCGCCCCCGGGGCCCAGGCCTGGCCCCGAGCCCGCTGGACTCGGCCGCCGGCCCTGCCCGTACGAACAGGC
GCAGGGGGGCGACGGGCCGGAGGAGCAGTGAGGGGCCGCCTGGTCCCCGGACTCAGCCTCGCTCCTCGCCGGCCT
CAGTTTACCACGTCTTAGGTCGGGGGGACCCCCTCCGAGTCTCGCGCTGTCTTCGAAGGCCCCTGTCTCCCTTCC
CCCACGTTGGGGACGCCCCTCCCAGAGCCCGGGTCACCTCCGGGCTTCCGCAGCCCCCTCCAAGGCGGAGTGGAG
CCTTGGGAACTCCCCGGCCAAGCACAGGGGTTCGAAAATACAGC**TGA**TACCCCGCGGGCCCTTAGCACGCGCCCC
AGCGCCGGAGCAGGGTCAGGGTCTTCTTGCGACCCGGCCCCGCTCCAGATCCCCCCAGCTCTCGGCCGCGGACCC
GGGCCGCGTGTGAGCGCCCTTTGCACCTCCTATCTCCAGGGTCCGCCGAGAGCCACGATTTTTTACAGAAAATGA
GCGATAAAGAGATTTTGTACTGTC

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FIGURE 4443

ATGAGAGCTACTGCAGGCTGGGCTGTGACCGTCTATGACAAGCCGGCATCTTTCTTTAAAGGGACACCTCTGGAC
CTGCAGCACAGGCTCTTCATGAAGCTGGGCGGCATGCACTCTCCGTTCAGGGCCCGTTTAGAACCTGAGGAACCA
GCCACGGAGCCGTCGGCCTTCATGGAGCGGGATGCTGGGAGCGGGCTGGTGATGTGTCTCTGCGAGTGGCCAGCC
CTGCTGGTCAGCAGCACAGGCTGGACAGAGGACGAAGACTTCTCCATCCTGCTGGCAGCTTTAGAAAGTAGGGGT
GTAGCTGTGCATGTTCCTGTCCCGGGCCACTGGGTGGGGCAGCCTGGGGACAGCGGAGGTGGTGGAGAGTTTGAG
CAACTGACTCTTGATGGACACAACCTTCCTTCTCTCGTCTGTATAACAGGCTCCCAGGAGTGGTTTGGAGCCCGC
GCCATGTGCTCTGGAGGCTGTGGCAGGGCAGGGGGAGTCCTCGTGTCCCCTGTGCACAACACAGACAAAAGGCTG
GGTCCACCCAGTGGGGGCCCGAGGCCAGCTGGCTGCAAGTGCAGGGCTGTGCGTCAGGGGTCAGGGTGCACACAC
CCCTGCGGGTCTCGGGGCTCCTGGGATGCTTCCCGAAGGGCCCGGATGGGGCCTGACTGGAGCTGCCGAGGGGTG
GAGCTTCTGGGAAAGGGATCCCTCCTAGCGGGGAGTGTCTTGGGCCTGGGGCCACTTGGTAGGGTCAGAGACGGG
TCCATAGCAGTATCTGCTCTTCTCTGTGAAGGCAAAGGGCCTCTGACGGAGTATTACAGCTGCCTCATCCACCAG
AAGCATTTCCAGCACATCCAGGAGGGCTGGGCCTGGGGTTGGGGCACTGTTGCCCAGGTGTGGGAGGGCAGTGGC
TTTGGGAGGTACAGGGACGATGTGTCAAACAGCGTCGCTTCTCCCAGTGAGATGGTTCTCCTTTGCCTCCGTCTC
TTTCCCCGATTGATTTTTCCAAATGGGGAGTCGTGGCTTGGTCCTGATGCGTCTCTAGAGCTGCATCTTCCAGCT
TCAAGGTCGGTGGACCTGGGTGTCTGTCTGCACACGTTCTCCAGTGGCCTGGACCTGCCCATGAAGGTGGTGGAC
ATGTTCGGGTGCTATTTGCCTGCGTGTGCCGTGAACTTCAAGTGTTTAAATGAGCTGGTGAAACATGAAGAAAAT
GGCCTGGTCTTTGAGGACTCAGAGGAACTGGCAGCTCAGCTGCAGATGCTTTTCTCAAACTTTCCTGATCCTGCA
GGCAAGCTAAACCAGTTCCGGAAGAACCTGCGGTAA

FIGURE 4444

CTTTTTCGCAACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCAGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTC
AAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAA
TTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGATTACA
GGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTAATTGTCGGTGTTAACAAA
ATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAATCAGCACTTACATTAAGA
AAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAA
GTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCACGCTGCTTG
AGGCTCTGGACTGCATCCTACCACCAACTCATCCAACTGACAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACA
AAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACCCGGTATGGTGGTCACCT
TTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTG
GGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTCGCTGGTGACAGCA
AAAATGACCCACCAATGGAAGCAGCGGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCA
CCGGCTATGCCCCTGTATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTG
ATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTCTTGAAGTCTGGTGATGCTGCCATTGTTGATATGG
TTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTCGCTTTGCTGTTCGTGATATGA
GACAGACAGTTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTG
CCCAGAAAGCTCAGAAGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAGAA
TGGTCTCAGAACTGTTTGTTTCAATTGGCCATTTAAGTTTAGTAGTAAAAGACTGGTTAATGATAACAATGCATC
GTAAAACCTTCAGAAGGAAAGGAGAATGTTTTGTGGACCACTTTGGTTTTCTTTTTTGCGTGTGGCAGTTTTAAG
TTATTAGTTTTTAAAATCAGTACTTTTTAATGGAAACAACTGGACCAAAAATTTGTCACAGAATTTTGAGACCCA
TT

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FIGURE 4445

CTCTCTCCGGTCCATGCCTCCAAGATGACAAAGAAAAGAAGGAACAACGTTCGTGCCAAAAAGGGCCGCGGCCAC
GTGCAGCCTATTCGCTGCACTAACTGTGCCCGATGCGTGCCCAAGGACAACGCCATTAAGAAATTCGTCATTCGA
AACATAGTGGAGGCTGCAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTG
TGTGTGAAGCTACATTACTGTGTGAGTTGTGTAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGC
AAGGACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCGCACGTCCCCCACCAAAGCCCATGTAAGGA
GCTGAGTTCTTAAAGACTGAAGACAGACTATTCTCTGGAGAAAAATAAAATGGACATTGTACTTAAAAAAAAACA
AAAAAAAAAAAAAAAAAAA

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FIGURE 4446

CCGTGTGTGGCGCCTGCGCACCTCCTTTCCCTTTCGGATTCCCGACGCTGTGGTTGCTGTAAGGGGTCCTCCCTG
CGCCACACGGCCGTCGCCATGGTGAAGCTGAGCAAAGAGGCCAAGCAGAGACTACAGCAGCTCTTCAAGGGGAGC
CAGTTTGCCATTCGCTGGGGCTTTATCCCTCTTGTGATTTACCTGGGATTTAAGAGGGGTGCAGATCCCGGAATG
CCTGAACCAACTGTTTTGAGCCTACTTTGGGGATAAAGGATTATTTGGTCTTCTGGATTTGGAGGCAATCAGCGG
ACAGCATGGAAGATGTGTGCTCTGGCTCGGATAAGAGATGGGACATCATTCAGTCACTAGTTGGATGGCACAAGG
CTCTTCACAGACGCATCTGTAGCAGAGTGGAACTTGTACTAACTTATGATAGAATGTATCAGAATAAATGTTTTT
AACAGTGT

FIGURE 4447

ATGAACGACACATGGTTGATGGCAGAGTTCAGACAACAATTATTTGGAGCAGACCAGGAGCAAAGACAGCTGATT
AGAGGATCAGTACCCAGGGCGGTACCACTCACCAACCAGCTGGCCTCTGTTGTCACCCGTCAGCTCACGATCCAG
TCCCTCTGGATGGTGACGGTCAGCGCCGTGCCGGCCAGGTTTGCCAAGGCCACTAGGGTGGTCACCAGTGCACAG
CAGGCCACCTACCGAAGGAGGGGAAAGGGTCTTACAAACAAGCTGTTATTCCAAGAATCTCTTCAAAAAACAGCA
ACAAGGCTTTCAGCTTTCAGCTGGGAGGAGGCCAAGGTGCAACTTTCTTGGGTCGTCCTGAATCTAGCCACCTCT
GCCATGCTGCCGAAGTTCTACCCCAATGAGATCAAAGTCACATACCTAAGGTGTACTGGGGATGAAGTGGGTGCC
ACGTCTGTGTTGGCCCCCAAGATCAGCCCCCTAGGTCTGTCTTCAGAAAAGAACAGAGAGGCCCAGATTGAGGTG
GTGACTTCTGCCTCTGCCCTGATCATCAAAGCCCTCAAGGAACCGCCAAGAGACAGAAAGAAACAGAAAAACATT
AAACACAGTGGAAATATCACTTTTGATGAGATTGTCAATGTTGCTCAACACATGTGGCACCGATCTTTAGCCAGA
GAACTCTCTGGAATCATTAAAGAGATCCTGGGGACTCCCCAGTCTGTGGGCTGCAATGTTGATGGCTGCCACCCT
CATGATATCATAGATGACATCAACGGTGGTGCTGTGGAATGCCCAGCTAATTAA

FIGURE 4448

ATCACGATGCCAGTTATATTTAATGAGCCTCTGAGCTTCCTACAGCGCCTAACTGAATACATGGAGCATACTTAC
CTCATCCACAAGGCCAGTTCACTCTCTGATCCTGTGGAAAGGATGCAGTGTGTAGCTGCGTTTGCTGTATCTGCT
GTTGCTTCTCAGTGGGAACGGACTGGAAAACCTTTCAACCCACTGCTGGGAGAGACTTATGAATTAGTGCGAGAT
GACCTTGGATTTAGACTCATCTCCGAACAGGTCAGCCATCACCCACCAATCAGTGCATTTCATGCTGAAGGATTA
AACAATGACTTCATCTTTCATGGCTCTATCTATCCCAAACTGAAATTCTGGGGGGAAGAGTGTAGAAGCAGAACCC
AAAGGAACCATCACCTTGGAGCTCCTTGAACACAATGAGGCATATACATGGACAAATCCCACCTGCTGTGTGCAT
AATATCATTGTGGGTAAACTGTGGATCGAACAGTATGGCAATGTGGAAATTATAAACCACAAGACTGGGGACAAA
TGTGTGTTGAATTTTAAGCCATGTGGCCTTTTTGGTAAGGAATTACACAAAGTTGAAGGCTACATTCAAGATAAA
AGCAAAAAGAAGCTCTGTGCCCTCTATGGGAAGTGGACTGAATGTTTATACAGTGTTGACCCTGCCACGTTTGAC
GCTTACAAAAAAAATGATAAGAAAAATACAGAAGAGAAGAAGAACAGCAAACAGATGAGCACCTCTGAGGAGTTG
GATGAAATGCCAGTGCCGGATTCTGAAAGTGTATTCATTATCCCTGGAAGCGTTCTTCTATGGCGAATAGCCCCA
CGGCCTCCAAATTCTGCCCAGATGTATAATTTTACTAGTTTTGCAATGGTTTTGAATGAAGTAGACAAAGACATG
GAGAGTGTGATTCCCAAGACAGACTGCAGGTTACGGCCTGACATCAGAGCCATGGAAAATGGAGAGATAGATCAA
GCTAGTGAAGAAAAAAAAACGACTTGAGGAAAAACAAAGAGCAGCCCGCAAAAACAGGTCCAAGTCAGAAGAGGAC
TGGAAGACGAGGTGGTTCCATCAAGGTCCTAATCCCTACAATGGAGCACAGGACTGGATTTACTCTGGCAGCTAC
TGGGACAGAAATTACTTCAATTTGCCTGACATTTATTAAAATGCATACAAGTCAGGGTGTTTGGCTAATCTACAA
ATAAGTCTTAAACCTATGTTTTTAAATTTTTTTCCCTTGGTTTCTACTTATCTTTTAAAAAAAAAAATGAAAAAA
CACTCATGAGATAACTGCATTTCACCCAACAAAAGCAGGGTATAAGGCGATATTGGTGATGA

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FIGURE 4449

GCCCACTCCCACCGCCAGCTGGAACCCTGGGGACTACGACGTCCCTCAAACCTTGCTTCTAGGAGATAAAAAGAA
CATCCAGTCATGGATAAAAATGAGCTGGTTCAGAAGGCCAAACTGGCCGAGCAGGCTGAGCGATATGATGACATG
GCAGCCTGCATGAAGTCTGTAACTGAGCAAGGAGCTGAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTTGCT
TATAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGGGTCGTCTCAAGTATTGAACAAAAGACGGAAGGTGCT
GAGAAAAAACAGCAGATGGCTCGAGAATACAGAGAGAAAATTGAGACGGAGCTAAGAGATATCTGCAATGATGTA
CTGTCTCTTTTGGAAAAGTTCTTGATCCCCAATGCTTCACAAGCAGAGAGCAAAGTCTTCTATTTGAAAATGAAA
GGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGTGATGACAAGAAAGGGATTGTCGATCAGTCACAACAA
GCATACCAAGAAGCTTTTGAAATCAGCAAAAAGGAAATGCAACCAACACATCCTATCAGACTGGGTCTGGCCCTT
AACTTCTCTGTGTTCTATTATGAGATTCTGAACTCCCCAGAGAAAGCCTGCTCTCTTGCAAAGACAGCTTTTGAT
GAAGCCATTGCTGAACTTGATACATTAAGTGAAGAGTCATACAAAGACAGCACGCTAATAATGCAATTACTGAGA
GACAACTTGACATTGTGGACATCGGATACCCAAGGAGACGAAGCTGAAGCAGGAGAAGGAGGGGAAAATTAACCG
GCCTTCCAACTTTTGTCTGCCTCATTCTAAAATTTACACAGTAGACCATTTGTCATCCATGCTGTCCCACAAATA
GTTTTTTGTTTACGATTTATGACAGGTTTATGTTACTTCTATTTGAATTTCTATATTTCCCATGTGGTTTTTATG
TTTAATATTAGGGGAGTAGAGCCAGTTAACATTTAGGGAGTTATCTGTTTTCATCTTGAGGTGGCCAATATGGGG
ATGTGGAATTTTTATACAAGTTATAAGTGTTTGGCATAGTACTTTTGGTACATTGTGGCTTCAAAAGGGCCAGTG
TAAAACTGCTTCCATGTCTAAGCAAAGAAAACTGCCTACATACTGGTTTGTCCTGGCGGGGAATAAAAGGGATCA
TTGGTTCCAGTCACAGGTGTAGTAATTGTGGGTACTTTAAGGTTTGGAGCACTTACAAGGCTGTGGTAGAATCAT
ACCCCATGGATACCACATATTAAACCATGTATATCTGTGGAATACTCAATGTGTACACCTTTGACTACAGCTGCA
GAAGTGTTCCTTTAGACAAAGTTGTGACCCATTTTACTCTGGATAAGGGCAGAAACGGTTCACATTCCATTATTT
GTAAAGTTACCTGCTGTTAGCTTTCATTATTTTTGCTACACTCATTTTATTTGTATTTAAATGTTTTAGGCAACC
TAAGAACAAATGTAAAAGTAAAGATGCAGGAAAAATGAATTGCTTGGTATTCATTACTTCATGTATATCAAGCAC
AGCAGTAAAACAAAAACCCATGTATTTAACTTTTTTTTAGGATTTTTGCTTTTGTGATTTTTTTTTTTTTTTTT
GATACTTGCCTAACATGCATGTGCTGTAAAAATAGTTAACAGGGAAATAACTTGAGATGATGGCTAGCTTTGTTT
AATGTCTTATGAAATTTTCATGAACAATCCAAGCATAATTGTTAAGAACACGTGTATTAAATTCATGTAAGTGGA
ATAAAAGTTTTATGAATGGACTTTTCAACTACTTTCTCTACAGCTTTTCATGTAAATTAGTCTTGGTTCTGAAAC
TTCTCTAAAGGAAATTGTACATTTTTTGAAATTTATTCCTTATTCCCTCTTGGCAGCTAATGGGCTCTTACCAAG
TTTAAACACAAAATTTATCATAACAAAAATACTACTAATATAACTACTGTTTCCATGTCCCATGATCCCCTCTCT
TCCTCCCCACCCTGAAAAAAAATGAGTTCCTATTTTTTCTGGGAGAGGGGGGGATTGATTAGAAAAAAATGTAGTG
TGTTCCATTTAAAATTTTGGCATATGGCATTTTCTAACTTAGGAAGCCACAATGTTCTTGGCCCATCATGACATT
GGGTAGCATTAACTGTAAGTTTTGTGCTTCCAAATCACTTTTTGGTTTTTAAGAATTTCTTGATACTCTTATAGC
CTGCCTTCAATTTTGATCCTTTATTCTTTCTATTTGTCAGGTGCACAAGATTACCTTCCTGTTTTAGCCTTCTGT
CTTGTCACCAACCATTCTTACTTGGTGGCCATGTACTTGGAAAAAGGCCGCATGATCTTTCTGGCTCCACTCAGT
GTCTAAGGCACCCTGCTTCCTTTGCTTGCATCCCACAGACTATTTCCCTCATCCTATTTACTGCAGCAAATCTCT
CCTTAGTTGATGAGACTGTGTTTATCTCCCTTTAAAACCCTACCTATCCTGAATGGTCTGTCATTGTCTGCCTTT
AAAATCCTTCCTCTTTCTTCCTCCTCTATTCTCTAAATAATGATGGGGCTAAGTTATACCCAAAGCTCACTTTAC
AAAATATTTCCTCAGTACTTTGCAGAAAACACCAAACAAAAATGCCATTTTAAAAAAGGTGTATTTTTTCTTTTA
GAATGTAAGCTCCTCAAGAGCAGGGACAATGTTTTCTGTATGTTCTATTGTGCCTAGTACACTGTAAATGCTCAA
TAAATATTGATGATGGGAGGCAGTGAGTCTTGATGATAAGGGTGAGAAACTGAAATCCC

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FIGURE 4450

TCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGTG
CAGCCTATTCGCTGCACTAACTGTGCCCGATGCGTGCCCAAGGACAAGGCCATTAAGAAATTCGTCATTCGAAAC
ATAGTGGAGGCCGCAGCAGTCAGGGACATTTCTGAAGTGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTGTAT
GTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGCAAG
GACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCCACCAAAGCCCATGTGAGGAGCT
GAGTTCTTAAAGACTGAAGACAGGCTGTTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

FIGURE 4451

CCTTCTCCCCGGCGGTTAGTGCTGAGAGTGCGGAGTGTGTGCTCCGGGCTCGGAACACACATTTATTATTAAAAA
ATCCAAAAAAAATCTAAAAAAATCTTTTAAAAAACCCCAAAAAAATTTACAAAAAATCCGCGTCTCCCCCGCCGG
AGACTTTTATTTTTTTTCTTCCTCTTTTATAAAATAACCCGGTGAAGCAGCCGAGACCGACCCGCCCGCCCGCGG
CCCCGCAGCAGCTCCAAGAAGGAACCAAGAGACCGAGGCCTTCCCGCTGCCCGGACCCGACACCGCCACCCTCGC
TCCCCGCCGGCAGCCGGCAGCCAGCGGCAGTGGATCGACCCCGTTCTGCGGCCGTTGAGTAGTTTTCAATTCCGG
TTGATTTTTGTCCCTCTGCGCTTGCTCCCCGCTCCCCTCCCCCCGGCTCCGGCCCCCAGCCCCGGCACTCGCTCT
CCTCCTCTCACGGAAAGGTCGCGGCCTGTGGCCCTGCGGGCAGCCGTGCCGAGATGAACCCCAGTGCCCCCAGCT
ACCCCATGGCCTCGCTCTACGTGGGGGACCTCCACCCCGACGTGACCGAGGCGATGCTCTACGAGAAGTTCAGCC
CGGCCGGGCCCATCCTCTCCATCCGGGTCTGCAGGGACATGATCACCCGCCGCTCCTTGGGCTACGCGTATGTGA
ACTTCCAGCAGCCGGCGGACGCGGAGCGTGCTTTGGACACCATGAATTTTGATGTTATAAAGGGCAAGCCAGTAC
GCATCATGTGGTCTCAGCGTGATCCATCACTTCGCAAAAGTGGAGTAGGCAACATATTCATTAAAAATCTGGACA
AATCCATTGATAATAAAGCACTGTATGATACATTTTCTGCTTTTGGTAACATCCTTTCATGTAAGGTGGTTTGTG
ATGAAAATGGTTCCAAGGGCTATGGATTTGTACACTTTGAGACGCAGGAAGCAGCTGAAAGAGCTATTGAAAAAA
TGAATGGAATGCTCCTAAATGATCGCAAAGTATTTGTTGGACGATTTAAGTCTCGTAAAGAACGAGAAGCTGAAC
TTGGAGCTAGGGCAAAAGAATTCACCAATGTTTACATCAAGAATTTTGGAGAAGACATGGATGATGAGCGCCTTA
AGGATCTCTTTGGGCCTGCCTTAAGTGTGAAAGTAATGACTGATGAAAGTGGAAAATCCAAAGGATTTGGATTTG
TAAGCTTTGAAAGGCATGAAGATGCACAGAAAGCTGTGGATGAGATGAACGGAAAGGAGCTCAATGGAAAACAAA
TTTATGTTGGTCGAGCTCAGAAAAAGGTGGAACGGCAGACGGAACTTAAGCGCAAATTTGAACAGATGAAACAAG
ATAGGATCACCAGATACCAGGGTGTTAATCTTTATGTGAAAAATCTTGATGATGGTATTGATGATGAACGTCTCC
GGAAAGAGTTTTCTCCATTTGGTACAATCACTAGTGCAAAGGTTATGATGGAGGGTGGTCGCAGCAAAGGGTTTG
GTTTTGTATGTTTCTCCTCCCCAGAAGAAGCCACTAAAGCAGTTACAGAAATGAACGGTAGAATTGTGGCCACAA
AGCCATTGTATGTAGCTTTAGCTCAGCGCAAAGAAGAGCGCCAGGCTCACCTCACTAACCAGTATATGCAGAGAA
TGGCAAGTGTACGAGCTGTTCCCAACCCTGTAATCAACCCCTACCAGCCAGCACCTCCTTCAGGTTACTTCATGG
CAGCTATCCCACAGACTCAGAACCGTGCTGCATACTATCCTCCTAGCCAAATTGCTCAACTAAGACCAAGTCCTC
GCTGGACTGCTCAGGGTGCCAGACCTCATCCATTCCAAAATATGCCCGGTGCTATCCGCCCAGCTGCTCCTAGAC
CACCATTTAGTACTATGAGACCAGCTTCTTCACAGGTTCCACGAGTCATGTCAACACAGCGTGTTGCTAACACAT
CAACACAGACAATGGGTCCACGTCCTGCAGCTGCAGCCGCTGCAGCTACTCCTGCTGTCCGCACCGTTCCACAGT
ATAAATATGCTGCAGGAGTTCGCAATCCTCAGCAACATCTTAATGCACAGCCACAAGTTACAATGCAACAGCCTG
CTGTTCATGTACAAGGTCAGGAACCTTTGACTGCTTCCATGTTGGCATCTGCCCCTCCTCAAGAGCAAAAGCAAA
TGTTGGGTGAACGGCTGTTTCCTCTTATTCAAGCCATGCACCCTACTCTTGCTGGTAAAATCACTGGCATGTTGT
TGGAGATTGATAATTCAGAACTTCTTCATATGCTCGAGTCTCCAGAGTCACTCCGTTCTAAGGTTGATGAAGCTG
TAGCTGTACTACAAGCCCACCAAGCTAAAGAGGCTGCCCAGAAAGCAGTTAACAGTGCCACCGGTGTTCCAACTG
TTTAAAATTGATCAGGGACCATGAAAAGAAACTTGTGCTTCACCGAAGAAAAATATCTAAACATCGAAAAACTTA
AATATTATGGAAAAAAAACATTGCAAAATATAAAATAAATAAAAAAAGGAAAGGAAACTTTGAACCTTATGTACC
GAGCAAATGCCAGGTCTAGCAAACATAATGCTAGTCCTAGATTACTTATTGATTTAAAAACAAAAAAACACAAAA
AAATAGTAAAATATAAAAACAAATTAATGTTTTATAGACCCTGGGAAAAAGAATTTTCAGCAAAGTACAAAAATT
TAAAGCATTCCTTTCTTTAATTTTGTAATTCTTTACTGTGGAATAGCTCAGAATGTCAGTTCTGTTTTAAGTAAC
AGAATTGATAACTGAGCAAGGAAACGTAATTTGGATTATAAAATTCTTGCTTTAATAAAAATTCCTTAAACAGTG

FIGURE 4452

ATGGTGCAGCGCATGTGGGCCGAGGCGGCCGGGCCTGCTGGCGGCGCCGAGCCGCTGTTTCCGGGCTCCCGGCGG
AGCCGCAGCGTGTGGGACGCCGTGCGCCTGGAGGTGGGCGTCCCCGACAGCTGCCCGGTGGTGCTGCACAGCTTC
ACGCAGCTAGACCCCGACCTGCCGCGCCCGGAGGTGGGTGGGGGTCGGGGCCTTCTGCAGAAATCAGCCAGCAGG
GTGGGCAGTGGGGGCTGCCGCCGCGCCCCGTCCAACAGTAGGGACCACGGCTGGGGTTTTGCGCCCCTCAATACC
GTTCCAGGGCCTGCTGTCACCAAGGCCGCTGCAGCCCAGGTGGACCTTTTTCTGCGGCACTGTCCCTGTTTACAT
CGGTGGCCTGTGCCTTATTTCACTCAGTTCCCACCCAGGGCCCGCAGCGCGTCGTTAGCCTTTACGATGCAGCCC
AGCATCCGTCGCCGGCCCCAGGGGGATATGATGTCAGGTGTTGTCCGGTACCACGCCATCAGGTCCCAGTGCCGG
TCACCGAGCTGTGTGCATTCTCTCTTGACCCCCACTGTTGCCTGTGACAGCCAGGGACACGGCATCCTGCTGGCC
TGTCACTCTGAGAAGGCTGATCAGGCTGTAGGTCTGTGCAGCCGCCAGTCTGTGCCCTATCTGGGAAACAGGTTA
CACAGGTGCATCCCCTGCACGGTGGCCAGGCAGGCCCTTGACGTCCCCGCGCCCGGCTGCCGGGCGTTGTCTTCA
CAGAGCTCCACGCAGGAGATCGGTGAGGAGCTGATCAACGGAGTCATCTACTCCATCTCCCTGCGCAAGGTGCAG
CTGCACCACGGAGGCAACAAGGGGCAGCGCTGGCTCGGGTATGAGAATGAGTCGGCCCTGAACCTTTATGAGACT
TGCAAGGTGCGGACCGTGAAGGCTGGCACGCTGGAGAAGCTGGTGGAGCACCTGGTGCCAGCCTTCCAGGGCAGC
GACCTCTCCTACGTCACCATCTTCCTGTGTACCTATAGAGCCTTCACCACCACCCAACAGGTCCTGGACCTGCTG
TTCAAAAGATACGGCTGCATCCTCCCCTATTCCGACGAGGATGGTGGACCCCAGGACCAACTTAAAAATGCCATC
TCCTCCATCCTGGGCACCTGGCTGGACCAGTACTCGGAGGATTTCTGTCAACCTCCGGACTTTCCCTGCCTCAAG
CAGCTGGTGGCCTACGTGCAGCTCAACATGCCAGGCTCAGACCTGGAGCGCCGTGCCCACCTTCTCCTGGCCCAG
CTGGAGCACTCGGAACCCATTGAGGCAGAGCCTGAGGGTGAGGAGGACTGGGCGCCAGCTCTGGAACTAGAGCCA
GCTCCAGAACAGGATCCAGCTCCCTCACAAACTCTAGAGCTGGAGCCAGCTCCAGCACCAGTTCCATCATTACAG
CCTTCCTGGCCTTCACCTGTGGTTGCAGAGAACGGGCTGAGTGAGGAGAAGCCTCACCTCTTGGTGTTCCCTCCA
GATCTGGTGGCAGAGCAGTTTACACTGATGGATGCGGAACTGTTCAAGAAGGTGGTGCCCTACCACTGCCTGGGC
TCCATCTGGTCCCAGCGGGACAAGAAGGGCAAGGAGCACCTGGCGCCCACCATCCGCGCCACTGTCACCCAGTTC
AACAGTGTGGCCAACTGTGTCATCACCACCTGCCTCGGGAACCGAAGCACGAAAGCCCCAGACAGGGCCAGGGTG
GTGGAGCACTGGATCGAGGTGGCCAGGGAGTGCCGGATCCTCAAGAACTTCTCGTCACTGTATGCCATCCTCTCT
GCCCTGCAGAGCAACTCCATCCACCGTCTGAAGAAGACGTGGGAAGACGTTTCCAGGGACAGTTTCCGGATCTTT
CAGAAGCTGTCAGAGATCTTCTCAGATGAGAACAACTACTCATTGAGCCGGGAGCTGCTCATCAAGGAGGGCACC
TCCAAGTTTGCCACCCTGGAGATGAACCCCAAGAGAGCCCAGAAACGGCCGAAGGAGACGGGCATCATCCAGGGC
ACCGTTCCCTACCTGGGCACGTTCCTCACCGACCTGGTGATGCTGGACACTGCCATGAAGGACTATCTGTATGGC
AGACTCATCAACTTTGAGAAGAGGAGGAAGGAGTTCGAGGTGATCGCCCAGATCAAGCTGCTGCAGTCGGCCTGC
AACAACTACAGCATCGCGCCAGATGAGCAATTTGGGGCCTGGTTCCGGGCCGTGGAGCGGCTCAGCGAGACTGAG
AGCTACAACCTGTCGTGCGAGCTGGAGCCCCCATCCGAGTCAGCCAGCAACACCCTCAGGACCAAGAAGAACACA
GCCATTGTCAAGCGCTGGAGCGACCGCCAGGCCCCCAGCACTGAGCTCAGTACCAGTGGCAGCTCCCACTCCAAG
TCCTGTGACCAGCTCAGGTGTGGCCCCTACCTCAGCAGCGGGGACATCGCTGACGCGCTCAGCGTGCACTCGGCC
GGCTCCTCTAGCTCCGACGTGGAGGAGATCAACATCAGCTTCGTCCCGGAGTCTCCTGATGGCCAGGAAAAGAAG
TTCTGGGAATCAGCCTCACAGTCATCCCCGGAGACCTCCGGCATCAGCTCAGCCTCCAGCAGCACCTCGTCCTCC
TCAGCCTCCACCACGCCCGTGGCTGCCACACGCACCCACAAGCGCTCTGTCTCAGGGCTCTGCAACTCCAGCTCC
GCGCTGCCGCTCTACAACCAGCAGGTGGGCGACTGCTGTATCATCCGCGTCAGCCTGGACGTGGACAATGGCAAC
ATGTACAAGAGCATCCTGGTGACCAGCCAAGATAAGGCTCCGGCTGTAATCCGCAAGGCCATGGACAAACACAAC
CTGGAGGAGGAGGAGCCGGAGGACTATGAGCTGCTGCAGATTCTCTCAGATGACCGGAGCGTGAACAGGCAGTTC
AAAGCTCACATCAGTGAGGAGCAAAGAGAAAAGGCATTTTTCACTGGGACAGAGCTGAAGATCCCTGAAAACGCC
AACGTCTTCTATGCCATGAACTCTACCGCCAACTATGACTTTGTCCTCAAGAAGCGGACCTTCACCAAGGGAGTG
AAGGTCAAGCACGGAGCCAGCTCCACCCTCCCTCGCATGAAGCAGAAAGGACTCAAGATTGCCAAGGGCATCTTC
TGA

FIGURE 4453

ATGGCGGCGGAGGCGGCCGATTTGGGGCTGGGGGCCGCCGTCCCCGTGGAGCTGAGGCGGGAGCGACGCATGGTG
TGCGTGGAGTACCCGGGAGTGGTGCGTGATGTGGCTAAGATGCTGCCGACTCTGGGCGGCGAGGAAGGCGTCTCC
CGGATCTACGCAGACCCCACCAAGAGGCTGGAGCTGTACTTCCGGCCCAAGGACCCATACTGCCACCCAGTGTGC
GCCAACCGCTTCAGTACCAGCAGCCTGCTGCTCCGCATCAGGAAGAGAACGAGGCGGCAGAAAGGGGTGCTGGGC
ACTGAGGCCCACTCCGAGGTCACATTTGACATGGAGATCCTTGGCATCATCTCCACCATTTACAAATTTCAGGGG
ATGTCTGACTTCCAGTACTTGGCTGTGCATACGGAAGCAGGCGGCAAGCATACGTCAATGTATGACAAGGTGCTC
ATGCTCCGGCCCGAGAAGGAGGCCTTTTTCCACCAGGAGCTGCCGCTCTACATCCCCCCACCCATCTTCTCCCGG
CTGGACGCCCCGGTGGACTACTTCTACCGACCAGAGACCCAGCACCGGCACTTTAAAAAGAAGGCCCAGGCTCGA
TCCCGTCTTTCTAGTTTTGTTTCACAATGTGAAAATTACTGCTATTCTTTGGAAGGCTACAACAATCCCCCCATC
TCAGGTGAGAATCTGATTGGCCTGAGCAGAGCCCGGCGCCCCCACAATGCCATCTTTGTCAACTTTGAGGATGAG
GAGGTGCCCAAGCAGCCACTGGAGGCTGCAGCCCAGACGTGGAGGAGAGTCTGCACTAACCCCGTGGACCGGAAG
GTGGAGGAGGAGCTGAGGAAGGCAAGTCCTGCGCTGCGCCTGGCCCCGCTGTTTGACATCCGTCCCATCTGGTCC
CGAAATGCTGTCAAGGCCAACATCAGCGTCCACCCAGACAAGCTCAAGGTCTTGCTTCCCTTCATAGCCTATTAC
ATGATAACAGGCCCCTGGCGCAGCCTATGGATTCGATTTGGGTATGACCCCCGAAAAAACCCAGATGCCAAGATT
TATCAAGTCCTCGATTTCCGAATCCGTTGTGGAATGAAACACGGTTACGCCCCCAGTGACTTGCCGGTCAAAGCA
AAGCGCAGCACCTACAACTACAGCCTCCCCATCACCGTCAAGAAGACATCCAGCCAGCTTGTCACCATGCATGAC
CTGAAGCAGGGCCTGGGCCCGTCGGGGACGAGTGGTGCTCGGAAACCAGCTTCCAGCAAGTACAAGCTCAAGGAC
TCTGTCTACATCTTCCGGGAAGGGGCCTTGCCACCCTATCGGCAGATGTTCTACCAGTTATGCGACTTGAATGTG
GAAGAGTTGCAGAAGATCATTCACCGCAATGACGGGGCAGAGAATTCCTGCACAGAACGGGATGGGTGGTGCCTC
CCCAAGACCAGCGACGAGCTCAGGGACACCATGTCCCTCATGATCCGGCAGACCATCCGCTCCAAGAGGCCTGAG
GGCTGTGCGGTGGCTGGAGCTGCCACTGAGTGTCTCGGTGAGGGTGACCTCACACTGGCTGAGCTTAAAGGCCCC
ATCTGA

FIGURE 4454

AGGATGGCAATGCCAGTGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGA
CTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCTGTATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAATGGCAAGGTCACCAAGTCTGCCCAGAAAGCTCAGAAGGCTAAATGAA
TATTATCCCTAATACCTGCCACCCCACTCTTAATC

FIGURE 4455

GCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACT
ACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAG
ATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATT
GATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTC
ATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTTGGTGAATTT
GAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTA
ATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAA
GTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAAATTCTTGAAGTCTGGTG
ATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTC
GCTTTGCTGTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTC

FIGURE 4456

AAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAATTT
CTGGTTGGAATGGTGACAAC**ATG**CTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTA
AGGATGGCAATGCCAGTGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGA
CTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCTGTATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAACCACC
TTTGGGTCGCTTTGCTGTTCGTGATA**TGA**GACAGACAGTTGCGGTGGG

FIGURE 4457

CTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCC
ACCACTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCT
GCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATC
ACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGA
GACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTTGGT
GAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAA
CAACTAATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAACTACA
AAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACCCGGTATGGTGGTCACCT
TTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTG
GGGACAATGTGG

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FIGURE 4458

GGGCCAGGCCTCCAAGCCGGCCTTACACCCAATCCAAGGAGGACAGACCGGACACAGAGGGACGGAGCGAGCAAG
GAGACATGGCTTCATCATTCCTGCCCGCGGGGGCCATCACCGGCGACAGCGGTGGAGAGCTGAGCTCAGGGGACG
ACTCCGGGGAGGTGGAGTTCCCCCATAGCCCTGAGATCGAGGAGACCAGTTGCCTGGCCGAGCTGTTTGAGAAGG
CTGCCGCGCACCTGCAAGGCCTGATTCAGGTGGCCAGCAGGGAGCAGCTCTTGTACCTGTATGCCAGGTACAAAC
AGGTCAAAGTTGGAAATTGTAATACTCCTAAACCAAGCTTCTTTGATTTTGAAGGAAAGCAAAAATGGGAAGCTT
GGAAAGCACTTGGTGATTCAAGCCCCAGCCAAGCAATGCAGGAATATATCGCAGTAGTTAAAAAACTAGATCCAG
GTTGGAATCCTCAGATACCAGAGAAGAAAGGAAAAGAAGCAAATACAGGTTTTGGTGGGCCAGTTATTAGTTCTC
TATATCATGAAGAAACCATCAGGGAAGAAGACAAAAATATATTTGATTACTGCAGGGAAAACAACATTGACCATA
TAACCAAAGCCATCAAATCGAAAAATGTGGATGTGAATGTGAAAGATGAAGAGGGTAGGGCTCTACTTCACTGGG
CCTGTGATCGAGGACATAAGGAACTAGTCACAGTGTTGCTGCAACATAGAGCTGACATTAACTGTCAGGACAATG
AAGGCCAAACAGCTCTACATTATGCCTCTGCCTGTGAGTTTCTGGATATTGTAGAGCTGCTGCTCCAGTCTGGTG
CTGACCCCACTCTCCGAGACCAGGATGGCTGCCTGCCAGAGGAGGTGACAGGCTGCAAAACAGTTTCTTTGGTGC
TGCAGCGGCACACAACTGGCAAGGCTTAATCAAAAGACTGGAAAACTGCAGTCTGTAATAGCATAAGGCTTCCAT
TATGAAAGAAAACTACAAAAATAATACTTCTTTTCCACCCGTCTTTGGTATGTATTGGCTAATAAAATCAGTTCT
GTGGAACTGGG

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FIGURE 4459

AATAAATTATTTTTGTTAAGGCAAGCATTGGTGTGTTCTTTAACTTGCTACTTGGAGACCTAGTGTCCAGTCTGG
ACAGAATGCACAGAGACCAGCCTCACCTGGAATGCAGCCAGACTCGATGTCCCTCAGCACACACAGCTCCTGGCC
ACAGACTGCCCATAGAACTGTCTGCACCCAAACCCCATGGCCTTTTCATGCACGGAGACAGGCCTCTGGATGTGC
AGCCTTGCCACCCCCTGCCCCAATCCTCCCTGAGAGCTCCTGCCTCAGTGCCCTGGGCTGGTGAGGGAGAAGCCT
GTCTGCACCTGCCTAATTCCAGCTCCTCCAGGAAGCAAGGGCTTGTTTGTCAGAGCTGCAGGGTTGGCCACTCGG
TGGGGAGGAGTCAGCCAGGATTAGAGAGCCTGCCCCTAATCCGGCCTGCTGGGTTTTACAAGGATCAGAGCTGCT
GATAATGAACCTCATTAAGGGGGAGCAGGAGCCTCAATCCGATTTGGTTTTCTCTTTGACATCTTCACTCTGCTC
AGATGGCCTGGGTGCTATGTGGAGCAGGTGGGATGCCAAGGCCACTCCTGCTATGGGGCAGCTGGGGCTGGGGAG
GGATGGCAGTCTCCCTGCATGTTTCCCTCGACCTCTTTAGCTGCAGCGCCTTGCTGGGCTCCTGGGTTGGACTCC
CTCTCTGTGCCCCTGCTCCAGGCACCCATTGGCTCCATCCTCCTGGTTGTGCTCTGCACCCCCTGCTCCCTTGGG
CTGGCCCTGGCTGGGGGCCTGAGAGACAGACAGGAACCCACAATCAGGAGGCAACCCTGGCCTGCAAGAGGAAGA
CAGAGGCTCCCAGGGCCGGTGCCCTGTGTGCCCACTGCACCAAGGCCGCTGAATAAGCCTGCCCTTCACCCCCTA
AGGGCTCCTTGCCCAATGCCAAGTGCTGGGGATTTCTGTCAGCAAGCCCTGTGGCTCCAGTGACGGTATTTCTAA
AGCCAAACTTAGTTACCTAGAATTAGCGCCATGTTGGAAACACTGTCGCAGCAGCCCGGGCTGCACAGTGTGTAG
CCCAGCCTCCAGGTCCACGGAGTGGTGTGGACCTCCCACCTCACAGCTGCCTCTGGCAGCCAAGCCTCTTTTCGC
CCGGCCCCAGCCCCTCTGGTTGATAAACGGGTGGGCCTCCTCAGCAGCGTGGCTGCCTTTCACCTTGATTTCCCC
AGGGCTCTCGGCAACATCGATAAACCAGCCTCGCCCACCAGCTGGGCCCTCCCCCACCCAGTCTGCCAGGCTGGG
AGCTGGAGCTTGCTGAGTCTTGAATGCCCTTCTAGATGGCTTCTCTAGAGGCTCTCCTGGCAAGAGAGGGTCCCA
AGGGGAGCCCTGCAAAGCAAAGGCTCCTTGTCTGGGGCGGGATAGAGAATCTCGCCTCTGTCTGGTGTGTTACCT
ACTGGGGGCACAGGAACAATTTCCTCAAGGAGACAGTGGCATGGAGCTTTGAAAGACGAGTAGGTGTTAGCAAGG
AAATAAGGAGGAACGGGGGTTACGGGCAGAGGAGAAAGCACATGCCAAGTCAGCAAAGAAAAGTAGAATTCGAAA
ACTTTTTAAAAATATTACTAAGGATTTTCACAATGCTGCACTGGGCTAGAAACTGAAGCTAAAACAGATACGTGG
TCCCTGCTGCTATGGGGCTTCCGTTCTAGAGGCAAGGACAGGTTGTGATGAGGGTTCTGAAGGATAGAGACCAAG
CAGGGAGGGTGTTGAGGAGGCTTCTGCGAGACCTGAAGGATGGGAAGCCAGGAAGTGGGAGGGGTGGGGGTCCAG
GCTGGAGGGGCCCAATGTAGGTGTAGAGGGACTACAGCCCTGAGGGGCTGCTCCATGCGGCATTCTTGGAGGTCC
AAGAGGGGCAGCGCCACCTTGGGCCAGGCTCCTCTCCAGCAGCCTTGGTATGGGGTGGGGGTGGGAAGACCCCTG
ATGCAGCCTGTCCTCTGGGTGTGGGGGTGGAGGAGAGGGCTCCAGGGGACCCAGCCAGCCTTGACCCTGGAGGAA
AGTCAGGTGGGCTCAGAGAGAGCCCTCAAATCTGGGCCCTGGGTCAGGGTGGGGTCAAGTCCAGCCTTGAAGAGA
ATGGACTCTGGAATCTGACGTCTGGGTTTGAATCCAGCTTCCAACACTCACTGGCTGTGTGACTTTGGGCAAGAT
AACTTATCCCCTTGTCCCCATGTGTCATTGGAGATAAACTACCCACCTACCAGATTGTTGTACCATGCTGGGCAA
ACACTAAGTGCTTAATAATGGTAGCCCACTGCTC

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FIGURE 4460

GGAGGCAGGCGGTGCCGCGGCGCCGGGACCCGACTCATCCGGTGCTTGCGTGTGGTGGTGAGCGCAGCGCCGAGG
ATGAGGAGGTGCAACAGCGGCTCCGGGCCGCCGCCGTCGCTGCTGCTGCTGCTGCTGTGGCTGCTCGCGGTTCCC
GGCGCTAACGCGGCCCCGCGGTCGGCGCTCTATTCGCCTTCCGACCCGCTGACGCTGCTGCAGGCGGACACGGTG
CGCGGCGCGGTGCTGGGCTCCCGCAGCGCCTGGGCCGTGGAGTTCTTCGCCTCCTGGTGCGGCCACTGCATCGCC
TTCGCCCCGACGTGGAAGGCGCTGGCCGAAGACGTCAAAGCCTGGAGGCCGGCCCTGTATCTCGCCGCCCTGGAC
TGTGCTGAGGAGACCAACAGTGCAGTCTGCAGAGACTTCAACATCCCTGGCTTCCCGACTGTGAGGTTCTTCAAG
GCCTTTACCAAGAACGGCTCGGGAGCAGTATTTCCAGTGGCTGGTGCTGACGTGCAGACACTGCGGGAGAGGCTC
ATTGACGCCCTGGAGTCCCATCATGACACGTGGCCCCCAGCCTGTCCCCCACTGGAGCCTGCCAAGCTGGAGGAG
ATTGATGGATTCTTTGCGAGAAATAACGAAGAGTACCTGGCTCTGATCTTTGAAAAGGGAGGCTCCTACCTGGGT
AGAGAGGTGGCTCTGGACCTGTCCCAGCACAAAGGCGTGGCGGTGCGCAGGGTGCTGAACACAGAGGCCAATGTG
GTGAGAAAGTTTGGTGTCACCGACTTCCCCTCTTGCTACCTGCTGTTCCGGAATGGCTCTGTCTCCCGAGTCCCC
GTGCTCATGGAATCCAGGTCCTTCTATACCGCTTACCTGCAGAGACTCTCTGGGCTCACCAGGGAGGCTGCCCAG
ACCACAGTTGCACCAACCACTGCTAACAAGATAGCTCCCACTGTTTGGAAATTGGCAGATCGCTCCAAGATCTAC
ATGGCTGACCTGGAATCTGCACTGCACTACATCCTGCGGATAGAAGTGGGCAGGTTCCCGGTCCTGGAAGGGCAG
CGCCTGGTGGCCCTGAAAAAGTTTGTGGCAGTGCTGGCCAAGTATTTCCCTGGCCGGCCCTTAGTCCAGAACTTC
CTGCACTCCGTGAATGAATGGCTCAAGAGGCAGAAGAGAAATAAAATTCCCTACAGTTTCTTTAAAACTGCCCTG
GACGACAGGAAAGAGGGTGCCGTTCTTGCCAAGAAGGTGAACTGGATTGGCTGCCAGGGGAGTGAGCCGCATTTC
CGGGGCTTTCCCTGCTCCCTGTGGGTCCTCTTCCACTTCTTGACTGTGCAGGCAGCTCGGCAAAATGTAGACCAC
TCACAGGAAGCAGCCAAGGCCAAGGAGGTCCTCCCAGCCATCCGAGGCTACGTGCACTACTTCTTCGGCTGCCGA
GACTGCGCTAGCCACTTCGAGCAGATGGCTGCTGCCTCCATGCACCGGGTGGGGAGTCCCAACGCCGCTGTCCTC
TGGCTCTGGTCTAGCCACAACAGGGTCAATGCTCGCCTTGCAGGTGCCCCCAGCGAGGACCCCCAGTTCCCCAAG
GTGCAGTGGCCACCCCGTGAACTTTGTTCTGCCTGCCACAATGAACGCCTGGATGTGCCCGTGTGGGACGTGGAA
GCCACCCTCAACTTCCTCAAGGCCCACTTCTCCCCAAGCAACATCATCCTGGACTTCCCTGCAGCTGGGTCAGCT
GCCCGGAGGGATGTGCAGAATGTGGCAGCCGCCCCAGAGCTGGCGATGGGAGCCCTGGAGCTGGAAAGCCGGAAT
TCAACTCTGGACCCTGGGAAGCCTGAGATGATGAAGTCCCCCACAAACACCACCCCACATGTGCCGGCTGAGGGA
CCTGAGGCAAGTCGACCCCCGAAGCTGCACCCTGGCCTCAGAGCTGCACCAGGCCAGGAGCCTCCTGAGCACATG
GCAGAGCTTCAGAGGAATGAGCAGGAGCAGCCGCTTGGGCAGTGGCACTTGAGCAAGCGAGACACAGGGGCTGCA
TTGCTGGCTGAGTCCAGGGCTGAGAAGAACCGCCTCTGGGGCCCTTTGGAGGTCAGGCGCGTGGGCCGCAGCTCC
AAGCAGCTGGTCGACATCCCTGAGGGCCAGCTGGAGGCCCGAGCTGGACGGGGCCGAGGCCAGTGGCTGCAGGTG
CTGGGAGGGGGCTTCTCTTACCTGGACATCAGCCTCTGTGTGGGGCTCTATTCCCTGTCCTTCATGGGCCTGCTG
GCCATGTACACCTACTTCCAGGCCAAGATAAGGGCCCTGAAGGGCCATGCTGGCCACCCTGCAGCC**TGA**ACCACC
TGGGGAGGAGGCGGGAGAGGGAGCTGCCATCTCTAGGCACCTCAAGCCCCCTGACCCCATTCCCTCCCCTCCCAC
CCCTTGCTCCTTGTCTGGCCTAGAAGTGTGGGAAATTCAGGAAAACGAGTTGCTCCAGTGAAGCTTCTTGGGGTT
GCTAGGACAGAGAGCTCCTTTGACACAAAAGACAGGAGCAGGGTCCAGGTTCCCCTGCTGTGCAGGGAGGGCAGC
CCCGGGCAGTGGGCATAGGGCAGCTCAGTCCCTGGCCTCTTAGCACCACATTCCTGTTTTTCAGCTTATTTGAAG
TCCTGCCTCATTCTCACTGGAGCCTCAGTCTCTCCTGCTTGGTCTTGGCCCTCAACTGGGGCAAGTGAAGCCAGA
GGAGGGTCCCCCAGCTGGGTGGGCTGGAATGGAACTCCTCACTAGCTGCTGGGGCTCCGCCCACCCTGCTCCCTT
CCGGACAATGAAGAAGCCTTTGCACCCTGGGAGGAAGGACCACCCCGGGCCCTCTATGCCTGGCCAGCCTCCAGC
TCCTCAGACCTCCTGGGTGGGGTTTGGCTTCAGGGTGGGGTTTGGAAGCTTCTGGAAGTCGTGCTGGTCTCCCAG
GTGAGGCAAGCCATGGTTGCTGGGCTGTAGGGTGAGTGGCTTGCTTGGTGGGACCTGACGAGTTGGTGGCATGGG
AAGGATGTGGGTCTCTAGTGCCTTGCCCTGGCTTAGCTGCAGGAGAAGATGGCTGCTTTCACTTCCCCCCATTGA
GCTCTGCTCCCTCTGAGCCTGGTCTTTTGTCCTTTTTTATTTTGGTCTCCAAGATGAATGCTCATCTTTGGAGGG
TGCCAGGTAGAAGCTAGGGAGGGGAGTGTCTTCTCTCTCCAGGTTTCACCTTCCAGTGTGCAGAAGTTAGAAGGG
TCTGGCGGGGGCAGTGCCTTACACATGCTTGATTCCCACGCTACCCCCTGCCTTGGGAGGTGTGTGGAATAAATT
ATTTTTGTTAAGGC

FIGURE 4461A

CCCGGAGCCGGTGCGAGGAGGGCACCCGGTGCGTCCCCGGAGCGGGGAGGCCAGGCCGGGCAGCCCTGGGGCCGG
TCGGGGCGGCGTCACTGCACCCTCCGCCAGGCTCCGCGGGATGCACCGTGGTAGCCGAGGGCGGAGGCGACACTC
TCAGGTAAATTGGCAGGATGAGGAGCAGCAAATCAAAAGAGGTGCCTTTACCAAATCCAAGGAACTCTCAAAGCA
AGGATACTGTTCAAGCAGATATAACCACATCGTGGGATGCACTTTCTCAAACCAAGGCTGCTCTGAGACACATTG
AAAATAAATTAGAAGTAGCCCCTACAAGTACAGCTGTGTGTGATTCTGTCATGGATACCAAGAAGTCTTCTACAA
GTGCTACTCGAAAAATAAGTAGAAAAGATGGTAGATACCTGGATGATTCTTGGGTTAATGCTCCAATCTCCAAAT
CCACTAAATCACGAAAAGAGAAATCTCGTAGTCCTCTCAGGGCCACCACCCTGGAGAGTAATGTGAAGAAAAATA
ATCGTGTGGAATTTCGTGAACCTTTGGTTTCTTATAGGGAAATCCATGGTGCACCTTCCAATTTCAGTTCCAGCC
ATCTGGAATCAAAGCACGTATACTGTGTAGATGTTAATGAAGAAAAGACTGAGAGCGGTAACTGGATGATAGGCA
GTCGAGAAGAACGGAATATACGGAGCTGTGATTTTGAGAGCTCCCAATCATCTGTCATCAATGATACAGTTGTTA
GGTTTTTAAATGATCGACCAGCAATTGATGCATTGCAAAATTCTGAATGTTTGATTAGGATGGGAGCTTCTATGA
GAACTGAGGAAGAAATGCCTAACAGAACAAAAGGAAGTGAGAATAATTTGAAGCTTTCTGTGAATAACATGGCCC
ATGATACTGATCCAAAAGCGTTACGACTAACTGACTCTTCTCCATCCTCTACTAGTACTTCTAATTCCCAAAGAT
TAGATATTCTAAAGCGGCGACAACATGATGTCAAACTGGAAAAACTTAAGGAACGGATTAGAAAACAGTGGGAAC
ACTCAGAAGAAACAAATGGCCGGGGCCAGAAGCTGGGTCATATTGACCATCCAGTAATGGTTGTTAATGTTGATA
ACTCAGTAACAGCAAAAGTCAGAAAAGTGGCAACAGCACCACCTGCTCCAGCATATAAAGGTTTCAACCCTTCAG
AGACCAAGATTCGAACACCTGATGGGAAAGTGTGGCAGGAGGCTGAGTTTCAAAACATGAGTAGAGAACTGTATC
GAGATTTAGCACTTCACTTTGCAGATGATATTTCTATAAAGGAGAAACCTGCTGAAAAAAGTAAAGAGAAGAAAG
TAGTCAAGCCAGTACGAAAAGTCCAAAAAGTAGCACAGTTATCAAGTACAGAATGCAGAACAGGTAGTAGTCATC
TTATAAGTACATCTTCTTGGCGAGATGGACAAAAATTAGTAAAGAAGATTCTGGGACCTGCTCCCAGAATGGAGC
CAAAAGAGCAAAGAACAGCATCAAGTGACAGAGGTGGAAGAGAAAGAACTGCTAAATCTGGGGGTCACATTGGAA
GAGCAGAATCTGATCCCAGGTTGGACGTTTTACATAGACATCTTCAAAGAAACTCAGAACGTTCGAGAAGTAAAT
CTCGGTCTGAAAATAATATAAAGAAACTAGCTTCATCTCTTCCAGATAATAAGCAGGAGGAAAATACTGCCTTAA
ATAAGGACTTTTTACCTATTGAAATTCGTGGCATTCTTGATGACCTACAGCTGGATTCTACAGCTCACACTGCAA
AGCAAGATACTGTAGAGTTACAGAACCAGAAGTCATCAGCACCAGTACATGCTCCTAGGAGTCACAGCCCAGTAA
AAAGAAAACCTGACAAAATAACAGCTAATGAAGATCCCCCTGTTATTTCCAAAAGGCGCCACTATGACACAGATG
AGGTACGACAGTACATTGTTAGGCAGCAGGAGGAAAGGAAGAGAAAGCAAAATGAAGAGAAGAAGGCTCAAAAGG
AGGCTACAGAACAGAAAAACAAACGATTACAAGAGCTCTACCGGAAGCAGAAGGAAGCCTTTACTAAAGTAAAAA
ATGTCCCTCCTTCTGAGCCATCAGCAACTAGGCGACTACAGGAAACTTACTCCAAATTGCTACTAGAAAAGACCT
TGCTTGAAGAGCCATCTCATCAACATGTTACGCAGGAAACACAGGCCAAACCAGGGTATCAGCCATCTGGAGAAT
CTGACAAAGAAAACAAAGTACAGGAACGTCCCCCAAGTGCATCTTCCAGTAGTGACATGTCTCTCTCAGAACCTC
CACAGCCTCTTGCAAGAAAAGACTTGATGGAATCTACATGGATGCAGCCTGAAAGATTGAGCCCACAAGTTCACC
ATTCTCAACCACAGCCTTTTGCTGGAACAGCTGGAAGTTTACTCTCCCATCTCTTGAGTTTAGAGCATGTAGGAA
TTTTGCATAAGGATTTTGAATCTATTTTACCAACCAGGAAGAATCATAATATGGCTTCAAGGCCATTAACTTTTA
CACCTCAACCATATGTGACCTCACCAGCTGCTTATACAGATGCCTTGTTAAAACCTAGTGCCAGCCAATATAAGA
GTAAACTGGATCGTATTGAAGCCTTGAAAGCAACAGCTGCTTCTTTGTCCAGCAGAATTGAAAGTGAAGCCAAGA
AATTAGCTGGGGCCAGCATTAACTATGGGTCAGCATGGAACACTGAGTATGATGTGCAGCAGGCACCTCAAGAAG
ATGGACCTTGGACCAAGGCTGTAACTCCACCTGTGAAAGATGATAATGAAGATGTTTTCTCTGCCAGAATTCAGA
AGATGCTGGGAAGCTGTGTATCTCATGCAACTTTTGATGATGATCTTCCTGGTGTAGGCAATCTTAGTGAATTTA
AAAAGCTTCCTGAGATGATAAGACCACAGAGTGCCATATCAAGCTTTAGAGTGAGATCCCCTGGTCCCAAACCAG
AAGGGCTACTGGCACAGTTATGTAAAAGGCAGACTGACTCTTCTAGCTCTGATATGCAAGCCTGTTCTCAAGACA
AAGCCAAAATATCTCTTGGTTCCAGCATAGATTCAGTCAGTGAAGGGCCTCTTCTTAGTGAGGGGAGTCTCTCTG
AAGAAGAGGGAGACCAGGATGGACAGCCCCTTTTGAAAGTAGCAGAAATTTTAAAAGAAAAGGAATTTTGTCCTG
GAGAAAGAAATAGTTATGAACCCATCAAAGAGTTTCAGAAAGAAGCTGAAAAATTCTTGCCACTTTTTGGGCACA
TAGGTGGTACACAAAGCAAAGGACCATGGGAAGAATTGGCAAAGGGAAGTCCACATAGCGTCATTAATATTTTTA
CAAAATCCTATCAGTTATATGGAAAAGGGTTTGAAGACAAGTTGGACAGAGGAACATCAACATCACGGCCTTTGA
ATGCCACCGCAACTCCTCTAAGTGGTGTTTCATATGAAGATGATTTTGTCTCCTCTCCAGGGACTGGGACTTCGA
CAGAAAAAAAATCAACTCTTGAACCTCATAGCACTTTAAGCCCTCAGGAGGACCATTCTAACAGAAAGTCTGCCT

FIGURE 4461B

ATGATCCTTCCTCTGTGGATGTTACCTCCCAGCATTCATCAGGAGCCCAGTCTGCTGCATCGTCTCGTTCATCTA
CTTCTTCTAAAGGAAAGAAAGGAAAAAAGGAAAAGACAGAATGGTTGGATTCATTCACTGGAAATGTTCAGAACT
CACTTCTTGATGAGGAAAAAGCAGAACGTGGCTCCCATCAAGGAAAGAAATCTGGGACCAGCAGCAAACTTTCTG
TTAAAGATTTTGAGCAGACTCTTGATACAGATAGCACTTTGGAGGATCTTTCTGGACATTCTGTGAGTGTCTCAT
CAGATAAGGGAAGATCTCAGAAAACTCCAACTTCTCCCCTGTCACCAAGTTCCCAGAAATCATTGCAGTTTGACG
TTGCAGGAACTTCTTCAGAAAGATCTAAGTCGTCAGTAATGCCTCCAACTATAACAGGATTTAAGCCTAATGCAC
CTCTCACTGATCTGAACCCGGCAGCCAGCAGAACAACGACAGAGAACATGGCTCCAATACCAGGTTCTAAGCGCT
TTTCTCCTGCTGGCCTCCATCATCGTATGGCAGCAGAACTCAGTTATCTGAACGCCATTGAGGAGTCGGTGCGCC
AACTGTCAGATGTAGAAAGAGTTAGAGGCATTTCACTTGCTCAGCAGGAGAGTGTGTCTCTAGCTCAGATAATAA
AGGCACAACAGCAACGCCATGAAAGAGACTTGGCCCTCTTGAAACTAAAGGCTGAACAAGAGGCTCTGGAGAGTC
AGAGACAATTAGAAGAAACCCGAAACAAAGCAGCTCAGGTCCATGCAGAATCATTACAGCAGGTGGTTCAATCAC
AACGGGAAGTAACTGAAGTCCTGCAGGAAGCAACGTGTAAAATAGCAGCTCAGCAGTCAGAAACTGCTCGCCTCA
CCACAGACGCAGCACGTCAAATCTGTGAGATGGCAGAGTTGACTAGAACTCATATCTCAGATGCTGTCGTGGCTT
CAGGAGCTCCCCTTGCAATACTGTATGACCACCAACGGCAGCACCTTCCAGACTTTGTGAAACAGCTGAGGACCA
GAACTGAAACAGATAGGAAAAGTCCATCTGTTTCACTCTCTCAGAGTAAAGAAGGGACCCTTGACTCAAAGCATC
AGAAGTATTCTGCTTCATATGATAGTTATTCTGAGTCTTCAGGATACAAGAATCATGATAGAAGAAGTAGCAGTG
GTAGCAGCCGCCAAGAAAGTCCTTCAGTTCCATCTTGTAAGGAAAATGAGAAGAAACTTAATGGTGAAAAGATAG
AGAGTTCCATTGATGAACAGGTTCAGACTGCTGCAGATGATTCTCTACGAAGTGATAGTGTTCCATCTCTTCCTG
ATGAAAAAGACTCAACGTCTATTGCAACAGAATATTCTCTGAAATTTGATGAATCCATGACAGAAGATGAAATAG
AAGAACAATCATTTCGATCATTACTACCTTCAGAGAGTCACCGCAGATTTAACATGGAAAAGAGAAGAGGTCATC
ATGATGACTCTGATGAAGAAGCTTCTCCAGAAAAAACTACACTGTCTACTGCCAAGGAACTGAACATGCCATTCT
CAGGAGGACAAGATAGCTTTTCTAAATTTACTATGGAGATGGTTCGACAGTATATGAAAGAGGAAGAAATGAGGG
CAGCTCACCAGTCTTCACTCCTGCGTCTCCGTGAAAAGGCCTTGAAGGAGAAGACTAAGGCTGAATTGGCCTGGT
TAGAGCATCAAAAAAAACATCTACGAGACAAAGGAGAGGATGATAAAATGCCCCCGCTCCGGAAGAAACAGCGTG
GTTTGCTTTTAAGGTTGCAGCAAGAAAAGGCAGAAATAAAACGTCTTCAAGAAGCCAATAAGGCAGCTCGGAAGG
AAAGACAGCTGATTCTTAAACAGCAGGAGGAGATAGAAAAGATCCGACAGACCACCATAAAACTACAGGAGAAAT
TGAAGTCTGCAGGGGAGAGTAAATTGGACTCTCATAGTGATGATGATACAAAGGATAATAAGGCAACCAGTCCTG
GTCCAACTGACTTGGAGACCCGCAGTCCTTCTCCCATTTCAATCTCCAGCAGTGAAACTAGCAGCATTATGCAGA
AACTGAAGAAAATGAGAAGCCGCATGGATGAAAAGTTTCTGACAAAGCGGGAGCAAAAATTAATGCAACGGCGAC
AACATGCAGAGGAGCTCCTAGAGTGGAAGCGACGTTTAGATGCAGAAGAAGCAGAAATTCGTCAAATGGAAAAAC
AAGCTTTGGCTGCCTGGGACAAAGAATTAATAAAACCCAAAACTCCTAAGAAAGAACTGGAGGACCAGAGAACAG
AACAGAAAGAAATAGCAAGTGAAGAGGAATCTCCAGTACCTCTGTACTCTCATCTAAACAGTGAAAGCTCCATTC
CAGAAGAATTAGGCAGCCCTGCTGTTGAATATGTACCATCCGAGTCTATAGGACAGGAGCAGCCAGGGAGTCCAG
ATCACAGTATACTTACTGAAGAAATGATTTGTTCACAGGAACTAGAATCTTCTACCTCTCCTAGTAAACATTCAC
TTCCCAAAAGCTGCACATCTGTGTCAAAGCAGGAGTCTAGCAAAGGAAGTCATAGGACTGGAGGACAATGTCACC
TGCCTATCAAGTCCCATCAGCACTGTTATAGTTGGTCAGATGAGTCATTATCTATGACACAGTCAGAAACTACAT
CTGACCAGAGTGATATTGAAGGTAGGATCAGAGCTCTGAAGGATGAGTTGCGGAAAAGAAAATCAGTTGTGAACC
AGCTGAAGAAGGAACAGAAAAAAAGGCAAAAGGAAAGACTGAAAGCCCAAGAAGCCAGTCTGATCAAGCAGTTAG
AGTCATATGATGAATTTATTAAGAAAACTGAAGCCGAGCTTAGCCAAGATTTGGAAACATCACCAACAGCCAAGC
CTCAGATTAAAACGCTCTCCTCAGCTTCTGAAAAACCCAAGATCAAACCCCTCACACCACTACACAGATCTGAAA
CGGCAAAGAATTGGAAATCACTAACAGAGTCAGAACGTTCCAGAGGATCCCTGGAGTCTATTGCTGAACATGTTG
ATGCTTCACTGTCTGGTTCTGAGAGATCAGTATCAGAAAGGTCTTTATCTGCATATGCAAAGAGAGTAAATGAAT
GGGACAGTCGAACAGAAGATTTTCAGACCCCATCTCCAGTTCTCAGATCATCAAGGAAAATCAGAGAAGAATCTG
GAGATTCTCTAGAAAATGTACCTGCATTACATCTTCTCAAAGAATTAAATGCCACTAGTAGAATTCTTGATATGT
CAGATGGCAAGGTTGGAGAATCTAGTAAAAAATCAGAAATAAAAGAAATAGAGTATACAAAATTGAAGAAGAGTA
AGATTGAAGATGCCTTTTCTAAAGAAGGTAAATCTGATGTCTTACTGAAATTAGTCCTAGAACAGGGAGATTCAT
CTGAAATTCTTTCAAAGAAAGATCTTCCTTTAGATTCTGAAAATGTTCAGAAAGACCTAGTTGGATTAGCTATTG
AAAATCTCCATAAAAGTGAGGAAATGTTGAAAGAGAGACAGTCAGATCAAGATATGAATCATAGTCCAAACATCC

FIGURE 4461C

AATCAGGAAAAGACATTCACGAACAAAAGAACACAAAGGAAAAAGATTTGTCTTGGTCAGAACATCTTTTTGCTC
CTAAAGAGATACCATACTCTGAAGATTTTGAAGTGTCTTCTTTCAAGAAAGAAATTTCAGCTGAATTGTACAAAG
ATGATTTTGAGGTGTCATCTTTGCTGTCACTCAGGAAAGACTCTCAGTCTTGCAGAGATAAGCCACAGCCAATGA
GGAGCTCTACAAGTGGAGCCACTAGCTTTGGTAGTAATGAGGAAATCAGTGAGTGCCTAAGTGAGAAAAGCCTTT
CTATCCATAGCAATGTTCATTCTGACAGGCTGTTGGAACTCAAGTCCCCTACTGAGCTGATGAAAAGTAAGGAGC
GCAGTGATGTGGAGCATGAACAGCAAGTTACTGAATCCCCTTCCTTGGCTTCAGTTCCTACTGCAGACGAGTTAT
TTGATTTCCACATTGGTGATAGGGTGTTGATTGGAAATGTTCAGCCAGGAATTCTTCGATTCAAAGGTGAGACTA
GTTTTGCTAAAGGATTTTGGGCCGGAGTGGAGTTAGATAAACCTGAAGGAAATAACAATGGAACATATGATGGTA
TTGCATATTTTGAGTGCAAAGAAAAGCATGGTATTTTTGCTCCTCCTCAAAAAATATCTCACATTCCAGAAAACT
TTGATGACTATGTAGACATTAATGAAGATGAAGACTGTTACTCAGATGAACGATATCAGTGCTATAATCAAGAGC
AAAATGATACAGAGGGTCCAAAAGACAGAGAAAAGGATGTCAGTGAATATTTTTATGAGAAATCCCTACCTAGTG
TGAATGATATAGAAGCCTCAGTTAATAGAAGTAGAAGCCTTAAAATAGAAACAGACAATGTACAGGACATTTCTG
GGGTACTTGAAGCCCATGTTCACCAGCAGTCTTCAGTGGATTCACAGATTTCTTCAAAGGAAAACAAAGACCTCA
TTTCTGATGCCACAGAAAAGGTTTCCATCGCTGCAGAAGATGACACTTTAGACAATACCTTTTCCGAAGAATTGG
AGAAGCAACAGCAGTTTACAGAAGAGGAAGACAACCTATATGCTGAAGCTTCAGAAAAGCTTTGTACACCACTTC
TGGATCTTTTAACAAGAGAAAAAAACCAACTGGAAGCCCAGCTGAAGTCATCACTAAATGAGGAAAAAAAGTCAA
AACAACAACTGGAAAAAATCAGCTTACTGACAGACAGTTTACTAAAAGTCTTTGTAAAGGACACAGTCAATCAAC
TACAACAAATCAAAAAAACCAGGGATGAGAAAATCCAGCTTAGCAATCAGGAGCTTCTTGGTGATGACCAAAAGA
AAGTAACACCCCAAGACCTATCCCAAAATGTTGAGGAACAGTCGCCAAGTATTTCAGGTTGCTTCTTAAGTTCTG
AATTGGAAGATGAAAAAGAAGAGATTTCCTCTCCAGATATGTGTCCCAGACCGGAGAGCCCAGTATTTGGTGCCA
GTGGGCAGGAAGAACTTGCTAAGAGACTTGCTGAACTTGAACTCAGCCGGGAGTTCCTGAGCGCGTTAGGAGATG
ATCAAGACTGGTTTGATGAAGACTTTGGTTTGAGCTCTTCTCACAAGATCCAAAAAAATAAGGCAGAAGAAACCA
TTGTACCTCTAATGGCAGAACCTAAAAGAGTAACCCAACAACCATGTGAAACATTATTGGCAGTCCCCCATACTG
CAGAAGAAGTAGAGATTCTTGTACATAATGCAGCAGAAGAACTTTGGAAATGGAAAGAATTAGGCCACGATCTTC
ATAGCATCAGTATTCCTACAAAACTGCTTGGCTGTGCCAGTAAAGGTCTAGATATAGAAAGCACTAGTAAAAGGG
TCTACAAACAGGCGGTTTTTGATTTAACAAAAGAGATTTTTGAGGAAATATTTGCTGAGGATCCCAACTTAAATC
AACCTGTCTGGATGAAGCCATGTAGAATCAACTCTAGTTATTTCCGACGAGTGAAAAATCCAAATAACCTTGATG
AAATCAAGAGCTTCATAGCAAGTGAAGTACTCAAGTTGTTCAGTCTTAAAAAGGAGCCAAACCACAAAACAGATT
GGCAGAAAATGATGAAATTTGGAAGAAAGAAAAGAGACCGAGTGGATCATATCCTGGTTCAGGAGCTCCATGAGG
AGGAGGCACAGTGGGTGAACTATGATGAGGATGAGTTGTGTGTGAAAATGCAGCTAGCCGACGGGATCTTTGAGA
CCCTGATCAAAGATACTATTGATGTTCTGAATCAGATCAGTGAAAAGCAGGGGAGAATGCTACTTGTGTGACATC
TTGCAAATAAATCGAACGCTGAGTGCTAATGTGAGTCCTGGGCCTTTCTGCCTCCTGATGTACACCCATCGCCAT
CATAGCAAGAGTGCTTCTGGACCTTGTACTTATTCTTAAAGACTACCAGTATGGAGTTCATAGGACAATGTGGTA
CACCTGGTATTACAGCCTTTGCCTTTCGAGACTATCCACTGGATTAATGGGTTATTTTCAGTGGGCAGGGTTGCA
CAGTGTAATCCTACACCTTTTGCTAACACCCCTACTAGGTCCCAGAGGGCCAGAAACACCTGACTTACCTCTGAG
TTTAGACTAGGGTATCACTTCTTTGAGTCTGAAGTCAAGTGAGAGAGGTATAGATAAATGCATCACATCACTTTT
GAAATGTAATTCTGGTCTATACCATGGAAGTCATAAATGGACATTATAGTCTCTAAACAGTATTAAACCCTTAAC
CACTTCTAAAATAGGCAAGCTCAATAATGTCTGCCAACTTCACATTCTGGAGTTTATTTCATTTCTTTTTGAAGA
CCATTTTCTTCCATTATTGTAGTTGAGCAGCACCAAGTGGACTGTCAGGCTAACAGGAATAAGTGGTAGCCTTGC
TTTCTGAGCACCATCTAAAGAATTTTAAACCTCTGCATTATGTTTAGTGTTCTCTGTGTGGGCATGAAAACAAAG
AAATGCCCCTACTGAAGACTGGGCTCAAAGGACCAATGCAGGGCTGGTTCTTTTACCCCTTGGTTTACTCCTGCA
CTTGTCTTACTCATTCTGAATCTCTACCAGCTGCTCCCAGAATCACAGATACTCAGGACCATCTCAGGCATCCAG
GCATGGCAAAGTGGAAATAATTCATTTTGGCCTGCAAACCTTCAACTCCCATCTTTCCCCAAGAAGTCAGAGATG
CTGTTACTTGAATGATTTAGGAAATGAGTGTGTGCACCAAAGACAAAAAGATATTGTCTATTGTTTGTGTGCTTG
TTTTGCGCTATGGAACATTTTTTAATTTATTTTAAGATAAATTATTAAGTTGAAAATGTGTGTCCCTATTCAGAA
GTGAAAGATTCATCTTGTAATAGTTAAACCTCCATCTTGAAGCTTCTATGGTTCATAGTCTTTGCACAGGAACCT
GTGGTTTTAACAAACCAATACACATATTGAAGAAGTCATTTTAATTCAGTGAAACGAAGATGGGCTTTTCCAGAT
CACCTGCAATAGCAGCAGTGGGATAAAATGATTTAAAAACACTGTACAATTTAACTCTGCCTCTCTTGCAGCATT

FIGURE 4461D

GCTTCTCACAACTATTACCTGCATCTGAAAAAAAATCTATAGACTCCAGCTGCTACATTAGAGCATAAGAGATGC
TCTCCTGGGACCTCAGTACCCTGCCTTCTTGACTGGTTTCCGTTCATCAGTCCTGTCCCTCTTCAAGTAATCTAG
AAGAATGTGGATACTCTTAGGCGTGAATGTAAATGCCTTAATATTGAAGGTCCTGGTTAGAAGCATGATACAAGA
CATCTACTGGATTCATATTTACAAATATCCTGGAATGTTATAGCTTCAAAGTATATTAGAAAAACCCCAAAGATG
GTATAATCTTTAAGTGTGCACGTTCGTTTATTTCTGCATCTTCCCTCCAAACTTGCCTTTGCATCTTAAATATTT
CACTATGCACACTCCCATTCCTCTTGGGTTTCATCTTGTCGTTTAAGAAATGTACTGAAATAATCATTGGAATAT
TTGCATTTTGCACAATGACTGGTATGATAGCTCTTGACAAATAAGGAAAGCACTGAAATGTTGTGATTGGGTCTC
GGGAAATGCTCAGATTGATGTCTTACCAGCATTTCTTCTGGGCTTGTGATGTTGAGCTGTAGTCTTGTAGCCATA
ATGAGCAAATTGACTAAGAGAAGCAAAGGTTTCTTGGGGTTATTAACCAGTAGTGTGGAAATACTAGTTTTATGT
GGCCAAGGAAAAGCAAAGGCTTTTCTTTTCAGTTTGTGTTATTTGGAAGACAGAAAAACATCTTGTCTACATCCT
TTGGCTGTTTGTAGGATCACGTTGTCCTTACGATACTGAAACTTTACAGCTGCTGTAAATTTTTTATAAATGAAT
TTCAAAATGTTATAATGGGACTGTAGGTTGTTTTTCTACATCTTCATTATTTGGACCTAAAACCAGTTTTTAATA
AGAAAGTTTATCTTTACTCTTTCTGAAATTATGACTCCAG

5145/5332

FIGURE 4462

ATGTCGGACACGTGGAGCTCTATCCAGGCCCACAAGAAGCAGCTGGACTCTCTGCGGGAGAGGCTGCAGCGGAGG
CGGAAGCAGGACTCGGGGCACTTGGATCTACGGAATCCAGAGGCAGCATTGTCTCCAACCTTCCGTAGTGACAGC
CCAGTGCCTACTGCACCCACCTCTGGTGGCCCTAAGCCCAGCACAGCTTCAGCAGTTCCTGAATTAGCTACAGAT
CCTGAGTTAGAGAAGAAGTTGCTACACCACCTCTCTGATCTGGCCTTAACATTGCCCACTGATGCTGTGTCCATC
TGTCTTGCCATCTCCACGCCAGATGCTCCTGCCACTCAAGATGGGGTAGAAAGCCTCCTGCAGAAGTTTGCAGCT
CAGGAGTTGATTGAGGTAAAGCGAGGTCTCCTACAAGATGATGCACATCCTACTCTTGTAACCTATGCTGACCAT
TCCAAGCTCTCTGCCATGATGGGTGCTGTGGCAGAAAAGAAGGGCCCTGGGGAGGTAGCAGGGACTGTCACAGGG
CAGAAGCGGCGTGCAGAACAGGACTCGACTACAGTAGCTGCCTTTGCCAGTTCGTTAGTCTCTGGTCTGAACTCT
TCAGCATCGGAACCAGCAAAGGAGCCAGCCAAGAAATCAAGGAAACATGCTGCCTCAGATGTTGATCTGGAGATA
GAGAGCCTTCTGAACCAACAGTCCACTAAGGAACAACAGAGCAAGAAGGTCAGTCAGGAGATCCTAGAGCTATTA
AATACTACAACAGCCAAGGAACAATCCATTGTTGAAAAATTTCGCTCTCGAGGTCGGGCCCAAGTGCAAGAATTC
TGTGACTATGGAACCAAGGAGGAGTGCATGAAAGCCAGTGATGCTGATCGACCCTGTCGCAAGCTGCACTTCAGA
CGAATTATCAATAAACACACTGATGAGTCTTTAGGTGACTGCTCTTTCCTTAATACATGTTTCCACATGGATACC
TGCAAGTATGTTCACTATGAAATTGATGCTTGCATGGATTCTGAGGCCCCTGGCAGCAAAGACCACACGCCAAGC
CAGGAGCTTGCTCTTACACAGAGTGTCGGAGGTGATTCCAGTGCAGACCGACTCTTCCCACCTCAGTGGATCTGT
TGTGATATCCGCTACCTGGACGTCAGTATCTTGGGCAAGTTTGCAGTTGTGATGGCTGACCCACCCTGGGATATT
CACATGGAACTGCCCTATGGGACCCTGACAGATGATGAGATGCGCAGGCTCAACATACCCGTACTACAGGATGAT
GGCTTTCTCTTCCTCTGGGTCACAGGCAGGGCCATGGAGTTGGGGAGAGAATGTCTAAACCTCTGGGGGTATGAA
CGGGTAGATGAAATTATTTGGGTGAAGACAAATCAACTGCAACGCATCATTCGGACAGGCCGTACAGGTCACTGG
TTGAACCATGGGAAGGAACACTGCTTGGTTGGTGTCAAAGGAAATCCCCAAGGCTTCAACCAGGGTCTGGATTGT
GATGTGATCGTAGCTGAGGTTCGTTCCACCAGTCATAAACCAGATGAAATCTATGGCATGATTGAAAGACTATCT
CCTGGCACTCGCAAGATTGAGTTATTTGGACGACCACACAATGTGCAACCCAACTGGATCACCCTTGGAAACCAA
CTGGATGGGATCCACCTACTAGACCCAGATGTGGTTGCACGGTTCAAGCAAAGGTACCCAGATGGTATCATCTCT
AAACCTAAGAATTTATAG

FIGURE 4463A

GGGTCTGAGACGGTGGGAGCGGTTGTGTGAAGATGGAGTTTCCCGGAGGAAATGACAATTACCTGACGATCACAG
GGCCTTCGCACCCCTTCCTGTCAGGGGCCGAGACATTCCATACACCAAGCTTGGGTGATGAGGAATTTGAAATCC
CACCTATCTCCTTGGATTCTGATCCCTCATTGGCTGTCTCAGATGTGGTTGGCCACTTTGATGACCTGGCAGACC
CTTCCTCTTCACAGGATGGCAGTTTTTCAGCCCAGTATGGGGTCCAGACATTGGACATGCCTGTGGGCATGACCC
ATGGCTTGATGGAGCAGGGCGGGGGGCTCCTGAGTGGGGGCTTGACCATGGACTTGGACCACTCTATAGGAACTC
AGTATAGTGCCAACCCACCTGTTACAATTGATGTACCAATGACAGACATGACATCTGGCTTGATGGGGCATAGCC
AGTTGACCACCATTGATCAGTCAGAACTGAGTTCCCAGCTGGGTTTGAGCCTAGGGGGTGGCACCATCCTGCCAC
CTGCCCAGTCACCTGAAGATCGTCTTTCAACCACCCCTTCACCTACTAGTTCACTTCACGAGGATGGTGTTGAGG
ATTTCCGGAGGCAACTTCCCAGCCAGAAGACAGTCGTGGTGGAAGCAGGGAAAAAGCAGAAGGCCCCAAAGAAGA
GAAAAAAGAAAGATCCTAATGAACCTCAGAAACCAGTTTCAGCATATGCTTTATTCTTTCGTGATACACAGGCTG
CCATCAAGGGACAGAATCCTAATGCCACTTTTGGTGAGGTTTCAAAAATTGTGGCCTCCATGTGGGATAGTCTTG
GAGAGGAGCAAAAACAGGTATATAAGAGGAAAACTGAGGCTGCCAAGAAAGAGTATCTGAAGGCACTGGCTGCTT
ACAAAGACAACCAGGAGTGTCAGGCCACTGTGGAAACAGTGGAATTGGATCCAGCACCACCATCACAAACTCCTT
CTCCACCTCCTATGGCTACTGTTGACCCAGCATCTCCAGCACCAGCTTCAATAGAGCCCCCTGCCCTGTCCCCAT
CCATTGTTGTTAACTCCACCCTTTCATCCTATGTGGCAAACCAGGCATCTTCTGGAGCTGGGGGTCAGCCCAATA
TCACCAAGTTGATTATTACCAAACAAATGTTGCCCTCTTCTATTACTATGTCTCAAGGAGGGATGGTTACTGTTA
TCCCAGCCACAGTGGTGACCTCCCGGGGGCTCCAACTAGGCCAAACCAGTACAGCTACTATCCAGCCCAGTCAAC
AAGCCCAGATTGTCACTCGGTCAGTGTTGCAGGCAGCAGCAGCTGCTGCTGCTGCTTCTATGCAACTGCCTC
CACCCCGACTACAGCCCCCTCCATTACAACAGATGCCACAGCCCCCGACTCAGCAGCAAGTTACCATTCTGCAGC
AGCCTCCTCCACTCCAGGCCATGCAACAGCCTCCACCTCAGAAAGTTCGAATCAATTTACAGCAACAGCCTCCTC
CTCTGCAGATCAAGAGTGTGCCTCTACCCACTTTGAAAATGCAGACTACCTTAGTCCCACCAACTGTGGAAAGTA
GTCCTGAGCGGCCTATGAACAACAGCCCTGAGGCCCATACAGTGGAGGCACCTTCTCCTGAGACTATCTGTGAGA
TGATCACAGATGTAGTTCCTGAGGTTGAGTCTCCTTCTCAGATGGATGTTGAATTGGTGAGTGGGTCTCCTGTGG
CACTCTCACCCCAGCCTCGATGTGTGAGGTCTGGTTGTGAGAACCCTCCCATTGTGAGTAAGGACTGGGACAATG
AATACTGCAGCAATGAGTGTGTGGTGAAGCACTGCAGGGATGTATTCTTGGCCTGGGTAGCCTCTAGAAATTCAA
ACACAGTGGTGTTTGTGAAATAGTCCTTCCTGTTCTCCAAGCCAGTGAAGAGTTATCTGCTGGGAAAGTGTCCAA
GAGCCTGTTTTTGAAACACAAGCTGGGCTTCTGGTAGTGCCTCATCACAACCCATGATGGCTGTTCATGTTTCAC
CCCTTTTCTTCCTTCAGCAGAGGCCAGGCTATGGAGCAGGGCCACTGAATTTGCTGTAATCTGGAGATGCTTTTT
ACTTTCAACCATAAGCGGTAATAGCAGAGGAAAGGGTGAAGGGAGTCTGGGCAAGCAAAGCATAGAGATGGTGGG
GTGGTGGTGGGGTTGAAGAAACTTGTTGGTATAATTGTCATAGGACTTGCCTAAAATATTATTAAAATTACGGGA
GTGTACTCAGCTTTGAGCCTAGGAGAAAATGCCACTGTGTGCATCCATTTTAAAGGGTTCCCTCATAAAAAAATG
TTATTCCCCATTATCACATCAGTACACTGCTTTGAAAACAAAACTTTTCAACATGGGCATACTGGGCTACATGGA
AAATGACATCACCCAGGAGTGATTTCTCTTTATATATATTATTTCTGCAGTTACCATCCTTATCTGAGTTATCAC
AGTTCATGAATCTAAGAGGCGGAACTCTACATCATTAGTAAGAGGTTCCACCAAAGTCTAAAGTTGTATTCACTT
GTGTTTGATGAACTATCTTTAAAAGACCATAGGTCTATCATTATTTCTTAGACATAATCTAAAGAAAAACAGACT
AGAGAAGCCACCTGGTTGTAACAGAATAAGCAGAAGTTTACAGCATGATAGTCCAAGTGGTGATAACTTTAAATA
AAACTCAAATTTTTACTGTTTGTAGACAGGAATGCTGTCCTAGAGAACCTCCTCCTCAACCAGCTACGTACATAG
TTTTATCCTATGCATTCCTGTTTTCTGTGTGTTTTTTGTTTTTTTTTTTTTTTTTTTTTGAGACAGAGTCTC
GCTCTGTCACCCAGGCTGGAGTGCAGTGGTGCGACCTCAGCTCACTGAAACCTCTGCCTCCCGGGTTCAAGCGAT
TCTCCTGCATCAGCCTCCCGAGTAGCTAGGATTACAGGCGCCCGCCACTACGCCCAGCTAATTTGTGGTATTTTT
AGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTCGAACTCCTGACCTCATGATCCGCCCGCCTTGACCT
CCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCACCCAGCCTGCATTCCTGTTTTTTTAATGGTTTTGGAGGG
TAGCAGTAGAGATGGGGTCTCACTATGTTGCCCAGTCTAGTCTTGAACTCCTGGGCTACAGTTACCCTCCTACCT
CGGCTTCCCAAAGTGCTCGGATTACAGGTGTGAGCCACTGTGCCTAGCCTATAATGATCATTTTAATGTTTCCCA
TGCACTCATTTAGTTTGAACCTTCACAGCAACCCAATGAGGTAATACTCCCATTTCACATATAATACTGAGAGAT
GAGTTGCACAAGATTATACACTGTTAAGTAGCAGAGCCAGAATGGACTTCAGAATCCCAACTACAATACAAATGT
TTATTTAAATAAAGAAGAAAGCTATTGTACAAATATCACTCTTCAGGTTTAGCTTACAGAGCCATGGCTATGGAT
TCTTAGCTCTGTAAGGAAGTGCTTCTATAAATTCTTAGGTTTAGAGATGATACCATCTGGGTACCTTTGCTTGAA

FIGURE 4463B

CCGTGCAACCACATCTGGGTCTAGTAGGTGGATCCCATCCAGTTGGTTTCCAAGGGTGATCCTGAAACAGTGTAA
AAGGAGGGGCAAACCAGAAATCCTGGAATTAGAGGGTTTAATATTGTTAAAAAATGCATACCAAATGAAGACTGC
CTATCATCATATCAAATATGCCAATTCTAAAAAAGAGCTTAACATTAGAATAGTATATGGTAGAATTACTAGTTCA
GAATTGGCATAGATTCTGGTGTTAAAATAGACTGGATCTGTATTATCTGAGGGTTAGTAACTAATGCTTAGCCAG
GCCTGCTTCACAGAGTTGCTACCAGGGAGTATTCTTTGGATAAGCAAAATGCTAGCAGCATGTGTTTTAAGCTCT
GTTAAGGGGTGAAAGATGTAATTATTGACAGATTAAATAGATAACTTCGTAACCACCAGGGGGCAGATTCAATAC
ATCACAGAATGGCTGAGGAAGATCCTTGGGTTGTGAAGAGAGTAGAAACCCTAGGGAGCAGTGCTTTTGGGTCCT
AGAACCTGTTGAGTTTCTAATGAATATTTGTAGAATCTCATAAAACAGTTTAAATACAAGCTT

FIGURE 4464A

CCAAAGGGGCAGGTCATACCAACATGCCTAATCTACTTAACACAATGATGGAGTTGCGCAAGTGCTGCAACCACC
CATATCTCATCAATGGTGCTGAAGAAAAAATCCTAACAGAATTCCGTGAAGCTTGCCATATTATACCTCATGACT
TTCACCTGCAGGCCATGGTTCGTTCAGCCGGCAAACTGGTTCTTATTGACAAGTTGCTTCCAAAGCTTAAAGCTG
GTGGCCATAAAGTTCTGATCTTCTCTCAGATGGTGCGCTGCCTAGACATCCTAGAGGATTATTTAATCCAGAGGA
GGTACTTATATGAACGTATTGATGGGCGAGTTAGAGGCAACCTTCGACAGGCTGCCATTGACCGCTTCAGCAAGC
CTGACTCAGACCGCTTTGTCTTCTTACTGTGTACCCGGGCTGGTGGACTTGGTATTAATCTTACAGCTGCTGATA
CCTGCATCATCTTTGATTCAGACTGGAATCCACAAAATGACCTGCAGGCCCAGGCACGATGTCATCGAATTGGGC
AGAGCAAAGCTGTGAAGGTGTACCGCCTCATCACTCGTAATTCCTACGAGAGAGAGATGTTTGATAAGGCCAGCC
TCAAGTTGGGGTTGGATAAGGCTGTGCTTCAATCCATGAGTGGTCGGGATGGCAACATTACTGGAATCCAACAGT
TCTCTAAGAAGGAGATTGAAGATCTTTTAAGAAAAGGAGCATATGCAGCCATCATGGAGGAAGATGATGAAGGCT
CCAAGTTTTGTGAAGAGGACATTGACCAGATCTTGTTAAGACGAACTACAACCATCACCATTGAATCTGAAGGAA
AAGGTTCCACCTTTGCTAAGGCAAGCTTTGTTGCTTCTGAAAACAGGACAGATATTTCTTTGGATGACCCCAACT
TTTGGCAAAAGTGGGCCAAAAAGGCTGACCTAGACATGGATCTGCTCAACAGCAAGAATAATTTGGTAATTGACA
CACCTAGAGTACGAAAACAAACGCGCCACTTTAGCACTCTGAAAGATGATGACCTGGTGGAATTCTCTGATTTGG
AAAGTGAGGATGATGAGCGGCCACGCTCCCGCAGACATGACCGTCATCATGCCTATGGGCGCACTGACTGCTTTC
GGGTGGAAAAGCATCTCCTGGTATATGGTTGGGGACGATGGCGAGATATTTTATCTCATGGACGCTTCAAGCGAC
GTATGACTGAACGAGATGTGGAGACCATTTGTCGGGCCATTCTCGTGTACTGTCTTCTACACTACCGTGGGGATG
AAAATATTAAAGGCTTCATCTGGGACTTGATTAGCCCAGCTGAAAATGGCAAGACAAAAGAATTGCAGAATCATT
CAGGTCTATCTATCCCTGTGCCTCGTGGACGCAAAGGAAAAAAAGTAAAGTCACAAAGCACTTTTGATATCCATA
AGGCAGATTGGATCCGGAAATATAACCCTGACACTTTGTTCCAAGATGAAAGTTATAAGAAGCACTTGAAACATC
AGTGTAACAAGGTACTGTTGCGGGTACGAATGCTATACTACCTGAGGCAGGAGGTTATTGGAGACCAAGCAGAAA
AGGTGTTAGGGGGTGCGATTGCCAGTGAGATTGACATATGGTTCCCAGTAGTGGATCAACTGGAGGTTCCAACAA
CTTGGTGGGACAGTGAGGCTGACAAGTCGCTGCTCATTGGAGTCTTTAAACATGGCTATGAGAAATATAATACCA
TGAGGGCAGACCCAGCCTTATGTTTCCTAGAAAAGGCTGGCCGACCAGATGACAAAGCAATTGCAGCAGAACATC
GAGTGTTGGATAACTTCTCTGACATAGTAGAAGGGGTTGACTTTGATAAAGATTGTGAAGATCCTGAATATAAAC
CACTCCAAGGTCCCCCAAAGGACCAAGATGATGAGGGTGATCCCTTGATGATGATGGATGAGGAGATCTCAGTGA
TTGATGGAGATGAAGCCCAGGTGACCCAACAGCCAGGCCATTTATTCTGGCCTCCGGGCTCTGCCCTAACAGCTA
GGCTTCGGCGTCTAGTAACAGCGTATCAGCGCAGCTACAAGAGAGAACAAATGAAGATAGAGGCTGCAGAACGTG
GGGACCGGCGAAGGCGGCGTTGTGAAGCAGCCTTCAAGCTGAAAGAAATTGCACGGCGGGAGAAACAACAACGAT
GGACAAGGCGTGAACAAACTGATTTTTATCGAGTGGTGTCTACGTTTGGTGTGGAATATGACCCTGACACCATGC
AGTTCCATTGGGATCGCTTCCGCACTTTTGCTCGACTAGACAAAAAGACAGATGAAAGCCTTACCAAGTACTTCC
ATGGCTTTGTGGCCATGTGCCGCCAAGTATGCCGCCTTCCCCCAGCAGCTGGAGATGAACCCCCCGACCCTAACC
TGTTCATTGAGCCCATCACTGAGGAGAGAGCCTCACGGACTCTCTACCGTATAGAATTGCTTCGGCGCTTACGGG
AACAAGTTTTATGCCACCCCCTTTTGGAAGATCGGCTGGCATTGTGTCAGCCTCCTGGTCCTGAATTGCCCAAAT
GGTGGGAGCCTGTTCGGCATGATGGGGAGCTTCTAAGAGGGGCAGCCCGCCATGGGGTGAGCCAAACAGACTGCA
ACATCATGCAGGACCCAGACTTCTCTTTTCTGGCTGCCCGTATGAATTATATGCAGAACCATCAAGCAGGAGCAC
CAGCTCCATCCTTGTCACGCTGCTCTACTCCACTGCTGCACCAGCAGTATACCTCACGCACTGCCTCACCACTGC
CCCTGCGCCCAGATGCTCCTGTTGAAAAGTCACCCGAGGAGACAGCTACCCAGGTCCCCAGTCTGGAGAGTCTGA
CTTTAAAGCTAGAGCACGAGGTGGTGGCCAGGAGCCGACCAACCCCACAAGACTATGAGATGCGAGTATCCCCCT
CTGATACTACCCCTCTGGTTTCCCGGAGTGTTCCACCAGTCAAACTGGAGGATGAGGATGATTCGGACTCTGAGC
TGGACTTGAGCAAGCTGTCACCATCTTCTTCTTCTTCCTCATCCTCATCCAGCTCCAGCTCCAGCACTGATGAGA
GTGAGGATGAGAAGGAAGAGAAGCTAACTGACCAGTCCCGCTCAAAGCTCTATGATGAAGAGAGTCTCCTGTCCC
TCACTATGTCCCAAGATGGATTCCCAAATGAAGATGGAGAACAAATGACCCCTGAGCTTCTGCTACTGCAGGAAA
GACAAAGAGCCTCTGAGTGGCCCAAGGATCGTGTCCTGATAAACCGTATTGACCTCGTCTGCCAGGCTGTACTCT
CAGGGAAGTGGCCTTCTAGCCGTAGGAGCCAGGAAATGGTAACAGGAGGAATTTTGGGGCCAGGCAACCACTTGC
TAGACAGTCCCTCATTGACTCCTGGAGAATATGGTGACTCTCCAGTCCCCACACCACGAAGTAGTAGTGCAGCTT
CCATGGCAGAGGAGGAAGCATCTGCAGTCAGCACAGCGGCAGCCCAGTTCACCAAACTTCGCCGAGGCATGGATG
AAAAGGAGTTTACAGTTCAAATCAAAGATGAGGAAGGATTGAAGTTAACATTCCAGAAGCACAAGTTGATGGCGA

FIGURE 4464B

ATGGAGTAATGGGAGATGGACATCCACTGTTTCATAAGAAGAAGGGGAACAGAAAGAAGCTAGTAGAGCTGGAGG
TGGAGTGCATGGAAGAGCCTAATCACCTTGATGTGGACCTGGAGACCCGGATCCCTGTCATCAATAAGGTGGATG
GTACTTTGCTGGTGGGTGAGGATGCCCCTCGCCGGGCTGAACTGGAGATGTGGTTACAGGGTCATCCAGAGTTTG
CTGTTGATCCCCGATTTCTAGCGTATATGGAGGATCGCAGAAAACAGAAGTGGCAAAGATGTAAAAAAAAATAATA
AGGCAGAATTGAACTGTTTGGGAATGGAACCAGTACAGACAGCTAACTCTAGAAATGGGAAAAAGGGTCATCACA
CTGAAACGGTGTTCAACCGGGTTTTGCCAGGGCCTATTGCACCAGAGAGCAGCAAGAAGCGGGCCCGTAGGATGC
GACCAGACCTTTCTAAGATGATGGCCCTCATGCAGGGTGGAAGCACTGGGTCTCTATCTCTGCATAACACGTTCC
AACACAGCAGTAGTGGCCTACAGTCTGTGTCATCTTTGGGTCACAGCAGTGCCACTTCTGCATCTTTGCCTTTTA
TGCCATTTGTGATGGGTGGTGCACCATCATCCCCTCATGTAGACTCCAGCACCATGCTTCATCACCACCACCACC
ACCCCCACCCCCACCATCACCACCATCACCATCCAGGCTTGAGAGCCCCTGGCTACCCCTCTTCACCAGTGACTA
CCGCCTCTGGTACTACCTTGCGGTTGCCACCACTGCAACCTGAGGAGGATGACGATGAGGATGAAGAAGATGATG
ATGACTTATCTCAGGGCTATGATAGCTCAGAAAGGGACTTCTCACTCATTGATGATCCTATGATGCCAGCTAACT
CAGACTCCAGTGAAGATGCTGATGACTGAAGCCCCAGCATGGGCCCCATTGCTTGGGCGGCTGCTGTATTTTCAT
TTACTCTGGCCCTTGGACTATGGAAACGTGGGAGGGGCAGGGGAGATGTGGGGAAGTCCAGGACTCCAGGAGGTG
AAAAGGAAAAAAAAAAAAAAATGTACCTGATTGCTCCCAATTATGAGAGGATTGGGTGGGCAGGGGAACTCCTAA
AATAATACATGACCACTTCCTCATTTCTGGGGAAGGAAAGGAGACTAGAGCAGCTGGTGTGCTCACCCCTCCCTA
GTCACCTCCATTAACCACAGACTATGTAGCGCTGGCCCTAGCCTCTGGCAGAGCCTGTTCCTGGCCGAACTGTGG
ATACAGCTGGAGGGTCAGGAACTGTTACCTTCTTTCCCCTTGGCATTAATAAATTTAAGTTAATCCTT

FIGURE 4465A

GGCAGACCGTCACGTGACGACGTCGATTCGCGTGCGGCAGTGGCGAAGTTGACAAACCCCGCGAAAATCGACTCT
TTGCATCGCACATTTTGTTGATTTTCCCTCGTTTTTCTTTCTCTCTTTCCCCCGTCCATCCGAAAGAGGGTTGGA
AAAAAACAAAACAAACAAACAAACAAAAAAAAAAACCTAACGCTGTTGGGACCCGGAAGCGGAAAGGGCATCTTTG
AGGTCGATACTTCCGGGTCATTGGGAGAGTGCGGGATTCCTGGGCCGAGAGCGGGTGGCTGAGCCGGGACCTCGC
GTGATTCTCGGAACCCGAGGAGAAGCGGCGTCCGGGGCTATGGCTGTGACTCTGGACAAAGACGCTTATTATCGG
CGAGTGAAGAGACTGTACAGCAATTGGCGGAAAGGAGAAGATGAGTATGCCAACGTTGATGCCATTGTTGTATCA
GTGGGTGTTGATGAAGAAATTGTTTATGCCAAATCAACTGCCTTACAGACATGGCTCTTTGGTTATGAACTAACT
GATACTATCATGGTCTTTTGTGATGACAAAATCATCTTTATGGCCAGCAAGAAAAAAGTGGAGTTCTTGAAACAG
ATTGCCAACACTAAGGGCAATGAGAATGCTAATGGAGCCCCTGCCATCACACTGCTAATACGAGAAAAGAATGAA
AGTAATAAGAGTAGCTTTGACAAAATGATTGAAGCCATTAAAGAAAGCAAGAATGGCAAGAAGATTGGAGTGTTC
AGCAAAGACAAATTCCCTGGAGAGTTCATGAAGAGCTGGAATGACTGCCTCAACAAAGAAGGCTTTGACAAAATA
GATATCAGTGCAGTTGTGGCATATACCATCGCTGTAAAGGAGGATGGGGAGCTCAACCTAATGAAGAAAGCAGCC
AGCATCACTTCTGAAGTCTTCAACAAATTCTTCAAGGAAAGAGTCATGGAAATAGTTGATGCAGATGAGAAAGTT
CGACACAGCAAACTGGCTGAGTCTGTGGAAAAGGCCATTGAAGAGAAAAAATACCTTGCTGGGGCAGACCCTTCT
ACTGTGGAAATGTGTTACCCTCCTATCATTCAGAGTGGTGGCAACTATAATCTCAAGTTCAGTGTGGTGAGTGAC
AAGAATCATATGCACTTTGGGGCTATCACTTGTGCCATGGGTATTCGCTTCAAGTCTTACTGCTCCAACCTTGTT
CGCACTTTGATGGTTGATCCTTCTCAAGAAGTTCAAGAAAATTATAACTTTTTGCTCCAGCTTCAAGAGGAGCTG
CTGAAGGAATTAAGACATGGTGTGAAGATATGTGACGTGTATAACGCTGTCATGGACGTGGTTAAAAAGCAGAAG
CCAGAACTGCTGAACAAAATTACCAAAAACCTAGGGTTTGGGATGGGAATTGAATTCCGTGAAGGCTCCCTAGTA
ATCAATAGCAAAAATCAATACAAACTGAAGAAAGGAATGGTTTTCAGCATCAATTTAGGATTCTCAGACCTGACT
AACAAGGAGGGGAAAAAGCCAGAAGAGAAAACCTATGCCCTGTTCATTGGTGACACAGTGCTTGTGGATGAGGAT
GGCCCAGCTACTGTTCTCACTTCTGTGAAGAAGAAAGTGAAGAATGTGGGGATTTTCCTAAAGAATGAAGATGAG
GAAGAAGAGGAGGAGGAGAAAGATGAGGCAGAGGACCTTTTGGGAAGAGGTTCTCGGGCAGCATTACTTACAGAA
AGAACAAGAAATGAAATGACTGCAGAAGAGAAGCGAAGAGCACATCAGAAAGAACTAGCGGCTCAACTCAATGAA
GAAGCAAAGAGGCGATTGACTGAACAAAAGGGAGAACAGCAGATTCAGAAAGCTCGCAAGTCTAATGTGTCCTAT
AAAAACCCATCTCTGATGCCTAAGGAACCACATATTCGGGAAATGAAGATCTACATCGATAAGAAATATGAGACT
GTAATAATGCCCGTGTTTGGCATTGCAACACCGTTTCACATTGCCACAATCAAGAATATAAGTATGTCCGTGGAA
GGAGATTATACTTACTTGCGAATCAACTTTTATTGCCCAGGCAGTGCTCTGGGCAGGAATGAAGGCAACATCTTT
CCTAACCCTGAAGCGACTTTTGTCAAGGAAATTACATACCGAGCATCAAATATTAAGGCACCCGGAGAACAGACA
GTACCAGCCTTGAACCTTCAGAATGCTTTCCGAATTATTAAAGAAGTACAGAAACGTTATAAAACTCGAGAAGCT
GAAGAGAAAGAGAAGGAGGGGATTGTAAAACAAGACTCACTGGTGATCAATCTAAACCGGAGTAATCCGAAACTG
AAAGATCTATACATTCGCCCAAATATTGCCCAAAAGAGGATGCAAGGCTCACTGGAGGCCCATGTCAATGGCTTC
CGCTTCACATCTGTTCGAGGAGACAAAGTGGATATTTTGTACAATAATATTAAGCATGCTTTGTTCCAGCCCTGT
GATGGAGAAATGATTATTGTCTTGCACTTTCACCTCAAGAATGCCATCATGTTTGGGAAGAAGCGGCACACGGAT
GTGCAGTTCTACACAGAAGTGGGAGAGATAACCACGGACTTGGGGAAACATCAGCATATGCATGACCGAGATGAC
CTCTATGCTGAGCAGATGGAACGAGAAATGAGGCACAAACTGAAAACAGCCTTTAAAAATTTCATTGAGAAAGTA
GAGGCTCTAACTAAGGAGGAACTGGAATTTGAAGTGCCTTTTAGGGACTTGGGATTTAACGGAGCTCCCTATAGG
AGTACCTGCCTCCTTCAGCCCACTAGTAGTGCGCTGGTAAATGCTACGGAATGGCCACCTTTTGTGGTGACATTG
GATGAGGTAGAGCTGATCCACTTTGAGCGGGTCCAGTTTCACCTGAAGAACTTTGATATGGTAATCGTCTACAAG
GACTACAGCAAGAAAGTGACCATGATCAACGCCATTCCTGTAGCCTCTCTTGACCCCATCAAGGAATGGTTGAAT
TCCTGCGACCTGAAATACACAGAAGGAGTACAGTCCCTCAACTGGACTAAAATCATGAAGACCATTGTTGATGAC
CCTGAGGGCTTCTTCGAACAAGGTGGCTGGTCTTTCCTGGAGCCTGAGGGTGAGGGGAGTGATGCTGAAGAAGGG
GATTCAGAGTCTGAAATTGAAGATGAGACTTTTAATCCTTCAGAAGATGACTATGAAGAGGAAGAGGAGGACAGT
GATGAAGATTATTCATCAGAAGCAGAAGAGTCAGACTATTCTAAGGAGTCATTGGGTAGTGAAGAAGAGAGTGGA
AAGGATTGGGATGAACTGGAGGAAGAAGCCCGAAAAGCGGACCGAGAAAGTCGTTACGAGGAAGAAGAAGAACAA
AGTCGAAGTATGAGCCGGAAGAGGAAGGCATCTGTGCACAGTTCGGGCCGTGGCTCTAACCGTGGTTCCAGACAC
AGCTCTGCACCCCCCAAGAAAAAGAGGAAGTAACTTCTGAACTTTGGCCCTGAGCTCCATTCTTCCTCCAGCCAA
CCCCTGAAAATTTTACATGACATAGAAACTGTATTTTTCCTTTCGTTTTCATTTGAAGTTTTGCCATTTGTGTTT

FIGURE 4465B

ATGGGTTTAGGGGGCCATTTGTGTGGACCAATCTACTCGGGGAATTCCAGGCCCACCAGGACACGTGCCAATGGC
CCCATTCAGATGGCAAGGGAGGAGGTGTTCTTGAAGACAGGAGGAGGCTCCCGCTGTTAATAAATATTGTTTCAT
TCTTCTCTCTTCCTGTCACCTTCTGCCAAGACATTGATGGCTTCTGACATCTTATTTGGTGTCTCAAAGCTGTAT
TTCCAAGACAGTGGTACAAGGTGACCCTTAATTACCCGTATCATGGTTCTTGACCAGCACATTCAATCCTCCAAC
CTACCCTACTGCCATGACCTTCCGCACATCTCTAAGTTTTATCTTTGCAATACTCAAGGTTCTCGGAAATTTGCT
AATGGTTGTGATAAACCATACAGCTTGAGCCAGTGAGGCAGATTGGGCTGGTGCCTTCGTCTGAGTTTTCCTGCT
TTCCTGCCTCGTGCAGATTCTGAGGTATATCTGCTGCCTTGGAAGACATAAGAAGCAGTGATACTCCCTGGCTCG
GTTATTTTCTCCATACAATGCACACATGGTACAATGATAGAAGGCAAAATTGCCACTGTCTTCTTTTTTTTCTCA
TATATCTAAGGAAGATATATCAGGTTGTGCCTCATGTACCGCTTCTAGTGAAATGTAGAGGAAGGCTCAAAGGAG
TCAACATTTATATCTGGAAGGGACAAGTCATGCCTTGGGCCTAGAATACCCTGATGAGAAAAGAGAAGAGGAAGG
GAGGCCATATCTACAACACAGCCTCTCGGCACTGCTGCTCCTTATTTTAACTTTGTCTTGCATTGTCCTGTATTT
ATCACAGTTTCTGTTGAACAGCTTTTCAAGTATTTGGGGAGTTTATCTTGCCATCCTCCCCTTCTGGTTCTCTGC
ACCCACCTGTCCCACTGCAGTTCCTTCCGTGCTCTGTGACTTTAAGAGAAGAAGGGGGGAGGGGTCCCGGATTTT
ATGTTTGTTTGTTTTTTCTCCTTAGCAGTAGGACTTGATATTTTCAATTTTGGAAGAACTAAAAGATGAATAAAC
TGGGTTTTTTTTGTTGTTTGTTTTTGT

FIGURE 4466

TTTTGTGAAGAGACGAAGACTGAGCGGTTGTGGCCGCGTTGCCGACCTCCAGCAGCAGTCGGCTTCTCTACGCAG
AACCCGGGAGTAGGAGACTCAGAATCGAATCTCTTCTCCCTCCCCTTCTTGTGAGATTTTTTTGATCTTCAGCTA
CATTTTCGGCTTTGTGAGAAACCTTACCATCAAACACGATGGCCAGCAACGTTACCAACAAGACAGATCCTCGCT
CCATGAACTCCCGTGTATTCATTGGGAATCTCAACACTCTTGTGGTCAAGAAATCTGATGTGGAGGCAATCTTTT
CGAAGTATGGCAAAATTGTGGGCTGCTCTGTTCATAAGGGCTTTGCCTTCGTTCAGTATGTTAATGAGAGAAATG
CCCGGGCTGCTGTAGCAGGAGAGGATGGCAGAATGATTGCTGGCCAGGTTTTAGATATTAACCTGGCTGCAGAGC
CAAAAGTGAACCGAGGAAAAGCAGGTGTGAAACGATCTGCAGCGGAGATGTACGGGTCAGTAACAGAACACCCTT
CTCCGTCCCCTCTACTCAGCTCCTCTTTTGACTTGGACTATGACTTTCAACGGGACTATTATGATAGGATGTACA
GTTACCCAGCACGTGTACCTCCTCCTCCTCCTATTGCTCGGGCTGTAGTGCCCTCGAAACGTCAGCGTGTATCAG
GAAACACTTCACGAAGGGGCAAAAGTGGCTTCAATTCTAAGAGTGGACAGCGGGGATCTTCCAAGTCTGGAAATG
AAAGGAGATGACCTTCAGGCCATTAAGAAGGAGCTGACCCAGATAAAACAAAAAGTGGATTCTCTCCTGGAAAAC
CTGGAAAAAATTGAAAAGGAACAGAGCAAACAAGCAGTAGAGATGAAGAATGATAAGTCAGAAGAGGAGCAGAGC
AGCAGCTCCGTGAAGAAAGATGAGACTAATGTGAAGATGGAGTCTGAGGGGGGTGCAGATGACTCTGCTGAGGAG
GGGGACCTACTGGATGATGATGATAATGAAGATCGGGGGGATGACCAGCTGGAGTTGATCAAGGATGATGAAAAA
GAGGCTGAGGAAGGAGAGGATGACAGAGACAGCGCCAATGGCGAGGATGACTCTTAAGCACATAGTGGGGTTTAG
AAATCTTATCCCATTATTTCTTTACCTAGGCGCTTGTCTAAGATCAAATTTTTCACCAGATCCTCTCCCCTAGTA
TCTTCAGCACATGCTCACTGTTCTCCCCATCCTTGTCCTTCCCATGTTCATTAATTCATATTGCCCCGCGCCTAG
TCCCATTTTCACTTCCTTTGACGCTCCTAGTAGTTTTGTTAAGTCTTACCCTGTAATTTTTGCTTTTAATTTTGA
TACCTCTTTATGACTTAACAATAAAAAGGATGTATGGTTTTTATCAACTGTCTCCAAAATAATCTCTTGTTATGC
AGGGAGTACAGTTCTTTTCATTCATACATAAGTTCAGTAGTTGCTTCCCTAACTGCAAAGGCAATCTCATTTAGT
TGAGTAGCTCTTGAAAGCAGCTTTGAGTTAGAAGTATGTGTGTTACACCCTCACATTAGTGTGCTGTGTGGGGCA
GTTCAACACAAATGTAACAATGTATTTTTGTGAATGAGAGTTGGCATGTCAAATGCATCCTCTAGAAAAATAATT
AGTGTTATAGTCTTAAGATTTGTTTTCTAAAGTTGATACTGTGGGTTATTTTTGTGAACAGCCTGATGTTTGGGA
CCTTTTTTCCTCAAAATAAACAAGTCCTTATTAAACCAGGAATTTGGAG

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FIGURE 4467

ACACCGGCGTGCTCGCAAGAGGCGGGAAAGCGTTAGGGAGAGACGCGGGTCGCAGGGTCCCTCCCTCTGCCTGCC
CTATCTACCCGCCTGCCCAGCGAGCCTGTCCATCTTCAGCGCCCAGGCCCTAGGGGAGGGGACGAGAAAGGCCCC
GCGCTTCTGACTCATCATCTCCAACCCCTTTCTCGCGCGCGCTCCAAGTCTCAGGACTTCGGACCTGGGCCCTCC
TGCGAGGGGGTGCGGCGACAGCATCTGGGAAGCCCCAGCTCTGCCAAGCGTCAGCTCCGAGCCCTCGCCAGTCTC
TGAAGCTGCCAGCGCAGGGCTGGGGACCCAGATCCAGCTCTCTATTGCAGTGGCTGGGGGAGCGGCACGCCAGTG
CAGGACCGCCCGCCCGGCTCCTCCCCGAACGCGGGGCCAGTGGTCGCGTCCGAGAAAGCGCCAGGCTAGGCCCCG
ACTTCCCCGCCTCGCGTCACTCAGCACATCCAACAGCGCCCCTACCGCGGAGAGAAGGCTCTTTATTTCCTAGCC
GGTCACGGGCTAGCGGGGCATCCTGGGACTTGTAGTCTCCGCTACAGTAGAAAGGAGATGGATCGAAAGGGGAAC
TGGGGCACTCCTGAATTGGATTCAGGGAGTTGGCGTGTGCAGGGTCCGGGATTTGGAGTGGATGGGATTATGAAA
GGTGGACAGAAAAGAAAAGTGCGATGAGGCAAATGTGAAGCTGTATGGGGAGGTGACAGGAAGAGAGGATATGGA
TGCAAGGGAGAAAGCAGCTTTTCAGGGTGGTGAGGTGAGGATATATTCTCGTCCAGGTGTATCTTCCCCTAACAG
GGAAGGAACGAAAAAAGGGCCTGCTTTGAGTGAAAACTGAAGGCACTCCCGGACTTCCTATTGGACTCGAAGGAT
CCCAGCAAGCTTCTGAGTTTGGTGGGGTGGGATGCAGGAATGTCTGGAGAGCATTCTCTCAGGGTGGAAGGAGAG
CAGCACGTGTCTGTTCCCGCTGTCCCACCCTCTCATTTGCTCCTGTGCTGGCCACCGTGGGACCATTCTCCAAAC
CAGGAACCTCTTCCAACTCAGAGAAGCCCTGAAAACCAGAGACAGGTGTGAGCAAATTGTAGAGGTGAGAAAGGA
GAAACCCCAGACAGAAACAACTGCTTCCTCCTGCCCAATTTTCTATCCTGTTTCCCATAGTCCTGCCAATATTTA
GGCAGCTTCCTAATGCTTTCCCACTCTTTTAACCTCAATCATTTGGATTCCCAGTTTCCTCTTACCCACCATTAG
GGGAGAAATGTTCAAAGCCAGAGAAAGCCAATCAGTTTCATTCTAGGACCTCTTCTTTTCTCTCCTGCCCCATTA
TTTTCCCTTAAGTGCCACTGACCAGGATAGGCAGTGGAAAAATTAGTTGGCAGCTAGCTATTCGTGCTTTCTTCC
CTGCCCCCATACCTCCTGCAGCTCTTGATAGTGCAGACTCTGGCTCCTGCAGCATCCTGGTTTCCTCTGGCTCAG
CAAGAATAGGGCGTGCACTGAGACCAGCACTCCCCCTAGGGTGAAGGCCTCAGCACTGAGTTCCAGCACCAGCAA
GCCAGC**ATG**CTGCAGGTAGACAGGGCTGAGAATGCAGGGACCCCGCACCTGTTTGCCCCTGCCCTTTTCCCTTCC
CACCTCCTCTTGCCTCCTTATCCTCCCACCTTCTCCTTCATTGACCAGTACCTGGGAGGAGGCAGTTGGGGCAGG
CCCCAAGGCTGTCTTCATCACCTCGACCACCACCACTATGAAACCCAAGATCAAGTTGAAGGTGTTGAATATCAT
CATGGCCCGCACCTGCCAGTGAGCCAGCTCAGCCCTGCCCAGCCTAGGGGAGTCATTCCAACCTCAATCCCCACT
TGCAGCCTAGCTGAAGACAAAACTCAGCTTCTGCTTCTCAGCCTCCAAACAGGGCCA**TAA**GCCCTCTTAACTTTT
TTGCTTTCCTCCTCAGTGATTGAGGCCAGTCAGTGGTGACAGCTGAGAGAATGAGTCAACACTTAGCCACTTACT
TCCTAGGCTGAGGGTTGTAGGTGTCTGTTTTAGGGAGTGGGAGGACAGTGCTGCGTTTTCTTCCCTCTCACCTTC
CAAAGGCGGGGTGCTCTGCGAAGCTCCAGAGTGACAGTCCCAGTGAGGAGACCCTGAATGGTGAGAAGGGCAAGT
GTTGAGCTCTGGTCCCGTTAGGAAGGGGCCCTGGGACCTTCCACCCTCCCTTGTGGTGGGTCTTACTGAGGCTCC
AGGCCCAAGAGGCAGCGCTGTGGCCATGTGACAATCAGAGTTCAGGCAGGCGACTGAGACAGCAAGGGGCACCAC
AACCACTGCCAGCCATAGCTGGCTCACCTGGGGGTAAGGGTAGGGTAATTGGGGAGGAACTGTCAGGGATTCCCT
CCCTTCTCGTAACTCCTACCTCTTTAGAGATCAGGAAATGGGATTGAATGCAGGGTGGAGGAAAGCAGTCAACCC
AGAGCAAGGACGTGATCATTAAAAATTAAGTATCATTT

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FIGURE 4468

GCACCCCGCCCCTGGCGGCCGCCTCTCGCGGCTCCCGGGGTCCCCAGCTCCCTGTCCCCGGAGCCAGAGCCCGGC
TCCCGCGCGGCTCCCAGCCCCGCCGCGCCGCCCCCCGCATGCTAATGGCCGGGCCGCCTCCCGCCGCACACAATG
CGGGCCAGGGCCGGGGGCGGGGGACCGGGGAGGGGGCGGGGGCCGGGCCGGGGGCGGGGGGGCCGGGGCCCGGCG
CATCTCCCCCGGCCCCACGTAACGCTGACGCCCGCGCCGCCGGCCCGCCGCCCGCCGCCGCCGCCGCCGCCG
CCCGCTCCGCCGCCGCCCGCCCGGGGCTCCTCCACAGCACCTGTTGCCTTCATTAGCAGCTTTTCCTCCTCTTCC
CTGCACTTCCCAGAACCAAAGAATGTGAAGGGGGTCC**ATG**GAGGGCTCACGTCCCCGCGCCCCGAGCGGCCACTT
AGCGCCGTCGCCGCCGGCTTTCGACGGCGAGCTGGATCTGCAGCGATACTCCAACGGGCCAGCCGTGAGCGCAGG
GTCGCTCGGGATGGGAGCGGTGAGCTGGTCTGAGAGTCGTGCAGGCGAACGGCGCTTCCCCTGCCCTGTATGCGG
GAAGCGCTTCCGCTTCAACTCTATCCTTGCTTTGCACCTGCGGGCGCACCCAGGAGCCCAGGCCTTCCAGTGCCC
TCACTGCGGCCACCGCGCGGCGCAGCGGGCTCTGCTGCGCTCGCACCTGCGCACACACCAGCCCGAGCGCCCACG
TAGTCCTGCTGCACGCCTGTTGCTGGAGTTGGAAGAGCGCGCGCTACTACGCGAGGCCCGACTGGGGAGAGCCCG
AAGCTCAGGGGGCATGCAGGCCACCCCTGCCACTGAGGGTCTGGCGCGGCCCCAGGCTCCTTCATCGTCCGCCTT
CCGTTGCCCCTACTGCAAAGGCAAGTTTCGCACCTCGGCGGAGCGCGAACGCCACCTGCACATCCTGCATAGGCC
CTGGAAGTGCGGCCTGTGCAGTTTCGGCTCCAGCCAGGAGGAGGAGCTGCTGCACCACAGCCTGACGGCCCACGG
GGCTCCCGAGCGTCCCCTGGCGGCCACCTCCGCTGCGCCTCCGCCTCAGCCTCAGCCTCAGCCTCCACCCCAGCC
CGAACCCAGATCAGTCCCCCAGCCGGAGCCGGAGCCGGAGCCCGAACGTGAGGCAACCCCGACCCCAGCTCCTGC
CGCTCCCGAGGAGCCCCCAGCGCCTCCGGAGTTCCGCTGCCAAGTGTGCGGCCAGAGCTTTACACAGTCTTGGTT
TCTCAAGGGCCACATGCGTAAGCACAAGGCCTCCTTCGATCATGCGTGTCCGGTGTGCGGCCGCTGCTTCAAGGA
GCCCTGGTTCCTTAAGAACCACATGAAGGTGCACGCCAGCAAGCTGGGCCCACTGCGTGCCCCGGGGCCTGCCTC
CGGGCCTGCCCGCGCCCCCCAGCCTCCTGACCTCGGCCTGCTGGCCTATGAGCCGTTGGGCCCAGCGCTCCTCTT
GGCCCCGGCTCCCACCCCGGCCGAGCGCCGTGAGCCCCCGAGCCTCTTGGGCTACCTGAGCCTGCGAGCTGGCGA
GGGCCGGCCCAACGGCGAGGGTGCTGAGCCCGGTCCCGGCCGCAGCTTCGGAGGCTTCCGCCCGCTGTCCTCTGC
TCTCCCGGCCCGGGCTCGCCGGCACCGTGCGGAGGAGCCTGAGGAAGAAGAGGAGGTGGTGGAGGCCGAGGAGGA
AACCTGGGCCCGGGGCAGGTCGCTGGGCTCTCTGGCTTCCCTGCACCCGCGCCCGGGTGAGGGACCGGGGCACTC
TGCCTCTGCTGCTGGGGCCCAGGCAAGATCGACCGCCACGCAGGAAGAGAATGGGCTGTTGGTTGGAGGGACCCG
GCCTGAAGGGGGCCGGGGCGCCACCGGCAAGGATTGTCCTTTCTGCGGAAAATCTTTCCGCTCAGCACATCACCT
CAAAGTGCATCTGCGAGTGCACACAGGCGAGCGGCCCTACAAGTGTCCGCACTGCGACTACGCGGGCACCCAGTC
CGGCTCGCTCAAGTATCACCTACAGCGCCACCACCGGGAGCAGAGGAGCGGGGCCGGCCCCGGGCCACCCCCGGA
GCCACCGCCTCCTTCCCAGCGGGGTTCGGCCCCGCAATCTGGAGCCAAGCCGTCTCCGCAGCCTGCGACCTGGGT
GGAGGGCGCCTCAAGTCCCCGGCCTCCTTCTAGCGGTGCTGGGCCGGGGTCCCGTCGGAAGCCCGCCAGCCCTGG
GAGGACCCTGCGCAACGGGCGAGGCGGTGAGGCCGAACCCCTGGACCTGTCCTTGCGGGCAGGGCCGGGAGGCGA
GGCCGGGCCTGGGGGTGCCCTCCACCGCTGCCTCTTCTGCCCGTTCGCCACTGGAGCCCCAGAGCTCATGGCCTT
GCACCTTCAAGTGCACCACAGCCGCCGGGCTAGGGGCCGCCGGCCACCCCAGGCTGACGCGTCCCCGCCCTATGC
CCGAGTACCATCAGGAGAGACCCCTCCCAGTCCTTCGCAGGAAGGGGAGGAGGGCTCCGGGCTGTCCAGACCCGG
AGAGGCAGGGCTGGGGGGGCAAGAACGG**TAG**TGGGCCCTCAGGGGCGATTAGCTTAGTGAGCTTACCCCGCCGGA
GCGGGGGAGCGCTAGAGGTAGTTGGGTAGAGAAGCCAGCAGGGGGCAGCGTGGGACCCATATCCCAGCCCCAGGC
GGACCAGAGGTGGAAGGCGCGGCGGGCGTAGGAGGGTGGGCTGGCGGTACCCACCCAGCCCAAGGGAGTCACAGT
GCCTTAGAAGTGGCAGAGGTGAGGGTCAAAGAACGGGGTCCCTGGGCTGGCAGAGAAGGTTTGTGTCCCTGTTGA
GGAGCCACTCTGCCAGTCTTTGCTGGTCCATAGGCGTGAGAGTTTATTTTTGTACAAGGGGTGAGGGTGGGGGGC
ACTGTACCCTTCTAGCCCCATCAGGGGCCCTGTAGACGTCGCTATTTTTGGTACGATTCCTGTCATCCCTATTGC
AGAGTCGTGTCCCCAATAAACAGGTGTCTTGAGGCACAGG

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FIGURE 4469

CGGCCCCCCGCATTCCCCGCCCCCACCTCCCCGCCTTGTTGTCCAACTTCTCCCGGAGCAGCCGGAGAGCAGGCG
TCGGGACGCAGCAAAGAGAGGAGAGGCCACCATGGCGGAGCTGCAGGAGGTGCAGATCACAGAGGAGAAGCCACT
GTTGCCAGGACAGACGCCTGAGGCGGCCAAGGAGGCTGAGTTAGCTGCCCGAATCCTCCTGGACCAGGGACAGAC
TCACTCTGTGGAGACACCATACGGCTCTGTCACTTTCACTGTCTATGGCACCCCCAAACCCAAACGCCCAGCGAT
CCTTACCTACCACGATGTGGGACTCAACTATAAATCTTGCTTCCAGCCACTGTTTCAGTTCGAGGACATGCAGGA
AATCATTCAGAACTTTGTGCGGGTTCATGTGGATGCCCCTGGAATGGAAGAGGGAGCCCCTGTGTTCCCTTTGGG
ATATCAGTACCCATCTCTGGACCAGCTTGCAGACATGATCCCTTGCGTCCTGCAGTACCTAAATTTCTCTACAAT
AATTGGAGTTGGTGTTGGAGCTGGAGCCTACATCCTGGCGAGATATGCTCTTAACCACCCGGACACTGTTGAAGG
TCTTGTCCTCATCAACATTGATCCCAATGCCAAGGGTTGGATGGATTGGGCAGCCCACAAGCTAACAGGCCTCAC
CTCTTCCATTCCGGAGATGATCCTTGGACATCTTTTCAGCCAGGAAGAGCTCTCTGGAAATTCTGAGTTGATACA
AAAGTACAGAAATATCATTACACATGCACCCAACCTGGATAACATTGAATTGTACTGGAACAGCTACAACAACCG
CCGAGACCTGAACTTTGAGCGTGGAGGTGATATCACCCTCAGGTGTCCTGTGATGCTGGTGGTAGGAGACCAAGC
ACCTCATGAAGATGCAGTGGTGGAATGTAACTCAAAACTGGACCCCACCCAGACCTCGTTCCTCAAGATGGCTGA
CTCCGGAGGTCAGCCCCAGCTGACTCAGCCAGGCAAGCTGACCGAGGCCTTCAAGTACTTCCTGCAAGGCATGGG
CTACATGGCCTCATCCTGCATGACTCGCCTGTCCCGGTCTCGTACAGCCTCTCTGACCAGTGCAGCATCCGTTGA
TGGCAACCGGTCCCGCTCTCGCACCCTGTCCCAGAGCAGCGAGTCTGGAACTCTTTCTTCGGGGCCCCCGGGGCA
CACCATGGAGGTCTCCTGTTGAATGGCCCTTGTTGCCCTAGAGTGGGACCCAGCCCTCACCTCCCCCAGAGCTAA
CCTGGGAGGTGCTGAAGGGGCATTGGGCCACCGTAAGCAAGGGAAAAAGGGCAGATCATGCGGGGAGATGACCTT
GATCTTTGATTGCTACCCTAACCTTGACCTTTAACCCGTGATTCCCCCCAGCTCCTGGAAGAGATGTCCTAATAT
CTCTTAGGGACCCAGACCCCTAAATTCTCCTCCTCCCCCATTTTGATGTTAAGGTGGAGAGGGCATATGCATCCT
CTGTCCTGATCTAGGTGTCTATAGCTGAGGGGTAAGAGGTTGTTGTAGTTGTCCTGGTGCCTCCATCAGACTCTC
CCTACTTGTCCCATATTTGCAAGGGGAGGGGATTTGGGGCTGGGGCTCCATTCACCAAAGCTGAGGTGGCTTCTC
ATTAACCCTTTAGGACTCTGAAGGGTATGGACCTACGTGAATGTGTGTCAGGGGGAGACTTGCTGGTGGGTTAGT
GGTCCTCAGGATGTGATAGAAACATCCAGTGTAAAAAGGAAGTTGGAATGGGAGTTGGCGGGCAGTGAACGAGTG
TGGGGAAGGATTGGTGCTGGGGCAACAGGAAGGGGCCTGGGGCCGTTTGGCTGCACTAACTTTGGTAGCTCAGTG
TGCATCTAGAGTGGGACTGGGGAGGGAGCTAAGCTTGGGCTGGGCTGCTTGGGGCTTGGCATAGGGTGGAAAGGG
CTACCCTGGGGCTCTGACCACACTGTAGTATGTGTGGAGGGTGCCCTCCCGTCTCCCACAACTTCTGCTATAACA
ATAAACTGTAGAGGAATCTGAGTACCGTT

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FIGURE 4470

GTTTCCGGTTCGCCTCCGGAGCC**ATG**GCGGCGGCACTGAAGTGTCTACTGACATTAGGAAGATGGTGCCCCGGCC
TTGGAGTGGCTCCCCAGGCCCGGGCGCTCGCCGCCTTAGTACCCGGAGTGACCCAGGTAGATAACAAGTCCGGTT
TCCTGCAGAAGAGGCCTCATCGCCAGCACCCTGGCATCCTAAAGCTGCCGCACGTGCGGCTGCCACAGGCACTGG
CTAACGGTGCCCAGTTATTGCTACTTGGGAGCGCTGGGCCCACTATGGAGAATCAGGTGCAAACACTGACCAGTT
ATCTCTGGAGCAGACATTTGCCTGTAGAGCCAGAGGAGTTGCAAAGACGGGCTAGGCATCTTGAGAAAAAATTCC
TGGAAAACCCAGACTTATCTCAGACAGAGGAGAAACTTCGTGGAGCAGTGCTACACGCACTACGTAAAACTACCT
ACCATTGGCAAGAACTGAGCTACACTGAGGGACTGAGCCTGGTGTATATGGCAGCAAGACTGGATGGTGGCTTTG
CAGCAGTCTCCAGAGCATTCCATGAGATCCGGGCTCGAAATCCAGCATTTCAGCCACAAACTTTGATGGACTTTG
GCTCAGGTACTGGTTCTGTCACCTGGGCTGCTCACAGTATTTGGGGCCAGAGCCTACGTGAATATATGTGTGTGG
ACAGATCAGCTGCCATGTTGGTTTTGGCAGAAAAACTACTGAAAGGTGGTTCAGAATCTGGGGAGCCTTATATTC
CAGGTGTCTTTTTCAGACAGTTTCTACCTGTATCACCCAAGGTGCAGTTTGATGTAGTAGTGTCAGCTTTTTCCT
TAAGTGAACTGCCCAGCAAGGCTGACCGCACTGAGGTAGTTCAAACCTTATGGCGTAAGACAGGTCATTTCCTGG
TACTGGTGGAGAATGGAACAAAAGCTGGGCACAGCCTTCTCATGGATGCCAGGGATCTGGTCCTTAAGGGAAAAG
AGAAGTCACCTTTGGACCCTCGACCTGGTTTTGTCTTTGCCCCGTGTCCCCATGAACTCCCTTGTCCCCAGTTGA
CCAACCTGGCCTGTAGCTTCTCACAGGCGTACCATCCCATCCCCTTCAGCTGGAACAAGAAACCAAAGGAAGAAA
AGTTCTCTATGGTGATCCTTGCTCGGGGGTCTCCAGAGGAGGCTCATCGCTGGCCCCGTATCACTCAGCCTGTCC
TTAAACGGCCTCGCCATGTGCATTGTCACTTGTGCTGTCCAGATGGGCACATGCAGCATGCTGTGCTCACAGCCC
GCCGGCACGGCAGGGATTTGTATCGTTGTGCCCGTGTCAGCTCCTGGGGAGATCTTTTACCTGTGCTTACTCCGT
CTGCGTTTCCTCCATCTACGGCTCAGGATCCCTCTGAGAGT**TGA**TGAGGATGTGTAACAAGTATTTTCTTCTATC
GTGCCTGCCAGGGCTGAAGCTGCCTGGTATCCAGGAGGGGAATGCTGGTATCCCCATATGTCTGTGTTTGTTTGA
GATTTTTAATAATAAATAATAAATTTTTGAAGAATGG

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FIGURE 4471

AGAGACTTGGGTTTTGCTCCCTAGGAGCCCTGGAATAGCTTTGGCCAGAATTCCCTATCTCCCATTAGAACCTCT
CCTTTGCGTCCTTTGTTAACCTCCAAGTCTACTTGGTGAAAACGCCCACGAAGAAGTAACAAGGACTTTGTTCCT
AGTGTGCCAGGTTTGGGCACCAGTGCTGTAGTGGCTTTCTCTGCTGCTCCTTGTGCATCAGCAGACAGATGTGGT
TCACATAGGAAGAAAGACTAACGTAGGCAAAGATTTGCTCTTTCTTCAGCAGCCCTAGAAAGACGGCGGCCTGGG
TGATTCACCACTCCTTCCTCACGTCCTTGATTTTATTTGAACTGAGCTCCAGATGCTCCTCCCACCCTTTTCCTC
TTGGAAGCCAAACCCCTTTGTAATCTGTATAAGGTCCACACCCCGGGAGCTGAGTGATTGCAGAAACTGGCCTTC
CATCTCTCTCAGACACCAAGCTGCAGATCCAGGCTTTTCTGGGAAAGTGAGGCCACC**ATG**GCTCTGGAGAAGTCT
CTTGTCCGGCTCCTTCTGCTTGTCCTGATACTGCTGGTGCTGGGCTGGGTCCAGCCTTCCCTGGGCAAGGAATCC
CGGGCCAAGAAATTCCAGCGGCAGCATATGGACTCAGACAGTTCCCCCAGCAGCAGCTCCACCTACTGTAACCAA
ATGATGAGGCGCCGGAATATGACACAGGGGCGGTGCAAACCAGTGAACACCTTTGTGCACGAGCCCCTGGTAGAT
GTCCAGAATGTCTGTTTCCAGGAAAAGGTCACCTGCAAGAACGGGCAGGGCAACTGCTACAAGAGCAACTCCAGC
ATGCACATCACAGACTGCCGCCTGACAAACGGCTCCAGGTACCCCAACTGTGCATACCGGACCAGCCCGAAGGAG
AGACACATCATTGTGGCCTGTGAAGGGAGCCCATATGTGCCAGTCCACTTTGATGCTTCTGTGGAGGACTCTACC
TAAGGTCAGAGCAGCGAGATACCCCACCTCCCTCAACCTCATCCTCTCCACAGCTGCCTCTTCCCTCTTCCTTCC
CTGCTGTGAAAGAAGTAACTACAGTTAGGGCTCCTATTCAACACACACATGCTTCCCTTTCCTGAGTCCCATCCC
TGCGTGATTTTGGGGGTGAAGAGTGGGTTGTGAGGTGGGCCCCATGTTAACCCCTCCACTCTTTCTTTCAATAAA
ACGCAGTTGCAAACACCTGAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4472

CACGCCGACCCTCCACACCTCACCACGCCCCCATCTCCGTCCGTGTACACACACTCACACAAGGACGCCAACCCC
ACCTAGATGCAAAGCAGGATTCAAAAGAACATCTTTGCGTTTTCTACCGGCTCCCCATCATCGTACTAGGGAGGA
AGAAGCGGGTGAGAAACAAAACTTCTTTCCATTGTCCTGCCCGTTTCTGCGGACTTGTTCTGAGGCCGAGGCACC
TCTAAGATACTG**ATG**GCTCTGCAGAGGACCCATTCATTGCTTCTGCTTTTGCTGCTGACCCTGCTGGGGCTGGGG
CTGGTCCAGCCCTCCTATGGCCAGGATGGCATGTACCAGCGATTCCTGCGGCAACACGTGCACCCTGAGGAGACA
GGTGGCAGTGATCGCTACTGCAACTTGATGATGCAAAGACGGAAGATGACTTTGTATCACTGCAAGCGCTTCAAC
ACCTTCATCCATGAAGATATCTGGAACATTCGTAGTATCTGCAGCACCACCAATATCCAATGCAAGAACGGCAAG
ATGAACTGCCATGAGGGTGTAGTGAAGGTCACAGATTGCAGGGACACAGGAAGTTCCAGGGCACCCAACTGCAGA
TATCGGGCCATAGCGAGCACTAGACGTGTTGTCATTGCCTGTGAGGGTAACCCACAGGTGCCTGTGCACTTTGAC
GGT**TAG**ATGCCACCATGTAGGGATTATCGCGAGTGGTTGACCTTACACTTACTCCTTAAATAGCAGTGAGTAATG
CATTTGAGCTGTCCCAGGCTCTGTCTCCTCAGCTCATTTCCTACTCTTTTTCTCTATATAACTCATTCTATTAAA
TACATTGCACCAAAGAGATATGGAGACATAAACCTGTAATGAATGAGGCTGGGCTTTTCTGTAATAAGCTTCCTT
TTATAATACTGGTCAGCTTAGCTCTCTCAGATCCTATCCTGTGGAATTTAGTTATTATGTGTATTTATGTAGTAT
TTCAAACATTTCAAAATGCTTTCATCTATGTTTATCACATTTTAATACCACAGCACTTATAATGATGTCACTACA
TATAGAAGCTCAAAGTTAAGGGATTTGCTGAAGACTGTAAAGTTAATGGAAGAATTGAGACAAAAATCCAGTGTA
GCTGGCCACTTATCCAGGGCTTTTTCTACTTCATCACAAGGAATGTTTTGAAAGTGTCTGCTTTTTTTATCCTTA
AAATTCACCTGTCAGGGAGGCATTAAAAATTTGGAAATGTATGCCAGCAAAATGTGAGCTCTGTATTTTTTGGCA
TTCTTATGTTTGGGTTTAATAAGATTAAGAAAATGATACTGGGAATTTTCTTTTTCCTGAAACTTTGAATCACCC
TAGTAAGTCAAAGTACTAAAAAATGTACTAGATCATTAAGACTTATGTGCTCTTACTGATTGAAAGATTTTTTAT
GTTTTCCTTGTAATAAAGGACCTAAACCGAAGGTACCTG

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FIGURE 4473

ATGATGCCGTGTCAGAGAGCAAAGCTCCTGTCCTTTTGGCCTAATTTGGTGATGCTGTTCTTGGGTCTACCACAC
CTCCTTTTGCCCTCCGCAGGAGCCTGTGTTGGAAGAGATGGTGATGGGCCTGGGCGTTTTGTTGTTGGTCTTCGT
GCTGGGTCTGGGTCTGACCCCACCGACCCTGGCTCAGGATAACTCCAGGTACACACACTTCCTGACCCAGCACTA
TGATGCCAAACCACAGGGCCGGGATGACAGATACTGTGAAAGCATCATGAGGAGACGGGGCCTGACCTCACCCTG
CAAAGACATCAACACATTTATTCATGGCAACAAGCGCAGCATCAAGGCCATCTGTGAAAACAAGAATGGAAACCC
TCACAGAGAAAACCTAAGAATAAGCAAGTCTTCTTTCCAGGTCACCACTTGCAAGCTACATGGAGGTTCCCCCTG
GCCTCCATGCCAGTACCGAGCCACAGCGGGGTTCAGAAACGTTGTTGTTGCTTGTGAAAATGGCTTACCTGTCCA
CTTGGATCAGTCAATTTTCCGTCGTCCGTAACCAGCGGGCCCCTGGTCAAGTGCTGGCTCTGCTGTCCTTGCCTT
CCATTTCCCCTCTGCACCCAGAACAGTGGTGGCAACATTCATTGCCAAGGGCCCAAAGAAAGAGCTACCTGGACC
TTTTGTTTTCTGTTTGACAACATGTTTAATAAATAAAAATGTCTTGATATCAGT

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FIGURE 4474

AACTGTGCGAACCAGACCCGGCAGCCTTGCTCAGTTCAGCATAGCGGAGCGGATCCGATCGGATCGGAGCGGATC
GGAGCACACCGGAGCAGGCTCATCGAGAAGGCGTCTGCGAGACC**ATG**GAGAACGGATACACCTATGAAGATTATA
AGAACACTGCAGAATGGCTTCTGTCTCACACTAAGCACCGACCTCAAGTTGCAATAATCTGTGGTTCTGGATTAG
GAGGTCTGACTGATAAATTAACTCAGGCCCAGATCTTTGACTACGGTGAAATCCCCAACTTTCCCCGAAGTACAG
TGCCAGGTCATGCTGGCCGACTGGTGTTTGGGTTCCTGAATGGCAGGGCCTGTGTGATGATGCAGGGCAGGTTCC
ACATGTATGAAGGGTACCCACTCTGGAAGGTGACATTCCCAGTGAGGGTTTTCCACCTTCTGGGTGTGGACACCC
TGGTAGTCACCAATGCAGCAGGAGGGCTGAACCCCAAGTTTGAGGTTGGAGATATCATGCTGATCCGTGACCATA
TCAACCTACCTGGTTTCAGTGGTCAGAACCCTCTCAGAGGGCCCAATGATGAAAGGTTTGGAGATCGTTTCCCTG
CCATGTCTGATGCCTACGACCGGACTATGAGGCAGAGGGCTCTCAGTACCTGGAAACAAATGGGGGAGCAACGTG
AGCTACAGGAAGGCACCTATGTGATGGTGGCAGGCCCCAGCTTTGAGACTGTGGCAGAATGTCGTGTGCTGCAGA
AGCTGGGAGCAGACGCTGTTGGCATGAGTACAGTACCAGAAGTTATCGTTGCACGGCACTGTGGACTTCGAGTCT
TTGGCTTCTCACTCATCACTAACAAGGTCATCATGGATTATGAAAGCCTGGAGAAGGCCAACCATGAAGAAGTCT
TAGCAGCTGGCAAACAAGCTGCACAGAAATTGGAACAGTTTGTCTCCATTCTTATGGCCAGCATTCCACTCCCTG
ACAAAGCCAGT**TGA**CCTGCCTTGGAGTCGTCTGGCATCTCCCACACAAGACCCAAGTAGCTGCTACCTTCTTTGG
CCCCTTGCTGGAGTCATGTGCCTCTGTCCTTAGGTTGTAGCAGAAAGGAAAAGATTCCTGTCCTTCACCTTTCCC
ACTTTCTTCTACCAGACCCTTCTGGTGCCAGATCCTCTTCTCAAAGCTGGGATTACAGGTGTGAGCATAGTGAGA
CCTTGGCGCTACAAAATAAAGCTGTTCTCATTCCTGTTCTTTCTTACACAAGAGCTGGAGCCCGTGCCCTACCAC
ACATCTGTGGAGATGCCCAGGATTTGACTCGGGCCTTAGAACTTTGCATAGCAGCTGCTACTAGCTCTTTGAGAT
AATACATTCCGAGGGGCTCAGTTCTGCCTTATCTAAATCACCAGAGACCAAACAAGGACTAATCCAATACCTCTT
GGA

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FIGURE 4475

ACTGGTTGCGGAGTGAGCTGGGCGCGCGGCGCGCAGGCGCCCTGGGGACCCGGTAGCGGCGGTGGCGGTGGCGGC
GGTGGCGGTGGCTGCGGCGACGGCAGAGGCGAAGGGAGCCGGATCGCCGACCTGAGCGGGAGGCGGCGGTGGCGG
CCATGGCGGCAGATGGAGAGCGTTCCCCGCTGCTGTCTGAGCCCATCGACGGTGGCGCGGGCGGCAACGGTTTAG
TGGGGCCCGGCGGGAGTGGGGCTGGGCCCGGGGGAGGCCTGACCCCCTCCGCACCACCGTACGGAGCCGCATTTC
CCCCGTTTCCCGAGGGGCATCCAGCCGTGTTGCCTGGGGAGGACCCACCCCCCTATTCACCCTTAACTAGCCCGG
ACAGTGGGAGTGCCCCTATGATCACCTGCCGAGTCTGCCAATCTCTCATCAACGTGGAAGGCAAGATGCATCAGC
ATGTAGTCAAATGTGGTGTCTGCAATGAAGCCACCCCAATCAAGAATGCACCCCCAGGGAAAAAATATGTTCGAT
GCCCCTGTAACTGTCTCCTTATCTGCAAAGTGACATCCCAACGGATTGCATGCCCTCGGCCCTACTGCAAAAGAA
TCATCAACCTGGGGCCTGTGCATCCCGGACCTCTGAGTCCAGAACCCCAACCCATGGGTGTCAGGGTTATCTGTG
GACATTGCAAGAATACTTTTCTGTGGACAGAGTTCACAGACCGCACTTTGGCACGTTGTCCTCACTGCAGGAAAG
TGTCATCTATTGGGCGCAGATACCCACGTAAGAGATGTATCTGCTGCTTCTTGCTTGGCTTGCTTTTGGCAGTCA
CTGCCACTGGCCTTGCCTTTGGCACATGGAAGCATGCACGGCGATATGGAGGCATCTATGCAGCCTGGGCATTTG
TCATCCTGTTGGCTGTGCTGTGTTTGGGCCGGGCTCTTTATTGGGCCTGTATGAAGGTCAGCCACCCTGTCCAGA
ACTTCTCCTGAGCCTGATGACCCACAGACTGTGCCTGGCCCCTCCCTGGTGGGGACAGTGACACTACGAAGGGAG
CTGGGGTAGTTAAAGGCTCCCGGGGCTTCTAGAAGGAAGCCAAGCAGCTGCCTTCCTTTTCCCTGGGGAGAGGTA
GGAAGGAACCAGGCCCTCACTTAGGTTTGGAGGGGCAGATAAGAGCACTGCTGACCATCTGCTTTCCTCCAAGGG
TTGCTGTGTCTAGGGTGAAGTAGGCAAAACGTTGCCCTTAAAACTGGGCCCTGAAGACGGTTCCAGCCTTGTCCT
TCCTGTGTGCTCCCTGAGAGCCATTCCTGTCCCTTACACATTCCAGGGCAGGGTGGGGGTGGGTAGCCCTGGGGG
TTCCCCTCCCTCTTGTGCACCATTAGGACTTTGCTGCTGCTATTGCACTTCACCAGAGGTTGGCTCTGGCCTCAG
TACCCTCAGTCTCCTCTCCCCACATTGTGTCCTGTGGGGGTGGGGTCAGCCGCTGCTCTGTACAGAACCACAGGA
ACTGATGTGTATATAACTATTTAATGTGGGATATGTTCCCCTATTCCTGTATTTCCCTTAATTCCTCCTCCCGAC
CTTTTTTACCCCCCCAGTTGCAGTATTTAACTGGGCTGGGTAGGGTTGCTCAGTCTTTGGGGGAGGTTAGGGACT
TATCCTGTGCTTGTAAATAAATAAGGTCATGACTCT

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FIGURE 4476

CAGACAGACCAATCACGCGCATTCTTCGGCCACGACAAGCGCGCCTCTGATCACGTGACCAGGTCCGCTACCCAC
GTGGGGGCTCAGCGTGCACCCTTCTTTGTGCTCGGGTTAGGAGGAGCTAGGCTGCCATCGGGCCGGTGCAGATAC
GGGGTTGCTCTTTTGCTCATAAGAGGGGCTTCGCTGGCAGTCTGAACGGCAAGCTTGAGTCAGGACCCTTAATTA
AGATCCTCAATTGGCTGGAGGGCAGATCTCGCGAGTAGGGCAACGCGGTAAAAATATTGCTTCGGTGGGTGACGC
GGTACAGCTGCCCAAGGGCGTTCGTAACGGGAATGCCGAAGCGTGGGAAAAAGGGAGCGGTGGCGGAAGACGGGG
ATGAGCTCAGGACAGAGCCAGAGGCCAAGAAGAGTAAGACGGCCGCAAAGAAAAATGACAAAGAGGCAGCAGGAG
AGGGCCCAGCCCTGTATGAGGACCCCCCAGATCAGAAAACCTCACCCAGTGGCAAACCTGCCACACTCAAGATCT
GCTCTTGGAATGTGGATGGGCTTCGAGCCTGGATTAAGAAGAAAGGATTAGATTGGGTAAAGGAAGAAGCCCCAG
ATATACTGTGCCTTCAAGAGACCAAATGTTCAGAGAACAAACTACCAGCTGAACTTCAGGAGCTGCCTGGACTCT
CTCATCAATACTGGTCAGCTCCTTCGGACAAGGAAGGGTACAGTGGCGTGGGCCTGCTTTCCCGCCAGTGCCCAC
TCAAAGTTTCTTACGGCATAGGCGATGAGGAGCATGATCAGGAAGGCCGGGTGATTGTGGCTGAATTTGACTCGT
TTGTGCTGGTAACAGCATATGTACCTAATGCAGGCCGAGGTCTGGTACGACTGGAGTACCGGCAGCGCTGGGATG
AAGCCTTTCGCAAGTTCCTGAAGGGCCTGGCTTCCCGAAAGCCCCTTGTGCTGTGTGGAGACCTCAATGTGGCAC
ATGAAGAAATTGACCTTCGCAACCCCAAGGGGAACAAAAAGAATGCTGGCTTCACGCCACAAGAGCGCCAAGGCT
TCGGGGAATTACTGCAGGCTGTGCCACTGGCTGACAGCTTTAGGCACCTCTACCCCAACACACCCTATGCCTACA
CCTTTTGGACTTATATGATGAATGCTCGATCCAAGAATGTTGGTTGGCGCCTTGATTACTTTTTGTTGTCCCACT
CTCTGTTACCTGCATTGTGTGACAGCAAGATCCGTTCCAAGGCCCTCGGCAGTGATCACTGTCCTATCACCCTAT
ACCTAGCACTGTGACACCACCCCTAAATCACTTTGAGCCTGGGAAATAAGCCCCCTCAACTACCATTCCTTCTTT
AAACACTCTTCAGAGAAATCTGCATTCTATTTCTCATGTATAAAACTAGGAATCCTCCAACCAGGCTCCTGTGAT
AGAGTTCTTTTAAGCCCAAGATTTTTTATTTGAGGGTTTTTTGTTTTTTAAAAAAAAATTGAACAAAGACTACTA
ATGACTTTGTTTGAATTATCCACATGAAAATAAAGAGCCATAGTTTC

FIGURE 4477

AGTGCTATCTGCAGGCTGGCCAGCTTCCTCTGCGCTCCGGAAAGCTGCGGCCCAGCGCGGACTAGTGAGGACCTC
CACAGCTCCTGACATTGCCAGGAGTCCTGTCGGCGTTTTCTCCCAGCCTCCGCCATGCCGGCGGTGCTGGGTTTT
GAAGGCAGCGCCAATAAGATTGGCGTGGGCGTGGTGCGGGATGGCAAGGTGCTGGCGAACCCGCGGCGGACTTAC
GTCACGCCTCCTGGCACAGGATTCCTTCCAGGTGATACAGCCAGGCATCACCGAGCTGTTATCCTAGACCTGCTG
CAGGAGGCACTAACAGAGTCTGGATTAACCTCCCAGGATATCGACTGCATTGCATACACCAAGGGCCCTGGCATG
GGTGCCCCACTGGTTTCTGTGGCTGTTGTGGCCCGTACTGTGGCCCAACTGTGGAATAAGCCATTGGTGGGTGTG
AACCACTGTATAGGCCACATTGAGATGGGCCGCCTCATCACTGGAGCCACCAGCCCAACCGTGTTGTATGTGAGT
GGAGGAAATACGCAGGTGCCTGTAATCCTAGCAACTCCGGAGGCTGGGCAGGAGAATCACTTGAACCCAGGAGGC
GGAAGTTGCGGTGAACCGAGATCGCACCATTGCATTCCAGCCTGGGCAACAAGAGCAAAACTCCGTCTCAAACAA
ACAAACAAACAAAAAACAAAAAAAAACAACTAAAGGACACTACCTGATTTATTATTTTGGGTGATTGCATACTCG
GAACATCGTTACCGTATCTTTGGGGAAACCATCGATATTGCAGTGGGTAATTGTCTGGATCGTTTTGCTCGAGTG
CTGAAGATTTCTAACGACCCAAGTCCAGGATACAACATTGAACAGATGGCAAAGCGAGGCAAGAAGCTAGTTGAG
CTGCCATACACTGTAAAGGGGATGGACGTCTCATTCTCAGGGATCCTGTCTTTCATTGAGGATGTAGCCCATCGG
ATGCTGGCCACAGGCGAGTGTACTCCTGAGGATCTGTGTTTCTCCCTGCAGGAAACTGTGTTTGCAATGCTGGTA
GAGATCACAGAGCGAGCCATGGCACATTGTGGCTCCCAGGAGGCCCTCATTGTGGGAGGAGTGGGGTGTAATGTG
AGGCTACAGGAGATGATGGCAACAATGTGCCAGGAACGTGGAGCCCGGCTTTTTGCTACAGATGAGAGATTCTGT
ATTGACAATGGAGCGATGATAGCCCAGGCTGGCTGGGAGATGTTTCGGGCTGGACACAGGACCCCACTCAGTGAT
TCTGGGGTTACACAGAGGTATCGGACAGATGAAGTAGAGGTGACCTGGAGGGACTAATAAGATCAACAGAATCAG
AGTAGATAGTTCCTTAATCGGAACCCAAAGGACCCCGTGCCTCAATCTCTATCCTGATGTCATGGGAGTCCTAGC
AAAGCTATAGACTCCAAGCAAGGCTTGGGGTCCTTTATGGAACCCCAGGATGACTCAGCAATAAAATATTTTTGG
TTTTTTGGTTTTGTATGTTGGTGATTGGATTGTGTTGTTCAGGACCAATGTAGATTTGGTGCTGGATAAATTCTT
GTTGGAGCTTGCTGCTGTGGAACCAAGAATGAGGTATCTTTTTTTTTTTTTTTAAGAAACGGAATCTTGCTGTGT
TTCCCAGGCTGGTCTCGAACTGGGCTCAAGCAGTCTTACCACCTCAGCCTCCTGAGTAAGGATGCCATTGTGCCT
GGCAACAATAGTAGTATCATAACTATTATTATAGCATCGGGTCCCGTGCTAACTGCTTTACATTCATTCTCTCAT
TTAAATTCTTTGAAGTAGGTGTGCAAGACTTCTCTCAAAATAGCCTGGAGGCTCACACCTGTTATCCCAGTGCTG
TGGGAGGCCAAGTCAGGAGGATCCCTTGAGCCCAGGAGTTTGAGCCCAGCCTGGGCAAATAGCAAGACACCATCT
ATTTGAAAAATGTAAAAATTATCTGGGCATGGTGGCGCACATCTGTAGTCCCAGCTCCAAGGGAGGCTGAGGCGG
GAAGATAGCTTGAGCCCAGGAGTTTGAGGTTGCAGTGAGCTGTGATTGAGCCACTGCATTCCAGCCTGAGTGACA
GAACAAAACCTTGTCTCTTAAAAACAAACAAACAAACAGCCTGGAGATTGGTCTAACTTGT

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FIGURE 4478

CCATGGCGGCGCGGCGGCGACGGAGCACCGGCGGCGGCAGGGCGAGAGCATTAAATGAAAGCAAAAGAGTTAATA
ATGGCAACACGGCTCCAGAAGACTCTTCCCCTGCCAAGAAAACTCGTAGATGCCAGAGACAGGAGTCGAAAAAGA
TGCCTGTGGCTGGAGGAAAAGCTAATAAGGACAGGACAGAAGACAAGCAAGATGGTATGCCAGGAAGGTCATGGG
CCAGCAAAAGGGTCTCTGAATCTGTGAAGGCCTTGCTGTTAAAGGGCAAAGCTCCTGTGGACCCAGAGTGTACAG
CCAAGGTGGGGAAGGCTCATGTGTATTGTGAAGGAAATGATGTCTATGATGTCATGCTAAATCAGACCAATCTCC
AGTTCAACAACAACAAGTACTATCTGATTCAGCTATTAGAAGATGATGCCCAGAGGAACTTCAGTGTTTGGATGA
GATGGGGCCGAGTTGGGAAAATGGGACAGCACAGCCTGGTGGCTTGTTCAGGCAATCTCAACAAGGCCAAGGAAA
TCTTTCAGAAGAAATTCCTTGACAAAACGAAAAACAATTGGGAAGATCGAGAAAAGTTTGAGAAGGTGCCTGGAA
AATATGATATGCTACAGATGGACTATGCCACCAATACTCAGGATGAAGAGGAAACAAAGAAAGAGGAATCTCTTA
AATCTCCCTTGAAGCCAGAGTCACAGCTAGATCTTCGGGTACAGGAGTTAATAAAGTTGATCTGTAATGTTCAGG
CCATGGAAGAAATGATGATGGAAATGAAGTATAATACCAAGAAAGCCCCACTTGGGAAGCTGACAGTGGCACAAA
TCAAGGCAGGTTACCAGTCTCTTAAGAAGATTGAGGATTGTATTCGGGCTGGCCAGCATGGACGAGCTCTCATGG
AAGCATGCAATGAATTCTACACCAGGATTCCGCATGACTTTGGACTCCGTACTCCTCCACTAATCCGGACACAGA
AGGAACTGTCAGAAAAAATACAATTACTAGAGGCTTTGGGAGACATTGAAATTGCTATTAAGCTGGTGAAAACAG
AGCTACAAAGCCCAGAACACCCATTGGACCAACACTATAGAAACCTACATTGTGCCTTGCGCCCCCTTGACCATG
AAAGTTATGAGTTCAAAGTGATTTCCCAGTACCTACAATCTACCCATGCTCCCACACACAGCGACTATACCATGA
CCTTGCTGGATTTGTTTGAAGTGGAGAAGGATGGTGAGAAAGAAGCCTTCAGAGAGGACCTTCATAACAGGATGC
TTCTATGGCATGGTTCCAGGATGAGTAACTGGGTGGGAATCTTGAGCCATGGGCTTCGAATTGCCCCACCTGAAG
CTCCCATCACAGGTTACATGTTTGGGAAAGGAATCTACTTTGCTGACATGTCTTCCAAGAGTGCCAATTACTGCT
TTGCCTCTCGCCTAAAGAATACAGGACTGCTGCTCTTATCAGAGGTAGCTCTAGGTCAGTGTAATGAACTACTAG
AGGCCAATCCTAAGGCCGAAGGATTGCTTCAAGGTAAACATAGCACCAAGGGGCTGGGCAAGATGGCTCCCAGTT
CTGCCCACTTCGTCACCCTGAATGGGAGTACAGTGCCATTAGGACCAGCAAGTGACACAGGAATTCTGAATCCAG
ATGGTTATACCCTCAACTACAATGAATATATTGTATATAACCCCAACCAGGTCCGTATGCGGTACCTTTTAAAGG
TTCAGTTTAATTTCCTTCAGCTGTGGTGAATGTTGATATTAAATAAACCAGAGATCTGATCTTCAAGCAAGAAAA
TAAGCAGTGTTGTACTTGTGAATTTTGTGATATTTTATGTAATAAAAACTGTACAGGTCT

FIGURE 4479

CTCCACTTTCTTTCCCTCTCCGTTTTGGTGGGCTGGTTGAAGATGAAATCCACTGAGGAGGGAAGTCCAGCACCC
TGTGTGCCAGTCCAGAACTGGCCCATCTGTAGACCCCCTGAAAATCATATGGGCTTGGATTTGGATATTCTCAAC
AGAAAGGGTTAAAGGCTGATGGTACCTAAAGCCTGGTACTTGAATTTTGATCAAGATAAGCTGCCTTAAGTTCTC
TTCATTACACAAATGATCCTAGATAATTGATAGATCCTGTGGTTCAACTGGATTTCTAGATAGAAGCTGGATTCA
TGTGATGCCAGAGGAGTAAAATTTCAAGAGACTGAAACCAGATCTGAGTTTCGCTGTTCCAGTCTGGACCTCTTT
GGTGCTGTAAATCCTGGATATACTGTAGATGAGTACTGCGTTTTTCTTTTATGGACTCTCTTCAGCTTCTGGAGA
CCTCACTATCCTATT**ATG**TCTTTGTGTGAAGACATGCTGCTTTGTAATTATCGAAAGTGTCGCATCAAACTCTCT
GGCTATGCATGGGTCACTGCCTGCTCTCACATCTTCTGTGATCAGCATGGCAGTGGTGAGTTTAGTCGCTCACCA
GCTATCTGTCCTGCCTGCAACAGTACCCTTTCTGGAAAGCTAGATATTGTCCGCACAGAACTCAGTCCATCAGAG
GAATATAAAGCTATGGTATTGGCAGGACTGCGACCAGAGATCGTGTTGGACATTAGCTCCCGAGCGCTGGCCTTC
TGGACATATCAGGTACATCAGGAACGTCTCTATCAAGAATACAATTTCAGCAAGGCTGAGGGCCATCTGAAACAG
ATGGAGAAGATATATACTCAGCAAATACAAAGCAAGGATGTAGAATTGACCTCTATGAAAGGGGAGGTTACCTCC
ATGAAGAAAGTACTAGAAGAATACAAGAAAAAGTTCAGTGACATCTCTGAGAAACTTATGGAGCGCAATCGTCAG
TATCAAAAGCTCCAAGGCCTCTATGATAGCCTTAGGCTACGAAACATCACTATTGCTAACCATGAAGGCACCCTT
GAACCATCCATGATTGCACAGTCTGGTGTTCTTGGCTTCCCATTAGGTAACAACTCCAAGTTTCCTTTGGATAAT
ACACCTGTTCGAAATCGGGGCGATGGAGATGGAGATTTTCAGTTCAGACCATTTTTTGCGGGTTCTCCCACAGCA
CCTGAACCCAGCAACAGCTTTTTTAGTTTTGTCTCTCCAAGTCGTGAATTAGAGCAGCAGCAAGTTTCTAGCAGG
GCCTTCAAAGTAAAAAGAATT**TGA**GCCACGCATAGTGTCACGCACCTGTGATCCCAGCTACTTAGGAGGTTGAGG
CTGGGAGGATCACTTGAGCCCAGGAGTCTGAGGCTTTAGTGATCTAAGATCATGCCACTGCACTCCAGCCTGGGC
AACAGAGTGAGACCCTGTTTCTAAAAAAAAAATAAAGATAATTTAGCTAACTT

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FIGURE 4480

GTATGAACGCAGCGGCGGACCTGTGAGGGGATCCGACTTGCCGGCAGAACTTACGCTGCGGGACCCCGGGCACTG
TTGCTGCTGCGGGAGACTGTGGGCTGTTTAGTGCCATGCACCCTTTACAGTGTGTCCTCCAAGTGCAGAGGTCTC
TGGGGTGGGGACCATTGGCCTCTGTGTCTTGGCTGTCGCTGAGGATGTGCAGGGCACACAGCAGTCTCTCTAGTA
CCATGTGTCCCAGTCCAGAGAGGCAGGAGGATGGAGCTCGGAAGGATTTCAGCTCCAGGCTGGCTGCTGGACCGA
CTTTTCAACATTTTTTAAAAAGTGCCTCAGCTCCTCAGGAGAAGCTGTCTTCAGAAGTGGAAGACCCACCTCCCT
ATCTCATGATGGATGAACTTCTTGGAAGGCAGAGAAAAGTCTACCTCGAGACCTATGGCTGCCAGATGAATGTGA
ATGACACAGAGATAGCCTGGTCCATCTTACAGAAGAGTGGCTACCTGCGGACCAGTAACCTCCAAGAGGCAGATG
TGATTCTCCTTGTCACATGCTCTATCAGGGAGAAGGCTGAGCAGACCATCTGGAACCGTTTACATCAGCTTAAAG
CCTTGAAGACAAGGCGGCCCCGCTCCCGGGTTCCTCTGAGGATTGGAATTCTAGGCTGCATGGCTGAGAGGTTGA
AGGAGGAGATTCTCAACAGAGAGAAAATGGTAGATATTTTGGCTGGTCCTGATGCCTACCGGGACCTTCCCCGGC
TGCTGGCTGTTGCTGAGTCGGGCCAGCAAGCTGCCAACGTGCTGCTCTCTCTGGACGAGACCTATGCTGATGTCA
TGCCAGTCCAGACAAGCGCCAGTGCCACGTCTGCCTTTGTGTCAATCATGCGAGGCTGTGACAACATGTGTAGCT
ACTGCATTGTTCCTTTCACCCGGGGCAGGGAGAGGAGTCGGCCTATTGCCTCCATTCTAGAGGAAGTGAAGAAGC
TTTCTGAGCAGGGGCTGAAAGAAGTGACACTTCTTGGTCAGAATGTTAATAGTTTTCGGGACAATTCGGAGGTCC
AGTTCAACAGTGCAGTGCCTACCAATCTCAGTCGTGGCTTTACCACCAACTATAAAACCAAGCAAGGAGGACTTC
GTTTTGCTCATCTTCTGGATCAGGTCTCCAGAGTAGATCCTGAAATGAGGATCCGTTTTACCTCTCCCCACCCCA
AGGATTTTCCTGATGAGGTTCTGCAGCTGATTCATGAGAGAGATAACATCTGTAAACAGATCCACCTGCCAGCCC
AGAGTGGAAGCAGCCGTGTGTTGGAGGCCATGCGGAGGGGATATTCAAGAGAAGCTTATGTGGAGTTAGTTCACC
ATATTAGAGAATCTATTCCAGGTGTGAGCCTCAGCAGCGATTTCATTGCTGGCTTTTGTGGTGAGACGGAGGAAG
ATCACGTCCAGACAGTCTCTTTGCTCCGGGAAGTTCAGTACAACATGGGCTTCCTCTTTGCCTACAGCATGAGAC
AGAAGACACGGGCATATCATAGGCTGAAGGATGATGTCCCGGAAGAGGTAAAATTAAGGCGTTTGGAGGAACTCA
TCACTATCTTCCGAGAAGAAGCAACAAAAGCCAATCAGACCTCTGTGGGCTGTACCCAGTTGGTGCTAGTGGAAG
GGCTCAGTAAACGCTCTGCCACTGACCTGTGTGGCAGGAATGATGGAAACCTTAAGGTGATCTTCCCTGATGCAG
AGATGGAGGATGTCAATAACCCTGGGCTCAGGGTCAGAGCCCAGCCTGGGGACTATGTGCTGGTGAAGATCACCT
CAGCCAGTTCTCAGACACTTAGGGGACATGTTCTCTGCAGGACCACTCTGAGGGACTCTTCTGCATATTGCTGACC
CTGAGAGGATGGCCTCAGAGCTGACTTGGGCAATCCTCCCCAACAGGAAGGGGAGACATTGCCTGCCACTGAGGA
AACAGGTCATGAAGGTGGAGATAAGCTGCAAGGGGCGAAGCAACTTTATGTCAGTGGAAAACGTGTCTCTTTAAA
GCTGCTATGTGAACAGCTTTTACAGTCATTAAATTTACCTAAACTAAGGTT

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FIGURE 4481

CCCTTCTGACCCACCCCGCTAGGTAGTCCCACACGGCGGCCCTCGGCTCCCGGGCCCCGCCCCGGCCTCCTGCAT
TTGCCCGAGGCCCCCTCCCCAGCACTGGCCACACCCCAGGGTAGCCCCGCCCCCAGAGCTCCTCCCCCAGCGGCC
GGGGTAGGGTGGCGGCTGGCCCAGCCGGGCCCCCGCTGCCCTCTGCCCTGGGCGCTTGGTCGGAGCGGGCTGGGC
AAAGCGGGACAGGGCGAGCGCGGCGGCCCGGGGGCTCGGAGGCGAAGATGGCGTCCGGCAGGCGCGCCCCGCGCA
CCGGGCTGCTGGAGCTGCGCGCCGGGGCGGGCTCGGGGGCCGGCGGCGAGCGATGGCAGCGGGTGCTGCTGAGTC
TGGCGGAGGACGTGCTGACCGTGAGCCCCGCCGACGGCGACCCTGGTCCCGAGCCCGGCGCTCCGCGGGAGCAGG
AGCCCGCGCAGCTCAACGGCGCCGCGGAGCCGGGCGCCGGGCCCCCGCAGCTGCCAGAGGCGCTACTGCTCCAGC
GGCGCCGCGTGACGGTGCGCAAGGCCGACGCCGGTGGGCTGGGCATCAGCATCAAAGGCGGCCGGGAGAACAAGA
TGCCTATTCTCATTTCCAAGATCTTCAAGGGATTGGCAGCTGACCAGACAGAGGCCCTTTTTGTGGGGGATGCCA
TCCTGTCTGTGAATGGGGAAGACTTGTCCTCTGCTACCCATGATGAGGCGGTGCAGGTCCTCAAGAAGACAGGCA
AGGAGGTGGTGCTGGAGGTCAAGTATATGAAGGACGTCTCACCGTATTTCAAGAACTCTACTGGTGGGACCTCGG
TCGGCTGGGACTCACCTCCTGCCTCACCCCTTCAGCGGCAGCCTTCCTCCCCTGGCCCCACACCCCGGAACTTCA
GCGAGGCCAAACACATGTCCTTGAAGATGGCATATGTCTCGAAGAGGTGCACCCCCAATGACCCGGAGCCCAGGT
ATCTGGAGATCTGCTCGGCAGATGGTCAAGACACCCTCTTCCTGAGGGCCAAGGATGAGGCTAGTGCGAGGTCGT
GGGCGACTGCCATCCAAGCCCAGGTCAATACTCTGACGCCGCGGGTCAAGGATGAGCTGCAGGCACTGTTGGCAG
CCACCAGCACAGCTGGGAGCCAGGACATCAAGCAGATTGGCTGGCTAACTGAGCAGCTGCCCAGTGGGGGCACAG
CCCCCACCCTGGCCCTGCTAACTGAAAAGGAACTGCTCCTCTACTTGTCTCTCCCCGAGACCCGCGAGGCCCTGA
GCCGGCCAGCCCGTACTGCCCCACTCATCGCCACCAGACTGGTGCACTCAGGCCCCTCCAAGGGCTCAGTGCCCT
ACGATGCAGAGCTCTCTTTTGCCCTGCGCACGGGCACGCGTCACGGTGTGGACACTCACCTGTTCAGCGTGGAGT
CACCGCAGGAGCTGGCTGCCTGGACCCGCCAGCTTGTGGATGGCTGTCACCGGGCCGCCGAGGGTGTGCAGGAGG
TGTCTACAGCCTGCACGTGGAATGGGCGTCCCTGCAGCCTGTCTGTGCACATCGACAAGGGCTTCACACTGTGGG
CGGCTGAGCCAGGTGCAGCCCGAGCTGTGCTCCTGCGACAGCCCTTCGAGAAGCTGCAGATGTCTTCAGATGACG
GTGCCAGTCTCCTTTTCCTGGATTTTGGAGGTGCTGAAGGCGAGATCCAGCTGGACCTGCACTCGTGTCCCAAAA
CCATAGTCTTCATCATCCACTCCTTCCTGTCGGCCAAAGTCACCCGCCTCGGGCTGTTGGCCTAGAAGTCGCCGG
ATGCACTAGCCCTGAAGAGGGGTGTCCATGACATGGCCTGAGCTGGGCCTCCACCGACTGCCTGCTCACCCCTGG
GCTGAGGGAAGGGAGAGGAGAGGAACAAGGGCCTCCGAAACCCCAACCCTGAGGGAGACTGGATTGGTCTTGGGG
CCCAGGACCCAGACGCAGGACAGAGTGGACTCTGCCTGTGATGGGGTGGCCTTCCTGCTGCCCCCCTCCACCAGT
GCCTTTTGCAGAGAGATATTTTGTGTACACAGAAGCCATTCCGAGTCTGGGACCTGCCCCTGTGCGGATCCTGAC
CCCAGCCAACAGCTGAGCTGCCGGGCCTCCTCGAGGCCCCTAAGCCACCCCCAGAGGTCCCATCTGAAGCTGGAG
TACCCTGGGGTCAGCAGCAAGAGAAAGAAGAGGAGATTTTCTGTTTGTTTTTCCCCTCAGCCCTGCCACCGTGGG
GAGTCTGGTTTTTCTCTTCATCCTGTCTCTCTCCTCCTTACTCTTGGATAAATAAACAGCCTGTGAGCACACAGG
CAGCCCGGCCCAGTG

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FIGURE 4482A

GGAAGGGTAGTGGAGAGAGAGGAAGCAGGAGGGAGGGAGAAAAAGAGAGAGACTGACTGTATCTGGGGATTCTGG
CAAGGTGAAGAGCTGGTCTGTTTGGCAGGACCTTCCCATCTGGGATCCATCTGTGTTTCCCTGGAATGGGACAGG
CAGCTCTAGTCAGTGAGAAATCGCAGATGTGAGAGAGCTGACACATGTCCAGCTAATGAAAGGAGGAGGAAGGCT
GGTCTCCGATTGAGCTTTGAAGATTAGGAGGAGAAAAAGAGGAGCTTTGGAATATCTATTTCAAATAAATTTGGT
GTATTTAAGAATCTGGATTGTTTATAATTTGGGCATTTGGGTTGGTCCTGAGAAAAGGGTGCCAGCGATGCCTGG
ATCGCCTGTGGAAGTGAAGATACAGTCCAGATCCTCACCTCCCACCATGCCACCCCTCCCACCAATAAATCCTGG
AGGACCGAGGCCAGTGTCCTTCACTCCTACTGCATTAAGCAATGGCATCAACCATTCTCCTCCTACCCTGAATGG
TGCCCCATCACCGCCACAGAGATTCAGCAATGGTCCTGCCTCCTCCACATCATCTGCACTCACAAATCAGCAATT
GCCAGCCACTTGTGGTGCTCGACAACTCAGCAAGTTGAAACGCTTTCTTACCACTCTGCAACAGTTTGGCAATGA
CATCTCCCCTGAGATTGGGGAGAAGGTGCGGACTCTTGTTCTTGCACTGGTGAACTCAACAGTGACAATTGAGGA
ATTCCACTGTAAGCTCCAAGAAGCCACAAACTTTCCCCTTCGTCCTTTTGTGATTCCATTTCTCAAGGCCAACCT
GCCCCTGCTGCAGCGGGAACTGCTGCACTGCGCTCGGGCGGCCAAGCAGACCCCATCCCAGTACCTGGCTCAGCA
CGAACACCTTCTGCTCAACACAAGCATTGCATCGCCTGCTGACTCGTCAGAGTTGCTCATGGAGGTGCACGGAAA
TGGGAAGAGGCCCAGTCCAGAGAGGAGAGAAGAGAATAGTTTTGATAGAGACACAATTGCTCCTGAGCCTCCTGC
CAAGAGAGTATGTACCATCAGCCCTGCTCCTCGGCACAGTCCTGCTCTCACTGTGCCCCTCATGAATCCCGGGGG
CCAATTCCATCCTACCCCTCCACCTCTTCAGCATTACACCTTAGAGGATATTGCAACTTCTCACCTGTATCGGGA
ACCCAACAAGATGCTAGAGCATCGAGAAGTTCGTGATAGACACCACAGTCTTGGTCTAAATGGAGGCTATCAAGA
TGAGTTGGTAGATCATCGTTTGACAGAAAGGGAATGGGCTGATGAATGGAAACATCTTGACCATGCGCTGAATTG
CATTATGGAAATGGTAGAGAAAACAAGGCGCTCTATGGCAGTTCTGCGGCGCTGTCAGGAATCAGATCGTGAAGA
ACTCAACTACTGGAAAAGACGGTACAATGAAAACACAGAGCTGAGGAAAACGGGGACCGAGTTGGTCTCCAGGCA
GCACAGCCCTGGGAGTGCAGATTCTCTCAGCAATGATTCTCAGAGAGAGTTCAACAGCAGGCCAGGTACAGGATA
CGTACCTGTGGAGTTTTGGAAAAAAACAGAAGAAGCTGTGAATAAGGTGAAAATTCAGGCCATGTCAGAAGTACA
GAAGGCCGTCGCTGAGGCAGAGCAGAAAGCCTTTGAAGTGATTGCAACAGAGAGAGCACGAATGGAGCAAACCAT
AGCGGATGTCAAGCGGCAGGCCGCAGAGGATGCTTTCCTCGTCATCAATGAGCAAGAGGAGTCCACGGAGAACTG
CTGGAACTGTGGCCGCAAAGCCAGCGAGACATGCAGTGGCTGCAATATCGCGCGATACTGTGGCTCTTTCTGCCA
GCACAAGGACTGGGAGCGGCACCACCGCCTCTGTGGTCAGAACCTGCATGGCCAGAGCCCCCACGGCCAGGGCCG
GCCGCTGCTTCCTGTAGGCAGGGGCTCCTCTGCCAGGTCCGCCGACTGCAGCGTGCCCAGCCCAGCCCTCGACAA
GACCTCGGCAACCACATCGCGTTCCTCAACACCTGCTTCTGTGACAGCTATCGACACCAACGGACTCTGAGCCCC
GGACTCTGCTTACCCTGATGGCTGCTCAGCACCACAGAGTGCTTGGGCTGAGGGACTGACTGTTGGAACCCGTGC
ATGTAGCTGCCGGGTCATCAGCAAGAAATGAATTGGAGGCAGGAAGAGTCCAAGCCTGAATAATAACACCCCACA
GCCTCTCTGTGCACTTGCTGTCTGCGGAGCCAGTGTGCCATTCTCTGCACATGGGCAGCCAGCCTGAGCTGCCTC
CTCCATGGCTTTCCTGGTTTGTTCCTCTCTCCACTGAAGCTGACTTAGCCGGCCCCTTTTCAGTGTAGACCACCA
GCTCCCCTCCCCATCTCCTTGAGTCAGCAGACTGTCCAATGTGCTCAGCCAGGCTGGAGGCGGCAGGCGGCAGGC
AGCAGGCTGTGGAGGAGGCCCCTCGGTCAGGGAGCGGCCTGCCTCACCCCTGAATAGCTCCTTCGGCCCCATCTC
CATCCTCAGCAGATGACACTGATTGGCCTCACGGGGACTTGGGTAAGCAACAGGCGGCATTCAGGACTCTTCTCA
ACCCTGCTGTTCAGACTTGATAAGATCTCAGAGTCCACAGGAAAGAAGTCACTGTTGCAATAAAAGCACCCGTAG
TAGCAAAAACATAAAACAAATAAAACTTCCCCCACATCACAGATGATTTTGGACAAGATTTTCCAACCTTGCTGG
CTACTTTAGTTTGGGACCTGTTTTTTTTCTCATTTGATTTTGCTTGTGCAGAAAATAGTTTCCAGCACATGGATT
GATCTGAGAGAGAATGAGGCTCAGTTGTGGATAGTCTGTTTTCTCTGAGCATGTTGGCCAACTAGTATCGTCAAA
TTATTGAGTGGATCATCTCTTGGAAATGCAGAACTTCTGCCACCACTTGGCTATTTGCACAGTCATCTTGTTCTG
TGTCCTTTTATCTCTCAGACCACACACATCTGGAACGCTGTGGGCATCTTCTGCCCATGGGCTCCATTTGGCACC
TGCTGAGCCACAGTTGTCCTGCTGGATGTGCTGTGCAGGTTGGTAGGACTTGCCCCCACTGTCAAGGCCTGGTCT
CATCTGAAAAGCCCTCCTGGACCTCAAAGAATTCTTCAGACCTCATAGTTACAGGTCATTATATCTACTATGTTG
ATTTATCATCAGGCACACAACTTCTGTTTCCTTCTCTTGTGTTATCTGATAGCGTCCCTCCTTGAGCTCATCAGA
AAGGTTTTATGAAATGTGAACCATTTTGGGAAAAGCTGATCAATTTTTCTTCCTAGCTTCCCATTTTCAAATGGG
ACATCACTCATATCCCTTTCAGAATGTTAGGAACTGCCTCCCACATTCTTCCCTGTCTTTTTGGGTTTTGTTTTT
TGTTGTTGTGGTGGTTTTTTAACACAAACCTGGGCAACAGAGCAAAACTCTGTCTCAAAAAAAAAAAAAAAAAGG
CAAAATTAAAGAATTTCAAGTCCCTAATTTACTCTAACCAAGCATTTTCAGTCTTACAAAGAAATCTAGTGCACG

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FIGURE 4482B

ACACCTTTAAAATGCCTAGATTTCCATTGCCTAAAGTAAGGTGTGACCAGTGAAACAACAGCAGAGAATCATGTT
CCTTTGCTGTGGAACACATAAGCCCCACAGTTTTCCAGTCAGCCTAATACATGGGTATCCCCCGACCCCATCTGC
CTCCTTAAGCCACAGTCCTTGGTGGGGAACTCTAAGGGGGACGGAGTCAGTACCCCGGACAGGGCCACATTTGCA
TGAGACATGGCTGTCTCACAGGTCACAGAGCCATTACAACAGCTTACTAGTTTTTCATGGATTTGTTGGATTAAC
ACCTTAAGCAGGTTTTTTATTGTTATTTTGTTTGTTTGTTTGTTTTGAGACGGGAGTTTCTCTCTTGTCTCCCAG
GCTGGAGTGCAATCGCGCAATCTCGGCTCACGGTAACCTCTGCCTCCCAGGTTCAAGCGAGTCTCCTGCCTCAGC
CTTCTGAGTAGCTGGGATTACAGGCATGCGCCACCACGCCCAACTAATTTTGTATTTTTAGTAGAGACGGGGTTT
CTCCTTGTTGGTCAGGCTGGTCTCAAACCCCGGACCTCAGGTGATCCCCCCACCTTGGCCTCCCAAAGTGCCAGG
ATTACAGGCATGAGCCACTGTGTCCGGTCTTGAGCAGGTTTTTAAAATCTCCAGTGGCCATAAAACTAGCCAGGG
TAGCTCATGCTTTTACTGGTTGGAATAAGGAGCCAAAACCAACAAAATAATATTTATTAGGGCTCGATGCCCATT
TCTGTGGCTAAGGCTTAGGTTTGGTGTGCAGAGCCTGGCCTGCTCTTGTGGGCTGTGGTTGCTGTGACAGTTTCG
TTTTCTGAATCTTTGTAATGCTCTTCCACCCTGCTCGTGCTGCCCAGAGGCTGATCTGCAAACCTGGGCAGTATT
CCACACTGAAGCTCAGTTTGCAAACCTTCTGCTGTGTTAATTCTGGTCAGTTTCACACAGAAGTCACGAGGGCCT
CTGCCCAGGACCTTCTATTCACATTTCAAGAATCCCTTTCTGAAATTCTCCAACTCTCTGGTCAGGAGGAGGAGC
ACCATTGGGGCGGGGTAGGCAGCTAGAGGCGCAGGAGCGAATCCAGGTTCCTTGCGTGGTTCCCAGCCTCTGCTG
ACAGCACCTCAGCTACCAGGTGGGGAGTGGAAATTCAGCCTGCTTAGAGGACTGACCTCTACAGTTCATATTTGC
AGTGACATAAAAGGCAAAGAGGAGCTGGCATGGTGGTACAGAAGGTATCAGTCAAGCGCAGGCTCTTCAGAAACC
TAGAAACTAAAAAAGAGATGCAACATGTGACTGGCCATCAGCCAGACATGTCTAGGGTGAGACCAGTGCTCAGCAC
CACCCGCCAAGGAACACTGATGAGTTGTGGGACATTATGGTCGGCCAAGTGAGGAATGATTGCAGGGACCAGAGA
AGACCAAAGATGCCAGATGTCCCCAGAGTTTCTTGAGGGCTGGGTTTCACGTCTTTGCTTGTCCTTTTTGTCCCC
ACTTGCCTGCACCGTGCCTGACTCATCCAGTGGGGAAGGTGACTCAAGAAGTTGTTTAAGCCTAGGCCTAGGCAG
TCCACTTCGGGAGGTGGGGGCACTCCACACTGGGGGGCCCTGCAGCTCCAGGGCTGGTGCTCTAGCAGATCCGCT
CAGGCACGGTTGGGTGACCGTGGGGTCACCGATTGCGTAGATTATTTCTAGGGCAGTGCTGGGTTAGAAATGTCT
GTCTGGAAACAGGACACATCTTGCCACCACAAGTCCACACCTGGCCTTGGCTGCTGCCCGCTCTCTGCAGCGTGG
ATTTCCTTTGCCCATTTGGGCCAGAAGGTCACCAGGAGTTCATCACTGCTTAGTGTCAACTTGACATCTTCAGCT
TCCAGACAGAAAACCCATGCTTTACTTTGTACAGCCCTGTCCCAGAGTTAGTAAGCCTCGGCTTGTCACCTGCTT
GCAAAGGGTATAGACATCATTCTGGGTAGTTCTAGAGGATATCGCAACAAGTGCGTTTGAAGGTTCAGCACAGCT
GGAATTGTACGGTAGTGAGCTCTTCAAAATGAAAACAGAATGACCGGATGGCCATCTGTCCTGGAAACTGTAGAA
TTGAATAAATCACTGAAAATAGAACACTTCTTGGAGGCTTTCTTCAGAACTGAACTAGAAACAAGGTTTCCAGGC
TCCCAGGTCAGTAGACCAAACCAACTTCCTTAGATTTTTTTTTTTAAGCTGTTTGCAGAAAACTGGGTGGTAGCG
TGTCTGAACCAAACGGAAGAATAGCCAGCGGAGCATGGACTGTTCCAGCACGGGCCAGATGGCCAGCTGTCGAGA
GCAGCCCTGCCCAGATTGCGGTGGGGGCTGTGCCAGCGGCTCCGCAGGGCCCTTCCAACTCTGGAGTGTCTGTAG
TTCTTGTGAAACCAAAACGTTGACTACCTGCCTCTTTCCTCGGGCATCGACGTGCTCATTTCCAAAGATGATGGT
GCAGGTGACCTTTTCCATCGTGAGCTAAGAGAAGGTTAGGAGGCCTGAGGGGCGGGCCTTGTGTCCCCTCCTCCC
CCTCCACAGCCCCTGAGGTGGAGCTTCCCTCACAGACCCCATCTGGTCGAGCCTACGGCTGCCCAGTGTACACTC
AGTGATGCTTATACCAAATAGGGCATGTGCGCTGGTGTCTGTTGGGGACAGCCCCATCCCTACCTTGGAGTCGGC
AGAGAAGCAGCAATAAGCATTAGGCGAATGATTGAAAGGGCTGCTGCGCCAAGAGGCCTTCAGTCCCCTTAACGT
GGCTTTCCAACTTCCTGACGAGGCTACAAAGGCTCCGCTCACAAAAGAAAGCCAATAATGTAAATAAATAGAAAA
CGAAGCCTCCACGCGTGGTTTTTAAAGGGGGATGATGAATGTGACACCACCCACAGAATGCATTAGAATCTGGTT
TTTCTGTGCTTTGTCATTTTACTCTGATAGGAATTTTTGTTACCTAACTCTGTGCATAACTTATTTAATGTACTG
TATAAATGAACCAAAACTGTTAAATATGTATTTAGTTTGTTCTACTTAAAGTAGTCAATAAAAAGGCTATATTCC
T

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FIGURE 4483

GGCGCCGGCGCCAAGGGGCGGCCTCTAGCCACACCGAGTCCGCCGCGGCGTCCAGGGTCGGCAGCAACCGCAGCC
GAGCCCGAGCGGGTGGCGGCGCCATGGCGTGCGCGGGGCTGCTCACCGTGTGCCTGCTCCGGCCGCCCGCGCCCC
AGCCCCAGCCCCAGACCCCGCGGCACCCCCAGCTCGCGCCCGACCCGGGGCCCGCCGGACACACGCTCTTCCAGG
ACGTTTTCCGCAGAGCAGACAAGAATGATGATGGGAAGCTCTCATTTGAGGAATTCCAGAATTACTTTGCCGATG
GGGTTCTCAGCCTGGGGGAGCTGCAGGAACTGTTCAGCGGCATTGATGGGCATCTCACCGACAATTTAGAAACAG
AAAAACTGTGTGACTACTTCTCAGAGCACCTGGGTGTCTACCGGCCGGTGCTGGCTGCATTGGAATCGCTGAACC
GTGCAGTGCTCGCTGCCATGGATGCCACCAAGCTGGAGTACGAGAGGGCCTCCAAAGTGGACCAGTTTGTGACGC
GCTTCCTGCTGCGGGAGACGGTGAGCCAGCTGCAAGCCCTTCAGAGCTCGCTGGAGGGGGCGTCAGATACCCTGG
AGGCCCAGGCCCATGGCTGGCGGTCAGATGCAGAGAGCGTGGAGGCGCAGAGCAGGCTCTGCGGCAGCCGGCGGG
CAGGACGCCGAGCCCTGAGGAGTGTCAGCCGGTCATCCACCTGGTCCCCCGGCTCTTCTGACACAGGGCGCAGCT
CAGAGGCCGAGATGCAGTGGCGGCTCCAGGTGAACCGCCTCCAGGAGCTCATCGACCAGCTCGAGTGCAAGGCCC
CCCGGCTGGAACCCCTGCGTGAAGAGGACCTGGCCAAGGGGCCTGACTTGCACATCCTCATGGCCCAGAGGCAGG
TCCAGGTGGCAGAGGAAGGCCTGCAGGACTTCCACCGAGCCCTGCGCTGCTATGTGGACTTCACAGGGGCCCAGA
GCCATTGTCTGCAGTGAGTCCGCCCAGAAGATGCTGGACGGTGCCTCCTTCACCCTGTATGAGTTCTGGCAGGAT
GAGGCCTCCTGGAGAAGGCACCAGCAGTCGCCTGGCAGCAAGGCCTTCCAGCGCATCCTCATCGACCACCTGCGG
GCCCCGGACACCCTCACCACTGTGTTCTTCCCAGCCTCCTGGTGGATAATGAATAACAACTGAGCCAGACCTGCA
CACGCCGAGGGCCCCGGGACCCTGCCTGCCTCCCTCTGGAGCCTTCTGGACTGGCCAGCCCAGCGCAAAGACCAG
GACTTGTCTCCTCCTGGACTTGGGCCTGGTGGAAGGGCTCTCAGCCCAGGGATCAGGGACTGGGCTGCTTGCTTT
CTATTTATTATTGATTTATTTATCCCTGTATTTTATTGTTTGTCACTTCAGCCTCCAAGCTACTTTGGCTTCTGC
CTGGCTCAGGAGACCTGGATTCTGGTCCCTGCTGTCCCTGCCTGGCTGAGCGACCCAGGGCAGGTCCCGTCCCTG
TCTGGGTGGGCCTCAGGCCATCTGGCCGCCTAGCGAGGGTCCTGCTTTCTTCCTGCTGTCTTGGGACCAGGCTTC
TGCTCCTCCTCAGCCAGCGGCAGAAGCAGGGCTGATGCTCAGGGACCCCCCAACCCTCAAACCTTGCCTCCGAGG
CTGGGCCTGAGCTGGGTGCCCCGTCGCCCTCCCAGGCCACTAGGCTCTGACTCTTCCAGCACCCATGGATGTGCC
AGAGGCCTCTGGGTTGGTTTGCATGTCATTTGCATATCGTTTGCATGCCCTCATCCCACCCATTCTCAGGGCAGT
ATGGGAAGCCCCAAGGTGACCTGGCCAAGTAGCAATAATTTGGGTCCAGGGTCACCTATTGCCCCCAGAGGCCTC
TGAACCCCAGGCTGGGACCCCAGCACAGAGGCAATAAAGGCAGTGGTCCCTTCC

FIGURE 4484

CCCTGCTGGGGCATCCCCGGCCTGTGATGCTCCCCGTCTCCCCAGAACCGCTGTTGTCCCGGATGGGCAGCCTGC
GGGCTCCCGTGGACGAGGACCGCCTGTCCCCGCTGGTGGCGGCCGACTCGCTCCTGGAGCATGTGCGGGAGGACT
TCTCCGGCCTCCTCCCTGAGGAGTTCATCAGCCTTTCCCCACCCCACGAGGCCCTCGACTACCACTTCGGCCTCG
AGGAGGGCGAGGGCATCAGAGACCTCTTCGACTGTGACTTTGGGGACCTCACCCCCCTGGATTTCTGACAGGGCT
TGGAGGGACCAGGGTTTCCAGAGATGCTCACCTTGTCTCTGCAGCCCTGGAGCCCCCTGTCCCTGGCCGTCCTCC
CAGCCTGTTTGGAAACATTTAATTTATACCCCTCTCCTCTGTCTCCAGAAGCTTCTAGCTCTGGGGTCTGGCTAC
CGCTAGGAGGCTGAGCAAGCCAGGAAGGGAAGGAGTCTGTGTGGTGTGTATGTGCATGCAGCCTACACCCACACG
TGTGTACCGGGGGTGAATGTGTGTGAGCATGTGTGTGTGCATGTACCGGGGAATGAAGGTGAACATACACCTCTG
TGTGTGCACTGCAGACACGCCCCAGTGTGTCCACATGTGTGTGCATGAGTCCATGTGTGCGCGTGGGGGGGCTCT
AACTGCACTTTCGGCCCTTTTGCTCTGGGGGTCCCACAAGGCCCAGGGCAGTGCCTGCTCCCAGAATCTGGTGCT
CTGACCAGGCCAGGTGGGGAGGCTTTGGCTGGCTGGGCGTGTAGGACGGTGAGAGCACTTCTGTCTTAAAGGTTT
TTTCTGATTGAAGCTTTAATGGAGCGTTATTTATTTATCGAGGCCTCTTTGGTGAGCCTGGGGAATCAGCAAAGG
GGAGGAGGGGTGTGGGGTTGATACCCCAACTCCCTCTACCCTTGAGCAAGGGCAGGGGTCCCTGAGCTGTTCTTC
TGCCCCATACTGAAGGAACTGAGGCCTGGGTGATTTATTTATTGGGAAAGTGAGGGAGGGAGACAGACTGACTGA
CAGCCATGGGTGGTCAGATGGTGGGGTGGGCCCTCTCCAGGGGGCCAGTTCAGGGCCCCAGCTGCCCCCCAGGAT
GGATATGAGATGGGAGAGGTGAGTGGGGGACCTTCACTGATGTGGGCAGGAGGGGTGGTGAAGGCCTCCCCCAGC
CCAGACCCTGTGGTCCCTCCTGCAGTGTCTGAAGCGCCTGCCTCCCCACTGCTCTGCCCCACCCTCCAATCTGCA
CTTTGATTTGCTTCCTAACAGCTCTGTTCCCTCCTGCTTTGGTTTTAATAAATATTTTGATGACGTTTGGGCCGG
GTTTTGGGACTCTGTTGGGAACATTTCGGGGCGGGAGAGGCCAAGGTTGCTGGGGAAATGCCCATTCTCCACTTC
CCTTCTCCCTGTCCGTGCCCGATTTGATTTGAGCCTCATAACTCGAAGAAAGGTCAGCTTCCTCGCTGTTTTGGT
CCTAACTCAAAAGCAGATCCAGTAAAGGTTTTTGTTGT

FIGURE 4485

CAGCTGCGGGGCGGAGGCGGAGGCGGAGGAGAGGCCTGCGGCGGCAGGGAGCGGCGGGACTGGGAGCGGGCGCCG
GAGCCGACCCGAGCCGAGCCGAGCCGAGCCGAGCCGGAGCGGGCGGCGAAGGCCGGCGCGGCGAGCAGCAACCATG
TCGGTGTTCGGGAAGCTGTTCGGGGCTGGAGGGGGTAAGGCCGGCAAGGGCGGCCCGACCCCCCAGGAGGCCAT
CCAGCGGCTGCGGGACACGGAAGAGATGTTAAGCAAGAAACAGGAGTTCCTGGAGAAGAAAATCGAGCAGGAGCT
GACGGCCGCCAAGAAGCACGGCACCAAAAACAAGCGCGCGGCCCTCCAGGCACTGAAGCGTAAGAAGAGGTATGA
GAAGCAGCTGGCGCAGATCGACGGCACATTATCAACCATCGAGTTCCAGCGGGAGGCCCTGGAGAATGCCAACAC
CAACACCGAGGTGCTCAAGAACATGGGCTATGCCGCCAAGGCCATGAAGGCGGCCCATGACAACATGGACATCGA
TAAAGTTGATGAGTTAATGCAGGACATTGCTGACCAGCAAGAACTTGCAGAGGAGATTTCAACAGCAATTTCGAA
ACCTGTAGGGTTTGGAGAAGAGTTTGACGAGGATGAGCTCATGGCGGAATTAGAAGAACTAGAACAGGAGGAACT
AGACAAGAATTTGCTGGAAATCAGTGGACCCGAAACAGTCCCTCTACCAAATGTTCCCTCTATAGCCCTACCATC
AAAACCCGCCAAGAAGAAAGAAGAGGAGGACGACGACATGAAGGAATTGGAGAACTGGGCTGGATCCATGTAATG
GGGTCCAGCGCTGGCTGGGCCCAGACAGACTGTGGTGGCCTGCGCAGCGAGCAGGCGTGTGCGTGTGTGGGGCAG
GCAGGATGTGGTGCAGGCAGGTTCCATCGCTTTCGACTCTCACTCCAAAGCAGTAGGGCCGCGTTGCTGCTCACT
CTCTGCATAGCATGGTCTGCACCTGGGAGATGGGCGGGGGGAGGGGGGCGGGCGGGGTGGGAAGTGCCTGCTGTT
TATAATGTTGAATTTCTGTAAAATAAACTGTATTTGCAAATCCAACATTGAGCTTCTGGACTACGCTGACTCCAC
TGCTGAATCCTCAATGGAAAGGGTCGACTGGTTGCAGTTGAAATGACCTGAAATGTAGCCTCTGTCCTTGTAAGT
CAGTTGACTTGCCGCACATCTCTTTGTGTACTTGTACGGTACTGGCAGAAAAGTCATTTTTCAAAAGCCATAGGC
TTTTCCTTGCCCTTAGCTGTAATAATGCATCTGATTTTGATTTCCTCCAGAGCTGTGTTTCTGTCCATCACCTGT
GTATTGGCCCTGTGTTTACCACTCTGGCCCACTCCTCACCCCCTTGCTCCCCTGGTCTTCTGGAGTTTGTGACAT
TGATTTGAAATGGATGGTGTTCTCTTGAGAGCAAGTGAGATTGTTAGAATTAAGTTCCAACTATACAGTTTTCTA
ACATAGCTATAAGGTCCTTGTTGCTGTTTGTGATAACTGATAGATAACTCATTGGAAACGTGCATACATTTATAT
TCAGATGAAATTATGGTTTGCACTGTCTATTAAATATCTCGATTAATTTTC

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FIGURE 4486

CGCGCGAGCGGCGCCAGCTCGGGGCAGCGGAACCCAGAGAAGCTGAGGGGGCGGTAGCGGCGGCGACGGCGACGA
CGACGACTCCCGCGCGTGTGCCCAGCCTCTTCCCGCCGCAGCCGCCCTTTTCCTCCCTCCCTTACGTCCCCGAGT
GCGGCAGTACCGCCTCCTTCCCAGCCGCGCGGCTTCCTCCAGACCTCTCGGCGCGGGTGAGCCCTATTCCCAGAG
GCAGGTGGTGCTGACCCTGTAACCCAAAGGAGGAAACAGCTGGCTAAGCTCATCATTGTTACTGGTGGGCACCATG
TCCTTGAAGCTTCAGGCAAGCAATGTAACCAACAAGAATGACCCCAAGTCCATCAACTCTCGAGTCTTCATTGG
AAACCTCAACACAGCTCTGGTGAAGAAATCAGATGTGGAGACCATCTTCTCTAAGTATGGCCGTGTGGCCGGCTG
TTCTGTGCACAAGGGCTATGCCTTTGTTCAGTACTCCAATGAGCGCCATGCCCGGGCAGCTGTGCTGGGAGAGAA
TGGGCGGGTGCTGGCCGGGCAGACCCTGGACATCAACATGGCTGGAGAGCCTAAGCCTGACAGACCCAAGGGGCT
AAAGAGAGCAGCATCTGCCATATACAGTGGCTACATCTTTGACTATGATTACTACCGGGACGACTTCTACGACAG
GCTCTTCGACTACCGGGGCCGTCTGTCGCCCGTGCCAGTGCCCAGGGCGGTCCCTGTGAAGCGACCCCGGGTCAC
AGTCCCTTTGGTCCGGCGTGTCAAAACTAACGTACCTGTCAAGCTCTTTGCCCGCTCCACAGCTGTCACCACCAG
CTCAGCCAAGATCAAGTTAAAGAGCAGTGAGCTGCAGGCCATCAAGACGGAGCTGACACAGATCAAGTCCAATAT
CGATGCCCTGCTGAGCCGCTTGGAGCAGATCGCTGCGGAGCAAAAGGCCAATCCAGATGGCAAGAAGAAGGGTGA
TGGAGGTGGCGCCGGCGGCGGCGGCGGTGGTGGTGGCAGCGGTGGCGGTGGCAGTGGTGGTGGCGGTGGCGGTGG
CAGCAGCCGGCCACCAGCCCCCCAAGAGAACACAACTTCTGAGGCAGGCCTGCCCCAGGGGGAAGCACGGACCCG
AGACGACGGCGATGAGGAAGGGCTCCTGACACACAGCGAGGAAGAGCTGGAACACAGCCAGGACACAGACGCGGA
TGATGGGGCCTTGCAGTAAGCAGCCTGACAGGAGCAATGGCCACCAGCAGGTGAAGGGCATCGCTGCCCCAGGCC
TCAAGCCGGGCACCCAACCCTGGATGCCACCCCCCAGCGGGTACCAGAGGAAAGCTGGCAGCAGGCGCCTCCTCC
CCCAACGCATCCCAGCCAGTGCCATGTCCTCTGCAGGTGGAGTTACTGGCCTACTCCTTCCCCATGAGCCCTCCC
TGTCTGCACTGCCCAGGCCAGAGGGTAGAGCACAGGGGTTTCCCCATACTACCTCCCCTCCCCAGGACACTCCCA
GGCTTGGGTTTTTTCTATAGGTTTGGCGGGGGGCCACAGGGAGGGGACCCTGACAATAAAGAGATTGGATCCC

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FIGURE 4487

GGTGGTGGGAGAGGTATCGGCAGGGGCAGCGCTGCCGCCGGGGCCTGGGGCTGACCCGTCTGACTTCCCGTCCGT
GCCGAGCCCACTCGAGCCGCAGCC**ATG**TCTGGGGACGAGATGATTTTTGATCCTACTATGAGCAAGAAGAAAAAG
AAGAAGAAGAAGCCTTTTATGTTAGATGAGGAAGGGGATACCCAAACAGAGGAAACCCAGCCTTCAGAAACAAAA
GAAGTGGAGCCAGAGCCAACTGAGGACAAGGATTTGGAAGCTGATGAAGAGGACACTAGGAAAAAAGATGCTTCT
GATGATCTAGATGACTTGAACTTCTTTAATCAAAAGAAAAAGAAGAAAAAAACTAAAAAGATATTTGATATTGAT
GAAGCTGAAGAAGGTGTAAAGGATCTTAAGATTGAAAGTGATGTTCAAGAACCAACTGAACCAGAGGATGACCTT
GACATTATGCTTGGCAATAAAAAGAAGAAAAAGAAGAATGTTAAGTTCCCAGATGAGGATGAAATACTAGAGAAA
GATGAAGCTCTAGAAGATGAAGACAACAAAAAAGATGATGGTATCTCATTCAGTAATCAGACAGGCCCTGCTTGG
GCAGGCTCAGAAAGAGACTACACATACGAGGAGCTGCTGAATCGAGTGTTCAACATCATGAGGGAAAAGAATCCA
GATATGGTTGCTGGGGAGAAAAGGAAATTTGTCATGAAACCTCCACAAGTCGTCCGAGTAGGAACCAAGAAAACT
TCTTTTGTCAACTTTACAGATATCTGTAAACTATTACATCGTCAGCCCAAACATCTCCTTGCATTTTTGTTGGCT
GAATTGGGTACAAGTGGTTCTATAGATGGTAATAACCAACTTGTAATCAAAGGAAGATTCCAACAGAAACAGATA
GAAAATGTCTTGAGAAGATATATCAAGGAATATGTCACTTGTCACACATGCCGATCACCGGACACAATCCTGCAG
AAGGACACACGACTCTATTTCCTACAGTGCGAAACTTGTCATTCTAGATGTTCTGTTGCCAGTATCAAAACCGGC
TTCCAGGCTGTCACGGGCAAGCGAGCACAGCTCCGTGCCAAAGCTAAC**TAA**TTTGCTAATCACTGATTTTGCAAA
GCTTGTTGTGGAGATGTGGCTGGACAGGTTTGCCATCAGAGTGGATATACCGTTGTATTAAAAACAAGATAAAAA
AGCTGCCAAGATTTTTGGCGAGTGGTTGGTCTGAAGTCCTTGCAAGACGCTGATGCTCAAGCTGTTGACATACTC
ATTGCCTACTTTAACACCTGTCAGAGAAACGTGATATGGGGTAAGGAGGTGCTTTTTTAAAATCGTTCATAGACT
TCTGTAAAATGCAAGATAAATTAAAGTTATTATAACAGTGATTCTTTCA

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FIGURE 4488

CTGAGGCCCAGCCCCCTTCGCCCGTTTCCATCACGAGTGCCGCCAGCATGTCTGACAAACTGCCCTACAAAGTCG
CCGACATCGGCCTGGCTGCCTGGGGACGCAAGGCCCTGGACATTGCTGAGAACGAGATGCCGGGCCTGATGCGTA
TGCGGGAGCGGTACTCGGCCTCCAAGCCACTGAAGGGCGCCCGCATCGCTGGCTGCCTGCACATGACCGTGGAGA
CGGCCGTCCTCATTGAGACCCTCGTCACCCTGGGTGCTGAGGTGCAGTGGTCCAGCTGCAACATCTTCTCCACCC
AGGACCATGCGGCGGCTGCCATTGCCAAGGCTGGCATTCCGGTGTATGCCTGGAAGGGCGAAACGGACGAGGAGT
ACCTGTGGTGCATTGAGCAGACCCTGTACTTCAAGGACGGGCCCCTCAACATGATTCTGGACGACGGGGGCGACC
TCACCAACCTCATCCACACCAAGTACCCGCAGCTTCTGCCAGGCATCCGAGGCATCTCTGAGGAGACCACGACTG
GGGTCCACAACCTCTACAAGATGATGGCCAATGGGATCCTCAAGGTGCCTGCCATCAATGTCAATGACTCCGTCA
CCAAGAGCAAGTTTGACAACCTCTATGGCTGCCGGGAGTCCCTCATAGATGGCATCAAGCGGGCCACAGATGTGA
TGATTGCCGGCAAGGTAGCGGTGGTAGCAGGCTATGGTGATGTGGGCAAGGGCTGTGCCCAGGCCCTGCGGGGTT
TCGGAGCCCGCGTCATCATCACCGAGATTGACCCCATCAACGCACTGCAGGCTGCCATGGAGGGCTATGAGGTGA
CCACCATGGATGAGGCCTGTCAGGAGGGCAACATCTTTGTCACCACCACAGGCTGTATTGACATCATCCTTGGCC
GGTAGGTGCCAGATGGGGGGTCCCGGGGAGTGAGGGAGGAGGGCAGAGTTGGGACAGCTTTCTGTCCCTGACAAT
CTCCCACGGTCTTGGGCTGCCTGACAGGCACTTTGAGCAGATGAAGGATGATGCCATTGTGTGTAACATTGGACA
CTTTGACGTGGAGATCGATGTCAAGTGGCTCAACGAGAACGCCGTGGAGAAGGTGAACATCAAGCCGCAGGTGGA
CCGGTATCGGTTGAAGAATGGGCGCCGCATCATCCTGCTGGCCGAGGGTCGGCTGGTCAACCTGGGTTGTGCCAT
GGGCCACCCCAGCTTCGTGATGAGTAACTCCTTCACCAACCAGGTGATGGCGCAGATCGAGCTGTGGACCCATCC
AGACAAGTACCCCGTTGGGGTTCATTTCCTGCCCAAGAAGCTGGATGAGGCAGTGGCTGAAGCCCACCTGGGCAA
GCTGAATGTGAAGTTGACCAAGCTAACTGAGAAGCAAGCCCAGTACCTGGGCATGTCCTGTGATGGCCCCTTCAA
GCCGGATCACTACCGCTACTGAGAGCCAGGTCTGCGTTTCACCCTCCAGCTGCTGTCCTTGCCCAGGCCCCACCT
CTCCTCCCTAAGAGCTAATGGCACCAACTTTGTGATTGGTTTGTCAGTGTCCCCCATCGACTCTCTGGGGCTGAT
CACTTAGTTTTTGGCCTCTGCTGCAGCCGTCATACTGTTCCAAATGTGGCAGCGGGAACAGAGTACCCTCTTCAA
GCCCCGGTCATGATGGAGGTCCCAGCCACAGGGAACCATGAGCTCAGTGGTCTTGGAACAGCTCACTAAGTCAGT
CCTTCCTTAGCCTGGAAGTCAGTAGTGGAGTCACAAAGCCCATGTGTTTTGCCATCTAGGCCTTCACCTGGTCTG
TGGACTTATACCTGTGTGCTTGGTTTACAGGTCCAGTGGTTCTTCAGCCCATGACAGATGAGAAGGGGCTATATT
GAAGGGCAAAGAGGAACTGTTGTTTGAATTTTCCTGAGAGCCTGGCTTAGTGCTGGGCCTTCTCTTAAACCTCAT
TACAATGAGGTTAGTACTTTTAGTCCCTGTTTTACAGGGGTTAGAATAGACTGTTAAGGGGCAACTGAGAAAGAA
CAGAGAAGTGACAGCTAGGGGTTGAGAGGGGCCAGAAAAACATGAATGCAGGCAGATTTCGTGAAATCTGCCACC
ACTTTATAACCAGATGGTTCCTTTCACAACCCTGGGTCAAAAAGAGAATAATTTGGCCTATAATGTTAAAAGAAA
GCAGGAAGGTGGGTAAATAAAAATCTTGGTGCCTGG

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FIGURE 4489

AGTTCCCGACCGCGGGCG**ATG**GCTGCCGCTGGGGGCGCCCGGCTGCTGCGCGCCGCTTCTGCGGTCCTCGGCGAC
CCGGCCGGCCGGTGGCTGCACCACGCCGGGTCCCGCGCTGGAGCCAGCGGCCTGCTGAGGAGCCGGGGACCGGGC
CGGAGCGCGGAGGCGAGCCGGCCGCTGAGCGTGTCGGCAGGGGCGCGGAGCAGCTCAGAAGATAAAGTGACAGTC
CACTTTATAAACTGTGATGGTGAAACATTAACAACCAAAGGAAAAGTTGGTGATTCTCTGCTAGACGTTGTGGTT
GAAAATAATCCAGATATTGATGGCTTTGGTGCATGTGAGGGAACTCTGGCTTGTTTAACCTGTCATCTCATCTTT
GAAGATCACATATATGAGAAGTTAGATGCAATCACTGATGAGGAGAATCACATGCTCGATCTGGCATATGGACTA
ACAGATCACAGTTGGGCTGCCAAATCTGTT**TGA**CAAAATCTATGGACAATATGACTGTTCGAGTGCCTGAAACAG
TGGCTGATGCCAGACAATCCATTGATGTGGGCAAGACCTCCTGAACTAGAACAAATAGGAATATTTTCATGGAAT
TTTACCTATTTTTATAATTATTATTTAAGTGATAAAATGAGTACATGGATGAGTGGATTCTGTATTATGACTAGC
TTTACTATTTTAATTCACCTTGTATAACTACTAAATTTTGTCATTCTTGAAAGTATGCAATTTTTATTTTGGTTA
TATTACAAAAATGTCAGTCAGATATTAAAAAATAGTTAATGTGATAGAAAAACCTTACATATTTTTTCTTATGTT
TGTTTAGCGACTTTAGCAAAATGTTTTCATATAATCTCATCTGTTTACCTAGAAGATAGGTTAAGGAAATATATT
ATTATTCCTGTTTGATGTAGGTGAAGGCAGAGATCTAACCTGGCTTGTTTAGGGCCATACCACTAATTGGAAAAT
CTGTACTAGAACCTGTGTCTTATTACTATAAGCTATTATGTTCAGACTGAAACTGGAGAAATTACGACAATTTAT
AGCAGTAGTTAAATCTGAATGTGTATGGACAAAAATATTTAATTGCTCAGTAAACTGCTTAACTTCAAAGATAGT
TATTAACCTCATAAATATTTCAAAATTTTGATTCTGAAGTCTAAGTCTGAACACAGACATAACACTATCAAAGAA
GTTTGATCTCTGTTTTGACTCAACTAGAGGAAAAATGATTGGATGGGTTTATTCTTTTCTAAGCAGAATGGTTTA
ACTTTGTACTCTTTGAAAAACAATGCTGATTTCTAAATCTCTGCCTATAACAGAATGG

FIGURE 4490

GGACTCGCTAAGTGTTCGCTACGCGGGGCTACCGGATCGGTCGGAA**ATG**GCAGAGGTGGAGGAGACACTGAAGCG
ACTGCAGAGCCAGAAGGGAGTGCAGGGAATCATCGTCGTGAACACAGAAGGCATTCCCATCAAGAGCACCATGGA
CAACCCCACCACCACCCAGTATGCCAGCCTCATGCACAGCTTCATCCTGAAGGCACGGAGCACCGTGCGTGACAT
CGACCCCCAGAACGATCTCACCTTCCTTCGAATTCGCTCCAAGAAAAATGAAATTATGGTTGCACCAGATAAAGA
CTATTTCCTGATTGTGATTCAGAATCCAACCGAA**TAA**GCCACTCTCTTGGCTCCCTGTGTCATTCCTTAATTTAA
TGCCCCCCAAGAATGTTAATGTCAATCATGTCAGTGGACTAGCACATGGCAGTCGCTTGGAACCCACTCACACCA
ATCCAGTGACCGTGTGTGGGCTGGCGGCTCTTCTCCCCCACCAACGGAACCCCTGTGTGCACCAACCTTCCCCAG
AGCTCCGGAGCGCCCTCTCCTCACTTCCAGGTTTTGGAGCAAGAGCTTGCAGGAAGCCCGCACCCAGCTTCCTTC
TGACCTTCAGTTCACTTTGTCGCCCTTGGAGAAAGCTGTTTTTCTTTAACTAAAAATAACCAAAATGCT

FIGURE 4491

GAGTTACCTCCCGCAGCCGCAGCCGCCGTGCTCAGCGCGAGCCCCGGAGCCCTTGAGCGCGAGGCGCGGAGCCCC
CGGAGCCCCCAAACCGCAGACACATCCCCGCGCCCCAGAGCCCCGGCCTGCGCGCCCAGCCGGGCCCGCGCG**ATG**

CCCTCAGACCGGCCTTTCAAGCAGCGGCGGAGCTTCGCCGACCGCTGTAAGGAGGTACAGCAGATCCGCGACCAG
CACCCCAGCAAAATCCCGGTGATCATCGAGCGCTACAAGGGTGAGAAGCAGCTGCCCGTCCTGGACAAGACCAAG
TTTTTGGTCCCGGACCATGTCAACATGAGCGAGTTGGTCAAGATCATCCGGCGCCGCCTGCAGCTGAACCCCACG
CAGGCCTTCTTCCTGCTGGTGAACCAGCACAGCATGGTGAGTGTGTCCACGCCCATCGCGGACATCTACGAGCAG
GAGAAAGACGAGGACGGCTTCCTCTATATGGTCTACGCCTCCCAGGAAACCTTCGGCTTC**TGA**GCCAGCAGTAGG
GGGGCTCGGCCTGGGAGTCGGGCGGCCCCGGTCAGGCCCTGCCCAGAGAGCTCCTGGTTCCTGAACTGAGCTGCC
TCTACCGTGGTGGGCTGGGCAGGCATGTGCCCCCCTAGTCAGAGGGCACCAACCCACCTACTCTGCCCCTGGGTG
GATCCTGGGCCGGTCGTGTTAGGGTTGTCCCTCTGGGTGCTGGCTGGTGGGATGGGGGAGGGTGGGGAGCAGCTC
CCAGCACCCCTGCTGTGTGGTTCATCTTTTTTTTAGGCCCCTGCCTGTCTGCCCATCTGCCCCTCACCCACCCGA
GGCTCTGCCCACCGCCTGGACCTGCCCACCCCTGAAAGACTGGCCCCTGGCTCCCCGCCCCTCGGTCTCCACGTG
GTGTATGGATCTGTGGTCATTGTCCCTCTGCAGAATAAAGATTGCTCAGGCCTGCCTGGC

FIGURE 4492

ATGGCGGCTCCCTTGGTCCTGGTGCTGGTGGTGGCTGTGACAGTGCGGGCGGCCTTGTTCCGCTCCAGTCTGGCC
GAGTTCATTTCCGAGCGGGTGGAGGTGGTGTCCCCACTGAGCTCTTGGAAGAGAGTGGTTGAAGGCCTTTCACTG
TTGGACTTGGGAGTATCTCCGTATTCTGGAGCAGTATTTCATGAAACTCCATTAATAATATACCTCTTTCATTTC
CTAATTGACTATGCTGAATTGGTGTTTATGATAACTGATGCACTCACTGCTATTGCCCTGTATTTTGCAATCCAG
GACTTCAATAAAGTTGTGTTTAAAAAGCAGAAACTCCTCCTAGAACTGGACCAGTATGCCCCAGATGTGGCCGAA
CTCATCCGGACCCCTATGGAAATGCGTTACATCCCTTTGAAAGTGGCCCTGTTCTATCTCTTAAATCCTTACACG
ATTTTGTCTTGTGTTGCCAAGTCTACCTGTGCCATCAACAACACCCTCATTGCTTTCTTCATTTTGACTACGATA
AAAGGCAGTGCTTTCCTCAGTGCTATTTTTCTTGCCTTAGCGACATACCAGTCTCTGTACCCACTCACCTTGTTT
GTCCCAGGACTCCTCTATCTCCTCCAGCGGCAGTACATACCTGTGAAAATGAAGAGCAAAGCCTTCTGGATCTTT
TCTTGGGAGTATGCCATGATGTATGTGGGAAGCCTAGTGGTAATCATTTGCCTCTCCTTCTTCCTTCTCAGCTCT
TGGGATTTCATCCCCGCAGTCTATGGCTTTATACTTTCTGTTCCAGATCTCACTCCAAACATTGGTCTTTTCTGG
TACTTCTTTGCAGAGATGTTTGAGCACTTCAGCCTCTTCTTTGTATGTGTGTTTCAGATCAACGTCTTCTTCTAC
ACCATCCCCTTAGCCATAAAGCTAAAGGAGCACCCCATCTTCTTCATGTTTATCCAGATCGCTGTCATCGCCATC
TTTAAGTCCTACCCGACAGTGGGGGACGTGGCGCTCTACATGGCCTTCTTCCCCGTGTGGAACCATCTCTACAGA
TTCCTGAGAAACATCTTTGTCCTCACCTGCATCATCATCGTCTGTTCCCTGCTCTTCCCTGTCCTGTGGCACCTC
TGGATTTATGCAGGAAGTGCCAACTCTAATTTCTTTTATGCCATCACACTGACCTTCAACGTTGGGCAGATCCTG
CTCATCTCTGATTACTTCTATGCCTTCCTGCGGCGGGAGTACTACCTCACACATGGCCTCTACTTGACCGCCAAG
GATGGCACAGAGGCCATGCTCGTGCTCAAGTAG

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FIGURE 4493

CCCTCACTCCTGGTCCCCATACCCAGCATCTAATCATCCATGCCCCCTACTCCTGGCCCCTCCATCCTTTCTTCT
CTGGTCCCCATCCCTGTCTCTCCCTTTCACCCTTGCCCTCCAGTCCTCTACCTCTGGCCTGCCCCTATTTCTGAA
AGCTTCTTCCAGTCCCTGATCTGGCTCATTCCCCACCTTCAACTCCCACCTTACATGTCTCACACTATCCCATGG
TTGGCATTACACTCACTCCTGTTCCCTTATTCTTCATTCCCAGTAATTCCCTACCAAATGGTGGGGACCCTGAGC
CCAGCTCTGACCAGGTAGAGCCTGTGCAGCCTGGGCTGCTGTCATTGCCCTCCAGTAAGGGCTCAGGGTTTTGCT
TTTAGTCTCCCCTTCCTTCTGCCTTGGGGGCGGTACTCTGTGGAGCTGCTTAGGCCTGGAAAGGTACAGTATGTA
GAAGAGGACTGTGAGACGTGAGTTAGAGGGAGAAGATGGAGGGAATCTAGGGAACGAGGCAGCCTATTGGAGATG
CGGACAGGACAGACACGTTGAGAAGCTGCAGGGAGCAGGGCACCAAGGGAGTGTGCACTGTGCTTGCTCAGAGAG
GCCAAACCCTGCTCCCAGGCTGAAGCCTGGAGTCTGCCCCCACTTCCCTTTTCTATAATCCACCCTTCTGCAGGC
CCTGAAATCTGAAGGGCTTAGTTAGTACCTTGCCACTCTACCCCCAACACGTCACCCGAGTAGAAGCTGGGCAAG
GCCCTACCATCCTGGCCGTCTGTTCACAAGCCCAAGGTGCTAGAACTAGCTTAGGAGACATGCAGGCCACAGGGC
TTCTAGGCAGGGAAAGGGCACACACCCTAGGTCAGCGTGCAGAGCAGTGATGCTGGAGGACACACCATGGGGTGA
AGCCATCCCAAGGCTGACAGCTCAGTCTTCACCTTGCCTCTGGCCTTGTATTTCACACCCTGCTCAGTATGGCTA
GCCAGCAGTCCTGAGTAGGAGTCCAGGACTCCCACTGTCTCAATCTGCAAATTGTTCCTATCCAGGTTCAGGGCC
TTCAGGGGGCCTCTTTTCATTTTCTCCCACAGGCCTCTCTTTCTTTCTAGGTTGCTGGGGAGAAATGGGTACCCT
ATGATCCCCCTCCCCTTCTCCTCCAGTAAATACCTGGAAGAGGGAACCTGAATCCCTGGGGGAGACAGAAGGGGC
AGGGGCCACCAGCCTCCCCTTCTTGTGGTGAGACTGAATTTTGGGCTCAGACACCAGCAACAGCCTCTTGGGATG
CCCTGAGTTGCTTCCCATTTCCTCTTTCTAGCCGTCCTTTTCTAGTGTGTGCTCACTCTTCCTAGGAACTTTTAA
GACTTCTTGGTACCTATGAACATAGGTCCTCCCCTCACCCCAACTCTAGGTTTCCAGGCCTCACAGCCAAGCTGA
AGCTTGGAGAAAACTCTGCATTCCCATGAGGGCAAAGGCAGCTGCCCTCCCTGACCCTATAGCCCCAGGCCTCAT
GGGGGGTATGTGGGGAAGGGATGGGGTATCCCCATGGATGCTGGGATGAGGACAGAGGAAGACCTGATGGGGTCT
CCTATTCCAGGGAATAAGCCAAATTAACACTAAAAACGGATCAAAGCTCCCACGCCAGTCCACTAGGGCCCCAGT
AGTTGACAGCCTTGCTCCTCTCCCAAGTTCTCCTTCAGAACCTAGTTGCTTTTATTCTTCCAGCTACCACTTGGG
CACTTCACAGCCAGCCTAGGGTCTTCGGCACCTCCAAGAGCTGAATCTCCCTCCAACCCTTCTTGCCTACTCCTC
ACTGCCAGCTGGGACCTAGGCTCAGTCCTGTGTGGTGCCCATGATCCTTCTGGTGGGGGAAGAGTTTAAGTTATA
GGGCATTTGGCTCAAATTTTAAAAGGCCTTTTGTTTACCTATATTTCTGGAGGCTCCTGTATTCTAGAACCCAAT
CTCTCACCTGCTTGGTTGCAAGGCTCATATTTTTTTGTACCTTTCCTATAGATTCTGTAGCATTTGAGTGTGGCA
ATATTTTAATTGTGTATAGATTTCTAAGAACCAACACTACTCAGTCTCCTGCTAGTCTGACTCCTGAAGCATCAG
CCCTTGTCATACTGTATTGACTGTGTACGTGCCTTTCACCTTGAGCATGCTTCAGGATTTTTTTTTAAACCACAG
AACTTGAATACATGAGGGAACCAGAGTTCAAAGTCCTATGCAACCTTAGGAGGGGGTTAGAGAGTCTGTTTTGAT
TGATGTTTTCTGAGGCCCTAGAGGAGTTTGTATCAATTTGTGAGTATTAATGTCAGTACTACCAGCACTTTGCCA
AAACTGTCAGAGGGACCCGTTTCTAGAGTGAGTCCCAGTTACATCAAACAGTGACTTCCAGTTATTCCCCAGTAA
GTCTGAGTGGTTCCTTCAAGCTGGGTGTCTTTCCAGCCTTTGCCAGTCTAGCCCCAGCAGGGCACCGTGTATGAA
TGCAGTTTGGTGCTGTTTTAGAGTATGCCTGCTCCCCAGCCCCCTGCCTGGAACCCTCTGAGCAACTTGCTCTGA
CCTATAATGTCTTAGGTGCAACACGGACCCCACCAGAGCTCTTGGATACCCCCCTAGATCCATGTGGCTTTATGT
GAGGGGACTGAATGCAGACACACCATAGCCCCCTTCTACTACTTTCCCTCTCGCCCTGCCACCTAGTTCCACATG
GAACCAACAAGTTGAGTGCATCCCTGTTGGGTGTTTTGTGTTGAGACTGGCTGAAATGAGGAGACTTTGACCATG
TGACGTGTCAACAGACTCAAGGAGACAACCACCTCAACTGGGTCATGTGGCATGCCTGTGTATGTGTGTAACAGA
ATTCTGATTGTTAGACTGTAATGCTATTCCTCTATGGGAGAAAAAAATTAATATAAAGAAAAACAAATAAAAATA
TATTTAAAGC

FIGURE 4494A

CTCCAGCCCAGGCAACAGAGCGTGACTCCGTCTCAAAAAAAAAAAAAAAAGTGAAAGGAAAATGAGGGGAGAATT
CTCATTGATAATAAGGGCGAAAAGGTTTTTTTGGCAGAGTAATAGAGTTTTGGAAACCATTGCAAAGCTGTCAAG
TGTGGTGTAGTTTTTGGTTAAGGAAATCAGAGGTGTCAGCAGACATAAAAGACAGGGGAAAACATGGGAAGTGTC
CTACCTATAGTGTAGAAAAAGCACAACTATCTATGTCAGAGGTCGACAGACTGTGGTCCATAGGTCAAATCTGGC
CCACGATCTGTTTTTGTAAATAACGTTTTATTGGAACATAGCCACACTCATTTATTTATATATTGTCCATATCTT
CTTTTGTGGTACCAATAGCAGAGTTGAGTAGTCGTGACAGAGATGTGTTGTGTCAGCTCACAAAGCTGGAAATAC
TCTTTACAAAAACATTTGCCAACCCCTGATCTATGTGTTTGAGTGTTGGATGTTCAACCTCTAATTTGCCATCCA
ATGTCTATATGATGATAGAGAATGAATAAACGTCTTGGCTCTGCCCTTTGGGCTGGATTACCCATGCTCTGTGTA
CCTGCAGCATAACACAGACCCCTGAATATTTATATCAGTCAGTGATGGCAAGGTCTATTGTTCTGGAGTGTACTG
TGTGGTAACTGTGGTAGTGCCAGCTTTACACGGATTAGATAATGCTCGGGCTTGTTTTGCCATTTTTTTTATTGG
GTTGTCTTTTACAAAAGATTTATTTATATATTCTGATTATTAATCCTTTGTTGTTGGTAGATATTACAGATGTCA
TTTCCCAGTTTCTTGCTTATTTTAATTTTTTTTTTTTTTTTTTTGAGATGAAGTCTTGCTCTGTCGCCCAGGCTG
GAGTGCAGTCGTGCCATCTCAGCTCATTGTAACCTCCGTCTCCCAGGTTCAAGTGATTCTCTTGCCTCAGCCTCC
CAAGTAGCTGGGACTACAGGCATGTGCCACCACACCTGGCTGATTTTTGTGTTTTTAGTAGGGATGGGGTTTCAT
CATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAAGTGATCCACCCGTCTTGGCCTCCTAAAGTGCTGGGATT
ACAGGTGTGAGCCACTGCGCCTGGCCTGTTGCTTATTTTAAAACATCTGTTTTAAGGTGTCATTTGTTAAAAAGT
TCTGAATTTTAGTATCAACTTTATCAATCTTTTCCTTTAAGATTTGCAGTTATTCTTTGTTTTGAGGCAGGGTCT
CGCTCTGTCACCGAGGCTGGAGTGCAGTGGTGCGATCTCGGCTCACTGCAGCCTCAACCTCCTGGGCTCAAGCAA
CCCTCCCACCTCCCATGCCAGTTGAGACCACAGGCATGCGCCACCATGCCCTGCTACTTTTTGCATTTTTTGTAG
AGGCGGGGTTTCGCCATGTTGCCCAGGCTAGTCTGGAACTCCTGAGCTCAAGCAGTCCACAAAGTGCTGGGATTA
CAGGTGTGAGCTACTGTGCCCAGCCTGCAATTATTCTTTATATTCTGGAATACCTACTGTTGTTTTCAATGGTTA
GATCTTTAATGTATCTGGAATGGATTCTTATGTGTAGTGTAAGGTCGGGTCCAGTTTCATTTTTTTTCCCTATGT
ATAACCAGTGATCCCAGCATCATTTATTGAATGGGGCTTGCTTTCAAATTGTGAGCTCTTTTTGGTGGAGTCTGT
CTCAGGTCCTTATTAAGCACTGCTGCTTGCTGATTGTGTGACCTTGGACAAATAAAACCTCATTGCGCCTCAGTC
TTTAAGGATAATAGTAATCTCATAGGGTTTTGTGAGGATTAAATGAGTCAATATACATAACGTGTAAAACAGTGC
TTGGCACCTAGAACATGCTCAATAAATATTAGCTGTACTTTAGCACTACTGTTCATTTCTGATTCCTCAGCACCT
GGTACAGAGCAGGGGCTCATTTTGCTCAATTAAATTGCCAAATTAATTTGGTTTTCAGGTCAATCAGAATGGTGA
GAGTTGGGCTGAGTGTTGCAGGAGATGCTTCCAAGGAGCTACTTAGTTTTAGGGGCTGCCTTAGATTATCTGCTA
GGATAGAACTCTTCTCACGCCATCACTTTTGCAGAGAACTTCTGTAGCAGAGGTTGCAAACTGGCAACCTGTGGT
TGGATTTGACCTGTATAAGTATTTTGTTTGGTTTACACAATATTTTTAATGTCTTAAAAATGTACACAGACCTCT
GAGTTTCTGACTTAACCTTGAAAAATTGGAAGATCTGTCAACAGCAAGCCCATATTCATTTATAGCGGTAACCAG
CTGAAACTTTTAGGTCCTGGGAGGAATGGAGAGGGGTCCCACTGACTAACTTTTCTGAGAGTGGTCAGAGAGTTC
TTAAGCAGAATTTTGATTTGGCTGCTGGGCTGCTACCTTGAAATCCAAGCCCTAAAAATGCCAGCTTCTTTGGAC
TTAGAAGATGACCTGGATAAATGATAAAAATTAAGAAAGAGATTTTGAAGTTTTCTTATTGTCCTCTTGGCATAT
GCTTCTGGAATAATATTCACC**ATG**GTTTTGGATGACCTTCCAAACTTAGAAGACATCTATACTTCCTTGTGTTCA
TCAACAATGGAAGACTCAGAGATGGATTTTGACTCTGGACTAGAAGATGATGACACAAAAAGTGATAGTATTTTG
GAGGATTCCACAATTTTTGTGGCCTTCAAAGGAAATATAGATGATAAAGACTTCAAATGGAAATTAGATGCAATA
TTGAAAAACGTGCCCAATTTGTTACACATGGAGTCCAGCAAGCTAAAAGTACAGAAGGTGGAGCCCTGGAACAGC
GTGCGTGTGACATTCAACATCCCCCGGGAAGCAGCGGAGCGGCTACGGATCCTTGCTCAGAGCAACAACCAGCAG
CTTCGGGATTTAGGGATTCTCTCCGTTCAGATTGAAGGGGAAGGTGCTATTAACCTGGCTTTGGCTCAGAACCGA
AGCCAAGATGTGAGAATGAATGGACCCATGGGAGCTGGAAATTCAGTTAGGATGGAGGCGGGATTTCCTATGGCA
AGTGGTCCAGGAATAATAAGGATGAACAACCCTGCCACTGTTATGATACCCCCGGGTGGAAATGTGTCATCTTCC
ATGATGGCACCAGGCCCCAATCCAGAGCTGCAGCCCAGGACTCCTCGCCCTGCTTCTCAGTCAGATGCAATGGAT
CCACTCCTCTCTGGGCTCCATATACAGCAGCAAAGTCATCCCTCAGGATCTTTAGCTCCCCCACATCACCCAATG
CAGCCTGTCTCTGTGAACAGACAAATGAACCCAGCTAATTTTCCCCAGCTGCAGCAGCAGCAGCAACAACAACAA
CAGCAGCAGCAGCAGCAGCAGCAGCAACAACAGCAACAGCAGCAACAACAGTTGCAGGCAAGACCCCCACAGCAA
CATCAGCAGCAACAGCCACAGGGAATTCGACCCCAGTTTACTGCCCCAACTCAGGTGCCTGTTCCTCCAGGCTGG
AACCAGCTGCCTTCTGGAGCCCTTCAACCTCCTCCAGCCCAGGGTTCTCTGGGCACAATGACTGCAAACCAAGGG

FIGURE 4494B

TGGAAGAAGGCTCCCTTGCCCGGCCCAATGCAACAGCAACTCCAGGCAAGACCATCCTTAGCCACGGTACAGACG
CCTTCCCACCCTCCCCCTCCATATCCCTTTGGCAGCCAGCAAGCCTCACAAGCCCACACAAACTTTCCTCAGATG
AGCAACCCAGGCCAGTTCACAGCTCCTCAGATGAAGAGTTTGCAGGGAGGGCCCTCTAGGGTCCCAACTCCCTTG
CAGCAGCCCCACCTCACCAACAAGTCTCCTGCCTCCTCACCCTCCTCCTTCCAGCAGGGATCCCCTGCATCCTCC
CCAACGGTTAACCAAACTCAGCAGCAGATGGGACCAAGGCCACCTCAAAATAACCCACTTCCCCAGGGATTTCAG
CAGCCTGTCAGCTCTCCGGGTCGGAATCCTATGGTTCAACAGGGAAATGTGCCACCTAACTTCATGGTGATGCAG
CAGCAACCACCAAACCAGGGGCCACAGAGTTTACATCCAGGCCTAGGAGGAATGCCTAAACGCCTCCCACCTGGC
TTCTCAGCAGGACAGGCCAATCCGAACTTTATGCAAGGTCAGGTGCCTTCGACCACAGCAACCACCCCTGGGAAT
TCAGGAGCCCCTCAGCTGCAAGCAAATCAAAATGTCCAGCATGCAGGTGGTCAAGGAGCTGGTCCTCCTCAAAAC
CAGATGCAGGTGTCCCACGGGCCGCCAAATATGATGCAGCCCAGCCTCATGGGAATTCATGGCAACATGAACAAT
CAGCAGGCTGGTACTTCTGGGGTTCCTCAAGTGAACCTCAGCAACATGCAAGGCCAGCCCCAGCAGGGCCCACCA
TCTCAGCTGATGGGCATGCACCAGCAAATCGTGCCCTCCCAGGGCCAGATGGTCCAGCAACAAGGAACCTTGAAC
CCTCAGAACCCTATGATCCTTTCAAGGGCCCAGCTTATGCCACAGGGCCAGATGATGGTGAACCCCCCGAGCCAA
AATCTTGGGCCCTCGCCCCAAAGGATGACCCCACCCAAGCAGATGCTTTCCCAGCAGGGCCCACAAATGATGGCG
CCACATAACCAGATGATGGGGCCTCAGGGGCAGGTTTTGCTCCAACAGAACCCAATGATAGAGCAGATTATGACC
AATCAAATGCAGGGGAATAAGCAGCAGTTTAACACTCAGAACCAGTCCAATGTCATGCCGGGACCAGCCCAGATA
ATGAGGGGACCAACTCCAAACATGCAAGGAAATATGGTGCAGTTTACGGGACAGATGTCAGGACAGATGCTGCCC
CAGCAAGGGCCTGTGAACAACAGTCCATCTCAGGTTATGGGCATTCAGGGACAGGTCCTGCGGCCACCAGGGCCC
AGCCCACACATGGCCCAGCAGCATGGTGATCCTGCTACTACAGCAAATAACGATGTCAGTTTATCTCAGATGATG
CCTGATGTTAGCATTCAACAAACCAACATGGTCCCCCCTCATGTGCAGGCCATGCAGGGAAACAGTGCCTCGGGA
AACCACTTCTCAGGCCATGGGATGTCTTTCAATGCACCTTTCAGTGGAGCTCCCAATGGAAATCAGATGTCCTGT
GGTCAAAATCCAGGCTTCCCAGTCAATAAGGATGTCACGCTAACGAGCCCATTGTTGGTCAACTTATTGCAGAGT
GACATATCTGCAGGCCATTTTGGGGTAAACAATAAGCAAAATAATACCAACGCAAATAAACCGAAGAAGAAGAAA
CCCCCTCGGAAGAAGAAAAATAGTCAGCAAGATCTAAACACCCCAGATACTCGCCCAGCTGGTCTGGAAGAGGCT
GATCAGCCACCGTTGCCTGGAGAACAAGGAATTAACTTGGATAACTCAGGCCCTAAACTGCCAGAATTTTCAAAC
CGGCCACCAGGTTATCCTTCTCAACCAGTTGAACAGAGGCCACTTCAGCAGATGCCTCCTCAACTCATGCAGCAT
GTGGCACCCCCACCACAGCCACCACAGCAGCAGCCACAGCCACAACTGCCTCAGCAGCAGCAGCCACCACCTCCC
AGTCAGCCACAGTCTCAGCAGCAGCAGCAGCAGCAGCAACAAATGATGATGATGCTCATGATGCAGCAGGATCCC
AAATCAGTTAGGCTTCCAGTCTCTCAAAATGTCCATCCTCCAAGGGGCCCCCTGAACCCCGACTCCCAGAGAATG
CCCATGCAACAGAGTGGCAGTGTGCCTGTCATGGTCAGTCTGCAAGGACCTGCCTCCGTGCCACCATCACCTGAT
AAACAAAGAATGCCAATGCCTGTGAATACTCCCTTGGGAAGCAATTCAAGGAAAATGGTCTATCAGGAGAGCCCG
CAGAATCCTTCCAGCTCGCCACTGGCGGAGATGGCCTCACTCCCTGAAGCAAGTGGCAGTGAAGCACCATCTGTC
CCAGGAGGCCCAAACAACATGCCTTCACATGTAGTACTTCCCCAGAATCAGTTAATGATGACAGGGCCAAAACCT
GGACCATCGCCCCTTTCAGCAACTCAAGGTGCAACTCCCCAGCAACCCCCTGTAAATTCCCTGCCCAGCTCTCAC
GGCCACCACTTCCCAAATGTGGCTGCGCCAACCCAGACATCTAGGCCCAAAACACCAAACAGAGCCAGCCCCAGA
CCCTATTATCCTCAGACACCCAACAACCGCCCTCCCAGCACAGAACCTTCAGAAATCAGTCTGTCACCAGAAAGA
CTCAATGCCTCCATAGCAGGACTCTTCCCTCCACAGATTAATATTCCTTTACCTCCTAGGCCAAATTTAAACAGG
GGCTTTGATCAACAAGGCCTAAATCCAACAACTTTGAAGGCCATCGGGCAAGCACCTTCAAATCTTACCATGAAT
CCTTCCAATTTTGCTACCCCACAAACTCACAAATTAGATTCTGTGGTAGTGAATTCTGGAAAGCAGTCTAATTCT
GGAGCAACAAAACGGGCAAGTCCAAGCAACAGTCGCAGGTCTAGTCCTGGGTCCAGTAGGAAAACCACTCCAAGC
CCTGGGAGGCAAAATTCAAAAGCCCCTAAACTTACTCTGGCCTCTCAGACAAATGCAGCCCTATTGCAGAATGTG
GAGTTGCCGAGAAATGTATTGGTCAGTCCCACTCCTCTGGCCAATCCCCCTGTACCTGGGAGCTTTCCTAACAAC
AGTGGGCTGAATCCTCAGAATTCTACTGTGTCTGTGGCTGCAGTTGGGGGTGTTGTTGAGGATAACAAGGAGAGC
TTGAATGTGCCTCAGGACAGTGATTGCCAGAATTCCCAGAGTAGGAAGGAACAGGTAAACATTGAACTAAAAGCA
GTCCCTGCCCAAGAAGTTAAAATGGTTGTCCCTGAAGATCAGTCCAAAAAGGATGGGCAGCCTTCGGATCCTAAC
AAACTTCCCAGTGTCGAAGAGAACAAAAATTTGGTGTCTCCTGCTATGAGGGAAGCACCAACATCGTTAAGTCAA
CTTCTTGACAACTCTGGAGCTCCCAATGTGACAATTAAACCCCCTGGGCTTACAGATCTGGAAGTAACACCTCCA
GTAGTTTCTGGGGAGGACCTCAAAAAAGCATCTGTCATTCCCACACTGCAGGATCTGTCTTCTTCTAAAGAACCT

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FIGURE 4494C

TCTAATTCCCTAAACTTACCTCACAGTAATGAGCTGTGTTCATCCCTTGTGCATCCCGAATTGAGTGAGGTCAGT
TCTAACGTTGCACCAAGCATCCCTCCAGTAATGTCAAGACCTGTTAGCTCTTCCTCCATTTCCACTCCCTTGCCC
CCAAATCAAATAACTGTATTTGTCACTTCCAATCCCATCACAACTTCAGCTAACACATCAGCAGCTTTGCCAACT
CACTTGCAGTCTGCATTGATGTCAACAGTTGTCACAATGCCCAATGCGGGTAGCAAGGTTATGGTTTCTGAGGGA
CAGTCAGCTGCTCAGTCTAATGCCCGGCCTCAGTTCATTACACCTGTCTTTATCAATTCATCCTCAATAATTCAG
GTTATGAAAGGATCACAGCCAAGCACAATTCCTGCAGCCCCACTGACAACCAACTCTGGCCTGATGCCTCCCTCT
GTTGCAGTTGTTGGCCCTTTACACATACCTCAGAACATAAAATTTTCTTCTGCTCCTGTACCGCCTAATGCCCTC
TCCAGTAGTCCTGCTCCAAACATCCAGACAGGTCGACCTTTGGTCCTTAGCTCACGAGCCACCCCTGTTCAGCTT
CCTTCCCCTCCTTGTACGTCTTCTCCAGTTGTCCCTTCTCATCCCCCTGTGCAGCAAGTGAAAGAATTGAATCCA
GATGAGGCTAGCCCTCAGGTGAACACCTCAGCAGATCAGAACACTCTTCCCTCTTCACAGTCAACCACAATGGTT
TCTCCCCTTTTGACCAATAGTCCAGGGTCCTCTGGCAACCGGCGAAGCCCAGTCTCGTCTAGTAAGGGCAAAGGA
AAAGTGGACAAAATTGGCCAAATTTTGTTGACCAAGGCATGTAAGAAAGTTACAGGCTCTCTTGAGAAAGGGGAA
GAACAATATGGTGCAGATGGAGAGACTGAAGGCCAAGGGCTAGACACCACAGCTCCGGGGCTCATGGGAACAGAG
CAGTTATCCACAGAGCTGGACAGTAAAACCCCAACGCCCCCAGCACCCACTCTGCTAAAAATGACCTCTAGCCCT
GTGGGCCCGGGCACTGCCTCAGCAGGACCCAGCTTACCTGGCGGTGCTCTCCCCACCAGTGTACGCTCGATAGTA
ACCACTCTGGTACCCTCCGAGCTCATCTCCGCCGTACCGACCACAAAAAGCAATCATGGTGGCATAGCATCTGAG
TCACTTGCGGGTGGCCTAGTGGAGGAGAAGGTGGGATCCCATCCAGAACTTCTACCCAGCATAGCCCCGTCGCAG
AATTTAGTCTCAAAGGAAACTTCAACCACAGCACTGCAGGCCTCTGTTGCCAGACCAGAGCTGGAGGTAAATGCT
GCCATAGTCTCTGGACAAAGCAGTGAGCCCAAAGAGATAGTTGAAAAGTCCAAAATCCCAGGCCGAAGAAACTCC
CGAACTGAAGAGCCAACTGTGGCCTCTGAAAGTGTGGAAAATGGACATCGTAAACGATCTTCTCGACCTGCTTCA
GCCTCCAGCTCTACTAAAGACATAACCAGTGCGGTGCAATCCAAGCGAAGAAAATCCAAGTAAACAAGCAGGACT
GCGACTTGATACTTGGAAATGTGTGTGACTTTTACAAAGAGCAATTTTGAGCTGTGACTTTTTTAAATCAATTTC
TGTACAGTTAGTAATTTTAATAATGTGGCCCTTTTCCTAGTCCCTGCAACCTGTTTCATAAAGTGCAATGGGGAA
AGCAGGACTGTTGAGCCCTTTTGGTGTTGCGAGTTGAAGTTCAAGGTTTCTAAAATGTTGTCTTGTATTGAAAGG
AGCTAATGCCATTATAAATGTTACTAGTTTTCACATTTCCTAAGCAGCCTAGAGTACAGGGTGAGCATTTTTAGA
TCTCCTAATGATGTATTGTGCCGTGGAAGTACTGTGTGTGAATAGCAGTAGTGGGGGCAAAAGCAATCTTCTCAT
TTGGAAATGTTGTAAATAATTTTATTATATAGTGTTTTGGATGTATTTGTTGTAGAAATGGACCAGTGAATAAAG
AGAATCTAAGGATTTGTACAATGTGAAATAACGTGTTAAATAAATGTCATTGTCATAGAACATAAAGTTATGTTA
TTGGTAAGGG

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FIGURE 4495

ATGGCGGCGGAGAACGAGGCCAGCCAGGAGAGCGCCCTGGGCGCCTACTCGCCAGTGGACTACATGAGCATCACC
AGCTTCCCGCGGCTGCCCGAGGACGAGCCGGCGCCCGCGGCCCCGCTGAGGGGCCGCAAGGACGAGGACGCCTTT
CTGGGAGACCCCGACACCGACCCGGACTCCTTCCTGAAGTCTGCACGGCTGCAGCGGCTGCCATCGTCGTCGTCG
GAGATGGGCAGCCAAGACGGGTCGCCGCTACGCGAGACGCGCAAAGACCCGTTCTCCGCCGCAGCGGCCGAGTGC
TCCTGCCGCCAGGATGGGCTCACGGTCATCGTCACGGCCTGTCTCACCTTCGCTACCGGTGTCACCGTGGCGCTG
GTCATGCAGATCTACTTCGGGGACCCCCAGATCTTCCAGCAGGGTGCCGTGGTGACCGATGCTGCCCGCTGCACT
TCACTGGGCATCGAGGTGCTCAGTAAACAGGGATCTTCTGTGGACGCAGCGGTGGCAGCAGCCTTGTGTTTGGGT
ATCGTGGCTCCACACAGTTCTGGCCTGGGCGGTGGGGGCGTGATGCTGGTACATGACATCCGACGAAATGAGAGC
CACCTAATTGATTTCCGGGAGTCCGCACCAGGGGCCCTCAGGGAAGAGACCCTGCAAAGATCCTGGGAGACCAAG
GTGGGGACCCTGCCTGGGCTCTTGGTGGGGGTTCCCGGAATGGTGAAGGGGCTACATGAAGCTCACCAGCTCTAT
GGCAGGCTGCCATGGTCCCAAGTCCTGGCCTTTGCAGCAGCTGTGGCCCAAGATGGCTTCAACGTGACTCATGAT
CTAGCCCGTGCCCTGGCTGAACAGCTGCCACCCAACATGTCCGAGCGCTTCCGGGAGACGTTCCTGCCATCGGGC
CGCCCGCCACTACCTGGCTCGTTGCTGCATCGGCCCGACCTGGCTGAGGTGCTGGATGTACTTGGCACCTCCGGC
CCGGCTGCCTTCTACGCAGGTGGCAACCTCACACTGGAGATGGTGGCCGAGGCTCAGCACGCAGGGGGTGTCATA
ACCGAAGAGGACTTCAGCAATTACAGCGCCCTTGTGGAGAAGCCTGTGTGTGGCGTGTACAGAGGCCACCTGGTT
CTTAGTCCCCCACCTCCGCACACGGGCCCTGCCCTCATCAGTGCTCTCAACATCCTGGAGGGCTTCAATCTCACC
AGCCTGGTATCCCGAGAACAGGCTCTTCACTGGGTGGCAGAGACCCTGAAGATTGCATTAGCCCTGGCCAGCAGA
CTGGGAGATCCCGTCTATGATTCTACCATCACTGAGAGCATGGATGACATGCTCAGCAAGGTGGAGGCCGCCTAC
CTCCGGGGCCATATCAATGACTCCCAGGCAGCCCCTGCCCCACTCCTGCCTGTCTATGAACTAGACGGAGCTCCC
ACGGCTGCCCAGGTGCTGATCATGGGACCTGATGACTTCATTGTGGCCATGGTTAGCTCCCTGAACCAGCCCTTT
GGCAGCGGCCTTATCACCCCCTCGGGGATCCTGCTCAACAGCCAGATGCTGGACTTCTCCTGGCCCAACCGGACA
GCTAACCACTCTGCACCCAGCCTGGAGAATTCAGTGCAGCCAGGGAAGCGGCCACTCTCTTTCCTGCTGCCCACA
GTGGTCCGACCCGCGGAGGGGCTCTGTGGAACCTACCTCGCTCTGGGGGCCAATGGAGCTGCGCGGGGCCTCAGC
GGCCTGACACAGGTTCTGCTGAATGTCCTGACCTTGAACCGGAACCTGAGTGACAGCCTGGCCCGCGGCCGCCTA
CACCCGGACCTGCAGTCCAACCTCCTGCAGGTGGACAGTGAGTTCACAGAGGAAGAGATTGAGTTCCTGGAAGCC
AGGGGTCACCACGTGGAGAAAGTAGATGTCTTATCCTGGGTCCATGGCAGCCGAAGGACCAACAACTTCATCATC
GCTGTTAAGGACCCTCGGAGCCCAGATGCAGCTGGAGCCACCATCCTGTAG

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FIGURE 4496

ATGGGGCTTCCTGAGGAGCGGGTCCGGAGCGGCAGCGGGAGCCGGGGCCAGGAGGAAGCTGGAGCCGGAGGCCGG
GCGCGGAGTTGGTCTCCGCCGCCCGAGGTCAGCCGCTCCGCGCACGTCCCCTCGCTGCAGCGCTACCGCGAGCTG
CACCGGCGCTCCGTGGAGGAGCCGCGGGAATTCTGGGGAGACATTGCCAAGGAATTTTACTGGAAGACTCCATGC
CCTGGCCCATTCCTTCGGTACAACTTTGATGTGACTAAAGGGAAAATCTTCATTGAGTGGATGAAAGGAGCAACT
ACCAACATCTGCTACAATGTACTGGATCGAAATGTCCATGAGAAAAAGCTTGGAGATAAAGTTGCTTTTTACTGG
GAGGGCAATGAGCCAGGGGAGACCACTCAGATCACATACCATCAGCTTCTGGTCCAAGTGTGTCAGTTCAGCAAT
GTTCTCCGAAAACAGGGCATTCAGAAGGGGGACCGAGTGGCCATCTACATGCCTATGATCCCAGAGCTTGTGGTG
GCCATGCTGGCATGTGCCCGCATTGGGGCTTTGCACTCCATTGTGTTTGCAGGCTTCTCTTCAGAGTCTCTATGT
GAACGGATCTTGGATTCCAGCTGCAGTCTTCTCATCACTACAGATGCCTTCTACAGGGGGGAAAAGCTTGTGAAC
CTGAAGGAGCTGGCTGACGAGGCCCTGCAGAAGTGTCAGGAGAAGGGTTTCCCAGTAAGATGCTGCATTGTGGTC
AAGCACCTGGGGCGGGCAGAGCTCGGCATGGGTGACTCCACCAGCCAGTCCCCCCCAATTAAGAGGTCATGCCCA
GATGTGCAGATCTCATGGAACCAAGGGATTGACTTGTGGTGGCATGAGCTCATGCAAGAGGCAGGGGATGAGTGT
GAGCCCGAGTGGTGTGATGCCGAGGACCCACTCTTCATCCTGTACACCAGTGGCTCCACAGGCAAACCCAAGGGG
TGTGGTTCACACAGTTGGGGGCTACATGCTCTATGTAGCCACAACCTTCAAGTATGTGTTTGACTTCCATGCAGA
GGATGTGTTCTGGTGCACGGCAGACATTGGTTGGATCACTGGTCATTCCTACGTCACCTATGGGCCACTGGCCAA
TGGTGCCACCAGTGTTTTGTTTGAGGGGATTCCCACATATCCGGACGTGAACCGCCTGTGGAGCATTGTGGACAA
ATACAAGGTGACCAAGTTCTACACAGCACCCACAGCCATCCGTCTGCTCATGAAGTTTGGAGATGAGCCTGTCAC
CAAGCATAGCCGGGCATCCTTGCAGGTGTTAGGCACAGTGGGTGAACCCATCAACCCTGAGGCCTGGCTATGGTA
CCACCGGGTGGTAGGTGCCCAGCGCTGCCCCATCGTGGACACCTTCTGGCAAACAGAGACAGGTGGCCACATGTT
GACTCCCCTTCCTGGTGCCACACCCATGAAACCCGGTTCTGCTACTTTCCCATTCTTTGGTGTAGCTCCTGCAAT
CCTGAATGAGTCCGGGGAAGAGTTGGAAGGTGAAGCTGAAGGTTATCTGGTGTTCAAGCAGCCCTGGCCAGGGAT
CATGCGCACAGTCTATGGGAACCACGAACGCTTTGAGACAACCTACTTTAAGAAGTTTCCTGGATACTATGTTAC
AGGAGATGGCTGCCAGCGGGACCAGGATGGCTATTACTGGATCACTGGCAGGATTGATGACATGCTCAATGTATC
TGGACACCTGCTGAGTACAGCAGAGGTGGAGTCAGCACTTGTGGAACATGAGGCTGTTGCAGAGGCAGCTGTGGT
GGGCCACCCTCATCCTGTGAAGGGTGAATGCCTCTACTGCTTTGTCACCTTGTGTGATGGCCACACCTTCAGCCC
CAAGCTCACCGAGGAGCTCAAGAAGCAGATTAGAGAAAAGATTGGCCCCATTGCCACACCAGACTACATCCAGAA
TGCACCTGGCTTGCCTAAAACCCGCTCAGGGAAAATCATGAGGCGAGTGCTTCGGAAGATTGCTCAGAATGACCA
TGACCTCGGGGACATGTCTACTGTGGCTGACCCATCTGTCATCAGTCACCTCTTCAGCCACCGCTGCCTGACCAT
CCAGTGA

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FIGURE 4497

GGGAGAACCGTTCGCGGAGGAAAGGCGAACTAGTGTTGGGATGGCCACCAACTGGGGGAGCCTCTTGCAGGATAA
ACAGCAGCTAGAGGAGCTGGCACGGCAGGCCGTGGACCGGGCCCTGGCTGAGGGAGTATTGCTGAGGACCTCACA
GGAGCCCACTTCCTCGGAGGTGGTGAGCTATGCCCCATTCACGCTCTTCCCCTCACTGGTCCCCAGTGCCCTGCT
GGAGCAAGCCTATGCTGTGCAGATGGACTTCAACCTGCTAGTGGATGCTGTCAGCCAGAACGCTGCCTTCCTGGA
GCAAACTCTTTCCAGCACCATCAAACAGGATGACTTTACCGCTCGTCTCTTTGACATCCACAAGCAAGTCCTAAA
AGAGGGCATTGCCCAGACTGTGTTCCTGGGCCTGAATCGCTCAGACTACATGTTCCAGCGCAGCGCAGATGGCTC
CCCAGCCCTGAAACAGATCGAAATCAACACCATCTCTGCCAGCTTTGGGGGCCTGGCCTCCCGGACCCCAGCTGT
GCACCGACATGTTCTCAGTGTCCTGAGTAAGACCAAAGAAGCTGGCAAGATCCTCTCTAATAATCCCAGCAAGGG
ACTGGCCCTGGGAATTGCCAAAGCCTGGGAGCTCTACGGCTCACCCAATGCTCTGGTGCTACTGATTGCTCAAGA
GAAGGAAAGAAACATATTTGACCAGCGTGCCATAGAGAATGAGCTACTGGCCAGGAACATCCATGTGATCCGACG
AACATTTGAAGATATCTCTGAAAAGGGGTCTCTGGACCAAGACCGAAGGCTGTTTGTGGATGGCCAGGAAATTGC
TGTGGTTTACTTCCGGGATGGCTACATGCCTCGTCAGTACAGTCTACAGAATTGGGAAGCACGTCTACTGCTGGA
GAGGTCACATGCTGCCAAGTGCCCAGACATTGCCACCCAGCTGGCTGGGACTAAGAAGGTGCAGCAGGAGCTAAG
CAGGCCGGGCATGCTGGAGATGTTGCTCCCTGGCCAGCCTGAGGCTGTGGCCCGCCTCCGCGCCACCTTTGCTGG
CCTCTACTCACTGGATGTGGGTGAAGAAGGGGACCAGGCCATCGCCGAGGCCCTTGCTGCCCCTAGCCGGTTTGT
GCTAAAGCCCCAGAGAGAGGGTGGAGGTAACAACCTATATGGGGAGGAAATGGTACAGGCCCTGAAACAGCTGAA
GGACAGTGAGGAGAGGGCCTCCTACATCCTCATGGAGAAGATCGAACCTGAGCCTTTTGAGAATTGCCTGCTACG
GCCTGGCAGCCCTGCCCGAGTGGTCCAGTGCATTTCAGAGCTGGGCATCTTTGGGGTCTATGTCAGGCAGGAAAA
GACACTCGTGATGAACAAGCACGTGGGGCATCTACTTCGAACCAAAGCCATCGAGCATGCAGATGGTGGTGTGGC
AGCGGGAGTGGCAGTCCTGGACAACCCATACCCTGTGTGAGGGCACAACCAGGCCACGGGACCTTCTATCCTCTG
TATTTGTCATTCCTCTCCTAGCCCTCCTGAGGGGTATCCTCCTAAAGACCTCCAAAGTTTTTATGGAAGGGTAAA
TACTGGTACCTTCCCCCAGCTTTCCATCTGAGGACCAGAAAAGTTGTGTCTCCCTTAGATGAGATCTAGACGCCC
CCAAATCCTTGAGATGTGGGTATAGCTCAGGGTAAGCTGCTCTGAGGTAAAGGTCCATGAACCCTGCCCCACTCC
TGTCAGCCCCTCATCAGCCTTTTCAGCAGGTTCCAGTGCCTGACTTGGGATAGGACTGAGTGGTAGGAGGAGGGG
GAGTGGAGGGGCATAGCCTTTCCCTAATTCTGCCTTAAATAAAACTGCATTGCTG

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FIGURE 4498

GACATGGCGGCGGCGCCGGTAGCGGCTGGGTCTGGAGCCGGCCGAGGGAGACGGTCGGCAGCCACAGTGGCGGCT
TGGGGCGGATGGGGCGGCCGGCCGCGGCCTGGTAACATTCTGCTGCAGCTGCGGCAGGGCCAGCTGACCGGCCGG
GGCCTGGTCCGGGCGGTGCAGTTCACTGAGACTTTTTTGACGGAGAGGGACAAACAATCCAAGTGGAGTGGAATT
CCTCAGCTGCTCCTCAAGCTGCACACCACCAGCCACCTCCACAGTGACTTTGTTGAGTGTCAAAACATCCTCAAG
GAAATTTCTCCTCTTCTCTCCATGGAGGCTATGGCATTTGTTACTGAAGAGAGGAAACTTACCCAAGAAACCACT
TATCCAAATACTTACATTTTTGACTTGTTTGGAGGTGTTGATCTTCTTGTAGAAATTCTTATGAGGCCTACGATC
TCTATCCGGGGACAGAAACTGAAAAGTAATGATGAAATGTCCAAGGACTGCTTGAGTATCCTGTATAATACCTGT
GTCTGTACAGAGGGAGTTACAAAGCGTTTGGCAGAAAAGAATGACTTTGTGATCTTCCTGTTTACATTGATGACA
AGTAAGAAGACATTCTTACAAACAGCAACCCTCATTGAAGATATTTTGGGTGTTAAAAAGGAAATGATCCGACTA
GATGAAGTCCCCAATCTGAGTTCCTTAGTATCCAATTTCGATCAGCAGCAGCTCGCTAATTTCTGCCGGATTCTG
GCTGTCACCATTTCAGAGATGGATACAGGGAATGATGACAAGCACACGCTTCTTGCCAAAAATGCTCAACAGAAG
AAGAGCTTGAGTTTGGGGCCTTCTGCAGCTGAAATCAATCAAGCGGCCCTTCTCAGCATTCCTGGCTTTGTTGAG
CGGCTTTGCAAACTGGCGACTCGAAAGGTGTCAGAGTCAACGGGCACAGCCAGCTTCCTTCAGGAGTTGGAAGAG
TGGTACACATGGCTAGACAATGCTTTGGTGCTAGATGCCCTGATGCGAGTGGCCAATGAGGAGTCAGAGCACAAT
CAAGCCTCCATTGTGTTCCCTCCTCCAGGGGCTTCTGAGGAGAATGGCCTGCCTCACACGTCAGCCAGAACCCAG
CTGCCCCAGTCAATGAAGATTATGCATGAGATCATGTACAAACTGGAAGTGCTCTATGTCCTCTGCGTGCTGCTG
ATGGGGCGTCAGCGAAACCAGGTTCACAGAATGATTGCAGAGTTCAAGCTGATCCCTGGACTTAATAATTTGTTT
GACAAACTGATTTGGAGGAAGCATTCAGCATCTGCCCTTGTCCTCCATGGTCACAACCAGAACTGTGACTGTAGC
CCGGACATCACCTTGAAGATACAGTTTTTGAGGCTTCTTCAGAGCTTCAGTGACCACCACGAGAACAAGTACTTG
TTACTCAACAACCAGGAGCTGAATGAACTCAGTGCCATCTCTCTCAAGGCCAACATCCCTGAGGTGGAAGCTGTC
CTCAACACCGACAGGAGTTTGGTGTGTGATGGGAAGAGGGGCTTATTAACTCGTCTGCTGCAGGTCATGAAGAAG
GAGCCAGCAGAGTCGTCTTTCAGGTTTTGGCAAGCTCGGGCTGTGGAGAGTTTCCTCCGAGGGACCACCTCCTAT
GCAGACCAGATGTTCCTGCTGAAGCGAGGCCTCTTGGAGCACATCCTTTACTGCATTGTGGACAGCGAGTGTAAG
TCAAGGGATGTGCTCCAGAGTTACTTTGACCTCCTGGGGGAGCTGATGAAGTTCAACGTTGATGCATTCAAGAGA
TTCAATAAATATATCAACACCGATGCAAAGTTCCAGGTATTCCTGAAGCAGATCAACAGCTCCCTGGTGGACTCC
AACATGCTGGTGCGCTGTGTCACTCTGTCCCTGGACCGATTTGAAAACCAGGTGGATATGAAAGTTGCCGAGGTA
CTGTCTGAATGCCGCCTGCTCGCCTACATATCCCAGGTGCCCACGCAGATGTCCTTCCTCTTCCGCCTCATCAAC
ATCATCCACGTGCAGACGCTGACCCAGGAGAACGTCAGCTGCCTCAACACCAGCCTGGTGATCCTGATGCTGGCC
CGACGGAAAGAGCGGCTGCCCCTGTACCTGCGGCTGCTGCAGCGGATGGAGCACAGCAAGAAGTACCCCGGCTTC
CTGCTCAACAACTTCCACAACCTGCTGCGCTTCTGGCAGCAGCACTACCTGCACAAGGACAAGGACAGCACCTGC
CTAGAGAACAGCTCCTGCATCAGCTTCTCATACTGGAAGGAGACAGTGTCCATCCTGTTGAACCCGGACCGGCAG
TCACCCTCTGCTCTCGTTAGCTACATTGAGGAGCCCTACATGGACATAGACAGGGACTTCACTGAGGAGTGACCT
TGGGCCAGGCCTCGGGAGGCTGCTGGGCCAGTGTGGGTGAGCGTGGGTACGATGCCACACGCCCTGCCCTGTTCC
CGTTCCTCCCTGCTGCTCTCTGCCTGCCCCAGGTCTTTGGGTACAGGCTTGGTGGGAGGGAAGTCCTAGAAGCCC
TTGGTCCCCCTGGGTCTGAGGGCCCTAGGTCATGGAGAGCCTCAGTCCCCATAATGAGGACAGGGTACCATGCCC
ACCTTTCCTTCAGAACCCTGGGGCCCAGGGCCACCCAGAGGTAAGAGGACATTTAGCATTAGCTCTGTGTGAGCT
CCTGCCGGTTTCTTGGCTGTCAGTCAGTCCCAGAGTGGGGAGGAAGATATGGGTGACCCCCACCCCCCATCTGTG
AGCCAAGCCTCCCTTGTCCCTGGCCTTTGGACCCAGGCAAAGGCTTCTGAGCCCTGGGCAGGGGTGGTGGGTACC
AGAGAATGCTGCCTTCCCCCAAGCCTGCCCCTCTGCCTCATTTTCCTGTAGCTCCTCTGGTTCTGTTTGCTCATT
GGCCGCTGTGTTCATCCAAGGGGGTTCTCCCAGAAGTGAGGGGCCTTTCCCTCCATCCCTTGGGGCACGGGGCAG
CTGTGCCTGCCCTGCCTCTGCCTGAGGCAGCCGCTCCTGCCTGAGCCTGGACATGGGGCCCTTCCTTGTGTTGCC
AATTTATTAACAGCAAATAAACCAATTAAATGGAGACTATTAAATAACTTTATTTT

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FIGURE 4499

GGAAGAACCCGCAGCAGCTCCCAGGATGAACTGGTTGCAGTGGCTGCTGCTGCTGCGGGGGCGCTGAGAGGACAC
GAGCTCT**ATG**CCTTTCCGGCTGCTCATCCCGCTCGGCCTCCTGTGCGCGCTGCTGCCTCAGCACCATGGTGCGCC
AGGTCCCGACGGCTCCGCGCCAGATCCCGCCCACTACAGGGAGCGAGTCAAGGCCATGTTCTACCACGCCTACGA
CAGCTACCTGGAGAATGCCTTTCCCTTCGATGAGCTGCGACCTCTCACCTGTGACGGGCACGACACCTGGGGCAG
TTTTTCTCTGACTCTAATTGATGCACTGGACACCTTGCTGATTTTGGGGAATGTCTCAGAATTCCAAAGAGTGGT
TGAAGTGCTCCAGGACAGCGTGGACTTTGATATTGATGTGAACGCCTCTGTGTTTGAAACAAACATTCGAGTGGT
AGGAGGACTCCTGTCTGCTCATCTGCTCTCCAAGAAGGCTGGGGTGGAAGTAGAGGCTGGATGGCCCTGTTCCGG
GCCTCTCCTGAGAATGGCTGAGGAGGCGGCCCGAAAACTCCTCCCAGCCTTTCAGACCCCCACTGGCATGCCATA
TGGAACAGTGAACTTACTTCATGGCGTGAACCCAGGAGAGACCCCTGTCACCTGTACGGCAGGGATTGGGACCTT
CATTGTTGAATTTGCCACCCTGAGCAGCCTCACTGGTGACCCGGTGTTCGAAGATGTGGCCAGAGTGGCTTTGAT
GCGCCTCTGGGAGAGCCGGTCAGATATCGGGCTGGTCGGCAACCACATTGATGTGCTCACTGGCAAGTGGGTGGC
CCAGGACGCAGGCATCGGGGCTGGCGTGGACTCCTACTTTGAGTACTTGGTGAAAGGAGCCATCCTGCTTCAGGA
TAAGAAGCTCATGGCCATGTTCCTAGAGTATAACAAAGCCATCCGGAACTACACCCGCTTCGATGACTGGTACCT
GTGGGTTCAGATGTACAAGGGGACTGTGTCCATGCCAGTCTTCCAGTCCTTGGAGGCCTACTGGCCTGGTCTTCA
GAGCCTCATTGGAGACATTGACAATGCCATGAGGACCTTCCTCAACTACTACACTGTATGGAAGCAGTTTGGGGG
GCTCCCGGAATTCTACAACATTCCTCAGGGATACACAGTGGAGAAGCGAGAGGGCTACCCACTTCGGCCAGAACT
TATTGAAAGCGCAATGTACCTCTACCGTGCCACGGGGGATCCCACCCTCCTAGAACTCGGAAGAGATGCTGTGGA
ATCCATTGAAAAAATCAGCAAGGTGGAGTGCGGATTTGCAACAATCAAAGATCTGCGAGACCACAAGCTGGACAA
CCGCATGGAGTCGTTCTTCCTGGCCGAGACTGTGAAATACCTCTACCTCCTGTTTGACCCAACCAACTTCATCCA
CAACAATGGGTCCACCTTCGACGCGGTGATCACCCCCTATGGGGAGTGCATCCTGGGGGCTGGGGGGTACATCTT
CAACACAGAAGCTCACCCCATCGACCCTGCCGCCCTGCACTGCTGCCAGAGGCTGAAGGAAGAGCAGTGGGAGGT
GGAGGACTTGATGAGGGAATTCTACTCTCTCAAACGGAGCAGGTCGAAATTTCAGAAAAACACTGTTAGTTCGGG
GCCATGGGAACCTCCAGCAAGGCCAGGAACACTCTTCTCACCAGAAAACCATGACCAGGCAAGGGAGAGGAAGCC
TGCCAAACAGAAGGTCCCACTTCTCAGCTGCCCCAGTCAGCCCTTCACCTCCAAGTTGGCATTACTGGGACAGGT
TTTCCTAGACTCCTCA**TAA**CCACTGGATAATTTTTTTATTTTTATTTTTTTGAGGCTAAACTATAATAAATTGCT
TTTGGCTATC

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FIGURE 4500

CAGGTCCGGAGCCTCAACTTCAGGATGTTGACAACATTGCTGCCGATACTGCTGCTGTCTGGCTGGGCCTTTTGT
AGCCAAGACGCCTCAGATGGCCTCCAAAGACTTCATATGCTCCAGATCTCCTACTTCCGCGACCCCTATCACGTG
TGGTACCAGGGCAACGCGTCGCTGGGGGGACACCTAACGCACGTGCTGGAAGGCCCAGACACCAACACCACGATC
ATTCAGCTGCAGCCCTTGCAGGAGCCCGAGAGCTGGGCGCGCACGCAGAGTGGCCTGCAGTCCTACCTGCTCCAG
TTCCACGGCCTCGTGCGCCTGGTGCACCAGGAGCGGACCTTGGCCTTTCCTCTGACCATCCGCTGCTTCCTGGGC
TGTGAGCTGCCTCCCGAGGGCTCTAGAGCCCATGTCTTCTTCGAAGTGGCTGTGAATGGGAGCTCCTTTGTGAGT
TTCCGGCCGGAGAGAGCCTTGTGGCAGGCAGACACCCAGGTCACCTCCGGAGTGGTCACCTTCACCCTGCAGCAG
CTCAATGCCTACAACCGCACTCGGTATGAACTGCGGGAATTCCTGGAGGACACCTGTGTGCAGTATGTGCAGAAA
CATATTTCCGCGGAAAACACGAAAGGGAGCCAAACAAGCCGCTCCTACACTTCGCTGGTCCTGGGCGTCCTGGTG
GGCAGTTTCATCATTGCTGGTGTGGCTGTAGGCATCTTCCTGTGCACAGGTGGACGGCGATGTTAATTACTCTCC
AGCCCCCTCAGAAGGGGCTGGATTGATGGAGGCTGGCAAGGGAAAGTTTCAGCTCACTGTGAAGCCAGACTCCCC
AACTGAAACACCAGAAGGTTTGGAGTGACAGCTCCTTTCTTCTCCCACATCTGCCCACTGAAGATTTGAGGGAGG
GGAGATGGAGAGGAGAGGTGGACAAAGTACTTGGTTTGCTAAGAACCTAAGAACGTGTATGCTTTGCTGAATTAG
TCTGATAAGTGAATGTTTATCTATCTTTGTGGAAAACAGATAATGGAGTTGGGGCAGGAAGCCTATGGCCCATCC
TCCAAAGACAGACAGAATCACCTGAGGCGTTCAAAAGATATAACCAAATAAACAAGTCATCCACAATCAAAATAC
AACATTCAATACTTCCAGGTGTGTCAGACTTGGGATGGGACGCTGATATAATAGGGTAGAAAGAAGTAACACGAA
GAAGTGGTGGAAATGTAAAATCCAAGTCATATGGCAGTGATCAATTATTAATCAATTAATAATATTAATAAATTT
CTTATATTT

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FIGURE 4501

TCACTGAGGAGCCCTAGACAAGGCCAATGGGTTCATCAATGCCCACTGGCTCTCTGCCAAAGCCAAAAAGGTGTC
AGGCAGTCTCCAGCGTGCTGGCCGGGTCTCGGATGCCACCCCTGCTCACTGAGCCTGCATGGGCCTTGCCCCCGA
CCCTGTGGTCTCTGGGATTGGGGTCGGCTTACCCTGTAGCACAGACAGGGACTCCTGCTGCCCTGGGAGCTGTCT
CAAGCAAAATCTCTTGTCCCAGAGGTGCCCATGTGGGTCCGCTGTGTCCCCTGTCATCATCCTTGTTTTTTCTCA
TTTTGGCCAAGGGCAGGCTCCCTGGGACAGGCAGGGAACAACTGCGGAGATATTAGTGATTCATAGGTTTGTACA
GTGTTTTATACTTTGCAAAGCACTTTATTAGCTCACACCTGTCCACTCACATGAAACTCGTGTTAGGCCCTGGGA
GGCCGACGGTAACTCTCACCGTGCCCTCAGATGAAGCACAGAGAGGTTGTTACTTGCCCGGGCCATCCAGTGGGC
TGGCTGGGTCTTGTGTCCCCATCTGTGGACCCCTCTAGGGTCTGAGATGAGATGAGAAGTGTCTCCTGTATCCAC
CTCTTCCTGGCCTCCCTTCCCCCACTTCCTGGTCCCTGTCCACTCCTCAGGTTGGTGCTCTCACTTCTTGAAAGC
TCTAGGCACCCCCGCCTCCCGCCAGGCTCCCCATTGGCTCCTGGCAGGCCAGCTGAGAATGAACAGGAGATGGAG
GCAGGCTGGGGTGTAGACTGCGAAGGCGGCCCTGCCGGGACTTCTTTCCAGTCCCCGGCGACCTCTTCGAATTCT
CTGCTATCTCTGGGGAGCCTCGGGTGGGAGGGGGTGTAAGAGACGCAGGGACGTGGGGAGAGGAGACAAGGCAGG
CAAGAACCACAGGGGACGGCGGACAGACGGGCGACATCCTGCGGAGGACGCCGTCAGTACCAGGAAGTGCAGGCG
ATGAGGAAGCGCACGTCGTCCAGCGGCCCCCACGGGCTGGGCTCGGGCTGGGGCTGGGGCTGGGGCTGGGGCTGG
GGCTGGGGCGGATGCCGGGGGCTGTTCCGGGCCCTCCGGCGCCGCAGGCTGGGGCTGGGGCTGGGGCTGGGTTTGC
GCAGGCTCCGGGGCGCCGCGGCCG

FIGURE 4502

GGTGGTGGCGTCACGGCGCCAGCTCCTCCCGACGCCGAGACCATGGGGGCTCAGCTAAGCGGCGGCCGCGGCGCC
CCGGAGCCTGCGCAAACCCAGCCCCAGCCCCAGCCCCAGCCTGCGGCGCCGGAGGGCCCGGAACAGCCCCGGCAT
CCGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCGAGCCCAGCCCGTGGGGGCCGCTGGACGACGTG
CGCTTCCTCATCGCCTGCACTTCCTGGTACTGACGGCGTCCTCCGCAGGATGTCGCCCGTCTGTCCGCCGTCCCC
TGTGGTTCTTGCCTGCCTTGTCTCCTCTCCCCACGTCCCTGCGTCTCTTACACCCCCTCCCACCCGAGGCTCCCC
AGAGATAGCAGAGAATTCGAAGAGGTCGCCGGGGACTGGAAAGAAGTCCCGGCAGGGCCGCCTTCGCAGTCTACA
CCCCAGCCTGCTTCCCAGCCTACACCCAGACCCAGCTCAGACCTTCGTGACCACCCCATCCCTTTCTCCGGCTGG
CTGGGTCGGGGGCATCCCTCTCTGTCGCTGGCTTCCAGAGGCAGGACAGGCCTCCTGGTCATGTCCCAGGTCATG
GAGAAGCCCGTGCCACAGTGACCCTCCCCATACTCCTGGGGGGGCTGCTCTCCATCCTGGATCGTAAGGAGGCAT
CATCAGGCTGTGTTCCTGGAACCCCAATAACCCTGGGCCCCCAGGGCCAGCCTGTTGTAGAGGGAGGCTATCTGA
CCGCCGGTCTGGCAGAGGAGATGGGTGGGCAGCTCCCAGACACCCCAAAGGACCCGGTTCTCTTCCCAGAGCGTC
CTAAGGTTACTCTTGGAACCTGATCTTTGTTCCCTCATCCCAGGGAAATGACACACTCTGTATTTCTGTTTTATT
TAGAAATGATTTAAAAAACATTATACAAAGGCTGATCAGTTTAAAATGTGACTGACACTGAAATGCTGTGATGTC
CCCCAGGCTGAGGGGAAGCTAGGCTCTGGGGCCCCCAGTGCTTTGCCCCTCTGTCTGCCCTGTCCTGGGGTGATG
GACAAACAGATGACCACAGGCAGGAGAATCTGAGATTGGAAGCCTCTAGGCTGAGCCCTCTGGGCCTGGCCCCAC
ATCCCTCACCTCTGCAGCCTGGGCTGCCTGCCTCCATCTCCTGTTCATTCTCAGCTGGCCTGCCAGGAGCCAATG
GGGAGCCTGGCGGGAGGCGGGGGTGCCTAGAGCTTTCAAGAAGTGAGAGCACCAACCTGAGGAGTGGACAGGGAC
CAGGAAGTGGGGGAAGGGAGGCCAGGAAGAGGTGGATACAGGAGACACTTCTCATCTCATCTCAGACCCTAGAGG
GGTCCACAGATGGGGACACAAGACCCAGCCAGCCCACTGGATGGCCCGGGCAAGTAACAACCTCTCTGTGCTTCA
TCTGAGGGCACGGTGAGAGTTACCGTCGGCCTCCCAGGGCCTAACACGAGTTTCATGTGAGTGGACAGGTGTGAG
CTAATAAAGTGCTTTGCAAAGTAT

FIGURE 4503

ACGGAAACCTTTTTAGGGAGTCCAAGGTACAGTCGCCGCGTGCGGAGCTTGTTACTGGTTACTTGGCCTCATGGC
GGTCCGAGCTTCGTTCGAGAACAACTGTGAGATCGGCTGCTTTGCCAAGCTCACCAACACCTACTGTCTGGTAGC
GATCGGAGGCTCAGAGAACTTCTACAGTGTGTTCGAGGGCGAGCTCTCCGATACCATCCCCGTGGTGCACGCGTC
TATCGCCGGCTGCCGCATCATCGGGCGCATGTGTGTGGGGAACAGGCACGGTCTCCTGGTACCCAACAATACCAC
CGACCAGGAGCTGCAACACATTCGCAACAGCCTCCCAGACACAGTGCAGATTAGGCGGGTGGAGGAGCGGCTCTC
AGCCTTGGGCAATGTCACCACCTGCAATGACTACGTGGCCTTGGTCCACCCAGACTTGGACAGGGAGACAGAAGA
AATTCTGGCAGATGTGCTCAAGGTGGAAGTCTTCAGACAGACAGTGGCCGACCAGGTGCTAGTAGGAAGCTACTG
TGTCTTCAGCAATCAGGGAGGGCTGGTGCATCCCAAGACTTCAATTGAAGACCAGGATGAGCTGTCCTCTCTTCT
TCAAGTCCCCCTTGTGGCGGGGACTGTGAACCGAGGCAGTGAGGTGATTGCTGCTGGGATGGTGGTGAATGACTG
GTGTGCCTTCTGTGGCCTGGACACAACCAGCACAGAGCTGTCAGTGGTGGAGAGTGTCTTCAAGCTGAATGAAGC
CCAGCCTAGCACCATTGCCACCAGCATGCGGGATTCCCTCATTGACAGCCTCACCTGAGTCACCTTCCAAGTTGT
TCCATGGGCTCCTGGCTCTGGACTGTGGCCAACCTTCTCCACATTCCGCCCAATCTGTACCGGATGCTGGCAGGG
AGGTGGCAGAGAGCTCACTGGGACTGAGGGGCTGGGCACCCAACCCTTTTCCACCTGTGCTTATCGCCTGGATCT
ATCATTACTGCAAAAACCTGCTCTGTTGTGCTGGCTGGCAGGCCCTGTGGCTGCTGGCTGAGGGTTCTGCTGTCC
TGTGCCACCCCATTAAAGTGCAGTTCCCTCCGG

FIGURE 4504

AGGAACCAGACTAGCATTTCTCAGTGGGTTCCAGTATGCAGCCGATTGATACCTGTGTCTCCTACCCAAGGACAG
GGGGACAGGGCTCTGTCTCGCACTTCCCAGTGGCCCCAGATGAGCCAGTCCCGAGCATGTGGTGGATCAGAACAG
ATTCCTGGAATAGACATACAGCTGAATAGGAAGTATCACACCACACGTAAGCTTTCTACTACCAAAGATTCCCCA
CAGCCTGTTGAGGAGAAGGTTGGTGCTTTCACAAAGATAATAGAAGCCATGGGATTCACGGGACCTTTGAAATAC
AGTAAATGGAAGATTAAGATTGCGGCCCTGCGCATGTATACTAGCTGTGTGGAGAAAACTGACTTCGAGGAATTC
TTTCTAAGGTGTCAGATGCCTGATACATTCAATTCATGGTTTCTTATAACCCTACTCCACGTCTGGATGTGTCTA
GTCCGAATGAAGCAGGAAGGCCGGAGTGGGAAGTACATGTGTCGTATCATAGTTCATTTTATGTGGGAGGATGTT
CAGCAGCGCGGCAGAGTCATGGGGGTTAATCCCTATATCCTGAAGAAGAACATGATCCTCATGACAAATCATTTC
TATGCAGCGATCTTGGGATATGATGAGGGGATCCTTTCAGATGATCATGGGCTGGCCGCTGCCCTCTGGAGAACC
TTCTTCAACCGGAAATGTGAAGACCCTCGACATCTTGAATTGCTGGTAGAGTATGTGAGGAAACAGATACAGTAC
CTGGACTCCATGAACGGGGAGGATCTGCTTCTGACAGGGGAGGTGAGCTGGCGCCCTCTAGTGGAGAAGAATCCT
CAGAGCATCCTGAAGCCCCATTCTCCGACTTACAACGACGAGGGACTTTGATGGGCTGGGCCCTCCGCACGGCCC
GCCAGCTGGCTTCGAGGAACCTCCAGGAGAGAAGTGCCTGTTGGTCCAGGACCCTGCAGAAAGTGGCCTGAACTG
ACCTCTGAACAGCATCTGTCAAATACCTGGCCCCATTTGTGTTGAGTTTCCTCTTAGTGTGCCCAGGAGTCTGAT
CTGCTGGGGTACAGGGCTGGGAGAACCCCTAGCTCTCCCGGGGTGTCCTCTCCCTTAGGGGAAGCCCCGAGTGAG
AGTCCCCCAGCACACACTCCCCAACCCCCTCCAGCAACTACATGTGACTGATAGCTTTTCCCAAAGGCCAAGGAA
GGGATGGTGTAGGTTCAAAAGGGAAACCCCCCAGGGCCTGCTGTGGCCTAGGAGCAGATTGTAATGCTGCCGAGT
CCGGTCGGTGACCACGCGTTGTCCCTCGGCTTTCAGCCATGGGGTTGAGTTGGCCATTAAAAGAAACAGAGACTT
CTCTCTGCCATGGCCCTTCTTTATTCCAGGGACTTAGAAACTTGCCTGAGATGGTGGACGCAGTAATGAGGGCAC
CGCGCAGCTCAGTTAGAGACGGAGAAAGGGAAGAGGCTGGGATGGTCTCTGCTGCTCTTGCCTCTAGTTCATGGA
GATGTGTCTCTGTTCAGGCCAAGATACAGCCAGCCAGGCCTGTCGTCTGGGACCCAGGAGGCCTCTGATGACCAA
GGGCTTTCACATCCTAAGTCATTTGGAAGGAGGCCTTGAGAACAAAGTCACCTTTGTCACTCCCAGTGAACTGAA
TGAGGAACATGCTGTCTCCTGTCTTGGCCTCCCCTTTCATGAGATACTGGGGAGAAGAGAACATTCCTCCTGGCT
TAGTTGTAGCAGACCCAGACCTGTGCCCAGCTTTGGTCCCCCTTCCCAACTTCTGAAGCACGTGCTGCAGAGCCA
CCTTGGTCTGAGCACCTGAGGACCAGCCCCTCCTCCCTCAGTGCGGGTCATCTCTTGGGGGATTTTCTTAAAGTG
AAGAAAGGGGGTGGGGAACCATATTGCCCCTCCCTCCCCCATCAAACTTCCTTCATTTAACTTGCTATAAAATGA
GTCATATAAAGAAACTCTATATGGGTGAGGTATATCCCACTTCTGTGAAAACATTACAAATCAAACCGCTTCTCT
CAGTTTATTTAAGATGCTTTTGTTGCGAGCGGAGCTCTAGAGTGAAGCCTCCTGTGTGTGTGTGAGATAATAACA
CCTTGTAACTCATTACAGCTGGGCACTATTTACATAAACCAGAGCTGAGCCAGGCAGGAATTTGCTGATTAATTT
ATTTTTAATGGAGTGAAGTATACCATGCACCAAAATAAACTTTACTGTGTGTACCTAACTGCTCCTGG

FIGURE 4505B

AACGGGAGCTGAAGGAGGCAGCCCGGCAGCACAGAGATGACCTTGCTGCCCTCCAAGAAGAGAGCAGCTCCCTGC
TGCAGGATAAGATGGACCTGCAGAAGCAGGTGGAGGACTTGAAGTCTCAGCTGGTGGCCCAGGATGACTCCCAGA
GGCTGGTGGAGCAGGAGGTTCAGGAGAAGCTGAGAGAGACCCAGGAGTATAACCGAATTCAGAAGGAGCTGGAGA
GAGAGAAAGCCAGCCTGACTCTGTCACTGATGGAAAAGGAACAGAGACTCCTTGTTTTACAAGAAGCTGACTCTA
TTCGACAACAAGAGCTGAGTGCCCTGCGCCAGGACATGCAGGAGGCCCAGGGAGAACAGAAAGAGCTCAGTGCTC
AGATGGAATTACTAAGGCAAGAGGTGAAGGAAAAGGAGGCTGACTTTCTGGCCCAGGAAGCACAGCTGCTGGAGG
AGCTGGAGGCGTCTCATATCACGGAGCAGCAGCTGCGAGCCTCCTTGTGGGCCCAGGAAGCCAAGGCAGCCCAAC
TACAGCTGCGACTGCGCAGCACAGAGAGCCAGCTAGAAGCGCTGGCCGCAGAGCAGCAGCCCGGGAACCAGGCCC
AGGCCCAGGCCCAGCTGGCCAGCCTCTACTCTGCCCTGCAGCAGGCCCTGGGGTCTGTTTGTGAGAGCAGGCCTG
AGCTGAGTGGTGGGGGAGACTCTGCTCCTTCCGTCTGGGGCCTTGAGCCAGACCAGAATGGAGCTAGGAGCCTCT
TTAAGAGAGGGCCCCTGCTGACTGCTCTCTCCGCTGAGGCAGTAGCATCTGCCCTCCACAAGCTTCATCAAGACC
TGTGGAAGACTCAACAGACCCGGGATGTTCTGAGGGATCAGGTCCAGAAACTGGAAGAGCGTCTAACTGATACTG
AGGCTGAGAAGAGCCAGGTCCACACAGAGTTGCAGGATCTGCAGAGACAGCTCTCCCAGAATCAGGAAGAGAAAT
CCAAGTGGGAAGGAAAGCAGAACTCCCTAGAATCTGAGCTGATGGAACTACATGAAACTATGGCATCCTTACAGA
GTCGCCTGCGGAGAGCAGAGCTACAGCGAATGGAAGCCCAGGGTGAGCGAGAGTTACTTCAGGCAGCCAAGGAGA
ACCTGACAGCCCAGGTGGAACACCTGCAAGCAGCTGTCGTAGAAGCCAGGGCTCAGGCAAGTGCTGCTGGCATCC
TGGAAGAAGACCTGAGAACGGCTCGCTCAGCACTGAAGCTGAAAAATGAGGAAGTAGAGAGTGAGCGTGAGAGAG
CCCAGGCTCTGCAAGAGCAGGGCGAACTGAAGGTGGCCCAAGGGAAGGCTCTGCAAGAGAATTTGGCCCTCCTGA
CCCAGACCCTAGCTGAAAGAGAAGAGGAGGTGGAGACTCTGCGGGGACAAATCCAGGAACTGGAGAAGCAACGGG
AAATGCAGAAGGCTGCTTTGGAATTGCTGTCTCTGGACCTGAAGAAGAGGAACCAAGAGGTAGATCTGCAGCAAG
AACAGATTCAGGAGCTAGAGAAGTGTAGGTCTGTTTTAGAGCATCTGCCCATGGCCGTCCAGGAGCGAGAGCAGA
AGCTGACTGTGCAGAGGGAGCAGATCAGAGAGCTCGAGAAGGATCGGGAGACTCAGAGGAACGTCTTGGAGCATC
AGCTTCTAGAACTTGAGAAGAAAGACCAAATGATTGAGTCCCAGAGAGGACAGGTTCAGGACCTGAAAAAGCAGT
TGGTTACTCTGGAATGCCTGGCCCTGGAACTGGAGGAAAACCATCACAAGATGGAGTGCCAGCAAAAACTGATCA
AGGAGCTGGAGGGCCAGAGGGAAACCCAGAGAGTGGCTTTGACCCACCTTACGCTGGACCTAGAAGAAAGGAGCC
AGGAGCTGCAGGCACAAAGCAGCCAGATCCATGACCTGGAGAGCCACAGCACCGTTCTGGCAAGAGAGCTGCAGG
AGAGGGACCAGGAGGTGAAGTCTCAGCGAGAACAGATCGAGGAGCTGCAGAGGCAGAAAGAGCATCTGACTCAGG
ATCTCGAGAGGAGAGACCAGGAGCTGATGCTGCAGAAGGAGAGGATTCAGGTTCTCGAGGATCAGAGGACCCGGC
AGACCAAGATCCTGGAGGAGGACCTGGAACAGATCAAGCTGTCCTTGAGAGAGCGAGGCCGGGAGCTGACCACTC
AGAGGCAGCTGATGCAGGAACGGGCAGAGGAAGGGAAGGGCCCAAGTAAAGCACAGCGCGGGAGCCTAGAGCACA
TGAAGCTGATCCTGCGTGATAAGGAGAAGGAGGTGGAATGTCAGCAGGAGCATATCCATGAACTCCAGGAGCTCA
AAGACCAGCTGGAGCAGCAGCTCCAGGGCCTGCACAGGAAGGTAGGTGAGACCAGCCTCCTCCTGTCCCAGCGAG
AGCAGGAAATAGTGGTCCTGCAGCAGCAACTGCAGGAAGCCAGGGAACAAGGGGAGCTGAAGGAGCAGTCACTTC
AGAGTCAACTGGATGAGGCCCAGAGAGCCCTAGCCCAGAGGGACCAGGAACTGGAGGCTCTGCAGCAAGAACAGC
AGCAGGCCCAGGGACAGGAGGAGAGGGTGAAGGAAAAGGCAGACGCCCTCCAGGGAGCTCTGGAGCAAGCCCATA
TGACACTGAAGGAGCGTCATGGAGAGCTTCAGGACCACAAGGAACAGGCACGAAGGCTGGAGGAAGAGCTGGCAG
TGGAGGGACGGCGGGTCCAGGCCCTGGAGGAGGTGCTGGGAGACCTAAGGGCTGAGTCTCGGGAACAGGAGAAAG
CTCTGTTGGCCCTCCAGCAGCAGTGTGCTGAGCAGGCACAGGAGCATGAGGTGGAGACCAGGGCCCTGCAGGACA
GCTGGCTGCAGGCCCAGGCAGTGCTCAAGGAACGGGACCAGGAGCTGGAAGCTCTGCGGGCAGAAAGTCAGTCCT
CCCGGCATCAGGAGGAGGCTGCCCGGGCCCGGGCTGAGGCTCTGCAGGAGGCCCTTGGCAAGGCTCATGCTGCCC
TGCAGGGGAAAGAGCAGCATCTCCTCGAGCAGGCAGAATTGAGCCGCAGTCTGGAGGCCAGCACTGCAACCCTGC
AAGCCTCCCTGGATGCCTGCCAGGCACACAGTCGGCAGCTGGAGGAGGCTCTGAGGATACAAGAAGGTGAGATCC
AGGACCAGGATCTCCGATACCAGGAGGATGTGCAGCAGCTGCAGCAGGCACTTGCCCAGAGGGATGAAGAGCTGA
GACATCAGCAGGAACGGGAGCAGCTGCTGGAGAAGTCTCTGGCCCAGAGGGTCCAAGAGAATATGATCCAAGAGA
AGCAGAATCTGGGGCAAGAGAGAGAAGAGGAGGAGATAAGGGGCCTTCATCAGAGTGTAAGGGAGCTACAGCTGA
CTCTAGCCCAAAAGGAACAGGAGATTCTGGAGCTGAGGGAGACCCAGCAAAGGAACAACCTGGAAGCCTTACCCC
ACAGCCACAAAACCTCCCCAATGGAGGAACAATCTCTAAAACTTGATTCTTTAGAGCCCAGGCTGCAGCGGGAGC
TGGAGCGGCTACAGGCAGCCCTGAGACAGACAGAAGCCAGGGAGATTGAGTGGAGGGAGAAGGCCCAGGACTTGG

FIGURE 4505C

CACTCTCCCTAGCGCAGACCAAGGCCAGTGTCAGCAGTCTGCAGGAGGTAGCCATGTTCCTACAAGCCTCTGTCC
TGGAGCGGGACTCAGAACAGCAAAGGCTGCAGGATGAACTGGAGCTCACCAGACGGGCTCTGGAGAAGGAGCGGC
TACACAGCCCAGGTGCAACCAGCACAGCAGAACTGGGGTCCAGAGGGGAGCAGGGTGTGCAGCTGGGAGAGGTCT
CAGGAGTGGAGGCTGAGCCTAGTCCTGATGGAATGGAGAAGCAGTCATGGAGACAAAGGCTTGAACACCTGCAGC
AAGCAGTGGCCCGGCTGGAGATTGACAGGAGCAGGCTGCAGCGCCACAATGTCCAGCTGCGGAGTACCTTGGAGC
AGGTGGAGCGAGAACGGAGGAAGCTGAAGAGGGAGGCCATGCGTGCGGCCCAGGCAGGGTCCCTAGAGATCAGCA
AGGCCACGGCTTCTTCACCCACACAGCAGGATGGGAGAGGACAGAAGAACTCAGATGCCAAGTGTGTGGCTGAAC
TGCAGAAAGAGGTGGTCCTGCTGCAAGCTCAGCTGACTTTGGAGCGGAAGCAGAAGCAGGACTACATCACCCGCT
CAGCACAGACCAGCCGTGAGCTAGCAGGCCTGCACCACAGCCTCTCACACTCACTTCTTGCCGTGGCCCAGGCCC
CTGAGGCCACTGTCCTGGAGGCAGAGACCCGCAGGCTGGATGAGTCCCTGACTCAAAGTCTGACATCCCCAGGGC
CAGTCCTGCTACACCCCAGCCCCAGCACTACCCAAGCCGCCTCCAGGTAGCAGCCACAGCCAGGAGCACACAGAC
AGAAGACTGTGTCATGGGTCATGGCCCCTCCGCACACCTACAGGTTTGCCAAAGGAAAAGCCTGGCTCTGTTAGG
CACCCAGGAGCCCCAGGTCGGCGGGTGTTCCCAGGAAGAGGAAGTAAATCTGCAACCCTGGGGAGGACCCCAACT
CACCTGGGAATGAGGCAAATTGCATTTGCTTGCTCCCTATGGAATCACCCAGAGGGGTGCCTTGCCCTGGCTGAG
GGACATGTACTGCCTCTCATCTAGAATTTATTTTCCTAGCACTTCACCACCTCCTTCATCTTCTCCTTCAACAAT
AAACCCTGAGATCTTTGCATTC

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FIGURE 4506

CTGGCGTCCCCTTTCCGGCCGGTCCCCATGGAGGCGCTGGGGAAGCTGAAGCAGTTCGATGCCTACCCCAAGACT
TTGGAGGACTTCCGGGTCAAGACCTGCGGGGGCGCCACCGTGACCATTGTCAGTGGCCTTCTCATGCTGCTACTG
TTCCTGTCCGAGCTGCAGTATTACCTCACCACGGAGGTGCATCCTGAGCTCTACGTGGACAAGTCGCGGGGAGAT
AAACTGAAGATCAACATCGATGTACTTTTTCCGCACATGCCTTGTGCCTATCTGAGTATTGATGCCATGGATGTG
GCCGGAGAACAGCAGCTGGATGTGGAACACAACCTGTTCAAGCAACGACTAGATAAAGATGGCATCCCCGTGAGC
TCAGAGGCTGAGCGGCATGAGCTTGGGAAAGTCGAGGTGACGGTGTTTGACCCTGACTCCCTGGACCCTGATCGC
TGTGAGAGCTGCTATGGTGCTGAGGCAGAAGATATCAAGTGCTGTAACACCTGTGAAGATGTGCGGGAGGCATAT
CGCCGTAGAGGCTGGGCCTTCAAGAACCCAGATACTATTGAGCAGTGCCGGCGAGAGGGCTTCAGCCAGAAGATG
CAGGAGCAGAAGAATGAAGGCTGCCAGGTGTATGGCTTCTTGGAAGTCAATAAGGTGGCCGGAAACTTCCACTTT
GCCCCTGGGAAGAGCTTCCAGCAGTCCCATGTGCACGTCCATGACTTGCAGAGCTTTGGCCTTGACAACATCAAC
ATGACCCACTACATCCAGCACCTGTCATTTGGGGAGGACTATCCAGGCATTGTGAACCCCCTGGACCACACCAAT
GTCACTGCGCCCCAAGCCTCCATGATGTTCCAGTACTTTGTGAAGGTGGTGCCCACTGTGTACATGAAGGTGGAC
GGAGAGGTACTGAGGACAAATCAGTTCTCTGTGACCAGACATGAGAAGGTTGCCAATGGGCTGTTGGGCGACCAA
GGCCTTCCCGGAGTCTTCGTCCTCTATGAGCTCTCGCCCATGATGGTGAAGCTGACGGAGAAGCACAGGTCCTTC
ACCCACTTCCTGACAGGTGTGTGCGCCATCATTGGGGGCATGTTCACAGTGGCTGGACTCATCGATTCGCTCATC
TACCACTCAGCACGAGCCATCCAGAAGAAAATTGATCTAGGGAAGACAACGTAGTCACCCTCGGTGCTTCCTCTG
TCTCCTCTTTCTCCCTGGCCTGTGGTTGTCCCCCAGCCTCTGCCACCCTCCACCTCCTCGGTCAGCCCCAGCCCC
AGGTTGATAAATCTATTGATTGATTGTGATAGT

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FIGURE 4507

ATCAAGGCCCTGGGCTGGAGGAAGACATCCCAGATCCAGAGGAGCTCGACTGGGGGTCCAAGTACTATGCGTCGC
TGCAGGAGCTCCAGGGGCAGCACAACTTTGATGAAGATGAAATGGATGATCCTGGAGATTCAGATGGGGTCAACC
TCATTTCTATGGTTGGGGAGATCCAAGACCAGGGTGAGGCTGAAGTCAAAGGCACTGTGTCCCCAAAAAAAGCAG
TTGCCACCCTGAAGATCTACAACAGGTCCCTGAAGGAAGAATTTAACCACTTTGAAGACTGGCTGAATGTGTTTC
CTCTGTACCGAGGGCAAGGGGGCCAGGATGGAGGTGGAGAAGAGGAAGGATCTGGACACCTTGTGGGCAAGTTCA
AGGGCTCCTTCCTCATTTACCCTGAATCAGAGGCAGTGTTGTTCTCTGAGCCCCAGATCTCCCGGGGGATCCCAC
AGAACCGGCCCATCAAGCTCCTGGTCAGAGTGTATGTTGTAAAGGCTACCAACCTGGCTCCTGCAGACCCCAATG
GCAAAGCAGACCCTTACGTGGTGGTGAGCGCTGGCCGGGAGCGGCAGGACACCAAGGAACGCTACATCCCCAAGC
AGCTCAACCCCATCTTTGGAGAGATCCTGGAGCTAAGCATCTCTCTCCCAGCTGAGACGGAGCTGACGGTCGCCG
TATTTGATCATGACCTCGTGGGTTCTGACGACCTCATCGGGGAGACCCACATTGATCTGGAAAACCGATTCTATA
GCCACCACAGAGCAAACTGTGGGCTGGCCTCCCAGTATGAAGTGTGGGTCCAGCAGGGCCCACAGGAGCCATTCT
GAGTTTCTGGCCAAACACATTCAAGCTCACATTCCCTTTTGTGTCTCCAGATCCTATGATTTCATGGAAGGGGAC
CCTCCCACCCACCGCCACTGCCAACCAAGACATAGCTCAGTGGTCAAGACTTGGGCTTGGGAGTCGGGATCCTGT
AACGAATGTCACTTGACCGCTTTCTTTTTTTATGAAACAGTCTCGCTCTGTCTCCCAGGTTGGAGTGCAGTGGCA
CGATCTCGGCTGACTGCAACCTCCACCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCCAGTAGCTGGGA
TTACAGGCGTGGGCCCCCATGTCCAGCTAATTTTTATATTTTCGCTCTGTCTCCCAGGTTGGAGTGCAGTGGCAC
GATCTCGGCTGACTGCAACCTCCACCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCCAGTAGCTGGGAT
TACAGGCGTGGGCCCCCATGTCCAGCTAATTTTTATATTTTTAGTAGAGACAGGGTTTCACCATGTTGTCCAGGC
TGGTCTTGAACCCCTGACCTCAAGTGATCCACCCACCTCTGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCA
CCATGCCAGGCCCTCTTAACCTCTTCAAGTCTGTTTTCTCATCTGCAAAACAGAGGTAATAAGATCAGTATCTTC
TTAATGGAAGCACCTGGACTACATTTTTTTCATTCATTGTTATCATAAATGAGGACTAACCTGTCTCCCGTTGGG
AGTTTTGAACCTAGACCTCATGTCTTCATGACGTCATCACTGCCCCAGGCCCAGCTGTGTCCCTACACCAGCCCC
AGCTGACGCATCTTCTTTTTCTGCCTGTAGAGATGGTTACAATGCCTGGCGTGATGCATTCTGGCCTTCGCAGAT
CCTGGCGGGGCTGTGCCAACGCTGTGGCCTCCCTGCCCCTGAATACCGAGCCGGTGCTGTCAAGGTGGGCAGCAA
AGTCTTCCTGACACCACCGGAGACCCTGCCCCCAGGGATCTCTTCACATGTGGATTGACATCTTTCCTCAAGATG
TGCCTGCTCCACCCCCAGTTGACATCAAGCCTCGGCAGCCAATCAGCTATGAGCTCAGAGTTGTCATCTGGAACA
CGGAGGATGTGGTTCTGGATGACGAGAATCCACTCACCGGAGAGATGTCGAGTGACATCTATGTGAAGAGCTGGG
TGAAGGGGTTGGAGCATGACAAGCAGGAGACAGACGTTCACTTCAACTCCCTGACTGGGGAGGGGAACTTCAATT
GGCGCTTTGTGTTCCGCTTTGACTACCTGCCCACGGAGCGGGAGGTGAGCGTCTGGCGCAGGTCTGGACCCTTTG
CCCTGGAGGAGGCGGAGTTCCGGCAGCCTGCAGTGCTGGTCCTGCAGGTCTGGGACTATGACCGCATCTCTGCCA
ATGACTTCCTTGGATCCCTGGAGTTGCAGCTACCAGACATGGTGCGTGGGGCCCGGGGCCCCGAGCTCTGCTCTG
TGCAGCTGGCCCGCAATGGGGCCGGGCCGAGGTGCAATCTGTTTCGCTGCCGCCGCCTGAGGGGCTGGTGGCCGG
TAGTGAAGCTGAAGGAGGCAGAGGACGTGGAGCGGGAGGCGCAGGAGGCTCAGGCTGGCAAGAAGAAGCGAAAGC
AGAGGAGGAGGAAGGGCCGGCCAGAAGACCTGGAGTTCACAGACATGGGTGGCAATGTGTACATCCTCACGGGCA
AGGTGGAGGCAGAGTTTGAGCTGCTGACTGTGGAGGAGGCCGAGAAACGGCCAGTGGGGAAGGGGCGGAAGCAGC
CAGAGCCTCTGGAGAAACCCAGCCGCCCCAAAACTTCCTTCAACTGGTTTGTGAACCCGCTGAAGACCTTTGTCT
TCTTCATCTGGCGCCGGTACTGGCGCACCCTGGTGCTGCTGCTACTGGTGCTGCTCACCGTCTTCCTCCTCCTGG
TCTTCTACACCATCCCTGGCCAGATCAGCCAGGTCATCTTCCGTCCCCTCCACAAGTGACTCTCGCTGACCTTGG
ACACTCACCCAGGGTGCCAACCCTTCAATGCCTGCTCCTGGAAGTCTTTCTTACCCATGTGAGCTACCCCAGAGT
CTAGTGCTTCCTCTGAATAAACCTATCACAGCC

FIGURE 4508

CAAATATTCCATTCAGCATTACAAAGATGGATGTTCTTCAGTTCCTAGAAGGAATCCCAGTGGATGAAAATGCTG
TACATGTTCTTGTTGATAACAATGGGCAAGGTCTAGGACAGGCATTGGTTCAGTTTAAAAATGAAGATGATGCAC
ATGGCCCACTGCGTGACCTTGGTTCAGCTGTCCATTTCCTGTGACCATCTCATTGACAAGGACATCGGCTCCAAG
TCTGACCCACTCTGCGTCCTTTTACAGGATGTGGGAGGGGGCAGCTGGGCTGAGCTTGGCCGGACTGAACGGGTG
CGGAACTGCTCAAGCCCTGAGTTCTCCAAGACTCTACAGCTTGAGTACCGCTTTGAGACAGTCCAGAAGCTACGC
TTTGGAATCTATGACATAGACAACAAGACGCCAGAGCTGAGGGATGATGACTTCCTAGGGGGTGCTGAGTGTTCC
CTAGGACAGATTGTGTCCAGCCAGGTACTGACTCTCCCCTTGATGCTGAAGCCTGGAAAACCTGCTGGGCGGGGG
ACCATCACGGTCTCAGCTCAGGAATTAAAGGACAATCGTGTAGTAACCATGGAGGTAGAGGCCAGAAACCTAGAT
AAGAAGGACTTCCTGGGAAAATCAGATCCATTTCTGGAGTTCTTCCGCCAGGGTGATGGGAAATGGCACCTGGTG
TACAGATCTGAGGTCATCAAGAACAACCTGAACCCTACATGGAAGCGTTTCTCAGTCCCCGTTCAGCATTTCTGT
GGTGGGAACCCCAGCACACCCATCCAGGTGCAATGCTCCGATTATGACAGTGACGGGTCACATGATCTCATCGGT
ACCTTCCACACCAGCTTGGCCCAGCTGCAGGCAGTCCCGGCTGAGTTTGAATGCATCCACCCTGAGAAGCAGCAG
AAAAAGAAAAGCTACAAGAACTCTGGAACTATCCGTGTCAAGATTTGTCGGGTAGAAACAGAGTACTCCTTTCTG
GACTATGTGATGGGAGGCTGTCAGATCAACTTCACTGTGGGCGTGGACTTCACTGGCTCCAATGGAGACCCCTCC
TCACCTGACTCCCTACACTACCTGAGTCCAACAGGGGTCAATGAGTACCTGATGGCACTGTGGAGTGTGGGCAGC
GTGGTTCAGGACTATGACTCAGACAAGCTGTTCCCTGCATTTGGATTTGGGGCCCAGGTTCCCCCTGACTGGCAG
GTCTCGCATGAATTTGCCTTGAATTTCAACCCCAGTAACCCCTACTGTGCAGGCATCCAGGGCATTGTGGATGCC
TACCGCCAAGCCCTGCCCCAAGTTCGCCTCTATGGCCCTACCAACTTTGCACCCATCATCAACCATGTGGCCAGG
TTTGCAGCCCAGGCTGCACATCAGGGGACTGCCTCGCAATACTTCATGCTGTTGCTGCTGACTGATGGTGCTGTG
ACGGATGTGGAAGCCACACGTGAGGCTGTGGTGCGTGCCTCGAACCTGCCCATGTCAGTGATCATTGTGGGTGTG
GGTGGTGCTGACTTTGAGGCCATGGAGCAGCTGGACGCTGATGGTGGACCCCTGCATACACGTTCTGGGCAGGCT
GCTGCCCGCGACATTGTGCAGTTTGTACCCTACCGCCGGTTCCAGAATGCCCCTCGGGAGGCATTGGCACAGACC
GTGCTCGCAGAAGTGCCCACACAACTGGTCTCATACTTCAGGGCCCAGGGTTGGGCCCCGCTCAAGCCACTTCCA
CCCTCAGCCAAGGATCCTGCACAGGCCCCCCAGGCCTAGGTTCCCTTGGAGGCTGTGGCAAGTCCTCAATCCTGT
GTCCCAGAGGTCCCTCTGGGCCACAACCCAACCCTTCTCACTCTCCTCAGTGCTAGCACTTTGTATTTTTTGATA
CTTTTATACTTGTTTCTGCTTTTGCTGCTCTTGATCCCACCTTTGCTCCTGACAACCCTCATTCAATAAAGACCA
GTGAAGACC

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FIGURE 4509A

GCTTCCTTTGGGAGCCCAACGTTTAGCTCAACTGTTCCAAGCACAGCCTCTCCAATGAACACAGTCCCGCCGCCA
CCAATTCCTCCAATTCCAGCGATGCCATCTCTGTGCCACCCATGACCCCACTGCCACCCATGTCGGGCATGCCGC
CCTTGAATCCGCCACCTGTGGCACCTCTACCTGCTGGAATGAATGGCTCTGGAGCACCTATGAATTTGAACAATA
ATCTGAATCCTATGTTTCTTGGTCCGTTGAATCCTGTTAACCCTATCCAGATGAACTCTCAGAGCAGTGTGAAGC
CACTCCCCATCAACCCTGATGATCTGTATGTCAGTGTGCATGGAATGCCCTTTTCTGCAATGGAAAATGATGTCA
GAGATTTTTTTCATGGGCTCCGTGTTGATGCAGTGCATTTGTTGAAAGATCATGTAGGTCGAAATAATGGGAATG
GATTGGTTAAGTTTCTCTCCCCTCAAGATACATTTGAAGCTTTGAAACGAAACAGAATGCTGATGATTCAACGCT
ATGTGGAAGTTAGCCCTGCCACAGAAAGACAGTGGGTAGCTGCTGGAGGCCATATCACTTTTAAGCAAAATATGG
GACCTTCTGGACAAACTCATCCCCCTCCTCAGACACTTCCCAGGTCAAAATCGCCCAGTGGGCAGAAAAGATCAA
GGTCAAGATCACCACATGAGGCTGGTTTTTGTGTTTACTTGAAAGGGCTACCATTTGAAGCAGAAAACAAACATG
TCATTGATTTTTTTAAAAAGCTGGATATTGTGGAAGATAGTATTTATATAGCTTATGGACCCAATGGGAAAGCAA
CTGGCGAAGGCTTTGTAGAGTTCAGAAATGAGGCTGACTATAAGGCTGCTCTGTGTCGTCATAAACAGTACATGG
GCAATCGCTTTATTCAAGTTCATCCAATTACTAAGAAAGGTATGCTAGAAAAGATAGATATGATTCGAAAAAGAC
TGCAGAACTTCAGCTATGACCAGAGGGAAATGATACTAAATCCAGAGGGGGATGTCAACTCTGCCAAAGTCTGTG
CCCACATAACAAATATTCCATTCAGCATTACAAAGATGGATGTTCTTCAGTTCCTAGAAGGAATCCCAGTGGATG
AAAATGCTGTACATGTTCTTGTTGATAACAATGGGCAAGGTCTAGGACAGGCATTGGTTCAGTTTAAAAATGAAG
ATGATGCACGTAAGTCTGAACGCTTACACCGTAAAAAACTTAATGGGAGAGAAGCTTTTGTTCATGTAGTTACCC
TAGAAGATATGAGAGAGATTGAGAAAAATCCCCCTGCCCAAGGAAAAAAGGGATTAAAGATGCCTGTGCCAGGTA
ATCCTGCAGTTCCAGGAATGCCCAATGCGGGACTGCCCGGTGTGGGACTGCCCAGTGCAGGACTTCCCGGTGCAG
GCCTGCCCAGCACAGGACTGCCTGGTTCAGCAATAACCAGTGCAGGACTGCCTGGTGCGGGAATGCCCAGTGCAG
GAATACCTAGTGCAGGAGGTGAAGAGCATGCCTTCCTGACTGTAGGATCAAAGGAAGCCAATAATGGGCCTCCAT
TTAACTTTCCTGGTAATTTTGGTGGATCAAATGCCTTTGGGCCACCAATCCCTCCTCCAGGATTAGGAGGCGGGG
CCTTTGGTGATGCTAGGCCTGGTATGCCTTCAGTTGGAAACAGTGGTTTGCCTGGTCTAGGACTGGATGTTCCGG
GTTTTGGAGGTGGACCAAACAATTTAAGTGGGCCATCGGGATTTGGAGGGGGCCCTCAGAATTTTGGAAATGGCC
CTGGTAGCTTAGGCGGTCCCCCGGGGTTTGGAAGTGGCCCTCCTGGTCTTGGAAGTGCCCCTGGGCATTTGGGTG
GGCCACCAGCTTTTGGGCCTGGCCCCGGCCCCGGCCCCGGCCCTGGCCCAATCCATATTGGTGGTCCCCCTGGCT
TTGCATCTAGTTCTGGAAAACCAGGACCGACAGTAATTAAAGTGCAAAACATGCCCTTTACTGTGTCTATTGATG
AGATTTTAGATTTCTTTTATGGCTATCAAGTAATCCCAGGCTCAGTGTGTTTAAAATACAATGAAAAAGGTATGC
CCACAGGTGAAGCCATGGTGGCCTTTGAGTCTCGGGATGAAGCCACAGCTGCTGTCATTGACTTAAATGACAGGC
CTATAGGTTCAAGAAAAGTAAAACTTGTATTAGGGTAGCCATTCACATCATTTTTTATAGGGTAGATCTTCATAT
TGCTGTGATTAATGCATCCAGATTGTTTTCCTAGTATTTCCAGGTTAGAACCTGTGGATTGTTTCAATTGCATAT
AGCTTGGTTTCCATAACATAGAGCATTGGTTGACTGTTTACAGAAGACTCACTCACCAGGATAAACATTGCTGTA
TGTTACAGTAAAGCTATCTGGAGAGAACACATAAATGATTTTGGCATACCATTAGAGAAACCATTTGTAAAACTC
AAATGACCACATAAAGCTTATCAAGGAGTCTAGATTGGTTTTGTTTTATACCATATGGGATGAAGAAAATAGAAA
TGTCAGTAGAACTCATTGAGGGTGCTCTTGCCAGCTGCTGAAAATAGAAGTTGGCTACTCTCAGAATTTGGTTTA
AAGCTGGACAGATTTGCTTTGTTATAGGGTAAAGCTTTGTCTAAAGTCCTCATTTTCTTTTAAAATTGAATAAAA
TTTCTGTATACAGATTCATTGTATGTACCTTTATTGCTTCTTAAGGGTCCTTGCTGTATAGACAGTCCTGCTTCA
GAAGTTGCTGCTTTGTTTGTCTAATTGACTCATTTGTAAATGAGCAGAACTGTTTTGTTGGTTTTTTTCCCTAAA
TATAAAAGTCCACACTTCGTTTGTGCTATAACCTCAAACTTTGATTTCTAATGTCACACTTAAAACTGTGTGGAA
TAAGACTTTTGCCATAAAAATAAACTATGGAGTCCTTTATCTACCAGAGCCTTTTTGGTTTGACCGCCACGATTT
AGGTTAGTCAGTTTAAAAATTGTTCATGTTGTTTGGATGGTATCGAAAACCAGAAACCACTTTTAATAATGTGTT
TAAGATACTTGATTTGAAGTCCTTTTCATATGGACTAATTGTAGTATCAATTTCCTCCTGTCCCGATTATGTGAA
ATTTTGGCCTTTAAACAAAGAGGGGCCCATTCATAAGAAAGTGTTATATCTAGGTTTTTAAAACTGAAGTTGAAA
TTATCTTTGTTAGCAGTAGTAGTATAGAATAAAAGATCCGTATGCTGGTTCGTAGATTGATACGTGTTAGTCCTG
TTATTTGGAGGCTTTTTGGCATAGTTGTTCGATCAGGAGCCTGTTTACTAAAAGTCTTCATACAGAGTACAAGTG
CAGCCGCCAGAGGAGAAAATTGAGATTCTTGACCCTTTCATACTCTTTTCTTTGGTATTCAGGACACTAAGGCAG
GAGGACCACATGAGTTCTGGTTGGTAAGTGTCCTTGTCATGAAAACACTTGCCTTACAAGGCTCTAATTATGATT
TCCCTAGTCAGTGCTCTGAAGATGTGTCACATTATATTATAAACAATACGGAAGGGGAGATAGGTGAGATGATAT

FIGURE 4509B

GAAAAACAAATTTTCTCACTGTCATAAAAGGCTCTAATTATGGTTACTTTCCTTGTGATGAAAAACTTGGCCTTA
CAGGGCTCTAGTTATGGTTACTTTCCCTAGTCAATGCTCTGAAAATGTGTCACATTATAAACAATACAGAAGGAG
AGATAGATGAGAGATCATGAAAACCAAATTTTATCTTTTACATGGCCCCTTTGTCTTCGTTTGAAACATCCCCAA
CATTTCCTACAAATCAGCGTAGTTACAAAGGGGTCAGTCTTTTAAAATAAGTATTTCCTATTAAACTATATATAT
ATACAGTGCCTTTTTGGTGTTGTGAGTCAGTGGAACACTGAAATACAGCGGTTGTGTAATTTAAGAGTGGCAACA
GTTTCATTTGATAAGATTTGAAAAGGCTTTTTATCACTACAATCTTAGAGGATTGACAGTACAGGATTTTTGTTT
AAGAGAAGGATTGTTTAGACTCAAGAGGTGACTATGTTGTGGGTCTTTTGATAATTCATGAATACAGATTTGCTT
TGACCGATCACTAGATACTGCCTCCTCAATTTCAAAAGCAATATAACGTTTGTATATGCTGTTTAATTTAAGTTA
ATGTTAAGTAATCATTTCTCATTCCAAAGACAATGCAAAAAACTTCAGCACTGCTTGAGAGTTGTATTTCAGCCA
CAGATATTTTCTCCATTGGAAAGCTATTTTCATTTTAGAAAAATGGGTTGTTTGAAGATGAAAGTCTTTTATCTT
TTTTCACAATTTATTTTGGTTATATGTTCGTACATTCTTATTAAATATTTCATACACTTTATTGCAACTACTTTG
TTATTTCTACATCTTAGATAAATGCTGAAAAGGAAAACGATTTCATTGTTCATCTAATTAAATAAATTAAAAGAG
CGGTTTGTGTAGAAATTGGAGAGAACTATGTTTTATATGAATCACAACAGTGCTCGTTGTGGACTGTAATTAAAT
GCTTTGCCCTCTGGAACTTG

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FIGURE 4510

GAGCCTGGGGCCCAGGACTGCAGCGGCTTCGGAAGGTGGGCTCTGCCAGCGGGACCATGCTGCTCCGAGCCGCTT
GGAGGCGGGCGGCAGTGGCGGTGACAGCGGCTCCAGGGCCGAAGCCCGCGGCGCCCACTCGGGGGCTGCGCCTGC
GCGTTGGAGACCGTGCTCCTCAGTCTGCGGTTCCCGCAGATACAGCCGCTGCCCCGGAGGTGGGGCCAGTGCTGC
GACCTCTCTATATGGATGTGCAAGCTACAACTCCTCTGGACCCCCGGGTGCTTGATGCCATGCTCCCTTACCTAA
TCAACTACTATGGGAACCCACACTCCCGGACACATGCTTATGGCTGGGAGAGTGAGGCAGCCATGGAACGTGCTC
GTCAGCAAGTAGCATCTCTGATTGGAGCTGATCCTCGTGAGATCATTTTTACTAGTGGTGCTACTGAATCCAACA
ACATAGCAATTAAGGGGGTGGCCCGATTCTACAGGTCACGGAAAAAGCACTTGATCACCACCCAGACAGAACACA
AATGTGTCTTGGACTCCTGCCGTTCACTGGAAGCTGAGGGCTTTCAGGTCACCTACCTCCCAGTGCAGAAGAGTG
GGATCATTGACCTAAAGGAACTAGAGGCTGCTATCCAGCCAGATACTAGCCTGGTGTCAGTCATGACTGTGAACA
ATGAGATTGGAGTGAAGCAGCCTATTGCAGAAATAGGGCGGATTTGCAGTTCCAGAAAGGTATATTTCCATACTG
ATGCAGCCCAGGCTGTTGGAAAAATCCCACTTGATGTCAATGACATGAAAATTGATCTCATGAGCATTAGTGGTC
ACAAAATCTACGGTCCCAAAGGGGTTGGTGCCATCTACATCCGTCGCCGGCCCCGTGTGCGTGTGGAGGCCCTGC
AGAGTGGAGGGGGGCAGGAGCGGGGTATGCGGTCTGGGACAGTGCCCACACCCTTAGTGGTGGGGCTGGGGGCTG
CGTGTGAGGTGGCACAGCAAGAGATGGAGTATGACCACAAGCGAATCTCAAAGTTGTCAGAGCGGCTGATACAGA
ATATAATGAAGAGCCTTCCAGATGTGGTGATGAATGGGGACCCTAAGCACCATTATCCCGGCTGTATCAACCTCT
CCTTTGCATATGTGGAAGGGGAAAGTCTGCTGATGGCACTGAAGGACGTTGCCTTATCCTCAGGGAGTGCCTGCA
CCTCTGCATCCCTGGAGCCCTCTTATGTGCTTAGAGCAATTGGCACTGATGAGGATTTAGCGCACTCTTCTATCA
GGTTTGGAATTGGCCGCTTCACTACAGAGGAGGAAGTGGACTACACAGTGGAGAAATGCATTCAGCATGTGAAGC
GTCTTCGAGAAATGAGCCCTCTCTGGGAGATGGTTCAGGATGGCATTGACCTCAAGAGCATCAAGTGGACCCAAC
ACTAGAAGAATAGGGCCCTGACTTTGTGCTGGTCTGGCCCCTCCTGCCTCACCAACCCGTGCACAACCAGACACC
TTGTTACACCTAGTGGATGCTCTAGATTGGTATAGACCAGTTGACTTCAGCATCAGTCCACCTCTATGACAGAAA
CACAAGAAAACTGTCTTTCCCTAGCTTCAGTTCCTTGGGTGTGGAGCACTCCCCATTTCTTCTCGGGTCTTAAAG
TGTGTGGACATTTTCATCCCGAAGCCATAGAGACATTTGCTGTCATATTGCTGCTGGGCACATCTGTGCTCTTGG
TGAGGAGAGCAAGAGGAACCAGAAGAAGTCTCTTTGGTCAGGGACCATGATGCTCTACATGGACATTTGAGTCTT
CGTCTTCTGCTGCTGCTCGGCTGGACCAGCTTCTTTAACAGCAAGCATAATCCACTTCAATGTAATATTTTCTGT
AGCTCCAAAGGCTATCTCTTCATATTGACTGCAGACAGACTGAATGGACAGTTTCTTAGAGGGCTTGTCTCCTTT
CTACCCTTGTCCTCTTTCCTTTCCTTTGACCTAATGGAGCTAGAAATATGTCTGTGACTCCACCAGTTATTCTAA
TAATTTGTTTTCTTGAAAATTGTTAATTTCAAGACTGGAGAAATAAACTCACCTTCTATTTACTCTGTGACTTTA
TGAGAGGTTGAGGGAAAAGTGGAAGCTGTACTTGGGAATTGTGGAGAAGACCGCCACTCCATCTGATTTGCATAA
ATGACTCAGTGGGCTTTTGTATCTCTTCATTTAAGAATTATTTGAATGCCTGCCAGGAGCCAGATTTGTTCTGGG
TATTAGGAATACACTGGTTAACAGGACCAAAAAAGACCCTGCCCTCACTGAGTTTTAAATTTTAGTGGAGAGATG
GAAAATAATTAAACAAATAAACAATGTTATAGATTGTG

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FIGURE 4511

GACGCGGGGCCGGAACGCGAAGAGGGTGGTGGAGTCGGGCTACCCACTGATTTTCCTTCCCTTACTTCCCCTGAG
CCCTTGGGCCCACTTCCCAGCCTACCGCTTCCGTCCCCGCCCGACTCTTGGGCCAGCGCCTGGGCCCACACTTTC
CTATCCCCCGCAGATGCCGGTGGCCGTGGGTCCCTACGGACAGTCCCAGCCAAGCTGCTTCGACCGTGTCAAAAT
GGGCTTCGTGATGGGTTGCGCCGTGGGCATGGCGGCCGGGGCGCTCTTCGGCACCTTTTCCTGTCTCAGGATCGG
AATGCGGGGTCGAGAGCTGATGGGCGGCATTGGGAAAACCATGATGCAGAGTGGCGGCACCTTTGGCACATTCAT
GGCCATTGGGATGGGCATCCGATGCTAACCATGGTTGCCAACTACATCTGTCCCTTCCCATCAATCCCAGCCCAT
GTACTAATAAAAGAAAGTCTTTGAGT

FIGURE 4512

CGGGCTGGGCGGTTCCGCGGCCTGGGCCTAGGGGCTTAACAGTAGCAACAGAAGCGGCGGCGGCGGCAGCAGCAG
CAGCAGCAGCAGCAATCTCTTCCCGAACACGAGCACCACAGGCGCCCGAAGGCCGGAACAGGCGTTTAGAGAAAA
TGGCAGACGATATTGATATTGAAGCAATGCTTGAGGCTCCTTACAAGAAGGATGAGAACAAGTTGAGCAGTGCCA
ACGGCCATGAAGAACGTAGCAAAAAGAGGAAAAAAAGCAAGAGCAGAAGTCGTAGTCATGAACGAAAGAGAAGCA
AAAGTAAGGAACGGAAGCGAAGTAGAGACAGAGAAAGGAAAAAGAGCAAAAGCCGTGAAAGAAAGCGAAGTAGAA
GCAAAGAGAGGCGACGGAGCCGCTCAAGAAGTCGAGATCGAAGATTTAGAGGCCGCTACAGAAGTCCTTACTCCG
GACCAAAATTTAACAGTGCCATCCGAGGAAAGATTGGGTTGCCTCATAGCATCAAATTAAGCAGACGACGTTCCC
GAAGCAAAAGTCCATTCAGAAAAGACAAGAGCCCTGTGAGAGAACCTATTGATAATTTAACTCCTGAGGAAAGAG
ATGCAAGGACAGTCTTCTGTATGCAGCTGGCGGCAAGAATTCGACCAAGGGATTTGGAAGAGTTTTTCTCTACAG
TAGGAAAGGTTCGAGATGTGAGGATGATTTCTGACAGAAATTCAAGACGTTCCAAAGGAATTGCTTATGTGGAGT
TCGTCGATGTTAGCTCAGTGCCTCTAGCAATAGGATTAACTGGCCAACGAGTTTTAGGCGTGCCAATCATAGTAC
AGGCATCACAGGCAGAAAAAAACAGAGCTGCAGCAATGGCAAACAATTTACAAAAGGGAAGTGCTGGACCTATGA
GGCTTTATGTGGGCTCATTACACTTCAACATAACTGAAGATATGCTTCGTGGGATCTTTGAGCCTTTTGGAAGAA
TTGAAAGTATCCAGCTGATGATGGACAGTGAAACTGGTCGATCCAAGGGATATGGATTTATTACATTTTCTGACT
CAGAATGTGCCAAAAAGGCTTTGGAACAACTTAATGGATTTGAACTAGCAGGAAGACCAATGAAAGTTGGTCATG
TTACTGAACGTACTGATGCTTCGAGTGCTAGTTCATTTTTGGACAGTGATGAACTGGAAAGGACTGGAATTGATT
TGGGAACAACTGGTCGTCTTCAGTTAATGGCAAGACTTGCAGAGGGTACAGGTTTGCAGATTCCGCCAGCAGCAC
AGCAAGCTCTACAGATGAGTGGCTCTTTGGCATTTGGTGCTGTGGCAGATTTGCAAACAAGACTTTCCCAGCAGA
CTGAAGCTTCAGCTTTAGCTGCAGCTGCCTCTGTTCAGCCACTTGCAACACAATGTTTCCAACTCTCTAACATGT
TTAACCCTCAAACAGAAGAAGAAGTTGGATGGGATACCGAGATTAAGGATGATGTGATTGAAGAATGTAATAAAC
ATGGAGGAGTTATTCATATTTATGTTGACAAAAATTCAGCTCAGGGCAATGTGTATGTGAAGTGCCCATCAATTG
CTGCAGCTATTGCTGCTGTCAATGCATTGCATGGCAGGTGGTTTGCTGGTAAAATGATAACAGCAGCATATGTAC
CTCTTCCAACTTACCACAACCTGTTTCCTGATTCTATGACAGCAACACAGCTACTGGTTCCAAGTAGACGATGAA
GGAAGATATAGTCCCTTATGTATATAGCTTTTTTTCTTTCTTGAGAATTCATCTTGAGTTATCTTTTATTTAGAT
AAAAATAAAGAGGCAAGGATCTACTGTCATTTGTATGCAATTTCCTGTTACCTTGAAAAAATAAAAATGTTAACA
GGAATGCAGTGTGCTCATTCTCCCTAAATAGTAAATCCCACTGTATACAAAACTGTTCTCTTGTTCTGCCTTTTA
AAATGTTCATGTAGAAAATTAATGAACTATAGGAATAGCTCTAGGAGAACAAATGTGCTTTCTGTAAAAAGGCAG
ACCAGGGATGTAATGTTTTTAATGTTTCAGAAGCCTAACTTTTTACACAGTGGTTACATTTCACATTTCACTAAT
GTTGATATTTGGCTGATGGTTGAGCAGTTTCTGAAATACACATTTAGTGTATGGAAATACAAGACAGCTAAAGGG
CTGTTTGGTTAGCATCTCATCTTGCATTCTGATCAATTGGCAAGAAAGGGAGATTTCAAAATTATATTTCTTGAT
GGTATCTTTTCAATTAATGTATCTGTAAAAGTTTCTTTGTAAATACTATGTGTTCTGGTGTGTCTTAAAATTCCA
AACAAAATGATCCCTGCATTTCCTGAAGATGTTTAAACGTGAGAGTCTGGTAGGCAAAGCAGTCTGAGAAAGAAA
TAGGAAATGCAGAAATAGGTTTTGTCTGGTTGCATATAATCTTTGCTCTTTTTAAGCTCTGTGAGCTCTGAAATA
TATTTTTGGGTTACTTCAGTGTGTTTGACAAGACAGCTTGATATTTCTATCAAACAAATGACTTTCATATTGCAA
CAATCTTTGTAAGAACCACTCAAATAAAAGTCTCTTAAAAAGGCC

FIGURE 4513

ATGAAAAGAGTCAAGAGATTCCTTGAGAAGAGAGAACCAAAACTCAATGAAAATATTAAAAATGCAATGCTGATT
AAAGGGGGAAATGCAAACGCAACAGTGACACAAGTACTTAAAGATGTGTGTGCACTGAAAAAACCATACGGTGTA
CTGTATAAAAAGAAAAATGTTACAAGACCTTTTGAGGATCAGACATCACTGGAATTACTTTCAAAGAAGTCAGAT
TGTTCTTTATTCATGTTTGGCTCCTATAATAAGAAGCGGCCAAATAATCTAGTAATAGGTCATATGTATGACTAC
CATGTGCTGGATATGATTGAATTAGGTATTGAGAATTTTGTCTCTCTAAAAGACATTAAGAACAGTAAATGTCCT
GAGGGAACAAAACCCATGCTAATATTTGCTGGTGATGATTTCAATGTAACAGAAGATTACAGAAGACTAAAAAGT
CTTCTTACTGATTTCTTCAGAGGCCCCACAGTATCAAATATCTGCCTGGCTGGATTAGAATATGTTCTGCACTTC
ACTGCACTGAATGGGAAGATTTACTTTCGAAGATATAAGTTGCTGTTGAAGAAATCTGGTTGCAGAACACCACGG
ATTGAATTGGAAGAGATAGGACCCTCATTGAATCTGGTTCTGAGGAGGACACACCTGGCATCCGATGACCTTTAT
ACATTATCTATGAAAATGCCAAAAGCTCTCAAGCCAAAGAAGAAGAAAAATATCTCCAATGATACTTTTGGTACA
ACTTATGGAAGGATTCATATGTAG

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FIGURE 4514

GGAGAATAAAGGCAGCCCCGTTGATGACTGAAAATGACAAAGCATCCACCTAACAGACGAGGAATCAGCTTTGAA
GTGGGAGCCCAGTTGGAAGCCCGGGACCGTTTAAAAAACTGGTATCCAGCTCACATAGAAGACATTGACTACGAG
GAAGGAAAAGTACTCATCCATTTCAAGCGTTGGAACCATCGTTATGATGAGTGGTTCTGCTGGGACAGTCCTTAT
TTACGCCCTTTAGAGAAAATACAGCTGAGGAAAGAGGGCTTGCATGAAGAGGATGGATCTTCTGAATTTCAAATA
AATGAGCAGGTCCTTGCTTGCTGGTCTGATTGTCGTTTTTACCCGGCCAAAGTCACTGCTGTTAACAAGGATGGT
ACTTACACTGTGAAATTTTATGATGGAGTAGTTCAGACTGTCAAACATATTCATGTCAAAGCTTTTTCCAAAGAT
CAGAATATTGTGGGTAATGCTAGGCCTAAAGAAACAGATCACAAAAGTCTTTCATCATCTCCTGATAAACGAGAG
AAGTTTAAAGAACAGAGAAAAGCAACAGTGAATGTGAAGAAAGACAAAGAAGATAAACCCTTAAAGACAGAAAAG
CGACCCAAGCAGCCTGATAAAGAAGGAAAGTTAATCTGTTCTGAAAAGGGGAAAGTGTCAGAGAAAAGTCTTCCC
AAGAACGAGAAGGAAGACAAGGAAAACATTTCCGAAAATGACAGAGAGTATTCTGGAGATGCCCAAGTGGATAAG
AAACCTGAAAATGACATTGTGAAGAGTCCACAAGAAAACTTGAGGGAACCCAAAAGAAAACGAGGCAGACCCCCT
TCCATAGCTCCTACTGCTGTGGATTCAAACTCTCAAACTTTGCAACCAATAACATTGGAACTGAGAAGAAGGAAA
ATATCAAAAGGATGTGAAGTCCCATTAAAACGTCCTCGGCTTGACAAAAATTCATCCCAGGAAAAGTCAAAAAAC
TACTCGGAAAACACTGACAAAGACTTATCGAGGAGACGTTCCTCCAGGCTGTCCACTAATGGGACCCATGAGATC
CTAGATCCTGACTTGGTTGTATCAGATTTGGTTGATACGGATCCTTTGCAAGACACGTTGTCTAGTACCAAGGAA
TCTGAAGAAGGTCAGTTGAAGTCTGCTTTGGAAGCTGGCCAGGTCTCATCTGCACTGACTTGCCACTCCTTTGGG
GATGGATCCGGGGCTGCAGGCTTGGAGTTGAACTGCCCATCAATGGGAGAAAACACGATGAAAACAGAACCGACT
TCTCCCCTTGTGGAATTACAAGAGATTTCGACTGTGGAAGTAACAAATACTTTTAAGAAAACAGATGATTTTGGG
TCATCTAATGCACCAGCTGTCGACCTAGACCATAAGTTTAGATGCAAAGTTGTGGACTGTTTAAAATTTTTCCGC
AAAGCCAAACTGTTGCACTATCACATGAAGTATTTCCATGGAATGGAGAAGTCACTGGAGCCAGAAGAGAGCCCG
GGAAAGAGGCATGTCCAAACCAGGGGCCCTTCAGCTTCAGACAAGCCCAGCCAGGAGACCCTGACCAGGAAGCGG
GTCTCTGCCAGTTCCCCAACTACAAAAGACAAGGAAAAGAATAAAGAGAAGAAATTCAAGGAGTTTGTGAGAGTG
AAGCCAAAGAAGAAAAAGAAAAAGAAAAAGAAAACCAAACCTGAATGCCCCTGCAGTGAGGAGATCAGTGACACC
TCCCAGGAACCTTCTCCACCCAAGGCATTTGCTGTTACCAGGTGTGGGTCCTCACACAAGCCAGGGGTCCATATG
AGCCCGCAGCTTCATGGCCCAGAATCTGGACACCACAAAGGGAAAGTGAAAGCATTGGAGGAGGATAATTTGAGT
GAGTCCTCTTCTGAGAGCTTTCTCTGGAGTGATGATGAGTATGGCCAAGATGTGGATGTGACCACCAACCCAGAT
GAGGAACTTGATGGGGATGACCGCTATGACTTCGAGGTGGTCCGCTGCATCTGTGAGGTCCAGGAGGAAAATGAC
TTCATGATTCAGTGTGAAGAGTGCCAGTGCTGGCAGCATGGGGTCTGCATGGGATTACTGGAAGAAAATGTGCCC
GAGAAATACACCTGTTATGTTTGCCAAGACCCTCCAGGTCAGAGGCCTGGCTTCAAGTACTGGTATGACAAGGAG
TGGCTGAGCAGGGGACATATGCATGGCCTGGCATTTCTAGAAGAGAACTACTCCCATCAGAATGCCAAGAAGATC
GTGGCCACCCACCAGCTTCTTGGTGATGTGCAGAGAGTGATTGAGGTTCTGCATGGCCTGCAGCTCAAGATGAGC
ATCTTGCAAAGCCGGGAGCATCCTGATCTGCCGCTGTGGTGCCAGCCTTGGAAACAGCACTCAGGGGAGGGGAGA
TCTCATTTCAGAAACATCCCTGTCACTGACACCAGGAGCAAGGAGGAAGCTCCAAGCTATAGAACTTTGAACGGG
GCAGTGGAGAAGCCCAGGCCCCTGGCCCTGCCCCTGCCGCGTTCTGTGGAGGAATCCTATATCACCAGTGAGCAT
TGCTACCAGAAGCCCCCGCGCCTATTACCCTGCCGTGGAGCAGAAGCTGGTGGTGGAGACGAGGGGCTCTGCCCTC
GACGATGCGGTCAACCCCCTCCATGAGAACGGCGATGATTCCCTTTCCCCGCGCCTGGGCTGGCCTCTAGACCAA
GACAGGAGCAAGGGGGACAGTGACCCCAAACCCGGCTCCCCAAAGGTGAAGGAATATGTCTCCAAAAAGGCCCTA
CCAGAAGAAGCCCCTGCTCGGAAGCTGCTGGACAGAGGTGGAGAGGGGCTGCTGAGCTCCCAGCACCAGTGGCAG
TTTAACCTGCTGACCCATGTGGAATCTCTTCAGGATGAAGTTACGCACAGGATGGACTCCATTGAGAAGGAGTTG
GATGTGTTGGAGAGCTGGCTGGACTACACTGGGGAACTGGAGCCCCCTGAGCCGCTGGCCAGGCTTCCGCAGCTC
AAGCATTGTATCAAGCAGCTGCTGATGGACCTGGGCAAGGTGCAGCAGATCGCCCTCTGCTGCTCAACATGAAAC
TGGGCACCCAAAACTCATGGGGGCACAATCCTGGGGCACCTGCAGGAGGAGCTTCGCAT

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FIGURE 4515

GGACGCAGAGAAGCCAGAGACTTTCGCTTCCGGCTGCCGCAGGCGCTTCGCTGGTGCAGGTAAGCTCCGCACACT
CTCGGCCGGTCCCGAGTCCGACTCCCTCAAGGGTGACGCGAGCTCTGCCCTTTAACCGGAAACGTCTCCCTGCTC
ACCCCACCCCCGCGCAGACGCAGTGCTGAGCACACAGCTACCGGACAAAGAGTGACGCCCGGAGCTGGAGTT**ATG**

GCGGCTACGGAGCCGATCTTGGCGGCCACTGGGAGTCCCGCGGCGGTGCCACCGGAGAAACTGGAAGGAGCCGGT
TCGAGCTCAGCCCCTGAGCGTAACTGTGTGGGCTCCTCGCTGCCAGAGGCCTCACCGCCTGCCCCTGAGCCTTCC
AGTCCCAACGCCGCGGTCCCTGAAGCCATCCCTACGCCCCGAGCTGCGGCCTCCGCGGCCCTGGAGCTGCCTCTC
GGGCCCGCACCCGTGAGCGTAGCGCCTCAGGCCGAAGCTGAAGCGCGCTCCACACCAGGCCCCGCCGGCTCTAGA
CTCGGTCCCGAGACGTTCCGCCAGCGTTTCCGGCAGTTCCGCTACCAGGATGCGGCGGGTCCCCGGGAGGCTTTC
CGGCAGCTGCGGGAGCTGTCCCGCCAGTGGCTGCGGCCTGACATCCGCACCAAGGAGCAGATCGTGGAGATGCTG
GTGCAAGAGCAGCTGCTCGCCATCCTGCCCGAGGCGGCTCGGGCCCGGCGGATCCGCCGCCGCACGGATGTGCGC
ATCACTGGC**TGA**GCGGTGGAGCTGCGGGCGGCCAGGGCCGGGCGCTCTGTGCGGACTGGGGCCATGATCGGGCCC
GGGGGCCTGAGCCTGGGACCCCACCCCGTGTTAATGAAAAATGAGTTTTGGCAGCGCC

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FIGURE 4516A

CATCAGCGGGCGGGGGTGTCGCCGAACAGGCTGCTCCGCAGAGCCCGCCGCGACCCCGCGCCGCCCCGCCCCGCG
GCCTGCCTGCCAGAGGAGCCGAGGGGGCCGCCCCTCGCCCAACCTGCCCGACATGGGGAACCCCGGGCCCAGGCG
TGCTGGTCACC**ATG**ACAACAGAGACAGGCCCCGACTCTGAGGTGAAGAAAGCTCAGGAGGAGGCCCCGCAGCAGC
CCGAGGCTGCTGCCGCTGTGACCACCCCTGTGACCCCTGCAGGCCACGGCCACCCAGAGGCCAACTCCAATGAGA
AGCATCCATCCCAGCAGGACACGCGGCCTGCTGAACAGAGCCTAGACATGGAGGAGAAGGACTACAGTGAGGCCG
ATGGCCTTTCGGAGAGGACCACGCCCAGCAAGGCCCAGAAATCGCCCCAGAAGATTGCCAAGAAATACAAGAGTG
CCATCTGCCGGGTCACTCTGCTTGATGCCTCGGAGTATGAGTGTGAGGTGGAGAAACATGGCCGGGGCCAGGTGC
TGTTTGACCTGGTCTGTGAACACCTCAACCTCCTAGAGAAGGACTACTTCGGCCTGACCTTCTGTGATGCTGACA
GCCAGAAGAACTGGCTGGACCCCTCCAAGGAGATCAAGAAGCAGATCCGGAGTAGCCCCTGGAATTTTGCCTTCA
CAGTCAAGTTCTACCCGCCTGATCCTGCCCAGCTGACAGAAGACATCACAAGATACTACCTGTGCCTGCAGCTGC
GGGCAGACATCATCACGGGCCGGCTGCCATGCTCCTTTGTCACGCATGCCCTACTGGGCTCCTACGCTGTGCAGG
CTGAGCTGGGTGACTATGATGCTGAGGAGCATGTGGGCAACTATGTCAGCGAGCTCCGCTTCGCCCCTAACCAGA
CCCGGGAGCTGGAGGAGAGGATCATGGAGCTGCATAAGACATATAGGGGGATGACCCCGGGAGAAGCAGAAATCC
ACTTCTTAGAGAATGCCAAGAAGCTTTCCATGTACGGAGTAGACCTGCACCATGCCAAGGACTCTGAGGGCATCG
ACATCATGTTAGGCGTTTGTGCCAATGGCCTGCTCATCTACCGGGACCGGCTGAGAATCAACCGCTTTGCCTGGC
CCAAGATCCTCAAGATCTCCTACAAGAGGAGTAACTTCTATATCAAGATCCGGCCTGGGGAGTATGAGCAATTTG
AGAGCACAATTGGCTTTAAGCTCCCAAACCACCGGTCAGCCAAGAGACTGTGGAAGGTCTGCATCGAGCATCATA
CATTCTTCCGGCTGGTGTCCCCTGAGCCCCCACCCAAGGGCTTCCTGGTGATGGGCTCCAAGTTCCGGTACAGTG
GGAGGACCCAGGCACAGACTCGCCAGGCCAGCGCCCTCATTGACCGGCCTGCACCCTTCTTTGAGCGTTCTTCCA
GCAAACGGTACACCATGTCCCGCAGCCTTGATGGAGCAGAGTTCTCCCGCCCAGCCTCGGTCAGCGAGAACCATG
ATGCAGGGCCTGACGGTGACAAGCGGGATGAGGATGGCGAGTCTGGGGGGCAACGGTCAGAGGCTGAGGAGGGAG
AGGTCAGGACTCCAACCAAGATCAAGGAGCTAAAGCCGGAGCAGGAAACCACGCCGAGACACAAGCAGGAGTTCT
TAGACAAGCCAGAAGATGTCTTGCTGAAGCACCAGGCCAGCATCAATGAGCTCAAAAGGACCCTGAAGGAGCCCA
ACAGCAAACTCATCCACCGGGATCGAGACTGGGAACGGGAGCGCAGGCTGCCCTCCTCCCCCGCCTCCCCCTCCC
CCAAGGGCACCCCTGAGAAAGCCAATGAGAGAGCAGGGCTGAGGGAGGGCTCCGAGGAGAAAGTCAAACCACCAC
GTCCCCGGGCCCCAGAGAGTGACACAGGCGATGAGGACCAGGACCAGGAGAGGGACACGGTGTTCCTGAAGGACA
ACCACCTGGCCATTGAGCGCAAGTGCTCCAGCATCACGGTCAGCTCTACGTCTAGCCTGGAGGCTGAGGTGGACT
TCACGGTCATTGGTGACTACCATGGCAGCGCCTTCGAAGACTTCTCCCGCAGCCTGCCTGAGCTCGACCGGGACA
AAAGCGACTCGGACACTGAGGGCCTGCTGTTCTCCCGGGATCTCAACAAGGGGGCCCCCAGCCAGGATGATGAGT
CTGGGGGCATTGAGGACAGCCCGGATCGAGGGGCCTGCTCCACCCCGGATATGCCCCAGTTTGAGCCCGTGAAAA
CAGAAACCATGACTGTCAGCAGTCTGGCCATTAGAAAGAAGATTGAGCCGGAGGCCGTACTGCAGACCAGAGTCT
CCGCTATGGATAACACCCAGCAGGTTGATGGGAGTGCCTCAGTGGGGAGGGAGTTCATAGCAACCACTCCCTCCA
TCACCACGGAGACCATATCGACCACCATGGAGAACAGTCTCAAGTCCGGGAAGGGGGCAGCTGCCATGATCCCAG
GCCCACAGACGGTGGCCACGGAAATCCGTTCTCTTTCTCCGATCATCGGGAAAGATGTCCTCACCAGCACCTACG
GCGCCACTGCGGAAACCCTCTCAACCTCCACCACCACCCATGTCACCAAAACTGTGAAAGGAGGGTTTTCTGAGA
CAAGGATCGAGAAGCGAATCATCATTACTGGGGATGAAGATGTCGATCAAGACCAGGCCCTGGCTTTGGCCATCA
AGGAGGCCAAACTGCAGCATCCTGATATGCTGGTAACCAAAGCTGTCGTATACAGAGAAACAGACCCATCCCCAG
AGGAGAGGGACAAGAAGCCACAGGAATCC**TGA**CCTCTGTGAAGAGATCCTGGCATTTCTGGTCCAACCCAAGCCA
GAGAACCATTAAGAAGGGGCCTTCATTCTGGATTCTCCGACGCAACACTGACGTCCCAGCTGCGACGTACTGTCA
CTGATGAGAGACTGGGAAGGGAAAAGCATATATATATAGATATATAGAGATATAGATATATATACAGGAAACACC
GCATCCTTGCACTGCTGCTGGGGCTGGCAGAGCAGTTGGCTGACAGCAACAACCGACATCTGAACACCTACATTT
CCTTTGCAGACAAATTGAAGAACTGGTGGGATTTTTTTCAAGAAAAAAAATTATATAATAACTATAATCCCTTGC
TCACCCCTTTCCCCCGCCAAATAAGAAACGCAAGCCAGACCACGATGATTGTAGAAGTCCCTCCCGCCCTGGTTC
TGCACGTTACAGTTAGCAGACGAGCAATTCCATTTGTTCTTCTCCAGCATCTCTAAGGCCCACTTGAATGCAAAG
GAAAACACTTGCACAGCAAAGCAAGAGAAGTCACAGCAGCAAGACACGCACAGTCAACCATTTTCCGAGAAAAAA
AGAAAATTCCCCACTTGGAAAGAAAGAGGAGGAACACTGGATTCTTACTTTCTGGATCTTGACACTGGGCTGCAA
AACCTACCTTCCTCTCTCCCGCCTCCCCTCACCCTCAACTCTCAATGTCTTGCTGTCATTTTCTGTCTCGGCTCC
CTCCTCCCCCTTCCCCCTTCCCCCACCCCACACCCTTCACCCTCTGTGTCCTGGTCCTTCTGAGGGCCACTGCAG

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FIGURE 4516B

ATGACTCTCCTTTGAAATGAGAAAAAGAAAAGAAAGCAAGAACAGAAAACGAAGCCACAGGAAGGGAAGTAGACA
TTGTATGCTTATGGTTTCTCATTATGAAGGTGCAGCTTGTAGGAGGTTTGTACGGATGTGCTTTGAAGTTATGTA
TATTACATATAACAGGAAAAAATATTAAAATAAACAGTGCTGGTAAGTATGAAGCTGACATTCTAAAATTATAAT
TATCTGACTGTGATTGATGTATCCTGAGGTTCCTAGATCTCACTGAACTGGCCCAGCTAAGGAGACCTGGACTCT
GGGTGTGGGTTGGCTCACAGTAGGGGCTGACGGGTTCAGTGTAGTAATACTGTGTGTGGTGTTTGTAATTGGTTG
ATTGGTGGGGAGGGGTGGGGGGCCCTAATGGAGAGGTGTGGGTTTGGCAAGAAAGAAGCAACACAGATGTCGTCC
CCAAAATGCCAGTTCAAGACACCTTCTCCCTGCCCCCCTGGTAGTAACAGTCAGGGCCTGGTCTGTGCTCAGGTA
CTGGGTCCCAGTCTGGGACTCTGCTGCTGAAGTTGCCACAGTAGAGGTCCCTGGCTTAGTCCTTATCTCCCTACG
GGGCTTGCCTTGGTTTTCAGTCTTCTCTCTCTTTCTCTCTTTTTTTTTTTTTGCCACATTCTGCCCTTCCCTGA
CCCCATTGTAATAACCAACTCCATATCCAAAGGGAGGTGGTGCTCTCAGCCATTGTAGAAGATGGTGGCTTTAAC
CTGACTGTCTAAAAATTCCCAGCTAAGCCTTTTCCTCTACTCTCTTCCTTGTTCTGAATCATTTCTTCTTCTCAG
GCCAAAGTAGCCATGGTAAGGAGGCTTCATGGGGCAGACCCTGAAAGATCAAAACTGCATTTGCAAAGCCCTCCC
CTGTCCCAGGACAAAGCTGAGACTGACGGGTGATGTTGCTCATAGGCTCCAGCTCTGCATAAGACCTTGGCTTGG
AGACCTCCCTCTCAGTCAACAGCTGAACTCTGAGCTTGTGCCCAGAAATTACCCCAAGACCACAGGAACCCTTCA
AGAAGCTCCCATCACAAGCTTGGCATTGCTCTCTGCCACACGTGGGCTTCCTCAGGCTTGTCTGCCACAAGCTAC
TTCTCTGAGCTCAGAAAGTGCCCCTTGATGAGGGAAAATGTCCCACTGCACTGCGAATTTCTCAGTTCCATTTTA
CCTCCCAGTCCTCCTTCTAAACCAGTTAATAAATTCATTCCACAAGTATTTACTGATTACCTGCTTGTGCCAGGG
ACTATTCTCAGGCTGAAGAAGGTGGGAGGGGAGGGCGGAACCTGAGGAGCCACCTGAGCCAGCTTTATATTTCAA
CCATGGCTGGCCCATCTGAGAGCATCTCCCCACTCTCGCCAACCTATCGGGGCATAGCCCAGGGATGCCCCCAGG
CGGCCCAGGTTAGATGCGTCCCTTTGGCTTGTCAGTGATGACATACACCTTAGCTGCTTAGCTGGTGCTGGCCTG
AGGCAGGGCAGGAAATCAGAATAGCATTTGCTTCTCTGGGCAAATGGGAAGTTCAGCGGGGCAGCAGAATCAGTG
GCATTCCCCCTGGTGCAGGCCGGTGGGTCCACTCCAACTCCCCCTGAGTGTAGCAGCACACTTTCCATACACCAG
GTTCTTTCTACAATCCTGGTGGAAAAGCCACAGAACCTTCTTCCTGCCCTTCTTGAGAGTTCCCCCTCTTTCTGG
GTCAAGAGCTGGAGTGGTGGCTCCATCCTCTCTGGGCCACTTCGGTCTAGGAACTCATCTTTGCAGGAACCAGGA
GTCCTGAGCACACTGAACACACCTCAGAGGGAGGATCCTTGTTGTGGATTTTGCACCTGGCTTTGGGGCAGGGGT
GAAGTGACCAGGCTTAGCTTGTGGAGTTTATGGGCCACCAGGGTTTGGGGAAATCACCATCCCGCGGATGCTGTG
ACCTCCCTTCTACGGAGATGCAGGCAGTGCCACGAGGGAGGAGGGGACCTGCAAAGCTAGAATCTAGGGCACTGT
TTCCTCCCCATCCTTCTCTTTGTAGAGAATAGAGACGTTTGTCTTGTCTGTCTTCAACCTACTTTTCCTTTTCTC
TTTTTTGTTTCTCATCCTCTCTGTGCCACCTCTCCACCCAGGAGGCCATGTAGCATAGTGGAAAAAGTCCCTGAG
GGCGGTTAGGAGTTCTGGGTGACCATCCTGGCTCAGCTCCTAACTCACCATGTGACATCAGGCTATCCCCATTCC
CCCTCTTGGGCCTCAGTTTCCCGACTTGCAAAATAAGCAGAAAGAACCAGATGCTCTCCAGGGTCTTTTTCTACT
TTGCTATCTCATGGGTCTTCATTTTCTCTTATTTTGTTTTCTCTGGATCTTTTCCATCTGAGGGTACAGGAAGTA
CCAGGACCTGTTTCAGTTTTTGAATCCTGCAAGCACATTCCAAGACTGGCCTGAAACTGCATGAGCAACATCACT
CGAAATAATTTTTTTTTTCAAAAGCACCTTAACAACCAATTGCGATGCTGTCCTGTTCCTTTTTACTCACACCCT
TCTCTCCTTTCTCGTCCCCATGCTCCCCCACCTCAGTGCTCCGTGCTGTATGCGTGTGCTCTCTGTTCTTGTATA
CTCAATATAAGTGAAATAAATGTGTTTGATGCTGAACCAT

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FIGURE 4517

GTTTTATTTAGTACACAGGCAAGCAGCATAATCCAGTTTGTATTTTAGAAAGATCATATCAGTTGCTGTATGGAA
ACTAGATTGGAAGGGCCAGGAGAGGACCCAAGGAGGCCATTCTGTTATTTAGGGAAGAGATGATGGTGGTGTGGA
TCGGGTTGTGGTTGGTGGAGGAGGAGAGAAGTGCACAGATTGTAGAAGTGTTTTATAAGCAGTCAAGATTTGTCG
ATGGAGTACATGTGGGCAGTGCTCAAGATTGTGTCCCACATTTCTTTTTTTCTTTTTTTTTTTTGTTTGATTGGG
ATGGAGTCTCACTGTATTGCCCAGGCTGGAGTTCAGTGGCACCATCTCGGCTTACTGCAACCTCCACCTCCCGGG
TTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTACCTGGGGCTACAGGCGCCCGCTACCACACCCAGCTAATTTT
TGTATTTTTAATAGACATGAGGTTTCACCATGTTGGCCAGGCTGTTCTCAAACTCCTGACCTCAAATGATCTGCC
CGCCTCAGCCTCCCAAAGTGCTGAGATTACAAGTGTGAGCCACTGTGCCCGGCCTTAAATTTCTGATGGAAGGGT
GCCATATACCGAGAAGGGGAAATCTGGCAGGGGAACAGGTTTGGGGAGAAATCAAGAATTCTATTTTTTTTTTTA
ATTTTTTGTTTTTTAGAGACAGGGTCTCCTTCTTTTGCCCAGGCTGGAATGCAGTGGTGCAGTCATAGCTCACCA
CAGCCTTGAATTCCTGGGCTTAAGCAATCCTCGTGCTTCCACAGGCACATGCCACCACATCCATGCTAATTTGTT
TCTTCTCTTGGTAAAGATGAGGTCTCGCTGTGTTGCCTAGGCTGGTTTCAAACTCTTGGGCTTAAGTGATCCTCT
TGCCTTGGCCTCCCAAAATGTTAGGGTTACAAGCATGAGCCACTTGTGCCTGGCCAAGAATTCTATCTGTATATC
TTTATAGGTCTTGAGACATCCAAGTGGAGATGTCAAGAAGGCAGTATGTGAGTTTGGAATTCAAAGGAGCGGGCT
GGAGATACACATTTGAGAGCTGTTAGCATCGAGACCGTGGGTTTCAAACCTGCATCTGTGTCAGAATCACTTGGC
GTCATTCCCAGAGAGTATGATTCAGTGGTGGTATCTTAGGCTTTTTATGGCAAGCAAGAGAAACCATCCTGAGCT
GATTTAAGCAGAAAAGGGCTGCACTGAAAGGGAATGTTCAGTAGTTCACAGAATTTCTGGGAAGTTGGAAAACTG
GGGCTGGGCAGCAGGCAGGATCTCAGCCAAAATCATGCCACCGAGCCAGTTTGGCAGGACACTGCTGCCACACAC
TAAATGCCATCGCTGTGTCACTGTTCCCTGAACACTAGACACCATTGCTGTGGTTGCCACCAGCATTGGAATGGA
TCTTCCACTGTGCTCCTGATTCAAAGTCTGTAGTGAGGGCTTCTGATTGGTTGAGCTTAGGTGTAAGGGAGGCTG
GAAAAGCAAGAATTTGTTGTTTTCAGCTTTCACAGGAGGTGAACTCTGCCAAGACCTGTGCAGTGAGGAAGTCCC
CAGACATAGGAAGGAGGTCAGATGCCAGACTGGCACACAATGACAGATGTACTTGACAGCAAGTTTGCCAGCTTG
TGGGATTGTCTGGGAATCTGCATTTAAACCAGCACCCTGGAAATTCCCATGCAGGTGCTGCCTGAACCACATTTG
CATCCATTGCTTGAACTGGTACTTAAAGCTGTGGGGGCTGGGCGCGGTGGCCCACACCCGTAATCCCAGCACTTT
GGGAGGCTGAGGCAGGGGGACCACTTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCGAAACCCCGTCT
CACTAAAAATGCAAAAAATTAGCCGGGCGTGGTGGCACGCACCTGTAGTCCCAGCTATTCGGAGGCTGAGGCAGG
AGAATCGCTTGAACCCGGGAGGTGGAGGTTGCAGTGAGCCGAGATTGCGCCACTGCACTCCAGCCTGGGTGAAAG
GGCAAGACTATGTCTC

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FIGURE 4518

CGGACTGGCAGGGGGCAGGGAAGCTCAAAGATCTGGGGTGCTGCCAGGAAAAAGCAAATTCTGGAAGTTAATGGT
TTTGAGTGATTTTTAAATCCTTGCTGGCGGAGAGGCCCGCCTCTCCCCGGTATCAGCGCTTCCTCATTCTTTGAA
TCCGCGGCTCCGCGGTCTTCGGCGTCAGACCAGCCGGAGGAAGCCTGTTTGCAATTTAAGCGGGCTGTGAACGCC
CAGGGCCGGCGGGGGCAGGGCCGAGGCGGGCCATTTTGAATAAAGAGGCGTGCCTTCCAGGCAGGCTCTATAAGT
GACCGCCGCGGCGAGCGTGCGCGCGTTGCAGGTCACTGTAGCGGGACTTCTTTTGGTTTTCTTTCTCTTTGGGGC
ACCTCTGGACTCACTCCCCAGC**ATG**AAGGCGCTGAGCCCGGTGCGCGGCTGCTACGAGGCGGTGTGCTGCCTGTC
GGAACGCAGTCTGGCCATCGCCCGGGGCCGAGGGAAGGGCCCGGCAGCTGAGGAGCCGCTGAGCTTGCTGGACGA
CATGAACCACTGCTACTCCCGCCTGCGGGAACTGGTACCCGGAGTCCCGAGAGGCACTCAGCTTAGCCAGGTGGA
AATCCTACAGCGCGTCATCGACTACATTCTCGACCTGCAGGTAGTCCTGGCCGAGCCAGCCCCTGGACCCCCTGA
TGGCCCCCACCTTCCCATCCAGACAGCCGAGCTCACTCCGGAACTTGTCATCTCCAACGACAAAAGGAGCTTTTG
CCAC**TGA**CTCGGCCGTGTCCTGACACCTCCAGGTGAGTATCTCCTCTCTTGGAGAGGGAGGTTTAAACGGCAAGT
CCTGGAGTTGGCAGACGTTTTGAAAAATTGCCACTCACTCGGTTTAGGGAAACTGAGGCCAGAGAGGGACAAGTG
ACTTGCCCATGGTTG

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FIGURE 4519

TTCTCTTCCTGCTCTCCATCATGGCGCAGGATCAAGGTGAAAAGGAGAACCCCATGCGGGAACTTCGCATCCGCA
AACTCTGTCTCAACATCTGTGTTGGGGAGAGTGGAGACAGACTGACGCGAGCAGCCAAGGTGTTGGAGCAGCTCA
CAGGGCAGACCCCTGTGTTTTCCAAAGCTAGATACACTGTCAGATCCTTTGGCATCCGGAGAAATGAAAAGATTG
CTGTCCACTGCACAGTTCGAGGGGCCAAGGCAGAAGAAATCTTGGAGAAGGGTCTAAAGGTGCGGGAGTATGAGT
TAAGAAAAAACAACTTCTCAGATACTGGAAACTTTGGTTTTGGGATCCAGGAACACATCGATCTGGGTATCAAAT
ATGACCCAAGCATTGGTATCTACGGCCTGGACTTCTATGTGGTGCTGGGTAGGCCAGGTTTCAGCATCGCAGACA
AGAAGCGCAGGACAGGCTGCATTGGGGCCAAACACAGAATCAGCAAAGAGGAGGCCATGCGCTGGTTCCAGCAGA
AGTATGATGGGATCATCCTTCCTGGCAAATAAATTCCCGTTTCTATCCAAAAGAGCAATAAAAAGTTTTCAGTGA
AATGTGCAA

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FIGURE 4520

GTTCCGGCGAGGAGGCCGCGCCAGTGACAGCGATGGCGGCGGAGTCGGCGCTCCAAGTTGTGGAGAAGCTGCAGG
CGCGCCTGGCCGCGAACCCGGACCCTAAGAAGCTATTGAAATATTTGAAGAAACTCTCCACCCTGCCTATTACAG
TAGACATTCTTGCGGAGACTGGGGTTGGGAAAACAGTAAATAGCTTGCGAAAACACGAGCATGTTGGAAGCTTTG
CCAGGGACCTAGTGGCCCAGTGGAAGAAGCTGGTTCCTGTGGAACGAAATGCTGAGCCTGATGAACAGGACTTTG
AGAAGAGCAATTCCCGAAAGCGCCCTCGGGATGCCCTGCAGAAGGAGGAGGAGATGGAGGGGGACTACCAAGAAA
CCTGGAAAGCCACGGGGAGCCGATCCTATAGCCCTGACCACAGGCAGAAGAAACATAGGAAACTCTCGGAGCTCG
AGAGACCTCACAAAGTGTCTCACGGTCATGAGAGGAGAGATGAGAGAAAGAGGTGTCACAGAATGTCACCAACTT
ACTCTTCAGACCCTGAGTCTTCTGATTATGGCCATGTTCAATCCCCTCCATCTTGTACCAGTCCTCATCAGATGT
ACGTCGACCACTACAGATCCCTGGAGGAGGACCAGGAGCCCATTGTTTCACACCAGAAGCCTGGGAAAGGCCACA
GCAATGCCTTTCAGGACAGACTCGGGGCCAGCCAAGAACGACACCTGGGTGAACCCCATGGGAAAGGGGTTGTGA
GTCAAAACAAGGAGCACAAATCTTCCCACAAGGACAAACGCCCCGTGGATGCCAAGAGTGATGAGAAGGCCTCTG
TGGTGAGCAGAGAGAAATCACACAAGGCCCTCTCCAAAGAGGAGAACCGAAGGCCACCCTCAGGGGACAATGCAA
GGGAGAAACCGCCCTCTAGTGGCGTAAAGAAAGAGAAGGACAGAGAGGGCAGCAGCCTGAAGAAGAAGTGTTTGC
CTCCCTCAGAGGCCGCTTCAGACAACCACCTGAAAAAGCCAAAGCACAGAGACCCAGAGAAAGCCAAATTGGACA
AAAGCAAGCAAGGTCTGGACAGCTTTGACACAGGAAAAGGAGCAGGAGACCTGTTGCCCAAGGTAAAAGAGAAGG
GTTCTAACAACCTAAAGACTCCAGAAGGGAAAGTCAAAACTAATTTGGATAGAAAGTCACTGGGCTCCCTCCCTA
AAGTTGAGGAGACAGATATGGAGGATGAATTCGAGCAGCCAACCATGTCTTTTGAATCCTACCTCAGCTATGACC
AGCCCCGGAAGAAAAAGAAAAAGATTGTGAAAACTTCAGCCACGGCACTTGGAGATAAAGGACTTAAAAAAAATG
ACTCTAAAAGCACTGGTAAAAACTTGGACTCAGTTCAGAAATTACCCAAGGTGAACAAAACCAAGTCAGAGAAGC
CGGCTGGAGCTGATTTAGCCAAGCTGAGAAAGGTGCCTGATGTGTTGCCAGTGTTGCCAGACCTCCCGTTACCCG
CGATACAGGCCAATTACCGTCCACTGCCTTCCCTCGAGCTGATATCCTCCTTCCAGCCAAAGCGAAAAGCGTTCT
CTTCACCCCAGGAAGAAGAAGAAGCTGGATTTACTGGGCGCAGAATGAATTCCAAGATGCAGGTGTATTCTGGTT
CCAAGTGTGCCTATCTCCCTAAAATGATGACCTTGCACCAGCAATGCATCCGAGTACTTAAAAACAACATCGATT
CAATCTTTGAAGTGGGAGGAGTCCCATACTCTGTTCTTGAACCCGTTTTGGAGAGGTGTACACCTGATCAGCTGT
ATCGCATAGAGGAATACAATCATGTATTAATTGAAGAAACAGATCAATTATGGAAAGTTCATTGTCACCGAGACT
TTAAGGAAGAAAGACCCGAAGAGTATGAGTCGTGGCGAGAGATGTACCTGCGGCTTCAGGACGCCCGAGAGCAGC
GGCTACGAGTACTAACAAAGAATATCCAGTTCGCACATGCCAATAAGCCCAAAGGCCGACAAGCAAAGATGGCCT
TTGTCAACTCTGTGGCCAAGCCACCTCGTGACGTCCGGAGGAGGCAGGAAAAGTTTGGAACGGGAGGAGCAGCTG
TCCCTGAGAAAATCAAGATCAAGCCAGCCCCGTACCCCATGGGAAGCAGCCATGCTTCCGCCAGTAGCATCAGCT
TTAACCCCAGCCCTGAGGAGCCGGCCTATGATGGCCCAAGCACCAGCAGTGCCCACTTGGCACCAGTGGTCAGCA
GCACTGTTTCCTATGATCCTAGGAAACCCACTGTGAAGAAAATTGCCCCAATGATGGCCAAGACAATTAAAGCTT
TCAAGAACAGATTCTCCCGACGATAAACTGAGGACTTGCCTTGGAAATGGAATCTGGGGAGGCAGGAATACAAGG
ACAGTGGGGGTTGGGGAATGGAATTCTACAGGAGACTGGAGTCTTGCTTTGTGGATCCTTTTGGTCTCCGAGTCC
TGCAGTCTGCAGGTGCTGCCCCTGGGAACCTGCGTGCCACAGCCCCGCCTCCCTGCCTGGAGCACACTTTAGAAT
TCTGAAGATGTGAAGCCTCTGTCTCACTGAGGATTTTAAAGGTCAATTATACTTTTGTTGTTCATTAGCATCTTT
GTAAACTATAAGACGTAGTTTTAATTAATAAATATTGCCCCCAGAT

FIGURE 4521

GGAAGTTCCGGCGGGGGCGGCCGAGGGGGAAGAGTGTGTCTGCGGGAGAAAGAGGAGAATCGCCCAAGCGGCCTC
GGAAGTCCCAGGGAGTGGAGGCCCCCGCCGTGGAGCCGTGTGGTGTATGTGTGGTAACACCATGTCTGTGCCCCT
GCTCACCGATGCTGCCACCGTGTCTGGAGCTGAGCGGGAAACGGCCGCGGTTATTTTTTTACATGGACTTGGAGA
CACAGGGCACAGCTGGGCTGACGCCCTCTCCACCATCCGGCTCCCTCACGTCAAGTACATCTGTCCCCATGCGCC
TAGGATCCCTGTGACCCTCAACATGAAGATGGTGATGCCCTCCTGGTTTGACCTGATGGGGCTGAGTCCAGATGC
CCCAGAGGACGAGGCTGGCATCAAGAAGGCAGCAGAGAACATCAAGGCCTTGATTGAGCATGAAATGAAGAACGG
GATCCCTGCCAATCGAATCGTCCTGGGAGGCTTTTCACAGGGCGGGGCCCTGTCCCTCTACACGGCCCTCACCTG
CCCCCACCCTCTGGCTGGCATCGTGGCGTTGAGCTGCTGGCTGCCTCTGCACCGGGCCTTCCCCCAGGCAGCTAA
TGGCAGTGCCAAGGACCTGGCCATACTCCAGTGCCATGGGGAGCTGGACCCCATGGTGCCCGTACGGTTTGGGGC
CCTGACGGCTGAGAAGCTCCGGTCTGTTGTCACACCTGCCAGGGTCCAGTTCAAGACATACCCGGGTGTCATGCA
CAGCTCCTGTCCTCAGGAGATGGCAGCTGTGAAGGAATTTCTTGAGAAGCTGCTGCCTCCTGTCTAACTAGTCGC
TGGCCCCAGTGCAGTACCCCAGCTCATGGGGGACTCAGCAAGCAAGCGTGGCACCATCTTGGATCTGAGCCGGTC
GAGCCCCTGTCCCCACCCTTCCTGACCTGTCCTTTTCCCACAGGCCTCTGGGGGCAGGTGGCAAGGCCTGGCCGG
GCCTTCCTTCCTGGCCTTAGCCACCTGGCTCTGTCTGCAGCAGGGGCAGGCTGCTTTCTTATCCATTTCCCTGGA
GGCGGGCCCCCCTGGCAGCAGTATTGGAGGGGCTACAGGCAGCTGGAGAAAGGGGCCCAGCCGCTGACCCACTCA
CTCAGGACCTCACTCACTAGCCCCGCTTTGGGCCCCCTCCTGTGACCTCAGGGTTTGGCCCATGGGGCCCCCCCA
GGCCCCTGCCCCAACTGATTCTGCCCAGATAATCGTGTCTCCTGCCTCCACTCAGCTGCTTCTCAGTCATGAATG
TGGCCATGGCCCCGGGGTCCCCTTGCTGCTGTGGGCTCCCTGTCCCTGGGCAGGAGTGCTGGTGAGGAGGTGGAG
CCTTTTGAGGGGGGCCTTCCCTCAGCTGTTTCCCCACACTGGGGGGCTGGGCCCTGCCTCCCCGTTACCCTCCTT
CCCTGCAGGCCTGGAGCCTGTAGGGCTGGACTGAGGTTCAGGTCTCCCCCCAGCTGTCTCACCCCCACTTTGTCC
CCACTCTAGAGCAGGGAGGCAGTGGGGGAGGAGTTGTGTCTCGTCTTCTGTCTCCATGTGGTTTTTGGGTGTTTT
TCTTGTTGTGTCCTGGATTCCGATAAAATTAAAGAAATTGCTTCCTC

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FIGURE 4522

GGCCAAGATGGCAGCAATGAGGAAGGCGCTTCCGCGGCGACTGGTGGGCTTGGCGTCCCTCCGGGCTGTCAGCAC
CTCATCTATGGGCACTTTACCAAAGCGGGTGAAAATTGTGGAAGTTGGTCCCCGAGATGGACTACAAAATGAAAA
GAATATCGTATCTACTCCAGTGAAAATCAAGCTGATAGACATGCTTTCTGAAGCAGGACTCTCTGTTATAGAAAC
CACCAGCTTTGTGTCTCCTAAGTGGGTTCCCCAGATGGGTGACCACACTGAAGTCTTGAAGGGCATTCAGAAGTT
TCCTGGCATCAACTACCCAGTCCTGACCCCAAATTTGAAAGGCTTCGAGGCAGCGGTTGCTGCTGGAGCCAAGGA
AGTAGTCATCTTTGGAGCTGCCTCAGAGCTCTTCACCAAGAAGAACATCAATTGTTCCATAGAGGAGAGTTTTCA
GAGGTTTGACGCAATCCTGAAGGCAGCGCAGTCAGCCAATATTTCTGTGCGGGGGTACGTCTCCTGTGCTCTTGG
CTGCCCTTATGAAGGGAAGATCTCCCCAGCTAAAGTAGCTGAGGTCACCAAGAAGTTCTACTCAATGGGCTGCTA
CGAGATCTCCCTGGGGGACACCATTGGTGTGGGCACCCCAGGGATCATGAAAGACATGCTATCTGCTGTCATGCA
GGAAGTGCCTCTGGCTGCCCTGGCTGTCCACTGCCATGACACCTATGGTCAAGCCCTGGCCAACACCTTGATGGC
CCTGCAGATGGGAGTGAGTGTCGTGGACTCTTCTGTGGCAGGACTTGGAGGCTGTCCCTACGCACAGGGGGCATC
AGGAAACTTGGCCACAGAAGACCTGGTCTACATGCTAGAGGGCTTGGGCATTCACACGGGTGTGAATCTCCAGAA
GCTTCTGGAAGCTGGAAACTTTATCTGTCAAGCCCTGAACAGAAAAACTAGCTCCAAAGTGGCTCAGGCTACCTG
TAAACTCTGAGCCCCTTGCCCACCTGAAGCCCTGGGGATGATGTGGAAATAGGGGCACACACAGATGATTCATGG
ATGGGGACATGGAAATGAGAATAGGTTAAATGGTGCAGGTACCTCATAGCCAGCTCTACACAGAGGTCTCTCCTG
GCAGAAAGCAGGCGAAGGGCAGGAGGAGCTGCTTGGCAGAAGGACCTCCTGCCCAGACCTGAGGAGTGAGAGGCT
TTGAGGGCTGAAGTCTCCCTTTGTTACGGACCCTGGCCCAGGAGTTGAATGCCTGAGGACGTGTGGGAACCCCGT
TCCCTACTTAGCATGATCCTTGAGTCTCCTCTCTGGATGGAATCCGCGAGCTGGCCACCTGGCCACCCTCTACAC
GGCTCCACCCTGCCATGGCCGTGGGGCCCTTGCTCTCTGACTTCTCAGGACACAGGTCATGGAGGTTCTTCCCAA
GCTGGCAGAGGCCATTTGTGGAAAGTGGAGAGCTACGTGGTGGCCGTCTGCCAACTCCAGCATCTCTGGAAAATC
TCCACGCTGAATGTGATTTTTGAAAACAGCTTATGTAATTAAAGGTTGAATGGCACATCAT

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FIGURE 4523

GTCGGTAGAGGCAGAAGGAGAAGGTCGGGTTGTAGAAGCTGGGGTGGCCGGCAGCTCGCTCATCGGTGTTCGTGG
GCTTTGTCGGTCCGTGCCTCGTCTCTCCCTGGAAAGGGAGGGAGGCTTCGACGTCGAGAGGGAGCCGCTGCCGCG
TTAGTTCCGAGCTTGAAGTCACTAGGACTTCTCTCAAACTTGTGTGCTGAGGAGACTCAGATGTTGGCCTCAGCT
CCTAGGCTGAACTCAGCAGATCGGCCCATGAAAACTTCTGTATTGAGACAAAGGAAGGGATCTGTCAGAAAGCAA
CACTTGTTATCTTGGGCTTGGCAGCAAGGAAGAGGACAGGTAGTGGAGATCCTGCAATCTGAAAAGCAGACTGAA
AGGTGACAAAGAAGCTGAAG**ATG**GGTGGTGGAGAGAGGTATAACATTCCAGCCCCTCAATCTAGAAATGTTAGTA
AGAACCAACAACAGCTTAACAGACAGAAGACCAAGGAACAGAATTCCCAGATGAAGATTGTTCATAAGAAAAAAG
AAAGAGGACATGGTTATAACTCATCAGCAGCTGCCTGGCAGGCCATGCAAAATGGGGGGAAGAACAAAAATTTTC
CAAATAATCAAAGTTGGAATTCTAGCTTATCAGGTCCCAGGTTACTTTTTAAATCTCAAGCTAATCAGAACTATG
CTGGTGCCAAATTTAGTGAGCCGCCATCACCAAGTGTTCTTCCCAAACCACCAAGCCACTGGGTCCCTGTTTCCT
TTAATCCTTCAGATAAGGAAATAATGACATTTCAACTTAAAACCTTACTTAAAGTACAGGTA**TAA**AATAAGACAA
ATGTTTAAATTTAGTTATGTTCACGGATAGTTGTCAATTGGTCTGAAACAAATTCGCTAGGGAATCTATTTGTGT
AGAACTAATTAATGTAAAAAAAATAGACCATCTCGTGTTGTGTGCACTGTGATATAATGGTAGTATCAGTGCAAC
TTAAACTAATGATTGTACTTGATATTAAGTGTTCTCAACTGAGTAACTTTTAAGTGGAAACCAAGTTTAGATTTG
GGGAGTGGTAAAGGAATCAGCTTTTTCTATTGTTAGGGGAAGACAGTAATTTATCATTCATGGACCAGTAGATTG
TTGAAAGTTGGTGAATCGGATTATAAGCTTCTAGCTAACACAAGGATTCAGAATTAGGTAAACATCTGAAGGTTT
AGTATATTAGAAACACCCAAACCAGTAATATGCTAACCTGATGCACTGCTGAAAGAAAATGTGAATTTTTCGTAA
TAATTGCATTTTAGTGAATTGTACAGTGGGTGGAAAGGGCATTTGGAGCTCATTAGAATGAGACATAGTACACCC
CAATGGCCCTGTTTATTAAATGTAGTGGATTAAGTGTCTGTCAACAAATACACCAAAACCATTTTTTATAGAAAC
AGTATTTAATGGTCACTCAATAGCTTTCAAAATACATTTTTGTATTACAGCACTGCACAAGCTATTCTAATAGTG
CTCTGGCCTCATCATTCCTGCAAAGCTTGCTTTGGGGAGTTGGATAATGTGAAAATTTTAAGTACCTAGGGGAGA
AAGAGCCATGTAAATATCTGTAATAAACTTGTAGCATATGTAAAGTTTTCTTGGCCTTTATCTTACAAAAATGGA
GTATTTTAGTATGAATTTGCTGAATGTAAGACCGTGGACTGTTTTTTATAATATGGCCTAATTTTAAAGGTCCAA
AATAACTTGTTTTTAAAGTTTGCCCTTGTGCTAAAGTGCCAGTGTATGTATGTTATACTTGATTTGGTTGTAAAC
TATATTTCAAAGTAAACCCTAGTGTAATAAGTTTTATAACTAAAAAGGTTTAAGCTGCTAAAACTATTTTTAAGA
GATGTGAAATGCAGTATGGGACTATCTTTTTTTCCTCCTCTAAGCCCAAAGATTAACTAGAGTCCCTCCAACCTT
ATAGATTGTTGGCTTTCACAATCTTATAACCTAGGATACAGGTAGTTTCGAGTATGGTGCCAGTGATGTTTTGTT
TTTGTTTGGTCAAGGGGTAGGTGCAACCCAATGGACCACTTATGCAAAAGATGTAAACTCTTGCATAATACATTG
ATAACATGTTTTGCCAACTTTAAATGCTTAAACATAAGCGAAACCAGTAGCAAGTATGTGGGTCAGCTTAAAAAT
TTTGATTGTTAATGCCCTATTTTCTAATTTGGCACCTCTTGATGCCTAAGCAGGTAAGCAGATGCCTAAGCTGTA
TTTCTCCAAATAAATCAAGATGAAGTACTGCCCAAGTTAAATATTGATAGCCTAAAGACAAGTTTATGTAGTACT
TAATGTACATGATATGAATGTGAAGCATAAAATTAAATAAAATTTTTCCCC

FIGURE 4524

GTCTGAGGCTCGGCCGCCTGAGCCGCGGACGGTTTGCTGAGCCCGTTAGTGCGCCCGGCCGAGACACGCCGCCGC
CATGTCCCGCTACCTGCGTCCCCCCAACACGTCTCTGTTCGTCAGGAACGTGGCCGACGACACCAGGTCTGAAGA
CTTGCGGCGTGAATTTGGTCGTTATGGTCCTATAGTTGATGTGTATGTTCCACTTGATTTCTACACTCGCCGTCC
AAGAGGATTTGCTTATGTTCAATTTGAGGATGTTCGTGATGCTGAAGACGCTTTACATAATTTGGACAGAAAGTG
GATTTGTGGACGGCAGATTGAAATACAGTTTGCCCAGGGGGATCGAAAGACACCAAATCAGATGAAAGCCAAGGA
AGGGAGGAATGTGTACAGTTCTTCACGCTATGATGATTATGACAGATACAGACGTTCTAGAAGCCGAAGTTATGA
AAGGAGGAGATCAAGAAGTCGGTCTTTTGATTACAACTATAGAAGATCGTATAGTCCTAGAAACAGTAGACCGAC
TGGAAGACCACGGCGTAGCAGAAGCCATTCCGACAATGATAGATTCAAACACCGAAATCGATCTTTTTCAAGATC
TAAATCCAATTCAAGATCACGGTCCAAGTCCCAGCCCAAGAAAGAAATGAAGGCTAAATCACGTTCTAGGTCTGC
ATCTCACACCAAAACTAGAGGCACCTCTAAAACAGATTCCAAAACACATTATAAGTCTGGCTCAAGATATGAAAA
GGAATCAAGGAAAAAAGAACCACCTAGATCCAAATCTCAGTCAAGATCACAGTCTAGGTCTAGGTCAAAATCTAG
ATCAAGGTCTTGGACTAGTCCTAAGTCCAGTGGCCACTGATAGTATAAACCATGGTCATTTTTAGGCATGTATCA
TTCATTTACTCATAGTTTGGTTTACTTAAATTATCAGGAATACAATGTTGCAATGATGCTTAAAAAACACTTGTT
AGTTTTCCCTGTACCAGGCAATGGTTATAATTAAAATGATATGCTGTTGAGAAGCCACTCTTAAGAGTCCAGTTT
GTTTAATGTTATGGGCAGCTACCAATTTGTGGTGTCTCTGTATATTTTTGTAAAGATTCTCATTTTTTATGCTTG
AAGTATTTGGTGAAAAGATGTTGGTTGACCATAATTTGCAACATTGTCTCATTAAAAATAAACTTTCATATTCAT
ATTTGGTAGAACTGTTAACCTAGAAATGTAGCTTGCTAATAAGATAGAATGATACAAAAGTGAAGTAGTAGCCAC
AGTACAACACTGACTGCTCAGACACATTTAGGTTCAGGGTGGACCTTTATGTCTTGTCAAGATGTCTAGGCCCGG
CTGGGCGTGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGCGGATCACGAGGTCAGGAGTT
CGAGACCAGCCTGACCAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTATCCGGGCATGGTGGCACA
TGCCTGTAATCTCAGCTACTCAGGAGGCTGAGGCAAGAGAATCGCTTGAACCTGGGAGGTAGAAGTTGCAGTGAG
CCAAAATCACGCCACTGCACTCCAGCCTGGGCAACAGAGTGAGACTCCGTCTCAAAAAAAAAAAAAAAACCGGATG
TCTAGGCCAATGATAATTATTTTTGATGCAGTGTGGATTAGTTCTTTTGTTAACCCCACTGTCTTGGGGAATGAT
GCCAGCTGGGAAATTGAGTTTTTGACTGAAACATGGAGCCTTCACTGCTTTTTTTCTGGTTCCTATGAAGATTTG
GAACATAGAAAACACAAAAACTCACCTTAAAATTTGAGCAGGTCGTTGATGGCAAAAATAATTTTAAGGAAAAAG
GAATATTCTTATGTAGTTATTCTAAAGTTTAAGGAGCGTTGTTGACCATAATATTGCTTAGTTTTCTTACTGCTG
TTAAGTAAGTAAATTGTTTCAAAGTAGGTTTTGTGTGTGTGTGCCTAGTGTAAAAGAACTGAAATTTTGATGCTT
ACAGCACTTGGCTCGTGCATTTGTATCAAAATTTGCCTGCCTCTTTATGAGGGAGGCCTGCTTTTCACACCTCAG
TTTATTTAATACGAGGCAAGTTGTAAGACAACACTCATTCTAGGTGATTCTGTGGTGCCATGAAATTTAAGGTAA
TTTGGGGAAAAGGATTAGTCAGTTTTAAGCAAGAGTCACATCTTTTGAGCTTTCGATTATCAGTGTAGTACCTGA
CTAAAAATGAAGTAATACCCTTAAACCATTTATAATTTCTAGTATTTCTCTGAAAGATCGTTTTGGGGACAAAAG
TGACTTGACATGTCCAATTTCATTTCAGAATAAAAAGCTAGCATCTTTAAAAATCTCAGATTGCTTGCTTACAGA
TACAAGTACGAATTATGGACAAACGATTCCTTTTAGAGGATTACTTTTTTCAATTTCGGTTTTAGTAATCTAGGC
TTTGCCTGTAAAGAATACAACGATGGATTTTAAATACTGTTTGTGGAATGTGTTTAAAGGATTGATTCTAGAACC
TTTGTATATTTGATAGTATTTCTAACTTTCATTTCTTTACTGTTTGCAGTTAATGTTCATGTTCTGCTATGCAAT
CGTTTATATGCACGTTTCTTTAATTTTTTTAGATTTTCCTGGATGTATAGTTTAAACAACAAAAAGTCTATTTAA
AACTGTAGCAGTAGTTTACAGTTCTAGCAAAGAGGAAAGTTGTGGGGTTAAACTTTGTATTTTCTTTCTTATAGA
GGCTTCTAAAAAGGTATTTTTATATGTTCTTTTTAACAAATATTGTGTACAACCTTTAAAACATCAATGTTTGGA
TCAAAACAAGACCCAGCTTATTTTCTGCTTGCTGTAAATTAAGCAAACATGCTATAATAAAAACAAAATGAAGG

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FIGURE 4525

AGGAACGAGATGGCGGTTCTCTGGAGGCTGAGTGCCGTTTGCGGTGCCCAAGGAGGCCGAGCTGGCTCCAAGGCT
GCATCTCTCCACTGGACTAGCGAGAGGGTTGTCAGTGTTTTGCTCCCGGGTCTGCTTCCGGCTGCTTATTTGAAT
CCTTGCTCTGCGACGGACTATTCCCTGGCTGCAGCCCTCACTCTTCATGGTCACTGGGGCCTTGGACAAGTTGTT
ACTGACTATGTTCATGGGGATGCCTCGCAGAAAGCTGCCAAGGCAGGGCTTTTGGCATTTTCAGCTTTAACCTTT
GCTGGGCTTTGCTATTTCAACTATCACGATGTGGGCATCTGCAAAGCTGTTGCCATGCTGTGGAAGCTCTGACCT
TTTTGACTTCCTACTTTGAAGAATTGATGTATGCCTCTTTGCCTCTGCTTTGTCATGCCATTAAGCTCACAATAA
GGAAGAAATAACAGATAAGTCCATTGGTGGACAGCCTTCTTCTCTTAATCACAAGATTATTTTCAGAATTTAACT
TTGAGGAAAAGGTTTGAGAGGAATTATATTTAAGTTGTGAGACTGAGTTCTGTATTCTGGTGAGTTAATGGGGTT
GCCTCCCAGCTTCTTATAAGACTCACAGTATAACTAAACATGATATATCAGCTTTTGCCTTTTAATTTCTCAATC
TCTTAAAGAGAATC

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FIGURE 4526

CAGGAACGAGATGGCGGTTCCCTGGAGGCTGAGTGCCGTTTGCGGTGCCCAAGGAGGCCGAGCTCTGTTGCTGCG
AACTCCAGTGGTCAGACCTGCTCATATCTCAGCATTTCTTCAGGACCGACCTATCCCAGAATGGTGTGGAGTGCA
GCACATACACTTGTCACCGAGCCACCATTCTGGCTCCAAGGCTGCATCTCTCCACTGGACTAGCGAGAGGGTTGT
CAGTGTTTTGCTCCCGGGTCTGCTTCCGGCTGCTTATTTGAATCCTTGCTCTGCGACGGACTATTCCCTGGCTGC
AGCCCTCACTCTTCATGGTCACTGGGGCCTTGGACAAGTTGTTACTGATTATGTTCATGGGGATGCCTCGCAGAA
AGCTGCCAAGGCAGGGCTTTTGGCATTTTCAGCTTTAACCTTTGCTGGGCTTTGCTATTTCAACTATCACGATGT
GGGCATCTGCAAAGCTGTTGCCATGCTGTGGAAGCTCTGACCTTTTTGACTTCCTACTTTGAAGAATTGATGTAT
GCCTCTTTGCCTCTGCTTTGTCATGCCATTAAGCTCACAATAAGGAAGAAATAACAGATAAGCCCATTGGTGGAC
AGCCTTCTTCTCTTAATCACAAGATTATTTTCAGAATTTAATCTTTGAGGAAAAGGTTTGAGAGGAATTATATCT
AAGTTGTGAGACTGAGTTCTGTATTCTGGTGAGTTAATGGGGTTGCCTCCCAGCTTCTTATAAGACTCACAATAT
AACTAAACATGATATATCAGCTTTTGCCTTTTAATTTCTCAATCTCTTAAAGAGAATCCAGCTTTATTATGATTA
GTACATGATCAAATTTCCATATTTGCCTTGGGAATAATGGACAAAGGGAAATACTCTTAATTCATGAATAAAAAC
TTTGCAGAAAATTAGACAGTGTTTAATTTTCAAAAACTTCCCTCTCTAGTCAGTAGATACCACCTACTGATGGTT
ACATATACTAGGGAAATTTTAAAATTAGGAAATGCTGCTATCTCATATTATAAATTTCTAAATCCTAGGAAGAAA
CGCTTGGAGTGCTTCTGAAGATACAGAAGTTCCATTTAAGGGCAAGTTTCCCCAGAGACATATCAAAATATTATC
CATTGTAAACTGAGATTTAATTCTCAAATGTATTCTACTTGTTCTAAAACAATCTGTCCACAAATATAAAACTAT
AAGTAATAAATTGTTATTTCCGCACAATGGGAATCTCTAATGTGAAAATGTATTCTATGAAAATAATTTTTTTAA
ATAAAATGTTGTATAAAAAAA

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FIGURE 4527

TTGCTACATATGGAACTATTATTATTAGAAACCTTTCAGTGGAACCTCTGCCTTCCAACAGCCGCCCATTTCATT
GAGTATTATCTCTCTGAAGCAGTACACGAAACAGATCTTCATGACGGCTGGCCAATGATTTGCTTGGAAAAGACT
AAACTCTACATGGCCAAATATGCAGATTACTTCCTGGAAGTATCTTTGCAAGCTGCTGCATGTGTGGCTTCTTCG
AGGATTATACTTCGTCTTTCTCCAACGTGGCCTACAAGACTACATCGTCTTACTGCCTACTCTTGGGATTTCTTA
GTGCAGTGTATTGAACGACTGTTGATCGCTCATGATAATGATGTGAAAGAAGCAAACAAACAGAGAGGGCAAGCA
GGACCTCAGTCAGCGCAACTAAGTGTATTCCAGACAGCCTCCCAGCCATCACGGCCAGTTCACTTTCAGCAACCT
CAGTATCTCCATCAGACACATCAGACCTCACTGCAGTATCGCCATCCTACGTCAGAACAACCAAGCTGTCAGCAG
ATTGTATCGACCACACACACCTCATCTTACACACTACAGACATGTCCTGCTGGCTTCCAAACTAGTGTTCAGGGC
CTTGGGCACATGCAGACTGGTGTTGGGATGTCACTGGCAATACCAGTAGAAGTTAAGCCCTGTCTGAGTGTTTCT
TACAACCGGAGTTATCAGATAAATGAACATTACCCTTGTATTACTCCATGTTTTGAAAGGTGATTATTTGTGAAG
CTGATAACCGACCCAGACTGCTTTGTGACATGAAGCTATGGGTAAGCGTTTTGTAAACTTCTGTTCAAAAGGAAA
GGGATCTAAATGACATCAGAACTCTTCAGGTACCAGCACCAGGAAGACTGAATATCCTTTTTAATGCACCATGAA
TCCTGGGAGACTAAGCAAATTAACAGTATGTCAAATTCTGTTACAACAAATCCCTGTATGACAAAAATGTTCAAG
TCCTGGCTGATGGTCCAAATATTTCAAAAATATTCAGTACAACAGAAAATTTGGACAGACTTCAATTTGCCATTT
TGAGATTTGACCTGTGGTAGCATCTGGGCCTAATGTTGGCTTCTAAGTCAAAGACTAAATGTTTATCTCATCTAT
GGACTTGCCAAACAGTCTTTTATGAAGGAAAGTTACAGTATTAATTTTTGAAAAGGTTTTTTTTTATTCTGCAATT
TTTTATTTTTGTTCTACACATGAATTTTTGACTAAGTTTAAACTCATGAATTGTTATGCTATACCAATCTGCAGT
AAAAAAAATTTTTTTAGATGATTCTATATAACTTCGTCTCACAAATAGTGTAGGTATCTGGGTTTATATACTAAA
ATTAAGGGTGGAGAAGATCTTATTTTTTAAATCATGGTCATAATTTTTCTTTTTTTCCCTAAGTGATCAACATCA
AATTTTTAGAATTAAAATACATTTAACTCAGGGAATTTGTACTACTTGGAAACACTTAACTGTAATGCAACATGC
CTTGGGAATGTTATAGTGTGAACTACCTTTATAACATAGGTTAAAATACGCTTGCTAGGGTGTGTTTTCAAATGA
GAACATAATATAGCTCAGAATGAAGTGGTAGTTCCTGTGATTCATAATACATATGTAGGTTTTGCATATCTCAGT
GCAATCCATGATTTATACTCAGAATCGACATTCTTAAAAAGTTATTTCAAGGGATGGCATAACTGTAAGAGGTCA
GTGCTAGAATAAAGTCCTGTAGGTTTATTTTGGAAGGGACTGTGGCCAGGGTAGTTCTCAGGTTGTGCTAGAGCA
GCACTTTGTTATGTGGAAGACAGGTTTTTTAAGCAACCTTTGAATCCAGCTCTAGTCAGTCTAAGCAGGCAAAGG
TAACTGATGACTAAATTTCAGTAGCTACTTTCATTGGATTGACCCTACAACTGCCCTGGGACATTTCACTGTACC
AGTATTAACTGCAAACAGCAATAATTGTCATTACAGCAAGGGCAGTTTGGGGGTAAAGCATTTTGGAGGAATAAC
CTTAAAAAGTTAAAAAGTCATTGTAATAACTGATAAACTGTATACATTGTGCTCCTTTCTGTGGGAGAAGAAAGA
TTTGGTGGAGGGAAGCTTTCTGGTTTAAAAATTAGTAAGGTGTGTCTTTTTGTTTTTTTTAAGATAGCACTTGAA
TAGAAGGGAAAACTGCATGGCAGATACGTGACTGCCACAATATGCATCGAAGACAAACTTACTATAAAGATGTTG
TGGGTATGCAGCAGGAGTCTCAGTAATCAAGCCAATGGCCTTTGTCAGGAAGGGAAGGGGCTCAACACAGTGATG
GACTGATCCAGATGGCTCCCGGGGATGAATGTGGGTGGGTAGCTTCTGTCAGTATCAATGCTTAGAGAAATATCC
TTTCCTTAAAAAGAAAATAACTTTTATATTTAGAGTACATAGGGCATGATGTGGATTTATTAGTCTGGTAGATAA
AATGAAAAACCACTCAGGTAAGAACACTCACTCATGGCAGTTTTTAAGCATGAAAATTGTTTTCTGAAAGTATCA
TCACTTTTCCTTTTTAAAGAAGGCTGCTAATTGGATTTTGGTAGTTCTTACCTCAAGAAAACTTGAATTATTTGG
GGGAAAGTAGGCTCAAAAGAGAATATATCTTTCACATTCACATTCAGAACCCAGCAACCTGGAGTCCAATTTTCA
GTATTTTAACTACCTCAATAATGCTATGAATGTAAGATATTGGGATAGAGATCCCAACTTGAAACAACAGCCAGT
GCCTGTGGTAACTTAATGTCTTGTCAAATACTTTTATTGATTGGTTTATATGCCATTCTTGTTATAGAAGAATAT
GCCTTTTAAAAAAGCTTATTAATAACACTTTCCCAATTTATATTTTAAAAAGCTAAAGAACACTGGATTAATAAT
CTTTTGGGAGGGTAGAATAAAATAATTGATTACTATTGCTGCATACCCGGGGTGGGATGGGGTGGTTGGAGAACC
AGAACTATTTTTAAAACATTAGGTTTCAATATAAATACAACTCACAACTGCTAGCTTTGGGGGGTGGGGGAACAT
TGTGTGGGTTTTGTTTTGTTTAATTTATTGATTAGTCTTTAAAGTAGGCTTTTTTTTTTTTTTTGAGAATACTG
GACCATCATTAAATGTGTACTGTGAAGAGATTAATATGTATGAAGGGCTTTACCAAAGTCCACTAAATAAACACT
ACTCAAGTACAGACTGCAAACCAAAATGTATCTGTGTTACGACATTAATTGCAAATAGCAAGTATGGTGCTAAAG
TCTACACCAATGGAATTAGATGAGTGCTATGCACTTAATTTTAAAATAAAACTAGTTTTCAGT

FIGURE 4528A

GAAGGAACTGAGACACAGAGGTTGAGACTTGTCTAAAGTAACATGACCAATGAGGAAACTGAGGTCCAGAGAAGT
TGAAGTTTTCCCAAGGTCACACAGCAGAGCTGGAACTAGAGCTTGCATTTCCTGACTTCCAGATTAGTGTTATTT
TTACTTCAAACTATTACTTCTTGATAACTTCAAGAGTTTTCAGAAAAAAAGAAATTGGGACTTTTTTGGTTAAAT
CATGCCATCTGAACAGAAACAGTTATTTTGTGATGAAAAACAAACTACTTTAAAAAAAGATTATGATGTGAAAAA
TGAGATAGTTGATAGGTCGGCACCTAAACCAAAAATTTCAGGAAGTATTCATTATGCACTAAAAAATGTGAAAAT
TGATTTGCCAAAAATAAATATTCCAAATGAAGTCCTATTGAAACATGAAGTTGACAAATACAGAAAATTATTTCA
GAGTAAACAGCAGACTGCAAGAAAATCTATCAGTATAAAGACTGTAAGCTGTGTAGAGGAGTGTACATTGCTTCA
TAAGTCTGAGAGAGCTGAAGAAGAGGGTGTAAAAATGTCTGCAAAAATACTCAATTTCAGCTGTTTAAAATGCCG
AGACAACACTCGATATAGCCCAAATGATTTGCAGAAACACTTTCAAATGTGGCACCATGGCGAATTACCTTCATA
TCCTTGTGAAATGTGCAACTTTTCAGCAAATGACTTTCAGGTATTTAAACAACACAGACGAACCCATAGAAGCAC
TTTAGTAAAATGTGACATTTGTAACAATGAGAGTGTATATACTTTACTGAACTTGACAAAGCATTTCACATCCAC
ACATTGTGTTAATGGTAATTTTCAATGTGAAAAGTGTAAGTTCTCCACCCAGGATGTTGGCACATTTGTTCAGCA
CATTCATAGACATAATGAAATTCATTATAAGTGTGGTAAATGTCATCATGTATGTTTTACCAAAGGAGAGCTTCA
GAAGCACCTTCATATTCATTCTGGTACTTTTCCCTTCACTTGTCAATATTGTAGCTATGGTGCCACCAGGAGAGA
ACACCTTGTAAGACATGTTATAACTTTGCACAAAGAACATTTATATGCAAAAGAAAAACTGGAAAAAGACAAATA
TGAAAAAAGAATGGCAAAGACTTCTGCAGGACTTAAGCTAATACTGAAAAGATATAAAATAGGTGCATCAAGGAA
GACGTTCTGGAAACGTAAGAAAATTAACAGTGGAAGTGACAGAAGTATAGAAAAGAACACTCAAGTGCTTAAGAA
AATGAACAAAACACAGACTAAATCTGAAGACCAGAGCCATGTTGTTCAAGAGCATTTAAGTGAAGAAAAGGATGA
AAGACTACACTGTGAGAATAATGATAAAGCCCCTGAATCAGAGTCAGAGAAGCCAACTCCTCTGTCCACTGGGCA
AGGTAATAGAGCTGAAGAGGGACCAAACGCTAGTTCAGGTTTCATGAAGACTGCTGTACTAGGACCTACACTGAA
AAATGTAATGATGAAAAATAATAAACTAGCAGTTTCCCCTAACTATAATGCTACGTTTATGGGCTTCAAGATGAT
GGATGGAAAACAGCATATTGTATTAAAATTGGTGCCTATCAAACAAAATGTATGTTCACCAGGCTCACAGTCAGG
TGCTGCAAAGGACGGTACTGCTAATTTGCAGCCCCAGACTTTGGACACTAATGGATTTTTAACAGGAGTAACAAC
TGAGTTAAATGACACAGTTTATATGAAAGCAGCTACTCCATTTTCATGTTCATCTTCTATACTTTCAGGGAAAGC
AAGTTCAGAAAAAGAAATGACTTTGATATCTCAAAGGAATAATATGCTTCAAACAATGGATTATGAGAAAAGTGT
ATCTTCTTTGTCAGCAACATCAGAATTGGTTACAGCATCAGTGAATTTGACCACAAAATTTGAAACAAGAGATAA
TGTTGACTTCTGGGGAAATCATCTCACTCAGAGTCACCCCGAGGTATTAGGTACCACCATTAAAAGTCCAGATAA
AGTCAACTGTGTTGCCAAACCAAATGCATACAACAGTGGAGATATGCATAATTATTGCATTAATTATGGCAACTG
TGAGTTACCTGTTGAATCCTCCAACCAAGGATCATTACCTTTTCATAATTACTCAAAAGTGAATAATTCTAATAA
ACGTCGTAGGTTTTCAGGAACAGCAGTGTATGAAAACCCTCAAAGAGAATCTTCATCCAGCAAAACAGTTGTCCA
ACAACCAATTAGTGAATCATTTTTATCACTAGTGAGGCAGGAGAGCTCAAAACCAGATAGCCTATTAGCATCTAT
TAGCCTTTTAAATGATAAAGATGGAACTTTAAAAGCAAAATCTGAAATTGAAGAACAGTATGTTTTAGAAAAAGG
ACAAAACATTGATGGACAAAACCTGTACAGTAATGAAAATCAAAATTTAGAGTGTGCGACTGAAAAATCTAAATG
GGAAGACTTTTCTAATGTCGATTCACCTATGATGCCTAGAATCACATCTGTTTTCTCTCTCCAGAGCCAACAGGC
ATCAGAATTTCTGCCACCTGAAGTAAACCAATTGCTTCAGGATGTATTGAAAATAAAACCTGATGTAAAACAAGA
CTCTAGTAACACTCCAAATAAAGGCTTGCCACTTCATTGTGACCAGTCATTTCAAAAACACGAGAGAGAAGGCAA
AATTGTTGAATCTTCGAAAGATTTCAAAGTGCAAGGCATCTTCCCAGTTCCACCTGGCAGTGTGGGTATTAATGT
GCCTACAAATGATTTGAATTTGAAATTTGGAAAAGAAAAACAAGTGTCATCAATACCACAAGATGTGAGAGATTC
AGAGAAGATGCCTAGAATTTCAGGTTTTGGCACATTACTTAAGACTCAGTCAGATGCGATAATAACACAGCAGCT
TGTAAAAGACAAACTACGAGCCACCACACAAAATTTAGGTTCTTTTTATATGCAGAGTCCACTTTTAAATTCAGA
ACAAAAAAAAACTATAATTGTTCAGACTTCAAAAGGATTCTTAATACCATTGAACATTACTAACAAGCCTGGGCT
ACCAGTTATTCCTGGAAATGCACTTCCATTGGTTAATTCACAAGGTATCCCTGCTTCTCTTTTTGTAAACAAGAA
ACCTGGGATGGTTTTAACACTTAATAATGGGAAACTTGAAGGTGTTTCCGCTGTCAAAACCGAGGGTGCCCCAGC
TCGTGGAACTGTGACTAAGGAGCCTTGCAAAACACCTATTTTGAAGGTAGAACCAAACAATAATTGTCTTACACC
TGGACTTTGTTCCAGCATTGGCAGTTGTTTGAGCATGAAAAGTAGCTCAGAAAATACTTTGCCATTAAAAGGCCC
TTACATTTTGAAACCAACGAGTTCTGTGAAAGCTGTTCTTATTCCTAACATGCTATCTGAGCAACAGAGCACTAA
GTTGAATATCTCCGATTCAGTAAAACAGCAGAATGAGATTTTTCCAAAACCACCTCTTTATACCTTCTTGCCTGA
TGGCAAACAAGCTGTTTTTTTAAAGTGTGTGATGCCAAATAAAACTGAGCTGCTTAAGCCCAAATTAGTCCAAAA

FIGURE 4528B

TAGTACTTATCAAAATATACAGCCAAAGAAACCTGAAGGAACACCACAAAGAATATTGCTGAAAATTTTTAACCC
TGTTTTAAATGTGACTGCTGCTAATAATCTGTCAGTAAGCAACTCTGCATCCTCATTGCAAAAAGACAACGTACC
ATCTAATCAGATTATAGGAGGAGAGCAGAAAGAGCCAGAATCTAGAGATGCCTTACCCTTCTTACTAGATGACTT
AATGCCAGCAAATGAAATTGTGATAACTTCTACTGCAACATGCCCAGAATCTTCTGAGGAACCAATATGTGTCAG
TGACTGTTCAGAGTCCAGGGTATTAAGGTGTAAAACAAATTGTAGAATTGAGAGGAACTTCAATAGAAAAAAGAC
TTCCAAAAAAATTTTTTCAAAAACAAAAACTCATGGAAGTAAAGACTCTGAAACTGCCTTTGTATCTAGAAACAG
AAACTGTAAACGAAAGTGTAGGGATAGTTACCAAGAACCTCCAAGAAGAAAAGCAACATTGCATAGAAAGTGTAA
AGAAAAGGCAAAACCTGAAGATGTCCGTGAAACATTTGGATTTAGCAGACCTAGGCTTTCAAAAGATTCCATCAG
AACTTTGCGGCTTTTCCCTTTTAGTTCTAAACAGCTTGTGAAATGTCTAGGAGAAACCAACCAGTTGTAGTTTTG
AATCATCCTGACGCAGATGCACCAGAAGTAGTAAGTGTAATGAAAACTATTGCTAAATTTAATGGACATGTACTT
AAGGTTTCATTGTCAAAAAGAACTATAAATGCTTTACTGAAACCAGTTTGTTATAACCCTCCTAAAACAACTTAT
GATGATTTTTCCAAGAGGCACAAAACATTTAAACCTGTTAGTTCTGTGAAAGAAAGATTTGTGCTAAAATTAACA
CTCAAAAAGACAAGCAAAAACAATTACCAGATTGTGAAGACTACCTCTGAAAATATTTTGAAGGCTAAATTTAAC
TGTTGGTTTTGTGGTAGAGTATTTGACAATCAGGATACTTGGGCTGGTCATGGGCAGAGACATTTAATGGAAGCT
ACTCGGGATTGGAACATGTTAGAATAGTTTACCATAATTACCAAGGAAAAGAAAAGTAAAATTACCTTAGAAGAA
AACAACGGGTTCAGTTACCATAATGCAGACATTTTCTACTTCAGTATAGTACCTGAAATCGAACATTTTAAAAGT
TGATTGTATTTCTGTGGAAGAGTAAAAGTTGTATGTATGATATTTGAAAATGCTATCCCTGCACTCAAAAGTTTT
GAAAGAAACTAATCACAGCACAGAAGTACCTTGATTTAATTTTTTAAACGTGTTCTCGGGAAGTTAGGGCTAAAG
AAAATTTTGATAAAACAATTTTCCCACTTTAGTTCTTTAGTGACTCTTAGTAGAGGGTAATGGCTGACACCCCCA
TTCCCTCTCTTCTTCCACCAGCCTTATGCATCTAAGTGTAGCTCCTCTGGAGATGGAGAGCTCTTTCATCGTAGA
ACTGAAGGAGTTTCTCACATTTGTGAAGATACTTTGAGAGAACCTGGGTAAAGAAGTCACTCTATATCTGCTAAA
TATAGTTATTTTGAAGGATATTAGGCTCCTTGAAAGTACATTTAACTCACTACAGTTACACCTCATACAATGCTT
GAAGAGTTTTTGGCAAGTAAATTTTTTTTCCAGTTGAACTCTGTCACTTGTTAGAGATTGGGAACACTCTCCCAA
GGTGATTTTCTTTTTCTAAGTGACTGTGTCAAATGTTGCAGTAGATGGGCAGCTTCAAGAGAAGAATTTAAACTC
TTTGTCTCATTGAAAGTTTGGTTAAAGAACTTGAACATATTTCTAAATTTGATTATATTCTCTGATGATCCCTTT
GCACAGAACTATGCTTATCTCATGTTTGTCCTCCATAAACAAATGGCCATTTTTTTCTTCTTGGTTCCCATCCCT
TTAAAAAGAGTGGAACATAGGAGCACTTCCAAGGGAGTGGCTTTTCTTGAAAATTAAAATTGTTTACCAAAACAG
TATTTTGAAGCAAGATCATATTTTTGTCTGTATTCACTTTATTATTTGAACATGTCCAAATTAGGACAAAGCATT
TCTGTTAGCTGCTTCTCAGTGTGACTGACAACCCAAAACATATATACAGATTGTTGGCATTTGCAAAAGGAAGCA
TCAATAGTGGACCCAGAGGCAGTGCATAAAACCTTAGGATAGATTCCTAAGGGACATGCCCAACAGAGTTTTAAA
ATGGATGTTTTCATGATGACAACAGAATCATAGATTTAGATTTTTCACCTTGTAAGTTTGGATCAAATTTTGCTG
GTTCTTTGGATAATGGAGTTCTTGTGTTAACAAATTACGTGCTATATGATTTTTTGTTACATTGTTACAAGTGTT
AATGACATTTTCATTAATGGATGAAAACTTCAGGGCTTCTTTTCTGTATATAACAAATTAAGTCTGTACATATTT
TTGTACCTTTTATGTAAATTTTGCACAGAAATTTTTGGCATAAGTTTATTTTCTTTCAGTTTAGTTCAGTGCATG
CACTAATAAAACTGGTTGTTTAATTTAAAAGGAATATATAAGACTTTACCCATGTTATTTTCTTGGTTTTTATTT
CAGATGTAGATTTTGTTTTTGAGGTAAATTCGTTCTTCAGGGATTGAACACTATTGTTAGCAAGTGCCTAAAAAA
GATGTGAAACAGTTTACATATGTCAACTGTAACAGTAGGTCCCAAATGGGCCCATTCCCCTAATAGTTTTATTTT
TAAAGAAAGCCATACATAGAATGCTTCAAGCTATCTTGCTATGCACATTATACTTGTACTGTTTTGTGCAGTTTG
TCTACTTTCTTAGTGAAGTATTTTTTGTATAAAATGTTACAATTGTGTTTCTTAAATTGAGCCTAAGAATGGAGT
TAATTGGAAATATACAGTATATATTAATAATGTACATGGTGTTTAAAGAATGGTAAGCATTGTTAATTTCTGTAA
TGAACATTTTCAATTAAATTTATCTTGTTTGTGTTT

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FIGURE 4529

ATGGAAGATTCGATGGACATGGACGCCGACAAAGATGATCACTTTAAGGTGGATAATGATGAAAATGAGCACCAG
TTATCCTTAAGAACGCCAACAGTTTCCCTTGGGGTCTTTGAAATAACACCACCAGTGCTTTTATGGTTGAAGTGT
GGTTCAGGGCCAGTGCATATTAGTGGACAGCATTTAGTAGCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAG
GAGGAGGATGTGAAACTCTTAAGGATATCTGGAAAATTAAAAGGACAAGAATCCTTCAAAAAACAGGAAAAAACT
CGTAAAACACCAAAAGGGCCTAGTTCTGTAGAAGACATTAAATCAAAAATGCAAGCAAGTATAGAAAAAGGTGGT
TCTCTTCCCAAATGGAGGAAGTCTCTTTAG

FIGURE 4530

GCAGCCTGCACTCTCAGAAATCAGACTTGAGTGGCCGGAACCCTTGAGACCAGAGGCTTACCATGCTGCTCCCTA
GGAGGGCCAGGAACTGCTGACGTGACCACTGGACAGTTATTCGTGTCTCTTACAATTACCAAACAGAATGGACAA
GCTTAATAAAATAACCGTCCCCGCCAGTCAGAAGTTGAGGCAGCTTCAAAAGATGGTCCATGATATTAAAAACAA
TGAAGGTGGAATAATGAATAAAATCAAAAAGCTAAAAGTCAAAGCACCTCCAAGTGTTCCTCGAAGGGACTACGC
TTCAGAGAGCCCTGCTGACGAAGAGGAGCAGTGGTCCGATGACTTTGACAGCGACTATGAAAATCCAGATGAGCA
CTCGGACTCAGAGATGTACGTGATGCCCGCCGAGGAGAACGCTGATGACAGCTACGAGCCGCCTCCAGTAGAGCA
GGAAACCAGGCCGGTTCACCCAGCCCTGCCCTTCGCCAGAGGCGAGTATATAGACAATCGATCAAGCCAGAGGCA
TTCCCCACCCTTCAGCAAGACACTTCCCAGTAAGCCCAGCTGGCCTTCAGAGAAAGCAAGGCTCACCTCCACCCT
GCCGGCCCTGACTGCTTTGCAGAAACCTCAAGTCCCACCCAAACCCAAAGGCCTCCTTGAGGATGAGGCTGATTA
TGTGGTCCCCGTGGAAGATAATGATGAAAACTATATTCATCCCACAGAAAGCAGTTCACCTCCACCTGAAAAAGC
TCCCATGGTGAATAGATCAACCAAGCCAAATTCCTCAACGCCCGCCTCTCCTCCAGGAACAGCTTCAGGTCGAAA
CAGTGGGGCCTGGGAAACCAAGTCACCTCCACCAGCTGCACCATCCCCGTTGCCACGGGCCGGGAAAAAACCAAC
GACACCACTGAAGACAACTCCAGTTGCCTCTCAACAGAATGCTTCAAGTGTTTGTGAAGAAAAACCTATACCTGC
TGAACGCCACCGAGGGTCAAGTCACAGACAAGAAGCTGTGCAGTCACCAGTGTTTCCTCCTGCCCAGAAACAAAT
CCACCAAAAACCCATACCTCTGCCAAGATTTACAGAAGGGGGAAACCCAACTGTGGATGGGCCCCTACCCAGCTT
TTCATCTAATTCCACTATTTCAGAACAGGAAGCTGGCGTTCTCTGCAAGCCATGGTATGCTGGAGCCTGTGATCG
AAAGTCTGCTGAAGAGGCATTGCACAGATCAAACAAGGATGGATCATTTCTTATTCGGAAAAGCTCTGGCCATGA
TTCCAAACAACCATATACACTAGTTGTATTCTTTAATAAGCGAGTATATAATATTCCTGTGCGATTTATTGAAGC
AACAAAACAATATGCCTTGGGCAGAAAGAAAAATGGTGAAGAGTACTTTGGAAGTGTTGCTGAAATCATCAGGAA
TCATCAACATAGTCCTTTGGTTCTTATTGACAGTCAGAATAACACAAAAGATTCCACCAGACTGAAGTATGCAGT
TAAAGTTTCATAAAGGGGGAAAAAAAAAGATCAATACCATTGCTTCAGACACTTTCCCAAAGTTTCTCCTTTTGAG
AAAAAGTCCCAAAACTTCATATTTTGGATTATGAATCATCCAGTAATAAAATGGAAGATGGAGTCAGCTATTGAA
GTGGTCATCCATTTCTTTTTAAGAAGCTCATGTGGACTTGTTCTATTGCCTGACCTGATGAACTGTTAATATCTG
GTGAGGTTGAGTTATCATGCTACTAATATTTTCCAAATAAATATTTTTATTTTT

FIGURE 4531

GTGAGATGACATCAAAACCCTTCGTGTAGGAGGGTGGCAGTCTCCCTCCCTTCTGGAGACACCACCAGATGGGCC
AGCCAGAGGCAGCAGCAGCCTCTTCCCATGGATCCACCACGAGCGTCCCACTTGAGCCCTCGGAAGAAGAGACCC
CGGCAGACGGGTGCCTTGATGGCCTCCTCTCCTCAAGACATCAAATTTCAAGATTTGGTCGTCTTCATTTTGGAG
AAGAAAATGGGAACCACCCGCAGAGCGTTCCTCATGGAGCTGGCCCGCAGGAAAGGGTTCAGGGTTGAAAATGAG
CTCAGTGATTCTGTCACCCACATCGTAGCAGAGAACAACTCGGGTTCGGATGTTCTGGAGTGGCTTCAAGCACAG
AAAGTACAAGTCAGCTCACAACCAGAGCTCCTCGATGTCTCCTGGCTGATCGAATGCATAAGAGCAGGGAAACCG
GTGGAAATGACAGGAAAACACCAGCTTGTTGTGAGAAGAGACTATTCAGATAGCACCAACCCAGGCCCCCCGAAG
ACTCCACCAATTGCTGTACAAAAGATCTCCCAGTATGCGTGTCAGAGAAGAACCACTTTAAACAACTGTAACCAG
ATATTCACGGATGCCTTTGATATACTGGCTGAAAACTGTGAGTTTAGAGAAAATGAAGACTCCTGTGTGACATTT
ATGAGAGCAGCTTCTGTATTGAAATCTCTGCCATTCACAATCATCAGTATGAAGGACACAGAAGGAATTCCCTGC
CTGGGGTCCAAGGTGAAGGGTATCATAGAGGAGATTATTGAAGATGGAGAAAGTTCTGAAGTTAAAGCTGTGTTA
AATGATGAACGATATCAATCCTTCAAACTCTTTACTTCTGTATTTGGAGTGGGGCTGAAGACTTCTGAGAAGTGG
TTCAGGATGGGTTTCAGAACTCTGAGTAAAGTAAGGTCGGACAAAAGCCTGAAATTTACACGAATGCAGAAAGCA
GGATTTCTGTATTATGAAGACCTTGTCAGCTGTGTGACCAGGGCAGAAGCAGAGGCCGTCAGTGTGCTGGTTAAA
GAGGCTGTCTGGGCATTTCTTCCGGATGCTTTCGTCACCATGACAGGAGGGTTCCGGAGGGGTAAGAAGATGGGG
CATGATGTAGATTTTTTAATTACCAGCCCAGGATCAACAGAGGATGAAGAGCAACTTTTACAGAAAGTGATGAAC
TTATGGGAAAAGAAGGGATTACTTTTATATTATGACCTTGTGGAGTCAACATTTGAAAAGCTCAGGTTGCCTAGC
AGGAAGGTTGATGCTTTGGATCATTTTCAAAAGTGCTTTCTGATTTTCAAATTGCCTCGTCAAAGAGTGGACAGT
GACCAGTCCAGCTGGCAGGAAGGAAAGACCTGGAAGGCCATCCGTGTGGATTTAGTTCTGTGCCCCTACGAGCGT
CGTGCCTTTGCCCTGTTGGGATGGACTGGCTCCCGGTTTGAGAGAGACCTCCGGCGCTATGCCACACATGAGCGG
AAGATGATTCTGGATAACCATGCTTTATATGACAAGACCAAGAGGATATTCCTCAAAGCAGAAAGTGAAGAAGAA
ATTTTTGCGCATCTGGGATTGGATTATATTGAACCGTGGGAAAGAAATGCCTAGGAAAGTGTTGTCAACATTTTT
TTCCTATTCTTTTCAAGTTAAATAAATTATGCTTCATATTAGTAAAAGATGCCATAGGAGAGTTTGGGGTTATTT
AGGTCTTATTGAAATGCAGATTGCTACTAGAAATAAATAACTTTGGAAACATGGGAAGGTGCCACTGGTAATGGG
TAAGGTTCTAATAGGCCATGTTTATGACTGTTGCATAGAATTCACAATGCATTTTTCAAGAGAAATGATGTTGTC
ACTGGTGGCTCATTCAGGGAAGCTCATCAAAGCCCACTTTGTTCGCAGTGTAGCTGAAATACTGTCTATCTCTAA
TAAAAACAGGAGGAAAC

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FIGURE 4532

GAGGAAGAGGCTGAGGAGGCGCGGGGGGCGGGGGAGGCTCAGGAGCGGGCGGTGACGGCGACGGCGGCGGCAGAG
GAGGCAGCGGCTGGGCCGGGCCCCGTGCGTCTGTCCGCGCCCCGTGGATGCGAATCGGCCGCGGCGGAGGCGGCG
GCGGCGGAGGAGGCGGCGGCGGGAGGAGGAGTCGGTGAGCCGGCTCCGGGCCGGAGGGGCGCGGAGGATGAGGCC
GCTGCCTGGCGCTCTTGGCGTGGCGGCGGCCGCCGCGCTGTGGCTGCTGCTGCTGCTGCTGCCCCGGACCCGGGC
GGACGAGCACGAACACACGTATCAAGATAAAGAGGAAGTTGTCTTATGGATGAATACTGTTGGGCCCTACCATAA
TCGTCAAGAAACATATAAGTACTTTTCACTTCCATTCTGTGTGGGGTCAAAAAAAAGTATCAGTCATTACCATGA
AACTCTGGGAGAAGCACTTCAAGGGGTTGAATTGGAATTTAGTGGTCTGGATATTAAATTTAAAGATGATGTGAT
GCCAGCCACTTACTGTGAAATTGATTTAGATAAAGAAAAGAGAGATGCATTTGTATATGCCATAAAAAATCATTA
CTGGTACCAGATGTACATAGATGATTTACCAATATGGGGTATTGTTGGTGAGGCTGATGAAAATGGAGAAGATTA
CTATCTTTGGACCTATAAAAAACTTGAAATAGGTTTTAATGGAAATCGAATTGTTGATGTTAATCTAACTAGTGA
AGGAAAGGTGAAACTGGTTCCAAATACTAAAATCCAGATGTCATATTCAGTAAAATGGAAAAAGTCAGATGTGAA
ATTTGAAGATCGATTTGACAAATATCTTGATCCGTCCTTTTTTCAACATCGGATTCATTGGTTTTCAATTTTCAA
CTCCTTCATGATGGTGATCTTCTTGGTGGGCTTAGTTTCAATGATTTTAATGAGAACATTAAGAAAAGATTATGC
TCGGTACAGTAAAGAGGAAGAAATGGATGATATGGATAGAGACCTAGGAGATGAATATGGATGGAAACAGGTGCA
TGGAGATGTATTTAGACCATCAAGTCACCCACTGATATTTTCCTCTCTGATTGGTTCTGGATGTCAGATATTTGC
TGTGTCTCTCATCGTTATTATTGTTGCAATGATAGAAGATTTATATACTGAGAGGGGATCAATGCTCAGTACAGC
CATATTTGTCTATGCTGCTACGTCTCCAGTGAATGGTTATTTTGGAGGAAGTCTGTATGCTAGACAAGGAGGAAG
GAGATGGATAAAGCAGATGTTTATTGGGGCATTCCTTATCCCAGCTATGGTGTGTGGCACTGCCTTCTTCATCAA
TTTCATAGCCATTTATTACCATGCTTCAAGAGCCATTCCTTTTGGAACAATGGTGGCCGTTTGTTGCATCTGTTT
TTTTGTTATTCTTCCTCTAAATCTTGTTGGTACAATACTTGGCCGAAATCTGTCAGGTCAGCCCAACTTTCCTTG
TCGTGTCAATGCTGTGCCTCGTCCTATACCGGAGAAAAAATGGTTCATGGAGCCTGCGGTTATTGTTTGCCTGGG
TGGAATTTTACCTTTTGGTTCAATCTTTATTGAAATGTATTTCATCTTCACGTCTTTCTGGGCATATAAGATCTA
TTATGTCTATGGCTTCATGATGCTGGTGCTGGTTATCCTGTGCATTGTGACTGTCTGTGTGACTATTGTGTGCAC
ATATTTTCTACTAAATGCAGAAGATTACCGGTGGCAATGGACAAGTTTTCTCTCTGCTGCATCAACTGCAATCTA
TGTTTACATGTATTCCTTTTACTACTATTTTTTCAAAACAAAGATGTATGGCTTATTTCAAACATCATTTTACTT
TGGATATATGGCGGTATTTAGCACAGCCTTGGGGATAATGTGTGGAGCGATTGGTTACATGGGAACAAGTGCCTT
TGTCCGAAAAATCTATACTAATGTGAAAATTGACTAGAGACCCAAGAAAACCTGGAACTTTGGATCAATTTCTTT
TTCATAGGGGTGGAACTTGCACAGCAAAAACAAACAAACGCAAGAAGAGATTTGGGCTTTAACACACTGGGTACT
TTGTGGGTCTCTCTTTCGTCGGTGGCTTAAAGTAACATCTATTTCCATTGATCCTAGGTTCTTCCTGACTGCTTT
CTCCAACTGTTCACAGCAAATGCTTGGATTTTATGCAGTAGGCATTACTACAGTACATGGCTAATCTTCCCAAAA
ACTAGCTCATTAAAGATGAAATAGACCAGCTCTCTTCAGTGAAGAGGACAAATAGTTTATTTAAAGCATTTGTTC
CAATAAAATAAATAGAGGGAAACTTGGATGCTAAAATTACATGAATAGGAATCTTCCTGGCACTTAGTGTTTCTA
TGTTATTGAAAAATGATGTTCCAGAAAGATTACTTTTTTCCTCTTATTTTTACTGCCATTGTCGACCTATTGTGG
GACATTTTTATATATTGAATCTGGGTTCTTTTTTGACTTTTTTTTTTTCCCAATCCAACAGCATCCTTTTTTTTA
AAAGAGAGAATTAGAAAATATTAAATCCTGCATGTAATATATCTGCTGTCATCTTAGTTGGACCAACTTCCCATT
TATTTATCTTAAAACTATACAGTTACATCTTAATTCCATCCAAAGAAGATACAGTTTGAAGACAGAAGTGTACTC
TCTACAATGCAATTTACTGTACAGTTAGAAAGCAAAGTGTTAAATGGAGAAGATACTTGTTTTTATTAAACATTT
TGAGATTTAGATAAACTACATTTTAACTGAATGTCTAAAGTGATTATCTTTTTTCCCCCCAAGTTAGTCTTAAAT
CTTTTGGGTTTGAATGAAGGTTTTACATAAGAAATTATTAAAAACAAGGGGGGTGGGTAATAAATGTATATAACA
TTAAATAATGTAACGTAGGTGTAGATTCCCAAATGCATTTGGATGTACAGATCGACTACAGAGTACTTTTTTCTT
ATGATGATTGGTGTAGAAATGTGTGATTTGGGTGGGCTTTTACATCTTGCCTACCATTGCATGAAACATTGGGGT
TTCTTCAAAATGTGTGTGTCATACTTCTTTTGGGAGGGGGGTTGTTTTCTTCTGTTTATTTTCTGAGACTCCTAC
AGGAGCCAAATTTGTAATTTAGAGACACTTAATTTTGTTAATCCTGTCTGGGACACTTAAGTAACATCTAAAGCA
TTATTGCTTTAGAATGTTCAAATAAAATTTCCTGACCAAATTGTTTTGTGGAAATAGATGTGTTTGCAATTTGAA
GATATCTTTCTGTCCAGAAGGCAAAATTACCGAATGCCATTTTTAAAAGTATGCTATAAACTATGCTACTCTCAT
ACAGGGGACCCGTATTTTAAAATCTCCAGACTTGCTTACATCTAGATTATCCAGCACAATCATAAAGTGAATGAC
AAACCCTTTGAATGAAATTGTGGCACAAAATCTGTTCAGGTTGGTGTACCGTGTAAAGTGGGGATGGGGTAAAAG
TGGTTAACGTACTGTTGGATCAACAAATAAAGGTTACAGTTTTGTAAGAG

FIGURE 4533A

ATTCTGGCTGTGACTCAGTCACTGACACTGAGCCTGAGGACGAGAAGGTTGTTTCCTACTCGAAGCAGCAGAACC
TGCCGACGGTGACTTCACCTGGGAACCTGATGGTGGTGCAGCCGGACCGCATTCGCTGTGGGGCAGAAACCACTG
TCTATGTTATTGTGAGATGTAAGCTGGATGACAGGGTGGCGACAGAAGCAGAGTTTTCTCCTGAGGATTCTCCCT
CTGTAAGGATGGAAGCCAAGGTGGAGAATGAGTACACCATTTCAGTGAAGGCTCCCAACCTTTCATCTGGGAACG
TTTCTCTGAAGATATATTCTGGAGACTTAGTGGTGTGTGAAACCGTTATCAGCTATTATACTGACATGGAAGAAA
TTGGGAATTTATTGTCCAATGCCGCGAATCCTGTGGAATTCATGTGTCAGGCCTTTAAAATTGTGCCCTACAACA
CAGAGACCCTTGATAAACTGCTAACCGAATCCCTGAAGAACAATATCCCTGCAAGCGGACTGCACCTCTTTGGAA
TCAACCAGCTGGAAGAAGAAGATATGATGACAAATCAGAGGGATGAAGAGCTGCCCACCCTGTTGCATTTTGCTG
CGAAGTATGGACTGAAGAACCTCACTGCCTTGTTGCTCACCTGCCCAGGAGCCCTGCAGGCGTACAGCGTGGCCA
ACAAGCATGGCCACTACCCCAACACCATCGCTGAGAAACACGGCTTCAGGGACCTGCGGCAGTTCATCGACGAGT
ATGTGGAAACGGTGGACATGCTCAAGAGTCACATTAAAGAGGAACTGATGCACGGGGAGGAGGCTGATGCTGTGT
ACGAGTCCATGGCCCACCTTTCCACAGACCTGCTTATGAAATGCTCGCTCAACCCCGGCTGTGACGAGGATCTCT
ATGAGTCCATGGCTGCCTTTGTCCCAGCTGCCACTGAAGACCTCTATGTTGAAATGCTTCAGGCCAGTACATCTA
ACCCAATCCCTGGAGATGGTTTCTCTCGGGCCACTAAGGACTCTATGATCCGCAAGTTTTTAGAAGGCAACAGCA
TGGGAATGACCAATCTGGAGAGAGATCAGTGCCATCTTGGTCAGGAAGAAGATGTTTATCACACGGTGGATGACG
ATGAGGCCTTTTCTGTGGACCTGGCCAGCAGGCCCCCTGTCCCAGTGCCCAGACCAGAGACCACTGCTCCTGGTG
CTCACCAGCTGCCTGACAACGAACCATACATTTTTAAAGTTTTTGCAGAAAAAAGTCAAGAGCGGCCTGGGAATT
TCTACGTTTCCTCAGAGAGCATCAGGAAAGGGCCGCCCGTCAGACCATGGAGGGACAGGCCCCAGTCGAGTATAT
ATGACCCTTTTGCGGGAATGAAAACGCCAGGCCAGCGGCAGCTTATCACCCTCCAGGAGCAGGTGAAGCTGGGCA
TTGTCAACGTGGATGAGGCTGTGCTCCACTTCAAAGAGTGGCAGCTCAACCAGAAGAAACGATCGGAGTCCTTTC
GTTTCCAGCAGGAAAATCTTAAACGGCTAAGAGACAGCATCACCCGAAGACAGAGAGAGAAGCAAAAATCAGGAA
AGCAGACAGACTTGGAGATCACGGTCCCAATTCGGCACTCACAGCACCTGCCTGCAAAAGTGGAGTTTGGAGTCT
ATGAGAGTGGCCCCAGGAAAAGTGTCATTCCCCCTAGGACGGAGCTGAGACGAGGAGACTGGAAAACAGACAGCA
CCTCCAGCACAGCAAGTAGCACAAGTAACCGCTCCAGCACCCGGAGCCTCCTCAGTGTGAGCAGCGGGATGGAAG
GGGACAACGAGGATAATGAAGTCCCTGAGGTTACCAGAAGTCGCAGTCCAGGCCCCCCACAAGTGGATGGGACAC
CCACCATGTCCCTCGAGAGACCCCCCAGGGTGCCTCCGAGAGCTGCCTCACAGAGGCCTCCGACCAGGGAGACCT
TCCATCCTCCTCCACCTGTTCCACCCAGAGGACGCTGATTCCACCTCCTAAAACCTGCCTACTTCAGGACTTTAA
GACTCACAGTCTTCAGCCTGTTAATGATGTCTTCATGTTGAGTTTTATAGCATGACTGTTGACCTTAAGATCCAT
TCTCATTGCTGATAATGCTGCAGCCCTGCTGGTTTGGGCTTGCCTCGAAGATTTTATTAAGGCACGAAGAAGTGA
AAAACTAAGGGCTTCATTCACCATCACCAAGTATATCGAACCATATACTTGTTTGCCAAAAGGATGAAGACTTAA
TCGAAATACTTACCTCTAATTTGCCATATCAGAAGCCTAAAAAGAATGATCATAAATGTACTTCACCAGTGATTT
TACTGAAATGCACTTATATTAGTCTTTATGTATTTGCTAGTTCAGCCTGATTTCTAGAAGAGGTTATAGTGTGAG
ACTTGTAGTATTCAAGTAAGATAAGTGACCTAATTTTAAAATAATTCTTCTACTTTTCTGTATATTCAGCAGGGT
ATTTAAGTGCTAGGGCTGGTCACACACAACCAACTGAAAAAGACTAGAGGGATTAGTACAAACTCCTCTTATACA
GAAGGCAAATCTGAGGTTCCACAGAAGTCTGGAACCAAGACTATTCAGTTGGTTAAATAAAGAGGTTAGTCTAGA
CTGGGCCTGCTCATTCTAGGTCACCACATTTTCCATCTCCAAATAGCCAGGCCCTCTCTCCCTCAAGAAATGCCC
AGATGTAGAAATTCATCAGTGCCTATTGGTCTTCCAGAATTTTCCATCTTCCGTATCTCCCAGGCATGAGACTAC
CAAGTTTGTTTGTTTTCTTTCCAATTTGGGAATTTATACTTCAGTATGGTTTCAACGCAGTTATGTTTCCAGAGA
ACATCTAGAAGTGGCTGGAAACCAGAAGCTGGGGATTCCAGGGACCCCACTTAGTGCTCTATTTCCTTTATAGGT
TTTATTTCTGGTCATAGAGAGAGAAGGACCTTTGACTTTTTCTTCGTTGAGGCTTCTGAGGAGGAAAAACAAACC
TAAAATAGAAATACAGTCAGCCTTTCAAATCCATGGGTTCTGTGTCCGTGGATTCAACCAACCTTGGATCAAAAA
TATTTGAAAAAAAATCTACAAAGTTTCAAAAAGCAAAACTTGAATTTGCTGCATGCCAAGAAGTATGTTGAATTC
ATGTAAATGAAGTGATGTGTAGGCATTGTATTAGATATTATAAGAAATCTAGAAATGATTTAAAGCATACAGGAG
GATGTGCATAGGTTATATGCAAATACTATGCTATTTTATATATGGGACTTGAGCATTTGTGGATTTTGATACTGG
GGGATCCTGGAACCAATCCCCCATGGATACCAAAGTACGACTGTAGTTATCTATTTTTTACATACTTATTATTAC
CACCATGCTCAGTAAGTCCATTTTTGCATGGAATATGGAGCCTTAAAACATGTCATGAATTTGGAGTCCCTGGCA
CATAAATCTACCTTCAAATCAGAGGTCCTTAATGATGCCTAAACATACAGTAAAATTAGAATCAGAAATACTTCT
TTAAAAAATATTCAAAATGTGTTTGTTTCCCATGGGATTATTCTCTATCCCACACGAATGTAAAAAAATCCACAT

FIGURE 4533B

TAATGATCCATTTAAGTATAGTTTTATTGGGTCCTTTTCTAATGATTAAAGGTTCTTTCTCAATTTCATTCCTCA
GTCCTGCAAGTAAGGACTCATACTGAAGAGTACTGAAACAAGGACTTCTTGTCAGAAACAGCTTCTGGAATCTTG
GGTTTTGTTTTTGTTTTTTGACAAAATACACTATTGGCCATGTCCATCACGAGAGTGTTTGTAGTAATTAATTAC
CTTGTACAGGACCTGGCACTTAGTAGCATTCTTCAAATGTTCCCTCAGTGATCCTTTTACTCTCCTTGTCACTTA
TTTGGGAGAAATAGGGGCACGTGAGATAAGAAGAAGAATAATTTTGATGTTGGTATGCTTGCCCTGTTACTTATA
GACAGTCTTTGTCATAGGCAAACTTGAATTTGATTTAAAATAGGGCTGGGAAAAATATTCAATAACTGTAAGCCC
CCTTTTGGATGCCAAACTTAGAATTTTGTACATTCTCTGATGAACAAGCATTTAGATCGTAACATGGTAAAGCCT
ATTACCAGCCAATGTTGTTAGCATCTTTGTATGCACATCACTGTTTGTGCAATATATGAATATTTTGTTGCATTG
TATTCTTATATAAAAATAAGTAGAAAACATAAAATTGAAATTGCTGATGAGAAGCCTTGTCTCGTGAATGTGATA
CACTTGAGACACGGATGGAACTGATCAGGAGTGCCAAGTCAAAAGCAGCAGATCTTAAGCCCTCACTGGTTGTTC
CTTTAACATCCAAAATGGTTGGTTATATGTAAAAGAAGAAAATGAAATAATCTGGATGAAACACTGGGACTGTGT
TATCAAAGAATGTCTGTAGTGATGAGGTGAAAATTTTCATTTTCCAGAAACAGAACTGCTCATTTATAACATAAA
TATATTCAACTTCCACA

FIGURE 4534

CGAAGATGGCGGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCCGCCTGGCGGCCATCGTGG
CTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTTGTACGCTGTGAAGGCATCAACATTTCTGGCAATTTCTACA
GAAACAAGTTGAAGTACCTGGCTTTCCTCCGCAAGCGGATGAACACCAACCCTTCCCGAGTCCCCTACCACTTCC
GGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAGACCAAGCGAGGCCAGGCCGCTC
TGGACCGTCTCAAGGTGTTTGACGGCATCCCACCGCCCTACGACAAGAAAAAGCGGATGGTGGTTCCTGCTGCCC
TCAAGGTCGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCACGAGGTTGGCTGGAAGT
ACCAGGCAGTGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTACCGGAAGAAGAAACAGC
TCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACACAGAGGTCCTCAAGACCC
ACGGACTCCTGGTCTGAGCCCAATAAAGACTGTTAATTCCTAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAAA

FIGURE 4535

AGACTATCTTTCTAGACAAGGCAGTTGAGGAGGAGGGAGCGCTTGAGGGGGACTGGCCTGGCGTGCACTCCGCAC
CTCGGGGACATTATTGCGCGTGGAACGGCTGCTTTTGGAAGGCACAACTTCCTGAATGGACCATGACTCCCACCA
AAGATCCCTGTCTCTGATTCACCAAACAGCTTCAACCCTGAAACCAGGACGAGAAGTTGACAACATCTGAGTGGA
CAGCTAATTGACCTAAGACTTCAGACCAGACTATTGCCCAGAAGAAAAG**ATG**TTTGGTTTTCACAAGCCAAAGAT
GTACCGAAGTATAGAGGGCTGCTGTATTTGCAGAGCTAAGTCCTCCAGTTCTCGATTCACTGACAGTAAACGCTA
TGAAAAGGACTTCCAGAGCTGTTTTGGATTGCATGAGACTCGTTCAGGAGACATCTGCAATGCCTGTGTCCTGCT
TGTGAAAAGATGGAAGAAGTTGCCAGCAGGATCAAAAAAAAACTGGAATCATGTGGTAGATGCAAGGGCTGGACC
CAGTCTAAAGACTACATTGAAACCAAAGAAAGTGAAAACTCTATCTGGGAACAGGATAAAAAGCAACCAGATCAG
TAAACTGCAGAAGGAATTTAAACGTCATAATTCTGATGCTCACAGTACCACCTCAAGTGCCTCCCCAGCTCAATC
TCCTTGTTACAGTAACCAGTCAGATGACGGCTCAGATACAGAGATGGCTTCTGGTTCTAACAGAACACCAGTTTT
TTCCTTTTTAGATCTCACTTACTGGAAAAGACAGAAGATATGTTGTGGGATCATCTATAAAGGCCGTTTTGGGGA
AGTCCTCATTGACACACATCTCTTCAAGCCTTGCTGCAGCAATAAGAAAGCAGCTGCTGAGAAGCCAGAGGAGCA
GGGGCCAGAGCCTCTGCCCATCTCCACTCAGGAGTGG**TGA**CTGAGGTTTTTATGTAGAAGGGGAACAAAAAAAAA
AATATCTGAATTTTGAAAAACCACAAAGCTACAAACTGACCCTCTTTTTTTTTTGAGACGGAGTTTTGCTCTTGT
TACCCAGGCTGGAGTGCAGTGGCGTGATCTTGGCTCACTGCAACTTCCGTCTCCCGGGTTCAAGTGATTCTCCTG
CCTCAGCCTCCCAAGTAGCTGGGTTTATAGGTGCCCGCCACCAGACCCGGCTAATTTTTTAGTTTTAGTAGAGAC
GGGGTTTCACCACGTTGGCCAGGCTGGTCTTAAATGACCCTCTTATTTTTAACTTGGATACCTGCTATTCTGCCA
AAAGACAATTTCTAGAGTAGTTTTGAATGGGTTGATTTCCCCCACTCCCACAAACTCTGAAGCCAGTGTCTAGCT
TACTAAAAAAAGAGTTGTATATAATATTTAAGATGCTGAGTATTTCATAGGAAAGCTGAATGCTGCTGTAAAGTG
CTCTTTAAGTCTTTTTTTTTTTTAATCCCCTTCTAATGAATGAAACTAGGGGAATTTCAGGGGACAGAGATGGGA
TTTGTTGTATGATAAACTGTATGTAGTTTTTAGTCTTTCTGTTTTGAGAAGCAGTGGTTGGGGCATTTTTAAGAT
GGCTGGCTACTCTTGTTTTCCCTCATGATAATAAATTTGTCATAACTCAGTAACATGAACTTGCCCCTAGAGGTA
GTTGTTAATAATTTTGAAATATTAAGGTCTTGCCAAGCTTCTGATGATTCACACCTGTACTACTGATTATTAAGC
AGGACAGACTGAGCTTTCTGTTGCAAATACCTTGGAGGAGAAAGTAATTTCTAAATATACAGAGAGGTAACTTGA
CTATATATGTTGCATCCTGTGCCTCCCTTCATATTAATATTTGATAAAGATTTTAATTTATGTAAAACTTCTAAA
GCAGAATCAAAGCTCCTCTTGGGGAAATGGCAAGTCTTTAGGATAGGCAAGACCCTGTATGAATAGTACCAAAGC
ATTACCGCATGGTAGAGAACACACTCGATTAAAAATGTTAAGCTATCTGAAAAATAAAATGTGCAAGTCTTCAGG
ATGGCACAAAACAAAGGTTAATGCTTCTTGGGGCACATTTCTTAGAGGGCTTGCTGAGTGTGTAAATATAATCGA
CTTTTGTTTGTGTTACATGACTTCTGTGACTTCATTGAAAATCTGCACAATTCAGTTTCAGCTCTGGATTACTTC
AGTTGACCTTTGTGAAGGTTTTTATCTGTGTAGAATGGGTGTTTGACTTGTTTTAGCCTATTAAATTTTTATTTT
CTTTCACTCTGTATTAAAAGTAAAACTTACTAAAAGAAAAGAGGTTTGTGTTCACATTAAATGGTTTTGGTTTGG
CTTCTTTTAGTCAGGCTTTCTGAACATTGAGATATCCTGAACTTAGAGCTCTTCAATCCTAAGATTTTCATGAAA
AGCCTCTCACTTGAACCCAAACCAGAGTACTCTTACTGCCTCTTTTCTAAATGTTCAGGAAAAGCATTGCCAGTT
CAGTCTTTTCAAAATGAGGGAGAAACATTTGCCTGCCTTGTAATAACAAGACTCAGTGCTTATTTTTTAAACTGC
ATTTTAAAAATTGGATAGTATAATAACAATAAGGAGTAAGCCACCTTTTATAGGCACCCTGTAGTTTTATAGTTC
TTAATCTAAACATTTTATATTTCCTTCTTTTGGAAAAAACCTACATGCTACAAGCCACCATATGCACAGACTATA
CAGTGAGTTGAGTTGGCTCTCCCACAGTCTTTGAGGTGAATTACAAAAGTCCAGCCATTATCATCCTCCTGAGTT
ATTTGAAATGATTTTTTTTGTACATTTTGGCTGCAGTATTGGTGGTAGAATATACTATAATATGGATCATCTCTA
CTTCTGTATTTATTTATTTATTACTAGACCTCAACCACAGTCTTCTTTTTCCCCTTCCACCTCTCTTTGCCTGTA
GGATGTACTGTATGTAGTCATGCACTTTGTATTAATATATTAGAAATCTACAGATCTGTTTTGTACTTTTTATAC
TGTTGGATACTTATAATCAAAACTTTTACTAGGGTATTGAATAAATCTAGTCTTACTAGAAAATAAAA

FIGURE 4536

CTTTCCCAAGCGGCTGGCGAAGACGGCAGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCCG
CCTGGCGGCCATCGTGGTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTCGTACGCTGCGAAGGCATCAACATT
TCTGGCAATTTCTACAGAAACAAGTTGAAGTACCTCGCTTTCCTCCGCAAGCGGATGAACACCAACTCTTACCGA
GGCTCCTACCACTTCCGGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAGACCAAG
CGAGGCCAGGCCGCTCTGGACCGCCTCAAGGTGTTTGATGGCATCCCACCGCCCTACGACAAGAAAAAGCGGATG
GTGGTTCCTGTTGCCCTCAAGGTTGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCAC
GAGTTTGGCTGGAAGTACCAGGCAGGGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTAC
GGGAAGAAGAAACAGCTCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACACA
GAGGTCCTCAAGACCCACGGCCTCCTGATCTGAGCCCAATAAAGACTGTTAATTCCTCA

FIGURE 4537A

ATGCTCTATATGCAGTATGTTCTGCTGATTCCTTCTGTTCTACAAGAAGGCTCTTTGGATAAAGCTTGTGCCCAG
CTTTTTAATCTCACTGAATCTGTTGTTTTGACGGTCTCCCTCAACTATGGTGAGGTCCAGACCAAAATATTTGAA
GAAAATGTTACTGGAGAAAATTTCTTCAAATGCATCAGCTTTGAGGTTCCTCAGGCCAGATCTGACCCACTGGCA
TTTATTACATTTTCTGCTAAAGGAGCCACTCTCAACCTGGAAGAGAGGAGATCTGTGGCAATCAGATCCAGAGAG
AATGTGGTCTTTGTACAGACTGATAAACCCACCTACAAGCCTGGACAGAAAGCATGCAAAAATACACTTTCTTAT
TCTCAGGATCCAGAAGGCAATCGAATACAACAGTGGGTGAATGAGGAGTCTGTGGGAGGGATTCTACAACTCTCC
TTCCAGTTAATCTCAGAGCCCATCCTCGGATGGTATGAAATCACCGTGGAGATGCTCAATGAGAAGAAAACATAT
CACTCCTTCTCTGTGGAAGAATATGTGTTACCCAAATTTCAAATGACTGTGGATGCACCAGAAAATATCTTAGTT
GTGGACTCTGAATTCAAAGTGAATGTCTGTGCCTTATATACCTATGGTGAACCTGTGGACGGGAAGGTCCAACTT
AGTGTGTGCAGAGAATCTACGGCTTATCATTCATGTGCTCATCTTATCAGTTCACTCTGTAAAAATTTTACCATT
CAGATTAAATTGCTTAATCCAGACAACTCTCCAATCCCAAATGAAGTTGTTCAGTTGCATCTGAAGGACAAAATC
GTGGGAAACTACACCACAGATGTAAATGGCATCGCTCAGTTTTTCTTGGACACATATACGTTTACATACCCAAAT
ATCACTTTGAAAGCAGCCTACAAGGCCAATGAAAATTGCCAGGCTCATGGCTGGGTGTTGCCTCAATACCCTCAG
CCCGAGTACTTTGCATATCGATTTTACTCCAAGATGAATAGCTTCCTAAAGATTGTCCAAGAGATGGAAGAACTG
AGATGCAACCAGCAGAAGAGGGTGCTAGTGCACTGCATTCTCAATATGGAAGACTTTGAAGACAAAACCTACACA
GCAGACTTCAATTATTTGGTGATTTCAAAAGGTGTAATCATTCTTCATGGGCAACAGAAAATTGAGATCAACGAA
AATGGGAGGAAGGGCATATTTTCCATTTCTATAGACATTAACCCTGAATTAGCGCCCTCAGTACATATGCTTGTC
TATAGCTTGCATCCTGGAGGAGAAATGGTCAACTTAAATTTTTCTAAAGAAAAAAGTTTACCAGGATCCAATGTC
GATCTTCAAGTCTCGGCTGCTTCAAACTCTCTTTATGCTCTTTGGGCGGTAGACCAGAGGGTATTGCTACTAAGG
AATTATGGTCAGCTGCCAGCACAAACTGTGTATAGTCAGCTACATTCCAGCGAACTACATGGCTATTATTTCAGA
GGACTTAACTTAGAAGATGGCCTTAAAGTGCCGTGTCTTGAAGATGGACATATCCTTTACAATGGAATTTATTAC
ACACCTGCATGGGCTGACTTTGGAAAAGATGGCTATGACCTTGTGAAGGATCCTCAAAACAATCGGATTTTTCAA
TGGCAAAATGTGACTTCTTTCCGAAATATTACCCAACTCTCGTTCCAACTGATTTCAGAACCAATGTTTGGAGAT
TACTGGATTGTTGTGAAAAGAAACTCAAGGAAGACAGTGACACACCAATTTGCTGTTAAAAGATATGTGCTGCCC
AAGTTTGAAGTTACGGTCAATGCACCACAAACAGTAACTATTTCAGATGATGAATTCCAAGTGGATGTATGTGCT
AAGTACACCTTTGGCCAACCTGTGCAAGGGAAAACCCAAATCCGGGTGTGCAGAGAGTATTTTTCTTCAAGCAAT
TGTGAGAAAAATGACAATGAAATATGTGAGCAATTTATTGCACAGCTTAAATTTTCGGATCCCAATAATGTACCT
ATGGTGAACAAGTTGTTGCAACTGGAGCTCAATGATGAATTTATAGGAAATTATACTACGGACGAGAATGGCGAA
GCTCAATTTTCCATTGACACTTCAGACATATTTGATCCAGAGTTCAACCTAAAAGCCACATATGTTCGACCTAAG
AGCTGCTATCTTCCCAGCTGGTTGACGCCTCAGTACTTGGATGCTCACTTCTTAGTCTCACGCTTTTACTCCCGA
ACGAACAGCTTCCTGAAGATTGTTCCAGAACCAAAGCAGCTTGAATGTAATCACCAGAAGGTTGTTACTGTGCAT
TACTCCCTAAACAGTGAAGCATATGAGGATGATTCCAATGTAAAGTTCTTCTATTTGATGATGGTAAAAGGAGCT
ATCTTACTCAGTGGACAAAAGGAAATCAGAAACAAAGCCTGGAATGGAAACTTCTCGTTCCCACTCAGCATCAGT
GCTGATCTGGCTCCTGCAGCCGTCCTGTTTGTCTACACCCTTCACCCCAGTGGGGAAATTGTGGCTGACAGTGTC
AGATTCCAGGTTGACAAGTGCTTTAAACACAAGGTTAACATAAAGTTCTCTAACGAGCAGGGCTTACCTGGTTCC
AATGCTAGTCTCTATCTTCAAGCGGCGCCTGTCTTATTCTGTGCCCTCGGGGCTGTGGATGGGAACGTCCTTCTA
CTGAAATCTGAACAACAGCTGTCAGCTGAAAGTAGGGATATGTTCTACAATGGTTTATATTACACACCTGTAAGC
AACTATGGGGATGGAGATATCTATAATATTGTCAGGAACATGGGTCTCAAAGTCTTTACCAATCTCCATTACCGA
AAACCAGAAGTATGTGTGATGGAGAGAAGGCTGCCACTCCCTAAGCCGCTTTATCTAGAAACAGAAAATTATGGT
CCAATGCATAGTGTTCCGTCTAGAATTGCATCTAGTGGAATCAGAGGGGAGAATGCTGACTATGTAGAACAGGCT
ATAATTCAAACAGTAAGAACAAACTTCCCAGAGACATGGATGTGGGACCTCGTCAGTGTCGATTCCTCAGGCTCT
GCCAATCTTTCGTTCCTCATTCCTGATACGATAACCCAATGGGAGGCAAGTGGCTTTTGTGTGAATGGCGACGTT
GGATTTGGCATTTCCTCTACAACCACTCTAGAAGTCTCCCAACCTTTCTTTATTGAAATTGCCTCACCCTTTTCG
GTTGTTCAAAATGAACAATTTGATTTGATTGTCAATGCCTTCAGCTACCTGAATACATGTGTAGAGATTTCTGTT
CAAGTGGAGGAGTCTCAGAATTATGAAGCAAATATTAATACCTGGAAAATCAATGGCAGTGAGGTTATTCAAGCT
GGAGGGAGGAAAACAAACATCTGGACTATTATACCTAAGAAATTGGGTGCCAAAGCCTCCAAGCAGGGAGTTTTG
GACTTGCCAAATGATGTAGTAGAAGGGTCAGCCAGAGGCTTTTTCACTGTTGTGGGGGATATTCTAGGACTTGCC
ATGCAGAATCTGGTTGTTCTCCAAATGCCCTATGGAGGTGGAGAGCAGAATGCTGCCCTACTAGCATCTGATACT

FIGURE 4537B

TATGTTCTGGACTATCTGAAATCTACTGAGCAACTGACAGAGGAAGTTCAATCTAAGGCTTTCTTTCTCTTATCT
AATGGTTATCAAAGGCAATTATCTTTCAAAAACTCTGATGGTTCCTATAGTGTGTTTTGGCAGCAGAATCAGAAA
GGAAGCATATGGCTCAGTGCTCTTACTTTTAAGACATTGGAGAGAATGAAAAAATTTGTATTCATTGATGAAAAT
GTTCAAAAACAGACCTTAATCTGGCTTTCAAGCCAACAGAAAACAAGCGGCTGCTTTAAGAATGATGGCCAGCTT
TTCAACCACGCCTGGGAGTTTCCTGCTCTACGAAACGCACTCTTTTGCCTTGAAGCGGCATTGGACAGTGGTGTC
ACTAATGGCTACAATCATGCAATTCTAGCTTATGCTTTTGCCTTAGCTGGAAAAGAGAAGCAAGTGGAATCTTTA
CTCCAAACCCTGGATCAATCTGCCACAAAACTAAATAATGTCATCTACTGGGAAAGAGAAAGGAAACCCAAGACA
GAAGAATTTCCATCCTTTATTCCCTGGGCACCTTCTGCTCAGACTGAGAAGAGTTGCTATGTGCTGTTGGCTGTC
ATTTCCCGGAAAATTCCTGACCTCACCTATGCTAGTAAGATTGTGCAGTGGCTTGCCCAACAGATGAATTCCCAT
GGAGGCTTTTCTTCCAACCAGACACCTGATGATACTCTGTTCAAATTATATACGGGCCAAAAAGAAAGCTTTCGC
TCTAGTTCTGTGGGCTATACACTGGGAAAAGCAAATGAAAAGAAGGAAAACAGGAGAAATGGGGGAGCCGGTGGG
GAAGAGTGGCTGGCTCTCAGTCCCCGCCTCGCGGGCGGTGCCTCCCCACACTTCGATGGGGTTCCCAAGAGCCGG
GGGGAGCCAGGCGGGGAAGAGGGGCTCTTCTCTAAGAATCAAAACACTGTCACCTTTAGCAGTGAAGGATCCAGT
GAGATCCAGTTTAACGGTCATAACCGCCTACTGGTCCAACGTTCAGAAGTAACACAGGCACCTGGACAATACACA
GTAGATGTGGAAGGACGCGGTTGTACATTTATCCAGGCCACCCTTAAGTACAATGTTCTCCTACCTAAGAAGGCA
TCTGGATTTTCTCTTTCCTTGGAAATAGTAAAGAACTACTCTTTGACTGTTTTTGACCTCACAGTGAACCTCAAA
TACACTGGAATTCGCAATAAATCCAGTATGGTGGTTATAGATGTAAAAATGCTATCAGGATTTACTCCAACCATG
TCATCCATTGAAGAGGAGAAGCTGAAGTCCTTTCCTGTGTGTGTGAGCGCCAAGCTGGAGCCCAAGGATGACATG
GAGGAGGCGCTTGGGGGGTCTCCCCAGGTCTCCATGCTGCTCGTCAACATCAGAGAGATCCTGTGTAGCAGAAAA
TGGAGTCGCAGGGTATACAAGAAGTCTGTCTTCCCAGACGGACTGGCTGGTGCTGTAACAAAGACCCATGTGATG
CTGGGGGTAGAGACAGATAAACTGTTCAGTGCCCCTTGTCCATCAGTGAGAGAGCAGCTGGAGCAGAAGGTGGAG
AGGGAGGGGCAGCATCACCCACTCTGCCCTGGCACCAGGCTCAAGTCGCTCAAGCCCAGTGAGCTGGGTGTTAGG
ATGGCAGCCAGGCTCCCTGCTCAGTCACCTCCTTCCCTAGGCACCCCACACTTTCTCCCATTTCCACTTCCTACC
TATAAGATGGCACGT**TAA**

FIGURE 4538A

CTGAGGGGACCCGCCAGTTTCTAACTCAGTGGCGTTTGCCCTGATTCCCGGGGCCTGGCTTTCAGCGTAGCAATT
CTGCCGGCGAAGAAGGTGAGCGCAGTGCTGTGTGGCAGCAGAGCTCCTTAGGACGAGGAGCAGCGGGACGAGGAA
GGGCAGACTGGTGAAATCGCAAACTGGGCGTCTGTTCCGGCGCCGGACCCCTATTTGCAAAGGTCCATGGCTAAT
GAAACACAGAAGGTTGGTGCCATCCATTTTCCTTTTCCCTTCACACCCTATTCCATCCAGGAAGACTTCATGGCA
GAGCTGTACCGGGTTTTGGAGGCTGGCAAGATTGGGATATTTGAGAGTCCAACTGGCACTGGGAAGTCCTTAAGT
CTTATTTGTGGGGCCCTCTCTTGGCTCCGTGACTTTGAACAGAAGAAGCGTGAAGAAGAGGCACGACTCCTTGAA
ACTGGAACTGGCCCCTTACATGATGAGAAAGATGAATCCCTGTGTCTGTCTTCTTCCTGCGAAGGGGCTGCAGGC
ACCCCGAGGCCTGCTGGAGAACCGGCCTGGGTTACTCAGTTTGTGCAGAAGAAAGAAGAGAGGGACCTGGTGGAC
CGACTAAAGGCGGAGCAGGCCAGGAGGAAGCAGCGAGAAGAACGCCTGCAGCAGCTGCAGCACAGGGTGCAGCTC
AAGTATGCAGCCAAGCGCCTGAGGCAGGAAGAAGAAGAAAGAGAGAATCTCCTCCGCCTCAGCAGGGAGATGCTA
GAGACAGGCCCGGAGGCTGAGCGGCTGGAGCAGCTGGAGTCTGGGGAGGAGGAGCTGGTCCTCGCCGAATACGAG
AGTGATGAGGAGAAAAAGGTGGCGAGCAGAGTGGATGAGGATGAGGATGACCTGGAGGAAGAACACATAACTAAG
ATTTATTACTGTAGTCGGACACACTCCCAGCTGGCCCAGTTTGTGCATGAGGTGAAGAAGAGCCCCTTTGGCAAG
GATGTTCGGCTGGTCTCCCTTGGCTCCCGGCAGAACCTTTGTGTAAATGAAGACGTGAAAAGCCTAGGTTCTGTG
CAGCTTATCAACGACCGCTGTGTGGACATGCAGAGAAGCAGGCACGAGAAGAAGAAAGGAGCTGAGGAGGAGAAG
CCAAAGAGGAGGAGGCAGGAGAAGCAGGCAGCCTGCCCCTTCTACAACCACGAGCAGATGGGCCTTCTCCGGGAT
GAGGCCCTGGCAGAGGTGAAGGACATGGAGCAGCTGCTGGCCCTTGGGAAGGAGGCCCGGGCCTGTCCCTATTAC
GGGAGCCGCCTTGCCATCCCTGCAGCCCAGCTGGTGGTGCTGCCCTATCAGATGCTGCTGCATGCGGCCACTCGG
CAGGCCGCGGGCATCCGGCTGCAGGACCAGGTGGTGATCATCGACGAGGCGCACAACCTGATCGACACCATCACG
GGCATGCACAGCGTGGAGGTCAGCGGCTCCCAGCTCTGCCAGGCCCATTCCCAGCTGCTGCAGTACGTGGAGCGA
TACGGGAAGCGTTTGAAGGCCAAGAACCTGATGTACCTGAAGCAGATCCTGTATTTGCTGGAGAAATTCGTGGCT
GTGCTAGGGGGGAACATTAAGCAAAATCCCAATACACAGAGTCTGTCACAGACAGGGACGGAGCTGAAGACCATC
AACGACTTTCTCTTCCAGAGCCAGATCGACAACATCAACCTGTTCAAGGTGCAGCGATACTGTGAGAAGAGCATG
ATCAGCAGAAAGCTCTTTGGATTCACTGAACGGTACGGAGCAGTGTTCTCATCCCGGGAGCAGCCCAAACTGGCT
GGGTTTCAGCAATTCCTGCAGAGCCTGCAGCCCAGGACGACTGAAGCTCTTGCAGCCCCTGCAGACGAGAGTCAG
GCCAGCACCCTGCGACCAGCTTCTCCACTGATGCACATCCAAGGCTTCCTGGCAGCTCTCACTACGGCCAACCAG
GACGGCAGGGTCATCCTGAGCCGCCAAGGCAGCCTCAGTCAGAGCACCCTGAAGTTTTTGCTCCTGAATCCAGCT
GTGCACTTTGCCCAAGTGGTGAAGGAATGCCGGGCAGTGGTCATTGCGGGGGGTACCATGCAGCCGGTGTCTGAC
TTCCGGCAGCAGCTGCTGGCCTGTGCCGGGGTGGAAGCTGAGCGCGTGGTGGAGTTTTCCTGTGGTCACGTGATC
CCTCCAGACAACATCCTGCCCCTCGTCATCTGCAGCGGGATCTCCAACCAGCCGCTGGAATTCACGTTCCAGAAA
AGAGAGCTGCCTCAGATGATGGACGAGGTGGGTCGCATTCTCTGTAACCTGTGCGGTGTGGTTCCTGGAGGGGTG
GTCTGTTTCTTCCCCTCCTACGAGTACCTGCGCCAGGTCCATGCCCACTGGGAGAAGGGTGGCCTGCTGGGCCGT
CTGGCTGCCAGGAAGAAGATATTCCAGGAACCTAAGAGCGCACACCAGGTGGAGCAGGTGCTGCTGGCATATTCC
AGGTGCATCCAGGCCTGTGGCCAGGAGAGAGGCCAGGTGACAGGGGCCCTGCTCCTCTCTGTGGTTGGAGGAAAG
ATGAGTGAAGGGATCAACTTCTCTGACAACCTAGGCCGGTGTGTGGTGATGGTGGGCATGCCCTTCCCCAACATC
AGGTCTGCAGAGCTGCAGGAGAAGATGGCCTACTTGGATCAAACCCTCAGCCCCCGGCCAGGCACCCCCAGGGAA
GGCTCTGGTGGAGAACCTGTGCATGAAGGCCGTCAACCAGTCCATAGGCAGGGCCATCAGGCACCAGAAGGATTT
TGCCAGCGTAGTGCTCCTGGACCAGCGATATGCCCGGCCCCCTGTCCTGGCCAAGCTGCCGGCCTGGATCCGAGC
CCGTGTGGAGGTCAAAGCTACCTTTGGCCCCGCCATTGCTGCTGTGCAGAAGTTTCACCGGGAGAAGTCGGCCTC
TTCCTGATGGGCAACCACACCACTGCCTGGCGCCGTGCCCTTCCTTTGTCCTGCCCGCTGGAGACAGTGTTTGTC
GTGGGCGTGGTCTGCGGGGATCCTGTTACAAAGGTGAAACCCAGGAGGAGAGTGTGGAGTCCAGAGTGCTGCCAG
GACCCAGGCACAGGCGTTAGCTCCCGTAGGAGAAAATGGGGGAATCCTGAATGAACAGTGGGTCCTGGCTGTCCT
TGGGGCGTTCCAGGGCAGCTCCCCTCCTGGAATAGAATCTTTCTTTCCATCCTGCATGGCTGAGAGCCAGGCTTC
CTTCCTGGTCTCCGCAGGAGGCTGTGGCAGCTGTGGCATCCACTGTGGCATCTCCGTCCTGCCCACCTTCTTAAG
AGGCGAGATGGAGCAGGCCCATCTGCCTCTGCCCTTTCTAGCCAAGGTTATAGCTGCCCTGGACTGCTCACTCTC
TGGTCTCAATTTAAAATGATCCATGGCCACAGGGCTCCTGCCCAGGGGCTTGTCACCTTCCCCTCCTCCTTCCTG
AGTCACTCCTTCAGTAGAAGGCCCTGCTCCCTATCCTGTCCCACAGCCCTGCCTGGATTTGTATCCTTGGCTTCG
TGCCAGTTCCTCCAAGTCTATGGCACCTCCCTCCCTCTCAACCACTTGAGCAAACTCCAAGACACCTTCTACCCC

FIGURE 4538B

AACACCAGCAATTATGCCAAGGGCCGTTAGGCTCTCAACATGACTATAGAGACCCCGTGTCATCACGGAGACCTT
TGTTCCTGTGGGAAAATATCCCTCCCACCTGCAACAGCTGCCCCTGCTGACTGCGCCTGTCTTCTCCCTCTGACC
CCAGAGAAAGGGGCTGTGGTCAGCTGGGATCTTCTGCCACCATCAGGGACAAACGGGGGCAGGAGGAAAGTCACT
GATGCCCAGATGTTTGCATCCTGCACAGCTATAGGTCCTTAAATAAAAGTGTGCTGTTGGTT

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FIGURE 4539

AAAACAACTACGGCTGCGGTGTGGTTGGTGGTGAGATGACGACCTTAGTGCTGGATAATGGAGCTTACAACGCCA
AAATCGGTTACAGCCATGAAAATGTGTCGGTTATTCCTAATTGTCAGTTCCGGTCAAAAACAGCACGTCTTAAAA
CTTTTACTGCCAACCAGATAGATGAAATAAAAGACCCTTCTGGACTCTTTTACATCCTCCCTTTTCAAAAGGGCT
ACTTGGTGAATTGGGATGTTCAGAGACAAGTTTGGGATTACCTTTTTGGAAAAGAAATGTATCAGGTTGATTTTT
TAGATACTAATATTATTATCACTGAACCATACTTTAACTTCACTTCAATTCAAGAATCAATGAATGAAATTCTAT
TTGAAGAATACCAGTTTCAAGCAGTATTAAGAGTAAATGCTGGGGCTCTCAGTGCACATAGGTATTTCCGAGATA
ATCCTTCCGAATTATGCTGTATCATTGTTGATAGTGGATATTCCTTTACACATATAGTTCCTTATTGTAGAAGTA
AAAAGAAAAAAGAAGCAATTATTCGGATAAATGTGGGAGGAAAACTCTTAACCAATCATCTAAAGGAGATCATAT
CTTACAGGCAGCTACATGTTATGGATGAAACACATGTGATTAATCAAGTGAAAGAAGATGTATGCTATGTGTCTC
AGGATTTTTATAGAGACATGGATATTGCAAAGTTGAAAGGAGAAGAAAATACAGTAATGATAGACTATGTCTTGC
CTGACTTCAGTACAATTAAAAAGGGCTTTTGTAAGCCAAGGGAAGAGATGGTGTTGAGTGGAAAATACAAATCTG
GGGAACAAATTCTTCGTTTGGCCAATGAGAGATTTGCTGTTCCGGAAATACTCTTTAATCCTTCTGATATAGGCA
TTCAAGAAATGGGAATTCCAGAAGCTATTGTCTATTCAATTCAAAATCTACCTGAAGAAATGCAGCCGCATTTTT
TTAAGAACATTGTCTTGACAGGAGGAAATTCCCTTTTCCCAGGATTTAGGGATCGGGTTTACTCAGAAGTTCGAT
GTCTTACTCCAACAGATTATGATGTTTCTGTTGTGCTGCCTGAAAACCCTATTACTTATGCCTGGGAAGGTGGAA
AATTGATATCAGAGAATGATGATTTTGAAGATATGGTGGTAACAAGAGAAGATTACGAAGAAAATGGACATAGCG
TCTGTGAAGAGAAATTTGATATTTAAGCAACATTTTTGAATGAAAGTTGTGACCATAAGGTTTAATTTCAAAGTT
CCTTTTAAAAGAGGTTAAGGAACTGTGTTACCTTTTGTCCTAAGAAAAAGGCTTGAATTTATGTAAATACTTTGA
TCGATTGCTAATTTTCAAAGGCTTCTTAGGTAGGTTACTACAGTAAACTGTAACTCAGTCCACATTTTCATTTAG
GAGCTAGACTACCATAACAATGCTTATGCTGTTTCCAAGGGTAGGTTATTTTTCATTAAAAGAAGAATGAATGCA
TTTTAAGTTTAATTCTTCATAGCTGAAAGCACAAATTTAACGGCTTCACTGGACAGTTTTCCTTAGAAGGTAGTT
TTGTGTGACTGTGACTAAACTATTTTATTTTAAAATGTCATTCTTATTTATACATTCTAAAGTTGGAAAGACTGA
TCTTATATGTGTATAATGTTTATTTTGTACCTAGAGTACATTTAAAAGGGTGGAGACTAAGCTAATAAAGTTTTT
TTGGCC

FIGURE 4540A

GGAGGATATGGAGTAAAGCCAGAGTCAGTGGCCAGGCACGAAGGCAGAGCAGGAACAGCCAGGAGGCGTTTATTA
GGGGGGCGGGGGGAAAGAGCCCCAGCACCGCCCCTCCTGGAAGAAGGAAGAGGTAACTATAACTACCCAATATTG
CAGCCATGGAGTCCATGCTTAATAAATTGAAGAGTACTGTTACAAAAGTAACAGCTGATGTCACTAGTGCTGTAA
TGGGAAATCCTGTCACTAGAGAATTTGATGTTGGTCGACACATTGCCAGTGGTGGCAATGGGCTAGCTTGGAAGA
TTTTTAATGGCACAAAAAAGTCAACAAAGCAGGAAGTGGCAGTTTTTGTCTTTGATAAAAAACTGATTGACAAGT
ATCAAAAATTTGAAAAGGATCAAATCATTGATTCTCTAAAACGAGGAGTCCAACAGTTAACTCGGCTTCGACACC
CTCGACTTCTTACTGTCCAGCATCCTTTAGAAGAATCCAGGGATTGCTTGGCATTTTGTACAGAACCAGTTTTTG
CCAGTTTAGCCAATGTTCTTGGTAACTGGGAAAATCTACCTTCCCCTATATCTCCAGACATTAAGGATTATAAAC
TTTATGATGTAGAAACCAAATATGGTTTGCTTCAGGTTTCTGAAGGATTGTCATTCTTGCATAGCAGTGTGAAAA
TGGTGCATGGAAATATCACTCCTGAAAATATAATTTTGAATAAAAGTGGAGCCTGGAAAATAATGGGTTTTGATT
TTTGTGTATCATCAACCAATCCTTCTGAACAAGAGCCTAAATTTCCTTGTAAAGAATGGGACCCAAATTTACCTT
CATTGTGTCTTCCAAATCCTGAATATTTGGCTCCTGAATACATACTTTCTGTGAGCTGTGAAACAGCCAGTGATA
TGTATTCTTTAGGAACTGTTATGTATGCTGTATTTAATAAAGGGAAACCTATATTTGAAGTCAACAAGCAAGATA
TTTACAAGAGTTTCAGTAGGCAGTTGGATCAGTTGAGTCGTTTAGGATCTAGTTCACTTACAAATATACCTGAGG
AAGTTCGTGAACATGTAAAGCTACTGTTAAATGTAACTCCGACTGTAAGACCAGATGCAGATCAAATGACAAAGA
TTCCCTTCTTTGATGATGTTGGTGCAGTAACACTGCAATATTTTGATACCTTATTCCAAAGAGATAATCTTCAGA
AATCACAGTTTTTCAAAGGACTGCCAAAGGTTCTACCAAAACTGCCCAAGCGTGTCATTGTGCAGAGAATTTTGC
CTTGTTTGACTTCAGAATTTGTAAACCCTGACATGGTACCTTTTGTTTTGCCCAATGTTCTACTTATTGCTGAGG
AATGCACCAAAGAAGAATATGTCAAATTAATTCTTCCTGAACTTGGCCCTGTGTTTAAGCAGCAGGAGCCAATCC
AGATTTTGTTAATTTTCCTACAAAAAATGGATTTGCTACTAACCAAAACCCCTCCTGATGAGATAAAGAACAGTG
TTCTACCCATGGTTTACAGAGCACTAGAAGCTCCTTCCATTCAGATCCAGGAGCTCTGTCTAAACATCATTCCAA
CCTTTGCAAATCTTATAGACTACCCATCCATGAAAAACGCTTTGATACCAAGAATTAAAAATGCTTGTCTACAAA
CATCTTCCCTTGCGGTTCGTGTAAATTCATTAGTGTGCTTAGGAAAGATTTTGGAATACTTGGATAAGTGGTTTG
TACTTGATGATATCCTACCCTTCTTACAACAAATTCCATCCAAGGAACCTGCGGTCCTCATGGGAATTTTAGGTA
TTTACAAATGTACTTTTACTCATAAGAAGTTGGGAATCACCAAAGAGCAGCTGGCCGGAAAAGTGTTGCCTCATC
TTATTCCCCTGAGTATTGAAAACAATCTTAATCTTAATCAGTTCAATTCTTTCATTTCCGTCATAAAAGAAATGC
TTAATAGATTGGAGTCTGAACATAAGACTAAACTGGAGCAACTTCATATAATGCAAGAACAGCAGAAATCTTTGG
ATATAGGAAATCAAATGAATGTTTCTGAGGAGATGAAAGTTACAAATATTGGGAATCAGCAAATTGACAAAGTTT
TTAACAACATTGGAGCAGACCTTCTGACTGGCAGTGAGTCCGAAAATAAAGAGGACGGGTTACAGAATAAACATA
AAAGAGCATCACTTACACTTGAAGAAAAACAAAAATTAGCAAAAGAACAAGAGCAGGCACAGAAGCTGAAAAGCC
AGCAGCCTCTTAAACCCCAAGTGCACACACCTGTTGCTACTGTTAAACAGACTAAGGACTTGACAGACACACTGA
TGGATAATATGTCATCCTTGACCAGCCTTTCTGTTAGTACCCCTAAATCTTCTGCTTCAAGTACTTTCACTTCTG
TTCCTTCCATGGGCATTGGTATGATGTTTTCTACACCAACTGATAATACAAAGAGAAATTTGACAAATGGCCTAA
ATGCCAATATGGGCTTTCAGACTTCAGGATTCAACATGCCCGTTAATACAAACCAGAACTTCTACAGTAGTCCAA
GCACAGTTGGAGTGACCAAGATGACTCTGGGAACACCTCCCACTTTGCCAAACTTCAATGCTTTGAGTGTTCCTC
CTGCTGGTGCAAAGCAGACCCAACAAAGACCCACAGATATGTCTGCCCTTAATAATCTCTTTGGCCCTCAGAAAC
CCAAAGTTAGCATGAACCAGTTATCACAACAGAAACCAAATCAGTGGCTTAATCAGTTTGTACCTCCTCAAGGTT
CTCCAACTATGGGCAGTTCAGTAATGGGGACACAGATGAACGTGATAGGACAATCTGCTTTTGGTATGCAGGGTA
ATCCTTTCTTTAACCCACAGAACTTTGCACAGCCACCAACTACTATGACCAATAGCAGTTCAGCTAGCAATGATT
TAAAAGATCTTTTTGGGTGAGGTGTCTTACTTCTATTTTGAAGGATTATTTCAGTTTCAATCATGGGTGAGCTGA
TTTACATCTTTATATAGTTGGCTTGGAGGAAGTACTTCTATGGGAAAGTGAACAGTTCTGTGACAGGAAACATCT
CTGTCCATGCCAGCATAGTAGTTGTATGGACTTCTAACCAGTTGAGTTTTTTAAAGCATTGAGGATTTTTTCCTC
TTACCAACTCCTCTTCAGGTTTTTAAAGACCCAGCCCTTCCCAATCTCAAAGAGAAAAAGGAAACTGAGTTATCT
TGAATAACATAACTTTTTAATCAAATGTTTATTTTGGCTTGTGGATCTTGGTGTTATTTAAAAAATTGAGGTGAT
GGTCATTGCAAGCTCATCTATTAAGTACTATATGGTACACAGTCTATGAGTCATTAGTCTTCATTTTAATATGTA
AAAAATCTTGATGCTGTATTGATTTGTTTGCATTTAAGATGACAGTGAGAAAATGATAAGCATAAAGAGAAGTAT
CAGGTTATTTGCTTTTTCCAAACTTTTCAGATGAACTATTGTTTAGTACAGAGACTGAGCAAATACTACAAAATT
CAACTTAACCTTCATTTCATTGGTTTAAATGCGTTATTAACCATCTTAAGTGCAAACTAATCATTGTAAATTATA

FIGURE 4540B

TTTTAGCATGGTCTGCCTCAAATAGTAATGTATTTTTCTGCATTCACTTGGATATATTTAGAATCACTTTTTTCC
TCCTGTATCAAGGAAGAGGTATGTGCTGATTTGTTTGGATATTTGACAAGGCACTCTGATGTGACTTCCCTGACT
ACTACCTTCATATTTCATTTCAAATTCAAACTTCTGAGGTTGCAGCATATATGAATTGCATTTTCAAAAGAAGAT
TTGTAAGAATTAAACTATATTTATGAGTAAACTTTTGAGGTTTCTGCTGTATTGTTTCAAATGTAATAAACTTTA
CTTCTGT

FIGURE 4541

GGATTGAAACAAGATGGCGGGTTCGTGGTGAGAAGCCGTCAAGGAGTAGAAATTGGTATGCTTAGAAGCAGATTC
TAAAAGCAGTTTCTCTTCAGAACATCTTTTTTCATACCACTTGATAAGCATCTTGAAACACCATGGCTGTAGCTG
CAGTAAAATGGGTGATGTCAAAGAGAACTATCTTGAAACATTTATTTCCAGTCCAAAATGGAGCTTTATATTGTG
TTTGTCATAAATCTACGTATTCTCCTCTACCAGATGACTATAATTGCAACGTAGAGCTTGCTCTGACTTCTGATG
GCAGGACAATAGTATGCTACCACCCTTCTGTGGACATTCCATATGAACACACAAAACCTATCCCTCGGCCAGATC
CTGTGCATAATAATGAAGAAACACATGATCAAGTGCTGAAAACCAGATTGGAAGAAAAAGTTGAACACCTTGAGG
AAGGACCTATGATAGAACAACTTAGCAAAATGTTCTTTACTACTAAGCACCGTTGGTATCCTCATGGACGGTATC
ACAGATGTCGTAAGAATCTGAATCCTCCAAAAGACAGATGATGCGGAGGTTCCTGGGGGAATCAAAGAGAAATGT
GCCTCATTTGCCATTTGAGAAAATGCAGTCTGGTGTATTCAGTAATATATAGTAAAGTAATAATGATAAAATATC
TTTTCATATATTAGAATGTGTACTTTTATATAAAGTAATTCTGGATTTGACATTCTCATTTAGAGAAACCTATTT
TCTTTTTTCTTTTTCTATTTTAGTGTTTCATTTATGTGCGGTCTCCAATTTAGGACTTTTCCATAGTGCCAAAGC
CATACATATTCAGTAGAACATCAATAAATTACATCAGAAATTCAACACTTTATTATAAAACGGGCTTCGTGTTAG
ATAATTTTGCTAAACAGTAGGCTACTGTAAGTGTTCTGAGCATATTTAAGACAGGCTAGCATTTTCAATTTACAA
TATTTTCAACTGATAGTAGGTTTATTGGGATGTAACCCTATGATAAGTTGAGAAACATCTCTTTTTGTGTGTCTA
CTGTGATTTAAGTATTTTTAATCATCAGCCAAGCATTGTTAGTAGTATAAATATGATTAATAAAAATGTGCATGG
CTTTCCT

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FIGURE 4542

GGTTAAGAGAGACGCGCGCGCAGTCGCGCGCGGGTCGTGCCGTACCACCGTCGCGGGCAGGCTCGGCCACGAGCG
CCAGAGCCCCGCGCCTCCCCTCGCGGCCTGTCCCAAGTCCCTGCCCCGCAACAGAGCGTCACTTCCGCCATCCCC
GGCAGCGGTTGGGGCGGGGCGCACGGGGGAGGGGGCCAGGTCGGAGGGAAGCCCGCCCGTGCCCGAGCCCGCGCC
CGAGCAGGGACTACATTTCCCGAGGGGCCTCGGCGGCGGCTGCGGCGACGGGCGCGGCAACGTCCCCCGGAAGTG
GAGCCCGGGACTTCCACTCGTGCGTGAGGCGAGAGGAGCCGGAGACGAGACCAGAGGCCGAACTCGGGTTCTGAC
AAGATGGCCGGGCTGCCCCGCAGGATCATCAAGGAAACCCAGCGTTTGCTGGCAGAACCAGTTCCTGGCATCAAA
GCCGAACCAGATGAGAGCAACGCCCGTTATTTTCATGTGGTCATTGCTGGCCCTCAGGATTCCCCCTTTGAGGGA
GGGACTTTTAAACTTGAACTATTCCTTCCAGAAGAATACCCAATGGCAGCCCCTAAAGTACGTTTCATGACCAAA
ATTTATCATCCTAATGTAGACAAGTTGGGAAGAATATGTTTAGATATTTTGAAAGATAAGTGGTCCCCAGCACTG
CAGATCCGCACAGTTCTGCTATCGATCCAGGCCTTGTTAAGTGCTCCCAATCCAGATGATCCATTAGCAAATGAT
GTAGCGGAGCAGTGGAAGACCAACGAAGCCCAAGCCATAGAAACAGCTAGAGCATGGACTAGGCTATATGCCATG
AATAATATTTAAATTGATACGATCATCAAGTGTGCATCACTTCTCCTGTTCTGCCAAGACTTCCTCCTCTTTGTT
TGCATTTAATGGACACAGTCTTAGAAACATTACAGAATAAAAAAGCCCAGACATCTTCAGTCCTTTGGTGATTAA
ATGCACATTAGCAAATCTATGTCTTGTCCTGATTCACTGTCATAAAGCATGAGCAGAGGCTAGAAGTATCATCTG
GATTGTTGTGAAACGTTTAAAAGCAGTGGCCCCTCCCTGCTTTTATTCATTTCCCCCATCCTGGTTTAAGTATAA
AGCACTGTGAATGAAGGTAGTTGTCAGGTTAGCTGCAGGGGTGTGGGTGTTTTTATTTTATTTTATTTTATTTTA
TTTTTGAGGGGGGAGGTAGTTTAATTTTATGGGCTCCTTTCCCCCTTTTTTGGTGATCTAATTGCATTGGTTAAA
AGCAGCTAACCAGGTCTTTAGAATATGCTCTAGCCAAGTCTAACTTTATTTAGACGCTGTAGATGGACAAGCTTG
ATTGTTGGAACCAAAATGGGAACATTAAACAAACATCACAGCCCTCACTAATAACATTGCTGTCAAGTGTAGATT
CCCCCCTTCAAAAAAAGCTTGTGACCATTTTGTATGGCTTGTCTGGAAACTTCTGTAAATCTTATGTTTTAGTAA
AATATTTTTTGTTATTCTA

FIGURE 4543A

GCCGCGGTGCTGCTGCTCAGTGGGAGCGGGTCTTCGCAACTGTCTCCGCGTGGCGCGCGCCTCTAGCCGCCCTTC
CCCTGGCGGCTACGGCCGGAGGGAGCGGAGGCGAGCGGGAGTCGGGCTCCATGGAGAGCGGCGGACAACTGGGCA
GAGGCGGAGCTTTCATCTCGGCACCCTGGTTCCAGTGACCCGCGCTAGCGTCCCGTCCCGCCCGCGTCGGAGCGG
CCGCCGGCCCCGGGACTGACCGGCCTCGCCGCACCTCCCGCACCGACTAGCGCTCCCGGGCGCTCCTGCGCCCGA
CTCGCCCTCGCCCCCACTCCCCGGCGGGGTGGCGGCGGCCGGGCCCCCACGGCGGCGGCCGGAGCAGCAGCAGCA
GCAGCAGGAGCCCGCCTCTATGATGAAGTTCAAGCCCAACCAGACGCGGACCTACGACCGCGAGGGCTTCAAGAA
GCGGGCGGCGTGCCTGTGCTTCCGGAGCGAGCAGGAGGACGAGGTGCTGCTGGTGAGTAGCAGCCGGTACCCAGA
CCAGTGGATTGTCCCAGGAGGAGGAATGGAACCCGAGGAGGAACCTGGCGGTGCTGCCGTGAGGGAAGTTTATGA
GGAGGCTGGAGTCAAAGGAAAACTAGGCAGACTTCTGGGCATATTTGAGAACCAAGACCGAAAGCACAGAACATA
TGTTTATGTTCTAACAGTCACTGAAATATTAGAAGATTGGGAAGATTCTGTTAATATTGGAAGGAAGAGAGAGTG
GTTCAAAGTAGAAGATGCTATCAAAGTTCTCCAGTGTCATAAACCTGTACATGCAGAGTATCTGGAAAAGCTAAA
GCTGGGTTGTTCCCCAGCCAATGGAAATTCTACAGTCCCTTCCCTTCCGGATAATAATGCCTTGTTTGTAACCGC
TGCACAGACCTCTGGGTTGCCATCTAGTGTAAGATAGAGAGAACTGGGTAGGCCTCTCCCACCATGTGCAGTCTC
ATGGGGAGAGGCTTCTTTCGTTTCCTCGTCAAACATCTGATTGACGCTTGCAAACTGTCTGAATTTGCCATGCAA
GGTTTTCAAACAATTTGCATGTTTTTCAGATGCTTTCAAATCTTTTTTTAAAAAAATAGTGTAAAATATTTTAAT
AAGCCAAAGCCATGTGGAATTTTTGTTTAGATGCCTTAACTGTGCCACACCCCACAACCCCCTATATTATTTTGG
TTGTCTATTTCTCACAGCATATTTTCAGTTTTTTGTCCATTTGACATCAGTCTGTGGTTTATTTTGTCATCAGAT
TACTTGTGGGTATACCTACCCCAAAATTGTTTTCTCATTCACAGCATTAGCATATTCAGCAAATCCATCTGTGGT
GGGAATTAAAAATATTATTGGTATTAAAGAAATCCATTCACCCCAAAACTTGTTTTACAGGATTACAATTTTAAT
TCAAAATTTCCAGATTTGGGCTATTTCTGTATGATCCAATAACTTATTTTGTCACAGGGCTTAATTTGCCATTTT
TGGGGATTTGTCGACTCATTTTGTCTGAATTTTCACAACTGGTATTATGTCACTAGCTACCTGATACGGCTATTT
CCCTTATAACTCAATAGTACCTTAACACAAAGTATAACTCTGTAGAGTTGGTGAATATTTTAGGGAAATATTAGC
AAAATGCATGTAGTAAAGACATCTTATGAAAACTGTATTCATGGAATTTGATTTAGCATGCTCAGTTGCCAGTTC
CCATTATCGATACTCTTTCTTTGCAGAATACCTTAGAACCGTTATTTCCCTCAGTGTAGATTGCTCTTAAAATGT
ATTCAGTTATTTAGTGGCCCCCACAGGAGTGGAGTCTTGAAATCTAATTCTAAATGCCAGTCAGTGATGATCGCA
TCACAGTTGAGTGAAATGGCCTTCCTGTTCAGCTGTTAGAGACTGAAGATTGTTAGGGCACCTTAGAATGTCTCA
TCTTTTCTAGGTTGTCAACAGGTACTATTTGTCACATAACTAACTTTCGAGGCACTGGAACATACCTGAACTAAG
AATTAAATCTTTTACTTTATACTCACTTAAAATCAAGAATCCCATCTAAAACACATAGGTACCTTATCTGAAACT
CTTGCACTTCCCCAACCAGGGCAGAAATGAGGTGGGAGAAGTTTGACTAAAATGAGGGATGGGGGAAAGTAAAAG
ATGTTTTTTTTTTTTTGAGACTCGCTTTGTCACCCAGGCTGGAGTGCAATGGCACAATCTCAACTCACCGCAACC
TCCGCCTCCCGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGTTGGGATTACAGGCGCCTGCCTCCATG
CCTGGCTAATTTTGTATTTTTAGTAGAGACAGGGTTTCTTCATGTTGGTCAGGCTGGTCTCAAACTCCTAACCTC
GTGATCCGCCTGCCTCGACCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCATGCCCAGCCAAAGATCATTT
TTTTATATAGACTTCAGCCCTTTGTAAATATTGTAACTGGGGAGTATAGAGTAGAAAAAAAGTATAGTTAAAACA
TTTGTTCTACAAATTAACCTTTAAAAATATAATTACTGCTAAAAATAGAGTGCTGTTACACTTAAGGAAAATTAG
TGCCATTTTGGAAATGAGATCTTGTGCCATAAATACAGCTGAACTGAATATAAATGTTCACAAATTAATGCTGTC
AAAGGAATGAGTAAAGCAGAAAAACTTTTAACCAGCAACATTTCAAGTACGTAGTGTGATCAAACATGATCATCC
AGAATTTTTATATTTTTTTCTTTGTACAGAGGTTACATATTCTGGGTGTTCTTTTATAAAGGAAACATTTTAAAT
CCCACAAATTGACACTTTCTATCTTCAATGGACTAAGATTTTTTTGGTCAGTAATCTCTGAAATTTCCTTAAATT
ATATACTTAACATAGCAGAGAAACTGGATTGTTTTTGTATATAAGACTGCTTCCACCTGAAATGCTGTCATAAGT
ACTGGGGGGGTGGGGGAGTGCCCATCTTGTACATGATATTCTTAGAGGTAATAAGGTAATGATGCATGAATTTAT
TTTATAAACTCTTGGACTATGTATTTGACATGTAAAATATGTACAGTATTAACGTCAACCATCTCTTTAAAGTTA
GCCTATAAATATTGTTGTATAATTTTCTTTGGTCAGAAACACTTGGACTGAATAGTGACACTCGGTAAGGATTTT
CAGTGCCATTTAGCAAAACGTCTTTAGTCTATGCAACTAGCAAAAATCTGCATAATGCAACAACACAGTTTTCAC
ACTTCAAATTTTACATGAGGGGTTCTTCACGATTCTCCTGGAACCCAGTCTAGCAAAATGAGAGGAAAGGCCCTA
GGGAGATTTATTTCTGTTAAATAGTTAACTCTGCTGAGTATGACAAATAGTGTCTACTATCTCAACCCTCCAAAA
TTTGCAGAGTGTTGGGACTGTCATTTGTGATTTTTTTTTTTTTTTTTTGGTGGGGTAGTTGAATAAAATTGGGCA
GCTAAATTTTTCAGTTCCATGTGCCTCCCAAATAAAAAACAGAAAATAAGTAGTTTTTGTGAATTGACTTGCAGA

FIGURE 4543B

CAAAGTAGAAACTGTGCTGCATGATGTTATTTTGTAAACAGATGACATTTTCTGACCAGGCACATGCCATCCAAT
TTTCTGTCAATCACACTGTTGTATAAAGCAGCAGAACTGAAGGGGAAAAATGATTGTTGTATACACTGAATTGCT
TTGCATGGTCTCATTTGAGATAATTGATGTAAGAATCCTGACTTTTTTATATTTGGAAACATCAAATAAAAATGG
AAAAAATGATCATGGCTTTAAAAAAAAAACAAAAACACACACACATGAACTCAGATTTGCAAACCAGGTTTCTGA
AACTTTGGGTAAGGTGTATGCTTTTAACTTTGAAATGTATAAACACCCAGCGGAAACGTATACCTTTCAGTGCAT
AGTGCATTGTGTGCTTACCCTGGGTTGTTTAAACTTGTGTTCAAATATTCCCCCTCCAAGTGAAAGCCTGTCGGG
AATTCCACAGTAACACCTTTACTGTTCTCCCATTGATGATCATATACGTTACCTCTTCCTAGCGGTACATTTGTA
TGATCCTTACTACTGGAATTACCGGGTTAAAAGGAAATGCTTACCACTAAGATGTCAGTATTCTCCTCATGGATA
TTTTCAGTCTCAATGTTGCCAGTCTAATAGTATAGTATGTGGTTGCTTTACTGCTGTTCTCCCCACCCCCGTGGA
GTTGTGTCATTATTTTAATGAATGTGAGCTCTTGACTTACTCTAGAATTCTAATACAGATACTTTCTGCACTAGT
ATCACTTTTATTATTGCAGTTCCATTTAAAAGCATAACTGGCTAAGTCACCGCCCCACCCGCCGCATTACATTTC
CTAAAACATACTGCTGCCAAAGACCAACTGTAGAATCCTTAAGTCCTGTTCAAGTGTCACTTCATTTTTTATTAG
GGGTTTCTTAGTTGGAGGGCATGAGAAACTTGGCCCTTTCCAATGTTGTCTTCACATTGGAGTATAAGAATTCTC
TATAGGACTCTTTAATTTTTTTTTTTTTTGGTAGAGATGGGGTCTTGCTGTGTTGCCCAGGCTGGTCTCAAACT
CCTAGGCTTAAGCAGTCCTCCAGCCTCAGCCTTCTCAAAGTGCTAGGATGATTGGCATGAGCCACCTCGTCTGGC
CTGCAGGTCTTTTTAAGCATTTGCTGTTCAATAATAAGCATCTTCTTTATGCCTAGTATTTGTGATAAGAGCACA
AAACAA

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FIGURE 4544

CAGTGGGTGACCGCGGCTGCGAGGGACTTTGTCATCCGTCCTCCAGGATCTGGGGAGAAAGAGCCCCATCCCTTC
TCTCTCTGCCACCATTTCGGACACCCCGCAGGGACTCGTTTTGGGATTCGCACTGACTTCAAGGAAGGACGCGAA
CCCTTCTCTGACCCCAGCTCGGGCGGCCACCTGTCTTTGCCGCGGTGACCCTTCTCTC**ATG**ACCCTGCGGTGCCT
TGAGCCCTCCGGGAATGGCGGGGAAGGGACGCGGAGCCAGTGGGGGACCGCGGGGTCGGCGGAGGAGCCATCCCC
GCAGGCGGCGCGTCTGGCGAAGGCCCTGCGGGAGCTCGGTCAGACAGGATGGTACTGGGGAAGTATGACTGTTAA
TGAAGCCAAAGAGAAATTAAAAGAGGCACCAGAAGGAACTTTCTTGATTAGAGATAGCTCGCATTCAGACTACCT
ACTAACAATATCTGTTAAAACATCAGCTGGACCAACTAATCTTCGAATCGAATACCAAGACGGAAAATTCAGATT
GGACTCTATCATATGTGTCAAATCCAAGCTTAAACAATTTGACAGTGTGGTTCATCTGATCGACTACTATGTTCA
GATGTGCAAGGATAAGCGGACAGGTCCAGAAGCCCCCCGGAACGGCACTGTTCACCTTTATCTGACCAAACCGCT
CTACACGTCAGCACCATCTCTGCAGCATCTCTGTAGGCTCACCATTAACAAATGTACCGGTGCCATCTGGGGACT
GCCTTTACCAACAAGACTAAAAGATTACTTGGAAGAATATAAATTCCAGGTA**TAA**ATGTTTCTCTTTTTTTAAAC
ATGTCTCACATAGAGTATCTCCGAATGCAGCTATGTAAAAGAGAACCAAAACTTGAGTGCTCTGGATAACTATAT
GGAATGCTTTCTAAGAACAGCTGAAGCTAATCTAATTTAAATTTAACAGCTTGAAGAGGTAGCTAGGTGTTTAAA
GTTCCTCCAGATACTTTTACCTGAGTGATGCTTCCCTTCCTAAGGCTGACCAAGACCTGTTGATCCTTTTAGATT
AAAAATAAAATGTCGCATGTAAAGGCTGAAGTCGCGTTTTATCAGAATGCCTTGCCTTCTTAGGTTCTTTTCCAT
TATGTCAAAGGTCCAGGCTCCAGTAGGAGAGAAAGAACTCCTCATAGGAATACTGAAGAAGTGGGAAGGAACCAA
GCTGACACAGGCCTCACTGCAATTTGATATGCCTGCTGATCAGAGTCTCTTGGGCATTTTATATTTTGCATTCTG
ATGTACCTAGGAGTTTTGTTAAACAGATGATGTATGTGAGTATTTATCCCATTTTATGCAATTAACCAAATCAAC
CAAAAAAAGTGACCATGAAGTCCTGTATTTGTCTTTTTACTACATGTAGGAACTCTCATGTGAATGAGTACTGTA
GTAATCCATTCTATGGGAGCCTTATTTCAGAAATATTTCAAACTGGTGCAAATGGAAAAGACTTTCTCTTTTCCT
TTAAAGCTAAAGACAAGAATATCATGCTATACAGGTGCAACTCAATCCCCGTTAATAAAAACCAATGTAGGTATA
GGCATTCTACCCTTTGAAATAGCTGTGTCCCAACCTGTTGCCATTGATTTTTTGGAAATGGCTTTAGAAATATCC
AAGTTGTCCTTGAATTGTCTAACCATGGACATAAACAGTTGTCTCCCTTCTACTGTGTAGAATACTTTGACTTAA
TTTTCTTCCAGATACAGGGGGATACCTGCCTGTTTTTCAAAGTGTTTATTTACTGCTGTTACTATTTGATTAGAA
TGTATTAAATAAAAAAAACCTGATTTCT

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FIGURE 4545

GGTGCCGCATCCCCAGCCCGCCGCCATGGCCGCCTACAAACTGGTGCTGATCCGGCACGGCGAGAGCGCATGGAA
CCTGGAGAACCGCTTCAGCGGCTGGTACGACGCCGACCTGAGCCCGGCGGGCCACGAGGAGGCGAAGCGCGGCGG
GCAGGCGCTACGAGATGCTGGCTATGAGTTTGACATCTGCTTCACCTCAGTGCAGAAGAGAGCGATCCGGACCCT
CTGGACAGTGCTAGATGCCATTGATCAGATGTGGCTGCCAGTGGTGAGGACTTGGCGCCTCAATGAGCGGCACTA
TGGGGGTCTAACCGGTCTCAATAAAGCAGAAACTGCTGCAAAGCATGGTGAGGCCCAGGTGAAGATCTGGAGGCG
CTCCTATGATGTCCCACCACCTCCGATGGAGCCCGACCATCCTTTCTACAGCAACATCAGTAAGGATCGTAGGTA
TGCAGACCTCACAGAAGATCAGCTACCCTCCTGTGAGAGTCTGAAGGATACTATTGCCAGAGCTCTGCCCTTCTG
GAATGAAGAAATAGTTCCCCAGATCAAGGAGGGGAAACGTGTACTGATTGCAGCCCATGGCAACAGCCTCCGGGG
CATTGTCAAGCATCTGGAGGGTCTCTCTGAAGAGGCTATCATGGAGCTGAACCTGCCGACTGGTATTCCCATTGT
CTATGAATTGGACAAGAACTTGAAGCCTATCAAGCCCATGCAGTTTCTGGGGGGATGAAGAGACGGTGCGCAAAGC
CATGGAAGCTGTGGCTGCCCAGGGCAAGGCCAAGAAGTGAAGGCCGGCGGGGAGGATACTGTCCCCAGGAGCACC
CTCCCTGCCCGTCTTGTCCCTCTGCCCCTCCCACCTGCACATGTCACACTGACCACATCTGTAGACATCTTGAGT
TGTAGCTGCAGATGGGGACCAGTGGCTCCCATTTTCATTTTAGCCATTTTGTCGCCTGCACCCACTCCCTTCATA
CAATCTAGTCAGAATAGCAGTTCTAGAGCACAGGTTCTCAGTCTAAGCTATGGAAAAGCTCCCCTTATCCAACAG
AGTTTAAAAGTAGTGACTTGGGTTTTTGCGAGTGCTTTGTTTACTAAGGACTTTGGGGAGGAACCATGCTAAGCC
ATGACCAGTGAGGAGAAGCAACAGAGCCTGTCTGTCCCCATGAGCGGAGTCTGTCCTCTGCTCTTCTGCAGTCAG
GCCACTGCCTACTGCCTGGGGGCTCTAGTCATTCCAGTGGAAGACGAATGTAACCTGCGTGGTGATGTGACAACT
GTTTCCTCCCTGACCCCAGAGGATCTGGCTCTAGGTTGGGATCAATCCTGAATTTCGTTATGTGTTAATTTACTT
TTATTAAAAAAAGTATAGTATATATAAATAATACAAAACAATAACCCTTCTGGGGTTTCTTGTGGCGGTTGAAATA
GTCCCACATGTGGTCATCAGAAAATAAGCCATTCCTCATACCAATATAGGATCAGCTCCTTGACCTCTGAGGGGC
AGGAGTGCTTCCTGGTGTGTGTATTAGAATCCCTTCCTGCCTTGTTTCATGGCAGTGAAATGCCTCTTGGTCCTG
TCCAAGTGTATCTTTCACTGATTTCTGAATCATGTTCTAGTTGCTTGACCCTGCCACATGGGTCCAGTGTTCATC
TGAGCATAACTGTACTAAATCCTTTTTCCATATCAGTATAATAAAGGAGTGATGTGCAA

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FIGURE 4546A

CTGGTTTCTTGCCTTAAGGAGCCCATTGCCTTTCCCGCTGAAGTCTAGATGTTGACATGTAATAAAGCGGGCAGC
AGGATGGTGGTGGATGCGGCCAACTCCAATGGGCCTTTCCAGCCCGTGGTCCTTCTCCATATTCGAGATGTTCCT
CCTGCTGATCAAGAGAAGCTTTTTATCCAGAAGTTACGTCAGTGTTGCGTCCTCTTTGACTTTGTTTCTGATCCA
CTAAGTGACCTAAAGTGGAAGGAAGTAAAACGAGCTGCTTTAAGTGAAATGGTAGAATATATCACCCATAATCGG
AATGTGATCACAGAGCCTATTTACCCAGAAGTAGTCCATATGTTTGCAGTTAACATGTTTCGAACATTACCACCT
TCCTCCAATCCTACGGGAGCGGAATTTGACCCGGAGGAAGATGAACCAACGTTAGAAGCAGCCTGGCCTCATCTA
CAGCTTGTTTATGAATTTTTCTTAAGATTTTTAGAGTCTCCAGATTTCCAACCTAATATAGCGAAGAAATATATT
GATCAGAAGTTTGTATTGCAGCTTTTAGAGCTCTTTGACAGTGAAGATCCTCGGGAGAGAGATTTTCTTAAAACC
ACCCTTCACAGAATCTATGGGAAATTCCTAGGCTTGAGAGCTTACATCAGAAAACAGATAAATAATATATTTTAT
AGGTTTATTTATGAAACAGAGCATCATAATGGCATAGCAGAGTTACTGGAAATATTGGGAAGTATAATTAATGGA
TTTGCCTTACCACTAAAAGAAGAGCACAAGATTTTCTTATTGAAGGTGTTACTACCTTTGCACAAAGTGAAATCT
CTGAGTGTCTACCATCCCCAGCTGGCATACTGTGTAGTGCAGTTTTTAGAAAAGGACAGCACCCTCACGGAACCA
GTGGTGATGGCACTTCTCAAATACTGGCCAAAGACTCACAGTCCAAAAGAAGTAATGTTCTTAAACGAATTAGAA
GAGATTTTAGATGTCATTGAACCATCAGAATTTGTGAAGATCATGGAACCCCTCTTCCGGCAGTTGGCCAAATGT
GTCTCCAGCCCACACTTCCAGGTGGCAGAGCGAGCTCTCTATTACTGGAATAATGAATACATCATGAGTTTAATC
AGTGACAACGCAGCGAAGATTCTGCCCATCATGTTTCCTTCCTTGTACCGCAACTCAAAGACCCATTGGAACAAG
ACAATACATGGCTTGATATACAACGCCCTGAAGCTCTTCATGGAGATGAACCAAAAGCTATTTGATGACTGTACA
CAACAGTTCAAAGCAGAGAAACTAAAAGAGAAGCTAAAAATGAAAGAACGGGAAGAAGCATGGGTTAAAATAGAA
AATCTAGCCAAAGCCAATCCCCAGTACACAGTGTATAGTCAAGCCAGCACCATGAGCATTCCGGTTGCAATGGAG
ACAGATGGGCCTTTATTTGAAGATGTGCAGATGCTGAGAAAGACAGTGAAGGACGAGGCTCATCAGGCACAGAAA
GATCCGAAGAAGGACCGTCCTCTTGCACGCCGCAAGTCCGAGCTGCCTCAGGACCCCCACACCAAGAAAGCCTTG
GAAGCTCACTGCAGGGCCGATGAGCTGGCCTCCCAGGACGGCCGCTAGCCTCCGGGGCGCCGCGTCGGGGCCGGG
CCCGCCAGTTCTTTTCCGGATTCTGTAGAAAATACATACTTCCTGTGCCATACCAATCAGTTACACTCAAAGCTT
TCTTGGACCCCGTTCCGTAGGCAATAACGTGCGTCCGCCTCAGCGCGAGATTAGGAGTTCAAACAATGGTGACTT
CCCAGAGCCCGCTGGCAGAGCCGCGGGTTGACGACGGTGTCCTCGCAGTGTCGCCGCCACCCCAGCGTAGTCCAA
GTCAGACTATTTCACAAAGTCAGAGCGATAGGAAAGCACCCTGCCCTTCATCTTCATGTTCTCCCAAATGGAACT
TAGGATCTTTTAACATAGGTGGTTCTGTGATAACATCAGTGTTTTCCAAATCAAAGGAACGCTTTAAAAAATAGG
ACCTATTTTTTAAGACTTTACAGCCTTTGAAATGGTTTCCACGTGATTGTTACGCCAGCAGTTCTCGTTTTGTTT
GTTTTTCAATCTCAGTGAAATGGCTCTTTGCTTTCGAGTTCTCACGCAACGTACTGGGCAAATGACAATCCTCAG
CCGCTGGTATTTTCTAAGGGGTCTCTTCACTTTGATGAGTGACATGAACACCGTGTCTCCTTCTCTTGTGTGTAC
CTAAAGCCATATTTCCAAGTCTGTGGTACTCCAGGATTCCAGGAGTAAGCCTGTAGAAGAGATTTATTTTAAAAG
AGATTGCTCTGAAATTTATCTTAAAAGAGCTTGCTCTGTCTACCTTGACAGAAATTGGAGTTTTAAAATTATGTG
TTAATATTTTTATTTGCAGATTTCGTTTCCGTCAACTTAAACATTGTTGCCCTTCAACAAGGCTCTTGAATTAAT
AAAATTATAGTCTCTAAGAATTCCACATTTTATGGAAAGTTAGAGCAAAATCATTTTGAGTTAAGCCAGTTCTTA
GCCTAATGCAAACTGCAGCGCCTTTAAGCATAAAGTAACACAACAGCATTGCACGGGGCCGGCACTGCCGCTGCC
TTCACTGAAGGCTGCAGTGCTGTTCTGAGAGCTTGGAGGAGGCACCAGCGAGGATGACGTTTAGTGGAGCTCTTT
CTGTTGAAAAGAGCTCACGTTATCAACACCTTGTAAGGAAAATACAGTGTCTGAGTTTTCATCGGTCTTCACATG
CTGCTATATATTCCACAGAGTTCCTTGCATGTACTGAGCTTTTGTTTTAGATGGAATAGCACAAGGAGAAAAATC
TTTAAACTTAGTGCTTTGTCTATTCTTTATTTCTCTCAGGGTGGCCAGTATTTTGACTTATTTATCCTGCTTGAA
AGCTACTTGAGATGTGTACTGCTATTCTAAACACGTGATCTAGTTTCTTTCATCTCTGGCATAAGATTATATAAC
TTAATGTTAAGTGTCTTGAGGCATAAAAGACAAAATGTGGCTTATTTTAGGATCTGTTTTTTCATCGAGGTCTCG
GGTATCCTTTCAAAGATAGTGAGAAGCAGACACTGCTCCTTGTGCAGCTCTGGTACCTCCTGCCCACTGCTGTCA
CTTCAAGCCACTGGCAATGCTTCTGTCCTCGTGTCTTGGAGGAAAATCACCTGGGGGGAGGGGACTTCTTGTGGT
AAGAGCAAGTGCAGGTATGAAATGCGAAGATTGCCCCAGCTAAAAGTGGACAAGTCCGCTTTGTGAGATGAATAC
TTCCTGAGAAACTTGACAAGTATCTCTCCATTTTACCATTATGAAAACTATCATTAAAAAAAACAGTTTAGATGC
CTTCTCCTTTTGAGGGAAAAAGGGTGCTTTTTATTGTATAAAGCAGCGTCTTATGTATTTTGATATACCATTGTT
TGAACTTCCGTCTTTAGCTGATAGATTCTCAAATATCCTTGATTTTGGATGTTCAGTATGTTTGTGAGAGAGGTT
TCTGGGAAGACTCTCTTTTTGCCCTCGGGAAAAAGCAAAATATCAATGTTTGGGTGACTGTGTAAAGCTCAGTGT

FIGURE 4546B

GTAAGAACATCTTTTTGTCTAGGTTTTCTTTCTGCTCTTTATTGAAGACAAACACTCACCAAAAAGAAAAATAAA
AGTTTTCAGAGAAACTAATTTTCTTTGGCAAGAGTATTACTTAATATTTTGGCCTCCTAAAGTTTCCCTAGTTAG
TACTCGGACTCCTGTGCTAATTGTCAGCTTACATATCATTGTATAGAGACTGTTTATTCTGTACCAAACTGATTT
CAAAAGTACTACATTGAAAATAAACCGGTGACTGTTTTTCTTCATAAAGTTCTGCGTTTGGCATCTTCACTCTTT
CCAAAATGTATCTGTACATCAGAAATGTCACTATTCCAAGTGTCTTTTTAGTGTGGCTTTAGTATGGCTTCCTTT
TAATATTGTACATACATTGTATCTTTGTTTTATGGTAATAAGTAATAAAAATGTAGACTTC

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FIGURE 4547

ACACGGGTTTATCTGCATCAATCACGGGAGTACGTTTAATGAATGCCAAACCTATTGGATTTAACCCCATAATGA
ATGTCTATGTTGATGTTATAGGAAATGAATTCTTTTTCTTCTTCTCCTTCATCACCGACGTCCTCTTTGAGCGTG
GAGCGCTCCACCAGCACCGTGTGGACCTGCGGGTCCGAAAGGAACTTGCGCATCTGCTCCAGGGCGCTCTTCTCC
TCCAGCGCCGCCTCCAGCGCGGCCGGCGCCTCGCCGCCGTCCTCCAGCAGCAGCGGCACCAGCTTGCGCAGGTGC
TTCTGCAGCACCGACACGTCCGCCACATTCTGCACGGCCGACACTTCCAATCCGGCCGAGCCGTCCTCGCCGCCG
CCGCCCCCGGGCTCCGACATGGTGTCGCGCTCGGGACCTTCCAGGAGCGATGAGAAGGCGGCCGC

FIGURE 4548

CAGTTGCTTCAGCGTCCCGGTGTGGCTGTGCCGTTGGTCCTGTGCGGTCACTTAGCCAAGATGCCTGAGGAAACC
CAGACCCAAGACCAACCGATGGAGGAGGAGGAGGTTGAGACGTTCGCCTTTCAGGCAGAAATTGCCCAGTTGATG
TCATTGATCATCAATACTTTCTACTCGAACAAAGAGATCTTTCTGAGAGAGCTCATTTCAAATTCATCAGATGCA
TTGGACAAAATCCGGTATGAAAGCTTGACAGATCCCAGTAAATTAGACTCTGGGAAAGAGCTGCATATTAACCTT
ATACCGAACAAACAAGATCGAACTCTCACTATTGTGGATACTGGAATTGGAATGACCAAGGCTGACTTGATCAAT
AACCTTGGTACTATCGCCAAGTCTGGGACCAAAGCGTTCATGGAAGCTTTGCAGGCTGGTGCAGATATCTCTATG
ATTGGCCAGTTCGGTGTTGGTTTTTATTCTGCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAAACATAAC
GATGATGAGCAGTACGCTTGGGAGTCCTCAGCAGGGGGATCATTCACAGTGAGGACAGACACAGGTGAACCTATG
GGTCGTGGAACAAAAGTTATCCTACACCTGAAAGAAGACCAAACTGAGTACTTGGAGGAACGAAGAATAAAGGAG
ATTGTGAAGAAACATTCTCAGTTTATTGGATATCCCATTACTCTTTTTGTGGAGAAGGAACGTGATAAAGAAGTA
AGCGATGATGAGGCTGAAGAAAAGGAAGACAAAGAAGAAGAAAAAGAAAAAGAAGAGAAAGAGTCGGAAGACAAA
CCTGAAATTGAAGATGTTGGTTCTGATGAGGAAGAAGAAAAGAAGGATGGTGACAAGAAGAAGAAGAAGAAGATT
AAGGAAAAGTACATCGATCAAGAAGAGCTCAACAAAACAAAGCCCATCTGGACCAGAAATCCCGACGATATTACT
AATGAGGAGTACGGAGAATTCTATAAGAGCTTGACCAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTTTCA
GTTGAAGGACAGTTGGAATTCAGAGCCCTTCTATTTGTCCCACGACGTGCTCCTTTTGATCTGTTTGAAAACAGA
AAGAAAAAGAACAACATCAAATTGTATGTACGCAGAGTTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAA
TATCTGAACTTCATTAGAGGGGTGGTAGACTCGGAGGATCTCCCTCTAAACATATCCCGTGAGATGTTGCAACAA
AGCAAAATTTTGAAAGTTATCAGGAAGAATTTGGTCAAAAAATGCTTAGAACTCTTTACTGAACTGGCGGAAGAT
AAAGAGAACTACAAGAAATTCTATGAGCAGTTCTCTAAAAACATAAAGCTTGGAATACACGAAGACTCTCAAAAT
CGGAAGAAGCTTTCAGAGCTGTTAAGGTACTACACATCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTAC
TGCACCAGAATGAAGGAGAACCAGAAACATATCTATTATATCACAGGTGAGACCAAGGACCAGGTAGCTAACTCA
GCCTTTGTGGAACGTCTTCGGAAACATGGCTTAGAAGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTC
CAACAGCTGAAGGAATTTGAGGGGAAGACTTTAGTGTCAGTCACCAAAGAAGGCCTGGAACTTCCAGAGGATGAA
GAAGAGAAAAAGAAGCAGGAAGAGAAAAAAACAAAGTTTGAGAACCTCTGCAAAATCATGAAAGACATATTGGAG
AAAAAAGTTGAAAAGGTGGTTGTGTCAAACCGATTGGTGACATCTCCATGCTGTATTGTCACAAGCACATATGGC
TGGACAGCAAACATGGAGAGAATCATGAAAGCTCAAGCCCTAAGAGACAACTCAACAATGGGTTACATGGCAGCA
AAGAAACACCTGGAGATAAACCCTGACCATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAAC
GACAAGTCTGTGAAGGATCTGGTCATCTTGCTTTATGAAACTGCGCTCCTGTCTTCTGGCTTCAGTCTGGAAGAT
CCCCAGACACATGCTAACAGGATCTACAGGATGATCAAACTTGGTCTGGGTATTGATGAAGATGACCCTACTGCT
GATGATACCAGTGCTGCTGTAACTGAAGAAATGCCACCCCTTGAAGGAGATGACGACACATCACGCATGGAAGAA
GTAGACTAA

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FIGURE 4549

CTCTCTCCGGTCCGTGCCTCCAAG**ATG**ACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCAC
ATGCAGCCTATTCGCTGCACTAACTGTGCCCGATGCGTGCCCAAAGACAAGGCCATTAAGAAATTCGTCATTCGA
AACATAGTGGAGTCCGCAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTG
TATGTGAAGCTGCATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGC
AAGGACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCCACCAAAGCCCATG**TAA**GGA
GGTGAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

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FIGURE 4550

GGCTGGGGAAGATGGCGGTGGCTGGGGCGGTGTCCGGGGAGCCGCTGGTGCACTGGTGCACCCAGCAGTTGCGGA
AGACTTTCGGCCTGGATGTCAGCGAGGAGATCATTCAGTACGTTTTGTCAATTGAGAGTGCTGAAGAGATACGAG
AATATGTTACTGATCTCCTCCAGGGAAATGAAGGCAAAAAAGGTCAATTCATAGAAGAACTTATAACCAAATGGC
AAAAGAATGATCAGGAGTTGATTTCGGATCCTTTGCAGCAGTGCTTCAAAAAAGATGAAATTTTAGATGGGCAGA
AATCAGGCGACCATCTAAAGCGGGGTAGGAAGAAAGGGAGAAACAGACAGGAAGTTCCTGCATTTACTGAACCTG
ACACGACTGCAGAGGTTAAAACACCTTTTGATTTGGCCAAGGCACAAGAGAACAGCAACTCCGTAAAGAAGAAGA
CAAAGTTTGTCAATTTATACACAAGAGAGGGACAGGACAGGCTTGCAGTCCTGCTCCCTGGTCGTCACCCTTGTG
ATTGCCTGGGCCAGAAGCACAAGCTCATCAATAACTGTCTGATCTGTGGGCGCATTGTCTGTGAACAAGAAGGCT
CAGGCCCTTGCTTATTCTGTGGCACTCTGGTGTGTACTCATGAGGAACAAGATATTTTACAGCGTGACTCAAACA
AGAGCCAGAAACTGCTAAAGAAACTCATGTCAGGAGTGGAGAATTCTGGAAAGGTGGACATCTCTACCAAGGACC
TTCTTCCTCATCAAGAATTGCGAATTAAGTCTGGTCTGGAGAAGGCTATCAAGCATAAAGACAAACTGTTAGAGT
TTGACAGAACTAGTATTCGAAGGACCCAAGTCATTGATGATGAGTCAGATTACTTTGCCAGTGATTCTAACCAAT
GGTTGTCCAAACTTGAGCGGGAAACCTTGCAGAAGCGAGAGGAGGAGCTGAGAGAACTTCGACACGCCTCTCGAC
TTTCTAAGAAGGTCACCATTGACTTTGCAGGAAGGAAGATCCTGGAAGAAGAAAATTCACTAGCAGAGTATCATA
GCAGACTAGATGAGACAATACAGGCCATTGCCAATGGAACCTTGAACCAGCCACTGACCAAATTGGATAGATCTT
CTGAAGAGCCTTTGGGAGTTCTGGTAAATCCCAACATGTACCAGTCCCCTCCCCAGTGGGTTGACCACACAGGTG
CAGCCTCACAGAAGAAGGCTTTCCGTTCTTCAGGATTTGGACTAGAGTTCAACTCATTTCAGCACCAGTTGCGAA
TCCAGGATCAAGAATTTCAGGAAGGCTTTGATGGTGGCTGGTGCCTCTCTGTACATCAGCCCTGGGCTTCTCTGC
TTGTCAGAGGGATTAAAAGGGTGGAGGGCAGATCCTGGTACACCCCCCACAGAGGACGACTTTGGATAGCAGCCA
CAGCTAAAAAACCCTCCCCTCAAGAAGTCTCAGAACTCCAGGCTACATATCGTCTTCTTCGTGGGAAAGATGTGG
AATTTCCTAATGACTATCCGTCAGGTTGTCTTCTGGGCTGTGTGGACCTAATTGACTGCTTGTCCCAGAAGCAAT
TTAAGGAGCAGTTCCAAGCATCAGTCAAGAGTCTGATTCTCCATTTGTTTTCATCTGCAAAAATCCTCAGGAAAT
GGTTGTGAAGTTTCCTATTAAAGGAAATCCAAAAATCTGGAAATTGGATTCCAAGATCCATCAAGGAGCAAAGAA
GGGGTTAATGAAGCAGAATAAAGCTGTCTGACCCAGGAGAAAAGGAACTATACAGCATAGTGGAGTTTTGTGTAC
TAAAATTGCTATCTACTGGTCCTTTGGAATTGAAGTAGTAGAAACCTAAAGGCTTGGCGTCAGGCTTGAATATCT
CAGAACTTAAACTCTTACCAAAATCTGTATATTTTTCTTAAGGAGTGGGATTCCTACTTTATGTAATGGGGTCGA
AATCTTTGAACACATTATTTATAAAAACCTGTTTAAAAATTCT

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FIGURE 4551

GTGAAACACCCTCGGCTGGGAAGTCAGTTCGTTCTCTCCTCTCCTCTCTTCTTGTTTGAACATGGTGCGGACTAA
AGCAGACAGTGTTCCAGGCACTTACAGAAAAGTGGTGGCTGCTCGAGCCCCCAGAAAGGTGCTTGGTTCTTCCAC
CTCTGCCACTAATTCGACATCAGTTTCATCGAGGAAAGCTGAAAATAAATATGCAGGAGGGAACCCCGTTTGCGT
GCGCCCAACTCCCAAGTGGCAAAAAGGAATTGGAGAATTCTTTAGGTTGTCCCCTAAAGATTCTGAAAAAGAGAA
TCAGATTCCTGAAGAGGCAGGAAGCAGTGGCTTAGGAAAAGCAAAGAGAAAAGCATGTCCTTTGCAACCTGATCA
CACAAATGATGAAAAAGAATAGAACTTTCTCATTCATCTTTGAATAACGTCTCCTTGTTTACCCTGGTATTCTAG
AATGTAAATTTACATAAATGTGTTTGTTCCAATTAGCTTTGTTGAACAGGCATTTAATTAAAAAATTTAGGTTTA
AATTTAGATGTTCAAAAGTAGTTGTGAAATTTGAGAATTTGTAAGACTAATTATGGTAACTTAGCTTAGTATTCA
ATATAATGCATTGTTTGGTTTCTTTTACCAAATTAAGTGTCTAGTTCTTGCTAAAATCAAGTCATTGCATTGTGT
TCTAATTACAAGTATGTTGTATTTGAGATTTGCTTAGATTGTTGTACTGCTGCCATTTTTATTGGTGTTTGATTA
TTGGAATGGTGCCATATTGTCACTCCTTCTACTTGCTTTAAAAAGCAGAGTTAGATTTTTGCACATTAAAAAATT
CAGTATTAATT

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FIGURE 4552

ACGGCGCCCGCCGCCCGCCCGGAGCCCGCGAGCAACCCCAGTCCCCCCCACCCGCGCGTGGCGGCGCCGGCTCCC
TAGCCACCGCGGCCCCACCCTCTTCCGGCCTCAGCTGTCCGGGCTGCTTTCGCCTCCGCCTGTGGATGCTGCGCC
TCTCCGAACGCAACATGAAGGTGCTCCTTGCCGCCGCCCTCATCGCGGGGTCCGTCTTCTTCCTGCTGCTGCCGG
GACCTTCTGCGGCCGATGAGAAGAAGAAGGGGCCCAAAGTCACCGTCAAGGTGTATTTTGACCTACGAATTGGAG
ATGAAGATGTAGGCCGGGTGATCTTTGGTCTCTTCGGAAAGACTGTTCCAAAAACAGTGGATAATTTTGTGGCCT
TAGCTACAGGAGAGAAAGGATTTGGCTACAAAAACAGCAAATTCCATCGTGTAATCAAGGACTTCATGATCCAGG
GCGGAGACTTCACCAGGGGAGATGGCACAGGAGGAAAGAGCATCTACGGTGAGCGCTTCCCCGATGAGAACTTCA
AACTGAAGCACTACGGGCCTGGCTGGGTGAGCATGGCCAACGCAGGCAAAGACACCAACGGCTCCCAGTTCTTCA
TCACGACAGTCAAGACAGCCTGGCTAGATGGCAAGCATGTGGTGTTTGGCAAAGTTCTAGAGGGCATGGAGGTGG
TGCGGAAGGTGGAGAGCACCAAGACAGACAGCCGGGATAAACCCCTGAAGGATGTGATCATCGCAGACTGCGGCA
AGATCGAGGTGGAGAAGCCCTTTGCCATCGCCAAGGAGTAGGGCACAGGGACATCTTTCTTTGAGTGACCGTCTG
TGCAGGCCCTGTAGTCCGCCACAGGGCTCTGAGCTGCACTGGCCCCGGTGCTGGCATCTGGTGGAGCGGACCCAC
TCCCCTCACATTCCACAGGCCCATGGACTCACTTTTGTAACAAACTCCTACCAACACTGACCAATAAAAAAAAAT
GTGGGTTTTTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4553

AGAAGATGGCGTCGGGTGGTGGTGGCTGTAGCGCTTCGGAGAGACTGCCTCCGCCCTTCCCCGGCCTGGAGCCGG
AGTCCGAGGGGGCGGCCGGGGGATCAGAACCCGAGGCTGGGGACAGCGACACCGAGGGGGAGGACATTTTCACCG
GCGCCGCGGTGGTCAGTAAACATCAGTCTCCAAAGATAACTACATCCCTTCTTCCCATCAACAATGGCTCCAAAG
AAAATGGGATCCATGAAGAACAAGACCAAGAGCCACAGGATCTCTTTGCAGATGCCACAGTGGAGCTATCCTTGG
ACAGCACACAAAATAATCAGAAGAAGGTGCTAGCCAAAACACTCATTTCTCTTCCTCCTCAGGAAGCCACAAATT
CTTCGAAGCCCCAGCCAACCTATGAGGAGCTAGAGGAAGAAGAACAGGAGGATCAATTTGATTTGACAGTCGGTA
TAACTGATCCTGAGAAGATAGGGGATGGTATGAATGCATATGTAGCCTACAAAGTTACAACACAGACAAGCTTAC
CATTGTTCAGAAGCAAACAGTTTGCAGTAAAAAGAAGATTTAGTGACTTTCTGGGTCTTTATGAGAAGCTTTCCG
AGAAGCACTCTCAGAATGGCTTCATTGTCCCTCCGCCCCCGGAGAAGAGCCTCATAGGGATGACAAAAGTGAAAG
TTGGGAAGGAAGATTCTTCTTCTGCAGAATTTCTTGAAAAACGGAGGGCCGCTTTAGAAAGGTACCTTCAGAGGA
TTGTAAATCATCCTACCATGTTACAGGACCCTGACGTCAGAGAGTTCTTGGAAAAAGAAGAGCTGCCACGTGCCG
TGGGTACCCAGACATTGAGTGGTGCTGGTCTCCTCAAGATGTTCAACAAAGCCACAGATGCCGTCAGCAAAATGA
CCATCAAGATGAATGAATCAGACATTTGGTTTGAGGAGAAGCTCCAGGAGGTAGAGTGTGAGGAGCAGCGCTTAC
GGAAACTGCATGCTGTTGTAGAAACTCTAGTCAACCATAGGAAAGAGCTAGCGCTGAACACAGCCCAGTTTGCAA
AGAGTCTAGCCATGCTTGGGAGCTCTGAGGACAACACGGCATTGTCACGGGCACTCTCCCAGCTGGCTGAGGTGG
AAGAAAAAATTGAGCAGCTCCACCAGGAACAGGCCAACAATGACTTCTTCCTCCTTGCTGAGCTCCTGAGTGACT
ACATTCGCCTCCTGGCCATAGTCCGCGCTGCCTTCGACCAGCGCATGAAGACATGGCAGCGCTGGCAGGATGCCC
AAGCCACACTGCAGAAGAAGCGGGAGGCCGAGGCTCGGCTGCTGTGGGCCAACAAGCCTGATAAGCTGCAGCAGG
CCAAGGACGAGATCCTCGAGTGGGAGTCTCGGGTGACTCAATATGAAAGGGACTTCGAGAGGATTTCAACAGTGG
TCCGAAAAGAAGTGATACGGTTTGAGAAAGAGAAATCCAAGGACTTCAAGAACCACGTGATCAAGTACCTTGAGA
CACTCCTTTACTCACAGCAGCAGCTGGCAAAGTACTGGGAAGCCTTCCTTCCTGAGGCAAAGGCCATCTCCTAAT
GGACCAAGGACCCCAGAGCCCACCTGTGTGACGCTGCCTTTTTATACACTGTCCTCCTCCACCTTGATGGACCCC
TAGTGATGCATCCTGCCTAGGCTGGACTTAACCCCTTCCTCCCTGTCCCCACGACCAACTGTCCCCAGTTACTCT
AACCGTTATTTCATTTAGCTTCCATATATATTTTCTTACCTAAGAGAATAGTTTCCTGCTTTAAGCAAAAGACCT
ACAATAGGTGGTGGAATTATGGGATGGGGTGGAGTATTGATATAAATATATAAATACAAATGTATATTTTTCAGG
ATGTGGTTTAGGAACTGGGAATAACGTTTTC

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FIGURE 4554

GTCTGGCCCCGCCTTTTCTCTGCTCTCCTGAACCTTTAGGCTTGTCTCGGCCCATTTGAAGACCAGGAAGTTGAT
CAATCCCGAGGCTGCTGAGAGACGGTGGCGCGATTGGGACAGTCGCCAGGGATGGCTGAGCGTGAAGATGCAGCG
GGTGTCCGGGCTGCTCTCCTGGACGCTGAGCAGAGTCCTGTGGCTCTCCGGCCTCTCTGAGCCGGGAGCTGCCCG
GCAGCCCCGGATCATGGAAGAGAAAGCGCTAGAAGTTTATGATTTGATTAGAACTATCCGGGACCCAGAAAAGCC
CAATACTTTAGAAGAACTGGAAGTGGTCTCGGAAAGTTGTGTGGAAGTTCAGGAGATAAATGAAGAAGAATATCT
GGTTATTATCAGGTTCACGCCAACAGTACCTCATTGCTCTTTGGCGACTCTTATTGGGCTGTGCTTAAGAGTAAA
ACTTCAGCGATGTTTACCATTTAAACATAAGTTGGAAATCTACATTTCTGAAGGAACCCACTCAACAGAAGAAGA
CATCAATAAGCAGATAAATGACAAAGAGCGAGTGGCAGCTGCAATGGAAAACCCCAACTTACGGGAAATTGTGGA
ACAGTGTGTCCTTGAACCTGACTGATAGCTGTTTTAAGAGCCACTGGCCTGTAATTGTTTGATATATTTGTTTAA
ACTCTTTGTATAATGTCAGAGACTCATGTTTAATACATAGGTGATTTGTACCTCAGAGTATTTTTTAAAGGATTC
TTTCCAAGCGAGATTTAATTATAAGGTAGTACCTAATTTGTTCAATGTATAACATTCTCAGGATTTGTAACACTT
AAATGATCAGACAGAATAATATTTTCTAGTTATTATGTGCAAGATGAGTTGCTATTTTTCTGATGCTCATTCTGA
TACAACTATTTTTCGTGTCAAATATCTACTGTGCCCAAATGTACTCAATTTAAATCATTACTCTGTAAAATAAAT
AAGCAGATGATTCTTAT

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FIGURE 4555

GCGCATGCGCGGGGGCCATATTAGCAGCGGTTATTCGGTGAGCGGTGGTGGTTTATTCTTCCGTGGAGTTAAGGG
CTCCGTGGACATCTCAGGTCTTCAGGGTCTTCCATCTGGAACTATATAAAGTTCAGAAAACATGTCTCGAAGATA
TGACTCCAGGACCACTATATTTTCTCCAGAAGGTCGCTTATACCAAGTTGAATATGCCATGGAAGCTATTGGACA
TGCAGGCACCTGTTTGGGAATTTTAGCAAATGATGGTGTTTTGCTTGCAGCAGAGAGACGCAACATCCACAAGCT
TCTTGATGAAGTCTTTTTTTCTGAAAAAATTTATAAACTCAATGAGGACATGGCTTGCAGTGTGGCAGGCATAAC
TTCTGATGCTAATGTTCTGACTAATGAACTAAGGCTCATTGCTCAAAGGTATTTATTACAGTATCAGGAGCCAAT
ACCTTGTGAGCAGTTGGTTACAGCGCTGTGTGATATCAAACAAGCTTATACACAATTTGGAGGAAAACGTCCCTT
TGGTGTTTCATTGCTGTACATTGGCTGGGATAAGCACTATGGCTTTCAGCTCTATCAGAGTGACCCTAGTGGAAA
TTACGGGGGATGGAAGGCCACATGCATTGGAAATAATAGCGCTGCAGCTGTGTCAATGTTGAAACAAGACTATAA
AGAAGGAGAAATGACCTTGAAGTCAGCACTTGCTTTAGCTATCAAAGTACTAAATAAGACCATGGATGTTAGTAA
ACTCTCTGCTGAAAAAGTGGAAATTGCAACACTAACAAGAGAGAATGGAAAGACAGTAATCAGAGTTCTCAAACA
AAAAGAAGTGGAGCAGTTGATCAAAAAACATGAGGAAGAAGAAGCCAAAGCTGAGCGTGAGAAGAAAGAAAAAGA
ACAGAAAGAAAAGGATAAATAGAATCAGAGATTTTATTACTCATTTGGGGCACCATTTCAGTGTAAAAGCAGTCC
TACTCTTCCACACTAGGAAGGCTTTACTTTTTTTAACTGGTGCAGTGGGAAAATAGGACATTACATACTGAATTG
GGTCCTTGTCATTTCTGTCCAATTGAATACTTTATTGTAACGATGATGGTTACCCTTCATGGACGTCTTAATCTT
CCACACACATCCCCTTTTTTTGGAATAAAATTTGGAAAATGGAAATGAAGGAATAAATTCTCTGTAGCAGTAATT
GTTAAATATA

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FIGURE 4556

AAAATTTTAGGTGGTTAAAATGTGGTACGTAAATTTTATATGTCTCAACTCTGTTTCATGTTAAATGTGTTACAG
GAATGAATCTGAAGTCTGCTGCAGTAAAACACAGAAGGCTTTAAAATGTTTTCTTGCATAAAATTCAAAACTTTT
AAGTAGCTGCTTATGAGAATAGGGAAGGCAGAAAGCTAATGTCTGTCTCAAGATACAGGACAGCTGTTTGCTCAT
CAACCTCAACTGTGTGTGCAACTGAGGAAC**ATG**GCTCAAGAAACTAATCACAGCCAAGTGCCTATGCTTTGTTCC
ACTGGCTGTGGATTTTATGGAAACCCTCGTACAAATGGCATGTGTTCAGTATGCTATAAAGAACATCTTCAAAGA
CAGAATAGTAGTAATGGTAGAATAAGCCCACCTGCAACCTCTGTCAGTAGTCTGTCTGAATCTTTACCAGTTCAA
TGCACAGATGGCAGTGTGCCAGAAGCCCAGTCAGCATTAGACTCTACATCTTCATCTATGCAGCCCAGCCCTGTA
TCAAATCAGTCACTTTTATCAGAATCTGTAGCATCTTCTCAATTGGACAGTACATCTGTGGACAAAGCAGTACCT
GAAACAGAAGATGTGCAGGCTTCAGTATCAGACACAGCACAGCAGCCATCTGAAGAGCAAAGCAAGTCTCTTGAA
AAACCGAAACAAAAAAAGAATCGCTGTTTCATGTGCAGGAAGAAAGTGGGACTTACTGGGTTTGAATGCCGGTGT
GGAAATGTTTACTGTGGTGTACACCGTTACTCAGATGTACACAATTGCTCTTACAATTACAAAGCCGATGCTGCT
GAGAAAATCAGAAAAGAAAATCCAGTAGTTGTTGGTGAAAAGATCCAAAAGATT**TGA**ACTCCTGCTGGAATACAA
AATTCTTGAGCATCTGCAAACTAAAAATTGACTTGAGGTTTTTTTTTTCCTAGTCATTGGGAATGTAGAGCAGTG
TATCTTGCATGTCATCGGAAGAATAGATTTTTGTTTTGGTTTTGTTTTGAAAATGACTCTGAACATTTATTTCCA
TTGCAATTTCTGTGGCTGAGGAGACTTAAACTTTACAAGTATTATCCTTTTAAGATCATTTTAATTTTAGTTGAG
TGCAGAGGGCTTTTATAACAAACGTGCAGAAATTTTGGAGGGCTGTGATTTTTCCAGTATTAAACATGCATGCAT
TAATCTTGCAGTTTATTTTCTCATTGTGTATGTATATATCGCTTTTCTCTGCAGCACGATTTCTCTTTTGATAAT
GCCCTTTAGGGCACAACTAGTTATCAGTAACTGAATGTATCTTAATCATTATGGCTGCTTCTGTTTTTTCATTAA
CAAAGGTTATTCATATGTTAGCATATAGTTTCTTTGCACCCACTATTTATGTCTGAATCATTTGTCACAAGAGAG
TGTGTGCTGATGAGATTGTAAGTTTGTGTGTTTAAACTTTTTTTTGAGCGAGGGAAGAAAAAGCTGTATGCATTT
CATTGCTGTCTACAGGTTTCTTTCAGATTATGTTCATGGGTTTGTGTGTATACAATATGAAGAATGATCTGAAGT
AATTGTGCTGTATTTATGTTTATTCACCAGTCTTTGATTAAATAAAAAGGAAAACCAG

FIGURE 4557

ATGGTTAACCCCACTGTGTTTTTTGACATCGCCGTCGATGGCGAGCCCTTGGGCCACGTCTCCTTCGAGCTGCTT
GCAGACAAGTTTCCAAAGACAGCAGAAAACTTTCATGCTCTGAGCACTGGAGAGAAAGGATTTGAATTATCAGAG
TTTATGTGTCAGGGTGGTGACTTCACATGCCATAATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAATTTGAT
GATGAGAACTTCATCCTAAAGCATACAGTGGTGGATGGCAAGCATGTGGTCTTTGGCAAGGTGAAAGAAGGCATG
AATATTGTGGAGGCCACGGAGCGCTTTGAGTCCAGGAATGGCAAGACCAGGAAGAAGATCACCATTGCTGACTGT
GGACAACTCTTAA

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FIGURE 4558

GTGCACGCGCTGAAACCGGAGCGCGCAGGGCGCGCCAGGGTGAGGGGGACGGGGGCGGGGTGGGGGCAGCCCTTT
CCCAGGCGGTAGCGGGGGCGGCGTCGCTGTTGCCCTTTTAAGCCGCGGGGCCGCCGCCTCCTGCCGCTGGAGTCG
GTTACAAAGGAAGCGCCACCCAGGCCGCCACACGCCGAGGCTTCCGCGCCCCTCGCCATTTTCCAGCAGCGCTCG
ACGAGGCGGAGCCGCGAGAGCGCGGCCCAGGCCGGCCCCGCGGGGCGGTCGCGGCCGTGACGGCGGCTCCGGGCC
CGGCTCCCCTTCCGCGCCCGGCTCCCCTTCCGCGCCCCTCCCGCCGGAGATGAGGGGAAG**ATG**TCCGTGTCAGGG
CTCAAGGCCGAGCTGAAGTTCCTGGCGTCCATCTTCGACAAGAACCACGAGCGATTCCGCATCGTCAGTTGGAAG
CTGGACGAGCTGCACTGCCAGTTCCTGGTGCCGCAGCAGGGCAGCCCGCACTCGCTGCCGCCGCCACTCACGCTC
CACTGCAACATCACGGAATCCTATCCATCTTCTTCACCGATATGGTTTGTGGATTCTGAAGACCCAAATCTGACA
TCAGTTCTGGAACGTCTAGAAGATACTAAGAACAACAATTTGCTTCGTCAGCAATTGAAGTGGTTGATATGTGAA
CTCTGCAGTTTATATAACCTTCCTAAGCACCTGGATGTTGAGATGCTAGATCAACCACTACCCACGGGTCAGAAT
GGGACAACAGAAGAAGTGACTTCAGAAGAAGAGGAAGAAGAAGAAGAGATGGCTGAAGATATAGAAGACTTAGAT
CACTATGAGATGAAGGAAGAAGAGCCTATTAGTGGGAAAAAGTCAGAGGATGAAGGAATTGAAAAAGAAAATTTG
GCAATATTAGAGAAAATTAGGAAGACTCAAAGGCAAGACCATTTAAATGGTGCAGTGTCTGGGTCAGTGCAAGCT
TCAGATAGACTTATGAAAGAGCTCAGGGACATATACAGATCACAGAGTTATAAAACAGGGATTTATTCAGTGGAA
CTCATAAATGACAGTTTATATGACTGGCATGTTAAACTGCAGAAGGTTGACCCTGATAGTCCTTTGCACAGTGAT
CTTCAGATCTTAAAAGAAAAAGAAGGCATAGAATATATTTTGCTTAACTTCTCTTTTAAGGATAACTTTCCATTT
GATCCTCCATTTGTTCGAGTGGTGTTACCTGTTCTCTCAGGAGGGTATGTATTGGGTGGAGGAGCATTATGTATG
GAACTTCTCACAAAACAGGGCTGGAGCAGTGCCTACTCAATAGAATCGGTCATCATGCAAATAAATGCCACCTTA
GTCAAAGGCAAAGCCAGAGTGCAGTTTGGAGCAAATAAGAATCAATATAATCTAGCAAGAGCCCAACAATCCTAT
AATTCCATTGTACAGATACATGAGAAAAATGGCTGGTACACCCCTCCAAAGGAAGATGGC**TAA**ATGTGTTGACTG
TTGTATGTTTGGACTAATGTTGCTTTAAAGAAAATCTTTCTAACATGCAGACAAAAGCTTTGAGTGCCCCTATTA
CAGCAGTACCGAAGATGTTAGTTAATAGATATTTTAGTGGATAATCTGTCATCTGACATCCAGTATAAGTTACAG
CCTTTGCATTTTGCTCATTTTAGATATCTTGGACTGAGCAGTGGGGCCTTTACTGTATTTTTCCTGATAAATACA
CATACTGGCCACTCCTTATCTCTTTTTCTTGAAAAGTGAACTTTTTAAAGCAGCCAAGTCAACATCAGGCTACTG
AAGTTGAGGCTTTAGGGTAACTTTCCTATATTGAGCCCATGGGTTACAAGGATTTGCAATATATTGTTCCATTTA
CAGCCAATACAGGTTTAATCGATGTTCAATATTGGTTTAGGAAATTTAAGGCCTTCTAAATCATAATAGCTCTTT
CATGTCTAAAACCATTTTATGATATTGCCAAAATGTGATAGGAAACCTACTCATTAAATTGTTAAACTTTTTAAT
GACTATGTGAAGATATGAATTGTTTCCTGAAGATAATACTCTTAATTGAGTTGTATTGTACTTCTTAGGCAAAGC
AGTGTAAAACTGTATCAATTAAGGCTTGTGAGTAGTGATTTCCACTGGGGCATCAGAGTCTTGGCTGGGCTGAAT
CTGCTGCTTGTTGGTTCAGTGTTTCTTATGAACAAGAGCCACAGTACAGAGCTTCAAGTTATTTAAAATACTAAG
TCATCTTACGTTTCCATTTTATTAACGGGATGTTGCAATCGTTTGTAAACTAATAAACTTATAAAGTGATTGGCA
CAAAGACTCCTTGAGCAAAAGCTGTGCAGTTAAGTACAAAAAGATACTTAATTTGGAGACTCTTACAGTAATTTT
TGCCATGTCAAAACAATGGCTTTTACATTGAAAGATTAATAGAAACTCTACATATGTTAATTTTTTTATAGAACC
TGACTCAAATCAAGGTACTCTCCATTTTATTGCCTTACCTGAATCAGTCCTTTTTGGTTGGTAATAGATTTTTTT
ATACACCCACGTTTGATTTAAAAGTAAATTCTAGTTCTTAAGCACTTTTAACAAATCCAGAAGCACATTTTTCTG
CACAAACAAGTTACAAAGTTCAAAAGTGTTTCTTGTGCATTAGCTTTGAGATTCAGTTTTTAACTTTGTAAACCA
CATCTGAGAGACTTGTCATTTCTACATTGTGTGTGTTTAATTTCTTTTGATTCCATTTTGGTTAAGAGAGCAGTA
AATAGATTTTCTGGTATTCTTGTTCACTTGATTACATTTGTATAAAGTTCTGATTGCCAGTTGCTCAGATAACAA
GTGACAAGGCAGAATTCTTTAAATCAGTAAAGTTCCTTAAGCCTAAGGCTAAATCTTGAATACATTGTTGAATTC
TTTAATATCCTGATGGCAAGCAGACTGATAGCTGCACATTTGGCATGCTTTGTTTAATGGATTTTATTTTTAATT
GCAGATTTATTTGGCAATGTACAGTAAATTTTGTAAACTTGCATCAAGTTTATGAATAAAGAACCATTT

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FIGURE 4559

AGTGCGCGCCGGCCGGGCAACCCTATGCTGGCGTAATCGGGTTCCTCCGAGCCGCCGTAGGACTGGTTCCGGCGG
GCTGGTGAGGAATGGAGCCGGTAGGCTGCTGCGGCGAGTGCCGCGGCTCCTCCGTAGACCCGCGGAGCACCTTCG
TGTTGAGTAACCTGGCGGAGGTGGTGGAGCGTGTGCTCACCTTCCTGCCCGCCAAGGCGTTGCTGCGGGTGGCCT
GCGTGTGCCGCTTATGGAGGGAGTGTGTGCGCAGAGTATTGCGGACCCATCGGAGCGTAACCTGGATCTCCGCAG
GCCTGGCGGAGGCCGGCCACCTGGAGGGGCATTGCTTGGTTCGCGTGGTAGCAGAGGAGCTTGAGAATGTTCGCA
TCTTACCACATACAGTTCTTTACATGGCTGATTCAGAAACTTTCATTAGTCTGGAAGAGTGTCGTGGCCATAAGA
GAGCAAGGAAAAGAACTAGTATGGAAACAGCACTTGCCCTTGAGAAGCTATTCCCCAAACAATGCCAAGTCCTTG
GGATTGTGACCCCAGGAATTGTAGTGACTCCAATGGGATCAGGTAGCAATCGACCTCAGGAAATAGAAATTGGAG
AATCTGGTTTTGCTTTATTATTCCCTCAAATTGAAGGAATAAAAATACAACCCTTTCATTTTATTAAGGATCCAA
AGAATTTAACATTAGAAAGACATCAACTCACTGAAGTAGGTCTTTTAGATAACCCTGAACTTCGTGTGGTCCTTG
TCTTTGGTTATAATTGCTGTAAGGTGGGAGCCAGTAATTATCTGCAGCAAGTAGTCAGCACTTTCAGTGATATGA
ATATCATCTTGGCTGGAGGCCAGGTGGACAACCTGTCATCACTGACTTCTGAAAAGTATGTCTTGTGTGCTTCTG
ATTTCGTCTGTGAATGAAGGGAAATGGTCTCAGGTTTTGTCACTTTGGGGTTAACAATTTAAAAAACGTGTTTAA
AGAATTATTAAGATAATAGTTCATTCCATTTTGTAGTAGACATTGGCTAAGGGGCTTACTGAACATAATTCTGCT
TACGGTTGAATAATTACATTTTTATATATATTGTCCTTCAAGAACTTCCTTGAGTCACATTCTCCTTAAAATTTG
ACATTGCCTGTTGATCTTTCCTTTGACAGATGTGGTACTCTGTGTGACCTCAATGTGTCACCTCCTTTCTAGTTT
CCTCCTTTAAAGGAAACACATGGTTAGAGTGTATCTTTATGGCAAAACTTCTCAGAGCTTCTAATATGCCCAGTG
CTGTGGAAATCTGGAAGGAGAATAGCATTACCTGTGACAGTTCCCAAATGTGTTTGGTCACAAAACTTTTTTCCA
CAGAATGTCTTGCAAGTCGTACTGGTTTTTGGAAATTCTGTATTAGATCTTTTGAAAGGCTTTTTCAAGCTTAAA
AATTGTGGATCTTTTTTGTTACTAAGGCTTTTGCTTTCAAAGATAAAAATATTTGCTCTTC

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FIGURE 4560

AGCATTAGGTGACTGGCTGAGGCGGCGCCAGTTGGCCGGGCACGGGGCTGCTGTAAGGCCGAGGTTGCGGCGGAA
GCGGAGACCATGTTCCGAGCGGCGGCTCCGGGGCAGCTCCGGCGGGCGGCCTCATTGCTACGATTTCAGAGTACC
CTGGTAATAGCTGAGCATGCAAATGATTCCCTAGCACCCATTACTTTAAATACCATTACTGCAGCCACACGCCTT
GGAGGTGAAGTGTCCTGCTTAGTAGCTGGAACCAAATGTGACAAGGTGGCACAAGATCTCTGTAAAGTAGCAGGC
ATAGCAAAAGTTCTGGTGGCTCAGCATGATGTGTACAAAGGCCTACTTCCAGAGGAACTGACACCATTGATTTTG
GCAACTCAGAAGCAGTTCAATTACACACACATCTGTGCTGGAGCATCTGCCTTCGGAAAGAACCTTTTGCCCAGA
GTAGCAGCCAAACTTGAGGTTGCCCCGATTTCTGACATCATTGCAATCAAGTCACCTGACACATTTGTGAGAACT
ATTTATGCAGGAAATGCTCTATGTACAGTGAAGTGTGATGAGAAAGTGAAAGTGTTTTCTGTCCGTGGAACATCC
TTTGATGCTGCAGCAACAAGTGGCGGTAGTGCCAGTTCAGAAAAGGCATCAAGTACTTCACCAGTGGAAATATCA
GAGTGGCTTGACCAGAAATTAACAAAAAGTGATCGACCAGAGCTAACAGGTGCCAAAGTGGTGGTATCTGGTGGT
CGAGGCTTGAAGAGTGGAGAGAACTTTAAGTTGTTATATGACTTGGCAGATCAACTACATGCTGCAGTTGGTGCT
TCCCGTGCTGCTGTTGATGCTGGCTTTGTTCCCAATGACATGCAAGTTGGACAGACGGGAAAAATAGTAGCACCA
GAACTTTATATTGCTGTTGGAATATCTGGAGCCATCCAACATTTAGCTGGGATGAAAGACAGCAAGACAATTGTG
GCAATTAATAAAGACCCAGAAGCTCCAATTTTCCAAGTGGCAGATTATGGAATAGTTGCAGATTTATTTAAGGTA
GTTCCTGAAATGACTGAGATATTGAAGAAAAAATGAATCAGGATCATGCCTTAAAAAGAAAACTTTTGTTAAAGT
ATTCCACTGAAATCACAGATATTTGTGGGTATTATAACAATCATTGGAAAGCATGGAGAGCTACATTTCATAATT
TGAGGGAAAATTTCTAACAGATGCCAGAATGCTTGTTTATGGGATTGCTGTGTTTCCTTTTAATTATTTGTGGTT
CCAAACAATTATTGTTTGAACTTTTTAAATTCTGTACTAAAATCTATAATAAAGCTTTTCCACAGCTTTAAAACT
ATCAGAAATATGCCTAGCCTCTAGAGAAAATTGAAGAAAAGGAGTAAAAATTTTGTTTATTT

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FIGURE 4561A

CAAGATGGCGGCCAAGGTGGCGAAGCAGCAGCCGCGGCGGCGGCGGCGGCTGGAGTGAGCGTCCGACTCGCCGCG
CCGAACGAGGTCCCGGTGTAGGGCCGCGCGCCGTGGCCGCGTCCCACTCCTCAGGCCGGGGCGCACGTCGGCTCC
CACGCTTAGCCAGCTCCCGGTGGTTTCCTAGAAACATGATTGTTTATTGGCATTGATCTCACAGTCTGGTGAGGA
CTTCTTTACTGATAATGTCAAGTTCAGGTTATCCTCCCAACCAAGGAGCATTCAGCACAGAACAAAGTCGTTATC
CTCCTCACTCTGTCCAGTATACATTTCCCAACACCCGCCACCAGCAGGAGTTCGCAGTCCCTGATTATCGTTCCT
CTCATCTTGAAGTGAGTCAGGCATCACAGCTTTTGCAGCAACAGCAGCAGCAACAGCTTCGAAGGCGACCTTCCT
TGCTTTCAGAATTTCACCCAGGTTCTGACAGGCCTCAAGAAAGGAGAACTAGTTATGAACCGTTTCATCCAGGCC
CATCCCCAGTGGATCATGATTCACTGGAATCGAAGCGACCACGTCTGGAACAGGTTTCTGATTCTCATTTTCAGC
GTGTCAGTGCTGCGGTTTTGCCTTTAGTGCACCCGCTGCCAGAAGGGCTGAGGGCTTCTGCAGATGCTAAGAAGG
ATCCAGCATTCGGAGGCAAACATGAAGCTCCATCCTCTCCAATTTCGGGGCAACCATGTGGAGATGATCAAAATG
CTTCACCTTCAAAACTCTCAAAGGAAGAGTTAATACAGAGTATGGATCGTGTAGATCGAGAAATTGCAAAAGTAG
AACAGCAGATCCTTAAACTGAAAAAGAAACAACAACAGCTTGAAGAAGAGGCAGCTAAACCTCCTGAGCCTGAGA
AGCCCGTGTCCCCTCCTCCTGTGGAGCAGAAACACCGCAGTATTGTCCAAATTATTTATGATGAGAATCGGAAAA
AAGCAGAAGAAGCTCATAAAATTTTTGAAGGTCTTGGCCCAAAAGTTGAACTGCCACTGTATAACCAGCCATCAG
ATACCAAGGTGTACCATGAGAACATCAAGACAAACCAGGTGATGAGGAAAAAACTCATTTTATTTTTTAAAAGAA
GAAATCATGCAAGAAAACAAAGGGAACAAAAAATCTGCCAGCGTTATGATCAGCTCATGGAGGCATGGGAGAAAA
AAGTGGACAGAATAGAAAATAATCCTCGGAGGAAAGCTAAAGAAAGCAAAACAAGGGAATACTATGAAAAGCAGT
TTCCAGAAATTCGAAAACAAAGAGAACAGCAAGAAAGATTTCAGCGAGTTGGGCAGAGGGGAGCTGGTCTTTCAG
CCACCATTGCTAGGAGTGAGCATGAGATTTCTGAAATTATTGATGGGCTCTCTGAGCAGGAGAATAATGAGAAAC
AAATGCGGCAGCTCTCTGTGATTCCACCTATGATGTTTGATGCAGAACAAAGACGAGTCAAGTTCATTAACATGA
ATGGGCTTATGGAGGACCCTATGAAAGTGTATAAAGATAGGCAGTTTATGAATGTTTGGACTGACCATGAAAAGG
AGATCTTTAAGGACAAGTTTATCCAGCATCCAAAAAACTTTGGACTAATTGCATCATACTTGGAGAGGAAGAGTG
TTCCTGATTGTGTTTTGTATTACTATTTAACCAAGAAAAATGAGAATTATAAAGCCCTCGTCAGAAGGAATTATG
GGAAACGCAGAGGCAGAAACCAGCAAATTGCTCGACCCTCGCAAGAAGAAAAAGTAGAAGAAAAAGAAGAGGATA
AAGCAGAAAAAACAGAAAAAAAAGAAGAAGAAAAGAAAGATGAAGAGGAAAAAGATGAAAAAGAAGACTCCAAAG
AAAATACCAAGGAAAAGGACAAGATAGATGGTACAGCAGAAGAAACTGAGGAAAGAGAGCAAGCCACACCCCGGG
GGCGAAAGACTGCCAACAGTCAGGGCCGCCGTAAGGGCCGGATCACCAGGTCCATGACAAACGAAGCTGCAGCTG
CCAGTGCTGCAGCCGCAGCGGCTACTGAAGAGCCCCCACCACCTCTGCCACCGCCACCAGAACCCATTTCTACAG
AGCCTGTGGAGACCTCTCGATGGACAGAAGAAGAAATGGAAGTTGCTAAAAAAGGTCTAGTAGAACATGGTCGTA
ACTGGGCAGCAATTGCTAAAATGGTGGGAACGAAAAGTGAAGCTCAATGTAAAAACTTCTATTTTAACTATAAAA
GGCGACACAATCTTGACAACCTCTTACAGCAGCATAAACAGAAAACTTCACGAAAACCTCGTGAAGAGCGAGATG
TGTCTCAATGTGAAAGTGTCGCTTCCACTGTTTCTGCTCAGGAGGATGAAGATATTGAAGCCTCCAATGAAGAAG
AAAATCCAGAAGACAGCGAAGTTGAAGCTGTCAAGCCCAGCGAGGACAGTCCTGAAAATGCTACTTCTCGAGGAA
ACACAGAACCTGCGGTTGAGCTTGAGCCCACCACGGAAACTGCACCCAGTACATCTCCCTCCTTAGCAGTTCCAA
GTACAAAACCAGCTGAAGATGAAAGTGTGGAGACCCAGGTGAATGACAGCATCAGTGCTGAGACAGCAGAGCAGA
TGGATGTAGATCAGCAGGAGCACAGTGCTGAAGAGGGTTCTGTTTGTGATCCCCCACCCGCTACCAAAGCTGACT
CTGTGGACGTTGAAGTGAGGGTGCCAGAAAACCATGCATCTAAAGTTGAAGGTGATAATACCAAAGAAAGAGACT
TGGATAGAGCCAGTGAGAAGGTGGAACCTAGAGATGAAGATTTGGTGGTAGCTCAGCAAATAAATGCCCAAAGGC
CCGAGCCCCAGTCAGACAATGATTCCAGTGCCACGTGCAGCGCTGATGAGGATGTGGATGGAGAGCCAGAGAGGC
AGAGAATGTTTCCTATGGACTCAAAGCCTTCACTGTTAAACCCCACTGGATCTATACTCGTCTCATCTCCGTTAA
AACCAAATCCACTGGATCTGCCACAGCTTCAGCATCGAGCTGCTGTTATCCCACCAATGGTATCCTGCACCCCAT
GTAACATACCAATTGGAACCCCAGTGAGCGGCTATGCTCTCTACCAGCGACACATTAAAGCAATGCATGAGTCAG
CACTCCTGGAGGAGCAGCGGCAGAGACAAGAACAGATAGATTTGGAATGTAGAAGTTCTACAAGTCCATGTGGCA
CATCCAAGAGTCCAAACAGAGAGTGGGAAGTCCTTCAGCCTGCTCCACATCAAGTGATAACTAATCTCCCTGAAG
GCGTTCGGCTTCCGACAACTCGACCAACCAGGCCACCGCCCCCTCTCATCCCGTCATCCAAAACCACAGTGGCTT
CAGAAAAACCATCTTTTATAATGGGAGGCTCCATCTCACAGGGAACACCAGGCACTTATTTGACTTCTCATAATC
AGGCTTCCTACACTCAAGAAACACCCAAGCCGTCAGTGGGATCTATCTCTCTTGGACTGCCACGGCAACAGGAAT
CTGCCAAATCAGCTACTTTGCCCTACATCAAGCAGGAAGAATTTTCTCCCCGAAGCCAAAACTCACAACCTGAGG

FIGURE 4561B

GTCTGTTGGTCAGGGCCCAACATGAAGGTGTAGTCAGAGGTACCGCAGGAGCCATACAAGAAGGAAGTATAACTC
GGGGAACTCCAACCAGCAAAATTTCAGTGGAGAGCATTCCATCCCTACGGGGCTCTATCACTCAGGGCACCCCGG
CTCTGCCCCAGACTGGCATACCAACAGAGGCTTTGGTGAAGGGGTCCATTTCGAGAATGCCCATTGAAGACAGCA
GTCCTGAGAAAGGCAGAGAGGAAGCTGCATCCAAAGGCCATGTTATTTATGAAGGCAAAAGTGGACATATCTTGT
CATATGATAATATTAAGAATGCCCGAGAAGGGACTAGGAGTCCAAGAACAGCTCATGAAATCAGTTTAAAGAGAA
GCTATGAATCAGTGGAAGGAAATATAAAGCAAGGGATGTCAATGAGGGAGTCTCCTGTATCAGCACCGTTAGAGG
GGCTGATATGCCGAGCATTACCCAGGGGGAGTCCTCATTCTGACCTCAAAGAAAGGACTGTATTGTCTGGCTCCA
TAATGCAGGGGACACCAAGAGCAACAACTGAAAGCTTTGAAGATGGCCTTAAATATCCCAAACAAATTAAAAGGG
AAAGTCCTCCCATACGAGCATTTGAAGGTGCCATTACCAAAGGAAAACCATATGATGGCATCACCACCATCAAAG
AAATGGGGCGTTCCATTCATGAGATTCCAAGGCAAGATATTTTAACTCAGGAAAGTCGGAAAACTCCAGAAGTGG
TCCAGAGCACACGGCCGATAATTGAGGGTTCCATTTCCCAGGGCACACCAATAAAGTTTGACAACAACTCAGGTC
AATCTGCCATCAAACACAATGTCAAATCCTTAATCACGGGGCCTAGCAAACTATCCCGTGGAATGCCTCCGCTGG
AAATTGTGCCAGAGAACATAAAAGTGGTAGAACGGGGAAAATATGAGGATGTGAAAGCAGGCGAGACCGTGCGTT
CCCGGCACACGTCAGTGGTAAGCTCTGGCCCCTCCGTTCTTAGGTCCACACTGCATGAAGCTCCCAAAGCACAAC
TGAGCCCTGGGATTTATGATGACACCAGTGCACGGAGGACCCCTGTGAGTTATCAAAACACCATGTCCAGAGGCT
CACCCATGATGAACAGAACTTCTGATGTTACAATTTCTTCTAACAAGTCTACCAATCATGAAAGGAAATCGACAC
TGACCCCTACCCAGAGGGAAAGTATCCCAGCGAAGTCTCCAGTGCCTGGGGTGGACCCTGTCGTGAGCCACAGTC
CGTTTGATCCCCATCACAGAGGCAGCACTGCAGGCGAGGTTTATCGGAGCCACCTGCCCACGCACTTGGATCCAG
CCATGCCTTTTCACAGGGCTTTGGATCCTGCAGCGGCTGCTTACCTGTTTCAGAGACAGCTTTCACCAACTCCAG
GTTACCCAAGTCAGTATCAGCTTTACGCAATGGAGAACACAAGACAGACAATCTTAAATGATTACATTACCTCAC
AACAGATGCAAGTGAACTTGCGTCCAGATGTGGCCAGAGGACTCTCCCCAAGAGAGCAGCCACTGGGTCTCCCAT
ACCCAGCAACGAGAGGAATCATTGACCTGACCAATATGCCTCCAACAATTTTAGTGCCTCATCCAGGGGGAACAA
GCACTCCTCCCATGGACAGAATCACTTATATTCCTGGTACACAGATTACTTTCCCTCCCAGGCCGTACAACTCTG
CTTCCATGTCTCCAGGACACCCAACACACCTTGCAGCTGCTGCAAGTGCTGAGAGGGAACGGGAACGGGAGCGGG
AGAAGGAGCGGGAGCGGGAACGGATTGCTGCAGCTTCCTCCGACCTCTACCTGCGGCCAGGCTCAGAACAGCCTG
GCCGACCTGGCAGTCATGGATATGTTCGCTCCCCTTCCCCTTCAGTAAGAACTCAGGAGACCATGTTGCAACAGA
GACCCAGTGTTTTCCAAGGAACCAATGGAACCAGTGTAATCACACCTTTGGATCCAACTGCTCAGCTACGAATCA
TGCCACTGCCTGCTGGGGGCCCTTCAATAAGCCAAGGCCTGCCAGCCTCCCGTTACAACACTGCTGCGGATGCCC
TGGCTGCTCTTGTGGATGCTGCAGCTTCTGCACCCCAGATGGATGTGTCCAAAACAAAAGAGAGTAAGCATGAAG
CTGCCAGGTTAGAAGAAAATTTGAGAAGCAGGTCAGCAGCAGTTAGTGAACAGCAGCAGCTAGAGCAGAAAACCC
TGGAGGTGGAGAAGAGATCTGTTCAGTGTTTATACACTTCTTCAGCCTTTCCAAGTGGCAAGCCCCAGCCTCATT
CTTCAGTAGTTTATTCTGAGGCTGGGAAAGATAAAGGGCCTCCTCCAAAATCCAGATATGAGGAAGAGCTAAGGA
CCAGAGGGAAGACTACCATTACTGCAGCTAACTTCATAGACGTGATCATCACCCGGCAAATTGCCTCGGACAAGG
ATGCGAGGGAACGTGGCTCTCAAAGTTCAGACTCTTCTAGTAGCTTATCTTCTCACAGGTATGAAACACCTAGCG
ATGCTATTGAGGTGATAAGTCCTGCCAGCTCACCTGCGCCACCCCAGGAGAAACTGCAGACCTATCAGCCAGAGG
TTGTTAAGGCAAATCAAGCGGAAAATGATCCTACCAGACAATATGAAGGACCATTACATCACTATCGACCACAGC
AGGAATCACCATCTCCCCAACAACAGCTGCCCCCTTCTTCACAGGCAGAGGGAATGGGGCAAGTGCCCAGGACCC
ATCGGCTGATCACACTTGCTGATCACATCTGTCAAATTATCACACAAGATTTTGCTAGAAATCAAGTTTCCTCGC
AGACTCCCCAGCAGCCTCCTACTTCTACATTCCAGAACTCACCTTCTGCTTTGGTATCTACACCTGTGAGGACTA
AAACATCAAACCGTTACAGCCCAGAATCCCAGGCTCAGTCTGTCCATCATCAAAGACCAGGTTCAAGGGTCTCTC
CAGAAAATCTTGTGGACAAATCCAGGGGAAGTAGGCCTGGAAAATCCCCAGAGAGGAGTCACGTCTCTTCGGAGC
CCTACGAGCCCATCTCCCCACCCCAGGTTCCGGTTGTGCATGAGAAACAGGACAGCTTGCTGCTCTTGTCTCAGA
GGGGCGCAGAGCCTGCAGAGCAGAGGAATGATGCCCGCTCACCAGGGAGTATAAGCTACTTGCCTTCATTCTTCA
CCAAGCTTGAAAATACATCACCCATGGTTAAATCAAAGAAGCAGGAGATTTTTCGTAAGTTGAACTCCTCTGGTG
GAGGTGACTCTGATATGGCAGCTGCTCAGCCAGGAACTGAGATCTTTAATCTGCCAGCAGTTACTACGTCAGGCT
CAGTTAGCTCTAGAGGCCATTCTTTTGCTGATCCTGCCAGTAATCTTGGGCTGGAAGACATTATCAGGAAGGCTC
TCATGGGAAGCTTTGATGACAAAGTTGAGGATCATGGAGTTGTCATGTCCCAGCCTATGGGAGTAGTGCCTGGTA
CTGCCAACACCTCAGTTGTGACCAGTGGTGAGACACGAAGAGAGGAAGGGGACCCATCACCTCATTCAGGAGGAG

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FIGURE 4561C

TTTGCAAACCAAAGCTGATCAGCAAGTCAAACAGCAGGAAATCTAAGTCTCCTATACCTGGGCAAGGCTACTTAG
GAACGGAACGGCCCTCTTCAGTCTCCTCTGTACATTCAGAAGGGGATTACCATAGGCAGACGCCAGGGTGGGCCT
GGGAAGACAGGCCCTCTTCAACAGGCTCAACTCAGTTTCCTTATAACCCTCTGACTATGCGGATGCTCAGCAGTA
CTCCACCAACACCGATTGCATGTGCTCCCTCTGCGGTGAACCAAGCAGCTCCTCACCAACAGAACAGGATCTGGG
AGCGAGAGCCTGCCCCACTGCTCTCAGCACAGTACGAGACCCTGTCGGATAGTGATGACTGAACTGCACAAAGTG
AGGGGAACAGGGTGCAGGAGAGGGATCTCTAGTTTTTGTGGTTTAATTTTTAGTAGCAGGTCAAAAACCTGCCCT
CCTGTGACTTATTCCCTGAGACTTTTCAGGAGAGCCAGCCCACAGATGATGAAGAAATGATGGAAGTTCATTTGG
AGAGTCAAATGGGAAAAAAACAAACAAAAAACTGCCTTTGATACAGGCAATTCAGTGGACTATAATAATAGTGGA
GGGTTGAGATGTAGAGTTTTTAAAAAGTGAACAGTTGCTGTTCTTACATCTGTAAAGAAAACCATAATGTCTTTA
AATCACTCTTCTGTAAATAGATGACCTTTTTGCAGTGTA

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FIGURE 4562

CCATCATGGAAGCAATGTGGCTCCTGTGTGTGGCGTTGGCGGTCTTGGCATGGGGCTTCCTCTGGGTTTGGGACT
CCTCAGAACGAATGAAGAGTCGGGAGCAGGGAGGACGGCTGGGAGCCGAAAGCCGGACCCTGCTGGTCATAGCGC
ACCCTGACGATGAAGCCATGTTTTTTGCTCCCACAGTGCTAGGCTTGGCCCGCCTAAGGCACTGGGTGTACCTGC
TTTGCTTCTCTGCAGGAAATTACTACAATCAAGGAGAGACTCGTAAGAAAGAACTTTTGCAGAGCTGTGATGTTT
TGGGGATTCCACTCTCCAGTGTAATGATTATTGACAACAGGGATTTCCCAGATGACCCAGGCATGCAGTGGGACA
CAGAGCACGTGGCCAGAGTCCTCCTTCAGCACATAGAAGTGAATGGCATCAATCTGGTGGTGACTTTCGATGCAG
GGGGAGTAAGTGGCCACAGCAATCACATTGCTCTGTATGCAGCTGTGAGGGCCCTGCACTCAGAAGGGAAGTTAC
CTAAAGGGTGCTCTGTGCTCACGCTTCAGTCTGTGAATGTGCTGCGCAAGTACATCTCCCTTCTGGATCTGCCCT
TGTCTCTGCTTCATACGCAGGATGTCCTCTTCGTGCTCAACAGCAAAGAAGTGGCACAGGCCAAGAAAGCCATGT
CCTGCCACCGCAGCCAGCTCCTCTGGTTCCGCCGCCTCTACATTATCTTCTCCCGGTACATGAGAATCAACTCAC
TGAGCTTCCTCTGAAGCCTTGAAGGGTTTTCAGATCCAAGGAACAAAGGGGAAAATAGACAAAGGAGTGCAGAGG
ACCTGGCCTGGCACTGGCTTATTTACCTGAGCTCAAGGAGATCCCCGCTGGAGCAGCCTCTGCAAAAGGGAGCCC
ATGTAGGCCAGGGGCTGTCCAAACTCCAGCTTCTTCCCCTGGGAAAAAACCCAAAGAACCAAAAACAAACCACCC
CAAGGATAATAATAGCTACACTGCTAGCTTCTCAAGTTCTTGTGAAAAACAATTTACATAATGACACAGTAGATG
TGGAACACCTAGCCCAGTGCCTGGGCAGGTCCCTATTATCATAAATGAACATAAAAGTGCTCTAAAAACACTC

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FIGURE 4563

GGGCGGTTGGCTTTGTTGGGTGAGCTTGTTTGTGTCCCTGTGGGTGGACGTGGTTGGTGATTGGCAGGATCCTGG
TATCCGCTAACAGGTCAAA**ATG**CAGATCTTCGTGAAAACCCTTACCGGCAAGACCATCACCCTTGAGGTGGAGCC
CAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAGGATAAGGAAGGCATTCCCCCCGACCAGCAGAGGCTCAT
CTTTGCAGGCAAGCAGCTGGAAGATGGCCGTACTCTTTCTGACTACAACATCCAGAAGGAGTCGACCCTGCACCT
GGTCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGGCAAGACCATCACCCTGGAAGTGGA
GCCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAGGATAAAGAAGGCATCCCTCCCGACCAGCAGAGGCT
CATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTTCTGACTACAACATCCAGAAGGAGTCGACCCTGCA
CCTGGTCCTGCGTCTGAGAGGTGGTATGCAGATCTTCGTGAAGACCCTGACCGGCAAGACCATCACTCTGGAGGT
GGAGCCCAGTGACACCATCGAAAATGTGAAGGCCAAGATCCAAGATAAAGAAGGCATCCCCCCCGACCAGCAGAG
GCTCATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACTCTTTCTGACTACAACATCCAGAAAGAGTCGACCCT
GCACCTGGTCCTGCGCCTGAGGGGTGGCTGT**TAA**TTCTTCAGTCATGGCATTCGCAGTGCCCAGTGATGGCATTA
CTCTGCACTATAGCCATTTGCCCCAACTTAAGTTTAGAAATTACAAGTTTCAGTAATAGCTGAACCTGTTCAAAA
TGTTAATAAAGGTTTCGTTGCATGGTA

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FIGURE 4564

AGGTAGGCTCTCTAGGAATCTGGGAGTAGTAGCTGGGGGGCAAGAGCAAATAAAGAGCTCGAGCTTCTGTGGTCT
CTGGGGAGATGTTCCCGGGAAGCCTGTCTAGAGGGCGGAGGGCAGCTGTTGAGATGGCGTGGCTCCCCGGCTCCT
GCGCCCGCGTGGCTTTCGCGGCGGGCGCTGCGGCCCGGTATTGGACAGCCTGGCAGGGCAGCGCGGGGCCGAATC
CGGCTGCCGTGGCTGAGGCTCATGGATCACTCTTTTGTGGTAGGGCCACATCTGCCAGAGCCTGGAGTCTGCGAA
GGCCGGGACCCGGTTCCCCGGCCCACAGTGGGGGTGTGCAAACCCGAGAGAACTGGATTGCGTACCCACTGCAGA
GTGCTGAAGACGGGGTAGCCACGAGGTTGCAAATTCGTGAAGAATCAGCATCATGTTTGGCAGCTGAGTATTGGA
GCCAGGAGCCTGCCATGAGGTTTTGAGAACAGAGTGCTGTTTTAGAGCTGGCAGCAGCATCTCAGCCCAAGAGAA
GGTTATATTCCCAGAGGATGTCAGTCCCAAGGACCAGTAGCTGCCATCAGTTTGGATTCTGAAAACTAACTGGCA
TCAACACTGGGTGTAGAAACATGCTTGCCTTATGTATCAGAGGACATGCTCAGCAGATCCAAGAGATATATTTGG
CAACTTTTTCTAGAAAAGGCACATTGGGTATCATTCATTACATTCTTGAGT

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FIGURE 4565

TCCTATCCACCCTCCACTCCCCTGTCCCTTGGTGACTCATCCCTGAGCTTCCCAAGGAAGCCCCCACCCTCTGCC
CTTTCCTCCCGCCTTCCATGAGTGGAAAATCCACCTCCGCCCCCTATAGCAGGCCAGCCCCCTTCCTCCCCAGTC
TCCGACCCCATCCCCCAGCCGACCAGTTTCCTCTCCAGGACCAGGGAGCAATCACAGCTGCCCCGACCTTGGCTT
CCTCTGCTGGGTGGGATTGGGGGCTGGGCCCCCAAATGGGCCCCTGGCTTCCCCCTTCCTCTGGGCAGGGGACAG
AGAGACACAGGCTCGGGGAGCAGGACTGACTTCCTCTTGTCCCGGAATGAGCATGCCTGCCCTTTGCAAGCAGGT
TTGGGTCTCACGCAGAGGAAACCAAAAGCAATAAGAGGGAGGGAAGGCAGAGCAACCAATCAAGGGCAGGGTGAG
ACTCAAAACGAGCGGGCTCCCTGGGGAGCCAGACAGAGGCTGGGGGTGATGGCGGAGCTACAGCAGCTGCAGGAG
TTTGAGATCCCCACTGGCCGGGAGGCTCTGAGGGGCAACCACAGTGCCCTGCTGCGGGTCGCTGACTACTGCGAG
GACAACTATGTGCAGGCCACAGACAAGCGGAAGGCGCTGGAGGAGACCATGGCCTTCACTACCCAGGCACTGGCC
AGCGTGGCCTACCAGGTGGGCAACCTGGCCGGGCACACTCTGCGCATGTTGGACCTGCAGGGGGCCGCCCTGCGG
CAGGTGGAAGCCCGTGTAAGCACGCTGGGCCAGATGGTGAACATGCATATGGAGAAGGTGGCCCGAAGGGAGATC
GGCACCTTAGCCACTGTCCAGCGGCTGCCCCCCGGCCAGAAGGTCATCGCCCCAGAGAACCTACCCCCTCTCACG
CCCTACTGCAGGAGACCCCTCAACTTTGGCTGCCTGGACGACATTGGCCATGGGATCAAGGACCTCAGCACGCAG
CTGTCAAGAACAGGCACCCTGTCTCGAAAGAGCATCAAGGCCCCTGCCACACCCGCCTCCGCCACCTTGGGGAGA
CCACCCCGGATTCCCGAGCCAGTGCACCTGCCGGTGGTGCCCGACGGCAGACTCTCCGCCGCCTCCTCTGCGTTT
TCCCTGGCCTCGGCCGGCAGCGCCGAAGGTGTCGGTGGGGCCCCCACGCCCAAGGGGCAGGCAGCACCTCCAGCC
CCACCTCTCCCCAGCTCCTTGGACCCACCTCCTCCACCAGCAGCCGTCGAGGTGTTCCAGCGGCCTCCCACGCTG
GAGGAGTTGTCCCCACCCCCACCGGACGAAGAGCTGCCCCTGCCACTGGACCTGCCTCCTCCTCCACCCCTGGAT
GGAGATGAATTGGGGCTGCCTCCACCCCCACCAGGATTTGGGCCTGATGAGCCCAGCTGGGTGCCTGCCTCATAC
TTGGAGAAAGTGGTGACACTGTACCCATACACCAGCCAGAAGGACAATGAGCTCTCCTTCTCTGAGGGCACTGTC
ATCTGTGTCACTCGCCGCTACTCCGATGGCTGGTGCGAGGGCGTCAGCTCAGAGGGGACTGGATTCTTCCCTGGG
AACTATGTGGAGCCCAGCTGCTGACAGCCCAGGGCTCTCTGGGCAGCTGATGTCTGCACTGAGTGGGTTTCATGA
GCCCCAAGCCAAAACCAGCTCCAGTCACAGCTGGACTGGGTCTGCCCACCTCTTGGGCTGTGAGCTGTGTTCTGT
CCTTCCTCCCATCGGAGGGAGAAGGGGTCCTGGGGAGAGAGAATTTATCCAGAGGCCTGCTGCAGATGGGGAAGA
GCTGGAAACCAAGAAGTTTGTCAACAGAGGACCCCTACTCCATGCAGGACAGGGTCTCCTGCTGCAAGTCCCAAC
TTTGAATAAAACAGATGATGTCCTGTGACTGCCCCACAGAGATAAGGGGCCAGGAGGGATTGAAAGGCATCCCAG
TTCTAAGGCTGCTGCTAATTACAGCCCCCAACCTCCAACCCACCAGCTGACCTAGAAGCAGCATCTTCCCATTTC
CTCAGTACCCACAAAGTGCAGCCCACATTGGACCCCAGACACCCCTCTGCAGCCATTGACTGCAACTTGTTCTTT
TGCCCATT

FIGURE 4566

AGTATGTGTGGTTGGGGAATTCATGTGGAGGTCAGAGTGGAAGCAGGTGTGAGAGGGTCCAGCAGAAGGAAACATG
GCTGCCAAAGTGTTTGAGTCCATTGGCAAGTTTGGCCTGGCCTTAGCTGTTGCAGGAGGCGTGGTGAACTCTGC
CTTATATAATGTGGATGCTGGGCACAGAGCTGTCATCTTTGACCGATTCCGTGGAGTGCAGGACATTGTGGTAGG
GGAAGGGACTCATTTTCTCATCCCGTGGGTACAGAAACCAATTATCTTTGACTGCCGTTCTCGACCACGTAATGT
GCCAGTCATCACTGGTAGCAAAGATTTACAGAATGTCAACATCACACTGCGCATCCTCTTCCGGCCTGTCGCCAG
CCAGCTTCCTCGCATCTTCACCAGCATCGGAGAGGACTATGATGAGCGTGTGCTGCCGTCCATCACAACTGAGAT
CCTCAAGTCAGTGGTGGCTCGCTTTGATGCTGGAGAACTAATCACCCAGAGAGAGCTGGTCTCCAGGCAGGTGAG
CGACGACCTTACAGAGCGAGCCGCCACCTTTGGGCTCATCCTGGATGACGTGTCCTTGACACATCTGACCTTCGG
GAAGGAGTTCACAGAAGCGGTGGAAGCCAAACAGGTGGCTCAGCAGGAAGCAGAGAGGGCCAGATTTGTGGTGGA
AAAGGCTGAGCAACAGAAAAAGGCGGCCATCATCTCTGCTGAGGGCGACTCCAAGGCAGCTGAGCTGATTGCCAA
CTCACTGGCCACTGCAGGGGATGGCCTGATCGAGCTGCGCAAGCTGGAAGCTGCAGAGGACATCGCGTACCAGCT
CTCACGCTCTCGGAACATCACCTACCTGCCAGCGGGGCAGTCCGTGCTCCTCCAGCTGCCCCAGTGAGGGCCCAC
CCTGCCTGCACCTCCGCGGGCTGACTGGGCCACAGCCCCGATGATTCTTAACACAGCCTTCCTTCTGCTCCCACC
CCAGAAATCACTGTGAAATTTCATGATTGGCTTAAAGTGAAGGAAATAAAGGTAAAATCACTTCAGATCTCTAAT
TAGTCTATCAAATGAAACTCTTTCATTCTTCTCACATCCATCTACTTTTTTATCCACCTCCCTACCAAAAATTGC
CAAGTGCCTATGCAAACCAGCTTTAGGTCCCAATTCGGGGCCTGCTGGAGTTCCGGCCTGGGCACCAGCATTTGG
CAGCACGCAGGCGGGGCAGTATGTGATGGACTGGGGAGCACAGGTGTCTGCCTAGATCCACGTGTGGCCTCCGTC
CTGTCACTGATGGAAGGTTTGCGGATGAGGGCATGTGCGGCTGAACTGAGAAGGCAGGCCTCCGTCTTCCCAGCG
GTTCCTGTGCAGATGCTGCTGAAGAGAGGTGCCGGGGAGGGGCAGAGAGGAAGTGGTCTGTCTGTTACCATAAGT
CTGATTCTCTTTAACTGTGTGACCAGCGGAAACAGGTGTGTGTGAACTGGGCACAGATTGAAGAATCTGCCCCTG
TTGAGGTGGGTGGGCCTGACTGTTGCCCCCCAGGGTCCTAAAACTTGGATGGACTTGTATAGTGAGAGAGGAGGC
CTGGACCGAGATGTGAGTCCTGTTGAAGACTTCCTCTCTACCCCCCACCTTGGTCCCTCTCAGATACCCAGTGGA
ATTCCAACTTGAAGGATTGCATCCTGCTGGGGCTGAACATGCCTGCCAAAGACGTGTCCGACCTACGTTCCTGGC
CCCCTCATTCAGAGACTGCCCTTCTCACGGGCTCTATGCCTGCACTGGGAAGGAAACAAATGTGTATAAACTGCT
GTCAATAAATGACACCCAGACCTTCC

FIGURE 4567

AGATCGATCTAAGATGGCGACCGTCGAACCGGAAACCACCCCTACTCCTAATCCCCCGACTACAGAAAAGGAGAA
AACGGAATCTAATCAGGAGGTTGCTAACCCAGAACACTATATTAAACATCCCCTACAGAACAGATGGGCACTCTG
GTTTTTTAAAAATGATAAAAGCAAAACTTGGCAAGCAAACTTGTGGCTGATCTCCAAGTTTGATACTGTTGAAGA
CTTTTGGGCTCTGTACAACCATATCCAGTTGTCTAGTAATTTAATGCCTGGCTGTGACTACTCACTTTTTAAGGA
TGGTATTGAGCCTATGTGGGAAGATGAGAAAAACAAACGGGGAGGACGATGGCTAATTACATTGAACAAACAGCA
GAGACGAAGTGACCTCGATCGCTTTTGGCTAGAGACACTTCTGTGCCTTATTGGAGAATCTTTTGATGACTACAG
TGATGATGTATGTGGCGCTGTTGTTAATGTTAGAGCTAAAGGTGATAAGATAGCAATATGGACTACTGAATGTGA
AAACAGAGAAGCTGTTACACATATAGGGAGGGTATACAAGGAAAGGTTAGGACTTCCTCCAAAGATAGTGATTGG
TTATCAGTCCCACGCAGACACAGCTACTAAGAGCGGCTCCACCACTAAAAATAGGTTTGTTGTTTAAGAAGACAC
CTTCTGAGTATTCTCATAGGAGACTGCGTCAAGCAATCGAGATTTGGGAGCTGAACCAAAGCCTCTTCAAAAAGC
AGAGTGGACTGCATTTAAATTTGATTTCCATCTAAATGTTACTCAGATATAAGAGAAGTCTCATTCGCCTTTGTC
TTGTACTTCTGTGTTCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGCTAGAGTTTACACTATCCCAATCAAAGAA
TTACAGTACACATCTCCAGAATCCATAAATGTGTTCCTGGCCCACTCTGTAATAGTTCAGTAGAATTACCATTAA
TTACATACAGATTTTACCTATCCACAATAGTCAGAAAACAACTTGGCATTTCTATACTTTACAGGAAAAAAAATT
CTGTTGTTCCATTTTATGCAGAAGCATATTTTGCTGGTTTGAAAGATTATGATGCATACAGTTTTCTAGCAATTT
TCTTTGTTTCTTTTTACAGCATTGTCTTTGCTGTACTCTTGCTGATGGCTGCTAGATTTTAATTTATTTGTTTCC
CTACTTGATAATATTAGTGATTCTGATTTCAGTTTTTCATTTGTTTTGCTTTTGTTTTTTTCCTCATGTAACATT
GGTGAAGGATCCAGGAATATGACACAAAGGTGGAATAAACATTAATTTTGTGCATTCTTTGGTAATTTTTTTTGT
TTTTTGTAACTACAAAGCTTTGCTACAAATTTATGCATTTCATTCAAATCAGTGATCTATGTTTGTGTGATTTCC
TAAACATAATTGTGGATTATAAAAAATGTAACATCATAATTACATTCCTAACTAGAATTAGTATGTCTGTTTTTG
TATCTTTATGCTGTATTTTAACACTTTGTATTACTTAGGTTATTTTGCTTTGGTTAAAAATGGCTCAAGTAGAAA
AGCAGTCCCATTCATATTAAAACAGTGTACAAAACTGTAAATAAAATGTGTACAGTGAATTGTCTTT

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FIGURE 4568

GAAACCCAGGGAGGGGAGGGGAGGAGAAGGGAGTAATGGGGAGGAGGCCGCGCGGGGTGGGGTCTGGCGGTACGC
GCTGGCTGCGTCGACGTGCTGACGCCATGACGCCCCGGCTGGTGTGTGTCGGTGTGTATGTGTGTGTGTGAGTGT
GCGCGCTCCGAGTGTGTGTGTATTTGTGTATCGGCGGTCCCGCAGGTCCCGGATGTTGCGGACAGTATGAGGCAA
GCGCAGGGGGACGGGGACCAGCAGCTGTCGCCGCCGCTCTCAGGGTGAAGAGGGAACAGAAATCTTTGCCCCCTG
ACTTTGGAAATCTCGTTTAACCTTCAAACTGGCGATGTCAAGGGTTCCAAGTCCTCCACCTCCGGCAGAAATGTC
GAGTGGCCCCGTAGCTGAGAGTTGGTGCTACACACAGATCAAGGTAGTGAAATTCTCCTACATGTGGACCATCAA
TAACTTTAGCTTTTGCCGGGAGGAAATGGGTGAAGTCATTAAAAGTTCTACATTTTCATCAGGAGCAAATGATAA
ACTGAAATGGTGTTTGCGAGTAAACCCCAAAGGGTTAGATGAAGAAAGCAAAGATTACCTGTCACTTTACCTGTT
ACTGGTCAGCTGTCCAAAGAGTGAAGTTCGGGCAAAATTCAAATTCTCCATCCTGAATGCCAAGGGAGAAGAAAC
CAAAGCTATGGAGAGTCAACGGGCATATAGGTTTGTGCAAGGCAAAGACTGGGGATTCAAGAAATTCATCCGTAG
AGATTTTCTTTTGGATGAGGCCAACGGGCTTCTCCCTGATGACAAGCTTACCCTCTTCTGCGAGGTGAGTGTTGT
GCAAGATTCTGTCAACATTTCTGGCCAGAATACCATGAACATGGTAAAGGTTCCTGAGTGCCGGCTGGCAGATGA
GTTAGGAGGACTGTGGGAGAATTCCCGGTTCACAGACTGCTGCTTGTGTGTTGCCGGCCAGGAATTCCAGGCTCA
CAAGGCTATCTTAGCAGCTCGTTCTCCGGTTTTTAGTGCCATGTTTGAACATGAAATGGAGGAGAGCAAAAAGAA
TCGAGTTGAAATCAATGATGTGGAGCCTGAAGTTTTTAAGGAAATGATGTGCTTCATTTACACGGGGAAGGCTCC
AAACCTCGACAAAATGGCTGATGATTTGCTGGCAGCTGCTGACAAGTATGCCCTGGAGCGCTTAAAGGTCATGTG
TGAGGATGCCCTCTGCAGTAACCTGTCCGTGGAGAACGCTGCAGAAATTCTCATCCTGGCCGACCTCCACAGTGC
AGATCAGTTGAAAACTCAGGCAGTGGATTTCATCAACTATCATGCTTCGGATGTCTTGGAGACCTCTGGGTGGAA
GTCAATGGTGGTGTCACATCCCCACTTGGTGGCTGAGGCATACCGCTCTCTGGCTTCAGCACAGTGCCCTTTTCT
GGGACCCCCACGCAAACGCCTGAAGCAATCCTAAGATCCTGCTTGTTGTAAGACTCCGTTTAATTTCCAGAAGCA
GCAGCCACTGTTGCTGCCACTGACCACCAGGTAGACAGCGCAATCTGTGGAGCTTTTACTCTGTTGTGAGGGGAA
GAGACTGCATTGTGGCCCCAGACTTTTAAAACAGCACTAAATAACTTGGGGGAAACGGGGGGAGGGAAAATGAAA
TGAAAACCCTGTTGCTGCGTCACTGTGTTCCCTTTGGCCTGGCTGAGTTTGATACTGTGGGGATTCAGTTTAGGC
GCTGGCCCGAGGATATCCCAGCGGTGGTACTTCGGAGACACCTGTCTGCATCTGACTGAGCAGAACAAATCGTCA
GGTGCCTGGAGCAAAAAGG

FIGURE 4569

GATGTCCGGCTGGAGCTGTCGCCTCCGCCGCCGCTGCTGCCGGTGCCGGTTGTGAGCGGGTCTCCAGTCGGCTCC
TCTGGGCGTCTC**ATG**GCCTCTAGCAGCTCCCTGGTGCCCGACCGGCTGCGCCTGCCGCTCTGCTTCCTGGGTGTC
TTTGTCTGCTATTTTTACTATGGGATCCTGCAGGAAAAGATAACAAGAGGAAAGTATGGGGAAGGAGCCAAGCAG
GAGACGTTCACCTTTGCCTTAACTTTGGTCTTCATTCAATGTGTGATCAATGCTGTGTTTGCCAAGATCTTGATC
CAGTTTTTTGACACTGCCAGGGTGGATCGTACCCGGAGCTGGCTCTATGCTGCCTGTTCTATCTCCTATCTGGGT
GCCATGGTCTCCAGCAATTCAGCACTACAGTTTGTCAACTACCCAACTCAGGTCCTTGGTAAATCCTGCAAGCCA
ATCCCAGTCATGCTCCTTGGGGTGACCCTCTTGAAGAAGAAGTACCCGTTGGCCAAGTACCTGTGTGTGCTGTTA
ATTGTGGCTGGAGTGGCCCTTTTCATGTACAAACCCAAGAAAGTTGTTGGGATAGAAGAACACACAGTCGGCTAT
GGAGAGCTACTCTTGCTATTATCGCTGACCCTGGATGGACTGACTGGTGTTTCCCAGGACCACATGCGGGCTCAT
TACCAAACAGGCTCCAACCACATGATGCTGAACATCAACCTTTGGTCGACATTGCTGCTGGGAATGGGAATCCTG
TTCACTGGGGAGCTCTGGGAGTTCTTGAGCTTTGCTGAAAGGTACCCTGCCATCATCTATAACATCCTGCTCTTT
GGGCTGACCAGTGCCCTGGGTCAGAGCTTCATCTTTATGACGGTTGTGTATTTTGGTCCCCTGACCTGCTCCATC
ATCACTACAACTCGAAAGTTCTTCACAATTTTGGCCTCTGTGATCCTCTTCGCCAATCCCATCAGCCCCATGCAG
TGGGTGGGCACTGTGCTTGTGTTCCTGGGTCTTGGTCTTGATGCCAAGTTTGGGAAAGGAGCTAAGAAGACATCC
CAC**TAG**GAAGAGAGAGACTACCTCCACATCAAGAATATTTAAGTTATTATCTCAAACAGTGACATCTCTTGGGAA
AATGGACTTAATAGGAATATGGGACTGAGTTCCAGTCTTTTTTAATAAAATAAAATCAAGC

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FIGURE 4570

GCAGCCGGGAGAGCCATGGCGGGGGCCGCAGCGGGCGGCAGAGGCGGAGGTGCCTGGGGGCCGGGGCGCGGAGGG
GCCGGGGGGCTCCGGCGGGGCTGCTCTCCCCCAGCCCCCGCCGGCTCCCCCCGGGCTGGGCTGCAGCCGCTCAGG
GCCACGATCCCCTTCCAGCTGCAGCAGCCGCACCAGCGCCGGGACGGGGGTGGCCGTGCAGCCAGCGTCCCATGC
TCGGTGGCCCCAGAAAAGTCAGTGTGTAGGCCTCAGCCACTTCAGGTCCGGCGTACATTCTCCCTGGACACCATC
CTCAGCTCCTACCTTCTGGGCCAGTGGCCACGAGATGCTGATGGGGCCTTCACCTGCTGCACCAATGACAAGGCC
ACCCAGACGCCCCTGTCCTGGCAAGAGCTAGAAGGTGAGCGTGCCAGTTCCTGTGCACACAAGCGCTCAGCATCC
TGGGGCAGCACAGACCACCGAAAAGAGATTTCCAAGTTGAAGCAACAACTGCAGAGGACGAAGCTGAGCCGCAGT
GGGAAAGAGAAGGAGCGAGGTTCACCACTCCTAGGGGACCACGCAGTGCGGGGAGCACTGAGGGCGTCCCCTCCC
AGCTTCCCCTCAGGGTCCCCTGTCTTGCGACTCAGCCCCTGCCTGCACAGGAGCCTGGAAGGGCTCAACCAAGAG
CTGGAGGAGGTATTTGTGAAGGAGCAGGGAGAAGAGGAGCTGCTGAGGATCCTTGATATCCCTGATGGGCACCGG
GCCCCAGCTCCTCCCCAGAGTGGCAGCTGTGATCATCCCCTCCTCCTCCTGGAGCCTGGCAACCTTGCCAGCTCT
CCTTCCATGTCCTTGGCATCTCCCCAGCCTTGTGGCCTGGCCAGTCATGAGGAACATCGGGGTGCCGCCGAGGAG
CTGGCATCCACCCCCAACGACAAAGCCTCCTCTCCAGGACACCCAGCCTTTCTTGAAGATGGCAGCCCATCTCCA
GTCCTTGCCTTTGCTGCCTCCCCTCGACCTAATCATAGCTACATCTTCAAACGGGAGCCCCCAGAAGGCTGTGAG
AAAGTGCGTGTGTTTGAAGAAGCCACGTCTCCAGGTCCTGACCTGGCCTTCCTGACTTCCTGTCCTGACAAGAAC
AAAGTCCATTTCAACCCGACTGGCTCAGCCTTCTGCCCCGTCAACCTGATGAAGCCCCTCTTCCCCGGCATGGGC
TTCATCTTCCGTAACTGCCCCTCAAACCCGGGATCTCCCCTTCCCCCGGCCAGCCCCAGGCCACCACCTCGGAAG
GATCCGGAAGCCTCCAAGGCCTCCCCACTGCCATTCGAGCCATGGCAGCGCACCCCACCATCAGAAGAGCCTGTG
CTTTTCCAGAGCTCCCTGATGGTCTGAGGGTCCCACCCCTGCCCCACTTTACCATAGAGACCAGTGCCTTGGTGG
CAGGTCCCTCCCCAGGTCCCCTGAGATGGGGTATGGAGGGGCCCTTCCCTCTCGGCCTTCGAGCACTTTCTTTCA
CTTACTGTGTCAAAGCCCTGGGTCCTCTTTTTGATGGGCACCGGCCCCTCTGAACGTGATGGGACCTGCCTTCTC
CACTAGTAGCTGGGCAGCTCACAATTCACACCTGTGTACCTGCCACATCCCTCACTTGGTGGAAAACACCCAGAA
GGTCTTGAGTCCCCCACCCCTGGGTGTCAGTCCAAATGACTGTATAGGAGGCCCTTATTTTTGTCACAGAGCAAG
CTGGCCATGAACGAAGGAGAGAAGACGCCACAGATTTCCTTCCCTCTCCTCCAGGAGACCATAAGATAGATCCCC
CATCCTCTCAGCCCTATTCCCATGCCTCCCTCTCATTGGAGGAGCTGACCAAAGCAGCCCTAACGGGCCATAACA
CTTGACCAATTCAGCTGCTGGCAGAGGGAGGAAACAAGTGTTTTCCCAAGTGGCATTTTCATCTCGCTTTCACCC
TGACTAAAGATTGTCTTAAGTAGCAGCCCAGCCCGCCCAGCCCCAGGTGGGTAGTGGGGAGGAGAGCTGGCATTC
CTCCAGGTGGCAAATGGCGACTCTATACTCTCCGCCCGCCCCAGGGCTGGATGGATTAGAAAAATGCCTATTTTT
CTTGTATCGATGTAGAGACTCTATTTTCTCCCAAAGACACTATTTTTGCAGCTGTTTGAAGTTTGTATATTTTCC
GTACTGCAGAGCTTACACAAAATTGAAGAATGTTAATGTTCGAGTTTTCTTATCTTGTGTTTAGAGGTTGTTTTT
TGCAGATCTTGGTGTTAATAGACCAAATAAATAAATAAATATTCCCAGC

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FIGURE 4571

GCCGCTGCCCGAATCGGAACCGTCGGGCCGCAGCCGCCGGCA**ATG**CCGCGAAGGAAGAGGAATGCAGGCAGTAGT
TCAGATGGAACCGAAGATTCCGATTTTTCTACAGATCTCGAGCACACAGACAGTTCAGAAAGTGATGGCACATCC
CGACGATCTGCTCGAGTCACCCGCTCCTCAGCCAGGCTAAGCCAGAGTTCTCAAGATTCCAGTCCTGTTCGAAAT
CTGCAGTCTTTTGGCACTGAGGAGCCTGCTTACTCTACCAGAAGAGTGACCCGTAGTCAGCAGCAGCCTACCCCA
GTGACACCGAAAAAATACCCTCTTCGGCAGACTCGTTCATCTGGTTCAGAAACTGAGCAAGTGGTTGATTTTTCA
GATAGAGAAACTAAAAATACAGCTGATCATGATGAGTCACCGCCTCGAACTCCAACTGGAAATGCGCCTTCTTCT
GAGTCTGACATAGACATCTCCAGCCCCAATGTATCTCACGATGAGAGCATTGCCAAGGACATGTCCCTGAAGGAC
TCAGGCAGTGATCTCTCTCATCGCCCCAAGCGCCGTCGCTTCCATGAAAGCTACAACTTCAATATGAAGTGTCCT
ACACCAGGCTGTAACTCTCTAGGACACCTTACAGGAAAACATGAGAGACATTTCTCCATCTCAGGATGCCCACTG
TATCATAACCTCTCAGCTGACGAATGCAAGGTGAGAGCACAGAGCCGGGATAAGCAGATAGAAGAAAGGATGCTG
TCTCACAGGCAAGATGACAACAACAGGCATGCAACCAGGCACCAGGCACCAACGGAGAGACAGCTTCGATATAAG
GAAAAAGTGGCTGAACTCAGGAAGAAAAGAAATTCTGGACTGAGCAAAGAACAGAAAGAGAAATATATGGAACAC
AGACAGACCTATGGGAACACACGGGAACCTCTTTTAGAAAACCTGACAAGCGAGTATGACTTGGATCTTTTCCGA
AGAGCACAAGCCCGGGCTTCAGAGGATTTGGAGAAGTTAAGGCTGCAAGGCCAAATCACAGAGGGAAGCAACATG
ATTAAAACAATTGCTTTTGGCCGCTATGAGCTTGATACCTGGTATCATTCTCCATATCCTGAAGAATATGCACGG
CTGGGACGTCTCTATATGTGTGAATTCTGTTTAAAATATATGAAGAGCCAAACGATACTCCGCCGGCACATGGCC
AAATGTGTGTGGAAACACCCACCTGGTGATGAGATATATCGCAAAGGTTCAATCTCTGTGTTTGAAGTGGATGGC
AAGAAAAACAAGATCTACTGCCAAAACCTGTGCCTGTTGGCCAAACTTTTTCTGGACCACAAGACATTATATTAT
GATGTGGAGCCCTTCCTGTTCTATGTTATGACAGAGGCGGACAACACTGGCTGTCACCTGATTGGATATTTTTCT
AAGGAAAAGAATTCATTCCTCAACTACAACGTCTCCTGTATCCTTACTATGCCTCAGTACATGAGACAGGGCTAT
GGCAAGATGCTTATTGATTTCAGTTATTTGCTTTCCAAAGTCGAAGAAAAAGTTGGCTCCCCAGAACGTCCACTC
TCAGATCTGGGGCTTATAAGCTATCGCAGTTACTGGAAAGAAGTACTTCTCCGCTACCTGCATAATTTTCAAGGC
AAAGAGATTTCTATCAAAGAAATCAGTCAGGAGACGGCTGTGAATCCTGTGGACATTGTCAGCACTCTGCAAGCC
CTTCAGATGCTCAAATACTGGAAGGGAAAACACCTAGTTTTAAAGAGACAGGACCTGATTGATGAGTGGATAGCC
AAAGAGGCCAAAAGGTCCAACTCCAATAAAACCATGGATCCCAGCTGCTTAAAATGGACCCCTCCCAAGGGCACT
TAAAGTGACCTGTCATTCCGAGCCAGCGAACCCCAGCAGTAGGAATCCGTACCCTAGGGATCTGTCTGTCATTTC
TCTGTTGCTCTTGTGATTGGCAAGTACAGTATCCTTTGGGAAGGCCATCCCCCTCAGGACTGTCCTGGCTCCGAC
CTTTGTGTACACTGCAGACGCTGGTTCTGAGGAACTGTTGTTTCGGCCTCAGTGAGGTTGCCTGGATGGGATCTG
TATTAGACTTGAGTGCAGGTCTCTCAGCACTGACCCAAGGAGTTCTGTTATGGTACTGTACCTGTCCAGTCACTG
GTTCTCTCCTCATGTCCTCTCGCCCCATGAGGTTGTGTTGTGTCTTCTAAGCGTGGTACTAGTGCTTGCCACCTG
GTCACCAGACCTCCAAATATGGCTGCCACCACCAGGACCTTTCCAGTTACTCCTTATATGTGTGTTCTATGGAGG
GGCAGGGAAAAGGTGGCACTTGTGAGTGTGTGTGGATTGGCAGGGGGTCCATTCACTTTGGGTTCCATCTTGCTT
TAAATTTCTTCATTTTGATTAAGAGACCTCTTTTTGATCTGTATTGGGCTAACCAGAGCCAAATACTTTTGAAGA
GTTTCCCAGGGACTAGTCATGGTAATAGCATATAATTGATCTGAATGAGATGGAGAGAAGAATGAAGGGGTGGTG
GTTCTGGGTTTGATTTGAGTTCACCTGTGGGCAGTGGGCAGTGGGCAGTGTCTTGGTGAAAGGGAACGGATACTA
CTTTTTGCCTCACCGTAAAGTACTCACTAGTAAATATTTCCTTCTCTCTTTACTCCCACTTTTTACGTTTGCAGG
TGCCAAAGTAATGTCCACTTTTCCCTTTCATGCTGCATATTAACTGGTTAATTATACTGCAGAAACCTTTTCACC
TCCACTAGTCTGATACAGTACATCTGTACTTCCATATACCTTGCACTGATTTTGTCTGAGTGCCCTGGGAGAAGT
AGAAAATGATTGAAAGTGACTTCCGTATCTCAGCCCATGACTCAGCAAGGCAGAATGGCCACCCCTGCCAAAGTT
TGCTTCTCTTTTCAACAGTGCCTCACCCTCCCTCTAGGATTAAAGTGCTTCTGCCCTTCCACGAACTCCTCCTCC
ATTTCCTTTTTGGGATTTGTCACCATCCTTCTATTCTCTGGTCTTCTATTTTTGGTGTTGTTCAAGTGAAGGAAG
AGATGTTCCCTCTAATTTCTCTCTAGCCCATTATAACCTGCTATCTTGGGGCAACTTTTGATGTATGACATGTCA
CCCTTCCCAACTTGGTCTCCTCCAACATGCTGTCTTCATGTGGAGCCCTCACCACAATCCCTGACTCCGGTCATT
TGTGCCTTTCTCTTGTCATCTCTGTACACTACTTATATTCACTGTGGGTTGGGGGAGCTAATTTTAAGCATGTTC
AGTGGCAGCTCCCCTCCAGTTTCAGTGTCACTGTTAAAATTTATCAAAAAGCAACTTCACTAGGGGTTTTCTTAA
GGGATAAAGGCCTTTTACAGAAGCTAAACCCTTCCCCACATGTGGTAGAATGTGCTCTTCTATATCTACTCCTCA
ATAAAGCATGTTCTCTGCTC

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FIGURE 4572

GAATTAAACAACCACCATGTCGAGCAAAAAGGCAAAGACCAAGACCACCAAGAAGCGCCCTCAGCGTGCAACATC
CAATGTGTTTGCCATGTTTGACCAGTCACAGATTCAGGAGTTCAAAGAGGCCTTCAACATGATTGATCAGAACAG
AGATGGCTTCATCGACAAGGAAGATTTGCATGATATGCTTGCTTCTCTAGGGAAGAATCCCACTGATGCATACCT
TGATGCCATGATGAATGAGGCCCCAGGGCCCATCAATTTCACCATGTTCCTGACCATGTTTGGTGAGAAGTTAAA
TGGCACAGATCCTGAAGATGTCATCAGAAACGCCTTTGCTTGCTTTGATGAAGAAGCAACAGGCACCATTCAGGA
AGATTACCTAAGAGAGCTGCTGACAACCATGGGGGATCGGTTTACAGATGAGGAAGTGGATGAGCTGTACAGAGA
AGCACCTATTGACAAAAAGGGGAATTTCAATTACATCGAGTTCACACGCATCCTGAAACATGGAGCCAAAGACAA
AGATGACTGAAAGAACTTTAGCTAAAATCTTCCAGTTACATTGTCTTACTCTCTTTTACTTCTCAGACACTTCCC
CCACCCTCATAGAACCTGTTGCATGCAACTTAGTTTCACAGCTTTGCCTCTTCTTTTTGATGTATTTATTCCAGA
CCTTTCTGCCACTTAGCACTTGTATAATCAGACTGGAAATGGGGATGAGGGTGTAAATTGTATTGAAAAAGATCG
CGAATAAAAATCAACAAATGTGAAAGCCCAGAAAAATATATTCGTATTTCTGGTTTTGCTGGATTTTTACATTTT
TATATAATAAAAATGTTATTTTGAAATAAAGATTATGCTGACTCAAATGCAATGT

FIGURE 4573

GAATTAAACAACCACC**ATG**TCGAGCAAAAAGGCAAAGACCAAGACCACCAAGAAGCGCCCTCAGCGTGCAACATC
CAATGTGTTTGCCATGTTTGACCAGTCACAGATTCAGGAGTTCAAAGAGGCCTTCAACATGATTGATCAGAACAG
AGATGGCTTCATCGACAAGGAAGATTTGCATGATATGCTTGCTTCTCTAGGGAAGAATCCCACTGATGCATACCT
TGATGCCATGATGAATGAGGCCCCAGGGCCCATCAATTTCACCATGTTCCTGACCATGTTTGGTGAGAAGTTAAA
TGGCACAGATCCTGAAGATGTCATCAGAAACGCCTTTGCTTGCTTTGATGAAGAAGCAACAGGCACCATTCAGGA
AGATTACCTAAGAGAGCTGCTGACAACCATGGGGGATCGGTTTACAGATGAGGAAGTGGATGAGCTGTACAGAGA
AGCACCTATTGACAAAAAGGGGAATTTCAATTACATCGAGTTCACACGCATCCTGAAACATGGAGCCAAAGACAA
AGATGAC**TGA**AAGAACTT

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FIGURE 4574

GCGCCGAGCAGGAGCAGGGAACAAAGGAGCGGAGAGGGGAGGGGAGAGAGTTGGGCGAGGGAGAGCCCCCGGCCG
GCTGCCAGAAGATCCCGGCGGGAGGAAGCCCAAGTGTCACTTGAATTCCACCCAAGGAGCGGGCGCCTGGGATCA
GAGCGTCCTGTTTAGCAATAACGGCTGGAGCACGTCCTACAAGTTACGGGAGAGTCGGCTGTGAAGGAGACGTTC
GCTTATCCCCTGTGTCCCCGCTCCTGGCCCCTCCAGACCCCAGCCTTGCCTCGCGCTGGGAGGGGAGATCCAGAA
TGAAAGGCAAGAAAGGTATTGTTGCAGCATCTGGCAGTGAGACTGAGGATGAGGACAGCATGGACATTCCCTTGG
ACCTTTCTTCATCCGCTGGCTCAGGCAAGAGAAGGAGAAGGGGCAACCTACCCAAGGAGTCTGTGCAGATTCTTC
GGGATTGGCTGTATGAGCACCGTTACAATGCCTATCCTTCAGAGCAAGAAAAAGCGTTGCTGTCCCAGCAAACAC
ACCTGTCTACGCTACAGGTCTGTAACTGGTTCATCAACGCCCGCCGCAGGCTCCTCCCTGACATGCTGAGAAAGG
ATGGCAAAGATCCAAATCAGTTCACAATTTCCCGCCGTGGGGCCAAGATTTCTGAAACGAGCTCTGTGGAGTCCG
TGATGGGCATCAAAAACTTCATGCCAGCTCTAGAGGAGACCCCATTTCATTCCTGTACAGCTGGGCCAAACCCAA
CCCTAGGGAGGCCACTGTCTCCTAAGCCGTCATCCCCGGGATCAGTTTTGGCTCGTCCATCAGTGATCTGCCATA
CCACTGTGACTGCATTGAAAGATGTCCCTTTCTCTCTCTGCCAGTCGGTCGGTGTGGGACAAAACACAGATATAC
AGCAGATAGCGGCCAAAAACTTCACAGACACCTCTCTCATGTACCCAGAGGACACTTGTAAATCTGGACCAAGTA
CGAATACACAGAGTGGTCTTTTCAACACTCCTCCCCCTACTCCACCGGACCTCAACCAGGACTTCAGTGGATTTC
AGCTTCTAGTGGATGTTGCACTCAAACGGGCTGCAGAGATGGAGCTTCAGGCAAAACTTACAGCTTAACCCATTT
TCAAGCAAAACAGTTCTCAGAAATGTCATGATTGCCGGGGTGAAGGCAAGAGATGAATTGCATTATTTTATATAT
TTTTTATTAATATTTGCACATGGGATTGCTAAAACAGCTTCCTGTTACTGAGATGTCTTCAATGGAATACAGTCA
TTCCAAGAACTATAAACTTAAAGCTACTGTAGAAACAAAGGGTTTTCTTTTTTAAATGTTTCTTGGTAGATTATT
CATAATGTGAGATGGTTCCCAATATCATGTGATTTTTTTTTTCCTCCCCTTCCCTTTTTTTGTTATTTTTCAG
ACTGTGCAATACTTAGAGAACCTATAGCATCTTCTCATTCCCATGTGGAACAGGATGCCCACATACTGTCTAATT
AATAAATTTTCCATTTTTTTTCAAACAAGT

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FIGURE 4575

TCAGAAACCCTGATTTGAGCCAGACGTCCAAAGTCAAACCTCCGGGTGGACATTCCCCTCAGGTGAACCATCTGA
AAAGACCAGTCAGTGGAGTGGGGGACGCTCCAGGCACCAGCAATGGCGCAACTGTCTCTTCCACCAAAAGGCACA
AGTCCCTTTTTCAGTGCGCGAAATGTAGTTTTGCCACAGACTCGGGGCTCGAATTTCAGAGCCACATACCTAAGC
ACCAGGTGGACAGCTCCACAGCCCAATGTCTCCTCTGTGGTTTGTGCTACACCTCTGCCAGCTCCCTCAGCCGCC
ACCTCTTCATTGTCCACAAGGTGAGAGACCAGGAGGAGGAGGAGGAAGAGGAGGCGGCGGCAGCGGAGATGGCAG
TGGAGGTGGCAGAGCCAGAGGAGGGCTCCGGGGAGGAGGTGCCCATGGAGACTAGAGAGA**ATG**GACTGGAAGAAT
GTGCCGGTGAGCCTTTGTCGGCTGACCCAGAGGCGAGGAGATTGCTGGGCCCGGCCCCTGAGGACGACGGTGGCC
ACAATGATCACAGTCAACCACAGGCCTCTCAGGACCAGGACAGCCACGCACCATCCCCTCAGGTGTGACCGGAGA
CTTTGCAGTGTGCATGGTCAGGGGTGGTGCCGAAGCGTCTTCCACCTGCCGTGCGGACCGTGGAAAATAAAAGGC
TCTGCCCCCGGGGTGAGTGTGGCCGGTTGTACCCTGCAG**TAG**CGTCTGCCCTGAGCTGCCAGTGCTGGGTATCCC
CCAGCCCCAGGAAATGTGGGGTCGGCCGGGACCCTCACAGCTCTGAATTTGCTTCTGTTATTTACGGCTTTTTGC
TGCTTCTTGGTACCCCATCTCCTGTCTGTGTCCTTCCAACCCCAGGCTGCTTATGTGGCCCAACCCCAATGCTGT
CAACTAGGCTTGAACCCCACAGCGGCTGTGCTCTTCTGGGAGGTTCCCGCTTGCTGCCTTCAGCCAGGGCGCTCC
TCAGAGCCCTGTTTTCCTGCAGACACCAGCTCTCCTTCCTGCCTTTAGATCCTGAGAAGGAGGGAAATGAGGGGT
GCTGACACAGTCCCTCTGGGAGAGCTCTGCCTAGTCTGGTTTGGTGAGGCCCTTGATCACCTTGGCCCTCCTCCC
TGTCTTCTCTGATTCTTTTCCCTCAAAATAGTCCTGAGAACTAATTGTCACAGACATTGGAATATTTGTACTGCT
CTCGTGCCATTTGAGAGGCTGCTGCCCCAGGCAGGCCAGCCCCTACTCCTCTTGGCTACACTCATGTTGCTCAGA
CTATATTTCAAATAAAAAAATCTTCTCACC

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FIGURE 4576

ATGAAGGATCCCAAACAGATGATCCGAGACATGGAGAAATTGGATGAAATGGAGTTTAACCCAGTGCAACAGCCA
CAATTAAATGAGAAAGTACTGAAAGACAAGCGTGAGATGAAGGCATGGTACATAGTCCTGAAATTGCCCAGCGAG
GTCATGATGATGATGTTTTTAGCACCAGTGAAGATGATGGCTATCCTGAGGACGTGGATCAAGATAAGCATGATG
ACAGTACTGATGACAGTGACACCGACGGATCAGATTGAGAAAGTGTGCGCCATGATGATGAAGTCAGGTCTGAGT
GTACGGTTTGCAGATATGCCTGGAAAATCAAGGAAGAAAAAAACCATGAAGGAACTGACTCCTCTTCAAGCCACG
ATGCTTCGTATGGCAGGTCAAGAAATCCCTGAGGAGGGACGGGAAGTAGAGGAATTTTCAGAGGACAATGATGAA
GATGATTCTGATGACTCTAAAGCAGAAAAACAATCACAAAAACACAATCAAGAGGAACTGCATTCTGATGGCACA
TCCACTGCTTCTTCACAGCAGCAGGCTCCCCGGCAGTCTGTTCCTCCTTCTCAGGAGCTCCTCCTGAGACCACCT
GGAATGCCAGGACTCGGCCTTTACCCTGACTTTTACCTCCACGACCACCGACTTTTACTACCTCCCCCACGTCTA
CCTCCAAGTCTGCCCCCTGGTCCCCCTCCTCGGGAACCCCCACCAAGGATACCTCCCCCTGCACCTCCAGCTCCC
TTGCTGAACCCTGAGATTTTAAGTGCCCCACCCGGCTTGATTCAGCGATCCAAGGTAGATAATACAAGTGCAGCC
ACCGTTGAGAAGAAAGCCACAGCAACCGTCACTGCCAAACCACAGATCACTAATCCCAAGGCAGAGATTACTCGA
TTTGTGCCCAGTGCATTGAGAGTACGTCGGGAGAATAAAAGGGCTACTGCTGCTTCCCAAAGAAAGTCAGAGGAT
AATTCTGCTGTGCCTCTTGCCAAAGCAGCACCCAAATCTGGTCCTTCTGTTCCTGTCTCAGTACAAACTAAGGAT
GATGTCTATGAGGATTTCATGAAAGAGATGGAAGGGCTACTGTGA

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FIGURE 4577

CCTTTCTGCCCGTGGACGCCGCCGAAGAAGCATCGTTAAAGTCTCTCTTCACCCTGCCGTC**ATG**TCTAAGTCAGA
GTCTCCTAAAGAGCCCGAACAGCTGAGGAAGCTCTTCATTGGAGGGTTGAGCTTTGAAACAACTGATGAGAGCCT
GAGGAGCCATTTTGAGCAATGGGGAACGCTCACGGACTGTGTGGTAATGAGAGATCCAAACACCAAGCGCTCCAG
GGGCTTTGGGTTTGTCACATATGCCACTGTGGAGGAGGTGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGA
TGGAAGAGTTGTGGAACCAAAGAGAGCTGTCTCCAGAGAAGATTCTCAAAGACCAGGTGCCCACTTAACTGTGAA
AAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAGAACATCACCTAAGAGATTATTTTGAACAGTATGGAAA
AATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGA
CCATGACTCCGTGGATAAGATTGTCATTCAGAAATACCATACTGTGAATGGCCACAACTGTGAAGTTAGAAAAGC
CCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGGTTCTGGAAACTTTGGTGGTGG
TCGTGGAGGTGGTTTCGGTGGGAATGACAACTTCGGTCATGGAGGAAACTTCAGTGGTCGTGGTGGCTTTGGTGG
CAGCCGTGCTGGTGGTAGATATGGTGGCAGTGGGGATGGCTCTAATGGATTTGGTAATGATGGAAGCAATTTTGG
AGGTGGTGGAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAA
TTTTGGAGGCAGAAACTCTGGCCCCTATGGCGGTGGAGGCCAGTACTTTGCAAAACCACGAAACCAAGGTGGCTA
TGGCGGTTCCAGCAGCAGCAGTAGCTGTGTCAGTGGCAGAAGATTT**TAA**TTAGGAAACAAAGCTTAGCAGGAGAG
GAGAGCCAGAGAAGTGACAGGGAAGCCACAGGTTACAACAGATTTGTGAACTCAGCCAAGCACAGTGGTGGCAGG
GCCTAGCTGCTACAAAGAAGACATGTTTTAGACAAATACTCATGTGTATGGGCAAAAAACTCGAGGACTGTGTTT
GTGACTAATTGTATAACAGGTTATTTTAGTTTCTGTTCTGTGGAAAGTGTAAAGCATTCCAACAAAGCGTTTTAA
TGTAGATTTTTTTTTTTTGCACCCATGCTGTTGATTGCTAAATGTAATAGTCTGATCGTGACGCTGAATAAATGT
CTTTTTTTTTTTAATGTGCTGTGTAAAGTTAGTCTACTCTGAAGCCATCTTGGTAAATTTCCCCAACAGTGTGAA
GTTAGAATTCCTTCAGGGTGATGCCAGGTTCTATTTGGAATTTATATACAACCTGCTTGGGTGGAGAAGCCATTG
TCTTCGGAAACCTTGGTGTAGTTGAACTGATAGTTACTGTTGTGACCTGAAGTTCACCATTAAAAGGGATTACCC
AAACAAAGTCATGGAATGGTTATAAAAGTGATTGTTGGCACATCCTATGCAATATATCTAAATTGAATAATGGTA
CCAGATAAAATTATAGATGGGAATGAAGCTTGTGTATCATCCATTATCATGTGTAATCAATAAACAATTTAATTC
TCTTGAA

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FIGURE 4578

AAGTCTCTCTTCACCCTGCCGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCGAACAGCTGAGGAAGCTCTTCA
TTGGAGGGTTGAGCTTTGAAACAACTGATGAGAGCCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCACGGACT
GTGTGGTAATGAGAGATCCAAACACCAAGCGCTCCAGGGGCTTTGGGTTTGTCACATATGCCACTGTGGAGGAGG
TGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAAGAGAGCTGTCTCCAGAG
AAGATTCTCAAAGACCAGGTGCCCACTTAACTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAG
AACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTG
GCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGACCATGACTCCGTGGATAAGATTGTCATTCAGAAATACC
ATACTGTGAATGGCCACAACTGTGAAGTTAGAAAAGCCCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCC
AAAGAGGTCGAAGTGGTTCTGGAAACTTTGGTGGTGGTCGTGGAGGTGGTTTCGGTGGGAATGACAACTTCGGTC
ATGGAGGAAACTTCAGTGGTCGTGGTGGCTTTGGTGGCAGCTCTAATGGATTTGGTAATGATGGAAGCAATTTTG
GAGGTGGTGGAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAA
ATTTTGGAGGCAGAAACTCTGGCCCCTATGGCGGTGGAGGCCAGTACTTTGCAAAACCACGAAACCAAGGTGGC

FIGURE 4579

AGGGAAGTGGAACTTTCCATGCTGAGTGAAAACTAACCAAGTGGCAGTTGTGACTGAAAACACTGAAACCTACCA
CGTCCAGATTCACTGGATTGGGGGATAGAGGAACGGTCACAGCTAGGGAGAAAGAAGTGATACCGGAAAAGAAAA
CCTAAATGAAGAGAATGAGGATGACTGCACAGTAGATGGCCACCTCTACCTCCACAGAGGCAAAGTCAGCCTCGT
GGTGGAATTATTTTTTTCTTTATGATGGTTCCAAGGTAAAGGAAGAAGGCGATCCAACAAGAGCTGGCATTTGTT
ACTTTTATCCTTCCCAGACCCTGCTAGACCAACAGGAGTTGCTTTGTGGACAGATTGCTGGAGTTGTCCGCTGTG
TTTCTGACATTTCTGACTCTCCTCCTACTCTTGTTCGTCTGAGAAAACTGAAGTTTGCCATAAAAGTTGATGGAG
ATTACCTTTGGGTGCTGGGCTGTGCTGTGGAGCTCCCTGATGTCAGCTGCAAGCGGTTTCTGGATCAGCTAGTTG
GATTCTTTAATTTTTACAATGGACCTGTTTCCCTAGCTTATGAGAACTGTTCTCAGGAAGAACTGAGCACGGAGT
GGGACACCTTCATCGAGCAAATTCTGAAAAACACCAGTGATCTGCATAAGATTTTCAATTCCCTCTGGAACTTGG
ACCAAACTAAAGTGGAGCCCCTGTTGTTGCTGAAGGCAGCCCGCATTCTGCAGACCTGCCAGCGCTCGCCTCACA
TTCTCGCTGGCTGCATCCTCTATAAAGGACTGATTGTCAGCACCCAACTCCCGCCCTCCCTCACCGCCAAGGTCC
TGCTTCACCGAACAGCACCTCAGGAGCAGAGACTCCCTACGGGAGAGGATGCCCCGCAGGAACATGGAGCGGCAT
TGCCCCCGAATGTCCAGATTATCCCTGTTTTTGTGACCAAAGAGGAAGCCATTAGTCTCCACGAGTTCCCGGTGG
AACAGATGACAAGGTCTCTAGCATCTCCAGCAGGACTCCAGGATGGTTCAGCCCAGCACCATCCAAAGGGTGGGA
GCACATCTGCCCTGAAAGAAAACGCCACTGGCCATGTGGAATCCATGGCCTGGACCACCCCAGATCCCACATCCC
CTGACGAAGCTTGTCCAGATGGCAGGAAGGAGAACGGATGCTTGTCTGGCCATGATCTGGAGAGCATCAGGCCCG
CAGGACTGCACAACTCTGCCAGGGGTGAGGTTCTTGGCCTCAGCTCCTCCCTGGGGAAGGAACTAGTCTTTCTCC
AAGAAGAACTCGACTTGTCTGAAATCCACATTCCAGAGGCTCAGGAAGTGGAAATGGCCTCAGGTCATTTTGCCT
TCCTACATGTGCCTGTTCCAGATGGCAGGGCTCCTTACTGCAAGGCATCTCTCAGCGCCTCCAGCAGCCTGGAAC
CCACGCCTCCTGAGGACACAGCCATCAGCAGCTTGCGCCCTCCCTCTGCTCCTGAGATGCTGACCCAGCATGGAG
CCCAAGAGCAGCTCGAAGACCATCCTGGCCATAGCAGCCAAGCCCCCATTCCCAGAGCAGACCCTCTCCCCAGAA
GGACCCGCAGGCCCTTGTTATTGCCTCGCTTAGATCCAGGACAGAGAGGAAACAAGCTTCCCACGGGGGAACAAG
GCCTGGATGAGGATGTTGATGGGGTCTGTGAAAGCCACGCAGCCCCTGGTCTGGAATGCAGTTCAGGCTCAGCAA
ACTGTCAGGGTGCTGGCCCCTCTGCAGATGGAATCAGCTCCAGGCTGACACCAGCAGAGTCCTGCATGGGGCTCG
TGAGGATGAATCTCTACACTCACTGCGTCAAAGGGCTGGTGCTGTCCCTGCTGGCTGAGGAGCCGCTGCTGGGAG
ACAGCGCAGCCATAGAGGAAGTGTACCACAGCAGCCTGGCTTCACTGAATGGGCTGGAAGTCCACCTGAAAGAGA
CGCTGCCCAGGGATGAGGCAGCCTCCACGAGCAGCACCTACAACTTCACACATTACGACCGCATTCAGAGCTTGC
TGATGGCAAACCTGCCGCAGGTGGCCACCCCGCAGGATCGCCGCTTCCTCCAGGCCGTCAGCCTGATGCATAGCG
AATTTGCCCAGCTGCCCGCGCTTTATGAAATGACTGTCAGAAATGCCTCCACGGCTGTGTACGCCTGTTGCAACC
CCATCCAGGAGACATATTTCCAGCAGCTGGCACCTGCAGCACGGAGCTCCGGCTTCCCAAACCCTCAGGATGGCG
CCTTCAGCCTCTCCGGCAAAGCAAAGCAGAAGCTGCTGAAGCACGGGGTGAACTTGCTCTGAACTGCACCCAGGA
GGTGACTGGGAAGGAGAAAACCAGCAAAGGAAGCTCTGCCTTTTATAATTGAAAAGGCCCCTCTATTTTATTTTT
CTTGAAAACATTCCCTTTTTTAGGAACCAAATGATATTTGAGTTTTTGTTATTCCTTTTGCAGATTGGGATGTGT
TTTGGGGGCAGGGGTTAGTTCTTCAGGTCGGCAGACCCAGAGCACTTGATAAAGAACTGTATTTAATCGGTAGTG
TTGGGGCCGGGACGGGCTTGGCTCCCTCTCTGCCATACTGAGCCTGAGGTATTTCATATCTCCTGCTGTTCCATC
CCAGCTTGAATTGGTGCCACAAGCTTCCAAGTTGGCATTTTTTCTAGAACCTGATCGTCCACTAGCCCAGAGTGT
GTGTGTTCAACCCCCACACCAGGTGGTGGTAGGCGGTGTGACTGCACAGCGAGGTGCCGGATCTGTGAGCAGGCC
GACTCCACTCCCACGCCGCAGGTAGGTTTCTCCAGTGCGCTCTTGCTGGGAGGTCCGGATCGTTCCTGCAGGGAA
GCGGCAGCACACGGAGACCACTTGGTTGAATTCTGTTGGAACTCTACTCAAATCTAGGGGCGTCTTCTTTGGACC
CACAATGGGGGCAAGCCTTAATAATATGGAAGGGAGTTTGGGCTTTAGAGATCCCTTTATAAAAGCTCTGGGGGC
TGAGCCCTGAGAATTCAGTGACAACAGGACCAACCTGCGCTGCCTTTGACTACAAGTGGGCCGTGCAGCTGGTTC
CTCTCGAGCGAGTGTCCCTAAATAGGAGTTTACAAGATGTCTGGGGGTAAAAGCACTGTGCTTTTCAGTGGTGGC
TGCGTGAAAGGGAGCGACACTCAGCTGTGTGTTCCTGGGCTTGTGTGGTACTTAGAACCTCAGTTCTATTACGTT
ATAGTCAGACATTTTTTTGACAGTATGAGACAGACTGCAGGATGAAAATATTTGTCAAAATCTTAACTGAATGTT
TACTGGAAGTACTTGAGATTCCATTTGAGAGTTGTATTGTTAATAATTTCATGTCAGTGAACTGATATCTGATGT
TTATGATATGGTGTCTTTTTCTTGAAACAAGCTTCCAAGGGCTAGAAATAAAATAGCCAAAAAATGCTGGAGTTC
TGAGTAATTAAA

FIGURE 4580

GTCAGAGACCA**ATG**GCTGCGGCCGCAGCTGCGGCGCTGGAATCCTGGCAGGCGGCGGCTCCGCGGAAGAGGCGCT
CCGCGGCTCGACGGCCGCGGCGGAGGGAGGCGGCGCCCCGGGGGAGAGAGGCGGCGCCCCGGGGGAGAGAGGCGG
CGCCCCGGGGCCCCGAGGCGGAGTTCGAGTCTGACAGCGGAGTCGTGCTTCGTCGCATCTGGGAGGCTGAGAAGG
ACCTGTTTATCTCTGATTTCTGGAGTTCAGCACTAGAAACCATCAATAGATGTCTCACAAAACATCTGGAACAAC
TGAAGGCCCCTGTGGGGACTCTTTCAGACATCTTTGGAAACCTGCATCTTGACTCATTGCCAGAGGAGTCAGATG
TGGCCACTGATTCTATCCCAAGAGAGATCTTGGTCACAGGAACCTGCCATTTGAAGTGTGTGTGTTACGGCATTG
GGAACTTTGCCACCTGCATCGTAGCTAGAAACCAGCTAACGTTTTTGCTGCTTTTGTTGGAAAAGTGCCAGATTC
CCAGAAGTCACTGTTGGGTATATGACCCTCTGTTTAGCCAACTTGAAATTGAAGTCCTTAACACCCTTGGTGTGA
CTGTTCTCAGTGAGAACGAGGAAGGGAAACGGAGTATTCGCGGGGAGCCTACCATCTTTTACATGCTCCATTGTG
GGACGGCCTTGTACAACAATCTTTTATGGAGTAACTGGTCAGTAGATGCCCTTTCTAAGATGGTCATCATTGGGA
ACAGTTTCAAAGGACTTGAGGAGAGGTTGTTGGCAAGGATTCTGCAGAAAAATTATCCCTACATTGCAAAGATTT
TAAAAGGACTGGAGGAGCTTGAGTTTCCTCAGACTTCACAATACATGGACATATTTAATGATACCTCTGTCCACT
GGTTCCCTGTGCAAAAGCTAGAACAGCTCTCCATAGATATTTGGGAGTTTCGGGAAGAACCAGATTATCAGGACT
GTGAGGACCTTGAAATCATCAGGAACAAGAGAGAAGATCCTTCTGCTACTGAC**TGA**ACTCGTTGTGAGGTACTCA
GTGTTGGCTGAGGTAGAAGCTGCCAC

FIGURE 4581

CCGGCCACGGTGCTTCCGGGTTCTGGTGTAGGAGCGGCGTCTTCTCGCGCGGATGGTGAAGCTGAATTTGGTACG
CTGGACCCTCGGACAGACAGCAAGAGAGAGACAAGCCCGAGGCCTGACTTCTAGCACTCCTGAGTTTGAGCCCTA
TGAGCAGTGGAACCTAGGGACCACCAAGGATCCAGATATAATTCTTTCCTCAGTAATAGAAAAAAGAATCTGGGA
TCTAAGAAGATACCTACTCATTTTCTAAGTGACTGGCCATGTCATTGTCCCACTTATACCGGGATGGGGAAGGCC
GCATTGATGATGATGATGACGAGCGGGAGAACTTTGAGATCACTGACTGGGATCTCCAGAATGAGTTCAACCCCA
ACCGACAGCGCCACTGGCAGACCAAGGAAGAAGCCACCTACGGGGTGTGGGCAGAGCGAGACTCGGATGATGAGA
GGCCCAGCTTTGGAGGCAAACGGGCCCGTGACTACTCTGCGCCAGTCAACTTCATCAGCGCAGGGCTCAAGAAAG
GGGCAGCGGAGGAGGCAGAGTTGGAAGATTCTGATGACGAAGAGAAACCTGTTAAGCAGGACGACTTTCCTAAGG
ATTTTGGACCAAGGAAGCTAAAAACGGGTGGCAATTTTAAGCCCAGCCAGAAAGGTTTTGCAGGAGGAACCAAAT
CTTTCATGGACTTCGGCAGCTGGGAAAGACACACAAAAGGAATTGGACAGAAGCTTCTTCAGAAGATGGGCTACG
TCCCTGGACGGGGCCTCGGGAAGAATGCACAAGGTATCATTAACCCAATTGAAGCCAAGCAGAGAAAGGGAAAAG
GTGCTGTGGGGGCTTATGGATCCGAGCGCACCACTCAGTCCATGCAAGACTTCCCTGTGGTTGACTCAGAGGAAG
AAGCTGAAGAGGAGTTTCAGAAGGAGCTGAGCCAGTGGAGGAAAGACCCAAGTGGAAGCAAGAAGAAGCCCAAAT
ACTCTTACAAGACCGTGGAAGAGTTGAAGGCCAAGGGCAGGATTAGCAAGAAGCTCACTGCTCCCCAGAAGGAAC
TTTCTCAAGTCAAGGTCATAGACATGACAGGCCGGGAGCAGAAGGTCTACTACAGCTACAGTCAGATCAGCCACA
AGCACAACGTTCCCGATGATGGGCTGCCGCTACAGTCCCAACAGCTGCCACAGTCTGGCAAAGAGGCCAAGGCCC
CCGGCTTCGCGCTGCCCGAGCTGGAGCACAACCTGCAGCTGCTCATCGACCTCACGGAGCAGGAGATCATCCAGA
ATGACCGGCAGCTACAGTATGAGCGGGACATGGTGGTCAACCTCTTCCACGAGCTGGAGAAGATGACCGAGGTCC
TGGACCACGAGGAGCGGGTCATCTCGAACCTCAGCAAGGTCCTGGAGATGGTGGAGGAGTGCGAGCGGCGGATGC
AGCCCGACTGCAGCAACCCCCTCACCCTGGACGAGTGTGCCCGCATCTTCGAAACCCTGCAGGACAAGTACTATG
AGGAGTACAGGATGTCCGACCGTGTGGACCTTGCTGTGGCCATCGTCTATCCACTCATGAAGGAGTACTTCAAGG
AGTGGGATCCCCTCAAAGACTGCACTTATGGCACCGAGATCATCTCTAAGTGGAAAAGCCTCCTAGAGAATGACC
AGCTCTTGTCCCATGGCGGACAGGACCTCTCAGCAGATGCCTTTCACAGGTTGATATGGGAAGTCTGGATGCCTT
TTGTTCGAAATATTGTCACCCAGTGGCAGCCAAGGAACTGTGACCCGATGGTGGACTTTTTGGATAGTTGGGTGC
ACATTATTCCTGTGTGGATCTTAGATAACATACTGGACCAACTCATCTTCCCCAAGCTGCAAAAGGAGGTGGAAA
ACTGGAACCCGCTCACAGACACTGTTCCCATCCACTCTTGGATCCACCCATGGCTGCCCCTTATGCAGGCACGGC
TGGAGCCACTCTATTCCCCCATCCGTAGTAAGCTGTCCAGCGCCCTGCAGAAGTGGCACCCCAGCGACTCCTCTG
CCAAGCTCATCCTCCAGCCCTGGAAGGATGTCTTCACTCCTGGCTCCTGGGAAGCATTCATGGTCAAAAACATAG
TGCCCAAGCTGGGGATGTGTCTTGGTGAGCTAGTCATTAACCCCCACCAGCAGCACATGGATGCATTCTATTGGG
TGATTGACTGGGAAGGGATGATCTCTGTCTCTAGCCTGGTGGGACTTCTTGAAAAGCACTTCTTCCCCAAGTGGC
TTCAGGTGCTGTGCTCTTGGCTCAGTAACAGCCCAAATTATGAGGAGATCACCAAGTGGTACCTGGGTTGGAAGT
CGATGTTCTCAGACCAAGTGCTGGCACATCCATCTGTCAAGGACAAATTTAATGAGGCACTTGATATCATGAACC
GGGCGGTGTCCTCCAACGTTGGTGCCTACATGCAGCCAGGAGCACGGGAGAACATTGCCTATCTCACCCACACGG
AGCGGAGGAAGGACTTCCAGTACGAGGCCATGCAGGAGAGGCGGGAGGCTGAGAACATGGCTCAGAGGGGCATTG
GCGTGGCCGCTAGCTCTGTGCCCATGAACTTTAAGGACCTCATTGAGACCAAGGCTGAGGAGCACAACATTGTCT
TCATGCCCGTCATTGGGAAGCGACACGAAGGGAAGCAGCTCTACACCTTTGGCCGCATTGTGATCTACATCGACC
GGGGAGTGGTCTTTGTCCAGGGCGAGAAGACGTGGGTGCCCACCTCACTGCAGAGCCTGATCGACATGGCCAAGT
GAACTGTGGCAGGTCCAGAACCAGTCAGAGACTTGCCCCTAAGAGGGATGTACTGTAAATAAACAGTATTTTTAG
ATCACCTTCAAAAGGGTAACTTCTTTACTCAGGAGCTACTCCACATCAGGCCAGGTCATGAGGGAAGGATGTAAA
ATGGGACAATGCCACGTAGGGCAGGAATCTTTATACCAAGTCCTCATGTGGGGTATCGTCCTCAAAACAGGACAG
CCAAGTTGATGTTCTTTCCTGGCAAAGGAGTTCTCTGTAGTTCCTCCATAGCAGCCTTCCCTTTAGTCTCTGGTG
GCAGCTTCTACCTCAGCCAACACTGAGTACCTCACAACGAGTTCAGTCAGTAGCAGAAGGATCTTCTCTCTTGTT
CCTGATGATTTCAAGGTCCTCACAGTCCTGATAATCTGGTTCTTCCCGAAACTCCCAAATATCTATGGAGAGCTG
TTCTAGCTTTTGCACAGGGAACCAGTGGACAGAGGTATCATTAAATATGTCCATGTATTGTGAAGTCTGAGGAAA
CTCAAGCTCCTCCAGTCCTTTTAAAATCTGAGCAGAAAAATTCAAGTATAAAAACTTCAGATAGTCACAGTAATC
CCCACTCTTCTGGGATAAATTTCCACTTTACTTGTCATCCCCACTTTACTTTTTAAAAAAATAACAAATAGGGTA
TTTTGATTTAAATGCTTTTGCACAATGAATTGGGCGCCCCAAGGACAGTGGATATCATGGACTGTGATACTAAGA
ATAAAGGAAATAAGGAAAAAACTAAGAGATGCATTAAAGA

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FIGURE 4582

GGCTCTGCCAGCAGACAGCCTTGGCACACAGGCACAAGGGCTGGAGCCCAGAGATGAGAGTGCCCAAGGGAGATG
TGAGCCTGGCGGGCTGCCCGCTAACCTGTCGCTGAAGCCCCAGAAGCGGGCCCTCAGGCCAGGCCTACCCTGCCT
CCGGCCCAGC**ATG**CGCCTGTCGGTGCGGAGGGTGCTGCTGGCAGCCGGCTGCGCCCTGGTCCTGGTGCTGGCGGT
TCAGCTGGGACAGCAGGTGCTAGAGTGCCGGGCGGTGCTGGCGGGCCTGCGGAGCCCCCGGGGGGCCATGCGGCC
TGAGCAGGAGGAGCTGGTGATGGTGGGCACCAACCACGTGGAATACCGCTATGGCAAGGCCATGCCGCTCATCTT
CGTGGGTGGCGTGCCTCGCAGTGGCACCACGTTGATGCGCGCCATGCTGGACGCGCACCCCGAGGTGCGCTGCGG
CGAGGAGACCCGCATCATCCCGCGCGTGCTGGCCATGCGCCAGGCCTGGTCCAAGTCTGGCCGTGAGAAGCTGCG
GCTGGATGAGGCGGGGGTGACGGATGAGGTGCTGGACGCCGCCATGCAGGCCTTCATCCTGGAGGTGATTGCCAA
GCACGGAGAGCCGGCCCGCGTGCTCTGCAACAAGGACCCATTTACGCTCAAGTCCTCGGTCTACCTGTCGCGCCT
GTTCCCCAACTCCAAGTTCCTGCTGATGGTGCGGGACGGCCGGGCCTCCGTGCACTCCATGATCACGCGCAAAGT
CACCATTGCGGGCTTTGACCTCAGCAGCTACCGTGACTGCCTCACCAAGTGGAACAAGGCCATCGAGGTGATGTA
CGCCCAGTGCATGGAGGTAGGCAAGGAGAAGTGCCTGCCTGTGTACTACGAGCAGCTGGTGCTGCACCCCAGGCG
CTCACTCAAGCTCATCCTCGACTTCCTCGGCATCGCCTGGAGCGACGCTGTCCTCCACCATGAAGACCTCATTGG
CAAGCCCGGTGGTGTCTCCCTGTCCAAGATCGAGCGGTCCACGGACCAGGTCATCAAGCCTGTTAACCTGGAAGC
GCTCTCCAAGTGGACTGGCCACATCCCTGGGGATGTGGTGCGGGACATGGCCCAGATCGCCCCCATGCTGGCTCA
GCTCGGCTATGACCCTTATGCAAACCCCCCCCAACTATGGCAACCCTGACCCCTTCGTCATCAACAACACACAGCG
GGTCTTGAAAGGGGACTATAAAACACCAGCCAATCTGAAAGGATATTTTCAGGTGAACCAGAACAGCACCTCCTC
CCACTTAGGAAGCTCG**TGA**TTTCCAGATCTCCGCAAATGACTTCATTGCCAAGAAGAGAAGAAAATGCATTTAAG
TGGAAATCGGACCTCTAATCCAAGCATATTGCTTGCTATTAATCGCCAAAACAGGACTGCTGATGAGGAATGTAT
TTGCATATGTTTGCAAAAGCTGAATCATTGAAAACGTACCTTGAAACTCTCTATCTCTGGACACTCCAGGGTAGA
GAATGAAGGGTATGGAAGTAGTCCGGCTTTTGAAACTTAGGTATTTTATATTTTTCCCCTCAAGAACTTTTTTTT
AAGAGACAGATTTGCCATCCTCCTTAATTTGCAGGACTGCCTTGGTGGCTTTGTTTGCTGGGACAAGGCCCACAA
CCTGTGCCTCTCCTATTGACCCTTACTTTGAATTCAAAGAATCTATTTAAGAGTTTAATATATGAGGCTTTCTTT
GATTCCTCCTCAGTTCTACCTAGTTTCACAGAGGAAAAAAATACTCTTTGAATAAAGTGAACAGAGGCTCATTTG
TTTGTGCCTTACTTTAC

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FIGURE 4583

CATTGCAGTACACTGAGCTCCACAGAGACAGCGCCGGGGCAAGTGAGAGCCGGACGGGCACTGGGCGACTGTGCC
TCGCTGAGGAAAAATAACTAAACATGAGCAAAGGAGATCCTAAGAAGCTGAGAGGCAAAATGTCATCAC**ATG**CAT
TTTTTGGGCAAACTTGTCGGGAGGCGCATAAGAAGAAGCACCCAGATGCTTCAGTCAACCTCTCAGAGTTTTCTA
AGAAGTGCCCATTACGAAAGAGAAATGAAAACCTATATCCCTCCCAAAGGGGAGACAAAAAAGAAGTTCAAGGAT
CCGAATGCACCCAAGAGGACTCCTTCGGCCTTCTTCCTGTTCTGCTCTGCGTATCGCCCAAAAATCAAAGGAGAA
CATCCTGGCCTGTCCATTGGTGATGTTGCGAAGAAACTGGGAGAGATGTGGAATAACACTGCCGCAGATGACAAG
CAGCCTTATGAAAAGAAGGCTGCGAAGCTGAAGGAAAAATACGAAAAGGATATTGCTGCATATCGAGCTAAAGGA
AAGCCTGATGCAGCAAAAAAGGGAGTTGTCAAGGCTGAAAAAAGCAAGAAAAAGAAGGAAGAGGAGGAAGATGAG
GAAGATGAAGAGGATGAGGAGGAGGAAGATGAAGAAGATGAAGATGAAGAAGATGATGAA**TAA**GTTGGTTCTAGC
GCAGTTTTTTTTTTCTTGTCTATAAAGCATTTAACCCCCCTGTACACAACTCACTCCTTTTAAAGAAAAAAATTG
AAATGTAAGGCTGTGTAAGATTTGTTTTTAAACTGTACAGTGTCTTTTTTTGTATAGTTAACACACTACCGAATG
TGTCTTTAGATAGCCCTGTCCTGATGGTATTTTCAATAGCCGCTAACCTTGCCTGGTACAGTATGGGGGCTGTAA
ATTGGCATGGAAATTTAAAGCGGGTTCTTGTTGGTGCACAGCACAAATTAGTTATATATGGGGATGATAGTTTTT
TCATCTTCAGTTGTCTCTGATGCAGCTTATACGAAATAATTATTCTGTTAACTGAATACCACTCTGTAATTGCAA
AAAGAAAAAGTTGCAGCTGTTTTGTTGACATTCTGAATGCTTCTAAGTAAATACAATTTTTTTATTAG

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FIGURE 4584

ATGGGTGCATACAAGTACATCCTGGAGCTATGGAGAAAGAAGCAGTCTGATGTCATGCGCTTTCTTCTGAGGGTC
CGCTGCTGGCAGTACCGCCAGCTATCTGCTCTCCACAGGGCTCCCCGCCCCACCCGGCCTGATAAAGTGCACCGA
CTGGGCTACAAACAAGGCCAAGCAAGTGACAGTGAGTCGTGTGGACCTGGTAAAATCACCAACTTCTCTGATTCT
CCTTATCTTGAAAACAGGGATGATAATGCTCCCCCCTACCCCACAGATGCTGTGACGTTCCAAGCAGACATCTAA

FIGURE 4585

CCAGAACACAGGTGTCATGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCG
TCATTGGACACGTAGATTCGGCAGGATGTCTACAAAATTGGTGGTATTGGTAGTGTTCCTGTTGGCCGAGTGGAG
ACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACAGAAGTAAAATCTGTCGAA
ATGCACCATGAAGCTTTGGGTGAAGCTCTTCCTGGGGACAGTGTGGGCTTCCATGTCAAGAATGTGTCTGTCAAG
GATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAG
GTGATTATCCTGAACCATCCAGGCCAAATAAGCGCTGGCTATGCCCCTGTATTGGATTGCCACACGGCTCATATT
GCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTC
TTGAAGTCCGGTGATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGCTGAGAGCTTCTCAGACTAT
CCACCTTTGGGTCGCTTTGCTGTTCGTGATATGAGACACACAGTTGCGGTGGGTGTCATCAAAGCAGTGGACAAG
AAGGCTGCTGGAGCTGGCAAGGTCACCAACTCTGCCCAGAAAGCTCAGATGGCTAAATGAATATTATCCCTAATA
C

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FIGURE 4586

CTTTTTCACAACGGGTTTGCCGCCAGAACACAGGTGTCATGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCAGTAGCATCGACAAAAGAACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACT
ATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTC
CCGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCTAAGAATGGGCAGACCCGAGAGCATGCCCTT
CTGGCTTACACACTGGGTGTGAAACAACTAATTGTTGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGC
CAGAAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTA
GCATTTGTGCCAATTTCTGGTTGGAATGGTAACAACATGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGA
TGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCATGCTGCTTGAGGCTCTGGACTGCATCCTACCACCA
ACTCGTCCAACTGACAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTAGTGTTCCT
GTTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACAGAA
GTTGTGGGCTTCCATGTCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAAT
GACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAA

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FIGURE 4587

GCCACTGCCTGGCACCCCGACGGGAGGGGCTCCGGATCGTTCGGAGCCGGCTGAACCCCTTCGGCCGCGAGCGAC
CGCATGAGTCGGGGGACTATGCCCCAGCCCGAAGCGTGGCCAGGCGCGAGCTGCGCCGAGACGCCGGCGCGGGAG
GCGGCGGCCACGGCGCGGGACGGCGGGAAGGCGGCGGCCAGCGGGCAGCCGCGGCCCGAGATGCAGTGCCCGGCC
GAGCAGTGAGAGGACATGTACCGTGCTGCAGATGAAATAGAAAAGGAGAAAGAATTGCTTATACATGAAAGAGGG
GCATCAGAACCGAGATTAAGCGTAGCTCCTGAAATGGATATCATGGACTACTGCAAAAAAGAATGGAGAGGAAAT
ACACAGAAAGCAACGTGTATGAAAATGGGCTATGAAGAGGTTTCTCAGAAGTTCACCTCCATACGGCGAGTCCGT
GGTGATAATTACTGTGCACTGAGGGCCACGCTGTTCCAGGCCATGAGCCAGGCTGTGGGGCTGCCGCCCTGGCTG
CAGGACCCGGAGCTCATGCTGTTACCAGAAAAACTCATAAGCAAATACAACTGGATCAAGCAATGGAAACTTGGA
CTGAAATTTGATGGGAAGAATGAGGACCTGGTTGATAAAATTAAAGAGTCCCTTACTCTGCTGAGGAAGAAGTGG
GCAGGCTTGGCTGAAATGAGAACTGCTGAAGCAAGACAGATAGCTTGTGATGAACTATTCACAAATGAGGCGGAG
GAATATAGCCTCTATGAAGCTGTAAAATTTCTAATGCTAAACAGAGCCATTGAACTATATAATGATAAAGAGAAA
GGAAAGGAAGTACCATTTTTCTCTGTGCTTCTGTTTGCTCGGGACACATCAAATGACCCAGGACAGCTTCTGAGG
AACCACCTCAACCAGGTGGGACACACTGGTGGTCTTGAACAGGTTGAAATGTTCCTTCTTGCCTATGCTGTGCGC
CACACCATCCAGGTGTACCGGCTCTCCAAGTACAACACGGAAGAATTCATCACAGTCTACCCCACCGACCCACCC
AAGGACTGGCCAGTGGTAACGCTCATTGCTGAGGACGATCGGCACTATAACATCCCCGTCAGAGTGTGTGAGGAG
ACCAGTCTATGAGAGACGCATGCTCCTGACAGCCTGGCGACGTGGCGAAGATGCACAGGTGGCTCCTGGGCTTGG
GCTGCAGGTTTGGGGGTCTCTAAGAACAATCTCTGAGAAGAACCCTTGGGCCCCTGGGAGCCAAGTTGGACAGGA
TGTCCTGAAGACTAGCTTTTGATAAGAGAAATTAACCAAGTCTTTCCCCTCATCTATGATGCAATATATTTCAGT
GGGGGCCTTCAGAGCACACCTGTTGGACGGTGCAAACCATATCTTCTCCAGAAGGCAAATACTTTTGTATCAGAG
GAAACTCAGTTTTGGAGAGGAATATGTTCTTTATATCTCAAATCAAAACTCTCTCTAATGGTAAACTGGCTTCTA
ATTTTTTTAAGTACAGTATTTTTTTTTCCCCTTTAGTAGTAACGGGTTTCTATAGATCTTCCTATACAGTCTGCT
TTAACTCAGGACCTTGAGATTATGAGACTGACGTGCTGCCCACTGCACTGAGGGGGCTTCTAACAGTCTGCTTTA
AGTGGTATAATTCTGGGATAGATCTGTTACTGGCATAGTCATGACAACCTCTGGTAATCTTACCTTCTCCTTTTT
ATGAAGGGAAGAGCAATGGTTTGGACTTACATCTTAATTAAGGCTATTTTAAGCAGATTGTTTTGCAACAGATTA
AGAATTGGGTCCCAAAGTGGGTTATTTCAAGGCATTTTTGAAGACTGGAGGAGCGTAGGAGGGAGTGGTGAGGGA
ACCTAGAACTTCTTGCTCCTTGTGACTATGACAGATGTCTGATGCCCCCAGCGCACTGGAGTCTGGGGCTTGGTG
CAGGTGGTGCCCCATCAGTGTGGACAGACACTACTTGCCTTTGTGGTTTAGTGTTGGAAGCTTTAATTATTCTAC
AGTTCCATAGATTCACAATTTTATAGCCAAACAGTTTGTATCCACCTGCTTTCAGAGGAGGAACCAAAGGCCAAA
TTACTTTGAGGTAGGGCTTAGCTGGACCTGGGTTTTCCTATGCTCTTTTCATGCTGTGTTGGAGGGTGTGTCCAC
TGCCAGATCTGTGTAACCCGTCTGGGTCAGGGGATGAGTGACAGCAAACCATCTTAAAATTTTTCATGAGTACAT
TTAAGCGGAAGCATACGGGAATATGAGTGCAAAAGTGTGGCTGAGCCGCGTATGCCCTTGATTGGTTTTGGGAAG
CCTGAGGGAGGCAGCCTTCCTGGCTATGAGCCATCGCCTGCCCAATCAGGCTAAGGGTGGTGACTGGGGTGGTGA
AGGGGCAGCTCTGCTGAGCATGGTCTGCCTTATGGCCTGAATTGTCCTCAAGGGGTGTGGACTGCAGATGGTGTT
CACATGAACCGGAGACATCACTCTTTAGGATTCTACTGGCAGCCCCTGAATTGGCTCAACGTTTGTGGAGGTGGT
ATTTCCCTGAAGTACTGAGCTTTGTTTTATAATAATTAAAATCCTTATTTGGTCCAATTTAATATAGTTTAGAAG
CTATTTTTTTTGAGGCAAACCGTTTTTGAAAATGTAAATTTTGTTTTTAATTAAAAATAAAGTCTTAGTTAAGAA
AACTCAGGATGCACAAAACTATTCAGACTGTTACTTTAGCTTTCTCCCATTACCTCATCAGTAATATTCACCACA
TTTTGCTAAATATTTATTGATTAGAGTGTTGAAATCAAATTCTGCTCTAAATGTGTGTGAATATGTTGGAGAGGC
TTTGTGTTCTTCACTGTGAAATGCAATTGTGCCTTGAATAAGAAGGTACCTAGAAGCCAAATTAAAGTAATAATG
ACTTCTT

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FIGURE 4588A

CTCTTTTTTTTCCCGGCAGATCTTTGTTGTGTGGGAGGGCAGCAGGGATGGACTTGAGCTTGCGGATCCCCTGCT
AGAGCAGCCGCGCTCGGAGAAGGCGCCGCAGCCGCGAGGAGGAGCCGCCGCCGCCGCGCCCGAGGCCCCGCCGCC
CGCGGCCTCTGTCGGCCCGCGCCCCGCTCGCCCCGTCGCCCCGTCGCCCCTCGCCTCCCCGCAGAGTCCCCTCGC
GGCAGCAGATGTGTGTGGGGTCAGCCCACGGCGGGGACTATGGTGAAATTCCCGGCGCTCACGCACTACTGGCCC
CTGATCCGGTTCTTGGTGCCCCTGGGCATCACCAACATAGCCATCGACTTCGGGGAGCAGGCCTTGAACCGGGGC
ATTGCTGCTGTCAAGGAGGATGCAGTCGAGATGCTGGCCAGCTACGGGCTGGCGTACTCCCTCATGAAGTTCTTC
ACGGGTCCCATGAGTGACTTCAAAAATGTGGGCCTGGTGTTTGTGAACAGCAAGAGAGACAGGACCAAAGCCGTC
CTGTGTATGGTGGTGGCAGGGGCCATCGCTGCCGTCTTTCACACACTGATAGCTTATAGTGATTTAGGATACTAC
ATTATCAATAAACTGCACCATGTGGACGAGTCGGTGGGGAGCAAGACGAGAAGGGCCTTCCTGTACCTCGCCGCC
TTTCCTTTCATGGACGCAATGGCATGGACCCATGCTGGCATTCTCTTAAAACACAAATACAGTTTCCTGGTGGGA
TGTGCCTCAATCTCAGATGTCATAGCTCAGGTTGTTTTTGTAGCCATTTTGCTTCACAGTCACCTGGAATGCCGG
GAGCCCCTGCTCATCCCGATCCTCTCCTTGTACATGGGCGCACTTGTGCGCTGCACCACCCTGTGCCTGGGCTAC
TACAAGAACATTCACGACATCATCCCTGACAGAAGTGGCCCGGAGCTGGGGGGAGATGCAACAATAAGAAAGATG
CTGAGCTTCTGGTGGCCTTTGGCTCTAATTCTGGCCACACAGAGAATCAGTCGGCCTATTGTCAACCTCTTTGTT
TCCCGGGACCTTGGTGGCAGTTCTGCAGCCACAGAGGCAGTGGCGATTTTGACAGCCACATACCCTGTGGGTCAC
ATGCCATACGGCTGGTTGACGGAAATCCGTGCTGTGTATCCTGCTTTCGACAAGAATAACCCCAGCAACAAACTG
GTGAGCACGAGCAACACAGTCACGGCAGCCCACATCAAGAAGTTCACCTTCGTCTGCATGGCTCTGTCACTCACG
CTCTGTTTCGTGATGTTTTGGACACCCAACGTGTCTGAGAAAATCTTGATAGACATCATCGGAGTGGACTTTGCC
TTTGCAGAACTCTGTGTTGTTCCTTTGCGGATCTTCTCCTTCTTCCCAGTTCCAGTCACAGTGAGGGCGCATCTC
ACCGGGTGGCTGATGACACTGAAGAAAACCTTCGTCCTTGCCCCCAGCTCTGTGCTGCGGATCATCGTCCTCATC
GCCAGCCTCGTGGTCCTACCCTACCTGGGGGTGCACGGTGCGACCCTGGGCGTGGGCTCCCTCCTGGCGGGCTTT
GTGGGAGAATCCACCATGGTCGCCATCGCTGCGTGCTATGTCTACCGGAAGCAGAAAAAGAAGATGGAGAATGAG
TCGGCCACGGAGGGGGAAGACTCTGCCATGACAGACATGCCTCCGACAGAGGAGGTGACAGACATCGTGGAAATG
AGAGAGGAGAATGAATAAGGCACGGGACGCCATGGGCACTGCAGGGACAGTCAGTCAGGATGACACTTCGGCATC
ATCTCTTCCCTCTCCCATCGTATTTTGTTCCCTTTTTTTTGTTTTGTTTTGGTAATGAAAGAGGCCTTGATTTAA
AGGTTTCGTGTCAATTCTCTAGCATACTGGGTATGCTCACACTGACGGGGGGACCTAGTGAATGGTCTTTACTGT
TGCTATGTAAAAACAAACGAAACAACTGACTTCATACCCCTGCCTCACGAAAACCCAAAAGACACAGCTGCCTCA
CGGTTGACGTTGTGTCCTCCTCCCCTGGACAATCTCCTCTTGGAACCAAAGGACTGCAGCTGTGCCATCGCGCCT
CGGTCACCCTGCACAGCAGGCCACAGACTCTCCTGTCCCCCTTCATCGCTCTTAAGAATCAACAGGTTAAAACTC
GGCTTCCTTTGATTTGCTTCCCAGTCACATGGCCGTACAAAGAGATGGAGCCCCGGTGGCCTCTTAAATTTCCCT
TCCGCCACGGAGTTCGAAACCATCTACTCCACACATGCAGGAGGCGGGTGGCACGCTGCAGCCCGGAGTCCCCGT
TCACACTGAGGAACGGAGACCTGTGACCACAGCAGGCTGACAGATGGACAGAATCTCCCGTAGAAAGGTTTGGTT
TGAAATGCCCCGGGGGCAGCAAACTGACATGGTTGAATGATAGCATTTCACTCTGCGTTCTCCTAGATCTGAGCA
AGCTGTCAGTTCTCACCCCCACCGTGTATATACATGAGCTAACTTTTTTAAATTGTCACAAAAGCGCATCTCCAG
ATTCCAGACCCTGCCGCATGACTTTTCCTGAAGGCTTGCTTTTCCCTCGCCTTTCCTGAAGGTCGCATTAGAGCG
AGTCACATGGAGCATCCTAACTTTGCATTTTAGTTTTTACAGTGAACTGAAGCTTTAAGTCTCATCCAGCATTCT
AATGCCAGGTTGCTGTAGGGTAACTTTTGAAGTAGATATATTACCTGGTTCTGCTATCCTTAGTCATAACTCTGC
GGTACAGGTAATTGAGAATGTACTACGGTACTTCCCTCCCACACCATACGATAAAGCAAGACATTTTATAACGAT
ACCAGAGTCACTATGTGGTCCTCCCTGAAATAACGCATTCGAAATCCATGCAGTGCAGTATATTTTTCTAAGTTT
TGGAAAGCAGGTTTTTTCCTTTAAAAAAATTATAGACACGGTTCACTAAATTGATTTAGTCAGAATTCCTAGACT
GAAAGAACCTAAACAAAAAAATATTTTAAAGATATAAATATATGCTGTATATGTTATGTAATTTATTTTAGGCTA
TAATACATTTCCTATTTTCGCATTTTCAATAAAATGTCTCTAATACAATACGGTGATTGCTTGTGTGCTCAACAT
ACCTGCAGTTGAAACGTATTGTATCAATGAACATTGTACCTTATTGGCAGCAGTTTTATAAAGTCCGTCATTTGC
ATTTGAATGTAAGGCTCAGTAAATGACAGAACTATTTTTCATTATGGGTAACTGGGGAATAAATGGGTCACTGGA
GTAGGAATAGAAGTGCAAGCTGGAAAGGCAAAAATGAGAAAGAAAAAGGCAGGCCCTTTGTGTCTACCGTTTTCA
GTGCTGTGTGATCATATTGTTCCTCACAGCAAAAAAGAATGCAAGGGCATAATGTTAGCTGTGAACATGCCAGGG
TTGCATTCACATTCCTGGGTACCCAGTGCTGATGGGGTGTGCCCACGTGGGGACATGTCCTTGGCGTGCTTCCTC
AGAGTGGCTTTTCCTCCATTAATACATATATGAGTACTGAAAAATTAAGTTGCATAGCTGCTTTGCAGTGGTTTC

FIGURE 4588B

AGAGGCAGATCTGAGAAGATTAAAAAAAAAATCTCAAATGTATCAGCTTTTTTTAAAGGACATTACTAGAAAATTA
AACAGTATTTTTTAACATGTGTGACTTTCATGCTTCTGGGGTTGGAGCTTAAAGATCCAAACTGAGAAAGCAGGC
CGGGCATGGTGGCTCATGCCTGTAATCCCAACACTTTGGGAGGCCAAGGAGGGTGGATCACTTAAGGTCAGGAGT
TTGAGACCAGCCTGGCCAACATGGCGAAACCCTGTCTCTACTAAAAACATAAAAATTAGCTGGGGGTGGTAGCAC
ATACCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTTGCTTGATCCTGGGAGGCAGAGGTTGTAGTG
AGCCGAGATCGCGCCATCGCACTCCAGCCTGGGTGACAAGAGCAAAACTCCATCTC

FIGURE 4589

CGCGTGCGCAGAGCGAACGCCTGCAGCCTCCCTGCCCCTCCCACAACGCTCGACCCCAGGATTCCCCCGGCTCGC
CTGCCCGCC**ATG**GCCGACAAGGAAGCAGCCTTTGACAACACAGTGGAAGAATGAGTGATCAACAAGGAATACAAA
ATATGGAAAAAGAACACCCCTTTTCTTTATAATTTGGTGATGACCCATGCTCTGGAGTGGCCCAGCCTAACTGCC
CAGTGGCTTCCAGATGTAACCAGACCAGAAGGGAAAGATTTCAGCCTTCATCGACTTGTCCTGGGGACACACACA
TCGGATGAACAAAACCATCTTGTTATAGCCAGTGTGCAGCTGCCTGATGATGATGCTCAGTTTGATGCATCACAC
TACGACAGAGAGAAAGGAGAATTTGGAGGTTTTGGTTCAGTTAGTGGAAAAATTGAAATAGAAATCAAGATCAAC
CATGAAGGAAAAGTAAACAGGGCCCGTTATATGCCCCAGAACCCTTGTATCATCACAACAAAGACTCCTTCCAGT
GATATTCTTGTCTTTGACTATACAAAACATCCTTCTAAACCAGATCCTTCTGGAGAATGCAACCCAGACTTGCGT
CTCCGTGGACATCAGAAGGAAGGCTATGGGCTTTCTTGGAACCTAAATCTCAGTGGGCACTTACTTAGTGCTTCA
GATGACCACACCATCTGCCTGTGGGACATCAGTGCCGTTCCAAAGGAGGGAAAAGTGGTAGATGCGAAGACCATC
TTTACAGGGCATACGGCAATAGTAGAAGATGTTTCCTGGCATCTACTCTGTGAGTCTCTGTTTGGGTCAGTTGCT
GATGATCAGAAACTGATGATTTGGGATACTCGTTCAAACAATACTTCCAAACCAAGCCACTCAGTTGACACTCAC
ACTGCTGAAGTGAACTGCCTTTCTTTCAGTCCTTATAGTGAGTTCATTCTTGCCACAGGATCAGCTGACAAGACT
GTTGCCTTGTGGGATCTGAGAAATCTGAAACTTAAGTTGCATTCCTTTGAGTCACATAAGGATGAAATATTCCAG
GTTCAGTGGTCACCTCACAATGAGACTATTTTAGCTTCCAGTGGTACTGATCACAGACCGAATGTCTAGGATTTA
AGTAAAATTGGAGAGGAACAATCCCCAGAAGATGCAGAAGACAGGCCACCAGAGTTGTTGTTTATTCATGGTGGT
CACACTGCCAAGATACCTGATTTCTCCTGGAATCCCAGTGAACCTTGAGTGATGTGTTCTGTATCGGAAGACAAT
ATCATGCAAGTGTGGCAAATGGCAGAGAACATTTATAATGATGAAGACCCTGAAGGAAGCATGGATCCAGAAGGA
CAAGGGTCC**TAA**ATATGTCTTTACTTCTTGTGATTTTAGACTCCCCTTTTTTCTTCTCAACCCCGAGAGTGATTT
AACACTGGTTCTGAGACAGATTTTATTCAGCTATCCCTCTATATAATAGGTACCACCGATAATGCTATTAGCCCA
AACAGTGGGTGTTTTCTAAATATTAATGGGGGGCTTGATTCAACAAAGCTACAGAGTTATGTTGAAATTTTCTTC
AGGAATTTTCTAGTAACCCAGGTCTAAAGTAGCTACAGAAAGGGGAATATTATGTGTGATTATTTTTCTTCTTAT
GCTATATCCCCAAGTTTTTTGGACTCATTTAAGTAAAGGCTAGAGTGAGTAAGGAGAATAGAGCCAAATGAGGTA
GGTGTCTGAGCCATGAAGTATAAATACTGAAAGATGTCACTTTTATTCAGGAAATAGGGGAGATTCAAGTCATAT
AGATTCCTACTCGAAAATCTCGACACCTGAGTTTCCAGGATGCACATTTTCATACGTAGACCAGTTTCCTCTTGG
TTTCTTCAGTTAAGTCAAAACAGCACGTTCCTCTTTCCCCATATATTCATATATTTTTGCTCGTTAGTGTATTTC
TTGAGCTGTTTTCATGTTGTTTATTTCCTGTCTGTGAAATGGTGTTTTTTTTTTTTTGTTGGTGTGTGTTTTTT
TTTTTTAACTTGGGACCGCCAAGTTGTAAAGATGTATGTTTTTACCTGACAGGTATACCACAGGTAGATTGTCAA
GTTGAGAAGAGTGAATCGATAAATTGTATTTGTTTTAAAAATTAAATTAATCCTTGATAAGAGTTGCTTTTTTTT
TAGGAGTTTGTCCTTGACCACTAGTTTGATGCCATCTCCATTTTGGGTGACCTGTTTCACCAGCAGGCCTATTAC
TCTCCATGACTAACTGTGTAAGTGCTTAAAATGGAATAAATTGCTTTTCTACATT

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FIGURE 4590

AACAGCTGCTGCTGGCTCTTCCTCTTGCGGCCTTTTCCTGAAACGGATTCTTCTTTCGGGGAACAGAAAGCGCCA
GCCATGCAGCCTTGGCACGGAAAGGCCATGCAGAGAGCTTCCGAGGCCGGAGCCACTGCCCCCAAGGCTTCCGCA
CGGAATGCCAGGGGCGCCCCGATGGATCCCACCGAGTCTCCGGCTGCCCCCGAGGCCGCCCTGCCTAAGGCGGGA
AAGTTCGGCCCCGCCAGGAAGTCGGGATCCCGGCAGAAAAAGAGCGCCCCGGACACCCAGGAGAGGCCGCCCGTC
CGCGCAACTGGGGCCCGCGCCAAAAAGGCCCCTCAGCGCGCCCAGGACACGCAGCCGTCTGACGCCACCAGCGCC
CCTGGGGCAGAGGGGCTGGAGCCTCCTGCGGCTCGGGAGCCGGCTCTTTCCAGGGCTGGTTCTTGCCGCCAGAGG
GGCGCGCGCTGCTCCACGAAGCCAAGACCTCCGCCCGGGCCCTGGGACGTGCCCAGCCCCGGCCTGCCGGTCTCG
GCCCCCATTCTCGTACGGAGGGATGCGGCGCCTGGGGCCTCGAAGCTCCGGGCGGTTTTGGAGAAGTTGAAGCTC
AGCCGCGATGATATCTCCACGGCGGCGGGGATGGTGAAAGGGGTTGTGGACCACCTGCTGCTCAGACTGAAGTGC
GACTCCGCGTTCAGAGGCGTCGGGCTGCTGAACACCGGGAGCTACTATGAGCACGTGAAGATTTCTGCACCTAAT
GAATTTGATGTCATGTTTAAACTGGAAGTCCCCAGAATTCAACTAGAAGAATATTCCAACACTCGTGCATATTAC
TTTGTGAAATTTAAAAGAAATCCGAAAGAAAATCCTCTGAGTCAGTTTTTAGAAGGTGAAATATTATCAGCTTCT
AAGATGCTGTCAAAGTTTAGGAAAATCATTAAGGAAGAAATTAACGACATTAAAGATACAGATGTCATCATGAAG
AGGAAAAGAGGAGGGAGCCCTGCTGTAACACTTCTTATTAGTGAAAAAATATCTGTGGATATAACCCTGGCTTTG
GAATCAAAAAGTAGCTGGCCTGCTAGCACCCAAGAAGGCCTGCGCATTCAAAACTGGCTTTCAGCAAAAGTTAGG
AAGCAACTACGACTAAAGCCATTTTACCTTGTACCCAAGCATGCAAAGGAAGGAAATGGTTTCCAAGAAGAAACA
TGGCGGCTATCCTTCTCTCACATCGAAAAGGAAATTTTGAACAATCATGGAAAATCTAAAACGTGCTGTGAAAAC
AAAGAAGAGAAATGTTGCAGGAAAGATTGTTTAAAACTAATGAAATACCTTTTAGAACAGCTGAAAGAAAGGTTT
AAAGACAAAAAACATCTGGATAAATTCTCTTCTTATCATGTGAAAACTGCCTTCTTTCACAGACTCTACTGATAT
ATTTCCAAGTATTAGGTCACTTGATAAGTGATCCGCACTGAAGCAAAAGATAAACTCAGCATTCTTAGGTGCTTA
TTCTAATGCCACCAGTTTTACTTCTGTTAGCAAAAATCTAAAGTAACATAACAGACTTATCACCCCCATTTGGAA
TTAGTATACAAATAGAAATGATCCTAATCAATTTAATTAATTATAATGGACACACAAGAAAAAATACCTACACAG
CTTTTCGAGAAACGAAGACAATGACTTTGTCTGTGGATGACATACTCTGTAGAAAAGTTTGCATGTGACTCCATT
TCTCTTCCTCGGTGGTTACAATTATATTTTGCTTCACTGAACTTACAGCCTAAAGGATTCAAAGAACATAGTTCA
TCAAGGTCATCATGATTGAGGGTGAGACCGCATACATCAGCTCAAAATGCATCTTCTCTCTCATTGGTTAATGTT
TTTAATAAACTGCTAAGCAAAATGGCAGACGTCCTAAAAAAA

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FIGURE 4591

GGCCGCGCCCTGCAGATTGTCTCTTGTTGCGTAAGTTTTTTTGACCGTCACTCGTGTCAGCTTCAAAGTCAGATA
GATTTTTCTCCCAGCATGTTCTACTTCCGAGGCTGTGGCCGTTGGGTCGCGGTTTCCTTCACCAAGCAGCAATTT
CCGTTGGCACGGTTGAGCAGTGACAGCGCGGCGCCCCGGACTCCGCACTTCGACGTGATAGTCATTGGTGGAGGA
CATGCCGGGACTGAGGCAGCCACCGCCGCCGCTCGGTGCGGCTCTCGGACTCTGCTCCTCACTCACCGCGTGGAC
ACGATCGGTCAGATGTCATGTAATCCTTCCTTTGGTGGCATCGGAAAGGGACATTTAATGAGGGAAGTAGATGCC
TTGGATGGCCTGTGTTCTCGCATCTGTGACCAGTCTGGTGTACATTATAAAGTATTAAACCGGCGTAAGGGACCA
GCTGTGTGGGGTCTGAGAGCTCAGATTGATAGGAAACTCTATAAACAGAACATGCAGAAAGAAATCTTGAATACA
CCACTGCTTACTGTTCAGGAGGGAGCTGTAGAAGATCTTATTCTTACAGAACCAGAGCCTGAACACACTGGGAAA
TGCCGTGTCAGTGGGGTTGTTTTGGTGGATGGAAGCACAGTATATGCAGAGAGTGTGATTCTGACTACTGGGACA
TTTCTGAGAGGCATGATTGTAATTGGATTGGAGACGCATCCAGCAGGACGTTTAGGGGATCAGCCTTCTATAGGA
TTGGCTCAGACACTGGAGAAGTTAGGGTTTGTGGTGGGAAGGTTGAAGACTGGGACTCCACCCCGAATTGCCAAA
GAGTCCATTAATTTCAGTATTCTAAACAAGCATATACCGGACAATCCATCCATACCATTCAGCTTTACCAATGAG
ACAGTATGGATTAAGCCAGAAGATCAGCTGCCATGTTACTTGACTCACACCAACCCTAGAGTGGATGAGATTGTC
CTTAAGAACCTTCACCTTAATAGTCATGTTAAAGAAACGACAAGAGGACCTCGATACTGTCCCTCCATTGAATCA
AAAGTTTTGCGTTTTCCAAACCGTCTACATCAGGTTTGGTTGGAACCTGAAGGAATGGATTCTGACCTTATCTAC
CCACAGGGGTTATCTATGACGCTACCAGCTGAGTTACAAGAGAAAATGATCACATGCATCAGAGGCTTGGAGAAA
GCTAAAGTGATTCAGCCAGACGGAGTTTTGCTCTTGTTGCCCAGGATGGAGTGCAATGGTGCGATCTCGGCTCAC
CACAACCTCCCCCTGCCAGGCTACGGTGTTCAGTATGATTACTTAGATCCCCGTCAGATCACCCCTTCCTTGGAG
ACTCATTTGGTTCAACGACTCTTCTTTGCTGGACAGATCAATGGCACCACTGGTTATGAGGAAGCTGCAGCTCAA
GGTGTGATAGCCGGAATCAACGCCAGTCTTCGGGTCAGTCGCAAGCCTCCCTTTGTGGTTAGCCGAACAGAAGGT
TACATAGGAGTCTTGATTGATGACCTCACTACTCTGGGCACCAGTGAACCATACCGCATGTTTACCAGCCGAGTA
GAGTTCCGTTTGTCACTGCGCCCTGATAATGCTGACAGCCGGCTCACACTGCGAGGGTATAAAGACGCTGGCTGT
GTGTCCCAACAACGATATGAAAGAGCTTGTTGGATGAAGTCTTCTTTAGAAGAAGGCATTTCTGTGTTGAAATCT
ATTGAGTTTTTGAGCTCTAAATGGAAAAAATTAATCCCAGAGGCTTCTATAAGTACTAGTAGAAGTCTGCCTGTC
AGAGCTCTCGATGTTCTGAAGTATGAGGAAGTTGACATGGATTCATTAGCCAAGGCTGTTCCAGAGCCCTTGAAG
AAGTATACTAAATGTAGAGAGCTGGCTGAAAGACTGAAAATAGAAGCCACTTATGAATCAGTGTTGTTCCATCAA
CTACAAGAAATAAAGGGAGTTCAGCAAGATGAAGCTCTCCAACTGCCAAAAGACCTAGATTATTTGACTATCAGG
GATGTGTCTTTGTCCCATGAAGTTCGAGAGAAACTACATTTTAGTCGTCCACAGACGATCGGGGCTGCTAGTCGC
ATACCCGGAGTAACACCTGCCGCCATCATCAATCTGCTGAGATTTGTGAAGACCACTCAACGAAGACAGTCGGCT
ATGAATGAATCATCCAAGACTGATCAATACTTATGTGATGCAGACAGACTTCAAGAGAGAGAGTTATAGCTTTCA
ATTCATAAAAGATTTTTAAAGAGCATATAAATAATTTGATCAATACAACAGTATAGATAAAAGAATTATTTAGCA
CATGTTAAAATAGCTTTATTAGGTTACTATGGGTTTGCCATTAATTTCTGAGTGGGACAGAAATTATAATTGTGC
TTTTTCGTGTATATGAAAAAACTAGTCGTAAACAATTTGTACTCTTTCTTTAAGGAGCTGTAATACAAATAACTT
TGTGCAGTGTTCATCAAAGAGAGAGACAGTGAACCTAAAACTGAACCTGGAATAAAACTCAACATGCAGATTTGC
CTACTCATAGGGACTTTGCCTATTAAGTCTACCAAATTAAAAGTCTTATCATTCAGCGTGTTTTGAGAGTTAATA
ATCTTTTGCTTGGTTATACTAGGCTAGGAAGCAATATCAAAGCCCTTAAATTCTCAAGACTAAAGACTTGAGATT
ATATAAAATTATCCAGAATCATTCAGCTAATACTATTGGAATATAGTATGTAGGGTGAAAGTTGACAGAAATCTG
TACTTCTTCAGGAAATCCTCACTGGTAATTGTTTTGAACATTAATGAAAGCCCTATAAAATAGAAAGATTGGAAA
TCACCATTGTTTCCTATTATCCACAGTGTGGATGGATACTTATTTGGTGACCTAGTTATGGGAGAATTGAGTAAC
GTTAGTTATTTTATATCATACCATAAAAATATTTTC

FIGURE 4592

CTCATTTAACTTTTTTAATGGGTCTCAAAATTCTGTGACAAATTTTTGGTCAAGTTGTTTCCATTAAAAAGTACT
GATTTTAAAAACTAATAACTTAAAACTGCCACACGCAAAAAAGAAAACCAAAGTGGTCCACAAAACATTCTCCTT
TCCTTCTGAAGGTTTTACGATGCATTGTTATCATTAACCAGTCTTTTACTACTAAACTTAAATGGCCAATTGAAA
CAAACAGTTCTGAGACCGTTCTTCCACCACTGATTAAGAGTGGGGTGGCAGGTATTAGGGATAATATTCATTTAG
CCTTCTGAGCTTTCTGGGCAGACTTGGTGACCTTGCCAGCTCCAGCAGCCTTCTTGTCCACTGCTTTGATGACAC
CCACCGCAACTGTCTGTCTCATATCACGAACAGCAAAGCGACCCAAAGGTGGATAGTCTGAGAAGCTCTCAACAC
ACATGGGCTTGCCAGGAACCATATCAACAATGGCAGCATCACCAGACTTCAAGAATTTAGGGCCATCTTCCAGCT
TTTTACCAGAACGGCGATCAATCTTTTCCTTCAGCTCAGCAAACTTGCATGCAATGTGAGCCGTGTGGCAATCCA
ATACAGGGGCATAGCCGGCGCTTATTTGGCCTGGATGGTTCAGGATAATCACCTGAGCAGTGAAGCCAGCTGCTT
CCATTGGTGGGTCATTTTTGCTGTCACCAGCAACGTTGCCACGACGAACATCCTTGACAGACACATTCTTGACAT
TGAAGCCCACATTGTCCCCAGGAAGAGCTTCACTCAAAGCTTCATGGTGCATTTCGACAGATTTTACTTCCGTTG
TAACGTTGACTGGAGCAAAGGTGACCACCATACCGGGTTTGAGAACACCAGTCTCCACTCGGCCAACAGGAACAG
TACCAATACCACCAATTTTGTAGACATCCTGGAGAGGCAGGCGCAAGGGCTTGTCAGTTGGACGAGTTGGTGGTA
GGATGCAGTCCAGAGCCTCAAGCAGCGTGGTTCCACTGGCATTGCCATCCTTACGGGTGACTTTCCATCCCTTGA
ACCAAGGCATGTTAGCACTTGGCTCCAGCATGTTGTCACCATTCCAACCAGAAATTGGCACAAATGCTACTGTGT
CGGGGTTGTAGCCAATTTTCTTAATGTAAGTGCTGACTTCCTTAACAATTTCCTCATATCTCTTCTGGCTGTAGG
GTGGCTCAGTGGAATCCATTTTGTTAACACCGACAATTAGTTGTTTCACACCCAGTGTGTAAGCCAGAAGGGC**AT**
GCTCTCGGGTCTGCCCATTCTTGGAGATACCAGCTTCAAATTCACCAACACCAGCAGCAACAATCAGGACAGCAC
AGTCAACCTGAGATGTCCCTGTAATCATGTTTTTGATAAAGTCTCTGTGTCCTGGGGCATCAATGATAGTCACAT
AGTACTTGCTGGTCTCAAATTTCCACAAGGAGATATCAATGGTGATACCACGTTCACGCTCAGCTTTCAGTTTAT
CCAAGACCCAGGCATACTTGAAGGAGCCCTTTCCCATCTCAGCAGCCTCCTTCTCAAATTTTTCAATGGTTCTTT
TGTCGATGCCACCGCATTTATAGATCAGATGGCCAGTAGTGGTGGACTTGCCCGAATCTACGTGTCCAATGACGA
CAATGTTGATATGAGTCTTTTCCTTTCCCATTTTGGCTTT**TAG**GGGTAGTTTTCACGACACCTGTGTTCTGGCGG
CAAACCCG

FIGURE 4593

ACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATA
TCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGTG
GCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCT
GGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAATTTGAGACCA
GCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTTATCAAAAACATGATTACAGGGACATCTC
AGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGA
CCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTAATTGTCGGTGTTAACAAAATGGATTCCA
CTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCT
ACAACCCCGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAACA
TGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCACGCTGCTTGAGGCTCTGG
ACTGCATCCTACCACCAACTCGTCCAACTGACAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTG
GTATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAG
TCAACGTTACAACGGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATG
TGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACC
CACCAATGGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATG
CCCCTGTATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTT
CTGGTAAAAAGCTGGAAGATGGCCCTAAATTCTTGAAGTCTGGTGATGCTGCCATTGTTGATATGGTTCCTGGCA
AGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTCGCTTTGCTGTTCGTGATATGAGACAGACAG
TTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCCAGAAAG
CTCAGAAGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAGAACGGTCTCAG
AACTGT

FIGURE 4594

ATCTTCCGGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCTGACATATGTTCTCTAGGCCT
TTTAGAAAACATGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTCACCATGGCAAAACTGGGAGTCTA
CGATGTTCCCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAA
TGTGCGTATTGAGCACATTACGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGCGTGAAGGAAAATGATCAGAA
AAAGAAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAGCTAAAGCGCCAGCCTGCTCCACCCAGAGAAACACACTT
TGTGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCCTATTAATTCATGGCATAATAGGTGTTAAA
AAGAAAAATAAA

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FIGURE 4595

GGCCGGCGGCAGAGCTGTCCGGCTGCGCGGTGGCCCGGGGGGCCCGGGCGGCAGGGCAAGCAGCGCGGCCTCGGC
CTATGCGACCGGTGGCGCCGGCGCGGCTTCTGCCTGGAGAGGATTCAAGATGACCAACGAAGAACCTCTTCCCAA
GAAGGTTCGATTGAGTGAAACAGACTTCAAAGTTATGGCAAGAGATGAGTTAATTCTAAGATGGAAACAATATGA
AGCATATGTACAAGCTTTGGAGGGCAAGTACACAGATCTTAACTCTAATGATGTAACTGGCCTAAGAGAGTCTGA
AGAAAAACTAAAGCAACAACAGCAGGAGTCTGCACGCAGGGAAAACATCCTTGTAATGCGACTAGCAACCAAGGA
ACAAGAGATGCAAGAGTGTACTACTCAAATCCAGTACCTCAAGCAAGTCCAGCAGCCGAGCGTTGCCCAACTGAG
ATCAACAATGGTAGACCCAGCGATCAACTTGTTTTTCCTAAAAATGAAAGGTGAACTGGAACAGACTAAAGACAA
ACTGGAACAAGCCCAAAATGAACTGAGTGCCTGGAAGTTTACGCCTGATAGGTAAACAAATCATACTCCCCAGTC
AAGACTTCCCTGACAGTCCCACTACGAGAAAGCTGTGGTGGGACAGCCAAGTACTCGTTTCCACACCAAGACTCA
GACTTTTTGAGCCAAAAAAAAGCCACATTCTTACACTGTCCAGCTTGTAATGGTTAATGTAAAACTTACCAGATG
AACCTTGTGTTTCAGCTTTTTTCTTTTCCCCTTCCCCTTGCTTCAGAGGCCTGATGGCGTCGGACTATTCCGAAG
AAGTGGCCACCTCCGAAAAATTCCCCTTCTAGAACATGTAGACACTTGAGAAATGTTTCTGTTTGAAGAAAATAG
AGGGAGAAACAGAAGTCTTAAGTCTGTGGCACACTGTGTCTTCAGACAGTTTGAAGGAATGAAAACCTAGAGATT
TTAAATCATGAATTGAACATGTAAAATTCCAGTAAAATGTAAAAACGGAATATGCATCGCTCTTAACCTTGAGCA
TAGTGACTTAGAGACACTGTGTATCAGTTTTGCCAATAAGACTGTGGACTTCATGATTGTTGTTGAACTTCTGGG
TCAAAACTCAAATGAGGTGAATTTTGCCTTTAAAGGGTTTATTTGCTGAGAACCAACTTTCAATAGTCATGAGAG
AATCAAATAATAGATGTCCGTACAAGTAGCGCATATATTTAACCATTTAGTTTGGGGCTCTATATTACTTGCTTG
AGCCTTAATCAATGTGGTTTTATTCAATGGTTTGTTCTTTGAATGGTTGCAAAAACTGTAGATAATCTTACTGAG
GACTGTACAAACATGAAGGTGTGGTATCAAACTTCAGGTTGAAACTGTTTGAAGCATTATAAACATTCATTTCAC
AACTAGATTGTATAAGGATATTAGCTGTGATGAGACTCACTGCATTATTTTTTTTAGTGAATTTTATGAAATCCC
CGTTCCATTCAACAGGCACATGTTTAAAAGAGCTTTGTCGTTGGTGTTAATGGGGGAATGTGTTCCTTCATTGTA
TTTGGGCCTTTTGTATTGCACTCTTGATATTAAATTAAATGTGCCTT

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FIGURE 4596

GAGGGTGGGGCTGTAGCACCAGGTCAGGGAACGCGGGAGCCGCAGGGTTCCAGGGATCCCGCGGCTCCTCGCGGC
TTGGCCTGACCGGCTTCCTCCACATACGCCCCTCTCCTACACAAGTCCGGCCCTCGGCGCTCCTGCCGAAGCAGC
AGGCGCCTCGGACTCTGCGCGGCTCCCGCCGGCCACTCACCTATGATGGTCCGCGCCGCCGAGACGATGACCACA
GGATCTGAGCCTGCATTCATCTTGCTTCTCCTGCCGCCGTCTGCCCTGCGCTGCCTGCAAGCTAGGCAAAGCTCC
TCCTCGCAGCCCACAGGCCTGCCGCGGGCGGGACCTGAGCTCAGGACTGGAATCCCACGGGCGAGAATCTCGAGT
GCGAGCCCGGCCCGCGGCGGGTCTCAGCACAGCTCTGATGGGTCCTTTTGCTCTCGGCGGCTTCGGGAGGTCCTA
TGCGTTTCTCCTGGCGCCAGTCATTCGCTCGCGTGAGGGGCTTGCTAGGAGCGTCTCGGTGCGAGCCCCCTGCCT
TCTAAGATCAACTCTGGCTGTGAACGGGTGAGGACGCCGGGAGCGTCTTAGCGTCACAAAAGTTCCTTTGGTTGA
CGTTTGGACAGTGAAAGGAGCATGTAACAAGTGGGGTCAGTTTTGTTTAAAACCCTTTCTGACTTCCCAGCCTCT
TACTGGGCAAAGTTCATAATTTTTCTGAGCTTTCTAGGGTTTCCAGGCAAGCTTATGAGGGGCCACCGTTACAGC
AACTTGTTGGGAACACCTGGATAGTGGAACAAGAAAGCTTTGTCACAAAGTCATGAAGGGGAAAACTGTTGACGG
ACCTGGAGAATCTTCCTGAAGAACTTTAAAGTTGATTGAAAGAATCATTAAATCCTGGAAACCTACATTAAGACT
T

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FIGURE 4597

GGCAGCGCAGGGCAGACGGCGGCAGGAGAAGCAAGATGAATGCAGGCTCAGATCCTGTGGTCATCGTCTCGGCGG
CGCGGACCATCATAGGTTCCTTCAATGGTGCCTTAGCTGCTGTTCCTGTCCAGGACCTGGGCTCCACTGTCATCA
AAGAAGTCTTGAAGAGGGCCACTGTGGCTCCGGAAGATGTGTCTGAGGTCATCTTTGGACATGTCTTGGCAGCAG
GCTGTGGGCAGAATCCTGTTAGACAAGCCAGTGTGGGTGCAGGAATTCCCTACTCTGTTCCAGCATGGAGCTGCC
AGATGATCTGTGGGTCAGGCCTAAAAGCTGTGTGCCTTGCAGTCCAGTCAATAGGGATAGGAGACTCCAGCATTG
TGGTTGCAGGAGGCATGGAAAATATGAGCAAGGCTCCTCACTTGGCTTACTTGAGAACAGGAGTAAAGATAGGTG
AGATGCCACTGACTGACAGTATACTCTGTGATGGTCTTACAGATGCATTTCACAACTGTCATATGGGTATTACAG
CTGAAAATGTAGCCAAAAAATGGCAAGTGAGTAGAGAAGATCAGGACAAGGTTGCAGTTCTGTCCCAGAACAGGA
CAGAGAATGCACAGAAAGCTGGCCATTTTGACAAAGAGATTGTACCAGTTTTGGTGTCAACTAGAAAAGGTCTTA
TTGAAGTTAAAACAGATGAGTTTCCTCGCCATGGGAGCAACATAGAAGCCATGTCCAAGCTAAAGCCTTACTTTC
TTACTGATGGAACGGGAACAGTCACCCCAGCCAATGCTTCAGGAATAAATGATGGTGCTGCAGCTGTCGTTCTTA
TGAAGAAGTCAGAAGCTGATAAACGTGGGCTTACACCTTTAGCACGGATAGTTTCCTGGTCCCAAGTGGGTGTGG
AGCCTTCCATTATGGGAATAGGACCAATTCCAGCCATAAAGCAAGCTGTTACAAAAGCAGGTTGGTCACTGGAAG
ATGTTGACATATTTGAAATCAATGAAGCCTTTGCAGCTGTCTCTGCTGCAATAGTTAAAGAACTTGGATTAAACC
CAGAGAAGGTCAATATTGAAGGAGGGGCTATAGCCTTGGGCCACCCTCTTGGAGCATCTGGCTGTCGAATTCTTG
TGACCCTGTTACACACACTGGAGAGAATGGGCAGAAGTCGTGGTGTTGCAGCCCTGTGCATTGGGGGTGGGATGG
GAATAGCAATGTGTGTTCAGAGAGAATGAATTGCTTAAACTTTGAACAACCTCAATTTCTTTTTAAACTAATAAA
GTACTAGGTTGCAATATGTGAAATCAGAGGACCAAAGTACAGATGGAAACCATTTCCTACATCACAAAAACCCAA
GTTTACAGCTTGTACTTTACTTTAATGTGTAATACTCAACTCAAGGTACAAGACAATTGCATTTAACATTGTTAT
AAATAAAAGGAACATCAGATCAATCATT

FIGURE 4598

ACGTGTATCGCTGCCGTCAAGATGGAGGGGCCTTTGTCCGTGTTCGGTGACCGCAGCACTGGGGAAACGATCCGC
TCCCAAAACGTTATGGCTGCAGCTTCGATTGCCAATATTGTAAAAAGTTCTCTTGGTCCAGTTGGCTTGGATAAA
ATGTTGGTGGATGATATTGGTGATGTAACCATTACTAACGATGGTGCAACCATCCTGAAGTTACTGGAGGTAGAA
CATCCTGCAGCTAAAGTTCTTTGTGAGCTGGCTGATCTGCAAGACAAAGAAGTTGGAGATGGAACTACTTCAGTG
GTTATTATTGCAGCAGAACTCCTAAAAAATGCAGATGAATTAGTCAAACAGAAAATTCATCCCACATCAGTTATT
AGTGGCTATCGACTTGCTTGCAAGGAAGCAGTGCGTTATATCAATGAAAACCTAATTGTTAACACAGATGAACTG
GGAAGAGATTGCCTGATTAATGCTGCTAAGACATCCATGTCTTCCAAAATCATTGGAATAAATGGTGATTTCTTT
GCTAACATGGTAGTAGATGCTGTACTTGCTATTAAATACACAGACATAAGAGGCCAGCCACGCTATCCAGTCAAC
TCTGTTAATATTTTGAAAGCCCATGGGAGAAGTCAAATGGAGAGTATGCTCATCAGTGGCTATGCACTCAACTGT
GTGGTGGGATCCCAGGGCATGCCCAAGAGAATCGTAAATGCAAAAATTGCTTGCCTTGACTTCAGCCTGCAAAAA
ACAAAAATGAAGCTTGGTGTACAGGTGGTCATTACAGACCCTGAAAAACTGGACCAAATTAGACAGAGAGAATCA
GATATCACCAAGGAGAGAATTCAGAAGATCCTGGCAACTGGTGCCAATGTTATTCTAACCACTGGTGGAATTGAT
GATATGTGTCTGAAGTATTTTGTGGAGGCTGGTGCTATGGCAGTTAGAAGAGTTTTAAAAAGGGACCTTAAACGC
ATTGCCAAAGCTTCTGGAGCAACTATTCTGTCAACCCTGGCCAATTTGGAAGGTGAAGAAACTTTTGAAGCTGCA
ATGTTGGGACAGGCAGAAGAAGTGGTACAGGAGAGAATTTGTGATGATGAGCTGATCTTAATCAAAAATACTAAG
GCTCGTACGTCTGCATCGATTATCTTACGTGGGGCAAATGATTTCATGTGTGATGAGATGGAGCGCTCTTTACAT
GATGCACTTTGTGTAGTGAAGAGAGTTTTGGAGTCAAAATCTGTGGTTCCCGGTGGGGGTGCTGTAGAAGCAGCC
CTTTCCATATACCTTGAAAACTATGCAACCAGCATGGGGTCTCGGGAACAGCTTGCGATTGCAGAGTTTGCAAGA
TCACTTCTTGTTATTCCCAATACACTAGCAGTTAATGCTGCCCAGGACTCCACAGATCTGGTTGCAAAATTAAGA
GCTTTTCATAATGAGGCCCAGGTTAACCCAGAACGTAAAAATCTAAAATGGATTGGTCTTGATTTGAGCAATGGT
AAACCTCGAGACAACAAACAAGCAGGGGTGTTTGAACCAACCATAGTTAAAGTTAAGAGTTTGAAATTTGCAACA
GAAGCTGCAATCACCATTCTTCGAATTGATGATCTTATTAAATTACATCCAGAAAGTAAAGATGATAAACATGGA
AGTTATGAAGATGCTGTTCACTCTGGAGCCCTTAATGATTGATCTGATGTTCCTTTTATTTATAACAATGTTAAA
TGCAATTGTCTTGTACCTTGAGTTGAGTATTACACATTAAAGTAAAGTACAAGCTGTAAACTTGGGTTTTTGTGA
TGTAGGAAATGGTTTCCATCTGTACTTTGGTCCTCTGATTTCACATATTGCAACCTAGTACTTTATTAGTTTAAA
AAGAAATTGAGGTTGTTCAAAGTTTAAGCAATTCATTCTCTCTGAACACACATTGCTATTCCCATCCCACCCCCA
ATGCACAGGGCTGCAACACCACGACTTCTGCCCATTCTCTCCAGTGTGTGTAACAGGGTCACAAGAATTC

FIGURE 4599

GGAGAGTTTGGGGATCTACAGCAGCCAAAGGCTTGTCCCTGACTTTATATGGCTGCTCCTGGCGAGCGACTGAGT
CGTCCGTGAGGAAAAAGAGGCGAGGCTTTTCCGAGATCGTCTCAGCGATGGCGCTTCGGTCGCGGTTTTGGGGGT
TGTTCTCGGTTTGCAGGAACCCTGGGTGCAGGTTCGCAGCCCTGTCAACCAGCTCCGAGCCGGCAGCGAAACCTG
AAGTGGACCCTGTGGAAAATGAAGCTGTCGCCCCAGAATTCACCAACCGGAACCGCCGGAACCTGGAGCTTTTAT
CTGTAGCCAGGAAAGAGCGGGGCTGGCGGACGGTGTTTCCCTCCCGTGAGTTCTGGCACAGGTTGCGAGTTATAA
GGACTCAGCATCATGTAGAAGCACTTGTGGAGCATCAGAATGGCAAGGTTGTGGTTTCGGCCTCCACTCGTGAGT
GGGCTATTAAAAAGCACCTTTATAGTACCAGAAATGTGGTGGCTTGTGAGAGTATAGGACGAGTGCTGGCACAGA
GATGCTTAGAGGCGGGAATCAACTTCATGGTCTACCAACCAACCCCGTGGGAGGCAGCCTCAGACTCGATGAAAC
GACTACAAAGTGCCATGACAGAAGGTGGTGTGGTTCTACGGGAACCTCAGAGAATCTATGAATAAATGGAAGCAT
TAATTGTTTTGAACATGTAAATATAAATCTGTCAGCCACTACAGCCATCAAAAGAGAGCATCTGGAAGAACAGCC
AGCTTGGAAGTTTTACAGCAATAATGTTGCAGTGGAATATTATTTGTAGTTAAGGTCATCCTCCTCCCCTTTCTG
TTTTTTTAAATCAAGAACTACGTTCTGCCCCTCTCTTGGGCTTCAGAAGCATCTAAGAAAAGCAGTCATCAATTA
TAATTAACTTTCAAAGGGCAAGTCAGAAGTTGTTTATAAATTACAAAATAAAGGCATATTATGAACTCTT

FIGURE 4600A

CGAGCCCAGTCGAGCCGCGCTCACCTCGGGCTCCCGCTCCGTCTCCACCTCCGCCTTTGCCCTGGCGGCGCGACC
CCGTCCCGGGCGCGGCCCCCAGCAGTCGCGCGCCGTTAGCCTCGCGCCCGCCGCGCAGTCCGGGCCCGGCGCGAT
GGGGGCCGCCGCCGGCCGGAGCCCCCACCTGGGGCCCGCGCCCGCCCGCCGCCCGCAGCGCTCTCTGCTCCTGCT
GCAGCTGCTGCTGCTCGTCGCTGCCCCGGGGTCCACGCAGGCCCAGGCCGCCCCGTTCCCCGAGCTGTGCAGTTA
TACATGGGAAGCTGTTGATACCAAAAATAATGTACTTTATAAAATCAACATCTGTGGAAGTGTGGATATTGTCCA
GTGCGGGCCATCAAGTGCTGTTTGTATGCACGACTTGAAGACACGCACTTATCATTCAGTGGGTGACTCTGTTTT
GAGAAGTGCAACCAGATCTCTCCTGGAATTCAACACAACAGTGAGCTGTGACCAGCAAGGCACAAATCACAGAGT
CCAGAGCAGCATTGCCTTCCTGTGTGGGAAAACCCTGGGAACTCCTGAATTTGTAACTGCAACAGAATGTGTGCA
CTACTTTGAGTGGAGGACCACTGCAGCCTGCAAGAAAGACATATTTAAAGCAAATAAGGAGGTGCCATGCTATGT
GTTTGATGAAGAGTTGAGGAAGCATGATCTCAATCCTCTGATCAAGCTTAGTGGTGCCTACTTGGTGGATGACTC
CGATCCGGACACTTCTCTATTCATCAATGTTTGTAGAGACATAGACACACTACGAGACCCAGGTTCACAGCTGCG
GGCCTGTCCCCCCGGCACTGCCGCCTGCCTGGTAAGAGGACACCAGGCGTTTGATGTTGGCCAGCCCCGGGACGG
ACTGAAGCTGGTGCGCAAGGACAGGCTTGTCCTGAGTTACGTGAGGGAAGAGGCAGGAAAGCTAGACTTTTGTGA
TGGTCACAGCCCTGCGGTGACTATTACATTTGTTTGCCCGTCGGAGCGGAGAGAGGGCACCATTCCCAAACTCAC
AGCTAAATCCAACTGCCGCTATGAAATTGAGTGGATTACTGAGTATGCCTGCCACAGAGATTACCTGGAAAGTAA
AACTTGTTCTCTGAGCGGCGAGCAGCAGGATGTCTCCATAGACCTCACACCACTTGCCCAGAGCGGAGGTTCATC
CTATATTTCAGATGGAAAAGAATATTTGTTTTATTTGAATGTCTGTGGAGAAACTGAAATACAGTTCTGTAATAA
AAAACAAGCTGCAGTTTGCCAAGTGAAAAAGAGCGATACCTCTCAAGTCAAAGCAGCAGGAAGATACCACAATCA
GACCCTCCGATATTCGGATGGAGACCTCACCTTGATATATTTTGGAGGTGATGAATGCAGCTCAGGGTTTCAGCG
GATGAGCGTCATAAACTTTGAGTGCAATAAAACCGCAGGTAACGATGGGAAAGGAACTCCTGTATTCACAGGGGA
GGTTGACTGCACCTACTTCTTCACATGGGACACGGAATACGCCTGTGTTAAGGAGAAGGAAGACCTCCTCTGCGG
TGCCACCGACGGGAAGAAGCGCTATGACCTGTCCGCGCTGGTCCGCCATGCAGAACCAGAGCAGAATTGGGAAGC
TGTGGATGGCAGTCAGACGGAAACAGAGAAGAAGCATTTTTTCATTAATATTTGTCACAGAGTGCTGCAGGAAGG
CAAGGCACGAGGGTGTCCCGAGGACGCGGCAGTGTGTGCAGTGGATAAAAATGGAAGTAAAAATCTGGGAAAATT
TATTTCCTCTCCCATGAAAGAGAAAGGAAACATTCAACTCTCTTATTCAGATGGTGATGATTGTGGTCATGGCAA
GAAAATTAAAACTAATATCACACTTGTATGCAAGCCAGGTGATCTGGAAAGTGCACCAGTGTTGAGAACTTCTGG
GGAAGGCGGTTGCTTTTATGAGTTTGAGTGGCACACAGCTGCGGCCTGTGTGCTGTCTAAGACAGAAGGGGAGAA
CTGCACGGTCTTTGACTCCCAGGCAGGGTTTTCTTTTGACTTATCACCTCTCACAAAGAAAAATGGTGCCTATAA
AGTTGAGACAAAGAAGTATGACTTTTATATAAATGTGTGTGGCCCGGTGTCTGTGAGCCCCTGTCAGCCAGACTC
AGGAGCCTGCCAGGTGGCAAAAAGTGATGAGAAGACTTGGAACTTGGGTCTGAGTAATGCGAAGCTTTCATATTA
TGATGGGATGATCCAACTGAACTACAGAGGCGGCACACCCTATAACAATGAAAGACACACACCGAGAGCTACGCT
CATCACCTTTCTCTGTGATCGAGACGCGGGAGTGGGCTTCCCTGAATATCAGGAAGAGGATAACTCCACCTACAA
CTTCCGGTGGTACACCAGCTATGCCTGCCCGGAGGAGCCCCTGGAATGCGTAGTGACCGACCCCTCCACGCTGGA
GCAGTACGACCTCTCCAGTCTGGCAAAATCTGAAGGTGGCCTTGGAGGAAACTGGTATGCCATGGACAACTCAGG
GGAACATGTCACGTGGAGGAAATACTACATTAACGTGTGTCGGCCTCTGAATCCAGTGCCGGGCTGCAACCGATA
TGCATCGGCTTGCCAGATGAAGTATGAAAAAGATCAGGGCTCCTTCACTGAAGTGGTTTCCATCAGTAACTTGGG
AATGGCAAAGACCGGCCCGGTGGTTGAGGACAGCGGCAGCCTCCTTCTGGAATACGTGAATGGGTCGGCCTGCAC
CACCAGCGATGGCAGACAGACCACATATACCACGAGGATCCATCTCGTCTGCTCCAGGGGCAGGCTGAACAGCCA
CCCCATCTTTTCTCTCAACTGGGAGTGTGTGGTCAGTTTCCTGTGGAACACAGAGGCTGCCTGTCCCATTCAGAC
AACGACGGATACAGACCAGGCTTGCTCTATAAGGGATCCCAACAGTGGATTTGTGTTTAATCTTAATCCGCTAAA
CAGTTCGCAAGGATATAACGTCTCTGGCATTGGGAAGATTTTTATGTTTAATGTCTGCGGCACAATGCCTGTCTG
TGGGACCATCCTGGGAAAACCTGCTTCTGGCTGTGAGGCAGAAACCCAAACTGAAGAGCTCAAGAATTGGAAGCC
AGCAAGGCCAGTCGGAATTGAGAAAAGCCTCCAGCTGTCCACAGAGGGCTTCATCACTCTGACCTACAAAGGGCC
TCTCTCTGCCAAAGGTACCGCTGATGCTTTTATCGTCCGCTTTGTTTGCAATGATGATGTTTACTCAGGGCCCCT
CAAATTCCTGCATCAAGATATCGACTCTGGGCAAGGGATCCGAAACACTTACTTTGAGTTTGAAACCGCGTTGGC
CTGTGTTCCTTCTCCAGTGGACTGCCAAGTCACCGACCTGGCTGGAAATGAGTACGACCTGACTGGCCTAAGCAC
AGTCAGGAAACCTTGGACGGCTGTTGACACCTCTGTCGATGGGAGAAAGAGGACTTTCTATTTGAGCGTTTGCAA
TCCTCTCCCTTACATTCCTGGATGCCAGGGCAGCGCAGTGGGGTCTTGCTTAGTGTCAGAAGGCAATAGCTGGAA

FIGURE 4600B

TCTGGGTGTGGTGCAGATGAGTCCCCAAGCCGCGGCGAATGGATCTTTGAGCATCATGTATGTCAACGGTGACAA
GTGTGGGAACCAGCGCTTCTCCACCAGGATCACGTTTGAGTGTGCTCAGATATCGGGCTCACCAGCATTTCAGCT
TCAGGATGGTTGTGAGTACGTGTTTATCTGGAGAACTGTGGAAGCCTGTCCCGTTGTCAGAGTGGAAGGGGACAA
CTGTGAGGTGAAAGACCCAAGGCATGGCAACTTGTATGACCTGAAGCCCCTGGGCCTCAACGACACCATCGTGAG
CGCTGGCGAATACACTTATTACTTCCGGGTCTGTGGGAAGCTTTCCTCAGACGTCTGCCCCACAAGTGACAAGTC
CAAGGTGGTCTCCTCATGTCAGGAAAAGCGGGAACCGCAGGGATTTCACAAAGTGGCAGGTCTCCTGACTCAGAA
GCTAACTTATGAAAATGGCTTGTTAAAAATGAACTTCACGGGGGGGGACACTTGCCATAAGGTTTATCAGCGCTC
CACAGCCATCTTCTTCTACTGTGACCGCGGCACCCAGCGGCCAGTATTTCTAAAGGAGACTTCAGATTGTTCCTA
CTTGTTTGAGTGGCGAACGCAGTATGCCTGCCCACCTTTCGATCTGACTGAATGTTCATTCAAAGATGGGGCTGG
CAACTCCTTCGACCTCTCGTCCCTGTCAAGGTACAGTGACAACTGGGAAGCCATCACTGGGACGGGGGACCCGGA
GCACTACCTCATCAATGTCTGCAAGTCTCTGGCCCCGCAGGCTGGCACTGAGCCGTGCCCTCCAGAAGCAGCCGC
GTGTCTGCTGGGTGGCTCCAAGCCCGTGAACCTCGGCAGGGTAAGGGACGGACCTCAGTGGAGAGATGGCATAAT
TGTCCTGAAATACGTTGATGGCGACTTATGTCCAGATGGGATTCGGAAAAAGTCAACCACCATCCGATTCACCTG
CAGCGAGAGCCAAGTGAACTCCAGGCCCATGTTCATCAGCGCCGTGGAGGACTGTGAGTACACCTTTGCCTGGCC
CACAGCCACAGCCTGTCCCATGAAGAGCAACGAGCATGATGACTGCCAGGTCACCAACCCAAGCACAGGACACCT
GTTTGATCTGAGCTCCTTAAGTGGCAGGGCGGGATTCACAGCTGCTTACAGCGAGAAGGGGTTGGTTTACATGAG
CATCTGTGGGGAGAATGAAAACTGCCCTCCTGGCGTGGGGGCCTGCTTTGGACAGACCAGGATTAGCGTGGGCAA
GGCCAACAAGAGGCTGAGATACGTGGACCAGGTCCTGCAGCTGGTGTACAAGGATGGGTCCCCTTGTCCCTCCAA
ATCCGGCCTGAGCTATAAGAGTGTGATCAGTTTCGTGTGCAGGCCTGAGGCCAGGCCAACCAATAGGCCCATGCT
CATCTCCCTGGACAAGCAGACATGCACTCTCTTCTTCTCCTGGCACACGCCGCTGGCCTGCGAGCAAGCGACCGA
ATGTTCCGTGAGGAATGGAAGCTCTATTGTTGACTTGTCTCCCCTTATTCATCGCACTGGTGGTTATGAGGCTTA
TGATGAGAGTGAGGATGATGCCTCCGATACCAACCCTGATTTCTACATCAATATTTGTCAGCCACTAAATCCCAT
GCACGGAGTGCCCTGTCCTGCCGGAGCCGCTGTGTGCAAAGTTCCTATTGATGGTCCCCCCATAGATATCGGCCG
GGTAGCAGGACCACCAATACTCAATCCAATAGCAAATGAGATTTACTTGAATTTTGAAAGCAGTACTCCTTGCTT
AGCGGACAAGCATTTCAACTACACCTCGCTCATCGCGTTTCACTGTAAGAGAGGTGTGAGCATGGGAACGCCTAA
GCTGTTAAGGACCAGCGAGTGCGACTTTGTGTTCGAATGGGAGACTCCTGTCGTCTGTCCTGATGAAGTGAGGAT
GGATGGCTGTACCCTGACAGATGAGCAGCTCCTCTACAGCTTCAACTTGTCCAGCCTTTCCACGAGCACCTTTAA
GGTGACTCGCGACTCGCGCACCTACAGCGTTGGGGTGTGCACCTTTGCAGTCGGGCCAGAACAAGGAGGCTGTAA
GGACGGAGGAGTCTGTCTGCTCTCAGGCACCAAGGGGGCATCCTTTGGACGGCTGCAATCAATGAAACTGGATTA
CAGGCACCAGGATGAAGCGGTCGTTTTAAGTTACGTGAATGGTGATCGTTGCCCTCCAGAAACCGATGACGGCGT
CCCCTGTGTCTTCCCCTTCATATTCAATGGGAAGAGCTACGAGGAGTGCATCATAGAGAGCAGGGCGAAGCTGTG
GTGTAGCACAACTGCGGACTACGACAGAGACCACGAGTGGGGCTTCTGCAGACACTCAAACAGCTACCGGACATC
CAGCATCATATTTAAGTGTGATGAAGATGAGGACATTGGGAGGCCACAAGTCTTCAGTGAAGTGCGTGGGTGTGA
TGTGACATTTGAGTGGAAAACAAAAGTTGTCTGCCCTCCAAAGAAGTTGGAGTGCAAATTCGTCCAGAAACACAA
AACCTACGACCTGCGGCTGCTCTCCTCTCTCACCGGGTCCTGGTCCCTCGTCCACAACGGAGTCTCGTACTATAT
AAATCTGTGCCAGAAAATATATAAAGGGCCCCTGGGCTGCTCTGAAAGGGCCAGCATTTGCAGAAGGACCACAAC
TGGTGACGTCCAGGTCCTGGGACTCGTTCACACGCAGAAGCTGGGTGTCATAGGTGACAAAGTTGTTGTCACGTA
CTCCAAAGGTTATCCGTGTGGTGGAAATAAGACCGCATCCTCCGTGATAGAATTGACCTGTACAAAGACGGTGGG
CAGACCTGCATTCAAGAGGTTTGATATCGACAGCTGCACTTACTACTTCAGCTGGGACTCCCGGGCTGCCTGCGC
CGTGAAGCCTCAGGAGGTGCAGATGGTGAATGGGACCATCACCAACCCTATAAATGGCAAGAGCTTCAGCCTCGG
AGATATTTATTTTAAGCTGTTCAGAGCCTCTGGGGACATGAGGACCAATGGGGACAACTACCTGTATGAGATCCA
ACTTTCCTCCATCACAAGCTCCAGAAACCCGGCGTGCTCTGGAGCCAACATATGCCAGGTGAAGCCCAACGATCA
GCACTTCAGTCGGAAAGTTGGAACCTCTGACAAGACCAAGTACTACCTTCAAGACGGCGATCTCGATGTCGTGTT
TGCCTCTTCCTCTAAGTGCGGAAAGGATAAGACCAAGTCTGTTTCTTCCACCATCTTCTTCCACTGTGACCCTCT
GGTGGAGGACGGGATCCCCGAGTTCAGTCACGAGACTGCCGACTGCCAGTACCTCTTCTCTTGGTACACCTCAGC
CGTGTGTCCTCTGGGGGTGGGCTTTGACAGCGAGAATCCCGGGGACGACGGGCAGATGCACAAGGGGCTGTCAGA
ACGGAGCCAGGCAGTCGGCGCGGTGCTCAGCCTGCTGCTGGTGGCGCTCACCTGCTGCCTGCTGGCCCTGTTGCT
CTACAAGAAGGAGAGGAGGGAAACAGTGATAAGTAAGCTGACCACTTGCTGTAGGAGAAGTTCCAACGTGTCCTA

FIGURE 4600C

CAAATACTCAAAGGTGAATAAGGAAGAAGAGACAGATGAGAATGAAACAGAGTGGCTGATGGAAGAGATCCAGCT
GCCTCCTCCACGGCAGGGAAAGGAAGGGCAGGAGAACGGCCATATTACCACCAAGTCAGTGAAAGCCCTCAGCTC
CCTGCATGGGGATGACCAGGACAGTGAGGATGAGGTTCTGACCATCCCAGAGGTGAAAGTTCACTCGGGCAGGGG
AGCTGGGGCAGAGAGCTCCCACCCAGTGAGAAACGCACAGAGCAATGCCCTTCAGGAGCGTGAGGACGATAGGGT
GGGGCTGGTCAGGGGTGAGAAGGCGAGGAAAGGGAAGTCCAGCTCTGCACAGCAGAAGACAGTGAGCTCCACCAA
GCTGGTGTCCTTCCATGACGACAGCGACGAGGACCTCTTACACATCTGACTCCGCAGTGCCTGCAGGGGAGCACG
GAGCCGCGGGACAGCCAAGCACCTCCAACCAAATAAGACTTCCACTCGATGATGCTTCTATAATTTTGCCTTTAA
CAGAAACTTTCAAAAGGGAAGAGTTTTTGTGATGGGGGAGAGGGTGAAGGAGGTCAGGCCCCACTCCTTCCTGAT
TGTTTACAGTCATTGGAATAAGGCATGGCTCAGATCGGCCACAGGGCGGTACCTTGTGCCCAGGGTTTTGCCCCA
AGTCCTCATTTAAAAGCATAAGGCCGGACGCATCTCAAAACAGAGGGCTGCATTCGAAGAAACCCTTGCTGCTTT
AGTCCCGATAGGGTATTTGACCCCGATATATTTTAGCATTTTAATTCTCTCCCCCTATTTATTGACTTTGACAAT
TACTCAGGTTTGAGAAAAAGGAAAAAAAAACAGCCACCGTTTCTTCCTGCCAGCAGGGGTGTGATGTACCAGTTT
GTCCATCTTGAGATGGTGAGGCTGTCAGTGTATGGGGCAGCTTCCGGCGGGATGTTGAACTGGTCATTAATGTGT
CCCCTGAGTTGGAGCTCATTCTGTCTCTTTTCTCTTTTGCTTTCTGTTTCTTAAGGGCACACACACGTGCGTGCG
AGCACACACACACATACGTGCACAGGGTCCCCGAGTGCCTAGGTTTTGGAGAGTTTGCCTGTTCTATGCCTTTAG
TCAGGAATGGCTGCACCTTTTTGCATGATATCTTCAAGCCTGGGCGTACAGAGCACATTTGTCAGTATTTTTGCC
GGCTGGTGAATTCAAACAACCTGCCCAAAGATTGATTTGTGTGTTTGTGTGTGTGTGTGTGTGTGTGTGTGTG
TGTGAGTGGAGTTGAGGTGTCAGAGAAAATGAATTTTTTCCAGATTTGGGGTATAGGTCTCATCTCTTCAGGTTC
TCATGATACCACCTTTACTGTGCTTATTTTTTTAAGAAAAAAGTGTTGATCAACCATTCGACCTATAAGAAGCCT
TAATTTGCACAGTGTGTGACTTACAGAAACTGCATGAAAAATCATGGGCCAGAGCCTCGGCCCTAGCATTGCACT
TGGCCTCATGCTGGAGGGAGGCTGGGCGGGTACAGCGCGGAGGAGGAGGGAGGCCAGGCGGGCATGGCGTGGAGG
AGGAGGGAGGCCGGGCGGTCACAGCATGGAGGAGGAGGGAGGCGCTGCTGGTGTTCTTATTCTGGCGGCAGCGCC
TTTCCTGCCATGTTTAGTGAATGACTTTTCTCGCATTGTAGAATTGTATATAGACTCTGGTGTTCTATTGCTGAG
AAGCAAACCGCCCTGCAGCATCCCTCAGCCTGTACCGGTTTGGCTGGCTTGTTTGATTTCAACATGAGTGTATTT
TTTAAAATTGATTTTTCTCTTCATTTTTTTTTCAATCAACTTTACTGTAATATAAAGTATTCAACAATTTCAATA
AAAGATAAATTATTAA

FIGURE 4601

CTTTTTCGCAACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCAGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTC
AAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAA
TTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGATTACA
GGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTAATTGTCGGTGTTAACAAA
ATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAATCAGCACTTACATTAAGA
AAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAA
GTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCACGCTGCTTG
AGGCTCTGGACTGCATCCTACCACCAACTCATCCAACTGACAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACA
AAATTGGTGGTATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACCCGGTATGGTGGTCACCT
TTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTG
GGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTCGCTGGTGACAGCA
AAAATGACCCACCAATGGAAGCAGCGGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCA
CCGGCTATGCCCCTGTATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTG
ATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTCTTGAAGTCTGGTGATGCTGCCATTGTTGATATGG
TTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTCGCTTTGCTGTTCGTGATATGA
GACAGACAGTTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTG
CCCAGAAAGCTCAGAAGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAGAA
TGGTCTCAGAACTGTTTGTTTCAATTGGCCATTTAAGTTTAGTAGTAAAAGACTGGTTAATGATAACAATGCATC
GTAAAACCTTCAGAAGGAAAGGAGAATGTTTTGTGGACCACTTTGGTTTTCTTTTTTGCGTGTGGCAGTTTTAAG
TTATTAGTTTTTAAAATCAGTACTTTTTAATGGAAACAACTGGACCAAAAATTTGTCACAGAATTTTGAGACCCA
TT

FIGURE 4602

CTCTCTCCGGTCCATGCCTCCAAGATGACAAAGAAAAGAAGGAACAACGTTCGTGCCAAAAAGGGCCGCGGCCAC
GTGCAGCCTATTCGCTGCACTAACTGTGCCCGATGCGTGCCCAAGGACAACGCCATTAAGAAATTCGTCATTCGA
AACATAGTGGAGGCTGCAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTG
TGTGTGAAGCTACATTACTGTGTGAGTTGTGTAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGC
AAGGACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCGCACGTCCCCCACCAAAGCCCATGTAAGGA
GCTGAGTTCTTAAAGACTGAAGACAGACTATTCTCTGGAGAAAAATAAAATGGACATTGTACTTAAAAAAAAACA
AAAAAAAAAAAAAAAAAAA

5308/5332

FIGURE 4603

ATGAACGACACATGGTTGATGGCAGAGTTCAGACAACAATTATTTGGAGCAGACCAGGAGCAAAGACAGCTGATT
AGAGGATCAGTACCCAGGGCGGTACCACTCACCAACCAGCTGGCCTCTGTTGTCACCCGTCAGCTCACGATCCAG
TCCCTCTGGATGGTGACGGTCAGCGCCGTGCCGGCCAGGTTTGCCAAGGCCACTAGGGTGGTCACCAGTGCACAG
CAGGCCACCTACCGAAGGAGGGGAAAGGGTCTTACAAACAAGCTGTTATTCCAAGAATCTCTTCAAAAAACAGCA
ACAAGGCTTTCAGCTTTCAGCTGGGAGGAGGCCAAGGTGCAACTTTCTTGGGTCGTCCTGAATCTAGCCACCTCT
GCCATGCTGCCGAAGTTCTACCCCAATGAGATCAAAGTCACATACCTAAGGTGTACTGGGGATGAAGTGGGTGCC
ACGTCTGTGTTGGCCCCCAAGATCAGCCCCCTAGGTCTGTCTTCAGAAAAGAACAGAGAGGCCCAGATTGAGGTG
GTGACTTCTGCCTCTGCCCTGATCATCAAAGCCCTCAAGGAACCGCCAAGAGACAGAAAGAAACAGAAAAACATT
AAACACAGTGGAAATATCACTTTTGATGAGATTGTCAATGTTGCTCAACACATGTGGCACCGATCTTTAGCCAGA
GAACTCTCTGGAATCATTAAAGAGATCCTGGGGACTCCCCAGTCTGTGGGCTGCAATGTTGATGGCTGCCACCCT
CATGATATCATAGATGACATCAACGGTGGTGCTGTGGAATGCCCAGCTAATTAA

FIGURE 4604A

GGGTCCCTGGTCGTGCCTGTCAGAGAGGCTGGCGGCAGTGGTGGCTCTCCCGGCTGGGTTGTCAGTCAGTGAGAG
GAGGGGGAAGATGGCTCACCGGGACCCGTTCTGCTAGGAAGAAGGGGAGCAGGTGGTGCTGCTACTCGGGAGGAA
GCAGAGCAGCCTCCGTCGCTGTCGCTGAGAGCCTCACGAGTCGAGGTCCTGCAGGTGGAGCTCCGGCAGCCGCCC
TGGTTGAAGGTTTAGAACAGATGTGGAAAA**ATG**TTTACTTCAGAGAAAGGGGTTGTGGAGGAATGGTTGTCAGAG
TTTAAGACATTACCAGAAACATCTTTACCAAATTATGCCACAAATTTGAAAGACAAGAGTTCTTTAGTTTCATCT
CTCTATAAAGTTATCCAGGAGCCACAAAGTGAGTTGCTAGAACCTGTCTGTCACCAGCTCTTTGAATTCTATCGC
AGTGGAGAGGAGCAGTTGCTTCAATTTACGCTGCAATTTCTCCCAGAACTAATTTGGTGCTACCTTGCAGTCTCA
GCCAGCAGAAATGTGCATAGCAGTGGATGCATTGAAGCTCTTCTTCTAGGGGTTTACAATTTGGAAATAGTTGAC
AAACAGGGACATACCAAAGTATTGAGTTTTACGATTCCATCTTTATCCAAACCATCTGTATACCATGAACCTTCC
AGCATTGGGTCCATGGCTCTGACTGAGAGTGCACTATCCCAGCATGGTTTGTCAAAAGTGGTATACAGTGGACCT
CATCCTCAAAGGGAGATGCTGACAGCACAGAATCGGTTTGAAGTGTTGACATTCCTTTTGTTGTGTTACAATGCT
GCCTTAACTTACATGCCCAGTGTTTCTCTTCAGTCACTGTGTCAAATTTGTTCAAGAATCTGTGTTTGTGGATAT
CCTCGACAACATGTAAGAAAATATAAAGGTATAAGTAGCAGGATACCAGTTTCTTCAGGATTCATGGTGCAAATG
TTAACAGGGATTTATTTTGCCTTTTATAATGGAGAATGGGATCTAGCTCAAAAAGCACTGGATGATATTATATAC
AGAGCCCAGCTAGAATTATATCCAGAGCCATTGCTGGTTGCTAATGCAATAAAGGCTTCATTGCCTCATGGTCCC
ATGAAATCTAATAAGGAAGGTACAAGGTGTATTCAAGTTGAAATCACACCAACTTCCTCTCGAATATCAAGAAAT
GCAGTAACCAGCATGTCAATAAGGGGTCATAGGTGGAAAAGACATGGAAATACAGAATTAACAGGTCAAGAAGAA
CTGATGGAGATATCTGAAGTTGACGAGGGATTTTATTCCAGGGCTGCGTCTAGTACCAGCCAGTCGGGTTTATCA
AACAGTAGTCACAATTGTAGTAACAAGCCAAGTATAGGAAAGAACCACAGACGGTCAGGAGGAAGCAAAACTGGA
GGAAAAGAAAAAGAAACTACAGGGGAATCTTGCAAAGATCACTTTGCTCGAAAACAAACTCAGAGAGCCCAAAGT
GAGAATCTTGAGCTTCTCTCTTTGAAGAGACTTACTTTAACAACCAGCCAATCCCTACCTAAGCCTAGTAGCCAT
GGTTTGGCTAAGACCGCAGCGACTGTATTTAGTAAATCCTTTGAACAAGTCAGTGGTGTCACAGTCCCACATAAC
CCGTCATCTGCTGTTGGTTGTGGGGCTGGGACAGATGCCAATAGGTTTTCCGCTTGTAGTCTCCAAGAAGAAAAG
CTTATTTACGTTTCAGAAAGAACTGAACTTCCAATGAAGCATCAATCAGGTCAGCAGAGACCTCCTAGTATTAGC
ATTACTCTGTCCACAGAT**TAA**TTAGTAACATATTTTTCTCCCATAACCTAGTGAACCTGGAAATACAACTTTGCT
TCTTTATGAAAGTACCCTGGGTCTTTCATCCGTATTCCTGACAGGAGCCCTGATGTCTTAAATTCTGAAGGCTCC
CCTGACTTTATGAAGGGAAGATTGTCTAGGTTGCAGTAAGTTGAAATATGGTTTTGTTATTTCTTGATTAAGATT
TTTTCCCCTTGGTTTGAGTCTTTTTTTTCCCTCCTCTTATTTGTTATTGTTGCCCTAAGATTGTCAGTGACAATA
AATTTTGACAGGTTGTCTAATCAAGTTGGTTATGTCTCATGTGAGGTTGTAAGGTGGTTTTTCTTGTTTTGGTTT
GGTTTGGTTTTTTAATAGCTCCTATTTTGATGGCTGTGTGTTTGGCCTTCAGAGTCAAAGGGAGTCTGCATGTAT
GGGAACTGTTTTATAGAGAATGGGGCAGAGGCACAACTCCAGGAATTCTCTAGCTCCTGGTCAGGAAGCCAATCT
GAAAACAGGCATGTGGAAACACAAAAATGATGTGTATGAAAAGCACCTGATGAAAATATTTGTAAGCAGATCATC
TTTATGATTAGAACAATTTGCTCAAAGCCCTGGAAAATGCCTGGTAACCCAGTGCCTAGAATATTATATGATTCC
AGGGGATGGCTAGAGGCATTTCTGTTGTTATCTCTGAAACATTTTTATATCAAAAATCAGATTGCTGGTAGGTGT
GTTGTTTTGAAGTGTTTTATCTGGATTTAGCATGTGAAGATCCCTTTCAATTATTAAGGTATAATAGGCTGTAAA
GCTGATTTACCCTACTGCTGGACTTTGGAAATCCTAGTTAGTTTGGACTCCTATAATTCAGAGCATACGTCATTG
GAAGACTTCCTGGAAATCAGTGTAAATCTTGCAACATAGCTCTCAAGATACCACTGTATAATATGTAATTGTTTG
TCTGCAAATGCATTTTTCATCTATAAAATGTCATGAAAGAAAATAAAGGTAGTGAAATATGGACAAAGGACATTT
ATATATTAACTAAAGTTGTTTATGTTTGTGTTCTTAAATTTAAAACACGAAGAAAAAGAAATGTCTTTCTTGTTA
GTGAACAGGCCTGTTTTAAATATCTTAGTATGATATCAAAAGAATAATCAATTTAGTTACCTCCCAACTAAAAAG
TAAAAATGAAAAAGACGACATGGCAGAAGTTGAAACAAACTTGTATGTATCTGTATGTGACCTCTAGATGGAAAT
AAAAGTTTGATGTTTGCTAGCCGTGGTCCTTTTGGCTATGGTTGCGGTTCCCCTGTAAAGCAAATGTACTTAAGT
CATCATTCAGAGTGAGAGAGAGAAAGCACGGCTGAGGCTGAGTCAGTTGACCGTTGAGGAAGACCTAAGGAGCTG
TCCAGTTCTTGGCTCTTTTTCACTGTGACTGCACAGCGGTTTCCTTCTTCATAGTCCCTTGCTGTAGTCACCAAG
AGAGCATGCTAGTGTTTTCCTCTTGTTCCTGCTTATGCAGAGCTCAGATATATGAAAAATTTGTATGCTTTGAAG
GCTGCCAAAGCATTTATACTCTGGACATAGTTTTAACTGCAACTGCTTTGGCTACCAGTTTAAACCGAGTTCTTC
AAAAAGCATGAACTCGTTTTCATTCATTAGCCCTGTTTACAATGTGGATTTTGACATAAATGAATTTGATTTTCT
TTTAGCTCCAGTAACAGAATGGAATAAGATCTATTGCCATAAATTGTAGTTAAGAACTGTAAGGCAATCGGGCAG

FIGURE 4604B

TGAAACTTGATATTGTATTAACTTAATAGGAACCCTGTGTACAATTTAAAATATTTGTAAAATATCACTGTGAAT
TTACAGATGTCTTTTTGTCATTCTTTAACAATGAATTTCCCCTGTGCATAGTTATTAATAGTATTGGTATTATTA
AAAACTAATTTGGCATTTT

FIGURE 4605

GCGCCGAGCCGGTTTCCCCGCCGGTGTCCGAGAGGCGCCCCCGGCCCGGCCCGGCCCGGCCCGCGCCCTCCGCCC
CCGCCTCCCCGGGCCGGCGGCGGTGGGCGAGCTCGCGGGCCCGGCCGCCCCCAGCCCCAGCCCCGCCGGGCCCCG
CCCCCCGTCGAGTGC**ATG**AGGTTGACGCTACTTTGTTGCACCTGGAGGGAAGAACGTATGGGAGAGGAAGGAAGC
GAGTTGCCCGTGTGTGCAAGCTGCGGCCAGAGGATCTATGATGGCCAGTACCTCCAGGCCCTGAACGCGGACTGG
CACGCAGACTGCTTCAGGTGTTGTGACTGCAGTGCCTCCCTGTCGCACCAGTACTATGAGAAGGATGGGCAGCTC
TTCTGCAAGAAGGACTACTGGGCCCGCTATGGCGAGTCCTGCCATGGGTGCTCTGAGCAAATCACCAAGGGACTG
GTTATGGTGGCTGGGGAGCTGAAGTACCACCCCGAGTGTTTCATCTGCCTCACGTGTGGGACCTTTATCGGTGAC
GGGGACACCTACACGCTGGTGGAGCACTCCAAGCTGTACTGCGGGCACTGCTACTACCAGACTGTGGTGACCCCC
GTCATCGAGCAGATCCTGCCTGACTCCCCTGGCTCCCACCTGCCCCACACCGTCACCCTGGTGTCCATCCCAGCC
TCATCTCATGGCAAGCGTGGACTTTCAGTCTCCATTGACCCCCCGCACGGCCCACCGGGCTGTGGCACCGAGCAC
TCACACACCGTCCGCGTCCAGGGAGTGGATCCGGGCTGCATGAGCCCAGATGTGAAGAATTCCATCCACGTCGGA
GACCGGATCTTGGAAATCAATGGCACGCCCATCCGAAATGTGCCCCTGGACGAGATTGACCTGCTGATTCAGGAA
ACCAGCCGCCTGCTCCAGCTGACCCTCGAGCATGACCCTCACGATACACTGGGCCACGGGCTGGGGCCTGAGACC
AGCCCCCTGAGCTCTCCGGCTTATACTCCCAGCGGGGAGGCGGGCAGCTCTGCCCGGCAGAAACCTGTCTTGAGG
AGCTGCAGCATCGACAGGTCTCCGGGCGCTGGCTCACTGGGCTCCCCGGCCTCCCAGCGCAAGGACCTGGGTCGC
TCTGAGTCCCTCCGCGTAGTCTGCCGGCCACACCGCATCTTCCGGCCGTCGGACCTCATCCACGGGGAGGTGCTG
GGCAAGGGCTGCTTCGGCCAGGCTATCAAGGTGACACACCGTGAGACAGGTGAGGTGATGGTGATGAAGGAGCTG
ATCCGGTTCGACGAGGAGACCCAGAGGACGTTCCTCAAGGAGGTGAAGGTCATGCGATGCCTGGAACACCCCAAC
GTGCTCAAGTTCATCGGGGTGCTCTACAAGGACAAGAGGCTCAACTTCATCACTGAGTACATCAAGGGCGGCACG
CTCCGGGGCATCATCAAGAGCATGGACAGCCAGTACCCATGGAGCCAGAGAGTGAGCTTTGCCAAGGACATCGCA
TCAGGGATGGCCTACCTCCACTCCATGAACATCATCCACCGAGACCTCAACTCCCACAACTGCCTGGTCCGCGAG
AACAAGAATGTGGTGGTGGCTGACTTCGGGCTGGCGCGTCTCATGGTGGACGAGAAGACTCAGCCTGAGGGCCTG
CGGAGCCTCAAGAAGCCAGACCGCAAGAAGCGCTACACCGTGGTGGGCAACCCCTACTGGATGGCACCTGAGATG
ATCAACGGCCGCAGCTATGATGAGAAGGTGGATGTGTTCTCCTTTGGGATCGTCCTGTGCGAGATCATCGGGCGG
GTGAACGCAGACCCTGACTACCTGCCCCGCACCATGGACTTTGGCCTCAACGTGCGAGGATTCCTGGACCGCTAC
TGCCCCCCAAACTGCCCCCCGAGCTTCTTCCCCATCACCGTGCGCTGTTGCGATCTGGACCCCGAGAAGAGGCCA
TCCTTTGTGAAGCTGGAACACTGGCTGGAGACCCTCCGCATGCACCTGGCCGGCCACCTGCCACTGGGCCCACAG
CTGGAGCAGCTGGACAGAGGTTTCTGGGAGACCTACCGGCGCGGCGAGAGCGGACTGCCTGCCCACCCTGAGGTC
CCCGAC**TGA**GCCAGGGCCACTCAGCTGCCCCTGTCCCCACCTCTGGAGAATCCACCCCCACCAGATTCCTCCGCG
GGAGGTGGCCCTCAGCTGGGACAGTGGGGACCCAGGCTTCTCCTCAGAGCCAGGCCCTGACTTGCCTTCTCCCAC
CCCGTGGACCGCTTCCCCTGCCTTCTCTCTGCCGTGGCCCAGAGCCGGCCCAGCTGCACACACACACCATGCTCT
CGCCCTGCTGTAACCTCTGTCTTGGCAGGGCTGTCCCCTCTTGCTTCTCCTTGCATGAGCTGGAGGGCCTGTGTG
AGTTACGCCCCTTTCCACACGCCGCTGCCCCAGCAACCCTGTTCACGCTCCACCTGTCTGGTCCATAGCTCCCTG
GAGGCTGGGCCAGGAGGCAGCCTCCGAACCATGCCCCATATAACGCTTGGGTGCGTGGGAGGGCGCACATCAGGG
CAGAGGCCAAGTTCCAGGTGTCTGTGTTCCCAGGAACCAAATGGGGAGTCTGGGGCCCGTTTTCCCCCCAGGGGG
TGTCTAGGTAGCAACAGGTATCGAGGACTCTCCAAACCCCCAAAGCAGAGAGAGGGCTGATCCCATGGGGCGGAG
GTCCCCAGTGGCTGAGCAAACAGCCCCTTCTCTCGCTTTGGGTCTTTTTTTTGTTTCTTTCTTAAAGCCACTTTA
GTGAGAAGCAGGTACCAAGCCTCAGGGTGAAGGGGGTCCCTTGAGGGAGCGTGGAGCTGCGGTGCCCTGGCCGGC
GATGGGGAGGAGCCGGCTCCGGCAGTGAGAGGATAGGCACAGTGGACCGGGCAGGTGTCCACCAGCAGCTCAGCC
CCTGCAGTCATCTCAGAGCCCCTTCCCGGGCCTCTCCCCCAAGGCTCCCTGCCCCTCCTCATGCCCCTCTGTCCT
CTGCGTTTTTTCTGTGTAATCTATTTTTTAAGAAGAGTTTGTATTATTTTTTCATACGGCTGCAGCAGCAGCTGC
CAGGGGCTTGGGATTTTATTTTTGTGGCGGGCGGGGGTGGGAGGGCCATTTTGTCACTTTGCCTCAGTTGAGCAT
CTAGGAAGTATTAAAACTGTGAAGCTTTCTCAGTGCACTTTGAACCTGGAAAACAATCCCAACAGGCCCGTGGGA
CCATGACTTAGGGAGGTGGGACCCACCCACCCCCATCCAGGAACCGTGACGTCCAAGGAACCAAACCCAGACGCA
GAACAATAAAATAAATTCCGTACTCCCCACCC

FIGURE 4606

GACGGCAAATGGCGGACTTCGACACCTACGACGATCGGGCCTACAGCAGCTTCGGCGGCGGCAGAGGGTCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCCACAGAGCCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCAGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGTACGGCTAG
TCAGAGACAAAGACACAGATAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCACTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTCAGAAAAGGTGGACCAGATGACAGAGGAATGGGTAGCTCTCGAGAATCTAGAGGTGGAT
GGGATTCCCGGGATGACTTCAATTCTGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAGGTAGTCGCCCAGGCG
ACCGGCGAACAGGCCCCCCCATGGGCAGCCGCTTCAGAGATGGCCCTCCCCTCCGTGGATCCAACATGGATTTCA
GAGAACCCACAGAAGAGGAAAGAGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAGTCGCGACGCCCCTCA
ATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGAAGTCGTTCAAAAGGAGCAAG
AATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGGTGAGTCCCCGGGCAG
CCGTCCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCTTGTGAGTGCATGTCA
GCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTTTGTGCGTTTTTTTCT
TTCTTCCGCTGCTTCCCCATTTTCCTTCTGTCCTTTTTCTCCTGCTCCTTGTTTTCCCAGCAGCACATGGGGTTC
CTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTGGGCTGCGGTGCTGCGTCATTTTTCCTTTGCTTTCTC
TTTACTTTAGACACTGGCCCAACTCCAGGCGTTTCCTTTCATTCCCTCAGTGCTTCTCTTCTGACCTGCATGTTG
AGTTCTGTATTGCTGGGGCTTCCAACAAAAACCAGAGTCACTGACAGAGGGAACAGCAGAGACCTTGTTGGTATT
CAGCTGTGATGGATATAGAGAATCAGAGGCACCTTGTTTTCACAACTAGGATAAAAATATCTGCAGGGTCCTTTC
CATTCCTATTTAGAGGGAGTCCTGGCTCCATGACCCCCTCCCGAGTGGACTGTCCAAGCAGATAGGCTCACACGA
GAAACAGTGAGGCTGAAAGGGGGGGCTATGGAAGAGCGGTAGGGAGTCCACGGAGAAGATGCAGTGAATGCTTGC
ATGCATTCACACGTGTGTGTGTCCCAGCTAGTTCACTCCTTTCGCCGTGCGTGGTGGAGGCTGGCCTCTCTGGCT
GGGTGCAGTGAATGGCCAGCGGGTTTCTTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGAGGGGGTGGTGCTGGT
GCTGCACTGGGCTGACTGCGGCGCTGACGCAGCGTTTCCCCCCATCCCTGTTGCCTGTGTGTTGTGTGGATCTGT
TCCTAGTATAGGCAACATAATGAGATACTGTGCTTCCCACCTCCCCTTCAGTTCAGAGCCAAAATGGGTCTAGAA
TCTGGCACTTTACTCATTTCCTTTGATAAATTGTACTATGCAGAGCTGTCAGGAACCTTCAGATAGCAGTAGAGG
ACTGCAGCTGTCTAGGTCTGCGGCCACATCTTGGGGACACACTGGACTGTTCCCATGTGCAGGGTTCAGCAGTTA
TGTGGGAGTGCTAGGGGTTAGGCTTTTGAGCTTGAACGCCTGCGTGTGAACAGATGAAAAATCCTTCAGTACCCA
AGTCCCAGTCTGTCCTATGGGGAGCAGTTTGGGGGCGGCCGGCAGCAGGAGCCTGGGAAAGAGGCCCTCGCCAGG
TGATGGCAGGGCCAGGGTGGCCTGGGGCACCCAGCGGAATGTGCTTAGTATTTGGTCACCAGCCGTCATCCTGGG
CTTTTCCTACTGTGTCTTGTTACAAGGCCTCAGCAATCCACAGAACTCTCTCTCCTTCCTTCCACCTGTCAGCTT
CTCTGCTTCTGAGATAAGAACCATTTGTGTAACACCAACACTTAACTTCAGAAAGACATGCATTATGTGGTGTAA
TCAAACCCGATGCTTTCAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACAAAACACATGCATCTA
AACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAACACATTCAGCTATATGAC
AGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAAGAAAACCTTACGTAATATTT

FIGURE 4607

CAGTGCGGCGGATGTACGGATGATTCAGTGGCTGGCAGGAAGCCCGCCCTGCCCGCCCGCCAGTGTCAGTGGTGT
TGGCATCAGCTTGGGCAGGTGTGCGGGCTCAGGATGGGGCGGCCGTGGTGAGGAACCCTGGACTCTCAGAGATGG
AATTTCACCGTGTTGCCTAGGCTGGTCTGGAGCTCTTGATCTCAAGCGATCCTCCCTGCCTCGGCCTCCCAACGT
GCTGGGATTATAGGCGTGAGCCACCGCTCCTGGCCAGGGTCTGTTCCTAGTTGCAACAGTTCTTGGAAACCCACT
CGAGAGGGCCACGCCTCCATTCACCAGGCCACGCATCACAAGAGGCAACACCAGGAGCCAACATGAGCTCGGGGA
CTGAACTGCTGTGGCCCGGAGCAGCGCTGCTGGTGCTGTTGGGGGTGGCAGCCAGTCTGTGTGTGCGCTGCTCAC
GCCCAGGTGCAAAGAGGTCAGAGAAAATCTACCAGCAGAGAAGTCTGCGTGAGGACCAACAGAGCTTTACGGGGT
CCCGGACCTACTCCTTGGTCGGGCAGGCATGGCCAGGACCCCTGGCGGACATGGCACCCACAAGGAAGGACAAGC
TGTTGCAATTCTACCCCAGCCTGGAGGATCCAGCATCTTCCAGGTACCAGAACTTCAGCAAAGGAAGCAGACACG
GGTCGGAGGAAGCCTACATAGACCCCATTGCCATGGAGTATTACAACTGGGGGCGGTTCTCGAAGCCCCCAGAAG
ATGATGATGCCAATTCCTACGAGAATGTGCTCATTTGCAAGCAGAAAACCACAGAGACAGGTGCCCAGCAGGAGG
GCATAGGTGGCCTCTGCAGAGGGGACCTCAGCCTGTCACTGGCCCTGAAGACTGGCCCCACTTCTGGTCTCTGTC
CCTCTGCCTCCCCGGAAGAAGATGAGGAATCTGAGGATTATCAGAACTCAGCATCCATCCATCAGTGGCGCGAGT
CCAGGAAGGTCATGGGGCAACTCCAGAGAGAAGCATCCCCTGGCCCGGTGGGAAGCCCAGACGAGGAGGACGGGG
AACCGGATTACGTGAATGGGGAGGTGGCAGCCACAGAAGCCTAGGGCAGACCAAGAAGAAAGGAGCCAAGGCAAA
GAGGGACCACTGTGCTCATGGACCCATCGCTGCCTTCCAAGGACCATTTCCCAGAGCTACTCAACTTTTAAGCCC
CTGCCATGGTTGCTCCTGGAAGGAGAACCAGCCACCCTGAGGACCACCTGGCCATGCGTGCACAGCCTGGGAAAA
GACAGTTACTCACGGGAGCTGCAGGCCCGTCACCAAGCCCTCTCCCGACCCAGGCTTTGTGGGGCAGGCACCTGG
TACCAAGGGTAACCCGGCTCCTGGTATGGACGGATGCGCAGGATTTAGGATAAGCTGTCACCCAGTCCCCATAAC
AAAACCACTGTCCAACACTGGTATCTGTGTTCTTTTGTGCTATGAATTTGGATTCCTAATTGCTATTGTTGGTTG
CTGGGGTTTTAAATGATTGATAAGCTTGTACAGTTAACTTATAGAGGGGGAGCCATATTTAACATTCTGGATTTC
AGAGTAGAGATTTCTGTGTTGTCTCCTAGAAAGCATTACATGTAGTTTATTTCAGCATCCTTGTTGGGTGGGGCC
CTGGCTCTCTTCCCCTTTGGTGGGACCTCCCCTTTCTTTGGGCTTCAGTTCACTCAGGAAGAAATGAGGCTGTCG
CCATCTTTATGTGCTTCCAGTGGAAATGTCACTTGCTACAGACAATAGTGCATGAGAGTCTAGAGAAGTAGTGAC
CAGAACAGGGCAGAGTAGGTCCCCTCCATGGCCCTGAATCCTCCTCTGCTCCAGGGCTGGCCTCTGCAGAGCTGA
TTAAACAGTGTTGTGACTGTCTCATGGGAAGAGCTGGGGCCCAGAGGGACCTTGAGTCAGAAATGTTGCCAGAAA
AAGTATCTCCTCCAACCAAAACATCTCAATAAAACCATTTTAGTTG

5314/5332

FIGURE 4608

GGGAAGAGGAGGCGCGAGAATGGAGGTGGAGGCCGTCTGTGGTGGCGCGGGCGAGGTGGAGGCCCAGGACTCTGA
CCCTGCCCCTGCCTTCAGCAAGGCCCCCGGCAGCGCCGGCCACTACGAACTGCCGTGGGTTGAAAAATATAGGCC
AGTAAAGCTGAATGAAATTGTCGGGAATGAAGACACCGTGAGCAGGCTAGAGGTCTTTGCAAGGGAAGGAAATGT
GCCCAACATCATCATTGCGGGCCCTCCAGGAACCGGCAAGACCACAAGCATTCTGTGCTTGGCCCGGGCCCTGCT
GGGCCCAGCACTCAAAGATGCCATGTTGGAACTCAATGCTTCAAATGACAGGGGCATTGACGTTGTGAGGAATAA
AATTAAAATGTTTGCTCAACAAAAAGTCACTCTTCCCAAAGGCCGACATAAGATCATCATTCTGGATGAAGCAGA
CAGCATGACCGACGGAGCCCAGCAAGCCTTGAGGAGAACCATGGAAATCTACTCTAAAACCACTCGCTTCGCCCT
TGCTTGTAATGCTTCGGATAAGATCATCGAGCCCATTCAGTCCCGCTGTGCAGTCCTCCGGTACACAAAGCTGAC
CGACGCCCAGATCCTCACCAGGCTGATGAATGTTATCGAGAAGGAGAGGGTACCCTACACTGATGACGGCCTAGA
AGCCATCATCTTCACGGCCCAGGGAGACATGAGGCAGGCGCTGAACAACCTGCAGTCCACCTTCTCAGGATTTGG
CTTCATTAACAGTGAGAACGTGTTCAAGGTCTGTGACGAGCCCCACCCACTGCTGGTAAAGGAGATGATCCAGCA
CTGTGTGAATGCCAACATTGACGAAGCCTACAAGATTCTTGCTCACTTGTGGCATCTGGGCTACTCACCAGAAGA
TATCATTGGCAACATCTTTCGAGTGTGTAAAACTTTCCAAATGGCAGAATACCTGAAACTGGAGTTTATCAAGGA
AATTGGATACACTCACATGAAAATAGCGGAAGGAGTGAACTCTCTTTTGCAGATGGCAGGCCTCCTGGCAAGGCT
GTGTCAGAAGACAATGGCCCCGGTGGCCAGTTAGAGCAGAGACTTCACTGACTGACTTACAGGTGCCCTATTCTG
AGGTACAGGAGCCGCGGCTTTCTGATGGGGGAAAATGCCGCCTTAGGCTGGAGCCAACATGACTGTCCTTTAAAC
TCCAGTGGCTGGCCAGGCACGGTAGCTCACGCCTGTAATCCCAACACTTTGGGAGGCCGAGGCAGGTGGATCACC
TGAGGTCAGAAGTTCAAGACCAGCCTGGCCAACATGGGGAAACCCTGTCTTTACTAAAAATATAAAAATTAGCTG
GGTGTGGTGGCGGGCACCTGTAATCCCAGCTACTCGGGAGGCTGTGGCAGGAGAATCGCTTGAACCCAGGAGGTG
GAGGTTGCAGTGAGCCAAGATCACACCATTGCACTCCAGCCTGGGCGACAGAGTCTCCATCTGGGGAAAAAAATT
AAATAAATAAACTCCCG

FIGURE 4609A

CGGCTCGGCCGCGGGGCGCGCAGGCGGCTGCTGGGCGGCCTCGGTGCGCGCCTCCCGCCTTCCCAGAGACGTGGC
GCGAGGCCCGGGCCCTGAGCACCTATCGCGGGGATCCCCGGCGCCAGGAGGGGGTGCAGCCGGTGGGCAGCGCCG
CGCAGGGAGGGGCCGCAGCATCCTCGCCCCCCAGCGCGCCCGGGCCCGAGAGGAGGAGGCCGGGGCTCTCCGGGC
CTCCCGCCGCTTAGCCTGATGCTGGAAGGACGAAGGTGAGTGAAGATGGCAGAGAGGACGTGACCAGCACTCACC
CTTGTCCACCTGCCCAGTGGCACCGCC**ATG**CAGAAGCCCAGCGGCCTGAAGCCCCCCGGCCGTGGGGGGAAGCAC
TCCAGCCCCATGGGCCGGACATCTACTGGGTCAGCTTCATCCTCGGCGGCGGTGGCCGCTAGCTCCAAGGAAGGC
TCCCCACTGCACAAACAGTCATCTGGACCCTCCTCCTCCCCGGCCGCAGCTGCTGCCCCCGAGAAGCCGGGCCCC
AAGGCGGCGGAAGTGGGGGATGACTTCCTGGGGGACTTTGTGGTGGGCGAGCGGGTGTGGGTGAACGGCGTGAAG
CCAGGCGTGGTGCAGTATCTGGGAGAGACGCAGTTCGCACCGGGCCAGTGGGCTGGCGTGGTGCTGGACGACCCG
GTGGGCAAGAATGATGGCGCGGTGGGCGGCGTGCGCTACTTCGAGTGCCCGGCCCTCCAGGGTATCTTCACGCGG
CCCTCCAAGCTGACCCGGCAGCCCACGGCCGAGGGCTCGGGGAGTGATGCCCACTCCGTGGAGTCGCTGACTGCC
CAGAACCTGTCATTGCATTCGGGCACGGCCACGCCCCCGCTGACCAGCCGCGTCATCCCCCTGCGGGAGAGCGTC
CTCAACAGCTCCGTGAAGACTGGCAACGAGTCGGGATCCAACCTCTCAGACAGCGGCTCTGTGAAGCGGGGCGAA
AAGGACCTGCGCCTGGGGGACCGCGTGCTGGTTGGCGGGACGAAGACTGGCGTGGTGCGGTACGTGGGGGAGACA
GACTTTGCCAAGGGCGAGTGGTGTGGCGTGGAGCTGGACGAGCCCCTTGGGAAGAATGATGGGGCGGTGGCGGGC
ACCAGGTACTTCCAGTGCCCACCCAAGTTTGGTCTCTTCGCGCCCATCCACAAAGTGATCCGTATCGGCTTCCCA
TCTACCAGCCCAGCCAAGGCCAAGAAGACCAAGCGTATGGCCATGGGTGTGTCAGCACTGACCCACAGTCCCAGC
AGTTCCTCCATCAGCTCCGTCAGCTCTGTGGCCTCCTCCGTGGGGGGTCGGCCCAGCCGCAGTGGCCTGCTCACG
GAGACCTCTTCACGCTACGCCCGCAAGATCTCGGGCACCACGGCCTTGCAGGAGGCACTGAAGGAGAAGCAGCAG
CACATTGAGCAGCTGCTGGCTGAACGAGACCTGGAACGGGCTGAGGTGGCCAAGGCCACAAGCCACATCTGCGAG
GTGGAGAAGGAGATTGCCCTGCTCAAGGCACAGCATGAGCAGTATGTTGCAGAAGCCGAGGAGAAGCTGCAGCGA
GCCCGGCTGCTCGTGGAGAGCGTGCGGAAAGAGAAGGTGGACCTGTCCAACCAGCTGGAGGAGGAGAGGAGGAAG
GTGGAGGATCTGCAGTTCCGCGTGGAGGAGGAGTCCATCACCAAGGGAGACCTGGAGACCCAGACGCAGCTGGAG
CACGCGCGCATTGGGGAGCTGGAACAGAGCCTGCTACTGGAGAAGGCGCAGGCCGAGCGGCTGCTCCGAGAATTA
GCGGACAACAGGCTGACCACAGTGGCCGAGAAGTCGCGCGTGCTGCAGCTGGAGGAGGAGCTCACCCTGCGCCGA
GGTGAAATCGAGGAGCTCCAGCAGTGCCTGTTGCACTCGGGTCCCCCACCTCCGGACCACCCAGACGCCGCCGAG
ATCCTGCGGCTACGGGAGCGGCTGCTCTCGGCCAGCAAGGAACACCAGAGGGAGAGTGGGGTGCTGCGGGATAAA
TACGAGAAGGCCCTGAAGGCCTACCAGGCGGAGGTGGACAAGCTCCGCGCGGCCAACGAGAAGTACGCACAGGAG
GTGGCGGGCCTGAAGGACAAGGTTCAGCAGGCCACCAGCGAGAACATGGGGCTAATGGACAACTGGAAATCCAAG
CTGGACTCGCTGGCCTCGGACCACCAGAAGTCCCTGGAGGACCTCAAAGCCACCCTGAACTCGGGCCCAGGCGCC
CAGCAGAAGGAGATCGGCGAGCTGAAGGCAGTGATGGAGGGCATCAAGATGGAGCACCAGCTGGAGCTGGGTAAC
TTGCAGGCCAAGCATGACCTGGAGACCGCCATGCACGTGAAGGAGAAGGAGGCCCTGCGAGAGAAGCTGCAGGAG
GCCCAGGAGGAGCTGGCTGGGCTGCAGCGGCACTGGCGGGCCCAGCTGGAGGTGCAAGCCAGCCAGCACCGGCTG
GAGCTGCAGGAGGCCCAGGACCAGCGCCGGGATGCCGAGCTGCGTGTGCACGAGCTGGAAAAACTGGACGTGGAG
TACCGGGGCCAGGCGCAGGCTATCGAGTTCCTCAAGGAGCAGATCTCGCTGGCCGAGAAGAAGATGTTGGACTAC
GAGCGGCTGCAGCGGGCAGAAGCCCAGGGCAAACAGGAGGTCGAGAGTTTGCGGGAGAAGCTCCTGGTGGCTGAG
AACAGACTCCAGGCGGTCGAGGCCCTGTGCTCCTCCCAGCACACCCACATGATTGAGTCGAATGACATTTCAGAG
GAGACGATCAGGACGAAGGAAACTGTGGAGGGCCTGCAGGACAAGCTGAACAAGAGGGACAAAGAGGTGACAGCC
TTGACCTCCCAGACCGAGATGCTCAGGGCCCAAGTAAGTGCGCTGGAGAGCAAGTGTAAGTCAGGCGAGAAGAAG
GTGGACGCCCTCCTGAAGGAGAAGCGGCGCCTGGAGGCAGAGCTGGAGACCGTGTCCCGGAAGACCCATGACGCC
TCGGGCCAGCTAGTCCTCATCAGCCAGGAGCTGCTGCGGAAGGAGCGGAGCCTGAACGAACTGCGGGTGTTGCTG
CTGGAGGCCAATCGTCACTCCCCAGGGCCGGAGAGGGACCTGAGCCGTGAGGTACACAAGGCTGAGTGGCGGATC
AAGGAGCAGAAACTCAAGGATGACATCCGGGGCCTGCGTGAAAAGCTGACCGGGCTGGACAAAGAGAAATCCCTG
TCGGATCAGAGGCGCTACTCCCTCATCGACCGGTCCTCGGCGCCCGAGCTTCTGCGGCTGCAGCACCAGCTGATG
AGCACGGAGGACGCCCTGCGGGATGCGCTGGACCAGGCTCAGCAGGTGGAGAAGCTGATGGAGGCCATGAGGAGC
TGCCCTGACAAGGCCCAGACCATCGGCAATTCCGGTTCTGCAAACGGCATCCACCAGCAGGACAAAGCTCAGAAA
CAAGAGGACAAGCAC**TGA**TCCTGAGGGGATACTGTGGAGCAGCCCAGTCCACACCAGAGCCCCACGCGGCTGCCC
GGCAGTACCTCCTCCAGGCAGGAGCCGGGACTGTCACTTTGGAGACAAAACAGTGTTTGTAACAATAACGTACTC

FIGURE 4609B

ACCGCCGCGGACAATCCCCCACCCCGATCCCTCGCCAGACCAGGACGCTTCCTCAAGCCCAGCCTTCTACAGAGA
GTGTGAACGGTACAGCCCCGGCCTGACCCGGGGACCTTCAGCCTGGACACCCGGCAGCTTCTGGAGTTTGTCAGT
GGAGGCAGAGGGGATCCGGCCAGGCCCCTCTGTCCAGAAGGAGCTGCCCTGAGGACCATCTTAGCGGCCCTGTCC
TCTTTTTCCGCCCATTCTCCCTCGGGTCTCCCCAGAGGGGCCGGCGGGGGCTGGGGAGGGGGTAAGTTTATCCAT
GCAGACACCAAGGGGGAGCATCCAGTCTTTAAGAGCCAAGTGGGGGCCCCTTTTCCGAAGCCACTTCCAGGCCAA
GGCAGTCGCCAGGGCTTCTTGTCCCCACCTTCTGAACCTTCTTCAAACAGTAGTACAAGCTCCCCTCAGCCAGCC
TGCCTGCCCAGCGAGGCCCCCAGGTTCAAGGTGTTGGCGGGGGCGGAGGGCAGGGGAACGGGATCCTTCTCCCGC
TGCCCACCAACACCAACACACACACACCTCTAAGCTGCTGGCCGAAGATGTCACCAAGGCCAAAGACACAGTATT
ATGAAGGTTTGGAAACCCCTCTCCTCACCTCCCACCGTGACCTTGGGCAAACCCTGGCTCGGAGCCCAGGGCAGA
GGCAGCTCAGAGTGGAGGCTCTAGGCAGGTTTGACAAAGGTCAGTAATACGGTTTCCCCTGGGGTTGACCAGATG
TTCCAAAATATCTGCATCCACCTGGAGATGCAGCTAAGTGGGTCCTTATGTACACACCACGTTCACACACACACA
GAGGGACCACGTGTGCACGCATGACCGTGTGGGTGGCGGCGTTTGCTGTGAACCACGCTCAGGCCACACAGAGAC
ACATACTTGGTTTCTGGGACTGAGACCCAGGCCTGGCAGGACCGTGCCTACAGATACTGCAAACGTTCCTACAGC
CTAGAGGTGCGTATACACACCCAAGTACACGCAGCCAGGCATTCAGGGGTGTGTTTGCCACATGGAGCATCCCTT
CCTGGTCTTGCCAGGCACCTGCACAGAGCGTCTCCAGCCCCATCTCCTAACGGGGGCTGGGGGTAAGAGAAATCT
AACTGCGCTCCCCCAACCCCTCGCCCTGCCATCTTCCCCTCAAGCCTGCTAAGTTATCCCAGGCCTGTGCGTGGT
GGAAAAAGCCAGCCTTGGCCCTGCAGCCTCCACCTCGCCGCTGGGGGACCAACAGGTTGCTTACAGCTTTGCACC
CCGGCATCAGCACAGGGGTCCCTGCCCCACCCTCCGGCAGCTCAGGGAGTGTTTTCCTGTGAGGCCTCCCCCATC
AGTGGACCAGAGGGAGAAGCCCGATGCCCCATCCCGGCTTTCCCGTAACGCACAGGACACGTGTGCAATTCATAG
GAACGGCCCAGATCGCCCTCATGAGTGCCACCTGGTACAGGTAGGTGGCGCTCACGTTCCTGCCCAAATGCAGCC
CATCGGGGAGTCACAGTCAGTCCCCCCGGCCCCCCTCCCAGTCCCTGTTGGCTTTCGGTAGCTCTCGCATGCAGT
TCTATTAACAGCCGTCTAGAAGCGATGCTTTAGTGGCCTAACCCAGGGTCAAATACAGCTCTTTCTAGCAAAATC
AGGCAGCTCTGCCCCATCGGTAGGGGCACCGATTAGTCTACTAACAGCCAGAGGTCCATCTAGCAGGGTGCCGGG
AGGAGCTGAGCCCCCGGAGGTGGGCTCCTGGTGACGGGTGTCCAAGAAGCGGTTTCCTTGGGAGCTTCTGCCTCC
GTGGGCCTCTCAGCCCGCCCCGTGTGGCCGCCCGGGTGTGGCTCAGCCATGTCCCCTCCCCAGGTCCTTCATTCA
CCCCTCCCCTCCCCACAGTGGAATTGTTGAAGTGTGGCGAGTCTGTGCTCGGGACAATAAAGCTTGTGACAGGTC
CAGG

FIGURE 4610

TAAATGGCAGCCAATGGAGGGTGGTGTTGCGCGGGGCTGGGATTAGGGCCGGGGCGAATGGCTGGCAATCTTACT
GGGATTACAGAACAAAGAGCCTCCCCGCGCTCCCGCTCTCCGCTCCTCTCCCCGCGCCGCCCCGCCCTCCGCCGC
AGCCCGCGCCGGGGGTGGGGGCCGCCGAGCGCCAGCCCCCCGGCCGGCCGATTCCCCCCCCGCGCCCCCTCCCCG
CGCCTCCCTCCCCGCCCTCGCCGCGCCGCCGTCCTCGCCTCCCTCTGCCTCTCCTTCCCCCATTCTCCCGGATTA
ATTAAGGAGGCAGCGGCAGGAGGCTGAGTCCTGGCCGCGGGCCGGGGCCGGGGCGCCGCTGGCAGGAGCGCTTGG
GGATCCTCCAAGGCGACCATGGCCTTGCTGGGTAAGCGCTGTGACGTCCCCACCAACGGCTGCGGACCCGACCGC
TGGAACTCCGCGTTCACCCGCAAAGACGAGATCATCACCAGCCTCGTGTCTGCCTTAGACTCCATGTGCTCAGCG
CTGTCCAAACTGAACGCCGAGGTGGCCTGTGTCGCCGTGCACGATGAGAGCGCCTTTGTGGTGGGCACAGAGAAG
GGGAGAATGTTCCTGAATGCCCGGAAGGAGCTACAGTCAGACTTCCTCAGGTTCTGCCGAGGGCCCCCGTGGAAG
GATCCGGAGGCAGAGCACCCCAAGAAGGTGCAGCGGGGCGAGGGTGGAGGCCGTAGCCTCCCTCGGTCCTCCCTG
GAACATGGCTCAGATGTGTACCTTCTGCGGAAGATGGTAGAGGAGGTGTTTGATGTTCTTTATAGCGAGGCCCTG
GGAAGGGCCAGTGTGGTGCCACTGCCCTATGAGAGGCTGCTCAGGGAGCCAGGGCTGCTGGCCGTGCAGGGGCTG
CCCGAAGGCCTGGCCTTCCGAAGGCCAGCCGAGTATGACCCCAAGGCCCTCATGGCCATCCTGGAACACAGCCAC
CGCATCCGCTTCAAGCTCAAGAGGCCACTTGAGGATGGCGGGCGGGACTCGAAGGCCCTGGTGGAGCTGAACGGT
GTCTCCCTGATTCCCAAGGGGTCACGGGACTGTGGCCTGCATGGCCAGGCCCCCAAGGTGCCACCCCAGGACCTG
CCCCCAACCGCCACCTCCTCCTCCATGGCCAGCTTCCTGTACAGCACGGCGCTCCCCAACCACGCCATCCGAGAG
CTCAAGCAGGAAGCACCTTCCTGCCCCCTTGCCCCCAGCGACCTGGGCCTGAGTCGGCCCATGCCAGAGCCCAAG
GCCACCGGTGCCCAAGACTTCTCCGACTGTTGTGGACAGAAGCCCACTGGGCCTGGTGGGCCTCTCATCCAGAAC
GTCCATGCCTCCAAGCGCATTCTCTTCTCCATCGTCCATGACAAGTCAGAGAAGTGGGACGCCTTCATAAAGGAA
ACCGAGGACATCAACACGCTCCGGGAGTGTGTGCAGATCCTGTTTAACAGCAGATATGCGGAAGCCCTGGGCCTG
GACCACATGGTCCCCGTGCCCTACCGGAAGATTGCCTGTGACCCGGAGGCTGTGGAGATCGTGGGCATCCCGGAC
AAGATCCCCTTCAAGCGCCCCTGCACTTATGGAGTCCCCAAGCTGAAGCGGATCCTGGAGGAGCGCCATAGTATC
CACTTCATCATTAAGAGGATGTTTGATGAGCGAATTTTCACAGGGAACAAGTTTACCAAAGACACCACGAAGCTG
GAGCCAGCCAGCCCGCCAGAGGACACCTCTGCAGAGGTCTCTAGGGCCACCGTCCTTGACCTTGCTGGGAATGCT
CGGTCAGACAAGGGCAGCATGTCTGAAGACTGTGGGCCAGGAACCTCCGGGGAGCTGGGCGGGCTGAGGCCGATC
AAAATTGAGCCAGAGGATCTGGACATCATTCAGGTCACCGTCCCAGACCCCTCGCCAACCTCTGAGGAAATGACA
GACTCGATGCCTGGGCACCTGCCATCGGAGGATTCTGGTTATGGGATGGAGATGCTGACAGACAAAGGTCTGAGT
GAGGACGCGCGGCCCGAGGAGAGGCCCGTGGAGGACAGCCACGGTGACGTGATCCGGCCCCTGCGGAAGCAGGTG
GAGCTGCTCTTCAACACACGATACGCCAAGGCCATTGGCATCTCGGAGCCCGTCAAGGTGCCGTACTCCAAGTTT
CTGATGCACCCGGAGGAGCTGTTTGTGGTGGGACTGCCTGAAGGCATCTCCCTCCGCAGGCCCAACTGCTTCGGG
ATCGCCAAGCTCCGGAAGATTCTGGAGGCCAGCAACAGCATCCAGTTTGTCATCAAGAGGCCCGAGCTGCTCACT
GAGGGAGTCAAAGAGCCCATCATGGATAGTCAAGGAACTGCCTCCTCACTTGGCTTCTCTCCCCCTGCCCTGCCC
CCAGAGAGGGATTCCGGGGACCCTCTGGTGGACGAGAGCCTGAAGAGACAGGGCTTTCAAGAAAATTATGACGCG
AGGCTCTCACGGATCGACATCGCCAACACACTAAGGGAGCAGGTCCAGGACCTTTTCAATAAGAAATACGGGGAA
GCCTTGGGCATCAAGTACCCGGTCCAGGTCCCCTACAAGCGGATCAAGAGTAACCCCGGCTCCGTGATCATCGAG
GGGCTGCCCCCAGGAATCCCGTTCCGAAAGCCCTGTACCTTCGGCTCCCAGAACCTGGAGAGGATTCTTGCTGTG
GCTGACAAGATCAAGTTCACAGTCACCAGGCCTTTCCAAGGACTCATCCCAAAGCCTGATGAAGATGACGCCAAC
AGACTCGGGGAGAAGGTGATCCTGCGGGAGCAGGTGAAGGAACTCTTCAACGAGAAATACGGTGAGGCCCTGGGC
CTGAACCGGCCGGTGCTGGTCCCTTATAAACTAATCCGGGACAGCCCAGACGCCGTGGAGGTCACGGGTCTGCCT
GATGACATCCCCTTCCGGAACCCCAACACGTACGACATCCACCGGCTGGAGAAGATCCTGAAGGCCCGAGAGCAT
GTCCGCATGGTCATCATTAACCAGCTCCAACCCTTTGCAGAAATCTGCAATGATGCCAAGGTGCCAGCCAAAGAC
AGCAGCATTCCCAAGCGCAAGAGAAAGCGGGTCTCGGAAGGAAATTCCGTCTCCTCTTCCTCCTCGTCTTCCTCT
TCCTCGTCCTCTAACCCGGATTCAGTGGCATCGGCCAACCAGATCTCACTCGTGCAATGGCCAATGTACATGGTG
GACTATGCCGGCCTGAACGTGCAGCTCCCGGGACCTCTTAATTACTAGACCTCAGTACTGAATCAGGACCTCACT
CAGAAAGACTAAAGGAAATGTAATTTATGTACAAAATGTATATTCGGATATGTATCGATGCCTTTTAGTTTTTCC
AATGATTTTTACACTATATTCCTGCCACCAAGGCCTTTTTAAATAAGT

FIGURE 4611A

AGGAGGAGGAGGGTGAGAGAGAAGCTGGGAGAGCAGAGAAAAGGGGCCACCGGTCGCCCCCCCGCTTCCCCGCAC
GCGCTCTCCAGCCGCGGCCGCCCGCCTGCCGCGGTCACCCCGGCCTCTGCCTCTGTCCCCCAGTGATCGGATCAA
GGCGCTGAGCGAGGCCCTGCCTGCGGGGCGGCCATGCGGCGGTGACAGGAGCGCGACCGACACGCACGGGCCCCT
CGCCCCCTCTCGCCTCCCGTCCGCTCGCCAGCTCCCCTCAGCCGAGGCTGCTCCGCGGCGGCCGCAGCCCGCGCG
CGGCCCACACTCGCCTCCCCTCGGCACCCCCGGCCCCGGAGCTGCCTGGAGGCGGCCGCACTCGGGGATCATGGC
CCAAGTTGCAATGTCCACCCTCCCCGTTGAAGATGAGGAGTCCTCGGAGAGCAGGATGGTGGTGACATTCCTCAT
GTCAGCTCTCGAGTCCATGTGTAAAGAACTGGCCAAGTCCAAAGCCGAAGTGGCCTGCATTGCAGTGTATGAAAC
AGACGTGTTTGTCGTCGGAACTGAAAGAGGACGTGCTTTTGTCAATACCAGAAAGGATTTTCAAAAAGATTTTGT
AAAATATTGTGTTGAAGAAGAAGAAAAAGCTGCAGAGATGCATAAAATGAAATCTACAACCCAGGCAAATCGGAT
GAGTGTAGATGCTGTAGAAATTGAAACACTCAGAAAAACAGTTGAGGACTATTTCTGCTTTTGCTATGGGAAAGC
TTTAGGCAAATCCACAGTGGTACCTGTACCATATGAGAAGATGCTGCGAGACCAGTCGGCTGTGGTAGTGCAGGG
GCTTCCGGAAGGTGTTGCCTTTAAACACCCCGAGAACTATGATCTTGCAACCCTGAAATGGATTTTGGAGAACAA
AGCAGGGATTTCATTCATCATTAAGAGACCTTTTTTAGAGCCAAAGAAGCATGTAGGTGGTCGTGTGATGGTAAC
AGATGCTGACAGGTCAATACTATCTCCAGGTGGAAGTTGTGGCCCCATCAAAGTGAAAACTGAACCCACAGAAGA
TTCTGGCATTTCCCTGGAAATGGCAGCTGTGACAGTAAAGGAAGAATCAGAAGATCCTGATTATTATCAATATAA
CATTCAAGCAGGCCCTTCTGAAACTGATGATGTTGATGAAAAACAGCCCCTATCGAAGCCTTTGCAAGGAAGCCA
CCATTCTTCAGAGGGCAATGAAGGCACAGAAATGGAAGTACCAGCAGAAGATTCTACTCAACATGTCCCTTCAGA
AACAAGTGAGGACCCTGAAGTTGAGGTGACTATTGAAGATGATGATTATTCTCCACCGTCTAAGAGACCAAAGGC
CAATGAGCTACCGCAGCCACCAGTCCCGGAACCCGCCAATGCTGGGAAGCGGAAAGTGAGGGAGTTCAACTTCGA
GAAATGGAATGCTCGCATCACTGATCTACGTAAACAAGTTGAAGAATTGTTTGAAAGGAAATATGCTCAAGCCAT
AAAAGCCAAAGGTCCGGTGACGATCCCGTACCCTCTTTTCCAGTCTCATGTTGAAGATCTTTATGTAGAAGGACT
TCCTGAAGGAATTCCTTTTAGAAGGCCATCTACTTACGGAATTCCTCGCCTGGAGAGGATATTACTTGCAAAGGA
AAGGATTCGTTTTGTGATTAAGAAACATGAGCTTCTGAATTCAACACGTGAAGATTTACAGCTTGATAAGCCAGC
TTCAGGAGTAAAGGAAGAATGGTATGCCAGAATCACTAAATTAAGAAAGATGGTGGATCAGCTTTTCTGCAAAAA
ATTTGCGGAAGCCTTGGGGAGCACTGAAGCCAAGGCTGTACCGTACCAAAAATTTGAGGCACACCCGAATGATCT
GTACGTGGAAGGACTGCCAGAAAACATTCCTTTCCGAAGTCCCTCATGGTATGGAATCCCAAGGCTGGAAAAAAT
CATTCAAGTGGGCAATCGAATTAAATTTGTTATTAAAAGACCAGAACTTCTGACTCACAGTACCACTGAAGTTAC
TCAGCCAAGAACGAATACACCAGTCAAAGAAGATTGGAATGTCAGAATTACCAAGCTACGGAAGCAAGTGGAAGA
GATTTTTAATTTGAAATTTGCTCAAGCTCTTGGACTCACCGAGGCAGTAAAAGTACCATATCCTGTGTTTGAATC
AAACCCGGAGTTCTTGTATGTGGAAGGCTTGCCAGAGGGGATTCCCTTCCGAAGCCCTACCTGGTTTGGAATTCC
ACGACTTGAAAGGATCGTCCGCGGGAGTAATAAAATCAAGTTCGTTGTTAAAAAACCTGAACTAGTTATTTCCTA
CTTGCCTCCTGGGATGGCTAGTAAAATAAACACTAAAGCTTTGCAGTCCCCCAAAAGACCACGAAGTCCTGGGAG
TAATTCAAAGGTTCCTGAAATTGAGGTCACCGTGGAAGGCCCTAATAACAACAATCCTCAAACCTCAGCTGTTCG
AACCCCGACCCAGACTAACGGTTCTAACGTTCCCTTCAAGCCACGAGGGAGAGAGTTTTCCTTTGAGGCCTGGAA
TGCCAAAATCACGGACCTAAAACAGAAAGTTGAAAATCTCTTCAATGAGAAATGTGGGGAAGCTCTTGGCCTTAA
ACAAGCTGTGAAGGTGCCGTTCGCGTTATTTGAGTCTTTCCCGGAAGACTTTTATGTGGAAGGCTTACCTGAGGG
TGTGCCATTCCGAAGACCATCGACTTTTGGCATTCCGAGGCTGGAGAAGATACTCAGAAACAAAGCCAAAATTAA
GTTCATCATTAAAAAGCCCGAAATGTTTGAGACGGCGATTAAGGAGAGCACCTCCTCTAAGAGCCCTCCCAGAAA
AATAAATTCATCACCCAATGTTAATACTACTGCATCAGGTGTTGAAGACCTTAACATCATTCAGGTGACAATTCC
AGATGATGATAATGAAAGACTCTCGAAAGTTGAAAAAGCTAGACAGCTAAGAGAACAAGTGAATGACCTCTTTAG
TCGGAAATTTGGTGAAGCTATTGGTATGGGTTTTCCTGTGAAAGTTCCCTACAGGAAAATCACAATTAACCCTGG
CTGTGTGGTGGTTGATGGCATGCCCCCGGGGGGTGTCCTTCAAAGCCCCCAGCTACCTGGAAATCAGCTCCATGAG
AAGGATCTTAGACTCTGCCGAGTTTATCAAATTCACGGTCATTAGACCATTTCCAGGACTTGTGATTAATAACCA
GCTGGTTGATCAGAGTGAGTCAGAAGGCCCCGTGATACAAGAATCAGCTGAACCAAGCCAGTTGGAAGTTCCAGC
CACAGAAGAAATAAAAGAGACTGATGGAAGCTCTCAGATCAAGCAAGAACCAGACCCCACGTGGTAGACCTCTTC
CCTCCTAGGCTTAAAGTATCAGTGGTTGAGAAGAGCTTTTCGGACCTGTTACTACCCCAAGCTGTGTAATATACT
TGTATAACAGAAATACCTTCTATACAAACCTTTTTTTCTACTTTTAGATAGAAATGTCTACTTTTTCAGCAGTTC
TGTGAATTAAAGAGCAGAGTGACTGTGGGTCTGGAATGGCTGGTGTACTTGGGAATGTACTATCAGGATTTTACA

FIGURE 4611B

GCAATGCTGGGAAATGACAGGGAAAATGACAGGAATGAATCTCACCAGATTTTTTATGTACTCAGCAGAGCCTTG
AGTTACGGTGTTTATTTTCCAATCAAGTGAAGATATCTCCTACTTCTCCTACTGGAACATCTCAGCTTCTGCAGT
GAAGAAAAATTCCTGTGATAGTTCAGTTCTTTAGTTTTTCTATTTGAAAAAAAAAAATCATTTAAATGATCCTTT
GTTCACGGCTCTCCTTAATGACTGAGTGAACAGTTCCTATCTGTATATTTGACTAAACCTTTTCCTAAGCTATCT
CTCATGGTTCCTATGTTTTTTTATCATAATTAAAAGCAAAACCATCTGGATCACCTAACAGTCAGAGGTCAGTAT
CTCAGCGTGTGAATTATAGAGGAAATACAGAGAGAACCTCTTCCACTTTTACTTTTCGTCCAAATAAAATGCATG
GTGTACCAGAAGTTGAAGATCGGGTTGAGGATTGGGGCTAGCTCGATGACACTAAGGCCCCAACATCGCGGGACC
TGCTGTGGCGCGGATTCTTAGGAACGCTGTTCTAGCCGGCCCCCTCTCCAGGGGTCGCCGTGGCCGGCATTATTT
CCTAGTTCTTCTTGTAACCCTGAGGTGCCAGCGCGGGGAGTGAGGAGGGGTCAGGGGGCTAAGGATGCAACCTCT
GACGTTCTGCGCCTTCCTAGGAGAGTCTTACATGTGTTGAGATTTCACAAGCAATGCGAGTTGTAAAATACCAGC
TCTACAAGAAGCTAGGCTCTGTGACGGCATAGTTTTCAGTAGCTTTATCACAATATTCACAATGGAGAATTATAT
GACATGGTAGCAGAAATAGGCCCTTTTATGTGTTGCTTCTATTTTACCTCAAATTGTAGATATAGGGTAATCAAT
AAAATCCATCCATGCCTTTCACACACTAA

FIGURE 4612

AGATGGGCCATCAACTGAGAAAGACCTTGACGAAAAGAAGAAAGAACCTGCAATTACATCGCAGAACAGCCCTGA
GGCAAGAGAAGAAAGTACTTCCAGCGGCAATGTAAGCAACAGAAAGGATGAGACAAATGCTCGAGATACTTATGT
TTCATCCTTTCCTCGGGCACCAAGCACTTCTGATTCTGTGCGGTTGAAGTGTAGGGAGATGCTTGCTGCAGCTCT
TCGAACAGGGGATGACTACATTGCAATTGGAGCTGATGAGGAAGAATTAGGATCTCAAATTGAAGAAGATATATA
TCAAGAAATAAGGAATACAGACATGAAATACAAAAATAGAGTACGAAGTAGGATATCAAATCTTAAAGATGCAAA
AAATCCAAATTTAAGGAAAAATGTCCTCTGTGGGAATATTCCTCCTGACTTATTTGCTAGAATGACAGCAGAGGA
AATGGCTAGTGATGAGCTGAAAGAGATGCGGAAAAACTTGACCAAAGAAGCCATCAGAGAGCATCAGATGGCCAA
GACTGGTGGGACCCAGACTGACTTGTTCACATGTGGCAAATGTAAAAAGAAGAATTGCACTTACACACAGGTACA
AACCCGTAGTGCTGATGAACCAATGACAACATTTGTTGTCTGTAATGAATGTGGAAATCGATGGAAGTTCTGTTG
AGTTGGAAGAATTGGCAAAATATCTGGACCATTAAGAAAACGGATTTTGTAACTAGCTTTAAACTAGGCCAAGCA
ACTAGTTTTCCTGCAAATCAAATTTTTAAAGCAACTTGGGTTAGACTTTGTTTTTGACCTAACATCCCTTCCTTA
AATGCCTTCTGTAGTTTCAGATCAGTAGGGAGACCATATAATAATTTTATGGTACCTGTTTCAAAACATATTTTT
TCTGTTTTTATAAGTAAGTTGATATTAATTAAACTCTTGGCAATATTTCTTCTTTCTTAAAGGAAAATATACCTT
AACTTTTTTTCTTTTACACTGTGAAACATACACAGTAGAAATTCTGTTACTCTCTGTTATTAATACATAAATGAA
AATACATTTTTTTCCATATTGGCATGTAGCTACAAATATTAAAGGAGGAGAAAAGGTAATATAATTTTAGGTTTA
CCAAATATGGTGTGTATTCAAATAATACTTGACCAGCTTATCTAAAATGTACATAATTTTGAGGTAGCTTATGAA
TTTGATTTTAATTATTATGTTCACAAGCTTGGAATATTAGATATTATTTTGCATCTGTAACTAACCGTGATCATC
ATTTCTTGTAATTTCTTGTACATGTATATTACTTGTTCTTAATAGATTTTTGGAAACAAGACTTTATTGAGATCA
GTTTGGTTTTCCTGTTAATTTACCTGTTTGACTTTATAATGTGTTTTAGTTTTGCAGAAGAACACTGTTGTAGTT
TAGAAGGCTTTTCATAAATCCCCTCATAGGCAAAGATGAAAACTTCCCACTATTTTTTTCCCCTCTTAGGAAGAC
ATACTGGAAAGAAAATGTTTAGCATCTTAGTGTAGTATAGCTATTGTAAACAGTTCATGACTAGATTTTGATTCG
GAAATCTATACTGACCAAGGATTAATCTTAAGGATTGTATAATTCATTAAAGCTGTGGTCTTTCCATGTGGAGAC
TGATAGAAAATAATTTTGTCCCAAGTCTTATTTGCTGACTTTTTCTGTCATGAGTGAGATTGTTGAACAAACTGA
ATATATGGGCTATAGCAAGTAGCTTTACAGTACAGATCTTACAATTAAGTTTTGCTTTTGTTAAAGTGTGTACCA
TTTTTTCTGTTTGGAGTAAGACAAAAATTGTTTTGACATAGGTTCCCTAGGGTACACTTGCTCTAGCATACTTTA
AAGGCCACTGTTGCAAAGTCTACATTTTATGCTGAATCTGCATTCTGTCAGGCACCCGTAGAAAGACCTCAGTAC
ATGCTTTGCACTCTCCTTTGCTCCCTTTTTCCAATTTCTTATTGCATATCATTTTGTTGTAATACAGAAAGCAGC
ATTTTTAAATGTCCGTGTTAAGAATTGGCCCACTGGTACCAACTCACCTCTATTTTGTCAGTTCATAGTTGAAGA
TTTTGTTTTATTTCAAAAACAAAGTACATTTTTGAAATAATGTTTCAGAATAAAATAATCTCACTTTTAAGTGAT
CCATTTTAAAATTTGTAATTCAATAAAGTTTTTTTTGTTGTTAAACAT

FIGURE 4613

TACCTGTGCGGCCCTCAACGTCTCCTTGGTGCGGGACCCGCTTCACTTTCGGCTCCCGGAGTCTCCCTCCACTGC
TCAGACCTCTGGACCTGACAGGAGACGCCTACTTGGCTCTGACGCGGCGCCCCAGCCCGGCTGTGTCCCCGGCGC
CCCGGACCACCCTCCCTGCCGGCTTTGGGTGCGTTGTGGGGTCCCGAGGATTTGTTGAAAGACATTCAAGATTAC
GAAGTTTAG**ATG**ACCAAAATGGATATCCGAGGTGCTGTGGATGCTGCTGTCCCCACCAATATTATTGCTGCCAAG
GCTGCAGAAGTTCGTGCAAACAAAGTCAACTGGCAATCCTATCTTCAGGGACAGATGATTTCTGCTGAAGATTGT
GAGTTTATTCAGAGGTTTGAAATGAAACGAAGCCCTGAAGAGAAGCAAGAGATGCTTCAAACTGAAGGCAGCCAG
TGTGCTAAAACATTTATAAATCTGATGACTCATATCTGCAAAGAACAGACCGTTCAGTATATACTAACTATGGTG
GATGATATGCTGCAGGAAAATCATCAGCGTGTTAGCATTTTCTTTGACTATGCAAGATGTAGCAAGAACACTGCG
TGGCCCTACTTTCTGCCAATGTTGAATCGCCAGGATCCCTTCACTGTTCATATGGCAGCAAGAATTATTGCCAAG
TTAGCAGCTTGGGGAAAAGAACTGATGGAAGGCAGTGACTTAAATTACTATTTCAATTGGATAAAAACTCAGCTG
AGTTCACAGAAACTGCGTGGTAGCGGTGTTGCTGTTGAAACAGGAACAGTCTCTTCAAGTGATAGTTCGCAGTAT
GTGCAGTGCGTGGCCGGGTGTTTGCAGCTGATGCTCCGGGTCAATGAGTACCGCTTTGCTTGGGTGGAAGCAGAT
GGGGTAAATTGCATAATGGGAGTGTTGAGTAACAAGTGTGGCTTTCAGCTCCAGTATCAAATGATTTTTTCAATA
TGGCTCCTGGCATTCAGTCCTCAAATGTGTGAACACCTGCGGCGCTATAATATCATTCCAGTTCTGTCTGATATC
CTTCAGGAGTCTGTCAAAGAGAAAGTAACAAGAATCATTCTTGCAGCATTTCGTAACTTTTTAGAAAAATCAACT
GAAAGAGAAACTCGCCAAGAATATGCCCTGGCTATGATTCAGTGCAAAGTTCTGAAACAGTTGGAGAACTTGGAA
CAGCAGAAGTACGATGATGAAGATATCAGCGAAGATATCAAATTTCTTTTGGAAAAACTTGGAGAGAGTGTCCAG
GACCTTAGTTCATTTGATGAATACAGTTCAGAACTTAAATCTGGAAGGTTGGAATGGAGTCCTGTGCACAAATCT
GAGAAATTTTGGAGAGAGAATGCTGTGAGGTTAAATGAGAAGAATTATGAACTCTTGAAAATCTTGACAAAACTT
TTGGAAGTGTCAGATGATCCCCAAGTCTTAGCTGTTGCTGCTCACGATGTTGGAGAATATGTGCGGCATTATCCA
CGAGGCAAACGGGTCATCGAGCAGCTCGGTGGGAAGCAGCTGGTCATGAACCACATGCATCATGAAGACCAGCAG
GTCCGCTATAATGCTCTGCTGGCCGTGCAGAAGCTCATGGTGCACAACTGGGAATACCTTGGCAAGCAGCTCCAG
TCCGAGCAGCCCCAGACCGCTGCCGCCCGAAGC**TAA**GCCTGCCTCTGGCCTTCCCCTCCGCCTCAATGCAGAACC
AGTAGTGGGAGCACTGTGTTTAGAGTTAAGAGTGAACACTGTTTGATTTTACTTGGAATTTCCTCTGTTATATAG
CTTTTCCCAATGCTAATTTCCAAACAACAACAACAAAATAACATGTTTGCCTGTTAAGTTGTATAAAAGTAGGTG
ATTCTGTATTTAAAGAAAATATTACTGTTACATATACTGCTTGCAATTTCTGTATTTATTGTTCTCTGGAAATAA
ATATAGTTATTAAAGGATTCTCACTCCAAACATGGCCTCTCTCTTTACTTGGACTTTGAACAAAAGTCAACTGTT
GTCTCTTTTCAAACCAAATTGGGAGAATTGTTGCAAAGTAGTGAATGGCAAATAAATGTTTTAAAATCT

FIGURE 4614

CTTCCTTCCGCTTGCGCTGTGAGCTGAGGCGGTGTATGTGCGGCAATAACATGTCAACCCCGCTGCCCGCCATCG
TGCCCGCCGCCCGGAAGGCCACCGCTGCGGTGATTTTCCTGCATGGATTGGGAGATACTGGGCACGGATGGGCAG
AAGCCTTTGCAGGTATCAGAAGTTCACATATCAAATATATCTGCCCGCATGCGCCTGTTAGGCCTGTTACATTAA
ATATGAACGTGGCTATGCCTTCATGGTTTGATATTATTGGGCTTTCACCAGATTCACAGGAGGATGAATCTGGGA
TTAAACAGGCAGCAGAAAATATAAAAGCTTTGATTGATCAAGAAGTGAAGAATGGCATTCCTTCTAACAGAATTA
TTTTGGGAGGGTTTTCTCAGGGAGGAGCTTTATCTTTATATACTGCCCTTACCACACAGCAGAAACTGGCAGGTG
TCACTGCACTCAGTTGCTGGCTTCCACTTCGGGCTTCCTTTCCACAGGGTCCTATCGGTGGTGCTAATAGAGATA
TTTCTATTCTCCAGTGCCACGGGGATTGTGACCCTTTGGTTCCCCTGATGTTTGGTTCTCTTACGGTGGAAAAAC
TAAAAACATTGGTGAATCCAGCCAATGTGACCTTTAAAACCTATGAAGGTATGATGCACAGTTCGTGTCAACAGG
AAATGATGGATGTCAAGCAATTCATTGATAAACTCCTACCTCCAATTGATTGACGTCACTAAGAGGCCTTGTGTA
GAAGTACACCAGCATCATTGTAGTAGAGTGTAAACCTTTTCCCATGCCCAGTCTTCAAATTTCTAATGTTTTGCA
GTGTTAAAATGTTTTGCAAATACATGCCAATAACACAGATCAAATAATATCTCCTCATGAGAAATTTATGATCTT
TTAAGTTTCTATACATGTATTCTTATAAGACGACCCAGGATCTACTATATTAGAATAGATGAAGCAGGTAGCTTC
TTTTTTCTCAAATGTAATTCAGCAAAATAATACAGTACTGCCACCAGATTTTTTATTACATCATTTGAAAATTAG
CAGTATGCTTAATGAAAATTTGTTCAGGTATAAATGAGCAGTTAAGATATAAACAATTTATGCATGCTGTGACTT
AGTCTATGGATTTATTCCAAAATTGCTTAGTCACCATGCAGTGTCTGTATTTTTATATATGTGTTCATATATACA
TAATGATTATAATACATAATAAGAATGAGGTGGTATTACATTATTCCTAATAATAGGGATAATGCTGTTTATTGT
CAAGAAAAAGTAAAATCGTTCTCTTCAATTAATGGCCCTTTTATTTTGGGACCAGGCTTTTATTTTCCCTGATAT
TATTTCTATTTAATACTCTTTTCTCTCAAGAAAAAAAAAAAAAGTTTGTTTTTTCTTTATTGTCCTTCATAGCAGG
CCAAGTATTGCCTCTCTGCAATAGACAGCTACTGTCAATACATGCTGTAATTTGACATTCTGGGTCACAGATATA
AGGTATTTAAAATCTATTTATGCTTTATAGAGAAACCAGACATTAAAACTTCATGCACTACTTATTTCGAATTAC
TGTACCTTATCCAAATTTACACCTAGCTATTAGGATCTTCAACCCAGGTAACAGGAATAATTCTGTGGTTTCATT
TTTCTGTAAACAACTGAAAGAATAATTAGATCATATTCTAGTATGTTCTGAAATATCTTTAAGACTGATCTTAAA
AACTAACTTCTAAGATGATTTCATCTTCTCATAGTATAGAGTTTACTTTGTACACGTTTGAAACCAACTACTGTA
GAAGATGAGGAATCTATTGTAATTTTTTGCTTTATTTTCATCTGCCAGTGGACTTATTTGAAATTTTCACTTTAG
TCAAATTATTTTTTGTATTAGTTTTTGATGCAGACATAAAAATAGCAATCATTTTAAATTGTCAAAATTTCCAGA
TTACTGGTAAAAATTATTTGAAAACAAACTTATGGGTAATAAAGGCTAGTCAGAACCCTATACCATAAAGTGTAG
TTACCATACAGATTAATATGTAGCAAAAATGTATGCTTGATATTTCTCAACTGTGTTAATTTTTCTGCTGTATTC
CAGCTGACCAAAACAATATTAAGAATGCATCTTTATAAATGGGTGCTAATTGATAATGGAAATAATTTAGTAATG
GACTATACAGGATGTTAATAATGAAGCCATATGTTTATGTCTGGATTTAAAAATTTTAAACAATCATTTACTATG
TCATTTTTCTTTACCTTGAAGAACATAAACTGTTATTTCACTTCTACAAATCAGCAAGATATTATTTATGGCAAG
AAATATTCCATTGAAATATTGTGCTGTAACATGGGAAAGTGTAAATGTTTTTCATGGTTTCTATCAATGTGAAAT
AAAATTTAATTCTGA

FIGURE 4615

CACGTGGCCTCCGAGCAGCTCAGGGCGCCCTTGAAAGTTCTTGGATCTGCGGGTTATGGCCGGTCCCTTGCAGGG
CGGTGGGGCCCGGGCCCTGGACCTACTCCGGGGCCTGCCGCGTGTGAGCCTGGCCAACTTAAAGCCGAATCCCGG
CTCCAAGAAACCGGAGAGAAGACCAAGAGGTCGGAGAAGAGGTAGAAAATGTGGCAGAGGCCATAAAGGAGAAAG
GCAAAGAGGAACCCGGCCCCGCTTGGGCTTTGAGGGAGGCCAGACTCCATTTTACATCCGAATCCCAAAATACGG
GTTTAACGAAGGACATAGTTTCAGACGCCAGTATAAGCCTTTGAGTCTCAATAGACTGCAGTATCTTATTGATTT
GGGTCGTGTTGATCCTAGTCAACCTATTGACTTAACCCAGCTTGTCAATGGGAGAGGTGTGACCATCCAGCCACT
TAAAAGGGATTATGGTGTCCAGCTGGTTGAGGAGGGTGCTGACACCTTTACGGCAAAAGTTAATATTGAAGTACA
GTTGGCTTCAGAACTAGCTATTGCTGCCATTGAAAAAAATGGTGGTGTTGTTACTACAGCCTTCTATGATCCAAG
AAGTCTGGACATTGTATGCAAACCTGTTCCATTCTTTCTTCGTGGACAACCCATTCCAAAAAGAATGCTTCCACC
AGAAGAACTGGTACCATATTACACTGATGCAAAGAACCGTGGGTACCTGGCGGATCCTGCCAAATTTCCTGAAGC
ACGACTTGAACTCGCCAGGAAGTATGGTTATATCTTACCTGATATCACTAAAGATGAACTCTTCAAAATGCTCTG
TACTAGGAAGGATCCAAGGCAGATTTTCTTTGGTCTTGCTCCAGGATGGGTGGTGAATATGGCCGATAAGAAAAT
CCTAAAACCTACAGATGAAAATCTCCTTAAGTATTATACCTCATGAATTCCCGTCCAAGGAAGCAGAGTTGTTAA
AGAGTACTGGAATAGGGGCTGAAGGATCTATATTCCCTTATTGCATTTTCCTTATGTATAATTTTCCAGATGGTG
ATGTTACTTTTCAGTGTACTCATATGTCTCATTTTCATCTAAAATTAAATGGCAGGAAACAAGGACTGCATAGAG

FIGURE 4616

CTCGCCTCACCAGGTACGGATCTCCCGCGCGTCGCCGAAAGCGGCTCTGACCCAGCGGAAGTAATTCTTTCGACT
GCCCCGGAACCCACCGGAGCAGGCAGCTGGGGGTGGGGGGGCGGCCCTGGGATAGGGGCTGTGGCAGTACGCGGG
GACCCGGCTGCGGTGGCTGCGGGACTGACGAGAAACTACTAAAGTTCCTGGGGAAGCAAAGTAGAATTTCATAAG
AACAAA**ATG**GATGGAGAGGAGAAAACCTATGGTGGCTGTGAAGGACCTGATGCCATGTATGTCAAATTGATATCA
TCTGATGGCCATGAATTTATTGTAAAAAGAGAACATGCATTAACATCAGGCACGATAAAAGCCATGTTGAGTGGC
CCAGGTCAGTTTGCTGAGAACGAAACCAATGAGGTCAATTTTAGAGAGATACCTTCACATGTGCTATCGAAAGTA
TGCATGTATTTTACGTACAAGGTTCGCTACACTAACAGCTCCACCGAGATTCCTGAATTCCCAATTGCACCTGAA
ATTGCACTGGAACTGCTGATGGCTGCGAACTTCTTAGATTGT**TAA**ATAAAATAAATTATAATAAACTGTTAACTC
TTTTCAGTATTTAATACCTGTAGTTCAGTTAGTAACTTTTTCATATATAGCATGTTGCCTGTATGCAGTTGAACT
ATATAAAGTTCATTGCAAAGCAGATTATCTTGTTTTTTTGCATAGCAATCAAAGTTGAAATTTGTTTGCTACATC
AACAAATTAAGGACATTTTCACAAACTGAGAAATAAACAAATATGCCAATTCGTAGGTGGTTTTGCCTTATCCTT
TGAATGTGACTTAAAATCAGCAATGATGATATAGTAAATACTGAAATTTAGGTGTAAATCAATACGTTCTACAGG
GAAATAATGAGGCTAAGTATTTTTATGTTTTTAGTGGTTTTTTAGAAACCTAATCTTATAGCCGCCATTAGCATT
ACTAGAGTTATGCAAATAATTGCATTATAAACATGTTTATAACTTAGCCAAAACATTGATTTTTATAACTCTCCA
AGTATGAGTTGAAATTTCTTATGTCTTTTGATAAACTGCAGTATTCTTTAAGTGTACTTTGTCCTTTTGTTTATT
GCTACAATTTAAGAACTTTATTTAAAAACAATTTTGGAAGGTTACTAGGTACAGCTTTTGCAGAAGAAACTGAAC
TGTAGCCAGATGGTCAGCAAGTAAACTACATGACTTAGAGTTCTTGTGCATTATACATTTTGGGTAATTCAAAGT
ACTGTATTTGCATTGACTATAAAGCGTCGTTTGCAATATTTATTCTTCCTTCATAGTCCCTTGTTGTGATTATAC
TTCCAGTTGTTTAAATGTATTTTAAAAGACTCACTATTAACTTTATTCAGATCTTAAAAGCTACACCTTTTTGAA
CTATTCCAGTCTTTCTCCATCCAATTAGAATGTTATGGAATAACATGTGAAGAGATACAGTGAAAATCATATTAT
AATGCATTGAAGATATCCTACATGAATTATCTTCTATTAAAATATGTCCCAATAAATATACCCATAATCAGTGGG
TCTTCTACTGAAATCAAGCTCATTCAGCTTTTCTATTAAGCAGCCAAAAAATTTTTTGAAAAAATATGACAGCAT
CATTCCTTATGCATGGGGAAAGAAGCACTGGAGATGGGTTTAGTATTGTCTTTATCTCAGAGGTGGAACAAAGTT
GTCATTATAGGGTCTATAAACTTAAGTCTCCAGCTTATTTGAGACTGGCTTAATATGGCTGAGCCCGGTGGCTCA
TGCCTGTAATCCCAGCACTTTCAGAGGACGAGGCGGGTAGATCACTTGAGGCCAGGAGTTTGAGACCAGCCTGGC
CACCATGGCAAAACCCCATCTCTACCAAAAATGCAAAAATTAGCTAGGCCATGGTGGCACACGCCTGTAATCCCA
GCTACTTGTGAGGCTGAGGCATGAGAATCGCTTGAACCTGGGAGGTGGAGGTGGCAGTGAGCCGAGATCGCACCA
CTGCACTCCAGCCTGGGTGACAGAGCGAGACTGTCTC

FIGURE 4617

CTCTTTTTCCGGCTGGAACCATGGAGGGTGTAGAAGAGAAGAAGAAGGAGGTTCCTGCTGTGCCAGAAACCCTTA
AGAAAAAGCGAAGGAATTTCGCAGAGCTGAAGATCAAGCGCCTGAGAAAGAAGTTTGCCCAAAAGATGCTTCGAA
AGGCAAGGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCACAAGGAATATAGGCAGATGTACAGAACTGAAA
TTCGAATGGCGAGGATGGCAAGAAAAGCTGGCAACTTCTATGTACCTGCAGAACCCAAATTGGCGTTTGTCATCA
GAATCAGAGGTATCAATGGAGTGAGCCCAAAGGTTCGAAAGGTGTTGCAGCTTCTTCGCCTTCGTCAAATCTTCA
ATGGAACCTTTGTGAAGCTCAACAAGGCTTCGATTAACATGCTGAGGATTGTAGAGCCATATATTGCATGGGGGT
ACCCCAATCTGAAGTCAGTAAATGAACTAATCTACAAGCGTGGTTATGGCAAAATCAATAAGAAGCGAATTGCTT
TGACAGATAACGCTTTGATTGCTCGATCTCTTGGTAAATACGGCATCATCTGCATGGAGGATTTGATTCATGAGA
TCTATACTGTTGGAAAACGCTTCAAAGAGGCAAATAACTTCCTGTGGCCCTTCAAATTGTCTTCTCCACGAGGTG
GAATGAAGAAAAAGACCACCCATTTTGTAGAAGGTGGAGATGCTGGCAACAGGGAGGACCAGATCAACAGGCTTA
TTAGAAGAATGAACTAAGGTGTCTACCATGATTATTTTTCTAAGCTGGTTGGTTAATAAACAGTACCTGCTCTCA
AATTGAAAAAAAAAAAAAAAAAAAAAG

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FIGURE 4618

TGAAAAGGATGGAATTAAAACAACCTTGGTTTGCCCTTATCTTGTAGACACTGGCATGTTCAGAGGCTGCCGAAT
CAGGAAAGAAATTGAGCCTTTTCTGCCACCTCTGAAGCCTGATTACTGTGTGAAGCAGGCCATGAAGGCCATCCT
CACTGACCAGCCCATGATCTGCACTCCCCGCCTCATGTACATCGTGACCTTCATGAAGAGCATCCTACCATTTGA
AGCAGTTGTGTGCATGTATCGGTTCCTAGGAGCGGACAAGTGTATGTACCCCTTTATTGCTCAAAGAAAGCAAGC
CACAAACAATAATGAAGCAAAAAATGGAATCTAAGAATCTTTTTGTATGGAATATTACTTCTATCAGAAGATGAT
CAAGATGTTTCAGTCCAGTGCACATCAGCATTGCTGACATTTTATGGATTCTAAACTTGTGTTGTTTCTTTTTTA
AATCAACTTTTTAAAAAAATAAAGTGTAAATTAACCGACTAGAGTACTTGGAAAATGTGATCAGTACAAGTGAAC
TTAGGTTGTTGCCAACAGGGTCCTTTTAGGCAGAACCCAGAAACCAGTCAAATCTGTAGAGAAGCAGTGTGACAT
CTTCAGGTTACCATTATTTTTTAATGAGCAGGAAGTCTAGAAATGATAACTAGACTGTATGTTTCATGTGTGTGA
TTTTTCAGAATTCCCAGAGTTTACTCATTCTTGTTATTAAACTCTAGCCAGTTGACATCTTCGCAATTTCAAGGA
CTGATAGTGCTGTATTTTCTCACGTTTTCTAAGTTTCCGTTTTGCAAGGCCTAGGTGACTTTTTCATGGTGTTTG
TATGTTTAGCTCTTTTGAAAAGGAATTTTGAAATCTCCATCAACTGAAGTAAATGATGTCTGAGTGTTACAGTAA
AGGTGACCAAGTCTCTTTCTTAAAGTCACAATGACTAAAGTATTAGTTGAATTTTTTTTTTTTTTTTTGATGG
AGTCTCGCTCTGTCACCAGGCTGGAGTGCAGTAGCACAATCACGGCTCACTGCAATCTCTGCCTCCCAGTTTCAA
GTGATTCTGCTGTCTCAGCCTCCCAAGTAGCTGGGACTACAGGCATGCGCCACCACGCCCAGCTAATTTTTGTAT
TTTTAGTAGAGACGGGGTTTCACCATGTTGGTCAGGATGGTCTCCATCTCTTGACATTGTGATCCACCTGCCTCG
GCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACTGCACCCAGCCTTGAATTTTTAATTTTATCTCTGATATA
CTTCATTAAGTGTCTGGAGACCTAATTATCCTAAAAGATCATACATTTTCTACCTATGAATTTTGCTGCATACAG
AAAGTGCCCTTTCCTCAGGAAGTTGCTGTGTTTCATTTCTTTGGATGGACTCTTATCTAGAATACATAGCAGCTC
TGCAAAGGAACAGTTTTTAAAAATGGGAACTTCTACATTGAAAAGTCCCCATTTTTGTGCCAACTATGATTAGTG
AGAGGAAGAAATCTTATTCTATGGCATATGTATGGAAGGGTGTAAAGATTCTTTTGAAAGGTTTATTCACATTGT
AGAACAGCAAATGACATTTTTACAGTATTTTTTTGTAAAGCAAACTATTTTGTGCCTTGAATTTGGTATATGTGT
ATTAGTGAAACATTGTAAAGGTGAACTTCTACCTCTGTATCTAAATGTATACCATCCACTTGTAAATGACTATAA
ACTATTATGTGATTGCTTTTTTTTTTAGAATGTCTTGTTTAAATAGTGGCCAATGTTTAAGGCTGTTAAAATAAG
CCAACTTTTACTAATTGGGGAGTTTTATAAATGACTGATTAAATTTAAAGAATTAACTTACATGCAATTGTGTGA
TTATTAGTTATCAGCAGTGTTGTAAGGAAAATTATTGTGTTTTTTTTTATGATCATTATCCCACTTTAGGTAAAG
AAAAATATTGGAATGGAATAGTGTTGGGAAACAGACATTAACAACCTAGGGTGCCTGCACTCAAATAGCCGATGT
TACTGTCCCTAGATTAGAGACTTGATTAAGGGCTTGTTTGTACCAAAAGTGGGGAAACAATGCCATGACCTGTGT
TTTAGTTTGGCTGCACCACAGATCAAATCTGCACTGTGTCTACATATAGGAAAGGTCCTGGTGTGTGCTAATGTT
CCCAATGCAGGACTTGAGGAAGAGCTCTGTTATATGTTTCCATTTCTCTTTATCAAAGATAACCAAACCTTATGG
CCCTTATAACAATGGAGGCACTGGCTGCCTCTTAATTTTCAATCATGGACCTAAAGAAGTACTCTGAAGGGTCTC
AACAATGCCAGGTGGGGACAGATATACTCAGAGATTATCCAGGTCTGCCTCCCAGCGAGCCTGGAGTACACCAGA
CCCTCCTAGAGAAATCTGTTATAATTTAACAACCCACTTATCCACCTTAAAACTGAGGAAAGTCGTCTTTACATC
TAATTTTATTCTTGTGTGTTATAACTTAAACCTATTTCTATTTTTGTTTGTTATTGCCCTTATAAGGGTGTCCAT
CTCCAAGTTCAATAAACTAATTCATTT

FIGURE 4619A

CCAATGTTGGAGCCGTCTGCAAAGTGTCCCCGGCAAGAAGAGGCTGCCTACCACAAGGACTTTAGCTTACTTTTT
AAAGATTGAAGAAAAAAAAGAAGACAGAAAAAGAAGAACTCAAAGATACACAAAGTAATTTGAACCAAGGCTCAG
AAGTTTTTGGAGCCGTGAGGGATACAGCAGTTTGGTCAATATTGTCTTAAC**ATG**CTTCAAATAAATCAGATGTTC
TCAGTGCAGCTGAGTCTTGGTGAGCAGACATGGGAATCCGAAGGCAGCAGTATAAAGAAGGCTCAGCAGGCTGTT
GCCAATAAAGCTTTGACTGAATCTACGCTTCCCAAACCAGTTCAGAAGCCACCCAAAAGTAATGTTAACAATAAC
CCAGGCAGTATAACTCCAACTGTGGAACTGAATGGGCTTGCTATGAAAAGGGGAGAGCCTGCCATCTACAGGCCA
TTAGATCCAAAGCCATTCCCAAATTATAGAGCTAATTACAACTTTCGGGGCATGTACAATCAGAGGTATCATTGC
CCAGTGCCTAAGATCTTTTATGTTCAGCTCACTGTAGGAAATAATGAATTTTTTGGGGAAGGAAAGACTCGACAA
GCTGCTAGACACAATGCTGCAATGAAAGCCCTCCAAGCACTGCAGAATGAACCTATTCCAGAAAGATCTCCTCAG
AATGGTGAATCAGGAAAGGATGTGGATGATGACAAAGATGCAAATAAGTCTGAGATCAGCTTAGTGTTTGAAATT
GCTCTGAAGCGAAATATGCCTGTCAGTTTTGAGGTTATTAAAGAAAGTGGACCACCACATATGAAAAGCTTTGTT
ACTCGAGTGTCAGTAGGAGAGTTCTCTGCAGAAGGAGAAGGAAATAGCAAAAAACTCTCCAAGAAGCGCGCTGCG
ACCACCGTCTTACAGGAGCTTAAAAAACTTCCACCTCTTCCTGTGGTGGAAAAGCCAAAACTATTTTTTAAAAAA
CGCCCTAAAACAATAGTAAAGGCCGGACCAGAATATGGCCAAGGGATGAACCCTATTAGCCGCCTGGCGCAAATT
CAACAGGCCAAAAAGGAAAAGGAGCCGGATTATGTTTTGCTTTCAGAAAGAGGAATGCCTCGACGTCGAGAATTT
GTGATGCAGGTGAAGGTAGGCAATGAAGTTGCTACAGGAACAGGACCTAATAAAAAGATAGCCAAAAAAAATGCT
GCAGAAGCAATGCTGTTACAACTTGGTTATAAAGCATCCACTAATCTTCAGGATCAACTTGAGAAGACAGGGGAA
AACAAAGGATGGAGTGGTCCAAAGCCTGGGTTTCCTGAACCAACAAATAATACTCCAAAAGGAATTCTTCATTTG
TCTCCTGATGTTTATCAAGAGATGGAAGCCAGCCGCCACAAAGTAATCTCTGGCACTACTCTAGGCTATTTGTCA
CCCAAAGATATGAACCAACCTTCAAGCTCTTTCTTCAGTATATCTCCCACATCGAATAGTTCAGCTACAATTGCC
AGGGAACTCCTTATGAATGGAACATCTTCTACAGCTGAAGCCATAGGTTTAAAAGGAAGTTCTCCTACTCCCCCT
TGTTCTCCAGTACAACCTTCAAAACAACTGGAATATTTAGCAAGGATTCAAGGCTTTCAGGTA**TGA**ATTAAAAGC
AAAAACAAAAAACAAAACAATTCATTAGCCTCAGATTCTTCATCTGTATACATCACAAGGCTCATTCTTGCCTGC
TAGTATGGCCTACATGCCACTTACGTTTTAAGTTATTTAGGAACACAAAGGACAGACAAAAAAGCCATATGCACA
TGCCTCATTTTCTCTTATTTTTGATCTATCTAGTAATTCTTTTGCTGCCTGTCTCTTCTCCATTTTCCTTCTTCT
TTTTTAAGCATTTTTCATATTCTTCACTGTCTTCTATTTGGTCTTGATTAGGTGCATCTATCTCTTCGCTCTGTC
TTCCACAAACAAAAATTCTGCCTTCAGACATTTGGTGTTAGTATTTCACACTCAGTTCTCCCTTTTTTTACATAA
GGATTGAGTTTCTTTTTATGATGATTTTACCTTTATAGCAATTTTGAATTTTGCATTCTATTGCTAGTATTGATT
CAGGTACACCATTAAGATACAACATTCTAGAAGTCTATTACCTTAGGAGTTAATTAAACATGATATTTGAAGAAT
AATGAAATGCTTTATAGTTGTTTGAGGCATAACAATGTGTATTTGTTTTACTGGATCATGTTTTGAACTGACTAG
GGAGGGTAGCACCTGCCTCAGATAGTACCAACAATTCTGTTTCACTGGGTAGTCTAAAACTAGCTTATAGTTTAA
CTTAACTTGTTGTGTATGTGAATTTAGGGATGGAAACTTTTTTTCCCCTATTTATTCTTTGTTTCCTTCTGGGAA
AAAACCCCACAAAAATCAGCACTCCTTTATGGATACATTGGAGCTTTTGAAAGAATTGTAAACTCTAGGAAGGGG
AAATATCTGTGTCTTGATTTCTTAGTTGCCTTGAAAATCATGTACTGAACTGTAACCGCTAACTTGACTGGATGA
ACTAGTTTGCTTGTGTGTAGAGAGTGTATTGCTTCCTCAGATTTCACTGTTTTCATCTCCTTTTCCATCTTAGTC
TTTATTCCTTAAGACCAAAAACTGTAATATCCTTTAGAAATGCTCTAGAAGATCTGTATTGTGTAGAATGATCAT
GTATTTATAAATATTTTACAAGTTTAGATTATAAAATGAAAAAGAAGGTCATGTGTTTTGGGGGGTATTTTGCAT
GTTCGGATTTTTTTTTCACTTCACCGAACCCTTCTGATTCTTTCAAACTATTGCCAGGTAGTTGTTAGTGTTTCT
AATTGGACTCTTAATATGAACTTCAAGAAGCTGTTACCAGTTATCGGCTCTGTCATCTGAAATTTTAACCACTTA
ATTTAAAGTTACAATTTTAGAATTTGTTTTTGTTGTTTTACCTTAAGAAACACAATAAATCACTGTTTAAAAAAG
ATCTCAATTTATATAAAGTACTGGAAAAAAGCTAAGTAATTTTTAGTTCTATCTATAATCTCCGTAGGATGAATT
AGAAATAAATTGTGATGAAAAGAAATTAACTGCTTATTTATGAATCTAATCATTTAGAAATGTCTGAGAGTAACA
CTGCATTCTTATAGAAACAAAGCACAAATTGCATTCAAGCTCTGAATTGATTTTTTGCTTGGAGCTGTTGTTACA
GTAGCTGTAATTTTGCTACCAGAATGTCTTAATTTTTTAAATTTGTTTTTATTTCTAAGCTCTTGGCAATGACAA
TAATTATAATTTTAACATATCTTCACTGTAGTCAACATGTAGAGTCTGCTTCCCTCATTATTGCATTGCTAAGGC
CTTTTTAAAAAGCTTATGCTTACATAATATACTCTTTTTTATGGACACGTTATATGTTTCCAAATCTGTGTATTG
TGATTTTTACATACTAATGAATATAAACAGGTGATTTTAAAATATTACTGTGCTTCTTTGGTTGAATGAGCTGGT
ATTGATGTAAAATACTCTGTCATTGATGGACCACTACCTGCAGCTAAGCAGTGAGCAGAATCTCCGGGAAATGAC

FIGURE 4619B

TTAGTCTGGCCACATGCATAGCCCATCTTCATAATGTCGCAGCAGAAGGTTCTTTGTGGTTAAAAGTTTTAAAGC
CTATTTCTTTATAGGTAACCCTCTCAGGTATATTTACCTGGTAGAAAAACATGTAGATTGTTTCTATTACTTAAA
TGTTTTAATTGGACTGTAGTTTAGAAATTACAGGACCAGCTTGTTACAGATTATACACTATTCTGTTACTTTTAT
TTCTGAAACTTAAAAACAATAAATTCTTTTTCTGTGTTTCTAGGTTAGAACTTTTTTATTTTATTGCACACTGAA
CAGATACTGTTGCTTATTGAATATTGTGTAAACCCTTCTTTGGCTTTCCTTGCCCATTGCAATTTGATTTAAGCC
TACTAGAGCCATTGTATGTGACAGCTATATTGTATTACAAAGTAAAAATATATGAGTGTATTG

FIGURE 4620

GCCCACTCCCACCGCCAGCTGGAACCCTGGGGACTACGACGTCCCTCAAACCTTGCTTCTAGGAGATAAAAAGAA
CATCCAGTCATGGATAAAAATGAGCTGGTTCAGAAGGCCAAACTGGCCGAGCAGGCTGAGCGATATGATGACATG
GCAGCCTGCATGAAGTCTGTAACTGAGCAAGGAGCTGAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTTGCT
TATAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGGGTCGTCTCAAGTATTGAACAAAAGACGGAAGGTGCT
GAGAAAAAACAGCAGATGGCTCGAGAATACAGAGAGAAAATTGAGACGGAGCTAAGAGATATCTGCAATGATGTA
CTGTCTCTTTTGGAAAAGTTCTTGATCCCCAATGCTTCACAAGCAGAGAGCAAAGTCTTCTATTTGAAAATGAAA
GGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGTGATGACAAGAAAGGGATTGTCGATCAGTCACAACAA
GCATACCAAGAAGCTTTTGAAATCAGCAAAAAGGAAATGCAACCAACACATCCTATCAGACTGGGTCTGGCCCTT
AACTTCTCTGTGTTCTATTATGAGATTCTGAACTCCCCAGAGAAAGCCTGCTCTCTTGCAAAGACAGCTTTTGAT
GAAGCCATTGCTGAACTTGATACATTAAGTGAAGAGTCATACAAAGACAGCACGCTAATAATGCAATTACTGAGA
GACAACTTGACATTGTGGACATCGGATACCCAAGGAGACGAAGCTGAAGCAGGAGAAGGAGGGGAAAATTAACCG
GCCTTCCAACTTTTGTCTGCCTCATTCTAAAATTTACACAGTAGACCATTTGTCATCCATGCTGTCCCACAAATA
GTTTTTTGTTTACGATTTATGACAGGTTTATGTTACTTCTATTTGAATTTCTATATTTCCCATGTGGTTTTTATG
TTTAATATTAGGGGAGTAGAGCCAGTTAACATTTAGGGAGTTATCTGTTTTCATCTTGAGGTGGCCAATATGGGG
ATGTGGAATTTTTATACAAGTTATAAGTGTTTGGCATAGTACTTTTGGTACATTGTGGCTTCAAAAGGGCCAGTG
TAAAACTGCTTCCATGTCTAAGCAAAGAAAACTGCCTACATACTGGTTTGTCCTGGCGGGGAATAAAAGGGATCA
TTGGTTCCAGTCACAGGTGTAGTAATTGTGGGTACTTTAAGGTTTGGAGCACTTACAAGGCTGTGGTAGAATCAT
ACCCCATGGATACCACATATTAAACCATGTATATCTGTGGAATACTCAATGTGTACACCTTTGACTACAGCTGCA
GAAGTGTTCCTTTAGACAAAGTTGTGACCCATTTTACTCTGGATAAGGGCAGAAACGGTTCACATTCCATTATTT
GTAAAGTTACCTGCTGTTAGCTTTCATTATTTTTGCTACACTCATTTTATTTGTATTTAAATGTTTTAGGCAACC
TAAGAACAAATGTAAAAGTAAAGATGCAGGAAAAATGAATTGCTTGGTATTCATTACTTCATGTATATCAAGCAC
AGCAGTAAAACAAAAACCCATGTATTTAACTTTTTTTTAGGATTTTTGCTTTTGTGATTTTTTTTTTTTTTTTTT
GATACTTGCCTAACATGCATGTGCTGTAAAAATAGTTAACAGGGAAATAACTTGAGATGATGGCTAGCTTTGTTT
AATGTCTTATGAAATTTTCATGAACAATCCAAGCATAATTGTTAAGAACACGTGTATTAAATTCATGTAAGTGGA
ATAAAAGTTTTATGAATGGACTTTTCAACTACTTTCTCTACAGCTTTTCATGTAAATTAGTCTTGGTTCTGAAAC
TTCTCTAAAGGAAATTGTACATTTTTTGAAATTTATTCCTTATTCCCTCTTGGCAGCTAATGGGCTCTTACCAAG
TTTAAACACAAAATTTATCATAACAAAAATACTACTAATATAACTACTGTTTCCATGTCCCATGATCCCCTCTCT
TCCTCCCCACCCTGAAAAAAATGAGTTCCTATTTTTTCTGGGAGAGGGGGGGATTGATTAGAAAAAAATGTAGTG
TGTTCCATTTAAAATTTTGGCATATGGCATTTTCTAACTTAGGAAGCCACAATGTTCTTGGCCCATCATGACATT
GGGTAGCATTAACTGTAAGTTTTGTGCTTCCAAATCACTTTTTGGTTTTTAAGAATTTCTTGATACTCTTATAGC
CTGCCTTCAATTTTGATCCTTTATTCTTTCTATTTGTCAGGTGCACAAGATTACCTTCCTGTTTTAGCCTTCTGT
CTTGTCACCAACCATTCTTACTTGGTGGCCATGTACTTGGAAAAAGGCCGCATGATCTTTCTGGCTCCACTCAGT
GTCTAAGGCACCCTGCTTCCTTTGCTTGCATCCCACAGACTATTTCCCTCATCCTATTTACTGCAGCAAATCTCT
CCTTAGTTGATGAGACTGTGTTTATCTCCCTTTAAAACCCTACCTATCCTGAATGGTCTGTCATTGTCTGCCTTT
AAAATCCTTCCTCTTTCTTCCTCCTCTATTCTCTAAATAATGATGGGGCTAAGTTATACCCAAAGCTCACTTTAC
AAAATATTTCCTCAGTACTTTGCAGAAAACACCAAACAAAAATGCCATTTTAAAAAAGGTGTATTTTTTCTTTTA
GAATGTAAGCTCCTCAAGAGCAGGGACAATGTTTTCTGTATGTTCTATTGTGCCTAGTACACTGTAAATGCTCAA
TAAATATTGATGATGGGAGGCAGTGAGTCTTGATGATAAGGGTGAGAAACTGAAATCCC

FIGURE 4621

TCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGTG
CAGCCTATTCGCTGCACTAACTGTGCCCGATGCGTGCCCAAGGACAAGGCCATTAAGAAATTCGTCATTCGAAAC
ATAGTGGAGGCCGCAGCAGTCAGGGACATTTCTGAAGTGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTGTAT
GTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGCAAG
GACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCCACCAAAGCCCATGTGAGGAGCT
GAGTTCTTAAAGACTGAAGACAGGCTGTTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

FIGURE 4622

CCTTCTCCCCGGCGGTTAGTGCTGAGAGTGCGGAGTGTGTGCTCCGGGCTCGGAACACACATTTATTATTAAAAA
ATCCAAAAAAAAATCTAAAAAAATCTTTTAAAAAACCCCAAAAAAATTTACAAAAAATCCGCGTCTCCCCCGCCGG
AGACTTTTATTTTTTTTCTTCCTCTTTTATAAAATAACCCGGTGAAGCAGCCGAGACCGACCCGCCCGCCCGCGG
CCCCGCAGCAGCTCCAAGAAGGAACCAAGAGACCGAGGCCTTCCCGCTGCCCGGACCCGACACCGCCACCCTCGC
TCCCCGCCGGCAGCCGGCAGCCAGCGGCAGTGGATCGACCCCGTTCTGCGGCCGTTGAGTAGTTTTCAATTCCGG
TTGATTTTTGTCCCTCTGCGCTTGCTCCCCGCTCCCCTCCCCCCGGCTCCGGCCCCCAGCCCCGGCACTCGCTCT
CCTCCTCTCACGGAAAGGTCGCGGCCTGTGGCCCTGCGGGCAGCCGTGCCGAG**ATG**AACCCCAGTGCCCCCAGCT
ACCCCATGGCCTCGCTCTACGTGGGGGACCTCCACCCCGACGTGACCGAGGCGATGCTCTACGAGAAGTTCAGCC
CGGCCGGGCCCATCCTCTCCATCCGGGTCTGCAGGGACATGATCACCCGCCGCTCCTTGGGCTACGCGTATGTGA
ACTTCCAGCAGCCGGCGGACGCGGAGCGTGCTTTGGACACCATGAATTTTGATGTTATAAAGGGCAAGCCAGTAC
GCATCATGTGGTCTCAGCGTGATCCATCACTTCGCAAAAGTGGAGTAGGCAACATATTCATTAAAAATCTGGACA
AATCCATTGATAATAAAGCACTGTATGATACATTTTCTGCTTTTGGTAACATCCTTTCATGTAAGGTGGTTTGTG
ATGAAAATGGTTCCAAGGGCTATGGATTTGTACACTTTGAGACGCAGGAAGCAGCTGAAAGAGCTATTGAAAAAA
TGAATGGAATGCTCCTAAATGATCGCAAAGTATTTGTTGGACGATTTAAGTCTCGTAAAGAACGAGAAGCTGAAC
TTGGAGCTAGGGCAAAAGAATTCACCAATGTTTACATCAAGAATTTTGGAGAAGACATGGATGATGAGCGCCTTA
AGGATCTCTTTGGGCCTGCCTTAAGTGTGAAAGTAATGACTGATGAAAGTGGAAAATCCAAAGGATTTGGATTTG
TAAGCTTTGAAAGGCATGAAGATGCACAGAAAGCTGTGGATGAGATGAACGGAAAGGAGCTCAATGGAAAACAAA
TTTATGTTGGTCGAGCTCAGAAAAAGGTGGAACGGCAGACGGAACTTAAGCGCAAATTTGAACAGATGAAACAAG
ATAGGATCACCAGATACCAGGGTGTTAATCTTTATGTGAAAAATCTTGATGATGGTATTGATGATGAACGTCTCC
GGAAAGAGTTTTCTCCATTTGGTACAATCACTAGTGCAAAGGTTATGATGGAGGGTGGTCGCAGCAAAGGGTTTG
GTTTTGTATGTTTCTCCTCCCCAGAAGAAGCCACTAAAGCAGTTACAGAAATGAACGGTAGAATTGTGGCCACAA
AGCCATTGTATGTAGCTTTAGCTCAGCGCAAAGAAGAGCGCCAGGCTCACCTCACTAACCAGTATATGCAGAGAA
TGGCAAGTGTACGAGCTGTTCCCAACCCTGTAATCAACCCCTACCAGCCAGCACCTCCTTCAGGTTACTTCATGG
CAGCTATCCCACAGACTCAGAACCGTGCTGCATACTATCCTCCTAGCCAAATTGCTCAACTAAGACCAAGTCCTC
GCTGGACTGCTCAGGGTGCCAGACCTCATCCATTCCAAAATATGCCCGGTGCTATCCGCCCAGCTGCTCCTAGAC
CACCATTTAGTACTATGAGACCAGCTTCTTCACAGGTTCCACGAGTCATGTCAACACAGCGTGTTGCTAACACAT
CAACACAGACAATGGGTCCACGTCCTGCAGCTGCAGCCGCTGCAGCTACTCCTGCTGTCCGCACCGTTCCACAGT
ATAAATATGCTGCAGGAGTTCGCAATCCTCAGCAACATCTTAATGCACAGCCACAAGTTACAATGCAACAGCCTG
CTGTTCATGTACAAGGTCAGGAACCTTTGACTGCTTCCATGTTGGCATCTGCCCCTCCTCAAGAGCAAAAGCAAA
TGTTGGGTGAACGGCTGTTTCCTCTTATTCAAGCCATGCACCCTACTCTTGCTGGTAAAATCACTGGCATGTTGT
TGGAGATTGATAATTCAGAACTTCTTCATATGCTCGAGTCTCCAGAGTCACTCCGTTCTAAGGTTGATGAAGCTG
TAGCTGTACTACAAGCCCACCAAGCTAAAGAGGCTGCCCAGAAAGCAGTTAACAGTGCCACCGGTGTTCCAACTG
TT**TAA**AATTGATCAGGGACCATGAAAAGAAACTTGTGCTTCACCGAAGAAAAATATCTAAACATCGAAAAACTTA
AATATTATGGAAAAAAAACATTGCAAAATATAAAATAAATAAAAAAAGGAAAGGAAACTTTGAACCTTATGTACC
GAGCAAATGCCAGGTCTAGCAAACATAATGCTAGTCCTAGATTACTTATTGATTTAAAAACAAAAAAACACAAAA
AAATAGTAAAATATAAAAACAAATTAATGTTTTATAGACCCTGGGAAAAAGAATTTTCAGCAAAGTACAAAAATT
TAAAGCATTCCTTTCTTTAATTTTGTAATTCTTTACTGTGGAATAGCTCAGAATGTCAGTTCTGTTTTAAGTAAC
AGAATTGATAACTGAGCAAGGAAACGTAATTTGGATTATAAAATTCTTGCTTTAATAAAAATTCCTTAAACAGTG